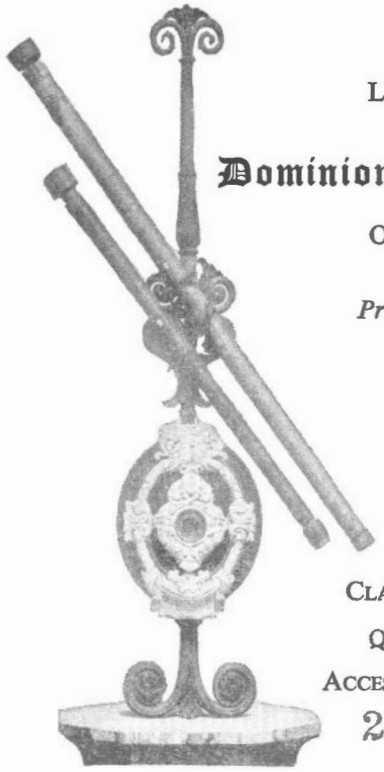

CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES
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PUBLICATIONS

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Dominion Observatory

OTTAWA

Volume XXVIII

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1966

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VOLUME XXVIII

*Paged separately.

CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
Dominion Observatories

PUBLICATIONS

of the

DOMINION OBSERVATORY

OTTAWA

Volume XXVIII • No. 1

MAGNETIC RESULTS, 1938-1947

R. G. Madill and J. F. Clark

Price 25 cents

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1963

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Magnetic Results 1938-1947

R. G. Madill and J. F. Clark

Introduction

An account of the work of the magnetic surveys carried on by the Dominion Observatory between 1907 and 1937, inclusive, is to be found in *Publications of the Dominion Observatory*, Vol. V, No. 5; Vol. VIII, Nos. 8 and 10, and Vol. XI, No. 7. In addition, a summary of declination values in Canada north of 60° is given in Vol. XI, No. 9 (1).

In the present publication it is intended to summarize the magnetic results obtained in all parts of Canada during the years 1938 to 1947 inclusive.

The work of the surveys between 1938 and 1947 was devoted chiefly to securing as many data as possible both for secular change and for purposes of improving magnetic charts of Canada and hydrographic charts of the coastlines. Many new stations were established in Northern Canada with a view to revising the isogonal maps and also for purposes of defining the location of the magnetic north pole. Reference may be made to *Contributions from the Dominion Observatory* Vol. I, No. 3. 'The search for the north magnetic pole' by R. Glenn Madill, reprinted from *Arctic* Vol. I, No. 1. (2). The program of work carried on for many years under C. A. French and R. G. Madill was continued during the war years after French retired and Madill succeeded him as head of terrestrial magnetism. There was new emphasis on applications to air navigation and on the requirements of the army and navy. In 1945 the Magnetic Division of the Dominion Observatory was expanded and more field parties were sent out. This growth has continued, with seasonal observers being employed to good advantage in a continuation and extension of ground surveys, both regional and large-scale. Several regional-anomaly projects in the mining areas were planned and carried out.

Grateful acknowledgement is made of the cooperation of the Geodetic Survey of Canada, Topographical Survey, and Canadian Hydrographic Service, all part of the Department of Mines and Technical Surveys; the RCAF, and the Meteorological Service of Canada, Department of Transport, in supplying declination values obtained in conjunction with their regular work. The U.S. Coast and Geodetic Survey kindly loaned instruments and provided transportation to some of the Arctic stations.

Instrumental Equipment

The instrumental equipment used during the period comprised the following:

Magnetometers—

(1) Combined magnetometer—dip-circle C.I.W. No. 20.

(2) Combined magnetometer—earth inductor P.I.C. No. 104.

(3) Magnetometer Cooke No. 15.

(4) C.I.W. magnetometer No. 8. (1947).

(5) New fluxgate electrical magnetometer No. 1.

Dip instruments—

(1) Dover dip-circle No. 130.

(2) Dover dip-circle No. 145.

(3) Dover dip-circle No. 211.

(4) Dover dip-circle No. 212.

(5) Earth inductor P.I.C. No. 104.

(6) Earth inductor Toepfer No. 1911. Secondary standard, used for base-station work.

Theodolites with compass attachments—

(1) Cooke theodolite T.S. 1576.

(2) Cooke theodolite T.S. 2314 with telescopic compass used for declinations in the Arctic.

(3) Gurley 11 compass transit.

Variometer—

(1) Askania vertical-force variometer No. 1256. Used in mining areas in 1946.

Chronometers—

(1) Half-seconds pocket chronometer Nardin No. 19726.

(2) Half-seconds pocket chronometer Nardin No. 19728.

(3) Half-seconds pocket chronometer Kittel 261.

(4) Longines pocket chronometer Serial No. 608959.

Ancillary equipment—

Wireless receiving sets; a number of Hallicrafter portable, battery-powered radio receivers for time signals; observing tents, living tents, tarpaulins, eiderdown robes, steel measuring tapes, bench marks, and miscellaneous field gear.

Magnetic Observations and their Reduction

As stated in Vol. XI, No. 7, (3), the methods of observation and reduction were similar to those described previously. The greatest departure is in connection with the portable electrical magnetometer first used in 1947, whereby a complete set of readings for declination, inclination and force may be secured in 15 minutes. This permits a revision of the observing schedule so that readings may be taken every hour and on the half-hour if desired.

The custom was followed of applying instrumental index corrections as obtained by IMS methods. The diurnal variation corrections were applied algebraically followed by disturbance correction where necessary. The disturbance corrections were deduced from the nearest magnetic observatory records and were applied algebraically to obtain final station values. The values as published are considered representative mean daily values for the date of observation. Values of the elements for locations other than these listed here may be derived from map sheets published by the Magnetic Division. Annual change data on these maps make possible revision of old station values to a current date, and values at intermediate points may be found by interpolation. Total and vertical magnetic intensities are read directly from these map sheets. Reference may also be made to publications that summarize the data from the Agincourt and Meanook magnetic observatories. *See* Vol. XVII, No. 2, and Vol. XXIII, No. 1 (4).

In succeeding publications the summaries of the magnetic results for Canada will comprise almost exclusively measurements made with the fluxgate portable field magnetometers. A number of these have been manufactured, tested, and proved suitable for field work. They were tried out as portable standards of reference between observatories but were not very satisfactory for this purpose owing to drifting of the constants, and the subsequent necessity to check frequently against a fixed standard (5).

For establishment of primary and secondary stations in the field the fluxgate magnetometers have now replaced dip-circles and the India survey pattern magnetometers completely. Recently, new models have been transistorized, and the design improved to reduce the effects of temperature and to stabilize the reduction coefficients.

Standardization data for the dip circles, and certain other instrumental corrections, are not published here. They are available upon request. The usual comparisons of field instruments at the Agincourt and Meanook observatories were carried out at the beginning and end of the regular field seasons. Intercomparison of standards has been practised whenever feasible.

Geographical Positions

The procedure followed has been described in previous publications. Positions were obtained from the most reliable sources possible or determined by astronomical observations on the spot. The remarks in Vol. XI, No. 7, p. 271, apply here as well. All the latitudes are north, and all longitudes are west of Greenwich.

Summary of Magnetic Observations

The stations are arranged in order of increasing westerly longitude. For each station the latitude, longitude, year to nearest tenth, declination, inclination and horizontal force are given. Total and vertical force may then be computed from the inclination and horizontal force using the formulas:

$$F = H \sec. I, \text{ or } F^2 = H^2 + Z^2.$$

$$Z = H \tan. I, \text{ or } Z = F \sin. I.$$

X and Y components may also be computed from H if required.

The Dominion Observatory is most grateful to observers of the many surveys who contributed data. Besides the Chief of the Division who supplied most of the results from 1938 to 1944, D. S. Craig, P. H. Serson, G. E. LeSueur, R. D. Hutchison, C. A. Cummings, A. E. Cameron, E. R. Niblett, W. L. W. Hannaford and K. Whitham, as well as a number of summer assistants made useful contributions. They carried out these field surveys under difficult conditions and extended the magnetic survey of Canada to all regions of the country.

Selection and Description of Stations

When stations are no longer available new ones are established in the vicinity. For purposes of annual and secular change, an exact re-occupation is necessary; therefore whenever it appears that a station is likely to become unavailable in the future owing to the growth of a town, extension of buildings or for any other reason, an auxiliary station is established near the old one and tied in to it. Thus we have stations A, B, C, ensuring continuity of the series of measurements obtained in the locality. One station will control a large area, so that many of the early stations are no longer required for secular change purposes. They have served their purpose of establishing the pattern of magnetic force on the maps, as published, and providing accurate data for provincial charts.

Attention is being given to maintenance of recording field stations near permanent recording observatories to provide check points to standardize and calibrate field instruments and to enable certain types of research investigations to be carried on. For those requiring them, descriptions of stations can be furnished on request.

REFERENCES

1. MADILL, R. G. Declination results at the Canadian stations north of latitude 60N, 1938–1947. *Pub. Dom. Obs.* v. XI, no. 9, 344, 1949.
2. MADILL, R. G. The search for the north magnetic pole. *Arctic*, v. 1, no. 1, 8–18.
3. FRENCH, F. A. and MADILL, R. G. Magnetic results, 1927–1937. *Pub. Dom. Obs.* v. XI, no. 7, 269, 1940.
4. JACKSON, W. E. W. Record of observations at the magnetic observatories Agincourt and Meanook, 1936–1937. *Pub. Dom. Obs.* v. XVII, no. 2, 250, 1958.

Ross, W. E. Record of observations at the Agincourt magnetic observatory, 1950–51. *Pub. Dom. Obs.* v. XXIII, no. 1, 8–9, 1959.

5. SERSON, P. H. and HANNAFORD, W. L. A portable electrical magnetometer. *Can. J. Technol.*, no. 34, 232–43, 1956.
6 BEALS, C S., HODGSON, J. H., INNES, M. J. S., and MADILL, R. G. Problems of geophysics in the Canadian Arctic. *Arctic*, v. 6, nos. 3 and 4, 176–187.

Magnetic Stations and Occupations

Abbreviations:
M.S. ..... Meteorological Service of Canada.
C.I. ..... Carnegie Institution of Washington.
T.S. ..... Topographical Survey (Canada).
U.S.C. & G.S. ..... United States Coast and Geodetic Survey.
D.O. ..... Dominion Observatory.

Station	*Location*	*Occupation*	*Remarks*
Aberdeen Lake	N.W.T.	1947	
Agincourt	Ont.	Magnetic Observatory	Toronto 1839 to 1898, established at Agincourt 1898.
Agnew River	N.W.T.	1947	
Alert Bay A	B.C.	1924, 1927, 1934	
Alert Bay B	B.C.	1934	
Algoma	Ont.	1916, 1918, 1926, 1930	No longer available.
Allen Lake	N.W.T.	1947	
Amos	Que.	1946	
Annapolis	N.S.	1912, 1918, 1925, 1931, 1936, 1940, 1945	
Arctic Bay	N.W.T.	1946	
Arctic Red River	N.W.T.	1923, 1931, 1943	
Argentia	Nfld.	1941	
Armstrong	Ont.	1914, 1918, 1927, 1930	
Arnprior	Ont.	1947	Airport site.
Assiniboia	Sask.	1927, 1930	
Atikokan	Ont.	1914, 1918, 1926, 1930, 1938	
Ayer's Cliff	Que.	1932, 1937, 1944	Eclipse Station 1932.
Baker Lake	N.W.T.	1933, 1937	M.S. Polar Year 1933.
Bancroft	Ont.	1921, 1926, 1930	
Banff A	Alta.	1907, 1908, 1911, 1919, 1927, 1930, 1935	C.I. 1907.
Banff B	Alta.	1935	
Battleford	Sask.	1907, 1911, 1919, 1927, 1930	M.S. 1907.
Battle Harbour	Labrador	1905, 1914, 1921, 1923, 1925, 1934, 1941	C.I. Station C; C.I. 1905, 1914, 1921, 1923.
Beaverton	Ont.	1947	
Belcourt	Ont.	1946	
Belleville B	Ont.	1920, 1926, 1930, 1937, 1944	
Bersimis	Que.	1907, 1920, 1925, 1931, 1935	
Black Bear Island	Ont.	1929	
Blanc Sablon	Que.	1920, 1925, 1935	
Blanc Sablon (Greenly Island)	Que.	1909, 1920, 1935	
Brandon B	Man.	1919, 1927, 1930, 1938	Originally T. S. Station.
Brochet Post	Man.	1945	
Bruderheim	Alta.	1911, 1919, 1927	
Cadillac	Que.	1946	
Calabogie	Ont.	1947	
Cambridge Bay	N.W.T.	1945, 1947	
Cameron Bay	N.W.T.	1945	
Camp 3. D.O.T.	N.W.T.	1943	
Cape Dorset	N.W.T.	1922, 1934, 1937, 1946	C.I. Station B, 1922.
Cape Hopes Advance	Que.	1928	
Cape Hopes Advance (Diana Bay)	Que.	1928	
Cape Race	Nfld.	1941	
Cape Scott	B.C.	1939	
Cape Smith	N.W.T.	1934, 1937, 1946	
Carcross	Yukon	1934	
Cartwright	Labrador	1934, 1946	
Chalk River A	Ont.	1913, 1918, 1920, 1923, 1930	
Chapleau	Ont.	1906, 1907, 1910, 1913, 1918, 1926, 1930	C.I. 1906.
Chaplin B	Sask.	1919, 1927, 1931	
Charlottetown	P.E.I.	1908, 1918, 1921, 1925, 1931, 1936, 1945	C.I. 1908.
Charlton Island	N.W.T.	1934	
Chesterfield	N.W.T.	1932, 1933, 1937, 1946	M.S. Polar Year Observatory.
Chipewyan	Alta.	1910, 1922, 1931, 1940	M.S. 1910.
Churchill B	Man.	1930, 1934, 1937	
Churchill C (Cape Merry)	Man.	1945	
Cochrane	Alta.	1927	

Magnetic Stations and Occupations—Continued

Station	*Location*	*Occupation*	*Remarks*
Cochrane A	Ont.	1913, 1914, 1918, 1926, 1928, 1936	No longer available.
Cochrane B	Ont.	1936, 1944	
Combermere	Ont.	1947	
Coppermine	N.W.T.	1945	
Coronation	Alta.	1922, 1927, 1930, 1938	
Courtenay	B.C.	1924, 1934	
Cranbrook B	B.C.	1919, 1927, 1934	No longer available.
Cranbrook C	B.C.	1934, 1938, 1942	Auxiliary for Station B.
Croker Bay	N.W.T.	1947	
Dauphin	Man.	1911, 1919, 1926, 1930, 1935	
Dawson	Yukon	1907, 1924, 1934	C.I. 1907.
Doucet A	Que.	1914, 1918, 1928	
Doucet B	Que.	1926, 1928, 1935, 1945	
Dubuisson	Que.	1946	
Dundas Harbour	N.W.T.	1934, 1946	
Dunmore	Alta.	1915, 1919, 1927, 1930, 1938	
Dunvegan	Alta.	1922, 1935	
Edson A	Alta.	1913, 1919, 1927, 1934	
Edson B	Alta.	1934	
Emerson B	Man.	1927, 1930	
Endako	B.C.	1915, 1919, 1927, 1934	
Essex	Ont.	1926, 1930, 1937, 1944, 1947	
Estevan	Sask.	1927, 1930, 1938	
Etah	Greenland	1947	
Evans Point	Ont.	1927	
Fawcett's Post	Ont.	1885, 1913, 1929	E. Fawcett 1885, C.I. 1913.
Fernie	B.C.	1946	
Fitzgerald	Alta.	1922, 1931	
Fort Albany	Ont.	1913, 1929	C.I. 1913.
Fort George (South)	B.C.	1913, 1915, 1919, 1927, 1934	
Fort Rae	N.W.T.	1945	
Fort Ross	N.W.T.	1946	
Fort St. John B	B.C.	1935	
Gander	Nfld.	1941	
Gaspé	Que.	1921, 1925, 1931, 1945	
Gladstone	Man.	1919, 1927, 1930	
Gleichen	Alta.	1911, 1919, 1927, 1930, 1938, 1942	
Goderich B	Ont.	1926, 1930, 1939, 1944	
Goldfields	Sask.	1940	
Good Hope A	N.W.T.	1943	
Goose Fiord	N.W.T.	1947	
Goose Island	B.C.	1939	
Grande Prairie	Alta.	1935	
Grant Point	Ont.	1927	
Greely Haven	N.W.T.	1947	
Grindstone	Que.	1921, 1931	
Guillemard Bay	N.W.T.	1947	
Gypsumville B	Man.	1919, 1927, 1930	
Halifax	N.S.	1915, 1911, 1912, 1918, 1925, 1931, 1936, 1940	C.I. 1905, M.S. 1911.
Harrington Harbour A	Que.	1909, 1920, 1925, 1935	
Harrington Harbour B	Que.	1935	
Havre-St-Pierre A	Que.	1909, 1920, 1935	
Havre-St-Pierre B	Que.	1920, 1925, 1935	
Havre-St-Pierre C	Que.	1935	
Hay River (Vale Point)	N.W.T.	1923, 1931	
Hearst A	Ont.	1914, 1918, 1926, 1930	No longer available.
Hearst B	Ont.	1936, 1944	
Hebron	Labrador	1937	
Hudson Bay Junction	Sask.	1911, 1919, 1927	
Huntingdon	Que.	1921, 1926, 1931, 1937, 1944, 1947	
Huntsville	Ont.	1946	

Magnetic Stations and Occupations—Continued

Station	*Location*	*Occupation*	*Remarks*
Île-à-la-Crosse	Sask.	1945	
Jasper B	Alta.	1927, 1934, 1939, 1946	
Joanne Bousquet	Que.	1946	
Jolly Lake	N.W.T.	1947	
Kamloops B	B.C.	1927, 1934	
Kamloops C	B.C.	1934, 1939, 1946	
Kettle Rapids	Man.	1923, 1935	
Kirkella	Man.	1906, 1910, 1919, 1927, 1931	C.I. 1906.
Lac Chicobi	Que.	1946	
Lacombe A	Alta.	1911, 1919, 1922, 1927, 1930, 1935, 1938, 1942	
Lac Seul	Ont.	1913, 1929	C.I. 1913.
Lake Harbour	N.W.T.	1922, 1934, 1937, 1946	C.I. 1922.
Lake St. Joseph	Ont.	1929	
Lake Temagami	Ont.	1946	
La Sarre	Que.	1946	
La Tuque C	Que.	1926, 1935	
Lloydminster A	Sask.	1911, 1919, 1927, 1935, 1940, 1946	
Longlac	Ont.	1916, 1927, 1930, 1935	
Louisburg	N.S.	1921, 1936, 1940, 1945	
Louvicourt Bridge	Que.	1946	
Macleod	Alta.	1915, 1919, 1927, 1934, 1940	
Magdalen River	Que.	1921, 1925, 1931, 1935	
Malartic	Que.	1946	
Markstay B	Ont.	1937, 1944	
Matapedia	Que.	1907, 1912, 1918, 1920, 1921, 1925, 1931, 1936, 1940, 1945	
Mattawa A	Ont.	1907, 1918, 1927, 1930, 1937	
Mattawa B	Ont.	1913, 1920, 1927, 1945	
McBride	B.C.	1913, 1919, 1927, 1934	
Meanook	Alta.	Magnetic Observatory	D.O. since 1916.
Mégantic	Que.	1947	
Melfort B	Sask.	1927, 1930, 1935	
Midway	B.C.	1915, 1919, 1927, 1934, 1938	
Mile 100, H.B.R.	Man.	1922, 1935	
Mile 200, H.B.R.	Man.	1922, 1927, 1930, 1935	
Miller Point	Ont.	1927	
Mistassini	Que.	1906, 1909, 1935	C.I. 1906, 1909.
Moncton B	N.B.	1925, 1931	
Moose Factory	Ont.	1929, 1945	
Mortier Bay A	Nfld.	1941	
Mortier Bay B	Nfld.	1941	
Mulgrave A	N.S.	1907, 1921, 1925, 1931, 1936	
Nanaimo	B.C.	1908, 1919, 1924, 1927	
Nanticoke	Ont.	1927	
Nelson	B.C.	1915, 1919, 1927, 1934	
New Liskeard A	Ont.	1913, 1918, 1926, 1934, 1944	
Noranda	Que.	1936	
Norman	N.W.T.	1923, 1931	
Normandale	Ont.	1927	
North Bay	Ont.	1946	
North Bend B	B.C.	1919, 1927, 1934, 1939	
Nottingham Island	N.W.T.	1928	
Oak Point	Man.	1916, 1919, 1927	Approximate C.I. 1908.
Ocean Falls B	B.C.	1924, 1927, 1934, 1939, 1946	
Ogoki	Ont.	1929	
Ottawa	Ont.	Annually since 1907	Several locations D.O.
Owen Sound	Ont.	1910, 1920, 1926, 1930, 1937, 1944	
Pacific	B.C.	1915, 1919, 1927, 1934	
Pangnirtung	N.W.T.	1934, 1946	
Parent	Que.	1914, 1918, 1928, 1935, 1945	

Magnetic Stations and Occupations—Continued

Station	*Location*	*Occupation*	*Remarks*
Parry Sound	Ont.	1916, 1920, 1926, 1930, 1937	
Pascalis Junction	Que.	1946	
Peace River	Alta.	1922, 1935, 1938	
Peacock Point	Ont.	1927	
Pense	Sask.	1910, 1919, 1927, 1931	
Penticton	B.C.	1915, 1919, 1927, 1934, 1938, 1946	
Point Lake	N.W.T.	1947	
Pond Inlet	N.W.T.	1934, 1946	
Port Burwell	N.W.T.	1928, 1934, 1937	Near C.I. Station B of 1914.
Port Colborne B	Ont.	1926, 1930, 1937, 1944	
Port Dover	Ont.	1927	
Port Harrison	Que.	1934, 1937, 1946	
Port Leopold	N.W.T.	1947	
Port Maitland	Ont.	1927	
Port Ryerse	Ont.	1927	
Port Stanley B	Ont.	1926, 1930, 1937, 1944, 1947	
Powell Rouyn	Que.	1946	
Prairie Point	Alta.	1938	
Prince Albert	Sask.	1907, 1908, 1910, 1911, 1919, 1927, 1930, 1935, 1940, 1946	M.S. 1907, C.I. 1908, T.S.1910.
Prince Rupert	B.C.	1915, 1919, 1924, 1927, 1934, 1946	
Quebec A	Que.	1906, 1909, 1913, 1913, 1914, 1918, 1920, 1926, 1928, 1931	C.I. 1906.
Quebec B	Que.	1928, 1931, 1935, 1937, 1945	
Rainy River B	Ont.	1918, 1927, 1930	No longer available.
Rainy River C	Ont.	1938	
Redditt	Ont.	1914, 1918, 1926, 1930	
Reliance	N.W.T.	1945	
Repulse Bay	N.W.T.	1937	
Resolute Bay A	N.W.T.	1947	
Resolute Bay B	N.W.T.	1946	
Resolution B	N.W.T.	1922, 1931, 1943	Also known as Fort Resolution.
Resolution Island	N.W.T.	1928	
River Clyde	N.W.T.	1946	
Riverton B	Man.	1927, 1930	
Rivière-aux-Écorces	Que.	1932	Eclipse Station.
Rivière-du-Loup B	Que.	1918, 1920, 1926, 1931, 1937, 1945, 1947	
Roberval B	Que.	1926, 1935, 1945, 1947	
Rosetown	Sask.	1922, 1927, 1930, 1935, 1940, 1946	
Ste-Anne-des-Monts	Que.	1925, 1931	
Saint-Dominique	Que.	1946	
Saint John	N.B.	1907, 1912, 1918, 1926, 1931	
Saint John Harbour	B.C.	1939	
Saint John's	Nfld.	1941	
Ste-Justine	Que.	1947	
St-Michel-des-Saints	Que.	1947	
St-Pamphile	Que.	1947	
Sault Ste. Marie	Ont.	1916, 1918, 1926, 1930, 1937, 1945	
Savoff A	Ont.	1928, 1930, 1936	
Savoff B	Ont.	1928	
Schreiber	Ont.	1906, 1910, 1918, 1926, 1930	C.I. 1906.
Selkirk	Yukon.	1907, 1924, 1934	
Seven Islands	Que.	1920, 1925, 1935	
Shawinigan Falls	Que.	1947	
Shelburne	N.S.	1941	Naval Station.
Sicamous B	B.C.	1915, 1919, 1927, 1934, 1938	
Simpson A	N.W.T.	1910, 1923, 1931	M.S. 1910.
Sioux Lookout B	Ont.	1918, 1926, 1929, 1936	
Slidre Bay	N.W.T.	1947	
Smithers	B.C.	1915, 1919, 1927, 1934, 1939, 1946	
Southampton Islands	N.W.T.	1934, 1946	
Spragge	Ont.	1947	
Squamish A	B.C.	1924, 1934	
Squamish B	B.C.	1934	
Stanstead	Que.	1921, 1926, 1931	

Magnetic Stations and Occupations—Concluded

Station	*Location*	*Occupation*	*Remarks*
Stewart	B.C.	1924, 1927, 1934	
Stewart	Yukon	1907, 1924, 1934	C.I. 1907.
Stony Rapids	Sask.	1945	
Sudbury C	Ont.	1916, 1919, 1926, 1930, 1937, 1946	
Swan River A	Man.	1911, 1919, 1927, 1930, 1935, 1942	
Swift Current	Sask.	1911, 1919, 1927, 1930	
Sydney B	N.S.	1918, 1921, 1925, 1931	
Tantalus	Yukon	1907, 1924, 1934	
Taschereau	Que.	1914, 1918, 1928, 1936, 1945	
Tasekyoah Lake	N.W.T.	1947	
The Forks (Albany River)	Ont.	1929	
The Pas A	Man.	1908, 1919, 1922, 1927, 1930, 1935	C.I. 1908.
The Pas B	Man.	1935, 1937, 1945	
Three Rivers B	Que.	1928	
Tignish	P.E.I.	1921, 1925, 1931, 1940	
Triangle Island	B.C.	1939	
Truro	N.S.	1907, 1912, 1918, 1920, 1925, 1931	
T.S. Monument 56N	N.W.T.	1923, 1931	
Turkey Point	Ont.	1927	
Twin City Junction B	Ont.	1916, 1918, 1926, 1930, 1938, 1945	
Val d'Or	Que.	1946	
Vancouver	B.C.	1908, 1915, 1919, 1924, 1927	No longer available.
Vegreville	Alta.	1911, 1919, 1927	
Victoria	B.C.	1907, 1908, 1919, 1924, 1927	C.I. 1907 near U.S. C.G.S. 1903.
Victoria (Mt. Douglas)	B.C.	1924, 1927, 1934, 1939, 1946	
Victoria (Observatory)	B.C.	1946	D.O. Royal Oak.
Wabamun A	Alta.	1913, 1919, 1927	
Wabamun B	Alta.	1927	
Wakeham Bay	Que.	1928, 1937	
Warman	Sask.	1911, 1919, 1927	
Whitehorse	Yukon	1907, 1924, 1934	C.I. 1907.
White River B	Ont.	1918, 1926, 1930, 1938	No longer available.
White River C	Ont.	1938, 1945	
Winnipeg	Man.	1906, 1907, 1908, 1910, 1911, 1913, 1914, 1915, 1916, 1918, 1919, 1927, 1936, 1938, 1945	C.I. 1906–08. D.O. 1908.
Wolseley B	Sask.	1919, 1927	No longer available.
Wolstenholme (Eric Cove)	Que.	1934, 1937, 1946	
Woodstock B	N.B.	1926, 1931, 1936, 1940, 1945	
Wrigley A	N.W.T.	1923, 1931	
Yarmouth	N.S.	1912, 1925, 1931	
Yellowknife	N.W.T.	1947	Airport Station.

Magnetic Observations

Station	Lat.		Long.		Date	Declination Value		Inclination Value North		Horizontal Intensity Value
	°	′	°	′		°	′	°	′	γ
						West				
St. John's	47	31.8	52	45.0	1941.6	29	09.4	72	40.1	15927
Cape Race	46	39.4	53	04.2	1941.5	28	03.8	72	17.9	16233
Argentina	47	19.4	54	05.2	1941.7	29	58.0	72	34.9	16318
Gander	48	55.5	54	34.4	1941.7	29	32.8	74	24.1	14535
Mortier Bay A	47	11.1	55	05.2	1941.6	28	39.5	72	59.2	15709
Mortier Bay B	47	11.5	55	08.5	1941.5	31	02.2	72	47.2	15935
Battle Harbour	52	16.4	55	35.4	1941.6	33	15.9	75	26.9	13659
Cartwright	53	42.4	57	05.0	1946.5	34	18.4	76	49.5	12537
Louisburg (Lighthouse)	45	54.2	59	57.9	1940.7	26	45.9	73	43.9	15409
Louisburg (Lighthouse)	45	54.2	59	57.9	1945.6	26	34.0	73	37.2	15533
Charlottetown	46	14.0	63	07.4	1945.7	24	48.2	74	23.3	15162
Halifax	44	37.6	63	34.5	1940.7	22	59.2	73	34.2	15725
Tignish	46	56.4	64	02.0	1940.7	25	07.7	75	15.9	14326
Gaspé	48	49.9	64	29.4	1945.7	20	01.8	75	48.3	13925
Shelburne	43	44.8	65	19.8	1941.9	21	13.4	73	33.2	15744
Annapolis	44	45.0	65	31.2	1940.7	22	12.3	73	48.4	15628
Annapolis	44	45.0	65	31.2	1945.7	22	06.5	73	39.0	15724
Pangnirtung	66	08.7	65	44.3	1946.7	54	44.0	83	28.4	06531
Matapedia	47	58.5	66	57.8	1940.7	24	11.3	76	03.2	13712
Matapedia	47	58.5	66	57.8	1945.6	24	02.8	75	58.6	13802
Woodstock B	46	09.6	67	34.6	1940.8	21	31.9	75	13.5	14508
Woodstock B	46	09.6	67	34.6	1945.7	21	23.2	75	09.0	14585
River Clyde	70	27.2	68	34.6	1946.7	60	05.3	84	40.1	05297
Rivière-du-Loup	47	51.6	69	34.0	1945.7	22	29.1	76	10.1	13856
Rivière-du-Loup	47	51.6	69	34.0	1947.6	21	57.4	76	06.8	13835
St-Pamphile	46	58.0	69	46.9	1947.6	20	53.3	75	49.0	14063
Lake Harbour	62	50.7	69	52.0	1946.5	46	53.7	82	47.3	07237
Ste-Justine	46	25.0	70	21.3	1947.6	20	05.5	75	38.6	14265
Mégantic	45	34.0	70	53.5	1947.6	18	28.2	75	19.3	14494
Quebec B	46	48.0	71	15.0	1945.6	19	38.6	75	38.1	14333
Ayer's Cliff	45	09.6	72	01.5	1944.5	17	17.4	75	02.7	14825
Ayer's Cliff	45	09.6	72	01.5	1947.6	17	08.8	75	01.3	14842
Mistassini	48	54.5	72	13.1	1947.6	20	38.2	77	44.4	12419
Roberval	48	32.1	72	13.6	1945.6	19	57.6	76	57.6	13240
Roberval	48	32.1	72	13.6	1947.6	19	53.4	76	57.9	13238
Etah	78	18.9	72	44.0	1947.6	91	03.9	86	12.5	03682
Shawinigan Falls B	46	33.8	72	44.9	1947.6	16	09.6	75	59.3	14173
St-Michel-des-Saints	46	41.0	73	55.4	1947.6	11	08.0	76	17.2	15272
Huntingdon	45	05.6	74	10.0	1944.5	14	24.5	75	51.9	14381
Huntingdon	45	05.6	74	10.0	1947.6	14	14.5	75	49.6	14369
Parent	47	55.4	74	37.6	1945.7	16	21.9	77	18.9	12892
Ottawa B	45	15.0	75	42.5	1938.5	13	23.5	75	49.3	14214
Ottawa B	45	15.0	75	42.5	1939.5	13	23.4	75	48.5	14198
Ottawa B	45	15.0	75	42.5	1940.5	13	23.6	75	48.2	14205
Ottawa B	45	15.0	75	42.5	1941.5	13	23.8	75	48.4	14192
Ottawa B	45	15.0	75	42.5	1942.5	13	21.5	75	48.3	14192
Ottawa A	45	23.6	75	43.0	1938.5	14	28.2	75	34.5	14504
Arnprior	45	25.0	76	22.1	1947.7	13	10.7	75	39.9	14454
Cape Dorset B	64	13.6	76	34.0	1946.6	15	48.4	84	44.3	05368
Doucet B	48	13.6	76	35.3	1945.7	15	06.0	77	22.8	12918
Calabogie	45	15.4	76	38.1	1947.7	13	07.5	75	37.0	14515
Pembroke	45	49.3	77	07.0	1946.7			76	10.9	12918
Belleville B	44	07.1	77	22.6	1944.5	10	33.8	74	58.1	14930
Louvicourt Bridge	48	04.0	77	23.0	1946.6			77	29.0	12820
Wolstenholme	62	31.9	77	23.9	1946.6	35	37.7	83	24.3	06855
Belcourt	48	25.0	77	25.0	1946.6			77	50.5	12446
Pascalis Junction	48	06.0	77	33.0	1946.6			77	41.0	12602
Combermere	45	21.0	77	36.6	1947.7	10	42.0	75	47.7	14447
Val d'Or	48	06.0	77	48.0	1946.6			76	51.0	13593
Dubuisson	48	06.0	77	54.0	1946.6			77	20.3	12932
Pond Inlet	72	41.7	77	58.3	1946.7	76	31.3	86	22.5	03601
Amos	48	34.0	78	06.4	1946.6	13	28.4	77	39.9	12666
Malartic	48	08.8	78	07.8	1946.6	14	16.0	77	57.9	12332

Magnetic Observations—Continued

Station	Lat.		Long.		Date	Declination Value		Inclination Value North		Horizontal Intensity Value
	°	′	°	′		°	′	°	′	γ
						West				
St-Dominique	48	50.0	78	08.0	1946.6			77	56.2	12416
Port Harrison	58	27.3	78	08.5	1946.6	31	39.7	82	59.6	07639
Cadillac	48	14.0	78	19.0	1946.7			74	40.3	15864
Cape Smith	60	44.3	78	28.2	1946.6	34	32.4	83	55.8	06263
Lac Chicobi	48	51.0	78	30.0	1946.7			78	06.7	12190
Joanne Bousquet	48	13.0	78	39.0	1946.7			77	38.7	12666
Belleterre	47	20.0	78	41.0	1946.7			77	42.8	12548
Taschereau	48	40.2	78	41.1	1945.7	13	29.1	77	53.5	12472
Mattawa B	46	19.5	78	42.7	1945.8	10	30.5	76	34.4	13729
Powell-Rouyn	48	16.0	79	04.0	1946.6			78	04.0	12254
La Sarre	48	47.0	79	10.0	1946.8			78	00.1	12339
Beaverton	44	25.6	79	10.6	1947.7	09	12.8	75	09.2	15075
Huntsville	45	21.0	79	13.0	1946.7			75	50.7	14413
Agincourt	43	47.0	79	16.0	1938.5	07	35.1	74	51.3	15310
Agincourt	43	47.0	79	16.0	1939.5	07	33.8	74	51.7	15292
Agincourt	43	47.0	79	16.0	1940.5	07	32.3	74	52.0	15281
Agincourt	43	47.0	79	16.0	1941.5	07	32.4	74	51.5	15288
Agincourt	43	47.0	79	16.0	1942.5	07	31.4	74	50.0	15303
Agincourt	43	47.0	79	16.0	1943.5	07	30.8	74	49.8	15308
Agincourt	43	47.0	79	16.0	1944.5	07	30.1	74	48.6	15314
Agincourt	43	47.0	79	16.0	1945.5	07	27.7	74	48.0	15322
Agincourt	43	47.0	79	16.0	1946.5	07	25.5	74	48.1	15311
Agincourt	43	47.0	79	16.0	1947.5	07	22.3	74	46.7	15338
Port Colborne B	42	52.6	79	17.6	1944.6	07	28.9	74	12.5	15801
Port Colborne B	42	52.6	79	17.6	1947.7	07	23.2	74	13.2	15818
North Bay	46	18.8	79	26.0	1946.7			76	32.5	13769
New Liskeard A	47	30.6	79	40.4	1944.5	10	21.4	77	21.0	12954
New Liskeard A	47	30.6	79	40.4	1946.7			77	21.8	12924
Lake Temagami	47	04.0	79	47.0	1946.7			75	36.1	14890
Markstay B	46	30.6	80	32.7	1944.5	09	06.4	76	23.0	13934
Moose Factory	51	15.2	80	37.2	1945.7	18	25.5	80	07.1	10408
Owen Sound	44	33.8	80	53.8	1944.6	07	19.4	75	18.6	14892
Sudbury	46	30.9	80	59.6	1946.7			76	23.7	13936
Cochrane B	49	04.2	81	01.9	1944.5	10	41.0	78	10.9	12232
Port Stanley B	42	40.4	81	14.5	1944.6	04	04.1	74	26.2	15637
Port Stanley B	42	40.4	81	14.5	1947.7	03	55.2	74	24.6	15648
Goderich B	43	44.9	81	42.9	1944.6	05	55.9	74	41.0	15504
Dundas Harbour	74	31.3	82	23.9	1946.7	96	42.0	86	56.4	03065
Essex	42	10.4	82	49.9	1944.7	03	01.7	73	34.1	16505
Essex	42	10.4	82	49.4	1947.7	02	53.3	73	34.6	16495
Southampton Island	64	07.8	83	09.7	1946.6	40	57.0	85	42.5	04462
Croker Bay	74	32.3	83	35.0	1947.6	88	02.9	87	19.4	02800
Hearst B	49	41.1	83	40.1	1944.6	08	34.3	78	37.5	11873
Sault Ste. Marie	46	30.9	84	17.8	1945.7	04	32.4	76	50.9	13608
Arctic Bay	73	02.4	85	11.9	1946.7	85	09.8	87	27.3	02556
White River C	48	35.5	85	16.5	1938.5	05	25.6	78	05.8	12440
White River C	48	35.5	85	16.5	1945.7	05	14.3	78	01.8	12400
Slidre Bay	79	59.2	85	56.2	1947.6	09	24.4	87	24.6	02532
Goose Fiord	76	26.4	88	33.9	1947.6	94	38.5	88	33.9	01964
						East				
Twin City Jct. A	48	22.3	89	25.0	1938.5	01	08.9	77	44.4	12847
Twin City Jct. C	48	22.3	89	25.0	1939.5	01	11.5	77	46.6	12830
Twin City Jct. C	48	22.3	89	25.0	1945.7	01	16.5	77	39.4	12925
						West				
Port Leopold	73	52.6	90	17.4	1947.6	94	45.6	88	24.3	01668
Chesterfield B	63	20.3	90	42.5	1946.6	11	24.1	86	07.1	04080
						East				
Atikokan	48	45.3	91	37.1	1938.5	03	30.4	77	29.7	13123
						West				
Agnew River	70	38.0	92	35.3	1947.6	55	27.4	88	31.9	01527

Magnetic Observations—Continued

Station	Lat.		Long.		Date	Declination Value		Inclination Value North		Horizontal Intensity Value
	°	′	°	′		°	′	°	′	γ
						East				
Fort Ross	71	59.7	94	11.0	1946.8	38	03.8	89	17.3	00722
Churchill C	58	45.0	94	14.0	1945.5	03	47.6	84	05.7	06318
Rainy River C	48	43.3	94	35.0	1938.6	07	25.6	77	23.2	13258
						West				
Resolute Bay A	74	41.2	94	49.9	1947.6	101	14.5	89	03.8	00893
Resolute Bay B	74	41.1	94	53.4	1947.7	105	29.4	88	57.3	01087
Tasekyoah Lake	68	41.6	96	39.6	1947.6	11	42.4	88	27.2	00612
						East				
Winnipeg	49	51.9	97	07.7	1938.8	11	36.2	78	06.4	12643
Winnipeg	49	51.9	97	07.7	1945.6	11	22.1	77	57.6	12780
						West				
Freeman's Cove	75	11.5	98	03.9	1947.7	128	52.8	89	20.4	00677
Guillemard Bay	71	51.3	98	18.3	1947.6	38	35.7	89	31.6	00488
Allen Lake	73	41.0	98	26.9	1947.6	124	54.3	89	35.6	00412
						East				
Aberdeen Lake	64	38.9	99	34.8	1947.6	17	34.7	86	36.2	03589
Brandon B	49	52.0	99	59.0	1938.7	12	52.9	77	29.3	13259
						West				
Peddie Bay	75	11.0	100	39.0	1947.7	148	17.3	89	34.0	00438
						East				
The Pas B	53	50.0	101	14.0	1945.6	15	15.4	79	48.2	10814
Swan River A	52	06.8	101	15.5	1942.7	15	46.8	78	54.5	11843
Brochet Post	57	53.2	101	40.8	1945.7	16	29.6	82	26.8	08116
Estevan 49	49	08.8	102	59.2	1947.6	15	44.8	76	16.0	14360
Greely Haven	71	56.0	104	50.0	1947.6	61	39.5	88	29.4	00970
Cambridge Bay	69	07.2	104	57.2	1945.6	35	09.0	87	43.1	02425
Cambridge Bay	69	07.2	104	57.2	1947.6	36	11.1	87	37.7	02466
Prince Albert	53	11.7	105	47.9	1940.6	20	31.4	79	08.1	11566
Prince Albert	53	11.7	105	47.9	1946.8	19	56.4	79	08.1	11665
Assiniboia	49	38.2	105	59.1	1938.7	17	36.1	75	47.4	14996
Stony Rapids	59	14.8	105	53.2	1945.6	25	34.4	82	45.4	07690
Chaplin B	50	28.0	106	39.5	1938.7	19	09.4	76	37.6	14045
Île-à-la-Crosse	55	27.3	107	53.6	1945.7	22	25.4	79	40.1	10926
Rosetown	51	33.8	107	59.7	1940.6	20	46.1	76	59.0	13714
Rosetown	51	33.8	107	59.7	1946.5	20	21.7	76	57.4	13848
Goldfields	59	27.7	108	30.7	1940.6	24	57.8	82	08.7	08339
Reliance	62	42.2	109	09.7	1945.6	33	57.0	83	53.8	06507
Lloydminster A	53	17.4	110	00.0	1940.6	23	02.2	78	00.4	12625
Lloydminster A	53	17.4	110	00.0	1946.8	22	31.5	78	03.7	12700
Dunmore	49	58.5	110	35.6	1938.7	20	23.0	75	24.1	15144
Chipewyan	58	42.7	111	08.8	1940.5	25	19.3	81	01.8	09507
Coronation	52	06.5	111	26.8	1938.6	22	40.4	76	31.7	14109
Jolly Lake	64	07.8	112	04.2	1947.7	35	38.0	84	03.7	06256
Gleichen	50	52.2	113	03.3	1938.6	22	52.1	75	27.6	15117
Gleichen	50	52.2	113	03.3	1942.7	22	36.0	75	25.4	15135
Meanook*	54	37.0	113	20.0	1938.5	25	54.8	77	52.7	12726
Meanook	54	37.0	113	20.0	1939.5	25	51.6	77	53.2	12710
Meanook	54	37.0	113	20.0	1940.5	25	45.0	77	52.6	13719
Meanook	54	37.0	113	20.0	1941.5	25	38.7	77	52.5	12717
Meanook	54	37.0	113	20.0	1942.5	25	33.6	77	51.8	12729
Meanook	54	37.0	113	20.0	1943.5	25	29.3	77	51.8	12724
Meanook	54	37.0	113	20.0	1944.5	25	22.3	77	50.2	12752
Meanook	54	37.0	113	20.0	1945.5	25	16.1	77	49.7	12753
Meanook	54	37.0	113	20.0	1946.5	25	10.4	77	50.1	12792
Meanook	54	37.0	113	20.0	1947.5	25	02.2	77	48.6	12790
MacLeod	49	43.1	113	24.4	1940.6	22	12.9	74	32.1	15939
Resolution Bay	61	10.2	113	40.5	1943.6	35	49.3	81	56.0	08528
Point Lake	65	21.1	113	41.6	1947.7	40	25.8	84	17.2	05979
Lacombe A	52	27.6	113	45.0	1938.6	24	23.9	76	25.1	14137

Magnetic Observations—Concluded

Station	Lat.		Long.		Date	Declination Value		Inclination Value North		Horizontal Intensity Value
	°	′	°	′		°	′	°	′	γ
						East				
Lacombe A	52	27.6	113	45.0	1942.7	24	03.0	76	22.6	14157
Yellowknife	62	28.6	114	26.3	1947.6	33	23.3	82	30.9	07754
Fernie	49	30.2	115	04.0	1946.7	22	20.2	73	44.5	16632
Coppermine	67	48.8	115	09.2	1945.6	47	14.2	85	13.4	05016
Cranbrook C	49	31.0	115	46.5	1938.7	23	23.1	73	29.9	16762
Cranbrook C	49	31.0	115	46.5	1942.7	23	07.7	73	27.5	16765
Fort Rae	62	49.4	116	05.4	1945.5	35	51.8	82	41.2	07734
Prairie Point	58	15.6	116	28.6	1938.6	32	22.6	79	43.2	10826
Peace River	56	13.8	117	17.5	1938.6	29	42.7	78	09.1	12413
Cameron Bay	66	03.7	117	45.9	1945.6	44	27.5	83	45.3	06443
Jasper B	52	53.5	118	04.0	1939.5	25	58.6	75	28.7	14936
Jasper B	52	53.5	118	04.0	1946.7	25	28.0	75	29.7	14996
Midway	49	00.5	118	46.8	1938.7	23	29.8	72	18.3	17686
Sicamous B	50	50.3	118	58.4	1938.7	24	47.0	73	50.6	16354
Penticton	49	29.3	119	35.5	1938.7	24	36.2	72	38.2	17481
Penticton	49	29.3	119	35.5	1946.7	24	06.3	72	39.2	17541
Kamloops C	50	40.8	120	19.7	1939.5	24	47.6	73	13.7	16720
Kamloops C	50	40.8	120	19.7	1946.7	24	22.3	73	15.0	16722
North Bend B	49	52.7	121	25.8	1939.5	24	57.2	72	28.5	17501
Victoria (Mt. Douglas)	48	29.1	123	19.0	1939.5	23	59.2	70	55.7	18613
Victoria (Mt. Douglas)	48	29.1	123	19.0	1946.6	23	35.1	70	56.1	18683
Victoria (Observatory)	48	31.3	123	25.0	1946.6	23	21.7	70	50.9	18678
Smithers	54	46.7	127	09.3	1939.6	28	45.5	74	56.6	15147
Smithers	54	46.7	127	09.3	1946.6	28	22.5	74	57.3	15193
Ocean Falls B	52	21.3	127	40.3	1939.6	26	25.1	73	07.2	16628
Ocean Falls C	52	21.3	127	40.3	1946.6	25	53.2	73	08.2	16653
Cape Scott	50	46.2	128	24.6	1939.6	26	07.8	71	29.1	18245
Goose Island	52	00.2	128	24.9	1939.5	26	23.9	72	00.2	17870
St. John Harbour	52	11.3	128	30.1	1939.5	28	16.7	73	04.8	17041
Good Hope A	66	15.5	128	38.3	1943.7	39	22.9	81	39.5	08591
Camp 3 DOT	66	27.7	129	01.3	1943.7	41	52.3			
Triangle Island	50	52.2	129	04.7	1939.6	26	03.3	71	17.1	18172
Prince Rupert B	54	18.2	130	19.6	1939.6	28	25.2	73	33.5	16223
Prince Rupert C	54	18.2	130	19.6	1946.6	27	52.8	73	02.3	18406
Arctic Red River	67	26.7	133	44.2	1943.7	42	58.8	81	47.0	08450

Dominion Observatory,
Ottawa, Canada.
February, 1963.

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DEPARTMENT OF MINES AND TECHNICAL SURVEYS
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Compiled by

E. R. Niblett and P. A. Forsyth

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Foreword

This report has been prepared on behalf of the subcommittee on Geomagnetism (Chairman: P. H. Serson) and the subcommittee on Aeronomy (Chairman: P. A. Forsyth) of the Associate Committee on Geodesy and Geophysics. It has been compiled from material submitted by university departments and government institutions, and provides a summary of activity in geomagnetism and aeronomy since the last national reports were issued in the spring of 1960. The work of commercial companies in exploration and interpretation is not reported. Annual reports on geomagnetism and aeronomy have appeared in the Canadian Geophysical Bulletin (Garland, 1960, 1961, 1962) published by the National Research Council.

Part I. Geomagnetism

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1. Geomagnetic Surveys

1.1. Ground Surveys of the Dominion Observatory

During the field seasons of 1960, 1961, and 1962 about fifty Dominion Observatory repeat stations and many additional locations were occupied for observations of declination, dip, and total intensity. These data are intended primarily for estimation and mapping of secular change.

The Observatory also conducted a special magnetic survey in the vicinity of the north magnetic dip pole in 1962 to determine its present position and rate of movement. Measurements of direction and intensity were made at six locations within 100 miles of the pole. Corrections for geomagnetic time variations were based on the records of Resolute Bay Magnetic Observatory. A preliminary estimate of the pole position for epoch 1962.5 is 75.1°N lat., 100.8°W long. (near the southwest corner of Bathurst Island).

Several local surveys have been completed to provide declination information for navigation and to study geological formations or other areas of special interest.

1.2. Airborne Surveys

The Dominion Observatory's three-component airborne magnetometer surveys of 1960 and 1961 are shown in Figures 1 and 2. A total of nearly 100,000 line miles was flown. The altitude of the observations was generally 10,000 feet.

The Geological Survey of Canada continued its low-level total-intensity surveys, and covered about 115,000 line miles in 1960 and 1961. The areas now surveyed are shown in Figure 3.

A new program to cover the Canadian Precambrian Shield with total-intensity aeromagnetic surveys was put forth by the Geological Survey in 1960 (Figure 3). In this plan both federal and provincial governments contribute to the cost. Flight lines are spaced ½ mile apart, and the average terrain clearance is 1,000 feet. The 1962 surveys included about 30,000 line miles over the Polar Continental Shelf in the Arctic, which are not shown on the map.

1.3. Sea Magnetometer Surveys

Total-intensity surveys were made at sea by the Geological Survey in cooperation with the Canadian Hydrographic Service and the Institute of Oceanographic Research in 1960, 1961, and 1962 (Figure 3). At the present time, a total of 50,000 line miles has been surveyed off the eastern continental shelf of Canada by hydrographic ships equipped with proton precession magnetometers.

A preliminary proton magnetometer survey of Lake Huron was made in 1962 by the University of Western Ontario.

2. Magnetic Charts and Compilation by the Dominion Observatory

An isogonic map at a scale of 100 miles to the inch depicting lines of equal magnetic declination and annual change for Canada, epoch 1960.0, has been published (Dawson, 1960a).

A magnetic declination chart of the Canadian Arctic has been compiled for the Canadian Hydrographic Service, and published (Dawson, 1960b).

To cope with the enormous amount of three-component aeromagnetic data being produced, the routine computations in chart compilation are now done on an IBM computer. Aeromagnetic data from 1953 to 1961 inclusive are entered on punched cards, each card containing position coordinates, G.M.T., altitude, three observed components (D, H,Z), and four computed components (X,Y,F,I). The component values represent 5-minute averages along the flight line. A machine program which sorts

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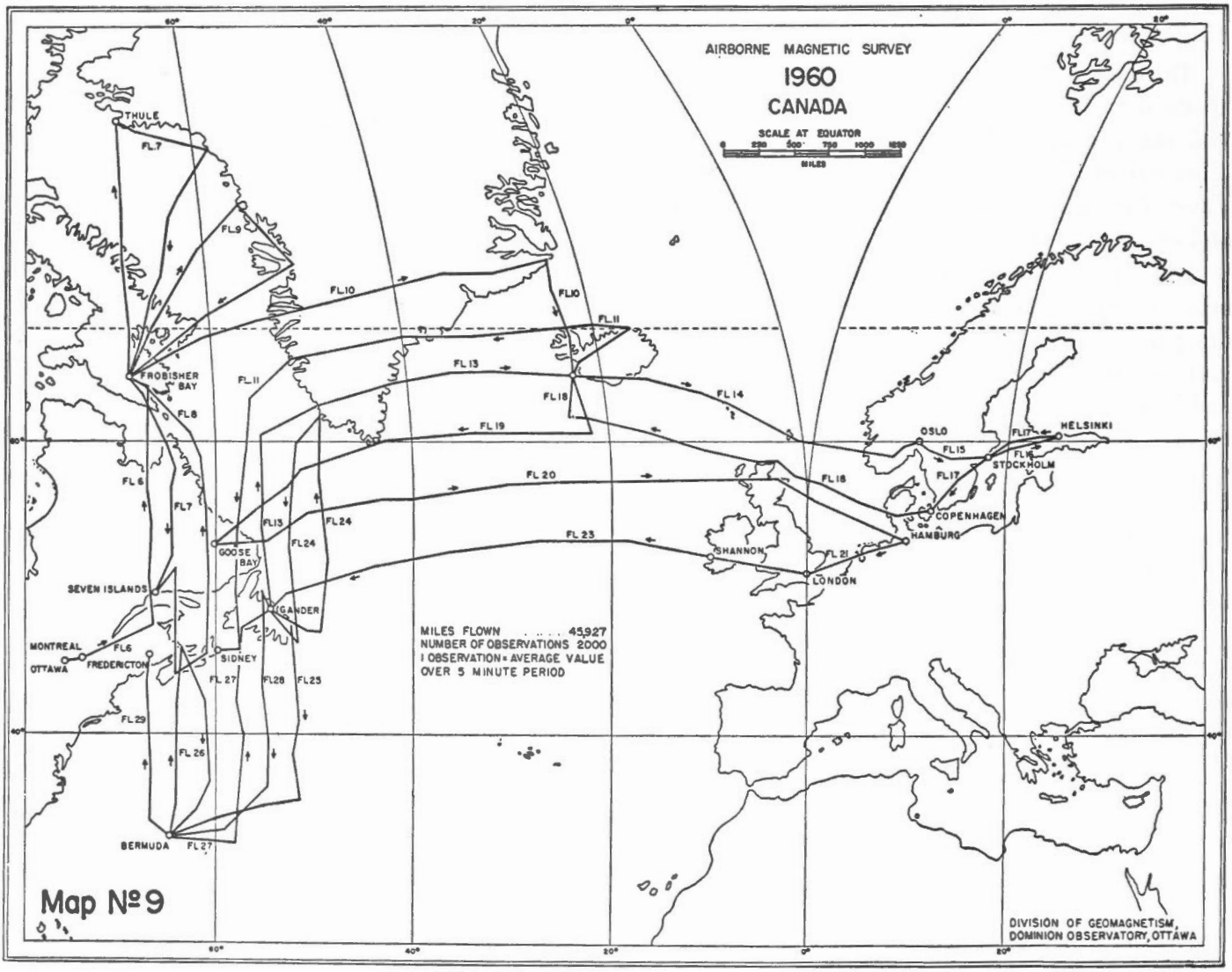

FIGURE 1. Three-component aeromagnetic surveys in 1960.

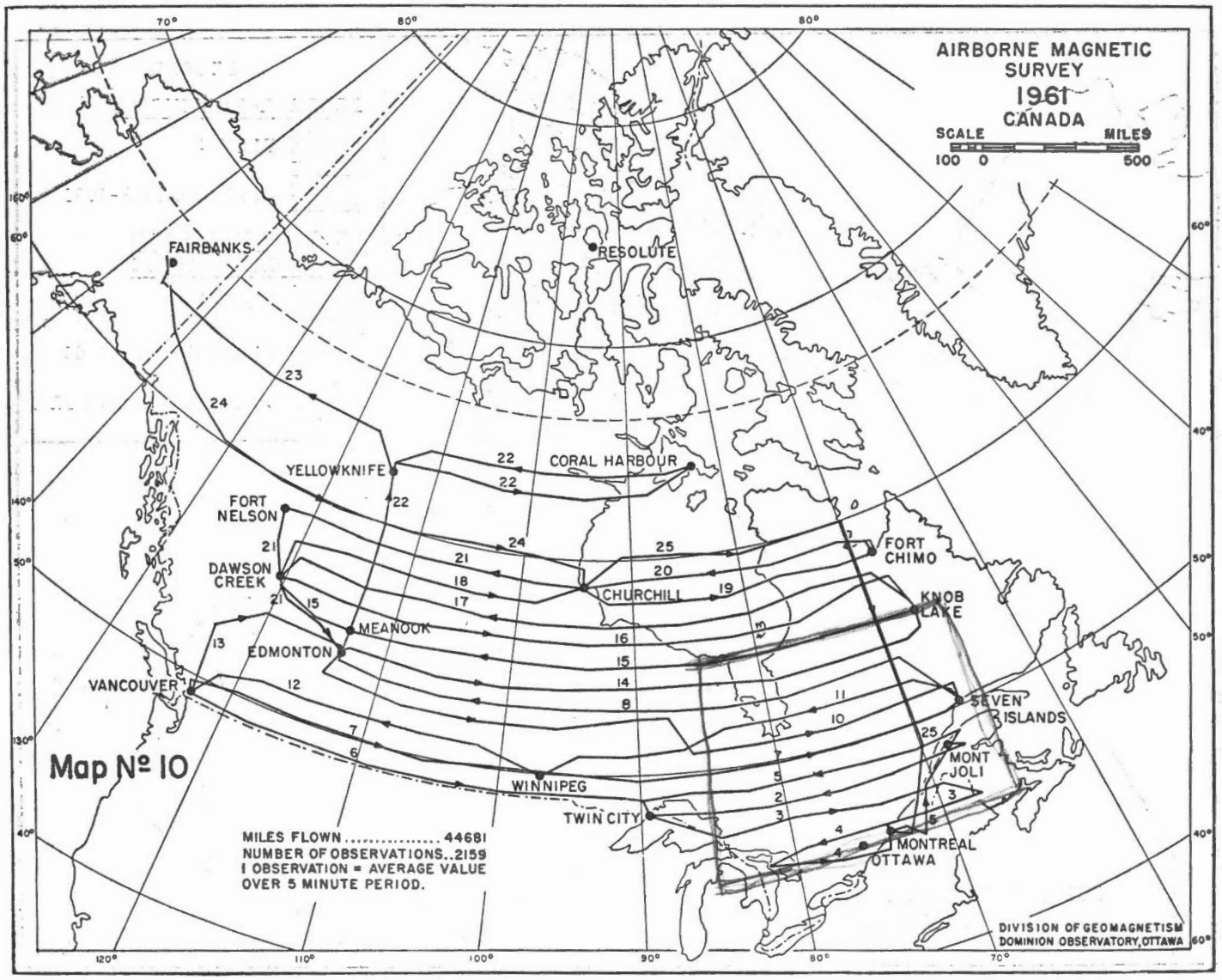

FIGURE 2. Three-component aeromagnetic surveys in 1961.

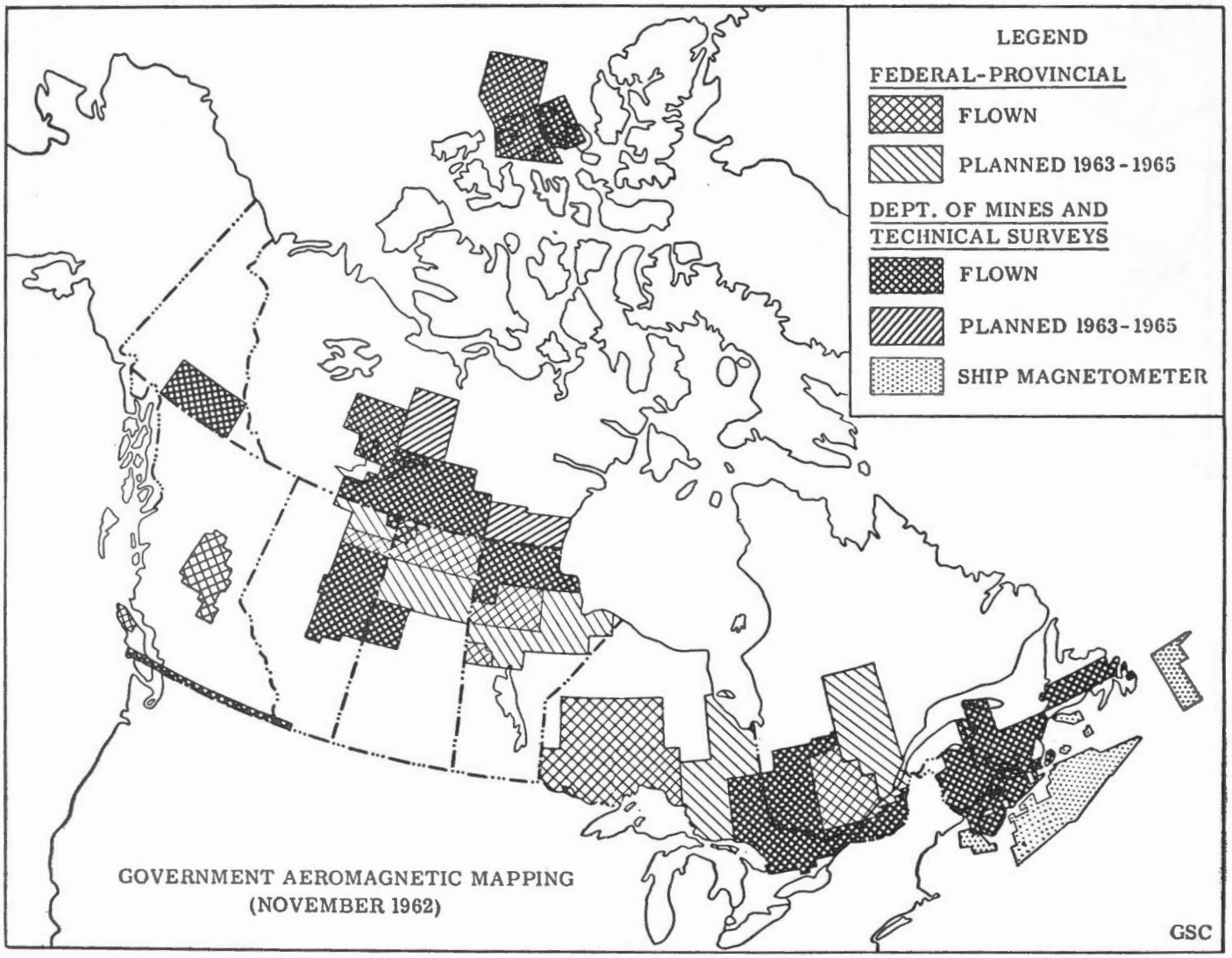

FIGURE 3. Low-level total intensity surveys.

the observations, reduces them to epoch by applying secular change corrections, and smooths them for mapping, has been devised and tested.

3. Magnetic Observatories

The five observatories at Agincourt, Meanook, Victoria, Baker Lake, and Resolute Bay were in continuous operation. In addition, three-component standard-run photographic variometers were operated at Churchill by the Defence Research Board. Two new Arctic observatories were established by the Dominion Observatory in the latter part of 1961. These are at Alert on the northern end of Ellesmere Island (82.5°N, 62.5°W) and Mould Bay on Prince Patrick Island (76.2°N, 119.4°W).

Magnetic observatory results during the International Geophysical Years, 1957 and 1958, have been published for Agincourt, Victoria, Yellowknife, Baker Lake, Resolute Bay, and Churchill. Other observatory publications include the Victoria results for 1959 and 1960, Resolute Bay for 1959, Agincourt and Meanook for 1938-39, and Agincourt for 1955-56. Q indices for selected days during the IGY at Resolute Bay, Baker Lake, and Yellowknife, have also been published. These publications are listed in the bibliography.

The disturbance indices, K, are supplied to I.A.G.A. Committee No. 9 on a routine basis for Agincourt, Meanook and Victoria. Mean annual values for all observatories are supplied to Committee No. 4. Monthly reports of special events (pulsations, bays, S.S.C., etc.) are supplied to Committee No. 10 for Agincourt, Meanook, and Victoria.

4. Developments in Magnetic Instruments

4.1. Dominion Observatory

A new gyro-stabilized platform for the three-component airborne magnetometer is under construction, making use of the improved gyroscopes now available. A Marconi Doppler Navigator has been incorporated into the instrument to supply more accurate ground-speed and drift information to the navigational computers.

A proton precession magnetometer has been developed which indicates and records the field intensity directly in gammas or tenths of gammas (Serson, 1961, 1962b). An experimental three-component proton precession magnetometer, which records a complete set of readings every minute on punched tape, has been successfully operated for periods up to 20 days. Digital computer programs for reduction of the data, rejection of erroneous readings and calculation of hourly means have been developed (Serson, 1962a). Improved circuits have been developed for transistorized portable fluxgate magnetometers, and progress has been made in the development of portable transistorized proton magnetometers.

A semi-automatic magnetogram reader has been designed and built and is now in use at Victoria Observatory (Caner and Whitham, 1962). With this system the operator tracks the magnetogram manually, while the machine computes hourly means, multiplies by the appropriate scale factor, adds baseline values, and types out the result in tabular form.

4.2. Geological Survey of Canada

A spinner-type magnetometer incorporating an air-driven turbine has been built. An astatic magnetometer has been completed for use in a regular laboratory building. The design includes special features to overcome the effects of large magnetic gradients and vibrations, and to reduce the time required for measurement.

A new proton magnetometer system for low-level aeromagnetic surveys has been developed. The signal from a proton magnetometer carried by a light aircraft or helicopter is telemetered by frequency-modulated radio, through an airborne repeater station to a ground station. Signals from a fixed proton magnetometer at the ground station are compared with the airborne signals, and the difference in magnetic fields is recorded. The system presents a great advantage in mountainous country, because complicated flight patterns can be flown according to the terrain without the necessity of control lines and datum adjustment. A survey of over 5,000 line miles was flown over Vancouver Island in 1962 using this system.

4.3. Other Developments

At the Pacific Naval Laboratory the development of low-noise, low-impedance micropulsation receivers has continued. Three-component systems for measurement of geomagnetic background between 0.01 and 30 cps (English *et al.*, 1961) are now in general use.

At the University of Alberta considerable effort has also gone into the design and construction of optimum coils and photo-cell amplifers for detecting pulsations. Signals are recorded on seven-channel magnetic tape recorders in the field. A high-speed multi-channel analog-digital conversion system has been built to prepare records for computer analysis.

Barringer Research Limited of Toronto has developed and made commercially available a portable transistorized proton precession magnetometer which reads total intensity directly in tens of gammas. The instrument is battery operated and features very low power-consumption (Barringer and Kagan, 1961).

5. Interpretation of Aeromagnetic and Ship Magnetometer Surveys

5.1. Geological Survey of Canada

Geologic-aeromagnetic correlation studies have been completed and published for several map-areas in the Northwest Territories (MacLaren, 1961, 1962a, 1962b).

A preliminary report (MacLaren) has been completed for the interpretation of the "Roads to Resources" area in northwestern Ontario, surveyed in the federal-provincial program. Magnetic-susceptibility and specific-gravity data from 7,500 rock samples from this area, as well as other petrographic and geochemical data are being used in further correlation studies.

Interpretation of an aerial magnetic and radiometric survey in the Arctic Archipelago has been completed and published (Gregory, Bower and Morley, 1960). An interpretation of the reconnaissance ship magnetometer data taken in Hudson Bay in 1961 indicates the existence of a sedimentary trough in the central part of the bay extending to a maximum depth of about 10,000 feet.

5.2. Institute of Oceanograhy, Dalhousie University

High-level aeromagnetic data from Dominion Observatory surveys and U.S. Project Magnet have been used in the investigation of the continental shelf and slope off the Canadian eastern seaboard and the region of the Mid-Atlantic Ridge. Large anomalies have been found on the continental shelf and slope north of Newfoundland and northeast of Newfoundland and Labrador. A large anomaly also appears over the Ridge in most of the flights. More detailed work at sea is being planned on the basis of these results.

5.3. Dominion Observatory

A quantitative evaluation and comparison of the techniques of base-looping and ground-monitoring for eliminating geomagnetic time variations from total-intensity flight records has been made (Whitham and Niblett, 1961).

A study has been done of the accuracy of three-component airborne magnetic measurements in relation to the problems of representing the geomagnetic field by world charts (Serson 1960). It is shown that airborne surveys can increase the accuracy of magnetic charts even in regions with a reasonable distribution of accurate observations on the ground.

6. Paleomagnetism and Rock Magnetism

6.1. Geological Survey of Canada and Dominion Observatory

A paleomagnetic study of Palaeozoic rocks from Prince Edward Island has been completed at the Geological Survey. Projects to study the structural history of the Sudbury Basin area (Hood, 1961) and the Lewis Thrust Plate of the Canadian Cordillera (Norris and Black, 1962a, 1962b) from paleomagnetic directions have also been completed. A paleomagnetic study of Proterozoic rocks from the Purcell system in southwestern Alberta, Saskatchewan, and British Columbia has been published (Black, 1962), as has a study of rocks from the Monteregian Hills in the Eastern Townships (Larochelle, 1962). Rocks from eleven geological units ranging from the Proterozoic to the Devonian in eastern and central Newfoundland have been measured for magnetization directions. Further specimens have been collected in Newfoundland and on the south coast of

Labrador. Oriented samples have also been collected in northern Yukon for an attempt to apply paleomagnetic data to the solution of structural geology problems.

At the Dominion Observatory, studies have been completed on the response of an astatic magnetometer to cylindrically-shaped rock specimens (Roy, 1963a) and on general design considerations in the construction of a sensitive astatic system (Roy, 1963b).

6.2. Canadian Universities

At the University of Western Ontario the magnetic properties of solid solutions of ilmenite and hematite have been investigated using natural and heat-treated crystals from the Allard Lake region in Quebec (Carmichael, 1961, 1962). A new range of composition in the solid solution series has been found to reverse its magnetic polarity with change in temperature.

The magnetization of a pyroxenite from Wilberforce, Ontario, has been found to be due to very fine needles of magnetite that have exsolved out of the pyroxene (Irwin, 1963). They have a high coercive force of 600 to 1,000 oersteds. Magnetic minerals responsible for the magnetization of some plateau basalts from India are being studied.

Precambrian and early Canadian basic intrusives in Ontario are being studied for determination of ancient pole positions for rocks that can be dated by radiogenic means. This work is part of the Canadian contribution to the Upper Mantle Project.

At the University of Toronto a study of magnetic properties of Precambrian diabase dykes was completed (Strangway, 1961). The direction of stable remanent magnetization was found to be close to the strike of the dyke, and an explanation of this was based on the demagnetizing effect of the shape of the dyke and the presence of magnetic minerals with different Curie temperatures. An investigation of the effect of temperature on remanent magnetization has been made (Krause, 1960).

Work has begun at the University of Manitoba on regional magnetic anomalies, and on the distribution of magnetic properties in the rocks of various tectonic regions. The areas under study are the boundary between the Superior and Churchill geologic provinces, and the Keewatin lava belts in eastern Manitoba and adjacent parts of Ontario. Aeromagnetic maps of these localities are being used for analysis as well as the measured magnetic properties of oriented rock specimens collected at regular intervals, and vertical-force magnetic-field measurements made at the collection sites. One of the objectives is to see if major structures at depth in the Canadian Shield are reflected in the magnetic anomalies.

At the Saskatchewan Research Council and the University of Saskatchewan, theoretical work has been completed on the interpretation of magnetic anomalies over sheet-like bodies with arbitrary direction of polarization and unknown base level (Hall and Vawter, 1961; Mader, 1962).

At the University of Saskatchewan, oriented rock specimens from the orebody at Coronation Mine and nearby are being used to study the influence of geological and geochemical conditions on magnetic properties of rocks.

7. The Main Geomagnetic Field and Secular Variation

At the Universities of Toronto and Waterloo, theoretical studies have been made of the effects of changes of the magnetic field at the core-mantle boundary on the earth's rate of rotation, due to electromagnetic coupling of the mantle to the core (Rochester, 1960, 1962). Changes in the length of day at a rate of a fraction of a millisecond per decade can be accounted for by the observed rate of secular variation. A study of the effect of the conductivity distribution in the mantle on the tightness of the core-mantle coupling has shown that a time constant as low as 10 years is consistent with the conductivity profile as presently estimated (Roden, 1961). The possibility of exciting the free nutation (Chandler Wobble) of the earth's axis of rotation via electromagnetic coupling has been investigated. The maximum torque available was found to be much too weak to provide the observed motion of the pole of rotation.

8. Geomagnetic Disturbance, Pulsations, and Aurora

8.1. Conjugate Point Experiments

During January 1961 the Pacific Naval Laboratory of the Defence Research Board and Stanford University carried out a cooperative experiment to measure electromagnetic background noise from 0.003 cps to 15 kc at Byrd Station, Antarctica, at its near conjugate, Great Whale River on the eastern shore of Hudson Bay, and at Churchill, Manitoba (Lokken *et al.*, 1961). The three stations are in the auroral zones. PNL equipment measured three components of micropulsations in the frequency band from .003 cps to 3 cps, and the vertical component in the ELF band between 2 and 30 cps (Lokken *et al.*, 1962a). Single components of micropulsations were also recorded at the mid-latitude stations, Ottawa and Albert Head (near Victoria). The Stanford equipment covered the VLF band from 15 cps to 15 kc.

Between 0.003 and 3 cps, two classes of micropulsations (impulsive bursts and regular signals) have been recognized. The distribution of these with latitude, their association with visible aurora, and their degree of similarity at conjugate stations, have been reported (Lokken, Shand and Wright, 1962a, 1962b).

Between 2 and 30 cps, the first three modes (8, 14, and 20 cps) of earth-ionosphere cavity resonance were conspicuous on the records from Byrd and Great Whale (Lokken *et al.*, 1961; Lokken, Shand and Wright, 1962a, 1962b). A notable feature of these records was the occurrence of large-amplitude bursts of one or two seconds duration which appear to show remarkably high coincidence between conjugate points.

8.2. Power Spectra, Coherence, and Statistical Studies at the Pacific Naval Laboratory

Measurements were made to study the coherence of micropulsations over a 46-km path near Ralston, Alberta, in 1960. Phase difference in horizontal components with periods of about 30 seconds suggests the presence of a conductivity anomaly. A further analysis of power spectra, coherence, and phase relationship has been done for daytime micropulsation activity at Albert Head and Borrego Springs, California, using simultaneous data (Lokken, 1961). Spatial variations in geomagnetic micropulsations have also been studied between Albert Head, Bear Creek on Vancouver Island, Borrego Springs, Summerland in interior British Columbia, and Ralston in Alberta (Duffus *et al.*, 1962).

Investigations of relative magnitudes of vertical and horizontal components of micropulsations indicate that low values of Z/H are associated with regions of uniform conductivity and permeability, while high values are associated with gradients and discontinuities (Duffus *et al.*, 1962). However, for measurements made in the valley and delta of the Fraser River (Christoffel *et al.*, 1961) the expected decrease of Z/H on the land side of a land-sea interface was not obtained. A theoretical investigation has been made of the variation of Z/H in a model earth, consisting of a flat semi-infinite conductor divided into two regions of different conductivity by a vertical plane normal to its surface (Weaver, 1963). Simultaneous measurements on the east coast near Halifax, and on Sable Island, were made in 1962; and in this case the observations were consistent with theoretical predictions. Near the auroral zone, high values of Z/H can be attributed to the distribution of current sources in the ionosphere as well as to geological features (Dosso and Lokken, 1961; Lokken, Shand and Wright, 1962a; Weaver, 1961).

8.3 Studies at the University of British Columbia

In cooperation with PNL, a permanent observing station has been established at Westham Island, 25 miles south of Vancouver, where rapid changes in the magnetic field—with periods from about 0.3 to 100 seconds—are recorded on chart paper and magnetic tape. Equipment has also been installed to extend the frequency range to 40 cps when required.

Diurnal and world-wide characteristics of geomagnetic micropulsations recorded during the IGY have been derived (Jacobs and Sinno, 1960a, b), and the equivalent overhead current systems which may give rise to the micropulsations have been constructed.

Conspicuous micropulsations in the auroral zones with periods from 0.03 to 10 seconds have been

studied and grouped into four classes. Possible physical mechanisms have been suggested for the generation of each class.

Further investigations on the L.M.T. or U.T. dependence of magnetic pearl-type oscillations have been made (Jacobs and Jolley, 1962). In many cases the onset of pearls appeared to be entirely dependent on L.M.T. No relationship was found between their occurrence and other upper-atmosphere phenomena.

A detailed study of world-wide changes in the geomagnetic field has been carried out (Nishida and Jacobs, 1962a, b, c). Particular attention has been given to their equatorial enhancement, and theories of their origin have been considered.

The equations of small hydromagnetic oscillations in cylindrical coordinates with the main magnetic field lying in the plane perpendicular to the axis of the cylinder have been derived (Westphal and Jacobs, 1962), and the eigenperiods of toroidal oscillations as a function of latitude were obtained without making any approximations. Using an electronic computer the calculations have been extended to the case of a non-uniform plasma density distribution and to the case of a dipole field deformed by the solar wind to lie within the magnetosphere.

A number of theoretical investigations on hydromagnetic wave propagation in the lower exosphere have been made (Jacobs and Watanabe, 1962). It has been shown that hydromagnetic waves with certain special frequencies incident in the polar regions may be selectively amplified in the upper atmosphere. Pearl-type magnetic pulsations may arise from the finite bard width of the characteristic frequency. The law of electric conduction for transverse waves propagated along a strong external magnetic field in a slightly ionized gas has also been investigated (Watanabe, 1961a, b). These results are applicable to the ionosphere which is slightly ionized and permeated by the terrestrial magnetic field.

8.4 Studies at the University of Alberta

At the University of Alberta, analyses of micropulsation pearls has shown that they can sometimes be highly stable oscillations containing at least two distinct time-independent spectral bands, each with a Q of 20 or more (Vozoff, Ellis, and Garland, 1962). Their polarization indicates that they are waves that have travelled through refractors slowly varying in time. The amplitude envelope does not appear to be due to the addition (beating) of two such distinct bands.

A set of cooperative experiments by the University of Alberta, the University of British Columbia, the University of Texas and PNL was made in 1960 to study areal coherence of magnetic pulsations (Smith, 1962). Although the interval turned out to be too quiet magnetically, it was found that there was sometimes a very strong resemblance, and high spectral coherency between fields in Texas, Arizona, and southern Alberta.

8.5 Geomagnetic Disturbances and Aurora

In a study of IGY auroral and geomagnetic data at the University of Toronto, a close correlation was established in space between individual auroral displays and the ionospheric current paths associated with simultaneously occurring geomagnetic storms (Sobouti, 1961).

This work is being extended at the Dominion Observatory where a study of the position and intensity of the auroral electrojet is in progress, using data from North American and polar-cap magnetic observatories operated during the IGY.

8.6 Other Studies of Magnetic Time Variations

A unifying theory of high-latitude geophysical phenomena, including geomagnetic agitation and bay disturbances, aurorae, and various irregular distributions of ionospheric electrons, has been developed by Defence Research Board scientists (Axford and Hines, 1961).

A study of the complicated surface distribution of irregular geomagnetic disturbance (agitation) and of sudden commencement impulses has also been made at DRB (Hope, 1961).

At PNL a comparison between geomagnetic fluctuations and records of ionospheric soundings at Victoria has been published (Shand, 1962).

At the Dominion Observatory a study of hourly range data in three components for the year 1960 has been completed for the Canadian magnetic observatories at Victoria, Meanook, Churchill, Baker

Lake and Resolute Bay (Loomer and Whitham, 1962). An account of the large geomagnetic disturbances at Canadian observatories in November 1960 was published (Niblett, 1961).

9. Magnetic and Electric Field Variations and Upper Mantle Conductivity

At the University of Alberta, vertical electric field variations have been monitored by placing electrodes in a bore-hole, and significant signals which correlate with magnetic activity have been recorded (Garland and Webster, 1960; Garland, 1962). Magneto-telluric measurements have been used with considerable success to estimate the depth to basement and to major conductivity variations within the sediments of the Alberta basin. The effects of complex or non-uniform fields on conductivity interpretations of the Cagniard type are under investigation.

A combined field operation was carried out in 1961 by the Universities of British Columbia, Alberta, and California (Berkeley) and PNL to measure simultaneous magnetic and electric variations at six field stations in the plains of Alberta. The stations were about 100 km apart and in an approximately north-south line. Apparent-resistivity analyses made at two of the stations indicated a three-layer earth model, the bottom layer being of reduced resistivity at a depth of 60-70 km.

Studies of the vertical boundary problem in magneto-telluric theory have been made at the University of Alberta (Rankin, 1962) and PNL (Weaver, 1962). The theory of electromagnetic induction in a conducting cylinder located in the near field of an alternating line current has been developed (Weaver, 1961).

For the Upper Mantle Project, magneto-telluric investigations are being continued in western Canada by the University of Alberta and the Dominion Observatory. Also planned is a joint program among Canadian universities to detect and investigate anomalous mantle conductivity by using closely spaced networks of magnetic (three-component) variation stations.

At Alert on Ellesmere Island the anomaly in the level of irregular magnetic activity first noted during the IGY, has been investigated further by the Dominion Observatory (Whitham and Andersen, 1962). Analysis of additional three-component observations in the vicinity of Alert indicates that the effect is of internal origin and is caused by a large body of anomalous conductivity striking parallel to the channel separating northern Ellesmere Island from Greenland. Another conductivity anomaly appears to exist near Mould Bay on Prince Patrick Island, and this is being investigated by the techniques of spectral analysis. Further field work in the area is planned.

10. Electromagnetic and Electrical Prospecting Methods

10.1 Geological Survey of Canada

Field equipment for groundwater prospecting is being developed. One system is designed to measure the polarizability of earth materials, in particular the membrane polarization of clays. Another electromagnetic system will measure variations in radiation resistance of a loop as it is passed over the ground. These variations depend to a large extent on changes in the permittivity of the ground.

A laboratory program to study the membrane polarization mechanism of clays and rocks has been started. Scale-model studies in both continuous wave and pulse methods are in progress.

On the theoretical side, studies of the electromagnetic fields of a magnetic dipole over both a homogeneous and layered earth are in progress. Investigations on the radiation resistances of vertical magnetic and horizontal electric dipoles placed over a homogeneous earth have been completed. Analysis of some theoretical aspects of electrode polarization in rocks has also been made.

10.2. University of Alberta

Numerical methods of directly interpreting conventional resistivity surveys were extended to the use of linear programming techniques (Vozoff, 1960). These are currently being applied to groundwater problems at the Alberta Research Council.

10.3. Dominion Observatory

Conventional resistivity measurements were made across the crater formation at Holleford, near Kingston, Ontario, during 1961 and 1962. The results suggest a meteoric rather than a volcanic origin for the formation.

Bibliography

ADAMS, R. D., AND CHRISTOFFEL, D. A., 1962, Total magnetic field surveys between New Zealand and the Ross Sea: *J. Geophys. Res.*, **67**, 805.

AXFORD, W. I., AND HINES, C. O., 1961, A unifying theory of high-latitude geophysical phenomena and geomagnetic storms: *Can. J. Phys.*, **39**, 1433.

BARRINGER, A. R., AND KAGAN, S., 1961, Measurement of magnetic fields: Canada Patent No. 628,289.

BLACK, R. F., 1962, Paleomagnetism in that part of the Purcell System in Southwestern Alberta and Southeastern British Columbia: *Geol. Surv., Canada*, Bull. 84.

BOWER, M. E., 1962, Sea magnetometer surveys of the Grand Banks of Newfoundland, Burgeo Bank and St. Pierre Bank: *Geol. Surv., Canada*, Paper 61–30.

CANER, B., AULD, D. R., AND KISSINGER, D. V., 1963, Record of observations at Victoria magnetic observatory for 1960: *Pub. Dom. Obs.*, Ottawa, **27**, No. 8.

CANER, B., AND LOOMER, E. I., 1961, Record of observations at Victoria magnetic observatory for 1957–58: *Pub. Dom. Obs.*, Ottawa, **24**, No. 9.

CANER, B., AND WHITHAM, K., 1962a, A semi-automatic magnetogram reader: *J. Geophys. Res.*, **67**, 5362.

———1962b, A geomagnetic observation of a high altitude nuclear detonation: *Can. J. Phys.*, **40**, 1846.

CARMICHAEL, C. M., 1961, The magnetic properties of illmenite-hematite crystals: *Proc. Roy. Soc., A*, **263**, 508.

———1962, The magnetization of solid solutions of illmenite in hematite, Proc. Conf. Magnetism and Crystallography, Kyoto, Japan, *J. Phys. Soc., Japan*, **17**, (Supp).

CHRISTOFFEL, D. A., JACOBS, J. A., JOLLEY, E. J., KINNEAR, J. K., AND SHAND, J. A., 1961, The Fraser Delta experiment of 1960, *PNL Rept.* 61–5.

DAWSON, E., 1960a, Isogonic chart of Canada, Epoch 1960.0 *Pub. Dom. Obs.*, Ottawa.

———1960b, Magnetic chart of the Canadian Arctic, *Can. Hydrographic Serv.*, Ottawa.

DEUTSCH, E. R., AND WATKINS, N. D., 1961, Direction of the geomagnetic field during the Triassic period in Siberia, *Nature*, **189**, 543.

DOSSO, H. W., AND LOKKEN, J. E., 1961, The resultant field at the surface of a flat conductor for an incident plane wave, *PNL Rept.* 61–1.

DOULOFF, A. A., 1961, The response of a disc in a dipole field, *Geophysics*, **26**, 452.

DUBOIS, P. M., 1962, Paleomagnetism and correlation of Keweenawan rocks, *Geol. Surv., Canada*, Bull. 71.

DUFFUS, H. J., AND KINNEAR, J. K., 1960, The effect of geomagnetic fluctuations on magnetic detection—a preliminary study, *PNL Rept.* 60–9.

DUFFUS, H. J., KINNEAR, J. K., SHAND, J. A., AND WRIGHT, C. S., 1962, Spatial variations in geomagnetic micropulsations, *Can. J. Phys.*, **40**, 1133.

———1962, Short range coherence of geomagnetic micropulsations, *Can. J. Phys.*, **40**, 218.

DUFFUS, H. J., SHAND, J. A., AND WRIGHT, C. S., 1960a, Influence of geological features on very low frequency geomagnetic fluctuations, *Nature*, **186**, No. 4719.

———1960b, Geomagnetic fluctuations recorded on magnetic tape during storms, *PNL Rept.* 60–6.

———1960c, Fluctuations of the geomagnetic field in the frequency range 0.02—3 cps, *PNL Rept.* 60–7.

———1962, Short range coherence of geomagnetic micropulsations, *Can. J. Phys.*, **40**, 218.

ENGLISH, W. N., EVANS, D. J., LOKKEN, J. E., SHAND, J. A., AND WRIGHT, C. S., 1961, Equipment for observation of the natural electromagnetic background in the frequency range 0.01—30 cycles per second, *Instrument Soc. Amer.*, Reprint No. 18–TC–61.

GARLAND, G. D. (Editor), 1960, Canadian Geophysical Bulletin, *Assoc. Comm. Geod. Geophys., NRC*, Ottawa, vol. 10.

———(Editor), 1961, Canadian Geophysical Bulletin, *Assoc. Comm. Geod. Geophys., NRC*, Ottawa, vol. 11.

———(Editor), 1962a, Canadian Geophysical Bulletin, *Assoc. Comm. Geod. Geophys.*, NRC, Ottawa, vol. 12.

———1962b, Natural earth currents and electric logging, *Bull. Can. Inst. Min. Met.*, Jan. 1962.

GARLAND, G. D., AND WEBSTER, T. F., 1960, Studies of natural electric and magnetic fields, *J. Res., Nat. Bur. Standards*, **64D**, No. 4.

GREENHOUSE, J. P., 1961, The Devon Island Expedition. Measurements of the electrical resistivity of ice-formations, *Arctic*, **14**, 259.

GREGORY, A. F., 1960, Geological interpretation of aeroradiometric data, *Geol. Surv., Canada*, Bull. 66.

GREGORY, A. F., BOWER, M. E., AND MORLEY, L. W., 1962, Geological interpretation of aerial magnetic and radiometric profiles, Arctic Archipelago, Northwest Territories, *Geol. Surv., Canada*, Bull. 73.

GREGORY, A. F., MORLEY, L. W., AND BOWER, M. E., 1961, Airborne geophysical reconnaissance in the Canadian Arctic Archipelago, *Geophysics*, **26**, 727.

HALL, D. H., AND VAWTER, F., 1961, Calculation of the body parameters of a sheet with uniform arbitrarily directed magnetization, *31st Ann. Internat. Meeting, Soc. Explor. Geophys.*, Paper No. 43.

HOOD, P. J., 1961, Paleomagnetic study of the Sudbury basin, *J. Geophys. Res.*, **66**, No. 4.

HOPE, E. R., 1961, Low-latitude and high-latitude geomagnetic agitation, *J. Geophys. Res.*, **66**, No. 3.

IRWIN, G. J., 1963, An investigation into the rock magnetism of the Wilberforce pyroxenite, M.Sc. thesis, Univ. Western Ontario, London, Canada.

JACKSON, W. E. W., 1962, Record of observations at Agincourt and Meanook 1938–39, *Pub. Dom. Obs.*, Ottawa, **17A**, No. 1.

JACOBS, J. A., 1962, Characteristics of geomagnetic pulsations, *J. Phys. Soc., Japan*, **17**, Suppl. A–II, Intern. Conf. Cosmic Rays, Storm, pt. II, 55.

JACOBS, J. A., AND JOLLEY, E. A., 1962, Geomagnetic micropulsations with periods 0.3–3 sec. ('Pearls'), *Nature*, **194**, 141.

JACOBS, J. A., AND SINNO, K., 1960a, World wide characteristics of geomagnetic micropulsations, *Geophys. J.R.A.S.*, **3**, 333.

———1960b, Some characteristics of geomagnetic micropulsations Pc, *Nature*, **188**, 285.

———1960c, The morphology of geomagnetic micropulsations Pc, *I.A.G.A. Sympos., Rapid Magnetic Variations*, Utrecht, 1959, Vrania No. 250, Tarragona, 1960.

JACOBS, J. A., AND WATANABE, T., 1962, Propagation of hydromagnetic waves in the lower exosphere and the origin of short period geomagnetic pulsation, *J. Atmos. Terr. Phys.* **24**, 413.

KRAUSE, B. R., 1960, Measurement of the change in the remanent magnetic moment of rocks with temperature, M.A. thesis, Univ. Toronto.

LAROCHELLE, A., 1961a, Adoption of an astro compass for collection of oriented rock specimens, *Geol. Surv., Canada*, Topical Rept. 32.

———1961b, The design of a Curie point meter, *Geol. Surv., Canada*, Bull. 69.

———1962, Paleomagnetism of the Monteregian Hills, *Geol. Surv., Canada*, Bull. 79.

LOKKEN, J. E., 1961, Some preliminary remarks on the power spectum and coherence of daytime Pc activity, *PNL Rept.* 61–7.

LOKKEN, J. E., SHAND, J. A., AND WRIGHT, C. S., 1962a, The Pacific Naval Laboratory—Stanford University conjugate point experiment, *PNL Rept.* 62–4.

———1962b, A note on the classification of geomagnetic signals below 30 cps, *Can. J. Phys.*, **40**, 1000.

———1963, Some characteristics of electromagnetic background signals in the vicinity of one cycle per second, *J. Geophys. Res.*, **68**.

LOKKEN, J. E., *et al.*, 1961, Stanford Pacific Naval Laboratory conjugate point experiment, *Nature*, **192**, 319.

LOOMER, E. I., 1961, Record of observations at Resolute Bay magnetic observatory, 1957–58, with a summary of earlier observations, *Pub. Dom. Obs.*, Ottawa, **26**, No. 2.

————1963a, Record of observations at Fort Churchill magnetic variometer station, 1957–58, *Pub. Dom. Obs.*, Ottawa, **27**, No. 3.

————1963b, Record of observations at Resolute Bay for 1959: *Pub. Dom. Obs.*, Ottawa, **27**, No. 7.

LOOMER E. I., AND ANDERSEN, F., 1961, Record of observations at Baker Lake magnetic observatory for 1957–58, *Pub. Dom. Obs.*, Ottawa, **26**, No. 3.

LOOMER E. I., NIBLETT, E. R., AND WHITHAM, K., 1960, Record of observations at Yellowknife magnetic observatory for 1957–58, *Pub. Dom. Obs.*, Ottawa, **24**, No. 8.

LOOMER, E. I., AND WHITHAM, K., 1962, On certain characteristics of irregular magnetic activity observed at Canadian magnetic observatories during 1960, *Pub. Dom. Obs.*, Ottawa, **27**, No. 2.

MADER, D. M., 1962, A graphic method of magnetic interpretation, B.A. thesis, College of Engineering, Univ. Saskatchewan.

MACLAREN, A. S., 1961, Aeromagnetic-geologic correlation, Firedrake Lake, Northwest Territories, *Geol. Surv., Canada*, Map 1085A.

————1962a, Aeromagnetic-geologic correlation, Wholdaia Lake, Northwest Territories, *Geol. Surv., Canada*, Map 1127A.

————1962b, Aeromagnetic-geologic correlation, Beaverhill Lake, Northwest Territories, *Geol. Surv., Canada*, Map 1126A.

MORLEY, L. W., 1960, Prospecting for massive sulphide deposits with airborne electromagnetic devices, *Proc. U.N. Seminar on Aerial Survey Methods and Equipment*, Mineral Resources Ser. No. 12, Bankok.

NIBLETT, E. R., 1961, Geomagnetic variations between November 12 and November 16, 1960, *Can. J. Phys.*, **39**, 619.

NISHIDA, A., AND JACOBS, J. A., 1962a, World-wide changes in the geomagnetic field, *J. Phys. Soc., Japan*, **17**. Suppl. A–I, Intern. Conf. Cosmic Rays, Earth Storm., pt. I, 39–44.

————1962b, World-wide changes in the geomagnetic field, *J. Geophys. Res.*, **67**, 525.

————1962c, Equatorial enhancement of world-wide changes, *J. Geophys. Res.*, **67**, 4937.

NORRIS, D. K., AND BLACK, R. F., 1962a, Paleomagnetism and differential rotation in the Lewis thrust plate, *J. Alberta Soc. Petrol. Geol.*, **10**, No. 1.

————1962b, Applications of paleomagnetism to thrust mechanics, *Nature*, **192**, No. 4806.

PATERSON, N. R., 1962, Geological mapping by magnetometer surveys, *Benedum Sympos., Earth Magnetism*, Univ. Pittsburgh.

PLET, F. C., 1963, Q indices of magnetic activity at Resolute Bay, Baker Lake and Yellowknife magnetic observatories for selected days of the IGY, *Pub. Dom. Obs.*, Ottawa, **27**, No. 4.

RANKIN, D., 1962, The magneto-telluric effect of a dike, *Geophysics*, **27**, 666.

ROCHESTER, M. G., 1960, Geomagnetic westward drift and irregularities in the earth's rotation, *Phil. Trans. Roy. Soc. London, A*, **252**, 531.

————1962, Geomagnetic core-mantle coupling, *J. Geophys. Res.*, **67**, 4833.

RODEN, R. B., 1961, Stationary electromagnetic coupling between the earth's core and a mantle of variable conductivity, M.A. thesis, Univ. Toronto.

ROSS, W. E., AND EVANS, A. E., 1962, Records of observations at Agincourt magnetic observatory, 1957–58, *Pub. Dom. Obs.*, Ottawa, **23**, No. 3.

————1963, Record of observations at Agincourt magnetic observatory, 1955–56, *Pub. Dom. Obs.*, Ottawa, **23**, No. 4.

ROSS, W. E., ONHAUSER, A. A., AND ONHAUSER, M. H., 1963, Record of observations at Agincourt magnetic observatory, 1959–60, *Pub. Dom. Obs.*, Ottawa, **27**, No. 5.

ROY, J. L., 1963a, The response of an astatic magnetometer to a cylindrical rock specimen, *Nature*, **197**, 134.

————1963b, Measurement of the magnetic properties of rock specimens, *Pub. Dom. Obs.*, Ottawa, **27**, No. 9.

SERSON, P. H., 1960, Airborne surveys for world magnetic charts; Symposium on World Magnetic Survey, I.A.G.A., Helsinki, *Rept. Dom. Obs.*, Ottawa.

————1961, Proton precession magnetometer, Canada Patent No. 618,762; also U.S. Patent No. 3070745, 1962, France Patent No. 1,273,962, 1960, Great Britain Patent No. 901,052, 1960, South Africa Patent No. 60/2952, 1960.

————1962a, Method of making an electromagnetic measurement, Canada Patent No. 654,552.

————1962b, A simple proton precession magnetometer, *Rept. Dom. Obs.*, Ottawa.

SERSON, P. H., AND HANNAFORD, W. L. W., 1960, Magnetometer, Canada Patent No. 611,194.

SHAND, J. A., 1961, The electromagnetic background in the one cycle per second region, *PNL Rept.* 61–7.

————1962, A note on geomagnetic and ionospheric records, *Can. J. Phys.*, **40**, 1046.

SMITH, H. W. (Editor), 1962, Report of co-operative geomagnetic measurement program, Rept. No. 128, E.E.R.L., Univ. Texas.

SOBOUTI, Y., 1961. The relationship between unique geomagnetic and auroral events, *J. Geophys. Res.*, **66**, No. 3.

STRANGWAY, D. W., 1961, Magnetic properties of diabase dikes, *J. Geophys. Res.*, **66**, No. 9.

VOZOFF, K., 1960, Numerical resistivity interpretation, general inhomogeneity, *Geophysics*, **25**, No. 6.

————1961, Calibration of pulsation detector coils, *J. Geophys. Res.*, **66**, No. 6.

VOZOFF, K., ELLIS, R. M., AND GARLAND, G. D., 1962, Composition of 'pearls', *Nature*, **194**, No. 4828.

WATANABE, T., 1961a, Waves in a rarefied ionized gas propagated transverse to an external magnetic field, *Can. J. Phys.*, **39**, 1044.

————1961b, Alfven waves in partially ionized gases, *Can. J. Phys.*, **39**, 1197.

————1962, Law of electric conduction for waves in the ionosphere, *J. Atmos. Terr. Phys.*, **24**, 117.

WEAVER, J. T., 1961, The magnetic field at the surface of a conducting cylinder located in the near field of an alternating line current, with application to geomagnetic micropulsations, *PNL Rept.* 61–6.

————1962, A note on the vertical fault problem in magneto-telluric theory, *PNL Rept.* 62–1.

————1963, The electromagnetic field within a discontinuous conductor with reference to geomagnetic micropulsations near a coast line, *Can. J. Phys.*, **41**, No. 3.

WESTPHAL, K. O., AND JACOBS, J. A., 1962, Oscillations of the earth's outer atmosphere and micropulsations, *Geophys. J.R.A.S.*, **6**, 360.

WHITHAM, K., 1960, Canadian National Report in geomagnetism, 1957–60, *Pub. Dom. Obs.*, Ottawa, **23**, No. 4.

WHITHAM, K., AND ANDERSEN, F., 1962, The anomaly in geomagnetic variations at Alert, in the Arctic archipelago of Canada, *Geophys. J.R.A.S.*, **7**, 220.

WHITHAM, K., LOOMER, E. I., AND NIBLETT, E. R., 1960, The latitudinal distribution of magnetic activity in Canada, *J. Geophys. Res.*, **65**, No. 12.

WHITHAM, K., AND NIBLETT, E. R., 1961, The diurnal problem in aeromagnetic surveying in Canada, *Geophysics*, **26**, No. 2.

WRIGHT, C. S., 1962, The Antarctic and the upper atmosphere, *Scientific American*, **207**, No. 3.

Part II. Aeronomy

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1. Spectrographic and Photometric Studies

The principal centres for spectroscopic studies of the emissions from the upper atmosphere are at the University of Saskatchewan in Saskatoon and at the Defence Research Northern Laboratory at Fort Churchill. Much of the airborne work (using aircraft and balloons) is done at the Canadian Armament Research and Development Establishment at Valcartier, Quebec, and much of the laboratory work is done at the University of Western Ontario.

1.1 Twilight Emissions

Very faint natural lithium emission has been observed, along with some evidences for increases in November and January. In addition, a large increase was observed in November 1961, probably caused by a large thermonuclear explosion; and a very large increase in November 1962, almost certainly caused by an explosion at about 50 km. During this large increase the fine structure of the Li line was observed with a photoelectric interferometer, providing a positive identification of it. Li^6 only was detected; the abundance of Li^6 must be less than or equal its natural value of 7.5%. Potassium was also found for the first time; comparison of the abundances of Na, K, and Li favors a marine origin for the first two, and a meteoritic origin for Li. The seasonal variation of sodium abundance at 44° S. was found to be six months out of phase with the variation at 52° N.

The O–O band of the infrared atmospheric system of O_2 was observed from an aircraft at 13 km, both in the daytime and in twilight.

Simultaneous observations of ratio and brightness of the sodium D lines were made with a photoelectric interferometer. The results agree well with the theoretical predictions based on the assumption that the daytime abundance of Na is the same as during twilight.

1.2 Infrared Studies

Infrared spectra have been obtained in the 1.5 μ region with spectral slit widths of 25 Å. Temperatures for OH bands in this region were determined. The seasonal variation of the 1.58 μ O_2 atmospheric band was observed to have a strong mid-winter maximum.

As part of a program of airborne infrared solar spectroscopy, studies are being made of water-vapour absorption in the vicinity of the tropopause.

A series of observations have been made on high-altitude infrared airglow from a balloon platform at 100,000 feet. Seven balloon flights have yielded spectral data; three measurements covering the 4–8 micron range and four the 2–4 micron interval. The $\Delta V = 1$ sequence of OH has been seen both night and day and a series of other features at longer wavelengths have been observed which appear to be partly thermal and partly photochemical in origin. Features observed include emission bands at 3.25, 4.4, 4.8, 5.35, 5.45, 5.6, 5.9, 6.2, 6.5, and 7.7 microns. Most of the features are thermal radiation from atmospheric gases: CO_2 at 4.4 μ, O_3 at 4.8 μ, CH_4 and N_2O at 7.7 μ and water vapour from 6 to 6.5 μ. The 6.2 μ peak vanished after sunrise. Intermittently, signals have been observed near 5.3 microns. The 5.9 μ emission does not appear to be entirely due to water vapour whereas the 6.5 μ peak can be identified as water vapour.

Equipment has been constructed for high-altitude solar spectroscopy, for solar scattering measurements in the infrared, and for interferometric studies of airglow from 100,000 feet.

1.3 Studies of the N_2^+ Bands, and Temperature Measurements

The fluorescence of these bands in sunlit aurora and in undisturbed twilight was observed photoelectrically. Some auroral displays show no detectable effect; others do give a small effect, and it appears that these always lie above 130 km. Apparently N_2^+ ions are very rapidly removed below this height. Some evidence was found for twilight emission in 1958, but it has since disappeared. This phenomenon may occur in the F region, with the ionization produced by solar extreme ultraviolet.

N_2^+ rotational temperatures were measured photographically with short exposures, and photoelectrically with a direct-reading device which gives an indication in 1 second. A temperature profile for the atmosphere was constructed from 90 to 170 km.

Temperatures were also found from Doppler line widths of the forbidden oxygen lines. Values as high as 2000° K were found, and temperature gradients were observed in the vertical dimension of auroral forms.

A Fabry-Perot interferometer has been constructed by the National Research Council, Ottawa, in which fringes produced by the auroral green line (OI λ5577) are scanned by thermal expansion of the etalon. Kinetic temperatures of the OI atoms will be calculated from the observed widths of the fringes. This program will continue over the next sunspot cycle.

1.4 Studies of Hydrogen Emissions

High-speed patrol spectrograph observations have shown the existence of a systematic tendency for a zone of hydrogen emission to be located to the south of the brighter auroral forms before midnight. After midnight this zone of hydrogen emission may coincide with or lie to the north of the most southerly bright auroral forms.

1.5 Photometric Studies

Photometric measurements of auroral brightness fluctuations have continued at Saskatoon. Simultaneous recordings made with 4-minute and 1.5-degree fields of view have a high degree of correlation. Power spectrum analysis has shown that periodic fluctuation components with periods ranging from 4 to 15 seconds are common.

At Ottawa two airglow photometers have been designed and constructed by NRC—an "all-sky" photometer using a convex mirror, and a narrow-beam photometer that automatically scans the whole sky. Both use sensitive photomultipliers and narrow-band interference filters to isolate spectral regions of interest. The all-sky instrument gives an index of over-all intensity, while the narrow-beam scanner provides information as to the spatial distribution of airglow luminosity.

1.6 Laboratory Studies

Studies have been made on CO^+, BO, BN, SiN and O_2 band systems. Currently, intensity measurements are being made in the vacuum ultraviolet region on a number of band systems of N_2, N_2^+, CO and CO^+. A number of band systems have also been studied in the near infrared of N_2^+ and NO. Some band systems of CO, CO^+ and N_2 are being studied in the visible. A systematic study has also been made on the factors that influence a degree of dependence of the electronic transition moment upon internuclear separation, and some work has also been done on the placing of relative band strengths of CO^+, N_2 and N_2^+ spectra on an absolute scale by reference to the lifetime measurements.

An atlas of common and important diatomic molecular spectra is being prepared.

A 2-KeV lithium-ion accelerator is being used to study effects of rotational disequilibrium between lithium and nitrogen. A 100-KeV proton accelerator is being used to study the spectroscopy of the beam in a variety of target gases. The very feeble luminescence produced by the X-radiolysis of a variety of atmospheric gases is being studied spectroscopically.

1.7 Theoretical Studies

Franck-Condon factors, r-centroids and other quantities derived from vibrational wavefunctions and related to intensities of molecular spectra of important diatomic molecules are calculated routinely on electronic computers.

Studies have been made on Klein-Dunham potentials of a wide variety of molecular-energy states, and recently, wavefunctions derived by machine calculations from these molecular potentials have been produced and turned into Franck-Condon factors.

2. Photographic and Visual Studies of Aurora and Noctilucent Clouds

All-sky camera studies are carried out on a continuous basis at Ottawa (National Research Council), Saskatoon (University of Saskatchewan) and Churchill (Defence Research Northern Laboratories).

2.1 All-sky Camera Studies

At Ottawa, auroral occurrence and N-S position are tabulated for every quarter hour (U.T.). A machine has been built which plots on a map the auroral forms as traced out on a projection of the all-sky camera picture. A 16-mm all-sky camera using high-speed colour film has also been operating at the meteor observatory at Springhill, Ontario, since December 1961. As yet insufficient auroral data have been recorded to establish routine methods of reduction.

2.2 Visual Observations

Visual auroral observations were carried out on a routine basis by stations in the Meteorological Service and by volunteer individuals and groups. These observations are plotted on synoptic maps, using two maps per day, and the southern extent of aurora is read from these plots.

2.3 Noctilucent Cloud Observations

Some visual and photographic observations have been made at Saskatoon.

3. Radio Studies of Aurora

Radio and radar studies of aurora are carried out at a number of centres. Radar studies in the UHF band are concentrated mainly at Ottawa (Defence Research Telecommunications Establishment) and at Prince Albert (Prince Albert Radar Laboratory). Radar work in the VHF band has been carried out at Ottawa, Saskatoon, and Churchill by the National Research Council and at Saskatoon by the University of Saskatchewan. A number of bistatic radio studies of aurora have been carried out by the Defence Research Telecommunications Establishment and by the University of Saskatchewan.

3.1 Occurrence and Association with Optical Aurora

The IGY auroral radar network at 48 mc/s operated at four stations: Ottawa, Saskatoon, Baker Lake and Resolute. Since 1960 this program has continued at three stations, Ottawa, Saskatoon and Churchill. Processing these data by machine methods is continuing and this will provide a network study of auroral activity over half a solar sunspot cycle.

Studies have continued of radio aurora at frequencies near 500 and 1,000 mc/s by means of back-scatter or radar techniques, and, at the lower frequency, by means of the effect of auroral ionization on lunar reflected signals.

The bistatic radio systems have provided new information concerning the occurrence and distribution of the ionization responsible for radio reflections. The early results indicate that the "radio-auroral" zone is coincident with that for optical aurora. A significant degree of association was found between the luminosity of optical aurora and the strength of the scattered signal observed on a bistatic radio system.

3.2 Interpretation of Radio Reflections from Aurora

A theoretical study of radio scattering in aurora was carried out, in which both weak scattering and strong scattering were considered. The results of this study were used as the basis for a multi-frequency back-scatter experiment. The observations indicate the occurrence of both weak and strong scattering for radio frequencies between 30 and 100 mc/s.

4. Meteors

During the past three years most of the work in this field has been carried out by the National Research Council.

4.1 Visual and Photographic Studies

A visual team of nine observers has recorded meteors at the meteor observatory at Springhill, Ontario during selected periods of meteor shower activity. During the years 1960, 1961 and 1962, a total of 5,680 meteors were observed at Springhill and records of 22,700 meteors were received from cooperating groups at other places in Canada and

the United States. Meteor spectrophotography was carried out at Springhill in conjunction with the visual program and some twenty different spectrographs were used. Over forty new meteor spectra were added to the world total.

4.2 Radio Studies

A new high-power meteor radar with a peak power from 2–4 megawatts at a frequency of 32 mc/s was put into operation at Springhill, and used in conjunction with the visual and photographic program at the same station. Meteor echo rates recorded with this equipment ranged up to 5,000 per hour, and for the fast showers, over one third of the visual meteors observed had head echoes.

Operation of the low-power IGY meteor radar, peak power 20 kw at 30 mc/s was continued at Springhill on a 24-hour-per-day basis. Over 7 million meteor echoes have now been tabulated on IBM cards and an analysis of five years of records—October 1957 to September 1962—is being prepared. These are being correlated with the visual observations, which have also been machine tabulated.

4.3 Laboratory Studies

At the University of Western Ontario a 4,000- to 5,000-feet-per-second ballistic pellet range is being used to study some aspects of meteor physics in the laboratory. Particular attention is paid to the ablation from solids as they pass through gases and also the spectrum of the very bright flash of light emitted when the pellet is brought to rest on a target.

5. The Ionosphere

The principal centre for ionospheric studies is the Defence Research Telecommunications Establishment in Ottawa. Some studies relating to auroral absorption and radio-star scintillations have been carried out by the University of Saskatchewan, and others relating to the general morphology have been carried out at the National Research Council Laboratories.

5.1 Absorption

A network of riometer stations extending from Resolute Bay to Ottawa has continued in operation, and the data have been used in studies of auroral absorption, polar-cap absorption, and sudden commencement absorption. The polar-cap absorption events have also been studied in the ionosonde recordings, and a theoretical assessment of this type of absorption has been made.

Multiple-frequency measurements of the intense absorption sometimes observed during auroral displays were used to determine the effective heights of the absorbing region, which seemed to vary in a systematic way during each display.

5.2 Ionospheric Sounding

Vertical incidence sounding of the ionosphere has continued at several Canadian stations, and oblique sounding has been carried out on a routine basis on a number of paths in Canada, as well as on a trans-Atlantic path. A top-side sounder was successfully placed in orbit at 1,000 km height and the top-side of the ionosphere is being studied from 0.5 to 12 mc/s in a routine manner. On suitable occasions the records are used with bottom-side soundings to give a complete electron density profile. Data from the vertical incidence sounding and top-side sounding program are being sent to the World Data Centre at Boulder, Colorado.

Studies of oblique sounding and of various scatter modes of propagation are being pursued with an aim to improve communications reliability.

Studies of the D region are being pursued during normal and disturbed conditions by means of the partial-reflection technique, and by monitoring the phase of standard low-frequency transmissions.

5.3 Radio-star Scintillations

An analysis of several years of scintillation data obtained at a station near the auroral zone (Saskatoon) indicated that there was a marked change in the altitude-angle dependence of the scintillations over a period of four years, presumably in response to changing auroral conditions.

Another study of the scintillations observed during aurora indicated that at such times there are strong fluctuations in phase imposed upon the radio waves passing through the auroral ionosphere.

5.4 General Morphology

Statistical work has been carried out by the National Research Council in analyzing standard ionospheric sounding records and correlating these with various phenomena of the atmosphere.

6. Sun-Earth Relations

Studies of the relationship between solar eruptions and such terrestrial disturbances as geomagnetic storms, polar-cap absorption events, and magnetic impulses have continued at the Defence Research Telecommunications Establishment, with particular emphasis being placed on the solar radio noise data. The monitoring of solar noise emissions on a number of frequencies has continued and a phase-sweeping interferometer at 50 mc/s is being used to determine the direction of arrival of the noise emissions.

At the Algonquin Radio Observatory of NRC, the solar spectrum in the frequency range of 20 to 120 mc/s is sampled sequentially 100 times per second and recorded on moving 35-mm film. In order to increase the probability of recording important events with high time resolution the film speed is automatically increased from 2 ft/hr to 16 ft/hr whenever the 2,800 mc/s flux of the NRC solar patrol radiometer rises 5 flux units above the ambient flux level. Polarization of solar radio bursts is observed at 74 mc/s using an equitorially mounted crossed-yagi antenna. By introducing suitable phase delays right and left, circular as well as vertical and horizontal linear components are recorded. The orthogonal components are recorded without phase delays. From these six parameters, the state of polarization of the incident flux is determined by calculation. The film records are read visually and the solar events are classified by type, frequency range, and time of occurrence. Selected events are scanned by a densitometer for detailed study. The relationship between the meter wavelength spectrum and the 2,800 mc/s solar flux is also studied. This program will continue through the next sunspot maximum.

7. Rockets and Satellites

At the Defence Research Telecommunications Establishment, rockets have been instrumented to measure radio absorption during ionospheric disturbances and at Churchill several have already been fired. A satellite experiment measured the intensity of cosmic radio noise at 3.8 mc/s. On September 29, 1962, a top-side sounding satellite, "Alouette" or 1962 Beta Alpha One, was successfully launched. This satellite also has a VLF receiver for the measurement of whistlers and ionospheric noise, a number of particle counters for an NRC experiment, and can measure cosmic and solar noise in the frequency range 0.5 to 12 mc/s.

Several other rocket experiments have been prepared or will soon be prepared by the laboratories of the National Research Council and the Universities of Toronto, Western Ontario, Saskatchewan and Alberta. These experiments include several different types of electron density measurement, energetic particle counting, magnetic field measurements, photometric and spectrographic observations, and micro-meteorite counting.

8. Cosmic Rays

Cosmic-ray measurements during the past three years include measurements on the ground near sea-level, on one mountain station, in rockets and in the Alouette satellite. Five ground stations have been in continuous operation since the beginning of the IGY. These are on Sulphur Mountain, near Banff, Alberta (operated by the University of Alberta, Calgary); at Churchill, Manitoba (operated by the National Research Council with the assistance of the Defence Research Northern Laboratory); at Resolute, in the Arctic Islands (operated by the National Research Council); at Ottawa (operated by the National Research Council); and at Deep River, Ontario (operated by Atomic Energy of Canada, Limited).

Each of these stations has a neutron monitor and a large cubical counter or scintillation telescope. The results from these are forwarded to the World Data Centre. Plans are in hand to replace the neutron monitors with super-neutron monitors having counting rates of nearly one million counts per hour.

Besides the above, narrow-angle telescopes are operated at Ottawa and underground experiments are carried out in an old mine near Banff. An extensive gamma-ray experiment is being carried out at the University of Manitoba, Winnipeg.

The National Research Council laboratories in Ottawa include a small nuclear emulsion group which has taken part in the International Cooperative Emulsion Flight Collaboration arranged by the University of Chicago.

A series of rocket experiments was carried out in 1958 and 1959 in which the background of cosmic rays was measured outside the earth's atmosphere and the particle content of aurora.

An energetic particle package for particle detection was flown in the satellite Alouette and is producing a great deal of data; at the time of writing very little of these have been published.

9. Theoretical Studies

The Defence Research Board Theoretical Studies Group concerned itself with a number of theoretical studies of hydromagnetic processes in the ionosphere, the magnetosphere and the interplanetary regions. Various aspects of upper atmospheric disturbances were examined and a unifying theory of storm phenomena was advanced. The role of internal gravity waves in upper atmospheric process was studied, as were the incoherent scattering of radio waves from electrons, and mechanisms for driving ionospheric current systems.

Bibliography

1. *Spectrographic and Photometric Studies*

ARMSTRONG, B. H. *et al.*, 1961. Radiative properties of high temperature air, *J. Quant. Spect., Rad. Transf.*, **1**, 143–162.

HAMPSON, JOHN, 1962, Photolysis of wet ozone and its significance to atmospheric heating of the ozone layer, *Third Internat. Congr., Aeronautical Sciences.*

HEBERT, G. R., AND NICHOLLS, R. W., 1961a, The λ2763A (0,9) band of the O_2 Schuman-Runge system, *J. Atmosph. and Terr. Phys.*, **21**, 213–215.

————1961b, Intensity measurements in emission on 29 bands of the O_2 Schumann-Runge system, *Proc. Phys. Soc.*, **78**, 1024–1037.

HERMAN, L., FERGUSON, H. I. S., AND NICHOLLS, R. W., 1961. Excitation of the first negative system of O^+_2 by a proton beam in air and oxygen, *Can. J. Phys.*, **39**, 476.

HUNTEN, D. M., 1962, Transmission functions for twilight studies, *J. Atmos. and Terr. Phys.*, **24**, 333–338.

HUNTEN, D. M., RAWSON, E. G., and WALKER, J. K., Rapid measurements of N^+_2 rotational temperature in aurora, *Can. J. Phys.* (submitted).

IYENGAR, R. S., AND SHEPHERD, G. G., 1961, Observations of auroral luminosity fluctuations, *Can. J. Phys.*, **39**, 1911.

JARMAIN, W. R., 1960, Klein-Dunham potential energy functions in simplified analytical form, *Can. J. Phys.*, **38**, 217–230.

————1963, Franck-Condon factors from Klein-Dunham potentials for bands of the Schumann-Runge system of O_2, *Can. J. Phys.*, **41**, 414.

JARMAIN, W. R., EBISUZAKI, R., AND NICHOLLS, R. W., 1960, Franck-Condon factors and r-centroids for some bands of the CO fourth positive ($A^1\Pi$–$X^1\Sigma$) band systems, *Can. J. Phys.*, **38**, 510–512.

JOHANSON, A. E. AND VALLANCE JONES, A., 1961, Variations with height and form of N^+_2 rotational temperatures in aurora, *Can. J. Phys.*, **40**, 24–32.

KULKARNI, P. V., 1962, An all-sky photometer, *Nature*, **196**, 363–364.

LYTLE, E. A., AND HUNTEN, D. M., 1962a, Observations of N^+_2 twilight and sunlit aurora, *Can. J. Phys.* (To be published in Vol. 40).

————1962b, Observations of N^+_2 twilight and sunlit aurora, *Can. J. Phys.*, **40**, 1370.

MCGREGOR, A. T., NICHOLLS, R. W., AND JARMAIN, W. R., 1961, Franck-Condon factors and r-centroids for some bands of the SiO $A^1\Pi$–$X^1\Sigma^+$ band system, *Can. J. Phys.*, **39**, 1215–1216.

MONTBRIAND, L. E., AND VALLANCE JONES, A., (in press), Studies of auroral hydrogen emissions in West-Central Canada, I. Time and geographical variations, *Can. J. Phys.*

NICHOLLS, R. W., 1959, Intensity measurements on molecular spectra and their evaluations, *Proc. Fifth Meeting and Conf., Internat. Comm. Optics*, Stockholm, Aug., Paper No. 62, 1–7.

————1960a, The interpretation of intensity distributions in the N_2 Lyman-Birge-Hopfield and CO fourth positive systems, *Nature*, **186**, 958–959.

————1960b, Franck-Condon ($q_{v'v''}$) arrays to high vibrational quantum numbers for the O_2 ($B^3\Sigma^-$ – $X^3\Sigma^+$) Schumann-Runge band system, *Can. J. Phys.*, **38**, 1705–1711.

————1961, Franck-Condon factors to high vibrational quantum numbers I: N_2 and N^+_2, *J. Res., Nat. Bur. Standards*, **65A**, 451–460.

————1962a, Laboratory astrophysics, *J. Quant. Spect., Rad. Transf.* (in press).

————1962b, Intensity measurements on molecular spectra, *Proc. Internat. Sympos. Molecular Structure, Spectroscopy*, Tokyo, Sept.

————1962c, Franck-Condon factors to high vibrational quantum numbers II: SiO, MgO, SrO, AlO, VO, NO, *J. Res. Nat. Bur. Standards*, **66A**, 227–231.

————1962d, Condon parabolae in molecular spectra, *Nature*, **193**, 966–967.

————1962e, Franck-Condon factors and r-centroids to high quantum numbers for bands of the $^2\Pi_g$ – $A^2\Pi_u$ system of N^+_2, *Can. J. Phys.*, **40**, 523–527.

———— (in press), Franck-Condon factors and r-centroids to high vibrational quantum numbers for three band systems of CO^+ and absolute band strengths for the comet-tail system, *Can. J. Phys.*

———— (in press), Franck-Condon factor surfaces for L_z B-X system, *J. Chem. Phys.*

NICHOLLS, R. W., AND STEWART, A. L., 1962, Allowed transitions, Ch. 2, 'Atomic and Molecular Processes' (ed. D. R. Bates), Academic Press, N.Y., 47–48.

NOXON, J. F., AND VALLANCE JONES, A., 1962, Observation of the (O,O) band of the ($^1\Delta_g$ – $^3\Sigma^-_g$) system of O_2 in the day and twilight airglow, *Nature*, **195**, 157.

REEVES, E. M., AND NICHOLLS, R. W., 1961, Measurement of rotational energy distribution in ionic collisions, *Proc. Phys. Soc.*, **78**, 588–593.

REEVES, E. M., NICHOLLS, R. W., AND BROMLEY, D. A., 1960, Optical excitation of N_2 by 0.5 to 1.5 MeV hydrogenic ions, *Proc. Phys. Soc.*, **76**, 217–222.

ROBINSON, D., AND NICHOLLS, R. W., 1960, Intensity measurements on the CO^+ comet tail and BO α and β molecular band systems, *Proc. Phys. Soc.*, **75**, 817–825.

————1961, Intensity measurements on overlapped bands, *J. Quant. Spect., Rad. Transf.*, **1**, 76–87.

SHEMANSKY, D. E., AND VALLANCE JONES, A., 1961, New measurements of the night airglow spectrum in the 1.5 μ region, *J. Atmos. Terr. Phys.*, **22**, 166–175.

SHEPHERD, G. G., 1960, A Fabry-Perot spectrometer for auroral and airglow observations, *Can. J. Phys.*, **38**, 1560.

SHEPHERD, G. G., PAULSON, K. V., AND NILSON, J. A., 1961, Stereoprojection systems for auroral height measurements, *Can. J. Phys.*, **39**, 1807–1816.

SMITH, K., MCEACHRAN, R. P., AND FRASER, P. A., 1962. Effect of virtual excitation of the 2s state on the elastic scattering of electrons by atomic hydrogen, *Phys. Rev.*, **125**, 553–558.

STEVENS, ANNE E., AND FERGUSON, H. I. S., (in press), Photoelectric intensity measurements upon bands of the SiN ($B^2\Sigma^+ - X^2\Sigma^+$) spectrum, *Can. J. Phys.*

SULLIVAN, H. M., AND HUNTEN, D. M., 1962a, Lithium twilight at Saskatoon, 1960–61, *Nature*, **193**, 1064–1065.

————1962b, Relative abundances of Li, Na, and K in the upper atmosphere, *Nature*, **195**, 589–590.

TINSLEY, B. A., AND VALLANCE JONES, A., 1962, The seasonal variation of the twilight sodium airglow in the Southern Hemisphere, *J. Atmos. Terr. Phys.*, **24**, 345–351.

TURGEON, E. C., AND SHEPHARD, G. G., 1962, Upper atmospheric temperatures from Doppler line widths – II. Measurements on the OI 5577 and OI 6300 Å lines in aurora, *Planet. Space Sci.*, **9**, 295–304.

VALLANCE JONES, A., Metallic emissions in the twilight and their bearing on atmospheric dynamics, *Planet. Space Sci.* (submitted).

————Observations of the O,O band of the $^1\Delta_g - {}^1\Sigma^-_g$ system of O_2 in the day and twilight airglow, *Nature* (submitted).

WALLACE, L. V., AND NICHOLLS, R. W., 1962, The interpretation of intensity distributions in the N_2 second positive of N^+_2 first negative band system, *J. Atmos. Terr. Phys.*, **24**, 749.

ZWICK, H. H., AND SHEPHERD, G. G., 1963, Ratio and absolute brightness measurements of the sodium E lines in the twilight glow, *Can. J. Phys.* (expect Feb.).

2. *Photographic and Visual Studies of Aurora and Noctilucent Clouds*

BAKER, K. D., AND CURRIE, B. W., 1961, An observation of noctilucent clouds in Western Canada, *Can. J. Phys.*, **39**, 1515.

BHATTACHARYYA, B. K., 1960a, Correlation studies of radio-aurora magnetic and earth current disturbances, *Can. J. Phys.*, **38**, 624–637.

————1960b, A study of auroral motions from all-sky camera records, *Can. J. Phys.*, **38**, 1279–1290.

————1961, Dipole-field type magnetic disturbances and auroral activities, *Can. J. Phys.*, **39**, 350–366.

CURRIE, B. W., 1962, The need for Canadian observations of noctilucent clouds, *J. Roy. Astron. Soc. Can.*, **56**, 141–147.

PARK, F. R., 1961, An all-sky camera for auroral photography, *J. Roy. Ast. Soc. Can.*, **55**, 203–210.

SHEPHERD, G. G., PAULSON, K. V., AND NILSON, J. A., 1961, Stereoprojection systems for auroral height measurements, *Can. J. Phys.*, **39**, 1807.

3. *Radio Studies of Aurora*

BLEVIS, B. C., AND CHAPMAN, J. H., 1960a, Characteristics of 488 megacycles per second radio signals reflected from the moon, *J. Res. Nat. Bur. Standards, 64D*, No. 4, 331-334.

————1960, U.H.F. radar propagation research. Avionics research: satellites and problems of long range detection and tracking, (ed. by E.V.D. Glazier, E. Rechtin, and J. Voge), Pergamon Press.

————1961, On the statistical properties of optical and radio aurora, *Can. J. Phys.*, **39**, 1423–1428.

FORSYTH, P. A., 1960, On the geometry of radio reflections from aurora, *Can. J. Phys.*, **38**, 593.

FORSYTH, P. A., GREEN, F. D., AND MAH, W., 1960, The distribution of radio-aurora in central Canada, *Can. J. Phys.*, **38**, 770.

HECTOR, F., AND FORSYTH, P. A., 1961, On the statistical properties of optical and radio aurora, *Can. J. Phys.*, **39**, 1423–1428.

INGALLS, R. P., BIRD, L. E., AND DAY, J. W. B., 1961, Band pass measurements of a lunar reflection circuit, *Proc. IRE*, **49**, 631–632.

KELLY, P. E., HANSEN, D. R., AND FORSYTH, P. A., 1961, The azimuthal distribution of ultra-high frequency radar echoes from aurora, *Can. J. Phys.*, **39**, 1535–1543.

LOCKWOOD, G. E. K., 1961, Determination of radar auroral heights with the Prince Albert radar, *Can. J. Phys.*, **39**, 1725.

LYON, G. F., 1962, The effect of absorption and multiple scattering on radio-auroral observations, *Can. J. Phys.*, **40**, 739–748.

LYON, G. F., AND FORSYTH, P. A., 1962, Radio-auroral reflection mechanisms, *Can. J. Phys.*, **40**, 749–760.

MCNAMARA, A. G., 1958, A continuously recording automatic auroral radar, *Can. J. Phys.*, **36**, 1–8.

————1960, An analysis of some statistical properties of auroral radar reflections and their relationships to the detection capabilities of the radar, *Can. J. Phys.*, **38**, 425–438.

————1961, Auroral radar observations at 48 mc/s during the period of the 12 November, 1960, solar event, *Can. J. Phys.*, **39**, 625–627.

MOORCROFT, D. R., 1961a, Models of auroral ionization. I Auroral ionization models and their radio-reflection characteristics, *Can. J. Phys.*, **39**, 677.

————1961b, Models of auroral ionization. II Applications to radio observations of aurora, *Can. J. Phys.*, **39**, 695.

SERSON, H. V., AND BLEVIS, B.C., 1961, Observations of auroral ionization during the period November 11–16, 1960, *Can. J. Phys.*, **39**, No. 4, 622–625.

4. *Meteors*

MCINTOSH, B. A., 1961, Analysis of a type of rough-trail meteor echo, *Can. J. Phys.*, **39**, 437–444.

————1962, The meteoric head echo, *J. Atmos. Terr. Phys.*, **24**, 311–315.

MCKINLEY, D. W. R., AND WEBB, E. L. R., 1961, Reduction of meteor velocities from continuous-wave radio records, *Monthly Notices, Roy. Astron. Soc.*, **122**, 255–262.

MCNAMARA, A. G., AND MCKINLEY, D. W. R., 1959, The effect of trail irregularities on the interpretation of meteor echoes, *J. Atmos. Terr. Phys.*, **16**, 156–159.

MILLMAN, P. M., 1959a, Note on some observational characteristics of meteor radio echoes, *J. Geophys. Res.*, **64**, 2192-2194.

————1959b, The contents of space near the earth, *Can. Aeronaut. J.*, **5**, 358-362.

————1959c, Meteor news, 1959, *J. Roy. Astron. Soc. Can.*, **53**, 137-141, 181-183, 271-276.

————1959d, Visual and photographic observations of meteors and noctilucent clouds, *J. Geophys. Res.*, **64**, 2122-2128.

————1960, Meteor news, 1960, *J. Roy. Astron. Soc. Can.*, **54**, 39-41, 189-192, 247-248.

————1961, Meteor news, 1961, *J. Roy. Astron. Soc. Can.*, **55**, 137-140, 195-196, 229-231, 265-267.

————1962a, Meteor news, 1962, *J. Roy. Astron. Soc. Can.*, **56**, 226-228, 263-267.

————1962b, Find a 'Fallen Star', *Roundel*, **14**, No. 6, 16-20.

————1962c, The meteor radar echo—an observational survey, *Astron. J.*, **67**, 235-240.

MILLMAN, P. M., AND HALLIDAY, I., 1961, The near-infra-red spectrum of meteors, *Planet. Space Sci.*, **5**, 137-140.

5. *The Ionosphere*

AXFORD, W. I., AND REID, G. C., 1962, Polar-cap absorption and the magnetic storms of February 11, 1958, *J. Geophys. Res.*, **67**, 1692.

BARRINGTON, R. E., AND NISHIZAKI, T., 190a, The hydrogen ion effect in whistler dispersion, *Can. J. Phys.*, **38**, 1642.
————1960b, Whistler dispersion and exospheric hydrogen ions, *J. Geophys. Res.*, **65**, 2581.
BARRINGTON, R. E., AND THOMPSON, W. E., 1962, Whistlers and magnetic activity, *Can. J. Phys.*, **40**, 775.
BELROSE, J. S., 1962, Phase measurements of CW transmission at 80 Kc over a 1900 km path, *Proc. IRE*, **50**, 1713.
BELROSE, J. S., AND CETENER, E., 1962, Measurements of electron densities in the ionospheric D-region at the time of a 2^+ solar flare, *Nature*, **195**, No. 4842, 688.
BELROSE, J. S., AND ROSS, D. B., 1961, Observations of unusual low-frequency propagation mode on 12 November, 1960, *Can. J. Phys.*, **39**, 609.
————1962, Observations of unusual low-frequency propagation mode during polar-cap disturbance (PCD) events, *J. Phys. Soc. Japan*, **17**, A–1, p. 126.
BROWN, R. R., *et al.*, 1961, Large-scale electron bombardment of the atmosphere at the sudden commencement of a geomagnetic storm, *J. Geophys. Res.*, **66**, 1035.
COLLINS, C., AND JELLY, D. H., 1961, Ionospheric disturbance at the time of cosmic ray increases, *Nature*, **189**, 4759, 128.
COLLINS, C., JELLY, D. H., AND MATTHEWS, A. G., 1961, High-frequency radio wave black-outs at medium and high latitudes during a solar cycle, *Can. J. Phys.*, **39**, 35.
FORSYTH, P. A., AND PAULSON, K. V., 1961, Radio-star scintillations and the auroral zone, *Can. J. Phys.*, **39**, 502.
FULTON, B. J., AND PETRIE, L. E., 1961, The analysis of transient modes of propagation across the auroral zone, *J. Geophys. Res.*, **66**, 2321–2327.
HAGG, E. L., 1963, A preliminary study of the electron density at 1000 kilometers, *Can. J. Phys.*, **41**, 195.
HAGG, E. L. AND ROLFE, W., 1963, A study of trans Atlantic radio propagation modes at 41.5 mc/s, *Can. J. Phys.*, **41**, 220.
HARTZ, T. R., 1963, Multi-station riometer observations of the atmosphere, (ed. J. Aarons), North-Holland Publ. Co., Amsterdam, p. 220.
HERTZBERG, L., 1960, The possible importance of nitric oxide formation during polar-cap ionospheric absorption events, *J. Geophys. Res.*, **65**, 3505.
JELLY, D. H., 1962, Polar-cap absorption events identified from H.F. vertical ionosonde data, *J. Phys. Soc. Japan*, **17**, A–1, p. 122.
JELLY, D. H. AND COLLINS, C., 1962, Some observations of polar cap absorption in the northern and southern hemispheres, *Can. J. Phys.*, **40**, 706.
JELLY, D. H., MATTHEWS, A. G., AND COLLINS, C., 1962, Radio wave absorption in the ionosphere, Pergamon Press, London, p. 206.
JULL, G. W., *et al.*, 1962, Frequency sounding techniques for HF communications over auroral zone paths, *Proc. IRE*, **50**, 1676–82.
LOCKWOOD, G. E. K., 1962, A ray-tracing investigation of ionospheric Z-mode propagation, *Can. J. Phys.*, **40**, 1840.
————1963, Plasma and cyclotron spike phonomena observed in topside ionograms, *Can. J. Phys.*, **41**, 190.
LOCKWOOD, G. E. K., AND PETRIE, L. E., (in press), Low latitude field aligned ionization observed by the Alouette topside sounder, *Planet. Space Sci.*
MONTALBETTI, R., AND MCEWEN, D. J., 1962, Hydrogen emissions and sporadic E layer behaviour, *J. Phys. Soc. Japan*, *17* A–1, p. 212.
MOORCROFT, D. R., 1963, Radio-star fadeouts on phase-switching interferometer records, *J. Geophys. Res.*, **68**, 111.
MOORCROFT, D. R., AND FORSYTH, P. A., 1963, On the relation between radio-star scintillations and auroral and magnetic activity, *J. Geophys. Res.*, **68**, 117.
MULDREW, D. B., 1963, The relationship of F layer critical frequencies to the intensity of the outer Van Allen belt, *Can. J. Phys.*, **41**, 199.
MULDREW, D. B., AND MALIPHANT, R. G., 1962, Long distance one hop ionospheric radio wave propagation, *J. Geophys. Res.*, **67**, 1805–1815.
NELMS, G. L., 1963, Scale heights of the upper ionosphere from topside surroundings, *Can. J. Phys.*, **41**, 202.
ORTNER, J., *et al.*, 1962, Cosmic noise absorption accompanying geomagnetic storm sudden commencements, *J. Geophys. Res.*, **67**, 4169.
PETRIE, L. E., 1963, Topside spread echoes, *Can. J. Phys.*, **41**, 194.
RASTOGI, R. G., 1960, Abnormal features of the F_2 region of the ionosphere at some southern high latitude stations, *J. Geophys. Res.*, **65**, 585–592.
————1960b, Asymmetry between the F_2 region of the ionosphere in the northern and southern hemispheres, *J. Geophys. Res.*, **65**, 857.
————1960c, Propagation of radio waves reflected from the ionosphere during a solar eclipse, *Geofis. Pura e Appl.* milan, **45**, 123–152.
————1960d, A synoptic study of the F-2 region of the ionosphere in the Asian zone, *J. Atmos. Terr. Phys.*, **18**, 315–331.
————1960e, Some aspects of the F_2 region at medium latitudes of the northern and southern hemispheres, *Zeits. fur Geophysik*, **26**, 217–226.
————1961, Lunar tide in the F_2 layer of the ionosphere near the geomagnetic equator, *Nature*, **189**, 214–215.
————1962, Thunderstorms and sporadic-E layer ionization over Ottawa, Canada, *J. Atmos. Terr. Phys.*, **24**, 533–540.
REID, G. C., 1961, A study of the enhanced ionization produced by solar protons during a polar-cap absorption event, *J. Geophys. Res.*, **66**, 4071.
————1962, The electron density profile of the lower ionosphere during a polar-cap absorption event, *J. Phys. Soc. Japan*, **17**, A:130.
SHIMAZAKI, T., 1962, A statistical study of occurrence probability of spread F at high latitudes, *J. Geophys. Res.*, **67**, 4617–4634.
VOGAN, E. L., AND HARTZ, T. R., 1961, Ionospheric absorption on November 12, 1960, *Can. J. Phys.*, **39**, 630.
WARREN, E., 1962, Sweep-frequency radio sounding of the topside of the ionosphere, *Can. J. Phys.*, **40**, 1692.
————1963, Perturbation of the local electron density by Alouette satellite, *Can. J. Phys.*, **41**, 188.
————(in press), Some preliminary results of sounding the topside of the ionosphere by radio pulses from a satellite, (Letter to Editor of *Nature*).
WARREN, E., AND MULDREW, D., 1961, A method for computing ionospheric focussing of radio waves, using vertical incidence ionograms, *IRE Trans. on Antennas, Propagation*, AP–9, 4, 403–409.
ZIAUDDIN, SYED, 1960, Simultaneous observations of pulsations in the geomagnetic field and in ionospheric absorption, *Can. J. Phys.*, **38**, 1714.
ZIAUDDIN, S., AND FORSYTH, P. A., 1961, Three-frequency measurements of auroral absorption, *J. Geophys. Res.*, **66**, 2315.

6. Sun-Earth Relations

COVINGTON, A. E., HARVEY, G. A., AND MCNARRY, L. R., 1961, The solar noise burst of November 12, 1960, *Can. J. Phys.*, **39**, 635–636.
HARTZ, T. R., AND MCALPINE, J. L., 1962, The dependence of ionospheric disturbances on large solar flares; Radio Wave Absorption in the Ionosphere, Pergamon Press, London, p. 13.
MCNARRY, L. R., 1959, Distribution of flares on the solar disk associated with noise, *Nature*, **184**, 806.
————1962, Forward scatter of radio signals via meteor trails and short-lived solar radio bursts, *Nature*, **193**, 1271–1272.
PAGHIS, I., 1961, Sun-earth relations and associated periodicities, *Nature*, **192**, No. 4800, 346.
————1962a, Magnetic impulses and sun-earth relations, *J. Phys. Soc. Japan*, **17**, A–1:21.
————1962b, On the selection of solar-flare radio burst events that are associated with polar-cap absorption, *J. Geophys. Res.*, **67**, 4503.

7. *Rockets and Satellites*

ADEY, A. W., AND HEIKKILA, W. J., 1961, Rocket electron density measurements at Fort Churchill, Canada, *Can. J. Phys.*, **39**, 219.

CHAPMAN, J. H., 1961, Effects of the ionosphere on radio noise measurements from an earth satellite, Space Research II, *Proc. Second Internat. Space Sci. Sympos.*, Florence, 1961, (ed. H. C. van de Hulst, C. de Jager and A. F. Moore), North-Holland Publ. Co., Amsterdam, p. 597.

CHAPMAN, J. H., Heikkila, J., AND BROWN, R. K., 1960, Two high altitude rocket experiments, Space Research, *Proc. First Internat. Space Sci. Sympos.*, Nice, 1960 (ed H. Kallmann-Bijl), North-Holland Publ. Co., Amsterdam, p. 366.

CHAPMAN, J. H., AND MOLOZZI, A. R., 1961, Interpretation of cosmic noise measurements at 3.8 mc/s from satellite 1960 η 1, *Nature*, **191**, 480.

FORSYTH, P. A., AND KAVADAS, A., 1961, Falling probe electron density measurements, *Can. Aeronaut. J.*, **7**, 105.

MOLOZZI, A. R., FRANKLIN, C. A., AND TYAS, J. P. I., 1961, Cosmic noise measurements from 1960 η 1 at 3.8 mc/s, *Nature*, **190**, 616.

8. *Cosmic Rays*

ALY, H. H., 1962, The hydrogen component in the primary cosmic radiation, *Can. J. Phys.*, **40**, 1049.

CARMICHAEL, Hugh, 1962, High-energy solar-particle events, *Space Sci. Rev.*, **1**, 28.

CARMICHAEL, H., AND STELJES, J. F., 1960, Collected results from the cosmic ray stations for July 1959, *IUGG Mono. No. 7*, "July 1959 Events and Associated Phenomena."

———1962, The solar cosmic ray increase of November 20, 1960, *J. Phys. Soc. Japan*, **17**, A–II. Int. Conf. Cosmic Rays, Earth Storm, Pt. II.

CARMICHAEL, H., *et al.*, 1961, Cosmic ray neutron increase from a flare on the far side of the sun, *Phys. Rev. Letters*, **6**, 49.

JUDEK, B., 1960a, Fading of minimum tracks in Ilford G_5 and K_5 emulsions, *Nuovo Cimento*, Suppl. **15**, 61.

———1960b, Reduction of spurious scattering in Ilford G_5 and K_5 emulsions, *Nuovo Cimento*, Ser. X, **16**, 834.

KATZMAN, J., 1961, Changes in the diurnal hour of maximum of the cosmic ray intensity, *Can. J. Phys.*, **39**, 1477.

KATZMAN, J., AND ROSE, D. C., 1962, Changes in the intensity level of cosmic rays at four stations in Canada, *Can. J. Phys.*, **40**, 1319.

KATZMAN, J., AND VENKATESAN, D., 1960, A world-wide study of the daily variation of the nucleonic component of cosmic rays, *Can. J. Phys.*, **38**, 1011.

LAPOINTE, S. M., AND ROSE, D. C., 1961, The effective directional sensitivity of cosmic ray neutron monitors, *Can. J. Phys.*, **39**, 668.

———1962, A statistical analysis of the barometer coefficients for cosmic-ray intensities, *Can. J. Phys.*, **40**, 687.

MCDIARMID, I. B., AND ROSE, D. C., 1960, High altitude cosmic ray measurements at Fort Churchill, *Can. J. Phys.*, **38**, 638.

MCDIARMID, I. B., ROSE, D. C., AND BUDZINSKI, E. E., 1961, Direct measurement of charged particles associated with auroral zone radio absorption, *Can. J. Phys.*, **39**, 1888.

MCDIARMID, I. B., AND WILSON, MARGARET D., 1962, The production of high-energy knock-on electrons and Bremsstrahlung by μ-mesons, *Can. J. Phys.*, **40**, 698.

ROSE, D. C., 1960, The sudden increase in cosmic ray intensity of May 4, 1960, *Can. J. Phys.*, **38**, 1224 (Note).

———1961, A polar-cap absorption rocket experiment, *Arkiv för Geofysik*, **3**, No. 21, p. 455.

ROSE, D. C., AND LAPOINTE, S. M., 1961, Asymmetry in the recovery from a very deep Forbush-type decrease in cosmic ray intensity, *Can. J. Phys.*, **39**, 239.

STELJES, J. F., CARMICHAEL, H. (AECL), AND MCCRACKEN, K. G. (MIT), 1961, Characteristics and fine structure of the large cosmic ray fluctuations in November 1960.

VAN HEERDEN, I. J., AND JUDEK, B., 1960, The relative abundances of cosmic ray nuclei of Charge $Z \geqslant 3$.

WILSON, B. G., ROSE, D. C., AND POMERANTZ, M. A., 1960, The unusual cosmic ray events of July 17–18, 1959, *Can. J. Phys.*, **38**, 328 (Letter).

WILSON, B. G., ROSE, D. C., AND WILSON, MARGARET D., 1962, Small cosmic ray increases measured at ground level, September 3rd, 1960, July 18th and 20th, 1961, *Can. J. Phys.*, **40**, 540.

WILSON, B. G., AND SWINSON, D. B., 1963, Time variations in extensive air showers, *Can. J. Phys.*, **41**, 183.

WILSON, MARGARET D., AND MCDIARMID, I. B., 1961, Transition curves in lead for μ-meson induced showers, *Can. J. Phys.*, **39**, 1730.

ZIAUDDIN, S., 1961, Polar-cap absorption following the solar flare of July 16, 1959, *Can. J. Phys.*, **39**, 1882.

9. *Theoretical Studies*

AXFORD, W. I., 1961, Note on a mechanism for the vertical transport of ionization in the ionosphere, *Can. J. Phys.*, **39**, 1393.

———1962a, The interaction between the solar wind and the earth's magnetosphere, *J. Geophys. Res.*, **67**, 3791.

———1962b, Note on a problem of magnetohydrodynamic stability, *Can. J. Phys.*, **40**, 654.

AXFORD, W. I., AND HINES, C. O., 1961, A unifying theory of high-latitude geophysical phenomena and geomagnetic storms, *Can. J. Phys.*, **39**, 1433.

———1962, On the thinness and orientation of auroral arcs, *J. Geophys. Res.*, **67**, 2057.

FEJER, J. A., 1960a, Hydromagnetic wave propagation in the ionosphere, *J. Atmos. Terr. Phys.*, **18**, 135.

———1960b, Scattering of radio waves by an ionized gas in thermal equilibrium, *Can. J. Phys.*, **38**, 1114.

———1961, The effects of energetic trapped particles on magnetospheric motions and ionospheric current, *Can. J. Phys.*, **39**, 1409.

HINES, C. O., 1960, Internal atmospheric gravity waves at ionospheric heights, *Can. J. Phys.*, **38**, 1441.

———(in press), The upper atmosphere in motion, *Quart. J. Roy. Met. Soc.*

———(in press), Geomagnetism and the ionosphere, *Proc.* **1962** *London Sympos. Ionosphere.*

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INTRODUCTION

This triennial report has been prepared for the Thirteenth General Assembly of the International Union of Geodesy and Geophysics (I.U.G.G.) on behalf of the Associate Committee on Geodesy and Geophysics which is the National Committee representing Canada in the International Union. It is an attempt to summarize the measurements of gravity and to review the research on gravity for the period from Jan. 1, 1960 to Dec. 31, 1962. Annual reports have been published in the Canadian Geophysical Bulletin (Garland, Editor) and similar triennial reports (Hamilton, 1960; Innes, 1957) have been prepared for previous General Assemblies.

The Dominion Observatory -- a Branch of the federal Department of Mines and Technical Surveys -- is responsible for the maintenance of relative gravity standards, for gravity control networks, and for regional gravity mapping. To support these major objectives work is undertaken in several allied fields such as instrument development, international gravity connections, and operation of a national gravity data centre. As the Observatory is primarily a research establishment there is, of course, emphasis on research on any worthy project that is possible. In the period under review gravity data have been used to assist in identifying fossil craters, to get the approximate thickness of ice on glaciers and snowfields and to assist in delineating various geological structures.

Several universities and research institutes undertake research in the application of gravity to specific problems from time to time. Within the last three years projects have either been completed or are still under way at the University of British Columbia, University of Alberta, Saskatchewan Research Council, University of Manitoba, University of Western Ontario, University of Toronto, Queen's University, McGill University, University of New Brunswick, and Nova Scotia Research Foundation. At the National Research Council in Ottawa an absolute determination of g has been completed.

Within the IUGG the measurement of gravity and the application of these measurements is of interest to many diverse and disparate groups. Traditionally the measurement of gravity has been considered an inherent part of the science of geodesy; thus Section IV of the meetings of the International Association of Geodesy (IAG) is entitled Gravimetry. Within this section progress in measurement of both absolute and relative gravity is discussed.

To coordinate the measurements of gravity throughout the world the International Gravity Commission was established as a standing

Commission of the IUGG and to carry out the policies established by the Commission a permanent office was set up in Paris known as the International Gravimetric Bureau (IGB). Both the Commission and the Bureau are concerned with the measurement of gravity and its application to problems of geodesy.

Inevitably there is an overlap of the interests of geodesy and geophysics. Knowledge of the physics of the earth contributes to understanding and evaluating the measurements of the size and shape of the earth and the knowledge of the size and shape, in turn, contributes to an understanding of the physics of the earth. The results of gravimetric investigations are of interest to the members of the International Association of Seismology and Physics of the Earth's Interior because analysis of gravity measurements provides a picture of the earth's mass distribution and this, in turn, is invaluable in studying the isostatic balance and the structure of the crust of the earth.

In addition, gravity techniques are becoming more and more widely used for detailed investigations of surface and near-surface features such as glaciers, snowfields, fossil craters, buried water courses, batholithic and other intrusions as well as many other geological features. This makes some aspects of gravity of interest to members of the International Association of Scientific Hydrology as well as to members of several organizations outside the IUGG such as those in geological and astronomical associations.

In view of these diverse applications of gravity it is useful to compile one national report that will include a summary of all the non-commercial activity in gravity in Canada for each three-year period. Reporters for other disciplines may then extract or abstract what they require for their association reports.

ABSOLUTE MEASUREMENTS AND CONNECTIONS TO FIRST ORDER WORLD STATIONS

Early in 1960 a long series of experiments to determine the absolute acceleration of gravity at the National Research Council in Ottawa were concluded. An abstract of the report on this work follows:

> An Absolute Measurement of the Acceleration Due to Gravity at Ottawa (Preston-Thomas, Turnbull, Green, Dauphinee and Kalra, 1960).
>
> 'An apparatus for determining the absolute value of gravity by measuring the distances through which a rule falls in discrete time intervals is described. From the data associated with 64 drops with two non-magnetic

stainless steel rules in vacuum, a value of g at the absolute gravity station at Ottawa of 980.6132 cm sec^2 with a possible error of $\pm$0.0015 cm sec^2 has been obtained. This value is 13.7 $\pm$ 2.0 milligal less than the Potsdam value at that position.'

The average correction to the Potsdam system indicated by this and other absolute determinations available to IAG Special Study Group 5 in 1960 was -12.8 $\pm$ 0.4 mgals.

In 1959 the Dominion Observatory bronze bi-pendulum apparatus was used to measure the gravity intervals between the First Order World (FOW) stations at Ottawa, Teddington, Paris, Rome and Bad Harzburg (Winter, Valliant and Hamilton, 1961). These measurements were incorporated in an adjustment of all available connections between Europe and North America that yielded a value for the Canadian National Reference Station (CNRS) of

$$g = 980.6197 \pm .0005 \text{ gals}$$

relative to the generally accepted value of 981.1804 gals for Bad Harzburg. This indicates that the adopted value of 980.6220 gals for the CNRS, hence all measurements in Canada, requires a correction of -2.3 $\pm$ 0.5 milligals to become consistent with other measurements in the Potsdam system.

If the best value of the acceleration of gravity in Canada in terms of the fundamental standards of length and time is required then the sum of the corrections listed above must be applied to any value observed relative to the CNRS -- that is, to any value published by the Dominion Observatory. This correction is -15.1 milligals with an uncertainty of the order of one milligal. It must be stressed that this is a provisional correction. There is no intention of abandoning either the Potsdam system or the Canadian reference system until many more measurements are available to improve the accuracy of the correction terms.

The absolute experiments at the National Research Council have not been resumed since completion of the observations published in 1960. The Dominion Observatory pendulum apparatus was dismantled at the end of 1959 and has not been used in the field since that time. As part of a post-graduate project at the University of Western Ontario, Mr. H.D. Valliant has built a completely new timing and recording system which uses an extremely accurate, portable frequency standard so that radio reception of WWV signals is no longer necessary for time interval measurements. The thermal sensing and control circuitry has been redesigned and an investigation of the effects of ambient temperature changes on the pendulums has been initiated.

NATIONAL PRIMARY NETWORK

During the last three years the National Primary Network of gravity control stations has been extended to the northern limits of the country as indicated in Fig. 1. Recent rapid growth of air services in Northern Canada has provided the transportation to make this possible and the advent of low-drift LaCoste and Romberg geodetic gravimeters has expedited the program greatly. Virtually all of the connections shown have been made with two instruments and many in the southern part of the country have been measured with seven or eight instruments. Adjustment of this network would be a relatively simple matter if the FOW stations at Ottawa, Vancouver and Fairbanks could be accepted without question. As it is, however, there is sufficient uncertainty in the gravity intervals between these stations that it will be necessary to adopt an interim arbitrary standard. A preliminary adjustment has already been made for that part of the network between Ottawa, Vancouver, Churchill and Fairbanks using the adopted value of the Ottawa - Washington base line (Innes, 1958) as a standard. Repeat measurements have been made where necessary so that now the stations within this region are internally consistent to within $\pm$ 0.2 mgal.

As formal publication of station descriptions tends to lag well behind physical changes, station description information is now being assembled in unpublished manuscript form with copies available on request only. Primary stations and excentres are assembled in one file and regional control stations in another. Details of these files are given below:

Primary stations and excentres

A system of excentres has been established for each primary station similar to that used by the IGB for FOW stations. It has been found to be more convenient, however, to show the connections and planimetric sketches on one page as illustrated in Fig. 2. At the end of 1962 a file containing the excentres for all primary stations west of Ottawa was available (Hamilton and Winter, 1962) and a similar file for stations east of Ottawa was in preparation.

Regional gravity control stations

To supplement the primary stations discussed above, additional control stations are established (Fig. 1) in conjunction with each regional gravity mapping program (Fig. 4). Some of these are temporary and no attempt is made to describe them. Many others, in relatively stable surroundings, are described and put on file for use on resurveys or special surveys of the area in the future. The regions for which these are available and the approximate total in each region are shown on Fig. 1. The number that have been added in

the last three years is shown in brackets in each region. In the southern part of the country these stations are of the order of 30 miles apart whereas in the north they are 100 to 150 miles apart.

GRAVITY DATA PROCESSING SYSTEM OF THE DOMINION OBSERVATORY

During the last four years a system for automatic processing of gravity data by digital computer has been evolving at the Dominion Observatory. Initially a program was written for use on an IBM 650 computer which merely carried out the arithmetic operations previously done by desk calculator. Numerous revisions have been made until, at the present time, a fully automatic program is in use on an IBM 1620 computer. A comprehensive report on this program has been submitted for publication in the Bulletin Geodesique (Tanner, in press).

Primarily the program is designed to process data from the field surveys conducted by the Dominion Observatory as described under Regional Gravity Mapping below. Without going into details it is sufficient to say that the field observations are transferred directly to cards and the program sorts and classifies the observations, computes the anomalies, and punches out the principal facts on cards in the format shown in Figure 3. Most of the pertinent features of the output are apparent from the card format. An explanation for some of the special codes follows:

Map Sheet - This is the number of the National Topographic System map on which the station is located. These map sheets have the same boundaries as ICAO. 1:1,000,000 World Aeronautical Charts.

Datum fact and elev. fact - The elevation factor is an assessment of the accuracy of the station relative to adjacent stations and the datum factor is an assessment of the accuracy of the elevation datum relative to mean sea level. The code used to classify accuracies is listed below:

Datum Factor	Elevation Factor
1. Spirit level	1. ± 3 feet
2. Radar altimeter or other altimeter	2. ± 10 feet
	3. ± 25 feet
3. Arbitrary	4. ± 100 feet
	5. greater than ± 100 feet (includes estimations)

Coord. fact. - This code identifies the source of the coordinates and hence gives an indication of their quality.

1. Scaled from 1:25,000 map
2. " " 1:50,000 map
3. " " 1:125,000 map
4. " " 1:250,000 map
5. " " 1:500,000 map
6. Instrument means - Decca, star observations, etc.
7. Dead reckoning
8. Other sources

I or W - This identifies measurements on ice or water.

I or W fact. - This gives an assessment of the accuracy of ice thickness or water depth and is coded as follows:

1. $\pm$ 3 feet
2. $\pm$ 10 feet
3. $\pm$ 25 feet
4. $\pm$ 100 feet
5. greater than 100 feet (includes estimations)

Adj. - This is a three digit code to identify the datum to which the control stations are referred. Two of the codes currently in use follow:

1-59 Central and northern Quebec
1-62 Western Canada

Sea state. - This space will be used to describe the roughness of the sea at the time sea-surface measurements are made.

GRAVITY AT SEA

Underwater measurements

A program of underwater measurements by the Dominion Observatory was initiated in 1961 with a traverse across Hudson Bay (Fig. 5) and continued in 1962 in the southern part of the Gulf of St. Lawrence. Using ships chartered by the Marine Sciences Branch of the Department of Mines and Technical Surveys stations were observed at intervals as weather permitted in 1961 and at approximately eight mile intervals in 1962. A 1200-foot multiconductor cable was used to lower and raise the LaCoste and Romberg underwater gravimeter as well as to relay information on the levelling, clamping, heating and reading from the

instrument to the control console on the ship.

The gravimeter is of the unstable type with high damping and is adjusted to have an infinite period. With this adjustment the rate of change of beam position is proportional to the difference between the torque exerted on the beam due to spring tension and the torque due to gravity. In the conventional land meter the instrument is set in a stable configuration and the beam position is the only important parameter. The beam motion is displayed graphically on the console. From the graph the beam velocity can be found and this, along with the dial reading, yields the gravimeter observation. This method of reading beam motion makes observations possible even when the instrument is unsteady due to seismicity or water movements. Repeat readings indicate that the reading accuracy is of the order of 0.1 or 0.2 mgal. In 1961 position was determined from dead reckoning but in 1962 Decca coordinates were available for all stations.

Measurements on sea ice

On the Polar Continental Shelf Project stations have been observed on the ice of the Arctic Ocean northwest of Borden and Ellef Ringnes Islands, as indicated on Fig. 4. On this survey a large helicopter was used to transport the gravity observer and the hydrographer together so that gravity observations and depth soundings could be made simultaneously. A specially designed LaCoste and Romberg ice gravimeter was used. This instrument is similar in principle to the underwater meter described above; it is also a highly-damped infinite-period type with beam motion recorded graphically but it does not have automatic levelling or remote recording facilities. An abstract of a report on this project follows:

> Gravity Anomalies Over the Polar Continental Shelf (Weber, in press).
>
> 'As part of the Polar Continental Shelf Project a gravity survey was carried out over the continental shelf north of the Sverdrup Islands. Using Decca navigation 350 stations were observed, the outermost stations being located over the continental slope some 250 kms from shore. A free air anomaly map and a bathymetric chart are presented. A very large positive anomaly feature of 120 milligals running parallel to the continental slope was discovered. The anomaly is discussed and interpreted as the effect of the transition of the crust from continental to oceanic domain.'

Development of vibration gravimeter

A vibrating string gravimeter constructed entirely of quartz has been developed at the Dominion Observatory by Mr. D.R. Bower. A phase-locked tracking system has been designed to correct for the nonlinear response inherent in vibrating string instruments and, in addition, to smooth the effects of extraneous accelerations. Methods for isolating the sensitive quartz assembly from the effects of accelerations due to shock are presently being studied.

The Second-order Errors of Sea-surface Gravity Measurements (Bower and Watt, 1963).

Abstract: 'A theoretical study of the effect of a continuous acceleration spectrum on the performance of a sea gravimeter is made. When a continuous rather than a discrete spectrum is assumed, second-order errors due to acceleration product terms become more complex. In particular, the second-order correction which must be applied to the reading of a gimbal-mounted gravimeter is disturbed from the constant value previously found assuming sinusoidal ship motion. This disturbance is in the form of very-long-period noise which has, in a typical case, a r.m.s. value one seventh of the constant value. It is shown also that very-long-period noise is present in the reading of a vertically stablized gravimeter due to cross-coupling effect and that it occurs whether or not the beam displacement and the horizontal accelerations are correlated. Finally the possibility of errors occurring due to nonlinear ship response is discussed.'

REGIONAL GRAVITY MAPPING BY THE DOMINION OBSERVATORY

A program of regional gravity mapping is now fully underway at the Dominion Observatory. Maps at the scale of 1:500,000 are being published in a new series known as the Gravity Map Series of the Dominion Observatory. As indicated in Fig. 4, four map sheets have been published, ten are in press, and several are in the compilation stage; field observations for several map sheets are completed each year. Existing 1:500,000 maps are used as a base map being shown in neutral grey, water areas in light blue and gravity data in red. The Bouguer anomaly is shown for each station and contours are drawn at five milligal intervals. A report describing the quality of the data, correlation with geology and a preliminary interpretation accompanies each group of maps. In some special cases, such as the Arctic Islands, preliminary black and white prints are being issued.

Observations for regional mapping are taken at intervals of nine miles (15 kilometres) or less. Virtually all of these regional readings are taken with Worden Gravimeters. The mode of transportation varies with the region. Road transportation is used wherever possible but for the most part the areas accessible by road were completed several years ago. Float-equipped aircraft are used where lakes are plentiful and helicopters are used in the Arctic and in other areas where necessary.

Progress by areas during the past three years is summarized below

Region	Area Square Miles	Number of Regional Station
Quebec and Labrador	160,000	3,000
Baffin Island	200,000	4,000
Arctic Islands (Polar Continental Shelf)	140,000	2,000
Northern Saskatchewan and Alberta	120,000	2,500
Northwest Territories (Muskox Project)	40,000	500
Prairie Provinces (South of 54° N)	75,000	1,800
TOTAL:	735,000	13,800

Abstracts of the reports published and in press follow.

General Characteristics of the Gravity Field in West Central Quebec (Tanner, 1961).

'The results of approximately 900 regional gravity stations established during 1958 in the Province of Quebec adjacent to Hudson and James Bay are presented in the form of four Bouguer anomaly maps. The Bouguer anomaly field throughout the area is relatively flat and the principal variations can be related to surface geology. Areas underlain by lower density granitic masses are associated with negative anomalies whereas in those regions underlain by gneisses and schists and, locally, altered basic volcanic rocks the anomalies are generally higher. The mean Bouguer anomaly for the four maps, -55 milligals, in

relation to a mean station elevation of 900 feet suggests that the region is over-compensated isostatically which may be the expression of crustal depression during the Pleistocene period.'

Regional Gravity Survey of the Sverdrup Islands and Vicinity (Sobczak, in press).

'Five profiles are used to analyse the major features of the Bouguer anomaly field. The observations are correlated with magnetic and geological information and the interpretation of the gravity data based on measured densities and densities computed from seismic velocities. On the basis of a density contrast of 0.14 gm/cc and an anomaly change of 63 milligals over a distance of 120 miles, the calculations indicate depths to basement varying from 6,800 feet near Isachsen to possibly 42,000 feet near the axis of the Sverdrup Basin. A broad positive Bouguer anomaly over Peary Channel is partly attributed to a corresponding broad lens of basic rocks extending from an outcrop on the Fay Islands. A sharp negative anomaly under Peary Channel north of the Dumbbell gypsum dome suggests a similar but larger submerged dome.'

Preliminary Results of Gravity Surveys in the Queen Elizabeth Islands (Sobczak, Weber, Goodacre and Bisson, in press).

'The data of some 3250 gravity stations over the Queen Elizabeth Islands and the adjoining polar continental shelf has been compiled. The results are presented in four Bouguer anomaly contour maps, and the anomalies are briefly discussed.'

GRAVITY IN GLACIOLOGICAL INVESTIGATIONS

In the study of glaciers and snowfields gravity measurements can be used to contour the lower surface of the ice mass. For the best results some control measurements such as bore holes or seismic depth determinations are needed but where the regional gravity field is not highly anomalous good approximations of the ice thickness can be made solely from the gravity data. The glaciers and icecaps on which gravity measurements have been made or published during the period under review are shown on Fig. 5 and discussed briefly below.

Athabasca Glacier, B.C.

In 1959 teams from the Universities of British Columbia and

Alberta carried out gravity and seismic surveys over the lower part of the Athabasca Glacier. Depth determinations by gravitational, seismic and electrical resistivity methods were reasonably consistent. A report on this project by Mr. E.R. Kanasewich has been submitted to the Journal of Glaciology.

Salmon Glacier, B.C.

An abstract of a paper on this glacier follows:

Gravity Measurements on the Salmon Glacier and Adjoining Snowfield, British Columbia, Canada (Russell, Jacobs and Grant, 1960).

'An account is given of a detailed gravity survey carried out on the Salmon Glacier and the adjoining snowfield. The reduction of the data is complicated by the extreme irregularity of the terrain and by the fact that the structure of the glacier and the locations of the stations are time dependent. Maps show the Bouguer anomalies, and two profiles are drawn across the glacier and one along its length. The accuracy of the results is discussed in detail; it is concluded that gravity measurements alone can give a very good indication of the shape of a deep-valley glacier and also its approximate depth. Other independent data are necessary to determine its precise thickness.'

Kaskawulsh and Hubbard Glaciers, Yukon Territory.

Gravity and seismic surveys were undertaken in 1962 by an Arctic Institute of North America expedition to investigate the form of the rock divide between the Kaskawulsh and Hubbard glaciers. The geophysical work was performed by students from McGill University and the University of Alberta.

Penny and Barnes Icecaps, Baffin Island, N.W.T.

In conjunction with the regional gravity mapping of Baffin Island by the Dominion Observatory a first order traverse was surveyed across the Penny Icecap and also across the Barnes Icecap in 1962. Several ice thickness measurements were made by explosion seismology and gravity readings were taken at frequent intervals to assist in interpolating for the thickness of ice along the traverse. Permanent markers were set in place on the Penny Icecap so that the gravity stations can be reoccupied in a few years to determine quickly whether there is an increase or decrease in the total mass of ice and snow.

Devon Island Snowfield, N.W.T.

During the summer of 1962 a gravity survey was carried out on the Devon Island Icecap by members of a party organized by the Arctic Institute of North America. To investigate ice thickness fifty gravity observations were taken along an 80 kilometer traverse from 75° 35′ N, 83° 30′ W on the north edge of the ice, to 75° 20′ N, 82° 30′ W, approximately the highest point of the icecap, and thence to 75° 00′ N, 83° 30′ W on the south edge. It is anticipated that the error in ice thickness determined from these observations will be less than ten per cent.

Meighen Island Icecap, N.W.T.

During the summer of 1960, in conjunction with the Polar Continental Shelf Project gravity observations were made at 156 stations on the Meighen Island Icecap by a party from the Dominion Observatory (Hornal, 1962). Bouguer anomalies have been computed for these stations and, by removing the regional trend, the residual anomalies attributable to the effect of the ice have been found. From these residual anomalies, using a density of 0.9 gm/cm^3 for ice and 2.39 gm/cm^3 for the underlying sediments the thickness of the ice has been estimated. These results show that the maximum thickness of 500 feet occurs near the southern edge and that the cap thins out to about 100 feet over its northern half.

Axel Heiberg, N.W.T.

In 1959 and 1960 a number of gravity measurements were made to investigate the thickness of ice on the McGill Icecap (unofficial name), the White Glacier and the Thompson Glacier (Becker, 1961). An analysis of these results is nearing completion.

Gilman Glacier and adjoining icecap, Ellesmere Island, N.W.T.

Two papers have been published on the results of geophysical surveys in this region (Weber, 1960; and Weber, Sandstrom and Arnold, 1960).

Abstract of the first paper follows:

Comparison of Gravitational and Seismic Depth Determinations on the Gilman Glacier and Adjoining Icecap in Northern Ellesmere Island (Weber, 1960).

'During the summers of 1957 and 1958 twelve bedrock profiles on the Gilman Glacier and on the icecap between Gilman Glacier and Mount Oxford were determined from seismic reflections. During the second field season more than 200 gravity stations were established over the same general area. The regional Bouguer

anomaly was calculated from the known ice thickness at a few selected locations along the seismic profiles, and was then extrapolated for the whole area. With this information and with assumed specific gravities of ice and bedrock of 0.9 and 2.71 respectively, the ice thickness was calculated from the gravity measurements. Agreement between the bedrock profiles as determined by the two methods was very close. It is concluded that a gravity survey, when supplemented by a few seismic soundings, can give a good indication of the shape of the bedrock and the ice thickness.'

GRAVITY IN FOSSIL CRATER INVESTIGATIONS

Several detailed gravity surveys have been made as part of an investigation by the Dominion Observatory to determine whether certain circular topographic features were formed by the impact and explosion of meteorites during the early history of the earth or whether they have been formed by processes originating from within the earth. When a negative gravity anomaly is found for these features it is evidence that the feature may be underlain by low density brecciated material indicative of an explosive origin. A brief discussion of the circular features identified on Fig. 5 follows:

Holleford, Brent and Deep Bay

Gravity surveys followed by geological and structural studies and by diamond drilling have led to the conclusion that all of these features were formed by a surface explosion and the most likely causes of these explosions were the impacts of meteorites. (Beals, Innes and Rottenberg, 1960, in press). An abstract of one of the several papers on these features follows:

The Use of Gravity Methods to Study the Underground Structure and Impact Energy of Meteorite Craters (Innes, 1961).

'Gravity data have been used to calculate the mass deficiency and hence the amount of shattered rock under the Deep Bay, Brent and Holleford craters. The results show good agreement with the crater model computed by Rottenberg as combined with the depth/diameter ratios of Baldwin for meteorite impact craters. The zone of complete rupture is shown to extend to a depth of approximately one-third of the crater's diameter, and impact energy values derived from energy of crushing, are 6.5×10^{23} ergs, 2.1×10^{24} ergs, and 8.7×10^{25} ergs for Holleford, Brent and Deep Bay, respectively.'

New Quebec

Due to its remote location this feature has not yet been the subject of as intensive an investigation as the three mentioned above. However, as it was formed in relatively recent geological time a comprehensive investigation of it will undoubtedly contribute significantly to the understanding of crater formation. As part of this investigation, in the spring of 1961, a detailed gravity survey and depth soundings were made from the ice surface of the lake which occupies this crater.

Clearwater Lakes

Preliminary gravity and topographical studies of these two large adjoining lakes were carried out by the Dominion Observatory during the winter of 1961 and a geological examination of the shore line and islands in the west lake was carried out during the summer of 1962. At the end of the period under review a more detailed gravity study and observations of the vertical magnetic intensity along two diametrical traverses was being made. The results of these investigations are being prepared for publication by M.R. Dence, L.W. Sobczak and M.J.S. Innes.

West Hawk Lake

An abstract of a report on this feature follows.

Evidence in Support of a Meteoritic Origin for West Hawk Lake, Manitoba, Canada. (Halliday and Griffin).

'West Hawk Lake in southeastern Manitoba is approximately circular with a present shoreline 11,700 feet in diameter and water depths up to 365 feet. Gravity readings from the lake ice indicate a residual negative anomaly of 6 milligals associated with the feature. The lake is not closely related to the local geology and an origin due to meteorite impact appears reasonable. An original rim diameter of 12,000 feet, modified by glaciation and erosion, is suggested, from which about 660 feet of sedimentary deposits are expected near the centre, underlain by a thick layer of breccia. It is hoped to confirm these predictions in the future by diamond drilling techniques.'

GRAVITY IN STUDIES OF GEOLOGICAL STRUCTURE

The requirements for gravity data to assist in delineating geological structure in Canada have increased steadily during the last

few years. Several new projects have been undertaken and several continuing projects have been studied in more detail as new information became available to assist in interpreting the observations. The locations of the features that have received attention during the period under review are shown on Figure 5; each one is discussed briefly below starting with features at the southeast of the country and continuing towards the west and north.

Nova Scotia

During the past three summers 3300 relative gravity observations have been made over the Carboniferous sediments in Nova Scotia by parties from the Nova Scotia Research Foundation under the direction of Prof. J.E. Blanchard. These observations have been made at intervals of 1000 feet along roads and trails. Elevations have been determined to a tenth of a foot and Bouguer anomaly maps contoured to two-tenths of a milligal are in preparation. These observations are tied to the Dominion Observatory's gravity network. This program represents a continuation of a program begun in 1952.

Mount Albert, Quebec

The regional gravity survey of Gaspe (Tanner and Uffen, 1959) while indicating a gravity high near the Mount Albert ultrabasic mass, did not completely cover the intrusion. As part of a program to locate promising drill sites for the International Upper Mantle Project, a detailed network of gravity stations was established over the body in 1961 by a party from the Dominion Observatory.

Eastern Townships, Quebec

A detailed gravity survey of this area has been under way for several years. An abstract of a report on this work follows.

> Gravity in the Eastern Townships of Quebec (Fitzpatrick, in preparation).
>
> 'Anomalous values of gravity in the Eastern Townships of Quebec range from -60 to +55 milligals. The most significant feature is a long linear positive anomaly paralleling and coinciding with, to a large extent, the axis of the Sutton Mountain anticlinorium. This anomaly is almost certain to be due to a major ultramafic intrusion which may represent an upwarped section of the mantle. Calculations show that this ultramafic material rises to within 10 kilometres of the surface near the town of Richmond, Quebec.'

Anstruther, Ontario

The Anstruther granitic intrusion, located near Bancroft, Ontario, is one of four intrusive features outcropping along an approximate north-south axis. In cooperation with the Geological Survey of Canada a party from the Dominion Observatory carried out a detailed gravimetric survey near the batholith and made measurements throughout the surrounding region in 1961.

Southwestern Ontario

At the University of Western Ontario a study has been made of the effects of variations in the bedrock topography and depths of overburden on gravity anomalies associated with buried limestone reefs. A hammer seismograph was used to determine depths of the overburden.

Kapuskasing High

During the summers of 1961 and 1962 a total of 360 stations has been observed by a party from the University of Manitoba to delineate in more detail the structures of this high anomaly first identified and interpreted by the Dominion Observatory. As the high cannot be correlated with the density of surface samples a deep-seated interpretation must be sought. Model studies indicate that moderate warps in the Conrad or Conrad and Mohorovicic discontinuities could produce anomalies similar to those observed. Correlation with geology and with the magnetic anomaly pattern was discussed in a paper presented to the Canadian Institute of Mining and Metallurgy in April 1962 (Brisbin and Wilson).

Red Lake Area

A gravity traverse over the greenstone belt in the Red Lake district was made in 1962 by a party from the University of Toronto in an attempt to discover the outline of the formation at depth.

Kenora Area

A gravity survey of the Lake of the Woods area is being carried out by a party from the University of Manitoba. Some 200 stations at one-mile intervals had been established by the end of 1962. The primary objectives of this survey are to determine the dips of the granite-greenstone contacts along the boundaries of the greenstone belt. The Bouguer anomaly map and model studies that have been prepared from the field work already completed will be extended as field work continues.

Churchill-Superior Boundary

Investigation of the large negative anomaly, which coincides with the boundary between the Churchill and Superior geological provinces of the Canadian Shield and the associated Nelson River High has been continued by parties from the University of Manitoba during the period under review. Some 500 gravity stations had been established prior to the publication of two reports by Wilson and Brisbin (1961 and 1962) on their geological and geophysical investigations of the area and 135 stations have been established since these reports went to press.

Coronation Mine

A gravity survey of the surface and underground workings of this mine was completed by a party from the University of Manitoba as part of a "Comprehensive Study of an Ore Deposit" for the National Advisory Committee for Research in the Geological Sciences and the data is being analysed.

Kindersley, Saskatchewan

As part of an intensive search for underground water sources in the Prairie Provinces the use of gravity methods has been investigated in the Kindersely - South Saskatchewan River area by the Saskatchewan Research Council. An abstract of a paper on this work follows.

> The Gravimeter in Studies of Buried Valleys (Hall and Hajnal, 1962).
>
> 'In glaciated areas, variation in density and thickness of the drift or of members within it is often an important cause of gravity anomalies. This can be utilized whenever the drift is the principal object of attention, such as in prospecting for ground water. Trends of gravity lows near Kindersley, Saskatchewan, some with amplitude of one milligal, appear to be connected with buried valleys formerly occupied by the South Saskatchewan River and its tributaries. Calculation from detailed gravimeter traverses and comparison with borehole samples give estimates of the thickness and density contrasts of the fill in the valleys. These indicate a low-density sand section with a thickness of up to 250 feet and a density contrast of 0.27 gm/cc for the buried valley of the South Saskatchewan River; and a low density silt section with a thickness of up to 400 feet and a density contrast of 0.25 to 0.35 gm/cc for a buried tributary valley. Density measurements indicate that contrasts within the drift can be as large as those between bedrock and drift. It is thus

possible to detect buried valleys which have been cut entirely into drift, as well as those cut into bedrock.'

Rocky Mountain Trench

An abstract of a paper on this area follows.

Gravity Measurements over the Southern Rocky Mountain Trench Area of British Columbia (Garland, Kanasewick and Thompson, 1961).

'A series of negative anomalies along the southern part of the Rocky Mountain Trench has been interpreted to be the effect of relatively deep basins in the trench floor. These are apparently filled with light material and separated from each other by regions of only thin cover over bedrock of normal density. The pattern obtained is very suggestive of a system of longitudinal and transverse faults, and the gravity field is therefore consistent with the theory that the trench, in this vicinity, was produced chiefly by down-faulting.'

Vancouver Island

An abstract of a doctoral thesis on this area follows.

The Structure of the Earth's Crust in the Vicinity of Vancouver Island from Seismic and Gravity Observations (White 1962).

'A seismic explosion program has been carried out in the Vancouver Island - Strait of Georgia area of Western Canada. The program included a relatively intensive survey in the Strait of Georgia between Campbell River and the south end of Texada Island, as well as a number of longer range refraction lines extending from Kelsey Bay along the coast as far south as northern California, and east through the mountains to a distance of 700 kms. Gravity readings were obtained at intervals of about ten kms along the east coast of Vancouver Island as well as for a number of east-west traverses. Readings were also obtained for a few locations on the British Columbia mainland. Except for a marked positive trend in the Victoria area, the regional value of the Bouguer anomaly for the Vancouver Island area is nearly zero.

The average structure for the area, derived from

the seismic refraction observations consists of a layer of volcanic and granitic strata less than five km in thickness, and an intermediate layer with a constant velocity for compressional waves of 6.66 km/sec., 46 km thick. A velocity of about 7.7 km/sec. for the mantle has been observed along unreversed refraction lines, both along the coast and east through the mountains. Interpretation of the refraction observations has been based mainly on first arrival phases. The observed regional gravity anomaly is compatible with the crustal model obtained from the seismic results.'

Muskox Complex

As part of Canada's participation in the International Upper Mantle Project a large ultrabasic intrusion some 75 miles long varying in width from 1000 feet at the southern end to five miles at the northern end is being investigated by the Department of Mines and Technical Surveys. In a cooperative project with the Geological Survey of Canada to select suitable deep drilling sites, a party from the Dominion Observatory established some 1800 gravity stations in the immediate vicinity of this intrusion and 500 more in the surrounding region (Fig. 5).

Gypsum Domes

In cooperation with the Polar Continental Shelf Project two large gypsum diapirs, termed the Isachsen and Dumbbell domes, have been surveyed by a party from the Dominion Observatory. Negative Bouguer anomalies of the order of 20 to 25 milligals respectively have been found (Sobczak, in press) but a full interpretation is not yet available.

Northern Ellesmere Island, N.W.T.

In conjunction with the Polar Continental Shelf Project two gravity profiles were observed by a party from the Dominion Observatory between Ellesmere Island and Greenland over a zone of anomalous conductivity that was discovered by the Geomagnetic Division (Whitham and Andersen, 1962).

GRAVITY IN GEODETIC INVESTIGATIONS

With the rapid extension of regional gravity mapping in Canada occurring at the same time as the availability of electronic digital computers extensive geodetic investigations using gravity data can now be undertaken that would have been impossible just a few years ago. Two abstracts are given below as well as a brief outline of another

project that is still underway.

A Study of the Geophysical and Geodetic Implications of Gravity Data for Canada (Shimazu, 1962)

'Making use of Bouguer anomalies and corresponding surface elevations in Canada, investigations have been made of the physical state of the earth's crust, the distribution of isostatic anomalies, undulations of the crust-mantle boundary, deflections from the vertical and undulations of geoidal heights. A modification of Tsuboi's method -- which assumes that a variation in the gravity is caused by the anomalous mass distributions at the base of the crust -- is used in this study and computational methods are outlined in Section I. The densities of the crust and the subterranean mantle are assumed to be 2.67 and 3.27 gm/cm^3 respectively. All the geophysical and geodetic quantities mentioned above can be obtained in a form of matrix products $Y_{ab} = \sum_i \sum_j X_{ij} \cdot \phi_{a-i,\, b-j}$ where $\phi_{a-i,\, b-j}$ is a response function to convert the given data X_{ij} (gravity anomaly or elevation) into Y_{ab}.

Section II consists of two-dimensional analyses carried out for three profile sections: the Canadian Shield, the Transcontinental section from the Pacific to the Atlantic coast, and the Cordillera. The grid interval for the gravity and elevation data has a range varying from 51.5 km to 210 km for these three sections, and thus the local variations of gravity and elevation with wave-lengths shorter than twice the grid interval (103 to 420 km) play no important part in the results. Section III is the three-dimensional analysis for the rectangular area bounded by longitudes 90° and 113° W and latitudes 49° and 62° N of Western Canada. The grid interval is 72 km and the total number of grid points for the Bouguer anomaly is 21 x 21. To obtain the response functions ϕ_{ij} and matrix products $Y_{ab} = \sum_i \sum_j X_{ij} \cdot \phi_{a-i,\, b-j}$ numerical calculations were carried out using a digital computer.

A brief interpretation of the results is presented. The average crustal thicknesses which are derived from the condition Σ (isostatic gravity anomaly)^2 = minimum, were found to be 36.4 km and 48 km for the Canadian Shield and the southern Cordillera respectively. The Cordillera and Shield regions are isostatically over-compensated while for the central Prairie regions the

opposite condition is true. In the area where the three-dimensional analysis is carried out the isostatic gravity anomalies range from -30 mgals in the north, to +20 mgals in the south. The deflections of the vertical do not exceed 4 seconds in the whole area with corresponding undulations of the geoidal heights varying from +5 m in the south to -8 in the north. The effect of the Mesozoic or younger sediments near the surface of the prairie region upon the over-all gravity field appear to be negligible.'

Gravimetric Deflections of the Vertical by Digital Computer (Nagy, in press).

'A digital computer program has been developed to calculate plumb-line deflections from gravity data. A region in Western Quebec 1,200 x 1,200 km for which free-air anomalies were available was subdivided into units of 50 x 50 km. With n denoting the number of points per unit, each unit was represented by one gravity anomaly calculated as an average in cases where $0 \leq n < 6$ and where $n > 50$. For $6 \leq n \leq 50$ the integral mean, obtained from a fitted surface of second order in two variables, was used.

Weighting functions were derived for and calculations were done in the rectangular plane coordinate system. For units with sufficient points for surface fitting, the contributions to the deflection components at the centre of the unit from within the unit itself were computed first, and then the effect of the outer region was added. The contributions from the outer region were obtained as the sum of the products of gravity anomalies and weighting coefficients over all units. The computations were repeated with three different origins in order to analyse the effect of the change in the number of points and the point distribution within the 50 x 50 km units. This analysis shows that non-uniform point distribution may seriously distort the fitted surface, giving erroneous values for the horizontal gradients and hence for the contribution to the deflection components at the centre from within the unit element.

The program solves for the gravimetric deflections relative to the origin. To make the computed gravimetric deflections comparable with astro-geodetic deflection it was necessary to transform the astro-geodetic deflections from Clarke's spheroid to the International Ellipsoid and

to add a constant term to all the gravimetric deflections. This constant term, representing the effect from beyond the region of integration, is the difference between the astro-geodetic and gravimetric deflections at the origin. A visual comparison of the plotted deflections shows generally good agreement both in direction and magnitude, indicating that the choice of weighting function, grid distance, and order of fitted surface was suitable. The accuracy of the astro-geodetic and gravimetric deflections is estimated at ± 1 and ± 2 seconds of arc respectively.'

Vertical deflections in New Brunswick

As part of an investigation of the geoid in the Maritimes a free air anomaly map of the Fredericton area has been compiled at the University of New Brunswick using published data as well as measurements made during 1962 in cooperation with the Dominion Observatory. Deflections of the vertical at four points will be computed from this data by the templet method for the near region and by electronic computer using mean free air anomalies as published by Heiskanen for more remote regions. A comparison between the gravimetric and astronomic deflections is being made. This work will be included in a thesis by E. Derenyi working under the direction of Prof. G. Konecny.

OTHER INVESTIGATIONS

Bouguer Gravity Corrections Using a Variable Density (Grant and Elsaharty, 1962).

'The principle of density profiling as a means of determining Bouguer densities is studied with a view to extending it to include all of the data in a survey. It is regarded as an endeavour to minimize the correlation between local gravity anomalies and topography, and as such it can be handled mathematically by the method of least squares. In the general case this leads to a variable Bouguer density which can be mapped and contoured. In a worked example, the correspondence between this function and the known geology appears to be good, and indicates that Bouguer density variations due to changing surface conditions can be used routinely in the reduction of gravity data.'

Terrain Corrections for Airborne Gravity Gradient Measurements (Chinnery, 1961)

'A method is given for the calculation of terrain corrections for airborne measurements of the vertical

gradient of gravity. This includes a short account of the theory concerned, a description of the practical procedure, a complete set of numerical tables, and some examples of their application. The method described is shown to be very flexible both with regard to aircraft height and to complexities of topography. Some discussion is also given of the magnitudes of topographic effects on the gravity gradient and it is shown that terrain corrections are in general more important here than in normal gravity work.'

An Integrating Technique for Airborne Gravity Gradient Measurements (Paterson, 1961).

'For some purposes it may be desirable to work with the gravity force g rather than its vertical gradient g'. A simple method has been tested by which measurements of g' on a plane surface can be integrated to produce values of g anywhere in space above the plane of measurement. The method appears to show promising results.'

Evaluation of the Dominion Observatory Bronze Pendulum Apparatus (Hamilton, 1961).

'From an analysis of all the observations on the pendulum pier in Ottawa over a three-year period it is shown that there is a gradual increase of some 4×10^{-7}s followed by a decrease of about the same amount which is believed to be due partly to a change in operating temperature and partly to creep in the bronze metal. From analysis of variance it is shown that the standard deviation for a gravity difference may be as low as 0.15 or as high as 0.58 mgal depending on the method of computation; this shows that the internal consistency is much better than the consistency between sets of observations.

The temperature control system is discussed and the record of thermistor resistances for one pendulum pair is presented to show that there is negligible correlation between temperature and residual errors and only partial correlation with the long term drift of the pendulum periods. Other possible sources of error are discussed and it is concluded that shocks of undetermined origin affect the pendulums each time they are removed from the thermostatted case.'

BIBLIOGRAPHY
of
CANADIAN ARTICLES ON GRAVITY

Bancroft, A.M. Gravity anomalies over a buried step. Jour.Geophys. Res., Vol. 65, No. 5, 1960 (Contr. Dom. Obs. Vol. 3, No. 27).

Bancroft, A.M. The establishment of gravity bases at airports across Canada. Pub. Dom. Obs., Vol. 24, No. 2, 1960.

Beals, C.S., Innes, M.J.S. and Rottenberg, J.A. The search for fossil meteorite craters. Current Science, Vol. 29, Nos. 6, 7, 1960 (Contr. Dom. Obs. Vol. 4, No. 4).

Becker, Alex. Gravity measurements in Jacobsen-McGill Arctic Research Expedition to Axel Heiberg Island, preliminary report 1959-1960, pp. 109-114. Unpublished manuscript, Dept. of Geography, McGill University, Montreal, 1961.

Beck, A.E. and Valliant, H.D. Minimum pendulums. Geophysics 27, p. 274, April 1962.

Bower, D.R. and Watt, P.A. The second order errors of sea-surface gravity measurements. J. Geophys. Res. Vol. 68, 245-250, 1963. Contr. Dom. Obs. Vol. 5, No. 11).

Chinnery, M.A. Terrain corrections for airborne gravity gradient measurements. Geophysics 26, 480-489, 1961.

Garland, G.D. (Editor), 1960, Vol. 13; 1961, Vol. 14; 1962, Vol. 15, Canadian Geophysical Bulletin, Associate Committee on Geodesy and Geophysics, National Research Council, Ottawa.

Garland, G.D., Kanasewick, E.R. and Thompson, Thomas L. Gravity measurements over the southern Rocky Mountain Trench area of British Columbia. J. Geophys. Res. 66, 2495-2505, 1961.

Grant, F.S. and Elsaharty, A.F. Bouguer gravity corrections using a variable density. Geophys. Vol. 27, No. 5, pp. 616-626, 1962.

Hall, D.H. and Hajnal, Z. The gravimeter in studies of buried valleys. Supp. Geophysics, Vol. 27, No. 6, 1962.

Hamilton, Angus C. Gravity measurements in Canada, January 1, 1957 to December 31, 1959. Pub. Dom. Obs., Vol. 24, No. 3, 1960.

Hamilton, Angus C. Evaluation of the Dominion Observatory bronze pendulum apparatus. Geophys. J. Roy. Astr. Soc., Vol. 6, 1961 (Contr. Dom. Obs. Vol. 5, No. 5).

Hamilton, A.C. and Winter, P.J. Primary gravity stations and excentre connections for Canada west of Ottawa. Dom. Obs. unpublished manuscript, 1962. (Copies on request).

Innes, M.J.S. Gravity and Isostasy in Northern Ontario and Manitoba. Pub. Dom. Obs. Vol. 21, No. 6, 1960.

Innes, M.J.S. The use of gravity methods to study the underground structure and impact energy of meteorite craters. J. Geophys. Res. Vol. 66, No. 7, 1961. (Contr. Dom. Obs. Vol. 5, No. 6).

Innes, M.J.S., Morelli, C. and Rice, D.A. Gravimetric ties Europe-America, Bollettina de Geofisica teorica ed applicata, Vol. II, N.6, guigna 1960.

Innes, M.J.S. Gravity connections of Canada. Bull. Geod. 1959, No. 51.

Millman, P.M., Clark, J.F., Willmore, P.L. and Innes, M.J.S. The Brent Crater, Pub. Dom. Obs. Vol. 24, No. 1, 1960.

Nagy, D. Gravimetric deflections of the Vertical by digital computer. Pub. Dom. Obs. Vol. 27, No. 1, 1963.

Paterson, Norman R. An integration technique for airborne gravity gradient measurements. Geophysics, 26, 474-479, 1961.

Preston-Thomas, H., Turnbull, L.G., Green, E., Dauphinee, T.M. and Kabra, S.N. An absolute measurement of the acceleration due to gravity at Ottawa. Can. J. Phys. Vol. 38, 1960. (Also in reprint as N.R.C. No. 5693).

Russell, R.D., Jacobs, J.A. and Grant, F.S. Gravity measurements on the Salmon Glacier and adjoining snowfield, British Columbia. Bull. Geod. Soc. Amer. Vol. 71, pp. 1223-30, 1960.

Shimazu, Yasuo. A study of the geophysical and geodetic implications of gravity data for Canada. Pub. Dom. Obs. Vol. 26, No. 7, 1962.

Tanner, J.G. General characteristics of the gravity field in West Central Quebec (with maps, No. 1, Eastmain; No. 2, La Grande; No. 3, Lac Bienville, and No. 4, Great Whale). Gravity Map Series of the Dom. Obs. Nos. 1 to 4, 1961.

Tanner, J.G. Tables of theoretical gravity between latitudes 40° and 85° at tenth-minute intervals. Dom. Obs. unpublished manuscript. (Copies on request) 1962.

Tanner, J.G. and Uffen, R.J. Gravity anomalies in the Gaspe Peninsula, Quebec. Pub. Dom. Obs. Vol. 21, No. 5, 1960.

Weber, J.R. Comparison of gravitational and seismic depth determinations on the Gilman Glacier and adjoining ice cap in Northern Ellesmere Island. Geol. of the Arctic, University of Toronto press, 1961.

Weber, J.R., Sandstrom, N. and Arnold, K.C. Geophysical surveys on Gilman glacier northern Ellesmere Island. Pub. No. 54, Intern. Assoc. of Sci. Hydrology, Snow and Ice Commission, pp. 500-511, 1960.

White, W.R.H. The structure of the earth's crust in the vicinity of Vancouver Island from seismic and gravity observations. Doctoral Thesis. Univ. of B.C., 1962.

Whitham, K. and Andersen, F. The anomaly in geomagnetic variations at Alert in the Arctic Archilepago of Canada. Geophys. Jour. R.A.S., Vol. 7, No. 2, 1962. (Contr. Dom. Obs. Vol. 5, No. 9).

Wilson, H.D.B. and Brisbin, W.C. Regional structure of the Thompson-Moak Lake Nickel belt. C.I.M.M. Trans. Vol. 64, pp. 470-477, 1961.

Wilson, H.D.B. and Brisbin, W.C. Tectonics of the Canadian Shield in Northern Manitoba. In Tectonics of the Canadian Shield. Roy. Soc. Can. Spec. Pub. No. 4. Edited by John S. Stevenson, pp 60-75, 1962.

Winter, P.J., Valliant, H.D. and Hamilton, A.C. Pendulum observations at Ottawa, Gander, Teddington, Paris, Rome and Bad Harzburg. Bull. Geodesique, No. 60, 1961 (Contr. Dom. Obs. Vol. 3, No. 29).

Winter, P.J. and Valliant, H.D. Measurements in the Prairie Provinces with the Dominion Observatory bronze pendulum apparatus. Geophys. Jour. R.A.S., Vol. 3, No. 2, 1960. (Contr. Dom. Obs. Vol. 3, No. 23).

Winter, P.J. Gravimeter calibration line Ottawa, Ontario, to Binghamton, N.Y. Dom. Obs. unpublished manuscript, 1962 (copies on request).

French Translations

Tanner, J.G. et Uffen, R.J. Anomalies gravimetriques de la péninsule de Gaspé, Québec (avec une carte d'anomalies gravimetriques a l'échelle de 4 milles au pouce). Pub. Dom. Obs. Vol. 21, No. 5, 1960.

Tanner, J.G. Caracteristiques generales du champ de gravité du secteur ouest de la partie centrale du Québec (avec cartes No. 1, Eastmain; No. 2, La Grande; No. 3, Lac Bienville, et No. 4, Great Whale) Series des Cartes Gravimetriques de l'Observatoire Federal, No. 1 à 4, 1961.

ADDITIONAL REFERENCES

Beals, C.S., Innes, M.J.S. and Rottenberg, J.A. Fossil meteorite craters. The Solar System. Ch. 9, Vol. 4, Univ. of Chicago Press (in press).

Brisbin, W.C. and Wilson, H.D.B. Interpretation of the Kapuskasing gravity high. Paper presented at CIMM annual meeting, April, 1962.

Fitzpatrick, M.M. Gravity in the Eastern Townships of Quebec (in preparation).

Halliday, I. and Griffin, A.A. Evidence in support of a meteoritic origin for West Hawk Lake, Manitoba, Canada (in press).

Hornal, R.W. Gravity survey of the Meighen Island Icecap. Proc. Roy. Soc. of Can. June 1962 (Abstract only).

Innes, M.J.S. Gravity measurements in Canada Jan. 1, 1954 to Dec. 31, 1956. Pub. Dom. Obs. Vol. 19, No. 1.

Innes, M.J.S. The establishment of a calibration standard for gravimeters in Eastern Canada and the United States. Trans. A.G.U., Vol. 39, No. 2, 1958.

Sobczak, L.W. Regional gravity survey of the Sverdrup Islands and vicinity (with map). Gravity Map Series, Dom. Obs. No. 11 (in press).

Sobczak, L.W., Weber, J.R., Goodacre, A.K. and Bisson, J-L. Preliminary results of gravity surveys in the Queen Elizabeth Island (with maps, No. 12 - Sverdrup Islands; No. 13 - Prince Patrick Island; No. 14 - Melville Island; No. 15 - Devon Island) (in press).

Tanner, J.G. A computer oriented system for processing gravity data (in press).

Weber, J.R. Gravity Anomalies over the Polar Continental Shelf. Contr. Dom. Obs. Vol. 5, No. 17 (in press).

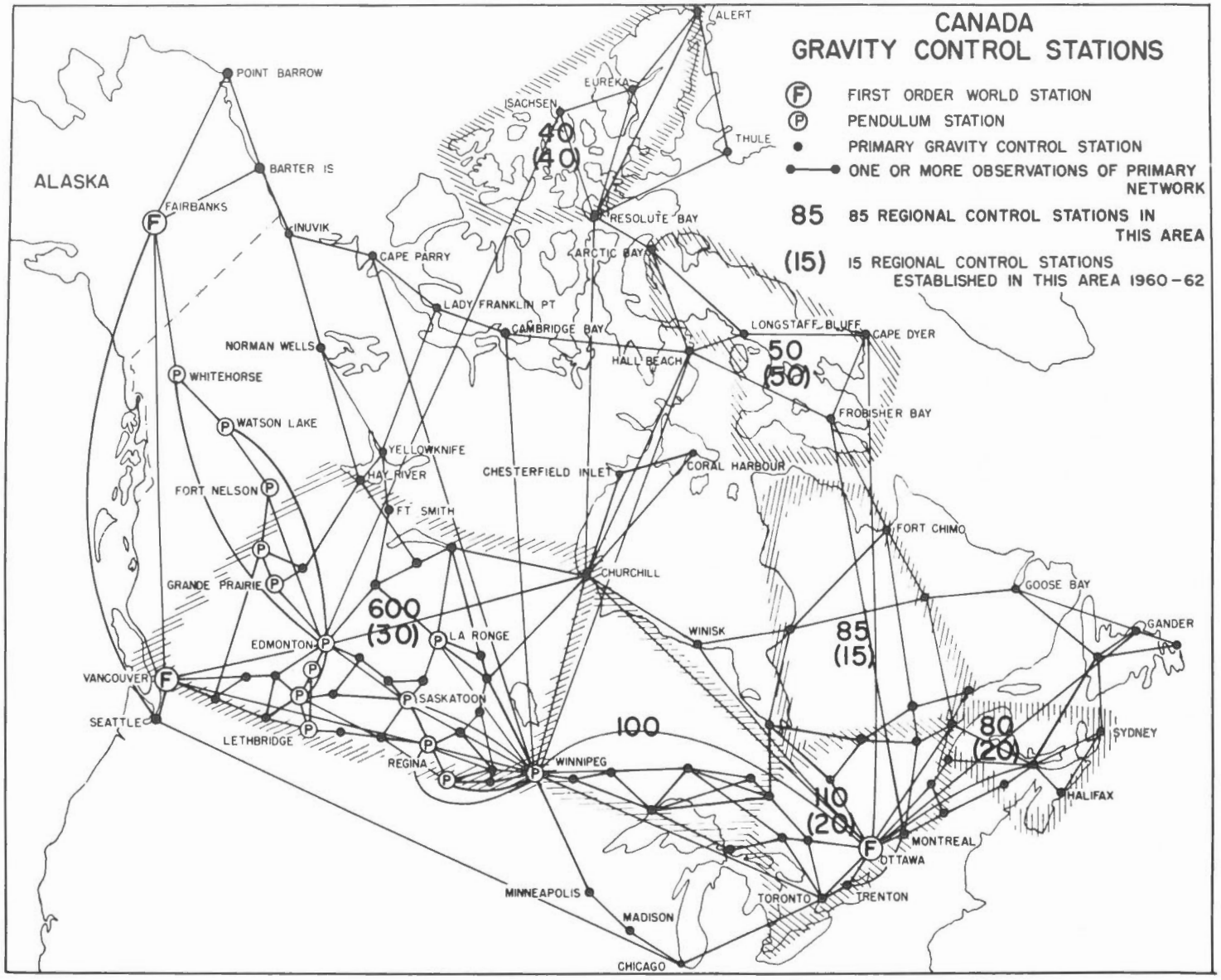
CANADA
GRAVITY CONTROL STATIONS
(F) FIRST ORDER WORLD STATION
(P) PENDULUM STATION
PRIMARY GRAVITY CONTROL STATION
ONE OR MORE OBSERVATIONS OF PRIMARY NETWORK
85 85 REGIONAL CONTROL STATIONS IN THIS AREA
(15) 15 REGIONAL CONTROL STATIONS ESTABLISHED IN THIS AREA 1960-62
ALASKA
ALERT
EUREKA
SACHSEN
THULE
POINT BARROW
BARTER IS
FAIRBANKS
INUVIK
RESOLUTE BAY
CAPE PARRY
ARCTIC BAY
LADY FRANKLIN PT
CAMBRIDGE BAY
LONGSTAFF BLUFF
CAPE DYER
NORMAN WELLS
HALL BEACH
WHITEHORSE
FROBISHER BAY
WATSON LAKE
YELLOWKNIFE
HAY RIVER
CHESTERFIELD INLET
CORAL HARBOUR
FORT NELSON
FT SMITH
FORT CHIMO
CHURCHILL
GRANDE PRAIRIE
GOOSE BAY
WINISK
GANDER
EDMONTON
LA RONGE
VANCOUVER
SASKATOON
SEATTLE
SYDNEY
LETHBRIDGE
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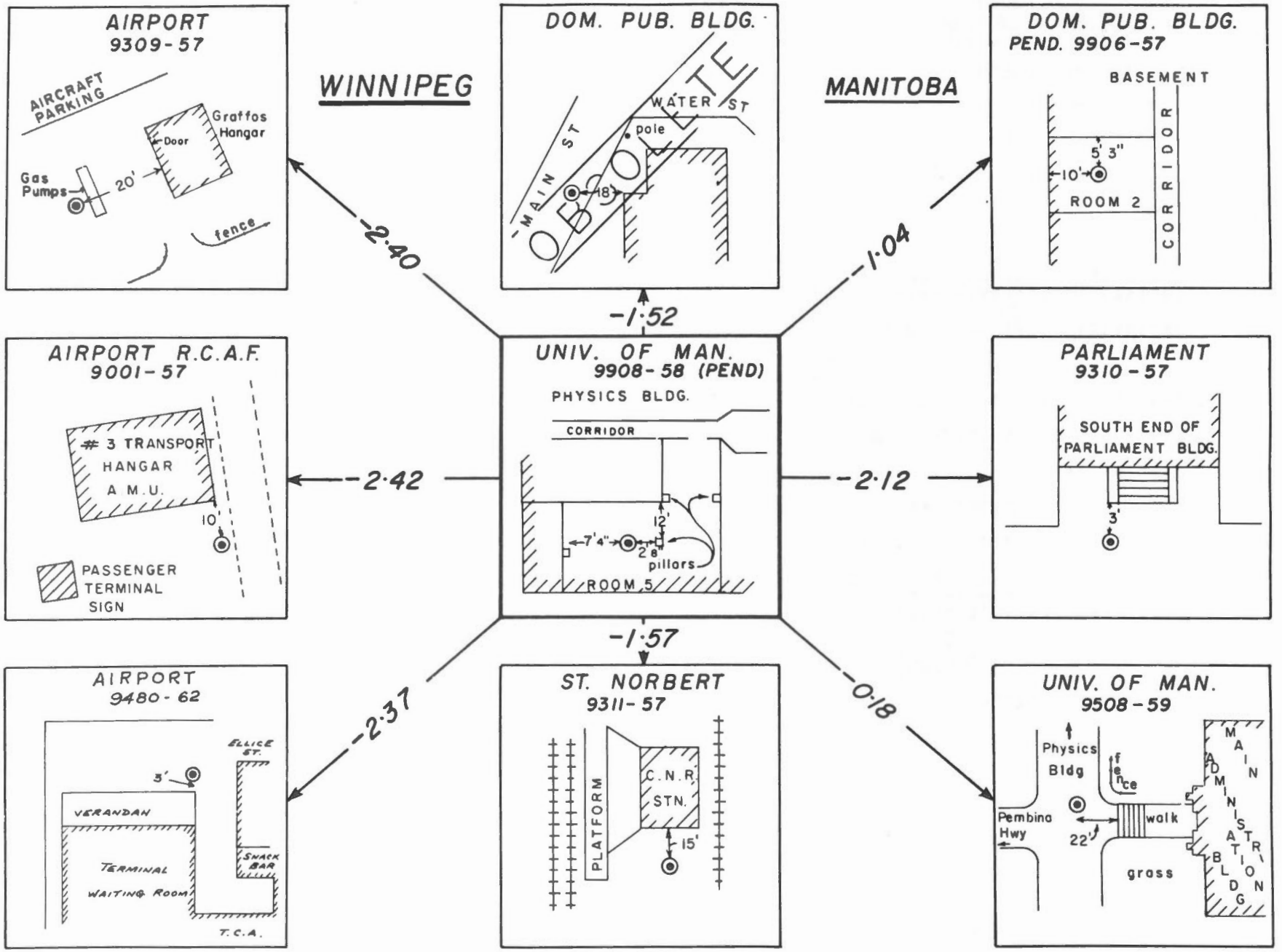
Figure 1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OBSOLETE
WATER ST
MAIN ST
pole
18'
DOM. PUB. BLDG.
PEND. 9906-57
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10'
ROOM 2
CORRIDOR
-2·40
-1·52
-1·04
AIRPORT R.C.A.F.
9001-57
3 TRANSPORT HANGAR
A M.U.
10'
PASSENGER TERMINAL SIGN
UNIV. OF MAN.
9908-58 (PEND)
PHYSICS BLDG.
CORRIDOR
12'
7'4"
2'8"
pillars
ROOM 5
PARLIAMENT
9310-57
SOUTH END OF PARLIAMENT BLDG.
3'
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-2·12
-1·57
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9480-62
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TERMINAL
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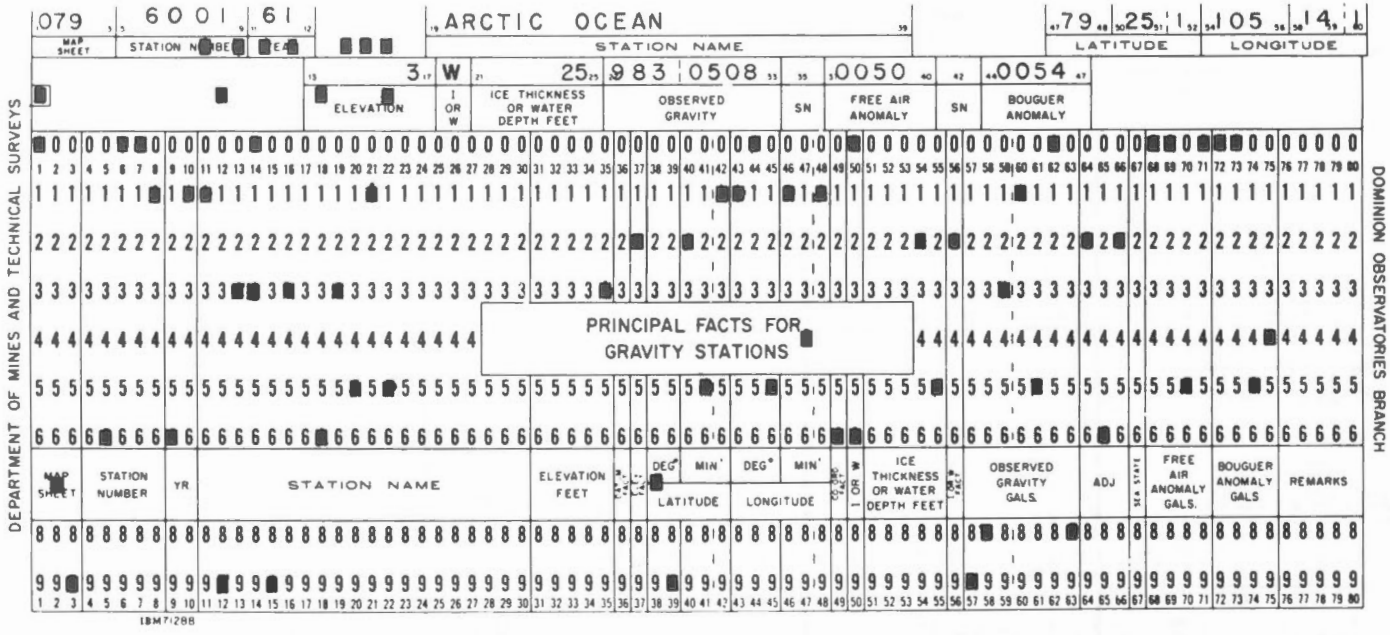
Figure 2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I OR W
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ICE THICKNESS OR WATER DEPTH FEET
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DEPARTMENT OF MINES AND TECHNICAL SURVEYS
DOMINION OBSERVATORIES BRANCH
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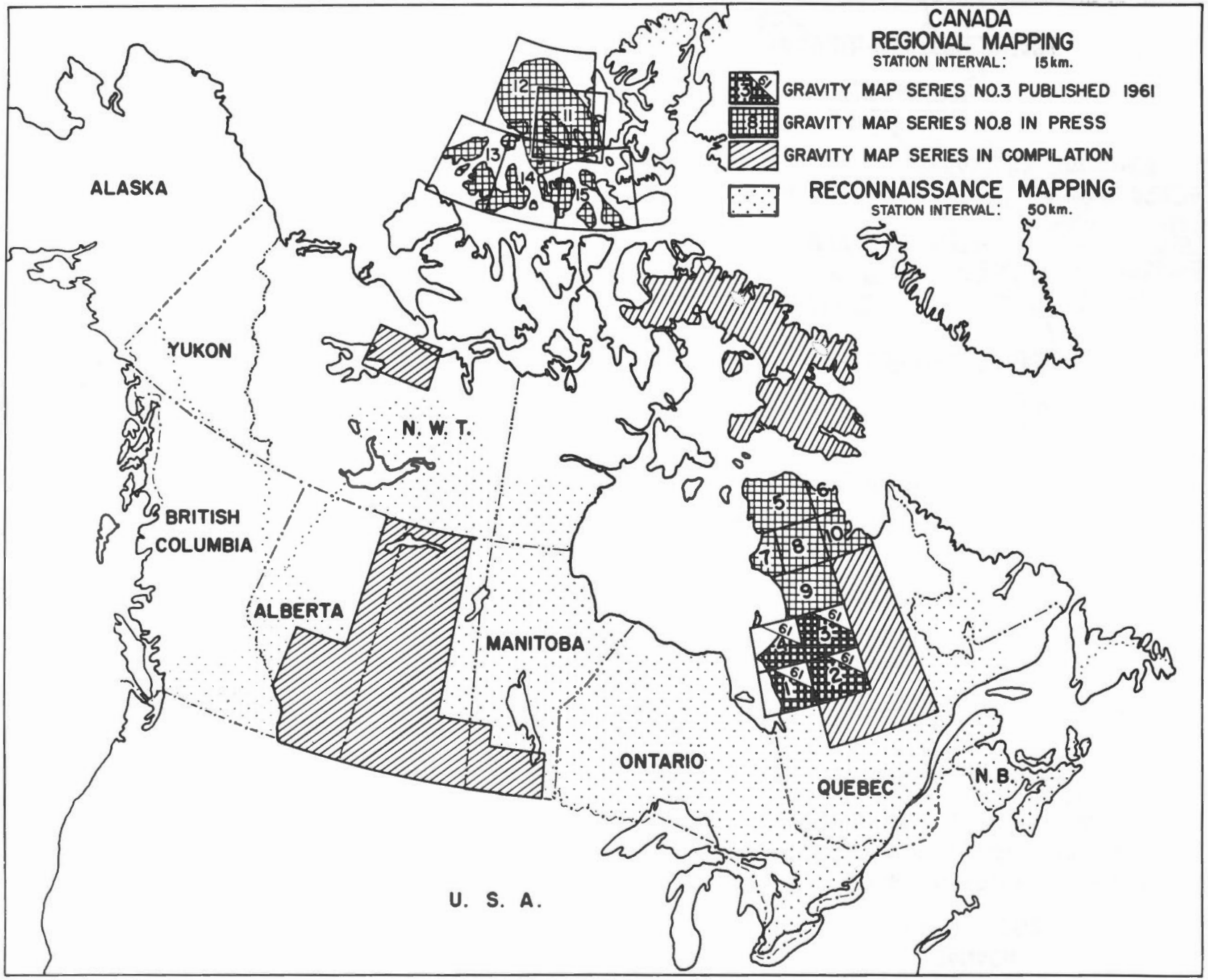
Figure 3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GRAVITY MAP SERIES NO.3 PUBLISHED 1961
GRAVITY MAP SERIES NO.8 IN PRESS
GRAVITY MAP SERIES IN COMPILATION
RECONNAISSANCE MAPPING
STATION INTERVAL: 50 km.
ALASKA
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BRITISH COLUMBIA
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MANITOBA
ONTARIO
QUEBEC
N. B.
U. S. A.

Figure 4

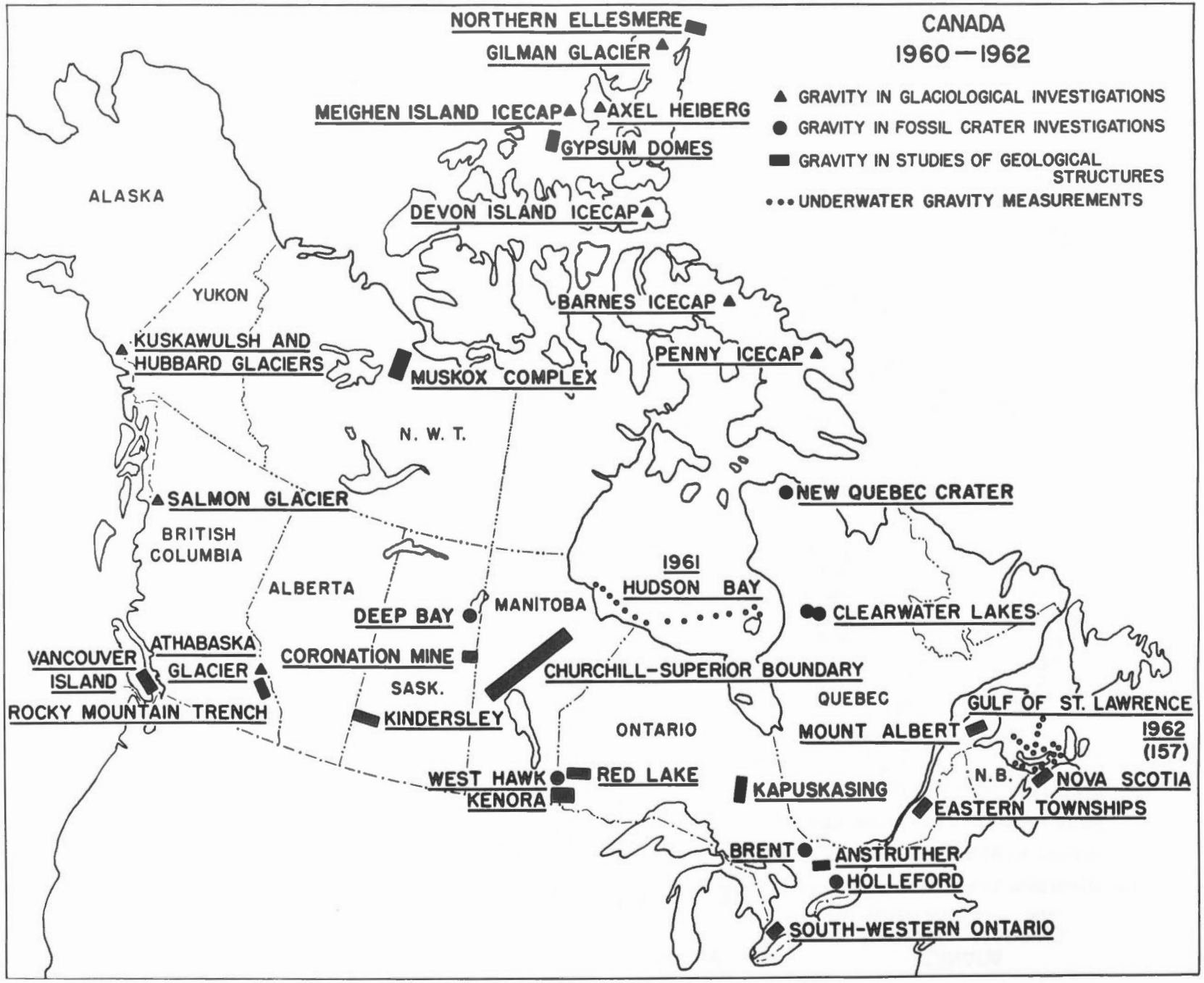
CANADA
1960 — 1962
▲ GRAVITY IN GLACIOLOGICAL INVESTIGATIONS
● GRAVITY IN FOSSIL CRATER INVESTIGATIONS
▬ GRAVITY IN STUDIES OF GEOLOGICAL STRUCTURES
••• UNDERWATER GRAVITY MEASUREMENTS
NORTHERN ELLESMERE
GILMAN GLACIER
MEIGHEN ISLAND ICECAP
AXEL HEIBERG
GYPSUM DOMES
DEVON ISLAND ICECAP
ALASKA
YUKON
BARNES ICECAP
KUSKAWULSH AND HUBBARD GLACIERS
MUSKOX COMPLEX
PENNY ICECAP
N. W. T.
SALMON GLACIER
NEW QUEBEC CRATER
BRITISH COLUMBIA
1961
HUDSON BAY
ALBERTA
MANITOBA
DEEP BAY
CLEARWATER LAKES
ATHABASKA GLACIER
VANCOUVER ISLAND
CORONATION MINE
CHURCHILL-SUPERIOR BOUNDARY
SASK.
QUEBEC
GULF OF ST. LAWRENCE
ROCKY MOUNTAIN TRENCH
KINDERSLEY
ONTARIO
MOUNT ALBERT
1962
(157)
WEST HAWK
RED LAKE
KAPUSKASING
N.B.
NOVA SCOTIA
KENORA
EASTERN TOWNSHIPS
BRENT
ANSTRUTHER
HOLLEFORD
SOUTH-WESTERN ONTARIO

Figure 5

CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
Observatories Branch

PUBLICATIONS

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Volume XXVIII · No. 4

RECORD OF OBSERVATIONS AT MEANOOK MAGNETIC OBSERVATORY 1957 - 1958 (Revised Edition)

Anne B. Cook - R. Glenn Madill

Price 50 cents

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QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1966

CONTENTS

MEANOOK MAGNETIC OBSERVATORY

NOTE: This publication is a revised and corrected version of "Record of Observations at Meanook Magnetic Observatory 1957-58", Pub. Dom. Obs. vol. 28, no. 4, 1963. Shortly after the original publication was released, Father P. N. Mayaud of the Institut de Physique du Globe, pointed out to us many inconsistencies in the tables of diurnal inequalities. In checking these values further errors were found in the other tables.

In consideration of the importance of accurate records for the period of the International Geophysical Year, it was decided to replace the original publication entirely by a new one, with as many errors corrected as possible. Users are asked to destroy copies of the earlier publication.

We regret the confusion which the publication of these erroneous values may have caused, and are grateful to Father Mayaud for bringing them to our attention.

Geographic Latitude 54°37′N
Geographic Longitude 113°20′W

Geomagnetic Latitude 61.8°N
Geomagnetic Longitude 301.0°E

1957-58
(Revised Version)

Introduction

Meanook Magnetic Observatory was established in July 1916 at a distance of 85 miles north of Edmonton and 11 miles south of the town of Athabasca, Alberta.

The observatory is controlled by the Division of Geomagnetism of the Dominion Observatory, Ottawa.

During the International Geophysical Year 1957-1958 an auroral all-sky camera; an auroral intensity recorder; a patrol spectrograph; a vertical incidence ionosphere sounder; a fixed ionosphere backscatter sounder; a riometer and telluric recorder were in operation at the station. This report deals with the standard magnetic observations only.

The Magnetic Equipment

The photographic recording equipment at Meanook consists of two sets, Standard and Low Sensitivity la Cour variometers installed originally for use in the Polar Year 1932-33. These are currently operating in the new magnetic observatory constructed in 1951.

Scale Coefficients

Standard	H	7.84γ/mm Temp. 1γ/degree C.
	D	0.98′ /mm
	Z	10.83γ/mm
Low	H	22.56γ/mm
	D	2.40′ /mm
	Z	16.76γ/mm

Stand-by Variometers

A three-component electrical Serson Magnetometer was in operation, with a chopper bar type inked output chart of 20mm/hr. The scale value was 8.3 gammas/mm corresponding to a full scale sensitivity of 1000 gammas in all components. The chart records were used in interpolating missing la Cour values. Such interpolated values of the la Cour records have been indicated in the tables by underlining. By means of limit switches and a relay the sensitivity of the electrical magnetometer is halved whenever any one element goes off scale, thus converting the instrument into a storm recorder.

Absolute Instruments

The absolute equipment available for the determination of baselines consisted of a Cooke 15 Magnetometer used for determination of declination and horizontal intensity. The corrections to the determination of declination to IMS was −0.3′ and horizontal intensity to IMS −0.00106H. A Ruska Type Earth Inductor No. 6540 was used for obtaining inclination and no corrections were applied. A five-component electrical magnetometer of standard saturated core type designed by Serson and Hannaford of the Dominion Observatory was used for determination of declination; inclination; total intensity. The Quartz Horizontal Magnetometer No. 259 became the primary standard for horizontal intensity.

Absolute Observations of Base-Line Values

Absolute observations were made on the average of once a week. Simultaneous marks were placed on the la Cour records and the base-line values determined by calculation from observed values and the measurement of the record ordinates at these points. The base-line values for D 1957 and Z 1958 were adopted by fitting the best continuous line between discontinuities. The base-line values for H and Z 1957 and D and H for 1958 were the means for the year. During 1957 and 1958 the r.m.s. value of the observed minus adopted values for D, H, and Z are:

D ± 0.8′
H ± 5γ
Z ± 13γ

A discontinuity occurred in the D baseline on November 26, 1957, and in the Z baseline on July 4, 1958.

The Magnetic Reductions

The time used throughout the IGY is Universal Time (U.T.). The hourly values of D, H, and Z were obtained from the magnetograms by means of a ruled transparent scale. Each value represents the mean reading for 60 minutes, centered on the half hour. The product of the ordinates and the scale value is added to the adopted base-line values and the sum obtained is the appropriate hourly value printed in the text. From the tabulated mean values for each calendar month the mean value for each hour of the day and the mean daily value for each day of the month are derived.

The mean diurnal inequalities of the elements D, H, and Z, not corrected for non-cyclic changes for all days and International Quiet and Disturbed days are given for the same period in the tables.

Magnetic Activity and Disturbance Indices

For the IGY period the magnetograms were read each month for sudden commencements, bays and pulsations and the results forwarded on standard forms in the manner internationally recommended to Committee No. 10 of the International Association of Geomagnetism and Aeronomy. The three-hour range indices for which the internationally accepted K-indices were derived were sent to De Bilt and Gottingen each month. Lower limit of K equals 1,500 gammas.

Mean Values for Month and Year—Meanook

Month	D East	H	Z	X	Y East	I North	F
1957	° ′	γ	γ	γ	γ	° ′	γ
January	24 24.8	12903	58798	11749	5333	77 37.4	60197
February	25.3	907	803	752	36	37.2	203
March	24.2	894	807	742	27	38.0	204
April	23.4	902	804	751	28	37.5	203
May	23.9	932	795	777	42	35.7	204
June	22.8	840	789	786	41	35.2	196
July	22.7	940	790	786	41	35.2	197
August	22.7	944	788	790	43	35.0	196
September	25.4	893	819	739	31	38.2	215
October	23.0	934	802	780	40	35.7	208
November	22.3	929	797	777	35	35.9	202
December	16.8	931	822	787	17	36.1	226
Year	24 23.1	12921	58801	11768	5335	77 36.4	60204
1958							
January	24 16.9	12936	58827	11792	5320	77 35.8	60233
February	15.7	919	847	778	08	37.1	248
March	16.2	911	846	770	07	37.5	246
April	14.4	946	851	805	15	35.6	258
May	13.8	954	848	813	16	35.1	257
June	14.3	963	850	820	22	34.7	261
July	14.6	942	797	801	14	35.2	205
August	14.4	952	782	810	18	34.4	192
September	15.3	941	795	799	16	35.2	202
October	14.6	941	802	800	14	35.3	209
November	14.4	961	786	818	21	34.0	198
December	14.9	951	792	808	19	34.6	202
Year	24 15.0	12943	58819	11801	5316	77 35.4	60226

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 1 Meanook — H = 12,000 γ + — January 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	928	931	935	938	941	939	936	931	929	931	928	812	910	939	931	918	903	913	903	904	906	906	909	917	918
2	927	928	923	936	941	946	945	939	940	891	808	863	913	917	934	928	926	918	906	871	844	903	915	922	912
3	910	914	914	921	923	918	915	915	913	910	913	913	910	914	914	910	903	908	895	895	888	896	896	899	908
4	909	915	917	917	921	923	923	918	906	914	923	923	922	920	921	918	914	910	903	902	903	899			
5 Q																		910	911			899	903	912	
6	923	923	929	929	936	943	937	931	931	928	928	923	922	934	935	937	937	930	920	915	911	913	918	928	928
7	937	937	941	947	945	946	943	934	933	922	912	906	909	944	942	942	937	918	906	906	909	917	920	926	928
8	930	925	925	939	958	948	947	939	927	913	789	750	841	890	926	939	935	910	906	908	898	899	909	914	907
9	937	935	929	936	943	951	961	943	933	920	927	923	907	839	825	856	888	881	881	884	884	892	925	923	909
10 D	931	942	972	967	942	962	839	881	849	676	714	669	747	793	732	818	881	918	900	896	892	881	904	925	860
11	931	934	920	923	919	923	920	879	637	585	539	613	782	813	935	930	923	915	904	897	896	896	897	911	851
12	920	927	926	931	918	943	939	928	923	900	915	927	924	919	927	928	928	923	915	906	903	904	907	914	921
13 Q	918	924	929	931	934	934	927	925	924	924	924	922	922	922	927	927	926	922	917	913	906	906	906	910	922
14 Q	915	924	924	924	926	926	929	928	921	929	932	932	920	928	937	936	937	936	926	919	912	911	907	910	924
15	919	920	916	920	922	924	921	920	903	908	920	932	925	902	926	941	933	933	921	916	915	908	907	911	919
16	911	922	922	921	921	918	931	918	913	915	915	909	883	898	931	938	939	932	918	911	906	903	904	912	916
17	919	919	920	922	924	926	924	924	907	919	922	924	938	938	924	931	943	939	928	915	896	900	904	915	922
18 Q	925	926	928	928	929	927	918	921	929	926	925	926	930	930	937	941	941	930	909	898	894	894	905	919	922
19	922	930	930	933	933	933	928	930	941	937	926	952	953	949	949	933	894	925	914	909	917	917	918	917	929
20 Q	919	924	922	927	934	934	934	933	933	930	933	933	937	940	940	937	932	929	920	905	901	905	913	928	927
21 D	943	950	951	951	991	998	959	960	770	877	822	810	845	912	904	632	661	701	583	672	532	567	869	948	825
22 D	846	1031	1128	1060	1159	1220	1204	927	928	846	803	794	850	866	869	869	857	857	861	848	857	869	880	887	930
23 D	888	893	904	903	910	909	910	917	894	691	687	599	521	612	639	801	891	879	871	903	887	886	878	896	824
24	908	926	910	941	986	957	918	909	891	898	900	901	895	898	901	902	918	916	898	862	882	871	908	894	908
25	996	1020	1078	1031	1050	1031	827	861	941	902	901	901	901	905	901	901	894	887	877	875	882	862	887	898	925
26	913	916	922	933	948	933	920	907	897	787	872	904	912	908	907	897	877	881	885	882	879	882	889	893	898
27	902	907	917	914	930	930	920	914	914	906	862	718	823	927	928	917	898	893	898	897	894	898	902	902	897
28	910	913	921	929	923	936	930	922	918	909	910	904	892	918	926	929	920	909	892	910	899	894	891	910	913
29	913	918	918	923	923	916	934	932	922	915	891	883	904	875	793	844	801	805	794	821	860	866	892	943	883
30 D	1001	998	992	993	906	1015	935	684	293	528	638	589	711	775	976	937	937	914	876	888	899	887	896	907	841
31	922	930	937	923	936	957	931	917	892	895	915	908	848	907	910	867	914	903	899	903	895	899	903	906	909
Mean	923	934	941	940	947	953	934	913	881	866	861	850	872	890	901	900	903	901	887	887	881	884	902	913	903

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 2 Meanook D = 24° E + ... ′ January 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	21.3	22.0	22.9	23.5	23.5	23.0	23.0	22.7	23.0	24.0	25.9	26.9	27.8	25.8	27.7	24.5	18.6	24.0	24.9	24.9	22.5	22.0	22.0	22.0	23.7
2	20.1	20.1	22.0	23.0	23.5	23.0	23.0	25.9	24.0	23.0	32.8	33.8	29.9	26.9	28.3	27.0	28.4	29.0	24.9	33.3	29.2	24.0	19.6	20.1	25.6
3	19.1	20.1	23.0	23.9	23.9	24.0	24.5	24.7	24.0	23.6	24.9	24.9	24.0	25.4	25.9	26.4	28.4	27.9	28.9	27.5	23.1	22.0	22.0	23.0	24.4
4	22.0	22.0	22.0	22.0	24.0	21.0	22.5	25.9	23.4	26.9	24.9	25.4	24.0	25.6	26.8	27.9	30.8	30.8	29.4	27.4	24.5	22.5			
5 Q																		30.8	28.0			20.5	20.7	21.5	
6	21.9	20.1	21.0	22.0	23.1	24.0	23.0	24.0	23.1	24.0	25.0	24.1	25.5	25.6	26.9	29.9	30.8	32.8	29.9	26.9	23.1	22.0	21.5	21.5	24.7
7	21.0	21.0	22.0	20.1	20.1	21.1	22.0	24.0	24.5	24.0	24.9	28.9	25.3	25.1	26.9	28.4	30.3	31.3	29.8	27.4	24.9	22.4	22.0	21.1	24.5
8	20.0	20.1	20.5	20.1	19.6	26.4	22.1	24.0	24.9	28.9	24.0	30.3	43.6	24.9	22.0	27.5	29.9	25.4	21.1	22.1	18.1	17.1	18.1	20.9	23.8
9	20.0	20.0	21.1	22.5	24.0	24.9	24.5	24.1	23.9	24.1	24.9	26.0	24.0	24.9	12.2	14.2	19.1	27.9	23.0	23.1	19.1	19.1	19.6	18.6	21.9
10 D	20.1	19.1	24.9	18.1	23.0	24.9	45.5	28.9	28.4	17.6	18.1	33.7	37.2	32.7	18.1	07.3	27.9	26.3	21.1	23.0	25.9	25.8	20.5	16.1	24.3
11	18.1	19.1	22.0	24.0	24.9	25.0	24.9	26.4	31.8	33.3	35.6	30.8	33.8	34.7	27.3	28.0	29.4	29.9	27.4	25.9	23.1	21.9	20.1	21.0	26.6
12	22.5	22.0	22.0	19.2	30.8	28.8	24.5	26.9	26.9	26.4	26.0	24.9	25.0	24.9	24.9	26.0	27.9	28.9	27.0	25.9	24.9	23.9	22.0	21.5	25.1
13 Q	22.5	22.5	23.0	24.0	24.0	24.0	23.9	24.1	26.9	26.4	24.9	24.9	23.1	24.9	26.9	28.5	29.9	31.8	29.4	28.4	25.4	23.9	23.1	23.4	25.4
14 Q	23.5	23.0	22.5	23.0	23.0	23.0	23.2	24.2	24.5	24.9	25.5	24.0	21.5	21.5	24.0	25.8	28.4	29.9	27.9	25.6	25.0	24.0	23.5	23.0	24.4
15	23.0	22.1	22.5	22.3	23.0	25.4	25.4	24.5	24.0	31.8	26.9	27.4	24.9	18.1	22.1	27.3	27.9	28.9	25.4	23.5	24.7	22.5	22.5	21.5	24.5
16	22.0	20.9	21.5	23.1	23.5	23.5	26.4	24.5	24.0	25.4	23.0	25.1	21.5	22.9	22.5	25.1	28.8	28.8	28.4	25.9	24.1	22.5	21.5	22.0	24.0
17	22.0	21.9	22.0	22.1	24.0	24.5	24.0	24.0	26.9	26.9	24.9	25.0	24.0	24.0	21.1	23.1	29.4	29.9	29.4	28.8	24.1	21.0	21.4	22.4	24.4
18 Q	23.1	23.0	23.0	23.3	23.9	23.0	24.1	24.9	26.9	23.1	22.9	22.0	24.9	24.9	24.0	25.9	29.4	31.8	29.4	26.9	24.5	22.0	21.5	21.9	24.6
19	22.0	22.4	22.5	23.0	23.0	22.3	24.0	23.5	24.0	23.0	20.5	25.4	24.0	25.4	25.4	23.5	13.2	21.9	19.3	16.1	19.1	18.6	18.0	19.1	21.6
20 Q	18.7	19.2	22.1	24.0	24.5	24.9	24.9	25.4	25.4	24.6	24.5	24.0	24.5	23.5	24.1	27.9	30.3	26.9	26.0	25.8	23.9	21.5	20.9	21.0	24.1
21 D	21.0	21.0	21.0	23.0	20.1	22.1	23.0	23.9	27.9	29.9	35.6	32.8	30.8	34.3	37.7	20.9	42.7	42.1	17.0	16.1	79.9	64.1	55.3	24.1	31.9
22 D	24.0	23.9	46.5	22.5	-2.0	9.8	30.8	23.1	4.5	15.6	28.8	24.0	29.9	29.9	31.7	32.7	34.3	34.7	30.9	28.9	26.0	22.5	21.1	21.1	24.8
23 D	22.0	22.0	22.1	22.8	23.0	24.0	23.1	23.1	28.4	41.6	46.6	36.2	52.4	35.7	24.0	24.5	24.0	27.9	24.0	30.6	27.8	22.0	20.9	20.9	27.9
24	21.9	18.1	19.1	22.0	22.0	24.0	25.8	27.9	25.0	24.9	24.9	25.9	24.9	24.8	25.9	29.9	32.7	33.7	33.3	32.4	18.2	17.1	15.1	20.5	24.6
25	21.0	25.9	23.0	18.1	16.1	21.0	10.7	22.0	24.9	27.4	24.9	25.4	24.1	23.5	24.9	27.9	29.9	28.8	29.3	27.0	24.0	22.5	20.1	19.3	23.4
26	20.1	21.9	21.0	21.0	19.3	23.0	23.9	27.8	24.9	23.5	23.5	23.1	24.0	23.8	23.0	26.4	24.1	26.1	25.0	24.9	23.1	20.5	20.9	20.1	23.1
27	21.5	21.1	20.1	24.1	25.0	21.0	23.1	23.6	23.0	22.9	30.6	36.7	42.7	25.9	25.9	30.8	26.0	29.0	27.4	24.0	21.5	21.1	21.0	20.1	25.3
28	20.5	21.0	21.1	21.5	24.0	22.0	23.5	22.5	22.0	23.9	27.9	27.5	23.0	22.0	26.0	27.9	30.8	30.8	25.4	24.1	19.1	19.1	20.1	18.1	23.5
29	20.1	21.0	22.5	23.0	22.4	29.9	26.4	20.5	22.9	23.9	24.0	32.8	35.7	32.8	32.3	33.7	15.2	18.1	12.7	7.0	16.2	17.1	15.2	19.2	22.7
30 D	18.0	23.9	24.1	28.8	19.1	31.8	29.9	17.1	27.9	40.1	36.7	43.6	44.5	45.6	29.4	39.2	34.3	35.2	31.8	24.9	21.1	21.9	20.7	20.1	29.6
31	20.1	19.1	22.0	23.5	24.1	23.1	24.0	23.0	19.1	26.0	27.9	27.4	24.0	24.9	29.4	25.9	30.8	28.4	24.9	25.4	23.0	18.2	19.1	20.1	23.9
Mean	21.1	21.3	22.9	22.5	22.0	23.7	24.7	24.2	24.4	26.0	27.1	28.2	29.0	26.9	25.5	26.4	28.0	29.2	26.0	25.0	25.0	22.8	21.7	20.8	24.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 Meanook $z = 58,000\ \gamma +$ January 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	797	797	797	797	797	797	797	797	797	792	782	707	706	782	776	779	771	765	781	788	788	795	799	795	782
2	803	803	803	803	803	805	813	825	801	748	747	775	782	766	798	803	799	792	786	781	786	830	830	820	796
3	809	809	809	809	809	809	809	809	799	798	798	797	799	799	802	803	803	803	808	808	801	803	804	804	804
4	805	803	805	810	809	810	824	805	782	792	803	800	803	803	799	799	807	807	809	809	809	809			
5 Q																		795	797				803	799	
6	794	796	798	803	808	812	803	799	789	789	789	782	761	781	791	797	798	798	798	797	790	787	790	791	793
7	788	790	792	797	811	814	803	810	797	789	774	748	714	776	798	799	795	786	792	798	798	798	798	800	790
8	802	803	813	825	851	847	821	805	799	766	668	614	669	745	784	803	804	790	782	792	803	813	827	827	786
9	821	823	817	827	833	847	852	825	814	801	803	796	764	671	696	701	738	776	787	801	811	825	855	862	798
10 D	852	843	879	890	874	853	755	799	809	735	684	593	695	748	690	658	749	825	818	822	826	851	853	852	790
11	860	825	823	821	821	821	827	818	680	706	749	803	673	690	786	825	825	818	814	814	814	811	817	816	794
12	817	810	810	829	841	829	822	829	821	803	797	805	803	803	807	809	809	808	809	809	809	809	808	810	813
13 Q	811	805	803	803	803	809	810	805	797	809	808	804	798	799	809	813	814	810	809	809	810	810	810	810	807
14 Q	810	810	810	810	810	810	809	803	787	782	792	792	782	776	798	808	799	798	798	798	798	798	801	801	799
15	801	801	801	805	808	814	809	800	764	727	760	775	775	747	753	788	787	788	795	792	798	798	803	803	787
16	805	803	808	808	811	812	798	790	782	787	776	766	727	712	761	787	797	796	797	799	799	800	801	801	788
17	800	797	798	802	803	803	808	792	771	751	771	776	787	787	782	776	792	787	789	791	797	792	792	792	789
18 Q	795	792	792	795	794	792	792	784	761	782	782	777	777	777	776	788	792	792	792	797	796	796	796	796	788
19	798	792	792	794	794	794	797	792	783	776	755	766	782	781	787	776	755	756	762	770	782	784	792	801	782
20 Q	808	814	814	809	809	808	807	799	795	792	792	792	792	792	795	797	792	792	792	792	792	792	792	798	798
21 D	797	798	803	824	878	898	851	852	722	798	721	771	738	689	710	848	528	615	700	732	756	857	733	842	769
22 D	851	861	692	844	784	765	722	709	724	797	841	836	814	820	829	829	825	825	825	825	818	821	822	823	804
23 D	829	827	830	830	830	835	841	840	776	608	779	939	820	771	717	706	773	792	798	828	830	836	840	851	805
24	851	857	865	873	887	874	857	847	834	830	828	818	803	818	820	818	825	820	821	823	829	824	834	844	838
25	894	868	879	901	915	912	749	803	852	835	835	829	826	826	830	831	836	836	839	830	835	835	842	836	845
26	835	837	847	855	885	855	846	841	809	755	786	811	810	805	803	803	804	805	803	809	814	825	820	821	820
27	822	816	827	842	852	836	823	814	805	795	734	539	593	735	792	791	802	803	808	808	808	808	809	810	786
28	809	809	814	822	830	828	823	813	805	803	792	782	753	766	788	798	798	798	801	803	803	810	808	809	803
29	809	814	814	813	823	825	814	812	808	803	746	722	735	723	713	732	690	695	756	782	807	812	833	886	782
30 D	906	864	877	870	875	836	814	771	646	695	803	722	587	614	825	826	831	825	801	810	818	823	820	821	795
31	825	830	836	836	846	851	829	798	747	782	803	792	719	768	798	755	788	802	803	807	810	825	830	827	804
Mean	821	817	815	825	831	827	810	806	782	774	776	767	751	761	780	788	783	790	795	801	804	813	812	819	798

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 4 Meanook $H = 12,000\ \gamma +$ February 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	917	927	933	928	929	921	921	922	917	835	891	921	929	928	925	921	917	909	903	898	896	898	905	913	912
2	918	928	928	929	928	929	929	923	910	883	898	907	907	945	931	934	918	895	875	921	913	912	904	914	916
3	922	934	936	930	929	929	930	929	922	921	921	926	931	931	931	930	921	898	907	906	904	900	906	929	922
4 D	928	970	972	937	934	1000	948	943	931	923	910	616	648	742	826	777	797	837	860	852	860	961	1001	1067	885
5 D	969	1093	1250	1218	1156	992	945	800	608	549	468	494	457	480	874	945	911	890	897	897	899	906	905	917	855
6	918	918	926	943	951	961	961	953	790	812	913	906	914	891	848	874	905	903	892	890	891	899	906	901	903
7 Q	903	910	910	915	915	915	918	921	923	876	930	913	926	918	918	913	903	887	876	887	906	907	912	914	909
8	921	922	930	938	942	936	952	952	944	927	921	912	922	922	925	918	905	898	898	905	921	928	928	917	924
9	920	922	939	939	973	942	936	929	918	932	934	938	930	927	921	917	908	903	903	910	913	904	915	933	925
10 Q	926	931	950	950	946	936	934	929	927	921	867	918	928	934	934	926	913	906	906	906	910	911	918	923	923
11	930	929	926	926	926	926	915	906	895	910	923	922	922	929	931	926	879	906	899	899	892	899	906	907	914
12	913	918	926	929	939	968	899	801	923	899	906	859	891	922	910	922	923	915	918	906	906	904	911	922	910
13 D	915	903	907	926	928	926	903	934	939	926	942	906	879	866	910	926	918	891	843	875	934	910	918	913	910
14	903	914	918	922	913	915	914	914	906	921	914	921	918	913	903	906	910	906	906	906	907	913	913	906	912
15	907	908	915	915	914	916	919	916	837	837	932	903	896	797	907	915	892	900	899	893	907	905	907	915	898
16	915	915	922	915	915	916	915	899	914	924	919	914	915	919	919	920	907	872	884	892	899	900	907	924	910
17	915	923	924	930	931	931	930	930	931	937	932	931	927	876	901	891	904	900	888	892	892	905	915	931	913
18	942	961	971	969	977	993	981	939	887	915	938	918	907	863	914	921	926	903	852	836	874	867	899	957	921
19	914	918	921	925	931	942	953	953	930	887	926	937	914	918	913	913	891	844	858	910	922	938	977	938	920
20	898	952	945	953	945	933	953	937	921	913	905	820	818	934	921	905	902	886	886	891	905	902	902	921	910
21 D	920	912	967	1046	991	940	974	924	803	653	732	959	928	787	771	799	889	901	881	881	904	936	921	999	892
22	985	977	953	926	926	918	871	910	910	879	793	785	793	895	910	909	887	910	901	895	921	920	919	914	900
23	932	912	957	939	954	933	936	911	832	845	841	873	896	892	911	904	903	895	793	821	975	958	964	998	907
24 D	1217	1386	1408	1021	868	693	684	786	696	137	272	495	849	856	940	903	923	904	896	903	907	907	915	915	853
25	921	898	911	934	917	914	912	912	902	898	922	914	914	913	913	909	905	902	905	907	912	912	906	909	911
26 Q	906	911	917	919	921	921	922	922	920	920	921	922	922	922	917	917	913	905	898	898	898	905	913	913	914
27 Q	910	934	926	926	938	935	934	930	926	928	922	926	930	930	922	915	903	892	892	891	896	903	910	910	918
28 Q	913	917	921	922	926	929	930	930	923	923	923	930	930	930	923	921	918	906	903	903	903	904	906	910	918
29																									
30																									
31																									
Mean	932	948	961	949	942	929	922	913	885	851	865	867	880	881	906	906	903	895	886	892	906	911	918	930	907

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 5 Meanook D = 24° E + ... ′ February 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	22.3	23.3	24.3	25.3	26.2	26.2	25.2	24.3	25.2	18.4	24.2	27.1	25.4	26.2	27.2	29.2	29.7	30.7	30.2	28.2	23.3	22.4	22.4	20.5	25.3
2	22.8	23.2	24.4	22.8	22.8	24.3	24.8	25.8	24.3	27.2	31.8	34.6	35.1	28.7	30.2	29.2	34.1	29.8	16.4	18.9	19.9	19.4	20.5	19.9	26.4
3	18.9	18.9	21.4	24.3	23.4	25.9	25.4	25.3	25.8	25.3	27.2	26.3	27.1	27.2	27.2	29.7	32.2	31.6	26.2	25.2	24.3	20.3	18.4	18.4	24.8
4 D	18.4	16.9	22.4	25.8	21.8	21.4	19.5	23.4	24.3	26.2	27.2	19.4	28.2	37.0	35.1	22.4	32.1	17.5	8.6	23.8	22.3	23.7	26.2	25.8	23.7
5 D	21.4	21.4	22.5	16.9	23.3	27.2	20.4	20.4	22.3	36.0	60.6	62.5	65.5	46.3	37.0	35.1	33.6	29.3	27.1	22.3	22.3	21.4	20.4	20.5	30.7
6	22.9	24.8	23.3	22.2	23.3	20.4	23.8	24.3	16.5	31.2	29.2	32.0	29.2	27.7	26.7	34.1	30.7	30.7	29.2	25.4	22.4	22.4	24.3	26.1	26.0
7 Q	24.3	23.8	24.2	24.3	24.2	24.2	23.3	27.1	27.7	22.3	27.7	30.3	27.3	29.1	29.1	28.7	29.3	28.3	22.5	20.3	19.4	20.5	21.4	20.5	25.0
8	19.4	17.4	19.4	17.9	22.4	22.8	24.3	22.4	24.2	27.2	29.2	29.3	29.2	30.2	30.2	30.2	30.2	32.1	24.4	23.3	23.3	23.3	22.3	24.3	25.0
9	21.3	21.4	20.4	19.3	21.8	24.4	24.3	23.8	25.2	25.4	28.7	30.1	29.1	29.3	29.7	32.5	34.1	31.2	25.2	23.8	23.7	23.3	21.8	21.4	25.5
10 Q	22.3	22.4	24.9	24.4	24.4	23.9	23.4	24.3	25.3	26.2	29.1	32.0	29.2	28.7	28.2	27.7	27.1	25.8	24.2	23.4	22.2	22.2	22.4	23.2	25.3
11	23.2	23.4	23.4	22.4	24.2	24.3	22.3	23.8	25.3	26.2	23.6	24.3	24.2	27.2	30.7	29.2	22.3	16.5	21.5	26.2	26.2	26.7	26.2	26.2	24.6
12	25.0	24.4	22.4	24.8	36.1	23.7	17.4	26.3	27.2	27.2	29.2	25.2	26.7	29.7	30.2	29.3	29.3	24.7	24.3	24.8	24.4	24.3	24.3	24.2	26.0
13 D	22.3	22.8	23.3	23.2	19.5	30.2	28.7	27.2	27.2	15.8	3.2	63.5	20.4	39.6	35.1	18.4	25.8	28.7	24.3	18.4	25.8	23.7	26.2	28.2	25.9
14	28.2	26.2	25.4	25.3	24.2	23.8	24.3	24.3	27.2	29.2	27.7	30.3	28.7	25.8	25.2	26.2	25.3	23.4	21.4	23.2	24.3	26.7	27.2	27.2	25.9
15	25.3	24.2	24.3	24.3	24.1	25.3	23.4	25.4	29.2	30.2	26.7	30.2	26.2	22.3	30.3	30.7	21.9	24.8	21.4	20.9	23.2	23.4	24.3	25.3	25.3
16	24.7	24.4	24.3	24.3	22.8	23.8	26.2	20.9	22.3	24.2	25.3	24.8	32.1	28.2	29.3	30.2	26.9	20.4	14.5	17.3	23.4	25.2	24.0	21.4	24.2
17	25.2	22.9	23.3	23.4	23.6	23.8	23.3	23.3	23.4	24.3	24.4	26.2	27.2	24.8	32.2	34.1	34.2	32.0	22.3	20.5	17.4	17.4	19.4	17.9	24.4
18	15.5	19.4	17.5	18.4	18.4	17.0	22.2	12.9	21.4	27.2	25.4	27.2	28.2	32.2	38.0	36.0	34.0	33.8	29.7	21.4	21.4	19.4	16.0	18.4	23.8
19	19.4	22.3	25.4	25.3	25.2	24.4	33.2	29.3	28.6	25.3	25.2	27.3	29.2	29.8	30.2	29.2	30.2	23.2	23.3	26.2	17.3	22.3	22.3	24.8	25.8
20	22.3	17.4	23.3	21.4	22.3	23.3	18.4	24.8	23.3	23.4	27.7	22.3	25.3	28.2	31.2	30.2	33.2	29.2	24.3	23.3	22.4	23.3	20.4	18.4	24.1
21 D	19.4	20.3	16.0	22.2	21.4	23.2	22.8	28.2	22.3	23.4	25.4	25.3	30.2	36.5	29.2	34.1	29.2	26.2	22.3	23.3	23.3	28.2	25.3	22.3	25.0
22	18.4	22.3	23.2	26.2	26.2	36.0	17.4	21.8	28.2	28.1	25.3	30.2	21.8	27.2	34.1	34.0	32.6	27.7	26.2	23.8	24.5	23.3	20.4	20.5	25.8
23	19.4	21.8	22.3	22.8	32.6	25.3	22.8	25.8	24.4	27.3	26.2	29.2	24.8	27.2	30.7	33.2	30.7	30.7	25.8	20.9	32.6	21.4	25.3	26.2	26.2
24 D	35.2	31.9	19.9	13.4	15.4	14.4	24.4	17.5	6.6	-6.6	47.4	43.9	39.9	35.0	28.2	34.6	34.1	34.1	31.2	26.7	26.2	26.2	26.2	24.3	25.1
25	22.8	23.2	22.3	21.3	23.3	23.8	23.8	24.3	21.4	18.9	27.7	29.2	29.3	28.2	29.2	31.2	30.7	28.2	26.2	23.3	22.3	23.5	25.2	25.3	25.2
26 Q	24.8	22.7	23.3	23.9	23.9	24.3	24.3	23.8	24.4	24.8	26.2	27.2	27.3	27.2	28.7	30.2	29.7	28.7	26.6	23.8	22.3	22.5	21.8	22.3	25.2
27 Q	22.3	19.5	19.9	22.0	22.2	24.3	24.3	24.4	24.4	28.2	28.7	26.9	27.3	27.2	27.7	29.2	31.2	32.5	27.7	24.3	21.4	21.4	21.3	22.8	25.0
28 Q	22.3	22.3	22.7	23.3	23.8	24.0	24.0	23.8	24.3	24.2	26.2	27.1	28.3	27.7	29.7	29.7	32.5	31.6	26.7	23.8	22.3	21.4	21.4	22.3	25.2
29																									
30																									
31																									
Mean	22.5	22.3	22.5	21.6	23.7	24.1	23.5	23.9	24.0	24.5	28.1	30.8	29.4	29.8	30.4	30.3	30.2	28.0	24.1	23.1	23.0	22.8	22.8	22.8	25.3

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 6 Meanook $Z = 58,000\ \gamma +$ February 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	833	831	829	821	815	812	810	808	804	689	760	786	808	809	809	809	809	809	810	810	814	814	813	814	805
2	812	812	810	815	827	838	818	820	801	712	753	765	756	799	799	802	799	792	782	792	799	805	813	816	797
3	820	823	825	823	827	820	812	814	810	809	803	803	803	802	803	808	808	799	794	792	795	814	833	838	812
4 D	842	885	877	825	829	836	809	841	830	812	798	663	576	570	690	692	706	792	797	825	857	905	864	863	791
5 D	873	916	868	787	760	663	573	630	824	827	792	706	738	700	706	830	830	829	823	821	825	843	842	831	785
6	829	834	829	831	852	867	862	853	722	761	810	809	814	792	752	769	776	797	805	805	818	820	822	821	810
7 Q	814	815	815	816	816	816	813	814	805	783	813	803	814	812	809	808	808	808	803	799	809	813	820	817	810
8	825	834	842	862	857	839	830	825	841	829	814	803	810	814	810	810	811	811	814	814	814	814	815	813	823
9	812	820	835	862	891	859	836	824	823	827	824	821	805	805	805	805	805	808	802	803	804	810	814	820	822
10 Q	821	824	821	810	809	809	815	810	805	792	711	764	794	797	797	797	797	797	807	807	808	808	805	803	800
11	803	808	807	807	814	814	805	792	761	771	788	790	786	791	788	788	798	803	799	804	814	820	820	814	799
12	807	807	814	836	850	836	727	690	792	797	790	765	787	803	790	802	814	804	808	810	809	807	809	809	798
13 D	807	807	808	808	820	809	810	765	760	661	717	620	825	550	634	701	717	786	765	829	829	814	814	813	761
14	813	809	803	803	801	798	803	803	786	788	787	797	797	788	792	798	798	803	809	810	813	812	813	808	801
15	801	801	801	802	802	803	807	797	722	706	803	772	760	652	755	771	764	786	801	804	814	820	815	815	782
16	813	808	808	802	803	803	797	785	797	808	797	769	760	776	782	782	783	788	782	795	809	807	808	823	795
17	797	804	803	799	797	797	797	797	792	792	792	792	792	738	744	743	744	755	764	771	778	792	802	808	783
18	840	843	844	850	875	888	866	816	744	773	815	810	777	719	771	797	820	823	801	810	839	850	868	885	822
19	835	820	807	801	820	820	803	788	825	771	804	813	792	798	798	803	786	761	798	840	866	862	862	854	814
20	840	856	862	852	842	818	837	835	810	808	797	745	730	803	803	809	814	810	810	814	820	829	818	831	816
21 D	829	827	875	863	901	851	847	700	693	950	900	853	825	734	723	722	782	830	820	831	851	864	885	912	828
22	906	909	905	874	852	765	679	787	826	787	722	709	711	797	808	810	818	830	821	841	873	852	841	857	816
23	864	855	878	856	867	848	825	782	625	695	722	770	787	787	803	798	798	810	813	825	866	862	853	938	814
24 D	841	200	695	370	668	723	727	840	907	671	671	987	879	825	857	830	841	842	827	825	824	824	830	831	764
25	840	830	840	844	831	825	824	824	744	760	830	821	825	825	825	820	814	810	807	814	817	816	816	820	818
26 Q	814	814	814	814	814	814	814	814	814	814	810	803	809	809	809	809	809	809	803	813	814	814	814	815	812
27 Q	812	814	828	839	828	814	803	808	803	801	803	804	809	805	805	805	805	805	800	800	803	803	808	807	809
28 Q	803	803	803	803	803	803	799	801	799	786	797	801	799	803	801	803	804	804	803	802	802	802	798	798	801
29																									
30																									
31																									
Mean	827	808	827	810	824	814	798	795	788	778	787	784	785	768	781	790	795	804	802	811	821	825	826	831	803

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 7 Meanook — H = 12,000 γ + — March 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	921	924	930	937	937	938	939	946	935	924	911	904	853	782	900	929	893	900	915	900	910	919	932	962	915
2 D	1002	1057	1189	1350	1216	744	475	577	621	750	766	677	330	307	431	708	867	856	782	837	954	986	1021	1096	817
3	1033	970	1033	985	978	810	625	861	864	862	862	751	867	813	802	916	875	907	875	875	900	892	896	906	882
4	928	899	934	1015	1071	961	930	871	907	871	797	808	789	790	883	918	903	899	895	892	895	892	907	900	898
5	914	939	927	937	953	930	922	919	903	830	841	877	922	852	874	914	881	842	867	892	899	929	882	945	900
6	946	953	915	921	929	930	934	927	937	881	808	852	899	863	813	824	900	922	892	874	881	874	883	894	894
7 Q	906	914	930	929	928	924	922	923	922	890	879	928	921	906	849	877	903	918	899	888	892	903	906	906	907
8	969	921	923	913	921	934	934	824	895	930	923	903	855	840	921	930	913	892	883	874	870	891	913	973	906
9	965	941	951	1015	1022	997	922	962	928	915	897	881	876	874	875	895	899	889	903	879	891	895	895	910	920
10 D	928	949	937	981	1065	1048	973	852	644	866	712	171	-109	283	-109	194	695	793	871	931	1011	1016	1019	984	738
11 Q	946	925	911	917	910	962	920	901	901	895	900	903	903	900	890	884	874	875	876	882	892	888	891	892	902
12 Q	893	907	914	907	907	914	907	809	790	872	891	884	922	921	923	907	900	892	882	885	893	904	908	911	894
13 Q	911	912	921	921	922	922	925	925	927	925	851	859	882	836	894	895	869	875	870	880	897	915	905	908	898
14 Q	908	911	919	919	922	926	926	926	924	924	935	938	934	934	927	918	910	899	891	892	909	908	922	919	918
15	920	936	926	925	931	932	935	935	939	943	943	943	947	940	936	920	910	884	876	873	896	926	950	915	924
16	948	1042	1024	934	932	933	948	944	924	920	928	932	920	916	916	921	904	877	819	817	897	1013	902	893	925
17	905	918	925	917	921	933	949	933	919	897	919	922	917	813	851	906	848	863	873	872	878	898	907	922	900
18	911	917	930	922	927	933	920	913	936	925	902	655	580	886	944	941	925	893	874	875	898	894	917	922	889
19	913	920	930	929	935	937	936	937	927	811	768	702	735	933	941	941	927	890	883	886	909	902	913	936	893
20	940	925	925	930	956	945	913	834	774	847	914	942	937	934	937	917	898	902	889	890	889	898	927	927	908
21	921	929	942	961	952	935	941	937	933	934	934	933	941	919	909	878	820	807	839	858	875	953	945	990	916
22	1027	913	927	937	980	1003	980	933	762	706	820	866	791	768	836	919	889	814	870	870	907	931	941	958	890
23	1019	964	949	997	938	927	917	886	918	913	804	706	831	913	941	908	870	875	891	900	898	902	925	919	905
24	958	927	942	933	925	925	925	929	895	883	929	934	933	929	927	921	919	898	882	870	894	918	887	902	916
25	924	928	1040	1238	1216	1020	1020	938	773	536	448	341	526	793	959	944	928	912	903	910	906	908	910	921	872
26	920	920	920	923	920	923	923	928	928	928	924	898	815	828	824	884	890	892	898	896	904	914	933	980	905
27 D	1035	937	927	945	943	908	941	804	800	729	784	829	596	856	835	717	913	903	839	845	866	964	1188	1259	890
28 D	1192	1184	1121	956	904	678	604	500	698	447	837	886	937	931	922	887	925	918	907	902	903	904	907	910	873
29 D	911	945	941	929	936	1003	1031	964	957	870	878	888	894	788	580	517	792	713	774	872	903	909	1041	974	874
30	1057	1147	1102	1094	996	914	895	883	861	891	902	908	900	880	877	870	856	865	872	879	898	883	937	937	929
31	936	938	933	934	945	926	910	903	902	920	898	865	876	848	880	880	870	862	886	876	929	1043	1038	1008	919
Mean	955	952	959	969	966	926	901	882	870	853	854	822	804	831	835	857	883	875	873	880	901	922	937	948	894

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 8 Meanook $D = 24^\circ E + \ldots '$ March 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	19.9	19.4	20.3	20.7	20.9	21.8	21.8	21.7	22.8	28.2	32.1	34.5	37.5	32.7	35.5	32.7	37.8	20.9	15.9	17.8	19.4	17.9	17.4	16.9	24.4
2 D	6.6	17.4	7.1	-14.1	-9.0	40.0	-8.0	-34.4	-6.8	18.8	40.5	53.7	75.8	-51.7	60.1	46.4	32.5	35.5	31.6	14.9	29.6	27.6	24.3	27.5	23.7
3	23.8	20.7	30.5	26.8	25.8	22.1	-10.2	28.7	25.7	26.6	24.3	20.8	25.3	17.9	25.7	29.7	35.0	30.6	23.8	18.0	20.8	21.7	23.3	20.8	23.3
4	17.9	19.9	19.9	22.8	18.9	23.9	26.7	20.8	28.7	27.7	27.8	29.2	30.6	21.7	26.7	30.7	32.6	31.5	28.7	24.8	23.9	21.3	19.4	18.9	24.8
5	19.9	20.8	18.9	21.8	23.8	21.8	23.8	23.8	22.8	25.7	30.2	31.7	29.7	27.7	27.7	29.7	32.6	31.6	24.8	22.8	22.9	21.3	22.7	16.9	24.8
6	15.9	22.7	21.8	22.2	21.7	25.2	27.7	19.8	26.7	25.6	21.8	23.8	23.7	25.7	18.9	17.9	32.6	27.7	27.2	26.7	21.0	20.8	22.7	21.8	23.4
7 Q	21.8	20.8	20.3	19.4	19.9	22.0	22.3	22.8	23.7	22.8	25.2	25.6	25.2	25.8	21.8	25.1	34.1	30.1	30.5	29.2	24.3	20.3	18.0	16.9	23.7
8	16.9	21.3	20.9	21.7	21.9	20.9	20.9	8.6	30.6	26.2	23.7	26.7	16.4	15.9	30.5	33.6	35.0	32.6	29.2	25.3	21.8	17.8	15.9	18.4	23.0
9	18.9	17.9	16.4	9.1	19.9	29.7	24.3	25.2	28.4	29.7	28.9	30.8	28.9	30.1	27.2	30.5	32.1	21.6	25.2	22.8	19.8	19.0	17.8	18.0	23.8
10 D	19.9	19.9	19.8	14.9	15.4	23.8	15.4	21.0	26.7	25.6	30.8	53.2	91.7	79.6	55.6	43.7	46.3	28.7	30.8	29.6	33.1	25.6	17.4	20.3	32.9
11 Q	21.3	19.4	19.9	19.9	22.7	22.8	23.3	25.2	23.9	23.7	25.2	24.8	24.8	26.6	28.7	30.5	30.6	29.7	25.2	23.7	21.3	22.3	23.3	22.8	24.2
12 Q	22.3	21.8	22.2	20.8	20.9	22.3	25.6	24.3	38.0	31.6	23.9	24.8	23.7	24.9	28.2	29.7	30.6	30.6	28.2	23.8	22.3	21.8	22.7	22.9	25.3
13 Q	21.8	21.8	21.7	21.7	22.8	24.8	27.7	21.8	22.7	22.9	15.0	16.9	21.8	18.8	25.7	27.7	29.2	22.3	19.9	14.0	16.0	18.8	20.7	22.3	21.6
14 Q	21.8	21.8	21.7	21.5	21.8	21.8	22.7	22.9	24.7	28.8	26.7	24.6	24.7	25.7	27.7	29.6	31.6	28.7	24.7	22.7	21.8	21.8	21.3	22.8	24.3
15	20.8	20.8	20.9	21.7	20.8	20.7	20.9	22.8	24.3	22.8	22.9	22.9	23.3	25.2	29.2	33.1	32.6	29.7	23.3	15.4	14.5	15.9	14.9	17.9	22.4
16	12.0	8.6	15.9	19.4	21.3	21.8	22.8	22.3	24.3	26.2	27.2	26.6	26.2	27.7	30.6	35.0	39.5	33.6	46.3	32.7	9.6	23.3	19.4	17.0	24.6
17	19.4	18.8	16.9	17.9	19.9	21.7	25.7	22.8	23.3	22.3	25.7	24.3	23.9	19.9	22.9	30.7	27.7	24.8	26.4	20.3	18.6	18.9	18.9	16.9	22.0
18	18.8	19.9	17.9	21.3	27.6	22.8	22.8	24.7	25.2	24.7	20.7	16.8	20.3	26.2	30.6	36.0	35.0	31.6	27.2	22.8	20.8	19.0	18.9	16.9	23.7
19	17.8	17.9	19.0	19.9	19.9	20.8	21.8	22.8	33.4	32.1	36.4	40.4	22.8	26.7	32.5	34.5	38.0	33.7	26.8	25.2	19.9	16.8	14.0	13.0	25.2
20	13.0	14.9	16.8	19.4	18.8	15.9	22.8	27.2	17.0	33.5	30.5	26.7	26.7	25.7	28.2	32.6	32.6	30.7	28.2	25.6	19.9	18.4	16.4	14.9	23.2
21	16.4	17.4	17.9	16.9	12.7	21.3	22.8	22.8	22.8	23.8	23.9	23.8	23.8	25.7	30.7	31.1	25.2	22.8	26.7	11.2	14.9	14.9	17.9	15.9	21.0
22	14.0	17.4	17.4	18.4	18.9	20.8	26.7	25.2	25.7	28.6	32.5	29.7	23.9	21.8	36.5	35.5	32.6	28.2	18.9	19.9	19.4	19.3	19.9	18.1	23.7
23	22.8	17.9	19.6	23.7	23.5	20.7	18.6	25.6	25.4	26.6	22.9	23.3	32.6	27.6	30.6	34.7	32.1	29.2	24.3	24.3	21.8	20.7	19.0	18.4	24.4
24	15.9	20.7	18.8	19.9	20.7	20.9	22.8	25.7	29.6	34.6	27.7	25.7	24.5	26.6	29.6	31.5	30.6	30.6	29.2	26.0	20.9	18.4	18.2	17.9	24.5
25	17.4	18.4	13.5	22.3	4.7	5.1	20.3	24.7	33.1	35.0	40.9	69.8	31.6	21.8	30.6	38.5	37.0	32.6	25.7	21.3	19.9	19.4	19.9	20.8	26.0
26	21.7	20.8	20.8	20.8	21.5	21.3	22.7	23.8	23.8	24.7	23.3	24.7	23.8	28.7	30.1	34.1	34.5	28.4	24.3	22.7	21.8	21.8	18.9	16.2	24.0
27 D	17.9	18.6	18.4	18.4	18.9	17.9	18.9	4.7	28.7	29.7	33.6	30.6	51.2	38.5	43.4	37.0	38.5	36.5	34.5	23.3	30.6	26.7	18.9	19.9	27.3
28 D	22.8	28.2	17.4	25.2	9.1	16.4	18.9	27.7	17.4	20.3	29.2	24.3	27.2	26.7	31.6	34.1	36.5	31.6	28.2	25.7	23.8	21.8	21.1	21.5	24.4
29 D	20.8	18.4	19.4	18.9	18.9	11.5	20.8	22.3	23.3	24.7	26.7	30.1	32.1	17.4	16.4	51.2	36.5	40.4	26.7	9.1	22.8	17.9	21.8	25.7	23.9
30	14.0	17.9	16.9	23.8	21.8	21.8	23.3	23.6	22.8	24.7	24.3	24.7	25.7	28.4	32.1	37.5	35.0	31.1	27.7	26.7	22.5	18.8	16.9	16.1	24.1
31	16.4	16.4	19.1	16.2	20.3	24.3	21.3	21.3	25.7	24.7	24.3	20.8	20.8	23.8	27.7	30.6	33.6	32.6	26.2	17.9	21.3	21.8	17.2	15.9	22.5
Mean	18.4	19.3	19.0	19.1	18.9	21.6	20.6	20.7	24.7	26.6	27.4	29.2	30.3	27.8	30.8	33.4	33.9	30.0	27.0	22.1	21.3	20.4	19.3	19.0	24.2

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 9 Meanook $Z = 58,000\ \gamma +$ March 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	797	797	801	801	802	803	808	810	803	796	764	755	721	619	707	745	732	729	749	775	786	801	799	837	772
2 D	885	895	663	325	360	225	201	769	1213	1009	1005	1108	1204	1177	948	787	831	818	835	820	825	840	831	814	808
3	874	864	851	855	885	825	776	787	803	811	799	775	804	731	699	797	818	841	828	825	825	823	823	825	814
4	841	836	862	893	947	809	825	776	803	782	752	732	731	776	790	820	821	821	818	820	821	818	834	823	815
5	838	844	830	830	848	823	823	821	764	668	700	731	798	733	783	803	786	782	798	810	824	836	820	850	798
6	861	857	812	810	820	825	838	834	779	784	733	749	782	764	748	749	816	830	820	821	823	820	821	825	805
7 Q	820	821	828	843	841	818	812	814	808	759	765	808	803	797	761	765	794	820	807	808	817	826	826	826	808
8	865	820	816	809	807	814	825	719	797	809	810	794	697	689	787	818	814	810	814	823	836	834	834	866	804
9	867	852	857	908	874	831	834	842	814	792	760	753	760	760	760	764	790	797	814	814	828	831	814	810	814
10 D	809	821	834	842	775	803	834	852	851	847	899	843	959	979	694	760	738	837	853	847	853	877	879	857	839
11 Q	855	855	851	844	841	849	853	830	825	825	824	822	820	825	825	824	818	820	818	823	828	828	827	825	831
12 Q	818	818	818	828	836	825	814	749	717	755	776	756	797	814	820	820	820	814	805	812	816	824	817	814	803
13 Q	814	813	812	812	814	815	814	812	807	803	701	689	717	663	745	765	774	771	801	821	835	852	829	821	788
14 Q	821	814	814	810	811	815	815	808	797	760	797	809	811	814	814	813	815	820	825	825	825	827	830	827	813
15	820	821	821	828	825	823	821	821	820	815	813	810	810	810	814	814	814	817	814	815	815	820	825	827	818
16	847	964	912	846	836	825	840	840	820	807	808	814	805	808	803	814	813	809	818	888	929	912	853	825	843
17	831	834	841	836	836	826	841	841	821	788	803	811	803	765	787	814	810	830	825	827	826	829	828	830	820
18	824	820	825	829	828	814	803	755	805	799	770	570	570	699	803	820	820	814	817	820	821	830	830	830	788
19	830	828	821	821	821	821	820	820	765	603	624	668	668	776	803	814	803	801	803	810	841	823	825	834	785
20	851	836	829	821	847	802	727	760	798	707	744	798	800	807	813	804	797	803	803	809	810	814	825	825	801
21	820	818	816	826	849	836	816	813	808	803	801	792	792	782	776	744	684	673	727	760	820	862	868	889	799
22	836	820	821	840	852	852	836	830	733	679	709	755	722	635	679	791	792	782	829	837	854	847	857	872	794
23	879	868	870	864	825	825	803	765	809	799	690	639	681	769	815	810	792	797	808	810	814	815	820	820	799
24	853	836	852	830	817	808	803	788	712	724	776	799	805	805	805	805	804	803	803	809	825	857	810	813	806
25	825	817	853	803	570	619	782	825	755	695	706	857	933	814	803	830	815	814	820	823	825	825	825	825	794
26	820	814	814	814	814	814	814	814	813	811	792	773	668	668	663	727	755	776	792	805	821	841	879	895	792
27 D	899	830	825	836	809	786	755	630	657	681	695	684	546	690	679	682	760	801	809	840	857	879	891	790	763
28 D	673	630	711	852	822	788	874	922	1046	904	782	803	847	855	857	860	866	848	841	844	841	836	836	836	832
29 D	834	842	847	836	836	835	797	816	816	803	782	782	771	652	549	370	800	809	836	830	830	834	863	872	785
30	863	836	868	818	843	825	825	789	782	809	814	827	830	830	836	841	825	822	825	825	831	834	844	854	829
31	850	844	841	854	866	842	814	811	805	812	796	760	771	760	771	784	804	831	836	839	867	933	933	904	830
Mean	836	831	826	818	812	794	795	802	811	782	774	776	781	776	772	779	797	805	813	820	831	840	839	837	806

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 10 Meanook H = 12,000 γ + April 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1074	926	924	923	941	754	836	721	627	815	825	704	767	862	839	792	808	837	831	893	904	911	970	1014	854
2	996	1021	915	912	919	931	950	839	874	780	811	919	916	925	922	903	909	864	853	889	915	925	932	925	906
3	966	927	922	919	934	933	928	915	892	823	756	608	786	884	903	875	847	844	854	910	970	966	986	1092	893
4	1015	979	1075	1030	1061	943	943	946	928	888	828	852	877	932	910	865	875	824	881	872	925	979	996	1024	935
5 D	1051	1061	1071	994	994	944	959	990	958	935	790	281	415	707	863	892	828	908	900	901	906	928	960	1125	890
6	1114	1085	1125	1085	1075	906	700	738	761	532	520	667	911	943	928	895	896	907	875	903	906	900	904	910	883
7 Q	914	929	934	927	932	933	928	931	933	927	932	932	933	934	933	924	926	864	894	890	892	897	906	932	920
8	927	925	928	934	945	949	933	927	829	721	729	744	792	845	898	920	919	917	903	893	894	827	960	944	883
9	925	959	942	951	999	839	793	925	896	815	797	698	611	735	742	729	878	884	865	903	925	945	909	1058	863
10 D	1074	1138	1342	1297	1085	988	992	437	381	498	493	399	352	288	325	493	847	963	976	917	921	932	938	927	792
11	942	907	916	923	919	924	919	923	917	909	779	415	411	698	931	953	931	910	900	900	900	909	913	913	861
12	920	932	927	925	930	944	945	815	931	929	921	927	825	919	915	908	887	880	878	915	920	913	922	919	910
13 Q	929	929	943	938	933	956	878	627	658	918	941	919	873	851	889	912	907	904	894	894	898	904	911	916	888
14 Q	923	930	934	941	937	937	938	938	938	937	938	943	941	937	935	926	917	895	890	898	894	907	919	922	926
15	925	935	945	953	955	960	980	971	956	948	935	839	896	928	884	894	890	874	870	881	871	960	1074	1113	935
16	1193	1095	1126	1079	938	967	990	946	926	926	915	932	921	901	875	845	848	874	899	892	899	923	969	1003	953
17 D	980	966	989	1024	1045	877	879	937	939	934	935	944	935	877	926	961	969	946	935	954	881	1022	993	1071	955
18 D	968	978	951	933	926	956	934	886	935	943	939	946	952	962	957	911	843	858	863	930	1032	1109	1212	1298	968
19 D	1251	1125	1080	1020	1075	1025	365	707	595	612	749	734	503	717	657	628	851	882	859	924	957	954	1023	1048	848
20	961	969	976	947	971	1042	973	818	819	824	808	815	883	905	902	899	859	886	905	896	891	903	922	970	906
21	994	967	986	907	1055	1041	993	903	936	766	766	604	710	542	688	844	884	904	913	916	915	912	912	921	874
22 Q	932	930	930	929	931	933	935	939	942	945	946	944	938	936	930	913	897	871	875	897	903	901	901	913	921
23	942	942	945	946	969	954	957	946	946	938	935	939	928	905	901	938	924	919	915	917	913	898	936	947	933
24	970	976	1022	950	828	931	931	932	892	741	916	944	939	936	918	917	882	913	906	908	904	929	991	950	922
25 Q	979	935	917	918	931	938	936	934	932	929	928	927	896	864	862	840	895	877	876	895	903	933	939	939	913
26	931	947	961	963	981	1006	993	967	979	965	887	597	667	503	558	780	890	855	892	899	957	1014	1038	1070	888
27	1093	1110	969	967	1028	931	967	923	714	816	896	876	883	860	927	906	903	892	907	927	934	931	962	1000	930
28	915	913	923	922	937	946	942	935	939	903	851	910	823	754	648	644	667	812	863	910	947	1040	1069	1079	887
29	981	1011	1027	1040	964	935	923	926	921	912	882	859	710	703	772	813	858	897	895	899	903	907	918	923	899
30	934	933	946	952	934	942	939	936	938	918	937	918	929	930	939	898	892	876	883	899	903	968	1031	1004	932
31																									
Mean	991	979	986	972	969	942	909	876	861	848	843	791	797	823	842	853	878	884	888	904	916	938	967	999	902

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 11 Meanook — D = 24 ° E + ... ′ — April 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	18.4	16.5	18.4	19.4	22.4	22.3	20.4	24.9	39.0	32.6	34.6	22.3	23.2	28.5	31.1	35.1	30.2	30.8	21.3	23.0	17.9	15.4	16.5	17.1	24.2
2	14.6	16.4	18.0	19.8	21.4	20.4	22.6	23.0	27.7	28.4	28.1	24.3	25.2	26.5	28.6	34.1	30.6	32.5	28.2	19.4	17.9	15.3	16.1	11.5	23.0
3	11.2	16.6	18.9	22.2	22.2	21.9	25.2	34.1	29.7	24.8	35.1	22.3	26.4	21.1	29.5	31.6	34.6	38.0	32.0	34.6	26.9	19.9	15.2	15.0	25.3
4	17.3	17.9	15.2	16.3	17.6	15.9	25.0	19.7	24.8	30.6	27.9	33.1	27.1	32.1	33.1	33.7	27.2	19.6	27.7	25.2	18.7	14.8	13.4	9.1	22.6
5 D	6.1	12.2	11.7	16.1	21.3	22.4	18.1	20.7	22.5	21.8	24.7	26.2	58.8	41.8	37.7	27.3	29.2	30.7	21.3	18.3	16.4	14.6	14.4	23.5	23.3
6	20.6	16.2	13.6	15.3	15.5	19.9	27.7	15.4	15.3	45.6	37.5	36.9	29.9	30.6	35.0	35.0	33.2	28.7	26.8	24.2	20.8	19.6	19.6	19.8	25.2
7 Q	20.4	19.9	20.4	21.8	21.8	20.8	21.8	21.7	23.2	23.9	25.2	25.5	27.1	29.7	32.6	35.0	36.5	35.5	30.3	25.7	20.7	18.1	17.4	17.1	24.7
8	17.6	19.4	20.3	20.4	21.7	22.3	25.1	27.1	31.3	42.8	41.9	41.9	43.9	41.1	37.0	36.1	31.1	26.2	23.6	22.3	17.6	14.7	14.5	14.7	27.3
9	14.3	17.4	17.4	23.0	24.4	37.9	24.3	18.6	25.2	29.0	28.5	26.2	34.6	42.4	35.5	35.7	25.5	24.5	20.2	14.4	16.9	16.9	13.0	14.8	24.2
10 D	16.9	15.7	-3.0	-36.1	-44.5	-29.4	4.0	17.1	26.7	41.6	33.0	48.9	67.3	23.2	47.9	45.5	31.1	26.7	18.4	17.4	20.3	20.4	20.4	20.8	18.8
11	22.8	23.6	21.5	22.6	22.3	22.1	22.4	25.8	25.1	24.0	26.9	43.9	51.2	39.4	41.8	38.2	33.3	31.3	24.1	23.3	17.4	18.4	18.8	18.8	27.5
12	18.4	18.4	19.8	20.8	21.3	21.3	16.5	8.9	26.5	26.3	26.1	27.2	29.2	30.4	33.6	33.8	32.0	27.2	19.9	16.7	18.6	17.3	18.3	18.4	22.8
13 Q	19.1	20.6	25.7	21.6	21.4	21.4	20.1	28.2	17.4	28.3	26.3	26.1	27.3	30.3	35.0	36.9	35.3	30.2	24.3	22.3	20.4	18.8	18.4	18.4	24.8
14 Q	18.9	19.7	20.3	21.4	22.1	22.3	22.3	22.3	23.1	24.3	25.0	25.2	27.1	28.2	29.7	31.6	33.1	31.6	27.9	21.8	18.7	17.4	15.7	15.7	23.6
15	16.3	17.8	18.6	19.4	20.6	20.4	22.5	22.2	22.3	22.5	23.9	21.3	27.7	33.1	34.1	32.2	32.6	29.2	19.9	17.4	17.5	20.2	15.2	10.6	22.4
16	13.4	9.6	14.5	16.3	22.0	21.3	20.4	22.2	25.2	24.1	23.2	23.6	26.2	28.2	32.1	32.6	30.8	29.8	17.4	16.1	15.0	14.5	15.1	17.3	21.2
17 D	13.0	13.1	17.4	17.5	20.5	16.2	22.3	21.8	21.4	22.2	22.9	22.8	27.9	32.1	35.5	37.8	36.5	33.7	30.7	31.6	17.8	13.5	10.3	0.1	22.4
18 D	8.7	11.5	13.2	17.0	19.5	21.4	22.3	25.9	24.9	24.8	22.6	23.0	24.2	27.3	28.5	33.9	37.2	40.0	34.1	16.4	31.0	29.7	25.2	14.4	24.0
19 D	20.3	12.5	17.1	27.8	3.4	3.8	34.7	26.3	17.9	43.4	38.0	33.6	5.2	40.0	44.0	45.8	43.2	37.5	38.1	32.1	26.8	24.9	23.4	23.0	25.3
20	19.2	14.9	23.3	37.6	22.9	22.8	22.5	18.9	27.3	28.6	20.0	24.5	24.8	31.9	35.7	36.0	31.7	22.6	23.4	23.9	17.3	17.9	15.9	14.9	24.1
21	16.7	13.5	14.4	21.3	13.5	21.3	19.6	19.5	21.5	29.2	25.4	19.2	32.3	31.4	29.5	26.3	26.5	21.5	21.3	20.7	17.9	16.5	16.4	16.7	21.3
22 Q	16.8	17.5	19.3	20.2	20.9	21.3	22.2	22.5	22.8	23.4	23.9	24.8	27.6	30.6	32.9	33.8	33.9	30.6	24.3	17.8	17.4	18.1	17.4	15.9	23.2
23	15.0	15.7	17.9	15.3	27.2	22.9	20.4	21.1	22.2	21.2	23.8	25.3	27.3	29.2	28.0	29.9	31.2	31.1	28.1	24.5	21.5	17.5	16.7	16.0	22.9
24	16.1	16.9	25.2	22.2	21.0	20.5	21.4	21.9	21.5	34.5	28.3	24.9	26.0	29.1	33.8	32.2	27.7	23.5	16.4	19.4	17.4	16.5	16.4	15.4	22.8
25 Q	19.1	19.4	19.4	20.4	21.2	20.4	21.4	20.5	22.3	21.8	22.8	22.3	23.4	23.2	23.3	23.3	30.6	24.8	21.3	15.9	14.5	15.4	15.4	16.4	20.7
26	18.4	19.5	18.4	19.9	17.4	19.3	23.2	21.1	27.2	23.4	23.2	29.7	34.2	36.5	47.8	31.0	25.7	27.3	15.0	19.6	18.1	19.6	14.6	12.5	23.4
27	13.5	15.4	17.4	16.5	22.8	23.8	23.3	18.7	19.5	23.3	24.3	27.7	26.2	29.2	30.1	30.2	27.3	22.4	13.5	16.5	14.6	14.5	15.4	17.2	20.9
28	17.9	18.4	19.4	21.2	21.4	22.3	28.2	27.2	22.8	19.4	20.3	23.8	29.6	28.2	31.1	31.1	23.6	30.2	29.8	24.3	19.6	22.4	22.8	21.4	24.0
29	16.4	16.0	15.4	24.4	22.2	22.3	23.8	22.0	21.1	22.0	28.0	22.2	16.1	35.4	36.3	30.0	28.7	29.6	24.9	21.1	18.0	16.4	16.6	17.5	22.8
30	17.7	19.4	20.3	21.3	34.1	24.2	21.3	20.4	21.7	19.8	24.0	25.2	29.2	33.2	35.9	37.1	31.1	32.6	28.2	23.3	18.5	17.9	18.2	16.9	24.7
31																									
Mean	16.5	16 7	17.6	16.9	18.7	19.6	22.1	22.0	24.0	27.6	27.2	27.5	30.2	31.4	34.2	33.8	31.4	29.3	24.4	21.6	19.1	17.9	16.9	16.0	23.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 12 Meanook Z = 58,000 γ + April 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	885	854	854	851	847	611	809	717	643	755	719	731	711	760	776	765	776	801	838	877	865	842	881	885	794
2	885	877	834	822	824	836	847	786	794	803	711	790	807	823	823	814	823	823	836	848	836	848	857	868	826
3	879	836	818	810	823	829	816	775	773	760	660	679	663	771	795	755	755	787	814	887	905	880	901	903	803
4	868	870	898	926	894	789	847	814	764	738	690	679	722	778	787	782	752	777	820	828	879	889	890	901	816
5 D	921	921	931	903	895	854	847	772	815	825	798	723	613	655	749	807	828	817	820	813	815	827	847	920	822
6	894	889	811	899	887	695	731	797	906	768	706	771	782	810	815	810	810	814	817	824	827	827	831	831	815
7 Q	825	823	825	820	817	814	811	809	799	811	807	813	814	815	816	811	812	812	803	808	811	812	828	822	814
8	825	814	811	811	811	815	799	795	758	757	718	703	670	682	719	772	790	811	825	836	843	859	887	866	791
9	857	869	861	898	879	625	768	804	792	821	836	822	779	684	690	706	755	784	817	826	846	880	893	930	809
10 D	939	888	700	568	679	706	812	792	901	1063	960	841	922	864	885	690	836	873	873	847	844	844	836	824	833
11	848	836	823	820	820	820	818	818	815	801	717	564	727	612	744	800	818	817	825	823	833	833	833	833	792
12	825	815	812	814	813	825	814	750	814	813	800	805	814	814	812	807	802	798	798	820	834	836	851	851	814
13 Q	839	839	854	825	829	827	757	733	652	782	810	807	769	725	725	776	798	807	810	814	822	822	822	814	794
14 Q	810	810	810	810	812	812	812	811	809	807	807	807	814	803	803	801	801	799	792	792	795	799	802	803	805
15	801	802	808	808	817	825	825	825	817	795	779	717	722	776	764	760	772	779	776	798	813	818	885	901	799
16	922	899	864	890	863	836	836	834	814	803	795	803	802	801	782	746	747	763	776	781	799	820	852	887	821
17 D	877	861	870	874	873	738	779	808	814	815	809	808	798	765	761	784	807	801	799	801	815	826	875	925	820
18 D	867	842	817	810	801	814	798	755	782	781	781	794	810	815	814	803	758	770	831	890	906	966	955	820	824
19 D	684	658	511	755	787	782	764	908	844	792	777	820	766	723	635	438	695	803	842	859	862	868	868	876	763
20	829	854	880	863	879	898	857	711	679	737	777	777	798	817	817	818	810	811	815	822	816	820	830	851	816
21	872	874	895	877	904	882	830	803	827	681	633	744	718	719	582	644	735	791	821	834	828	829	829	829	791
22 Q	822	814	814	811	808	807	807	805	804	804	804	803	804	803	802	797	790	785	791	798	800	800	807	811	804
23	827	833	839	839	849	830	828	817	808	796	792	802	802	795	781	794	795	790	792	796	797	805	822	842	811
24	868	878	690	814	811	803	797	792	742	658	727	788	797	803	803	773	773	776	776	796	803	822	864	865	801
25 Q	869	824	803	803	808	815	808	798	798	788	778	788	764	735	721	709	760	782	799	804	810	823	836	838	794
26	836	836	836	831	843	841	809	809	784	820	775	657	565	576	624	679	787	805	823	830	873	912	916	909	791
27	896	873	861	840	731	739	820	816	654	722	764	756	777	749	782	807	814	818	817	823	827	821	833	847	799
28	808	799	799	798	798	809	797	783	786	760	732	750	665	566	593	634	631	764	754	876	899	908	863	851	768
29	836	878	921	862	874	840	821	805	795	791	758	746	646	575	594	668	737	805	823	818	814	809	809	809	785
30	815	810	820	829	817	829	822	811	805	784	803	796	787	787	797	794	781	795	814	815	828	855	888	877	815
31																									
Mean	851	843	829	829	830	798	810	795	786	788	767	763	754	747	753	752	778	799	811	826	835	843	856	860	804

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 13 Meanook — H = 12,000 γ + — May 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	977	997	1028	1048	968	921	891	808	710	627	773	783	859	897	881	899	922	906	892	903	910	917	921	921	886
2	938	962	953	954	961	939	902	913	905	934	878	797	805	942	961	944	930	907	892	892	899	915	945	957	917
3	968	968	964	979	981	986	965	938	893	726	828	906	930	950	930	913	874	866	860	887	906	946	1053	991	926
4	971	955	945	957	976	998	993	962	914	729	767	856	885	877	868	883	875	853	864	885	922	942	962	989	910
5	1064	1032	972	962	978	979	953	953	947	946	937	946	942	939	931	931	924	915	914	926	924	924	945	992	953
6	1009	994	1013	1026	969	947	983	978	935	641	646	923	916	973	955	966	947	954	947	947	947	951	943	1007	939
7	962	931	935	942	977	1081	979	945	954	937	928	947	954	946	954	945	914	900	955	946	933	933	924	921	947
8	928	936	944	953	954	961	958	921	726	894	750	792	830	904	943	951	960	934	912	914	918	932	966	994	911
9 D	959	1004	1143	1226	1040	1041	781	934	914	879	862	921	892	885	891	905	905	896	910	913	926	934	946	958	944
10	970	943	939	952	960	957	945	942	923	934	950	900	889	908	915	927	930	920	932	944	922	956	984	991	939
11	964	943	947	945	940	946	944	951	953	953	957	957	960	946	950	936	928	938	928	932	929	953	964	1000	949
12 Q	993	929	913	928	930	938	938	946	946	954	957	955	949	944	938	929	920	922	930	939	946	951	946	990	943
13	1015	1020	1020	1020	983	990	969	968	932	904	782	860	892	918	913	910	891	899	892	928	953	962	987	983	942
14	971	950	935	958	955	953	946	945	946	946	946	933	947	947	946	933	910	898	891	884	906	920	947	962	936
15 Q	967	961	941	938	945	946	946	952	953	954	944	925	951	954	950	950	923	895	888	896	917	944	938	937	939
16 Q	946	947	935	935	945	946	952	953	955	950	952	952	947	951	945	926	899	876	874	883	903	938	954	967	934
17	973	974	973	981	981	981	976	969	963	967	968	962	961	968	959	937	908	901	913	930	945	945	936	953	955
18	976	949	961	962	954	961	957	957	955	953	948	942	942	940	938	924	914	914	912	912	905	918	939	970	942
19	984	982	961	960	961	954	947	952	950	939	945	946	899	888	913	889	906	903	883	913	938	938	977	977	938
20 D	1015	1001	1055	1109	1118	1084	928	946	892	826	889	881	870	773	735	901	923	906	914	914	914	940	943	1000	936
21	971	935	962	954	993	984	985	929	906	763	610	875	850	936	946	922	921	913	906	920	938	945	960	968	917
22	946	950	953	941	946	945	952	958	961	961	967	969	968	969	943	931	926	923	924	920	916	921	935	934	944
23	961	982	975	961	950	965	946	904	924	939	934	927	932	946	930	907	877	899	906	916	923	906	908	931	922
24 Q	938	944	944	952	947	945	945	960	950	710	834	923	935	922	937	944	943	930	908	909	895	899	910	931	920
25	960	960	992	985	989	969	972	1008	938	828	807	733	914	939	910	932	924	906	881	882	908	944	968	936	925
26 D	1039	1165	1181	1161	1085	993	996	914	812	576	579	515	710	970	979	868	764	883	930	952	962	1047	1030	1002	921
27	992	975	947	916	949	942	880	906	939	918	903	884	900	944	952	939	928	917	906	914	931	935	937	944	928
28	969	945	945	940	940	943	945	953	928	866	871	934	946	935	932	910	914	922	910	918	931	963	1000	1016	937
29 Q	992	974	942	946	955	946	952	943	929	924	946	952	939	915	884	887	909	899	890	890	884	907	950	984	931
30 D	984	991	965	944	925	940	944	944	953	811	609	683	783	820	937	906	874	848	875	930	978	1095	1094	1110	914
31	1024	1063	1078	1052	990	959	953	939	927	845	926	948	957	961	948	932	915	899	899	917	936	924	943	932	953
Mean	978	976	979	983	972	969	946	942	917	862	858	881	905	926	926	921	910	904	905	915	925	943	960	972	932

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 14 Meanook $D = 24^\circ E + \ldots '$ May 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	17.3	15.6	25.9	13.5	32.0	27.1	27.2	22.4	28.2	7.1	29.1	25.4	23.3	28.2	34.1	35.1	33.6	33.6	31.7	24.4	21.3	20.4	19.2	18.4	24.8
2	18.3	19.4	22.8	15.0	23.1	36.1	28.7	21.5	26.1	24.2	19.4	19.4	21.4	31.4	33.6	35.9	37.8	37.1	31.2	24.3	19.8	17.1	15.5	16.3	24.8
3	15.1	16.0	18.4	17.1	23.6	22.4	23.2	24.1	22.7	20.5	22.8	23.9	28.5	31.5	32.7	33.6	28.7	30.1	29.2	21.4	17.8	16.5	17.7	16.5	23.1
4	16.1	16.4	16.4	18.4	18.0	22.3	22.3	22.2	20.0	21.8	34.9	32.2	34.2	38.0	40.5	36.4	32.8	28.4	19.9	14.5	10.7	10.4	9.4	10.7	22.8
5	13.5	12.4	18.1	18.3	19.8	17.4	18.0	20.5	21.4	23.9	24.4	25.3	26.1	29.0	30.0	30.0	29.9	25.6	17.3	19.0	17.9	17.9	17.0	15.0	21.2
6	15.3	15.0	14.6	23.2	20.4	20.5	22.4	23.2	23.9	12.5	19.4	27.0	35.8	32.1	30.9	29.6	28.2	26.1	22.8	21.7	22.4	21.4	20.1	19.5	22.8
7	21.4	19.3	19.6	21.1	20.0	30.6	23.4	30.4	25.5	23.9	29.4	27.4	30.3	30.2	34.4	34.6	33.1	30.4	19.2	23.3	22.6	21.4	21.6	21.2	25.6
8	19.4	19.5	20.4	21.4	21.9	23.5	23.0	22.5	23.8	31.3	26.2	31.1	40.4	36.3	37.0	35.6	36.0	31.2	26.4	20.5	16.5	13.8	14.5	18.4	25.4
9 D	18.1	12.1	7.4	19.7	22.1	12.4	24.2	26.2	19.5	18.5	28.2	32.1	33.9	33.8	34.6	31.3	27.4	24.4	24.4	20.9	18.5	18.5	18.6	21.2	22.8
10	18.1	18.5	20.5	21.8	23.1	21.4	21.4	20.0	17.2	20.4	22.0	18.9	20.6	27.2	33.8	35.7	34.1	31.5	24.0	23.5	16.3	18.4	20.4	20.2	22.9
11	19.0	19.2	19.4	20.9	22.2	22.1	22.4	22.8	23.3	23.4	24.8	25.3	26.4	30.0	32.8	32.3	31.5	27.6	21.8	21.4	19.1	18.2	19.0	18.7	23.5
12 Q	17.0	19.4	20.9	21.4	22.3	22.8	23.3	23.3	21.4	26.8	23.3	24.5	27.9	30.3	34.0	34.0	31.0	26.3	21.7	18.9	16.5	16.5	16.4	16.0	23.2
13	19.5	21.4	17.5	13.3	23.4	22.4	17.8	16.1	18.4	21.1	16.6	30.2	30.2	34.6	34.6	36.0	34.7	26.0	24.7	15.6	18.9	17.2	18.1	20.3	22.9
14	21.7	21.8	21.4	21.3	25.1	21.4	19.9	20.1	20.2	21.7	22.8	24.3	30.3	33.2	36.1	36.8	37.1	32.1	23.1	18.4	13.0	10.0	12.2	15.6	23.3
15 Q	18.5	21.4	22.4	21.2	21.5	22.2	22.2	22.5	22.3	21.6	24.0	28.7	33.6	36.5	39.1	36.0	33.6	29.3	21.4	19.1	13.8	12.8	11.1	12.3	23.6
16 Q	16.4	20.9	22.9	22.4	22.3	22.4	22.5	22.3	22.8	23.1	25.2	26.3	30.3	33.6	36.5	38.1	38.1	37.0	28.2	15.8	10.9	11.4	11.7	13.4	23.9
17	16.3	19.3	21.4	21.8	22.2	23.3	21.4	21.4	21.3	22.2	23.8	26.2	32.3	34.2	26.0	35.6	39.7	35.3	20.4	19.1	16.9	15.0	13.5	12.6	23.4
18	14.3	18.4	19.8	19.5	20.3	20.5	20.4	20.9	21.0	22.1	23.0	24.3	26.2	28.5	31.6	34.6	34.8	30.7	24.3	19.4	14.0	11.3	11.6	12.5	21.8
19	15.5	16.9	20.9	23.2	20.4	19.9	20.3	19.6	20.0	24.3	22.8	22.4	20.7	23.3	30.9	36.5	35.6	32.6	26.2	15.6	18.9	18.2	15.6	15.3	22.3
20 D	16.4	14.4	10.7	19.6	16.0	25.0	24.4	23.3	22.0	29.2	30.2	29.3	31.8	38.6	40.2	43.9	41.0	37.2	18.3	19.4	15.5	15.3	16.5	15.8	24.8
21	18.2	19.5	20.6	21.4	21.5	24.9	21.4	19.0	22.5	25.2	41.0	31.4	33.2	37.0	40.0	39.8	38.8	32.1	25.9	21.8	18.2	14.0	14.0	15.5	25.7
22	17.4	17.4	20.0	20.5	20.5	20.4	22.9	23.1	23.0	23.1	23.3	25.1	29.3	31.8	34.6	35.5	34.8	33.0	26.1	22.8	18.6	16.4	17.4	18.0	24.0
23	18.2	19.5	23.0	23.4	23.8	20.5	24.8	29.3	24.0	24.5	24.8	31.2	32.7	36.9	39.8	39.0	34.0	24.4	21.4	19.0	16.7	16.7	15.3	18.3	25.0
24 Q	21.4	22.4	23.1	22.0	21.5	21.1	22.1	21.1	23.0	18.6	34.1	29.2	32.6	36.3	41.0	42.4	37.9	31.2	22.3	18.2	16.5	16.2	16.2	17.9	25.4
25	19.7	22.9	21.1	19.1	24.9	21.4	20.2	18.9	21.1	15.9	28.4	22.5	36.2	42.6	41.0	43.9	38.0	32.2	24.8	21.2	18.3	18.3	15.5	10.6	24.9
26 D	10.7	12.5	19.5	27.2	19.3	19.3	18.9	17.9	17.6	22.0	24.8	17.9	41.4	39.9	40.0	42.9	27.2	24.5	24.5	28.6	23.8	29.7	28.8	23.5	25.1
27	18.9	21.9	21.9	20.1	24.5	27.4	17.3	21.2	21.2	20.0	23.5	27.1	32.1	32.2	34.8	34.1	29.5	26.5	22.8	19.5	18.0	18.3	18.9	20.2	23.8
28	19.5	22.2	22.4	21.5	22.2	21.8	21.4	31.6	22.6	23.8	23.1	29.0	33.5	38.9	38.8	35.4	30.3	26.4	23.1	22.7	21.5	21.5	22.3	25.1	25.9
29 Q	23.1	21.8	21.4	21.7	21.5	20.9	20.6	28.2	19.9	18.6	23.4	25.2	27.7	31.2	32.9	32.9	33.0	32.1	24.4	19.2	16.0	16.5	17.2	18.3	23.6
30 D	19.3	18.5	20.2	20.9	20.9	20.5	21.5	21.2	19.1	33.6	38.7	22.4	31.9	36.1	41.9	50.5	48.8	41.4	14.6	15.9	19.3	20.6	22.1	17.3	26.6
31	18.1	15.0	17.9	21.4	19.0	23.2	20.7	20.3	19.3	14.0	22.8	27.2	28.4	30.3	32.8	34.1	34.6	33.2	25.3	18.9	12.8	11.7	13.6	14.8	22.1
Mean	17.8	18.4	19.8	20.4	21.9	22.5	21.9	22.5	21.8	21.9	25.8	26.2	30.4	33.4	35.5	36.5	34.4	30.6	23.6	20.1	17.5	16.8	16.8	17.1	23.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 15 Meanook $Z = 58,000\ \gamma +$ May 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	873	879	863	927	790	803	818	801	787	786	679	637	733	765	745	756	786	804	810	803	804	814	815	816	796
2	821	828	829	841	830	782	766	777	788	809	753	699	706	775	809	809	808	800	803	808	810	820	833	839	798
3	847	857	853	768	888	862	841	816	799	727	668	753	776	788	783	771	753	776	808	829	846	863	913	878	811
4	863	851	841	841	855	860	841	810	743	803	676	700	711	710	676	684	722	749	776	798	829	859	867	878	789
5	894	875	842	830	841	834	818	803	796	797	776	776	787	787	783	786	792	786	775	774	775	785	807	838	807
6	864	862	872	888	850	821	818	817	786	713	683	726	738	792	795	808	809	809	808	808	802	814	814	859	807
7	852	825	808	799	821	809	818	786	797	764	742	774	794	791	791	792	785	776	791	788	788	789	790	795	795
8	794	788	792	796	799	809	817	782	655	700	721	687	710	736	779	785	782	778	783	788	788	798	836	875	774
9 D	852	841	847	775	842	818	684	777	798	781	711	749	761	775	773	899	809	819	820	825	818	818	820	828	802
10	810	810	811	815	799	776	798	789	765	773	790	748	733	759	781	798	808	804	801	798	799	815	851	865	796
11	839	820	809	811	805	798	792	789	794	794	796	796	792	791	791	791	792	792	786	787	798	815	837	868	803
12 Q	869	830	903	788	788	788	788	786	766	755	787	797	797	797	796	792	785	776	776	781	787	788	787	808	796
13	842	865	876	903	868	853	835	820	798	765	751	745	766	794	803	811	804	804	812	813	829	841	842	841	82.0
14	820	801	788	800	811	799	797	796	796	796	796	785	787	792	799	797	788	789	787	792	800	803	810	822	798
15 Q	830	829	807	790	788	788	787	787	787	787	778	755	776	781	776	784	787	789	786	792	808	820	828	813	794
16 Q	797	796	787	785	786	786	787	787	777	777	778	779	782	776	776	776	775	775	779	788	796	807	818	827	787
17	829	830	826	828	852	838	831	814	804	798	797	792	795	808	798	787	770	771	774	787	796	800	797	800	804
18	810	804	803	799	789	787	786	782	777	774	755	772	775	775	776	775	771	765	765	772	781	797	814	839	785
19	860	852	836	818	809	799	795	786	785	788	787	787	735	719	755	755	749	755	764	765	787	830	852	841	792
20 D	857	869	914	828	890	799	733	795	745	717	712	709	706	604	608	748	789	787	787	787	810	803	790	817	774
21	817	828	807	807	818	825	825	757	744	679	765	765	745	756	788	770	766	775	782	792	809	814	820	820	786
22	798	792	797	797	794	785	782	782	777	778	782	788	794	794	794	788	787	783	775	775	777	777	781	787	786
23	799	810	823	813	803	797	763	689	756	774	776	775	775	786	785	760	746	757	776	798	809	810	797	787	783
24 Q	777	777	782	788	790	788	785	787	768	723	693	721	755	755	765	777	782	787	785	785	794	803	805	805	774
25	804	808	817	821	829	839	810	800	776	749	733	786	766	792	755	760	772	772	777	787	809	827	857	913	798
26 D	940	957	908	829	896	851	814	773	764	875	864	873	759	830	840	798	711	778	788	828	860	882	875	839	839
27	823	820	799	792	798	775	646	727	782	765	740	725	775	807	817	809	809	799	798	799	803	808	808	807	785
28	811	799	797	790	790	789	787	742	747	711	720	766	779	779	782	782	785	792	788	799	803	809	822	854	784
29 Q	841	830	809	797	777	785	782	739	743	749	771	781	788	777	756	765	785	795	786	786	785	782	792	814	784
30 D	829	852	839	815	792	786	785	782	772	593	598	874	775	727	774	782	765	758	764	765	835	940	919	877	791
31	883	909	906	838	776	818	813	798	782	717	756	790	796	798	798	798	792	788	777	765	760	760	766	776	799
Mean	837	836	833	816	818	808	791	784	773	758	746	762	763	771	776	784	779	784	787	792	803	816	825	833	795

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 16 Meanook H = 12,000 γ + June 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	943	947	946	945	940	947	947	954	947	963	962	964	947	892	916	940	940	931	924	924	931	927	930	948	940
2 Q	954	969	961	976	978	955	947	947	953	958	946	965	973	980	982	982	958	935	908	891	901	915	929	952	951
3	952	971	987	964	1011	1038	966	948	930	939	845	602	922	968	909	844	889	849	820	864	946	972	984	971	921
4 D	1087	1078	1165	1121	1133	819	962	828	759	743	444	593	704	914	929	863	819	896	944	963	1018	1076	1227	1235	930
5	1084	1208	1060	1030	1016	993	963	830	659	796	900	955	921	942	940	925	869	842	895	906	838	970	1062	1271	961
6 D	1149	1194	1202	1180	1247	1018	899	636	765	626	777	820	656	812	870	874	976	955	938	929	981	1015	938	979	934
7	1065	1055	1072	984	918	914	917	928	936	937	914	914	915	938	938	932	923	918	909	907	927	947	958	967	946
8	986	1007	1011	987	996	878	942	899	905	936	922	899	898	871	892	896	905	921	934	940	948	925	929	945	932
9 Q	945	950	954	969	960	955	959	956	952	951	949	951	963	959	954	938	927	909	902	912	935	941	952	966	946
10 Q	973	967	954	949	945	949	950	952	953	956	955	952	951	951	949	932	928	905	914	914	921	943	975	969	947
11 Q	985	985	985	982	967	964	967	967	975	967	962	960	975	975	975	955	934	910	889	884	910	913	931	962	953
12	970	984	963	959	959	959	960	960	945	960	960	956	945	930	937	902	916	929	933	937	946	933	936	982	949
13	992	966	960	950	952	960	968	969	960	960	909	830	911	939	949	956	952	927	929	937	938	935	944	1017	945
14	985	968	960	964	964	964	960	951	945	945	949	935	906	906	963	972	978	968	959	935	930	938	952	960	952
15	996	1019	985	999	1038	999	961	974	923	905	937	952	978	960	891	834	890	890	934	922	905	903	913	959	944
16	979	957	946	934	950	956	955	958	955	952	944	953	960	970	961	962	968	960	945	924	922	930	930	945	950
17	953	968	996	1008	1011	986	975	954	951	952	946	904	844	946	922	922	939	950	935	917	916	943	903	985	947
18	1024	1079	1206	1134	1055	1016	935	859	717	862	875	841	890	959	958	967	954	939	923	922	930	939	993	1102	961
19	1161	1166	1184	1062	975	986	976	890	859	624	585	611	499	578	710	883	893	990	914	918	938	977	983	990	885
20	1009	1048	1037	971	1004	907	978	975	961	950	930	891	953	977	985	976	961	939	934	944	926	928	970	986	964
21	969	975	1022	985	976	1117	1117	1036	946	707	929	950	939	926	910	903	903	891	921	929	954	986	962	969	955
22	995	961	905	922	931	930	937	948	929	913	790	656	530	750	934	953	953	921	903	897	902	908	959	1013	893
23	979	977	942	931	931	933	939	946	947	947	950	943	940	949	978	969	954	925	906	916	923	941	937	960	934
24	1032	1086	1119	1153	1183	1131	1133	1015	982	960	937	950	962	957	957	954	938	937	923	930	939	953	948	970	1002
25 D	1001	1234	1275	1374	1286	1219	1079	1015	985	960	969	873	913	839	976	967	928	905	913	991	1085	1110	1117	1156	1049
26 D	1296	1352	1568	1509	1196	1085	825	466	522	196	212	235	243	309	539	476	694	811	985	986	1003	1021	1058	1039	818
27	953	974	949	946	929	927	929	960	953	938	931	942	934	896	896	891	890	882	867	893	903	923	928	921	923
28	972	932	962	953	951	980	1006	932	692	732	646	840	977	983	983	952	927	912	898	912	920	914	917	926	909
29	929	936	937	945	944	950	952	952	952	963	960	967	983	989	996	978	963	940	920	910	917	927	960	964	951
30 D	978	968	1041	1065	1158	853	1240	1157	934	842	752	252	252	605	648	258	392	758	804	1073	1219	1392	1470	1359	906
31																									
Mean	1010	1033	1043	1027	1017	978	975	925	893	868	856	835	846	886	905	892	901	909	914	928	949	968	987	1012	940

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 17 Meanook — D = 24° E + ... ′ — June 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	13.7	15.7	17.6	18.8	20.1	20.1	20.5	20.7	24.0	24.0	22.7	24.9	26.0	25.5	33.5	36.7	35.2	31.3	24.5	18.6	16.1	16.0	13.3	14.2	22.2
2 Q	16.0	19.0	22.0	22.9	21.5	21.0	20.1	20.8	22.0	23.0	21.1	25.4	28.5	32.5	34.4	37.7	35.7	31.5	26.4	21.6	18.0	13.9	11.3	12.1	23.3
3	14.1	15.2	17.2	18.2	18.2	26.9	21.0	14.1	29.0	30.8	17.1	24.5	22.5	36.2	39.2	42.5	36.7	35.8	42.6	2.8	7.3	15.1	17.0	13.7	23.3
4 D	19.1	24.0	14.0	14.7	16.3	26.0	23.5	20.8	24.1	21.1	35.7	20.1	26.2	26.2	32.3	34.7	31.8	29.6	35.9	29.9	29.0	24.6	26.0	22.5	25.3
5	12.9	18.0	13.9	13.9	17.0	19.6	18.1	11.6	1.0	16.2	17.8	21.9	23.0	29.1	33.0	37.8	35.8	26.8	20.8	15.0	14.6	16.8	21.5	21.5	20.0
6 D	12.7	11.4	12.3	-0.4	-9.3	0.1	12.7	24.1	16.2	9.9	29.9	17.7	16.2	23.5	32.8	36.6	38.6	36.6	28.5	21.0	22.0	22.2	14.7	19.6	18.8
7	22.7	21.8	23.2	17.3	17.7	18.3	19.8	19.6	20.1	19.6	17.6	22.5	25.1	29.6	30.1	30.3	29.4	25.2	19.0	14.7	14.0	13.4	13.5	14.0	20.8
8	15.2	18.2	18.6	19.1	20.1	12.2	19.1	20.1	17.2	18.9	19.1	21.5	24.9	28.4	30.3	28.9	26.9	24.9	21.1	20.0	17.1	15.1	14.7	15.8	20.3
9 Q	17.1	17.3	18.9	21.0	26.9	22.0	19.6	18.6	20.7	21.9	23.1	26.8	29.8	31.7	32.8	33.5	30.3	28.6	23.0	15.0	12.0	12.0	13.9	16.6	22.2
10 Q	19.0	20.1	20.1	20.1	20.9	21.1	21.9	21.9	21.5	21.2	21.9	24.9	28.9	33.0	35.2	35.4	31.5	27.9	24.9	17.9	13.1	12.6	13.1	14.7	22.6
11 Q	14.1	15.5	18.2	18.4	18.4	18.9	19.9	19.9	19.9	20.1	22.0	27.5	32.1	34.3	34.3	33.3	30.8	28.5	24.0	19.1	15.6	12.5	12.5	13.7	21.8
12	15.1	18.4	21.8	21.0	20.3	19.8	18.6	18.8	20.0	20.6	21.5	24.0	25.7	32.7	35.2	33.8	27.9	24.9	23.0	18.8	15.1	12.7	11.5	12.7	21.4
13	15.1	19.0	20.1	20.1	19.9	20.2	19.8	17.6	16.5	15.3	16.8	16.1	26.4	29.9	33.1	34.2	34.6	31.9	24.7	24.0	20.1	15.2	12.4	11.7	21.4
14	15.7	17.6	18.9	20.1	21.8	25.0	20.1	18.8	19.8	18.6	20.5	23.5	26.4	29.4	32.8	34.4	34.3	31.3	25.9	25.6	19.6	13.2	12.7	10.4	22.3
15	10.2	12.7	16.2	16.1	23.5	24.5	20.0	15.1	17.1	25.6	23.1	24.9	28.4	33.0	34.8	27.7	36.7	26.7	21.8	25.9	15.1	9.9	10.5	12.0	21.3
16	15.1	17.6	17.4	17.4	18.0	18.2	20.9	19.9	19.3	19.3	20.8	26.0	32.5	34.7	37.2	33.8	31.7	28.0	26.4	23.1	20.4	17.1	13.2	11.2	22.5
17	10.4	12.7	11.4	12.4	16.6	22.0	25.7	21.7	21.3	22.6	23.5	25.9	29.9	33.9	34.4	29.9	31.5	32.8	31.0	28.7	20.3	19.6	14.8	9.2	22.6
18	13.2	8.0	6.1	11.7	18.2	12.5	8.5	23.7	18.1	27.9	20.5	18.1	23.2	32.9	39.0	42.6	41.1	38.8	33.8	26.4	21.5	16.6	13.9	14.4	22.1
19	19.6	17.1	16.6	6.8	20.7	21.7	16.4	14.5	16.6	17.1	15.5	29.4	44.1	28.5	39.3	31.8	32.3	29.9	17.1	18.1	21.0	22.9	19.8	15.9	22.2
20	16.7	17.1	20.1	18.8	25.4	23.1	23.5	19.8	19.6	19.8	19.1	24.2	32.8	38.2	39.6	37.8	33.9	31.8	27.4	24.7	17.3	8.2	8.2	10.0	23.2
21	10.7	13.1	16.0	13.7	17.3	14.8	7.3	7.3	8.2	11.1	24.1	21.7	27.0	31.3	33.8	37.7	33.8	30.5	25.2	20.0	8.8	8.6	8.0	6.4	18.2
22	9.8	11.1	15.6	16.1	16.6	20.1	19.6	17.6	16.3	25.2	18.3	16.7	27.2	40.3	34.5	33.4	32.8	31.0	20.8	18.1	15.0	12.0	10.2	10.7	20.3
23	14.1	14.7	16.2	18.0	20.1	20.9	21.0	20.9	20.6	20.1	21.7	22.7	27.8	29.9	34.1	35.6	35.9	33.0	24.9	22.2	14.5	8.4	7.0	8.3	21.4
24	8.6	10.1	13.8	10.3	14.1	16.4	9.8	7.2	8.3	13.4	14.4	23.2	27.0	32.3	36.7	38.1	35.8	33.3	29.4	24.9	19.1	15.3	14.0	12.7	19.6
25 D	12.4	5.3	7.9	15.8	14.2	20.1	9.4	12.2	16.2	20.6	21.9	20.0	30.9	25.9	33.0	38.8	38.8	43.6	18.1	24.9	25.1	20.3	13.8	14.7	21.0
26 D	5.8	-1.2	2.6	2.3	-7.2	9.5	-0.6	10.2	24.5	24.5	26.0	47.9	57.5	40.1	31.9	53.5	56.3	35.2	24.5	24.1	26.8	23.2	26.0	22.9	23.6
27	18.8	15.6	19.1	21.1	20.5	20.8	21.7	20.5	36.6	19.3	22.0	25.0	32.2	37.7	42.1	44.6	38.8	34.7	30.8	19.1	15.0	11.4	11.7	12.3	24.7
28	17.6	20.8	25.4	22.0	19.7	17.1	19.8	24.2	20.7	26.8	33.9	34.7	33.0	34.7	41.2	49.0	42.6	41.8	27.1	22.1	14.1	9.3	8.5	10.1	25.6
29	13.7	16.2	19.0	20.0	20.5	21.1	20.8	20.7	22.7	21.0	22.0	23.8	22.3	27.9	29.9	31.8	33.3	29.9	24.8	18.2	15.6	14.3	13.4	13.7	21.5
30 D	16.1	17.6	20.1	20.7	26.0	16.1	9.8	12.3	12.7	24.9	17.2	37.3	125.9	78.7	43.6	42.0	51.7	61.7	71.2	94.5	94.7	97.7	115.1	51.5	48.3
31																									
Mean	14.5	15.3	16.7	16.3	17.8	19.0	17.6	17.8	19.0	20.6	21.7	24.8	32.1	33.4	35.1	36.6	35.6	32.6	27.3	23.3	19.9	17.7	17.2	15.0	22.8

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 18 Meanook $Z = 58,000\ \gamma +$ June 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	782	784	784	785	785	786	785	782	764	771	782	786	782	744	738	760	770	766	771	776	782	790	790	792	777
2 Q	793	803	803	812	826	818	797	785	774	777	761	774	785	787	789	788	776	771	765	766	776	777	777	779	786
3	783	782	785	777	798	779	771	765	700	695	673	603	659	744	734	693	722	742	763	805	797	788	836	829	751
4 D	872	889	875	854	857	798	799	721	655	645	680	653	776	749	764	738	725	792	825	866	890	901	904	827	795
5	847	853	827	852	838	801	799	766	738	689	706	778	776	797	797	795	766	742	787	803	814	841	899	926	802
6 D	868	886	842	862	734	796	765	729	786	792	684	709	679	701	711	742	783	797	796	809	852	853	818	825	784
7	870	901	886	841	809	796	788	788	787	787	768	747	756	786	798	797	787	792	797	798	809	818	829	813	806
8	820	839	836	842	833	704	753	732	722	766	755	744	756	722	738	755	765	779	797	797	798	798	808	813	778
9 Q	809	801	801	814	818	797	796	789	782	787	787	798	799	796	789	786	775	776	782	777	786	786	782	788	792
10 Q	792	787	782	785	787	787	787	787	787	787	787	786	781	777	776	778	776	771	772	772	778	791	809	810	785
11 Q	825	812	805	791	791	791	791	791	791	800	791	799	802	800	797	791	791	784	773	766	773	784	789	807	792
12	814	828	817	803	796	796	798	792	737	773	792	792	783	760	771	771	773	782	781	785	794	794	798	825	790
13	848	828	809	790	787	787	789	789	775	753	727	663	720	760	788	808	809	797	796	795	807	814	849	863	790
14	857	847	819	815	815	803	794	787	775	771	782	765	733	718	776	790	787	775	766	775	796	807	810	809	790
15	820	838	830	849	859	850	825	815	782	727	763	797	809	799	745	657	732	758	797	808	792	789	805	855	796
16	852	821	809	797	808	809	801	792	787	784	775	787	789	795	791	782	774	771	766	765	761	765	774	781	789
17	782	789	804	821	818	753	787	797	790	787	781	747	668	760	663	771	789	789	785	787	788	823	824	852	781
18	874	875	895	852	816	818	804	792	810	723	711	722	766	799	797	792	785	779	776	788	801	817	847	912	806
19	912	905	814	808	830	822	816	778	744	750	602	560	604	617	652	738	777	788	792	821	848	861	867	864	774
20	874	879	865	821	810	695	809	814	798	787	765	719	765	775	778	776	771	771	781	792	799	808	796	797	794
21	809	820	842	828	836	829	788	768	779	736	755	792	791	782	765	765	770	771	797	814	863	879	829	798	800
22	825	820	791	778	777	776	772	769	766	742	792	722	691	585	771	809	809	808	799	798	809	803	810	831	777
23	841	820	788	782	781	781	776	776	777	777	777	776	775	766	778	779	776	772	775	789	810	836	820	792	788
24	820	864	894	933	894	841	824	770	755	786	777	797	810	798	787	798	792	791	787	788	792	794	797	802	812
25 D	821	909	912	885	820	710	744	787	821	798	808	665	775	755	818	813	788	782	797	847	940	951	922	895	824
26 D	918	905	852	580	559	776	799	762	861	1023	679	934	1064	971	895	937	738	743	842	847	857	886	886	870	841
27	822	817	821	825	803	803	803	809	738	755	768	802	810	787	776	776	785	792	788	795	797	799	802	815	795
28	840	830	833	816	808	810	817	709	673	701	727	709	777	814	812	796	776	779	777	783	782	787	790	800	781
29	798	796	794	796	792	791	787	786	788	794	796	799	804	799	797	788	784	784	776	777	787	796	808	809	793
30 D	812	798	831	885	776	462	744	753	695	634	749	391	667	667	553	504	708	777	829	1005	965	786	453	315	698
31																									
Mean	833	838	828	816	802	779	790	776	768	763	750	737	765	763	764	769	772	777	788	803	815	817	811	810	789

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 19 Meanook — H = 12,000 γ + — July 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1502	1432	1159	903	1095	1040	724	577	329	867	960	953	949	945	952	939	929	934	932	953	924	892	899	913	946
2 D	906	928	918	915	908	913	918	922	922	888	820	771	348	-124	355	333	687	801	984	964	1025	968	923	902	787
3 D	919	1072	1237	1056	1015	961	976	937	929	917	918	788	832	921	960	941	950	949	935	961	953	946	987	990	960
4	934	919	924	928	929	928	930	930	931	932	932	932	945	950	953	946	929	906	899	913	953	1009	1070	1116	947
5 D	973	951	953	1088	974	767	997	937	782	636	538	393	871	970	997	965	939	901	897	897	954	1041	1122	986	897
6	1022	1033	1027	968	1001	962	944	931	858	892	840	884	882	922	933	928	936	931	924	906	957	1007	1038	1095	951
7	936	929	943	997	977	953	935	930	930	934	944	930	932	896	931	937	934	920	903	903	898	910	924	920	931
8	929	951	989	977	954	959	952	883	939	953	926	932	911	923	937	953	947	922	918	918	944	921	932	983	940
9	1008	1010	952	1022	952	946	953	953	946	946	943	938	930	920	924	905	899	927	918	923	929	921	953	978	946
10 Q	986	986	992	957	954	953	945	946	946	946	947	953	953	961	957	954	946	934	924	916	920	934	947	971	951
11 Q	969	978	968	949	953	952	954	957	957	953	955	955	950	964	961	946	932	921	910	933	955	937	944	975	951
12	975	1011	1001	1004	939	952	957	954	947	953	943	939	940	960	960	960	935	913	909	907	931	939	953	969	952
13 Q	973	951	935	942	946	946	950	950	953	955	955	961	959	960	961	948	930	906	908	915	910	921	932	942	942
14	948	957	953	956	955	953	955	958	969	954	955	962	964	965	965	970	961	953	933	927	944	956	929	989	956
15 Q	956	987	976	935	940	949	947	952	954	945	951	958	966	970	966	951	944	946	934	934	939	933	933	949	951
16	953	960	955	955	963	965	968	982	915	915	817	738	777	893	922	942	855	899	906	945	941	968	990	998	922
17	945	952	963	955	953	955	948	952	955	961	961	908	860	918	937	932	943	934	929	920	921	920	947	950	938
18	953	940	948	961	966	992	981	975	936	922	881	900	916	930	943	935	880	875	887	920	923	940	969	1047	938
19 D	1075	1106	1052	988	957	947	960	1012	953	944	953	953	969	979	915	852	841	863	884	912	1014	1096	1048	1063	972
20	951	1015	1062	1018	1019	1020	959	938	923	931	928	935	924	920	920	935	924	920	917	913	926	948	979	1029	956
21	953	931	942	934	942	945	949	940	945	949	959	950	911	929	938	957	947	926	908	906	905	924	924	917	935
22	942	962	948	965	994	1053	897	965	993	985	905	632	837	926	938	904	838	872	869	908	1014	977	941	927	920
23	983	978	934	1058	1024	976	951	940	947	944	945	954	970	973	964	947	935	925	928	917	911	913	925	1004	956
24	985	964	939	933	943	940	946	947	896	919	936	878	722	960	949	940	884	894	927	923	914	954	951	970	926
25	953	993	950	960	964	957	957	943	946	957	961	966	979	987	977	971	973	955	938	928	930	904	913	931	954
26 Q	935	958	955	953	956	953	953	953	962	962	968	970	984	993	997	987	972	936	922	910	906	910	931	942	953
27	953	956	957	957	962	957	961	962	964	965	970	979	989	993	997	989	974	958	939	921	935	936	953	968	962
28	987	971	973	972	971	983	975	973	972	968	971	975	979	981	972	956	938	924	924	924	932	939	941	935	960
29	953	985	963	987	982	964	962	969	952	944	888	906	918	917	925	952	953	935	910	895	912	924	900	934	939
30	955	944	949	962	959	958	959	955	944	954	964	966	965	964	955	939	937	936	921	923	924	925	937	941	947
31	945	937	948	952	962	958	952	956	962	957	951	927	937	946	964	951	939	924	919	933	945	968	945	953	947
Mean	979	989	980	971	968	957	946	938	918	931	919	896	902	913	933	925	920	917	918	922	938	948	957	974	940

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 20 Meanook D = 24° E + ... ′ July 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	7.8	10.0	-16.7	-33.2	0.5	-17.7	3.4	17.0	-8.6	19.8	18.3	22.3	25.8	29.9	36.1	38.9	41.6	37.8	39.7	28.9	17.3	11.2	10.2	12.8	14.7
2 D	17.1	17.2	19.2	19.2	20.0	20.1	20.1	20.1	20.5	13.2	21.1	20.1	7.3	58.3	72.5	59.3	61.7	36.8	35.6	33.3	26.5	15.2	14.1	14.2	26.7
3 D	14.4	18.8	17.2	14.0	19.6	16.5	18.9	21.2	20.9	19.3	19.0	22.0	36.7	24.7	30.8	36.7	37.7	35.3	34.7	29.9	22.9	18.5	16.3	20.1	23.6
4	16.2	17.0	19.6	20.0	20.1	21.0	21.0	21.0	21.0	21.0	20.2	22.1	24.9	28.4	29.9	30.9	33.2	29.4	34.3	22.1	31.7	28.5	23.0	16.1	23.9
5 D	12.2	2.4	8.2	-8.4	-1.5	-21.0	13.2	3.4	24.5	24.0	38.7	50.1	29.9	32.4	38.9	42.6	40.6	36.5	32.8	28.0	27.2	34.5	31.7	16.0	22.4
6	11.1	12.2	16.2	20.1	15.7	17.0	20.9	20.1	12.7	18.0	15.1	17.6	23.0	30.8	32.9	33.7	36.6	34.6	32.8	35.8	30.8	25.0	19.1	17.7	22.9
7	14.9	16.8	17.6	21.9	25.5	19.2	20.0	19.0	21.8	19.9	20.5	23.1	25.0	30.8	36.5	39.2	38.7	34.4	28.0	25.0	16.9	12.7	13.1	15.3	23.2
8	17.0	17.2	22.0	22.1	19.8	19.0	21.1	16.3	21.1	19.0	20.0	23.1	26.9	35.7	38.7	36.8	35.5	31.6	25.9	24.0	23.0	18.0	16.9	17.2	23.7
9	18.1	22.9	20.5	19.6	20.1	19.0	21.5	22.9	21.9	19.6	20.5	23.3	26.0	29.1	31.7	32.3	32.7	26.0	22.9	19.0	19.1	14.9	14.2	16.1	22.2
10 Q	16.6	18.0	18.0	16.9	16.6	19.0	24.5	21.5	20.0	22.0	23.9	26.4	27.9	30.7	32.9	33.0	32.9	30.7	26.7	22.5	18.6	17.0	17.0	18.0	23.0
11 Q	19.0	19.1	21.1	19.6	18.7	18.8	19.0	19.8	20.7	19.6	22.9	25.0	27.8	34.5	34.0	33.6	28.9	19.8	20.5	24.0	22.1	24.5	26.9	26.4	23.6
12	26.4	22.3	24.8	19.6	20.1	17.2	20.5	19.9	23.1	19.0	19.1	19.6	23.1	29.9	34.8	37.3	37.5	34.8	26.8	16.0	12.0	10.3	12.2	13.3	22.5
13 Q	15.1	19.2	20.9	19.6	19.1	20.1	20.8	20.9	20.5	20.5	19.6	20.9	23.5	28.2	33.0	35.0	34.3	31.9	24.2	16.8	11.9	9.9	10.7	14.2	21.3
14	17.0	19.1	20.1	19.0	19.0	20.1	20.9	21.0	21.1	20.7	23.5	24.9	30.8	32.3	33.6	36.6	40.1	35.5	28.9	22.5	21.3	17.2	13.3	13.3	23.8
15 Q	19.1	22.0	24.1	20.9	19.2	19.2	20.1	20.9	20.4	21.0	23.6	24.5	24.5	26.4	29.9	32.7	34.8	34.7	25.8	19.6	13.4	10.1	10.2	13.7	22.1
16	17.0	20.1	22.0	22.0	21.9	21.0	21.8	27.0	28.9	20.8	21.1	36.0	40.3	21.1	44.0	40.1	34.1	30.9	21.8	9.7	10.2	16.1	20.1	20.9	24.5
17	18.2	18.6	18.0	18.3	19.0	19.7	19.6	20.5	22.9	21.5	18.6	20.8	23.9	28.1	32.7	33.8	28.0	26.9	24.7	21.4	15.7	16.9	16.2	16.9	21.7
18	17.0	18.2	19.2	18.3	17.2	19.5	28.5	25.0	23.0	23.6	23.7	32.3	34.3	32.9	35.4	40.6	36.6	32.3	22.7	15.1	15.0	15.9	12.4	12.1	23.8
19 D	15.8	16.2	17.8	16.2	19.2	17.9	14.7	21.0	19.6	18.4	23.2	26.9	31.3	35.5	44.5	40.5	22.0	29.7	20.5	18.0	22.3	23.8	18.1	17.1	22.9
20	11.2	10.0	14.9	19.0	19.3	17.0	23.5	19.9	18.1	19.1	19.2	21.0	23.0	26.9	31.2	36.9	38.7	35.9	27.9	23.3	17.6	18.2	17.0	19.2	22.0
21	14.7	17.0	18.1	20.1	20.1	20.7	21.8	21.0	21.8	21.0	22.7	22.8	24.2	30.7	35.2	38.4	36.5	34.7	29.3	23.8	17.7	13.7	10.2	11.0	22.8
22	12.1	15.0	18.1	17.6	15.1	18.9	37.2	24.0	19.8	20.2	18.4	48.5	42.4	33.8	34.8	31.7	31.3	28.4	33.5	28.9	24.8	15.9	10.2	12.2	24.7
23	14.7	17.1	16.0	14.7	14.7	21.9	22.3	23.5	22.0	20.2	20.8	23.1	26.0	29.1	30.8	31.8	30.9	30.3	26.9	22.5	17.1	16.2	15.2	16.4	21.8
24	24.2	20.1	21.0	19.1	19.9	19.7	19.4	18.1	15.6	19.2	19.1	19.5	24.9	30.8	32.7	33.1	30.1	27.4	16.2	10.2	15.0	17.0	19.1	18.2	21.2
25	21.5	23.0	21.6	21.1	23.0	26.5	25.9	22.1	20.1	20.9	21.7	23.5	26.4	29.4	33.5	36.9	35.0	32.4	26.8	24.9	20.9	18.0	17.9	17.3	24.6
26 Q	18.2	20.5	20.9	21.9	21.3	21.1	22.0	20.6	20.0	21.0	19.6	20.5	23.2	27.1	29.8	31.1	30.8	29.2	24.5	18.6	13.1	11.0	11.2	15.0	21.3
27	18.0	20.1	21.5	20.1	19.6	19.9	20.1	21.3	21.7	22.5	23.9	25.6	29.0	31.8	33.5	34.1	34.7	32.3	26.7	20.1	17.1	12.0	9.0	12.7	22.8
28	15.6	19.6	19.0	17.1	18.1	20.1	19.5	18.8	18.1	23.0	24.5	26.4	28.7	30.8	34.6	36.9	37.4	31.8	24.5	17.6	13.4	11.2	11.1	12.7	22.1
29	15.3	16.3	17.8	22.2	24.2	17.8	17.6	19.9	22.6	20.5	32.0	36.9	33.5	39.2	44.7	41.8	38.8	33.4	25.9	18.2	17.9	10.3	8.1	9.2	24.3
30	13.2	18.6	19.4	19.6	20.0	21.0	20.1	18.7	18.7	24.1	22.8	24.0	26.9	29.1	31.3	32.8	34.9	32.3	26.1	20.7	18.8	15.8	14.2	13.8	22.4
31	16.1	17.7	18.8	18.6	20.1	20.1	20.1	21.5	23.0	21.5	21.0	18.1	24.9	31.2	29.9	32.7	32.6	30.7	24.9	20.0	17.3	13.3	13.0	15.3	21.8
Mean	16.3	17.5	18.0	16.7	18.2	17.1	20.6	20.3	19.9	20.5	21.9	25.5	27.3	31.3	35.6	36.5	35.5	31.9	27.2	21.9	19.0	16.5	15.2	15.6	22.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Meanook z = 58, 000 γ + July 1957

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	D	461	355	438	763	808	733	778	933	1025	841	822	838	858	850	842	836	824	808	809	809	813	795	783	808	776
2	D	808	807	804	803	799	798	798	798	798	756	710	767	494	301	905	636	816	782	870	911	906	824	803	807	771
3	D	819	896	852	830	853	845	827	834	829	829	843	747	681	749	808	826	825	815	822	845	851	830	836	841	822
4		810	803	803	801	798	797	796	796	796	798	793	808	805	804	804	798	794	788	788	788	829	875	940	937	815
5	D	851	810	819	841	648	696	819	814	710	686	959	760	691	776	825	821	813	808	803	809	841	929	933	875	806
6		851	829	841	845	850	841	830	814	744	753	744	760	767	785	803	805	809	799	808	816	877	911	896	879	819
7		819	819	819	841	788	812	804	774	778	786	803	803	804	775	788	799	797	788	787	791	799	800	809	810	800
8		819	822	840	819	819	809	786	695	763	798	782	793	777	799	795	797	803	794	799	805	827	821	825	841	801
9		852	863	808	797	795	795	797	760	771	787	787	782	782	771	765	765	763	775	786	796	808	809	819	829	794
10	Q	830	831	843	833	814	787	788	793	793	797	797	798	797	796	789	793	796	787	786	782	786	787	796	797	800
11	Q	798	803	809	797	787	787	787	787	786	775	786	787	787	786	787	787	782	786	786	786	786	786	795	803	789
12		803	807	795	796	791	794	798	778	744	789	776	750	751	776	813	812	797	797	777	788	809	811	819	819	791
13	Q	821	819	800	789	788	787	787	786	786	786	785	785	782	786	789	789	787	787	777	771	787	786	781	771	788
14		787	788	787	781	782	784	786	784	777	744	753	783	777	776	765	756	749	756	764	771	782	798	808	830	778
15	Q	831	841	821	795	784	783	778	781	777	745	753	784	788	788	786	775	769	774	767	770	770	775	787	798	784
16		803	804	797	788	788	788	787	777	712	732	734	626	635	652	705	744	695	733	770	785	793	810	831	854	750
17		853	821	799	796	791	793	791	789	787	787	771	733	712	745	770	782	798	793	782	783	796	803	814	819	788
18		821	815	803	793	791	810	809	776	755	744	679	720	732	768	776	776	765	786	797	801	821	857	874	897	790
19	D	913	863	845	841	830	799	803	735	748	798	799	803	810	804	772	712	674	734	777	821	895	946	886	871	812
20		851	904	916	882	836	851	809	803	788	778	787	799	798	808	797	799	798	790	803	816	822	839	866	918	827
21		830	797	797	795	795	795	788	783	787	786	788	789	765	765	768	787	787	788	786	786	787	797	797	798	789
22		799	818	796	789	797	787	581	700	786	788	775	762	641	713	753	744	701	731	775	814	917	853	830	803	769
23		820	850	816	842	762	821	819	790	782	768	786	798	799	798	795	786	785	782	784	786	798	803	798	840	800
24		858	824	793	782	786	781	783	755	704	725	750	710	803	765	771	778	752	745	773	776	797	819	837	850	780
25		855	836	793	797	809	807	798	787	786	773	793	797	803	800	794	786	783	787	783	776	776	777	788	798	795
26	Q	797	798	787	782	782	782	782	778	765	741	777	786	788	786	785	784	775	775	775	776	776	777	787	797	781
27		795	788	785	792	778	777	776	782	782	777	782	785	788	788	789	785	776	775	774	775	776	784	785	788	782
28		793	787	782	778	776	783	777	777	776	783	783	786	788	787	785	782	776	768	765	765	768	773	776	777	779
29		786	798	796	811	824	796	787	756	754	774	678	695	731	734	722	744	763	749	749	764	778	797	787	778	765
30		786	784	782	787	798	798	794	775	744	742	767	777	784	781	778	775	777	786	782	776	786	788	789	798	781
31		807	788	782	777	782	777	775	775	776	773	765	727	722	749	770	775	776	767	760	753	765	783	793	810	772
Mean		810	805	798	805	794	793	788	783	778	772	778	769	756	760	787	778	778	778	786	793	811	818	822	827	790

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 22 Meanook $H = 12,000\ \gamma +$ August 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	950	935	965	957	970	990	957	973	968	960	962	966	946	967	961	951	939	928	922	923	932	952	953	953	953
2	990	977	1001	987	983	1012	986	973	966	949	953	950	912	934	956	942	957	943	940	932	928	924	951	1015	961
3 D	990	950	935	938	948	953	970	971	962	943	942	953	956	947	957	943	906	858	885	966	975	953	948	1041	949
4	1048	1033	971	961	986	960	969	935	899	924	951	947	939	945	957	953	938	918	910	910	910	903	918	934	947
5	940	944	942	943	946	951	946	950	957	957	960	958	964	962	957	942	923	902	906	947	968	993	1036	1120	959
6 D	1171	1110	1142	1084	1026	975	945	734	358	679	660	605	838	873	810	889	886	864	904	921	950	972	1047	1042	895
7	1034	985	955	970	969	969	953	953	857	903	930	899	875	908	935	918	914	904	892	896	903	920	934	932	929
8	939	946	949	955	961	1034	964	934	951	943	939	942	970	961	939	942	913	901	901	911	911	910	914	948	941
9	979	955	1080	971	946	950	956	961	955	950	956	957	965	978	973	969	941	907	906	903	906	934	942	986	955
10	955	998	993	983	948	956	966	957	963	950	903	968	970	970	975	979	967	955	943	943	941	943	956	949	960
11 Q	973	969	959	959	957	958	958	957	958	964	962	965	973	982	979	975	958	942	940	936	935	935	954	954	958
12	956	995	994	1019	1076	1031	1105	956	907	958	961	977	969	960	941	906	901	878	897	906	905	920	930	941	958
13 D	967	982	1107	1104	1104	959	604	533	661	682	656	496	746	958	974	942	933	922	905	907	918	921	934	950	870
14	949	956	956	954	952	947	957	952	950	951	954	947	939	945	934	950	923	903	900	902	900	912	948	976	940
15	1020	1023	980	928	942	946	950	947	954	974	957	957	961	956	964	953	935	912	885	900	917	897	926	961	948
16	982	1001	1020	969	948	946	950	951	953	959	965	964	973	972	964	951	932	906	894	900	904	914	928	950	950
17 Q	954	950	946	950	953	957	958	960	961	961	963	968	968	972	961	945	927	914	905	904	910	922	930	955	946
18	944	949	967	952	966	962	967	969	972	976	968	930	884	953	965	960	953	930	899	918	935	945	946	961	948
19	968	986	1079	997	1007	913	921	928	850	750	837	967	967	969	961	951	923	918	914	921	922	930	939	954	936
20	961	952	941	952	949	947	946	953	957	945	976	961	962	913	916	934	909	921	871	911	945	950	948	997	942
21	1019	1080	1148	1137	1100	785	923	937	931	671	721	727	820	876	899	900	929	960	936	929	934	938	941	943	924
22 Q	941	949	954	961	960	954	954	955	943	950	957	954	954	957	957	943	928	914	906	908	917	928	939	939	943
23 Q	947	952	954	957	957	959	961	963	962	965	965	959	961	967	960	952	938	927	921	919	934	953	961	965	952
24 Q	961	959	961	959	960	961	964	964	965	965	965	962	954	966	961	951	926	902	888	894	907	933	935	947	947
25	956	961	960	963	965	970	976	978	990	977	975	971	970	978	978	962	927	910	899	888	905	944	934	931	953
26	946	961	960	961	965	965	962	963	967	967	969	968	967	958	949	931	891	888	897	892	920	905	936	970	944
27	1011	958	959	1001	1116	1072	1029	956	901	907	802	918	974	977	952	929	903	878	878	890	925	929	976	964	950
28	952	959	956	960	976	993	1068	932	938	955	954	954	966	961	955	944	914	895	898	905	919	933	964	968	951
29	966	946	945	950	956	956	956	958	960	960	957	952	956	949	945	932	918	895	906	857	922	941	1053	1014	948
30 D	1227	1086	1508	1250	1386	1135	1014	662	835	775	808	798	935	936	944	928	913	913	923	925	920	919	920	941	1008
31 D	950	953	936	949	958	945	933	909	941	945	944	937	897	880	888	919	846	843	804	864	905	963	996	1034	922
Mean	985	999	1003	986	994	968	957	923	912	913	915	915	936	949	947	941	923	908	902	911	923	933	953	972	944

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 23 Meanook $D = 24^\circ E + \ldots'$ August 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	16.1	18.1	17.4	18.6	18.3	16.1	25.4	22.0	21.0	22.0	23.5	22.5	24.9	29.8	31.7	32.9	31.7	27.9	23.7	20.9	14.8	15.1	13.3	14.2	21.7
2	13.8	14.7	17.8	18.1	18.1	18.6	16.4	18.3	21.5	22.7	25.1	26.9	28.6	29.6	32.5	36.7	34.1	34.3	28.6	23.5	16.3	9.3	9.3	11.2	21.9
3 D	17.1	20.0	20.1	19.6	20.1	20.1	19.0	21.5	20.0	19.2	21.0	23.8	25.4	28.0	27.4	30.8	46.9	65.8	20.0	0.9	16.1	12.7	12.0	11.3	22.5
4	14.8	17.1	14.8	12.7	14.2	16.0	15.1	16.1	15.7	20.2	22.0	22.5	24.9	28.5	29.8	30.1	32.1	29.9	25.6	19.4	14.7	13.3	15.2	16.1	20.0
5	17.7	20.4	20.5	20.5	20.6	19.8	22.1	22.4	22.5	22.9	24.0	24.9	26.9	30.8	33.6	33.1	40.1	38.7	26.7	20.1	19.2	17.2	17.0	16.3	24.1
6 D	14.2	14.3	8.3	18.1	24.9	12.2	8.3	15.9	58.9	32.9	32.8	18.4	32.8	38.8	34.7	42.1	37.2	23.9	16.6	19.1	19.7	15.6	17.8	17.1	23.9
7	19.4	18.1	16.1	17.8	24.5	19.7	20.1	19.6	18.6	19.2	19.3	21.0	23.5	28.4	35.0	36.5	36.2	33.0	26.8	23.0	19.3	18.2	16.9	16.6	22.8
8	17.1	18.2	18.9	18.9	18.7	17.6	10.1	22.5	20.5	19.3	21.6	22.7	27.5	30.5	34.9	33.8	32.3	28.6	22.9	18.0	14.7	14.7	14.2	15.6	21.4
9	17.3	17.3	20.1	17.1	14.2	19.1	23.9	30.8	22.0	20.1	21.3	24.8	28.9	33.0	37.7	40.8	40.6	35.3	30.8	21.7	16.6	18.1	16.1	20.1	24.5
10	23.8	21.0	24.4	24.8	21.2	20.7	25.4	22.1	20.2	20.1	19.1	21.1	25.1	29.4	32.8	32.8	29.4	25.4	21.0	15.2	13.7	15.2	16.3	19.6	22.5
11 Q	21.5	20.5	19.2	18.9	18.9	20.1	20.2	21.5	22.0	22.9	23.9	25.9	28.7	31.3	32.8	36.7	36.8	32.3	28.5	24.6	18.8	16.0	16.1	17.0	24.0
12	18.1	20.0	20.1	16.1	22.8	19.0	19.1	14.8	17.9	24.0	25.9	25.8	31.7	34.5	39.6	42.6	41.6	24.8	13.7	11.3	5.0	10.7	14.7	17.6	22.1
13 D	18.6	17.6	17.6	12.7	-12.3	6.1	7.8	20.1	20.1	28.7	20.3	25.8	34.9	41.0	38.9	40.8	35.5	27.9	27.1	20.1	16.1	16.1	17.3	17.6	21.5
14	19.1	20.2	20.5	20.9	20.4	20.1	20.0	22.5	24.5	24.0	23.8	24.3	30.5	37.7	41.6	39.3	33.4	36.5	25.4	24.9	15.6	9.3	10.7	12.2	24.1
15	17.2	15.1	19.1	18.6	19.6	20.0	21.0	21.9	34.7	22.1	19.1	22.0	24.9	28.2	31.3	32.9	32.9	32.3	24.0	21.0	19.1	10.0	9.8	11.4	22.0
16	12.2	15.6	17.6	20.1	18.0	20.1	20.1	20.9	22.5	21.9	21.0	22.0	15.6	29.0	32.8	35.7	32.8	30.9	26.0	16.3	12.3	11.4	14.2	16.4	21.1
17 Q	20.0	21.5	20.5	20.0	20.2	20.2	20.5	21.0	21.2	21.9	22.7	24.0	26.9	30.6	35.7	36.7	33.3	28.1	23.0	16.9	13.1	12.6	12.2	14.0	22.4
18	17.1	18.8	19.3	21.0	19.6	19.1	19.1	20.5	20.6	22.4	22.3	15.6	19.8	32.9	34.0	35.2	33.8	28.9	25.8	18.1	16.7	17.4	18.2	20.7	22.4
19	21.5	22.7	25.0	26.8	31.9	29.0	23.0	33.5	29.5	33.8	21.1	22.0	25.4	31.5	32.0	32.8	29.4	26.7	21.1	17.5	16.1	16.9	17.9	20.1	25.3
20	23.5	24.5	22.5	24.3	21.5	21.4	23.7	24.1	23.0	26.1	20.2	20.5	23.0	25.9	34.5	37.6	30.3	25.4	20.1	15.3	14.8	18.1	18.4	18.4	23.2
21	19.6	19.5	23.3	26.9	0.0	8.3	30.8	28.8	26.7	8.8	28.4	38.6	36.7	38.9	33.5	38.8	35.7	25.2	23.7	20.2	20.2	19.9	19.0	19.0	24.6
22 Q	19.2	19.1	19.3	20.0	19.3	21.2	20.6	20.0	20.7	24.1	24.2	25.8	29.0	29.8	29.9	30.7	30.7	28.4	22.0	18.1	16.2	15.1	16.1	17.1	22.4
23 Q	18.1	19.1	19.0	19.0	19.6	20.0	20.1	21.1	21.8	23.0	24.0	25.4	28.9	31.6	33.0	33.6	31.3	28.0	23.0	19.1	17.3	16.1	17.8	19.4	22.9
24 Q	19.9	19.5	19.2	20.0	20.1	20.5	20.8	21.7	22.0	22.5	23.2	24.0	27.1	30.0	32.8	33.1	32.1	30.1	24.5	19.6	15.8	14.2	14.5	16.2	22.6
25	17.6	19.1	20.1	19.9	20.1	19.3	20.0	19.7	20.5	21.6	23.2	24.7	28.9	33.4	36.4	35.0	39.1	30.6	25.1	19.2	10.5	11.2	11.2	14.9	22.6
26	18.8	20.0	20.1	20.5	20.2	19.3	20.5	21.0	22.1	22.6	23.0	24.7	26.4	27.6	36.4	42.1	43.1	33.8	25.4	15.0	12.5	11.1	12.7	12.5	23.0
27	11.4	18.1	19.3	15.8	15.3	16.7	18.1	19.3	25.9	23.5	20.2	24.9	30.3	33.9	36.2	37.3	36.2	30.5	25.0	11.2	14.3	13.4	14.7	16.1	22.0
28	18.8	20.9	21.5	20.9	18.8	16.6	17.2	15.5	23.0	22.5	22.5	23.1	25.0	30.7	36.1	37.4	35.6	32.5	25.0	19.5	13.3	10.7	10.9	11.7	22.1
29	19.0	19.2	19.1	19.2	20.1	20.6	21.1	21.2	20.9	21.0	21.2	22.5	26.1	29.9	31.7	33.4	30.6	29.0	20.6	30.8	50.9	4.4	4.4	9.7	22.8
30 D	15.1	32.0	29.9	27.6	10.4	19.6	17.8	-3.5	20.1	5.1	21.0	26.6	25.1	30.1	34.3	37.7	38.2	34.9	28.4	19.2	18.1	19.0	18.9	20.1	22.7
31 D	20.9	20.1	20.5	19.8	21.5	26.7	19.1	20.7	23.9	22.0	23.0	24.5	25.0	28.0	36.7	35.9	36.4	36.9	17.0	3.2	10.8	18.8	23.0	24.1	23.3
Mean	18.0	19.4	19.7	19.8	18.1	18.8	19.6	20.6	23.4	22.0	22.7	23.9	27.0	31.4	34.2	36.0	35.1	31.5	23.8	18.2	16.5	14.3	14.9	16.3	22.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 24 Meanook $z = 58,000\ \gamma +$ August 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	803	782	787	787	796	798	720	788	776	768	774	776	757	777	787	797	793	790	787	779	773	771	765	771	779
2	793	796	831	830	835	850	798	811	798	787	796	787	755	755	785	778	781	771	765	765	774	788	799	828	795
3 D	847	803	775	771	776	776	777	793	796	771	756	776	788	787	797	797	786	783	772	786	782	776	776	821	786
4	885	865	809	813	817	811	814	765	727	738	765	776	778	777	785	794	787	787	787	787	787	787	787	794	793
5	793	791	787	787	787	787	786	787	786	782	787	788	793	789	789	785	780	793	793	821	860	871	883	886	804
6 D	895	904	940	916	798	793	819	887	868	657	712	831	763	738	641	718	753	746	773	814	852	868	895	857	810
7	864	830	810	830	810	830	811	788	695	762	762	755	745	776	788	776	774	774	786	793	795	799	806	798	790
8	797	796	798	798	803	825	701	765	786	777	771	764	798	793	778	791	791	790	797	787	788	798	810	821	788
9	840	874	826	830	809	803	771	723	749	775	786	794	797	798	789	778	776	776	782	787	787	808	817	864	797
10	847	842	868	857	830	814	814	788	788	764	703	777	796	787	785	785	784	786	788	797	799	798	795	788	799
11 Q	787	786	777	777	777	782	785	785	785	785	785	787	790	788	788	793	794	790	787	787	796	797	793	797	787
12	798	819	833	873	881	798	793	783	749	786	778	789	786	777	755	744	749	743	733	749	765	787	796	798	786
13 D	799	809	864	733	829	836	625	821	886	902	839	803	744	793	818	797	787	791	797	810	804	814	822	819	806
14	803	797	797	796	796	796	797	802	798	797	796	788	776	770	755	771	771	776	771	776	786	793	809	821	789
15	868	852	847	793	788	787	787	787	753	769	783	787	793	793	797	798	788	798	788	787	803	798	807	821	799
16	841	857	863	808	798	787	787	787	787	787	787	787	788	798	798	787	788	777	768	775	782	786	786	788	796
17 Q	793	788	784	782	783	783	785	785	783	783	785	786	787	788	785	781	773	767	767	774	777	785	788	793	783
18	788	787	794	787	782	778	777	777	777	774	775	717	683	745	756	763	771	788	787	799	810	819	827	830	778
19	839	843	902	874	828	760	765	767	668	668	678	779	798	797	788	796	786	784	793	798	798	803	803	803	788
20	809	799	788	793	793	790	798	797	776	706	790	793	793	745	720	746	746	761	760	777	817	841	852	864	786
21	873	895	882	793	761	690	765	768	757	625	595	634	666	677	690	742	768	776	793	798	798	798	798	798	756
22 Q	794	790	790	794	795	805	799	797	753	760	782	787	787	787	787	786	782	779	776	777	785	788	796	790	786
23 Q	787	785	782	782	782	782	782	782	782	782	782	782	782	782	782	782	778	775	771	774	777	781	783	774	781
24 Q	774	776	777	777	776	776	775	775	775	775	775	775	775	776	776	775	771	765	765	778	775	784	777	775	775
25	775	775	775	776	778	778	779	779	777	777	776	776	782	778	778	776	773	764	763	765	776	789	802	819	779
26	807	788	778	778	782	785	781	776	778	778	781	783	785	776	771	776	771	753	753	761	777	793	789	799	779
27	819	807	793	803	822	787	808	786	722	744	707	700	775	788	782	781	789	787	787	787	798	821	822	812	784
28	797	785	787	789	798	814	822	722	747	776	777	777	797	796	785	784	787	786	788	793	799	809	814	822	790
29	825	794	787	786	786	786	785	779	779	779	776	767	765	771	775	775	775	770	776	770	787	787	850	793	784
30 D	868	798	868	829	744	668	700	695	749	635	693	763	802	804	809	807	803	787	784	791	790	797	801	807	775
31 D	815	815	812	808	802	758	752	774	786	788	800	796	771	743	741	760	757	759	789	785	808	829	864	933	794
Mean	820	814	816	805	798	788	777	781	772	760	763	774	774	776	773	778	778	777	778	785	794	802	810	816	788

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 25 Meanook — H = 12,000 γ + — September 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1008	1106	1236	1059	1070	910	772	603	647	796	844	866	885	866	918	941	931	926	930	936	945	961	984	976	921
2	986	968	980	986	962	790	299	545	844	975	922	732	291	326	350	404	805	841	929	939	1020	1302	1379	1537	838
3 D	1385	1216	1287	1143	1029	993	910	969	891	434	631	363	90	90	-420	180	985	874	946	942	948	925	939	913	777
4 D	921	924	920	971	945	963	929	914	913	918	918	924	930	946	716	332	420	277	913	953	859	1019	1337	1220	878
5	930	695	558	596	538	943	969	632	609	950	952	937	914	922	914	910	871	893	861	866	922	986	1015	921	846
6	904	906	953	954	935	886	942	962	973	1008	887	627	543	726	837	837	846	866	884	900	937	937	938	940	881
7	930	939	922	946	1000	946	941	937	932	929	931	942	946	950	941	930	914	899	899	906	924	943	947	938	935
8 Q	934	930	932	932	937	938	943	945	946	945	946	942	945	936	923	920	913	905	899	909	916	936	944	931	931
9	937	955	954	947	970	902	781	949	907	945	898	698	854	921	928	912	895	889	897	903	913	931	951	949	908
10	942	939	949	945	952	952	961	953	786	945	958	952	949	943	933	920	902	882	899	902	827	920	949	953	930
11 Q	952	949	954	952	952	952	958	972	972	949	945	945	960	952	938	907	883	878	870	892	915	941	956	956	937
12	961	949	956	952	956	958	954	956	960	952	907	949	962	960	951	927	907	887	880	886	909	935	967	978	940
13 D	1009	1018	749	762	813	1000	624	498	478	306	662	833	800	623	760	835	849	880	880	904	912	911	1010	930	794
14	929	913	917	912	921	927	937	651	474	251	623	485	531	499	615	930	925	904	925	911	936	942	991	1057	796
15	1004	1011	967	991	904	959	954	950	950	934	916	911	935	937	931	922	891	874	860	876	917	961	978	1001	939
16	1019	992	1013	992	972	967	949	946	939	947	943	947	943	941	929	914	897	888	914	898	909	927	947	930	944
17	933	952	962	949	960	956	954	954	931	931	929	856	857	865	786	891	860	904	914	914	922	941	846	953	918
18	949	968	991	978	1006	968	952	952	953	954	956	959	945	961	960	951	935	909	894	907	929	934	970	936	951
19 Q	944	952	954	952	968	960	963	962	960	964	962	954	938	941	944	937	930	916	907	915	934	944	945	952	946
20 Q	944	942	954	962	962	962	969	967	968	968	962	962	961	956	950	943	929	921	922	922	932	967	952	949	951
21	944	956	966	964	967	961	968	968	934	883	325	159	642	590	666	628	461	431	813	921	904	1031	985	948	792
22	1036	1021	1007	1050	954	1035	702	784	856	801	796	615	742	807	1510	1510	1479	797	968	883	925	1015	1254	1341	962
23 D	1610	1696	1571	1268	493	-375	642	670	542	441	498	500	566	510	567	563	702	834	897	881	964	1039	1035	993	796
24	1040	1086	961	960	1003	678	862	981	866	494	575	502	541	604	905	921	883	867	882	899	909	945	956	960	845
25	952	968	972	992	960	940	881	748	750	905	701	700	800	749	949	937	916	900	898	910	922	941	941	938	886
26	956	944	952	954	954	966	959	945	907	847	898	904	905	921	913	929	929	902	894	900	912	933	952	953	926
27 Q	945	942	943	945	952	952	952	953	956	960	960	961	960	961	945	933	922	914	913	922	922	927	945	945	943
28	947	945	958	963	1015	1039	1009	973	950	953	952	952	945	938	941	921	922	913	920	912	930	952	938	938	951
29 D	976	971	989	991	1054	1022	710	1040	1046	967	862	649	678	627	459	422	436	869	659	815	1040	1035	1141	1070	855
30	929	883	907	907	894	898	899	914	874	384	481	1639	835	963	866	924	897	759	874	893	902	926	952	936	893
31																									
Mean	995	988	978	962	933	898	875	873	857	821	825	812	793	798	818	838	841	847	891	904	925	967	1005	998	894

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 26 Meanook D = 24° E + ... ′ September 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	15.0	14.3	26.8	18.3	27.5	32.8	38.2	1.1	15.3	18.6	18.1	20.1	22.5	23.9	32.4	32.8	31.3	27.9	23.5	20.1	18.3	18.1	19.6	21.2	21.1
2	21.8	21.4	25.4	27.0	44.1	50.5	35.8	26.9	19.6	22.7	29.0	32.0	32.0	73.8	87.8	91.5	41.8	34.7	26.9	41.1	45.5	63.2	49.6	28.0	40.5
3 D	18.6	13.9	18.0	23.1	17.1	18.4	1.9	18.1	16.8	16.2	27.8	31.5	62.5	98.5	60.3	87.9	60.7	46.5	10.9	19.6	20.1	22.5	21.0	23.9	31.5
4 D	24.3	24.8	22.0	22.5	35.8	23.0	19.5	20.3	21.2	21.8	23.2	24.1	27.3	33.3	33.1	25.8	82.0	157.6	155.2	30.6	17.6	33.8	50.5	33.9	40.1
5	14.2	-2.5	-70.6	-25.2	-26.5	-13.6	9.8	19.7	-1.3	24.5	25.8	27.9	31.8	34.7	42.4	45.3	44.7	38.8	30.1	23.5	21.7	26.0	28.0	20.5	15.4
6	19.4	21.2	19.6	41.6	17.6	7.4	15.6	17.8	15.8	28.9	30.8	42.1	31.0	42.9	53.7	55.6	41.6	29.2	12.7	4.9	11.3	15.5	20.1	22.3	25.8
7	25.0	24.9	21.4	16.7	18.2	21.0	18.9	21.2	22.6	24.0	25.4	25.0	29.4	33.0	34.5	32.5	30.8	26.7	20.8	15.9	14.2	15.1	17.6	21.0	23.2
8 Q	22.5	21.0	20.4	20.4	20.4	21.0	21.0	22.2	23.0	23.9	25.0	26.4	28.9	32.8	35.1	30.4	28.1	24.9	21.0	17.8	16.9	16.7	17.6	19.1	23.2
9	19.6	18.6	18.1	19.1	16.1	3.8	8.3	28.4	26.8	29.6	28.4	22.5	29.9	30.6	39.3	36.6	29.9	24.9	18.6	16.0	15.1	16.9	19.0	20.0	22.3
10	20.7	20.5	20.5	20.2	20.0	22.0	21.0	23.2	16.0	29.6	28.8	28.9	31.3	32.9	33.4	31.9	32.4	22.8	15.1	14.2	13.1	11.2	14.7	17.7	22.6
11 Q	18.6	18.6	19.2	19.1	19.1	19.9	20.8	35.4	23.5	24.5	26.4	23.0	26.9	30.0	31.8	34.3	36.2	30.9	20.9	11.9	7.2	10.3	14.2	19.0	22.6
12	20.1	20.9	18.9	19.3	19.7	19.1	20.5	21.5	22.5	24.8	21.8	30.0	32.3	34.3	38.0	40.7	35.7	30.3	24.8	19.1	16.2	14.4	16.1	18.1	24.1
13 D	18.1	19.0	14.7	21.0	84.7	76.9	57.3	74.4	46.4	25.3	34.9	34.3	42.1	39.7	52.6	47.2	37.7	35.2	26.6	22.9	24.9	25.0	26.4	24.7	38.0
14	22.9	21.5	20.0	21.2	21.1	20.1	18.1	5.8	16.2	42.2	44.3	16.1	57.0	56.8	42.1	40.5	31.0	26.4	24.3	20.8	20.2	18.9	21.8	23.0	27.4
15	20.5	24.0	21.7	20.5	8.3	22.3	21.0	19.1	21.0	22.8	24.0	27.4	27.9	30.8	31.4	33.5	31.3	28.2	20.5	16.9	10.4	13.4	15.9	15.1	22.0
16	17.2	23.9	20.8	22.8	21.6	22.0	20.2	20.0	21.5	23.0	23.5	24.2	25.4	28.4	30.9	33.8	32.5	28.4	24.6	21.9	19.1	20.0	20.7	21.1	23.6
17	21.1	20.1	20.1	20.9	21.0	19.2	20.1	21.2	22.9	28.9	29.8	34.3	38.5	26.4	31.8	30.3	23.9	20.9	16.6	20.1	17.8	17.2	17.2	17.5	23.2
18	20.0	20.0	14.6	21.1	14.3	16.9	19.4	21.5	18.6	23.2	24.1	24.8	24.4	30.9	31.6	32.9	33.7	33.8	22.5	16.4	19.4	19.0	16.7	19.5	22.5
19 Q	19.1	18.7	19.6	19.6	19.4	20.0	19.9	21.9	23.0	22.9	24.4	23.1	24.8	30.1	31.8	33.3	30.7	28.1	21.2	19.4	19.1	19.5	20.3	17.9	22.8
20 Q	19.1	18.6	18.3	19.0	19.6	20.0	20.1	22.0	24.0	23.2	23.7	25.4	26.9	27.6	28.8	30.0	33.8	24.5	22.1	15.5	18.2	17.2	19.1	19.0	22.3
21	19.1	18.7	19.1	19.1	18.5	19.2	19.1	21.0	19.1	21.0	40.6	39.6	46.5	53.3	47.5	51.4	56.2	32.9	29.7	31.7	6.7	20.6	21.1	17.0	28.7
22	27.8	27.8	22.4	14.2	-2.5	-1.5	3.8	13.3	13.3	23.1	38.7	48.5	38.7	39.0	-20.1	-3.4	93.0	38.7	22.5	25.6	29.9	33.9	45.6	43.5	25.7
23 D	37.2	30.5	48.8	-60.4	-65.3	-36.5	0.8	4.0	21.9	23.9	38.7	44.8	40.3	44.0	25.9	47.4	41.6	35.2	24.9	18.8	24.5	28.8	24.9	22.5	19.5
24	24.0	28.4	28.9	23.9	20.1	19.0	27.9	21.0	21.9	3.4	15.1	0.8	13.7	41.5	35.7	35.9	31.9	22.0	17.0	19.0	18.2	18.0	21.1	22.6	22.1
25	24.1	29.9	22.0	18.1	32.3	19.0	23.1	6.7	3.3	29.9	25.0	34.7	36.7	39.5	39.6	37.6	32.9	28.3	21.0	16.0	15.1	18.0	20.1	23.0	24.8
26	23.4	22.5	21.0	20.1	21.9	38.7	20.2	21.3	21.4	19.1	19.3	22.0	25.1	31.7	37.2	36.2	33.7	26.4	20.9	16.0	13.3	14.3	19.0	22.0	23.6
27 Q	23.0	21.0	20.5	20.9	20.9	20.9	21.0	21.9	21.7	23.0	24.0	24.5	24.9	27.6	30.9	32.7	32.6	26.8	24.1	20.5	17.6	18.1	19.1	21.0	23.3
28	22.5	19.9	19.1	19.3	13.2	18.1	18.1	20.9	22.4	24.5	24.6	24.6	26.0	27.9	31.3	31.7	30.8	28.8	26.0	20.1	15.1	16.2	18.7	20.1	22.5
29 D	18.2	16.6	10.9	14.7	17.1	10.2	4.5	15.2	19.0	28.5	29.4	29.8	62.4	58.2	37.2	29.9	45.4	79.9	35.8	29.9	37.7	25.9	30.2	27.9	29.8
30	25.9	21.0	25.8	26.0	20.9	20.8	20.8	21.1	23.1	4.9	24.1	66.8	41.6	37.8	37.7	39.7	36.1	35.2	24.9	20.9	19.1	20.1	16.2	16.1	26.9
31																									
Mean	21.4	20.7	18.3	16.8	17.9	19.0	19.6	20.9	19.1	23.4	27.3	29.3	33.6	39.2	36.9	38.9	39.5	35.8	26.9	20.2	18.8	20.9	22.7	21.9	25.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 27 Meanook $Z = 58,000\ \gamma +$ September 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	873	896	896	821	819	656	571	593	626	729	680	717	763	764	793	808	802	803	808	809	808	818	809	816	770
2	831	830	817	810	709	463	864	871	906	905	874	795	689	874	782	557	734	706	719	731	788	819	592	604	761
3 D	720	807	753	817	861	845	817	845	921	981	966	1056	970	841	744	755	803	846	821	814	822	840	827	829	846
4 D	821	825	819	842	843	853	830	813	812	816	816	817	823	830	1013	1211	1178	1220	787	882	871	941	971	695	889
5	823	928	902	776	899	928	869	893	795	862	856	857	857	852	840	834	821	815	819	821	841	879	864	831	853
6	830	830	861	851	838	737	826	836	809	784	782	719	825	750	742	706	687	738	795	837	842	834	729	830	792
7	831	831	819	828	847	839	822	817	810	812	813	814	819	819	816	819	821	819	824	824	819	819	814	809	821
8 Q	808	809	809	809	809	809	809	809	809	808	807	805	808	808	808	803	808	798	798	808	819	819	810	804	808
9	798	799	808	819	829	744	734	776	758	776	796	733	743	752	767	787	798	799	798	808	819	819	813	803	786
10	798	799	808	808	804	809	809	808	723	767	797	808	808	803	797	798	797	797	794	797	799	803	807	808	798
11 Q	802	800	800	798	798	798	803	765	782	787	788	787	789	799	798	797	798	798	798	807	814	821	821	813	798
12	811	808	809	799	799	798	799	799	799	786	701	742	782	789	796	808	809	812	810	817	819	821	831	852	800
13 D	875	901	812	635	732	753	839	885	1101	1182	1068	928	1106	1070	808	847	863	878	855	857	842	847	845	839	890
14	831	836	835	841	838	839	830	736	647	634	912	944	690	630	821	825	817	824	847	851	863	874	890	886	814
15	863	871	871	895	764	854	836	842	847	836	809	797	826	830	831	833	827	828	830	841	857	868	868	875	842
16	895	886	890	895	875	854	833	825	814	813	809	809	813	819	821	819	822	824	821	831	829	830	830	821	837
17	814	816	821	819	811	809	808	808	771	733	732	638	658	703	660	733	752	771	807	814	816	811	809	808	772
18	808	810	831	853	863	831	817	810	809	808	799	799	793	814	810	810	808	804	817	810	817	817	830	809	816
19 Q	799	803	804	803	804	808	809	810	803	799	793	789	782	787	793	798	800	798	805	807	810	810	808	805	801
20 Q	804	800	800	798	798	798	807	808	803	799	793	787	789	796	793	797	797	797	798	808	810	819	809	808	801
21	798	809	804	799	799	798	804	798	765	700	543	874	1123	993	777	753	755	723	930	992	938	948	993	994	842
22	913	906	895	819	803	798	712	819	894	862	841	776	752	755	696	430	875	803	891	863	927	934	948	684	816
23 D	928	755	634	597	646	1032	923	840	1043	1024	823	830	1036	472	580	581	771	885	949	928	949	918	918	895	831
24	928	961	895	875	830	592	645	852	820	809	678	755	776	776	799	830	821	810	840	853	863	863	862	857	816
25	857	885	864	874	873	802	727	603	656	764	755	683	668	721	831	821	821	819	819	829	830	840	829	830	792
26	830	819	819	819	830	775	787	809	749	679	744	755	755	764	755	765	787	810	819	819	830	830	839	819	792
27 Q	819	810	810	810	810	810	809	809	803	803	809	809	809	810	809	803	803	798	798	804	804	805	806	806	807
28	803	798	808	817	874	885	831	840	821	810	808	809	809	810	809	809	810	810	809	809	799	798	798	798	816
29 D	809	809	830	852	864	711	710	798	829	887	873	798	706	753	1143	1128	1322	1345	996	1063	966	970	982	852	916
30	852	856	864	852	842	841	841	852	886	873	656	744	808	847	842	830	851	835	819	830	830	851	863	850	834
31																									
Mean	832	836	826	814	817	796	797	806	814	821	797	799	812	794	802	796	832	837	827	839	841	849	840	818	818

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 28 Meanook H = 12,000 γ + Ocotober 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	937	946	1004	968	959	950	945	942	930	941	941	942	940	898	891	930	929	913	905	891	888	930	922	927	932
2	938	961	999	960	949	945	945	945	937	938	913	945	956	960	953	945	949	936	937	936	942	929	956	972	948
3	945	925	937	945	949	958	956	953	953	945	912	804	784	921	920	847	885	887	929	943	927	956	949	949	920
4	966	967	952	968	980	961	962	953	938	936	936	956	949	933	903	907	906	865	862	894	928	937	960	953	936
5	960	955	951	950	944	955	957	953	944	937	951	952	959	881	943	927	904	890	905	926	932	921	940	951	937
6 Q	944	952	957	959	960	959	967	965	944	937	952	953	959	959	915	944	937	927	916	916	916	930	937	944	944
7 Q	952	958	965	967	971	979	971	966	968	960	958	973	967	963	955	957	951	940	924	928	940	937	941	948	956
8 Q	955	953	959	963	963	963	964	964	976	966	968	967	966	963	963	952	941	934	926	926	932	932	936	943	953
9	955	965	968	970	971	975	983	980	976	973	967	968	972	967	950	941	929	927	928	926	908	929	944	941	955
10	955	967	974	990	988	1006	881	771	775	705	861	919	876	894	879	884	926	937	906	912	920	975	941	936	907
11 D	951	948	983	967	1020	771	771	834	772	730	667	463	620	665	850	827	924	929	911	904	932	951	944	936	845
12	938	937	960	951	945	937	945	866	756	572	749	804	937	960	960	937	909	872	898	902	909	922	996	1023	899
13 D	1127	1158	1226	1219	1098	1060	1040	960	941	929	922	923	952	929	875	894	912	905	912	904	922	936	962	988	987
14 D	1050	1141	1124	989	1014	451	859	937	931	506	576	936	920	874	804	608	733	898	878	870	847	890	921	1000	865
15	1011	976	952	976	1017	1000	960	941	937	930	922	847	773	844	812	912	903	882	873	902	913	942	927	922	919
16 Q	925	923	940	938	944	945	954	956	956	956	956	956	953	956	945	931	912	903	905	907	912	917	929	929	935
17	952	958	960	960	965	964	963	965	968	968	960	872	870	969	961	956	936	917	913	920	925	937	945	945	944
18 Q	960	968	960	964	972	968	968	968	969	969	968	961	965	966	961	952	945	929	923	921	922	929	933	935	953
19	945	956	963	968	970	974	1007	1005	984	968	942	930	968	970	961	949	937	926	919	929	931	933	925	925	954
20	936	942	952	934	961	971	967	961	958	952	952	956	953	933	929	945	922	884	899	905	922	931	949	959	941
21 D	976	945	950	953	952	952	952	967	952	952	952	945	937	929	942	897	902	894	919	926	956	949	976	1000	945
22	1023	1018	979	1018	967	943	955	951	889	803	740	906	936	944	936	911	891	885	908	921	908	936	898	944	925
23	999	974	944	937	933	940	955	940	951	944	916	951	944	944	928	916	905	897	900	904	913	930	919	944	934
24	936	940	952	951	955	955	959	959	955	951	953	944	874	916	947	937	920	897	882	874	911	928	944	944	933
25	951	953	962	962	962	962	959	959	955	952	905	959	963	959	951	936	932	918	915	911	923	936	944	955	945
26	960	971	967	971	975	982	969	959	959	955	947	948	959	951	950	940	928	912	914	908	920	921	928	944	947
27	955	961	963	959	975	975	959	973	968	971	966	912	761	936	974	957	960	940	924	910	921	897	920	947	941
28	958	998	959	969	971	988	959	928	948	936	932	920	951	959	959	951	944	908	899	916	932	921	930	941	945
29	947	979	967	963	971	971	969	960	834	818	915	953	936	936	963	951	949	920	940	920	941	963	975	997	943
30	975	964	1011	1045	1032	985	831	716	880	952	942	954	952	931	942	944	942	931	922	915	943	945	942	945	939
31	952	958	961	960	956	960	960	960	961	959	960	937	813	898	965	960	942	914	899	905	905	930	938	945	937
Mean	966	972	977	974	974	945	948	937	928	900	907	915	912	926	929	918	920	910	909	912	921	933	941	953	934

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 29 Meanook — D = 24° E + ... ′ — October 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	16.2	15.1	22.5	23.1	25.9	22.1	21.0	21.1	23.9	26.9	24.1	24.1	24.1	27.7	25.9	32.2	32.3	29.9	36.5	30.3	15.2	14.3	15.1	17.9	23.6
2	18.1	15.1	14.3	19.6	18.1	20.1	22.0	24.1	25.8	25.4	19.2	22.1	23.0	23.9	27.9	28.6	25.8	24.9	22.0	21.1	19.1	18.8	16.6	17.0	21.4
3	15.1	18.1	19.8	20.4	21.0	20.1	20.8	22.0	23.9	24.0	23.1	24.8	24.9	33.8	36.5	20.1	23.8	22.5	19.0	22.0	18.1	18.6	18.1	14.3	21.9
4	11.2	12.2	20.9	18.6	23.0	18.1	21.0	22.0	24.1	25.9	24.9	25.9	24.9	27.4	29.9	29.9	28.9	25.8	17.1	13.2	18.1	16.6	16.2	16.2	21.3
5	18.1	15.1	17.1	18.0	23.0	23.0	20.1	20.7	16.1	23.9	28.4	26.8	26.4	27.4	29.9	32.3	31.8	27.4	22.5	24.9	19.3	18.1	16.2	16.1	22.6
6 Q	16.9	17.1	18.2	19.1	19.6	19.2	21.0	21.0	23.5	25.0	24.1	24.5	24.1	24.0	24.9	27.9	29.8	29.4	27.9	24.5	21.1	20.1	19.1	18.1	22.5
7 Q	18.1	18.1	19.1	19.6	19.2	20.0	19.2	21.5	23.0	23.0	27.4	26.4	25.0	26.4	28.9	30.2	30.8	29.9	26.8	22.5	20.1	19.1	18.1	17.1	22.9
8 Q	16.9	18.8	19.2	20.1	20.5	21.0	21.0	22.0	23.0	24.0	24.5	24.9	25.8	26.8	28.9	30.7	30.7	30.8	26.9	23.5	22.0	21.7	20.0	18.1	23.4
9	17.1	17.0	17.1	17.6	17.1	19.1	18.6	21.7	23.0	25.3	25.4	24.9	24.9	26.9	23.0	21.9	21.9	21.4	20.1	15.6	15.6	18.1	18.1	19.1	20.4
10	19.0	20.0	20.0	23.8	18.1	19.0	19.1	25.9	22.0	27.9	34.7	26.7	22.0	18.1	17.1	19.2	22.0	31.8	31.7	24.4	21.1	19.2	16.1	17.0	22.3
11 D	17.1	18.1	23.0	19.1	18.0	3.9	33.7	26.9	24.9	39.8	40.4	48.5	28.0	28.9	21.1	22.1	25.9	24.0	20.9	14.9	16.1	18.1	20.8	21.1	24.0
12	22.0	21.9	22.9	23.0	22.0	24.0	24.1	27.9	37.7	39.7	42.7	27.9	25.4	28.8	29.9	31.7	31.3	24.9	20.5	22.0	21.1	19.9	17.1	14.3	25.9
13 D	13.2	14.2	19.0	16.0	16.1	21.1	24.9	23.5	23.0	22.5	23.9	21.9	23.0	23.0	24.9	26.9	29.9	29.8	28.0	23.1	24.0	21.9	17.1	16.1	22.0
14 D	16.1	18.1	15.1	20.9	14.3	20.1	11.7	20.8	26.4	30.5	44.1	29.4	27.4	19.6	33.9	22.0	22.8	28.0	29.9	22.0	13.7	13.7	14.8	19.1	22.2
15	16.6	14.2	22.0	23.1	22.9	23.5	24.5	23.0	24.0	24.0	26.8	26.7	24.0	25.0	34.7	34.6	34.5	31.9	24.0	22.6	18.1	17.8	18.1	19.0	24.0
16 Q	19.6	20.9	22.0	22.0	21.7	21.9	22.0	21.9	22.0	23.0	23.0	23.9	24.9	25.8	30.8	33.7	35.7	30.8	27.4	22.5	20.1	19.6	20.5	20.0	24.0
17	18.1	18.0	19.1	19.6	20.1	20.9	21.0	22.5	22.0	23.5	24.9	24.9	23.0	25.9	30.8	31.8	33.8	30.3	27.9	22.9	21.1	19.1	17.6	18.6	23.2
18 Q	17.6	17.1	20.0	20.9	19.1	20.8	21.2	22.2	22.9	21.9	22.9	23.9	24.0	24.9	27.9	31.7	31.7	31.0	28.9	23.9	20.1	20.9	21.0	20.9	23.2
19	20.0	19.8	20.1	20.1	20.1	20.9	16.2	28.9	22.0	24.0	24.9	24.9	26.4	26.4	28.9	32.3	28.8	30.3	23.5	23.0	20.9	18.1	20.0	20.9	23.4
20	19.1	19.0	17.2	18.1	18.1	19.2	21.2	21.1	24.0	25.9	28.9	28.8	27.9	23.0	24.0	32.3	34.3	33.7	18.0	15.1	16.1	19.0	17.9	16.9	22.4
21 D	10.9	20.1	22.5	20.6	20.1	21.0	22.5	23.1	25.7	25.5	25.4	26.5	24.9	28.7	32.8	39.6	32.3	26.4	22.0	23.1	25.9	24.5	18.1	11.3	23.9
22	20.0	22.5	22.0	23.0	21.9	19.6	21.0	20.1	24.1	27.4	29.8	27.9	27.0	27.0	29.9	32.8	36.7	30.8	21.5	20.1	20.1	19.5	21.0	19.0	24.4
23	16.1	18.5	21.0	21.1	21.3	22.9	26.3	22.0	24.9	24.1	26.9	26.0	26.9	26.9	28.8	30.9	30.8	26.9	22.1	20.9	20.9	14.2	19.1	16.1	23.2
24	20.5	21 0	20.1	21.1	20.9	21.1	21.9	21.3	21.9	24.0	24.0	25.9	22.9	24.0	30.8	34.7	32.8	29.9	26.9	17.8	18.1	17.1	17.1	19.1	23.1
25	19.1	19.1	20.1	21.0	21.0	21.7	21.0	21.9	21.9	22.5	20.7	21.0	24.9	26.9	29.9	31.3	32.7	31.7	24.9	23.0	21.0	19.6	19.0	16.5	23.0
26	16 1	12.2	18.1	21.2	21.9	21.1	21.9	23.0	23.9	24.9	24.1	20.1	23.1	26.8	29.9	32.9	32.8	28.0	24.8	19.6	19.0	19.1	18.1	19.1	22.6
27	18.2	18.5	20.1	20.2	20.1	18.1	19.1	22.0	22.5	21.1	24.0	25.4	22.0	29.9	34.7	37.8	32.3	30.8	29.8	24.0	20.1	18.1	15.1	17.1	23.4
28	18.1	12.5	18.1	20.1	21.0	21.0	24.4	24.9	27.5	25.9	24.0	25.4	23.9	23.9	27.4	30.9	31.8	37.7	18.2	20.1	17.3	20.1	19.2	20.1	23.1
29	19.1	12.2	20.1	19.1	22.0	22.0	23.1	22.1	20.1	20.9	25.4	28.0	26.8	23.9	28.8	34.6	36.8	33.9	25.3	24.2	18.2	15.7	13.4	12.1	22.8
30	15.7	16 4	12.9	19.4	16.9	12.4	19.1	33.5	31.3	24.2	21.7	21.7	23.0	24.2	26.5	31.1	32.8	30.1	28.9	24.0	22.0	19.0	19.6	21.0	22.8
31	21.0	20.1	20.1	20.1	21.0	20.4	21.0	22.0	23.5	22.5	24.0	27.9	18.1	27.4	32.3	33.8	34.2	33.7	27.9	24.9	20.9	17.2	18.6	19.7	23.8
Mean	17.4	17.5	19.5	20.3	20.2	20.0	21.5	23.1	24.0	25.5	26.7	26.1	24.6	25.9	28.8	30.4	30.7	29.3	24.9	21.8	19.5	18.6	18.0	17.7	23.0

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 30 Meanook Z = 58,000 γ + October 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	851	851	886	863	810	810	821	822	798	797	809	801	810	803	803	788	809	810	819	819	841	840	819	819	821
2	819	829	857	840	819	819	819	810	776	775	755	776	798	809	810	819	819	809	819	819	819	821	821	841	821
3	841	821	819	819	819	819	819	821	809	797	768	668	668	735	773	691	720	776	798	830	814	836	830	831	788
4	847	852	840	841	851	825	840	830	803	776	776	798	805	809	804	809	803	797	803	825	836	821	825	830	819
5	852	830	819	819	819	809	814	814	787	787	797	798	803	803	809	803	798	798	808	816	814	807	819	819	810
6 Q	809	805	803	803	803	803	819	819	819	809	797	782	798	799	803	809	809	807	798	797	798	798	798	798	803
7 Q	798	798	798	798	798	808	810	803	803	788	760	787	798	798	798	798	798	798	788	788	788	788	797	798	795
8 Q	803	803	803	803	803	803	803	803	803	803	803	803	798	798	798	799	798	788	776	778	786	787	790	798	797
9	798	798	798	803	816	825	836	830	825	809	798	798	793	797	787	786	787	793	797	803	798	819	830	831	806
10	841	852	840	840	852	841	841	810	862	701	732	787	775	755	734	767	787	819	819	830	863	890	852	833	813
11 D	841	841	862	830	842	700	777	776	755	701	679	722	647	634	711	733	767	803	819	829	840	847	851	841	777
12	830	819	830	830	808	809	819	787	808	776	711	722	744	787	819	803	798	799	809	816	839	851	883	864	807
13 D	863	873	841	836	873	733	787	819	803	786	776	864	798	797	777	798	808	809	803	809	830	863	873	883	821
14 D	874	841	874	851	765	603	830	819	852	934	890	819	791	799	771	657	760	819	834	851	841	851	852	862	818
15	852	895	873	864	873	841	842	829	810	798	777	765	717	717	755	787	787	787	803	819	830	819	819	825	812
16 Q	819	809	809	809	803	803	809	809	808	808	804	803	809	803	809	809	809	803	798	798	798	810	809	809	807
17	804	799	803	799	798	801	803	803	798	798	786	722	744	776	787	789	787	793	798	797	798	798	798	796	791
18 Q	797	798	797	797	798	798	798	798	798	798	797	797	796	797	798	798	798	797	793	797	798	798	797	798	797
19	797	797	797	797	798	799	830	821	830	803	765	744	786	790	791	793	793	793	799	799	798	798	809	798	797
20	798	798	810	814	812	798	809	808	798	787	765	775	776	755	764	776	774	774	776	777	788	796	814	830	790
21 D	853	840	819	808	807	809	809	801	791	797	797	787	777	771	786	776	767	765	786	797	809	847	901	874	807
22	873	863	851	819	807	808	831	787	786	738	673	760	801	818	809	803	799	807	798	803	807	831	830	842	806
23	877	862	819	809	808	808	797	787	776	798	765	797	797	797	803	803	803	797	803	819	819	925	819	809	812
24	799	801	808	809	809	809	798	797	798	775	782	787	732	760	793	798	798	803	809	819	819	819	819	809	798
25	808	809	819	809	808	808	803	803	787	776	711	775	797	797	803	803	803	798	808	810	809	810	809	810	799
26	808	821	829	819	822	841	819	808	798	786	775	776	776	777	788	803	803	798	798	808	809	809	809	808	804
27	803	798	797	797	798	808	797	803	798	798	787	755	641	711	776	776	798	797	803	803	810	809	798	798	786
28	803	840	840	819	819	829	808	755	775	788	776	755	787	803	809	803	807	798	803	798	809	798	808	803	801
29	804	814	830	814	819	809	803	798	652	679	753	787	765	767	787	798	798	788	779	779	788	805	838	889	789
30	805	815	842	855	853	713	730	620	721	788	779	756	779	771	805	809	809	810	819	830	836	829	819	809	792
31	808	807	803	803	801	798	800	788	787	788	777	764	679	690	776	798	798	798	803	808	809	809	803	798	787
Mean	825	825	826	820	816	796	810	799	794	785	772	775	767	775	788	787	793	798	802	809	814	823	824	824	802

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 31 Meanook — H = 12,000 γ + — November 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	949	956	960	967	960	976	968	963	956	931	944	958	968	960	950	929	922	911	905	916	922	934	934	949	945
2	952	959	960	963	965	964	966	968	967	958	958	958	967	963	956	950	931	916	911	923	927	925	925	927	948
3	959	963	949	956	953	953	962	917	782	756	740	792	576	770	909	955	922	887	903	920	923	931	941	942	886
4 Q	949	951	954	955	958	960	959	959	958	960	960	960	960	959	954	947	935	927	912	920	923	925	930	933	946
5 Q	943	952	961	967	968	966	964	964	964	964	964	964	963	963	960	955	949	934	925	920	927	937	952	955	953
6	958	961	962	963	967	966	970	969	974	967	966	969	972	972	972	956	950	937	930	906	911	954	1032	1045	964
7	1082	1088	1088	926	911	895	862	903	864	805	857	914	856	807	795	866	919	907	891	905	913	912	916	927	909
8	933	937	941	941	940	934	933	916	815	502	662	770	717	875	898	919	952	938	927	927	927	945	939	1016	884
9 D	973	977	976	1026	948	965	856	745	817	898	905	898	655	574	728	937	959	918	898	902	920	930	959	971	889
10	1014	962	951	951	979	930	953	821	723	806	642	838	919	938	912	910	877	908	895	910	914	934	944	928	898
11	941	948	982	979	1010	995	951	889	777	663	814	908	902	869	916	918	928	913	902	899	887	926	988	957	911
12	992	985	954	944	948	955	963	951	904	741	822	812	733	733	847	911	901	926	916	907	911	932	937	930	898
13	929	949	952	951	946	949	952	946	938	920	937	858	825	923	942	964	943	914	907	909	920	938	949	957	930
14	964	966	968	980	990	989	993	962	870	833	919	967	949	956	945	923	902	892	904	911	923	938	934	927	938
15	942	980	1023	1038	1000	971	942	698	882	856	870	938	955	949	952	950	943	920	923	927	933	931	945	956	934
16	960	967	959	967	967	964	963	949	934	953	949	925	923	927	934	952	943	923	912	917	927	923	945	952	943
17 Q	956	958	960	962	966	967	966	964	961	959	960	960	958	949	945	952	945	935	927	927	927	923	942	949	951
18	933	955	996	1018	1006	1006	967	952	870	870	580	388	447	537	549	817	962	936	912	927	938	936	941	942	849
19	942	956	957	964	976	985	988	983	977	959	942	945	949	934	949	947	941	934	931	931	934	926	936	941	951
20	955	963	963	966	967	960	958	962	959	947	920	920	878	943	961	953	941	938	927	937	928	931	938	949	944
21 Q	962	958	956	955	966	952	949	941	955	966	964	964	960	960	960	958	950	941	931	931	939	938	939	945	952
22 Q	954	960	964	966	971	970	974	966	968	967	964	963	964	966	960	943	931	926	932	929	933	934	941	952	954
23	964	964	966	972	967	963	966	969	956	955	962	960	976	980	975	969	958	933	930	933	949	952	963	974	961
24	976	983	981	985	1013	1000	978	974	963	966	972	969	979	974	967	967	963	949	923	927	928	943	950	960	966
25 D	973	989	999	990	991	988	1041	896	803	831	823	873	949	967	963	939	933	905	908	856	949	930	949	972	934
26 D	1001	1007	1058	1009	1078	1103	1011	990	684	858	821	850	851	942	909	962	981	546	533	900	990	1011	964	1005	919
27 D	1035	1086	1086	1184	1184	1036	626	691	695	729	608	584	964	952	917	907	905	909	907	884	908	920	934	972	901
28 D	979	980	1031	1031	953	958	950	811	936	905	919	984	737	699	754	865	880	908	909	925	919	927	912	934	909
29	960	978	976	978	969	981	952	935	945	902	913	934	933	872	920	905	902	942	957	943	934	931	939	942	939
30	954	970	972	972	975	978	971	968	967	959	953	966	959	959	966	964	963	958	941	933	934	937	942	951	959
31																									
Mean	966	974	980	981	980	973	948	917	892	876	874	890	878	892	909	933	934	911	904	917	927	935	945	955	929

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 32 Meanook D = 24° E + ... ′ November 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	20.1	20.1	19.6	19.1	24.9	18.1	19.1	22.4	22.0	24.9	23.9	23.0	24.9	26.4	27.9	29.9	32.7	27.9	24.1	21.3	18.6	19.4	19.6	18.2	22.8
2	19.6	18.2	19.1	19.6	20.0	19.6	21.2	22.0	20.5	24.0	24.5	23.0	24.9	25.9	27.9	29.9	31.3	29.4	25.0	20.9	19.1	17.6	17.4	17.1	22.4
3	16.3	16.1	19.1	21.1	21.0	21.1	25.9	17.1	25.8	32.8	45.6	43.3	32.8	39.2	34.7	34.7	33.7	25.6	13.2	17.9	19.8	21.0	21.0	21.5	25.8
4 Q	21.0	20.1	20.0	21.0	20.9	21.5	21.5	21.3	22.7	22.7	23.0	23.9	24.1	24.8	26.8	29.9	30.9	29.9	23.3	21.1	20.3	20.0	20.7	20.1	23.0
5 Q	20.2	20.5	20.1	20.1	20.7	21.3	21.6	22.0	22.7	23.5	23.0	23.7	24.9	25.9	27.8	29.9	31.3	29.9	27.9	24.2	21.0	19.5	18.7	19.1	23.3
6	19.1	20.1	20.5	21.0	21.0	21.5	21.5	21.5	21.5	22.5	24.3	24.9	25.0	25.8	26.9	29.9	30.7	28.4	35.7	24.9	21.2	18.6	23.7	15.6	23.6
7	18.6	18.1	22.9	28.0	26.9	22.7	22.0	24.9	26.7	25.4	24.0	23.2	23.1	26.9	19.0	23.7	26.9	25.4	19.0	19.1	20.1	21.8	22.0	22.0	23.0
8	21.9	22.1	22.4	23.0	21.3	27.6	24.5	23.3	29.4	16.1	25.6	35.7	37.2	24.5	31.8	32.7	30.3	29.0	24.0	19.8	17.3	19.6	21.0	13.1	24.7
9 D	17.6	14.8	17.1	16.4	16.6	20.7	13.2	6.2	19.6	24.0	23.9	25.8	36.7	28.9	27.9	26.4	26.9	28.6	23.5	19.2	13.5	16.1	17.1	19.6	20.8
10	17.6	21.2	22.0	23.0	24.5	21.0	19.2	19.4	29.9	28.9	30.3	31.0	33.8	34.0	28.8	25.0	25.0	21.9	24.0	17.1	18.6	18.1	18.0	17.1	23.7
11	18.4	21.9	20.1	22.9	25.6	23.0	21.7	18.1	21.5	18.1	33.9	29.9	30.8	28.0	28.1	30.8	30.3	25.4	25.0	20.0	14.7	15.8	18.6	20.1	23.4
12	16.1	21.5	21.7	24.0	24.5	26.8	28.4	23.0	22.9	19.6	30.3	32.8	37.2	19.1	25.4	27.0	26.4	22.0	21.0	19.3	21.0	18.1	19.0	18.1	23.6
13	18.6	21.0	22.3	22.7	22.6	23.0	25.8	26.9	24.9	24.2	23.2	23.7	22.0	24.0	29.2	32.6	27.4	21.9	13.2	16.8	19.1	19.1	18.7	20.0	22.6
14	20.1	17.6	20.8	20.0	19.1	22.5	20.5	22.5	21.3	24.7	25.6	24.7	28.8	25.4	25.2	30.3	26.9	24.9	19.1	21.1	21.0	19.2	19.8	16.1	22.4
15	15.1	16.1	20.1	26.1	23.0	24.0	20.1	18.1	22.9	24.7	25.8	25.9	27.0	26.2	27.4	30.8	29.9	30.3	22.9	21.1	21.8	21.6	19.1	18.0	23.2
16	18.6	18.9	20.0	21.0	22.3	22.0	23.3	19.1	20.2	22.8	24.9	26.4	25.9	24.9	28.9	30.0	30.9	29.4	24.0	22.5	21.3	20.1	20.1	18.9	23.2
17 Q	18.6	20.1	19.2	19.1	21.0	19.8	21.3	22.0	22.0	22.5	22.5	23.0	23.3	24.0	24.9	28.9	31.1	28.4	25.9	23.4	22.5	21.2	19.6	18.1	22.6
18	18.1	17.4	20.1	18.0	21.2	21.0	28.4	27.1	28.4	27.9	28.9	47.5	66.1	66.1	40.6	35.2	30.8	27.4	22.0	18.4	19.1	19.8	19.6	20.5	28.7
19	21.0	19.6	20.4	22.0	19.0	18.1	19.8	22.2	26.8	23.0	26.4	26.4	26.9	24.9	27.0	29.2	28.6	26.2	24.9	23.9	22.5	21.5	20.2	21.5	23.4
20	20.9	20.9	21.1	21.0	21 0	20.9	21.0	21.1	21.7	23.1	23.0	26.1	27.8	29.8	32.8	30.8	25.8	23.3	19.7	20.1	20.7	19.1	20.1	21.0	23.0
21 Q	21.9	21.5	21.5	21.5	21.5	22.0	21.2	22.1	20.7	21.5	22.5	23.6	24.5	24.5	24.9	27.9	27.9	26.0	22.1	21.0	20.0	20.3	18.8	18.2	22.4
22 Q	19.6	20.9	20.9	21.5	21.4	21.2	21.3	20.1	22.0	22.0	23.0	24.5	24.5	24.9	25.9	28.8	25.4	24.9	22.0	21.0	21.2	20.5	20.1	19.6	22.4
23	20.2	21.0	21.7	22 0	22.1	22.0	22.0	22.9	24.0	26.9	26.9	26.0	26.9	26.0	25.9	28.8	31.5	32.8	24.9	22.1	19.1	18.0	17.0	16.1	23.6
24	18.9	16.6	19.3	19.6	15.6	20.0	21.5	22.5	22.5	24.5	24.9	26.4	27.4	26.9	28.8	28.8	29.9	29.0	25.0	22.0	19.3	18.1	15.2	16.9	22.5
25 D	17.1	17.8	14.4	19.4	20.8	20.1	20.2	36.2	20.5	23.1	23.2	22.3	23.5	23.9	26.1	31.5	31.5	29.9	23.5	7.2	14.7	17.1	18.1	15.0	21.5
26 D	14.8	15.1	15.6	18.0	22.5	18.1	25.9	24.9	21.0	33.3	31.5	34.3	26.4	33.1	42.6	31.0	37.7	9.8	8.0	7.5	21.3	18.2	18.2	10.4	22.5
27 D	12.4	7.4	14.8	27.5	11.3	7.6	7.6	11.4	9.9	15.4	9.5	42.3	21.4	19.2	25.0	29.5	20.2	15.3	21.0	14.8	10.2	14.3	11.4	11.4	14.0
28 D	8.3	9.4	10.4	9.5	16.2	17.0	20.7	7.5	11.9	26.9	24.2	26.1	37.8	18.3	24.2	27.0	19.0	23.3	21.2	15.3	11.5	13.8	14.3	11.1	17.7
29	13.3	11.4	11.4	14.6	15.5	16.3	17.5	17.8	18.7	24.7	23.2	29.5	22.7	18.2	21.2	21.7	23.1	20.5	17.2	13.4	13.4	12.3	13.2	12.9	17.7
30	12.9	12.4	13.4	13.4	15.1	14.6	13.6	15.3	17.1	17.3	18.8	18.0	17.4	18.1	18.2	18.4	20.2	19.0	18.2	16.4	15.3	15.1	14.2	12.6	16.0
31																									
Mean	17.9	18.0	19.1	18.7	20.6	20.5	21.0	20.7	22.1	23.7	25.3	27.9	28.5	26.9	27.7	29.0	28.5	25.5	22.0	19.1	18.6	18.5	18.5	17.3	22.3

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 33 Meanook $z = 58,000\ \gamma +$ November 1957

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		798	798	798	810	819	830	819	799	797	765	756	786	799	798	789	797	798	798	799	800	802	802	801	799	798
2		799	803	803	806	808	812	787	793	798	793	788	784	796	797	796	800	800	800	802	803	805	805	808	809	800
3		824	838	819	798	797	799	787	679	603	635	580	679	669	673	722	789	787	782	796	801	801	803	799	799	752
4	Q	799	799	798	798	798	799	798	798	797	797	796	796	791	793	797	798	798	797	796	798	808	808	798	796	798
5	Q	793	795	798	799	799	799	798	798	798	797	796	793	793	795	797	798	797	796	798	803	803	801	798	793	797
6		797	795	793	793	793	793	793	793	793	787	789	788	788	787	793	793	796	796	797	800	819	864	854	841	801
7		787	624	795	814	782	775	782	779	775	805	801	793	765	753	744	756	805	809	810	814	819	819	814	814	785
8		810	810	809	808	808	799	771	743	712	760	721	663	744	744	742	755	799	801	809	817	824	829	836	883	783
9	D	851	866	862	834	803	839	776	760	727	797	819	799	706	603	576	769	825	811	821	868	857	864	852	851	797
10		882	841	821	822	768	755	803	753	646	721	743	731	769	791	793	809	801	811	812	823	828	831	840	840	793
11		855	845	853	857	862	862	830	700	614	578	627	734	743	749	774	774	788	799	803	814	819	830	842	836	783
12		868	874	841	825	827	825	830	821	798	667	744	669	630	623	637	738	786	809	788	805	809	816	819	819	778
13		829	819	814	814	809	807	803	776	762	758	768	753	722	777	782	787	785	784	777	779	801	805	803	803	788
14		803	817	841	823	830	846	829	803	765	723	745	774	769	779	782	776	771	775	777	799	809	810	808	807	794
15		809	819	852	890	855	825	787	668	765	755	760	779	788	798	803	798	803	798	803	808	809	808	810	805	800
16		810	810	816	810	808	809	799	783	776	787	788	775	767	776	771	80 9	805	803	800	809	809	803	805	803	797
17	Q	803	801	799	807	800	800	810	798	793	793	793	790	787	784	786	793	789	793	795	798	796	797	796	798	797
18		810	825	831	830	845	833	744	743	750	794	701	695	733	679	744	673	776	793	795	798	803	803	807	803	775
19		803	810	810	810	814	838	849	839	808	817	798	798	803	793	809	803	799	798	805	805	805	801	805	803	809
20		805	805	808	814	808	807	803	803	801	786	744	747	673	744	765	773	782	786	793	797	800	803	803	799	785
21	Q	809	807	803	803	803	801	779	776	764	794	798	796	790	790	795	795	795	798	798	799	803	798	797	797	795
22	Q	799	798	798	798	799	801	802	801	803	797	795	790	787	787	788	787	786	782	776	785	791	793	793	793	793
23		790	790	789	791	793	793	794	797	777	775	787	796	784	782	786	790	788	787	782	786	793	788	789	793	788
24		793	793	798	803	832	834	805	799	782	776	782	779	779	782	781	782	776	771	782	784	787	788	787	787	790
25	D	797	799	819	848	816	819	798	634	635	822	852	799	817	814	811	782	790	798	808	796	823	819	836	836	799
26	D	852	863	904	847	832	879	851	771	695	744	771	842	797	789	727	787	744	700	803	809	875	870	875	883	813
27	D	912	955	803	722	765	800	799	830	863	909	803	826	830	841	841	836	830	814	825	836	850	848	876	883	837
28	D	874	874	904	877	847	857	817	630	841	836	808	808	755	805	713	771	793	817	827	847	843	860	852	852	821
29		863	861	863	851	855	865	839	836	832	762	765	777	807	782	819	798	782	819	826	833	833	833	838	839	824
30		842	854	852	852	849	845	836	847	845	839	833	829	830	830	830	830	832	832	836	836	836	836	832	832	838
31																										
Mean		822	820	823	819	814	818	804	772	764	772	768	772	767	768	770	785	794	795	801	808	815	818	819	820	797

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 34 Meanook H = 12,000 γ + December 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	960	958	1036	1152	1099	1045	997	907	826	771	835	862	868	848	887	941	949	949	945	938	931	942	905	945	937
2	972	960	952	963	967	961	912	894	960	952	834	749	866	835	831	913	945	954	945	935	926	942	937	938	918
3	945	949	952	952	952	953	938	920	952	929	796	922	933	914	938	956	956	940	933	921	925	938	942	945	933
4	942	967	967	967	952	944	941	940	964	949	890	933	945	949	972	971	961	949	938	933	940	945	938	945	948
5	963	989	945	968	983	974	933	871	729	709	968	960	772	799	880	870	941	902	921	925	934	948	952	987	909
6 D	984	965	952	977	1030	1022	969	898	804	854	804	592	883	922	905	789	871	934	929	920	917	929	941	952	906
7	972	960	960	954	949	949	934	922	658	726	796	634	499	749	956	963	955	945	928	905	921	936	938	933	877
8	941	952	958	960	976	967	959	956	919	854	909	902	929	952	960	960	960	952	945	945	942	945	945	944	934
9	953	956	956	967	960	945	965	941	885	827	929	780	854	898	920	922	930	944	937	937	930	915	934	945	922
10	952	953	963	976	964	961	953	941	883	844	818	753	709	749	735	678	883	913	930	922	929	950	960	984	888
11 D	984	987	1000	1078	1074	1188	1148	1015	976	976	968	925	952	936	898	928	941	926	898	883	941	941	906	969	998
12 D	992	981	983	1000	999	1015	1007	956	885	549	779	811	890	952	929	942	906	960	898	894	905	929	952	956	920
13	983	973	972	988	1003	984	960	952	928	679	600	921	937	984	914	844	874	945	929	924	929	933	937	945	918
14	944	955	956	954	965	976	972	967	960	953	952	956	956	952	953	953	952	938	929	921	921	921	925	938	949
15	960	963	962	968	978	976	968	945	898	772	898	933	902	922	823	858	960	945	945	927	933	936	937	945	927
16	956	952	969	976	968	974	968	960	952	938	922	917	937	961	960	960	960	944	899	929	938	933	931	945	948
17	968	976	984	1015	1007	992	980	991	992	960	953	952	953	953	953	960	960	942	917	930	933	937	937	945	962
18	968	968	979	968	974	967	960	956	945	935	905	860	912	956	952	960	961	952	942	930	927	930	937	952	946
19	949	960	969	984	976	963	976	960	952	917	917	862	819	938	952	960	952	963	937	870	891	952	929	937	937
20	940	999	1012	976	1000	1062	1028	991	974	945	937	930	936	952	953	945	945	921	921	920	922	945	952	941	960
21	952	975	976	984	999	1038	1147	1006	944	884	942	935	939	948	948	935	920	917	921	924	924	916	928	944	956
22 Q	949	959	969	967	959	959	955	951	951	951	951	951	951	951	951	951	943	932	921	921	924	928	932	943	947
23 Q	951	955	959	967	966	960	960	959	951	959	959	959	952	951	951	944	944	947	940	942	931	936	934	952	951
24	959	966	966	966	966	967	967	966	966	960	959	944	960	967	967	966	961	951	940	929	929	928	935	948	956
25	959	959	966	975	966	973	1007	988	960	971	960	955	952	951	960	960	952	944	908	886	904	903	881	951	950
26	968	958	959	990	1018	1046	1053	1008	975	772	796	949	944	857	889	912	935	929	918	932	924	924	932	944	939
27 Q	944	951	958	959	959	959	959	952	952	955	952	952	952	943	932	956	953	941	928	913	913	929	936	936	945
28 Q	951	956	965	967	967	973	966	966	958	958	958	958	958	958	958	959	955	944	937	928	929	932	944	951	954
29 Q	959	959	959	961	960	960	969	968	966	965	965	952	959	963	964	964	960	948	940	937	941	932	937	945	956
30	960	975	971	974	975	983	1030	1030	1045	779	699	540	618	861	974	975	973	955	936	936	934	936	939	948	914
31 D	948	948	995	1151	987	965	799	822	686	355	537	367	524	461	367	563	752	748	882	920	975	1038	1010	980	782
Mean	959	964	970	987	984	987	977	952	916	856	874	859	876	901	907	915	936	935	927	922	928	937	937	949	931

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 35 Meanook D = 24° E + ... ′ December 1957

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	12.4	10.5	9.3	10.2	15.4	15.0	12.9	8.9	19.2	21.3	30.7	25.6	26.9	18.7	17.5	18.7	18.3	17.1	19.3	17.4	14.4	13.8	14.3	13.3	16.7
2	12.4	9.9	14.3	14.3	15.8	19.3	17.8	17.4	19.2	19.2	22.3	36.0	23.2	23.2	9.4	9.9	10.5	14.2	16.3	17.2	13.4	13.3	14.2	12.9	16.5
3	13.4	14.3	14.3	15.3	16.2	16.3	23.2	23.4	17.3	18.2	16.3	18.2	23.2	18.3	15.3	15.4	20.7	16.3	18.2	16.6	13.3	11.4	11.5	12.4	16.6
4	14.3	17.1	18.2	15.8	15.8	15.7	21.2	13.4	17.2	17.3	15.3	22.5	17.3	17.3	17.3	18.2	20.2	18.3	19.1	16.4	14.3	14.2	11.4	12.4	16.7
5	13.4	12.5	16.3	22.2	19.2	17.9	14.3	24.2	12.3	11.4	16.4	20.1	14.4	8.3	12.9	12.4	17.4	18.7	9.9	16.4	11.4	9.4	8.4	9.9	14.6
6 D	9.4	10.9	16.2	17.3	20.7	25.6	18.2	14.3	23.2	25.6	24.0	27.0	34.9	36.0	21.2	4.0	12.4	20.7	16.4	16.5	13.5	11.4	10.9	12.9	18.5
7	12.5	15.3	18.2	17.3	17.3	16.2	15.3	17.2	16.4	18.7	28.0	23.2	37.6	30.6	24.1	25.1	24.0	20.0	16.8	8.4	9.4	11.6	13.4	12.4	18.7
8	14.3	14.3	15.3	16.4	18.2	22.2	15.4	17.2	17.2	10.3	13.4	17.2	17.3	15.2	18.8	20.2	20.7	21.3	20.3	15.5	14.4	14.2	13.8	14.3	16.6
9	11.4	14.3	15.8	15.8	15.3	13.2	18.2	20.7	20.1	17.3	17.3	23.1	12.4	14.4	6.6	9.9	13.3	20.2	15.2	15.3	15.3	12.9	13.3	12.5	15.2
10	13.4	14.3	12.4	15.3	15.3	16.1	15.3	21.1	30.0	18.2	27.1	35.9	40.8	23.6	16.3	3.6	3.6	10.4	15.3	17.4	14.3	13.3	13.4	9.4	17.3
11 D	9.2	10.4	13.8	22.2	19.2	11.5	13.4	22.2	26.1	17.3	16.3	21.2	18.2	21.2	25.9	16.4	22.1	26.0	23.6	14.3	11.9	18.7	9.3	11.3	17.6
12 D	17.3	12.4	11.3	12.5	15.3	25.2	27.1	18.7	16.4	-7.4	25.0	19.2	21.2	21.3	22.2	23.1	24.3	22.2	21.2	13.4	14.2	12.4	11.7	12.4	17.2
13	12.3	11.4	14.3	16.2	18.2	18.3	17.8	17.4	14.3	23.6	20.2	28.0	25.6	15.2	22.1	15.5	15.4	19.1	18.3	19.2	15.2	14.8	14.2	13.4	17.5
14	15.2	13.8	11.5	15.2	17.3	15.3	15.8	19.0	17.2	16.3	17.9	17.4	17.5	18.2	18.2	20.1	22.1	22.7	20.7	19.2	16.3	13.4	10.4	11.4	16.8
15	11.4	12.3	14.2	15.3	13.4	15.2	19.2	18.2	17.4	13.3	17.3	28.0	27.0	15.8	17.2	-4.8	16.4	22.3	20.0	16.3	15.2	13.4	13.4	13.4	15.9
16	11.4	12.5	13.8	13.3	13.4	14.3	14.2	15.8	15.3	18.2	19.6	21.3	16.3	18.2	19.1	19.1	20.0	21.1	19.1	12.6	14.2	14.4	15.2	16.5	16.2
17	13.3	12.3	8.6	9.3	14.4	15.3	8.4	22.1	20.1	20.2	16.8	16.3	16.4	16.4	17.2	17.2	20.1	25.0	17.3	15.8	15.8	15.3	16.2	15.4	16.0
18	15.3	12.9	11.4	15.2	13.8	14.2	14.3	16.3	15.3	15.3	20.2	17.4	15.3	15.2	20.1	20.2	22.2	24.1	22.2	20.3	18.2	15.8	13.4	12.9	16.7
19	12.3	12.4	14.4	15.2	12.3	13.4	16.3	18.2	22.3	17.2	19.7	25.0	19.1	17.4	21.3	20.3	18.3	20.3	27.2	17.8	4.0	6.5	12.3	12.4	16.5
20	12.3	13.4	10.4	14.3	10.4	12.4	16.8	19.2	16.4	16.3	17.4	19.2	17.2	17.3	17.3	19.3	19.3	22.1	18.2	15.8	15.3	11.4	11.3	12.4	15.6
21	12.5	12.4	13.4	12.4	5.5	13.4	4.5	9.3	16.8	20.2	19.2	18.2	18.2	16.8	18.2	21.3	22.7	18.2	16.3	15.3	15.4	12.9	11.9	10.4	14.8
22 Q	10.9	10.4	11.4	11.7	15.3	16.4	16.2	16.3	16.3	16.3	16.3	16.3	17.3	17.3	18.2	19.2	21.1	21.2	18.7	16.3	16.1	15.3	13.8	13.4	15.9
23 Q	13.4	14.3	13.4	11.4	14.4	15.8	16.3	15.3	13.4	17.2	17.2	16.4	19.1	18.7	19.1	20.2	21.7	21.7	18.2	15.8	14.8	13.8	13.4	13.4	16.2
24	13.3	13.8	15.2	15.3	15.3	15.1	15.4	15.2	14.3	15.8	16.3	17.1	18.4	18.2	18.2	20.1	21.5	22.2	21.2	18.2	12.4	13.4	12.9	13.3	16.3
25	13.3	13.4	14.3	12.3	15.3	14.2	11.4	21.2	19.1	17.3	17.2	19.2	18.2	17.3	16.4	20.2	23.2	23.1	23.2	8.4	7.4	12.9	8.4	8.4	15.6
26	12.4	13.4	13.4	10.3	16.3	12.2	15.2	16.8	18.2	22.7	23.2	24.0	22.3	25.6	13.4	12.9	24.2	23.2	19.2	18.2	15.9	14.3	14.3	13.3	17.3
27 Q	13.4	12.5	12.4	15.4	15.2	15.3	16.8	16.3	16.2	16.3	16.3	16.4	16.8	16.4	13.4	18.7	23.2	23.2	22.7	19.7	13.8	12.9	11.4	12.5	16.1
28 Q	12.3	12.4	14.3	15.2	15.3	13.3	15.2	16.4	16.4	16.2	16.3	16.4	16.3	16.3	17.3	18.2	22.6	23.2	22.2	20.3	18.2	13.4	12.4	12.3	16.4
29 Q	13.3	13.4	14.3	14.7	15.3	15.2	15.3	15.3	15.2	15.3	16.1	16.2	15.2	15.8	16.4	18.2	22.2	22.6	21.2	19.2	17.4	14.2	12.9	12.4	16.1
30	13.3	12.4	9.7	15.2	15.4	16.3	10.4	9.3	16.4	28.0	41.9	59.9	37.8	16.3	16.4	19.5	19.2	19.8	18.3	18.2	16.8	15.2	15.3	14.3	19.8
31 D	14.3	10.9	13.4	13.4	13.4	13.3	7.0	13.4	12.9	84.4	31.5	45.2	25.6	31.0	33.0	10.4	17.8	14.8	21.7	27.1	28.3	25.1	17.3	11.4	22.4
Mean	12.9	12.8	13.5	14.7	15.3	15.9	15.4	17.1	17.7	19.3	20.4	23.5	21.5	19.1	18.1	16.2	19.4	20.5	19.3	16.7	14.5	13.7	12.8	12.5	16.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 36 Meanook $Z = 58,000\ \gamma +$ December 1957

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	829	833	857	892	845	868	834	793	762	748	756	744	737	738	734	764	794	810	829	830	831	841	842	841	806
2	852	852	851	852	851	801	765	786	819	831	765	592	651	638	710	723	765	798	819	819	821	836	836	830	786
3	831	831	840	841	841	829	755	786	819	807	745	777	775	777	809	809	829	828	825	830	836	843	845	851	815
4	851	851	850	841	831	829	810	775	837	819	744	778	808	799	819	824	830	830	825	824	830	839	839	845	822
5	852	885	861	841	851	863	830	711	690	592	808	830	744	658	710	775	814	819	851	874	896	874	864	885	807
6 D	885	885	863	863	819	840	853	829	723	722	776	659	722	744	788	732	768	817	841	839	851	852	859	859	808
7	879	870	857	842	841	847	830	814	658	664	722	776	787	653	787	814	830	830	829	829	830	842	842	851	805
8	863	853	848	852	864	851	840	840	809	744	786	787	787	810	829	830	831	824	819	830	830	835	836	836	826
9	852	852	852	851	840	836	841	798	764	744	797	744	722	700	706	765	810	836	830	830	840	842	859	851	807
10	851	841	862	864	835	829	830	808	786	733	723	690	723	715	700	710	722	797	831	842	857	873	859	875	798
11 D	863	885	895	845	809	776	765	658	711	840	852	829	851	819	798	830	830	810	809	830	840	867	863	891	824
12 D	863	863	883	901	896	840	857	831	841	830	695	722	797	840	851	841	821	874	840	847	847	847	852	861	839
13	863	852	852	873	874	874	852	830	809	668	644	776	794	847	782	767	783	799	813	819	821	830	830	830	812
14	830	830	845	841	842	842	842	841	830	830	828	829	829	829	829	829	829	829	829	830	828	830	830	841	833
15	836	839	839	841	851	862	841	823	787	711	756	765	767	787	652	679	777	803	809	809	825	829	829	830	798
16	841	842	842	840	841	851	841	841	830	809	806	765	767	809	819	819	819	819	825	830	834	836	836	841	825
17	851	830	857	917	906	896	841	840	885	852	841	830	825	821	825	830	821	819	819	830	829	830	841	857	846
18	852	841	852	863	852	842	841	841	825	808	782	695	753	808	808	819	831	830	830	831	836	831	830	830	822
19	831	831	841	852	852	852	862	843	831	797	793	775	764	776	787	819	810	819	809	809	810	825	834	841	819
20	857	868	864	852	864	862	874	852	830	851	836	819	821	829	831	840	842	830	829	830	830	842	841	852	844
21	841	841	863	873	874	873	868	809	852	852	831	830	809	829	831	830	822	819	829	830	830	830	840	852	840
22 Q	851	852	863	853	851	840	837	829	830	830	830	829	829	829	829	830	830	830	830	830	831	833	833	833	836
23 Q	830	830	830	830	831	830	831	833	830	831	830	830	821	822	822	829	830	831	830	829	820	820	820	830	828
24	830	829	829	829	827	828	829	829	820	819	819	787	798	819	819	819	821	821	819	819	829	829	830	831	822
25	830	830	830	840	840	839	831	744	810	840	830	819	814	808	819	819	819	819	819	819	831	830	830	852	823
26	852	834	834	864	895	928	928	874	840	840	732	777	809	723	755	782	812	809	810	836	829	830	830	841	828
27 Q	830	830	840	841	841	831	830	830	830	830	830	821	829	810	809	830	830	825	819	821	819	826	840	830	828
28 Q	830	830	830	831	840	836	841	834	830	830	830	830	829	825	828	830	836	830	819	822	821	819	829	829	830
29 Q	825	825	825	830	830	829	829	829	825	823	821	814	809	810	821	830	829	819	821	825	828	826	836	840	825
30	841	841	859	841	840	847	864	825	790	809	744	690	819	670	787	840	831	830	830	830	830	830	831	831	815
31 D	831	841	868	874	885	840	744	863	1058	933	1042	966	890	933	701	864	901	862	857	895	894	850	841	809	877
Mean	846	846	851	854	850	846	833	814	812	795	793	780	790	783	787	804	817	823	826	831	835	838	840	844	822

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 37 Meanook — HORIZONTAL INTENSITY (gammas) (All Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+20	+25	+61	+ 89	+46	+ 70	+39	+41	+101	+32	+37	+28	+49	+49	+71	+28
1-2	+31	+41	+58	+ 77	+44	+ 93	+49	+55	+ 94	+38	+45	+33	+55	+60	+67	+38
2-3	+38	+54	+65	+ 84	+47	+103	+36	+59	+ 84	+43	+51	+39	+59	+61	+69	+46
3-4	+37	+42	+75	+ 70	+51	+ 87	+31	+42	+ 68	+40	+52	+56	+54	+53	+63	+47
4-5	+44	+35	+72	+ 67	+40	+ 77	+28	+50	+ 39	+39	+51	+53	+50	+49	+54	+46
5-6	+50	+22	+32	+ 40	+37	+ 38	+17	+24	+ 4	+11	+44	+56	+31	+29	+22	+43
6-7	+31	+15	+ 7	+ 7	+14	+ 35	+ 6	+13	- 19	+14	+19	+46	+16	+17	+ 2	+28
7-8	+10	+ 6	-12	- 26	+10	- 15	- 2	-21	- 21	+ 3	-12	+21	- 5	- 7	-14	+ 6
8-9	-22	-22	-24	- 41	-15	- 47	-22	-32	- 37	- 6	-37	-15	-27	-29	-27	-24
9-10	-37	-56	-41	- 54	-70	- 72	- 9	-31	- 73	-34	-53	-75	-50	-46	-50	-55
10-11	-42	-42	-39	- 59	-74	- 84	-21	-29	- 69	-27	-55	-57	-50	-52	-48	-49
11-12	-53	-40	-72	-111	-51	-105	-44	-29	- 82	-19	-39	-72	-60	-57	-71	-51
12-13	-31	-27	-90	-105	-27	- 94	-38	- 8	-101	-22	-51	-55	-54	-42	-80	-41
13-14	-13	-26	-63	- 79	- 6	- 54	-27	+ 5	- 96	- 8	-37	-30	-36	-20	-62	-27
14-15	- 2	- 1	-59	- 60	- 6	- 35	- 7	+ 3	- 76	- 5	-20	-24	-24	-11	-50	-12
15-16	- 3	- 1	-37	- 49	-11	- 48	-15	- 3	- 56	-16	+ 4	-16	-21	-19	-40	- 4
16-17	0	- 4	-11	- 24	-22	- 39	-20	-21	- 53	-14	+ 5	+ 5	-17	-26	-26	+ 1
17-18	- 2	-12	-19	- 18	-28	- 31	-23	-36	- 47	-24	-18	+ 4	-21	-30	-27	- 7
18-19	-16	-21	-21	- 14	-27	- 26	-22	-42	- 3	-25	-25	- 4	-20	-29	-16	-16
19-20	-16	-15	-14	+ 2	-17	- 12	-18	-33	+ 10	-22	-12	- 9	-13	-20	- 6	-13
20-21	-22	- 1	+ 7	+ 14	- 7	+ 9	- 2	-21	+ 31	-13	- 2	- 3	- 1	- 5	+10	- 7
21-22	-19	+ 4	+28	+ 36	+11	+ 28	+ 8	-11	+ 73	- 1	+ 6	+ 6	+14	+ 9	+34	- 1
22-23	- 1	+11	+43	+ 65	+28	+ 47	+17	+ 9	+111	+ 7	+16	+ 6	+30	+25	+56	+ 8
23-24	+10	+23	+54	+ 94	+40	+ 72	+34	+28	+104	+19	+26	+18	+44	+44	+68	+19
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 38 Meanook — DECLINATION (minutes) (All Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	-3.7	-2.8	-5.8	- 6.9	- 6.1	- 8.3	- 6.4	- 4.7	- 4.0	-5.6	-4.4	-3.9	-5.2	- 6.4	- 5.6	-3.7
1-2	-3.4	-3.0	-4.9	- 6.7	- 5.5	- 7.5	- 5.2	- 3.3	- 4.7	-5.5	-4.3	-4.0	-4.8	- 5.4	- 5.4	-3.7
2-3	-1.9	-2.8	-5.2	- 5.8	- 4.1	- 6.1	- 4.7	- 3.0	- 7.1	-3.5	-3.2	-3.3	-4.2	- 4.5	- 5.4	-2.8
3-4	-2.3	-3.7	-5.1	- 6.5	- 3.5	- 6.5	- 6.0	- 2.9	- 8.6	-2.7	-3.6	-2.1	-4.4	- 4.7	- 5.7	-2.9
4-5	-2.8	-1.6	-5.3	- 4.7	- 2.0	- 5.0	- 4.5	- 4.6	- 7.5	-2.8	-1.7	-1.5	-3.7	- 4.0	- 5.1	-1.9
5-6	-1.1	-1.2	-2.6	- 3.8	- 1.4	- 3.8	- 5.6	- 3.9	- 6.4	-3.0	-1.8	-0.9	-3.0	- 3.7	- 4.0	-1.2
6-7	-0.1	-1.8	-3.6	- 1.3	- 2.0	- 5.2	- 2.1	- 3.1	- 5.8	-1.5	-1.3	-1.4	-2.4	- 3.1	- 3.0	-1.2
7-8	-0.6	-1.4	-3.5	- 1.4	- 1.4	- 5.0	- 2.4	- 2.1	- 4.5	+0.1	-1.6	+0.3	-2.0	- 2.7	- 2.3	-0.8
8-9	-0.4	-1.3	+0.5	+ 0.6	- 2.1	- 3.8	- 2.8	+ 0.7	- 6.3	+1.0	-0.2	+0.9	-1.1	- 2.0	- 1.0	-0.2
9-10	+1.2	-0.8	+2.4	+ 4.2	- 2.0	- 2.2	- 2.2	- 0.7	- 2.0	+2.5	+1.4	+2.5	+0.4	- 1.8	+ 1.8	+1.1
10-11	+2.3	+2.8	+3.2	+ 3.8	+ 1.9	- 1.1	- 0.8	0	+ 1.9	+3.7	+3.0	+3.6	+2.0	0.0	+ 3.2	+2.9
11-12	+3.4	+5.5	+5.0	+ 4.1	+ 2.3	+ 2.0	+ 2.8	+ 1.2	+ 3.9	+3.1	+5.6	+6.7	+3.8	+ 2.1	+ 4.0	+5.3
12-13	+4.2	+4.1	+6.1	+ 6.8	+ 6.5	+ 9.3	+ 4.6	+ 4.3	+ 8.2	+1.6	+6.2	+4.7	+5.6	+ 6.2	+ 5.7	+4.8
13-14	+2.1	+4.5	+3.6	+ 8.0	+ 9.5	+10.6	+ 8.6	+ 8.7	+13.8	+2.9	+4.6	+2.3	+6.6	+ 9.4	+ 7.1	+3.4
14-15	+0.7	+5.1	+6.6	+10.8	+11.6	+12.3	+12.9	+11.5	+11.5	+5.8	+5.4	+1.3	+8.0	+12.1	+ 8.7	+3.1
15-16	+1.6	+5.0	+9.2	+10.4	+12.6	+13.8	+13.8	+13.3	+13.5	+7.4	+6.7	-0.6	+8.9	+13.4	+10.1	+3.2
16-17	+3.2	+4.9	+9.7	+ 8.0	+10.5	+12.8	+12.8	+12.4	+14.1	+7.7	+6.2	+2.6	+8.7	+12.1	+ 9.9	+4.2
17-18	+4.4	+2.7	+5.8	+ 5.9	+ 6.7	+ 9.8	+ 9.2	+ 8.8	+10.4	+6.3	+3.2	+3.7	+6.4	+ 8.6	+ 7.1	+3.5
18-19	+1.2	-1.2	+2.8	+ 1.0	- 0.3	+ 4.5	+ 4.5	+ 1.1	+ 1.5	+1.9	-0.3	+2.5	+1.6	+ 2.4	+ 1.8	+0.6
19-20	+0.2	-2.2	-2.1	- 1.8	- 3.8	+ 0.5	- 0.8	- 4.5	- 5.2	-1.2	-3.2	-0.1	-2.0	- 2.2	- 2.6	-1.3
20-21	+0.2	-2.3	-2.9	- 4.3	- 6.4	- 2.9	- 3.7	- 6.2	- 6.6	-3.5	-3.7	-2.3	-3.7	- 4.8	- 4.3	-2.0
21-22	-2.0	-2.5	-3.8	- 5.5	- 7.1	- 5.1	- 6.2	- 8.4	- 4.5	-4.4	-3.8	-3.1	-4.7	- 6.7	- 4.6	-2.8
22-23	-3.1	-2.5	-4.9	- 6.5	- 7.1	- 5.6	- 7.5	- 7.8	- 2.7	-5.0	-3.8	-4.0	-5.0	- 7.0	- 4.8	-3.4
23-24	-4.0	-2.5	-5.2	- 7.4	- 6.8	- 7.8	- 7.1	- 6.4	- 3.5	-5.3	-5.0	-4.3	-5.4	- 7.0	- 5.4	-4.0
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 39 Meanook — VERTICAL INTENSITY (gammas) (All Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+23	+24	+30	+47	+42	+44	+21	+32	+14	+23	+25	+24	+29	+35	+28	+24
1-2	+19	+ 5	+25	+39	+41	+49	+15	+26	+18	+23	+23	+24	+26	+33	+26	+18
2-3	+17	+24	+20	+25	+38	+39	+ 8	+25	+ 8	+24	+26	+24	+23	+28	+19	+23
3-4	+27	+ 7	+12	+25	+21	+27	+15	+17	- 4	+18	+22	+32	+18	+20	+13	+22
4-5	+33	+21	+ 6	+26	+23	+13	+ 4	+10	- 1	+14	+17	+28	+16	+12	+11	+25
5-6	+29	+11	-12	- 6	+13	-10	+ 3	0	-22	- 6	+21	+24	+ 4	+ 2	-12	+21
6-7	+12	- 5	-11	+ 6	- 4	+ 1	- 2	-11	-21	+ 8	+ 7	+11	- 1	- 4	- 4	+ 6
7-8	+ 8	- 8	- 4	- 9	-11	-13	- 7	- 7	-12	- 3	-25	- 8	- 8	-10	- 7	- 8
8-9	-16	-15	+ 5	-18	-22	-24	-12	-16	- 4	- 8	-33	-10	-14	-18	- 6	-18
9-10	-24	-25	-24	-16	-37	-26	-18	-28	+ 3	-17	-25	-27	-22	-27	-14	-25
10-11	-22	-16	-32	-37	-49	-39	-12	-25	-21	-30	-29	-29	-28	-31	-30	-24
11-12	-31	-19	-30	-41	-33	-52	-21	-14	-19	-27	-25	-42	-29	-30	-29	-29
12-13	-47	-18	-25	-50	-32	-24	-34	-14	- 6	-35	-30	-32	-29	-26	-29	-32
13-14	-37	-35	-30	-57	-24	-26	-30	-12	-24	-27	-29	-39	-31	-23	-34	-35
14-15	-18	-22	-34	-51	-19	-25	- 3	-15	-16	-14	-27	-35	-23	-15	-29	-26
15-16	-10	-13	-26	-52	-11	-20	-12	-10	-22	-15	-12	-18	-18	-13	-29	-13
16-17	-15	- 8	- 9	-26	-16	-17	-12	-10	+14	- 9	- 3	- 5	-10	-14	- 8	- 8
17-18	- 8	+ 1	- 1	- 5	-11	-12	-12	-11	+19	- 4	- 2	+ 1	- 4	-12	+ 2	- 2
18-19	- 3	- 1	+ 7	+ 7	- 8	- 1	- 4	-10	+ 9	0	+ 4	+ 4	0	- 6	+ 6	+ 1
19-20	+ 3	+ 8	+14	+26	- 3	+14	+ 3	- 3	+21	+ 7	+11	+ 7	+ 9	+ 3	+17	+ 7
20-21	+ 6	+18	+25	+31	+ 8	+26	+20	+ 6	+23	+12	+18	+13	+17	+15	+23	+14
21-22	+15	+22	+34	+39	+21	+28	+28	+14	+31	+21	+21	+16	+24	+23	+31	+18
22-23	+14	+23	+33	+52	+30	+22	+32	+22	+22	+22	+22	+18	+26	+26	+32	+19
23-24	+21	+28	+31	+56	+38	+21	+37	+28	0	+22	+23	+22	+27	+31	+27	+24
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 40 Meanook — HORIZONTAL INTENSITY (gammas) (Quiet Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	- 4	- 5	+ 9	+22	+34	+13	+14	+ 6	+ 2	- 1	+ 2	0	+ 8	+17	+ 8	- 2
1-2	+ 1	+ 4	+10	+17	+18	+16	+22	+ 7	- 1	+ 3	+ 5	+ 5	+ 9	+16	+ 7	+ 4
2-3	+ 2	+ 8	+15	+18	+ 2	+13	+16	+ 6	+ 6	+ 8	+ 8	+11	+ 9	+ 9	+12	+ 7
3-4	+ 4	+10	+15	+17	+ 6	+17	- 2	+ 8	+ 7	+10	+10	+14	+10	+ 7	+12	+10
4-5	+ 7	+13	+14	+19	+11	+11	0	+ 8	+13	+14	+15	+11	+11	+ 8	+15	+12
5-6	+ 6	+11	+26	+26	+11	+ 7	+ 1	+ 9	+11	+15	+12	+12	+12	+ 7	+20	+10
6-7	+ 3	+11	+16	+ 9	+13	+ 7	0	+10	+15	+17	+12	+11	+10	+ 8	+14	+ 9
7-8	+ 3	+10	- 7	-40	+17	+ 8	+ 2	+11	+18	+16	+ 8	+ 9	+ 5	+10	- 3	+ 8
8-9	+ 3	+ 7	-11	-33	+13	+ 9	+ 5	+ 9	+19	+14	+10	+ 5	+ 4	+ 9	- 3	+ 6
9-10	+ 4	- 3	- 3	+18	-35	+12	+ 3	+12	+16	+ 9	+12	+ 7	+ 4	- 2	+10	+ 5
10-11	+ 5	- 4	-13	+22	- 7	+ 7	+ 6	+13	+13	+12	+11	+ 6	+ 6	+ 5	+ 8	+ 4
11-12	+ 4	+ 5	- 1	+19	+ 8	+11	+10	+12	+11	+14	+11	+ 4	+ 9	+10	+11	+ 6
12-13	+ 4	+11	+ 9	+ 3	+11	+14	+13	+13	+11	+14	+10	+ 4	+10	+13	+ 9	+ 7
13-14	+ 6	+10	- 4	- 9	+ 4	+ 4	+20	+20	+ 8	+13	+ 8	+ 3	+ 7	+12	+ 2	+ 7
14-15	+12	+ 6	- 7	- 4	- 3	+ 8	+19	+14	- 2	0	+ 5	+ 1	+ 4	+10	- 3	+ 6
15-16	+12	+12	- 7	-11	- 6	+ 2	+ 8	+ 4	-14	- 1	0	+ 4	- 1	+ 2	- 8	+ 4
16-17	+10	- 6	-13	- 5	-15	-10	- 5	-14	-26	-11	- 9	0	- 9	-11	-14	- 1
17-18	+ 6	-17	-12	-31	-29	-29	-21	-29	-35	-22	-19	- 8	-21	-27	-25	-10
18-19	- 6	-21	-18	-28	-35	-40	-30	-37	-39	-29	-26	-17	-27	-36	-28	-18
19-20	-15	-18	-18	-19	-30	-42	-28	-37	-30	-29	-26	-22	-26	-34	-24	-20
20-21	-20	-14	- 7	-16	-24	-28	-24	-29	-18	-24	-21	-23	-21	-26	-16	-20
21-22	-20	-10	0	- 5	- 6	-20	-23	-15	+ 1	-19	-20	-19	-13	-16	- 6	-17
22-23	-16	- 5	+ 3	+ 2	+ 7	- 4	-12	- 5	+ 7	-13	-10	-14	- 5	- 4	0	-11
23-24	- 7	- 2	+ 3	+11	+28	+12	+ 6	+ 3	+ 5	- 8	- 4	- 5	+ 4	+12	+ 3	- 4
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 41 Meanook — DECLINATION (minutes) (Quiet Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	-2.7	-1.9	-2.0	- 4.5	- 4.7	- 6.4	- 4.7	- 3.1	-2.4	-5.4	-2.5	-3.5	-3.6	- 4.7	-3.6	-2.6
1-2	-2.7	-3.0	-2.7	- 4.0	- 2.8	- 4.9	- 2.5	- 2.9	-3.3	-4.8	-2.1	-3.5	-3.3	- 3.3	-3.7	-2.8
2-3	-2.0	-2.1	-2.7	- 2.4	- 1.8	- 3.1	- 1.3	- 3.4	-3.2	-3.5	-2.4	-3.0	-2.6	- 2.4	-3.0	-2.4
3-4	-2.0	-1.6	-3.2	- 2.3	- 2.2	- 2.2	- 2.5	- 3.3	-3.0	-2.9	-2.1	-2.5	-2.5	- 2.6	-2.8	-2.0
4-5	-0.8	-1.4	-2.2	- 1.9	- 2.1	- 0.9	- 3.3	- 3.2	-3.0	-3.2	-1.6	-1.0	-2.1	- 2.4	-2.6	-1.2
5-6	-0.9	-1.0	-1.1	- 2.2	- 2.1	- 1.8	- 2.6	- 2.5	-2.5	-2.6	-1.6	-0.9	-1.8	- 2.2	-2.1	-1.1
6-7	-0.6	-1.3	+0.5	- 1.8	- 1.8	- 2.0	- 1.0	- 2.4	-2.3	-2.3	-1.4	-0.2	-1.4	- 1.8	-1.5	-0.9
7-8	0.0	-0.5	-0.4	- 0.4	- 0.5	- 2.0	- 1.5	- 1.8	+1.8	-1.5	-1.2	-0.2	-0.7	- 1.4	-0.1	-0.5
8-9	+1.3	-0.1	+2.8	- 1.6	- 2.1	- 0.8	- 1.9	- 1.3	+0.2	-0.3	-0.7	-0.6	-0.4	- 1.5	+0.3	0.0
9-10	+0.1	0.0	+2.1	+ 0.9	- 2.2	- 0.4	- 1.4	+ 0.1	+0.7	+0.2	-0.3	+0.1	0.0	- 1.0	+1.0	0.0
10-11	-0.2	+2.4	-0.6	+ 1.2	+ 2.1	- 0.3	- 0.3	+ 0.7	+1.9	+1.2	+0.1	+0.3	+0.7	+ 0.6	+0.9	+0.7
11-12	-0.9	+3.6	-0.5	+ 1.4	+ 2.8	+ 3.5	+ 1.2	+ 2.2	+1.6	+1.5	+1.0	+0.2	+1.5	+ 2.4	+1.0	+1.0
12-13	-1.1	+2.7	+0.2	+ 3.1	+ 6.5	+ 6.6	+ 3.1	+ 5.3	+3.6	+1.6	+1.5	+0.8	+2.8	+ 5.4	+2.1	+1.0
13-14	-0.9	+2.8	+0.5	+ 5.0	+ 9.6	+ 9.0	+ 7.1	+ 7.8	+6.8	+2.4	+2.1	+0.8	+4.4	+ 8.4	+3.7	+1.2
14-15	+0.1	+3.5	+2.6	+ 7.3	+12.8	+11.6	+ 9.7	+ 9.6	+8.8	+5.1	+3.3	+0.7	+6.3	+10.9	+6.0	+1.9
15-16	+2.4	+4.0	+4.7	+ 8.7	+12.7	+12.9	+10.8	+10.9	+9.3	+7.6	+6.3	+2.8	+7.8	+11.8	+7.6	+3.9
16-17	+5.1	+4.8	+7.4	+10.5	+10.8	+10.3	+10.1	+10.0	+9.4	+8.5	+6.6	+6.0	+8.3	+10.3	+9.0	+5.6
17-18	+5.5	+4.2	+4.5	+ 7.1	+ 7.2	+ 7.1	+ 7.0	+ 7.3	+4.2	+7.2	+5.1	+6.2	+6.1	+ 7.2	+5.8	+5.2
18-19	+3.6	+0.4	+1.9	+ 2.2	- 0.3	+ 2.1	+ 2.1	+ 1.3	-1.0	+4.4	+1.5	+4.5	+1.9	+ 1.3	+1.9	+2.5
19-20	+2.0	-2.0	-1.1	- 2.7	- 5.7	- 4.0	- 2.0	- 3.2	-5.8	+0.2	-0.6	+2.1	-1.9	- 3.7	-2.4	+0.4
20-21	0.0	-3.6	-2.7	- 5.1	- 9.2	- 7.5	- 6.4	- 6.6	-7.0	-2.5	-1.7	-0.1	-4.4	(- 7.4)	-4.3	-1.4
21-22	-1.8	-3.5	-2.8	- 5.8	- 9.3	- 9.0	- 7.8	- 8.1	-6.5	-2.9	-2.4	-2.2	-5.2	- 8.6	-4.5	-2.5
22-23	-2.4	-3.5	-2.6	- 6.5	- 9.4	- 9.6	- 7.1	- 7.5	-4.8	-3.5	-3.2	-3.4	-5.3	- 8.4	-4.4	-3.1
23-24	-2.3	-2.9	-2.3	- 6.7	- 8.4	- 8.2	- 4.8	- 6.1	-3.7	-4.4	-3.7	-3.3	-4.7	- 6.9	-4.3	-3.0
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 42 Meanook — VERTICAL INTENSITY (gammas) (Quiet Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+ 8	+ 6	+17	+31	+36	+14	+27	+5	+ 3	+5	+5	+4	+13	+20	+14	+6
1-2	+ 7	+ 8	+16	+20	+25	+11	+30	+3	+ 1	+3	+4	+4	+11	+17	+10	+6
2-3	+ 7	+10	+16	+19	+31	+ 9	+24	0	+ 2	+2	+3	+8	+11	+16	+10	+7
3-4	+ 6	+10	+18	+12	+ 3	+11	+11	0	+ 1	+2	+5	+8	+ 7	+ 6	+ 8	+7
4-5	+ 6	+ 8	+20	+13	- 1	+15	+ 3	0	+ 1	+1	+6	+9	+ 7	+ 4	+ 9	+7
5-6	+ 7	+ 5	+16	+13	0	+ 9	- 3	+3	+ 2	+3	+6	+4	+ 5	+ 2	+ 8	+6
6-7	+ 6	+ 2	+13	- 3	- 1	+ 5	- 4	+3	+ 4	+8	+1	+4	+ 3	+ 1	+ 6	+3
7-8	0	+ 3	- 6	-11	-10	0	- 3	+2	- 3	+7	-2	+2	- 2	- 3	- 3	+1
8-9	-13	- 1	-18	-30	-19	- 7	- 7	-7	- 3	+6	-5	0	- 9	-10	-11	-5
9-10	- 7	-11	-29	- 4	-29	- 2	-20	-5	- 4	+1	0	-1	- 9	-14	- 8	-5
10-11	- 4	-20	-36	- 1	-26	- 5	- 9	-1	- 5	-8	0	-1	-10	-13	-12	-6
11-12	- 7	-11	-32	- 1	-20	+ 2	0	+1	- 8	-5	-3	-5	- 7	- 4	-12	-6
12-13	-11	- 1	-19	- 7	- 8	+ 3	0	+2	- 8	0	-6	-6	- 5	- 1	- 8	-6
13-14	-12	- 1	-26	-26	-10	- 6	0	+2	- 3	-1	-6	-6	- 8	- 4	-14	-6
14-15	- 4	- 2	-16	-29	-13	- 8	- 1	+1	- 3	+1	-3	-4	- 7	- 5	-12	-3
15-16	+ 4	- 2	-11	-23	- 8	- 6	- 3	+1	- 3	+3	-2	0	- 4	- 4	- 8	0
16-17	+ 1	- 2	- 4	-10	- 4	- 9	- 7	-3	- 4	+3	-3	+2	- 3	- 6	- 4	0
17-18	0	- 2	0	- 5	- 3	-13	- 7	-7	- 4	-1	-3	-2	- 4	- 8	- 2	-2
18-19	0	- 3	+ 3	- 3	- 5	-14	-10	-9	- 4	-9	-3	-6	- 5	-10	- 3	-3
19-20	+ 1	- 2	+ 9	+ 1	- 1	-15	-11	-4	+ 4	-8	+1	-4	- 2	- 8	+ 2	-1
20-21	+ 1	+ 1	+16	+ 5	+ 7	- 7	- 7	0	+ 8	-6	+4	-6	+ 1	- 2	+ 6	0
21-22	+ 1	+ 2	+23	+ 9	+13	- 1	- 6	+5	+12	-4	+3	-5	+ 4	+ 3	+10	0
22-23	+ 2	+ 3	+17	+17	+19	+ 3	+ 1	+5	+ 8	-2	0	+2	+ 6	+ 7	+10	+2
23-24	+ 3	+ 2	+14	+15	+26	+ 9	+ 5	+3	- 4	0	-1	+3	+ 6	+11	+ 6	+2
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 43 Meanook — HORIZONTAL INTENSITY (gammas) (Disturbed Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+ 66	+111	+175	+174	+ 75	177	+163	+132	+360	+ 93	+ 82	+ 68	+140	+137	+200	+ 82
1-2	+107	+174	+176	+163	+111	+240	+185	+207	+345	+113	+ 97	+ 63	+165	+186	+199	+110
2-3	+133	+222	+185	+196	+154	+325	+151	+197	+283	+143	+120	+ 89	+183	+207	+202	+141
3-4	+119	+151	+194	+163	+177	+325	+ 77	+136	+207	+104	+138	+167	+163	+179	+167	+144
4-5	+126	+ 94	+174	+134	+107	+279	+ 77	+156	+ 48	+ 94	+120	+133	128	+155	+112	+118
5-6	+165	+ 31	+ 38	+ 67	+ 76	+ 74	+ 13	+ 65	- 99	- 78	+100	+143	+ 50	+ 57	- 18	+110
6-7	+113	+ 12	- 34	- 67	- 12	+ 76	+ 3	- 36	- 57	- 1	- 14	+ 79	+ 5	+ 8	- 40	+ 48
7-8	+ 18	- 2	- 99	- 99	- 11	-105	- 35	-167	- 2	+ 13	- 84	+ 15	- 46	- 80	- 47	- 13
8-9	-109	- 84	- 94	-129	- 64	-132	-129	-177	- 46	- 10	-123	- 69	- 97	-126	- 70	- 96
9-10	-132	-241	-106	-106	-176	-252	- 62	-124	-207	-103	- 66	-203	-148	-154	-130	-160
10-11	-123	-214	- 43	-109	-178	-294	- 75	-127	-106	-103	- 95	-120	-132	-169	- 90	-138
11-12	-164	-185	-148	-230	-184	-370	-141	-171	-166	- 73	- 73	-193	-175	-217	-154	-154
12-13	-121	-127	-309	-259	- 97	-371	-118	- 54	-207	- 41	- 79	- 81	-155	-160	-204	-102
13-14	- 64	-133	-205	-180	- 51	-229	-174	- 10	-261	- 56	- 84	- 80	-127	-116	-176	- 90
14-15	- 32	- 15	-307	-145	- 36	-133	- 77	- 14	-404	- 42	- 56	-107	-114	- 65	-224	- 52
15-16	- 45	- 9	-234	-114	- 24	-237	-106	- 5	-354	- 84	+ 12	- 72	-106	- 93	-196	- 28
16-17	- 11	+ 9	0	- 23	- 43	-163	- 43	- 32	-142	- 35	+ 21	- 21	- 40	- 70	- 50	0
17-18	- 2	+ 8	- 2	+ 21	- 32	- 60	- 23	- 49	- 73	- 7	- 73	- 1	- 24	- 41	- 15	- 17
18-19	- 38	- 4	- 4	+ 16	- 16	- 8	+ 14	- 43	+ 39	- 10	- 79	+ 6	- 11	- 13	+ 10	- 29
19-20	- 15	+ 3	+ 39	+ 35	+ 2	+ 63	+ 25	- 12	+ 79	- 16	- 17	+ 7	+ 16	+ 20	+ 34	- 6
20-21	- 43	+ 22	+ 89	+ 49	+ 18	+136	+ 62	+ 5	+125	- 6	+ 27	+ 29	+ 43	+ 55	+ 64	+ 9
21-22	- 38	+ 45	+117	+ 98	+ 66	+198	+ 76	+ 17	+166	+ 16	+ 33	+ 51	+ 70	+ 89	+ 99	+ 23
22-23	+ 29	+ 53	+197	+135	+ 67	+237	+ 83	+ 40	+272	+ 30	+ 33	+ 38	+101	+107	+158	+ 38
23-24	+ 57	+ 83	+206	+203	+ 78	+229	+ 58	+ 73	+205	+ 55	+ 60	+ 56	+114	110	+167	+ 64
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 44 Meanook — DECLINATION (minutes) (Disturbed Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	- 6.7	- 2.7	- 8.8	- 9.8	- 8.5	-14.2	- 8.8	- 5.7	- 8.5	-8.4	- 5.3	-6.0	- 7.8	- 9.3	- 8.9	- 5.2
1-2	- 5.7	- 3.4	- 5.9	- 9.8	-10.2	-16.0	- 9.3	- 2.1	-10.8	-6.0	- 6.4	-7.5	- 7.8	- 9.4	- 8.1	- 5.8
2-3	0.0	- 5.3	-10.0	-11.5	- 8.1	-16.0	-13.1	- 3.6	- 8.9	-2.7	- 4.8	-5.7	- 7.5	-10.2	- 7.8	- 4.0
3-4	- 4.7	-11.1	-13.8	-25.5	- 4.6	-16.8	-20.7	- 3.3	-27.6	-3.2	-12.1	-3.6	-12.2	-11.4	-17.5	- 7.9
4-5	-11.1	- 5.8	-15.8	-18.8	- 2.8	-19.4	-10.7	-10.0	-13.9	-4.3	- 1.8	-1.7	- 9.7	-10.7	-13.2	- 5.1
5-6	- 5.2	- 2.8	- 4.5	-15.9	- 4.0	-13.0	-19.1	- 6.0	-13.4	-5.5	- 2.6	-0.4	- 7.7	-10.5	- 9.8	- 2.8
6-7	+ 2.8	- 2.9	-13.2	- 2.5	- 1.6	-16.4	- 8.2	- 8.5	-15.0	-0.4	- 1.8	-2.8	- 5.9	- 8.7	- 7.8	- 1.2
7-8	- 4.5	- 2.7	-18.2	- 0.4	- 2.6	-11.5	- 5.7	- 8.0	- 5.4	-0.1	- 2.1	-3.0	- 5.4	- 7.0	- 6.0	- 3.1
8-9	- 4.3	- 5.5	- 8.6	- 0.1	- 3.5	- 8.7	- 6.9	+ 5.7	- 6.7	+1.6	- 2.7	+1.1	- 3.2	- 3.4	- 3.4	- 2.8
9-10	+ 1.3	- 7.1	- 2.6	+ 8.0	- 2.7	- 7.2	- 3.3	- 1.3	- 8.6	+5.9	+ 5.2	+9.8	- 0.2	- 3.6	+ 0.7	+ 2.3
10-11	+ 5.5	+ 6.7	+ 5.7	+ 5.4	+ 5.4	- 1.3	+ 1.8	+ 0.7	- 1.0	+8.4	+ 3.2	+7.0	+ 4.0	+ 1.7	+ 4.6	+ 5.6
11-12	+ 6.4	+16.8	+11.9	+ 8.1	+ 0.6	+ 1.2	+ 6.0	+ 0.9	+ 1.1	+6.9	+10.9	+9.2	+ 6.7	+ 2.2	+ 7.0	+10.8
12-13	+11.3	+10.8	+29.2	+13.9	+ 7.6	+23.9	+ 4.0	+ 5.7	+15.1	+2.3	+ 9.9	+6.9	+11.7	+10.3	+15.1	+ 9.7
13-14	+ 7.9	+12.8	+16.3	+10.1	+10.5	+11.5	+13.9	+10.3	+23.0	+2.4	+ 5.4	+7.2	+10.9	+11.6	+13.0	+ 8.3
14-15	+ 0.5	+ 6.8	+15.0	+15.9	+13.3	+ 7.3	+22.3	+11.5	+10.0	+4.6	+ 9.9	+5.5	+10.2	+13.6	+11.4	+ 5.7
15-16	- 2.8	+ 2.8	+16.0	+15.3	+15.9	+13.7	+21.4	+14.6	+15.9	+5.4	+ 9.8	-4.0	+10.3	+16.4	+13.2	+ 1.4
16-17	+ 4.9	+ 4.9	+11.6	+12.6	+10.8	+16.0	+18.5	+15.9	+21.7	+5.5	+ 7.8	+0.5	+10.9	+15.3	+12.8	+ 4.5
17-18	+ 5.5	+ 1.1	+ 8.1	+10.9	+ 7.4	+13.9	+13.0	+15.0	+39.1	+4.5	+ 2.1	+1.7	+10.2	+12.3	+15.6	+ 2.6
18-19	- 2.7	- 3.2	+ 3.9	+ 5.7	- 2.1	+ 8.2	+10.4	- 1.1	+18.9	+4.3	+ 0.1	+2.0	+ 3.7	+ 3.8	+ 8.2	- 1.0
19-20	- 3.0	- 3.2	- 5.9	+ 0.4	- 3.0	+11.5	+ 5.4	-10.4	- 7.4	-0.5	- 6.5	-0.7	- 1.9	+ 0.9	- 3.4	- 3.4
20-21	+ 8.4	- 2.1	+ 1.5	- 0.3	- 5.1	+12.1	+ 1.0	- 6.7	- 6.8	-4.2	- 5.1	-2.0	- 0.8	+ 0.3	- 2.4	- 0.2
21-22	+ 3.6	- 1.4	- 2.5	- 2.2	- 3.9	+10.2	- 1.6	- 4.7	- 4.6	-4.6	- 3.4	-2.2	- 1.4	0.0	- 3.5	- 0.8
22-23	0.0	- 1.2	- 5.7	- 4.1	- 3.8	+11.7	- 4.2	- 5.1	- 1.2	-6.0	- 3.5	-5.8	- 2.4	- 0.4	- 4.2	- 2.6
23-24	- 7.2	- 1.9	- 3.5	- 6.4	- 5.6	- 1.2	- 6.2	- 4.9	- 5.2	-6.0	- 5.8	-6.2	- 5.0	- 4.5	- 5.3	- 5.3
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 45 Meanook — VERTICAL INTENSITY (gammas) (Disturbed Days) — 1957

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+54	+ 53	+ 15	+ 45	+70	+ 70	- 27	+51	- 44	+47	+44	+23	+33	+41	+16	+43
1-2	+46	- 59	- 1	+ 22	+79	+ 89	- 51	+32	- 55	+40	+58	+31	+19	+37	2	+19
2-3	+24	+ 39	- 29	- 47	+74	+ 74	- 46	+58	-105	+48	+45	+42	+15	+40	-33	+38
3-4	+59	- 55	- 67	- 30	+34	+ 25	+ 18	+17	-126	+29	+12	+44	- 3	+23	-48	+15
4-5	+56	+ 10	- 85	- 5	+41	- 39	- 10	- 4	- 93	+11	- 1	+20	- 8	- 3	-43	+21
5-6	+45	- 9	-118	- 34	+13	- 80	- 23	-28	- 36	-78	+25	+ 2	-27	-30	-66	+16
6-7	+ 4	- 33	-113	- 12	-34	- 18	+ 8	-60	- 51	- 4	- 5	-20	-28	-26	-45	-14
7-8	+ 2	- 31	- 7	- 5	-15	- 38	+ 25	0	- 38	- 1	-88	-36	-19	- 7	-13	-38
8-9	-57	+ 17	+112	+ 20	-27	- 24	+ 25	+23	+ 67	- 9	-61	-12	+ 6	- 1	+48	-28
9-10	-66	- 2	+ 44	+ 43	-50	- 10	- 15	-44	-104	- 6	+ 8	-16	- 1	-30	+46	-19
10-11	-27	- 10	+ 28	+ 13	-98	- 68	+ 29	-34	+ 35	-19	- 3	- 7	-13	-43	+14	-12
11-12	-20	- 20	+ 39	- 15	-32	-118	- 14	0	+ 12	- 8	+ 1	-47	-19	-41	+ 7	-22
12-13	-62	- 17	+ 60	- 33	-54	+ 4	- 91	-21	+ 54	-44	-32	-31	-22	-40	+ 9	-36
13-14	-64	-110	+ 66	- 48	-60	- 19	-101	-21	- 81	-48	-43	-16	-45	-50	-28	-58
14-15	-38	- 64	- 60	- 44	-53	- 40	+ 33	-33	- 17	-39	-80	-56	-41	-23	-40	-60
15-16	-19	- 31	-114	-108	- 4	- 41	- 31	-18	+ 30	-58	-24	-25	-37	-24	-62	-25
16-17	-51	- 11	- 6	- 28	-29	- 40	- 7	-17	+113	-27	-17	- 8	-11	-23	+13	-22
17-18	-16	+ 30	+ 18	0	-11	- 10	- 8	-21	+160	- 8	-25	+ 4	+ 9	-12	+42	- 2
18-19	- 4	+ 21	+ 30	+ 21	- 7	+ 30	+ 19	-11	+ 7	+ 3	+ 3	+ 4	+10	+ 8	+15	+ 6
19-20	+11	+ 40	+ 31	+ 30	+ 1	+ 87	+ 42	+ 3	+ 34	+12	+18	+17	+27	+33	+27	+22
20-21	+17	+ 51	+ 36	+ 36	+25	+103	+ 64	+13	+ 16	+23	+36	+22	+37	+51	+28	+32
21-22	+45	+ 64	+ 48	+ 54	+51	+ 87	+ 67	+23	+ 29	+41	+39	+21	+47	+57	+43	+42
22-23	+21	+ 61	+ 55	+ 64	+43	+ 9	+ 51	+37	+ 34	+50	+45	+21	+41	+35	+51	+37
23-24	+45	+ 64	+ 29	+ 61	+35	- 42	+ 43	+53	- 52	+47	+48	+21	+29	+22	+21	+44
Mean																

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 1 Meanook Z = 12,000 γ + January 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1046	1053	1171	1234	1061	834	936	1006	941	740	708	959	941	920	857	865	951	913	802	813	902	904	897	973	934
2	991	960	979	1035	963	963	925	882	826	693	748	673	673	850	921	955	959	936	929	928	919	912	906	921	894
3 Q	928	929	936	944	940	940	942	936	936	943	944	928	937	936	942	951	951	951	944	944	932	927	928	932	938
4 Q	932	936	940	942	944	952	944	944	944	948	949	955	955	955	959	966	955	943	929	928	928	928	933	950	944
5 Q	944	935	951	955	959	967	971	967	963	959	960	960	959	952	959	971	968	951	933	926	926	928	936	944	952
6	944	944	944	951	949	951	944	936	944	955	951	943	943	959	975	976	975	960	936	932	927	936	941	937	948
7 Q	935	943	950	958	956	962	966	958	950	958	950	950	950	923	947	974	966	950	939	933	928	939	943	943	949
8 Q	943	947	950	950	955	958	951	955	838	841	930	939	939	932	926	966	962	954	943	939	931	931	943	947	936
9	950	954	958	960	959	959	967	958	950	935	872	860	920	850	845	936	958	943	943	931	926	930	932	962	932
10	976	1007	972	974	961	971	970	981	953	949	947	939	942	910	949	961	942	927	919	921	919	933	946	948	951
11	948	957	961	967	969	973	965	957	957	949	880	949	973	957	958	953	934	917	910	899	918	942	942	942	945
12	942	958	957	961	993	1034	999	962	949	950	949	934	938	958	947	949	930	910	918	926	927	934	934	942	950
13	963	964	976	972	972	993	972	971	968	956	941	941	941	940	956	952	940	917	929	929	898	908	922	923	948
14	941	948	948	956	952	956	957	956	840	839	948	948	948	941	944	925	894	921	930	925	930	886	917	932	928
15	933	945	953	935	967	1006	1027	1033	1007	972	947	944	908	744	854	901	931	924	910	908	904	928	924	928	936
16	940	947	948	956	955	975	995	991	976	948	831	947	955	963	963	959	947	933	908	898	897	928	939	947	944
17 D	944	944	951	967	991	979	971	967	939	829	740	881	885	947	869	885	933	924	917	924	933	915	951	1023	925
18 D	1019	1033	1048	1077	1089	1136	1104	932	673	669	536	607	505	587	720	821	877	908	925	908	908	917	925	924	869
19	924	943	954	951	947	946	955	955	950	932	915	883	809	864	869	907	894	892	935	931	918	918	927	927	919
20	927	943	954	946	946	950	962	978	911	947	907	778	939	954	933	928	946	922	914	927	939	930	931	941	931
21 D	1164	1244	1206	1052	1126	1224	1068	1068	963	801	805	931	935	939	946	946	921	909	899	913	906	896	924	935	989
22	941	946	959	950	954	970	884	806	970	962	952	884	790	720	892	974	946	931	923	919	915	922	931	933	916
23 D	946	939	972	981	994	995	997	974	969	954	925	922	711	848	923	907	872	901	876	860	903	943	939	937	924
24	945	938	945	953	953	953	961	963	947	945	938	828	670	930	942	938	926	929	921	915	918	922	934	938	923
25	945	946	945	957	957	953	953	953	927	755	969	954	957	812	794	867	847	883	937	926	915	919	926	938	914
26	942	945	957	1020	1110	1149	945	1024	992	901	929	948	938	934	935	906	891	891	910	922	923	918	921	934	954
27	930	930	957	957	957	962	957	953	945	943	953	949	945	945	943	938	930	914	922	918	920	931	918	928	939
28	938	946																	1130	918	926	930	938	949	
29	953	949	952	994	1072	1076	1032	1000	883	855	953	953	945	945	945	933	930	931	921	912	912	930	945	949	952
30	949	949	953	959	981	969	977	968	967	961	951	913	945	969	967	959	961	953	938	923	914	922	930	934	951
31	942	937	945	945	945	941	945	942	942	923	912	937	942	961	961	961	953	953	949	944	922	930	945	946	943
Mean	958	964	973	979	983	989	971	962	930	897	894	905	891	901	918	934	933	927	920	917	918	924	931	939	936

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 2 Meanook — D = 24° E + ... ′ — January 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	11.4	10.4	15.7	2.6	0.6	3.6	11.4	15.2	12.6	31.0	35.4	23.2	20.2	18.3	15.8	19.4	25.0	22.8	16.4	16.4	17.3	13.8	10.9	12.3	15.9
2	13.4	9.4	9.4	15.3	15.8	17.8	17.8	20.2	18.3	28.0	33.0	31.0	17.2	22.1	19.2	22.2	23.0	21.8	21.2	19.2	16.6	16.3	16.2	14.8	18.8
3 Q	13.4	14.3	14.8	14.8	15.3	15.3	16.3	16.3	15.3	15.8	17.2	15.2	14.1	14.8	14.4	18.2	20.7	21.2	21.2	19.2	16.8	16.3	17.3	16.3	16.4
4 Q	16.2	15.3	15.3	15.3	15.3	15.2	14.8	15.3	16.6	16.8	16.8	16.3	15.2	15.3	16.2	18.7	21.3	23.6	21.2	20.2	18.2	16.2	15.3	13.4	16.8
5 Q	13.4	14.4	13.4	14.8	15.3	15.2	14.3	14.3	15.6	16.3	16.4	16.3	16.3	16.3	15.3	18.2	21.1	24.1	22.4	20.2	17.2	15.8	16.1	14.4	16.5
6	14.8	14.8	15.2	14.3	14.3	15.3	15.2	20.7	20.1	16.4	17.3	16.2	11.4	17.6	19.1	19.2	22.3	22.2	21.2	19.2	15.8	14.4	14.3	13.4	16.9
7 Q	14.2	14.2	14.3	15.3	15.3	15.4	14.8	15.2	17.2	18.2	20.2	19.1	18.2	16.2	14.3	22.3	24.1	21.2	19.3	17.8	14.4	14.3	14.3	14.3	16.8
8 Q	13.3	14.2	14.8	16.9	17.3	17.3	16.9	15.8	17.3	17.4	20.2	17.4	16.4	12.9	16.3	20.2	21.7	21.3	19.2	17.4	15.3	14.2	13.3	13.3	16.7
9	12.9	13.4	14.4	13.8	15.2	16.8	16.3	16.3	18.2	17.2	14.3	16.2	29.0	24.0	15.2	27.1	29.9	26.0	21.3	17.4	12.4	10.4	10.4	5.5	17.2
10	7.4	4.6	12.3	16.3	17.8	18.2	18.2	15.8	16.3	17.3	17.3	16.4	18.2	22.3	18.2	23.2	25.0	23.1	18.2	13.4	10.3	10.9	11.4	11.5	16.0
11	13.8	11.4	12.5	14.3	16.4	15.8	15.3	15.3	16.3	18.2	18.2	15.8	15.8	18.2	17.8	21.2	24.1	21.2	19.7	13.8	4.0	8.9	12.4	10.4	15.4
12	12.4	8.4	10.4	14.2	14.3	8.4	12.4	15.3	18.8	18.2	18.2	19.1	19.2	23.2	20.2	24.2	24.0	20.2	17.3	15.3	13.4	13.4	11.4	9.4	15.9
13	8.4	6.5	10.4	13.4	14.3	16.4	16.4	16.4	14.3	15.2	17.2	17.3	14.3	15.8	20.1	23.2	27.0	25.2	20.7	20.2	16.4	10.9	12.4	12.4	16.0
14	12.4	13.3	14.3	15.8	16.3	15.8	16.7	16.8	9.3	32.9	25.6	18.7	17.6	15.2	19.2	22.1	24.2	22.3	22.2	20.1	17.8	14.2	8.0	9.9	17.5
15	12.4	12.9	14.3	15.3	14.8	15.3	21.7	19.1	12.4	15.8	17.3	18.2	22.2	18.2	24.1	18.2	27.1	24.1	25.6	21.2	13.8	8.9	11.4	11.3	17.3
16	11.4	13.4	14.3	15.8	16.0	14.3	9.9	17.3	16.3	18.2	19.7	17.3	19.7	19.1	17.4	28.2	31.4	28.9	30.1	20.7	8.4	7.5	7.5	10.4	17.2
17 D	10.4	12.4	13.8	11.4	13.3	17.3	15.3	15.4	15.8	15.8	20.2	27.1	20.2	13.8	20.2	13.8	22.3	23.7	19.2	17.3	15.0	10.2	7.4	10.4	15.9
18 D	10.4	2.6	4.5	4.5	8.4	12.3	16.2	20.8	39.5	35.4	24.6	40.2	47.5	51.0	36.6	39.0	36.6	24.4	19.2	21.2	12.5	10.4	12.4	13.8	22.7
19	13.4	13.4	13.9	15.2	15.8	13.8	17.3	21.2	16.4	17.2	19.8	19.2	19.2	15.3	12.4	23.2	22.7	15.3	17.3	17.8	17.3	15.2	15.2	13.4	16.7
20	14.2	13.8	14.2	16.2	16.2	15.8	14.3	17.3	18.7	21.2	22.2	28.1	24.1	19.3	26.1	21.1	22.7	25.1	17.8	13.8	13.4	12.4	8.4	11.7	17.8
21 D	3.6	5.5	9.4	20.2	3.6	12.4	16.4	10.4	19.1	20.2	23.1	18.2	16.8	18.3	20.1	22.8	25.6	29.5	21.2	17.3	14.4	12.4	12.4	12.4	16.0
22	10.9	13.8	15.3	15.3	17.3	15.3	14.3	17.3	15.8	14.2	14.8	19.2	15.3	14.3	19.7	31.0	29.0	25.2	23.2	18.3	15.3	12.4	12.4	13.4	17.2
23 D	11.4	12.5	11.4	11.4	13.8	16.4	14.3	21.2	15.3	18.2	18.2	19.2	22.3	11.9	25.0	19.2	17.3	17.4	20.2	5.4	7.5	9.4	13.4	15.2	15.3
24	14.2	15.4	16.3	16.3	15.8	19.2	15.8	14.3	14.3	16.2	16.3	24.0	34.4	23.2	27.1	25.1	22.7	23.2	21.3	18.2	15.8	15.2	13.3	13.8	18.8
25	11.9	12.5	16.8	16.2	14.3	15.2	19.2	18.2	15.6	17.4	18.2	19.2	18.2	23.1	20.2	31.9	8.0	2.6	15.8	18.8	16.3	14.3	13.4	13.4	15.9
26	13.8	15.3	13.4	13.3	15.3	4.5	25.1	14.3	17.4	14.2	17.2	18.2	17.3	18.2	20.1	22.7	20.7	14.3	16.8	14.0	13.6	12.4	12.9	11.9	15.7
27	13.8	12.4	13.2	14.8	15.3	14.8	15.8	16.3	15.3	13.4	17.3	17.4	17.0	17.8	20.0	24.1	24.1	22.7	22.2	21.2	15.9	12.4	11.4	12.4	16.7
28	13.4	14.3																	20.2	19.2	16.8	14.3	13.4	13.4	
29	12.6	13.4	13.4	25.1	20.2	20.1	21.7	16.9	14.3	14.3	19.2	18.2	17.3	19.1	19.3	18.2	17.4	15.3	19.2	19.2	17.3	14.3	13.4	13.4	17.2
30	12.9	13.4	14.3	16.3	17.8	14.8	14.3	16.4	16.8	16.3	17.3	14.3	18.7	17.8	17.3	14.3	19.7	20.7	19.2	16.8	13.4	11.5	12.4	13.4	15.8
31	14.9	14.4	14.8	15.3	14.4	16.6	16.3	16.3	17.4	18.2	25.1	14.3	12.3	16.8	18.2	20.2	23.2	18.2	19.2	20.2	15.3	13.4	13.3	12.5	16.7
Mean	12.3	12.1	13.4	14.7	14.5	14.8	16.2	16.7	16.9	18.5	19.9	19.7	19.5	19.0	19.5	22.4	23.5	21.6	20.3	17.7	14.4	12.7	12.5	12.5	16.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 Meanook $Z = 58,000\ \gamma +$ January 1958

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	841	825	776	700	765	721	830	797	841	874	830	852	857	842	819	814	852	830	821	841	863	867	864	885	825
2	852	863	922	901	874	840	831	841	863	809	776	821	787	755	787	830	833	841	847	847	845	845	845	845	838
3 Q	841	841	852	852	852	851	851	841	834	819	819	810	808	809	819	819	825	829	830	840	840	840	840	840	833
4 Q	841	841	841	841	841	841	834	830	830	819	810	819	829	829	831	831	836	835	830	830	830	830	831	832	832
5 Q	838	837	842	843	852	843	842	831	831	831	831	824	826	820	820	830	830	829	830	830	830	831	831	831	833
6	831	831	831	832	836	831	826	815	816	826	820	798	766	777	810	810	820	822	820	820	820	820	830	820	818
7 Q	831	830	831	831	831	831	831	820	820	816	788	777	799	788	787	820	820	820	820	820	822	830	830	830	818
8 Q	830	830	831	831	831	837	837	832	784	745	783	799	788	794	766	820	820	820	820	820	820	820	822	822	813
9	822	832	843	843	843	843	843	832	812	811	878	724	735	746	697	713	767	789	810	821	821	823	821	832	804
10	859	892	876	843	843	859	854	831	832	831	819	805	800	778	793	831	832	832	832	832	827	832	833	832	833
11	831	832	838	842	832	833	833	832	827	821	766	793	821	821	824	828	825	825	821	819	823	832	832	832	824
12	832	853	854	854	868	854	832	842	831	832	823	811	800	832	843	835	812	816	821	821	832	831	826	831	833
13	844	844	865	845	850	876	856	856	850	833	817	812	822	822	833	833	832	824	836	828	854	888	871	844	843
14	844	843	833	833	833	832	833	833	682	730	800	822	822	822	822	817	779	790	822	828	833	844	866	843	817
15	834	836	844	844	855	877	876	866	817	844	844	822	791	649	746	806	833	833	839	843	843	854	844	839	828
16	844	844	844	844	844	845	866	893	845	833	779	768	812	839	833	828	828	828	833	843	833	834	845	844	835
17 D	845	834	840	857	868	868	861	854	802	807	683	736	748	823	760	791	823	813	834	834	845	872	909	909	826
18 D	868	878	932	926	921	953	921	759	650	823	906	683	748	814	818	781	769	728	780	808	834	845	845	845	826
19	845	846	847	856	851	851	867	835	844	841	814	760	748	781	786	802	786	781	823	843	845	851	844	840	824
20	840	840	846	845	843	845	845	834	780	840	825	753	791	834	813	818	823	808	823	814	829	834	845	867	826
21 D	965	956	888	630	802	824	824	781	835	792	802	835	846	857	864	857	846	841	834	834	836	835	841	835	836
22	846	846	846	856	857	867	792	803	852	847	846	798	722	554	737	868	846	835	835	841	841	841	846	846	820
23 D	846	846	867	879	890	921	890	814	856	826	812	803	702	781	703	804	770	802	819	830	852	856	850	846	828
24	856	852	846	846	836	846	836	835	835	835	815	689	639	782	830	830	835	826	830	836	840	845	841	835	821
25	839	836	858	861	858	859	836	825	820	663	829	825	820	726	652	696	701	750	827	835	839	853	847	842	804
26	836	836	852	874	858	863	701	686	853	836	847	853	847	836	836	827	808	816	825	835	847	857	859	869	832
27	857	836	858	857	858	860	848	846	825	803	840	836	836	836	835	836	836	835	836	842	842	842	842	842	841
28	836	836																	835	835	835	836	836	836	
29	837	837	849	902	940	923	881	852	837	847	837	837	826	836	837	815	816	837	844	848	852	858	847	842	847
30	837	837	837	844	832	832	848	848	847	833	816	783	783	821	832	821	821	826	836	838	842	847	837	837	831
31	838	840	837	837	842	848	847	837	826	782	718	789	794	826	836	836	830	828	826	826	832	837	840	832	824
Mean	846	846	851	842	850	852	842	827	819	815	812	795	790	794	799	815	815	816	827	832	837	840	844	843	827

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 4 Meanook H = 12,000 γ + February 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	931	953	953	953	958	951	949	945	926	938	945	934	890	937	942	962	965	964	952	944	942	935	923	932	943
2	947	946	952	952	946	949	942	944	942	915	868	931	948	933	934	953	956	949	943	945	942	938	938	938	940
3 Q	942	942	951	950	940	945	945	949	949	946	953	957	931	938	962	960	954	945	942	942	947	951	946	946	948
4	938	945	953	957	958	959	960	960	962	962	945	914	949	973	957	919	942	943	922	872	899	930	946	946	942
5	969	996	1023	1067	1025	1008	1039	969	824	926	868	834	504	875	953	906	906	922	938	937	893	934	915	961	925
6 D	981	999	986	971	1109	1051	1028	1007	807	961	865	589	789	782	749	742	874	929	945	945	945	952	957	954	913
7	945	969	1016	973	993	996	946	1001	954	898	945	789	836	937	907	890	840	910	925	937	945	962	953	965	935
8	971	960	984	1032	991	1039	1023	986	938	859	893	893	899	902	887	890	906	914	936	921	902	891	960	942	938
9	949	978	963	1020	989	962	953	949	949	942	939	896	902	921	910	898	824	847	891	941	969	953	929	942	935
10	978	961	981	968	986	985	954	954	946	937	921	920	891	828	829	844	828	835	860	880	973	1015	957	954	924
11 D	1032	843	881	1042	1083	1098	402	-195	648	549	542	329	696	355	626	738	898	904	832	804	887	918	926	871	738
12 D	958	938	969	973	926	990	774	715	855	735	547	836	875	926	910	895	882	761	753	977	929	930	915	926	871
13	957	939	945	938	939	934	938	938	875	769	897	868	710	850	912	851	812	876	898	898	918	927	929	902	892
14	949	942	983	1040	1032	977	1000	976	860	871	863	796	816	855	938	918	905	927	927	930	920	912	922	927	924
15 Q	936	937	942	942	945	947	948	951	947	942	869	905	930	944	952	944	930	928	925	925	933	941	938	937	936
16	937	946	953	955	955	956	960	972	958	958	944	893	901	858	892	930	953	953	941	942	949	941	952	944	939
17 D	966	961	969	1010	1113	1136	1066	1030	964	901	854	854	686	596	894	958	919	923	897	944	952	917	972	956	933
18 D	978	998	1003	1000	998	863	892	934	976	915	749	844	781	880	905	902	851	879	859	921	959	962	998	978	918
19	993	968	969	962	968	993	915	989	945	937	866	821	718	832	943	934	920	920	875	895	920	949	957	973	924
20	957	960	981	978	1025	997	982	978	953	906	797	934	879	792	781	953	938	898	817	792	840	925	932	950	914
21	953	712	827	827	919	1076	973	795	832	919	937	851	932	997	749	930	930	873	817	860	884	959	996	909	890
22	954	933	967	997	1033	1025	978	1002	912	845	768	664	987	811	910	919	932	919	916	903	906	938	954	943	921
23	966	1012	1111	1064	1010	995	805	672	712	630	731	715	927	958	955	952	911	923	906	927	946	962	950	944	904
24 Q	943	947	955	954	962	963	954	954	947	932	868	833	860	932	961	954	946	931	923	924	923	924	931	932	931
25 Q	942	944	949	951	957	960	954	968	938	945	954	962	960	959	959	954	943	931	923	920	918	925	934	938	945
26 Q	942	945	949	946	949	949	961	965	962	957	958	954	963	969	965	962	953	942	934	930	931	926	931	943	949
27	935	946	954	954	954	959	954	954	954	952	954	961	965	960	960	960	945	938	918	913	915	923	931	931	945
28	935	945	954	954	958	961	958	974	927	860	922	736	881	938	932	921	930	938	924	916	923	931	943	943	925
29																									
30																									
31																									
Mean	957	945	965	976	987	986	934	898	906	886	863	836	857	873	899	912	910	912	902	914	925	938	944	940	918

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 5 Meanook D = 24° E + ... ′ February 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	13.4	14.3	14.8	15.2	15.3	14.3	15.2	16.3	24.0	22.3	19.2	18.2	12.4	14.8	13.4	19.7	16.3	14.3	15.3	15.3	14.8	13.3	12.9	13.4	15.8
2	12.8	11.3	13.6	15.2	15.3	16.6	15.8	14.8	16.3	18.2	33.4	18.2	18.2	14.3	13 4	17.2	17.9	16.2	13.4	16.8	16.2	16.3	16.3	15.3	16.4
3 Q	14.3	13.4	14.3	14.3	15.2	16.1	14.8	16.3	18.2	17.3	18.2	16.3	13.8	12.4	18.7	18.7	18.2	19.3	16.8	15.4	14.7	14.3	14.8	13.8	15.8
4	13.8	13.4	13.8	14.3	14.8	14.4	14.3	15.2	15.3	15.3	17.8	18.2	23.2	20.2	20.1	16.3	13.4	18.2	22.7	16.3	1.1	6.5	10.9	12.9	15.1
5	10.4	4.6	5.4	10.4	12.5	8.0	11.3	13.8	10.3	19.1	28.0	22.2	26.0	25.1	29.0	30.5	11.3	11.5	11.5	15.8	17.8	6.3	6.5	11.4	14.9
6 D	9.5	7.0	12.2	11.7	9.3	14.3	10.5	14.8	-5.3	16.8	24.1	25.6	24.8	33.0	30.5	10.9	12.3	14.4	14.8	14.3	12.9	13.4	10.3	15.1	14.9
7	13.3	11.4	12.4	11.4	10.3	12.9	12.3	12.5	11.4	6.6	20.1	29.5	20.3	22.3	24.1	22.3	20.7	18.2	15.2	17.3	18.2	12.5	14.2	10.5	15.8
8	10.2	16.4	15.8	13.4	23.9	16.4	16.2	19.1	22.2	29.1	25.1	27.0	26.2	34.4	30.5	29.0	26.1	20.7	18.3	16.2	16.3	6.5	8.4	11.3	19.9
9	11.4	17.4	14.9	17.4	13.8	16.4	14.4	14.4	15.9	17.8	19.6	18.7	19.6	22.7	24.6	22.2	4.5	-0.4	10.3	17.8	10.4	4.5	8.3	8.0	14.4
10	9.7	16.2	15.8	10.5	9.4	13.3	13.3	14.4	15.8	18.2	18.1	20.2	22.2	16.3	28.0	11.4	16.8	19.1	15.8	22.7	13.8	16.3	16.4	7.6	15.9
11 D	11.4	48.0	45.6	49.5	-26.4	-19.7	-15.2	18.7	-14.1	-15.2	2.7	-24.0	-73.7	56.7	65.1	39.0	38.4	32.5	25.6	16.3	18.2	19.7	20.7	17.2	14.0
12 D	14.3	14.2	17.8	16.3	19.3	12.9	11.9	12.7	19.1	18.2	5.0	19.7	22.5	19.2	19.1	16.8	25.6	25.0	37.6	16.8	13.8	15.3	14.2	16.2	17.6
13	16.1	16.4	16.3	16.3	15.9	15.3	16.4	14.8	12.4	2.5	12.4	20.1	19.3	22.2	28.4	26.7	17.4	15.2	20.1	18.7	15.2	11.2	9.7	9.9	16.2
14	9.2	9.6	11.8	15.8	9.9	7.8	14.1	15.8	4.5	20.7	21.7	23.2	26.1	26.2	29.5	27.6	19.0	12.9	16.4	17.3	18.2	17.1	16.3	14.3	16.9
15 Q	13.4	13.4	13.4	13.4	13.4	14.3	14.3	14.2	15.1	16.1	14.8	14.3	18.2	18.2	19.7	18.3	20.7	18.7	16.3	14.4	15.2	13.4	13.3	14.3	15.4
16	13.8	13.4	12.9	13.1	14.4	13.2	16.8	12.4	15.2	15.8	16.6	14.7	16.9	17.8	20.7	19.2	23.1	15.3	11.9	13.5	14.0	14.9	15.2	15.2	15.5
17 D	12.4	11.7	10.1	7.6	3.0	11.3	12.4	12.3	16.2	20.3	28.0	30.0	32.9	47.6	35.4	21.2	29.1	14.3	4.7	13.3	13.2	11.1	10.4	13.9	17.6
18 D	14.8	20.0	11.9	12.2	15.4	2.6	9.4	17.2	17.2	8.9	16.8	30.5	34.9	19.3	20.2	19.7	15.8	11.7	12.4	11.9	9.7	11.5	12.3	13.5	15.4
19	15.2	14.8	11.4	13.4	13.4	10.7	7.5	19.7	8.7	18.2	18.3	28.9	20.3	14.6	22.1	26.6	20.7	18.7	15.8	7.4	9.8	11.3	9.7	9.3	15.3
20	11.4	11.3	12.5	11.9	12.9	13.2	13.4	16.3	10.4	12.4	8.9	20.3	22.2	15.3	23.6	31.9	29.5	22.3	13.6	2.7	7.2	0.9	3.4	4.5	13.8
21	7.2	6.7	3.4	17.8	-0.5	4.5	9.1	12.0	2.9	10.1	14.1	18.4	13.0	34.5	25.9	28.4	23.7	21.1	4.5	2.4	4.5	7.7	3.4	8.2	11.8
22	4.3	0.9	10.3	11.5	10.7	14.4	10.9	0.0	10.9	15.3	26.9	12.0	12.0	17.8	14.4	26.2	16.6	19.2	23.2	15.1	10.5	10.5	10.9	8.5	13.0
23	8.9	12.3	8.2	16.3	18.3	16.3	6.5	8.5	12.4	8.0	21.2	4.4	18.2	22.8	21.2	22.1	22.6	19.7	14.8	12.4	13.3	13.8	12.9	12.4	14.5
24 Q	12.3	12.5	12.4	18.2	17.8	14.3	14.2	16.8	13.3	19.7	22.2	25.6	22.5	17.6	20.7	22.3	22.1	22.7	20.7	18.3	16.4	14.6	12.9	12.9	17.6
25 Q	12.4	12.3	12.2	12.9	12.3	15.3	30.5	14.4	13.8	19.2	20.7	19.5	21.2	19.3	18.7	18.2	19.5	19.7	20.1	17.4	13.6	12.8	13.4	13.6	16.8
26 Q	13.2	11.8	12.5	13.4	13.4	15.8	17.8	17.2	15.4	16.3	16.2	17.8	17.6	18.2	18.7	20.2	21.7	20.3	18.2	16.4	15.2	13.3	13.4	12.5	16.1
27	14.1	12.9	12.8	12.9	13.4	13.4	13.4	15.8	16.4	18.2	19.6	17.2	16.2	14.3	18.2	22.7	24.1	19.0	22.7	13.8	11.3	12.0	12.3	12.5	15.8
28	14.1	13.4	13.4	12.4	12.3	13.3	13.5	16.4	15.3	14.3	22.1	20.2	22.2	24.5	26.6	19.7	15.2	15.3	14.4	15.9	15.2	13.3	12.4	11.4	16.1
29																									
30																									
31																									
Mean	12.0	13.6	13.6	15.0	11.7	11.8	12.7	14.5	12.5	15.0	19.0	18.9	17.5	22.9	24.3	22.3	20.1	17.7	16.7	14.7	13.2	11.9	12.0	12.1	15.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 6 Meanook — Z = 58,000 γ + — February 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	837	837	832	829	837	837	837	829	783	794	806	794	704	784	795	806	807	823	833	836	842	839	841	837	817
2	844	845	843	837	838	851	839	833	811	784	811	633	790	790	795	811	827	831	833	833	833	834	835	835	817
3 Q	833	833	833	833	833	833	833	822	818	811	812	820	790	767	805	817	822	827	833	833	833	833	833	834	823
4	834	833	835	833	829	827	827	829	827	820	798	719	761	805	805	790	783	805	811	805	837	860	861	838	815
5	849	876	891	909	891	872	885	882	783	805	801	829	735	757	806	779	785	796	811	827	860	902	882	872	837
6 D	873	882	872	851	866	894	899	877	774	839	806	819	796	752	795	752	773	828	851	852	850	852	866	888	838
7	872	872	915	915	903	872	807	888	760	776	845	788	795	861	838	818	802	856	839	856	888	888	862	866	849
8	871	883	888	894	916	937	894	839	828	828	823	819	797	784	797	784	819	845	839	837	845	850	873	866	848
9	871	883	962	931	899	897	861	859	860	854	843	778	807	818	807	794	744	753	808	861	903	877	877	877	851
10	905	895	900	963	893	889	863	861	855	846	820	808	797	762	743	731	759	846	896	900	950	922	904	917	859
11 D	1021	1335	-185	169	214	265	983	940	1562	1541	1517	1661	1395	1290	1033	846	911	939	904	895	889	885	900	900	950
12 D	927	915	927	922	897	905	824	731	781	770	874	846	818	867	867	873	863	873	922	947	889	883	878	881	870
13	886	878	869	863	862	863	867	861	799	721	759	797	721	792	827	792	813	820	862	874	895	895	887	883	837
14	901	906	896	901	863	884	897	832	679	793	798	840	787	776	814	814	822	879	863	875	875	868	868	868	846
15 Q	863	858	861	863	864	864	864	862	858	853	798	809	832	848	858	852	854	858	853	853	852	856	852	852	852
16	852	852	852	852	852	863	858	858	862	851	841	804	782	733	755	771	798	819	825	834	846	842	847	845	829
17 D	841	847	847	879	782	754	896	868	793	820	797	820	755	619	767	852	840	839	840	852	867	863	858	858	823
18 D	886	890	895	900	898	799	783	833	875	837	649	779	777	826	821	815	805	815	837	888	891	897	914	907	842
19	912	875	885	875	874	842	745	875	831	854	770	767	761	789	859	843	837	847	852	848	857	865	875	886	843
20	880	889	880	897	924	902	886	954	823	824	750	810	788	746	724	831	842	835	838	838	897	978	966	954	861
21	914	901	919	1011	1017	869	905	761	707	793	882	874	748	733	874	903	903	845	845	941	912	995	989	890	880
22	909	1017	1011	936	972	903	912	912	876	1195	719	776	806	792	850	825	852	876	860	865	863	870	881	895	891
23	907	931	1022	995	925	849	769	789	822	692	756	736	822	853	860	864	843	849	849	860	875	876	860	860	853
24 Q	854	855	864	881	865	854	854	838	800	795	747	724	795	834	849	849	849	844	849	849	849	846	844	843	835
25 Q	843	842	842	843	846	860	865	860	816	789	799	839	846	843	843	842	839	843	841	842	843	843	843	843	840
26 Q	844	843	843	843	844	843	843	855	850	839	833	833	837	843	844	845	845	845	845	854	850	854	847	847	845
27	844	844	843	843	843	843	843	843	839	823	826	831	833	833	833	839	841	843	833	843	854	856	857	850	841
28	844	844	844	855	850	845	845	850	833	763	806	695	649	779	778	812	813	833	850	850	850	854	855	852	819
29																									
30																									
31																									
Mean	876	891	846	862	853	840	857	851	839	847	824	823	804	810	823	820	825	840	847	859	868	874	873	869	847

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 7 Meanook $H = 12,000\ \gamma +$ March 1958

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	Q	950	939	943	954	954	954	955	955	954	958	953	947	939	943	954	952	935	911	899	903	906	916	928	939	939
2	Q	939	939	947	952	958	955	954	946	955	939	916	930	962	966	958	954	937	921	908	908	916	927	936	939	940
3		939	949	946	954	952	952	954	947	932	831	715	740	852	971	969	962	938	906	884	848	884	985	953	984	914
4		1002	1008	1197	1080	1139	1110	1062	963	907	798	772	740	696	743	860	946	921	858	884	889	914	947	968	963	932
5	D	947	955	985	1010	1016	1032	994	739	789	728	728	781	922	946	946	932	938	900	931	935	938	954	962	954	915
6		970	1034	1167	1135	1064	914	753	859	932	955	890	488	672	812	868	876	900	915	911	927	961	954	954	954	911
7		931	932	986	1041	942	1010	1001	797	664	817	958	918	754	830	900	950	911	916	907	903	906	900	935	939	906
8		961	986	1056	1034	1032	1032	856	927	645	770	782	805	932	919	931	958	938	923	908	907	908	908	935	944	917
9		979	994	974	969	1008	939	845	963	900	731	707	598	916	958	896	883	924	922	915	913	921	927	928	935	902
10		963	946	958	974	1005	966	970	958	946	892	733	672	872	845	907	922	921	880	845	911	927	911	919	955	908
11		962	962	946	947	956	953	947	946	946	947	945	911	752	758	894	865	793	830	845	874	961	946	961	1076	913
12	D	1082	1135	1070	1072	939	947	756	406	711	874	613	625	590	758	735	861	902	836	848	914	927	962	958	958	853
13	D	974	974	1068	1181	1068	798	876	370	300	471	532	464	447	387	456	519	720	789	880	935	944	936	943	932	748
14		939	938	929	936	935	940	939	939	939	935	906	914	872	946	937	919	911	923	922	916	924	928	923	932	927
15		939	946	959	966	1013	1079	997	947	681	758	798	649	680	578	794	856	798	883	906	914	906	930	943	954	870
16	Q	970	994	1063	1095	1010	986	970	962	946	955	946	946	943	946	943	943	931	915	922	930	931	946	927	937	961
17		938	947	939	943	952	978	954	935	782	558	900	794	790	652	778	888	907	888	872	899	954	929	932	938	877
18		954	963	971	994	971	1049	1052	720	939	868	845	911	805	727	833	820	833	856	852	864	974	970	923	932	901
19	D	968	971	1021	1146	1064	1052	908	979	966	939	892	605	464	582	558	727	700	891	923	955	932	950	1024	1095	888
20	D	1064	994	1060	1056	978	968	1008	963	668	741	680	897	932	908	809	906	899	919	906	892	892	953	947	977	917
21		1000	1036	989	1040	931	960	980	915	777	824	740	962	957	957	844	808	832	851	883	887	906	936	1007	1021	918
22		1189	1235	1172	1177	1024	934	914	918	910	915	926	929	930	887	874	926	931	918	907	894	898	945	990	1047	975
23		993	982	975	1013	985	993	993	891	911	883	794	834	875	818	821	899	898	896	906	906	961	981	953	969	922
24		970	924	947	1015	1059	1008	1029	989	856	720	696	714	900	958	903	857	834	900	896	907	935	1005	997	1008	918
25		1046	1103	1068	990	961	982	969	719	837	874	845	719	739	720	689	890	739	950	971	944	943	935	928	946	896
26		982	1010	974	974	978	986	982	986	931	834	988	409	772	908	813	743	790	913	907	903	915	938	943	982	898
27		1041	997	974	954	963	955	958	970	899	743	817	943	962	943	958	950	919	927	899	909	916	950	952	955	936
28	Q	939	978	979	979	966	958	954	958	908	911	950	960	970	961	958	955	915	899	900	927	924	935	939	911	943
29	Q	997	1005	962	955	976	969	939	960	958	938	950	962	963	963	962	961	924	924	927	927	932	939	939	927	952
30		939	963	961	963	963	970	966	962	629	774	966	814	723	558	535	783	798	880	900	915	902	958	1015	962	867
31		994	961	974	1001	990	1134	1033	1029	1002	975	978	955	932	943	939	895	903	906	907	921	932	839	976	999	963
Mean		983	990	1005	1016	992	982	951	888	843	834	834	791	823	832	846	881	875	895	899	909	925	940	953	967	911

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 8 Meanook D = 24° E + ...' March 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	9.9	12.5	13.6	14.2	14.1	14.7	14.7	15.3	16.3	16.3	16.4	17.3	18.2	20.2	25.0	25.2	24.1	24.6	18.2	15.8	13.8	12.3	12.3	11.8	16.5
2 Q	12.5	13.4	14.2	13.8	14.0	13.6	25.6	5.8	17.6	19.1	18.7	21.7	20.2	19.3	20.7	21.3	22.2	20.5	16.4	14.2	14.2	15.2	14.8	14.4	16.8
3	13.6	13.2	13.2	12.9	13.5	11.5	15.7	14.8	18.2	20.1	22.1	17.3	29.9	22.1	22.7	26.4	26.0	30.1	19.1	19.2	13.4	13.4	10.7	9.7	17.9
4	5.5	2.1	9.4	10.9	9.9	11.4	7.4	20.2	16.3	15.3	14.3	28.2	17.8	9.4	24.6	27.9	25.9	15.8	8.0	8.4	11.3	13.8	11.4	8.1	13.9
5 D	6.6	8.4	9.9	11.9	15.4	16.8	0.6	-13.1	8.0	27.0	25.0	28.5	26.1	25.6	24.2	28.5	24.0	20.2	13.6	15.9	13.8	12.3	11.7	11.4	15.5
6	12.4	11.5	25.2	8.6	17.6	20.1	11.6	15.3	16.2	16.3	18.8	14.3	15.2	16.8	24.0	22.1	20.3	18.2	16.3	13.4	14.2	16.8	13.5	10.9	16.2
7	12.4	14.4	10.7	15.3	5.0	19.7	16.2	2.5	3.1	14.8	18.2	21.3	17.8	11.4	23.2	30.9	30.0	20.1	15.2	17.6	14.2	8.4	9.6	13.7	15.2
8	10.4	8.9	14.8	16.5	13.3	15.8	13.4	17.3	14.4	13.3	17.2	12.9	21.7	19.7	19.7	24.2	28.6	27.2	24.0	22.2	18.7	14.3	12.7	11.6	17.2
9	8.2	8.0	10.5	13.3	15.3	6.0	19.3	22.2	18.8	12.5	26.1	20.7	17.8	20.8	26.1	18.2	22.3	19.1	18.7	19.7	16.8	16.3	14.4	13.4	16.9
10	10.4	10.6	10.9	8.5	11.3	12.5	13.8	14.4	14.3	24.0	37.7	34.0	28.0	19.7	17.4	22.2	27.1	23.2	7.3	7.2	10.5	8.9	7.4	6.0	16.1
11	9.2	11.3	13.0	13.4	14.3	14.3	14.4	14.8	15.3	16.2	16.2	17.3	14.3	15.2	25.0	27.6	22.2	12.5	8.6	12.3	12.4	13.9	10.7	6.5	14.6
12 D	6.0	15.3	1.1	3.5	2.5	-10.7	-8.1	-16.0	13.3	14.3	31.1	21.7	45.7	32.1	16.2	22.1	23.1	15.3	9.9	13.4	11.4	13.5	12.4	11.4	12.5
13 D	14.2	15.8	8.4	7.4	9.9	11.9	12.5	-0.3	53.4	30.0	64.1	44.9	19.5	19.5	26.8	23.2	45.0	36.6	19.7	8.0	10.4	12.4	13.4	14.8	21.7
14	14.8	12.9	13.2	15.3	15.3	14.6	15.2	15.8	16.2	16.8	15.3	16.3	20.7	22.7	30.5	20.7	11.5	19.3	17.2	15.8	14.3	12.9	12.5	11.4	16.3
15	10.9	10.3	9.3	9.3	10.7	11.3	14.2	12.7	23.3	23.2	17.8	20.7	24.0	27.4	26.6	33.4	19.7	25.1	6.4	14.2	14.3	13.4	12.4	13.4	16.8
16 Q	11.4	11.4	10.5	8.5	8.5	11.9	11.9	11.4	15.4	16.3	14.4	15.8	17.2	19.1	22.7	25.2	28.0	27.6	18.7	11.4	12.5	13.4	9.9	9.4	15.1
17	10.4	11.9	11.9	13.3	13.4	12.9	29.0	9.9	2.6	38.9	18.2	29.5	19.2	29.0	30.5	30.0	22.7	23.2	15.2	13.3	11.4	12.5	13.4	14.8	18.2
18	15.3	12.5	10.9	9.4	10.5	6.6	2.6	16.3	18.3	18.3	21.1	21.7	23.2	18.2	18.7	32.9	10.4	18.2	21.2	17.8	11.9	7.0	4.5	9.4	14.9
19 D	6.0	7.5	6.0	11.4	9.4	4.6	9.9	13.4	14.8	14.8	16.8	12.9	17.3	25.6	39.8	12.8	6.0	14.3	12.9	12.9	20.3	13.4	9.9	14.6	13.6
20 D	5.6	2.1	12.3	11.8	11.7	15.3	17.3	11.5	2.6	12.4	13.4	16.4	21.2	25.1	22.7	26.2	30.5	28.0	21.2	17.4	16.3	16.3	6.5	2.5	15.3
21	5.5	6.4	10.3	14.4	7.6	12.3	13.5	10.3	8.0	9.4	18.2	21.2	20.2	19.3	25.6	24.0	19.1	24.0	14.3	9.9	8.0	7.5	4.5	4.4	13.2
22	8.0	17.2	21.7	17.3	11.4	14.3	15.3	15.3	14.4	15.8	15.3	15.3	16.8	16.8	19.7	22.7	27.6	25.9	24.0	17.3	10.4	14.2	13.8	11.4	16.8
23	7.6	8.0	6.5	9.4	10.9	11.5	8.4	8.4	9.9	14.3	13.4	14.3	16.4	12.4	15.3	27.0	26.6	20.2	14.8	17.3	15.3	12.9	9.4	8.0	13.3
24	22.7	22.2	23.2	22.2	18.7	16.3	11.9	17.8	21.7	21.7	24.1	27.6	28.5	21.2	21.2	17.8	28.0	31.0	18.2	17.3	17.3	18.3	14.2	10.4	20.6
25	9.9	15.3	6.5	10.4	13.8	15.3	15.8	2.6	15.8	17.3	19.1	21.2	17.3	7.6	20.1	36.0	25.1	13.8	19.7	16.3	11.3	8.4	8.4	10.4	14.9
26	12.3	13.3	14.3	10.4	10.4	11.3	10.4	8.5	11.4	14.3	17.2	24.6	25.0	29.5	34.0	27.2	19.7	17.4	26.1	20.3	10.9	12.4	11.3	7.5	16.6
27	10.9	13.4	11.5	13.8	12.3	12.7	12.4	15.3	13.4	15.3	21.2	19.2	19.3	19.7	24.1	27.1	29.0	26.1	27.2	22.3	12.9	12.9	9.3	11.2	17.2
28 Q	10.4	10.4	11.4	17.3	12.9	12.4	13.4	13.4	22.2	27.1	21.1	18.2	17.3	18.2	20.7	21.3	24.6	17.2	16.8	13.4	13.8	13.4	12.9	8.9	16.2
29 Q	10.4	12.6	11.5	12.5	11.9	12.9	8.9	15.3	14.8	15.2	15.3	16.3	16.8	18.3	21.1	23.1	24.1	22.1	19.7	19.1	14.3	12.9	10.4	9.4	15.4
30	9.4	10.5	10.9	12.4	12.4	12.9	13.4	13.4	48.6	41.7	20.2	24.1	18.2	33.4	50.2	28.8	34.0	13.6	10.4	14.4	8.4	7.5	12.5	11.4	19.7
31	11.4	14.7	11.9	4.2	8.4	7.5	13.4	9.4	13.4	18.4	14.3	24.0	23.2	23.2	24.1	30.0	29.0	29.0	19.2	13.3	10.9	7.5	7.5	7.0	15.6
Mean	10.5	11.5	11.9	12.0	11.8	12.1	12.7	10.8	16.5	19.0	20.7	21.3	21.1	20.6	24.6	25.4	24.4	21.9	16.7	15.2	13.2	12.5	10.9	10.3	16.2

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 9 Meanook $Z = 58,000\ \gamma +$ March 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	861	861	850	843	840	840	844	844	844	843	839	833	812	802	824	833	833	841	844	848	854	855	862	869	842
2 Q	861	844	843	837	839	855	854	811	838	817	786	775	833	843	843	843	843	843	844	844	844	850	850	854	837
3	844	843	838	837	839	844	843	835	800	694	704	705	785	843	843	840	824	823	839	835	865	909	887	909	826
4	899	888	868	933	909	791	792	818	824	807	736	855	867	727	748	792	797	824	845	851	867	878	877	868	836
5 D	889	888	900	911	927	921	872	731	829	975	802	814	852	878	868	855	851	844	856	857	880	888	900	901	870
6	888	927	927	909	948	818	641	726	836	867	825	747	695	760	802	840	866	857	855	879	900	911	890	889	842
7	878	872	889	911	803	912	889	804	785	781	845	825	765	760	792	835	835	856	856	863	878	880	880	878	845
8	899	938	895	868	933	806	802	852	597	771	743	726	819	841	863	869	858	858	856	859	863	877	883	879	840
9	899	938	902	879	891	830	814	867	841	776	684	802	835	846	819	814	830	841	858	863	873	873	863	863	846
10	868	878	879	889	901	873	878	868	841	769	706	673	769	776	814	814	825	825	841	857	873	863	858	873	834
11	900	892	859	848	857	847	847	847	847	847	836	814	692	707	772	803	750	762	816	848	890	892	913	935	834
12 D	944	781	632	619	555	758	755	766	869	917	831	781	766	712	815	869	859	858	881	900	911	918	900	894	813
13 D	902	896	945	912	859	750	859	803	696	1064	864	879	966	810	788	944	772	782	869	891	869	869	869	874	864
14	890	880	879	868	869	869	869	858	858	847	830	820	774	826	826	847	820	820	831	836	840	847	851	853	846
15	849	852	858	865	880	847	858	827	664	708	751	762	751	740	804	773	762	832	848	857	870	880	882	884	817
16 Q	893	919	946	919	924	903	892	870	854	865	865	859	859	859	860	870	865	859	848	847	854	871	871	882	877
17	886	886	869	859	854	880	848	848	848	675	805	816	805	767	718	763	837	844	854	903	903	875	865	865	836
18	864	875	881	903	892	903	794	741	849	865	912	837	827	783	771	783	804	817	847	871	946	924	882	865	852
19 D	892	909	926	855	947	920	714	838	872	866	838	774	763	622	600	699	736	784	840	855	894	931	946	957	832
20 D	909	928	925	914	925	915	894	852	790	809	742	753	801	806	752	817	828	849	859	859	872	936	931	914	858
21	914	925	925	925	817	882	904	806	654	743	720	829	848	838	795	794	795	828	849	870	870	872	924	935	844
22	968	849	860	893	913	907	871	870	860	850	850	848	850	844	838	861	871	872	871	900	866	882	904	930	876
23	914	905	915	909	927	937	932	895	830	823	827	785	785	764	732	795	830	839	849	872	905	915	905	899	862
24	899	931	931	903	899	888	914	839	753	720	791	823	807	845	829	807	814	986	883	882	916	948	942	947	871
25	947	948	969	943	906	921	905	906	894	851	807	764	715	666	591	802	770	830	849	851	850	850	856	867	844
26	883	915	915	884	882	894	872	867	807	764	747	753	737	775	758	699	710	769	829	850	862	894	905	905	828
27	948	894	883	872	872	872	871	850	807	839	813	845	861	856	865	861	851	840	845	841	856	872	895	883	862
28 Q	862	861	895	906	873	862	840	850	792	748	803	830	846	851	851	850	846	840	842	846	846	857	878	862	847
29 Q	906	916	885	885	885	829	814	840	842	818	819	831	840	846	840	840	840	851	851	846	840	851	857	846	851
30	846	851	846	851	850	850	852	840	678	742	829	781	689	716	678	689	786	840	862	874	895	906	938	885	816
31	894	884	884	916	895	900	895	906	884	868	878	846	849	873	868	850	850	857	852	862	878	874	885	911	877
Mean	893	889	885	880	875	865	846	835	806	817	801	800	802	793	792	818	818	838	851	862	875	885	889	890	846

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 10 Meanook H = 12,000 γ + April 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1033	1007	1057	1065	1065	1040	958	914	930	917	917	916	932	915	881	872	908	927	903	921	970	966	985	994	958
2 D	1013	955	970	994	1131	997	986	688	892	676	680	852	931	977	967	939	950	931	915	916	938	939	950	911	921
3	1025	1004	1033	1039	1087	1080	938	979	939	916	927	856	899	939	950	938	938	923	911	923	950	964	978	954	962
4 D	949	970	985	958	978	1005	970	955	840	777	836	903	848	715	750	819	848	823	805	899	911	969	1135	1158	909
5	1111	1131	1231	1236	1095	1052	711	754	872	758	590	573								937	947	954	1005	1008	
6	1055	1118	1009	971	995	1058	1035	975	951	947	745	944	965	964	933	853	845	869	869	904	908	920	986	1130	956
7	1042	971	994	1079	1020	1041	1007	1021	883	876	721	870	915	885	901	916	911	919	933	948	915	923	964	975	943
8	923	954	1010	986	957	947	950	955	947	926	944	947	946	947	932	912	897	908	916	921	944	980	979	963	945
9	971	955	1000	1002	1015	991	963	963	959	955	955	963	956	948	944	940	920	900	900	921	939	962	935	914	953
10 Q	924	919	932	940	948	955	959	963	970	971	970	969	964	964	959	951	940	928	933	924	932	944	939	936	947
11 Q	967	962	971	971	977	971	975	975	980	967	971	967	965	966	959	957	955	947	944	936	940	947	933	963	961
12 Q	959	963	963	967	965	971	978	979	980	979	982	983	980	987	987	970	955	955	962	971	962	972	957	954	970
13 Q	955	962	967	964	967	972	978	977	975	979	980	983	980	973	968	962	951	948	940	944	948	954	964	970	965
14	971	961	964	964	979	987	987	973	984	978	871	915	956	940	909	947	943	943	915	893	937	948	955	1042	953
15	1105	1027	1069	1198	955	979	964	650	697	829	956	928	814	885	928	936	932	920	908	914	920	979	991	1058	939
16 D	1128	1061	1108	1038	1013	1073	937	689	963	818	627	485	475	787	883	966	939	884	922	940	1000	998	991	1140	911
17 D	1210	1351	1393	1323	1166	1057	963	790	756	815	830	719	810	796	865	627	853	862	891	1008	993	1029	1154	1154	976
18 D	1099	1099	1327	1329	1038	974	801	749	693	690	557	456	534	647	875	896	921	903	942	967	1004	1008	1039	1093	902
19	1005	1053	969	974	993	969	915	937	923	540	763	890	920	911	880	867	881	928	922	939	983	998	1030	1050	927
20	961	953	973	988	991	1009	795	810	929	962	970	962	900	849	875	920	910	891	911	938	961	1024	951	959	933
21	970	1019	993	993	991	997	1018	956	922	896	947	947	955	960	947	976	891	914	911	923	941	979	1087	1048	966
22 Q	944	940	945	962	980	980	969	962	929	779	856	940	975	975	964	959	936	923	918	926	940	942	944	958	939
23	966	967	959	959	959	963	969	970	969	971	975	951	906	911	923	905	870	886	902	909	925	955	986	1027	945
24	1038	1017	1041	1173	1162	1120	1017	859	919	908	893	863	862	893	915	917	881	893	917	927	930	948	944	963	958
25	982	998	1051	1100	1065	1010	984	976	955	922	869	931	948	963	974	971	955	940	940	936	935	933	936	943	967
26	955	960	963	967	969	969	974	975	976	973	971	972	975	979	978	956	925	947	929	971	947	947	939	953	961
27	951	947	955	963	964	967	972	990	972	979	979	977	971	956	959	954	937	923	922	926	930	991	1020	995	963
28	1025	1025	1100	1181	1079	1113	1069	1006	834	767	835	855	741	717	802	804	853	912	880	923	967	1008	1102	1134	947
29	1102	1085	1240	1213	1094	802	715	887	861	826	864	606	497	806	914	937	840	849	919	947	980	1006	1060	998	918
30	980	1078	1096	1006	1022	928	777	904	767	853	859	865	779	826	923	903	849	851	914	916	927	1031	1163	1096	930
31																									
Mean	1007	1010	1036	1044	1018	997	949	911	907	876	871	876	872	896	919	913	908	909	914	932	947	971	1000	1015	946

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 11 Meanook $D = 24^\circ E + \ldots'$ April 1958

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		6.5	7.5	8.4	4.5	7.5	5.5	10.4	11.5	17.3	15.8	15.3	14.4	15.4	19.7	19.2	15.3	16.2	13.4	16.3	13.4	9.4	3.3	3.6	3.6	11.4
2	D	2.6	2.6	4.5	6.5	2.7	6.5	-3.3	10.4	13.4	5.5	43.6	31.1	24.6	22.4	22.0	28.9	25.0	21.3	17.8	11.9	10.4	9.4	8.0	7.5	14.0
3		4.5	7.5	10.9	7.5	7.5	14.3	9.3	16.3	15.2	17.3	17.4	14.2	15.8	19.3	21.2	22.3	20.2	18.2	17.3	16.4	14.2	9.4	12.4	10.4	14.1
4	D	10.5	12.5	17.3	13.4	12.3	12.3	10.9	15.2	13.3	21.2	20.5	26.1	25.2	26.0	23.2	30.0	31.0	32.0	17.2	7.0	0.6	3.6	7.4	9.4	16.6
5		6.4	10.3	13.4	-7.3	7.6	12.4	7.6	7.0	19.2	24.1	2.6	-10.1								15.3	13.8	11.4	9.4	8.4	
6		5.0	9.4	6.5	10.4	10.4	9.5	10.4	9.4	8.4	11.9	27.0	17.3	21.1	25.0	31.0	33.8	23.2	18.2	17.8	11.4	10.4	7.9	7.5	10.4	14.7
7		4.5	8.4	7.5	8.0	1.6	9.4	18.2	11.3	11.5	18.2	23.2	17.4	20.3	21.3	27.2	27.0	25.6	25.0	21.2	17.7	11.2	9.4	10.3	10.6	15.2
8		11.9	10.2	9.4	11.4	12.3	13.3	13.8	13.8	14.3	20.3	19.2	17.4	20.3	23.1	26.1	28.5	26.0	21.2	17.3	18.2	12.4	9.4	7.5	5.5	16.0
9		5.5	8.4	3.6	9.4	9.4	10.4	12.9	13.8	15.2	16.3	18.2	18.2	19.2	21.2	24.0	25.1	25.1	23.2	16.0	11.4	6.2	4.5	2.1	0.6	13.3
10	Q	3.6	9.4	12.4	13.4	13.4	13.4	13.4	14.6	15.3	17.8	16.2	16.3	18.2	21.2	23.7	25.1	23.6	22.1	16.3	12.9	10.4	8.4	6.6	7.5	14.8
11	Q	8.4	9.5	11.4	10.6	11.4	10.4	11.4	13.4	13.9	16.4	17.3	17.3	18.2	21.1	23.3	24.2	23.6	20.7	18.2	16.3	13.0	8.9	10.3	10.4	15.0
12	Q	11.4	11.4	12.4	12.4	12.4	12.3	12.3	13.2	15.2	16.3	16.8	17.3	18.3	21.2	24.6	25.6	24.2	21.3	17.2	14.3	9.3	10.3	9.9	11.9	15.5
13	Q	12.0	11.5	12.4	11.3	10.9	12.3	13.4	15.3	19.2	17.8	16.4	16.4	18.6	20.2	22.2	23.0	23.2	21.2	16.3	13.4	8.4	9.2	8.4	9.4	15.1
14		10.9	11.4	11.4	11.5	11.4	13.4	17.3	13.3	14.3	15.3	27.1	36.5	24.2	24.6	30.0	31.0	23.2	19.1	24.1	22.7	7,5	4.5	1.6	-2.8	16.8
15		1.1	7.5	1.6	-5.3	9.4	13.4	7.4	7.4	11.9	20.2	17.4	17.4	16.3	26.1	28.0	27.6	20.7	20.8	15.3	10.3	6.0	4.5	2.6	1.6	12.0
16	D	6.5	6.5	3.6	5.5	10.4	1.7	18.2	6.0	12.4	20.2	13.4	52.6	37.8	36.8	24.7	28.6	26.1	20.3	10.0	9.7	9.4	5.6	3.6	4.5	15.6
17	D	5.5	15.3	13.4	3.0	7.5	-0.3	5.0	16.1	27.7	18.2	20.2	13.4	18.2	24.1	26.2	29.5	7.2	12.3	12.2	8.3	6.0	6.1	6.1	6.4	12.8
18	D	4.3	6.2	6.4	2.1	5.0	8.7	11.2	11.5	7.2	11.0	8.2	25.4	12.0	16.8	17.6	17.6	15.0	13.4	17.3	18.0	13.4	12.3	7.4	11.7	11.7
19		6.0	9.2	11.9	7.8	12.2	12.2	12.4	10.3	12.4	-15.6	2.6	20.2	21.1	22.2	27.1	25.0	23.6	22.5	17.5	19.7	16.1	9.9	5.5	8.3	13.3
20		8.0	7.5	9.9	19.9	23.6	10.4	-0.9	-5.1	14.2	14.1	14.4	14.1	11.7	17.8	21.9	25.7	24.0	23.4	18.8	19.6	17.1	17.1	17.2	16.8	15.0
21		17.7	17.6	17.7	19.2	19.2	18.2	20.9	19.5	19.5	19.8	18.8	21.2	22.4	23.1	24.4	25.0	24.1	23.8	14.4	6.5	3.8	5.2	5.0	5.0	17.2
22	Q	8.1	10.4	10.6	11.9	16.0	20.1	15.0	13.3	13.8	8.9	20.4	19.2	19.5	22.3	24.8	24.6	23.2	19.2	13.8	6.8	5.5	4.0	4.5	6.5	14.3
23		8.7	9.9	11.3	12.5	12.5	13.3	13.3	13.9	14.4	15.2	15.3	12.4	21.3	27.7	30.1	27.0	25.0	22.2	6.0	5.7	2.9	2.1	4.1	4.6	13.8
24		6.4	7.0	2.7	2.1	12.2	5.5	3.6	13.7	22.1	17.1	15.8	17.2	17.3	23.6	24.1	23.0	20.2	10.4	9.3	6.0	1.7	2.5	-0.5	0.6	11.0
25		1.6	3.6	5.5	9.0	9.9	13.3	14.3	13.4	14.8	17.2	16.8	18.7	21.3	25.0	24.1	25.2	25.1	21.2	16.3	12.4	8.4	7.5	7.5	7.5	13.8
26		7.5	9.3	10.4	11.5	12.3	12.5	13.4	14.4	14.4	15.2	14.4	16.3	18.6	23.2	24.1	25.4	25.2	20.2	14.3	12.4	4.6	6.0	5.6	8.4	14.2
27		9.3	12.4	13.3	12.4	12.5	12.4	19.2	15.2	16.2	17.2	16.4	16.5	17.3	19.1	24.1	29.1	29.0	29.5	20.7	17.8	4.2	5.5	4.5	2.9	15.7
28		0.0	4.7	6.0	10.1	12.2	13.2	9.3	6.0	4.5	15.1	18.2	19.7	24.8	43.4	37.8	36.4	24.2	21.2	14.5	6.0	7.2	10.9	11.2	13.4	15.4
29		6.3	8.4	-0.9	9.4	6.0	-11.2	-0.2	13.1	17.8	22.7	23.6	39.8	44.4	25.6	21.3	21.5	24.1	17.8	8.5	8.7	12.3	10.1	7.3	6.5	14.8
30		2.6	0.5	17.8	12.3	10.9	10.4	7.8	13.8	4.0	12.4	15.6	18.0	17.8	24.3	27.8	31.5	28.7	19.9	15.8	13.3	6.0	13.2	13.2	7.5	14.4
31																										
Mean		6.8	8.8	9.3	9.4	10.9	10.2	11.0	12.4	14.3	15.1	18.3	20.8	20.2	23.7	25.0	26.3	23.3	20.5	15.7	12.7	8.6	7.6	6.9	7.3	14.3

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 12 Meanook $Z = 58,000\ \gamma +$ April 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	928	907	934	934	934	884	825	820	831	841	820	820	825	819	820	798	841	863	874	897	961	934	916	928	873
2 D	908	896	885	907	908	901	875	691	858	939	787	777	798	862	863	852	874	875	864	862	874	889	907	908	865
3	928	901	939	940	955	855	787	852	851	820	825	798	809	853	873	873	863	873	874	874	890	908	918	896	873
4 D	884	896	896	896	885	869	896	820	841	789	733	778	775	787	760	722	768	808	831	885	889	916	949	950	843
5	950	940	836	897	928	841	701	663	739	766	786	853								907	929	929	928	928	
6	951	950	929	914	929	909	887	870	767	820	777	821	854	864	853	823	799	810	832	843	865	875	897	951	866
7	900	903	919	918	820	887	853	831	832	864	767	820	831	829	829	832	827	851	880	901	887	887	903	913	862
8	886	875	908	897	875	864	853	853	853	821	842	842	853	854	843	833	832	833	842	842	864	908	913	896	862
9	886	887	906	927	897	897	864	863	859	853	842	840	842	842	837	832	832	837	842	848	863	880	887	879	864
10 Q	864	853	842	842	842	842	842	844	842	833	842	842	842	844	844	847	852	853	852	853	863	875	875	863	850
11 Q	854	854	865	865	854	846	843	843	843	833	833	843	843	843	843	854	854	845	843	843	843	836	843	843	846
12 Q	843	843	843	843	843	843	843	845	838	822	833	843	843	845	843	843	843	838	833	854	854	855	860	854	844
13 Q	843	841	843	843	840	845	843	843	843	849	838	833	833	833	833	838	843	843	838	843	843	843	853	854	842
14	854	845	838	843	853	876	855	847	843	821	704	714	800	791	747	789	795	811	827	834	865	887	887	907	826
15	936	909	941	789	864	866	810	573	638	751	823	833	752	768	811	827	843	854	865	876	887	909	903	919	831
16 D	920	920	942	942	919	932	834	682	846	801	704	664	617	833	855	855	861	839	855	888	930	910	919	964	851
17 D	942	920	930	877	705	742	877	877	660	780	834	833	822	769	785	746	818	835	964	1029	999	948	1038	984	863
18 D	978	1020	954	646	575	775	692	835	751	889	697	889	930	629	745	799	910	925	904	926	950	953	952	911	843
19	887	919	893	889	870	858	734	834	826	682	683	785	834	832	828	797	807	840	858	887	937	943	934	930	845
20	887	877	893	889	870	877	783	766	818	847	855	842	799	785	789	821	838	850	856	886	910	952	976	856	855
21	854	848	863	895	890	863	878	797	657	647	773	768	817	833	824	791	791	791	845	851	859	883	944	918	828
22 Q	875	854	853	855	869	873	851	845	827	756	721	810	851	860	855	853	851	851	855	856	857	862	856	851	844
23	851	851	849	845	845	845	845	845	846	847	847	825	770	782	791	791	791	787	797	819	845	877	927	948	836
24	931	909	932	990	878	845	831	758	784	823	819	779	737	775	796	808	819	828	845	855	864	883	889	890	844
25	883	888	922	952	948	899	877	871	845	813	770	789	813	829	835	845	845	836	836	835	838	840	840	845	854
26	845	845	840	840	840	840	843	843	843	843	843	845	845	840	836	835	829	823	829	845	862	878	890	856	845
27	848	848	848	848	846	846	853	809	811	831	846	846	846	836	830	826	815	824	832	837	865	919	926	901	847
28	922	939	969	876	928	904	884	865	760	774	846	846	771	722	727	765	821	872	898	915	939	924	960	953	866
29	976	949	962	945	820	863	858	891	842	800	765	668	803	825	839	843	826	841	862	858	897	930	942	904	863
30	895	938	904	882	920	800	706	800	804	763	806	804	774	782	817	824	830	846	879	897	901	923	952	917	848
31																									
Mean	895	893	898	880	862	860	835	818	809	812	796	807	811	813	819	819	832	841	856	870	886	897	912	903	851

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 13 Meanook H = 12,000 γ + May 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1065	1069	1035	1021	1021	969	951	937	817	840	864	904	931	947	919	925	885	908	914	959	954	988	1045	1028	954
2	972	1008	1022	1044	1027	917	921	843	808	890	950	958	958	954	945	926	911	897	898	913	958	968	968	968	943
3	954	968	954	961	958	957	958	960	962	968	958	946	971	981	974	961	942	921	915	921	943	919	951	975	953
4	996	951	955	985	992	998	981	867	857	942	948	946	953	973	975	963	961	951	935	937	951	965	967	1005	956
5	970	992	1012	998	955	962	969	951	969	969	972	973	974	969	959	954	921	911	905	906	925	977	1056	1034	966
6	1022	1021	1034	987	987	1006	984	969	959	951	959	953	951	954	941	937	920	908	912	920	940	956	971	969	963
7 Q	965	955	961	975	973	980	978	977	975	980	983	993	983	981	973	969	950	929	925	927	942	961	966	956	965
8	965	978	984	977	983	980	977	978	944	940	988	985	987	992	967	958	953	947	940	937	957	996	982	941	968
9	967	958	962	967	975	987	992	1016	974	965	975	984	986	985	984	981	961	939	925	937	952	964	966	983	970
10	1017	1002	945	967	975	975	933	846	924	854	661	776	827	970	983	927	951	922	924	925	969	961	1037	962	926
11	964	964	963	963	963	969	978	937	755	614	783	920	970	987	973	965	966	932	936	940	947	955	953	963	928
12	963	964	962	963	970	972	979	987	956	967	973	963	873	937	971	967	940	912	908	939	944	972	1053	1119	965
13 D	1108	931	925	947	967	1001	1010	979	940	914	740	673	669	701	870	822	885	868	884	891	956	979	1140	1143	914
14 D	1457	1362	889	853	1093	1049	799	661	846	837	676	834	935	690	732	853	868	919	921	939	1006	1018	963	1069	928
15	1206	1103	1116	1034	1022	701	908	893	955	955	964	929	854	744	815	907	943	912	951	988	970	988	1011	1038	954
16	1105	1112	1048	1050	974	963	963	949	879	885	941	960	964	922	874	847	840	908	931	940	960	934	956	976	953
17	956	973	1023	1026	988	971	976	976	954	899	926	929	915	792	785	862	896	887	886	909	917	979	1003	1108	939
18	1061	1171	1121	1073	1003	963	987	886	839	822	704	928	967	965	939	931	912	913	924	928	944	968	989	1022	957
19	980	959	970	983	994	962	1011	889	818	909	953	951	962	955	979	973	955	933	917	924	936	964	936	967	949
20 Q	1011	1003	984	969	960	960	964	968	964	956	952	968	965	969	964	949	934	930	911	921	949	960	986	1021	963
21	1032	1036	1018	1024	999	964	956	960	974	977	973	973	984	989	980	964	957	948	938	937	937	949	957	966	975
22 Q	974	985	988	980	976	973	976	976	979	980	980	980	980	980	968	963	949	953	945	943	949	957	976	996	971
23 Q	1009	991	986	988	984	978	978	978	978	982	984	978	978	975	986	966	944	930	929	942	952	959	953	968	971
24 Q	977	980	981	979	976	984	983	984	989	988	987	982	980	996	1001	989	968	952	954	958	954	958	966	972	977
25	983	988	978	979	984	984	988	984	987	988	996	999	1007	1013	1006	989	973	933	916	936	945	1003	1032	1043	985
26 D	1012	963	1003	980	1078	1026	1034	996	963	788	772	645	478	647	458	767	843	968	1012	1009	996	1006	1003	1028	895
27	1032	1015	988	957	965	1003	957	956	968	956	934	623	737	963	959	958	921	903	900	894	973	1010	1039	1199	950
28	1195	1097	1117	1082	1015	948	901	858	902	894	913	937	870	894	922	898	913	920	908	930	974	962	980	1007	960
29 D	1144	1285	1127	1159	1016	1064	996	941	738	556	720	623	451	498	723	932	932	965	926	968	968	979	976	988	903
30	992	988	1043	996	1065	1028	1012	1021	933	880	945	937	921	887	874	906	946	953	957	968	971	980	1031	1062	971
31 D	1026	1040	1054	1125	1005	1011	1050	1004	962	930	833	749	764	813	969	980	973	821	709	690	1051	1297	1440	1484	991
Mean	1035	1026	1005	1000	995	974	969	940	918	902	900	900	895	904	915	932	929	922	918	928	958	982	1008	1031	954

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 14 Meanook — D = 24° E + ... ′ — May 1958

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	4.7	6.0	4.2	11.2	12.1	15.8	11.9	10.4	6.0	12.1	13.2	15.6	21.7	25.2	27.0	26.0	21.0	17.0	17.5	15.3	10.1	9.5	10.9	8.9	14.4
2	7.6	7.2	8.9	7.6	7.5	10.3	18.0	9.6	2.7	10.1	10.7	15.0	18.7	20.0	21.3	22.0	19.3	12.9	9.5	5.5	4.7	2.5	4.5	6.0	10.9
3	9.3	9.0	10.9	14.9	19.9	12.9	12.4	12.4	12.4	12.0	10.9	16.3	22.5	25.1	25.6	25.0	24.9	23.2	14.1	10.4	9.2	3.3	3.6	3.7	14.3
4	7.2	8.4	10.5	11.1	10.7	10.9	11.7	4.0	22.2	18.7	16.4	17.8	20.8	23.6	25.3	26.7	26.1	23.8	18.0	13.2	10.9	9.0	5.0	6.5	14.9
5	8.1	6.5	8.0	13.2	16.0	15.1	15.3	20.0	19.7	16.3	16.2	16.9	20.0	22.9	26.9	27.6	30.3	29.0	17.5	7.8	3.5	7.3	7.3	6.0	15.7
6	7.3	6.5	8.6	12.0	10.2	9.5	10.1	9.3	12.7	11.9	13.1	14.4	17.9	21.7	23.4	22.3	23.8	18.7	10.9	6.0	3.6	1.1	2.7	4.0	11.8
7 Q	5.5	8.6	9.9	10.4	11.2	10.9	10.9	11.5	10.9	13.8	15.1	18.2	21.0	20.9	23.6	23.6	21.0	16.6	11.6	7.8	6.0	2.9	4.0	7.4	12.6
8	7.3	8.0	9.8	11.6	11.9	10.3	12.4	13.3	17.8	18.9	18.2	18.0	23.2	24.9	28.0	26.1	25.6	18.7	12.9	9.3	7.4	8.0	7.3	6.5	14.8
9	7.2	8.5	9.5	9.7	10.1	11.5	12.5	14.1	15.8	16.0	15.9	15.8	19.0	24.0	24.2	23.8	21.1	18.5	14.3	6.5	2.7	2.6	3.6	7.5	13.2
10	11.4	11.9	14.7	13.8	15.2	21.2	16.3	20.3	23.0	10.3	11.9	29.9	32.5	23.2	25.4	30.0	26.1	25.6	19.4	10.9	5.5	4.5	7.5	9.4	17.5
11	10.4	12.4	12.5	13.3	13.3	14.2	14.3	25.1	19.2	25.1	20.1	16.3	19.0	24.0	26.0	28.0	25.1	22.2	14.3	8.4	1.8	2.6	3.6	6.8	15.8
12	9.4	10.9	12.3	12.3	12.3	11.0	11.5	14.2	16.2	18.2	18.2	17.4	14.3	23.1	27.6	27.1	25.6	18.2	11.4	15.2	4.6	1.6	5.5	9.4	14.4
13 D	7.5	8.0	7.5	9.2	10.3	11.8	17.3	17.2	14.3	16.3	11.3	24.1	29.0	30.1	31.9	32.1	19.3	9.5	10.4	-1.4	-5.8	-2.3	4.4	2.1	13.1
14 D	8.3	-4.4	5.5	9.5	7.5	8.0	-16.9	-1.2	12.4	8.0	-3.3	9.4	18.3	28.0	27.6	25.7	24.1	19.1	14.4	12.9	8.4	5.5	6.3	4.5	9.9
15	5.5	7,0	12.3	15.3	1.1	8.4	1.5	8.5	11.3	7.5	10.3	11.3	16.3	19.2	25.1	32.0	28.8	28.0	26.2	15.2	9.0	9.3	13.3	13.8	14.0
16	9.9	9.3	9.6	16.2	11.4	11.3	11.9	10.4	7.0	4.5	6.7	10.9	15.3	18.7	23.5	23.1	19.2	17.3	9.4	4.5	4.6	1.6	4.4	8.4	11.2
17	11.4	13.4	18.2	19.0	18.7	14.2	13.4	14.3	10.9	3.9	9.4	11.3	16.3	21.3	17.3	19.2	22.2	17.2	13.4	3.5	-0.4	0.5	-0.5	2.6	12.1
18	5.5	9.4	6.5	12.7	5.5	8.9	10.4	6.6	-1.8	5.5	18.2	13.3	16.3	21.1	25.6	27.6	30.0	23.6	13.3	5.0	4.6	4.5	8.0	8.9	12.2
19	10.4	12.0	13.3	13.3	25.1	18.3	17.8	12.3	13.3	9.3	10.9	14.6	19.2	23.2	28.0	32.5	31.4	26.5	19.2	11.4	7.0	4.5	4.5	6.0	16.0
20 Q	9.3	11.3	12.5	14.2	14.2	12.4	12.4	12.4	10.9	13.4	14.2	16.2	20.2	24.5	27.5	28.0	26.2	21.7	12.4	5.0	2.6	2.7	2.6	2.1	13.7
21	1.6	1.7	5.5	8.4	11.3	10.3	10.9	10.3	12.4	11.3	13.4	15.6	19.8	23.6	23.6	25.0	22.2	18.2	10.5	6.8	2.1	3.3	3.7	6.0	11.6
22 Q	8.4	10.5	11.4	13.2	13.3	12.4	12.4	12.4	13.3	13.3	15.2	16.4	20.1	26.1	29.0	29.0	29.5	24.6	16.8	13.4	8.9	6.0	5.4	4.5	15.2
23 Q	6.6	6.9	8.1	8.3	10.1	7,8	8.2	8.4	8.4	8.3	8.7	9.7	11.1	13.8	15.3	15.5	15.2	12.3	16.3	15.2	8.7	5.6	4.0	4.5	9.9
24 Q	7.0	9.3	11.0	11.9	11.5	12.3	11.5	11.8	11.9	10.4	10.8	11.9	17.1	24.6	29.9	29.3	27.7	22.1	14.4	9.3	5.1	3.6	3.7	5.6	13.4
25	7.8	9.8	11.8	11.9	11.4	11.9	11.4	12.3	12.3	12.3	13.0	16.3	21.3	25.6	29.0	31.9	30.9	31.0	21.2	11.4	5.0	3.6	-0.9	0.0	14.6
26 D	4.5	2.1	2.6	7.5	8.4	8.4	8.4	8.0	8.0	25.0	9.3	17.3	27.6	24.3	31.6	35.3	25.6	12.2	15.3	9.9	6.4	10.5	7.3	7.1	13.4
27	10.2	9.3	9.5	8.3	10.5	11.9	10.9	8.4	9.2	10.4	5.8	14.6	27.6	27.6	28.0	23.2	29.4	21.0	17.6	4.0	3.6	4.0	11.2	8.0	13.5
28	9.9	3.9	3.6	7.5	15.2	4.5	5.5	12.9	12.9	7.5	7.0	10.5	14.4	22.3	30.3	30.4	24.2	21.1	16.5	10.7	8.0	5.3	7.0	7.2	12.5
29 D	5.4	20.7	5.4	12.0	6.0	5,0	-9.1	-2.1	3.7	-2.8	14.8	21.7	34.8	49.6	46.2	39.3	31.5	27.6	20.4	2.3	7.0	12.2	12.0	14.4	15.7
30	14.6	11.9	10.9	10.9	11.1	13.2	10.1	11.5	11.0	18.9	19.3	21.4	26.1	28.0	25.8	27.6	29.3	25.2	20.1	15.2	11.4	10.6	9.5	9.9	16.8
31 D	8.1	5.8	9.2	5.4	15.2	10.6	3.6	6.8	7.4	11.9	9.5	14.3	22.2	27.0	31.2	27.8	28.7	41,5	45,6	20.2	25.6	30.9	11.9	11.9	18.0
Mean	8.0	8.4	9.5	11.5	11.9	11.5	10.0	11.1	11.9	12.2	12.4	15.9	20.8	24.4	27.1	27.2	25.3	21.4	16.3	9.4	6.2	5.7	5.9	6.8	13.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 15 Meanook $Z = 58,000\ \gamma +$ May 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	930	929	945	936	899	885	869	844	745	685	764	791	826	857	855	857	858	865	882	907	905	899	930	894	865
2	878	903	916	951	894	833	821	830	772	796	829	853	861	865	864	862	851	846	853	868	901	891	885	874	862
3	855	862	857	858	855	845	844	844	849	847	839	807	829	847	845	849	847	847	853	853	864	862	873	881	850
4	908	807	857	864	883	893	873	858	806	804	816	807	828	850	856	854	854	854	850	842	847	865	896	932	857
5	907	902	924	934	875	854	853	810	837	847	847	851	851	851	842	840	831	827	826	836	840	871	940	923	863
6	930	952	949	902	879	874	865	859	836	830	830	837	843	846	841	840	838	838	837	839	844	854	865	864	862
7 Q	860	860	859	854	850	848	848	848	845	846	843	839	838	837	838	837	836	836	840	841	843	863	871	871	848
8	848	839	841	843	848	854	849	839	789	767	836	845	848	843	820	816	826	827	824	830	843	862	886	891	838
9	865	843	840	837	846	858	854	860	843	840	840	846	843	841	843	837	834	833	838	840	854	859	870	886	848
10	903	904	890	870	866	869	806	784	805	837	778	719	719	827	848	816	826	838	838	854	881	859	903	903	839
11	871	851	844	844	843	844	840	804	709	807	829	839	859	860	849	849	851	849	849	860	863	860	855	849	841
12	839	833	833	839	839	847	849	833	779	786	806	817	773	816	818	817	823	817	816	839	860	897	909	948	835
13 D	936	882	858	847	849	878	860	880	720	730	783	764	618	774	805	729	785	817	844	855	867	904	1001	933	830
14 D	903	859	915	775	909	860	849	806	816	870	782	774	849	757	804	828	840	871	870	892	915	904	884	924	852
15	916	904	903	904	849	818	827	828	827	840	860	849	817	739	773	837	855	871	898	926	871	871	892	913	858
16	906	916	905	893	872	872	877	852	749	699	775	834	850	834	802	780	802	834	834	840	845	844	857	861	839
17	865	872	899	898	845	861	861	850	834	813	830	829	819	753	699	711	778	807	845	868	876	883	883	921	838
18	899	937	925	914	841	850	871	807	753	763	807	796	841	841	838	833	850	872	856	856	866	882	893	894	854
19	870	850	856	872	893	852	829	818	796	802	824	841	856	850	855	862	860	852	856	860	867	871	861	861	851
20 Q	883	878	871	861	850	840	834	834	819	813	796	829	832	839	839	840	829	828	824	829	840	845	852	861	840
21	873	895	910	906	884	862	836	829	829	835	841	842	846	846	846	845	842	841	835	835	835	846	846	846	852
22 Q	845	851	848	848	842	840	841	840	840	840	841	842	833	822	819	820	818	819	819	825	839	846	857	868	838
23 Q	888	898	907	877	841	814	812	811	804	820	820	820	820	835	841	841	841	833	827	838	836	844	844	844	840
24 Q	840	835	835	835	835	835	838	838	838	833	830	811	804	825	833	833	833	830	830	830	830	835	844	844	832
25	841	835	833	833	833	833	833	833	833	833	835	839	840	840	834	826	825	819	822	822	822	835	851	954	838
26 D	972	973	896	897	906	869	863	843	843	804	756	693	783	808	771	674	736	788	804	823	843	884	915	912	836
27	906	906	899	867	868	885	863	856	803	809	830	804	723	823	842	848	836	847	850	844	883	901	972	955	859
28	907	869	916	910	862	785	767	780	764	786	802	832	809	800	819	815	819	834	836	841	864	884	868	869	835
29 D	918	874	910	847	889	869	788	797	1064	1145	1029	1069	863	648	713	820	800	852	837	847	874	895	882	886	880
30	876	868	890	908	895	912	885	860	819	755	817	840	833	816	797	823	834	850	852	849	872	880	929	938	858
31 D	923	938	935	852	901	906	873	861	852	800	805	814	765	731	809	858	858	836	874	918	1002	859	873	680	855
Mean	889	881	886	873	866	856	844	833	813	816	823	825	817	817	821	822	830	838	843	852	864	870	887	886	848

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 16 Meanook — H = 12,000 γ + — June 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1290	1303	850	1050	918	931	918	992	615	902	962	979	971	954	929	946	913	854	847	898	1014	1028	1043	1090	967
2	971	1058	1064	1012	1031	1126	770	432	953	947	889	746	629	591	567	748	794	889	920	944	947	956	953	957	871
3 Q	958	959	956	960	956	960	971	973	984	988	983	947	935	973	998	992	944	955	952	969	963	956	959	967	965
4 Q	971	977	971	995	983	976	983	982	995	989	987	987	987	992	987	982	956	960	937	937	944	954	960	964	973
5	973	969	973	972	983	986	983	975	973	976	984	984	994	1012	998	984	940	973	971	956	951	960	971	991	976
6	993	992	981	983	987	988	991	978	959	976	996	1012	1009	1004	996	986	973	938	937	948	965	1051	1180	1227	1002
7 D	1599	1502	1600	899	909	894	763	728	493	666	643	737	863	843	910	972	908	925	929	935	1004	1003	983	990	946
8	1003	981	967	968	951	966	974	980	979	976	976	957	968	977	987	992	985	964	933	930	921	957	1024	1074	975
9	1246	1062	1014	996	993	1032	770	793	905	852	807	806	691	646	903	916	952	948	950	969	975	1048	1184	1468	955
10	1506	1347	1341	1297	1011	1011	897	681	693	673	846	811	900	873	889	924	959	922	909	930	995	1057	1182	1109	990
11	1072	1094	1133	1110	983	959	936	945	992	866	878	825	947	952	961	935	910	923	924	912	967	974	953	935	962
12	956	963	982	1001	1034	986	1014	948	869	853	886	948	897	937	979	951	942	922	944	939	940	971	1021	1016	954
13	1028	986	982	985	1003	976	975	984	955	944	956	977	980	983	986	971	956	924	923	933	944	973	959	983	969
14	1007	992	975	959	967	975	984	983	980	976	977	958	971	978	977	967	955	935	928	948	946	952	1065	1158	980
15	1045	992	985	1046	1090	1148	1112	863	931	560	810	968	1005	992	958	956	926	904	941	941	960	960	960	966	959
16	1010	1014	976	976	972	984	871	864	943	843	721	875	889	807	926	956	956	932	932	951	941	952	957	983	926
17 Q	988	984	984	994	996	986	974	963	970	970	970	952	970	988	982	976	957	938	925	934	945	938	962	985	968
18 Q	993	984	984	981	980	981	981	979	978	978	978	987	999	996	984	968	963	948	929	937	952	952	954	987	973
19	993	988	989	993	1003	989	984	987	974	962	976	968	980	996	996	996	957	934	940	956	949	971	968	962	975
20 Q	971	1035	987	984	979	980	981	981	981	988	990	994	991	988	981	980	970	971	957	956	961	993	1007	965	982
21 D	1007	1076	1174	1286	1278	1194	1104	1058	952	899	767	588	666	917	808	836	915	952	1070	992	996	1217	1188	1223	1007
22	1243	1094	1232	1082	1074	1066	800	734	784	870	800	696	886	916	908	934	937	949	953	964	980	1066	1109	1078	965
23	1139	1090	1084	1036	984	877	938	917	917	941	964	957	916	929	941	941	941	918	934	948	973	968	985	963	967
24	1003	999	1023	1046	1046	995	988	662	925	926	885	854	792	807	769	886	951	965	954	960	957	988	1043	981	934
25	986	1012	1043	1067	1028	973	964	960	894	783	886	973	980	980	941	933	921	917	937	941	961	965	1005	996	960
26	1003	1009	1011	986	987	1036	996	968	968	959	962	963	963	957	948	976	965	937	954	945	942	960	984	971	973
27	996	968	965	970	981	996	980	960	920	960	956	965	958	964	980	976	978	972	963	968	968	984	988	996	971
28 D	956	957	1011	1090	1027	1023	1020	1009	1018	932	752	394	992	992	948	948	948	956	933	1011	1206	1589	1685	1457	1053
29 D	1391	1459	1567	1278	1120	624	618	784	784	647	582	247	247	59	269	342	908	674	871	952	1019	1003	1003	996	810
30	1004	992	989	1003	956	948	949	956	973	972	968	984	996	1003	996	996	995	980	984	973	976	965	966	949	978
31																									
Mean	1073	1061	1060	1034	1007	986	940	901	909	892	891	884	899	900	913	929	942	929	939	949	972	1010	1002	1046	963

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 17 Meanook D = 24° E + ... ′ June 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	22.3	13.1	12.1	3.4	9.4	-5.1	15.2	9.4	9.4	12.3	12.2	12.3	19.6	26.7	29.7	29.9	33.0	27.2	14.9	14.1	13.1	9.9	11.8	12.9	14.4
2	5.4	3.7	-1.3	-0.4	5.6	5.5	-3.2	-6.3	5.8	8.6	10.7	10.4	37.4	40.7	46.0	35.0	26.2	22.9	10.3	10.3	6.5	8.0	9.4	10.8	12.8
3 Q	12.9	13.8	13.9	12.4	13.9	12.8	13.8	14.4	15.8	15.2	13.4	10.4	11.7	26.6	28.0	26.0	26.0	16.3	15.6	10.3	8.1	6.6	8.0	10.3	14.8
4 Q	11.5	12.7	13.0	13.8	14.3	14.0	13.8	17.4	12.8	11.5	11.0	16.4	16.4	25.6	27.0	28.0	25.6	23.1	18.7	15.2	9.3	6.5	4.6	5.4	15.3
5	6.6	8.5	10.4	11.5	13.4	14.4	13.4	10.5	14.3	9.7	11.5	11.9	13.9	16.2	17.4	17.5	18.2	13.8	13.4	13.4	9.4	5.4	2.8	4.7	11.8
6	8.0	11.1	12.4	13.2	12.4	16.5	14.3	12.3	14.2	15.7	18.2	16.4	19.6	24.0	28.0	29.9	28.4	27.0	17.8	12.8	15.2	14.7	15.3	18.1	17.3
7 D	7.6	-6.7	-7.3	-25.4	1.1	-11.2	-4.2	-2.3	6.0	16.4	11.4	24.6	20.1	34.3	36.8	34.8	34.8	25.4	16.4	17.3	16.6	14.3	13.8	14.8	12.1
8	14.2	13.6	12.5	12.6	12.9	13.8	18.7	16.4	11.7	10.9	9.8	10.0	16.6	25.1	29.0	29.9	27.9	21.3	23.2	11.6	0.7	4.2	6.5	9.6	15.1
9	9.3	4.6	4.5	7.0	8.1	8.9	12.9	8.4	8.9	4.9	14.2	23.8	23.1	27.1	24.4	25.8	25.6	20.2	18.2	11.4	14.9	11.1	15.8	8.2	14.2
10	8.9	9.5	16.3	0.6	-8.3	3.6	5.4	-14.1	5.5	4.5	15.3	21.3	25.6	25.2	30.4	24.0	22.1	25.9	18.6	10.9	13.4	14.3	13.9	9.6	12.6
11	3.1	6.4	4.6	9.9	4.5	10.2	6.5	7.0	11.5	11.4	9.9	10.9	22.1	26.1	28.0	30.5	30.5	17.3	15.3	11.4	11.5	8.4	8.0	4.4	12.9
12	6.5	8.8	11.5	13.0	12.9	12.4	11.4	14.6	13.4	10.4	18.8	20.3	22.7	26.6	28.2	28.9	20.2	17.1	16.2	9.5	4.6	4.6	10.2	7.5	14.6
13	6.6	9.4	10.1	9.4	17.9	-5.2	12.9	12.5	12.5	14.2	15.2	16.8	21.0	23.2	25.6	27.0	28.5	29.4	14.1	13.8	8.4	9.4	4.5	4.6	14.2
14	7.6	9.8	11.5	12.7	10.3	8.6	7.5	10.2	10.3	11.3	12.3	13.4	20.7	22.6	22.2	25.0	24.0	18.3	20.3	18.2	0.7	-1.6	2.7	5.4	12.7
15	10.4	4.8	6.0	4.9	2.8	7.3	-5.2	-14.9	7.8	3.6	6.5	19.3	21.7	23.7	23.7	24.0	25.6	21.2	11.5	10.9	8.8	5.6	5.6	8.3	10.2
16	9.4	13.4	12.7	11.9	11.1	9.5	9.9	14.4	14.2	17.6	17.2	22.3	26.6	18.7	22.2	25.8	27.6	25.9	15.4	7.1	4.5	3.6	6.5	9.4	14.9
17 Q	10.8	13.2	13.8	12.5	15.9	11.1	12.3	12.4	12.3	10.5	10.5	10.4	19.0	24.1	25.6	25.7	25.5	23.1	17.2	13.4	10.3	4.5	2.1	3.6	14.2
18 Q	6.5	8.4	10.4	11.3	12.3	12.3	12.3	12.4	13.4	18.7	19.2	17.2	21.5	25.0	25.6	26.2	25.6	25.0	22.8	15.0	7.5	3.6	2.5	2.6	14.9
19	3.6	6.5	9.4	9.6	11.4	9.3	9.9	10.3	10.4	13.0	15.2	17.3	12.9	25.1	28.0	31.1	35.4	25.1	18.4	19.1	10.3	5.5	3.1	3.6	14.3
20 Q	4.4	3.6	8.6	8.0	8.4	9.6	11.3	13.3	13.3	13.8	14.8	15.3	18.4	22.2	24.0	24.4	23.2	19.2	13.8	9.5	6.5	2.8	2.6	3.6	12.3
21 D	2.1	0.0	1.1	1.5	2.1	4.2	6.5	2.1	-2.4	-0.4	-5.4	20.2	36.8	35.4	42.8	29.9	36.0	43.7	23.0	22.7	4.0	23.6	1.1	6.3	14.4
22	13.3	3.7	11.1	9.3	-14.6	3.3	7.0	11.3	13.6	13.6	12.9	7.3	21.2	24.6	23.6	28.9	30.5	25.8	20.7	21.3	12.9	10.7	10.9	11.9	14.0
23	7.9	11.3	12.8	9.1	17.0	4.2	15.7	13.8	13.4	8.7	12.9	15.3	21.7	24.8	28.5	28.2	26.7	26.5	15.8	8.7	8.3	6.9	12.1	9.4	14.9
24	8.0	9.7	8.7	9.3	9.5	5.5	8.4	3.7	13.2	13.6	15.9	16.8	17.4	32.0	20.9	23.6	26.6	27.6	26.4	23.2	15.8	10.8	11.9	10.5	15.4
25	8.4	8.5	8.7	15.3	10.2	11.9	11.3	10.9	12.9	12.4	20.2	19.7	20.5	24.4	24.4	24.1	25.4	22.9	19.6	11.5	13.8	4.7	6.3	7.0	14.8
26	7.0	9.9	8.8	11.2	9.3	12.6	8.2	10.4	12.3	11.8	14.3	16.8	22.7	24.6	27.2	29.6	29.1	29.1	19.2	17.7	11.3	8.9	8.9	8.0	15.4
27	7.0	9.7	9.1	11.1	13.4	11.5	13.8	14.3	13.3	13.7	15.8	19.7	24.6	27.4	27.7	28.5	24.3	22.7	18.7	16.6	13.8	9.7	6.0	3.6	15.7
28 D	3.1	7.8	6.3	9.7	10.9	12.3	10.5	8.2	15.6	11.9	18.5	34.4	24.7	28.0	28.2	30.2	31.0	34.2	43.7	47.9	62.4	73.2	39.3	41.2	26.4
29 D	10.9	-30.9	-28.1	-36.4	-39.7	4.0	-5.9	1.1	10.2	27.0	-1.1	-0.9	-1.3	-1.4	-0.9	39.3	36.8	43.2	27.0	19.7	14.8	13.4	14.8	14.8	5.4
30	16.4	18.7	18.3	16.8	18.3	13.8	13.4	12.9	10.7	9.6	10.9	13.8	19.1	19.7	25.6	27.0	26.2	26.0	18.7	12.7	11.9	10.3	10.3	9.4	16.3
31																									
Mean	8.7	7.2	7.2	7.0	7.6	8.1	9.3	8.2	11.2	11.9	12.7	16.1	20.6	24.9	26.6	28.0	27.6	24.9	18.8	15.2	11.6	10.5	9.4	9.3	14.3

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 18 Meanook $Z = 58,000\ \gamma +$ June 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	681	798	832	861	871	891	776	830	1006	865	853	886	891	883	870	870	863	853	868	887	928	951	1080	1049	881
2	864	917	930	925	927	843	842	756	874	864	849	729	775	631	591	675	713	831	853	876	884	883	879	874	824
3 Q	871	871	868	863	860	859	861	853	853	848	842	819	804	832	859	865	850	843	832	843	844	843	848	856	849
4 Q	863	870	869	870	875	870	870	820	843	853	855	863	859	853	844	846	842	843	837	837	832	844	848	853	852
5	853	848	844	844	847	853	853	853	848	794	813	848	869	884	857	813	828	830	842	841	845	853	843	850	844
6	844	845	845	845	847	857	851	817	805	806	822	854	859	856	847	838	843	833	832	832	844	861	1004	973	852
7 D	979	838	615	604	730	795	811	843	995	1094	844	898	854	866	864	898	858	865	861	868	897	899	891	886	856
8	878	876	864	861	860	860	832	840	845	845	849	833	849	849	849	854	856	849	849	851	840	857	886	925	857
9	973	921	909	909	899	871	664	676	828	800	854	875	898	799	807	832	854	857	852	873	898	946	1018	955	865
10	791	813	728	725	800	898	887	953	939	747	758	780	834	822	822	867	866	866	877	888	921	951	974	919	851
11	921	952	954	877	826	889	889	855	855	824	811	747	822	845	866	857	846	830	846	855	878	900	904	883	864
12	867	876	876	893	893	849	887	839	773	770	785	822	812	823	855	855	855	857	872	883	877	893	904	885	854
13	909	894	878	877	852	840	867	878	872	845	841	856	863	860	860	856	856	852	858	850	861	862	860	873	863
14	878	873	874	863	856	853	860	865	856	856	856	845	847	852	856	856	851	845	845	835	847	856	896	985	863
15	939	878	876	905	912	813	738	878	913	911	903	940	866	850	835	841	845	833	840	840	840	849	856	862	865
16	883	900	878	868	861	864	736	733	832	795	814	761	761	737	795	848	852	852	859	859	859	852	857	869	830
17 Q	879	880	877	874	885	873	868	857	850	848	847	826	836	855	855	848	846	846	839	842	841	859	846	851	855
18 Q	852	852	848	847	847	842	841	841	841	845	841	843	846	837	826	820	817	821	827	834	848	863	878	868	843
19	837	842	853	853	858	858	852	848	836	810	821	822	832	840	842	843	838	836	815	815	815	833	840	847	837
20 Q	847	867	879	856	840	837	837	837	837	837	842	843	842	846	848	848	838	820	825	830	829	836	853	852	843
21 D	864	881	944	944	788	794	849	827	849	842	888	804	858	858	731	743	788	858	945	933	940	981	967	955	868
22	848	880	848	803	827	874	815	869	815	837	837	784	832	827	842	860	858	853	858	878	891	896	924	896	852
23	913	912	922	858	821	821	858	783	782	821	869	868	842	815	838	836	837	836	843	848	848	848	865	858	835
24	874	891	893	908	811	816	859	741	879	841	827	795	708	637	708	795	833	848	849	859	877	907	946	923	834
25	881	881	903	925	906	892	865	854	757	609	695	822	849	759	838	828	826	827	843	859	881	867	880	891	839
26	897	897	897	880	869	897	865	865	856	849	850	854	854	849	838	838	838	827	826	826	836	843	856	865	857
27	880	878	861	854	854	855	859	815	751	800	796	814	825	828	830	830	829	822	822	821	833	851	876	908	837
28 D	895	863	876	919	853	887	885	831	846	834	815	791	843	848	833	826	827	830	843	875	1033	853	632	250	824
29 D	015	054	-43	314	514	588	618	1015	1033	1105	1078	1052	1228	1192	1512	1408	1093	886	860	877	888	907	919	929	835
30	920	920	924	909	908	877	866	866	866	866	855	864	876	877	876	865	855	836	824	836	845	854	877	882	873
31																									
Mean	847	849	837	844	843	847	832	838	858	842	840	838	851	837	850	855	847	843	848	855	870	877	890	876	851

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 19 Meanook H = 12,000 γ + July 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	995	1218	1094	1054	988	984	823	968	890	870	823	830	807	937	940	929	972	966	964	948	945	929	941	964	949
2 Q	960	972	980	981	981	972	971	966	957	949	956	963	966	976	964	976	988	987	968	964	930	956	972	1011	969
3	992	972	973	988	976	980	976	927	858	1003	981	968	940	935	980	980	895	890	925	941	918	941	934	960	951
4	981	981	984	1006	979	996	979	948	744	680	625	850	970	933	902	934	917	839	903	941	941	987	1035	1032	920
5	984	973	979	963	974	974	978	957	949	984	966	962	924	847	902	996	996	987	976	968	972	1011	1012	1003	968
6 Q	1007	1018	1019	1003	976	966	960	968	968	968	976	984	984	981	952	960	976	966	957	948	948	956	965	971	974
7	984	999	987	987	988	986	981	992	971	937	777	890	984	992	992	968	981	958	937	929	941	992	964	949	961
8 D	976	1043	1092	1054	1019	996	964	936	603	549	434	209	82	378	-224	-106	-59	581	527	649	908	1245	1362	1340	690
9 D	1268	1326	1340	1326	1272	1123	978	929	821	364	298	416	297	52	175	570	841	917	974	973	976	968	1074	1130	850
10	1151	1159	1100	1084	1082	996	992	934	835	830	877	908	850	879	948	956	952	952	941	949	945	979	1082	1109	978
11	1122	1067	1071	980	949	935	950	946	949	867	800	899	872	848	872	906	922	914	910	922	918	958	993	969	939
12	1016	972	969	990	1029	955	957	958	812	655	870	839	926	949	975	988	976	922	942	928	955	971	977	969	938
13	981	1010	1031	1009	980	989	957	976	964	932	818	827	883	890	929	941	957	971	972	952	929	941	973	971	949
14	966	996	996	1097	1028	981	981	968	745	840	902	887	815	925	902	929	921	964	945	941	934	956	974	975	940
15 Q	973	984	987	992	990	987	970	963	937	933	930	941	933	898	933	957	956	959	960	948	957	981	992	996	961
16 Q	1011	999	976	984	984	976	972	958	948	941	940	894	913	940	941	934	926	913	917	918	925	941	976	989	951
17	1090	1102	997	963	1036	911	844	926	957	964	949	957	965	966	975	963	949	942	927	918	930	942	972	997	964
18 D	1033	1096	1132	1036	1014	983	998	636	887	954	954	834	837	947	958	967	943	958	923	915	918	997	1099	1096	963
19	989	984	976	983	990	976	958	872	817	940	970	966	966	974	950	974	973	959	946	940	904	1002	1143	1084	968
20	1064	1082	1201	1025	967	935	962	910	816	896	857	692	689	856	953	925	934	954	958	942	966	970	947	966	936
21 D	989	1010	1006	976	1068	983	973	956	802	897	935	971	962	936	928	936	920	893	843	953	1007	957	991	971	953
22	958	1005	1019	997	983	982	974	970	975	864	943	888	816	970	958	962	967	967	958	951	959	950	950	959	955
23 Q	953	957	959	957	964	958	965	965	965	965	965	957	934	942	980	966	951	941	926	927	934	949	958	961	954
24	1002	1019	1008	997	973	968	973	933	980	965	973	977	942	982	980	980	957	902	906	931	933	953	1020	959	967
25	985	993	958	972	966	974	997	880	824	624	612	655	757	785	898	903	886	879	942	969	1011	1025	1071	961	897
26	1050	1051	1083	1026	962	956	952	933	905	894	918	863	948	975	956	941	929	922	932	939	950	975	980	992	960
27 D	992	996	1031	1027	988	1090	1078	541	772	807	941	879	607	576	814	894	908	908	948	953	999	1088	1178	1137	923
28	1144	1129	1080	979	996	1039	988	965	959	968	968	972	980	982	983	971	963	950	941	941	954	956	948	965	988
29	960	971	965	971	961	960	964	972	972	979	979	981	988	987	981	976	960	948	941	937	940	937	945	973	965
30	972	973	979	972	973	984	992	981	984	984	980	973	962	988	992	987	925	933	945	945	963	938	948	987	969
31	997	975	964	969	971	988	969	919	947	910	824	903	966	985	1004	997	918	872	1000	994	950	957	973	985	956
Mean	1018	1033	1031	1011	1000	983	967	924	888	868	863	862	854	878	884	908	910	923	928	935	947	978	1008	1011	942

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 20 Meanook — D = 24° E + ... ′ — July 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	11.3	9.9	17.8	15.6	17.1	14.3	19.7	17.7	13.4	15.6	9.4	14.2	22.3	26.3	32.5	29.9	21.7	21.7	23.2	17.8	11.3	7.0	5.8	7.8	16.8
2 Q	10.6	12.9	14.9	17.8	15.6	14.0	17.4	18.0	15.8	14.8	13.4	15.8	18.7	22.1	25.0	27.6	23.2	21.6	20.8	15.6	13.4	9.9	6.0	6.5	16.3
3	9.7	10.8	9.0	11.4	13.2	14.6	12.0	4.5	5.5	14.6	10.9	9.0	14.3	21.7	29.2	27.3	24.8	15.6	5.8	6.4	7.7	4.4	3.6	5.5	12.1
4	8.0	8.4	13.3	16.5	16.8	14.4	13.8	14.8	11.7	17.2	6.0	20.1	19.1	25.2	30.6	27.9	31.9	20.2	18.3	16.4	17.2	11.9	14.7	13.4	16.0
5	11.9	13.3	18.0	15.3	14.0	15.4	15.9	15.3	18.0	14.0	8.2	11.7	13.2	17.8	20.7	24.1	22.2	21.3	15.8	12.9	13.4	16.9	13.4	9.9	15.5
6 Q	9.9	12.8	13.8	15.3	12.7	11.5	10.9	13.4	11.9	12.3	12.3	14.3	16.5	18.3	20.1	23.2	27.4	23.2	18.7	14.2	12.4	7.6	6.5	8.0	14.5
7	9.1	11.4	13.8	14.2	16.4	14.2	8.0	7.5	8.0	6.4	6.4	25.0	25.6	28.5	29.0	28.9	22.5	22.5	24.2	8.2	5.0	9.2	7.0	3.7	14.8
8 D	4.5	3.6	9.2	8.0	8.0	8.9	1.7	-8.6	-46.8	-24.4	-17.1	-50.5	30.9	65.0	33.0	-7.0	-9.6	-41.0			19.8		77.9	32.3	
9 D	17.3	4.4	19.3	21.3	-39.7	-20.0	-18.5	-7.7	-9.2	29.2	23.4	9.0	57.3	22.5	32.1	39.3	30.9	23.5	5.5	3.1	4.8	6.6	14.8	10.9	11.7
10	7.5	10.5	2.1	4.0	8.9	12.3	8.4	11.5	4.7	4.8	6.5	10.4	13.4	22.5	21.2	23.6	24.2	21.1	24.1	17.2	10.3	12.5	15.3	16.8	13.1
11	12.0	7.4	11.9	9.8	12.3	10.5	9.0	8.9	12.5	7.2	7.4	11.2	16.4	26.0	23.2	23.3	23.1	21.7	16.8	17.8	14.8	6.0	5.0	1.8	13.2
12	-1.8	5.5	5.0	5.8	16.1	8.4	8.0	9.6	8.9	7.0	12.5	16.2	25.0	21.3	26.1	27.8	23.6	21.5	6.5	8.9	11.3	9.2	9.7	13.3	12.7
13	14.3	14.3	20.3	24.6	12.9	16.8	23.1	14.6	12.9	18.0	13.6	8.9	21.7	32.8	38.1	33.3	29.6	23.5	15.2	12.9	8.2	10.3	10.4	7.4	18.2
14	8.6	8.0	8.7	13.5	16.4	13.3	13.3	11.3	11.4	13.6	17.6	14.2	24.2	27.1	30.5	30.6	24.6	16.8	18.2	14.4	9.9	9.2	8.9	10.9	15.6
15 Q	11.1	11.5	12.7	15.3	15.8	16.3	14.3	13.3	15.6	14.2	11.4	14.7	19.4	22.6	19.5	23.7	23.2	20.1	17.3	10.9	7.5	7.5	9.0	8.9	14.8
16 Q	11.4	12.7	13.4	12.4	16.8	11.5	9.5	10.4	12.4	9.9	12.5	10.9	17.3	22.3	28.7	27.4	23.2	15.8	11.9	8.9	4.4	4.7	6.0	8.9	13.5
17	13.8	13.3	12.5	11.3	13.7	26.0	12.9	11.8	12.5	12.9	12.4	13.4	16.9	17.6	21.2	23.6	23.6	23.2	17.8	12.4	7.5	7.0	5.5	6.0	14.5
18 D	7.6	6.6	2.7	10.4	6.6	5.6	3.7	26.2	17.3	13.4	10.4	16.2	17.2	30.4	29.5	28.3	37.8	22.3	20.7	8.4	6.0	8.0	11.5	15.3	15.1
19	7.0	7.5	10.2	10.9	16.2	7.6	10.9	17.3	5.0	14.6	16.2	18.1	20.8	27.6	28.3	31.1	31.5	26.6	23.1	23.1	21.1	18.2	17.8	12.8	17.6
20	3.3	6.5	9.4	9.4	11.5	18.3	14.8	11.3	10.3	11.5	6.6	-3.8	-4.3	15.2	26.1	25.6	27.4	22.1	18.3	15.4	15.4	12.9	8.0	10.4	12.6
21 D	12.3	9.3	9.9	10.3	13.2	19.3	11.9	6.5	0.7	6.0	12.4	18.2	22.2	20.9	22.0	23.1	30.4	30.0	53.0	5.2	3.1	7.2	4.7	9.5	15.0
22	10.9	16.7	15.3	14.0	19.1	12.3	10.9	12.3	11.2	5.6	20.2	12.4	14.8	22.2	23.1	23.9	24.2	21.9	21.1	17.8	10.0	7.8	8.4	8.9	15.2
23 Q	9.5	10.4	10.4	11.4	11.3	11.4	12.3	13.3	12.3	13.3	15.2	14.6	16.4	20.1	23.6	26.4	28.1	25.1	21.1	12.3	7.8	5.0	4.4	5.5	14.2
24	6.0	8.0	8.3	11.4	10.9	10.9	10.3	10.5	11.2	9.7	12.9	16.7	14.3	26.6	31.9	30.0	29.8	30.5	6.2	9.5	2.6	1.7	3.6	7.5	13.4
25	6.0	7.5	10.4	10.3	10.7	12.4	8.4	14.5	17.2	9.4	6.0	8.4	21.4	22.3	23.6	26.2	25.0	18.2	21.2	14.2	12.9	10.9	14.6	17.6	14.6
26	15.3	7.6	9.3	10.5	10.9	13.3	10.3	12.4	12.9	7.5	10.1	9.7	17.8	23.0	28.0	26.1	23.0	19.1	13.4	8.9	4.4	7.0	7.5	6.6	13.1
27 D	8.9	11.5	14.6	11.7	14.4	8.9	0.6	1.5	7.8	16.8	16.8	19.1	18.2	33.1	34.4	31.3	31.0	28.1	29.0	9.9	4.9	2.5	7.8	7.5	15.4
28	3.1	7.6	5.0	10.9	7.5	11.2	7.4	10.4	11.9	13.8	14.8	17.1	20.2	23.1	25.1	27.6	29.0	25.5	18.5	11.3	5.8	0.7	0.1	2.6	12.9
29	6.5	9.5	12.4	13.8	10.9	13.4	13.8	14.1	13.3	13.3	15.3	18.2	21.2	25.0	27.6	30.1	29.0	25.0	22.3	9.4	9.2	6.6	7.8	8.8	15.7
30	8.5	11.9	15.4	16.8	12.4	11.9	16.7	17.7	13.1	9.5	10.5	12.5	18.2	25.1	25.6	30.0	33.9	20.2	16.3	8.4	9.8	5.0	5.6	8.7	15.2
31	12.9	15.8	18.2	16.4	13.4	13.4	19.2	17.3	12.4	9.3	6.4	10.3	17.8	25.4	29.0	29.1	31.5	16.3	10.9	13.3	7.6	9.5	9.5	10.7	15.6
Mean	9.4	10.2	11.9	13.3	11.6	12.1	11.0	12.0	10.0	12.2	11.9	13.6	19.2	23.8	26.8	27.7	27.0	22.1	18.5	12.2	9.8	8.1	8.4	9.1	14.6

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Meanook $Z = 58,000\ \gamma +$ July 1958

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		896	970	946	922	880	824	806	942	805	812	868	855	856	831	811	812	828	825	844	849	857	850	856	866	859
2	Q	866	866	870	870	870	866	860	835	817	816	834	839	839	838	828	835	833	839	844	850	866	882	904	926	854
3		924	893	871	875	881	872	870	782	794	838	850	838	773	773	806	823	785	764	759	769	781	792	784	787	820
4		792	781	785	802	803	803	792	753	562	662	738	695	770	743	737	743	761	738	761	803	836	873	892	889	771
5		846	815	817	803	793	793	787	749	726	749	761	770	759	705	716	792	793	781	781	778	781	814	847	863	784
6	Q	835	835	832	834	808	787	770	780	780	750	770	787	787	787	765	749	759	770	781	771	771	771	780	781	785
7		793	803	803	799	803	792	791	787	762	715	565	662	749	759	770	771	770	759	770	770	770	792	813	825	766
8	D	805	843	889	856	835	820	759	689	565	743	813	717	917	988	1147	696	1343	1371	938	1107	1083	510	300	707	852
9	D	686	816	754	583	715	706	700	823	933	815	975	1166	1003	1019	911	705	759	830	847	830	825	825	889	911	834
10		841	841	825	880	879	830	835	812	754	758	780	781	749	759	814	815	813	811	819	819	819	835	877	888	818
11		889	889	857	843	827	815	803	782	787	727	693	748	732	732	738	770	803	804	808	819	834	846	851	830	801
12		835	847	835	823	834	803	792	803	618	715	709	662	695	733	780	803	792	791	787	781	814	825	819	817	780
13		814	827	862	815	808	804	752	797	791	727	597	678	727	694	732	745	780	801	791	792	792	793	802	804	772
14		819	825	823	895	858	845	825	802	559	613	705	727	695	700	685	742	769	781	787	792	808	825	835	835	773
15	Q	836	837	837	845	841	815	808	791	749	749	748	749	748	713	716	749	765	781	797	797	797	814	819	835	789
16	Q	846	835	825	823	825	813	792	781	781	765	769	722	738	752	759	759	770	781	792	803	803	814	825	851	793
17		896	880	824	818	824	729	749	770	760	783	890	793	793	794	793	798	792	792	782	782	792	803	804	826	803
18	D	857	878	901	880	868	815	760	448	707	771	778	749	614	757	760	771	766	771	771	771	793	824	869	900	782
19		804	819	809	815	826	809	778	593	679	760	794	788	793	792	782	793	793	782	782	793	815	880	924	889	796
20		847	858	863	760	803	664	750	749	749	760	781	674	663	673	749	771	793	793	788	782	793	809	809	826	771
21	D	826	826	831	824	857	804	782	771	679	723	750	803	793	760	750	751	771	759	793	859	816	793	826	852	792
22		826	847	824	815	793	804	798	882	760	641	696	685	663	760	766	782	782	793	793	804	793	788	782	782	777
23	Q	777	781	782	782	778	782	782	782	782	781	775	771	744	759	771	781	782	782	781	781	792	792	804	804	780
24		814	815	831	826	793	782	793	788	783	777	782	792	771	774	772	771	755	771	744	770	772	785	820	798	787
25		782	788	788	782	783	792	782	785	620	836	598	636	696	706	740	772	772	773	836	878	848	836	880	901	775
26		869	868	869	815	835	815	793	728	686	672	733	800	793	803	793	782	781	771	788	798	804	826	826	815	794
27	D	815	826	846	847	844	858	772	896	878	901	848	859	852	701	652	717	760	783	804	804	847	933	932	925	829
28		918	890	880	842	836	837	809	794	793	794	804	804	805	804	805	804	788	792	788	782	782	782	782	784	812
29		793	793	782	782	782	782	788	788	782	783	788	793	793	795	793	792	792	788	788	781	782	794	804	815	790
30		804	793	793	803	788	783	772	762	772	777	782	792	782	762	769	777	760	751	771	782	815	826	826	842	787
31		826	822	816	803	793	793	782	701	717	728	696	718	766	781	788	804	782	760	803	793	777	803	826	837	780
Mean		832	839	835	821	821	801	788	772	740	756	765	769	770	772	781	773	800	803	797	809	815	811	820	839	797

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 22 Meanook — H = 12,000 γ + — August 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	996	972	968	949	963	965	972	973	981	972	929	733	807	973	973	979	979	957	925	901	919	936	936	975	943
2	964	974	984	984	972	979	970	972	967	965	972	925	862	843	948	980	968	933	964	933	933	941	960	996	954
3	1030	1043	1048	1011	1016	937	949	974	839	968	956	877	948	941	910	956	956	956	945	948	949	952	971	965	960
4 Q	976	984	990	980	974	980	974	970	972	971	971	980	972	948	968	987	973	956	952	941	941	941	956	960	967
5 Q	976	980	987	987	980	981	981	980	971	956	937	894	949	983	968	976	984	981	960	953	958	956	971	975	968
6 Q	985	995	972	972	981	988	979	979	979	972	968	973	984	988	984	972	949	933	921	934	945	956	964	978	969
7	980	987	993	987	974	984	992	996	909	791	874	863	800	981	1011	1011	977	945	955	932	945	956	963	977	949
8 Q	981	988	981	971	974	975	976	980	980	980	980	980	992	987	964	956	968	948	945	944	935	940	952	979	969
9	996	996	965	1003	994	973	972	972	980	980	979	978	981	988	989	965	948	948	948	940	946	929	916	957	968
10	984	973	980	982	988	998	1028	1078	1007	994	984	957	996	996	976	960	937	966	933	926	933	952	992	976	979
11	968	1012	996	984	987	1031	1010	862	980	784	591	934	966	981	981	988	952	940	929	949	963	971	972	964	946
12	965	956	964	964	973	999	996	981	984	960	965	941	925	971	981	972	948	924	918	945	965	972	976	981	964
13	1015	988	960	984	1003	996	814	1007	972	973	863	909	963	975	979	964	951	947	934	933	934	948	964	963	956
14	979	981	987	970	964	964	965	968	967	968	968	966	971	964	956	948	921	886	898	917	949	974	1003	1053	962
15	1007	971	954	998	1046	968	972	972	965	974	970	976	976	972	968	971	949	929	926	924	932	952	963	993	968
16	1016	1032	980	976	960	958	966	967	968	974	981	982	980	964	974	953	924	906	890	895	924	935	956	966	959
17 D	967	973	967	976	974	974	1005	1029	1017	920	794	990	994	975	974	919	914	749	954	989	1146	1131	1052	1147	980
18 D	1149	1014	949	946	1032	1035	953	934	927	855	895	942	949	949	957	941	917	909	903	903	917	927	957	957	951
19	956	976	956	948	949	948	941	948	956	929	885	937	933	934	960	960	944	918	908	913	925	934	956	960	941
20 Q	971	968	970	965	968	971	968	963	970	968	964	965	964	953	960	956	941	925	929	932	933	941	948	941	956
21	945	957	971	964	972	968	973	973	973	973	979	960	941	956	979	964	941	941	936	938	938	941	973	985	960
22 D	992	992	1104	1206	1458	1297	1019	1029	971	949	924	916	923	990	977	917	918	929	918	926	940	949	954	959	1007
23	956	957	960	962	1024	1036	1053	981	973	963	963	966	963	971	971	962	937	926	913	924	932	941	996	995	968
24 D	965	1046	1417	1263	1133	1043	1035	862	670	639	603	411	194	479	909	996	1004	964	957	956	965	976	1011	972	895
25	992	957	1020	1015	1010	999	785	807	941	901	815	934	956	912	984	980	952	928	918	924	939	948	964	963	939
26	973	981	970	950	986	988	888	764	809	559	433	399	493	800	934	930	923	905	925	928	937	948	957	1008	850
27 D	976	1082	1211	951	1074	1098	886	559	791	769	746	725	887	800	614	809	847	831	902	949	969	992	1015	985	894
28	950	956	960	964	966	956	948	894	858	863	839	948	933	846	777	869	879	807	835	858	921	992	960	992	907
29	952	949	960	957	963	967	971	957	946	894	792	898	925	913	948	948	925	905	901	913	933	941	979	995	935
30	999	957	972	981	980	971	976	937	918	972	965	965	965	925	956	940	917	901	880	899	910	948	980	965	949
31	974	960	972	976	976	976	969	965	945	934	966	965	938	933	947	932	901	913	905	908	921	938	954	967	947
Mean	985	986	1002	991	1007	997	964	943	938	912	885	896	904	929	948	954	940	920	923	928	945	957	970	982	959

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 23 Meanook D = 24° E + ... ' August 1958

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	11.4	13.3	13.8	11.7	12.7	11.9	12.3	12.3	12.7	10.9	5.6	15.2	22.1	25.4	32.0	37.2	34.8	16.3	24.6	20.2	8.0	7.6	6.5	9.4	16.2
2	12.9	15.4	15.4	16.0	16.4	14.2	15.2	16.2	15.2	16.1	14.2	10.3	16.8	22.8	30.0	34.4	33.0	25.1	19.2	14.8	4.9	5.8	7.0	7.6	16.6
3	10.3	12.7	24.3	15.8	24.2	24.7	24.2	19.1	10.4	13.4	12.9	12.4	19.8	23.2	25.5	28.0	26.6	26.5	18.2	13.7	10.4	7.6	7.5	9.5	17.5
4 Q	12.5	13.5	14.2	16.7	14.9	14.2	13.3	15.3	15.3	12.1	12.4	12.4	16.3	16.3	21.0	24.2	25.2	21.1	17.8	14.5	10.4	7.9	7.4	9.4	14.9
5 Q	11.4	13.2	14.4	14.3	15.2	14.2	14.3	14.2	13.5	13.2	8.1	13.6	19.1	25.1	22.7	26.1	25.1	20.7	15.5	9.9	7.1	6.5	7.4	8.4	14.7
6 Q	10.5	12.6	12.5	11.5	11.4	11.4	11.5	11.3	11.5	12.4	14.3	17.2	20.9	23.7	25.8	26.6	26.0	23.1	14.3	8.4	3.7	2.0	3.7	6.5	13.9
7	9.7	11.3	10.9	11.3	10.9	10.0	10.4	9.3	9.3	21.7	14.8	15.8	24.3	28.1	30.0	32.5	33.0	30.5	20.0	18.2	5.0	1.1	2.7	5.5	15.7
8 Q	8.0	9.8	10.9	12.3	10.4	11.5	12.3	11.5	12.9	12.8	14.3	15.2	18.2	19.2	21.2	24.0	27.0	23.2	15.3	7.5	3.3	1.1	2.5	6.5	13.0
9	9.4	11.0	12.3	9.9	10.7	10.9	11.4	11.4	12.4	12.4	12.5	15.2	19.2	25.1	28.4	32.0	27.6	22.3	20.1	14.0	10.9	7.6	4.2	6.5	14.9
10	8.4	10.9	9.7	9.5	9.4	8.5	7.0	8.4	13.4	11.9	12.9	17.4	23.2	21.2	24.1	26.2	24.9	11.4	6.8	10.4	8.4	0.1	3.1	6.5	12.3
11	8.4	10.4	12.4	21.0	15.2	10.4	11.4	1.1	25.0	22.1	14.8	16.3	15.8	21.1	24.6	22.6	21.8	18.2	13.3	11.9	8.4	8.2	9.2	10.9	14.7
12	12.9	13.3	13.3	12.0	12.0	25.2	11.9	13.7	12.4	13.0	15.4	14.8	14.6	20.1	22.2	21.3	21.1	18.3	14.0	8.5	7.6	4.5	5.5	6.5	13.9
13	6.4	7.0	7.5	7.0	5.6	3.7	3.6	17.4	12.9	12.4	10.3	14.6	24.1	25.1	26.7	25.8	23.4	20.9	18.2	11.9	7.6	7.4	8.4	10.4	13.3
14	9.5	9.4	10.4	12.5	10.4	11.4	12.3	13.3	13.2	13.8	14.9	17.2	20.2	24.0	25.9	26.2	25.1	20.5	5.0	-3.3	-1.2	1.1	4.7	4.6	12.5
15	9.9	10.4	10.9	9.7	18.5	12.4	11.4	10.3	10.4	11.8	14.4	15.2	20.1	25.6	32.1	33.0	30.0	24.6	15.2	9.1	1.7	1.3	4.8	6.5	14.6
16	6.5	7.4	9.7	11.4	11.3	11.3	11.9	12.4	14.4	14.3	14.3	13.8	17.3	21.2	24.1	25.1	27.0	13.8	16.4	9.4	3.1	2.6	4.5	8.9	13.0
17 D	11.4	11.4	11.4	11.4	11.5	11.9	5.0	6.4	7.4	7.0	19.2	18.7	18.0	24.4	28.1	34.2	19.1	0.6	10.4	37.0	30.3	14.8	17.2	14.1	15.9
18 D	5.0	4.9	6.0	4.5	8.0	6.0	9.9	9.3	9.5	10.4	12.4	15.2	19.7	23.2	26.1	28.5	28.1	24.1	20.2	14.4	8.9	4.7	2.6	6.0	12.8
19	9.9	9.9	11.4	13.3	10.3	18.2	15.8	12.4	13.3	8.6	8.4	11.9	17.8	22.2	27.0	27.1	27.9	25.2	21.7	13.8	10.1	5.7	4.4	5.4	14.6
20 Q	7.0	9.6	10.4	10.3	16.3	16.8	13.4	13.9	18.7	14.9	15.2	17.7	20.1	22.2	28.0	18.1	17.1	14.0	14.8	9.6	6.0	4.0	4.7	7.0	13.7
21	8.9	10.5	10.3	11.4	11.5	11.3	11.5	12.7	13.8	13.8	14.3	13.4	17.8	21.3	27.4	27.1	26.0	21.2	15.2	12.5	7.8	6.4	6.2	6.4	14.1
22 D	6.8	7.3	17.2	22.2	2.6	-25.8	-23.8	-0.3	7.0	12.9	14.8	16.7	23.6	22.2	24.2	32.5	24.1	20.4	6.2	8.4	4.7	6.5	8.4	10.4	10.4
23	12.7	12.7	12.3	11.3	7.6	7.4	14.6	12.9	14.2	14.2	15.2	16.8	19.7	11.9	23.3	23.1	21.3	18.2	11.9	12.0	2.5	5.0	7.0	8.9	13.2
24 D	9.3	5.5	20.7	6.4	-50.3	0.3	11.9	3.7	8.9	29.9	20.8	14.3	14.2	40.9	27.4	24.0	25.0	28.9	15.9	9.0	10.4	9.0	11.9	9.9	12.8
25	12.3	17.2	18.2	20.2	16.1	14.2	12.9	16.4	15.4	12.8	9.7	12.1	16.1	27.2	30.1	28.3	25.2	19.0	11.4	8.4	6.0	8.3	11.4	15.8	16.0
26	18.2	18.2	15.6	12.3	13.3	6.0	8.4	15.4	18.1	20.2	18.4	42.5	23.2	25.6	30.9	35.1	30.2	21.3	12.2	10.4	8.2	9.5	9.9	10.7	18.1
27 D	12.9	12.6	15.4	15.2	3.3	-15.6	-19.5	-0.4	2.6	4.0	4.0	9.4	22.3	39.7	43.8	42.4	31.8	16.3	17.3	9.6	13.3	9.8	13.0	15.2	13.3
28	16.9	17.6	16.2	16.4	15.8	17.2	13.2	7.8	10.3	11.9	13.3	16.8	19.2	22.1	24.0	19.5	22.2	15.4	10.4	9.9	2.0	6.0	7.9	11.2	14.3
29	14.4	15.2	16.0	15.8	12.5	12.3	15.0	14.8	13.8	17.3	4.0	15.0	20.7	22.2	25.6	25.2	22.3	19.7	11.4	10.0	10.3	8.4	11.9	14.3	15.3
30	15.4	14.3	12.5	11.9	10.4	11.4	13.4	11.9	14.3	20.3	14.9	16.1	18.2	21.2	27.2	25.6	26.4	21.2	16.2	12.5	9.8	9.7	9.7	12.1	15.7
31	13.2	15.3	16.2	18.7	11.4	13.8	13.3	13.2	10.9	18.1	14.7	13.8	16.2	24.0	26.1	29.0	21.2	18.7	15.3	10.7	8.4	8.8	9.9	11.5	15.5
Mean	10.7	11.7	13.3	13.0	10.0	10.0	10.0	11.2	12.7	14.2	13.1	15.7	19.3	23.8	26.9	27.9	25.8	20.0	15.0	11.8	7.7	6.1	7.3	9.1	14.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 24 Meanook $Z = 58,000\ \gamma +$ August 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	843	827	810	799	794	789	782	783	776	772	752	713	642	761	789	805	805	805	794	784	795	805	810	821	786
2	816	816	805	805	805	783	789	780	718	750	783	761	664	751	718	761	756	719	761	782	793	804	809	816	773
3	836	860	870	827	827	691	740	783	622	730	745	669	718	729	718	761	767	789	793	798	803	803	810	810	771
4 Q	805	804	805	816	805	804	794	781	782	781	789	792	781	750	751	772	787	784	794	781	789	795	799	799	789
5 Q	795	794	796	794	794	794	772	761	772	738	718	697	729	772	751	741	751	772	783	783	783	794	806	816	771
6 Q	827	816	794	784	784	784	783	783	783	783	783	789	789	784	778	772	772	772	773	773	773	771	772	783	784
7	794	794	805	799	793	783	783	778	685	642	664	691	643	750	794	794	782	772	772	789	772	778	772	804	760
8 Q	795	794	789	783	783	792	778	778	778	778	783	782	783	782	752	730	761	772	778	783	783	789	795	810	780
9	827	827	816	832	834	794	783	783	780	780	780	783	783	789	794	778	771	767	767	761	772	783	782	793	790
10	794	783	783	777	783	782	805	816	805	773	756	741	772	780	767	761	751	767	772	783	794	794	823	827	783
11	805	815	827	827	805	827	827	675	664	588	599	727	729	761	772	789	794	794	799	805	794	795	805	805	768
12	805	804	799	795	794	783	794	794	794	761	767	758	741	772	783	783	783	783	772	772	778	794	783	789	783
13	805	805	789	794	810	702	724	794	789	780	734	718	784	791	783	772	761	761	767	771	771	772	783	783	773
14	794	793	794	783	772	772	772	772	771	772	772	771	778	772	773	763	767	761	772	772	794	814	848	902	786
15	870	816	789	799	827	772	783	780	773	778	780	783	789	783	772	773	773	772	772	773	772	772	772	793	786
16	816	848	848	827	784	771	772	761	750	761	772	773	783	772	772	772	773	761	761	772	773	783	783	783	782
17 D	784	774	774	774	773	773	773	800	752	752	686	790	807	784	784	764	795	795	914	914	935	914	865	892	807
18 D	860	659	828	817	828	751	784	795	795	784	753	779	796	796	805	806	806	794	790	792	795	794	795	796	800
19	806	810	806	795	794	764	735	751	773	752	798	752	762	774	784	785	790	795	790	795	795	795	806	806	784
20 Q	795	795	794	790	785	783	779	762	742	772	779	784	790	784	784	785	784	779	770	762	770	781	785	784	780
21	783	783	784	784	783	784	774	773	773	773	764	752	735	730	761	772	772	764	762	762	768	774	795	760	769
22 D	805	811	865	913	735	686	595	730	773	764	773	742	719	795	795	784	779	780	794	806	811	806	806	805	778
23	795	790	790	790	813	837	811	800	795	784	779	783	784	790	790	779	784	784	784	790	794	800	822	828	796
24 D	816	838	805	465	616	762	784	704	741	708	871	595	773	795	817	828	828	800	800	817	828	817	826	805	768
25	818	817	850	784	816	806	687	698	741	703	676	742	774	730	773	784	796	795	796	805	817	818	817	816	777
26	817	817	819	807	810	815	706	425	537	576	264	434	492	677	792	804	792	768	818	828	833	828	828	828	713
27 D	822	871	924	860	828	741	849	898	757	806	844	892	859	849	826	779	773	774	838	854	891	870	860	838	838
28	818	817	806	811	800	806	795	730	698	698	718	795	795	757	757	752	783	768	826	838	861	860	838	837	790
29	806	806	816	806	806	800	795	773	757	719	703	719	752	762	784	796	799	797	806	816	828	818	828	828	788
30	837	817	816	807	817	806	785	709	687	762	795	795	800	784	779	783	788	790	790	795	805	826	833	817	793
31	806	805	807	806	805	805	772	790	851	729	762	795	774	752	753	762	762	773	800	805	805	806	807	805	789
Mean	813	813	813	795	794	779	771	759	749	744	740	745	752	770	776	777	780	778	791	796	802	805	808	812	782

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 25 Meanook — H = 12,000 γ + — September 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	971	970	964	964	964	969	971	969	967	960	971	963	955	927	947	951	932	912	900	917	925	935	947	955	950
2	960	964	964	971	971	972	972	977	972	964	948	952	948	971	972	963	945	926	910	909	916	926	951	992	955
3 D	979	971	959	963	971	975	977	977	956	340	621	774	885	477	356	877	908	923	893	877	971	1107	1237	1401	891
4 D	1224	1081	1146	1073	1038	979	959	971	986	972	964	963	971	963	916	246	618	740	613	673	929	932	999	1259	926
5 D	1209	1127	1034	814	815	912	893	814	724	830	744	693	774	689	759	846	901	904	877	861	906	898	916	904	868
6	914	917	921	926	933	933	926	924	924	926	917	917	933	934	929	918	905	894	905	915	929	929	930	945	923
7	937	941	945	949	948	963	968	957	929	828	878	933	941	954	902	783	800	835	880	912	965	1004	1012	1010	924
8	973	1050	1097	972	954	946	957	957	956	960	960	949	948	940	925	916	936	934	933	926	929	957	1034	945	961
9	1011	1050	972	965	980	964	968	963	964	952	930	940	968	895	800	894	915	914	894	923	952	945	1058	1050	953
10	987	978	960	956	956	957	968	965	963	948	917	926	902	832	908	932	908	913	923	939	941	968	972	978	942
11	956	988	968	965	970	965	976	995	972	957	941	971	956	962	941	924	902	898	894	929	929	945	956	976	952
12	964	968	976	979	971	971	972	972	972	972	968	968	965	965	949	934	902	886	902	917	936	949	960	956	953
13 Q	962	963	971	972	973	972	972	975	973	972	977	975	973	968	960	947	925	908	908	920	939	937	955	962	957
14 Q	964	964	964	967	971	979	979	978	979	929	979	978	963	963	972	956	931	901	907	923	931	955	975	954	959
15	967	959	969	972	979	980	980	979	979	980	980	979	972	972	972	962	940	915	917	925	935	964	986	1002	965
16 D	985	985	995	998	1187	1151	1093	1042	1004	916	963	994	983	956	878	964	900	868	867	953	971	1149	1124	1055	999
17	1002	967	934	945	958	976	961	955	938	932	951	953	940	910	944	948	940	922	915	922	928	944	951	949	945
18 Q	951	954	955	956	961	961	964	963	965	965	965	965	963	962	955	938	915	902	899	910	939	938	955	953	948
19	953	959	961	965	967	969	969	970	972	971	978	971	947	959	959	944	929	920	919	927	940	942	949	957	954
20	963	978	975	975	975	977	975	977	977	977	977	977	973	971	965	955	939	929	930	947	943	962	959	955	964
21 Q	961	967	967	969	970	972	975	977	977	977	977	975	973	971	961	948	936	928	931	929	947	965	973	975	963
22 Q	955	959	969	975	975	976	979	980	980	980	980	980	982	979	971	963	947	929	922	928	944	958	963	964	964
23	966	972	977	975	986	986	983	983	973	973	978	987	983	981	975	956	938	928	923	929	940	954	962	963	965
24	967	971	975	980	980	985	983	983	967	955	940	947	963	970	964	945	934	929	930	936	941	947	967	971	960
25 D	981	979	995	1064	1080	1310	1078	664	722	827	422	324	473	422	418	649	879	881	919	947	955	1069	1191	1196	852
26	1053	1034	1095	1034	915	799	885	798	798	822	606	689	664	759	797	893	961	937	948	969	980	970	975	966	889
27	955	956	954	958	959	960	956	948	940	893	882	806	885	940	939	908	922	925	904	906	955	969	964	973	932
28	983	988	967	969	969	944	959	953	910	910	805	925	944	953	948	957	956	948	925	924	929	940	940	947	941
29	952	957	959	961	962	958	959	962	959	959	937	944	965	969	973	965	948	931	919	925	937	947	957	955	952
30	954	957	957	961	965	969	968	967	958	958	877	974	701	820	931	950	898	881	891	914	938	967	907	946	925
31																									
Mean	968	982	982	970	973	978	971	950	942	918	898	910	913	898	893	898	910	905	900	914	941	966	988	1000	941

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 26 Meanook D = 24° E + ... ′ September 1958

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	12.9	13.5	13.4	12.8	12.7	13.0	13.6	12.5	15.6	17.4	15.3	14.8	17.6	20.2	25.0	27.1	27.1	21.1	15.2	10.3	8.3	7.0	9.4	12.3	15.3
2	14.3	14.3	14.2	14.2	13.4	12.5	12.0	12.5	13.3	11.4	11.4	15.8	19.2	25.4	24.0	25.0	23.9	21.3	16.4	12.3	6.8	4.4	5.9	8.1	14.7
3 D	11.4	11.5	11.5	11.4	13.0	13.2	20.2	14.3	12.4	52.6	37.0	30.5	24.6	40.3	69.7	44.1	44.6	33.9	15.7	12.3	12.3	25.4	26.8	16.6	25.2
4 D	10.9	10.4	10.6	10.2	5.0	7.5	11.9	11.7	13.9	14.3	16.4	16.3	19.3	16.4	23.2	-6.5	57.6	85.0	72.2	78.8	75.4	67.2	32.5	7.5	27.8
5 D	10.3	19.7	24.4	21.4	4.9	18.2	12.9	13.5	13.3	21.8	13.5	4.6	9.9	9.9	15.3	17.4	21.3	19.3	20.7	6.4	6.4	8.6	9.3	9.9	12.1
6	12.0	11.9	13.2	13.3	13.5	13.2	13.2	12.3	14.2	13.3	13.2	16.3	18.2	23.2	25.6	24.6	23.6	19.7	11.5	8.0	6.3	7.5	9.5	9.5	14.4
7	11.1	11.4	12.3	11.9	10.7	27.3	21.7	16.8	14.1	14.8	17.8	20.7	24.1	26.2	22.7	13.4	10.0	11.4	11.4	7.5	13.6	15.3	10.7	4.7	15.1
8	4.2	5.3	9.9	13.0	9.5	11.7	11.8	13.2	13.8	16.8	15.8	15.8	19.1	21.3	22.3	23.5	19.3	18.1	12.9	10.6	9.0	9.4	10.9	11.7	13.7
9	4.5	6.8	9.3	10.4	11.9	12.9	13.8	10.4	11.4	15.4	19.7	16.9	19.3	20.2	23.1	17.7	20.5	17.8	10.9	6.0	11.7	7.1	8.4	13.8	13.3
10	10.4	14.2	15.2	11.6	12.3	12.3	12.9	13.8	12.4	12.4	11.2	15.8	15.8	16.4	23.4	24.0	25.7	17.4	10.5	9.9	8.9	10.3	10.3	11.8	14.1
11	11.3	10.4	13.3	12.3	9.4	10.3	11.3	14.2	11.7	14.2	15.6	18.4	21.7	24.6	27.8	26.6	25.0	17.9	12.6	10.2	7.6	7.7	10.3	9.9	14.8
12	11.8	10.9	11.3	9.9	10.5	10.9	11.7	11.9	14.1	15.3	15.3	17.2	18.7	22.1	25.2	25.2	23.6	19.4	10.9	6.6	6.5	8.3	9.7	12.4	14.1
13 Q	12.7	11.7	11.5	11.6	11.6	11.7	11.5	12.1	13.4	14.4	15.8	17.3	18.7	21.1	23.6	23.6	21.7	17.3	9.9	7.0	8.0	6.4	8.5	11.5	13.8
14 Q	12.3	11.3	10.9	10.9	11.4	11.9	12.4	13.5	14.6	14.7	15.8	17.3	19.2	23.1	27.2	27.4	24.2	22.1	12.4	10.9	6.3	8.3	8.8	11.5	14.9
15	10.7	11.3	10.7	11.3	10.9	11.7	12.3	13.2	13.6	14.8	15.8	17.2	19.7	23.1	26.2	26.6	26.2	23.4	13.2	8.0	6.5	6.5	5.4	4.8	14.3
16 D	5.6	6.2	4.2	4.6	24.1	3.1	6.7	12.7	13.2	14.6	25.0	22.2	26.0	27.4	30.5	30.5	30.0	32.0	-10.9	-2.1	2.8	8.4	6.8	8.0	13.8
17	9.9	9.7	12.1	12.1	12.6	14.4	12.6	12.7	11.9	17.4	13.6	13.6	12.9	13.1	21.7	20.9	23.3	22.5	17.8	17.1	14.6	12.9	13.2	12.7	14.8
18 Q	12.9	12.5	12.1	12.1	12.6	12.7	13.1	13.5	14.6	16.0	15.1	15.3	15.9	19.5	22.7	23.2	24.1	19.4	18.0	12.8	8.0	6.0	7.5	9.6	14.6
19	11.1	11.1	11.7	12.6	12.6	12.7	12.8	14.1	14.6	14.9	17.4	17.5	14.7	18.4	20.4	21.7	21.0	17.6	13.8	12.8	9.3	9.1	10.1	9.3	14.2
20	9.7	9.7	10.5	10.7	11.0	10.9	12.1	12.7	13.2	14.6	15.1	15.9	17.6	19.7	20.9	21.9	21.2	18.0	14.3	10.7	9.7	7.2	8.3	10.0	13.6
21 Q	10.1	10.1	10.7	11.9	12.4	12.4	12.3	12.8	14.4	14.8	16.3	16.8	18.2	19.5	20.2	22.3	20.7	18.0	14.0	8.7	5.2	7.0	8.9	9.5	13.6
22 Q	11.1	10.6	11.2	11.9	11.7	11.7	12.1	12.9	13.3	14.1	15.0	16.1	16.8	19.5	22.9	24.7	23.4	20.9	16.5	10.3	8.0	8.0	9.6	10.5	14.3
23	10.2	9.7	10.1	10.7	9.7	7.7	10.9	11.9	14.1	17.8	19.9	19.4	20.4	21.9	23.8	25.9	23.4	17.3	11.1	8.7	7.7	7.8	8.3	9.9	14.1
24	10.5	10.2	9.6	10.1	9.9	9.2	9.6	10.4	13.3	15.4	18.1	15.6	20.3	23.0	24.0	22.4	20.0	16.8	12.4	8.6	8.3	8.3	7.4	7.5	13.4
25 D	8.6	4.6	7.2	8.0	22.7	-13.6	-13.6	-3.0	6.5	9.9	36.0	71.2	28.6	26.8	19.9	28.1	24.4	19.2	15.4	15.6	8.2	12.2	26.4	14.3	16.0
26	4.5	8.9	14.6	13.8	8.2	7.2	11.2	18.0	24.3	20.0	19.7	23.1	16.5	22.9	20.3	19.6	17.2	12.7	11.6	9.6	11.9	13.7	14.4	15.8	15.4
27	17.3	16.5	14.6	13.4	13.6	12.2	14.2	16.0	15.0	15.8	18.9	14.0	16.0	22.8	25.6	22.4	20.5	18.0	14.8	9.1	6.5	8.7	10.8	13.2	15.4
28	13.4	18.5	12.1	11.3	20.1	19.7	18.0	15.1	20.5	20.7	21.8	17.2	16.8	21.8	25.6	28.3	25.5	25.4	21.1	17.1	15.2	13.8	13.8	14.4	18.6
29	14.8	13.4	12.5	12.3	11.4	17.4	16.4	13.4	12.9	14.2	11.4	13.4	15.5	18.5	23.2	26.6	26.6	24.6	19.5	13.8	10.7	10.2	11.9	13.2	15.7
30	14.0	12.7	12.7	12.9	12.2	11.9	15.0	10.9	14.5	14.3	9.1	24.8	31.0	33.8	31.5	27.1	19.7	17.8	12.7	-2.8	1.9	7.8	7.2	7.6	15.0
31																									
Mean	10.8	11.3	11.9	10.4	12.2	11.6	12.2	12.7	13.9	16.6	17.4	19.0	19.1	22.1	25.6	23.5	24.5	22.2	15.3	11.8	10.7	11.4	11.4	10.7	15.3

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 27 Meanook $Z = 58,000\ \gamma +$ September 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	796	796	791	791	789	791	795	784	785	769	785	773	774	753	740	758	763	774	785	796	801	807	812	807	784
2	801	806	801	796	796	795	786	785	763	741	710	736	742	774	791	795	795	795	796	796	796	797	797	807	783
3 D	811	818	807	796	796	796	786	774	747	544	893	915	883	903	612	667	730	742	774	785	820	861	677	720	777
4 D	796	731	741	753	818	829	807	817	819	807	796	784	801	817	839	1014	1501	1209	1143	1122	893	658	486	430	850
5 D	684	514	525	623	730	785	839	839	775	741	839	742	754	774	699	742	812	838	845	850	861	838	855	839	764
6	829	829	829	829	819	829	829	807	807	796	785	774	806	818	818	817	818	818	823	829	839	834	829	827	818
7	818	818	818	813	814	785	784	774	753	709	687	736	786	812	796	709	682	742	774	808	853	893	895	893	790
8	873	877	861	850	818	812	807	807	797	796	795	796	801	796	785	784	774	774	786	796	801	823	851	839	812
9	850	872	850	818	797	796	763	796	806	796	784	763	797	763	699	754	797	807	818	823	846	834	887	857	807
10	836	845	833	812	812	801	793	782	779	780	760	774	758	733	766	793	808	812	818	812	808	814	819	829	799
11	809	822	822	812	801	799	791	797	801	791	780	793	791	793	791	788	788	791	795	806	813	812	811	808	800
12	807	801	796	801	796	796	795	791	791	796	796	795	791	786	791	791	796	795	796	807	807	811	808	797	797
13 Q	787	787	787	787	787	787	787	787	787	787	787	787	787	788	791	791	787	785	786	797	807	807	807	796	791
14 Q	791	785	785	785	785	785	785	785	789	793	791	785	786	785	784	785	786	785	796	796	796	796	796	785	788
15	784	785	787	786	786	785	791	791	791	789	788	788	785	786	786	786	785	774	773	773	775	785	785	791	785
16 D	807	798	812	810	830	809	819	802	797	754	759	792	786	783	700	764	764	781	785	818	840	889	878	862	802
17	870	854	818	802	813	819	802	796	770	764	778	796	789	776	808	821	820	819	808	808	808	811	809	807	807
18 Q	802	797	796	795	796	796	792	794	796	792	792	792	794	796	796	794	792	792	792	802	810	797	799	797	796
19	786	787	786	786	786	786	787	787	788	779	775	776	764	775	786	786	786	786	787	792	796	789	789	789	785
20	786	786	786	789	789	789	787	786	792	792	789	789	786	786	786	786	786	786	785	788	790	796	796	786	788
21 Q	781	786	786	786	786	786	786	786	785	787	787	785	786	786	785	785	785	785	781	785	785	786	786	788	785
22 Q	783	786	786	784	784	784	785	785	785	785	785	785	783	786	786	787	783	783	781	790	792	792	788	785	786
23	785	787	789	797	799	819	819	819	797	790	790	794	786	785	785	786	786	786	783	786	787	792	797	802	794
24	806	797	788	789	789	790	794	790	764	732	716	731	748	761	760	759	764	770	776	783	792	795	797	813	775
25 D	813	806	839	867	761	714	637	786	884	1116	954	876	1089	840	840	852	832	823	851	893	881	864	892	861	857
26	894	922	856	807	754	711	802	818	787	752	775	734	774	754	716	724	797	804	811	824	837	833	833	835	798
27	824	819	808	807	808	811	782	786	792	746	721	719	732	749	764	770	786	798	808	819	830	839	832	835	791
28	840	838	813	830	830	722	785	800	746	743	678	707	775	785	792	804	812	809	807	810	810	810	810	808	790
29	802	802	801	799	797	797	783	798	797	787	766	743	785	792	802	802	802	802	799	802	802	807	808	806	795
30	797	797	797	797	797	797	788	792	781	778	667	653	603	579	708	754	746	752	798	735	824	830	830	819	759
31																									
Mean	808	802	796	797	795	790	790	795	788	778	777	774	787	780	770	785	809	804	809	814	817	813	805	801	795

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 28 Meanook H = 12,000 γ + October 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	949	951	958	969	975	996	845	955	992	975	966	967	959	963	963	950	936	928	925	930	927	922	977	1014	954
2	1048	1023	1057	1047	1072	1043	972	962	1002	969	970	967	963	963	948	945	939	925	912	911	920	940	954	959	975
3	956	964	978	987	1046	1034	980	1003	970	980	979	928	852	830	932	931	907	877	889	923	929	931	931	944	945
4 Q	948	956	958	963	965	969	975	975	977	967	968	971	969	964	953	960	944	937	928	929	933	947	955	979	958
5	970	958	958	962	969	972	985	979	972	971	970	967	970	964	959	955	944	925	923	935	940	977	956	953	960
6	946	955	964	971	988	985	985	976	976	974	976	977	969	922	971	971	954	939	935	943	952	939	938	954	961
7	958	985	971	971	994	1026	971	999	974	923	894	911	950	974	970	955	911	923	937	939	950	972	972	969	958
8	974	1021	1048	1075	1021	986	984	933	923	974	966	966	958	966	962	969	958	946	939	931	932	936	947	946	969
9 Q	954	963	969	966	971	971	973	970	971	961	936	964	976	968	969	968	961	955	943	943	943	939	947	954	960
10 Q	962	964	972	976	977	977	975	977	977	978	978	977	975	969	967	963	958	948	939	935	930	939	944	958	963
11 Q	958	961	969	970	976	972	974	974	974	978	972	982	982	979	974	966	950	936	923	930	939	962	963	958	963
12 Q	963	970	972	973	972	977	977	979	978	981	985	985	986	982	978	969	947	931	916	922	943	952	965	970	966
13	970	970	972	974	972	986	971	972	961	900	931	978	969	965	985	980	961	946	932	930	947	954	958	971	961
14	974	978	977	976	972	981	980	997	982	985	985	985	985	986	977	974	958	946	925	929	942	965	955	961	970
15	979	968	981	983	993	987	983	982	972	976	983	975	979	979	970	962	955	950	939	935	939	954	964	964	969
16	970	977	979	979	1026	946	889	986	986	979	991	982	978	970	970	962	950	932	911	910	920	939	960	968	961
17	972	970	971	978	993	979	987	985	986	981	981	977	985	985	980	970	954	931	914	927	932	952	952	952	966
18	963	974	970	970	979	982	985	981	978	983	979	979	982	977	969	961	954	936	921	922	932	943	951	954	964
19	961	970	972	972	978	981	980	982	985	985	977	950	935	974	982	966	930	930	919	931	935	943	957	954	960
20	962	970	974	967	970	968	974	978	980	980	980	982	979	977	974	962	954	946	939	934	943	961	950	958	965
21	962	969	985	973	978	978	978	976	972	968	952	938	962	976	973	970	954	936	911	911	922	937	947	957	958
22 D	961	963	970	986	1008	994	731	812	821	700	776	875	731	889	954	918	867	877	848	938	1005	994	1044	1049	905
23 D	1056	985	961	1050	1024	924	907	794	505	409	504	441	625	604	598	618	766	879	883	921	968	1041	1032	1040	814
24 D	1025	1041	1073	1084	1024	977	726	338	372	348	202	373	148	108	654	560	841	918	963	939	961	1010	1032	1070	741
25	963	923	922	922	922	939	943	946	952	943	939	939	936	934	932	924	908	906	899	900	911	919	925	930	928
26	936	939	939	954	952	950	954	822	693	884	968	955	923	953	947	914	892	896	903	898	896	954	954	935	917
27 D	949	947	954	962	962	970	954	954	884	927	949	936	932	946	954	963	908	879	828	837	993	1065	985	950	941
28 D	935	930	931	942	947	970	957	946	789	750	630	660	703	931	954	887	867	868	881	919	931	955	994	997	886
29	985	966	952	972	970	988	969	946	935	790	868	930	958	954	936	884	888	930	935	931	936	938	988	1009	940
30	1020	969	957	962	963	983	966	921	943	944	903	847	838	899	897	924	915	899	921	946	962	968	910	946	933
31	964	962	961	962	971	973	966	966	946	950	950	975	982	978	976	970	955	947	939	939	939	939	954	962	959
Mean	971	969	973	981	985	979	948	934	914	904	903	911	904	917	940	928	925	923	917	925	940	958	968	970	941

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 29 Meanook D = 24° E + ... ′ October 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	10.0	10.9	10.9	10.6	10.6	10.4	8.0	24.3	14.1	15.5	15.5	16.0	17.5	20.1	24.2	27.7	30.1	25.4	19.1	16.0	9.4	7.0	6.0	6.2	15.2
2	0.8	0.9	8.0	9.1	4.7	13.3	0.5	21.2	14.1	15.2	14.4	14.3	15.8	17.8	21.3	23.4	22.3	20.1	16.5	9.9	7.6	7.1	7.6	7.5	12.2
3	8.9	8.0	7.6	7.6	-1.0	10.2	2.1	13.3	20.7	17.2	15.3	20.3	21.2	16.2	20.2	21.3	20.3	11.1	1.1	0.5	4.1	8.4	10.0	11.9	11.5
4 Q	12.4	12.4	11.4	11.6	12.3	11.8	11.6	17.0	15.0	14.3	16.0	16.4	16.9	18.7	18.7	18.9	19.3	18.2	15.2	11.3	9.6	9.9	11.3	11.4	14.2
5	10.4	6.0	9.4	9.9	10.3	11.4	11.6	12.5	13.8	14.2	15.8	17.2	17.4	19.1	24.0	25.4	23.2	27.2	11.7	11.3	9.1	5.4	9.5	8.7	13.9
6	10.4	11.3	11.6	11.6	11.3	13.4	10.4	12.4	13.8	16.2	17.2	17.3	17.2	14.6	18.5	21.1	22.2	20.2	13.5	12.1	10.5	5.2	10.9	10.6	13.9
7	9.2	6.5	8.9	9.9	7.6	9.4	16.7	16.8	16.4	17.3	17.2	14.3	15.8	16.8	18.2	21.7	17.6	8.9	12.9	8.5	10.9	9.9	8.0	7.2	12.8
8	8.4	1.5	-2.8	4.5	7.0	9.9	15.2	15.2	12.9	15.8	16.3	15.3	15.3	15.3	17.2	18.7	21.3	22.2	20.5	18.2	14.4	11.9	9.3	9.4	13.0
9 Q	9.4	9.0	8.9	12.5	11.3	11.3	12.4	13.4	14.6	15.9	17.2	19.1	16.3	16.4	18.2	20.1	22.3	22.2	20.3	17.6	14.2	12.8	10.3	10.6	14.8
10 Q	9.4	10.4	10.4	10.4	10.7	11.6	12.3	13.4	13.9	14.5	14.8	15.5	16.0	17.1	19.8	23.7	25.0	23.7	16.3	16.0	12.9	10.9	10.9	9.4	14.5
11 Q	8.9	10.3	11.1	11.7	11.7	13.0	13.3	13.5	13.4	16.3	15.2	15.4	15.8	16.3	18.8	22.3	22.7	21.6	18.2	12.5	7.7	7.0	7.3	9.9	13.9
12 Q	10.7	10.9	12.1	12.4	12.4	12.7	13.1	13.6	13.6	14.4	14.9	15.3	15.8	16.8	19.1	22.7	24.2	24.2	20.2	16.3	10.4	8.7	9.0	10.3	14.7
13	11.1	11.2	11.9	11.5	11.3	15.3	13.3	15.4	17.4	25.8	28.1	21.3	20.8	18.3	22.8	24.6	25.0	23.2	13.9	12.4	10.1	9.4	11.0	10.4	16.5
14	10.8	9.8	11.4	11.4	10.8	11.8	12.0	13.2	14.0	14.8	15.8	16.1	16.3	18.0	22.3	25.1	25.5	23.2	18.2	13.4	8.2	7.5	10.5	10.4	14.6
15	7.6	10.4	11.2	10.6	9.1	13.5	12.3	13.3	15.6	16.9	17.8	14.8	14.8	17.9	21.3	25.0	22.0	18.1	16.2	10.4	7.4	8.0	9.5	11.4	14.0
16	11.3	10.3	9.4	10.9	5.0	4.5	-0.3	16.8	15.9	15.4	15.8	15.2	16.2	18.2	20.2	23.6	24.6	23.2	18.2	15.2	9.7	8.2	8.0	9.9	13.6
17	10.3	10.3	10.2	9.0	9.3	11.7	9.9	18.2	13.6	12.9	14.6	15.8	16.2	18.1	19.2	22.7	24.0	27.3	18.0	11.5	9.0	8.5	8.4	10.1	14.1
18	9.9	7.6	9.9	11.7	11.8	11.7	12.5	13.9	20.1	19.2	16.8	14.3	14.9	16.4	20.2	24.1	23.3	20.2	18.7	14.9	11.3	9.4	10.1	10.3	14.7
19	10.0	10.4	10.9	11.9	13.4	12.2	12.4	12.6	13.2	14.3	14.3	14.2	10.3	15.6	21.7	25.6	24.2	11.4	6.8	7.2	10.3	9.6	8.9	8.0	12.9
20	7.7	9.4	10.4	12.9	12.3	12.9	13.5	14.2	14.2	13.8	14.7	15.4	15.9	17.3	19.9	24.0	26.2	23.2	18.3	15.3	12.1	9.4	10.7	11.5	14.8
21	10.1	10.8	9.3	12.9	11.9	11.9	13.1	13.4	13.5	15.3	16.2	13.1	16.3	17.4	18.0	21.1	22.1	23.8	17.3	15.9	12.3	9.9	10.2	9.4	14.4
22 D	10.3	10.9	11.5	9.9	10.0	9.8	12.8	13.8	16.8	33.9	38.3	24.0	19.5	19.2	22.3	25.2	21.7	6.3	-0.9	9.9	12.4	11.5	14.8	15.4	15.8
23 D	7.0	10.8	13.7	11.9	10.9	7.4	14.8	2.4	29.9	49.1	36.9	37.4	20.6	18.0	12.7	7.0	13.3	13.2	4.5	8.0	8.0	15.3	14.4	15.2	15.9
24 D	7.8	6.0	8.4	3.7	13.4	15.4	4.4	26.1	21.5	35.9	33.9	41.4	17.0	17.3	35.8	37.7	17.2	22.7	6.6	23.6	19.3	17.6	17.8	13.4	19.3
25	9.4	12.1	13.7	15.6	15.5	17.3	20.7	12.9	12.3	14.8	15.2	16.2	16.8	17.4	21.0	25.1	26.2	25.2	19.7	16.2	14.4	13.4	13.4	13.4	16.6
26	13.3	12.9	13.0	13.4	13.3	11.6	16.3	13.9	25.2	22.1	19.1	17.3	11.5	16.9	22.1	22.1	18.6	18.6	13.4	15.0	17.2	13.4	10.3	11.3	15.9
27 D	11.8	12.2	13.3	14.0	17.4	16.5	13.4	14.8	10.3	14.3	18.4	17.1	14.4	15.8	18.7	21.7	15.0	23.5	35.9	17.8	9.3	10.4	8.6	12.9	15.7
28 D	11.4	12.3	13.8	13.4	13.3	12.2	11.9	12.4	5.5	17.3	46.3	46.6	37.8	26.1	20.7	19.7	5.5	16.8	11.3	-2.3	4.6	8.9	9.5	8.0	16.0
29	4.3	7.5	12.5	16.9	13.8	13.4	12.8	12.4	15.8	13.8	16.2	17.3	17.3	17.9	18.1	17.5	17.8	17.6	17.8	15.9	12.4	12.4	8.0	9.4	14.1
30	8.9	10.1	12.3	11.7	12.5	15.8	23.6	12.0	13.3	15.4	16.5	12.7	14.2	20.0	17.9	17.9	18.7	8.7	-0.7	6.4	11.6	12.9	6.5	9.9	12.9
31	11.3	13.4	13.3	13.1	12.1	26.7	15.3	15.6	18.2	14.7	18.8	20.7	20.7	20.7	21.0	24.1	20.2	20.7	17.2	15.1	12.7	13.3	12.7	12.0	16.8
Mean	9.5	9.6	10.6	11.2	10.8	12.6	12.0	14.6	15.6	18.3	19.5	18.9	17.2	17.8	20.5	22.6	21.3	19.7	14.7	12.6	10.7	10.1	10.1	10.5	14.6

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 30 Meanook $Z = 58,000\ \gamma +$ October 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	807	797	797	804	819	824	775	807	813	808	797	794	800	802	802	802	800	797	786	797	797	798	824	872	805
2	916	894	861	867	862	835	753	737	783	785	797	798	797	802	798	802	807	808	807	807	807	808	819	819	815
3	807	813	819	830	873	809	755	840	781	796	797	764	743	737	753	764	764	781	818	835	819	809	807	804	797
4 Q	819	808	807	797	797	797	802	797	797	796	786	792	792	789	786	797	797	797	802	808	808	799	797	813	799
5	828	830	807	786	796	797	808	807	797	792	786	785	792	787	787	796	796	794	797	797	798	808	807	802	799
6	796	794	793	796	813	808	807	797	797	786	785	785	778	743	764	787	797	797	786	792	802	809	802	797	792
7	792	802	797	802	824	835	672	775	802	735	737	700	743	774	792	792	776	776	792	796	807	819	835	850	784
8	830	850	894	894	841	808	830	808	710	798	800	792	787	792	796	797	797	796	794	794	794	797	804	797	808
9 Q	797	798	801	807	798	798	797	797	797	764	732	764	785	786	787	797	794	786	785	785	787	786	787	788	788
10 Q	786	785	796	797	797	794	792	792	792	792	792	792	786	786	787	796	787	786	786	776	776	782	786	793	789
11 Q	797	793	791	793	793	793	787	787	776	776	765	771	777	783	787	788	788	787	798	798	799	798	803	798	788
12 Q	793	789	786	787	787	786	786	787	787	787	776	787	787	786	791	793	797	797	793	793	793	793	793	793	789
13	787	787	786	788	793	754	765	797	765	690	711	765	756	743	765	776	782	782	786	793	788	793	793	797	773
14	789	788	786	787	793	788	791	788	786	782	777	776	782	777	777	788	787	787	787	785	781	786	787	787	785
15	791	795	793	798	820	819	798	789	786	776	776	776	765	776	786	787	786	777	776	777	782	786	793	787	787
16	787	787	798	799	863	733	765	809	808	787	787	787	787	787	787	788	787	782	782	782	782	782	791	791	789
17	793	793	793	798	829	820	821	787	798	788	788	787	787	787	788	787	788	788	788	787	789	798	798	798	795
18	799	798	798	799	793	797	799	797	765	764	777	787	787	786	787	787	786	787	787	787	791	793	791	790	789
19	787	787	787	787	797	788	787	786	786	784	765	723	690	744	764	776	787	787	782	777	787	787	793	793	776
20	799	799	799	793	787	787	787	786	787	787	786	787	787	787	787	787	787	787	786	787	786	791	787	787	789
21	788	787	797	814	808	793	787	787	876	775	759	706	721	756	776	787	788	787	787	786	787	797	797	797	781
22 D	796	788	788	788	832	789	756	832	906	874	735	787	745	704	776	776	777	837	821	848	876	875	858	863	809
23 D	884	864	844	821	809	788	810	810	929	787	929	951	744	854	772	777	756	821	853	884	888	886	842	832	839
24 D	863	863	794	853	842	832	843	672	1049	1210	1097	1270	972	1043	956	1043	854	907	886	837	907	906	857	907	928
25	882	844	836	832	830	832	814	823	832	811	820	820	815	821	822	832	826	821	817	811	821	820	817	814	826
26	814	814	814	810	809	810	812	771	566	739	775	796	788	799	804	801	774	783	804	825	838	856	841	827	795
27 D	834	832	838	827	817	834	816	809	894	757	794	774	784	795	797	806	791	792	872	901	933	874	849	844	828
28 D	835	828	823	824	839	824	837	798	787	785	811	789	789	791	796	765	754	783	835	837	815	863	921	884	817
29	874	868	857	868	837	863	837	806	758	783	800	789	811	813	816	756	763	806	785	806	818	822	789	811	814
30	864	851	819	830	826	821	766	756	756	778	777	734	739	746	751	778	787	799	800	810	821	822	809	820	794
31	815	800	800	804	809	787	766	768	750	765	756	788	893	799	789	800	786	804	804	804	810	806	804	799	796
Mean	818	814	810	812	818	805	791	790	798	795	791	797	784	790	791	797	789	797	803	807	812	814	812	815	802

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 31 Meanook H = 12,000 γ + November 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	970	970	974	971	971	978	973	971	970	971	978	978	978	979	986	971	963	945	941	947	960	955	954	962	967
2 D	966	974	974	978	978	982	982	982	982	977	978	977	941	962	946	901	856	817	908	922	945	941	963	961	950
3 D	977	968	976	1009	1082	1021	1001	968	962	955	924	961	945	930	939	936	913	927	935	941	943	954	955	956	962
4	954	954	974	979	990	985	971	971	966	966	956	970	954	962	972	969	954	947	941	947	949	946	950	952	962
5 Q	957	966	970	969	970	971	971	972	974	973	973	972	968	974	970	963	954	946	942	954	949	960	958	964	964
6 Q	976	979	981	985	987	987	987	990	987	985	985	987	990	983	976	967	958	946	942	946	946	947	950	958	972
7	970	978	978	982	989	985	984	979	978	973	950	961	954	979	977	978	970	955	946	942	947	947	950	958	967
8 Q	963	969	969	970	971	974	974	974	974	958	974	979	982	979	977	962	950	946	943	944	951	958	963	963	965
9	970	970	969	970	971	975	980	977	978	977	978	978	986	985	982	979	973	962	950	955	964	971	974	974	973
10 D	982	985	983	983	980	973	982	977	937	660	551	958	994	978	977	970	954	924	939	947	950	952	966	982	937
11 D	970	1046	1229	1059	1033	1028	974	774	884	946	958	946	936	966	966	962	950	943	939	942	955	962	955	961	970
12	966	970	978	982	983	976	974	974	972	974	965	939	954	955	955	958	958	950	943	935	950	943	946	979	962
13	970	985	1001	1000	992	1001	1008	992	974	973	972	973	973	971	970	960	945	938	938	938	945	949	953	958	970
14	969	966	965	977	978	974	978	978	979	978	978	978	978	974	974	965	955	946	939	943	947	956	955	968	967
15	971	979	978	979	979	971	997	974	908	977	985	975	974	977	985	978	966	958	954	952	954	962	969	976	970
16	981	981	992	992	985	1008	1028	981	923	946	976	978	912	922	974	973	973	954	945	942	945	953	961	978	967
17	963	964	968	968	970	1004	978	905	874	948	968	960	944	953	980	970	962	945	944	941	944	945	952	957	954
18	968	972	976	977	976	976	976	968	948	976	969	971	952	969	991	984	971	977	945	937	937	959	944	958	966
19	962	968	970	970	976	968	962	976	969	949	965	978	976	969	961	975	977	969	953	945	945	946	951	954	964
20	961	961	966	971	980	981	984	978	977	978	977	938	938	977	979	981	981	975	962	960	957	957	957	961	968
21	969	969	973	977	978	977	976	977	978	973	970	953	957	976	977	978	977	970	959	953	957	960	962	967	969
22 Q	978	981	978	985	970	981	981	979	977	977	977	965	978	981	977	971	962	951	945	945	953	960	962	974	970
23	981	984	985	985	985	978	978	977	953	985	969	949	915	954	978	981	969	961	961	963	963	963	960	963	968
24	968	970	973	973	971	969	962	938	898	837	773	918	898	867	976	977	969	960	949	951	946	953	965	967	939
25	977	984	985	989	986	989	985	984	984	982	983	983	977	971	969	945	917	931	883	903	938	942	953	1011	965
26	999	980	960	974	967	974	968	961	957	952	952	942	941	933	956	953	953	930	953	958	952	953	952	952	957
27	961	969	969	970	965	967	976	972	949	931	854	951	973	963	929	934	955	949	944	938	942	954	959	977	952
28 D	982	994	1002	1009	991	982	986	1001	932	703	759	821	836	903	969	982	978	968	958	954	955	957	954	954	939
29	961	962	961	969	978	997	982	939	730	899	944	936	857	935	958	968	971	967	950	946	947	955	958	966	943
30 Q	966	968	969	971	978	978	976	974	974	973	973	973	970	972	974	969	963	955	946	944	950	955	955	963	966
31																									
Mean	970	976	984	982	984	984	981	965	948	942	937	958	951	960	970	965	957	947	943	944	950	954	957	966	961

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 32 Meanook — D = 24° E + ... ′ — November 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	11.5	11.9	11.9	11.9	12.8	12.5	11.9	12.2	12.5	13.3	14.0	15.4	16.4	17.0	20.1	23.6	23.2	21.0	15.8	9.9	10.7	11.3	12.4	11.0	14.3
2 D	10.9	11.5	11.7	12.3	13.3	12.9	12.9	13.4	14.3	15.3	16.5	17.4	18.3	24.4	27.3	18.7	35.4	17.6	1.8	13.7	10.7	10.6	9.2	9.8	15.0
3 D	6.5	9.9	11.7	5.8	9.3	13.7	17.6	14.3	13.4	12.9	14.8	16.2	16.3	13.5	19.4	25.0	20.2	14.6	14.7	12.6	13.4	11.2	9.9	9.9	13.6
4	9.9	12.3	8.7	13.4	13.4	9.3	12.8	13.6	14.2	15.2	15.1	15.6	20.7	15.2	17.8	20.4	21.5	18.5	14.3	13.2	13.1	13.4	13.4	12.2	14.5
5 Q	12.5	11.5	12.3	12.6	13.3	13.3	12.9	12.9	13.4	14.2	14.6	14.8	15.4	15.8	17.9	20.6	20.9	20.2	18.5	15.7	13.4	12.3	12.8	12.4	14.8
6 Q	12.7	12.1	11.6	12.4	12.2	12.3	12.6	12.7	13.6	14.0	14.7	14.8	16.5	16.9	17.8	20.8	21.4	19.8	15.6	13.6	11.7	11.7	12.2	11.4	14.4
7	10.4	10.4	10.9	11.9	11.3	11.4	13.3	13.1	12.9	14.2	18.7	17.3	23.7	13.3	20.2	22.0	22.7	20.2	15.5	13.7	13.2	11.9	10.5	10.1	14.7
8 Q	12.0	12.9	12.8	12.4	13.7	13.3	12.3	13.3	14.9	14.4	17.3	14.2	17.2	18.2	19.7	21.0	21.1	19.3	15.3	13.8	13.1	12.9	12.4	12.0	15.0
9	10.9	11.4	11.3	11.0	11.1	18.2	10.3	12.3	12.4	12.5	13.4	14.4	15.9	16.4	17.6	19.1	19.8	19.2	15.3	14.3	12.9	11.9	11.7	11.3	13.9
10 D	11.3	11.4	12.2	12.5	12.2	12.1	12.5	13.4	16.4	9.4	61.4	25.1	18.0	19.2	21.3	21.3	22.3	15.0	3.9	3.6	9.7	8.2	10.7	8.4	15.5
11 D	10.6	9.9	6.0	14.3	13.4	15.2	12.9	14.2	15.0	17.0	15.3	16.8	17.8	18.1	19.8	21.2	22.2	19.2	13.9	12.7	11.9	12.9	13.5	13.4	14.9
12	12.5	12.9	12.5	13.2	12.9	12.0	12.7	13.4	13.8	15.2	16.7	14.8	19.7	20.8	19.1	18.7	22.4	23.0	15.4	12.5	9.5	6.0	8.7	9.0	14.5
13	9.0	11.9	8.2	12.8	12.2	10.5	14.2	15.3	16.8	13.0	14.2	15.2	15.3	16.2	17.7	19.7	19.3	17.1	14.9	13.4	12.9	12.4	12.3	12.1	14.0
14	10.9	10.9	12.7	13.3	13.2	12.8	12.9	12.9	12.9	13.8	13.9	14.6	15.3	15.8	17.1	19.3	20.2	19.1	16.7	14.4	12.2	10.4	9.3	12.3	14.0
15	9.2	9.6	11.3	12.5	11.9	13.4	14.3	8.4	12.3	17.4	15.2	15.4	15.3	19.1	18.7	20.3	21.1	18.5	16.2	13.6	11.9	10.3	10.5	10.4	14.0
16	8.4	11.0	10.5	10.9	11.9	11.3	12.7	14.3	10.0	12.3	14.9	18.2	16.0	13.6	12.6	20.7	22.1	18.0	15.2	13.2	12.2	12.4	12.3	12.0	13.6
17	11.9	12.3	12.4	13.4	14.5	14.5	17.3	7.5	14.7	18.3	17.3	15.4	13.3	18.4	18.3	21.5	22.1	18.5	19.2	16.3	14.3	13.8	12.7	11.5	15.4
18	11.4	12.1	11.9	12.3	12.5	13.3	13.4	17.4	22.1	16.4	19.2	20.2	16.8	21.2	21.2	20.2	15.8	16.4	14.6	13.4	12.0	11.0	9.9	10.4	15.2
19	10.9	11.4	12.0	12.4	12.4	12.5	12.9	15.8	15.8	12.5	17.3	15.8	15.3	13.4	11.3	11.4	18.2	17.2	14.4	13.4	12.4	12.0	12.4	12.4	13.6
20	12.3	12.3	12.0	12.4	12.9	12.5	12.9	12.5	13.4	14.0	13.4	9.9	14.4	15.2	15.3	16.4	14.6	15.3	13.4	13.3	13.0	13.1	12.9	12.3	13.3
21	11.8	11.3	12.4	12.3	12.5	12.9	12.8	15.3	14.2	14.4	14.6	11.4	16.4	19.2	18.1	17.7	18.0	13.4	12.7	12.8	12.2	11.9	10.9	11.3	13.8
22 Q	10.7	10.1	11.3	11.2	11.9	12.7	12.8	12.8	13.9	15.6	15.6	13.4	15.8	16.0	17.1	19.5	19.1	17.5	15.3	13.6	12.0	11.3	10.4	9.9	13.7
23	9.9	9.9	10.4	11.5	13.2	13.3	13.5	16.3	11.5	18.2	17.9	20.1	17.8	20.3	19.2	18.2	17.0	10.7	12.8	13.3	13.1	13.8	13.8	12.7	14.5
24	12.5	12.7	12.7	12.7	12.7	12.5	12.9	19.5	24.4	30.5	14.6	18.3	15.0	20.3	17.6	14.4	18.6	17.0	13.9	12.1	11.4	10.5	10.4	10.4	15.3
25	11.9	11.9	12.7	12.9	12.9	12.1	12.6	13.0	13.0	13.7	14.6	14.4	14.8	16.7	14.4	14.4	6.5	13.8	6.8	6.5	7.5	8.1	8.9	8.9	11.8
26	14.8	14.3	13.7	15.3	15.3	16.3	11.8	12.9	12.8	12.3	15.6	17.9	15.8	15.8	20.3	20.5	14.8	12.5	12.9	11.7	12.7	12.4	11.9	10.8	14.4
27	10.9	11.9	13.0	11.9	12.9	16.0	14.7	15.3	24.6	23.3	13.6	15.6	14.5	14.6	13.6	10.5	16.0	13.8	15.8	13.7	12.3	9.9	10.1	10.5	14.1
28 D	10.1	12.0	14.0	14.6	16.0	13.8	15.7	27.8	16.5	14.2	15.6	28.3	23.1	21.5	16.4	16.4	16.3	14.6	11.5	11.2	12.7	12.0	11.8	10.9	15.7
29	11.1	12.0	13.1	11.8	13.4	16.6	14.7	14.9	24.8	24.4	23.3	16.4	13.1	14.7	13.4	10.8	15.6	13.6	12.9	11.8	11.4	11.9	13.0	11.9	14.6
30 Q	12.7	12.9	13.1	13.6	13.6	14.8	14.2	13.4	13.2	14.6	14.7	15.0	15.2	15.3	15.6	17.6	18.2	16.8	15.0	14.6	13.4	12.8	11.9	11.1	14.3
31																									
Mean	11.1	11.6	11.7	12.4	12.8	13.3	13.4	14.1	15.1	15.6	17.3	16.4	16.6	17.2	17.9	18.7	19.6	17.0	13.8	12.7	12.1	11.5	11.4	11.1	14.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 33 Meanook $Z = 58,000\ \gamma +$ November 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	800	800	800	801	800	799	800	800	800	799	796	795	790	790	799	800	795	789	790	790	782	796	795	796	796
2 D	797	797	795	796	797	796	795	792	795	788	778	778	767	715	681	649	703	734	757	788	811	810	811	803	772
3 D	812	816	811	827	778	788	767	801	802	801	769	790	789	777	778	778	765	773	788	795	800	800	801	804	792
4	811	810	822	838	827	833	805	801	800	800	779	795	773	795	801	805	805	800	801	800	810	807	805	801	805
5 Q	801	801	800	800	800	801	800	800	800	800	799	799	795	788	795	800	800	800	783	786	792	789	786	783	796
6 Q	783	779	779	779	776	783	779	776	779	776	771	774	774	776	783	786	779	774	789	779	788	788	788	792	780
7	801	800	800	800	800	801	800	799	800	800	767	762	740	756	746	752	770	778	789	800	801	801	801	800	786
8 Q	799	799	799	799	799	799	805	790	778	757	756	769	784	788	789	789	789	785	789	795	800	800	800	796	790
9	795	795	797	801	811	822	813	801	790	789	789	789	788	788	789	791	790	791	789	790	790	788	784	784	794
10 D	784	783	786	786	786	801	811	789	735	648	438	758	797	790	790	788	778	767	771	769	788	789	795	805	764
11 D	805	855	866	887	829	701	723	769	758	789	785	779	769	788	799	800	800	800	801	801	804	805	800	800	796
12	800	800	800	800	800	800	800	800	800	789	778	740	757	760	778	799	800	795	795	799	810	801	801	812	792
13	816	833	864	831	825	833	849	822	790	779	790	790	793	790	800	800	800	800	795	795	795	795	795	795	807
14	795	795	795	795	795	789	789	789	789	789	789	789	789	789	790	792	792	789	795	797	797	800	799	795	793
15	801	802	802	801	802	812	823	812	725	780	801	802	780	759	780	790	790	790	791	798	798	796	791	790	792
16	796	793	791	797	801	812	817	801	737	759	779	778	736	714	736	758	779	787	790	791	791	790	790	790	780
17	796	794	801	801	811	812	812	770	660	768	790	790	774	779	793	791	797	800	801	801	805	801	801	801	790
18	802	800	800	800	801	801	796	765	684	714	722	759	748	735	759	773	780	779	796	801	812	834	811	801	778
19	790	798	801	801	800	779	763	785	779	747	747	780	779	768	752	768	779	790	796	800	801	801	802	800	784
20	796	796	800	801	800	798	794	796	791	790	780	752	753	770	770	779	780	780	790	796	796	796	791	791	787
21	796	796	796	791	790	790	791	790	785	779	770	741	724	736	740	758	768	770	788	796	796	791	791	791	778
22 Q	792	796	794	797	790	791	790	789	779	779	780	767	768	779	779	789	789	789	796	796	796	790	790	790	787
23	790	790	790	790	790	790	800	801	733	753	768	741	725	725	758	780	780	779	782	789	789	791	791	790	786
24	789	789	789	789	789	790	785	758	714	660	601	682	638	661	768	779	790	791	801	802	808	805	802	800	758
25	798	796	796	794	794	793	790	790	790	789	786	780	772	757	752	753	747	772	802	829	836	830	838	876	794
26	825	806	810	823	812	812	802	801	796	782	776	770	772	754	771	768	770	771	798	801	801	801	802	801	793
27	801	802	811	818	823	829	820	801	763	747	671	768	779	768	737	758	770	786	793	802	802	802	811	828	787
28 D	838	846	848	855	836	814	768	709	758	702	618	676	655	704	779	779	789	783	796	801	801	801	802	803	773
29	800	802	813	819	825	830	819	780	606	705	768	758	692	709	736	758	770	785	791	798	800	797	797	796	773
30 Q	790	790	791	791	791	792	787	791	790	790	790	790	788	789	791	790	790	790	789	789	791	791	790	790	790
31																									
Mean	800	802	805	807	803	800	796	789	764	765	751	768	760	760	771	777	781	784	791	796	800	800	799	800	786

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 34 Meanook — H = 12,000 γ + — December 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	971	974	976	977	972	982	979	979	978	979	982	983	978	977	976	970	955	955	947	954	951	963	968	960	970
2	974	979	983	986	994	994	993	994	987	979	864	655	719	621	743	860	957	932	943	955	943	970	982	1012	917
3	1002	998	986	986	978	979	974	970	970	970	970	976	970	971	977	976	970	966	955	955	950	953	954	958	971
4 D	970	990	984	995	990	993	990	966	905	693	570	558	449	456	511	504	523	519	693	892	1015	977	997	1018	799
5 D	1079	1059	1212	1259	1155	1046	1064	1012	971	957	949	934	934	927	934	934	926	912	912	914	918	918	918	931	991
6	947	947	958	958	955	1054	950	949	950	928	646	851	903	805	864	935	961	955	939	939	943	946	943	939	924
7 Q	953	957	970	977	976	965	954	960	954	954	957	957	953	946	973	965	958	957	946	945	945	945	949	960	957
8	960	968	972	980	980	980	977	975	972	972	944	945	979	960	945	941	967	976	961	952	929	951	968	944	962
9	988	988	1005	991	990	977	983	1015	991	969	966	969	969	961	976	969	961	952	948	944	947	948	948	953	971
10 Q	964	967	968	977	988	988	983	972	980	977	972	968	967	960	964	961	960	952	952	949	948	948	952	956	966
11	967	977	982	978	975	977	981	977	989	971	978	978	975	975	977	973	966	957	953	953	954	953	954	965	970
12 Q	977	985	970	974	978	980	978	977	976	973	970	973	975	970	970	967	960	954	945	945	953	957	953	969	968
13 D	992	1000	1008	993	1016	1032	997	976	988	983	976	974	922	506	474	619	753	757	803	779	853	937	955	952	885
14	970	977	977	977	970	952	944	929	952	952	952	953	954	937	843	865	865	920	929	865	890	928	937	983	934
15	952	956	961	961	961	960	960	960	960	961	964	967	962	961	952	953	952	944	944	944	948	953	959	976	957
16	989	985	1004	985	993	1003	985	976	973	945	921	891	868	965	985	970	960	954	962	957	957	961	965	975	964
17 D	979	978	985	979	977	971	963	963	931	879	932	962	970	986	982	990	979	901	858	955	953	961	939	1008	958
18 D	1386	1171	1167	1041	888	914	944	916	918	931	939	946	947	946	946	939	935	931	922	915	916	924	927	954	973
19	945	985	1091	1119	1016	1008	969	922	836	603	867	855	859	863	910	945	961	960	945	953	938	949	953	965	934
20	965	953	965	977	976	968	957	954	899	893	918	851	938	934	968	957	938	930	942	934	926	936	945	957	941
21	969	969	969	976	974	974	978	932	908	939	900	906	911	950	970	977	969	955	943	934	939	954	954	962	950
22	972	973	979	975	972	966	956	971	959	933	971	975	971	971	959	967	974	959	955	925	935	949	963	971	963
23	977	971	974	978	978	979	976	977	947	884	932	914	918	866	913	985	978	932	890	938	943	958	955	978	948
24	984	989	981	981	977	977	965	961	937	960	969	970	934	935	970	978	970	957	954	952	953	954	953	957	963
25 Q	974	976	978	978	979	977	974	974	974	974	947	966	966	982	982	977	985	971	955	954	958	963	969	986	972
26	994	991	994	1001	994	992	986	984	979	970	978	978	969	884	954	985	974	939	947	954	952	946	947	951	968
27	994	989	982	982	986	1018	966	960	948	888	831	711	853	932	970	971	962	948	947	943	946	955	958	969	942
28	962	976	994	979	985	980	976	977	969	961	955	961	974	978	946	924	958	961	932	935	932	943	970	974	963
29	990	985	986	979	982	977	971	977	977	971	976	971	974	962	961	974	970	955	932	916	908	946	928	947	963
30	974	985	985	990	984	977	979	919	921	943	978	969	906	969	985	990	978	961	939	938	939	946	961	962	962
31	971	973	981	982	985	982	979	978	989	985	989	989	975	989	989	989	978	959	950	943	950	961	970	977	976
Mean	990	986	998	996	984	985	975	966	954	931	925	918	921	905	918	932	939	928	927	933	940	950	955	967	951

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 35 Meanook D = 24° E + ... ′ December 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	11.4	12.4	12.4	12.9	13.3	13.0	12.8	12.8	12.7	12.4	12.9	13.8	13.4	14.9	15.8	17.2	18.3	16.9	14.9	11.9	10.9	10.9	11.7	11.7	13.4
2	11.4	11.7	11.4	11.1	10.9	11.7	12.3	12.3	12.4	15.6	26.1	50.5	57.4	42.6	45.2	39.3	35.4	20.8	12.9	10.5	13.4	11.2	8.4	8.4	21.0
3	10.5	11.4	10.7	12.3	13.6	13.9	14.8	14.8	14.7	14.9	14.8	16.0	16.0	15.6	15.6	18.1	20.6	18.7	19.3	17.8	16.8	19.5	13.8	12.9	15.3
4 D	11.8	11.4	11.8	11.9	13.3	11.5	12.7	14.0	17.8	30.7	26.5	37.2	33.8	27.3	15.6	33.9	30.7	30.7	34.2	23.6	26.7	23.1	16.9	15.4	21.8
5 D	13.3	20.5	11.9	10.6	12.7	18.5	18.0	15.6	17.0	19.5	21.9	20.7	19.2	17.8	17.4	18.7	20.1	17.8	18.5	17.3	15.3	13.8	12.9	11.8	16.7
6	11.8	11.1	13.6	13.5	12.9	12.9	13.4	13.6	14.6	16.1	4.0	21.5	25.0	21.5	18.2	22.1	12.2	14.2	13.3	12.5	13.2	10.3	11.4	11.2	14.3
7 Q	13.4	13.8	14.6	15.4	13.8	13.2	13.3	14.0	13.4	13.3	14.3	14.6	13.4	13.4	14.9	17.8	18.2	18.2	15.3	15.2	14.2	13.4	12.9	12.3	14.4
8	12.4	12.4	12.3	12.4	14.3	13.6	13.4	13.8	13.8	15.4	15.4	24.0	20.1	18.2	15.6	19.2	19.1	16.3	13.6	14.0	12.4	4.8	5.7	11.3	14.3
9	10.9	9.3	13.4	11.7	13.3	14.1	12.9	25.0	19.5	15.6	17.6	20.3	20.1	17.0	17.3	18.7	19.1	17.4	17.6	16.8	14.4	12.9	12.5	11.5	15.8
10 Q	11.5	11.9	11.9	12.4	10.7	12.3	13.3	13.4	14.4	15.4	15.4	15.4	15.4	15.4	15.4	16.3	17.3	17.2	15.9	15.3	14.8	13.8	13.2	11.9	14.2
11	12.2	12.4	12.3	12.7	11.9	11.5	12.2	13.3	13.5	14.2	15.8	16.1	16.2	17.2	15.2	16.8	16.4	13.9	13.3	12.4	12.4	11.8	9.9	11.1	13.5
12 Q	11.4	10.3	10.9	12.5	12.9	12.9	12.8	12.7	12.9	13.8	13.2	14.2	15.2	15.4	15.8	17.0	16.6	17.5	16.4	14.4	12.3	11.4	10.2	8.0	13.4
13 D	10.3	6.6	10.4	10.5	13.8	10.5	12.3	11.9	12.5	15.2	14.3	18.2	24.6	32.0	56.6	33.0	33.9	11.0	14.6	-4.4	0.1	8.9	3.8	6.0	15.3
14	10.1	12.9	16.6	15.8	15.2	15.2	14.3	14.3	15.2	14.4	15.6	16.4	15.8	15.8	9.4	9.5	5.5	9.9	14.4	8.6	11.1	9.0	7.3	9.5	12.6
15	11.5	13.3	13.8	14.4	14.5	14.2	13.8	13.4	13.4	12.9	14.2	14.4	14.6	16.9	18.1	20.2	20.2	21.1	18.2	15.8	14.0	13.1	11.5	11.9	15.0
16	11.1	10.3	9.2	13.9	17.4	11.3	14.1	12.9	13.4	12.9	14.3	27.5	33.2	18.8	19.7	19.5	18.2	20.1	19.7	15.2	14.3	12.2	11.5	12.3	16.0
17 D	13.3	13.4	14.3	14.8	14.8	14.3	13.4	13.1	14.9	13.6	16.3	18.3	18.2	16.4	17.8	18.9	23.1	19.7	13.4	-1.3	9.3	10.4	12.8	12.4	14.4
18 D	11.7	19.2	14.8	22.7	10.5	25.6	21.1	14.3	13.8	15.8	14.2	14.4	14.2	13.4	14.8	16.3	18.7	18.7	17.2	16.1	11.1	8.9	10.7	12.4	15.0
19	10.3	14.0	7.5	8.2	24.6	21.1	26.0	14.2	14.4	-5.8	19.3	22.1	10.4	13.8	10.3	16.9	16.4	15.2	15.8	18.8	15.8	14.3	12.9	11.5	14.5
20	10.0	12.9	22.5	24.2	18.3	18.3	11.1	14.6	16.8	10.7	16.9	10.4	17.6	17.8	18.8	16.3	15.2	14.8	15.8	17.3	15.8	13.3	13.6	13.6	15.7
21	12.3	12 1	11.9	12.7	11.7	13.4	15.8	12.5	10.6	13.2	14.8	12.5	10.1	10.9	14.2	16.6	13.9	13.4	12.9	12.7	11.8	10.3	11.5	11.5	12.6
22	12.9	13.8	12.3	13.3	13.8	13.8	18.2	14.4	10.8	8.4	12.7	15.2	14.3	15.3	12.3	13.8	18.2	19.0	18.3	14.8	8.9	10.6	9.5	10.7	13.6
23	12.9	12.9	13.3	14.2	13.8	13.7	13.4	12.8	15.7	19.1	24.1	25.0	15.6	18.2	13.4	22.7	20.3	13.6	5.0	3.7	8.7	9.6	8.9	11.9	14.3
24	12.9	14.5	14.2	13.6	15.6	12.7	11.9	12.1	6.2	11.5	12.4	14.2	13.0	12.2	12.3	17.8	19.5	16.8	16.2	15.0	13.6	12.1	11.9	11.5	13.4
25 Q	12.5	12.9	13.3	13.8	14.2	13.8	12.9	12.9	12.5	12.7	7.8	13.3	14.5	15.6	17.1	15.8	18.7	18.7	15.6	12.9	11.1	9.7	9.7	10.3	13.5
26	10.3	10.5	11.4	10.0	12.9	12.4	12.9	14.0	13.5	10.9	14.8	19.3	18.2	26.2	23.4	22.1	23.6	15.6	8.0	11.9	9.9	10.0	7.3	7.8	14.0
27	7.9	9.8	12.3	12.9	13.8	11.9	13.6	18.7	11.8	12.4	18.7	18.5	17.2	12.4	18.2	18.5	18.1	18.6	16.6	14.8	11.9	11.3	11.4	9.9	14.2
28	8.9	10.0	9.4	13.4	14.3	14.2	13.6	15.6	14.7	13.4	14.2	14.7	13.8	14.6	14.8	13.3	18.4	20.1	17.3	13.8	11.8	7.8	7.8	7.3	13.2
29	6.6	11.5	13.5	14.8	14.7	14.0	15.4	13.8	10.3	12.5	13.8	15.2	14.8	15.9	12.7	18.2	20.7	21.7	18.5	16.0	9.4	6.2	7.0	7.8	13.5
30	8.4	11.5	13.6	14.8	15.3	15.7	18.5	6.6	13.8	17.0	17.0	16.8	16.4	15.3	18.0	21.1	20.8	21.5	16.7	19.5	21.6	19.7	19.6	20.7	16.7
31	21.3	21.6	13.8	16.4	16.4	15.2	17.2	10.8	14.3	11.3	13.0	13.4	15.4	14.4	14.0	17.4	20.7	21.3	18.9	16.3	13.1	11.0	10.4	10.8	15.4
Mean	11.2	12.6	12.8	13.6	14.2	14.2	14.6	13.8	13.7	13.8	15.7	18.8	18.6	17.8	18.0	19.4	19.6	17.8	16.1	13.5	12.9	11.8	10.9	11.2	14.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 36 Meanook $Z = 58,000\ \gamma +$ December 1958

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	790	790	790	790	790	790	789	790	790	786	784	784	780	785	786	788	790	792	794	797	794	790	788	785	789
2	786	786	788	790	794	799	797	795	793	786	673	604	665	667	630	683	727	742	771	790	792	814	809	800	753
3	803	799	803	802	799	798	797	792	794	791	792	791	790	790	791	797	797	792	792	792	792	792	792	792	795
4 D	790	789	789	790	789	790	789	780	801	857	792	710	793	793	793	877	970	943	962	879	851	799	799	766	820
5 D	703	711	758	738	758	732	740	791	824	835	844	825	818	818	816	818	817	812	807	807	812	812	812	814	792
6	813	812	813	813	812	807	807	807	802	795	716	742	726	722	715	745	769	769	790	791	802	813	812	809	783
7 Q	807	813	824	823	815	813	807	807	802	802	802	802	801	791	802	806	803	801	805	805	804	803	807	806	806
8	807	802	803	806	802	802	802	803	803	802	769	739	791	786	775	775	771	790	803	813	812	820	835	825	797
9	845	833	827	824	813	813	823	749	803	824	814	792	795	801	813	812	803	802	802	803	803	803	803	803	808
10 Q	803	803	803	803	803	803	804	804	803	802	802	803	801	803	802	802	803	803	811	809	803	802	802	802	803
11	802	801	801	803	807	803	802	802	791	780	807	807	802	792	797	798	798	792	797	797	797	797	802	802	799
12 Q	802	802	802	803	802	802	802	801	798	791	779	780	781	791	794	797	800	802	810	802	799	801	803	812	798
13 D	844	837	885	910	844	856	829	812	807	812	791	780	748	647	490	532	688	694	792	803	824	847	835	835	781
14	835	824	835	833	829	824	811	792	795	802	820	807	812	791	705	715	726	764	801	797	815	820	826	829	800
15	813	804	804	804	803	803	804	803	804	813	813	803	802	798	792	792	802	813	814	813	810	808	805	807	805
16	803	794	793	819	836	826	814	802	813	787	746	737	685	773	802	802	803	803	808	803	800	798	800	798	794
17 D	793	793	792	793	792	792	792	793	737	650	727	776	770	781	793	792	782	760	840	830	782	803	803	832	783
18 D	804	867	792	815	759	776	781	770	772	780	791	798	803	798	803	803	803	803	803	803	799	803	798	823	798
19	825	852	899	922	836	834	819	803	754	619	727	700	727	775	781	769	808	803	808	808	808	814	814	813	797
20	818	814	834	829	815	814	803	782	787	727	750	726	760	743	780	802	798	790	804	813	813	814	814	814	794
21	814	804	805	814	816	816	808	760	690	737	738	737	738	761	762	780	781	772	782	792	803	808	803	802	780
22	813	824	814	803	802	802	802	782	761	727	770	782	791	781	776	770	776	781	796	789	798	803	803	803	790
23	803	802	798	793	802	798	793	793	781	708	750	817	705	684	673	761	787	770	765	789	793	804	804	813	774
24	814	818	813	814	814	802	791	793	750	770	792	791	761	750	782	803	792	796	798	798	798	802	798	798	793
25 Q	798	793	793	793	793	792	792	791	788	787	743	761	761	782	782	792	798	791	787	791	791	791	792	791	786
26	791	787	792	800	798	798	798	792	792	784	776	775	769	657	715	781	781	770	778	781	791	798	803	808	780
27	824	813	807	813	826	826	808	776	769	717	661	608	726	780	792	804	789	792	802	802	804	803	803	804	781
28	803	803	813	814	803	804	803	770	764	770	776	770	781	782	766	749	781	803	801	808	814	804	814	815	792
29	843	836	814	803	793	803	798	792	791	792	792	792	791	778	775	787	782	791	798	804	802	803	803	825	800
30	821	825	815	814	803	798	776	673	728	761	802	791	726	749	793	792	792	792	792	793	792	802	804	803	785
31	803	804	808	803	800	802	803	772	791	796	798	792	784	786	792	798	793	793	801	795	800	798	793	791	796
Mean	807	808	810	812	805	804	799	786	783	774	772	765	767	766	763	778	791	791	804	803	803	805	806	807	792

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 37. Meanook — HORIZONTAL INTENSITY (gammas) (All Days)

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+22	+38	+ 72	+61	+81	+110	+76	+35	+44	+30	+ 9	+39	+51	+75	+52	+27
1-2	+28	+26	+ 79	+64	+72	+ 98	+91	+36	+41	+28	+15	+35	+51	+74	+53	+26
2-3	+37	+46	+ 94	+90	+51	+ 97	+88	+52	+41	+32	+23	+47	+58	+72	+64	+38
3-4	+43	+57	+105	+98	+46	+ 71	+69	+41	+29	+40	+21	+45	+55	+56	+68	+42
4-5	+47	+68	+ 81	+72	+41	+ 44	+58	+57	+32	+44	+23	+33	+50	+50	+57	+43
5-6	+53	+67	+ 71	+51	+20	+ 23	+41	+47	+37	+38	+23	+34	+42	+32	+49	+44
6-7	+35	+15	+ 40	+ 3	+15	- 23	+25	+14	+30	+ 7	+20	+24	+17	+ 7	+20	+24
7-8	+26	-21	- 23	-35	-14	- 62	-18	- 7	+ 9	- 7	+ 4	+15	-11	-26	-14	+ 6
8-9	- 6	-13	- 68	-39	-36	- 54	-54	-12	+ 1	-27	-13	+ 3	-27	-40	-33	- 7
9-10	-39	-33	- 77	-70	-52	- 71	-74	-38	-23	-37	-19	-20	-46	-59	-52	-28
10-11	-42	-56	- 77	-75	-54	- 72	-79	-65	-43	-38	-24	-26	-54	-68	-58	-37
11-12	-31	-83	-120	-70	-54	- 79	-80	-54	-31	-30	- 3	-33	-56	-67	-63	-38
12-13	-45	-62	- 88	-74	-59	- 64	-88	-46	-28	-37	-10	-30	-53	-65	-57	-37
13-14	-35	-46	- 79	-50	-50	- 63	-64	-21	-43	-24	- 1	-46	-44	-50	-49	-32
14-15	-18	-20	- 65	-27	-39	- 50	-58	- 2	-48	- 1	+ 9	-33	-29	-37	-35	-16
15-16	- 2	- 7	- 30	-33	-22	- 34	-34	+ 4	-43	-13	+ 4	-19	-19	-22	-30	- 6
16-17	- 3	- 9	- 36	-38	-25	- 21	-32	-10	-31	-16	- 4	-12	-20	-22	-30	- 7
17-18	- 9	- 7	- 16	-37	-32	- 34	-19	-30	-35	-18	-14	-23	-23	-29	-26	-13
18-19	-16	-17	- 12	-32	-36	- 24	-14	-27	-41	-24	-18	-24	-24	-26	-27	-19
19-20	-19	- 5	- 2	-14	-26	- 14	- 7	-22	-27	-16	-17	-18	-16	-18	-15	-15
20-21	-18	+ 6	+ 14	+ 1	+ 4	+ 9	+ 5	- 5	0	- 1	-11	-11	- 1	+ 3	+ 4	- 8
21-22	-12	+19	+ 29	+25	+28	+47	+36	+ 7	+25	+17	- 7	- 1	+18	+29	+24	0
22-23	- 5	+25	+ 42	+54	+54	+74	+66	+20	+47	+22	- 4	+ 4	+33	+53	+41	+ 5
23-24	+ 3	+21	+ 56	+69	+77	+83	+69	+32	+59	+29	+ 5	+16	+43	+65	+53	+11
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 38 Meanook — DECLINATION (minutes) (All Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	-4.6	-3.7	-5.7	-7.6	-5.8	-5.6	-5.2	-3.7	-4.5	-5.1	-3.3	-3.7	-4.9	-5.1	-5.7	-3.8
1-2	-4.8	-2.1	-4.7	-5.6	-5.4	-7.1	-4.4	-2.7	-4.0	-5.0	-2.8	-2.3	-4.2	-4.9	-4.8	-3.0
2-3	-3.5	-2.1	-4.3	-5.1	-4.3	-7.1	-2.7	-1.1	-3.4	-4.0	-2.7	-2.1	-3.5	-3.8	-4.2	-2.6
3-4	-2.2	-0.7	-4.2	-5.0	-2.3	-7.3	-1.3	-1.4	-4.9	-3.4	-2.0	-1.3	-3.0	-3.1	-4.4	-1.6
4-5	-2.4	-4.0	-4.4	-3.5	-1.9	-6.7	-3.0	-4.4	-3.1	-3.8	-1.6	-0.7	-3.3	-4.0	-3.7	-2.2
5-6	-2.1	-3.9	-4.1	-4.2	-2.3	-6.2	-2.5	-4.4	-3.7	-2.0	-1.1	-0.7	-3.1	-3.8	-3.5	-2.0
6-7	-0.7	-3.0	-3.5	-3.4	-3.8	-5.0	-3.6	-4.4	-3.1	-2.6	-1.0	-0.3	-2.9	-4.2	-3.2	-1.2
7-8	-0.2	-1.2	-5.4	-2.2	-2.7	-6.1	-2.6	-3.2	-2.6	0.0	-0.3	-1.1	-2.3	-3.6	-2.6	-0.7
8-9	0.0	-3.2	+0.3	-0.1	-1.9	-3.1	-4.6	-1.7	-1.4	+1.0	+0.7	-1.2	-1.3	-2.8	0.0	-0.9
9-10	+1.6	-0.7	+2.8	+0.7	-1.6	-2.4	-2.4	-0.2	+1.3	+3.7	+1.2	-1.1	+0.2	-1.6	+2.1	+0.2
10-11	+3.0	+3.3	+4.5	+3.9	-1.4	-1.6	-2.7	-1.3	+2.1	+4.9	+2.9	+0.8	+1.5	-1.8	+3.8	+2.5
11-12	+2.8	+3.2	+5.1	+6.4	+2.1	+1.8	-1.0	+1.3	+3.7	+4.3	+2.0	+3.9	+3.0	+1.0	+4.9	+3.0
12-13	+2.6	+1.8	+4.9	+6.3	+7.0	+6.3	+4.6	+4.9	+3.8	+2.6	+2.2	+3.7	+4.2	+5.7	+4.4	+2.6
13-14	+2.1	+7.2	+4.4	+9.3	+10.6	+10.6	+9.2	+9.4	+6.8	+3.2	+2.8	+2.9	+6.5	+10.0	+5.9	+3.8
14-15	+1.6	+8.6	+8.4	+10.6	+13.3	+12.3	+12.2	+12.5	+10.3	+5.9	+3.5	+3.1	+8.5	+12.6	+8.8	+4.2
15-16	+5.5	+6.6	+9.2	+11.9	+13.4	+13.7	+13.1	+13.5	+8.2	+8.0	+4.3	+4.5	+9.3	+13.4	+9.3	+5.2
16-17	+6.6	+4.4	+8.2	+8.9	+11.5	+13.3	+12.4	+11.4	+9.2	+6.7	+5.2	+4.7	+8.5	+12.2	+8.2	+5.2
17-18	+4.7	+2.0	+5.7	+6.1	+7.6	+10.6	+7.5	+5.6	+6.9	+5.1	+2.6	+2.9	+5.6	+7.8	+6.0	+3.0
18-19	+3.4	+1.0	+0.5	+1.3	+2.5	+4.5	+3.9	+0.6	0.0.	+0.1	-0.6	+1.2	+1.5	+2.9	+0.5	+1.2
19-20	+0.8	-1.0	-1.0	-1.7	-4.4	+0.9	-2.4	-2.6	-3.5	-2.0	-1.7	-1.4	-1.7	-2.1	-2.0	-0.8
20-21	-2.5	-2.5	-3.0	-5.8	-7.6	-2.7	-5.3	-6.7	-4.6	-3.9	-2.3	-2.0	-4.1	-5.6	-4.3	-2.3
21-22	-4.2	-3.8	-3.7	-6.8	-8.1	-3.8	-6.5	-8.3	-3.9	-4.5	-2.9	-3.1	-5.0	-6.7	-4.8	-3.5
22-23	-4.4	-3.7	-5.3	-7.5	-7.9	-4.9	-6.2	-7.1	-3.9	-4.5	-3.0	-4.0	-5.2	-6.5	-5.3	-3.8
23-24	-4.4	-3.6	-5.9	-7.1	-7.0	-5.0	-5.5	-5.3	-4.6	-4.1	-3.3	-3.7	-5.0	-5.8	-5.4	-3.8
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 39 Meanook — VERTICAL INTENSITY (gammas) (All Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+19	+29	+47	+44	+41	- 4	+35	+31	+13	+16	+14	+15	+25	+26	+30	+19
1-2	+19	+44	+43	+42	+33	- 2	+42	+31	+ 7	+12	+16	+16	+25	+26	+26	+24
2-3	+24	- 1	+39	+47	+38	-14	+38	+31	+ 1	+ 8	+19	+18	+21	+23	+24	+15
3-4	+15	+15	+34	+29	+25	- 7	+24	+13	+ 2	+10	+21	+20	+17	+14	+19	+18
4-5	+23	+ 6	+29	+11	+18	- 8	+24	+12	0	+16	+17	+13	+13	+12	+14	+15
5-6	+25	- 7	+19	+11	+ 8	- 4	+ 4	- 3	- 5	+ 3	+14	+12	+ 6	+ 1	+ 7	+11
6-7	+15	+10	0	-16	- 4	-19	- 9	-11	- 5	-11	+10	+ 7	- 3	-11	- 8	+10
7-8	0	+ 4	-11	-33	-15	-13	-25	-23	0	-12	+ 3	- 6	-11	-19	-14	0
8-9	- 8	- 8	-40	-42	-35	+ 7	-57	-33	- 7	- 4	-22	- 9	-22	-30	-23	-12
9-10	-12	0	-29	-39	-32	- 9	-41	-38	-17	- 7	-21	-18	-22	-30	-23	-13
10-11	-15	-23	-45	-55	-25	-11	-32	-42	-18	-11	-35	-20	-28	-28	-32	-23
11-12	-32	-24	-46	-44	-23	-13	-28	-37	-21	- 5	-18	-27	-26	-25	-29	-25
12-13	-37	-43	-44	-40	-31	0	-27	-30	- 8	-18	-26	-25	-27	-22	-28	-33
13-14	-33	-37	-53	-38	-31	-14	-25	-12	-15	-12	-26	-26	-27	-20	-30	-30
14-15	-28	-24	-54	-32	-27	- 1	-16	- 6	-25	-11	-15	-29	-22	-12	-30	-24
15-16	-12	-27	-28	-32	-26	+ 4	-24	- 5	-10	- 5	- 9	-14	-16	-13	-19	-16
16-17	-12	-22	-28	-19	-18	- 4	+ 3	- 2	+14	-13	- 5	- 1	- 9	- 5	-12	-10
17-18	-11	- 7	- 8	-10	-10	- 8	+ 6	- 4	+ 9	- 5	- 2	- 1	- 4	- 4	- 4	- 5
18-19	0	0	+ 5	+ 5	- 5	- 3	0	+ 9	+14	+ 1	+ 5	+12	+ 4	0	+ 6	+ 4
19-20	+ 5	+12	+16	+19	+ 4	+ 4	+12	+14	+19	+ 5	+10	+11	+11	+ 8	+15	+10
20-21	+10	+21	+29	+35	+16	+19	+18	+20	+22	+10	+14	+11	+19	+18	+24	+14
21-22	+13	+27	+39	+46	+22	+26	+14	+23	+18	+12	+14	+13	+22	+21	+29	+17
22-23	+17	+26	+43	+61	+39	+39	+23	+26	+10	+10	+13	+14	+27	+32	+31	+18
23-24	+16	+22	+44	+52	+38	+25	+42	+30	+ 6	+13	+14	+15	+26	+34	+29	+17
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table40 Meanook — HORIZONTAL INTENSITY (gammas) (Quiet Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	- 8	- 1	+12	- 6	+18	+ 4	+19	+12	+ 1	- 5	+10	+ 2	+ 5	+13	0	+ 1
1-2	- 6	+ 1	+24	- 7	+14	+16	+24	+17	+ 3	+ 1	+ 5	+ 6	+ 8	+18	+ 5	+ 1
2-3	+ 1	+ 7	+32	0	+11	+ 4	+22	+14	+ 7	+ 6	+ 5	+ 6	+10	+13	+11	+ 6
3-4	+ 6	+ 7	+40	+ 5	+ 9	+11	+21	+ 9	+10	+ 8	+ 8	+11	+12	+12	+16	+ 8
4-5	+ 7	+11	+26	+11	+ 5	+ 7	+17	+10	+12	+10	+ 7	+13	+11	+10	+15	+10
5-6	+12	+11	+17	+14	+ 6	+ 5	+10	+13	+14	+11	+10	+12	+11	+ 8	+14	+12
6-7	+11	+10	+ 7	+16	+ 7	+ 6	+ 6	+10	+16	+13	+10	+ 8	+10	+ 7	+13	+10
7-8	+ 8	+15	+ 9	+15	+ 8	+ 4	+ 2	+ 8	+17	+13	+10	+ 6	+10	+ 5	+14	+10
8-9	-18	+ 7	- 3	+11	+ 8	+10	- 7	+ 8	+17	+13	+ 9	+ 6	+ 5	+ 5	+ 9	+ 1
9-10	-14	+ 2	- 7	-21	+ 8	+11	-11	+ 3	+17	+11	+ 5	+ 5	+ 1	+ 3	0	0
10-11	+ 3	-22	- 4	- 4	+ 8	+10	- 9	- 2	+18	+ 6	+ 8	0	+ 1	+ 2	+ 4	- 2
11-12	+ 2	-20	+ 2	+12	+11	+ 1	-14	- 8	+17	+14	+ 7	+ 3	+ 2	- 2	+11	- 2
12-13	+ 4	-13	+ 8	+17	+ 8	+ 4	-16	+ 6	+13	+16	+10	+ 2	+ 5	0	+14	1
13-14	- 4	+ 6	+ 9	+17	+11	+15	-15	+ 6	+11	+10	+10	0	+ 6	+ 4	+12	+ 3
14-15	+ 3	+18	+ 8	+11	+ 9	+14	- 8	+ 3	+ 6	+ 6	+ 7	+ 7	+ 7	+ 4	+ 8	+ 8
15-16	+22	+13	+ 6	+ 4	- 2	+ 8	- 3	+ 3	- 8	+ 3	- 2	+ 2	+ 4	+ 2	+ 1	+ 9
16-17	+16	+ 3	-19	- 9	-20	-14	- 3	- 3	-27	-10	-11	- 2	- 8	-10	-16	+ 2
17-18	+ 6	- 7	-33	-16	-30	-18	- 9	-17	-44	-21	-19	- 8	-18	-19	-29	- 7
18-19	- 6	-13	-36	-17	-36	-32	-16	-25	-45	-32	-24	-17	-25	-27	-32	-15
19-20	-10	-14	-28	-16	-31	-25	-21	-25	-36	-30	-21	-17	-23	-26	-28	-15
20-21	-15	-12	-25	-12	-20	-19	-23	-24	-18	-24	-18	-15	-19	-21	-20	-15
21-22	-13	- 9	-14	- 4	-10	-13	- 5	-19	- 7	-14	-12	-11	-11	-12	-10	-11
22-23	- 7	- 6	-13	- 9	0	- 4	+11	- 8	+ 6	- 7	-10	- 8	- 5	0	- 6	- 8
23-24	- 1	- 3	-16	0	+14	+ 2	+24	+ 1	+ 4	+ 2	- 4	0	+ 2	+10	- 3	- 2
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 41 Meanook — DECLINATION (minutes) (Quiet Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	-2.5	-3.2	-5.1	-6.2	- 5.6	- 5.1	- 4.2	- 4.4	- 2.4	-4.3	-2.3	-1.7	-3.9	- 4.8	-4.6	-2.4
1-2	-2.2	-3.7	-3.9	-4.5	- 3.6	- 4.0	- 2.6	- 2.3	- 3.0	-3.8	-2.5	-1.5	-3.1	- 3.1	-3.8	-2.5
2-3	-2.1	-3.4	-3.8	-3.1	- 2.4	- 2.4	- 1.6	- 1.6	- 3.0	-3.6	-2.2	-1.2	-2.5	- 2.0	-3.4	-2.2
3-4	-1.2	-1.9	-2.7	-3.0	- 1.4	- 2.7	- 0.2	- 1.0	- 2.6	-2.7	-2.0	-0.4	-1.8	- 1.3	-2.8	-1.4
4-5	-0.9	-1.9	-3.7	-2.1	- 0.9	- 1.3	- 0.2	- 0.4	- 2.3	-2.7	-1.5	-0.8	-1.6	- 0.7	-2.7	-1.3
5-6	-1.0	-1.2	-2.9	-1.2	- 1.8	- 2.3	- 1.7	- 0.4	- 2.2	-2.3	-1.2	-0.7	-1.6	- 1.6	-2.2	-1.0
6-7	-1.2	+2.0	-1.1	-1.8	- 1.9	- 1.6	- 1.8	- 1.1	- 2.0	-1.9	-1.5	-0.8	-1.2	- 1.6	-1.7	-0.4
7-8	-1.1	-0.6	-3.8	-1.0	- 1.7	- 0.3	- 1.0	- 0.8	- 1.3	-0.2	-1.4	-0.6	-1.2	- 1.0	-1.6	-0.9
8-9	-0.4	-1.2	+1.3	+0.5	- 1.9	- 0.8	- 1.0	+ 0.3	- 0.2	-0.3	-0.6	-0.5	-0.4	- 0.8	+0.3	-0.7
9-10	+0.3	+1.4	+2.8	+0.5	- 1.1	- 0.4	- 1.8	- 1.0	+ 0.6	+0.7	+0.1	-0.3	+0.2	- 1.1	+1.2	+0.4
10-11	+1.5	+2.1	+1.2	+2.5	- 0.2	- 0.5	- 1.7	- 1.2	+ 1.4	+1.2	+0.9	-1.1	+0.5	- 0.9	+1.6	+0.8
11-12	+0.2	+2.4	+1.9	+2.4	+ 1.5	- 0.4	- 0.6	+ 1.2	+ 2.3	+1.9	+0.2	+0.5	+1.1	+ 0.4	+2.1	+0.8
12-13	-0.6	+2.3	+1.9	+3.6	+ 4.8	+ 3.1	+ 3.0	+ 4.9	+ 3.5	+1.7	+1.6	+0.6	+2.5	+ 4.0	+2.7	+1.0
13-14	-1.5	+0.8	+3.0	+6.3	+ 9.0	+10.4	+ 6.2	+ 7.3	+ 6.3	+2.6	+2.0	+1.2	+4.5	+ 8.2	+4.6	+0.6
14-15	-1.3	+3.0	+6.0	+8.8	+12.1	+11.7	+ 8.7	+ 9.7	+ 9.1	+4.5	+3.2	+2.0	+6.5	+10.6	+7.1	+1.7
15-16	+2.9	+3.2	+7.2	+9.6	+12.1	+11.8	+11.0	+ 9.8	+10.0	+7.1	+5.5	+3.0	+7.8	+11.2	+8.5	+3.6
16-17	+5.1	+4.1	+8.6	+8.6	+11.0	+10.9	+10.4	+10.0	+ 8.6	+8.3	+5.7	+4.0	+7.9	+10.6	+8.5	+4.7
17-18	+5.6	+3.8	+6.4	+6.0	+ 6.5	+ 7.0	+ 6.5	+ 6.4	+ 5.3	+7.6	+4.3	+3.9	+5.8	+6.6	+6.3	+4.4
18-19	+4.0	+2.1	+2.0	+1.4	+ 1.3	+ 3.3	+ 3.3	+ 1.5	- 0.1	+3.6	+1.5	+1.8	+2.1	+2.4	+1.8	+2.4
19-20	+2.3	0.0	-1.2	-2.2	- 2.8	- 1.6	- 2.3	- 4.1	- 4.3	+0.3	-0.2	+0.2	-1.3	-2.7	-1.8	+0.6
20-21	-0.3	-1.3	-2.3	-5.6	- 6.7	- 6.0	- 5.6	- 7.9	- 7.1	-3.5	-1.7	-1.1	-4.1	-6.6	-4.6	-1.1
21-22	-1.3	-2.6	-2.6	-6.6	- 8.8	- 9.5	- 7.7	- 9.7	- 7.1	-4.5	-2.2	-1.8	-5.4	-8.9	-5.2	-2.0
22-23	-1.4	-2.8	-3.9	-7.0	- 9.0	-10.3	- 8.3	- 8.9	- 5.6	-4.7	-2.5	-2.2	-5.6	-9.1	-5.3	-2.2
23-24	-2.3	-2.9	-5.2	-5.8	- 8.1	- 9.2	- 7.1	- 6.5	- 3.7	-4.1	-3.1	-2.9	-5.1	-7.7	-4.7	-2.8
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 42 Meanook — VERTICAL INTENSITY (gammas) (Quiet Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+10	+ 8	+26	+11	+24	+14	+32	+23	0	+ 8	+ 4	+ 4	+14	+24	+11	+ 6
1-2	+10	+ 7	+29	+ 4	+25	+20	+31	+20	-1	+ 4	+ 4	+ 4	+13	+24	+10	+ 6
2-3	+14	+10	+33	+ 4	+24	+20	+29	+15	-1	+ 6	+ 4	+ 6	+14	+22	+10	+ 8
3-4	+14	+15	+27	+ 4	+15	+14	+31	+13	-2	+ 6	+ 5	+ 6	+12	+18	+ 9	+10
4-5	+16	+11	+21	+ 4	+ 4	+13	+24	+ 9	-2	+ 4	+ 3	+ 4	+ 9	+12	+ 7	+ 8
5-6	+15	+12	+ 7	+ 5	- 4	+ 8	+12	+11	-2	+ 3	+ 5	+ 4	+ 6	+ 7	+ 3	+ 9
6-7	+13	+13	- 2	- 1	- 5	+ 7	+ 2	0	-2	+ 2	+ 4	+ 2	+ 3	+ 1	- 1	+ 8
7-8	+ 5	+ 8	- 8	- 1	- 5	- 7	- 6	- 8	-2	+ 1	+ 1	+ 2	- 2	- 6	- 2	+ 4
8-9	- 6	-11	-17	- 9	-10	- 4	-18	- 9	-1	- 1	- 3	0	- 7	-10	- 6	- 5
9-10	-20	-22	-33	-27	- 9	- 2	-28	-10	0	- 8	- 8	- 3	-14	-12	-17	-13
10-11	-20	-41	-28	-32	-14	- 3	-21	-10	-1	-20	- 9	-14	-18	-12	-20	-21
11-12	-20	-34	-25	-11	-11	-10	-27	-12	-2	- 9	- 9	-11	-15	-15	-12	-18
12-13	-16	-19	-13	- 3	-14	-11	-29	- 6	-2	- 5	- 7	-12	-11	-15	- 6	-14
13-14	-18	-12	-11	0	- 8	- 4	-30	- 6	-1	- 5	- 5	- 6	- 9	-12	- 4	-10
14-15	-21	+ 1	- 7	- 2	- 6	- 2	-32	-18	-1	- 3	- 1	- 3	- 8	-14	- 3	- 6
15-16	- 2	+ 2	- 4	+ 2	- 5	- 3	-26	-21	-1	+ 4	+ 2	+ 1	- 4	-14	0	+ 1
16-17	0	+ 3	- 5	+ 3	- 8	-10	-18	-10	-3	+ 2	+ 1	+ 2	- 4	-12	- 1	+ 2
17-18	+ 1	+ 4	- 4	+ 1	-10	-14	-10	- 5	-3	0	- 1	+ 1	- 3	-10	- 2	+ 1
18-19	0	+ 5	- 5	- 1	-12	-16	- 1	- 1	-2	+ 2	+ 1	+ 5	- 2	- 7	- 1	+ 3
19-20	+ 2	+ 7	- 5	+ 5	- 7	-12	0	- 4	+5	+ 1	0	+ 4	0	+ 2	- 4	+ 3
20-21	+ 3	+ 6	- 3	+ 7	- 2	-10	+ 6	- 1	+9	+ 1	+ 5	+ 2	+ 2	- 2	+ 4	+ 4
21-22	+ 4	+ 7	+ 6	+ 9	+ 7	+ 1	+15	+ 5	+6	+ 1	+ 3	+ 1	+ 5	+ 7	+ 6	+ 4
22-23	+ 5	+ 5	+13	+12	+14	+ 6	+26	+11	+6	+ 3	+ 2	+ 2	+ 9	+14	+ 8	+ 4
23-24	+ 5	+ 5	+12	+ 8	+18	+ 8	+39	+18	+1	+ 6	+ 2	+ 3	+10	+21	+ 7	+ 4
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 43 Meanook — HORIZONTAL INTENSITY (gammas) (Disturbed Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+ 96	+108	+143	+156	+223	+293	+176	+ 65	+169	+127	+ 24	+159	+145	+189	+149	+ 97
1-2	+115	+ 73	+142	+163	+190	+303	+218	+ 76	+122	+115	+ 42	+118	+140	+197	+136	+ 87
2-3	+142	+ 87	+177	+233	+ 74	+285	+244	+185	+119	+120	+ 82	+170	+160	+197	+162	+120
3-4	+134	+124	+229	+204	+ 87	+165	+208	+123	+ 75	+147	+ 57	+131	+141	+146	+164	+112
4-5	+124	+171	+149	+141	+106	+ 94	+196	+189	+111	+136	+ 62	+ 83	+130	+146	+134	+110
5-6	+106	+153	+ 95	+ 97	+104	- 23	+159	+144	+158	+109	+ 46	+ 69	+102	+ 96	+115	+ 94
6-7	+ 87	- 43	+ 44	+ 7	+ 52	- 71	+122	+ 35	+ 93	- 2	+ 34	+ 70	+ 36	+ 34	+ 36	+ 37
7-8	+ 61	-177	-173	-150	- 10	- 42	- 76	- 62	- 13	- 89	- 11	+ 45	- 58	- 48	-106	- 20
8-9	- 31	- 25	-177	- 95	- 36	-184	- 99	- 70	- 29	-184	- 12	+ 21	- 77	- 97	-121	- 12
9-10	-129	- 63	-113	-169	-121	-147	-162	-119	-130	-231	-103	- 33	-127	-137	-161	- 82
10-11	-185	-164	-175	-218	-178	-215	-164	-153	-164	-246	-117	- 45	-169	-178	-201	-128
11-12	- 68	-185	-190	-241	-221	-267	-214	-148	-157	-201	- 18	- 47	-163	-212	-197	- 80
12-13	-133	-110	-193	-204	-267	-208	-319	-156	- 90	-230	- 21	- 78	-167	-238	-179	- 86
13-14	- 80	-167	-148	-140	-256	-203	-298	-106	-206	-162	- 3	-158	-161	-216	-164	-102
14-15	- 65	- 58	-163	- 56	-176	-183	-346	- 59	-242	- 35	+ 8	-153	-127	-191	-124	- 67
15-16	- 43	- 28	- 75	- 75	- 55	-147	-224	- 29	-191	- 69	- 1	-125	- 88	-114	-102	- 49
16-17	- 17	+ 10	- 32	- 22	- 26	- 38	-165	- 25	- 66	- 8	- 21	- 99	- 42	- 64	- 32	- 32
17-18	- 17	+ 4	+ 3	- 43	- 18	- 84	- 25	- 69	- 44	+ 26	- 35	-118	- 35	- 49	- 14	- 42
18-19	- 44	- 18	+ 34	- 29	- 36	- 26	- 33	- 18	- 73	+ 23	- 15	- 84	- 27	- 28	- 11	- 40
19-20	- 44	+ 43	+ 62	+ 22	- 27	+ 2	+ 13	0	- 45	+ 53	- 10	- 31	+ 3	- 3	+ 23	- 10
20-21	- 18	+ 59	+ 63	+ 45	+ 69	+ 92	+ 86	+ 42	+ 39	+114	- 1	+ 9	+ 50	+ 72	+ 65	+ 12
21-22	- 13	+ 61	+ 87	+ 65	+130	+212	+175	+ 50	+124	+155	+ 2	+ 21	+ 89	+142	+108	+ 18
22-23	- 1	+ 79	+103	+130	+178	+208	+265	+ 53	+186	+159	+ 8	+ 25	+116	+176	+145	+ 28
23-24	+ 28	+ 62	+119	+167	+217	+195	+259	+ 59	+256	+163	+ 12	+ 51	+132	+182	+176	+ 38
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 44 Meanook — DECLINATION (minutes) (Disturbed Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	-7.7	- 3.4	- 8.0	- 8.2	- 7.3	- 5.3	- 2.8	- 4.0	- 9.6	- 6.9	-5.1	-6.6	- 6.2	- 4.8	- 8.2	-5.7
1-2	-8.5	+ 4.3	- 5.9	- 5.5	- 7.6	-17.9	- 6.3	- 4.7	- 8.5	- 6.1	-4.0	-2.4	- 6.1	- 9.1	- 6.5	-2.6
2-3	-6.2	+ 3.6	- 8.2	- 5.1	- 8.0	-22.6	- 2.7	+ 1.1	- 7.4	- 4.4	-3.8	-4.0	- 5.6	- 8.0	- 6.3	-2.6
3-4	-7.1	+ 3.5	- 6.5	- 8.0	- 5.3	-24.0	- 0.9	- 1.1	-16.4	- 6.0	-3.0	-2.5	- 6.4	- 7.8	- 9.2	-2.3
4-5	-9.2	-11.8	- 5.9	- 6.5	- 5.5	-17.8	-15.7	-18.0	- 5.0	- 3.5	-2.1	-3.6	- 8.7	-14.2	- 5.2	-6.7
5-6	-4.8	-11.6	- 8.1	- 8.3	- 5.3	-13.7	-10.8	-17.6	-13.3	- 4.3	-1.4	-0.6	- 8.3	-11.8	- 8.5	-4.6
6-7	-2.4	-10.1	- 9.3	- 5.7	-13.4	-10.1	-14.9	-16.3	-11.4	- 5.1	-0.6	-1.1	- 8.4	-13.7	- 7.9	-3.6
7-8	-0.6	- 0.8	-16.6	- 2.3	- 8.3	-10.8	- 7.7	- 9.2	- 9.2	- 2.6	+1.7	-2.9	- 5.8	- 9.0	- 7.7	-0.6
8-9	+3.3	- 9.3	+ 2.7	+ 0.7	- 4.9	- 6.8	-10.1	- 6.0	- 7.1	+ 0.3	+0.2	-1.4	- 3.2	- 7.0	- 0.8	-1.8
9-10	+7.0	- 5.9	+ 4.0	+ 1.1	- 2.3	- 1.3	+ 2.0	- 0.2	+ 3.7	+13.6	-1.2	+2.2	+ 1.9	- 0.4	5.6	+0.5
10-11	+7.1	- 0.6	+14.4	+ 7.1	- 5.7	- 7.4	+ 1.4	+ 1.2	+ 6.6	+18.2	+9.8	+2.0	+ 4.5	- 2.6	+11.6	+4.6
11-12	+8.4	+ 0.5	+ 9.2	+15.6	+ 3.3	+ 3.6	+ 1.3	+ 1.8	+10.0	+16.8	+5.8	+5.1	+ 6.8	+ 2.5	+12.9	+5.0
12-13	+8.2	- 7.6	+10.2	+ 9.5	+12.4	+ 5.4	+14.4	+ 6.5	+ 2.7	+ 5.3	+3.8	+5.4	+ 6.4	+ 9.7	+ 6.9	+2.4
13-14	+5.5	+19.3	+ 9.9	+11.1	+17.8	+10.1	+12.4	+17.0	+ 5.2	+ 2.7	+4.4	+4.7	+10.0	+14.3	+ 7.2	+8.4
14-15	+6.4	+18.2	+10.2	+ 8.6	+19.7	+12.8	+15.2	+16.9	+12.7	+ 5.5	+5.9	+7.8	+11.6	+16.2	+ 9.2	+9.5
15-16	+5.7	+ 5.6	+ 6.6	+12.8	+18.0	+18.3	+16.2	+19.3	+ 3.7	+ 5.7	+5.6	+7.5	+10.4	+17.9	+ 7.2	+6.1
16-17	+8.2	+ 8.3	+ 9.8	+ 6.8	+11.8	+19.8	+18.2	+12.6	+16.6	- 2.0	+8.3	+8.7	+10.6	+15.6	+ 7.8	+8.4
17-18	+6.4	+ 3.7	+ 7.2	+ 5.8	+ 8.0	+20.2	+11.7	+ 5.0	+18.9	0.0	+1.3	+2.9	+ 7.6	+11.2	+ 8.0	+3.6
18-19	+2.1	- 4.7	- 0.3	+ 0.8	+ 7.2	+10.5	+12.8	+ 1.0	+ 3.6	- 5.1	-5.8	+2.9	+ 2.1	+ 7.9	- 0.2	-1.4
19-20	-1.6	- 1.4	- 2.2	- 3.1	- 5.2	+ 9.8	- 7.6	+ 2.6	+ 3.2	- 5.1	-4.2	-6.4	- 1.8	- 0.1	- 1.8	-3.4
20-21	-3.8	- 2.3	- 1.3	- 6.1	- 5.7	+ 7.6	- 9.6	+ 0.5	+ 2.0	- 5.8	-3.3	-4.1	- 2.7	- 1.8	- 2.8	-3.4
21-22	-5.9	- 1.7	- 2.1	- 6.7	- 2.7	+12.1	- 8.2	- 4.1	+ 5.4	- 3.8	-4.0	-3.6	- 2.1	- 0.7	- 1.8	-3.7
22-23	-5.9	- 2.3	- 4.9	- 7.6	- 5.6	+ 3.6	- 4.6	- 2.4	+ 1.4	- 3.5	-3.9	-5.1	- 3.4	- 2.2	- 3.6	-4.3
23-24	-4.3	- 0.7	- 4.8	- 6.2	- 6.0	+ 3.5	- 3.5	- 1.9	- 7.7	- 3.6	-4.5	-5.0	- 3.7	- 2.0	- 5.6	-3.6
Mean																

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

Table 45 Meanook — VERTICAL INTENSITY (gammas) (Disturbed Days) — 1958

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	+45	+ 45	+59	+ 73	+ 80	-166	-20	+19	- 28	- 2	+ 28	- 8	+10	-22	+26	+28
1-2	+40	+109	+33	+ 77	+ 55	-166	+20	+32	- 77	- 9	+ 40	+ 3	+13	-15	+ 6	+48
2-3	+32	-194	+22	+ 68	+ 52	-208	+26	+41	- 65	-27	+ 42	+ 8	-17	-22	0	-28
3-4	-30	-121	- 5	+ 1	- 7	-124	-20	-32	- 40	-22	+ 51	+14	-28	-46	-16	-22
4-5	+21	-134	- 5	- 55	+ 40	-102	+ 6	-42	- 23	-16	+ 26	- 6	-24	-24	-25	-23
5-6	+29	-142	+ 5	- 9	+ 26	- 62	-17	-56	- 23	-31	+ 1	- 6	-24	-27	-14	-29
6-7	+37	+ 12	-29	- 18	- 4	- 65	-63	-41	- 32	-32	- 7	- 9	-21	-43	-28	+ 8
7-8	-27	- 15	-49	- 72	- 13	+ 16	-92	-13	- 6	-60	- 7	- 4	-28	-26	-47	-13
8-9	-31	+ 92	-36	- 62	+ 8	+ 93	-65	-35	- 6	+69	- 10	- 7	+ 1	0	- 9	+11
9-10	- 4	+ 96	+79	- 13	+ 19	+ 95	-27	-35	- 18	+38	- 34	- 8	+16	+13	+22	+12
10-11	-22	+ 64	-32	-102	- 22	+ 43	+15	-13	+ 38	+29	-102	- 6	- 9	+ 6	-17	-16
11-12	-46	+120	-47	- 66	- 28	+ 33	+41	-39	+ 12	+70	- 23	-17	+ 1	+ 2	- 8	+ 8
12-13	-48	+ 43	-18	- 66	- 75	+ 82	+18	- 7	+ 53	-37	- 24	- 8	- 7	+ 4	-17	- 9
13-14	- 5	+ 6	-82	- 77	-107	+ 77	+27	+ 6	+ 13	- 7	- 25	-27	-17	+ 1	-38	-13
14-15	-35	- 8	-83	- 51	- 70	+109	+26	+ 7	- 72	-25	- 14	-56	-23	+18	-58	-28
15-16	-19	- 37	-11	- 58	- 69	+ 96	-90	- 6	- 2	-11	- 20	-30	-21	-17	-20	-26
16-17	-16	- 27	-38	- 7	- 47	+ 33	+62	- 2	+118	-58	- 12	+17	+ 2	+12	+ 4	-10
17-18	-25	- 6	-24	+ 3	- 18	+ 6	+85	-10	+ 69	-16	- 8	+ 8	+ 5	+16	+ 6	- 8
18-19	-11	+ 6	+14	+ 31	- 5	+ 23	+13	+29	+ 70	+ 9	+ 3	+46	+19	+15	+31	+11
19-20	+ 1	+ 22	+25	+ 65	+ 16	+ 33	+56	+38	+ 84	+17	+ 11	+30	+33	+36	+48	+16
20-21	+18	+ 12	+38	+ 75	+ 50	+ 84	+55	+54	+ 51	+40	+ 21	+19	+43	+61	+51	+18
21-22	+27	+ 11	+61	+ 70	+ 39	+ 65	-41	+42	+ 12	+37	+ 22	+18	+30	+26	+45	+20
22-23	+34	+ 18	+62	+100	+ 60	+ 45	-55	+32	- 52	+20	+ 22	+15	+25	+20	+32	+22
23-24	+36	+ 22	+61	+ 90	+ 16	- 39	+41	+29	- 68	+22	+ 24	+19	+21	+12	+26	+25
Mean																

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THE NORTH MAGNETIC DIP POLE

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The North Magnetic Dip Pole

E. Dawson and E. I. Loomer

Abstract:—A survey of the north magnetic dip-pole area was carried out in August 1962. Six field stations were occupied within a 100-mile radius of the predicted position of the dip pole. A pole position of 75.1°N and 100.8°W has been computed based on these observations for 1962.5. The 1948 position of the dip pole was recomputed to 73.9°N and 100.9°W. The predominant secular motion of the dip pole has been northward and over the past 58 years it has averaged 5 n.m. per year in this direction. Over the same period it had a westward motion of 2 n.m. per year until the last 15 years when this motion has shifted to the east.

Résumé:—On a érigé lors de travaux de levés au mois d'août 1962 dans la zone du pôle magnétique Nord six stations dans un rayon de 100 milles de la position prédite du pôle. On a établi sa position pour 1962.5 à 75.1° de latitude Nord et 100.8° de longitude Ouest en se fondant sur les observations recueillies aux stations. Un second calcul de la position du pôle en 1948 a permis de fixer sa position exacte à 73.9° de latitude Nord et 100.9° de longitude Ouest. Le déplacement séculaire prédominant du pôle s'est fait en direction Nord, et depuis 58 ans, la vitesse moyenne en cette direction a été de 5 milles nautiques par année. Au cours de la même période le pôle magnétique s'est déplacé en direction ouest à la vitesse de deux milles nautiques annuellement jusqu'à il y a 15 ans, alors que son déplacement s'est effectué en direction est.

Introduction

The first survey of the north magnetic dip pole by the Division of Geomagnetism of the Dominion Observatory took place in the summer of 1947 (Madill, 1948), and the second in August 1962. During the latter, six field stations were occupied within a 100-mile radius of the predicted pole position. A pole position for 1962.5 has been computed based on these observations.

The 1948 pole position has been recomputed based on observations made by this division in the years 1947–49. The secular and diurnal motions of the pole are commented on. An appendix is used to list the observations of Ross (1834), Amundsen's observations as published by Wasserfall (1939), and the Dominion Observatory measurements used in the calculations described above. Figure 1 shows the stations occupied by this division in the dip-pole area from 1946 to 1962, the dip-pole positions from different determinations, and the path of the unperturbed dip pole.

Selection of Field Stations

From the estimated position of the dip pole in 1960 and its secular motion as deduced from the records of Resolute Bay magnetic observatory, the authors believed that the 1962 pole area was probably located at the southern end of Bathurst Island. Observations within a radius of about 100 miles of the pole and encompassing the pole area would provide an ideal basis for an accurate pole determination. Accordingly, stations were planned at Peddie Bay, Freeman's Cove and Bracebridge Inlet on Bathurst Island; at Langley Point

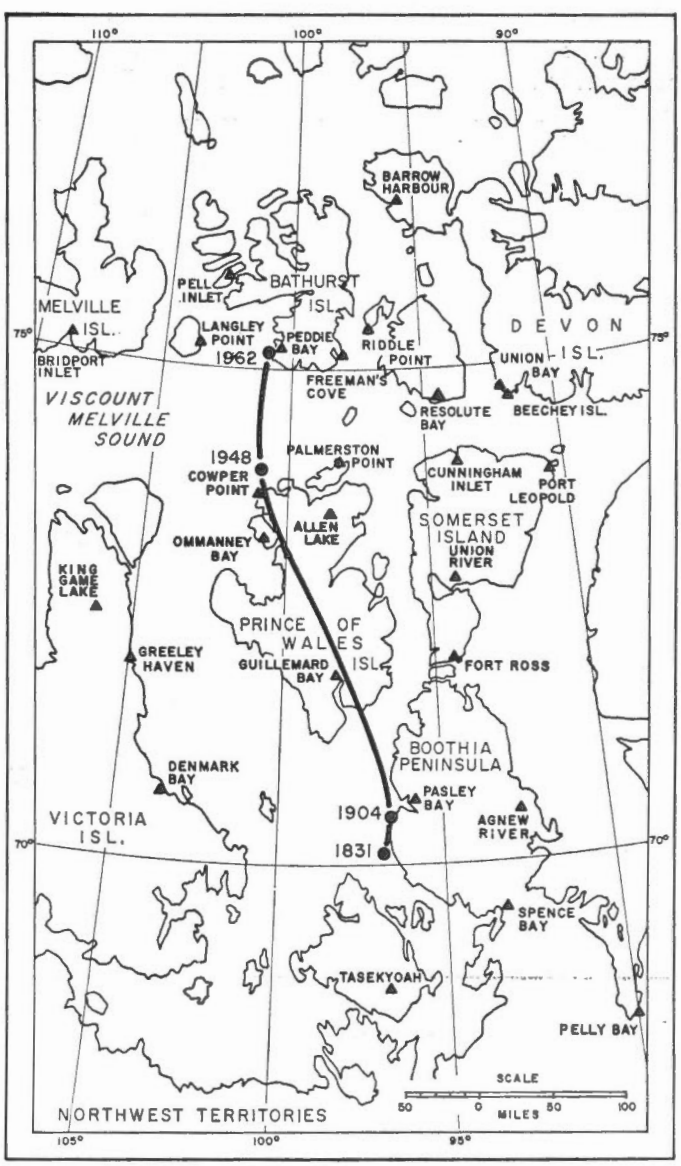

FIGURE 1

▲ Stations occupied from 1946 to 1962
● Observed magnetic dip pole positions
— Path of the unperturbed dip pole

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on Byam Martin Island; on Stefansson Island, at Cowper Point on Prince of Wales Island; at Palmerston Point on Russell Island; and at Riddle Point on Little Cornwallis Island (*see* Figure 1). The stations planned at Bracebridge Inlet and on Stefansson Island were not occupied owing to ice conditions.

Field Equipment

Two portable electrical magnetometers T3, T4 of the saturable core type were used for the determination of the vector geomagnetic field. A Varian proton-precession magnetometer type M-49A, was used for the measurement of the magnitude of F, the total intensity. It was important that at each selected site the magnetic observations be representative for the area. Accordingly, the proton magnetometer was used also to check the local gradients of the magnetic field. This was done along a 300-foot line in a N-S and an E-W direction.

In the field, the fluxgate magnetometers proved reasonably reliable and rugged, but the oscillator output became unstable when temperatures dropped near the freezing mark. It was decided to use the T3, T4 instruments for measurements of declination and inclination only, and the proton magnetometer for the measurement of total intensity. The M-49A proved to be an extremely reliable magnetometer, with a probable error for a single observation in total intensity of $\pm$ 10 γ. For the T3, T4 instruments, the probable errors in the D and I measurements are estimated to be $\pm$ 6′ in D and $\pm$ 0.2′ in I at higher latitudes in a horizontal field of about 500 γ.

Astronomical Observations in the Field

At all stations the method of sun observations as described by Hazard (1957) was used to determine azimuth and longitude. The latitude was scaled from the most recent topographic maps of the area, scale 8 miles to 1 inch. The time of the observation was obtained to the nearest 0.2 seconds with a Lemania chronometer whose rate was checked daily against WWV time signal via the ship's radio.

Field Results

As previously mentioned, local gradients in total intensity were measured at each site over a 300-foot area to determine the suitability of the site. All sites picked were quite flat magnetically with no anomalies greater than 10γ within the measured area. The results shown in Table I for all stations are reduced to the mean value for the day and are given to the nearest minute in D and I, and to the nearest 10γ in F.

All these stations are within 140 miles of the Resolute Bay magnetic observatory. The August mean hourly values in X, Y, Z for Resolute Bay were compared with those for the recently established observatory at Mould Bay on the east coast of Prince Patrick Island (Figure 2). There is extremely good correlation between the two observatories particularly on a local time comparison. Hence it seemed permissible to use Resolute Bay magnetograms in the reduction of the field observations to epoch.

The observations were corrected to the mean of the year by the following steps:

1. The mean value for the day was obtained by correcting the field observations for daily variation and magnetic disturbance. The corrections for daily variation and disturbance were by far the largest corrections involved.
2. The mean value for the month was obtained by correcting the results of step 1 for post-perturbation. This was quite a small correction.
3. The mean value for the year was obtained by correcting for annual variation to convert the monthly to the yearly mean level.

Since the observations were made in August, the secular change component involved in reducing the observations to the mean of the year is quite small and

TABLE I

Magnetic Observations Reduced to Mean of the Day

Station	Date	Lat. N	Long. W	No. of Obs. each Component	Magnetic Declination	Magnetic Inclination	Total Intensity
		° ′	° ′	° ′	° ′	° ′	γ
Peddie Bay	Aug. 15	75 10	100 23	18	112 12 W	89 51 N	58040
Langley Point	Aug. 17	75 09	103 39	12	70 46 E	89 30	58150
Palmerston Point	Aug. 22	74 06	97 40	8	55 23 W	89 36	58190
Cowper Point	Aug. 24	73 41	100 43	9	44 55 E	89 40	58610
Freeman's Cove	Aug. 25	75 06	97 50	4	116 10 W	89 35	58320
Riddle Point	Aug. 25	75 21	96 50	3	106 09 W	89 22	57880

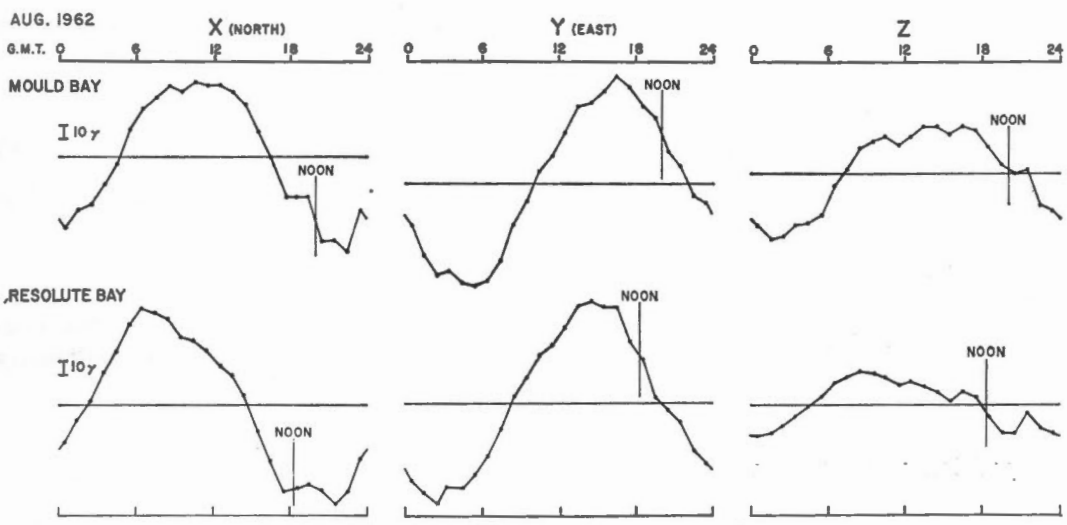

FIGURE 2.
Mean hourly values at Resolute Bay and Mould Bay magnetic observatories.

TABLE II

Magnetic Observations Reduced to Epoch 1962.5

Station	D	I	F(γ)	H(γ)	Z(γ)	X(γ)	Y(γ)
	° ′	° ′					
Peddie Bay	111 11 W	89 52 N	58040	140	58040 N	50 S	130 W
Langley Point	73 24 E	89 30	58120	500	58110	140 N	490 E
Palmerston Point	53 36 W	89 38	58170	380	58160	220 N	300 W
Cowper Point	45 24 E	89 40	58600	350	58600	250 N	250 E
Freeman's Cove	114 33 W	89 35	58310	420	58310	170 S	380 W
Riddle Point	104 32 W	89 23	57870	630	57870	160 S	610 W
Resolute Bay	82 39 W	89 11	58130	840	58120	110 N	830 W

was neglected. The corrected values of D, I, F, plus the computed values of H, the horizontal intensity, Z the vertical intensity, X and Y the north and east components of H are shown in Table II, all reduced to epoch 1962.5. The Resolute Bay observatory values are also shown.

Magnetic Dip-pole Determination

By definition, the north magnetic dip pole is the point where the earth's magnetic field is directed vertically downwards. If the field is resolved into a vertical and horizontal component, then the pole is the point where the horizontal component vanishes. It is this horizontal component that gives direction to the compass, and it may be considered as a force that is directed generally but not necessarily towards the magnetic pole. It has increasing magnitude with increasing distance from the pole.

There are various methods of determining the pole position. Several of these methods were considered and rejected. A spherical harmonic analysis is more adaptable to magnetic measurements on a world-wide basis, and is certainly not the ideal technique to apply to the small area with which this survey is concerned. The construction of magnetic meridians has the advantage of simplicity and speed in determining an approximate pole position. Its disadvantage is that it really requires a denser network of stations surrounding the pole area, than is available. By definition, at the pole H = 0; therefore X and Y, the north and east components of H respectively are also zero here. If one constructs the X and Y maps for this area, the point of intersection of the two zero contours defines the magnetic dip pole. However, these contours display a marked curvature it would be preferable to avoid. Again, by definition, I = 90° at the dip pole. Methods involving inclination, such as assuming a linear relation between H and the distance from the pole, are usually quite subjective.

The most decisive method is to treat the magnetic field as a vector problem where force and direction are mutually dependent. The laws governing their distribution are defined in vector form by Maxwell's equations. The horizontal intensity is considered as a vector representing the gradient of a potential field. Hutchison's projection (1949) outlined in the Appendix of Whitham et al. (1960), appears best.

By resolving the horizontal intensity parallel and perpendicular to the Greenwich grid direction and plotting isolines of the two components U, the grid-north component, and V, the grid-east component, on a polar stereographic projection, the following advantages are obtained at high latitudes: 1. The proximity of the geographical pole does not curve the isolines. 2. The isolines can be easily adjusted to intersect at right angles which is a necessary result if the field represented is derivable from a potential. Expressed analytically,

$$\frac{\delta V}{\delta u} = \frac{\delta U}{\delta v} \qquad \text{(Hutchison 1949)} \quad (1)$$

Small u, v, are parameters of position and are defined later.

All corrected D, H values were converted to U, V components using the relations

$$U = H \cos (\lambda \pm D) \qquad (2)$$

$$V = H \sin (\lambda \pm D) \qquad (3)$$

where λ is west longitude and the sign is positive for east declination. The contours of U and V were derived analytically to avoid arbitrary smoothing. Since such a small area was involved only the first-order terms of a Taylor expansion were used.

$$U = U_0 + a_1 \alpha + a_2 \beta \qquad (4)$$

$$V = V_0 + b_1 \alpha + b_2 \beta \qquad (5)$$

where U_0, V_0 are the values of U, V at the central point of the expansion. An approximate pole position was picked as this central point.

$$\alpha = u_s - u_0$$

$$\beta = v_s - v_0$$

where u_s, v_s are the grid coordinates of any point with field components U, V and u_0, v_0 are the grid coordinates of the assumed central point, which were $u_0 = .0246$ and $v_0 = -.1284$ and u, v, are both functions of west longitude λ and co-latitude φ such that

$$u = \tan \varphi/2 \, . \cos (\lambda - 180°)$$

$$v = \tan \varphi/2 \, . \sin (\lambda - 180°).$$

Applying the orthogonal relation (1) to equations (4) and (5) the following set of consistent equations was derived.

$$U = U_0 + a_1 \alpha + a_2 \beta \qquad (6)$$

$$V = V_0 + a_2 \alpha + b_2 \beta \qquad (7)$$

Applying a least-squares solution to 14 equations in U, V, it was found that the best expansions were, in units of gammas,

$$U = -1 - 68501 \alpha + 4641 \beta \qquad (8)$$

$$V = -5 + 4641 \alpha - 22568 \beta \qquad (9)$$

At the dip pole, $U = V = 0$.

Solving equations (8) and (9) for α and β, then converting back to latitude and longitude, the preliminary 1962.5 position for the dip pole is

Latitude 75.1° N

Longitude 100.8° W

Maps were drawn using equations (8) and (9) and values of U and V were scaled off at convenient intervals, then converted back to magnetic elements D, H, X, and Y. Maps were then drawn in D, I, H, X, Y, and are shown in Figures 3 to 7. The inclination map was drawn by assuming a linear relationship between H and I. This is only valid if Z is constant over the area concerned. Actually from Table II, the observed value deviated from the mean by $\pm$ 240 γ.

A comparison was made between the observed station values and the values interpolated from the maps. The standard deviation of the differences were:

D $\pm$ 4.2°

I $\pm$ 2.2′

H $\pm$ 45 γ

X $\pm$ 60 γ

Y $\pm$ 45 γ

Secular Motion of the Dip Pole

The most direct method of obtaining information as to the pole's secular motion is by comparing the present position with one in the past. For this reason, it was decided to re-examine the preliminary pole position of 1948 using the observations made by this Division in the years 1947-49, (Figure 1). Thirteen stations were picked from these observations, all within 100 miles of the 1948 preliminary pole position 73° N, 100° W. All station values were reduced to epoch 1948.0 (*see* Table VI Appendix). Using the same method of analysis as for the 1962 dip pole, and applying a least-squares solution to 26 equations in U, V, it was found that the best expansions were

$$U = 9 - 66078 \alpha + 4012 \beta \qquad (10)$$

$$V = 194 + 4012 \alpha - 23815 \beta. \qquad (11)$$

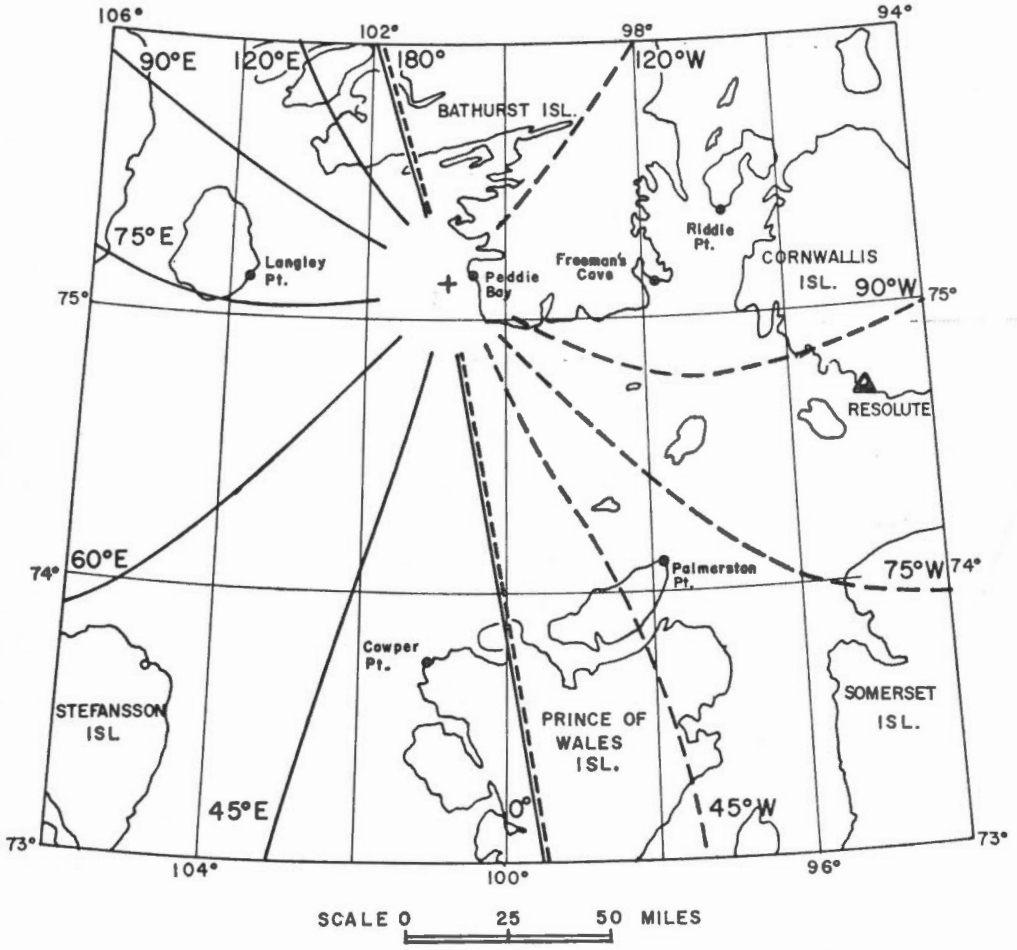

FIGURE 3
D-isolines in the vicinity of the north magnetic dip pole for 1962.5

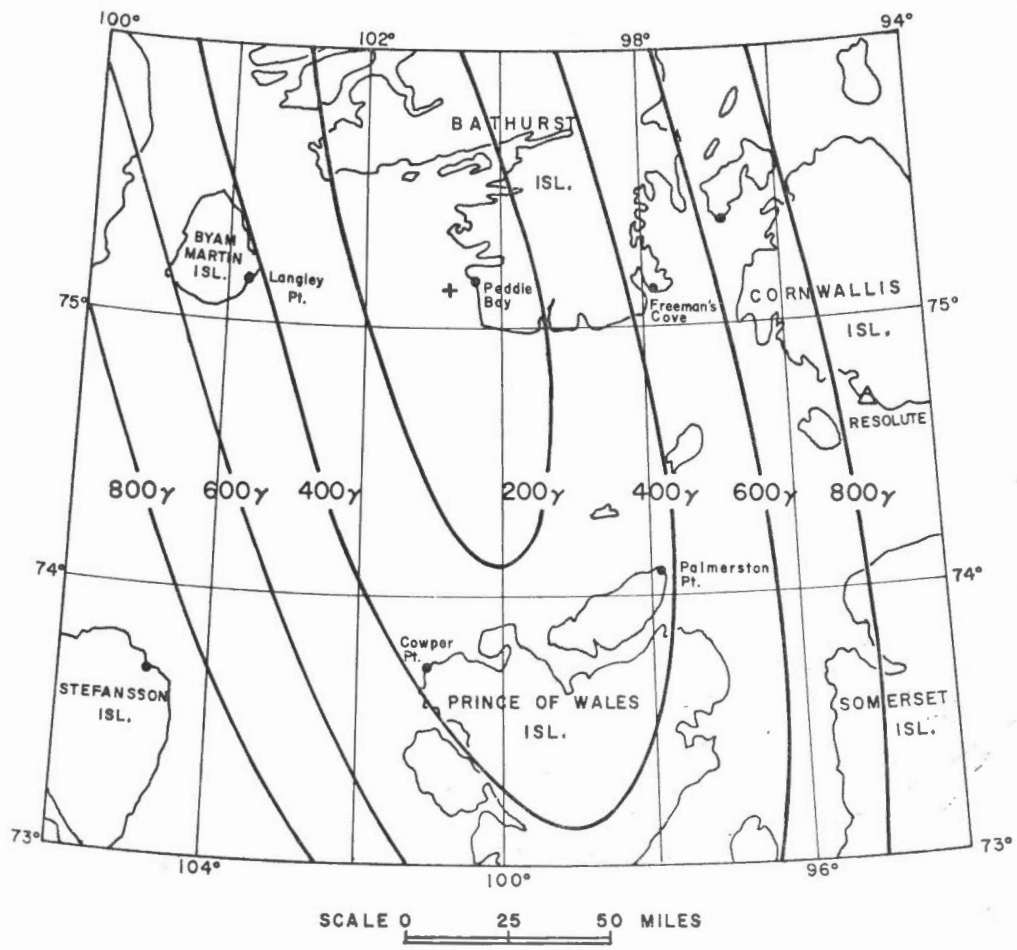

FIGURE 4
H-isolines in the vicinity of the north magnetic dip pole for 1962.5

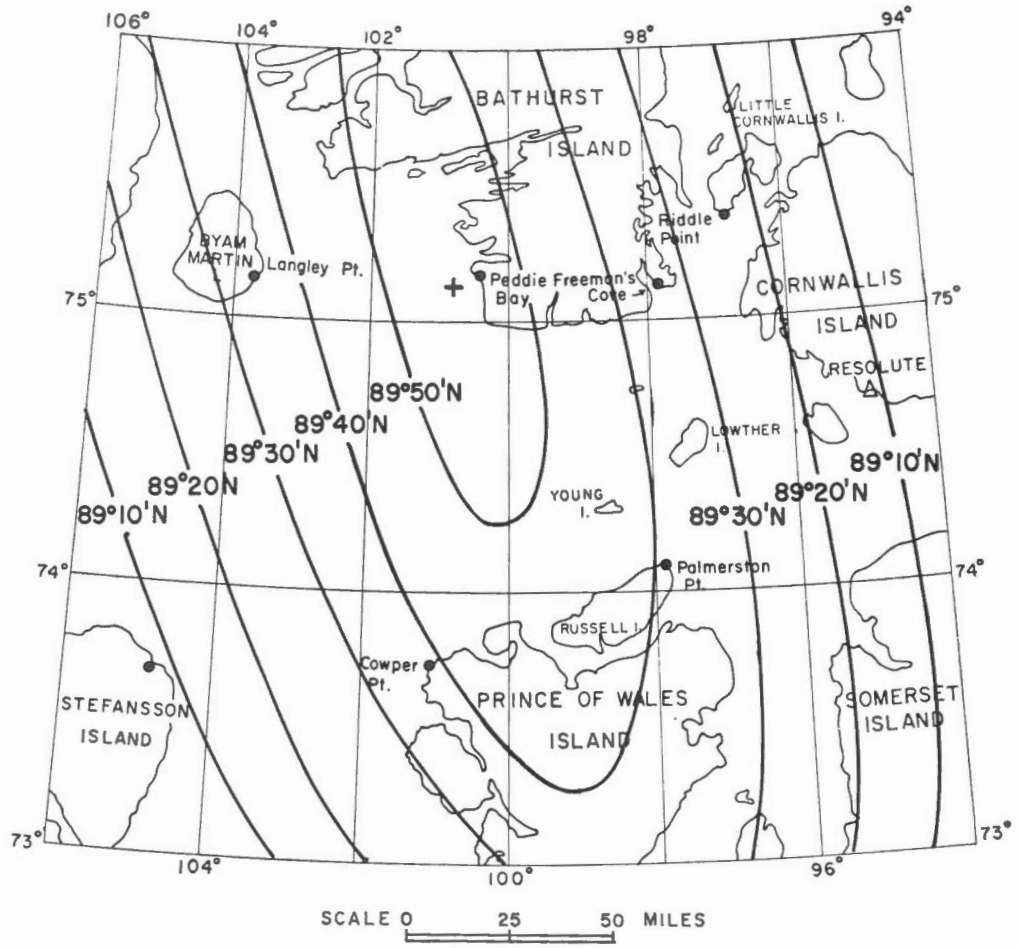

FIGURE 5
I-isolines in the vicinity of the north magnetic dip pole for 1962.5

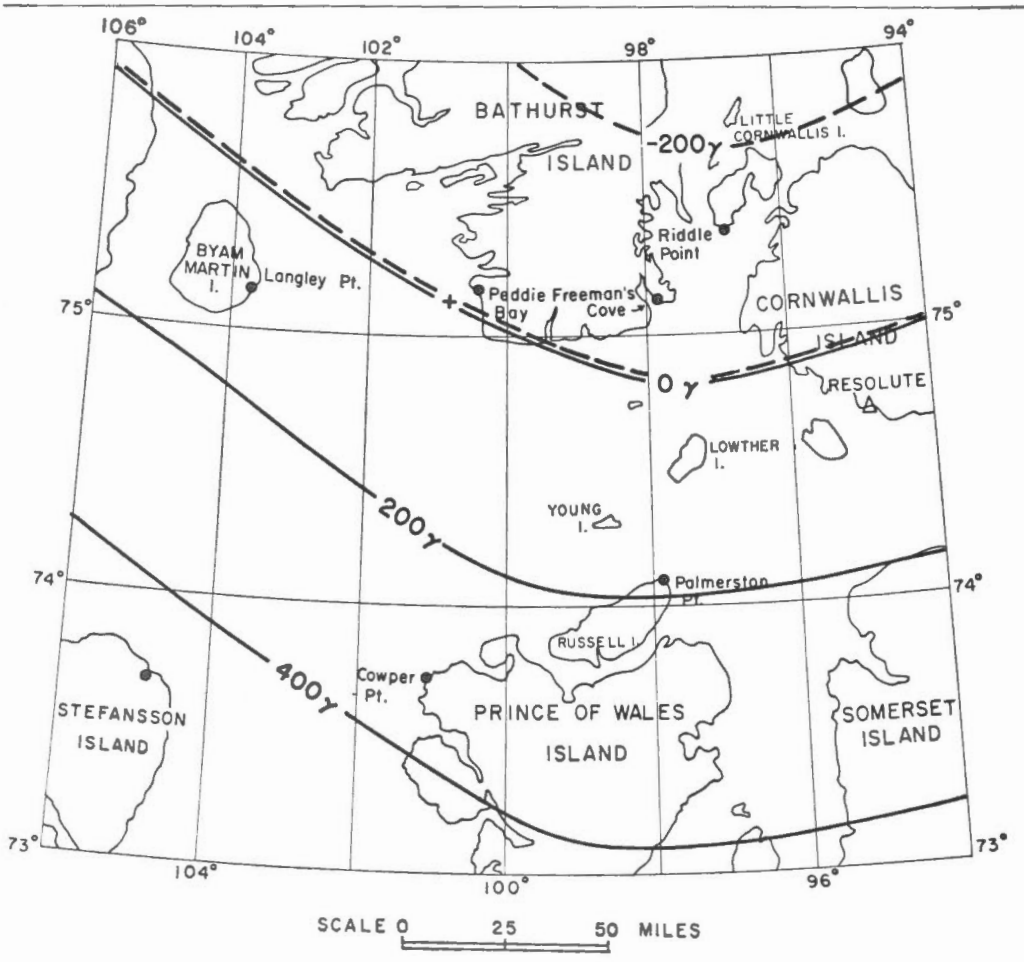

FIGURE 6
X-isolines in the vicinity of the north magnetic dip pole for 1962.5

FIGURE 7
Y-isolines in the vicinity of the north magnetic dip pole for 1962.5

Solving equations (10) and (11) for α and β, the 1948.0 position for the dip pole is

Latitude 73.9° N

Longitude 100.9° W.

All the observed positions for the north magnetic dip pole are shown in Table III. The original observations are given in the Appendix.

Figure 1 shows the path of the unperturbed dip pole according to the above observed positions. Amundsen's observations gave the first observed proof that the secular change of the earth's magnetic field produces a gradual change in the position of the dip pole. Such a change must be expected since every point of the earth's surface is subject to these gradual changes in the earth's magnetic field.

The predominant motion of the dip pole has been northward and over the past 58 years it has averaged 5 n.m. per year in this direction. Over the same period, the dip pole had a westward motion of 2 n.m. per year approximately until the last fifteen years when this motion has shifted to the east.

TABLE III

Date	Latitude	Longitude	Secular Motion	
			North	East
1831.4	70.1 N	96.9 W(a)		
			0.3 n.m./yr	+0.1 n.m./yr
1904.5	70.5	96.6 (b)		
			4.7 n.m./yr	−1.8 n.m./yr
1948.0	73.9	100.9		
			5.0 n.m./yr	+0.1 n.m./yr
1962.5	75.1	100.8		

All positions are given to the nearest tenth degree. The abbreviation n.m. refers to nautical miles.

(a) a re-computation of Ross's position by A. Nippoldt (1930).

(b) a re-computation of Amundsen's position by K. F. Wasserfall (1939).

More precision can be gained concerning this dip pole secular motion if the assumption is made that the secular variation field at the dip pole and at Resolute Bay, 96 miles distant, are nearly identical.

An indication of the validity of this assumption was made this summer when two repeat stations at Peddie Bay and Freeman's Cove were re-occupied. Peddie Bay was not an exact re-occupation, but as mentioned previously, the area proved to be quite flat magnetically, the local gradients in F being less than 1γ per 50 feet.

From the graphs of X, Y, shown in Figure 8 for Resolute Bay, Freeman's Cove and Peddie Bay, 96, 44 and 6 miles from the dip-pole position respectively, the average secular change over the past 15 years is 21 $\pm$ 3γ in X and 8 $\pm$ 1γ in Y.

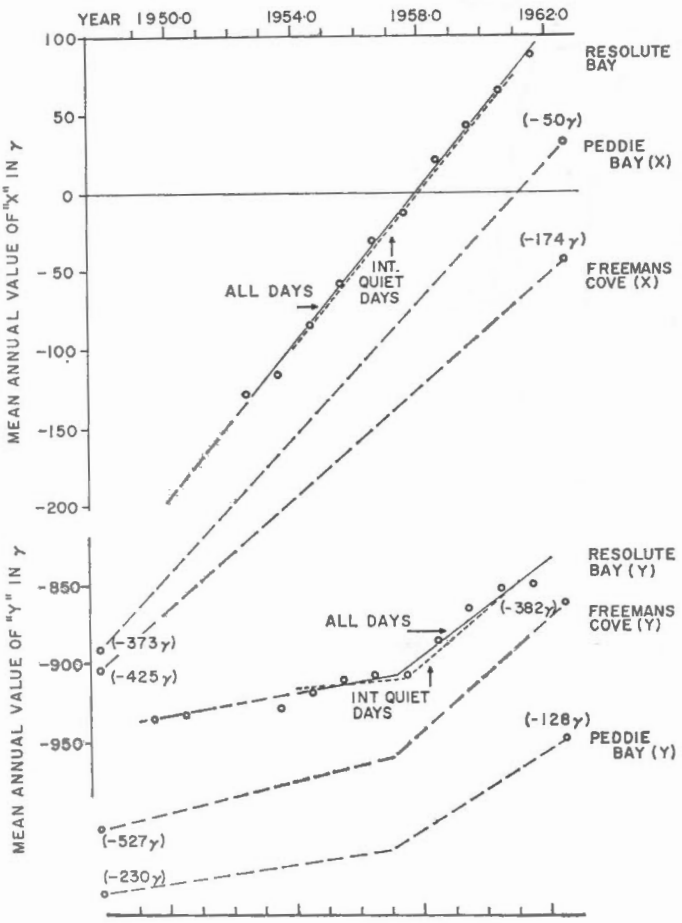

FIGURE 8. Comparison of secular change at Resolute Bay as given by the mean annual values in X and Y with the secular change at Peddie Bay and Freeman's Cove as determined from the observed field values shown in the brackets.

At Resolute Bay, X is increasing at the rate of 24γ a year. The gradient in X from Figure 6 is 4.6γ per mile. Therefore the dip pole is moving north at the rate of 5.2 miles a year. This agrees favorably with the previous estimated rate of 5 miles a year. Y increased 4γ a year east until 1957 when this eastward trend increased to 15γ a year.

The gradient of Y from Figure 7 is 9.52γ/mile. In terms of miles a year, this means that from at least 1952 until 1957 the pole moved east 0.4 mile a year and this rate increased to 1.6 miles a year east after 1957. Or, estimating over the past 15 years, the dip pole has an average eastward motion of 0.8 mile a year. This is about a magnitude larger than the estimate made from the pole positions of 1948 and 1962 and reflects the uncertainty in the longitude of these positions.

The Standard Deviation in the Dip-pole Determination of 1962

Since the maps (Figures 3 to 7) were derived from observations taken at only seven stations, the use of the standard deviation of the differences between the observed station values and values interpolated from the maps does not give a valid indication of the accuracy of the dip-pole position. The variance of U, V in the 14 equations involved in obtaining the consistent equations (8) and (9) was determined. This leads to a standard deviation of $\pm$99 γ in X and Y. The gradient of X is 4.6γ per n.m. and the gradient of Y is 9.5γ per n.m. Therefore the deviation in latitude is $\pm$0.2° and in longitude $\pm$ 0.7°.

$\therefore$ the dip pole position for 1962.5 is 75.1° $\pm$0.2°N
100.8° $\pm$0.7°W.

A Note on the Predicted Dip-pole Position for 1960.

The predicted pole position for epoch 1960 (Whitham, et al. 1960) was 74.8° $\pm$0.3°N; 99.6° $\pm$1.2°W and was based mainly on two premises:

1. A 1950 dip-pole position of 74°N and 100°W.
2. The prediction of the pole drift from secular change data at Resolute Bay observatory.

The validity of the latter premise (Figure 8) has been verified. From 1948 to 1950, the unperturbed dip pole moved 10 miles north and 1 mile east. Therefore, the 1950 position based on the re-computed 1948 position is 74° 06′N and 100° 51′W. This means using the methods of Whitham, et al. (1960) a more accurate 1960 prediction would have been 74.9°$\pm$0.3°N and 100.4° $\pm$1.2°W. By accident this value is close to the adopted value for that epoch.

The Diurnal Motion of the North Magnetic Dip Pole

The pole position was calculated for each hour of the day on international disturbed days and international quiet days, using Resolute Bay observatory data for the twelve-month period from July 1961 to June 1962. These plots are shown in Figure 9, centred about the unperturbed pole position for epoch 1962.5. The two plots are very similar in form indicating that the disturbed-day variation may be regarded as produced by an enhancement of the polar-cap current system responsible for the quiet-day variation. As noted in a paper of

Whitham and Loomer (1956) this diurnal motion, produced by current systems in the ionosphere, may displace the pole position 50 to 100 miles during a severe magnetic storm. This is in marked contrast to the average yearly drift of approximately 5 miles north and 1 mile east produced by the secular variation field of internal origin.

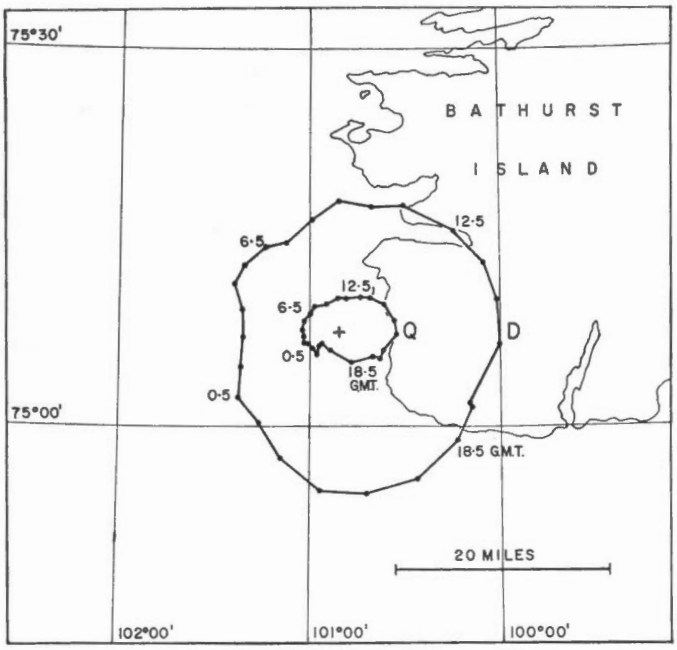

FIGURE 9. Average diurnal paths of the north magnetic dip pole on (D) International disturbed days and (Q) international quiet days for the period July 1961 to June 1962.

Acknowledgments

The writers wish to acknowledge the help and encouragement given by Mr. R. G. Madill, recently retired Chief of the Division of Geomagnetism, who initiated the present survey, and that carried out in 1947. The unfailing cooperation of Captain E. S. Brand, Director of Marine Operations Branch, Department of Transport, Captain M. Gagne of the CCGS *N.B. McLean* and Captain J. W. R. Dufour of the CCGS *d'Iberville* is most gratefully acknowledged.

References

HAZARD, D. L. 1957. Directions for magnetic measurements. Ser. No. 166, C.G.S., *U.S. Dept. Commerce.*

HUTCHISON, R. D. 1949. The horizontal geomagnetic field in the Canadian Arctic. B.A.Sc. Thesis, University of Toronto.

MADILL, R. G. 1948. The search for the north magnetic pole. *Arctic* **1**, p. 8–18.

NIPPOLDT, A. 1930. *Preuss. Met. Inst. Veroff.* N. 372, p. 137–143.

PACKARD, M. and VARIAN, R. 1953. *Bull. Am. Phys. Soc.*, **28**, No. 7.

——— 1954. *Phys. Rev.* **93**, 941.

ROSS, J. C. 1834. On the position of the north magnetic pole. *Roy. Soc. Lond. Philos. Trans.* **124**, 47–52.

SERSON, P. H. and HANNAFORD, W. L. W., 1956. A portable electrical magnetometer. *Can. J. Technol.* **34**, 232.

WASSERFALL, K. F. 1939. Studies on the magnetic conditions in the region between Gjöahavn and the magnetic pole during the year 1904. *Terr. Mag.* V. 44, p. 263–275.

WHITHAM, K. and LOOMER, E. I. 1956. The diurnal and annual motions of the north magnetic dip pole. *J. Atmos. Terr. Phys.* **8**, 349–351.

WHITHAM, K., LOOMER, E. I. and DAWSON, E. 1960. Recent studies of the north magnetic dip pole. *Arctic* **12**, 28–39.

APPENDIX

TABLE IV lists the observations made by Commander J. C. Ross on the position of the north magnetic pole in 1831 (J. C. Ross, 1834).

TABLE V lists the observations made by Amundsen in 1904 as stated by K. F. Wasserfall (1939).

TABLE VI lists the observations used in the re-computation of the 1948.0 dip pole position. These observations were made by personnel of the Division of Geomagnetism in the period 1947–1949. Also listed are the U, V values reduced to epoch 1948.0.

TABLE IV

Observations on the Dip of the Magnetic Needle

Date	Time of the day	Poles of the Needle direct					Poles of the Needle reversed					Observed Dip	Remarks
		Axis direct		Axis reversed		Mean	Axis direct		Axis reversed		Mean		
		Face East	Face West	Face West	Face East		Face East	Face West	Face West	Face East			
		° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	
1831													
Feb. 15	Noon	78 11.5	99.34.73	78 6.23	99 25.67	88 49.53	79 26.17	98 37.67	79 17.33	98 52.5	89 3.42	88 56.47	
28	1 P.M.	81 30	98 38.78	79 35.60	98 14.50	89 29.72	72 7.86	103 38.44	72 52	105 43.75	88 35.51	89 2.61	
March 1	2 P.M.	81 42.8	97 52	81 7	96 49.4	89 22.80	77 16	100 27	77 47.42	98 49.6	88 35.0	88 58.90	
4	Noon	81 34.8	96 37.4	81 18	97 25	89 13.8	76 30.4	101 10	78 15.6	99 27	88 51.25	89 2.52	
15	1 P.M.	81 34.7	96 34.5	81 34.2	96 41.2	89 6.15	75 27.5	102 12.3	75 6.9	102 59.5	88 56.55	89 1.35	Mean observed dip at Sheriff's Bay in lat. 70° 1′ N.,
21	4 P.M.	75 5.67	103 6.17	74 12.83	101 8.33	88 23.14	81 14.5	97 6	81 56.1	95 35.3	88 57.97	88 40.56	and long. 91° 54′ W. Variation 96° 12′.3 W. previous
22	4 P.M.	86 7.63	91 30.17	87 0.0	90 29	88 47.7	86 13	92 35.7	87 19.83	90 37.83	89 11.59	88 59.15	to my journey towards the magnetic pole = 88°
23	3 P.M.	86 18.2	91 11.35	87 9.14	90 47	88 51.42	86 24.17	90 17	87 28	91 22	88 47.29	88 49.36	57′.04 N. (1831).
24	2 P.M.	81 56.5	96 18.7	81 49.7	96 0.20	89 1.27	81 57.70	95 40.1	81 18	97 20.2	89 4.0	89 2.64	
25	3 P.M.	78 56	98 30	78 1.1	99 27.5	88 43.65	79 51.4	99 12.17	80 8.72	97 21.4	89 8.42	88 56.04	
30	3 P.M.	77 41	99 49.25	77 38.75	99 44.44	88 43.36	81 23.9	96 58.3	81 59.4	96 26.4	89 12.0	88 57.68	
April 1	2 P.M.	76 47.1	100 2.90	78 29	100 14.20	88 53.27	81 52.4	95 48.14	81 27.12	97 13.4	89 5.27	88 59.27	
	4 P.M.	78 40.67	99 2.17	78 36.33	98 52	88 48.04	80 8.27	97 51.13	80 20.27	97 48.5	89 2.04	88 55.04	
May 28	8 A.M.	86 31.7	92 47	86 26.83	93 30	89 48.87	73 9.5	106 11.5	84 20	94 35.8	89 34.2	89 41.53	89° 41′.9 N. Variation 57° 15′ W.; lat. 69° 34′ 45″ N.;
	2 P.M.	86 17.22	92 51.3	87 2.14	93 32.16	89 55.71	74 42.2	104 58.22	83 24.7	94 50.18	89 28.83	89 42.27	long. 94° 53′ W.
June 1	Noon	86 23.67	93 8.33	87 6.17	93 32.83	90 2.75	73 53.67	104 51.67	83 44.33	97 7.5	89 54.29	89 58.52	89° 58′.11 N. Assumed direction of meridian S. 75°
	3 P.M.	85 55.5	93 32.62	86 40.67	93 54	90 0.71	73 22	105 24.83	83 23.33	97 28.67	89 54.71	89 57.71	W. (True.)
	5 P.M.	86 32.33	93 10.33	87 16.67	93 9.83	90 1.79	74 58.83	104 16.83	83 0.83	97 5.13	89 50.15	89 55.97	89° 59′.465 N. Assumed direction of meridian N.
	7 P.M.	86 52.83	93 9.67	87 14.50	93 32.0	90 12.25	74 55	104 24.5	83 38.17	96 37	89 53.67	90 2.96	60° W.; lat. 70° 5′ 17″ N.; long. 96° 45′ 48″ W.
2	9 A.M.	84 24.33	96 12.67	82.46.37	96 55.1	90 4.62	82 29.5	97 14.33	85 14.5	94 58.33	89 59.14	90 1.88	89° 59′ N. Assumed direction of meridian N. 15° W.
	11 A.M.	84 3	96 25.56	82 32.60	96 35.75	89 54.08	82 36.5	97 26.75	85 20.67	94 29.0	89 58.17	89 56.12	
6	8 A.M.	86 0.5	92 15.83	86 58.33	93 6.67	89 42.38	75 25.67	103 55.83	82 40.17	96 28.5	89 37.54	89 40.19	Same position as on the 28th of May.
8	9 A.M.	86 27.5	92 3.33	87 13.67	92 17.83	89 30.58	75 20	101 36.17	81 22.33	98 37.83	89 14.04	89 22.33	At Cape Isabella. Lat. 69° 26′ 20″; long. 93° 51′ W.
9	8 A.M.	84 42.83	94 33.13	84 25.67	93 42.5	89 21.03	77 48.83	100 1	81 42	97 21.5	89 13.33	89 17.18	At Padleak. Lat. 69° 30′ 1″; long. 93° 27′ 52″ W.
17	2 P.M.	86 5	92 40.2	87 41.5	91 52.5	89 34.8	82 41	93 30	85 1.3	93 2.3	88 33.65	89 4.22	
	5 P.M.	86 9.8	91 48.5	87 45	91 15	89 14.57	80 45	96 30.8	85 9.2	93 7	88 53	89 3.79	
July 13	2 P.M.	85 43.33	92 4.5	87 50.33	91 42	89 20.40	82 23	95 1.5	82 37	95 14.83	88 49.04	89 4.74	Observed dip at Sheriff Bay on my return from the
Aug. 12	1 P.M.	86 27.5	91 41.7	87 57.5	91 14.7	89 20.35	84 9.2	93 24.2	79 45.8	97 38.3	88 44.37	89 2.36	magnetic pole 89° 3′.32 N. (1831.)
20	Noon	80 3.34	98 7.5	80 46.7	97 20.8	89 4.53	76 15.7	101 30	99 53.2	78 15	88 58.47	89 1.50	
Oct. 21	10 A.M.	84 40.17	93 52	84 24	93 33.45	89 7.40	79 1.89	98 5.67	81 36.67	96 5	88 42.31	88 54.86	
22	9 A.M.	84 40.5	94 16.5	84 50.12	93 49.37	89 24.12	77 29.4	99 41	80 24.5	96 45.2	88 35.03	88 59.57	
23	Noon	84 9	93 13.9	84 40.6	93 43.2	88 56.67	78 55.4	99 5.9	81 57.6	95 32.8	88 53.93	88 55.30	
Nov. 21	Noon	84 18.8	94 8.1	84 18.1	94 27.9	89 17.98	77 20.5	99 22	78 41.8	98 5.6	88 22.47	88 50.22	
22	1 P.M.	84 56.2	93 46.6	84 54.6	93 48.6	89 21.5	78 55.3	98 24	79 28.3	96 51	88 24.65	88 53.07	
23	1 P.M.	84 43	93 37.6	84 59	93 24.4	89 11	79 39.8	98 8	80 36.2	95 55.4	88 34.88	88 52.92	
Dec. 24	10 A.M.	84 42.9	93 50.7	84 11.7	94 32.6	89 16.97	79 47.5	98 31	81 51.5	94 46	88 44	89 0.49	
	1 P.M.	85 21.5	93 2	84 19.8	93 57	89 10.07	79 58.6	98 16.8	81 37	94 41.5	88 38.48	88 54.27	Observed dip at Victory Harbour 88° 54′.86 N.
1832													Variation 101° 32′.03 W.; lat. 70° 9′ 18″ N.; long.
Jan. 21	Noon	85 1	94 8.6	84 24.5	94 23.2	89 29.32	76 53	100 16.2	81 7	95 59.4	88 33.9	89 1.61	91° 30′ 33″ W.
Feb. 16	1 P.M.	84 58.5	95 11.8	83 17.3	95 14	89 40.04	76 46.1	100 52	79 51.7	96 31.1	88 30.22	89 5.31	
18	1 P.M.	83 48.4	95 18.6	81 58.1	95 19.7	89 6.2	77 30.1	100 39.5	81 30.4	95 37.8	88 49.45	88 57.82	
March 17	3 P.M.	83 16.2	94 41.6	82 32	95 42.1	89 2.98	74 53.9	102 45.2	78 55	96 3.1	88 9.3	88 36.14	
27	2 P.M.	83 30.7	94 48.4	84 2.9	94 38.4	89 15.1	74 4.5	102 54.7	78 28	98 45.6	88 33.2	88 54.15	
April 13	.....	83 38.5	94 47	82 47.6	95 14.9	89 7	75 36.9	101 13	78 53	98 23.6	88 31.62	88 49.31	
15	.....	83 5.5	95 22.5	82 30.9	96 27.2	89 21.52	78 21	98 23.3	75 45.4	101 46.7	88 34.12	88 57.82	

TABLE V

Particulars for magnetic stations, Gjoa expedition 1904

Station	Latitude	Longitude	D	H γ	I
	° ′	° ′	° ′		° ′
Beechey Island	74 43 N	91 54 W	128 28 W	1550*	88 20.0 N
Gjoahaven	68 37	95 53	7 24 W	761	89 17.4
1	68 27	95 49	44 00 E	755	89 15.0
2	68 28	96 18	02 50 E	900	
3	68 42	95 31	35 15 E	645	
4	68 48	95 56	04 10 W	655	
I	69 24	95 22	35 30 W	410	89 36.0
II	70 25	96 18	45 40 E	395	89 34.0
III	70 42	96 15	120 00 E	140*	89 52.0
IV	70 56 N	96 21 W	101 30 W	285	89 38.0

*Interpolated.

TABLE VI

Measurements used in the recomputation of the 1948 dip pole position

Station	Latitude	Longitude	Date of Observation	D	I	H γ	Reduced to Epoch 1948.0	
							U γ	V γ
	° ′	° ′		° ′	° ′			
Resolute Bay (A)	74 41.2	94 49.9	1947.6	101 14.5 W	89 03.8	893	882	−90
Resolute Bay (B)	74 41.1	94 53.4	1947.7	105 29.4 W	88 57.3	1089	1065	−190
Freeman's Cove	75 11.5	98 03.9	1947.7	128 52.0 W	89 20.4	677	577	−339
Guillemard Bay	71 51.3	98 13.3	1947.6	38 35.7 W	89 31.6	488	242	428
Allen Lake	73 41.0	98 26.0	1947.6	124 54.3 W	89 35.6	412	365	−173
Peddie Bay	75 11.0	100 39.0	1947.7	148 17.3 W	89 34.0	438	291	−317
Greeley Haven	71 56.0	104 50.0	1947.7	61 39.5 E	88 29.4	970	−946	234
Pasley Bay	70 42.0	95 53.1	1948.6	25 49.7 W	88 59.1	1046	365	969
Pell Inlet	75 54.4	102 15.4	1948.6	168 20.0 E	89 41.1	386	11	−400
King Game Lake	72 27.0	106 15.0	1948.6	48 30.0 E	88 36.8	1414	−1273	589
Cunningham Inlet	75 06.0	93 45.0	1949.6	90 57.9 W	88 52.1	1138	1157	13
Union River	72 46.6	93 57.0	1949.6	73 23.4 W	88 59.9	1019	970	318
Ommanney Bay	73 15.7	102 21.0	1949.6	46 26.7 E	89 46.0	238	−183	92

CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
Dominion Observatories

PUBLICATIONS

of the

DOMINION OBSERVATORY

OTTAWA

Volume XXVIII • No. 6

RECORD OF OBSERVATIONS AT AGINCOURT MAGNETIC OBSERVATORY 1961

A. A. Onhauser and M. H. Onhauser

Price 25 cents

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1963

CONTENTS

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AGINCOURT MAGNETIC OBSERVATORY, 1961

Geographic Latitude 43° 57′ North

Geographic Longitude 79° 16′ West

Geomagnetic Latitude 55.0° North

Geomagnetic Longitude 347.0° East

Absolute Instruments

The absolute instruments and their corrections to International Magnetic Standard were as follows:

for D, I.M.S. = Elliott 48	−0.8′
for I, I.M.S. = Toepfer 89	−0.15′
for H, I.M.S. = QHM 258	+3.7 γ
for H, I.M.S. = Schuster-Smith	0.0 γ
for F, I.M.S. = Proton Precession Magnetometer (4257.60 cps per oersted)	0.0 γ

Variometers

Two photographic three-component, normal sensitivity sets, la Cour and Ruska, were used for continuous recording.

An electrical recording magnetometer, Type T613, Dominion Observatory design (Serson 1957) operating continuously, provided a visible record of the variations in H, D, and Z. It was used as a low-sensitivity set in the event of severe magnetic storms, and for determining at once the state, quiet or disturbed, of the magnetic elements.

The scale values per millimeter of these variometers during 1961 were:

	H	D	Z
la Cour	5.1 γ	0.9′	6.1 γ
Ruska	2.1 γ	1.1′	5.3 γ
Electrical recording magnetometer, T613	9.2 γ	2.2′	8.0 γ

Absolute Observations and Base-line Values

Absolute observations were made at least one a week. Base-line values were adopted by using French curves and getting the best fit to the observed values. The r.m.s. differences of the observed minus the adopted base-line values were 1.0′ in declination, 6 gammas in horizontal intensity, and 2 gammas in vertical intensity.

Notes on the Tables

Greenwich mean time (U.T.) is used throughout.

Table 58 lists the three-hour range indices in D, H, and Z, as well as the K-indices which are sent regularly to the International Association of Geomagnetism and Aeronomy for publication. The magnetograms were also read each month for sudden commencements, bays, and pulsations, and the results sent to the IAGA.

ANNUAL MEANS

Year	D	H	Z	I	F
	° ′	γ	γ	° ′	γ
1899	5 27.7	16491	59789	74 34.8	62021
1900	28.8	497	594	31.6	61835
1901	30.5	490	542	31.2	783
1902	32.6	472	470	31.1	709
1903	35.0	460	467	31.7	703
1904	39.3	429	395	32.3	626
1905	43.1	411	404	33.4	629
1906	46.2	387	365	34.1	585
1907	51.5	357	364	35.7	576
1908	55.0	322	290	36.5	496
1909	6 00.3	277	194	37.5	391
1910	04.8	248	163	38.6	353
1911	09.9	212	065	39.1	250
1912	14.6	184	004	39.7	183

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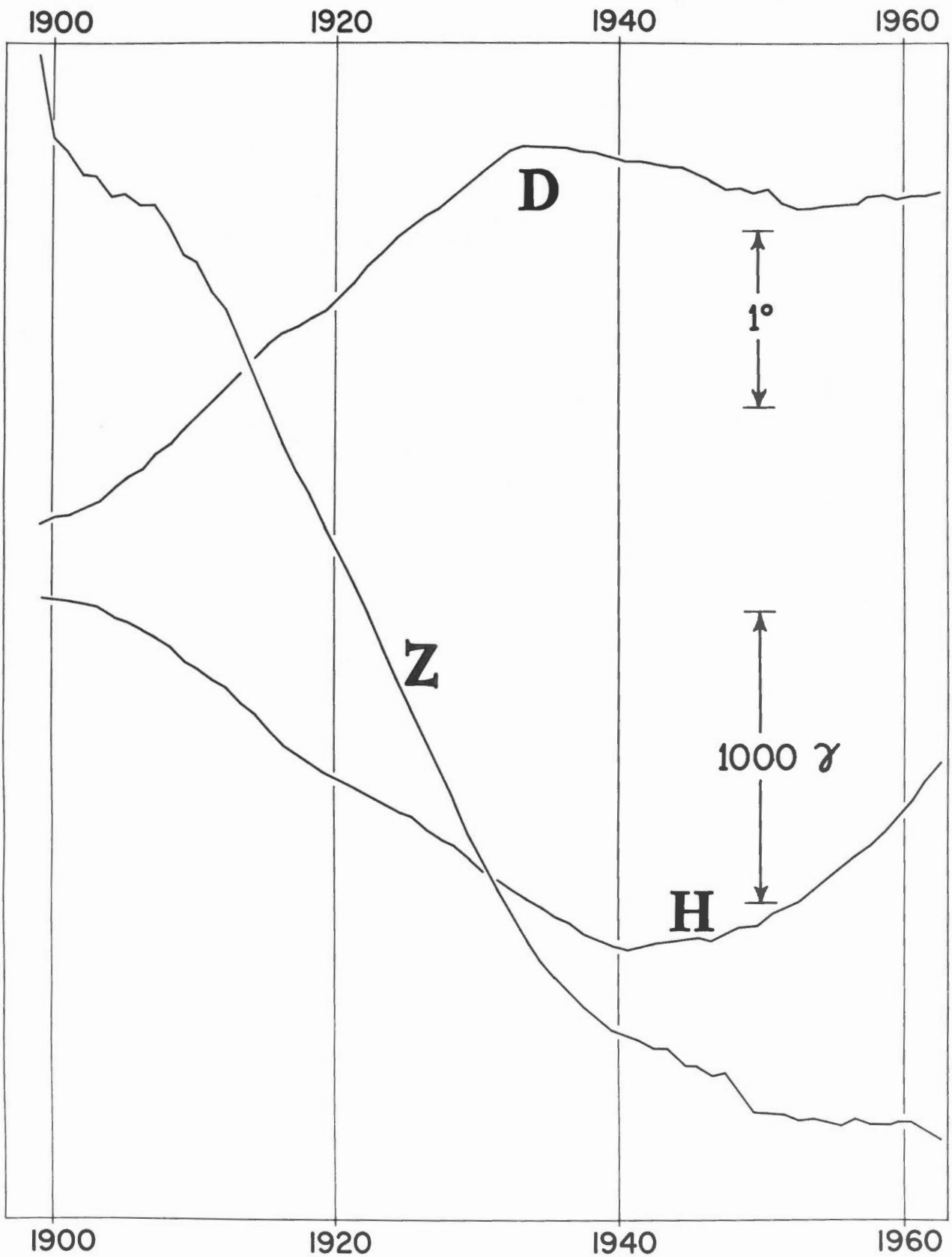
ANNUAL MEANS (Continued)

Year	D	H	Z	I	F
	° ′	γ	γ	° ′	γ
1913	6 19.3	16137	58893	74 40.6	61064
1914	24.7	092	775	41.3	60939
1915	29.4	034	657	42.7	809
1916	33.4	15987	538	43.5	682
1917	36.2	950	449	44.2	587
1918	38.3	916	366	44.8	496
1919	41.0	885	260	44.9	386
1920	45.4	865	166	44.6	291
1921	50.6	839	065	44.5	185
1922	56.2	809	57961	44.6	078
1923	7 00.9	784	849	44.3	59963
1924	05.8	752	733	44.3	843
1925	09.7	727	628	44.2	736
1926	13.4	692	529	44.6	630
1927	16.4	664	412	44.3	508
1928	20.3	628	315	44.9	407
1929	24.0	586	197	45.4	282
1930	28.1	544	103	46.4	181
1931	31.9	520	010	46.3	086
1932	35.8	485	56924	46.9	58991
1933	37.7	453	837	47.4	900
1934	37.5	424	762	47.9	820
1935	37.1	391	704	48.9	759
1936	36.9	362	658	49.8	704
1937	35.9	333	604	50.6	644
1938	35.1	310	564	51.3	599
1939	34.0	292	522	51.7	554
1940	32.3	281	503	52.0	533
1941	32.4	288	482	51.3	514
1942	31.4	303	460	50.1	497
1943	30.8	309	459	49.7	498
1944	30.1	313	406	48.7	454
1945	27.7	322	392	48.0	436
1946	25.5	311	361	48.1	404
1947	22.3	338	370	46.7	419
1948	22.5	355	302	44.7	358
1949	20.9	360	237	43.4	297
1950	22.0	399	236	41.2	306
1951	17.2	419	233	40.0	309
1952	15.7	444	214	38.3	297
1953	15.2	487	219	35.9	313
1954	16.0	522	209	33.8	313
1955	16.4	561	194	31.3	308
1956	16.8	601	218	29.4	343
1957	19.1	642	203	26.8	339
1958	19.7	686	196	24.2	344
1959	18.8	739	207	21.2	369
1960	19.7	797	205	18.1	383
1961	19.7	864	177	13.8	374
1962	20.6	929	147	09.7	363



Secular change at Agincourt: Annual Means 1899 – 1962

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 1 Agincourt — $H = 15{,}000\,\gamma +$ — January 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	827	848	834	824	817	822	813	824	830	830	830	837	840	835	825	813	810	815	824	830	835	836	839	840	828
2 Q	839	837	837	837	837	839	841	844	845	849	845	849	848	841	832	826	827	835	838	835	836	836	838	839	839
3	840	836	831	835	843	841	837	832	839	841	845	842	842	836	825	817	817	830	841	839	840	842	844	843	837
4 Q	842	841	841	839	836	834	833	835	838	840	841	841	839	832	820	812	814	829	837	840	846	850	854	848	837
5 Q	849	848	845	844	846	849	850	853	851	855	849	850	850	844	825	818	818	830	840	839	835	839	843	842	842
6	839	837	829	823	831	828	824	838	829	838	838	843	851	843	822	804	798	809	819	833	843	845	848	852	832
7	853	850	838	838	839	839	838	838	842	846	846	844	844	840	838	831	826	829	833	838	843	855	854	849	841
8 D	823	828	823	811	811	812	803	810	801	818	838	842	842	834	824	813	812	798	792	818	824	827	819	822	819
9 D	822	818	817	843	815	804	802	786	803	809	789	809	819	818	812	792	780	781	791	803	809	813	809	807	806
10	817	818	822	819	822	822	823	824	827	828	828	833	836	835	824	810	799	805	806	811	820	830	835	834	822
11 Q	833	833	833	831	830	834	833	832	833	837	838	838	834	829	817	806	803	811	823	833	839	843	844	846	831
12	845	843	839	837	844	845	844	844	846	847	849	847	842	836	820	804	800	813	823	813	844	845	852	846	836
13	843	846	845	846	843	843	840	838	838	834	834	834	839	838	833	818	818	828	833	844	844	854	854	850	839
14	850	843	843	842	840	839	838	840	842	845	845	844	844	839	829	822	818	825	835	843	849	849	853	849	840
15	845	839	843	838	840	834	834	828	833	850	849	849	845	838	833	828	823	829	838	838	843	843	785	813	835
16	833	840	836	823	803	802	797	801	816	834	838	837	835	833	825	815	809	815	827	835	853	847	849	847	827
17	838	832	832	838	838	839	838	838	837	843	840	841	847	841	835	823	823	828	838	842	843	846	849	843	838
18	839	843	853	853	849	850	848	853	851	850	839	844	843	838	848	830	818	813	817	814	827	838	839	838	839
19 D	841	840	815	826	835	835	834	837	840	845	846	849	849	839	814	775	756	771	816	808	810	815	798	796	820
20 D	788	796	769	804	801	787	786	758	776	798	808	819	824	804	771	752	758	787	809	824	828	830	825	826	797
21	826	826	824	814	819	812	806	809	819	829	820	827	831	824	824	774	778	804	816	822	830	833	831	832	818
22 D	832	829	828	829	833	831	830	809	824	833	830	824	832	824	809	788	768	802	807	817	825	838	834	829	821
23	825	821	825	832	828	830	830	831	835	838	838	838	837	831	824	812	806	812	825	838	851	856	855	848	832
24	836	834	836	831	835	822	832	811	837	850	852	840	839	844	830	808	795	792	799	825	836	842	840	830	829
25	809	820	832	830	820	825	830	831	835	839	835	835	839	825	822	813	806	811	820	825	830	840	840	841	827
26	840	839	840	840	840	835	841	845	848	850	850	855	839	839	845	833	814	819	818	827	834	832	837	837	837
27	831	830	840	840	837	838	837	834	839	845	841	844	840	834	824	821	820	828	830	839	845	847	848	849	837
28	831	826	833	835	840	842	840	845	842	840	845	846	846	837	846	840	832	832	825	826	830	830	833	832	836
29	835	828	825	834	839	840	840	840	840	845	846	842	842	840	826	820	813	814	821	825	829	834	837	840	833
30	841	841	837	836	840	840	841	842	845	849	849	851	849	849	844	840	837	835	835	839	844	846	849	849	843
31 Q	846	843	837	838	839	845	844	843	846	849	848	850	851	849	844	835	834	834	834	831	834	839	845	848	842
Mean	834	834	832	833	832	831	830	828	833	839	838	840	841	835	826	813	807	815	823	829	835	839	838	838	831

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 2 Agincourt — D = 7°W + ...' — January 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	17.3	16.3	19.1	19.3	19.1	17.1	15.0	17.2	17.1	17.9	18.3	18.3	16.7	15.5	17.2	18.8	20.7	21.2	21.2	20.9	20.3	19.2	19.1	19.2	18.4
2 Q	19.1	18.7	18.5	18.9	19.1	19.4	19.3	19.7	18.1	18.3	19.2	19.5	16.4	16.6	18.5	20.7	21.9	21.9	21.0	20.9	20.4	20.3	20.0	19.3	19.4
3	19.3	19.4	19.6	19.8	19.3	20.6	19.5	21.4	17.6	15.4	17.4	18.0	17.4	16.2	16.8	19.2	21.5	22.8	22.8	22.0	21.2	20.2	19.3	19.0	19.4
4 Q	18.4	18.4	18.5	18.5	19.1	19.1	19.7	18.5	17.4	17.1	17.1	16.6	16.6	15.2	15.6	18.6	21.7	23.7	23.9	23.1	21.9	20.3	19.4	19.0	19.1
5 Q	18.4	17.5	18.1	18.4	18.8	19.0	19.2	19.2	18.8	18.2	16.6	16.7	17.3	16.6	17.2	19.2	21.2	22.1	22.7	22.2	22.3	20.5	20.2	19.0	19.1
6	18.3	18.2	18.3	16.4	19.3	19.8	18.4	17.6	17.3	13.8	15.1	20.2	13.3	13.7	15.7	19.2	21.9	23.7	23.8	23.0	21.3	20.3	20.1	18.6	18.6
7	17.3	17.4	16.3	18.3	18.2	18.3	17.9	18.2	17.9	17.1	17.0	17.5	15.9	14.8	18.4	21.0	22.6	22.7	22.3	21.6	20.2	19.5	19.1	19.1	18.7
8 D	19.8	18.9	17.8	15.4	17.6	18.1	17.7	16.2	18.5	17.2	13.4	13.9	16.1	17.1	21.2	23.6	23.6	24.7	29.4	28.0	23.6	21.7	20.5	19.3	19.7
9 D	18.7	18.7	18.8	13.1	19.4	20.4	19.7	18.1	18.9	14.5	21.6	27.3	24.0	31.8	28.7	28.9	29.9	29.8	29.0	28.0	25.3	27.0	24.4	17.4	23.1
10	18.7	18.1	18.5	18.9	19.0	19.0	18.8	18.8	19.6	20.7	17.7	16.1	15.1	16.5	15.7	18.4	20.7	22.6	23.1	22.5	21.6	20.6	19.7	18.9	19.1
11 Q	18.1	17.9	17.9	18.1	18.4	17.6	18.8	19.0	18.5	18.1	18.1	17.8	16.9	16.1	16.0	18.7	21.0	22.1	21.5	20.5	19.1	18.8	18.8	18.5	18.6
12	18.1	17.9	18.1	17.9	17.6	19.4	19.7	19.6	20.0	17.8	17.2	17.1	17.3	16.1	16.1	18.2	22.2	24.5	25.9	25.0	22.8	20.8	20.0	19.0	19.5
13	17.4	18.2	17.2	17.3	17.3	18.1	18.2	17.5	18.2	13.1	13.3	13.3	18.3	11.7	16.2	19.4	22.3	22.9	22.6	22.5	21.8	20.6	20.3	18.5	18.2
14	19.3	17.8	18.1	18.3	18.4	18.5	18.8	18.5	18.4	18.2	18.4	17.4	16.6	15.3	14.8	16.8	19.7	22.0	23.7	23.1	22.5	22.0	24.4	24.8	19.4
15	21.0	18.5	17.4	18.6	18.6	17.5	20.4	20.3	13.8	15.3	16.1	16.0	17.9	18.6	18.4	20.3	22.3	22.4	21.7	19.9	18.8	19.8	20.0	22.2	19.0
16	23.6	22.2	17.7	18.8	15.9	11.1	19.3	15.6	17.5	18.2	20.2	19.3	18.4	17.4	17.5	18.9	20.3	21.6	23.2	22.1	20.9	19.7	19.4	19.3	19.1
17	19.5	19.5	16.7	19.2	19.3	19.7	20.1	22.2	17.4	17.5	19.8	21.3	18.7	17.5	17.8	19.4	21.4	23.1	22.1	20.0	18.6	18.4	18.3	18.6	19.4
18	18.6	17.5	17.7	18.1	18.6	18.6	19.5	18.7	17.9	17.5	15.7	15.6	19.2	27.7	26.8	19.9	21.3	23.4	24.1	24.1	24.1	21.2	19.5	18.7	20.2
19 D	17.8	17.6	13.0	17.5	18.8	19.6	19.9	19.8	19.9	19.9	19.5	18.7	17.7	15.9	15.9	21.3	28.9	30.6	30.2	28.4	22.5	24.3	16.5	20.6	20.6
20 D	11.2	13.1	6.2	18.6	11.4	18.7	15.1	31.7	28.1	25.1	25.2	22.2	19.6	28.8	34.4	31.2	31.7	30.8	25.7	21.5	20.6	19.3	18.9	18.5	22.0
21	17.6	17.7	18.6	17.9	13.3	16.6	15.7	26.2	20.4	20.4	15.9	26.8	21.4	12.2	12.2	20.9	29.1	27.9	25.2	22.9	20.0	18.7	18.8	18.6	19.8
22 D	18.0	17.7	18.1	18.3	19.1	19.4	15.2	26.0	14.2	18.0	17.3	29.8	19.7	12.7	14.1	17.0	22.3	22.3	25.4	23.1	20.9	19.5	18.8	19.4	19.4
23	18.5	16.8	16.8	15.0	15.9	18.4	18.7	19.4	22.1	21.1	19.6	18.7	17.7	15.8	14.2	16.8	19.6	22.5	23.3	22.7	21.5	20.2	18.7	18.7	18.9
24	17.5	16.9	16.8	15.8	18.6	16.5	15.6	23.0	13.8	17.5	17.4	20.4	23.3	19.8	16.0	21.3	24.8	26.7	24.9	25.7	23.6	20.4	19.9	19.5	19.8
25	16.1	17.2	16.9	16.7	10.3	15.1	17.2	17.4	19.4	21.0	20.1	26.8	23.2	22.1	19.7	20.0	21.5	22.4	22.1	22.2	21.3	20.4	19.5	19.5	19.5
26	18.7	18.2	17.7	16.7	16.7	17.6	21.3	18.7	18.6	17.5	20.5	18.7	20.4	22.6	20.3	20.5	22.3	23.5	25.1	25.0	23.3	21.2	19.4	18.7	20.1
27	18.5	15.7	16.6	19.0	18.9	18.5	18.0	18.4	23.2	15.8	18.3	17.7	17.4	16.0	16.2	16.7	18.6	20.3	21.5	21.3	20.3	19.3	18.5	18.6	18.5
28	18.2	17.8	18.1	18.5	18.6	18.3	17.4	17.6	15.7	16.3	17.8	19.4	17.5	17.5	20.3	19.7	19.7	20.5	22.3	20.3	22.8	20.6	18.8	18.5	18.8
29	19.4	18.6	17.6	18.4	20.3	19.1	17.6	17.5	17.5	17.6	18.0	19.7	18.4	14.9	14.9	15.5	19.4	22.1	25.0	25.8	23.7	21.1	19.7	19.8	19.2
30	19.0	18.9	18.1	17.0	15.7	17.7	18.4	18.2	19.3	18.5	18.1	18.1	17.2	15.3	14.3	15.6	17.4	20.1	21.9	21.8	21.2	20.2	19.3	19.2	18.4
31 Q	18.5	19.1	16.8	19.3	18.5	18.8	18.6	19.0	19.3	18.9	18.4	18.4	17.5	16.0	15.0	16.5	16.7	18.6	20.2	20.3	19.7	19.6	19.3	18.4	18.4
Mean	18.4	18.0	17.3	17.8	17.7	18.2	18.3	19.7	18.5	17.9	18.0	19.3	18.2	17.5	17.9	19.8	22.2	23.4	23.8	22.9	21.6	20.5	19.6	19.2	19.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 Agincourt — $Z = 56{,}000\ \gamma +$ — January 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	212	203	204	205	203	193	195	203	198	198	197	198	199	200	194	192	196	198	202	200	198	198	199	198	199
2 Q	198	198	198	197	197	197	197	197	195	193	192	192	192	193	191	192	198	200	198	192	192	197	197	197	195
3	197	197	197	197	191	194	196	192	185	191	192	195	197	197	195	192	194	197	197	197	198	199	199	197	195
4 Q	196	195	194	195	195	193	196	195	196	194	194	193	194	192	191	190	189	185	185	189	190	191	190	190	192
5 Q	191	190	190	190	190	190	190	189	189	188	187	189	191	190	185	184	185	187	189	189	190	196	196	196	190
6	196	195	195	196	196	195	196	196	195	188	186	180	179	184	182	184	190	194	194	194	196	193	193	195	191
7	195	195	202	203	197	194	194	194	194	193	191	191	191	185	176	172	177	180	183	187	190	191	192	196	190
8 D	204	212	226	219	214	207	205	202	192	166	171	179	185	184	184	185	190	195	201	209	207	209	210	205	198
9 D	201	201	201	165	181	178	173	148	117	126	153	153	166	173	170	184	195	204	215	219	226	245	282	254	189
10	222	208	202	202	202	202	202	201	193	184	187	194	196	193	192	193	197	201	202	206	207	205	201	200	200
11 Q	198	196	196	196	196	195	195	196	196	195	195	195	196	196	190	190	190	190	201	201	198	196	196	195	195
12	194	192	192	193	193	192	192	191	189	190	190	189	191	194	192	193	194	199	202	202	201	200	196	195	194
13	195	194	194	193	193	194	194	194	185	163	181	183	175	169	171	178	187	189	194	196	195	194	195	196	188
14	196	195	197	195	194	194	194	194	194	192	191	191	192	192	189	188	193	194	194	194	195	192	195	201	194
15	206	208	205	206	197	193	185	173	180	188	186	187	185	184	182	184	185	188	193	193	193	196	226	241	194
16	214	199	194	193	194	174	166	155	170	187	193	193	195	195	192	193	195	199	201	199	194	192	193	192	191
17	190	189	188	191	190	187	184	176	181	185	185	185	186	187	183	176	181	187	192	192	192	189	190	190	186
18	190	191	189	187	186	185	185	185	181	153	168	180	177	168	161	173	180	185	189	193	193	193	194	194	182
19 D	192	191	198	193	189	189	189	189	190	189	189	189	189	187	184	187	195	200	218	243	253	289	278	290	208
20 D	288	260	203	135	182	176	129	139	136	130	128	161	180	175	178	191	206	220	225	224	214	208	204	204	187
21	202	202	200	199	177	193	188	149	138	142	150	154	162	186	185	194	214	211	204	204	204	199	198	198	186
22 D	197	197	197	197	197	197	173	160	173	191	187	177	171	180	185	185	197	203	204	206	204	199	199	199	191
23	201	201	197	187	190	192	192	192	188	185	190	191	195	196	191	185	184	190	192	191	192	192	191	190	191
24	190	200	192	188	174	178	150	141	179	186	184	180	186	179	174	175	185	190	203	209	203	196	195	197	185
25	208	209	202	196	185	188	191	192	190	188	179	174	181	188	187	190	196	197	198	197	202	198	196	196	193
26	196	195	193	192	190	190	187	182	187	187	185	179	180	180	176	173	180	185	186	194	196	201	201	201	188
27	201	203	197	195	192	192	190	186	184	176	182	187	190	191	190	190	188	187	190	191	193	193	193	191	191
28	191	196	196	197	195	191	190	188	183	183	185	185	184	184	187	183	183	176	182	197	198	201	198	198	190
29	197	198	197	188	185	187	189	187	187	189	185	184	184	185	185	184	182	184	187	193	197	196	196	196	189
30	195	193	193	191	183	190	190	190	189	188	189	190	190	190	185	184	183	185	190	192	191	190	191	190	189
31 Q	191	191	191	191	192	191	191	191	191	188	187	188	190	191	186	185	182	181	184	191	191	191	192	191	189
Mean	202	200	197	193	192	191	187	183	182	181	183	184	186	187	184	185	190	193	197	199	200	201	202	202	192

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 4 Agincourt — H = 15,000 γ + — February 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	846	846	847	843	843	843	844	846	848	850	851	849	845	844	839	837	836	832	836	840	845	850	851	851	844
2 Q	848	845	844	844	841	843	845	845	848	847	845	846	846	834	825	818	816	819	828	831	837	843	844	844	839
3	846	846	847	850	849	848	845	846	843	841	847	857	850	819	825	844	830	824	838	839	849	851	855	851	843
4 D	849	847	849	843	838	833	838	831	830	833	834	836	835	824	793	827	817	807	803	781	883	988	1008	981	850
5	761	756	762	740	741	747	771	727	695	686	777	827	825	815	799	793	787	795	802	808	815	823	826	824	779
6	822	828	831	829	832	833	834	824	781	829	840	836	831	828	809	793	817	818	817	816	819	823	822	825	822
7	828	822	816	823	823	826	818	823	823	820	822	827	825	823	819	816	808	808	819	832	843	840	842	844	825
8	842	828	820	826	827	829	828	830	831	831	832	832	827	828	828	818	827	822	823	817	831	837	839	842	829
9	841	838	828	834	836	837	829	833	833	836	835	839	842	838	833	827	832	831	833	836	838	844	844	842	836
10	842	842	838	837	837	837	837	837	837	842	843	846	846	844	839	832	827	827	832	843	851	849	850	853	840
11	849	844	836	832	846	848	847	847	850	852	842	857	860	856	848	837	829	822	826	832	833	837	842	845	842
12 Q	843	841	837	837	838	841	842	843	845	846	848	848	848	846	838	829	825	827	834	842	843	842	842	847	841
13	849	850	852	853	848	846	849	851	838	785	792	826	827	804	791	782	778	802	820	826	833	839	837	840	826
14	837	840	842	842	842	843	843	845	845	844	844	844	844	842	836	836	836	839	842	848	838	842	837	829	841
15	833	844	843	842	842	842	850	846	848	847	849	843	842	840	832	828	825	822	829	837	842	848	849	850	841
16 D	849	839	829	846	847	853	847	833	827	832	766	836	825	800	824	818	798	801	810	821	823	836	841	841	827
17 D	837	836	837	837	837	837	842	842	843	841	839	839	840	860	849	832	827	819	837	844	852	841	826	816	838
18 D	786	734	785	785	781	780	785	819	800	804	803	821	837	806	821	807	796	775	800	823	838	842	841	839	804
19	829	835	838	837	842	837	842	842	834	837	841	846	837	853	840	815	802	812	811	829	848	857	856	847	836
20 D	836	827	848	828	824	834	844	838	834	826	838	842	830	833	837	802	803	817	819	822	832	833	832	841	830
21	836	836	833	855	844	838	833	836	839	840	842	847	842	831	831	822	801	805	807	823	823	822	826	833	831
22	843	843	836	846	841	842	840	837	845	841	838	841	841	839	825	803	804	810	822	832	839	841	841	832	834
23	837	843	851	847	843	850	846	836	839	846	848	849	849	849	843	837	832	834	841	852	848	856	853	852	845
24	846	850	853	852	850	858	824	842	848	850	849	850	849	842	835	825	817	817	827	841	853	855	853	854	843
25 Q	856	853	853	852	853	853	853	856	856	854	853	854	854	847	838	832	829	830	841	853	863	864	858	858	851
26 Q	858	853	850	850	853	854	855	856	858	858	858	858	857	850	838	831	834	838	846	854	858	857	857	858	852
27	860	858	853	842	852	842	848	853	858	861	857	854	850	849	838	833	832	833	841	852	860	866	864	865	851
28	865	856	848	841	842	844	846	845	853	839	841	837	839	853	844	832	829	832	837	848	848	856	851	853	845
29																									
30																									
31																									
Mean	838	835	836	836	835	836	837	836	833	833	835	842	841	836	829	822	818	818	826	833	842	849	850	848	835

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 5 Agincourt — D = 7°W + ...' — February 1961

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	17.9	18.1	17.6	18.0	17.3	17.4	18.2	18.1	17.3	17.5	18.0	17.8	16.7	16.3	16.4	16.4	16.4	18.2	20.9	21.0	21.0	20.2	19.2	18.0	18.1
2 Q	17.5	17.3	17.6	18.2	18.0	18.0	18.3	18.0	17.9	17.3	17.3	17.3	16.4	14.5	15.5	16.3	17.3	19.0	21.0	21.2	20.1	19.3	19.5	19.2	18.0
3	18.3	18.0	16.3	18.0	18.0	17.8	17.5	16.7	14.5	9.1	10.0	9.1	11.6	9.9	20.9	19.2	18.3	21.9	22.9	22.9	20.6	19.1	18.3	17.2	16.9
4 D	17.2	17.0	18.1	18.2	18.1	18.1	20.8	15.4	13.6	12.9	13.5	14.6	17.1	13.6	27.0	30.4	26.9	23.2	28.0	30.0	25.4	15.6	15.4	14.6	19.4
5	19.0	15.6	18.0	10.9	0.6	12.4	15.1	15.1	8.8	9.2	18.2	19.0	15.9	16.2	18.7	20.9	22.7	23.6	24.5	23.6	22.3	20.8	20.0	19.9	17.1
6	19.2	18.3	18.1	18.6	18.9	19.3	19.2	18.9	26.2	18.0	17.1	17.0	16.8	13.0	15.7	26.3	23.7	23.3	23.3	23.7	23.8	24.3	24.4	21.3	20.4
7	19.8	19.0	18.7	17.8	16.3	14.2	15.8	16.7	16.8	15.8	17.3	16.2	12.4	12.0	14.3	16.9	18.0	21.2	23.1	24.3	24.9	25.2	22.9	23.5	18.5
8	23.4	22.2	17.0	18.6	18.7	18.8	18.5	18.8	19.0	18.9	22.6	17.4	16.0	16.0	14.5	18.2	18.6	20.5	23.3	24.6	23.0	22.5	21.5	21.0	19.7
9	19.6	19.9	18.5	22.5	17.0	16.5	17.4	18.2	17.3	17.5	17.3	17.9	17.0	15.0	13.7	16.6	18.4	19.8	20.9	21.4	21.4	20.8	20.2	20.4	18.6
10	19.0	19.2	18.5	17.9	17.5	17.6	17.6	16.8	16.7	16.9	17.6	17.6	17.1	15.6	14.4	15.0	16.8	18.9	20.6	22.0	22.4	21.4	20.5	22.2	18.3
11	20.4	19.5	17.0	16.5	16.9	17.1	17.5	18.2	18.4	17.9	19.6	20.4	17.8	16.7	14.9	15.8	17.8	19.7	20.6	20.3	19.7	19.4	19.2	18.7	18.3
12 Q	18.5	17.8	17.8	18.6	17.7	18.1	17.9	17.9	17.8	17.7	17.5	17.0	16.7	16.0	15.5	16.7	19.6	21.3	21.1	20.1	19.1	18.9	19.5	19.3	18.2
13	18.6	18.1	17.7	17.6	17.6	16.6	17.7	17.4	15.2	27.6	19.4	8.5	11.3	21.7	21.4	22.2	26.7	28.2	25.0	23.0	20.6	19.2	18.6	18.0	19.5
14	17.5	17.5	17.6	18.2	18.4	18.3	17.8	17.5	16.8	17.4	17.2	16.6	15.6	14.7	15.3	18.4	20.3	21.1	21.1	20.2	19.3	18.8	18.3	18.4	18.0
15	16.7	16.9	16.9	17.5	17.5	18.3	18.9	18.3	17.5	18.3	17.4	18.8	19.7	15.2	15.6	18.7	21.0	22.6	22.8	21.7	19.9	18.6	18.2	17.4	18.5
16 D	17.2	12.8	15.2	16.6	17.8	17.5	18.3	19.4	26.7	10.0	20.6	10.8	17.1	27.3	32.4	21.8	23.2	24.1	24.4	23.6	22.9	20.1	18.3	17.4	19.8
17 D	17.4	17.3	17.3	17.9	18.2	18.1	18.2	17.8	17.8	16.9	16.9	18.2	15.3	17.0	15.3	16.2	18.6	22.0	25.4	24.9	25.0	23.7	22.8	18.6	19.0
18 D	17.3	-9.5	1.2	10.8	7.9	16.4	18.1	16.3	24.4	32.8	31.9	30.5	23.3	26.1	18.8	18.2	20.6	21.5	19.9	22.7	21.8	20.5	19.1	18.1	18.7
19	18.0	17.6	17.2	16.1	17.0	18.0	16.2	19.8	19.2	20.7	18.2	17.1	31.5	19.8	12.2	15.7	19.6	21.7	24.4	22.5	20.6	19.1	17.9	17.9	19.1
20 D	18.0	15.1	16.1	10.6	16.1	14.7	22.7	18.3	23.5	27.1	20.4	15.3	20.7	21.7	14.9	19.8	19.9	21.8	23.1	23.1	20.9	21.3	16.1	17.2	19.1
21	16.9	12.6	11.4	12.6	13.9	16.1	18.0	23.1	21.7	16.3	18.2	18.5	20.3	17.1	14.1	12.6	19.0	21.9	22.6	22.5	24.3	21.9	20.4	18.2	18.1
22	15.2	17.1	14.3	7.1	15.5	16.8	18.6	22.6	17.7	15.2	17.1	17.8	16.5	14.2	13.4	18.0	19.8	21.0	21.7	21.8	20.7	19.9	16.6	10.6	17.1
23	17.2	17.5	17.2	17.2	16.5	13.5	18.2	14.7	16.3	16.4	16.4	16.5	16.4	15.4	13.2	16.2	18.5	21.0	23.0	22.9	21.7	19.1	19.1	18.0	17.6
24	17.3	16.1	16.4	16.4	13.6	9.1	12.8	21.0	18.9	17.3	17.3	16.6	15.7	14.4	14.5	15.9	17.3	19.8	21.0	21.6	20.2	19.0	18.5	18.5	17.1
25 Q	18.3	18.2	17.6	17.5	17.6	17.6	18.2	17.7	17.5	17.6	16.2	16.3	15.2	13.7	13.7	15.7	19.0	22.0	23.7	22.9	21.0	19.2	18.6	18.6	18.1
26 Q	19.1	19.1	18.3	16.5	17.6	18.2	18.2	18.0	17.6	17.3	16.5	16.2	14.7	13.2	12.2	16.6	18.9	20.7	21.0	20.3	19.3	18.5	19.1	18.5	17.7
27	18.2	17.9	17.8	16.0	13.6	16.1	17.7	18.5	17.8	16.7	15.0	14.5	13.3	13.2	12.2	15.7	18.6	21.3	23.0	22.3	20.1	18.5	18.4	18.6	17.3
28	18.8	20.5	21.0	18.7	17.0	19.1	17.8	16.5	16.9	12.2	11.3	12.7	17.2	14.1	14.4	17.8	20.5	23.2	25.1	25.0	24.1	23.4	21.5	19.3	18.7
29																									
30																									
31																									
Mean	18.3	16.7	16.7	16.5	16.1	16.8	17.9	18.1	18.2	17.4	17.7	16.7	17.0	16.2	16.3	18.2	19.8	21.6	22.8	22.7	21.7	20.3	19.4	18.5	18.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 6 Agincourt — Z = 56,000 γ + — February 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	191	191	191	191	191	191	191	188	187	187	187	187	189	189	187	187	186	184	184	191	191	185	189	190	189
2 Q	189	188	188	188	188	188	188	188	188	187	187	188	191	190	186	187	189	186	188	191	193	191	191	190	189
3	191	190	189	187	187	187	187	186	184	173	167	165	174	173	175	176	176	178	186	191	193	192	192	192	183
4 D	192	192	192	192	193	197	190	190	194	192	192	192	190	185	185	181	186	185	190	230	350	417	395	400	225
5	322	267	234	185	136	131	204	162	100	77	100	167	211	217	217	217	219	219	216	216	216	216	210	209	194
6	205	205	203	201	200	200	198	188	136	162	192	195	203	200	192	199	200	198	200	201	206	213	211	208	196
7	205	209	212	214	209	196	203	200	200	198	193	187	191	192	192	192	189	197	199	201	205	205	214	218	201
8	219	223	217	206	204	200	199	199	198	194	197	197	198	198	192	186	183	185	190	197	203	203	203	201	200
9	202	204	211	206	201	199	198	199	198	196	193	193	193	192	188	188	185	188	193	196	197	196	196	196	196
10	196	196	198	198	198	196	193	191	188	190	192	193	194	193	191	188	188	187	187	192	193	193	193	196	193
11	196	199	204	205	196	193	190	190	190	188	184	172	170	174	174	175	180	186	193	199	200	199	196	193	189
12 Q	191	190	190	190	190	188	188	191	191	189	189	188	188	186	182	183	186	191	193	194	193	190	193	193	189
13	193	192	191	189	189	189	189	187	176	114	76	71	109	145	157	174	186	206	206	206	204	202	199	199	173
14	199	198	198	198	197	196	194	194	194	194	194	194	194	193	187	182	183	185	188	194	195	196	199	199	194
15	199	198	193	193	192	190	187	192	192	190	186	180	187	188	188	187	186	191	195	199	200	199	198	194	192
16 D	193	187	188	192	188	181	178	151	122	107	59	146	156	174	177	180	187	194	199	204	205	205	201	199	174
17 D	198	196	194	194	194	193	193	192	191	184	175	138	163	181	183	187	188	194	199	200	212	231	296	358	201
18 D	302	187	249	206	157	116	90	155	139	121	113	120	157	174	183	184	186	194	216	212	206	199	199	199	178
19	204	205	204	201	199	195	180	169	171	181	180	182	170	164	182	185	193	200	206	210	206	201	199	199	191
20 D	198	199	189	197	189	186	169	167	161	145	150	169	167	176	190	187	136	200	200	204	209	211	211	206	184
21	201	201	197	185	182	186	181	167	168	179	185	179	184	190	195	186	184	198	205	212	213	217	212	205	192
22	200	197	193	186	185	187	180	164	179	181	184	185	185	184	184	181	185	193	192	193	197	198	200	200	188
23	198	197	192	191	189	180	162	167	181	188	190	190	190	192	186	186	192	185	192	198	200	198	198	198	189
24	198	198	193	192	181	146	162	181	186	190	190	191	192	192	190	186	185	184	187	192	193	192	192	192	187
25 Q	190	190	189	189	189	189	189	188	187	187	187	189	188	188	188	184	182	187	192	192	192	192	189	189	189
26 Q	189	190	192	190	190	191	189	188	188	187	187	187	187	185	179	179	180	183	187	187	187	187	187	187	187
27	186	186	186	187	181	186	189	187	189	187	185	186	187	186	182	176	176	181	185	185	187	187	184	184	185
28	185	187	193	204	203	193	189	186	172	168	178	181	178	178	177	174	174	179	185	188	197	203	198	193	186
29																									
30																									
31																									
Mean	205	199	199	195	189	185	184	182	177	173	171	175	182	185	185	185	184	191	195	199	205	208	209	210	191

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 7 Agincourt $H = 15,000\ \gamma +$ March 1961

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	851	850	850	850	841	840	843	843	850	851	847	847	837	842	834	826	821	836	842	841	851	861	862	851	844
2	846	842	838	838	840	856	842	843	848	852	854	856	852	845	833	825	826	831	841	853	863	866	861	856	846
3 Q	855	847	851	851	852	852	854	856	857	857	857	857	855	843	829	819	821	830	844	859	868	871	866	866	851
4 Q	867	866	866	865	862	860	861	861	862	862	862	861	856	842	836	838	835	836	842	848	853	857	857	858	855
5	857	857	854	847	847	857	860	859	861	861	861	861	850	851	841	838	836	835	847	859	865	857	873	928	857
6 D	891	830	699	766	765	770	743	733	728	759	816	835	817	822	839	830	829	826	832	842	852	857	856	852	808
7 Q	850	848	850	851	852	852	852	852	853	853	856	856	853	850	841	835	833	837	841	847	847	854	853	856	848
8 Q	852	848	848	847	846	842	842	845	846	846	841	841	847	850	841	831	822	826	841	852	857	864	856	848	845
9	850	847	842	836	840	842	843	843	842	847	852	853	847	840	836	839	855	851	858	862	867	872	855	865	849
10 D	861	861	861	860	835	825	816	801	705	740	546	627	769	814	804	796	792	804	821	831	844	842	836	830	797
11	828	826	825	822	826	826	830	831	835	835	831	833	828	825	819	823	817	821	830	830	826	838	838	839	828
12	833	821	831	836	836	837	840	844	841	841	841	845	841	835	832	826	827	835	843	852	855	847	852	844	839
13	840	826	836	841	841	843	847	848	838	845	853	858	853	845	826	825	840	853	860	858	855	853	847	850	845
14 D	855	821	830	812	831	832	836	847	817	825	820	848	847	833	825	817	825	819	834	858	860	858	855	852	836
15 D	849	856	855	852	862	854	849	856	858	845	861	857	846	827	806	830	826	832	817	863	873	852	833	842	846
16	831	819	833	843	846	846	833	843	854	854	856	849	842	841	828	809	811	826	842	853	859	859	855	844	841
17	843	846	844	844	852	849	846	823	827	827	846	846	841	833	823	818	821	829	844	854	855	854	853	853	840
18	851	852	847	854	853	854	853	854	853	853	853	850	842	826	821	805	807	810	822	817	853	861	837	848	841
19 D	859	858	861	860	850	848	777	827	831	840	846	854	835	810	831	821	802	785	820	833	841	846	838	831	834
20	824	837	841	848	850	849	848	850	850	841	844	863	848	842	821	813	813	821	826	836	845	854	856	854	841
21	853	846	845	854	863	852	854	859	860	856	857	858	853	842	826	812	819	816	827	838	849	856	856	846	846
22	853	846	846	854	864	852	853	860	859	856	857	852	853	840	826	830	829	832	838	849	857	863	861	862	850
23	863	862	860	863	862	861	867	859	854	858	858	859	849	838	824	842	841	838	842	853	858	861	863	864	854
24	861	860	858	859	856	858	865	862	862	865	861	860	863	856	840	836	838	842	847	855	866	865	858	860	856
25 Q	860	857	861	861	863	861	862	867	866	867	866	863	854	839	843	841	843	850	858	867	872	875	867	865	860
26	866	867	867	871	868	867	867	869	863	856	866	868	858	850	836	832	835	839	851	857	867	880	858	858	859
27	871	872	869	867	866	860	857	857	853	857	861	862	857	853	840	802	763	814	858	882	838	852	853	852	851
28	855	862	873	877	858	837	825	845	847	859	856	852	845	835	830	812	824	835	843	841	848	849	859	865	847
29	864	862	861	858	858	860	860	857	858	865	864	858	851	844	836	832	832	842	853	852	857	862	868	868	855
30	866	855	844	851	826	839	843	850	846	851	851	847	835	823	813	816	823	841	858	866	872	863	865	868	846
31	866	865	866	866	867	867	870	870	868	869	869	869	860	850	836	826	838	852	854	872	875	875	876	877	863
Mean	854	849	846	849	848	847	843	846	842	845	842	846	845	838	830	824	824	830	841	851	856	859	856	857	844

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 8 Agincourt — $D = 7°W + \ldots'$ — March 1961

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		18.3	18.1	18.2	17.5	15.0	17.1	16.8	19.1	17.9	16.5	16.0	15.4	16.6	15.4	13.3	16.3	19.1	21.9	23.7	23.2	21.7	20.9	20.1	20.1	18.3
2		20.1	18.3	18.4	17.0	14.6	14.7	16.4	15.6	17.8	17.2	16.4	15.6	14.5	13.4	13.7	16.4	20.1	22.8	23.9	23.5	21.9	21.1	21.5	22.0	18.2
3	Q	21.7	19.9	19.0	18.5	18.4	19.0	19.0	19.3	17.9	17.5	16.8	15.8	14.6	12.9	13.9	18.3	21.4	24.1	25.2	24.3	22.0	20.2	19.0	19.0	19.1
4	Q	18.8	18.4	18.4	18.4	18.5	18.5	17.4	17.4	17.4	16.8	16.5	15.8	14.5	12.9	15.2	19.4	21.1	23.1	24.0	23.6	22.3	20.4	19.3	18.7	18.6
5		18.7	18.5	18.1	15.6	16.6	17.4	18.3	18.2	17.4	17.5	18.4	16.2	14.0	13.3	12.8	15.3	17.4	21.1	22.1	22.9	23.9	25.4	26.9	19.0	18.5
6	D	21.8	13.8	22.4	7.3	9.4	10.4	13.6	11.9	14.6	10.2	13.8	12.8	19.3	26.9	18.5	19.0	20.2	21.9	23.0	22.1	21.8	21.1	20.3	20.2	17.4
7	Q	19.9	19.4	19.3	19.3	19.1	18.9	18.9	18.9	18.6	18.4	18.1	17.4	15.7	14.8	14.7	17.1	19.6	22.3	23.5	23.8	23.7	23.0	21.9	21.2	19.5
8	Q	21.0	21.1	19.3	18.7	18.7	17.4	16.6	16.2	17.3	17.5	17.3	16.6	16.2	15.2	14.4	16.5	20.2	24.4	25.7	26.7	25.3	23.7	23.7	21.3	19.6
9		20.8	19.4	18.4	15.5	16.8	17.3	15.8	14.7	17.4	17.5	17.5	16.5	14.3	11.0	11.2	16.5	21.2	23.5	24.0	24.1	24.1	23.5	20.8	19.2	18.4
10	D	19.2	19.1	23.0	22.1	18.4	15.8	13.4	13.8	14.6	19.1	43.1	22.6	25.4	18.3	18.4	24.1	29.1	27.2	24.7	23.1	20.9	19.2	18.8	18.9	21.4
11		19.0	19.2	19.5	20.2	18.9	19.0	19.3	19.8	19.1	18.0	18.2	16.8	16.3	15.5	18.4	18.3	20.7	23.1	23.1	22.9	22.2	20.0	19.3	18.4	19.4
12		19.2	17.1	19.9	19.5	19.4	19.4	19.5	18.7	18.2	18.3	19.6	17.5	14.9	15.5	18.3	20.1	22.2	22.9	22.0	20.3	19.2	19.2	19.5	21.0	19.2
13		21.0	21.0	19.4	19.4	20.0	19.5	18.5	16.1	18.3	13.6	15.4	16.5	14.4	14.5	16.1	24.0	26.2	25.8	24.6	21.8	20.0	18.8	18.4	19.1	19.3
14	D	18.9	13.5	16.0	4.2	15.7	18.3	18.2	17.5	10.2	20.4	20.6	17.2	12.5	16.1	18.0	21.9	25.3	28.0	28.1	24.6	22.5	19.3	18.2	18.2	18.5
15	D	17.3	18.1	18.1	18.1	24.2	19.9	15.9	18.3	16.2	21.0	24.5	16.4	16.2	18.1	19.1	21.7	23.5	25.4	26.5	24.5	21.9	20.5	17.0	17.0	20.0
16		4.9	9.0	14.8	18.2	18.8	20.5	16.4	30.9	13.5	12.2	15.3	16.9	20.8	17.1	16.2	20.7	26.3	27.3	25.4	23.5	21.0	19.0	18.4	19.3	18.6
17		19.5	18.9	17.7	17.2	19.4	18.9	17.3	9.4	16.8	25.6	17.3	14.6	13.4	14.6	14.6	19.5	24.0	27.2	25.5	22.9	21.3	19.2	18.2	19.2	18.8
18		18.7	18.9	20.9	18.0	18.0	18.8	18.4	17.6	17.0	16.9	16.4	15.2	15.2	16.9	18.7	20.8	24.8	27.2	26.1	23.8	21.7	19.1	17.0	19.0	19.4
19	D	18.9	18.6	18.4	18.0	15.1	1.3	5.3	12.3	16.9	20.6	18.8	14.0	15.3	18.5	20.1	16.5	21.9	28.9	27.3	25.1	24.0	19.7	18.3	14.5	17.8
20		8.2	15.6	17.9	18.4	20.5	20.3	17.1	18.7	20.8	24.8	32.3	25.1	21.5	18.7	18.9	19.0	22.5	25.0	26.7	25.9	22.9	21.3	19.6	18.6	20.8
21		17.8	17.8	12.1	15.8	16.1	16.0	17.6	16.9	17.1	15.0	16.2	15.0	13.2	11.3	12.1	17.5	19.8	25.1	26.2	27.0	25.1	21.4	18.7	17.8	17.9
22		17.7	15.0	9.3	15.8	14.6	18.6	17.0	20.3	21.0	13.8	16.7	17.7	14.9	14.7	14.3	16.5	19.4	22.3	24.1	23.9	23.2	21.3	19.8	19.2	18.0
23		18.8	17.9	18.3	15.6	16.1	19.2	20.0	16.6	15.8	15.0	15.8	15.8	14.2	13.8	18.4	19.5	20.1	22.2	23.5	22.3	21.2	19.8	19.2	18.6	18.2
24		18.5	17.8	17.4	17.5	16.5	15.7	19.3	16.7	16.7	16.6	17.0	20.4	15.0	12.7	14.1	17.5	21.1	22.6	23.3	22.3	21.0	19.7	19.0	17.8	18.2
25	Q	18.4	17.5	18.1	18.3	17.8	17.0	17.0	17.4	16.1	16.1	15.9	14.8	12.7	12.4	15.9	18.7	21.8	25.1	25.7	24.5	22.7	20.5	19.4	19.5	18.5
26		19.3	18.7	17.9	15.1	17.7	16.9	16.7	17.1	11.7	16.6	15.8	14.9	13.0	12.5	14.0	16.7	20.0	23.3	24.2	23.6	22.4	21.2	20.2	19.8	17.9
27		18.8	18.8	18.1	17.8	16.3	15.9	14.1	14.0	15.4	18.7	18.6	16.0	16.0	13.8	12.5	14.2	19.6	35.4	16.0	27.3	27.2	22.6	20.5	20.0	18.6
28		19.7	18.7	16.7	5.7	11.7	8.4	16.4	19.7	19.5	16.8	13.6	12.9	13.2	13.3	16.3	19.7	24.9	25.5	25.3	24.4	23.3	21.4	20.6	19.5	17.8
29		18.9	19.1	18.8	18.2	18.0	18.0	17.7	17.5	17.1	17.7	18.0	15.8	14.5	14.0	13.9	15.7	20.3	24.3	25.5	27.1	26.1	23.5	20.4	19.2	19.1
30		19.1	17.3	12.3	7.6	13.4	15.1	16.0	17.0	9.3	13.6	15.0	14.2	11.7	10.6	14.0	19.8	24.2	26.1	25.9	23.5	21.3	19.1	18.1	18.6	16.8
31		18.8	18.8	18.8	18.8	18.2	18.6	18.1	17.7	16.9	16.1	15.7	14.5	13.0	11.6	13.5	15.4	22.5	22.5	26.1	25.3	23.4	21.2	18.9	17.7	18.4
Mean		18.4	17.8	17.9	16.4	17.2	16.8	16.8	17.3	16.6	17.3	18.4	16.4	15.4	14.8	15.6	18.5	22.0	24.8	25.0	24.0	22.6	20.8	19.7	19.1	18.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 9 Agincourt $Z = 56,000\ \gamma +$ March 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	190	187	186	186	183	185	187	186	185	186	183	183	181	180	176	173	174	180	184	187	187	189	193	197	184
2	198	198	198	199	193	158	172	178	188	187	186	186	186	184	178	176	178	181	186	188	188	186	189	192	186
3 Q	192	193	191	188	188	186	185	182	181	182	183	184	184	180	176	180	185	187	188	191	187	181	181	181	185
4 Q	181	181	180	180	180	180	180	180	180	180	180	180	180	181	182	179	179	183	186	186	186	185	185	185	182
5	184	183	183	182	183	183	183	183	188	181	180	180	181	180	178	173	173	178	182	184	192	219	297	338	194
6 D	351	308	113	156	157	144	124	116	127	107	162	186	175	163	178	185	190	193	198	198	196	192	192	192	179
7 Q	191	191	190	189	189	188	188	187	186	187	186	187	186	186	185	185	188	192	192	196	196	194	192	191	189
8 Q	191	191	191	191	191	191	191	188	186	184	184	185	188	185	186	175	177	183	186	186	186	192	197	191	187
9	191	191	194	197	196	196	194	178	188	191	191	191	191	185	179	174	173	174	178	177	180	184	183	186	186
10 D	189	192	208	225	224	233	213	190	47	-53	-40	39	157	197	193	196	202	205	205	202	200	196	194	194	167
11	193	194	195	197	192	196	195	191	192	189	193	193	196	188	186	184	185	190	196	199	194	196	192	194	192
12	196	199	197	193	192	191	191	189	189	188	188	191	190	189	185	188	191	193	193	193	193	190	192	193	191
13	195	205	199	194	191	191	186	174	173	178	188	189	186	183	180	179	177	175	179	183	186	186	185	187	185
14 D	187	200	195	150	191	178	141	129	147	173	118	144	160	163	168	175	184	186	197	200	196	191	190	189	173
15 D	190	191	187	193	136	161	180	184	180	166	153	161	178	178	185	185	183	189	191	194	196	205	213	211	183
16	197	210	188	178	162	150	147	78	152	172	181	181	179	177	174	171	173	181	185	185	184	185	185	183	173
17	183	183	183	188	186	184	177	138	175	162	178	185	188	186	185	188	189	186	187	187	189	189	188	187	182
18	186	186	185	184	183	184	184	184	183	183	183	185	185	185	183	179	186	190	202	196	194	196	194	192	187
19 D	190	186	185	185	175	114	51	136	167	178	175	182	178	172	171	173	179	193	205	202	209	207	199	198	175
20	198	195	193	187	168	163	174	179	172	154	137	145	166	174	174	177	178	179	183	189	197	195	191	189	177
21	191	192	186	177	162	176	180	174	174	178	183	184	186	187	186	189	184	185	187	196	194	194	190	187	184
22	187	186	185	183	182	149	165	151	140	169	180	181	183	184	179	177	179	180	181	182	185	187	187	186	177
23	185	185	184	182	176	174	161	161	159	173	176	181	185	180	176	177	164	168	171	175	180	186	186	186	176
24	185	185	185	184	182	178	170	179	181	181	177	178	178	178	175	175	174	174	173	173	174	184	185	186	179
25 Q	183	183	181	182	180	179	180	179	180	179	179	180	180	179	178	179	169	170	174	179	180	182	181	180	179
26	174	180	177	175	168	169	158	159	168	171	175	191	179	174	173	170	170	174	175	177	179	185	185	182	174
27	181	178	178	179	176	173	170	171	173	169	170	175	173	168	164	159	155	172	177	179	169	180	182	181	173
28	182	181	188	100	114	149	165	163	168	172	174	176	179	171	173	170	176	179	181	184	184	185	186	184	170
29	183	182	181	181	181	181	180	181	180	178	176	176	179	180	176	170	166	171	177	184	187	186	183	179	179
30	179	180	183	161	161	179	175	164	137	174	177	183	180	179	174	169	167	170	175	178	183	181	180	179	174
31	178	177	177	178	176	177	177	177	177	177	177	179	179	176	172	167	171	171	176	179	174	178	177	175	176
Mean	193	193	185	182	178	176	172	168	168	168	169	175	181	180	178	177	178	182	186	187	188	190	192	193	181

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 10 Agincourt — $H = 15{,}000\ \gamma +$ — April 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	868	837	808	822	849	857	851	836	842	861	855	871	861	843	827	815	820	834	842	857	864	861	870	886	847
2	867	864	863	861	867	851	829	825	815	851	835	837	842	835	814	808	813	819	830	850	867	863	863	860	843
3 D	855	833	824	836	802	804	803	797	798	814	824	839	837	821	802	789	803	819	843	852	864	855	860	851	826
4 Q	853	843	846	850	848	847	842	850	850	850	850	851	850	837	824	822	821	823	835	845	857	864	870	866	846
5 Q	868	864	853	859	851	859	860	858	855	857	858	855	851	844	834	830	839	847	851	860	866	870	872	871	856
6	865	859	854	852	855	854	855	858	859	860	860	858	857	852	846	835	834	836	847	871	893	895	880	875	859
7	844	855	852	854	857	858	861	863	867	869	869	864	857	848	838	838	847	857	865	873	876	876	878	873	860
8	867	864	864	862	859	861	861	860	865	865	864	863	858	849	840	836	837	842	853	862	875	883	871	877	860
9 D	873	869	861	864	863	865	871	862	865	847	827	866	842	825	819	814	811	808	828	840	855	866	861	846	848
10	838	848	852	855	865	856	896	855	853	852	854	862	851	835	833	840	840	845	852	868	876	873	875	863	856
11 D	864	862	868	856	844	851	837	861	859	849	860	857	846	832	837	818	813	812	844	850	864	868	869	864	849
12	860	863	859	858	857	857	848	848	862	859	858	852	849	834	820	818	828	839	847	857	871	861	862	861	852
13	856	856	858	854	858	856	857	859	862	863	862	862	853	835	822	797	859	862	866	874	882	883	877	883	858
14 D	877	876	877	878	880	880	866	859	859	848	847	836	832	816	821	807	803	827	871	905	943	976	1042	966	875
15 D	955	807	776	680	788	727	641	797	791	835	830	830	829	813	813	791	816	821	831	833	832	836	853	853	807
16	847	845	837	846	840	844	848	847	847	845	846	847	836	833	828	816	814	828	840	852	876	863	861	851	843
17 Q	848	848	849	847	850	851	852	853	855	857	858	853	853	843	825	811	809	811	823	835	850	860	863	861	844
18 Q	857	855	852	857	857	861	857	852	852	859	864	862	855	844	831	818	811	817	826	839	848	858	862	865	848
19	861	860	857	858	861	865	863	867	869	867	867	863	860	850	840	828	825	832	840	861	862	878	881	867	858
20	852	843	849	853	858	861	864	858	868	869	868	867	863	856	841	827	829	835	843	853	862	873	874	875	856
21 Q	870	868	868	866	864	864	864	863	864	868	867	866	861	855	846	834	832	836	846	861	878	868	874	876	861
22	874	874	873	872	871	870	872	875	878	878	881	884	880	863	851	855	841	844	857	858	887	882	845	859	868
23	868	864	862	862	860	861	859	857	856	853	847	849	848	848	840	833	841	853	864	871	882	869	878	856	858
24	861	864	862	856	862	864	866	867	866	863	859	857	858	841	832	824	841	861	867	867	867	880	863	851	858
25	853	863	862	862	860	856	858	858	858	859	858	856	854	841	827	824	834	851	863	864	864	868	876	872	856
26	874	872	868	853	865	869	869	869	868	871	872	869	863	852	820	831	848	856	859	866	868	871	861	868	862
27	864	863	859	858	858	873	871	871	865	876	876	880	866	853	857	857	872	873	883	887	885	873	875	872	869
28	863	863	861	863	853	843	844	854	859	858	860	858	858	851	843	840	848	858	863	873	884	882	879	875	860
29	867	861	864	866	867	866	866	868	868	872	874	868	861	852	841	836	848	864	881	890	898	900	893	868	868
30	869	861	861	863	866	861	864	867	866	865	861	851	852	859	839	847	864	869	877	892	892	887	887	888	867
31																									
Mean	865	857	853	851	855	853	850	854	855	858	857	858	853	842	832	825	831	839	851	862	873	875	876	870	854

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 11 Agincourt $D = 7°W + \ldots'$ April 1961

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		18.0	11.2	5.7	8.8	16.7	17.2	13.5	14.2	12.8	9.8	16.8	19.1	9.7	10.9	15.1	20.9	25.2	28.3	27.4	25.6	24.3	20.8	18.9	17.2	17.0
2		19.1	18.8	18.2	18.6	19.1	16.6	14.2	12.3	20.6	13.4	13.9	19.7	15.7	11.6	14.0	18.7	23.3	26.0	26.8	24.5	24.3	25.5	24.0	23.7	19.3
3	D	26.3	24.2	17.0	41.4	14.0	11.4	23.3	21.6	15.9	16.0	8.6	12.3	11.3	11.0	11.7	23.5	27.5	28.1	28.2	26.3	21.6	19.7	17.7	16.4	19.8
4	Q	12.2	15.0	17.6	19.0	18.7	17.9	18.1	16.8	15.8	16.0	15.2	14.1	12.7	12.3	13.2	15.9	19.0	23.1	25.0	25.2	24.1	22.2	20.3	18.8	17.8
5	Q	18.7	19.7	18.7	19.6	16.9	17.6	16.9	15.6	15.0	15.0	15.0	16.1	14.1	13.4	15.1	18.8	20.9	22.4	23.6	23.2	22.4	21.3	20.2	18.6	18.3
6		18.7	19.5	19.2	17.6	16.8	16.0	15.5	16.1	15.9	15.9	15.5	14.3	12.1	11.9	13.2	14.9	19.5	25.1	29.3	28.1	27.0	26.9	23.3	24.1	19.0
7		21.3	18.3	17.6	7.5	16.0	17.4	17.3	16.9	17.6	17.3	19.2	13.2	11.4	11.6	14.0	18.4	21.1	23.5	24.4	24.1	22.8	20.6	18.9	18.4	17.9
8		18.2	18.5	18.3	17.6	17.3	16.6	14.8	18.0	14.0	14.8	14.8	13.6	12.0	11.1	13.0	15.7	17.0	22.2	24.8	25.2	24.3	22.7	20.6	19.2	17.7
9	D	18.1	18.1	15.3	15.9	15.8	16.0	16.6	14.1	12.9	16.7	35.2	17.5	13.7	7.2	11.8	16.0	20.0	23.9	26.8	27.3	25.7	22.2	20.3	18.4	18.6
10		13.9	15.5	18.4	15.3	16.5	22.1	19.1	13.7	11.0	13.0	22.2	13.8	13.8	16.5	18.2	18.5	20.3	21.3	22.1	21.2	20.2	19.5	18.5	19.1	17.7
11	D	18.1	16.3	4.8	15.0	24.9	16.5	15.5	17.4	12.8	17.7	15.4	13.6	13.8	20.2	20.1	21.9	24.2	27.8	25.6	24.3	21.9	19.4	17.7	17.9	18.4
12		18.4	18.3	18.6	18.3	17.6	16.5	12.9	24.9	13.7	13.5	14.4	15.1	16.3	14.7	19.8	23.5	24.9	25.3	25.3	23.7	22.1	20.4	18.9	18.3	19.0
13		18.3	17.2	16.3	15.9	18.0	18.3	17.5	16.3	15.7	15.8	16.0	15.2	13.5	12.0	12.7	18.4	24.3	25.1	26.7	26.6	24.4	21.7	19.8	18.3	18.5
14	D	18.3	19.2	18.4	18.2	17.5	16.4	15.2	15.2	13.0	9.7	6.1	7.1	12.9	11.6	17.4	24.5	28.6	30.5	27.5	22.7	30.9	21.0	12.2	6.8	17.5
15	D	1.4	2.1	10.2	16.8	12.6	24.4	29.7	8.9	12.6	14.8	17.5	14.6	9.4	8.8	12.8	17.9	23.5	23.4	24.9	24.2	26.2	22.7	20.1	18.3	16.6
16		17.9	17.3	14.0	15.4	16.8	19.1	18.8	17.7	17.6	18.8	16.1	16.0	15.7	14.4	15.6	17.7	21.0	21.4	23.0	22.2	21.1	22.2	16.4	19.7	18.2
17	Q	20.1	18.6	18.8	17.6	18.8	18.5	18.7	19.6	18.5	17.4	16.0	15.5	13.7	16.5	13.3	16.9	21.0	23.9	26.2	26.8	25.8	23.2	21.0	19.1	19.4
18	Q	18.5	18.3	17.7	18.3	17.7	16.9	14.9	15.1	18.5	22.1	15.3	12.2	10.9	11.1	10.9	14.5	18.9	21.3	23.6	24.5	23.8	22.1	20.4	18.3	17.7
19		17.9	17.9	17.1	12.5	17.8	17.8	17.8	17.9	19.0	18.0	15.6	13.2	11.3	10.5	11.7	15.0	17.8	21.6	27.0	27.6	25.7	23.2	20.3	18.4	18.0
20		16.0	13.9	16.2	16.1	18.1	19.1	18.2	19.7	20.5	16.1	14.8	14.9	13.9	12.7	12.3	14.9	19.3	23.4	26.0	26.2	25.2	22.8	20.8	19.1	18.3
21	Q	18.5	18.5	18.7	18.2	18.1	17.9	17.4	17.5	17.2	17.2	16.4	15.3	14.2	13.6	14.3	16.9	20.1	22.7	24.3	24.4	22.4	21.7	20.1	19.3	18.5
22		19.2	19.2	18.8	18.3	17.3	17.3	17.2	16.9	16.2	15.4	15.7	14.6	15.8	14.8	14.9	18.1	21.6	23.7	24.8	26.8	26.9	25.8	23.7	20.5	19.3
23		19.3	19.2	19.2	18.9	15.6	15.5	14.6	15.2	20.2	14.3	10.9	15.1	15.5	15.3	17.2	22.6	25.8	26.5	26.4	26.1	26.3	24.1	21.5	21.8	19.5
24		20.5	20.9	15.4	18.3	19.1	18.6	18.4	17.4	17.3	16.0	15.0	15.7	14.6	13.6	17.4	21.3	24.6	25.7	26.6	26.8	24.8	24.8	23.0	21.9	19.9
25		21.5	19.2	14.7	18.7	17.4	17.4	17.4	16.6	17.5	17.8	15.1	14.0	14.0	14.8	15.4	21.5	24.9	27.9	28.6	27.7	25.2	22.4	20.6	20.4	19.6
26		21.3	20.6	16.6	16.6	22.0	21.1	14.8	15.9	16.0	15.1	14.2	13.0	12.7	13.7	15.8	23.2	22.8	24.3	25.0	25.2	23.8	21.8	21.5	19.2	19.0
27		18.7	17.8	18.7	16.4	16.1	15.7	15.7	16.3	21.6	17.5	13.2	10.3	11.3	16.3	19.5	22.1	25.8	27.1	27.3	26.9	26.8	25.2	21.3	20.0	19.5
28		18.4	20.2	16.4	14.6	13.9	13.8	14.8	16.9	17.5	16.1	14.8	13.9	12.8	12.2	14.0	18.6	21.2	22.8	24.1	23.9	22.5	21.8	20.1	18.8	17.7
29		19.4	19.4	18.8	19.1	19.3	19.1	18.8	18.5	18.4	17.5	16.0	14.7	13.1	13.9	15.7	17.8	23.2	26.1	26.6	25.4	23.1	20.7	21.5	18.6	19.4
30		19.7	20.9	19.4	20.2	19.5	18.4	18.6	17.6	16.7	16.7	14.7	10.9	9.4	13.7	15.5	21.3	23.0	26.8	26.7	25.1	24.1	23.8	22.1	21.9	19.5
31																										
Mean		18.2	17.8	16.5	17.5	17.5	17.6	17.2	16.7	16.4	15.9	15.7	14.3	13.0	13.1	14.9	19.0	22.3	24.7	25.8	25.2	24.3	22.4	20.2	19.0	18.6

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 12 Agincourt — $Z = 56{,}000\,\gamma +$ — April 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	175	175	168	180	187	178	164	128	117	146	163	156	152	156	162	165	172	182	183	187	188	188	188	184	168
2	183	181	181	183	170	136	139	152	133	123	142	158	156	163	163	165	163	168	171	180	192	207	220	223	169
3 D	236	249	249	101	135	183	160	103	89	99	185	193	195	187	181	182	194	195	201	204	209	201	206	205	181
4 Q	195	194	196	192	191	189	182	170	182	184	186	187	183	182	181	177	177	178	180	182	182	183	186	184	184
5 Q	187	187	193	190	184	187	183	179	181	181	180	178	176	175	173	170	169	172	175	177	180	181	182	184	180
6	184	186	191	192	188	186	184	183	182	180	181	183	185	181	176	169	164	160	165	178	189	213	214	223	185
7	217	198	195	173	173	182	182	182	181	178	172	176	180	178	180	177	172	167	169	174	180	177	178	180	180
8	180	178	179	182	180	182	176	174	170	176	176	178	177	174	170	167	165	169	172	179	180	181	181	179	176
9 D	178	180	180	180	181	182	182	177	174	78	46	53	127	158	165	174	178	178	184	186	185	182	180	182	161
10	186	186	186	182	164	124	133	152	158	165	167	169	172	172	172	174	174	175	180	183	186	185	189	188	172
11 D	187	185	160	150	91	117	155	160	169	164	170	171	169	162	163	167	175	194	200	195	194	193	192	191	170
12	187	183	180	180	181	180	152	160	162	175	177	177	178	175	172	175	176	182	185	188	191	188	188	186	178
13	185	183	180	178	178	180	181	181	181	179	180	182	186	186	185	175	177	174	178	184	186	186	181	182	181
14 D	180	180	180	179	179	177	177	177	163	143	144	149	142	148	153	157	170	199	294	816	305	362	392	256	205
15 D	335	179	233	26	121	87	8	151	199	194	198	195	194	186	186	187	196	185	188	204	207	208	202	198	178
16	196	194	195	188	191	186	182	182	182	185	185	184	179	178	178	181	182	188	191	201	209	218	224	203	191
17 Q	193	191	190	190	190	188	187	182	181	185	187	187	185	185	186	185	188	190	189	191	191	190	190	191	188
18 Q	185	187	187	186	183	178	174	175	179	171	175	181	184	185	184	181	177	176	180	183	187	189	191	193	182
19	189	189	189	180	181	184	184	184	178	180	183	184	184	181	178	178	178	178	179	185	188	190	193	193	184
20	197	197	193	190	181	180	178	174	175	178	180	180	181	180	178	176	175	175	175	180	184	189	189	187	182
21 Q	186	185	185	183	182	183	182	183	183	182	184	184	186	186	183	182	176	174	175	178	185	185	187	184	183
22	184	183	182	183	183	184	183	183	183	181	182	180	176	172	169	165	163	164	172	178	193	215	215	198	182
23	191	186	184	183	173	177	175	177	171	164	173	173	166	171	169	171	172	175	180	186	196	206	204	187	180
24	188	192	191	190	191	189	188	186	186	187	186	186	184	184	181	178	183	189	192	202	205	210	211	204	191
25	199	195	169	184	178	183	186	185	186	185	187	191	191	188	184	180	174	179	184	188	189	191	196	196	186
26	197	194	195	197	188	146	164	178	185	187	186	184	182	174	176	171	173	173	173	179	183	191	189	186	181
27	183	183	186	183	184	178	177	177	166	159	173	177	167	172	171	171	174	180	186	192	196	168	168	166	177
28	167	166	165	180	174	175	175	184	191	189	191	186	188	188	186	180	177	179	180	188	196	197	198	197	183
29	194	188	185	183	182	182	182	182	183	185	185	183	184	182	179	171	170	173	174	179	188	198	210	207	185
30	198	201	196	191	186	187	186	184	183	182	180	177	177	174	170	170	172	176	176	182	187	190	194	196	184
31																									
Mean	195	189	188	175	175	172	169	172	172	171	173	175	176	176	175	174	175	178	185	190	194	199	201	194	181

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 13 Agincourt $H = 15,000\gamma +$ May 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	871	875	871	844	846	854	857	857	856	850	842	849	854	862	843	829	833	836	853	868	880	895	892	892	859
2	876	842	867	848	855	866	886	863	862	854	854	851	850	842	835	822	820	828	841	856	863	866	865	862	853
3 Q	862	861	860	861	862	863	865	862	861	862	865	866	861	856	847	838	840	842	845	857	871	880	877	874	860
4	874	873	872	870	867	868	867	868	868	866	866	865	861	856	849	845	842	847	856	867	887	914	923	840	867
5	851	857	855	851	862	865	870	859	866	875	874	869	867	860	841	836	822	881	891	882	886	881	893	862	865
6 D	862	866	860	859	859	773	786	825	839	831	794	816	828	804	834	851	852	861	870	868	867	864	873	873	842
7 D	871	860	866	866	870	870	860	859	871	866	856	841	842	843	836	839	869	877	885	886	882	882	875	864	864
8	865	869	867	859	864	863	867	869	868	858	865	866	865	850	850	855	861	871	874	880	878	877	874	876	866
9	880	880	880	876	875	862	850	859	828	824	869	869	860	850	840	854	864	872	875	880	880	876	870	868	864
10	869	869	869	869	870	872	871	871	863	862	864	865	865	859	853	853	859	869	879	879	879	878	884	891	869
11	863	871	868	874	869	873	881	873	864	882	879	865	855	855	844	845	865	864	876	886	885	878	865	870	869
12	858	842	848	852	869	854	861	872	863	865	854	862	862	849	830	827	843	858	879	875	874	883	893	894	861
13	887	863	844	848	848	853	860	859	867	868	863	853	852	852	844	831	844	852	867	868	868	869	879	878	859
14	873	863	867	852	845	862	867	865	868	866	861	858	852	838	824	829	840	847	859	873	874	876	876	874	859
15 Q	875	875	874	874	873	873	873	877	880	881	878	873	867	857	845	847	856	867	877	886	890	878	882	880	872
16 D	872	846	866	869	879	881	842	847	851	852	867	867	860	845	830	822	823	852	862	876	892	872	873	886	860
17	857	867	867	867	869	872	871	870	869	872	872	869	862	846	831	843	848	855	861	872	879	876	873	867	864
18 Q	867	867	867	868	868	871	871	867	867	865	863	862	858	856	856	857	858	867	876	878	875	873	877	881	867
19	878	878	872	878	881	887	883	879	872	863	873	876	873	860	852	849	857	867	871	892	906	888	892	890	876
20	885	870	879	883	846	832	843	857	853	862	863	858	848	843	836	832	848	863	878	883	893	891	884	883	863
21 Q	881	879	877	874	877	879	876	875	875	875	875	875	874	870	862	858	859	860	870	879	880	895	911	907	877
22	884	888	889	891	886	895	888	889	893	890	894	900	894	884	875	870	859	863	875	871	885	878	889	889	884
23	891	889	883	890	884	869	872	875	876	881	879	874	871	860	855	872	873	883	892	884	883	880	879	875	878
24	881	875	871	862	860	872	877	875	870	870	870	870	863	854	849	844	855	872	878	886	889	889	890	880	871
25 D	886	874	870	875	870	821	767	814	819	823	847	835	817	807	810	821	823	844	870	882	876	877	870	865	844
26	870	870	872	864	866	870	866	863	869	865	864	856	850	841	838	844	858	865	875	884	886	885	885	884	866
27	877	875	875	884	873	870	870	868	869	864	863	863	859	850	842	836	849	862	874	882	889	885	878	879	868
28	875	875	875	869	868	870	869	874	875	875	872	870	874	864	860	844	842	861	873	880	879	920	873	871	871
29 Q	875	879	880	879	881	876	873	872	875	879	880	877	872	870	866	861	864	872	882	894	903	901	895	887	879
30	887	885	879	881	885	885	890	885	880	882	885	890	887	882	880	881	878	890	895	897	898	895	892	906	887
31 D	895	899	875	887	887	875	876	874	873	861	865	869	871	860	869	865	863	897	897	901	891	886	880	879	879
Mean	874	870	875	869	868	864	863	865	865	864	865	864	861	852	846	840	851	863	872	879	883	883	883	878	867

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 14 Agincourt — D = 7°W + ...' — May 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	21.9	19.5	11.6	14.9	14.9	17.4	17.7	16.9	14.7	13.9	14.9	16.6	16.0	17.5	14.6	19.1	23.1	27.7	27.8	27.8	25.5	23.1	21.8	21.9	19.2
2	21.9	10.9	12.1	13.6	14.0	17.7	18.5	19.2	17.3	17.4	13.8	10.1	9.7	10.2	11.4	15.9	20.1	23.1	24.3	24.7	24.0	22.9	20.8	19.4	17.2
3 Q	18.5	18.6	18.6	15.9	17.8	17.8	18.5	18.4	22.0	18.7	15.5	12.8	12.1	12.0	13.6	16.8	20.1	24.0	27.5	27.8	27.4	23.1	20.8	19.4	19.1
4	19.4	19.1	19.1	18.6	17.6	17.4	17.4	17.4	18.1	16.8	15.7	13.0	12.8	12.7	12.9	14.8	18.5	22.3	26.6	28.7	27.7	25.2	24.9	21.1	19.1
5	20.1	20.2	18.4	13.7	18.1	17.4	18.8	21.2	14.8	15.1	15.7	16.9	12.2	13.1	15.0	18.3	19.7	28.7	23.2	26.6	23.2	21.0	20.3	20.5	18.8
6 D	19.5	17.6	16.6	14.7	15.1	20.3	16.0	13.6	19.7	21.6	24.6	19.4	16.6	21.2	23.2	20.1	21.2	22.1	22.3	22.6	21.2	20.2	20.4	20.2	19.6
7 D	19.4	7.7	16.0	18.3	18.6	19.8	26.7	30.2	17.9	13.1	13.0	15.3	16.4	18.3	21.7	23.2	23.0	22.7	22.5	21.5	22.0	20.6	21.0	20.5	19.6
8	20.4	20.4	19.4	16.7	16.1	16.8	24.0	19.0	18.1	20.5	17.7	14.5	14.8	15.8	19.2	20.4	20.7	22.3	23.2	22.2	21.5	18.8	19.5	20.4	19.3
9	19.8	20.0	18.7	14.1	15.7	16.9	16.1	16.9	20.5	30.6	14.6	12.3	14.1	16.8	19.9	24.1	23.0	23.0	24.5	23.5	22.8	21.5	21.1	20.3	19.6
10	17.8	18.7	20.4	19.6	18.7	18.7	17.7	16.8	15.4	15.1	16.0	18.6	17.3	17.4	18.9	21.5	22.2	23.3	24.1	22.7	22.3	21.5	19.7	19.2	19.3
11	16.0	17.8	16.9	15.8	12.4	13.3	16.0	13.9	17.9	16.0	15.0	12.0	13.2	16.1	16.7	20.3	24.9	23.5	25.4	23.5	20.8	20.3	20.6	19.7	17.8
12	18.9	10.5	9.4	16.9	19.7	21.5	18.8	18.9	19.7	22.4	19.6	14.3	12.2	12.3	15.3	20.3	23.4	24.3	25.5	26.0	24.4	23.2	20.2	16.9	18.9
13	6.0	15.8	15.2	15.0	7.6	14.9	17.8	17.9	20.7	19.6	17.1	20.0	16.8	13.2	15.5	18.9	23.5	24.0	24.8	23.6	23.5	20.8	23.1	17.8	18.0
14	16.7	16.4	15.1	14.3	17.0	19.7	19.8	22.6	19.9	17.9	21.3	19.4	14.4	15.0	17.9	20.6	24.0	25.2	25.9	24.6	23.5	21.6	20.7	20.3	19.7
15 Q	20.0	19.9	19.8	19.6	19.3	18.9	18.7	18.3	19.0	19.2	16.2	13.7	13.3	12.7	13.6	18.0	21.6	24.6	26.6	26.3	24.5	22.6	20.5	18.9	19.4
16 D	13.3	12.5	17.2	19.0	18.0	11.2	13.4	13.4	12.5	16.9	18.3	11.4	9.6	9.9	16.8	20.8	24.5	25.5	27.2	27.3	23.6	23.1	20.3	18.0	17.7
17	14.9	18.6	19.1	19.1	18.9	18.7	18.8	19.8	19.1	19.7	16.1	15.5	13.9	14.4	16.4	18.3	22.4	24.8	25.4	24.8	24.1	22.4	20.8	19.9	19.4
18 Q	19.7	17.5	18.7	19.1	19.1	19.1	18.9	18.7	19.3	20.2	18.9	16.3	14.6	14.6	15.1	16.3	18.3	20.6	21.8	22.6	23.4	22.6	21.6	20.0	19.0
19	19.2	18.3	19.7	19.1	18.1	16.5	16.9	17.0	17.3	17.3	11.8	10.8	12.6	11.2	12.6	20.8	22.3	24.6	25.6	25.5	24.7	25.3	23.5	19.0	18.7
20	20.1	21.5	20.0	18.1	14.7	10.8	13.5	15.0	18.0	13.4	11.7	11.5	11.7	14.5	14.5	18.8	24.2	25.5	27.0	27.2	24.2	23.0	22.7	21.8	18.5
21 Q	21.0	19.3	18.1	17.5	18.0	17.3	18.4	17.6	17.0	14.8	13.2	12.7	12.7	12.7	13.6	16.4	19.1	22.8	25.0	26.5	26.9	24.5	21.7	20.1	18.6
22	21.0	21.0	21.1	20.2	19.2	18.0	16.4	15.7	14.6	13.7	12.1	11.1	8.8	6.3	10.0	13.1	16.9	20.3	22.7	26.7	26.3	26.2	21.9	20.0	17.6
23	19.3	20.0	19.1	18.2	14.9	16.4	17.5	17.7	18.2	17.0	16.5	13.9	14.6	14.6	15.2	22.4	22.1	25.0	23.9	24.1	22.1	19.2	18.1	18.1	18.7
24	17.4	11.8	16.1	17.3	14.3	17.8	22.1	21.2	19.0	16.4	13.6	12.7	12.2	12.8	14.2	18.2	22.9	23.8	24.7	24.4	23.2	21.6	19.2	18.2	18.1
25 D	17.8	16.5	14.0	17.6	15.6	28.6	10.1	13.6	10.8	11.6	12.5	11.9	13.7	19.4	18.1	22.5	25.8	27.5	26.6	26.0	25.6	24.0	22.0	20.2	18.8
26	19.4	9.9	15.8	19.2	20.2	19.9	21.3	23.0	20.3	17.3	15.9	14.8	15.5	15.8	16.8	20.5	24.0	24.9	24.4	23.5	22.0	21.8	21.1	20.9	19.5
27	20.1	19.8	20.3	22.9	18.4	19.2	20.3	19.0	17.5	14.9	13.8	12.2	13.4	14.8	18.4	21.2	23.5	25.8	26.6	26.4	25.1	24.0	23.0	21.4	20.1
28	21.3	20.5	21.2	19.4	18.5	18.4	18.4	17.2	16.3	15.3	13.2	12.1	10.6	11.2	12.7	16.7	24.7	28.7	30.5	30.4	28.8	23.3	25.0	22.2	19.9
29 Q	20.7	20.4	19.7	19.4	14.9	14.9	16.9	17.1	17.6	16.1	14.8	13.0	12.7	12.5	14.8	19.2	24.1	26.8	28.3	28.5	27.6	24.2	21.9	20.4	19.4
30	19.4	19.4	20.3	20.3	19.4	18.3	18.0	19.7	15.9	16.4	12.5	9.3	9.4	11.3	12.8	15.9	17.7	21.4	23.0	23.2	21.8	21.3	19.2	19.4	17.7
31 D	20.5	19.5	18.5	16.8	11.9	16.4	13.4	15.9	16.8	15.1	13.3	11.3	9.4	10.4	16.2	19.4	22.3	22.1	22.7	21.5	22.3	21.0	20.5	19.6	17.4
Mean	18.8	17.4	17.6	17.6	16.7	17.7	18.0	18.2	17.6	17.2	15.4	13.8	13.1	13.9	15.7	19.0	22.1	24.2	25.2	25.2	24.1	22.4	21.3	19.9	18.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 15 Agincourt $Z = 56,000\ \gamma +$ May 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	192	187	165	154	180	186	186	185	184	182	177	169	162	162	164	167	164	170	173	177	182	191	192	205	177
2	262	274	133	138	184	190	189	178	166	167	183	181	179	176	175	172	175	176	181	182	184	186	185	184	183
3 Q	184	183	182	178	180	179	178	177	175	172	175	176	176	176	178	177	178	181	186	183	186	180	180	180	179
4	179	179	178	178	178	176	176	175	175	175	180	178	178	175	172	170	172	171	172	181	191	214	248	232	183
5	209	198	186	184	181	178	159	108	151	171	177	170	173	171	170	176	178	194	194	192	191	192	204	206	180
6 D	198	190	189	184	176	−3	86	140	165	164	133	153	160	158	174	181	184	189	184	184	190	195	191	192	165
7 D	189	191	180	181	167	157	133	142	131	153	165	166	177	176	173	176	177	178	180	181	183	190	195	192	172
8	190	186	183	183	177	171	155	166	170	165	171	172	173	173	174	177	178	178	185	187	185	196	193	184	178
9	182	178	178	174	162	136	117	104	110	86	143	169	171	170	169	175	175	173	174	176	182	186	187	189	161
10	190	184	183	181	177	175	172	172	165	163	169	167	165	170	170	172	178	183	177	176	180	183	189	195	176
11	201	189	189	159	164	164	155	162	153	159	170	170	170	169	166	167	165	158	166	177	181	190	184	186	171
12	189	189	172	165	170	126	143	128	158	153	163	172	172	173	172	169	166	169	172	171	176	183	190	197	168
13	200	172	160	136	159	180	184	182	176	177	178	164	160	164	160	165	167	170	171	178	183	185	189	187	173
14	188	185	173	152	161	172	177	170	171	176	171	167	174	174	174	175	175	173	177	184	186	186	185	183	175
15 Q	182	181	179	179	179	178	178	178	178	174	174	176	175	172	170	166	166	165	169	180	192	196	203	207	179
16 D	215	196	202	190	181	129	57	137	142	158	162	177	183	178	174	171	175	177	178	183	190	190	192	198	172
17	198	191	188	183	178	168	177	173	177	178	179	178	177	175	172	170	171	169	164	173	179	183	183	182	178
18 Q	181	180	179	178	178	177	173	175	175	174	175	177	173	167	160	154	154	154	155	163	171	177	178	177	171
19	176	177	176	174	173	159	154	159	160	163	171	171	171	161	148	136	143	154	160	167	176	174	177	190	165
20	191	191	185	171	138	145	171	177	150	153	172	174	172	168	166	167	166	161	170	178	187	189	189	188	171
21 Q	190	188	181	182	180	173	169	174	175	178	179	179	178	172	165	160	157	161	167	179	183	185	187	188	176
22	185	183	181	181	181	178	177	177	175	176	175	173	168	162	156	155	152	155	161	172	178	182	184	183	173
23	181	174	174	174	163	162	173	176	175	175	174	168	162	158	153	150	156	161	168	175	183	186	186	185	171
24	185	177	167	170	162	164	167	167	170	173	176	179	174	167	167	163	163	168	171	174	179	181	185	186	172
25 D	190	192	178	154	119	−4	28	90	89	119	150	158	162	158	164	168	176	189	219	230	219	211	205	195	157
26	193	180	170	176	179	179	174	168	175	180	181	175	174	174	171	161	160	156	158	161	165	169	177	183	172
27	186	179	180	155	161	172	162	151	163	173	173	170	169	168	173	172	174	174	175	180	187	190	191	192	174
28	190	189	186	187	181	175	174	175	177	181	176	169	163	162	161	159	163	164	163	171	181	208	206	193	177
29 Q	184	180	177	176	168	152	168	175	177	180	180	177	173	170	171	169	168	170	174	176	178	178	176	178	174
30	178	178	178	178	178	175	172	162	157	166	170	170	170	164	162	159	157	161	162	159	169	171	175	180	169
31 D	176	175	175	172	135	145	156	151	113	94	81	126	155	165	172	168	162	163	166	175	175	175	184	198	157
Mean	189	185	179	176	168	159	163	161	161	164	168	169	166	167	168	169	170	170	173	179	183	189	191	190	173

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 16 Agincourt $H = 15,000\gamma +$ June 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	859	864	869	869	862	875	880	880	884	884	876	866	855	867	865	866	850	864	895	895	900	896	894	887	875
2 D	880	875	869	868	870	884	882	883	864	865	876	865	847	834	809	830	841	841	871	888	890	888	886	885	866
3	882	886	884	889	885	878	859	874	871	876	869	864	864	862	860	855	862	875	879	880	875	875	883	881	874
4	879	879	879	884	875	869	879	879	883	893	886	884	875	870	873	872	867	874	884	902	900	891	880	881	881
5	877	878	879	880	879	861	864	871	869	873	873	878	871	869	860	860	860	868	882	893	898	894	894	886	876
6	884	885	887	886	889	884	890	894	887	887	894	888	884	876	877	887	890	894	906	894	919	889	878	885	889
7	881	880	876	875	877	886	884	889	883	880	879	883	873	851	855	874	889	887	889	891	889	892	900	884	881
8	883	878	878	868	872	878	873	870	872	863	867	862	854	846	845	844	857	868	883	895	886	900	898	883	872
9	883	883	880	878	880	883	880	881	882	881	877	872	868	858	853	855	872	888	899	905	888	888	886	883	879
10 Q	883	882	883	880	878	874	879	879	874	879	879	870	873	879	876	870	873	886	894	903	899	892	888	884	882
11 Q	883	883	883	884	884	885	884	884	885	887	887	886	881	873	862	852	849	860	879	893	899	894	892	888	881
12	888	893	889	884	878	853	858	873	878	885	884	873	875	868	864	878	882	879	881	883	893	894	894	888	880
13 Q	883	883	883	883	883	881	879	878	883	888	888	888	882	873	868	868	868	876	888	894	893	899	896	889	883
14	888	888	888	888	888	888	888	887	882	884	893	895	888	878	870	863	873	884	895	900	904	900	893	903	888
15	902	901	899	896	893	890	893	893	885	887	889	878	875	878	874	872	880	897	895	888	887	898	905	897	890
16	890	891	873	873	879	879	879	878	873	869	872	872	869	861	859	854	865	874	880	886	894	889	889	887	876
17	889	890	891	882	878	878	886	883	879	880	883	879	873	868	865	870	879	894	910	922	916	900	903	889	887
18	880	882	883	889	884	889	886	881	874	865	865	868	869	862	864	852	869	894	894	901	918	928	933	887	884
19	875	874	887	879	863	860	869	866	863	860	855	858	850	844	838	844	855	876	898	905	902	890	882	881	870
20	891	896	887	881	871	877	886	882	894	889	881	882	875	863	861	865	876	887	912	909	937	937	945	932	892
21 D	927	912	880	874	876	887	888	906	889	894	881	842	830	875	845	851	839	831	845	887	907	1014	1072	979	893
22 D	913	856	811	816	788	800	789	802	804	809	797	830	807	820	833	824	836	842	863	887	897	909	892	895	838
23	881	858	863	866	867	866	867	867	868	870	872	867	863	862	859	865	872	872	891	892	887	882	886	890	872
24	888	891	871	865	867	871	873	873	873	868	868	867	864	858	851	847	857	872	882	889	892	884	883	888	873
25	883	887	877	877	881	879	881	886	877	870	864	868	879	874	867	862	857	863	877	884	888	903	896	881	878
26	882	877	883	882	881	882	880	879	881	884	887	885	882	877	858	863	862	871	893	913	904	897	891	884	882
27	882	884	884	888	883	875	872	883	866	862	864	867	870	870	868	867	871	874	874	882	891	900	897	892	878
28 Q	886	882	882	884	881	878	881	884	882	883	887	879	874	868	861	852	859	872	881	887	887	891	888	893	879
29 D	905	890	898	860	841	731	836	861	890	865	873	875	868	860	850	840	845	871	891	903	903	898	886	886	868
30 Q	875	881	880	877	877	881	878	878	878	879	876	873	866	854	843	832	832	846	875	886	891	896	891	891	872
31																									
Mean	886	883	879	877	874	870	874	878	876	875	875	872	867	863	858	858	863	873	886	895	898	900	900	892	878

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 17 Agincourt — D = 7°W + ...' — June 1961

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	D	17.8	17.9	18.2	16.9	12.6	18.7	17.9	18.4	17.7	16.8	12.9	17.4	22.5	14.0	17.8	22.6	23.1	25.8	24.4	24.2	22.1	21.6	20.0	18.7	19.2
2	D	15.4	13.3	17.3	17.7	14.9	18.7	18.4	18.8	25.3	23.3	14.1	14.3	15.8	14.5	20.9	27.0	22.4	26.2	23.9	22.3	23.1	21.8	20.0	19.6	19.5
3		19.1	19.0	16.9	17.7	16.2	15.5	16.6	23.2	23.5	22.6	18.1	16.5	14.1	13.4	13.9	16.0	18.5	20.6	21.7	23.2	23.3	23.5	22.0	20.8	19.0
4		20.1	19.7	18.7	15.1	16.4	17.0	15.2	16.2	20.2	22.2	16.9	14.7	14.1	16.9	15.2	17.8	20.8	22.5	25.0	25.3	23.4	22.4	21.5	20.6	19.1
5		20.4	20.6	20.4	19.7	18.0	15.2	18.4	19.8	23.6	22.1	18.1	15.1	13.4	14.0	16.5	19.0	21.4	24.8	26.4	24.5	23.2	21.8	20.2	20.1	19.9
6		20.4	20.4	17.4	16.0	17.8	17.8	18.7	17.8	16.0	12.9	13.2	12.4	12.0	13.1	15.1	18.6	18.4	19.7	29.3	27.9	21.6	21.1	20.6	21.2	18.3
7		21.5	21.5	21.5	21.5	20.4	22.1	24.2	18.7	20.6	22.7	18.6	14.4	12.9	15.6	25.6	29.3	27.7	28.2	26.4	23.3	22.5	19.7	17.0	19.3	21.5
8		17.5	8.6	19.6	19.4	20.6	27.8	27.0	21.3	18.7	14.8	16.9	15.3	13.7	13.9	16.7	19.5	22.4	25.4	25.7	22.5	23.2	19.5	18.7	19.6	19.5
9		20.4	20.6	20.6	19.8	20.3	19.5	18.6	19.6	22.4	19.0	14.2	12.2	11.8	14.0	17.8	21.7	24.4	26.2	26.0	23.0	22.4	20.5	19.7	19.7	19.8
10	Q	19.7	17.7	19.4	18.8	19.5	20.9	22.1	20.3	19.2	19.6	16.9	17.8	16.3	13.9	14.3	17.8	22.3	25.1	24.7	23.3	22.7	21.5	20.6	19.4	19.7
11	Q	18.6	19.3	19.6	20.0	20.3	19.7	18.6	18.5	18.3	17.0	15.0	13.2	11.9	11.8	13.7	18.4	23.5	27.0	28.9	27.9	25.3	23.2	20.9	19.0	19.6
12		18.5	18.5	18.6	15.5	15.2	10.4	15.0	17.9	17.7	17.4	18.8	18.9	16.0	14.0	14.8	15.9	19.6	24.3	26.8	27.7	26.0	23.2	21.3	20.1	18.8
13	Q	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.0	19.2	16.4	13.7	13.0	13.5	15.0	17.7	22.3	24.2	25.2	25.7	25.2	22.8	19.8	17.7	19.5
14		18.5	19.1	19.1	19.6	19.5	18.5	18.5	19.4	19.5	20.2	15.8	12.8	11.2	10.3	11.4	15.5	20.4	24.7	27.1	27.0	25.6	23.4	22.4	19.5	19.1
15		17.3	17.7	18.5	17.9	17.3	16.7	17.2	17.9	16.2	13.8	9.3	7.7	8.8	10.6	11.2	15.9	20.7	22.4	22.9	25.0	23.1	21.9	20.5	19.6	17.1
16		17.0	15.0	16.9	18.4	19.4	19.5	18.7	18.3	18.8	17.1	15.7	11.4	9.2	10.1	12.8	16.6	23.1	24.7	26.1	26.2	26.0	25.3	22.2	20.4	18.7
17		19.3	18.5	19.4	17.5	15.9	16.6	18.4	18.8	18.4	16.4	14.6	12.9	12.1	11.7	8.8	19.4	24.0	26.5	26.4	25.2	25.0	23.0	20.3	19.7	18.7
18		20.4	20.3	21.2	21.1	20.5	18.2	17.3	18.9	17.8	17.7	14.2	8.3	7.4	9.1	11.3	17.5	25.7	25.5	28.1	29.5	27.5	24.6	21.4	21.4	19.4
19		20.6	21.2	20.4	12.9	11.1	15.9	17.7	17.5	17.3	16.5	14.5	12.9	11.3	11.9	14.9	20.3	24.0	25.8	24.9	24.9	24.0	21.4	20.3	20.2	18.4
20		19.5	18.9	19.3	16.7	13.0	19.2	19.5	19.6	19.1	15.0	13.6	12.0	11.2	11.5	14.3	19.5	24.2	28.4	27.5	27.8	25.2	24.2	23.6	25.9	19.5
21	D	25.3	9.3	18.1	17.6	17.6	17.8	16.0	15.5	13.9	11.0	10.6	12.3	9.3	16.8	12.6	17.7	18.4	23.0	26.5	24.0	23.1	13.8	11.3	10.2	16.3
22	D	7.7	19.3	36.1	24.8	13.1	22.2	18.5	32.6	31.4	12.2	25.1	15.0	28.3	25.3	22.3	21.1	26.2	26.8	26.7	25.0	26.1	25.2	25.0	23.5	23.3
23		14.3	17.9	19.5	21.4	21.7	21.5	21.1	20.6	19.2	18.4	17.0	16.6	16.6	16.7	17.6	21.5	23.5	27.0	25.9	24.0	22.4	21.3	21.5	20.8	20.3
24		17.9	17.0	18.8	19.3	21.3	22.2	21.0	19.9	19.8	19.0	17.8	15.6	14.4	13.3	16.1	20.7	24.4	26.4	26.4	25.3	23.4	21.6	20.8	19.8	20.1
25		20.4	19.9	18.8	18.8	19.8	19.8	19.8	20.7	20.7	19.2	21.4	20.7	12.5	11.3	12.3	14.9	19.9	22.5	26.2	27.2	25.6	21.3	20.5	19.8	19.8
26		18.8	19.0	18.9	19.1	19.5	19.9	20.0	19.8	19.1	18.5	17.2	14.8	12.7	14.4	14.3	21.6	23.7	27.2	27.9	25.3	24.5	23.5	22.1	20.6	20.1
27		20.0	19.9	19.7	19.9	18.9	19.9	20.5	23.5	19.8	17.5	23.0	15.0	14.1	16.2	17.1	18.8	20.8	24.4	25.9	26.3	24.5	22.3	20.2	18.1	20.3
28	Q	18.1	18.8	19.1	18.9	17.6	15.9	18.2	20.0	20.1	18.9	16.0	11.5	8.7	8.8	13.2	19.1	24.1	27.2	27.4	25.4	25.2	22.7	21.1	18.4	18.9
29	D	17.1	18.0	16.4	-0.3	13.0	9.4	14.3	22.8	21.8	24.1	13.4	11.8	12.1	13.0	15.3	20.6	24.4	28.6	29.1	28.1	26.1	23.8	21.1	18.8	18.4
30	Q	17.0	17.1	20.3	20.6	20.8	23.2	20.4	20.5	19.7	18.3	15.2	11.9	10.5	10.6	14.0	19.5	23.5	25.8	26.7	26.1	24.7	22.4	21.5	19.8	19.6
31																										
Mean		18.6	18.1	19.6	18.1	17.7	18.6	18.9	19.9	19.8	18.1	16.2	14.0	13.3	13.5	15.2	19.4	22.6	25.2	26.2	25.4	24.2	22.2	20.6	19.8	19.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 18 Agincourt — $Z = 56,000\ \gamma +$ — June 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	201	193	187	182	170	164	174	172	144	121	143	151	112	149	159	158	162	162	163	175	177	182	186	191	166
2 D	189	184	184	182	174	169	172	164	119	107	151	155	159	157	157	157	164	174	183	186	188	181	181	178	167
3	177	180	177	163	143	121	139	152	149	138	162	171	173	170	173	175	175	174	175	177	178	179	182	184	166
4	182	181	180	164	155	159	169	167	164	152	157	163	164	164	163	160	162	164	166	171	176	176	176	176	167
5	176	179	180	174	155	153	170	170	163	162	166	176	176	174	173	169	172	177	178	179	182	181	186	184	173
6	182	181	176	169	168	174	175	163	149	174	177	175	170	165	163	162	161	162	168	169	182	194	194	187	172
7	179	177	176	176	177	159	138	153	152	135	140	154	158	157	154	155	164	165	178	193	199	204	198	187	168
8	188	174	174	175	175	145	122	145	147	158	168	163	164	168	173	180	181	180	176	183	192	196	193	187	171
9	181	180	179	177	178	175	174	174	168	168	174	174	171	170	167	166	168	169	169	175	181	187	187	183	175
10 Q	181	180	177	175	174	175	169	169	170	176	179	176	174	174	174	174	177	180	177	178	180	177	177	177	176
11 Q	177	176	175	174	174	173	174	174	175	176	181	181	180	177	177	177	174	171	170	170	174	175	178	178	175
12	175	174	170	170	163	131	163	176	177	182	179	169	162	160	159	157	166	166	163	168	175	177	178	180	168
13 Q	177	175	174	174	174	172	172	174	174	175	175	176	175	171	171	174	174	174	175	176	180	178	180	180	175
14	176	175	174	173	172	170	169	170	173	175	177	180	179	172	170	174	169	164	164	164	169	169	174	180	172
15	175	174	173	171	170	169	167	166	164	170	174	171	164	158	152	152	156	163	166	172	175	179	178	180	168
16	188	186	181	179	176	175	174	170	166	168	170	170	164	163	165	168	169	159	156	164	177	183	187	184	173
17	182	181	181	173	163	170	170	171	174	175	177	178	177	170	164	159	159	159	161	169	174	177	184	186	172
18	185	183	181	175	172	167	156	156	162	164	164	164	166	169	170	169	174	165	164	169	184	185	219	222	174
19	199	185	181	174	170	170	175	172	172	176	176	178	178	177	175	173	176	171	171	170	164	174	185	186	176
20	181	181	179	178	172	176	169	164	169	169	175	176	175	173	169	163	160	163	164	163	169	171	182	193	172
21 D	213	195	218	218	205	172	176	181	165	177	154	131	131	139	163	168	164	175	205	263	287	353	329	285	203
22 D	256	233	74	139	103	96	67	-32	35	86	91	123	104	116	145	164	178	174	194	208	200	212	207	207	141
23	219	208	194	186	182	181	182	183	183	184	186	187	184	182	181	182	181	176	170	172	181	189	192	197	186
24	196	183	184	184	182	177	176	179	179	178	179	179	177	177	176	169	168	175	181	180	178	182	182	185	179
25	183	183	183	182	181	178	177	171	169	170	165	159	164	165	164	167	172	176	177	181	181	189	196	201	176
26	197	192	186	183	179	179	179	181	182	183	184	183	182	179	175	177	173	170	167	166	173	180	182	181	180
27	179	178	178	178	175	172	146	117	128	159	158	158	164	165	165	170	173	175	171	165	166	177	181	181	166
28 Q	180	180	182	182	179	173	177	178	183	184	176	167	171	172	172	172	165	163	165	172	177	183	187	190	176
29 D	191	190	189	172	103	-5	126	165	187	177	180	185	179	180	184	184	188	195	195	194	190	190	190	190	172
30 Q	190	189	184	184	179	171	177	182	184	186	185	184	184	185	182	186	181	180	182	184	185	184	183	184	183
31																									
Mean	189	185	178	176	168	159	163	161	161	164	168	169	166	167	168	169	170	171	173	179	183	189	191	190	173

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 19 Agincourt $H = 15{,}000\gamma +$ July 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	889	893	881	870	870	870	875	879	880	885	880	880	884	880	862	845	828	854	879	904	912	906	895	887	879
2	880	880	884	879	880	876	875	886	884	886	887	882	881	869	858	843	839	871	899	902	894	890	892	893	880
3	889	893	895	895	897	895	895	878	881	888	887	865	879	873	853	843	851	874	914	923	924	897	888	888	886
4	886	891	889	887	887	888	890	894	896	898	886	886	882	873	871	870	876	878	903	908	929	936	947	914	894
5 D	837	851	818	805	810	861	837	840	843	858	861	858	843	847	837	832	841	859	881	877	892	907	903	883	853
6	880	878	864	886	871	875	878	883	879	872	866	859	856	853	845	821	800	846	907	916	906	885	880	876	870
7	861	862	860	866	870	866	871	865	876	870	866	861	856	846	829	843	856	863	891	903	912	907	897	887	870
8	885	875	871	868	871	876	884	876	865	871	874	870	864	858	846	845	858	871	877	884	896	891	892	877	873
9	875	877	882	890	888	864	846	866	874	870	865	860	866	861	852	841	845	884	912	911	895	884	877	875	873
10	879	876	871	871	889	851	857	871	865	860	864	865	863	870	860	845	854	894	906	897	890	885	871	870	872
11 Q	875	880	874	873	875	877	882	882	879	870	867	872	865	865	860	860	874	912	916	908	904	897	898	890	881
12 Q	875	875	880	882	884	885	895	885	872	865	869	872	861	855	850	854	854	862	882	896	905	901	899	897	877
13 D	897	898	899	895	895	896	896	895	896	890	889	923	882	954	740	789	922	856	890	911	925	914	943	959	894
14 D	885	852	864	861	870	860	859	860	814	561	495	507	657	687	738	762	753	790	811	899	974	937	884	868	794
15	858	845	826	820	806	795	804	827	842	827	815	826	830	820	814	825	826	837	856	882	937	998	952	938	850
16	881	847	839	831	845	856	854	851	853	843	843	848	833	820	810	840	851	861	872	892	896	888	880	881	855
17	881	868	867	867	873	868	874	878	869	863	852	848	834	831	849	843	847	854	888	955	929	1016	951	923	880
18 D	919	889	872	862	858	869	764	832	839	855	859	827	758	724	739	736	733	785	861	959	990	1007	992	925	852
19	890	854	824	817	832	847	854	852	851	850	853	852	845	829	835	834	839	859	875	884	884	874	875	870	853
20	864	865	869	869	872	867	871	857	860	870	874	876	865	849	839	844	840	869	905	919	931	929	935	912	877
21	894	892	865	847	834	779	803	704	804	844	850	850	841	824	811	807	828	828	832	860	862	869	876	878	837
22	887	881	877	877	877	872	878	868	863	876	883	870	863	843	835	855	862	873	883	885	884	884	884	880	872
23	879	877	879	878	878	879	883	885	888	892	885	883	876	854	839	846	879	893	880	889	881	884	897	884	879
24	874	866	867	862	864	848	868	875	864	866	872	865	855	853	849	848	874	891	898	898	887	887	888	887	871
25	880	868	871	858	847	858	882	879	867	883	878	881	863	858	850	853	865	875	887	892	887	887	892	900	873
26	889	876	876	871	871	877	877	879	882	877	873	877	870	855	846	850	858	869	880	896	933	904	940	916	881
27 D	922	916	907	916	915	908	904	903	195	170	499	670	810	802	805	819	802	807	852	876	1018	1101	933	868	805
28	844	829	841	859	841	849	855	850	841	836	856	855	842	840	833	824	846	854	880	891	884	887	868	862	853
29 Q	856	857	861	858	868	852	851	854	862	864	866	866	857	840	834	832	842	866	882	891	887	888	882	879	862
30 Q	880	874	866	872	877	877	875	879	877	866	861	857	861	851	844	849	865	877	887	896	906	882	880	876	872
31 Q	871	877	877	878	878	881	881	881	881	881	875	870	862	859	857	852	857	870	890	892	897	899	891	890	877
Mean	880	873	868	867	868	865	865	865	843	836	843	848	849	843	832	834	844	861	883	900	911	914	903	891	866

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 20 Agincourt — D = 7°W + ...' — July 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	18.8	18.1	14.7	16.8	18.6	21.2	20.7	18.2	19.1	19.4	16.8	13.2	11.4	10.4	13.1	18.5	24.0	28.9	30.6	28.6	25.0	22.3	19.7	18.6	19.4
2	18.3	18.5	19.2	18.4	19.4	21.5	18.3	19.6	22.1	17.4	12.3	11.2	10.5	10.4	12.1	16.7	25.0	29.6	25.8	24.6	23.4	20.9	19.6	19.3	18.9
3	19.0	19.4	20.1	19.8	19.4	19.0	18.2	18.3	13.7	13.8	13.0	18.5	16.1	12.9	14.8	18.5	22.6	26.3	25.7	25.5	23.2	22.8	21.3	20.5	19.3
4	20.0	20.3	18.6	18.2	17.2	16.4	18.2	17.4	16.5	13.9	10.9	10.0	8.1	9.0	11.2	15.3	18.4	23.9	22.7	21.9	20.5	20.0	19.1	19.1	17.0
5 D	10.2	13.4	17.3	6.4	3.7	19.1	9.7	15.4	11.4	14.6	12.7	12.7	15.5	17.3	17.5	25.8	25.1	23.9	23.2	24.5	22.8	21.1	18.1	20.0	16.7
6	15.8	18.7	15.2	18.1	17.0	17.9	18.0	20.6	20.8	16.8	15.5	13.4	13.4	15.0	17.3	19.0	21.7	29.1	25.2	21.7	20.5	21.0	20.2	20.0	18.8
7	19.6	15.5	19.4	15.9	19.5	22.4	24.3	27.0	18.9	15.6	15.6	14.9	14.2	13.3	14.3	20.3	20.9	19.6	24.6	24.3	21.6	20.1	19.0	19.1	19.2
8	18.9	18.5	17.1	13.2	18.6	19.9	24.1	22.1	23.7	23.4	14.8	10.2	11.2	13.2	15.7	19.8	24.1	24.2	25.0	24.3	21.7	20.7	18.9	17.9	19.2
9	16.5	19.5	18.9	16.7	15.8	13.6	23.9	14.8	16.2	16.9	15.6	14.9	12.1	12.6	15.6	17.8	23.2	24.0	23.9	23.5	23.2	22.2	19.9	19.8	18.4
10	17.8	16.8	15.9	14.7	18.8	15.7	18.5	18.8	19.7	18.8	22.2	16.0	17.1	14.1	14.8	16.2	25.1	26.2	26.2	26.0	23.4	20.4	20.3	19.4	19.3
11 Q	18.8	17.7	13.2	17.7	17.1	18.8	20.3	18.8	19.9	18.0	12.6	10.7	10.4	9.4	11.3	15.3	18.4	23.6	26.2	27.2	25.1	23.3	19.8	17.8	18.0
12 Q	18.4	18.7	18.5	18.8	19.4	19.6	21.4	18.7	20.5	22.4	13.0	6.8	6.8	8.4	12.3	16.9	22.3	25.3	26.7	26.1	25.3	23.7	21.9	20.1	18.8
13 D	18.8	18.8	19.7	18.8	18.3	18.7	18.7	17.7	17.5	15.8	15.3	11.2	8.8	-1.1	-4.1	1.2	25.9	18.2	22.0	26.0	21.4	24.5	18.5	8.5	15.8
14 D	13.0	12.3	15.1	19.3	20.5	19.6	20.4	19.6	31.5	55.7	70.1	43.0	33.6	25.1	21.6	29.0	35.0	26.9	20.0	15.2	11.3	15.9	15.9	15.1	25.2
15	13.4	17.1	14.6	14.7	8.4	13.9	15.6	21.3	20.2	17.8	11.9	6.0	8.4	8.4	11.1	14.2	18.6	20.8	22.6	23.3	21.6	17.7	18.1	19.3	15.8
16	15.0	14.8	9.9	14.9	21.1	20.2	19.5	18.7	20.2	20.8	19.6	14.2	11.9	12.4	15.7	19.3	20.5	22.2	25.1	25.7	25.6	24.2	23.3	21.4	19.0
17	19.9	17.9	18.7	18.9	22.5	23.3	17.7	16.6	17.5	17.0	21.1	20.1	21.6	18.8	16.7	12.8	17.8	23.3	25.2	25.9	34.3	21.6	26.2	25.7	20.9
18 D	14.2	16.0	18.8	4.0	17.2	19.2	26.8	14.3	22.4	18.1	10.9	15.7	40.8	39.0	34.9	23.2	25.5	19.4	22.3	11.4	12.2	11.4	7.7	11.0	19.0
19	13.8	12.8	13.0	14.4	17.0	21.4	21.5	22.3	21.5	19.8	18.0	16.1	15.8	16.6	16.8	18.8	22.4	23.7	24.2	24.0	24.3	24.2	22.2	20.7	19.4
20	20.4	20.8	20.3	19.8	18.4	18.9	19.2	18.9	19.7	17.6	13.5	12.1	11.7	12.5	14.2	19.4	25.5	26.2	27.1	28.2	30.6	30.9	25.9	25.4	20.7
21	22.4	19.3	13.1	13.3	1.2	10.6	-1.3	41.0	24.7	15.9	14.0	12.1	13.7	17.2	19.5	19.8	20.5	22.6	23.7	20.9	21.8	22.0	20.8	20.2	18.0
22	20.2	20.0	20.0	19.3	19.8	18.0	22.7	23.6	20.1	13.5	14.5	12.2	11.7	13.3	17.8	21.1	21.8	22.5	23.8	23.3	23.1	21.4	20.8	19.9	19.3
23	20.0	20.3	20.2	19.4	18.0	18.0	19.2	19.1	17.7	17.2	21.2	13.2	8.6	9.5	15.4	20.8	24.8	22.7	26.6	26.3	24.8	22.7	18.9	18.9	19.3
24	18.1	17.7	18.2	17.4	17.2	14.8	13.8	17.5	21.0	28.5	17.5	17.9	19.9	16.3	17.9	21.5	23.0	22.8	22.7	22.7	23.1	22.2	20.3	18.6	19.6
25	18.0	14.8	15.8	15.3	13.4	17.0	26.3	19.4	20.2	23.0	13.7	11.9	12.1	11.3	11.6	16.4	20.3	23.0	23.9	23.3	24.2	23.8	22.5	20.0	18.4
26	12.0	17.0	18.7	8.4	15.7	18.2	18.4	19.4	19.1	19.5	21.8	15.3	12.1	13.0	14.7	20.3	24.0	24.9	24.9	23.8	19.4	22.9	24.1	20.6	18.7
27 D	20.6	17.5	16.8	15.4	15.6	14.8	12.3	16.1	65.4	40.2	41.1	11.4	4.5	2.2	13.8	21.5	26.3	30.8	32.4	31.4	27.1	5.7	23.4	24.2	22.1
28	23.4	16.6	17.7	16.1	19.9	20.9	24.4	23.0	26.3	26.0	16.7	12.4	12.4	14.1	17.0	22.8	25.2	26.1	25.2	24.9	24.3	23.2	22.7	21.7	21.0
29 Q	21.3	21.2	20.8	17.6	14.6	18.5	19.6	21.0	21.6	20.2	17.7	13.7	12.4	10.3	13.5	18.5	22.3	25.6	25.7	25.9	25.1	24.2	23.3	22.2	19.9
30 Q	20.6	21.2	21.5	21.7	20.9	21.5	21.6	24.9	18.6	20.9	19.8	17.0	14.2	14.2	17.0	22.8	27.3	28.1	27.8	27.8	25.5	23.5	21.8	21.4	21.7
31 Q	21.6	21.4	21.4	21.4	21.1	20.6	20.6	20.5	19.5	18.2	16.1	15.9	16.3	14.5	16.1	20.3	25.3	27.4	27.9	29.0	27.0	23.8	22.2	20.7	21.2
Mean	18.0	17.8	17.5	16.3	17.0	18.5	19.1	20.3	21.5	20.5	18.4	14.3	14.1	13.3	15.2	18.8	23.3	24.6	25.1	24.4	23.3	21.4	20.5	19.6	19.3

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Agincourt — $Z = 56{,}000\ \gamma +$ — July 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	184	184	180	180	178	156	135	124	146	165	166	173	180	179	174	177	173	175	176	177	178	183	185	186	171
2	184	183	181	180	179	158	154	149	141	167	179	178	174	171	168	167	167	158	160	166	174	179	182	184	170
3	180	178	178	177	178	177	155	134	147	174	172	156	146	155	158	166	171	168	171	174	177	175	178	179	168
4	179	179	178	178	177	172	177	176	175	176	172	176	168	166	166	169	173	168	177	177	181	193	228	268	181
5 D	269	224	119	123	57	118	68	98	93	144	166	174	176	171	165	184	184	196	207	207	207	216	215	204	166
6	201	189	187	154	171	183	178	164	161	175	179	180	188	190	186	177	184	196	196	191	193	187	188	190	183
7	193	192	155	177	177	165	149	129	165	174	173	180	178	180	179	182	174	176	177	184	189	190	190	184	176
8	184	183	180	172	177	180	166	149	142	129	164	172	173	178	172	172	178	177	178	178	184	190	196	193	174
9	190	183	181	178	162	159	128	141	171	175	177	174	173	177	177	174	165	162	167	171	173	177	181	181	171
10	180	183	180	175	120	141	122	98	147	147	147	146	160	170	178	179	178	184	123	123	183	190	189	187	160
11 Q	185	184	183	180	177	167	171	171	171	173	177	179	177	173	173	165	161	160	160	165	174	183	189	192	175
12 Q	190	188	183	180	179	178	165	141	141	153	165	178	183	178	182	180	178	173	176	176	174	182	179	179	174
13 D	178	178	177	178	178	173	176	177	176	176	176	162	113	125	125	147	154	166	198	263	272	232	257	293	185
14 D	267	233	218	194	174	164	179	183	49	-187	-162	20	21	121	130	148	154	219	257	283	277	257	235	227	153
15	221	210	209	193	133	99	94	106	134	149	160	160	159	160	173	178	179	190	192	210	260	306	279	270	184
16	232	135	166	187	174	165	175	173	190	187	184	188	184	182	182	179	172	177	197	215	216	206	196	194	186
17	202	202	199	191	168	155	167	179	185	124	160	136	129	134	140	157	165	168	182	233	269	334	265	249	187
18 D	263	213	223	209	116	-6	-23	137	164	184	196	162	33	59	100	149	201	269	302	354	356	346	295	285	191
19	204	196	192	183	195	188	184	190	192	195	195	195	196	196	197	197	190	184	182	181	183	189	190	194	191
20	191	188	188	184	184	167	139	148	179	189	189	189	188	184	177	176	165	169	187	189	195	195	214	217	183
21	206	222	258	237	107	57	67	-62	74	148	148	156	154	159	164	175	182	183	200	213	213	212	203	196	161
22	192	189	188	188	187	185	155	134	116	157	154	184	190	185	178	179	173	170	170	181	188	189	189	188	175
23	186	183	183	183	182	181	182	179	179	177	158	161	165	166	161	170	176	177	183	192	195	204	217	214	181
24	208	203	192	182	146	118	160	176	167	136	149	161	165	168	171	171	171	172	177	183	188	195	196	195	173
25	195	188	153	173	181	170	129	152	157	149	165	184	182	172	169	170	171	173	176	183	183	187	184	186	172
26	199	188	186	171	158	176	176	177	178	177	169	169	170	171	173	176	177	178	184	188	195	208	232	250	184
27 D	231	221	205	187	169	127	150	163	-318	-331	-222	79	187	194	183	181	194	217	273	263	271	336	231	208	142
28	213	211	198	163	165	160	139	171	171	151	182	189	188	190	191	194	189	188	188	201	216	213	200	192	186
29 Q	188	183	184	181	153	159	169	177	182	183	183	183	181	181	177	176	168	161	164	176	183	185	182	183	177
30 Q	186	186	186	186	186	175	156	151	158	170	170	174	175	176	180	181	178	176	180	188	193	188	186	181	178
31 Q	178	177	177	176	176	176	175	175	174	174	176	176	175	171	163	163	164	169	169	177	185	186	182	185	175
Mean	202	192	186	181	163	153	146	147	139	137	147	164	162	167	168	173	174	181	188	199	207	213	208	208	175

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 22 Agincourt — H = 15,000 γ + — August 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	881	876	857	871	881	886	887	886	885	882	883	881	875	870	861	858	860	866	876	896	898	896	897	896	879
2 D	893	885	883	887	915	809	698	804	804	861	865	855	836	829	847	844	850	864	876	876	882	905	896	885	856
3	874	872	872	872	842	846	865	876	847	863	876	868	851	846	841	839	859	873	881	902	904	882	893	885	868
4 D	881	897	859	856	866	876	870	866	866	875	858	859	860	851	840	844	856	873	878	887	881	881	880	878	868
5	880	881	883	882	886	880	871	871	876	872	865	876	873	857	847	846	847	862	881	895	903	895	897	881	875
6	876	883	886	886	885	885	884	884	881	881	880	879	868	857	848	842	846	860	881	896	903	908	888	887	878
7 Q	883	886	886	887	885	886	887	887	885	884	882	882	877	872	867	857	868	887	901	900	902	902	897	886	885
8	886	891	891	887	876	874	875	887	883	863	884	879	877	870	873	866	862	866	882	855	882	905	902	892	880
9 Q	883	883	877	869	869	878	880	880	882	878	879	878	867	856	851	854	863	875	893	903	903	899	897	891	879
10	892	889	874	877	879	870	864	849	859	869	854	858	850	841	836	853	863	874	895	911	913	905	895	888	873
11 D	897	865	870	852	873	899	900	899	896	889	879	883	861	883	867	859	870	879	887	894	904	888	904	883	883
12	880	880	879	879	869	872	874	878	877	878	877	875	869	855	836	829	841	869	891	921	906	907	899	891	876
13 Q	890	889	873	874	880	883	884	885	889	889	884	879	868	853	834	832	840	863	885	902	909	905	903	898	879
14	895	894	894	892	890	889	890	890	889	885	886	881	862	864	844	832	833	851	884	894	892	899	904	896	880
15	989	894	897	894	894	896	908	885	885	883	881	879	874	859	843	842	854	874	879	885	894	893	893	894	882
16	888	889	885	890	900	898	894	889	889	888	887	884	874	859	845	845	859	869	884	900	910	913	910	894	885
17	889	889	891	895	893	894	896	896	894	890	880	886	889	878	884	849	853	870	887	895	904	899	888	886	886
18	887	889	891	889	894	896	898	896	900	899	899	895	889	877	861	859	869	881	886	893	899	896	898	901	889
19	900	898	886	884	881	868	869	865	871	876	878	871	874	864	857	853	854	863	873	882	886	894	893	890	876
20	889	887	888	889	889	888	888	888	884	883	879	877	879	874	863	858	859	873	893	893	893	893	890	885	883
21	888	888	888	889	895	896	895	895	890	886	883	878	873	863	855	856	862	875	888	899	908	903	901	899	886
22 Q	899	898	893	896	895	895	896	897	893	892	889	883	874	861	849	847	856	852	893	904	905	904	903	899	886
23 Q	897	897	895	893	895	895	893	888	888	889	885	880	875	867	859	862	871	883	896	906	908	906	904	901	889
24	901	903	902	903	901	900	902	901	900	898	897	893	880	864	850	859	877	889	904	917	922	914	904	911	896
25	904	899	893	903	904	899	900	899	893	889	893	885	873	851	849	863	872	883	900	906	914	925	900	901	892
26	899	908	904	889	893	899	899	897	887	882	888	889	882	868	862	859	864	878	893	919	924	907	893	883	890
27	857	876	889	889	892	890	892	883	880	886	885	879	867	848	839	839	857	873	884	889	895	899	896	897	878
28	888	893	898	893	893	894	892	892	891	887	881	879	873	862	853	849	853	863	879	896	904	897	895	900	884
29	900	899	896	893	893	895	898	897	893	893	893	889	883	873	859	858	868	893	904	905	874	888	896	880	888
30 D	852	852	848	885	887	887	888	889	893	898	866	845	820	838	823	815	816	854	881	893	891	890	883	867	865
31 D	854	853	822	807	795	854	883	826	866	883	882	877	867	857	851	847	854	859	873	897	887	900	884	879	861
Mean	886	887	882	882	884	883	881	881	881	883	881	878	869	860	851	849	857	871	887	897	900	900	896	891	880

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 23 Agincourt D = 7°W + ...' August 1961

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		20.8	20.1	13.5	16.6	19.8	19.8	19.8	19.1	19.1	18.3	17.0	12.7	12.4	12.0	14.1	17.8	21.7	25.9	27.1	26.5	25.3	23.7	21.8	21.7	19.4
2	D	17.0	9.8	18.1	16.0	-2.8	-6.1	28.7	12.7	15.0	9.5	12.5	12.6	15.2	15.3	18.0	21.1	24.9	24.4	25.4	24.5	22.9	20.9	17.2	17.1	16.2
3		17.1	17.5	15.1	16.3	14.7	18.5	22.8	23.3	26.6	23.6	15.5	14.0	16.6	17.3	14.2	20.4	21.7	24.2	27.2	25.7	25.2	23.3	19.2	15.4	19.8
4	D	16.5	10.7	19.0	18.9	20.1	25.9	21.5	18.1	21.2	20.7	21.0	20.0	16.1	17.1	18.8	22.3	24.3	26.9	27.3	26.0	24.2	21.9	21.5	21.8	20.9
5		21.4	21.1	19.3	21.0	19.0	18.5	19.6	20.8	20.5	25.3	20.8	15.0	13.5	14.4	19.0	22.7	25.4	27.8	27.2	26.0	23.1	21.8	20.0	20.7	21.0
6		20.0	21.1	21.1	21.1	20.2	19.0	19.2	19.5	20.3	18.6	17.8	14.6	14.3	15.5	20.4	25.5	29.6	31.0	29.8	26.6	23.5	21.7	20.6	19.8	21.3
7	Q	21.0	20.8	20.7	20.0	20.0	20.0	19.9	19.1	18.9	18.1	16.9	14.8	15.9	16.2	17.2	21.3	26.4	29.0	28.1	26.7	25.5	22.8	20.6	19.9	20.8
8		20.0	20.7	20.8	19.9	17.2	18.7	24.5	16.1	14.1	19.6	12.5	11.2	15.0	13.4	18.7	19.9	24.5	26.3	26.2	30.4	25.5	21.9	19.6	18.8	19.8
9	Q	19.6	20.0	18.3	17.6	17.2	21.8	20.0	19.9	19.8	18.8	17.1	14.5	12.6	13.5	15.3	19.0	22.6	26.6	27.3	26.3	24.4	21.9	20.7	20.0	19.8
10		19.9	18.9	18.0	18.7	16.7	12.0	13.2	25.4	24.4	13.1	9.6	7.9	7.3	12.6	21.1	26.6	29.0	28.3	28.3	27.1	23.4	20.8	19.3	18.8	19.2
11	D	18.7	14.0	16.7	3.9	10.4	18.7	19.3	18.1	21.5	20.8	13.3	11.5	23.4	19.9	22.0	24.9	24.4	27.2	30.9	30.0	28.2	25.3	22.7	21.8	20.3
12		21.6	21.4	20.5	16.1	16.2	17.2	18.9	21.0	18.6	17.0	15.6	14.1	13.6	14.2	16.8	22.2	27.2	30.8	31.1	28.6	27.1	24.6	21.9	21.5	20.7
13	Q	21.5	19.5	19.9	18.2	19.7	19.2	19.7	19.7	19.6	18.8	16.9	14.6	13.1	12.5	14.2	19.6	25.2	28.4	28.8	28.7	26.8	23.7	21.7	21.0	20.5
14		21.4	21.5	20.9	20.7	20.5	20.3	20.2	19.9	20.5	18.2	16.0	13.5	14.2	12.5	15.8	22.4	27.6	34.8	32.9	29.9	27.2	24.2	21.0	19.6	21.5
15		19.8	20.4	20.2	20.2	19.8	19.7	21.7	18.4	17.0	16.3	12.9	10.3	10.6	11.5	15.5	20.7	27.7	30.4	30.4	27.9	25.1	23.3	21.4	19.1	20.0
16		14.1	17.5	17.8	17.8	16.8	18.9	19.1	18.7	18.6	18.0	16.1	13.3	12.3	12.2	14.9	18.6	22.9	26.7	28.8	29.4	27.8	24.3	21.4	19.8	19.4
17		20.1	19.8	19.7	19.5	19.0	19.0	18.9	18.5	17.6	21.5	22.5	13.3	9.4	10.1	12.7	16.7	21.5	26.1	28.8	29.1	26.0	22.9	21.0	19.9	19.7
18		20.2	19.8	19.7	19.7	19.6	19.5	19.2	18.7	18.6	19.1	18.7	12.9	10.4	9.4	13.8	18.7	23.4	27.0	27.6	27.0	23.9	22.2	20.9	19.9	19.6
19		19.6	18.8	17.8	18.3	11.5	12.9	14.9	11.2	14.4	19.6	21.6	15.9	12.4	15.7	18.1	22.4	25.8	27.3	28.8	27.0	24.5	22.4	20.6	20.5	19.2
20		20.6	20.6	20.5	20.3	19.9	19.6	19.7	19.6	19.3	18.7	20.4	17.6	14.1	14.0	17.6	19.2	23.8	29.2	30.3	28.6	24.4	21.1	18.8	18.6	20.7
21		19.1	19.3	19.6	19.0	18.1	19.7	21.2	19.7	18.2	17.4	15.9	14.1	12.5	13.1	16.6	23.2	27.9	30.1	28.3	25.2	22.6	21.3	19.8	19.8	20.1
22	Q	20.4	20.3	19.8	19.8	19.7	19.3	18.7	17.9	17.8	17.2	15.7	13.5	12.2	13.1	16.5	21.9	26.3	27.9	28.2	27.3	24.9	22.4	20.9	20.8	20.1
23	Q	20.9	20.6	20.5	20.5	20.0	19.9	19.0	18.6	18.0	16.4	14.3	12.3	11.4	12.8	16.9	21.4	25.0	27.9	28.3	26.1	23.2	20.5	18.9	18.8	19.7
24		19.8	20.2	20.2	20.1	19.7	19.4	18.7	18.3	17.8	16.9	15.3	12.9	11.3	11.5	15.2	22.2	25.4	26.8	27.8	24.4	21.7	20.4	19.6	19.5	19.4
25		19.7	20.0	20.0	20.0	19.8	18.9	17.8	16.2	16.3	15.2	13.3	11.6	11.5	11.5	20.9	26.9	27.9	30.0	30.7	28.6	23.6	21.4	20.5	20.3	20.1
26		20.9	19.9	19.8	13.4	15.0	17.1	19.9	18.3	15.6	19.9	15.1	10.5	8.2	9.2	14.3	21.7	27.0	29.0	27.9	26.1	24.3	22.1	19.4	20.2	19.0
27		17.8	20.2	19.7	19.8	19.0	17.0	14.1	15.1	17.9	17.7	15.2	12.3	10.4	10.5	14.1	19.3	25.5	27.9	28.7	27.9	25.5	22.7	20.9	19.8	19.1
28		18.9	19.8	19.0	16.3	19.8	19.9	19.7	18.8	18.2	17.6	16.3	13.3	10.7	10.7	15.2	20.7	26.8	29.9	30.9	30.5	28.5	25.9	22.5	20.6	20.4
29		20.4	20.0	19.8	18.9	19.8	19.8	19.0	18.8	18.7	17.9	16.1	13.4	12.3	11.9	14.4	21.3	25.3	26.9	26.2	26.8	27.1	22.8	20.9	19.5	19.9
30	D	17.1	13.7	7.2	6.1	13.3	19.8	20.7	19.8	19.6	20.5	26.5	20.9	32.7	27.2	20.9	22.7	33.9	35.4	32.7	26.9	24.5	20.9	19.7	17.2	21.7
31	D	13.3	13.3	5.8	8.7	24.9	13.6	18.1	30.7	27.8	18.7	13.3	13.7	15.1	16.4	22.0	22.2	23.5	25.4	27.1	25.0	24.3	21.7	19.8	15.0	19.1
Mean		19.3	18.8	18.4	17.5	17.6	18.0	19.6	19.0	19.1	18.4	16.5	13.6	13.6	13.8	16.9	21.5	25.6	28.2	28.7	27.3	25.0	22.5	20.5	19.6	20.0

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table .24 Agincourt — $Z = 56{,}000\ \gamma +$ — August 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	183	185	187	174	175	177	176	176	176	176	176	177	177	179	179	182	186	182	177	179	182	187	191	188	180
2 D	212	254	222	186	107	27	64	68	-8	137	162	167	164	147	152	163	176	182	186	186	186	201	210	201	156
3	201	189	181	162	124	112	143	161	142	166	182	179	170	170	174	173	177	186	187	193	198	197	205	205	174
4 D	203	174	182	190	187	150	136	153	170	180	173	182	185	185	183	190	192	193	184	186	189	191	193	188	181
5	184	182	180	176	225	154	144	159	160	146	123	148	162	165	166	167	168	169	174	180	186	184	188	184	170
6	184	179	176	175	175	172	173	171	170	170	170	170	170	170	175	175	179	180	181	182	181	184	179	178	176
7 Q	174	174	174	174	175	175	174	173	172	174	176	174	173	170	169	168	169	173	175	181	185	185	185	176	175
8	179	178	175	176	178	176	102	149	156	139	125	156	167	170	173	168	162	167	181	185	192	199	192	185	168
9 Q	179	179	180	180	177	161	153	166	175	178	179	179	174	172	169	167	169	166	167	171	173	178	180	180	173
10	179	179	180	179	173	153	130	106	113	124	147	148	152	161	158	161	168	171	174	184	185	185	184	184	162
11 D	189	189	194	173	161	178	180	179	167	130	145	153	130	119	133	145	149	156	172	189	204	216	217	212	170
12	191	179	175	169	167	168	173	172	177	179	178	176	174	175	174	179	184	178	168	171	172	175	179	178	175
13 Q	175	177	179	182	178	177	174	175	177	177	178	178	177	176	172	172	170	166	171	173	174	177	174	176	175
14	173	172	172	172	172	172	172	172	167	171	177	178	172	166	160	148	148	156	165	168	176	180	182	176	169
15	173	172	172	172	172	172	125	123	154	173	173	177	174	166	160	160	166	167	173	178	180	179	179	179	167
16	178	174	173	169	148	154	166	170	171	172	173	174	172	171	165	161	160	159	163	168	172	174	179	176	168
17	174	173	172	172	171	171	171	171	171	170	159	160	163	165	161	149	148	155	165	174	178	185	184	181	168
18	177	173	171	170	169	169	169	168	169	170	167	166	165	164	160	158	153	156	160	165	170	171	172	172	167
19	169	169	170	171	152	136	134	124	143	158	136	133	136	146	152	160	158	163	170	173	175	179	182	177	157
20	175	172	170	170	170	170	170	170	170	171	166	159	159	159	158	154	157	165	175	177	185	188	186	180	170
21	177	176	173	172	168	165	158	160	165	170	171	171	168	166	164	164	164	168	176	177	182	180	178	175	170
22 Q	172	171	171	171	170	170	170	170	170	171	172	173	172	171	170	165	161	163	167	172	174	175	175	171	170
23 Q	171	170	170	171	170	169	171	171	171	171	172	174	175	172	172	171	170	170	172	176	177	178	175	170	172
24	167	166	165	164	164	165	164	165	165	165	166	169	167	163	156	153	155	164	175	176	177	176	166	165	166
25	167	170	171	168	166	166	166	160	161	160	164	165	166	164	163	166	166	167	172	173	173	176	168	168	167
26	166	166	166	166	161	154	161	160	167	167	167	167	165	164	164	161	161	160	160	168	177	183	191	203	168
27	199	181	173	171	166	154	126	135	165	172	173	173	168	165	160	161	165	168	173	176	179	178	174	173	168
28	172	172	172	166	170	170	169	169	169	168	171	173	172	165	160	161	166	167	170	177	180	178	177	172	170
29	172	172	171	168	168	168	168	167	167	168	168	168	169	166	161	160	154	153	166	180	184	182	181	199	170
30 D	213	203	191	148	148	163	168	172	166	141	102	89	157	148	128	149	162	177	182	191	194	210	222	222	169
31 D	210	192	150	78	25	75	119	84	99	170	169	173	174	169	169	165	168	180	187	193	193	197	198	192	155
Mean	182	179	176	169	162	156	154	155	157	164	163	165	167	165	163	164	166	169	173	178	182	185	185	183	169

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 25 Agincourt — $H = 15,000\ \gamma +$ — September 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	876	873	884	884	895	874	914	873	868	864	853	867	877	868	849	828	843	872	871	892	888	912	883	877	875
2	878	881	883	885	887	889	883	887	886	859	876	880	869	856	853	852	863	876	886	896	902	899	901	884	880
3	882	889	889	889	905	868	873	889	885	888	881	880	879	865	858	863	869	880	892	895	896	894	890	892	884
4	890	893	893	893	891	890	886	889	885	889	888	875	869	869	860	860	871	885	896	898	900	893	894	888	884
5	895	896	876	886	894	894	893	886	885	884	884	880	866	849	839	848	864	874	886	889	885	885	884	885	880
6	889	889	884	878	873	880	885	886	887	889	889	886	874	859	835	840	850	864	874	887	899	900	900	899	879
7 Q	898	890	888	889	893	894	896	896	894	894	894	891	879	862	851	853	859	870	884	890	900	905	904	900	886
8 Q	900	899	900	899	899	895	896	898	897	899	896	892	877	859	847	844	854	875	890	899	904	906	910	910	889
9	914	911	910	905	903	899	896	879	883	875	888	878	868	856	849	845	854	869	886	896	904	909	896	896	886
10	899	893	889	894	895	893	890	888	887	890	889	888	878	857	845	849	863	872	888	893	897	905	901	903	885
11	894	898	900	898	897	902	891	894	895	894	896	893	885	878	859	859	855	864	883	893	896	909	873	872	887
12	883	890	890	883	873	847	824	852	882	878	871	864	870	865	857	854	856	864	878	889	891	897	894	875	872
13	887	887	887	881	879	877	884	884	884	887	888	884	870	854	844	844	860	873	884	892	909	919	899	901	882
14 D	894	897	900	897	911	888	878	871	894	894	894	886	840	829	879	855	849	858	879	880	874	883	896	874	879
15	887	890	886	887	887	885	883	885	883	880	878	882	875	858	850	848	852	859	869	879	883	881	881	886	876
16	888	888	886	883	888	893	890	888	892	893	890	883	878	862	854	858	859	870	883	896	893	878	885	892	882
17	883	856	842	850	853	867	871	872	877	883	885	879	870	867	858	855	857	863	876	881	885	887	887	887	870
18	883	883	873	862	875	883	887	885	886	888	891	889	883	873	859	851	857	876	878	880	885	887	886	895	879
19 Q	896	894	891	886	889	890	891	896	893	895	891	891	883	878	876	874	875	886	896	895	892	891	890	895	889
20	890	883	880	874	869	874	884	875	884	890	899	899	896	890	885	877	889	904	903	901	896	875	887	895	887
21 Q	898	897	896	895	896	896	891	892	892	894	891	889	886	878	869	869	884	896	904	910	900	899	900	898	892
22	899	899	896	895	895	895	895	903	899	896	901	895	888	885	875	868	884	898	907	910	894	898	894	897	894
23 Q	895	897	896	894	894	894	894	893	894	893	890	887	876	862	852	862	878	892	899	909	904	904	907	905	890
24 D	905	904	903	902	902	904	906	899	901	908	899	914	904	877	827	841	860	851	866	892	880	887	846	850	884
25 D	872	862	858	871	882	886	822	862	870	857	872	881	848	844	852	840	850	862	874	884	886	892	882	881	866
26	881	890	891	876	882	883	887	883	880	876	882	887	885	867	848	837	850	862	881	884	892	887	876	878	877
27	861	871	861	857	851	870	861	851	866	851	846	862	857	875	856	844	848	856	881	885	890	887	892	889	865
28	886	885	881	877	880	880	882	880	883	882	883	883	876	866	854	846	849	862	878	885	892	885	892	876	877
29	881	886	885	882	891	881	880	881	881	885	886	885	881	871	860	850	855	874	886	896	889	892	899	888	881
30 D	882	881	881	873	859	842	865	871	873	881	883	886	875	861	860	849	851	857	873	894	886	896	984	1022	882
31																									
Mean	889	888	886	884	886	884	883	883	886	885	885	885	875	865	855	852	860	872	884	892	893	895	894	893	881

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 26 Agincourt — D = 7°W + ...' — September 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	12.4	16.7	15.8	16.3	22.8	27.9	24.6	22.2	12.6	14.0	19.9	20.7	12.6	11.9	15.8	20.3	27.0	26.0	28.0	25.0	25.4	23.3	17.1	19.9	19.9
2	20.7	19.8	19.8	18.1	19.1	20.0	19.7	24.3	18.2	26.8	24.5	15.3	15.8	16.4	19.0	21.1	25.1	27.1	26.5	24.4	21.6	20.5	19.5	16.7	20.8
3	15.1	20.8	21.3	20.6	23.8	21.7	29.0	15.1	16.3	17.6	19.5	17.1	13.3	15.1	19.8	25.0	27.2	30.4	30.7	27.5	23.8	21.3	20.2	20.4	21.4
4	20.4	20.6	20.6	19.8	19.8	19.7	19.7	25.0	19.5	19.7	17.1	17.7	16.9	17.2	21.5	26.2	29.0	28.1	26.1	24.0	22.2	20.7	20.1	20.5	21.3
5	18.2	14.1	19.0	21.5	21.8	25.0	23.3	23.1	18.0	15.5	15.7	13.0	14.6	17.0	23.6	29.5	33.0	32.3	28.2	26.4	24.1	21.8	19.3	19.2	21.6
6	19.3	19.8	18.9	20.8	16.7	18.7	20.6	19.8	19.0	18.6	17.6	15.2	13.4	14.2	17.0	23.2	27.9	30.5	30.4	28.4	24.7	21.5	20.2	20.4	20.7
7 Q	19.9	20.4	20.8	20.9	20.6	19.9	19.6	19.8	18.6	16.1	15.1	12.4	11.1	11.5	16.0	22.3	26.5	29.0	28.9	26.3	23.3	20.9	20.0	20.6	20.0
8 Q	20.8	20.6	20.6	20.2	20.0	19.7	19.4	17.9	17.0	16.9	16.7	15.0	12.7	12.5	15.6	20.4	25.2	28.2	29.6	28.6	25.9	22.6	21.1	21.3	20.4
9	21.3	21.4	20.7	20.7	20.1	19.4	17.7	11.8	12.4	19.8	11.3	6.0	9.5	13.0	17.3	21.3	25.6	28.5	28.8	26.7	23.8	22.2	21.4	21.2	19.2
10	21.9	19.9	17.4	20.5	20.5	20.2	19.7	18.7	18.0	16.8	15.9	12.5	11.7	12.3	16.0	23.0	27.3	30.6	28.7	26.9	26.3	30.3	19.4	19.5	20.6
11	19.7	19.9	20.3	19.9	19.0	17.8	17.3	16.6	14.8	13.2	13.2	12.7	13.0	14.1	16.4	23.1	28.0	30.5	31.3	28.0	24.1	26.9	26.0	24.3	20.4
12	22.2	21.1	20.6	18.6	19.0	13.5	28.9	20.5	17.9	17.7	16.6	17.9	18.6	16.9	18.8	21.5	24.3	27.0	27.6	26.6	24.5	22.0	19.7	17.7	20.8
13	20.5	19.6	19.9	19.1	17.8	18.4	19.6	17.4	16.8	15.9	15.9	14.4	13.2	13.3	16.1	20.8	25.7	29.5	31.2	29.7	26.6	25.2	25.3	23.2	20.6
14 D	19.2	19.7	21.2	20.5	10.5	11.1	15.9	18.6	20.4	9.3	10.5	9.6	15.1	28.6	31.6	23.2	26.9	28.1	26.3	26.1	25.7	23.1	22.9	14.7	20.0
15	21.5	20.9	20.9	20.6	20.3	20.3	19.6	18.6	20.2	15.6	18.3	18.3	17.5	17.0	17.7	19.7	22.4	24.2	25.0	24.4	23.2	22.6	22.6	21.4	20.5
16	19.6	21.0	20.5	20.7	21.0	24.0	21.6	20.3	20.5	17.9	18.6	20.5	17.7	17.7	20.8	22.1	26.5	28.8	29.5	28.8	26.1	24.2	22.2	20.4	22.1
17	19.3	17.9	13.5	17.5	25.5	16.9	16.1	16.1	16.1	18.6	18.6	18.5	18.5	17.7	19.6	22.2	23.8	26.6	27.1	25.4	23.3	22.4	21.9	21.4	20.2
18	21.4	21.1	20.1	15.9	19.7	21.6	19.8	18.5	18.4	18.1	18.6	17.3	16.2	15.6	18.2	23.7	27.4	26.2	26.0	24.9	24.0	23.1	22.5	22.3	20.9
19 Q	21.6	21.1	20.8	20.9	21.7	21.1	20.5	19.8	19.5	19.3	18.8	18.4	17.9	18.3	20.4	22.5	24.2	25.5	25.5	25.1	24.0	22.8	22.6	22.0	21.4
20	22.0	22.7	21.6	19.4	18.7	17.5	17.4	14.1	14.7	14.6	17.6	16.5	17.4	18.7	20.7	22.3	24.2	26.0	26.5	25.0	26.1	24.1	21.6	20.7	20.4
21 Q	20.6	20.6	20.6	20.2	19.7	19.5	19.2	18.4	18.4	18.5	18.1	17.9	17.0	16.7	18.4	21.5	25.2	26.9	26.9	25.1	23.2	21.4	20.9	20.7	20.6
22	20.1	20.0	19.8	19.8	19.6	19.3	19.0	18.1	17.0	16.5	15.3	14.7	15.1	19.0	20.4	24.5	27.6	26.7	25.3	24.0	22.2	20.2	19.9	20.4	20.2
23 Q	20.4	20.1	20.0	19.9	19.9	19.5	19.2	18.5	18.1	17.6	17.0	15.5	14.0	14.2	16.9	22.5	25.9	27.1	26.2	23.8	20.7	19.2	19.3	20.0	19.8
24 D	20.0	19.6	19.5	19.6	19.6	19.0	19.2	16.9	17.3	17.1	18.2	30.1	11.5	11.6	16.2	31.1	34.5	31.0	34.5	28.0	26.2	23.4	19.2	14.7	21.6
25 D	14.9	17.2	8.9	19.5	24.2	18.7	29.6	24.2	11.0	23.3	19.8	14.5	22.5	23.6	24.1	22.1	23.6	25.2	24.7	23.6	23.0	22.9	17.8	17.6	20.7
26	14.7	12.9	17.5	19.4	22.6	22.0	19.6	18.3	20.1	25.6	24.2	23.2	19.5	17.2	19.6	23.8	26.9	25.5	24.9	24.9	19.5	22.0	18.7	14.3	20.7
27	15.0	15.2	16.0	15.1	21.0	14.5	17.8	26.7	23.7	29.8	37.3	33.8	25.8	18.3	20.5	25.4	31.3	30.4	28.8	27.2	24.4	22.1	20.6	20.4	23.4
28	20.5	20.5	19.6	20.1	20.6	20.3	20.3	19.6	19.4	19.3	18.7	17.0	15.4	15.4	17.1	22.1	26.9	29.0	28.7	26.3	24.1	22.1	20.3	18.3	20.9
29	18.7	20.3	20.6	20.6	19.1	18.4	19.7	21.7	21.9	19.7	18.5	17.9	16.6	17.0	17.6	20.5	24.1	26.9	26.4	24.7	22.6	21.4	20.6	20.4	20.7
30 D	20.6	20.3	19.7	19.1	14.0	15.9	18.0	16.6	16.7	17.5	18.3	16.9	16.1	17.7	19.2	20.6	22.3	24.9	25.2	24.4	24.8	15.3	20.8	4.9	18.7
31																									
Mean	19.4	19.5	19.2	19.5	20.0	19.4	20.4	19.2	17.7	18.2	18.2	17.0	15.7	16.3	19.1	22.9	26.5	27.9	27.8	26.0	24.0	22.4	20.8	19.4	20.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 27 Agincourt — $Z = 56{,}000\,\gamma +$ — September 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	187	180	162	163	131	64	85	104	139	118	120	148	155	158	158	161	168	169	176	193	194	207	228	201	157
2	192	187	177	167	165	165	164	153	158	135	142	157	163	164	168	170	172	174	180	183	184	183	185	188	170
3	185	179	177	174	147	128	129	158	171	172	168	166	166	165	166	170	175	182	183	186	183	183	178	176	169
4	176	173	172	173	172	170	170	162	164	164	165	170	170	171	171	172	172	170	165	171	176	179	179	176	171
5	178	166	170	176	170	162	154	149	165	171	171	171	172	173	166	165	170	172	178	183	187	193	188	180	172
6	181	179	178	164	162	169	177	177	177	177	178	179	179	176	174	174	178	180	185	185	184	185	180	178	177
7 Q	177	177	177	177	174	173	173	172	172	174	177	180	180	180	180	180	180	184	186	186	185	184	179	175	178
8 Q	174	174	173	173	173	173	173	173	172	173	174	179	176	174	172	173	174	174	176	180	180	181	179	179	175
9	173	173	173	174	174	173	167	169	173	156	141	160	163	163	163	169	176	182	189	191	189	192	185	179	173
10	181	181	179	179	175	176	176	175	175	176	175	179	176	173	168	168	168	170	174	179	184	186	180	179	176
11	176	175	175	174	173	162	168	174	174	174	174	174	174	169	162	160	163	173	186	203	216	226	225	209	181
12	187	180	180	179	174	119	53	99	176	180	175	168	157	161	159	162	166	174	180	187	191	191	187	188	166
13	186	182	180	180	180	180	179	179	180	180	180	180	179	173	170	176	177	182	187	191	193	198	203	197	183
14 D	203	190	185	179	142	131	167	162	136	149	166	167	161	162	158	163	171	170	175	185	186	186	211	227	172
15	191	179	177	176	177	176	176	173	162	149	149	158	157	165	171	173	177	178	183	184	184	183	183	180	173
16	178	178	178	177	175	165	165	169	170	170	172	172	172	172	171	165	161	169	176	177	181	182	178	179	173
17	177	180	182	182	149	146	163	169	174	176	176	174	171	170	169	169	171	177	181	181	182	182	181	180	173
18	177	176	176	172	176	170	168	173	171	172	175	176	175	174	174	178	181	177	175	172	177	178	178	177	175
19 Q	174	174	174	175	174	175	175	174	174	172	172	172	174	177	177	174	171	174	175	175	176	177	176	178	175
20	176	178	181	178	177	178	166	160	163	166	170	169	168	165	166	165	166	168	171	175	182	181	178	176	172
21 Q	172	169	169	170	171	170	170	169	170	170	170	173	174	172	169	159	162	170	175	176	172	172	171	171	170
22	170	168	168	169	169	168	169	168	169	169	166	169	167	165	162	160	170	174	177	180	176	174	176	169	170
23 Q	166	165	164	165	165	166	164	165	166	165	168	170	167	165	164	164	167	175	177	176	173	169	164	164	167
24 D	164	164	164	163	164	163	160	160	159	144	141	135	131	144	152	156	163	170	182	193	194	213	240	211	168
25 D	182	183	159	121	67	116	67	78	112	134	129	142	149	152	161	165	166	172	176	179	181	185	188	184	148
26	179	165	159	166	165	157	157	165	165	152	148	142	151	161	170	181	182	187	193	194	199	192	196	190	172
27	187	167	161	131	114	118	127	90	90	94	90	112	148	162	161	166	166	173	179	180	181	182	180	177	147
28	175	176	176	179	178	177	176	176	175	175	176	177	176	175	172	169	171	176	182	185	185	182	182	179	177
29	180	178	177	177	167	167	173	172	168	167	166	167	167	168	170	169	173	176	173	175	177	181	178	172	172
30 D	173	174	174	178	173	172	172	171	175	175	175	174	172	167	171	167	162	165	170	179	181	188	416	428	194
31																									
Mean	179	176	173	170	162	158	156	158	163	161	163	165	166	167	167	168	171	175	179	183	188	187	195	192	172

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 28 Agincourt — $H = 15,000\ \gamma +$ — October 1961

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	D	1146	1040	777	785	739	456	352	225	464	568	765	785	816	825	831	827	828	836	841	857	867	866	860	856	759
2		856	854	851	851	850	850	851	851	854	850	848	851	846	848	837	835	837	841	861	874	874	870	866	866	853
3		866	866	864	865	866	866	866	866	865	866	866	863	854	844	834	837	846	856	866	876	871	865	866	866	861
4		865	867	868	867	866	866	866	866	866	866	865	854	844	833	832	831	826	832	859	867	873	865	866	856	857
5		863	871	873	872	871	872	873	876	873	873	873	872	862	853	842	836	833	842	857	866	880	879	882	878	865
6		882	881	881	881	879	879	881	877	879	883	885	877	871	866	862	861	863	867	878	880	882	877	877	878	876
7		874	863	867	859	869	872	873	880	880	885	886	877	866	859	857	851	851	859	873	880	884	886	889	892	872
8		894	892	890	888	887	886	882	870	868	877	885	887	877	868	858	847	844	853	870	882	893	894	895	895	878
9		898	894	888	883	882	878	884	886	888	891	891	890	882	870	859	853	859	852	884	892	895	892	888	890	882
10	Q	892	891	888	887	888	888	890	892	893	894	894	893	883	874	862	848	848	861	872	888	889	890	894	894	883
11		895	891	890	894	896	896	899	905	895	899	906	904	901	884	864	857	860	873	876	889	879	883	895	884	888
12		871	844	874	849	855	852	863	873	871	884	894	898	889	867	851	854	857	869	870	873	884	874	874	874	869
13		865	859	863	864	849	845	867	876	884	892	885	886	880	873	866	860	855	864	881	893	895	890	884	869	873
14		859	875	876	884	885	883	880	880	887	885	887	885	882	873	861	851	850	860	872	879	885	887	886	887	877
15	Q	885	887	888	887	885	887	886	886	889	890	893	890	884	877	872	866	871	884	890	894	888	889	890	895	886
16	Q	896	894	894	890	890	888	890	889	889	890	890	890	887	882	875	869	870	877	885	889	891	892	894	893	887
17	Q	893	892	893	893	890	890	892	894	894	895	894	892	889	881	875	872	871	879	884	890	896	900	907	916	891
18	Q	912	910	908	905	903	901	896	901	901	903	904	903	898	891	880	873	844	872	883	886	891	895	897	899	894
19		901	901	895	881	880	883	888	893	895	898	898	894	891	883	875	875	878	885	891	896	891	898	902	903	891
20		885	865	857	861	864	865	824	873	886	881	883	881	876	870	865	865	865	864	876	881	886	886	889	890	872
21		888	878	880	885	883	885	886	886	891	891	897	896	885	880	879	878	875	872	873	881	890	880	868	879	883
22		882	880	881	881	880	883	884	886	887	888	886	885	877	863	859	867	877	886	890	893	890	887	889	891	882
23		895	891	890	893	891	890	887	886	887	885	884	887	880	872	864	867	877	886	897	905	897	886	882	890	886
24		888	890	890	889	890	886	890	886	885	886	886	891	886	880	872	870	872	876	883	891	895	891	891	895	886
25		898	899	898	896	894	894	896	895	895	896	897	897	897	889	876	874	884	882	884	884	882	887	879	881	890
26	D	889	886	884	867	868	869	869	880	856	892	907	903	907	897	884	868	878	875	876	885	872	902	884	876	882
27	D	858	866	853	864	810	823	838	845	860	859	875	884	879	866	861	843	827	831	853	870	874	859	858	856	855
28	D	858	860	859	861	865	871	876	879	896	899	862	671	640	678	681	732	656	710	979	1331	1516	892	796	771	860
29	D	788	752	717	751	783	808	834	871	856	863	874	865	855	847	835	826	824	830	837	847	854	855	860	864	829
30		868	866	865	864	864	865	864	869	870	874	874	870	868	859	847	835	828	829	847	854	863	869	873	872	861
31		872	870	869	869	866	864	872	879	879	880	880	880	876	866	857	851	850	857	864	871	874	877	878	877	870
Mean		886	880	870	870	867	859	858	859	867	874	881	874	869	862	854	851	849	857	876	895	903	883	879	878	871

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 29 Agincourt — D = 7°W + . . .' — October 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	10.2	8.3	15.7	23.0	28.9	23.2	46.0	12.1	19.4	37.0	12.6	19.4	23.3	24.3	18.7	22.4	25.3	28.3	26.9	25.4	24.4	23.3	23.3	23.1	22.7
2	22.9	22.4	22.4	22.4	22.1	21.8	21.8	21.1	21.5	20.7	20.3	19.8	18.5	18.7	20.6	22.6	24.0	26.0	25.2	24.0	23.5	22.8	22.6	22.6	22.1
3	22.1	21.6	21.6	21.4	21.5	21.5	21.2	20.6	20.6	19.6	18.4	17.7	17.7	17.3	18.7	22.3	25.9	27.5	27.1	24.2	23.0	22.8	22.0	22.1	21.6
4	21.1	20.9	20.3	20.5	20.7	20.0	19.6	19.4	19.1	18.6	18.9	19.5	18.3	17.5	20.1	23.3	25.2	28.6	26.2	27.2	23.7	23.5	22.3	19.5	21.4
5	19.1	20.3	20.1	20.3	20.1	20.0	20.2	18.6	18.3	19.6	16.9	16.5	15.4	15.0	15.5	18.4	22.1	24.6	25.8	25.1	23.7	22.4	21.7	20.9	20.0
6	20.9	20.6	20.3	20.4	20.3	20.0	19.2	19.4	19.8	18.3	16.0	16.4	18.2	18.8	20.0	23.3	26.6	27.7	28.2	25.8	23.1	22.4	22.2	21.7	21.2
7	21.4	15.5	15.7	18.4	18.5	17.9	18.1	18.1	17.2	16.9	17.1	16.5	15.9	15.2	15.8	18.4	21.8	23.8	24.1	23.7	22.7	21.8	21.5	21.2	19.1
8	20.6	19.9	19.6	19.6	19.6	20.0	19.9	14.9	12.5	13.6	12.2	14.0	14.1	13.8	13.8	17.6	22.4	27.0	28.2	26.3	23.8	21.5	21.2	20.7	19.0
9	20.6	20.2	18.7	20.0	19.1	21.1	19.3	19.4	18.9	18.7	18.7	17.1	15.7	15.4	16.3	20.0	25.1	28.8	28.7	26.0	23.2	21.2	20.9	20.6	20.6
10 Q	20.1	19.6	19.8	19.6	20.1	20.3	20.0	19.7	19.3	18.9	18.5	17.5	15.7	14.7	14.6	17.3	20.8	24.7	26.4	26.1	24.4	22.1	21.3	20.4	20.1
11	20.1	20.1	19.5	19.6	18.8	19.1	19.4	18.2	18.7	22.4	14.3	16.0	17.8	17.5	16.4	18.3	22.5	25.8	27.3	27.6	26.4	25.2	22.1	21.5	20.6
12	20.4	4.4	19.2	15.7	17.0	24.6	16.7	22.8	28.6	22.6	17.9	17.3	16.6	15.7	20.7	25.3	24.2	24.7	25.5	25.4	24.2	24.1	23.0	21.2	20.7
13	20.4	18.3	18.8	18.3	13.1	15.0	17.2	19.6	26.2	18.4	18.4	17.3	16.1	16.0	16.3	18.0	21.9	27.2	26.8	24.5	22.9	21.5	21.3	20.8	19.8
14	15.9	20.4	20.2	20.4	20.7	20.8	21.8	24.6	20.1	17.5	18.4	19.3	17.8	18.3	17.1	19.3	22.9	25.2	25.3	24.1	22.5	21.4	21.1	20.7	20.7
15 Q	20.6	20.5	20.0	19.9	20.4	20.7	19.6	19.4	18.9	17.7	18.5	18.5	17.2	16.1	16.1	16.8	19.1	20.9	22.0	21.4	21.1	21.0	20.9	20.6	19.5
16 Q	19.9	19.8	19.7	19.7	19.7	19.5	19.4	18.9	19.1	19.3	19.0	18.9	17.7	16.5	16.8	18.4	20.5	23.1	24.4	24.0	23.1	22.4	17.9	20.8	19.9
17 Q	20.2	19.9	19.5	19.7	19.8	19.6	19.1	19.2	19.0	18.7	18.7	18.2	17.2	15.9	15.5	17.4	20.8	23.8	24.9	24.1	22.4	21.8	21.4	20.6	19.9
18 Q	20.0	19.7	19.4	19.5	19.8	18.5	18.0	18.7	18.2	18.0	18.2	18.0	16.7	15.0	15.2	16.7	19.8	22.2	23.2	23.1	22.6	21.9	21.2	20.8	19.4
19	20.6	20.6	19.2	19.2	18.9	18.7	18.9	19.5	19.4	18.9	18.7	18.1	16.3	16.2	17.4	19.2	21.5	23.2	23.6	23.3	22.3	22.3	22.9	23.8	20.1
20	17.1	23.4	17.4	17.5	10.7	22.1	29.2	17.2	21.1	19.7	17.5	18.7	18.0	18.1	19.2	20.4	22.3	24.1	23.6	22.9	21.7	20.8	20.9	20.9	20.2
21	20.8	19.5	20.9	21.1	20.9	20.6	21.0	20.5	20.1	19.8	19.0	17.9	17.2	18.8	19.9	21.6	24.6	27.4	28.9	26.4	23.2	23.5	25.0	22.6	21.7
22	20.7	19.9	19.9	20.5	20.2	19.7	20.2	20.7	19.7	19.1	21.4	19.8	17.7	18.2	20.3	24.5	26.0	25.6	25.5	24.5	22.3	21.3	21.0	20.4	21.2
23	20.0	20.0	21.1	20.5	20.9	20.0	19.5	20.4	19.0	18.1	18.1	17.8	17.6	17.5	18.5	22.4	25.4	24.7	24.3	23.0	21.9	23.4	22.7	21.0	20.7
24	20.4	20.1	20.3	19.8	21.1	19.8	21.0	19.0	19.2	18.6	17.9	17.0	17.0	17.0	17.6	19.1	22.3	24.1	24.3	23.7	22.8	21.7	21.6	20.9	20.3
25	20.1	19.9	20.4	20.7	21.0	20.8	20.2	19.9	20.2	18.4	18.3	17.6	15.7	16.4	19.8	24.3	27.4	27.1	28.5	26.9	23.3	21.2	20.6	20.5	21.2
26 D	19.8	20.0	18.1	17.9	17.2	12.3	14.1	20.0	23.3	21.6	19.2	19.4	18.2	18.3	21.3	23.2	26.4	24.5	25.4	25.2	25.4	33.7	34.0	28.5	22.0
27 D	16.3	18.2	19.0	-1.5	16.4	16.6	15.0	15.7	21.0	24.3	28.2	18.6	16.2	15.8	14.9	17.1	22.2	26.6	28.9	28.2	26.3	26.3	25.5	23.6	20.0
28 D	19.1	19.4	18.2	19.5	19.3	21.3	21.7	20.9	24.5	21.1	14.4	50.5	92.0	35.9	28.4	33.3	40.1	35.9	1.9	-25.8	-9.2	27.5	10.5	11.7	23.0
29 D	10.5	15.6	12.9	34.6	39.2	42.2	36.3	16.2	20.0	21.6	19.3	19.1	18.1	16.2	16.3	18.7	22.3	25.4	26.3	25.8	24.8	23.7	22.6	21.7	22.9
30	21.7	21.7	21.8	21.8	22.0	22.0	22.2	22.5	23.7	22.0	20.9	20.2	18.0	16.4	15.8	19.0	22.3	25.5	25.8	24.4	23.5	22.8	22.5	21.3	21.7
31	20.6	20.3	21.1	21.4	21.8	22.0	26.2	23.7	20.6	20.0	20.2	19.8	18.7	18.5	18.1	19.7	22.5	24.8	25.2	24.3	23.2	23.1	23.0	21.4	21.7
Mean	19.5	19.1	19.4	19.7	20.3	20.7	21.4	19.4	20.2	20.0	18.3	19.1	19.7	17.6	17.9	20.6	23.7	25.8	25.1	23.3	22.3	23.0	22.0	21.2	20.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 30 Agincourt — $Z = 56{,}000\gamma +$ — October 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	411	277	322	128	150	121	41	20	-56	-96	123	153	161	179	190	195	198	202	202	208	208	200	200	196	164
2	198	198	199	195	195	194	192	190	190	190	192	192	189	186	185	185	189	191	197	197	195	200	198	190	193
3	186	187	187	188	188	188	188	188	187	185	185	186	183	181	180	179	180	188	196	196	193	192	193	192	187
4	189	187	186	194	194	193	192	185	183	182	182	184	180	180	180	180	180	184	190	198	202	195	195	195	188
5	193	188	185	184	182	182	180	179	179	178	178	182	179	179	174	170	175	177	181	186	186	187	186	184	181
6	183	182	181	179	179	179	178	176	173	173	172	170	180	178	168	174	177	181	187	190	193	194	190	186	180
7	187	186	173	173	176	182	184	182	181	182	181	181	178	178	178	176	169	169	175	179	182	183	182	182	179
8	180	179	178	179	178	174	159	151	167	174	174	177	179	179	178	177	175	176	179	182	185	183	182	181	176
9	180	180	180	180	178	179	178	181	182	181	181	181	181	181	179	176	179	181	182	185	185	183	182	182	181
10 Q	180	180	179	179	178	179	179	179	179	180	179	181	182	179	179	178	181	183	182	185	184	185	182	181	181
11	179	184	184	184	183	183	182	174	168	150	141	150	156	163	168	170	171	171	177	181	188	185	184	186	173
12	192	194	150	180	184	166	166	161	142	142	163	172	178	181	182	181	178	175	178	184	190	192	198	198	176
13	202	204	200	189	171	176	177	173	155	155	176	181	181	179	179	178	177	181	183	179	179	181	185	181	180
14	193	192	190	187	185	185	181	163	168	177	179	178	178	180	180	180	180	180	183	184	185	183	183	181	181
15 Q	180	179	179	179	179	179	178	178	177	174	175	174	175	174	177	172	168	170	168	173	174	174	177	176	175
16 Q	175	174	174	174	175	175	175	174	175	175	175	173	175	174	171	168	166	168	173	174	173	170	174	175	173
17 Q	174	174	173	174	174	174	174	173	172	172	172	172	169	170	168	165	148	151	163	168	173	174	173	171	170
18 Q	168	168	168	170	170	168	171	172	172	172	172	174	174	173	172	167	163	164	167	170	173	175	175	174	171
19	173	173	174	181	179	181	180	179	175	173	172	174	174	173	174	171	168	171	172	168	172	174	177	178	174
20	183	236	222	216	198	183	116	153	186	186	183	185	184	180	178	174	171	173	177	177	178	179	179	179	182
21	178	177	178	178	178	178	177	177	177	177	174	173	173	174	173	171	174	179	184	181	183	181	195	192	178
22	186	185	183	181	179	177	177	178	178	177	175	175	175	174	169	181	166	168	171	173	177	178	178	178	177
23	176	175	174	173	174	173	174	172	173	175	173	175	175	173	172	166	163	164	170	174	175	178	175	175	173
24	173	172	172	172	168	156	154	163	167	165	165	167	168	167	166	161	161	167	171	174	173	173	174	174	168
25	173	174	172	172	171	171	171	170	168	167	168	169	168	168	167	162	166	168	173	179	181	180	185	185	172
26 D	181	173	175	170	163	150	155	156	120	98	107	111	115	127	141	150	158	164	173	180	198	255	285	284	166
27 D	247	210	197	156	129	143	150	145	163	156	146	176	175	174	176	174	169	173	182	204	204	243	235	222	181
28 D	206	203	196	186	182	182	183	181	165	107	70	-36	-61	52	154	183	209	318	315	-173	-143	257	276	235	144
29 D	225	173	114	73	68	124	104	180	192	197	192	191	196	196	195	193	189	192	193	195	197	197	195	193	174
30	193	192	192	192	192	190	191	190	185	187	188	192	194	193	190	195	197	200	199	199	196	193	193	192	193
31	191	191	190	190	188	181	164	169	183	186	186	187	188	186	188	187	186	190	194	194	193	191	188	187	187
Mean	195	189	185	176	174	173	167	168	165	161	168	168	168	172	175	175	175	181	185	173	175	191	193	190	177

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 31. Agincourt — H = 15,000 γ+ — November 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	875	874	873	872	873	871	872	873	873	878	878	877	879	873	869	868	870	868	867	868	874	880	882	879	874
2	881	882	880	879	879	880	880	878	876	882	887	881	867	878	877	873	871	867	867	872	878	881	883	879	877
3	877	872	870	869	875	875	878	878	885	883	885	882	877	872	868	868	872	875	879	883	883	888	888	888	878
4	888	888	888	884	883	885	885	886	890	892	891	892	890	882	877	875	877	882	888	893	894	884	884	876	886
5 D	873	873	879	886	878	878	878	883	883	883	884	891	887	854	853	864	863	869	874	873	873	877	861	854	874
6	866	866	865	880	867	856	869	867	882	876	881	880	877	866	862	863	865	869	877	882	886	889	893	894	874
7 D	894	880	869	883	880	874	857	858	856	867	858	863	852	822	806	812	817	806	832	838	910	871	847	848	854
8 D	841	881	799	832	836	842	847	861	867	867	869	869	865	850	846	842	845	851	862	868	857	863	866	870	854
9	872	858	861	866	863	866	867	864	865	877	879	879	878	864	857	850	847	850	851	858	872	881	878	876	866
10	874	875	873	883	883	883	882	880	879	880	880	883	876	866	853	844	846	852	862	873	880	884	884	883	873
11	883	882	880	880	883	883	883	883	886	884	885	886	877	863	849	844	849	863	879	888	888	890	888	888	878
12	880	867	864	877	878	868	859	863	864	873	879	889	883	882	874	854	849	868	880	887	886	882	884	877	874
13	874	872	871	872	875	877	880	882	883	885	887	886	884	877	870	864	864	869	878	887	888	894	899	895	880
14	894	894	891	882	867	882	881	857	878	890	894	895	894	886	879	872	867	870	868	868	876	884	887	887	881
15 Q	889	889	889	888	888	889	888	889	889	889	890	890	888	880	874	868	868	873	880	885	893	895	893	893	886
16	895	895	892	890	889	887	888	889	888	889	893	893	889	879	870	859	860	870	882	889	895	897	889	878	885
17 D	890	888	889	890	889	893	895	897	900	899	900	896	894	880	860	856	874	876	875	885	886	879	870	867	884
18 D	869	875	854	845	855	874	882	865	840	845	864	870	846	870	874	855	861	850	859	850	855	865	853	843	859
19	846	848	863	859	849	856	861	876	882	882	885	881	881	877	871	865	860	863	872	877	880	886	887	889	871
20	888	888	886	887	880	873	873	872	876	886	890	891	881	872	879	865	851	851	859	867	872	879	873	871	875
21	871	857	851	853	859	870	879	881	885	890	891	892	890	884	880	879	879	880	884	886	890	891	887	885	879
22 Q	886	886	895	891	891	891	893	893	893	895	895	896	891	888	881	874	871	872	877	884	886	885	891	893	888
23 Q	892	891	891	890	891	891	892	895	896	895	896	891	888	886	881	877	878	881	886	889	896	899	900	897	890
24 Q	893	892	891	891	890	891	891	892	896	892	895	892	890	882	875	865	861	866	872	886	891	897	898	903	887
25	902	901	899	900	899	898	897	898	898	902	901	900	899	891	880	866	863	868	881	885	897	898	898	898	892
26	898	896	894	893	896	899	898	901	892	887	897	901	898	891	880	873	870	871	879	891	900	901	892	886	892
27	886	887	886	879	882	886	888	891	892	897	898	898	896	886	876	868	862	860	867	884	895	899	900	899	886
28	897	892	890	892	893	898	896	898	899	902	899	896	893	887	879	868	863	863	874	886	892	897	898	898	890
29	895	892	885	884	887	886	887	886	886	891	892	896	895	892	880	869	866	871	879	887	896	899	898	897	887
30 Q	894	893	894	892	892	896	892	897	899	901	900	901	899	896	889	876	868	872	881	892	902	906	907	904	894
31																									
Mean	882	881	877	879	878	880	881	881	883	885	887	888	883	876	869	863	862	865	872	879	886	887	885	883	879

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 32 Agincourt — D = 7°W + ...' — November 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	21.3	21.3	21.3	20.8	23.5	20.0	20.7	21.3	21.8	20.5	19.2	21.4	20.8	18.7	18.1	18.8	20.8	22.6	23.6	24.3	23.5	22.3	21.7	21.4	21.2
2	20.8	20.8	20.8	20.6	20.6	20.8	20.8	23.5	23.7	20.1	16.1	18.2	20.5	21.9	21.3	21.9	23.4	24.4	24.2	23.5	23.3	22.3	21.5	21.4	21.5
3	21.6	21.6	20.1	19.6	23.7	19.7	19.6	18.5	20.0	20.0	19.2	19.5	17.9	18.3	18.5	19.6	20.6	22.0	23.0	23.0	22.6	22.0	21.7	20.7	20.5
4	20.1	20.6	20.2	19.9	19.6	19.7	20.0	19.9	19.8	19.6	19.4	19.3	18.4	17.3	17.6	18.7	20.7	22.7	23.2	22.4	21.6	21.6	21.6	21.3	20.2
5 D	19.5	20.5	19.9	20.4	20.5	15.1	20.0	20.4	23.1	20.7	17.5	16.5	15.3	24.0	37.1	28.2	27.2	27.0	25.1	25.7	24.4	22.7	22.5	19.3	22.2
6	19.5	19.5	18.5	18.5	18.0	17.8	19.7	18.4	27.8	18.2	17.5	16.7	17.6	17.0	17.0	19.0	20.9	22.1	22.5	22.2	21.4	21.0	20.7	20.3	19.7
7 D	20.5	20.9	18.4	17.8	20.2	17.3	16.1	12.7	12.7	16.4	23.6	38.2	34.9	32.1	32.3	29.3	27.3	26.1	30.8	30.7	23.4	23.6	27.3	23.1	24.0
8 D	18.5	11.6	6.8	15.2	15.8	20.0	19.3	24.2	20.1	20.7	20.7	20.6	19.7	18.5	16.5	19.0	21.8	24.3	24.7	23.2	23.1	22.7	23.4	21.0	19.6
9	20.2	18.5	17.5	19.7	19.7	18.8	20.7	20.5	27.3	20.7	19.4	20.7	20.4	17.8	18.3	20.7	23.9	24.9	26.3	25.4	23.8	22.7	22.6	22.2	21.4
10	20.9	20.5	18.8	16.9	20.7	22.0	21.4	20.6	20.2	19.1	19.4	18.5	17.0	16.8	18.5	20.5	23.2	25.4	26.0	24.8	23.0	21.8	21.3	20.8	20.8
11	20.4	20.3	20.5	20.5	20.7	21.1	21.4	21.4	20.9	20.2	20.0	19.3	18.2	16.8	16.8	20.2	22.7	24.3	24.7	23.3	21.7	20.8	20.7	20.5	20.7
12	18.6	16.8	16.7	17.9	19.3	18.1	18.2	24.9	25.3	19.6	16.8	18.8	23.5	23.3	23.2	23.7	26.9	30.0	26.0	24.8	24.4	23.5	21.4	18.6	21.7
13	20.8	18.0	18.2	18.9	19.1	19.9	20.8	20.8	20.3	20.5	20.2	19.4	18.5	17.4	17.4	19.2	22.0	24.1	24.7	24.0	23.2	21.7	20.8	20.1	20.4
14	19.8	18.6	19.4	19.9	19.4	15.9	18.6	26.0	21.9	17.2	17.7	17.9	16.9	16.5	16.5	18.0	20.3	23.3	25.7	26.9	24.7	22.6	20.7	19.9	20.2
15 Q	19.6	19.4	19.6	19.9	20.5	20.9	20.6	20.6	20.8	20.5	19.8	19.1	18.4	16.9	16.7	18.3	20.5	22.9	23.7	22.9	22.0	21.5	20.8	20.2	20.3
16	19.7	19.6	19.6	19.7	19.9	20.3	20.2	20.4	20.5	19.7	19.4	18.8	18.0	17.1	17.2	19.7	23.0	24.9	25.4	24.5	23.2	22.8	24.2	22.2	20.8
17 D	19.9	19.7	18.7	18.9	19.9	21.0	20.8	20.6	20.4	19.5	18.5	18.8	18.1	15.2	18.1	30.1	26.3	27.5	26.5	26.4	26.3	23.6	22.8	19.3	21.5
18 D	9.9	16.8	16.3	16.4	18.8	21.8	24.4	21.8	27.4	33.8	14.3	20.5	34.3	37.5	28.8	31.3	30.1	28.3	25.6	27.8	28.0	22.7	20.7	18.6	24.0
19	17.9	17.9	17.1	16.2	14.8	19.1	23.2	26.9	19.6	19.6	19.8	22.1	21.8	19.9	17.7	20.1	21.9	23.2	23.5	22.8	22.0	21.3	20.9	20.7	20.4
20	20.9	20.9	21.1	19.9	18.7	18.4	19.9	26.8	21.6	16.7	16.6	18.1	21.7	25.3	21.7	20.7	22.3	24.1	24.3	25.7	25.8	24.0	21.9	19.6	21.5
21	19.2	18.0	15.8	16.4	17.3	20.7	22.2	22.2	21.0	20.0	19.5	19.9	19.4	19.4	18.5	18.3	19.5	20.7	21.5	21.8	21.5	21.5	21.3	20.4	19.8
22 Q	18.9	19.5	19.9	19.8	20.1	20.4	20.5	20.2	20.1	19.9	19.9	19.6	19.2	17.9	18.3	18.5	20.4	22.3	23.1	22.3	21.9	21.5	20.8	20.2	20.2
23 Q	19.9	19.9	20.1	20.2	20.4	20.6	20.8	20.6	20.5	20.4	19.8	19.7	19.3	18.7	17.8	19.0	21.4	24.2	24.7	23.6	22.4	21.3	20.4	20.1	20.7
24 Q	20.4	20.0	20.3	20.5	20.7	21.0	20.4	19.9	19.6	19.4	19.4	19.7	19.5	18.5	18.6	20.4	23.1	25.1	26.6	25.0	24.1	22.4	21.5	20.3	21.1
25	19.4	18.9	19.4	19.6	19.9	20.3	20.5	20.1	21.7	25.0	18.1	17.0	17.3	15.8	16.7	18.5	21.6	23.6	25.0	25.0	24.0	22.0	20.4	19.6	20.4
26	19.2	18.6	19.3	19.6	19.4	20.4	21.3	22.5	20.0	19.7	17.6	19.7	17.6	16.1	15.9	18.2	20.7	23.8	25.3	24.7	23.0	21.6	21.3	20.5	20.2
27	20.3	19.7	19.0	20.9	20.1	20.6	21.3	21.6	21.7	19.9	19.5	19.0	18.4	17.4	17.0	18.6	20.2	23.4	25.5	25.0	23.4	21.9	20.6	19.8	20.6
28	19.7	19.6	20.0	19.5	20.4	20.4	20.5	20.4	19.9	19.6	19.6	19.4	19.2	18.4	18.5	19.2	23.1	25.0	28.0	26.6	24.1	22.2	21.0	20.1	21.0
29	19.6	19.3	18.6	19.7	19.6	21.6	20.7	20.8	20.1	19.7	18.9	19.3	18.6	17.9	17.9	18.2	20.2	23.4	25.3	25.1	23.3	21.5	20.5	20.7	20.4
30 Q	19.6	19.6	19.7	20.0	20.3	20.5	21.3	22.1	20.9	19.6	19.4	18.9	18.7	17.0	16.1	17.4	19.7	23.6	25.9	25.0	23.1	21.5	20.3	19.7	20.4
31																									
Mean	19.5	19.2	18.7	19.1	19.7	19.8	20.5	21.4	21.3	20.2	18.9	19.8	20.0	19.5	19.5	20.8	22.5	24.3	25.0	24.6	23.4	22.2	21.6	20.4	20.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 33 Agincourt $Z = 56,000\ \gamma +$ November 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	185	185	186	186	180	182	181	181	175	176	177	180	181	183	182	181	181	183	186	186	187	186	183	183	182
2	181	181	181	182	181	181	180	175	162	158	157	163	170	175	175	177	174	177	180	180	182	182	182	181	176
3	182	183	185	185	177	174	175	177	181	179	179	180	177	178	178	177	179	179	181	182	182	182	182	181	180
4	182	182	182	182	182	181	182	182	181	180	180	180	180	180	177	177	177	181	181	180	177	180	182	184	181
5 D	189	187	186	182	186	167	166	170	159	150	156	170	175	178	184	181	183	187	188	189	188	188	194	200	179
6	195	192	186	164	156	159	175	171	134	131	155	158	166	173	176	178	177	180	180	181	179	178	177	176	171
7 D	176	180	192	179	170	165	153	115	121	135	129	127	127	150	169	183	213	236	231	235	351	248	233	211	185
8 D	208	208	177	196	170	138	119	134	177	183	186	188	188	193	192	184	186	188	192	195	198	200	194	190	183
9	188	186	182	185	182	178	178	177	171	170	171	170	172	175	174	176	178	182	186	188	188	187	188	189	180
10	187	186	183	175	167	165	177	180	178	180	180	180	182	181	177	176	176	179	183	184	183	182	181	180	179
11	180	180	180	179	178	180	178	179	178	178	180	178	180	181	177	175	176	179	181	180	178	178	178	180	179
12	180	184	189	187	182	176	173	153	150	161	166	167	171	166	166	168	173	176	180	184	184	183	185	189	175
13	191	191	189	188	184	183	183	183	182	182	181	181	183	183	180	180	178	178	181	184	184	182	182	178	183
14	178	180	179	178	170	169	173	153	131	170	177	177	179	177	176	173	170	171	177	183	182	184	184	182	174
15 Q	179	177	177	178	177	177	176	178	177	176	177	177	180	179	177	174	172	176	181	182	181	180	179	177	178
16	177	176	175	175	175	175	174	175	176	175	175	175	176	176	174	169	170	174	177	177	177	175	177	182	175
17 D	179	176	176	176	175	174	174	173	174	172	171	170	171	170	169	170	168	168	171	175	181	181	190	224	176
18 D	214	212	211	192	172	147	155	128	113	29	80	114	120	127	146	154	157	169	191	199	216	205	204	206	161
19	200	193	160	172	160	151	150	146	168	175	174	174	173	172	169	166	170	175	177	178	179	177	176	176	171
20	175	174	175	172	169	167	169	156	149	168	169	168	171	169	174	178	180	186	191	193	192	191	191	189	176
21	188	188	192	190	184	178	178	178	179	180	179	178	179	176	177	174	172	174	175	176	178	180	179	179	180
22 Q	179	176	176	176	176	176	175	174	174	175	173	171	174	176	176	169	169	169	171	174	174	175	175	174	174
23 Q	174	173	170	173	169	170	171	171	171	171	171	170	172	173	168	163	164	165	169	174	174	174	173	172	171
24 Q	171	173	173	174	174	175	175	175	173	174	174	174	174	177	173	173	172	174	175	178	179	179	176	175	175
25	174	173	172	171	170	170	170	168	168	159	163	167	168	169	165	160	164	169	172	173	174	173	171	172	169
26	172	169	169	169	167	165	162	161	163	168	168	168	168	167	163	160	160	161	166	169	171	171	171	173	167
27	173	173	174	173	173	170	169	169	168	169	169	169	172	170	168	168	167	169	173	176	175	176	174	172	171
28	172	169	170	169	169	168	169	169	169	168	168	168	169	170	168	165	164	168	173	174	173	173	171	169	169
29	168	168	168	170	167	166	165	168	167	168	168	167	167	164	161	157	160	160	167	172	173	169	168	168	166
30 Q	168	167	167	167	167	165	166	163	165	166	167	166	167	166	163	160	159	160	163	168	172	169	168	167	166
31																									
Mean	182	181	179	178	174	170	170	166	165	164	167	169	171	172	172	172	173	176	180	182	187	183	182	183	175

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 34 Agincourt — $H = 15{,}000\gamma +$ — December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	904	903	903	904	904	898	892	881	863	892	877	883	838	719	797	786	821	839	843	847	853	854	847	842	858
2 D	834	824	834	849	851	851	862	866	867	869	861	853	881	823	818	818	825	826	821	850	868	871	871	877	849
3 D	809	807	794	786	754	787	782	804	750	802	871	863	852	867	863	847	845	852	855	854	867	867	881	875	831
4	877	887	882	876	876	872	881	877	871	874	887	886	885	882	881	867	856	868	880	886	886	891	889	889	880
5	892	894	891	893	896	892	890	893	893	894	897	896	893	888	890	887	854	841	815	882	877	883	879	882	883
6	878	878	873	877	871	878	883	883	883	883	882	893	890	882	869	852	884	838	858	861	871	878	879	880	875
7	878	877	881	883	887	887	888	888	887	882	887	882	883	891	881	870	866	866	873	883	889	893	893	891	883
8 Q	892	889	888	889	889	890	890	888	890	892	893	899	895	889	879	867	864	868	877	886	897	899	897	893	888
9	892	888	888	890	892	893	893	893	888	887	889	888	888	890	883	873	868	873	882	885	888	892	893	890	887
10	892	890	890	891	886	888	891	893	893	894	891	893	901	893	884	876	874	876	883	894	894	896	890	884	889
11	883	872	870	878	879	880	884	881	869	881	892	896	904	905	898	888	883	881	879	889	897	898	884	879	885
12	874	874	861	859	874	881	882	881	884	885	889	893	894	894	892	883	878	879	887	898	904	905	903	903	886
13	900	898	895	895	893	894	894	897	898	899	900	900	899	890	880	869	870	880	889	901	905	899	887	878	892
14	879	884	885	886	888	886	885	885	885	886	890	894	894	888	881	874	872	874	880	889	897	899	895	885	886
15	885	885	884	881	886	882	889	890	889	894	891	894	892	895	892	889	882	881	880	885	890	889	885	892	888
16	890	886	885	886	889	889	894	891	891	894	894	895	895	892	889	883	880	877	880	884	889	893	888	884	888
17	881	881	891	886	883	888	890	891	895	895	896	895	897	896	894	886	877	874	879	887	896	900	900	901	890
18 Q	900	898	895	896	900	902	903	903	905	905	903	903	904	902	896	886	881	883	891	900	906	907	908	907	899
19 Q	908	907	906	903	904	907	906	908	908	910	910	909	908	908	902	895	891	888	892	901	906	909	910	908	904
20 Q	907	904	902	899	902	904	903	907	904	905	907	911	910	906	905	897	891	890	893	899	905	909	908	909	903
21	908	904	899	892	897	904	909	911	911	909	911	911	911	912	913	909	902	896	900	905	909	909	908	910	906
22	907	904	904	904	905	906	907	909	911	913	914	913	910	903	905	900	890	888	885	892	900	904	901	900	903
23	896	894	886	882	887	889	893	888	902	904	904	905	906	904	890	887	879	881	884	893	900	905	892	900	894
24	913	907	893	887	890	898	904	904	908	908	904	906	905	900	897	876	872	874	874	881	890	893	898	901	895
25 Q	900	898	898	898	897	897	898	898	898	899	896	898	899	900	893	884	880	873	880	890	898	904	905	905	895
26	907	907	904	903	901	901	898	903	906	909	910	913	910	909	905	897	889	886	886	890	898	903	905	904	902
27	895	893	883	889	898	895	889	894	893	889	898	898	904	910	907	898	888	883	887	903	919	923	918	909	898
28 D	904	902	890	895	897	898	904	909	905	892	886	914	918	900	885	853	853	877	887	885	892	891	889	868	891
29	869	879	891	880	891	893	893	893	895	895	895	898	905	895	885	874	862	868	887	893	896	898	872	883	887
30 D	893	893	890	869	868	891	882	888	886	880	894	888	884	883	879	846	834	853	871	884	885	886	888	883	879
31	883	882	882	881	885	884	882	886	887	887	890	890	887	885	884	873	863	867	867	879	900	896	896	885	884
Mean	888	887	884	884	885	887	888	890	888	891	894	895	895	887	884	874	870	871	876	886	893	895	892	890	886

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 35 Agincourt — D = 7°W + ...' — December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	22.3	18.8	18.9	18.7	19.5	20.2	22.1	21.4	18.4	18.1	23.1	30.9	23.0	31.0	66.8	28.9	30.5	26.6	27.4	25.6	24.4	22.4	21.4	19.5	25.0
2 D	20.1	8.7	16.8	19.6	19.9	16.1	18.8	19.4	23.9	20.3	26.9	32.1	28.1	46.3	76.4	33.4	30.1	25.4	27.7	29.7	24.4	23.3	30.0	23.5	26.5
3 D	14.3	9.0	8.1	4.8	2.8	3.5	12.7	21.4	29.9	19.4	28.8	34.6	48.6	34.7	28.1	29.4	30.0	27.2	26.2	25.7	25.4	15.9	23.7	22.3	21.9
4	20.8	19.6	19.7	18.7	20.2	22.0	22.7	21.7	24.3	28.1	20.5	20.5	21.7	19.4	18.1	21.3	24.8	24.2	24.4	24.3	23.2	22.3	21.8	20.9	21.9
5	20.7	20.0	19.8	19.8	21.7	21.2	22.0	23.1	21.4	20.2	20.0	20.0	19.9	17.7	15.1	17.7	19.0	26.6	30.6	28.0	26.1	23.7	22.6	20.8	21.6
6	20.6	19.7	18.3	13.6	11.0	20.4	21.5	21.2	20.9	20.5	19.8	19.2	19.7	22.0	22.9	23.3	27.3	29.8	27.4	26.1	25.7	22.6	21.5	20.6	21.5
7	20.0	20.0	20.3	20.6	21.1	21.6	22.0	21.9	21.5	22.1	19.9	18.0	22.6	20.3	17.8	18.7	20.8	23.3	25.0	24.6	23.3	21.8	21.1	20.7	21.2
8 Q	20.6	20.2	20.4	20.6	20.9	20.9	21.2	20.9	21.1	20.0	20.1	19.6	19.7	18.9	17.5	18.9	20.4	23.4	24.3	23.8	22.7	21.5	20.6	20.4	20.8
9	20.4	20.6	20.6	20.4	20.9	20.8	21.2	20.7	20.4	20.5	19.6	19.3	19.4	18.0	17.0	18.7	21.5	23.3	24.2	24.3	23.8	22.5	20.7	20.0	20.8
10	19.8	19.8	19.8	20.6	20.9	20.9	21.2	21.2	20.7	19.9	19.7	21.7	20.8	18.6	17.3	19.5	21.9	25.4	27.2	27.5	26.3	25.5	25.7	21.8	21.8
11	20.4	18.5	19.2	17.6	17.8	19.8	20.3	21.5	23.5	26.4	19.7	19.6	20.4	21.3	22.7	24.4	27.7	30.1	30.7	31.8	31.3	30.7	25.9	23.0	23.5
12	20.9	20.8	16.9	16.9	20.4	20.0	20.9	21.2	20.9	20.9	20.6	20.3	20.0	18.8	18.0	19.6	20.9	24.0	25.2	24.3	22.2	20.9	20.6	20.1	20.6
13	19.8	19.8	19.8	20.1	20.7	20.9	21.2	21.3	20.9	20.6	20.4	20.1	19.4	19.2	16.9	17.8	21.9	24.5	25.0	24.0	22.6	22.7	23.1	22.7	21.1
14	21.0	18.8	18.7	19.6	20.3	20.5	20.7	20.6	20.5	19.6	20.1	20.1	19.7	18.9	18.4	19.1	21.7	24.1	25.5	24.6	22.8	22.0	20.9	20.9	20.8
15	20.3	19.6	19.5	18.9	16.9	19.5	20.4	21.5	22.4	22.6	19.9	21.5	22.1	20.8	19.7	19.5	20.5	21.5	22.6	23.2	23.0	22.7	21.2	20.6	20.8
16	19.9	19.1	18.5	18.6	19.1	20.3	19.8	20.1	19.6	19.6	19.6	19.9	19.6	18.2	17.7	17.6	19.7	21.4	22.8	22.8	22.3	21.1	21.2	21.1	20.0
17	20.2	20.2	19.3	19.1	18.6	19.7	20.4	21.0	20.9	19.8	20.5	19.9	19.2	18.4	17.4	18.1	20.0	22.0	23.8	24.1	23.2	21.7	20.8	20.1	20.4
18 Q	19.8	19.7	19.1	18.5	19.6	20.5	20.5	20.5	20.3	19.8	19.6	19.5	19.0	18.2	17.7	18.3	19.6	21.6	23.2	23.0	22.0	21.0	20.2	19.8	20.0
19 Q	19.5	19.3	19.3	19.5	19.9	20.6	20.8	20.4	20.1	19.6	19.5	19.1	18.6	18.5	18.0	18.5	20.2	22.4	24.1	23.6	22.2	20.5	19.6	19.5	20.1
20 Q	19.3	19.2	19.6	19.6	19.9	20.2	21.3	22.3	19.5	18.1	19.9	21.0	19.8	18.1	17.9	17.6	20.2	23.0	24.3	23.4	22.0	20.5	19.9	19.6	20.3
21	19.2	19.1	19.4	18.9	18.5	20.3	20.3	20.1	19.7	20.3	20.3	19.1	18.7	18.4	17.9	17.9	19.5	21.2	22.6	22.7	21.6	21.5	20.6	20.3	19.9
22	19.3	18.7	18.3	18.8	19.7	19.7	20.5	20.5	20.4	19.8	19.7	18.5	18.1	20.4	21.5	21.1	21.8	23.7	25.1	24.4	24.8	22.0	20.8	20.2	20.7
23	19.3	19.1	18.7	17.4	17.9	17.4	17.2	18.9	20.9	18.0	18.1	20.2	22.4	20.4	16.3	18.5	20.4	22.6	23.9	23.8	23.0	22.4	22.8	21.6	20.0
24	18.0	17.7	18.4	18.4	18.1	20.3	21.1	20.9	20.8	20.4	19.5	19.3	19.2	18.1	17.6	18.1	20.3	22.7	24.5	24.8	23.5	21.8	20.2	19.5	20.2
25 Q	18.8	18.5	18.5	19.0	19.3	19.9	20.2	20.6	20.5	20.8	19.5	19.1	18.4	17.3	16.1	16.2	19.1	21.2	22.6	23.3	22.8	21.3	19.9	19.1	19.7
26	18.7	18.4	18.7	18.6	19.3	20.1	20.1	20.5	20.1	19.1	19.2	19.0	19.2	18.6	17.9	17.3	19.5	22.5	23.7	23.9	23.1	21.6	19.8	19.4	20.0
27	19.7	16.0	15.0	14.9	16.5	17.9	18.9	20.4	16.6	17.3	17.3	17.8	19.7	16.9	15.3	14.5	16.9	20.6	22.3	22.9	22.9	20.8	19.2	19.1	18.3
28 D	18.9	18.8	18.6	26.2	24.9	20.1	20.2	22.3	20.2	16.8	17.6	24.8	20.8	16.4	15.6	24.5	29.1	27.3	24.5	25.1	24.8	22.8	22.0	20.1	21.2
29	16.2	11.8	16.5	16.8	19.8	20.1	20.5	20.3	19.9	20.7	21.2	21.6	18.8	17.7	18.2	18.7	21.8	24.3	24.4	23.7	22.2	21.1	19.9	18.8	19.8
30 D	18.5	17.6	17.3	16.7	17.8	20.8	19.1	20.6	20.3	20.2	21.6	19.8	23.4	22.0	20.7	20.3	22.5	24.4	24.5	24.3	22.5	20.9	20.5	17.6	20.6
31	18.5	18.2	18.0	18.1	18.1	18.4	20.1	20.5	19.9	19.8	19.9	20.4	21.0	18.6	17.1	18.7	21.2	24.2	26.8	26.7	23.2	21.0	19.6	19.5	20.3
Mean	19.5	18.2	18.4	18.4	18.8	19.5	20.3	20.9	21.0	20.3	20.4	21.2	21.3	20.7	21.8	20.2	22.3	24.0	25.1	24.8	23.6	22.0	21.5	20.4	21.0

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 36 Agincourt — $Z = 56{,}000\gamma +$ — December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	168	167	165	165	163	164	160	152	138	125	126	111	118	135	120	138	186	173	180	189	189	191	192	205	159
2 D	219	238	198	181	192	146	157	163	170	140	118	117	133	141	151	169	215	254	241	248	233	388	326	325	203
3 D	249	236	228	175	124	108	66	43	5	43	90	102	89	130	157	168	170	169	179	187	196	204	192	187	146
4	184	176	166	178	177	172	173	175	169	154	159	168	170	172	172	174	177	180	182	186	184	185	181	185	175
5	186	185	187	176	175	176	176	176	177	178	178	178	179	178	180	175	176	185	193	197	189	188	189	186	182
6	186	183	184	180	172	178	177	177	178	177	177	177	175	170	168	169	176	188	200	194	192	188	186	182	181
7	181	180	178	177	175	175	173	175	171	170	175	170	173	173	174	174	175	178	182	183	183	181	180	178	177
8 Q	177	175	175	176	175	175	173	174	174	176	176	175	175	174	171	170	170	174	177	177	176	175	171	172	174
9	171	172	173	172	171	171	171	171	171	171	171	171	170	171	168	166	170	174	173	177	178	178	174	172	172
10	171	171	170	171	170	171	171	171	171	171	169	165	164	163	165	166	169	174	178	176	174	183	185	183	172
11	183	183	184	177	176	172	163	154	143	127	140	148	148	148	150	153	159	167	172	181	188	190	190	189	166
12	190	190	196	193	186	179	176	176	173	172	174	176	175	176	172	170	170	174	179	176	174	177	175	174	178
13	173	172	172	171	171	171	171	171	171	164	167	168	170	174	165	165	167	168	172	174	172	171	172	179	171
14	183	179	176	172	171	169	168	168	169	170	170	170	169	168	166	165	166	170	172	177	180	176	172	172	172
15	171	171	170	171	163	165	164	165	165	163	164	165	166	166	163	160	160	163	167	172	175	176	177	175	167
16	172	172	171	171	171	170	163	159	165	167	167	167	168	168	167	164	165	167	171	174	176	179	171	171	169
17	170	171	165	168	168	169	167	168	168	169	166	165	167	165	164	160	163	165	172	176	176	172	171	170	168
18 Q	167	166	165	165	166	165	165	165	165	165	165	165	164	164	160	159	160	163	166	168	170	169	167	165	165
19 Q	164	163	164	163	163	162	162	162	163	162	162	161	161	162	160	159	160	163	162	167	168	167	165	163	163
20 Q	162	160	161	162	162	161	159	155	156	159	159	158	158	159	157	157	157	160	165	167	169	170	168	165	161
21	165	163	163	165	165	164	163	163	162	161	160	161	160	159	159	154	152	155	159	162	165	165	163	163	161
22	160	160	162	162	159	160	160	160	160	160	160	159	159	160	160	159	160	165	170	170	167	168	166	165	162
23	165	165	167	167	165	162	159	157	158	163	162	159	153	152	155	157	160	162	165	167	169	171	168	176	163
24	167	164	164	162	163	158	156	159	162	159	157	157	157	159	159	156	160	162	164	168	170	174	170	166	162
25 Q	166	165	164	164	163	163	163	162	162	162	162	164	165	166	166	163	163	166	170	169	170	170	166	164	165
26	163	162	162	162	159	158	159	158	159	158	158	156	155	156	156	157	158	159	164	167	169	169	167	166	161
27	166	168	169	165	158	160	160	161	161	158	159	160	160	159	157	151	149	149	156	163	165	161	157	157	160
28 D	158	160	163	164	162	161	158	152	149	140	141	147	146	152	149	150	155	161	161	167	170	173	174	177	158
29	174	171	165	167	167	164	164	164	162	160	157	160	159	159	156	154	151	154	159	163	168	168	171	171	163
30 D	167	163	161	163	163	151	156	161	161	158	161	158	161	161	161	163	173	174	172	174	177	175	172	171	165
31	170	168	167	166	162	159	160	161	164	164	163	163	161	164	160	158	159	163	168	174	173	172	166	166	165
Mean	176	175	173	170	167	164	162	161	159	157	158	159	159	161	161	161	166	170	174	177	178	183	179	179	168

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (All Days)

Table 37 Agincourt — 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+3	+3	+1	+2	+1	0	-1	-3	+2	+8	+7	+9	+10	+4	-6	-18	-24	-16	-8	-2	+4	+8	+7	+7
February	+3	0	+1	+1	0	+1	+2	+1	-2	-2	0	+7	+6	+1	-6	-13	-17	-17	-9	-2	+7	+14	+15	+13
March	+10	+5	+2	+5	+4	+3	-1	+2	-2	+1	-2	+2	+1	-6	-14	-20	-20	-14	-3	+7	+12	+15	+14	+13
April	+11	+3	-1	-3	+1	-1	-4	0	+1	+4	+3	+4	-1	-12	-22	-29	-23	-15	-3	+8	+19	+21	+22	+16
May	+7	+3	+8	+2	+1	-3	-4	-2	-2	-3	-2	-3	-6	-15	-21	-27	-16	-4	+5	+12	+16	+16	+16	+11
June	+8	+5	+1	-1	-4	-8	-4	0	-2	-3	-3	-6	-11	-15	-20	-20	-15	-5	+8	+17	+20	+22	+22	+14
July	+14	+7	+2	+1	+2	-1	-1	-1	-23	-30	-23	-18	-17	-23	-34	-32	-22	-5	+17	+34	+45	+48	+37	+25
August	+6	+7	+2	+2	+4	+3	+1	+1	+1	+3	+1	-2	-11	-20	-29	-31	-23	-9	+7	+17	+20	+20	+16	+11
September	+8	+7	+5	+3	+5	+3	+2	+2	+5	+4	+4	+4	-6	-16	-26	-29	-21	-9	+3	+11	+12	+14	+13	+12
October	+15	+9	-1	-1	-4	-12	-13	-12	-4	+3	+10	+3	-2	-9	-17	-20	-22	-14	+5	+24	+32	+12	+8	+7
November	+3	+2	-2	0	-1	+1	+2	+2	+4	+6	+8	+9	+4	-3	-10	-16	-17	-14	-7	0	+7	+8	+6	+4
December	+2	+1	-2	-2	-1	+1	+2	+4	+2	+5	+8	+9	+9	+1	-2	-12	-16	-15	-10	0	+7	+9	+6	+4
Year	+7.5	+4.3	+1.3	+0.8	+0.7	-1.1	-1.6	-0.5	-1.7	-0.3	+9.2	+1.5	-2.0	-9.4	-17.2	-22.2	-19.7	-11.4	+0.4	+10.5	+16.8	+17.2	+15.2	+11.4
Winter	+2.8	+1.5	-0.5	+0.2	-0.2	+0.8	+1.2	+1.0	+1.5	+4.2	+5.8	+8.5	+7.2	+0.8	-5.8	-14.8	-18.5	-15.5	-8.5	-1.0	+6.2	+9.8	+8.5	+7.0
Equinox	+11.0	+6.0	+1.2	+1.0	+1.5	-1.8	-4.0	-2.0	0.0	+3.0	+3.8	+3.2	-2.0	-10.8	-19.8	-24.5	-21.5	-13.0	+0.5	+12.5	+18.8	+15.5	+14.2	+12.0
Summer	+8.8	+5.5	+3.2	+1.0	+0.8	-2.2	-2.0	-0.5	-6.5	-8.2	-6.8	-7.2	-11.2	-18.2	-26.0	-27.5	-19.0	-5.8	+9.2	+20.0	+25.2	+26.5	+22.8	+15.2

DECLINATION (minutes) (All Days)

Table 38 Agincourt — 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+1.0	+1.4	+2.1	+1.6	+1.7	+1.2	+1.1	-0.3	+0.9	+1.5	+1.4	+0.1	+1.2	+1.9	+1.5	-0.4	-2.8	-4.0	-4.4	-3.5	-2.2	-1.1	-0.2	+0.2
February	+0.1	+1.7	+1.7	+1.9	+2.3	+1.6	+0.5	+0.3	+0.2	+1.0	+0.7	+1.7	+1.4	+2.2	+2.1	+0.2	-1.4	-3.2	-4.4	-4.3	-3.3	-1.9	-1.0	-0.1
March	+0.3	+0.9	+0.8	+2.3	+1.5	+1.9	+1.9	+1.4	+2.1	+1.4	+0.3	+2.3	+3.3	+3.9	+3.1	+0.2	-3.3	-6.1	-6.3	-5.3	-3.9	-2.1	-1.0	-0.4
April	+0.4	+0.9	+2.1	+1.1	+1.1	+1.0	+1.4	+1.9	+2.2	+2.7	+2.9	+4.3	+5.6	+5.5	+3.7	-0.4	-3.7	-6.1	-7.2	-6.6	-5.7	-3.8	-1.6	-0.4
May	0.0	+1.4	+1.2	+1.2	+2.1	+1.1	+0.8	+0.6	+1.2	+1.6	+3.4	+5.0	+5.7	+4.9	+3.1	-0.2	-3.3	-5.4	-6.4	-6.4	-5.3	-3.6	-2.5	-1.1
June	+0.8	+1.3	-0.2	+1.3	+1.7	+0.8	+0.5	-0.5	-0.4	+1.3	+3.2	+5.4	+6.1	+5.9	+4.2	0.0	-3.2	-5.8	-6.8	-6.0	-4.8	-2.8	-1.2	-0.4
July	+1.3	+1.5	+1.8	+3.0	+2.3	+0.8	+0.2	-1.0	-2.2	-1.2	+0.9	+5.0	+5.2	+6.0	+4.1	+0.5	-4.0	-5.3	-5.8	-5.1	-4.0	-2.1	-1.2	-0.3
August	+0.7	+1.2	+1.6	+2.5	+2.4	+2.0	+0.4	+1.0	+0.9	+1.6	+3.5	+6.4	+6.4	+6.2	+3.1	-1.5	-5.6	-8.2	-8.7	-7.3	-5.0	-2.5	-0.5	+0.4
September	+1.3	+1.2	+1.5	+1.2	+0.7	+1.3	+0.3	+1.5	+3.0	+2.5	+2.5	+3.7	+5.0	+4.4	+1.6	-2.2	-5.8	-7.2	-7.1	-5.3	-3.3	-1.7	-0.1	+1.3
October	+1.3	+1.7	+1.4	+1.1	+0.5	+0.1	-0.6	+1.4	+0.6	+0.8	+2.5	+1.7	+1.1	+3.2	+2.9	+0.2	-2.9	-5.0	-4.3	-2.5	-1.5	-2.2	-1.2	-0.4
November	+1.4	+1.7	+2.2	+1.8	+1.2	+1.1	+0.4	-0.5	-0.4	+0.7	+2.0	+1.1	+0.9	+1.4	+1.4	+0.1	-1.6	-3.4	-4.1	-3.7	-2.5	-1.3	-0.7	+0.5
December	+1.5	+2.8	+2.6	+2.6	+2.2	+1.5	+0.7	+0.1	0.0	+0.7	+0.6	-0.2	-0.3	+0.3	-0.8	+0.8	-1.3	-3.0	-4.1	-3.8	-2.6	-1.0	-0.5	+0.6
Year	+0.8	+1.5	+1.6	+1.8	+1.6	+1.2	+0.6	+0.5	+0.7	+1.2	+2.0	+3.0	+3.5	+3.8	+2.5	-0.2	-3.2	-5.2	-5.8	-5.0	-3.7	-2.2	-1.0	0.0
Winter	+1.0	+1.9	+2.2	+2.0	+1.8	+1.4	+0.7	-0.1	+0.2	+1.0	+1.2	+0.7	+0.8	+1.4	+1.1	+0.2	-1.8	-3.4	-4.2	-3.8	-2.6	-1.3	-0.6	+0.3
Equinox	+0.8	+1.2	+1.4	+1.4	+1.0	+1.1	+0.8	+1.6	+2.0	+1.9	+2.1	+3.0	+3.8	+4.2	+2.8	-0.6	-3.9	-6.1	-6.2	-4.9	-3.6	-2.4	-1.0	0.0
Summer	+0.7	+1.4	+1.1	+2.0	+2.1	+1.2	+0.4	0.0	-0.1	+0.8	+2.8	+5.4	+5.8	+5.8	+3.6	-0.3	-4.0	-6.2	-6.9	-6.2	-4.8	-2.8	-1.4	-0.4

VERTICAL INTENSITY (gammas) (All Days)

Table 39 Agincourt — 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+10	+8	+5	+1	0	-1	-5	-9	-10	-11	-9	-8	-6	-5	-8	-7	-2	+1	+5	+7	+8	+9	+10	+10
February	+14	+8	+8	+4	-2	-6	-7	-9	-14	-18	-20	-16	-9	-6	-6	-6	-7	0	+4	+8	+14	+17	+18	+19
March	+12	+12	+4	+1	-3	-5	-9	-13	-13	-13	-12	-6	0	-1	-3	-4	-3	+1	+5	+6	+7	+9	+11	+12
April	+14	+8	+7	-6	-6	-9	-12	-9	-9	-10	-8	-6	-5	-5	-6	-7	-6	-3	+4	+9	+13	+18	+20	+13
May	+16	+12	+6	+3	-5	-14	-10	-12	-12	-9	-5	-4	-7	-6	-5	-4	-3	-3	0	+6	+10	+16	+18	+17
June	+16	+12	+5	+3	-5	-14	-10	-12	-12	-9	-5	-4	-7	-6	-5	-4	-3	-2	0	+6	+10	+16	+18	+17
July	+27	+17	+11	+6	-12	-22	-29	-28	-36	-38	-28	-11	-13	-8	-7	-2	-1	+6	+13	+24	+32	+38	+33	+33
August	+3	+10	+7	0	-7	-13	-15	-14	-12	-5	-6	-4	-2	-4	-6	-5	-3	0	+4	+9	+13	+16	+16	+14
September	+7	+4	+1	-2	-10	-14	-16	-14	-9	-11	-9	-7	-6	-5	-5	-4	-1	+3	+7	+11	+16	+15	+23	+20
October	+18	+12	+8	-1	-3	-4	-10	-9	-12	-16	-9	-9	-9	-5	-2	-2	-2	+4	+8	-4	-2	+14	+16	+13
November	+7	+6	+4	+3	-1	-5	-5	-9	-10	-11	-8	-6	-4	-3	-3	-3	-2	+1	+5	+7	+12	+8	+7	+8
December	+8	+7	+5	+2	-1	-4	-6	-7	-9	-11	-10	-9	-9	-7	-7	-7	-2	+2	+6	+9	+10	+15	+11	+11
Year	+12.7	+9.7	+5.9	+1.2	-4.6	-9.2	-11.2	-12.1	-13.2	-13.5	-10.8	-7.5	-6.4	-5.1	-5.2	-4.6	-2.9	+0.8	+5.1	+8.2	+11.9	+15.9	+16.8	+15.6
Winter	+9.8	+7.2	+5.5	+2.5	-1.0	-4.0	-5.8	-8.5	-10.8	-12.8	-11.8	-9.8	-7.0	-5.2	-6.0	-5.8	-3.2	+1.0	+5.0	+7.8	+11.0	+12.2	+11.5	+12.0
Equinox	+12.8	+9.0	+5.0	-2.0	-5.5	-8.0	-11.8	-11.2	-10.8	-12.5	-9.5	-7.0	-5.0	-4.0	-4.0	-4.2	-3.0	+1.2	+6.0	+5.5	+8.5	+14.0	+17.5	+14.5
Summer	+15.5	+12.8	+7.2	+3.0	-7.2	-15.8	-16.0	-16.5	-18.0	-15.2	-11.0	-5.8	-7.2	-6.0	-5.8	-3.8	-2.5	+0.2	+4.2	+11.2	+16.2	+21.5	+21.2	+20.2

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 40 Agincourt 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+4	+2	+1	0	0	+2	+2	+3	+5	+8	+6	+7	+6	+1	-10	-19	-19	-11	-4	-2	0	+3	+7	+7
February	+5	+3	+1	0	0	+2	+3	+4	+6	+6	+6	+6	+5	-1	-10	-16	-17	-16	-8	-1	+4	+6	+5	+7
March	+5	+1	+3	+3	+3	+2	+2	+4	+5	+5	+5	+4	+1	-7	-14	-19	-21	-16	-6	+3	+8	+12	+8	+7
April	+9	+5	+3	+5	+3	+6	+4	+4	+4	+7	+9	+6	+3	-6	-19	-28	-28	-24	-15	-3	+9	+13	+17	+17
May	+1	+1	+1	0	+1	+1	+1	0	+1	+2	+1	0	-4	-10	-16	-19	-16	-10	-1	+8	+13	+14	+18	+15
June	+3	+3	+3	+2	+1	0	+1	+1	+1	+4	+4	0	-4	-10	-18	-25	-23	-11	+4	+13	+15	+15	+12	+10
July	-3	-1	-3	-1	+2	0	+3	+2	0	-5	-7	-7	-13	-20	-25	-25	-16	+3	+18	+23	+26	+19	+16	+12
August	+7	+7	+1	+1	+1	+4	+5	+4	+4	+3	0	-3	-12	-22	-31	-33	-24	-12	-10	+19	+22	+19	+17	+12
September	+8	+6	+5	+3	+5	+4	+4	+5	+5	+6	+3	+1	-9	-22	-31	-29	-19	-6	+5	+10	+10	+12	+13	+12
October	+7	+7	+6	+5	+3	+3	+3	+4	+5	+6	+7	+6	0	-7	-15	-23	-27	-14	-5	+1	+3	+5	+8	+11
November	+2	+2	+3	+2	+2	+3	+2	+4	+6	+6	+6	+5	+2	-2	-9	-17	-20	-16	-10	-1	+5	+7	+9	+9
December	+3	+1	+1	-1	+1	+2	+2	+3	+3	+4	+4	+6	+5	+3	-3	-12	-16	-18	-11	-3	+5	+7	+8	+6
Year	+4.2	+3.1	+2.1	+1.6	+1.8	+2.4	+2.7	+3.2	+3.8	+4.3	+3.7	+2.6	-1.7	-8.6	-16.8	-22.1	-20.5	-12.6	-1.9	+5.6	+10.0	+11.0	+11.5	+10.4
Winter	+3.5	+2.0	+1.5	+0.2	+0.8	+2.2	+2.2	+3.5	+5.0	+6.0	+5.5	+6.0	+4.5	+0.2	-8.0	-16.0	-18.0	-15.2	-8.2	-1.8	+3.5	+5.8	+7.2	+7.2
Equinox	+7.2	+4.8	+4.2	+4.0	+3.5	+3.8	+3.2	+4.2	+4.8	+6.0	+6.0	+4.2	-1.2	-10.5	-19.8	-24.8	-23.8	-15.0	-5.2	+2.8	+7.5	+10.5	+11.5	+11.8
Summer	+2.0	+2.5	+0.5	+0.5	+1.2	+1.2	+2.5	+1.8	+1.5	+1.0	-0.5	-2.5	-8.2	-15.5	-22.5	-25.5	-19.8	-7.5	+7.8	+15.8	+19.0	+16.8	+15.8	+12.2

DECLINATION (minutes) (Quiet Days)

Table 41 Agincourt 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+0.4	+0.6	+1.0	+0.3	+0.2	+0.2	-0.2	-0.2	+0.5	+0.8	+1.1	+1.1	+2.0	+2.8	+2.4	+0.2	-1.6	-2.8	-2.9	-2.5	-1.8	-1.0	-0.6	+0.1
February	-0.2	-0.1	+0.2	+0.3	+0.4	+0.2	-0.1	+0.1	+0.4	+0.5	+0.9	+1.1	+2.1	+3.3	+3.4	+1.7	-0.2	-2.2	-3.5	-3.1	-2.1	-1.2	-1.1	-0.7
March	-0.9	-0.2	+0.2	+0.4	+0.6	+0.9	+1.2	+1.2	+1.6	+1.8	+2.1	+3.0	+4.3	+5.4	+4.2	+1.1	-1.8	-4.8	-5.8	-5.5	-4.2	-2.5	-1.6	-0.9
April	+0.8	+0.3	+0.1	-0.2	+0.3	+0.6	+1.2	+1.4	+1.4	+0.8	+2.8	+3.7	+5.2	+5.0	+5.0	+1.8	-1.6	-4.3	-6.2	-6.4	-5.4	-3.7	-2.1	-0.4
May	-0.9	0.0	+0.2	+0.8	+1.3	+1.5	+0.8	+1.1	+0.1	+1.3	+3.4	+5.4	+6.0	+6.2	+5.0	+1.8	-1.6	-4.7	-6.7	-7.2	-6.8	-4.3	-2.2	-0.6
June	+0.9	+1.0	-0.1	-0.1	-0.1	-0.4	-0.3	-0.3	+0.2	+0.9	+3.6	+5.8	-7.4	+7.7	+5.4	+1.0	-3.7	-6.4	-7.1	-6.2	-5.1	-3.1	-1.3	+0.4
July	-0.2	-0.2	+0.8	+0.4	+1.3	+0.1	-0.8	-0.8	-0.1	0.0	+4.1	+7.1	+7.9	+8.6	+5.9	+1.2	-3.2	-6.1	-7.0	-7.3	-5.7	-3.8	-1.9	-0.5
August	-0.5	0.0	+0.3	+1.0	+0.9	+0.1	+0.7	+1.1	+1.3	+2.3	+4.0	+6.2	+7.1	+6.6	+4.1	-0.5	-5.0	-7.8	-8.0	-6.8	-4.8	-2.1	-0.4	+0.1
September	-0.2	-0.1	-0.1	0.0	+0.1	+0.5	+0.9	+1.6	+2.1	+2.8	+3.3	+4.6	+5.9	+5.8	+3.0	-1.4	-4.9	-6.9	-7.0	-5.3	-3.0	-0.9	-0.3	-0.5
October	-0.4	-0.2	+0.1	+0.1	-0.2	+0.1	+0.5	+0.6	+0.9	+1.2	+1.2	+1.5	+2.9	+4.1	+4.1	+2.4	-0.4	-3.2	-4.4	-4.0	-3.0	-2.1	-0.8	-0.9
November	+0.8	+0.8	+0.6	+0.4	+0.1	-0.2	-0.2	-0.2	+0.1	+0.6	+0.9	+1.1	+1.5	+2.7	+3.0	+1.8	-0.5	-3.1	-4.1	-3.2	-2.2	-1.1	-0.2	+0.5
December	+0.6	+0.8	+0.8	+0.7	+0.2	-0.2	-0.6	-0.8	-0.1	+0.5	+0.5	+0.5	+1.1	+2.0	+2.7	+2.3	+0.3	-2.2	-3.5	-3.2	-2.2	-0.8	+0.1	+0.5
Year	0.0	+0.2	+0.3	+0.3	+0.4	+0.3	+0.3	+0.4	+0.7	+1.1	+2.3	+3.4	+4.4	+5.0	+4.0	+1.1	-2.0	-4.5	-5.5	-5.1	-3.9	-2.2	-1.0	-0.2
Winter	+0.4	+0.5	+0.6	+0.4	+0.2	0.0	-0.3	-0.3	+0.2	+0.6	+0.9	+1.0	+1.7	+2.7	+2.9	+1.5	-0.5	-2.6	-3.5	-3.0	-2.1	-1.0	-0.4	+0.1
Equinox	-0.2	-0.1	+0.1	+0.1	+0.2	+0.5	+1.0	-1.2	+1.5	+1.6	+2.4	+3.2	+4.6	+5.1	+4.1	+1.0	-2.2	-4.8	-5.9	-5.3	-3.9	-2.3	-1.2	-0.7
Summer	-0.2	+0.2	+0.3	+0.5	+0.8	+0.3	+0.1	+0.3	+0.4	+1.1	+3.8	+6.1	+7.1	+7.3	+5.1	+0.9	-3.4	-6.2	-7.2	-6.9	-5.6	-3.3	-1.4	-0.2

VERTICAL INTENSITY (gammas) (Quiet Days)

Table 42 Agincourt 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+2	+2	+1	+2	+2	+1	+1	+1	+1	-1	-1	-1	0	0	-4	-4	-3	-3	-1	0	0	+2	+2	+2
February	+2	+2	+2	+1	+1	+1	+1	0	0	-1	-1	-1	0	-1	-4	-4	-4	-2	0	+3	+3	+1	+1	+1
March	+3	+3	+2	+2	+1	+1	+1	-1	-2	-2	-2	-1	-1	-2	-3	-5	-5	-2	+1	+3	+3	+2	+2	+1
April	+6	+5	+7	+5	+3	+2	-2	-6	-2	-3	-1	0	-1	-1	-2	-5	-6	-5	-4	-1	+2	+2	+4	+4
May	+8	+6	+4	+3	+1	-4	-3	0	0	0	+1	+1	-1	-4	-7	-10	-11	-10	-6	0	+6	+7	+9	+10
June	+4	+3	+1	+1	-1	-5	-3	-2	0	+2	+2	0	0	-1	-2	0	-2	-4	-3	-1	+1	+2	+4	+5
July	+10	+8	+7	+5	-2	-5	-8	-13	-10	-5	-1	+2	+3	0	-1	-3	-6	-8	-6	+1	+6	+9	+8	+8
August	+1	+1	+2	+2	+1	-3	-4	-2	0	+1	+2	+2	+1	-1	-3	-5	-5	-5	-3	+1	+3	+6	+5	+1
September	0	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	+1	+1	0	-1	-3	-2	+2	+5	+5	+4	+4	+1	0
October	+2	+1	+1	+1	+1	+1	+2	+1	+1	+1	+1	+1	+1	0	-1	-4	-9	-7	-3	0	+2	+2	+2	+1
November	+2	+1	0	+1	0	0	0	0	0	0	0	-1	+1	+2	-1	-5	-5	-4	-1	+3	+3	+3	+2	+1
December	+2	0	0	+1	0	0	-1	-2	-2	-1	-1	-1	-1	-1	-3	-4	-4	0	+3	+4	+5	+4	+2	0
Year	+3.5	+2.6	+2.2	+1.9	+0.4	-1.1	-1.5	-2.2	-1.3	-0.9	-0.2	+0.2	+0.3	-0.8	-2.7	-4.3	-5.2	-4.0	-1.5	+1.5	+3.2	+3.7	+3.5	+2.8
Winter	+2.0	+1.2	+0.8	+1.2	+0.8	+0.5	+0.2	-0.2	-0.2	-0.8	-0.8	-1.0	0.0	0.0	-3.0	-4.2	-4.0	-2.2	+0.2	+2.5	+2.8	+2.5	+1.8	+1.0
Equinox	+2.8	+2.0	+2.2	+1.8	+0.8	+0.5	-0.2	-2.0	-1.2	-1.5	-0.8	+0.2	0.0	-0.8	-1.8	-4.2	-5.5	-3.0	-0.2	+1.8	+2.8	+2.5	+2.2	+1.5
Summer	+5.8	+4.5	+3.5	+2.8	-0.2	-4.2	-4.5	-4.2	-2.5	-0.5	+1.0	+1.2	+0.8	-1.5	-3.2	-4.5	-6.0	-6.8	-4.5	+0.2	+4.0	+6.0	+6.5	+6.0

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 43 Agincourt — 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+6	+9	-2	+10	+6	+1	-1	-13	-4	+6	+10	+16	+21	+11	-7	-29	-38	-25	-10	+1	+7	+12	+4	+3
February	+1	-13	0	-2	-4	-2	+1	+3	-3	-3	-14	+5	+3	-5	-5	-13	-22	-26	-16	-12	+16	+38	+40	+34
March	+39	+21	-3	+6	+5	+2	-20	-11	-36	-22	-46	-20	-1	-3	-3	-5	-9	-11	+1	+22	+30	+27	+20	+17
April	+44	+8	0	-18	-6	-16	-37	-6	-7	-3	-4	+5	-4	-20	-22	-37	-32	-24	+2	+15	+31	+39	+56	+35
May	+19	+11	+10	+13	+15	-14	-32	-14	-7	-11	-12	-12	-14	-26	-22	-18	-12	+8	+19	+25	+24	+18	+16	+16
June	+29	+11	-3	-11	-21	-33	-13	-2	-2	-5	-8	-12	-27	-17	-28	-26	-26	-18	+5	+24	+31	+53	+58	+38
July	+52	+42	+32	+28	+30	+39	+12	+27	-122	-173	-119	-83	-50	-37	-68	-52	-30	-20	+19	+65	+120	+134	+91	+61
August	+9	+4	-10	-9	+1	-2	-19	-10	-2	+15	+3	-3	-18	-15	-21	-25	-18	-1	+12	+23	+23	+26	+23	+12
September	+6	+6	+6	+6	+12	+1	0	-2	+4	+3	+3	+9	-9	-21	-24	-35	-27	-18	-5	+11	+6	+17	+21	+24
October	+71	+44	-19	-12	-24	-71	-83	-97	-50	-21	+20	-15	-17	-14	-19	-18	-34	-21	+40	+121	+160	+38	+15	+6
November	+8	+15	-7	+2	+2	+7	+7	+8	+4	+7	+10	+13	+4	-10	-17	-19	-13	-15	-5	-2	+11	+6	-6	-9
December	+7	+4	+1	-1	-7	+4	+3	+8	-7	+5	+16	+19	+13	-23	-13	-32	-26	-12	-6	+2	+11	+12	+14	+7
Year	+24.6	+13.5	+0.6	+1.2	+0.8	-7.0	-15.2	-9.1	-19.3	-16.7	-11.8	-6.5	-8.2	-15.0	-20.8	-25.8	-23.9	-15.2	-4.7	+24.6	+39.2	+35.0	+29.3	+20.5
Winter	+6.0	+3.8	-2.0	+2.2	-0.8	+2.5	+2.5	+1.5	-2.5	+4.2	+5.5	+13.2	+10.2	-6.8	-10.5	-23.2	-24.8	-19.5	-9.2	-2.8	+11.2	+17.0	+13.0	+8.8
Equinox	+40.5	+19.8	-3.5	-4.0	-3.2	-21.0	-35.0	-29.0	-22.2	-10.8	-6.8	-5.2	-7.8	-14.5	-17.0	-23.8	-25.5	-18.5	+9.5	+42.2	+56.8	+30.2	+28.0	+21.0
Summer	+27.2	+17.0	+7.2	+5.2	+6.2	-2.5	-13.0	+0.2	-33.2	-43.5	-34.0	-27.5	-27.2	-23.8	-34.7	-30.2	-21.5	-7.8	+13.8	+34.2	+49.5	+57.8	+47.0	+31.8

DECLINATION (minutes) (Disturbed Days)

Table 44 Agincourt — 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+3.8	+3.7	+6.2	+4.4	+3.7	+1.7	+3.4	-1.4	+1.1	+2.0	+1.6	-1.4	+1.5	-0.3	-1.9	-3.4	-6.3	-6.7	-7.0	-4.8	-1.6	-1.4	+1.1	+1.9
February	+1.6	+8.5	+5.4	+4.2	+3.4	+2.1	-0.6	+1.6	-2.2	-0.9	-1.6	+1.1	+0.3	-2.1	-2.7	+2.2	-2.8	-3.5	-5.2	-5.8	-4.2	-1.2	+0.7	+1.8
March	-0.2	+2.4	-0.6	+5.1	+2.4	+5.9	+5.7	+4.2	+4.5	+0.8	-5.2	+2.4	+1.2	-0.6	+0.2	-1.6	-5.0	-7.3	-6.9	-4.9	-3.2	-1.0	+0.4	+1.2
April	+1.7	+2.2	+5.0	-3.3	+1.2	+1.2	-1.9	+2.7	+4.8	+3.2	+1.6	+5.2	+6.0	+6.4	+3.4	-2.6	-6.6	-8.6	-8.4	-6.8	-7.1	-2.8	+0.6	+2.6
May	+0.5	+3.8	+2.1	+1.3	+2.8	-0.7	+2.7	+1.2	+3.1	+2.9	+2.2	+4.7	+5.4	+2.8	-0.6	-2.6	-4.8	-5.4	-5.7	-5.2	-4.3	-3.2	-2.2	-1.1
June	+2.7	+3.8	-1.8	+4.0	+5.1	+2.0	+2.3	-2.3	-2.7	+1.9	+4.1	+5.2	+1.8	+2.7	+1.6	-2.4	-3.5	-6.7	-6.8	-5.4	-4.8	-1.9	-0.1	+1.2
July	+4.4	+4.2	+2.2	+7.0	+4.7	+1.5	+2.2	+3.2	-9.9	-9.1	-10.2	+1.0	-0.9	+3.3	+3.0	-0.4	-7.8	-4.1	-4.2	-1.9	+0.8	+4.1	+3.0	+4.0
August	+3.1	+7.4	+6.3	+8.9	+6.5	+5.3	-2.0	-0.2	-1.4	+1.6	+2.3	+3.9	-0.8	+0.5	-0.7	-3.0	-6.6	-8.2	-9.0	-6.8	-5.2	-2.5	-0.5	+1.1
September	+2.8	+1.5	+3.2	+1.2	+1.9	+1.6	-1.3	+0.5	+4.6	+3.9	+2.8	+1.8	+4.6	+1.5	-1.2	-3.3	-6.7	-6.8	-7.6	-5.2	-4.8	-1.4	+0.6	+6.8
October	+6.9	+5.8	+5.3	+3.4	-2.1	-1.0	-4.6	+5.1	+0.4	-3.0	+3.4	-3.3	-11.4	+0.0	+2.2	-0.8	-5.2	-6.0	+0.2	+6.3	+3.8	-4.8	-1.1	+0.4
November	+4.6	+4.4	+6.2	+4.5	+3.2	+3.2	+2.5	+2.3	+1.5	0.0	+3.3	-0.7	-2.2	-3.2	-4.3	-5.3	-4.3	-4.4	-4.3	-4.5	-2.8	-0.8	-1.1	+2.0
December	+4.9	+8.4	+7.1	+7.4	+7.2	+6.9	+4.4	+2.0	+0.5	+4.1	-0.6	-5.4	-5.8	-6.3	-18.5	-4.3	-5.5	-3.2	-3.0	-3.1	-1.3	-2.0	-0.5	+2.4
Year	+3.1	+4.7	+3.9	+4.0	+3.3	+2.5	+1.1	+1.6	+0.4	+0.6	+0.3	+1.2	0.0	+0.4	-1.6	-2.3	-5.4	-5.9	-5.7	-4.0	-2.9	-1.6	+0.1	+1.9
Winter	+3.7	+6.2	+6.2	+5.1	+4.4	+3.5	+2.4	+1.1	+0.2	+1.3	+0.7	-1.6	-1.6	-3.0	-6.8	-2.7	-4.7	-4.4	-4.9	-4.6	-2.5	-1.4	+0.1	+2.0
Equinox	+2.8	+3.0	+3.2	+1.6	+0.8	+1.9	-0.5	+3.1	+3.6	+1.2	+0.6	+1.5	+0.1	+1.8	+1.2	-2.1	-5.9	-7.2	-5.7	-2.6	-2.8	-2.5	+0.1	+2.5
Summer	+2.7	+4.8	+2.2	+5.3	+4.8	+2.0	+1.3	+0.5	-2.7	-0.7	-0.4	+3.7	+1.4	+2.3	+0.8	-2.1	-5.7	-6.1	-6.4	-4.8	-3.4	-0.9	+0.1	+1.3

VERTICAL INTENSITY (gammas) (Disturbed Days)

Table 45 Agincourt — 1961

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+22	+18	+10	-13	-2	-5	-21	-27	-33	-34	-29	-23	-16	-15	-14	-8	+2	+10	+18	+26	+26	+35	+40	+36
February	+24	0	+10	+4	-8	-18	-28	-22	-31	-43	-55	-40	-26	-14	-9	-9	-16	+1	+8	+18	+44	+60	+68	+60
March	+44	+40	+2	+6	+1	-10	-34	-24	-42	-61	-61	-33	-6	-1	+4	+7	+12	+18	+24	+24	+34	+23	+22	+21
April	+44	+15	+21	-53	-38	-30	-43	-26	-21	-28	-31	-27	-14	-11	-10	-6	+3	+11	+34	+42	+40	+50	+55	+27
May	+29	+24	+20	+12	-9	-80	-73	-33	-37	-27	-26	-8	+3	+3	+7	+9	+10	+15	+21	+26	+27	+28	+29	+30
June	+40	+29	+1	+9	-19	-50	-27	-40	-40	-36	-26	-21	-33	-21	-8	-3	+1	+6	+18	+36	+39	+54	+49	+41
July	+74	+46	+21	+11	-29	-52	-58	-16	-135	-170	-137	-48	-61	-33	-27	-5	+10	+46	+80	+107	+109	+110	+79	+76
August	+39	+36	+22	-11	-41	-47	-33	-35	-47	-18	-16	-13	-4	-13	-13	-4	+3	+12	+16	+23	+27	+37	+42	+37
September	+14	+11	+1	-7	-32	-38	-38	-33	-23	-24	-22	-15	-14	-11	-8	-5	-2	+1	+8	+18	+20	+28	+89	+82
October	+88	+41	+35	-23	-22	-22	-39	-29	-49	-73	-38	-47	-48	-20	+5	+13	+19	+44	+47	-43	-33	+65	+73	+60
November	+16	+16	+11	+8	-2	-18	-23	-33	-28	-43	-32	-23	-20	-13	-5	-2	+4	+13	+18	+22	+50	+28	+26	+29
December	+26	+26	+17	+3	-5	-20	-27	-32	-41	-45	-39	-39	-37	-22	-19	-9	+14	+20	+21	+27	+27	+60	+45	+47
Year	+38.3	+25.2	+14.2	-4.5	-17.6	-32.5	-37.0	-29.2	-43.9	-50.2	-42.7	-28.1	-23.0	-14.2	-8.1	-1.9	+5.0	+16.4	+26.1	+27.2	+33.3	+48.2	+51.4	+47.2
Winter	+22.0	+15.0	+12.0	+0.5	-4.2	-15.2	-24.8	-28.5	-33.2	-41.2	-38.8	-31.2	-24.8	-16.0	-11.8	-7.0	+1.0	+11.0	+16.2	+23.2	+36.8	+45.8	+44.8	+48.0
Equinox	+47.5	+26.8	+14.8	-19.2	-24.0	-25.0	-38.5	-28.0	-33.8	-46.5	-38.0	-30.5	-20.5	-10.8	-2.2	+2.2	+8.0	+18.5	+28.2	+10.2	+12.8	+41.5	+59.8	+47.5
Summer	+45.5	+33.8	+16.0	+5.2	-24.5	-57.2	-47.8	-31.0	-64.8	-62.8	-51.2	-22.5	-23.8	-16.0	-10.2	-0.8	+6.0	+19.8	+33.8	+48.0	+50.5	+57.2	+49.8	+46.0

THREE-HOUR RANGE INDICES, AGINCOURT, 1961

Table 46

January

	D		H		Z		K	
1	3121	1000	3121	1000	2110	1000	3121	1000
2	0022	1100	0001	1110	0000	0000	0022	1110
3	0230	1000	0210	0111	0110	0000	0230	1111
4	0110	1000	0000	0011	0000	0000	0110	1011
5	0001	1011	0001	1012	0000	0011	0001	1012
6	0313	2000	0112	0000	0001	1000	0313	2000
7	2110	2001	2100	1102	1100	1001	2110	2102
8	4333	2332	2222	1241	3122	0121	4333	2342
9	1444	4114	0433	2212	1455	2104	1455	4214
10	1012	2000	1001	0000	2001	0000	1012	2000
11	0120	1000	0110	0000	0000	0000	0120	1000
12	0120	1100	0110	0111	0000	0000	0120	1111
13	1121	4111	0010	2010	0012	2100	1212	4111
14	2001	1102	1000	0001	0000	0001	2001	1102
15	2132	3104	2121	1104	1131	1003	2132	3104
16	1431	1010	1320	0031	1330	0010	1431	1031
17	3032	1100	1011	0011	0020	0000	3032	1111
18	1012	4210	2112	3132	0003	2110	2113	4232
19	3101	2345	3110	1334	2100	0135	3111	2345
20	5553	4330	4543	3321	6543	2210	6553	4331
21	1344	4400	0332	2300	0332	3200	1344	4400
22	0154	5311	0142	3311	0033	2210	0154	5311
23	1211	1100	2100	0010	1000	0000	2211	1110
24	1342	3120	1232	2122	1240	2121	1342	3122
25	3433	3110	2203	2121	1202	2010	3433	3121
26	1132	4311	1121	3221	0021	2110	1132	4321
27	3033	2100	1011	1100	1011	0000	3033	2100
28	2021	2221	2001	2121	0011	0120	2021	2221
29	1311	2100	2200	1010	0200	0000	2311	2110
30	0211	0000	0200	0000	0200	0000	0211	0000
31	3100	0100	2100	0000	0000	0000	3100	0100

February

	D		H		Z		K	
1	0100	1100	0100	0021	0000	0010	0100	1121
2	0000	1010	0000	0000	0000	0000	0000	1010
3	2024	4310	0013	4222	0002	1110	2024	4322
4	1131	5347	1110	4379	0010	1167	1131	5379
5	4544	2100	3356	1101	5555	0000	5556	2101
6	1032	3402	2154	4322	0043	1211	2154	4422
7	1312	1112	1311	0012	0210	0102	1312	1112
8	3121	2110	2000	1121	1001	0010	3121	2121
9	3322	1000	2110	0000	1100	0000	3322	1000
10	1000	0002	0000	0011	0000	0001	1000	0012
11	2103	1000	2202	1010	0101	0000	2203	1010
12	0100	0000	0100	0000	0000	0000	0100	0000
13	0125	4311	0125	3312	0015	4310	0125	4312
14	1000	1111	1000	1122	0000	0010	1000	1122
15	1112	2100	1112	0000	0011	0000	1112	2100
16	3255	5211	3225	4212	2146	3100	3256	5212
17	0113	4334	0012	4334	0004	4226	0114	4336
18	7444	4221	5444	3331	6554	3210	7554	4331
19	0233	5211	2122	3322	0133	3111	2233	5322
20	4444	5413	3323	3323	2223	3111	4444	5423
21	3232	3323	2222	2333	1122	2212	3232	2333
22	3433	2214	2221	2222	1231	1111	3433	2224
23	2231	2101	1221	1021	0220	1010	2231	2121
24	1440	1000	1330	1000	0330	0000	1440	1000
25	0011	0000	0001	0001	0000	0100	0011	0001
26	1100	1100	0000	0010	0000	0000	1100	1110
27	0311	3310	0200	1211	0100	1100	0311	3311
28	1332	2111	1122	3122	0122	1011	1332	3122

March

	D		H		Z		K	
1	0221	3003	1210	2011	0100	1001	1221	3013
2	1421	1010	1311	0001	0320	0000	1421	1011
3	1111	1000	1100	0001	0000	0000	1111	1001
4	0000	2000	0000	1000	0000	0000	0000	2000
5	1101	0116	0100	0027	0000	0017	1101	0127
6	8543	4100	8435	4100	7545	2000	8545	4100
7	0000	1101	0000	1111	0000	0001	0000	1111
8	1210	1111	1100	1012	0000	0001	1201	1112
9	0330	3212	1120	2323	0030	1112	1330	3323
10	3347	4200	3367	4222	2367	5110	3367	5222
11	0221	2111	0210	2121	0101	0110	0221	2121
12	3012	2001	2010	1012	1000	0001	3012	2012
13	2142	2211	2121	2211	2022	0100	2142	2211
14	4544	3221	4344	2231	3445	1110	4545	3231
15	2324	3213	1203	4234	0413	3112	2424	4234
16	5453	3200	4341	2210	4351	1100	5453	3210
17	2144	3100	2133	2011	0032	1000	2144	3111
18	2100	1322	1000	2233	0000	0111	2100	2333
19	0453	3324	1452	4433	0462	1322	1463	4434
20	4324	3211	2113	2221	1213	2120	4324	3221
21	3322	1211	2311	1221	1310	0110	3322	1221
22	3343	2100	3321	1111	1341	1000	3343	2111
23	1331	3100	1211	2221	0121	1110	1331	3221
24	0233	2101	1122	2111	0111	1000	1232	2111
25	1010	2000	1000	1111	0000	0000	1010	2111
26	0332	2000	0212	1103	0111	0001	0332	2103
27	1132	2531	2111	1541	0010	0221	2132	2541
28	2532	2200	3432	2221	2531	1111	3532	2221
29	0001	1110	0100	1120	0000	0100	0101	1120
30	3441	2000	2320	1110	0331	0100	3441	2110
31	0000	2301	0000	1222	0000	0100	0000	2322

April

	D		H		Z		K	
1	4444	3212	4332	1133	3252	1111	4454	3233
2	1344	3112	1332	2132	0433	1012	1444	3132
3	4754	2222	3543	1122	3655	1111	4755	2222
4	3130	1000	1010	1011	2030	0000	3130	1011
5	1211	1100	2200	0010	1100	0000	2211	1110
6	1011	1013	1000	1033	1000	0023	1011	1033
7	3403	1000	2101	0112	3301	0001	3403	1112
8	0132	1000	1120	0022	0010	0010	1132	1022
9	3135	4220	1125	4233	0026	4111	3136	4233
10	3444	2211	2321	2233	0432	1111	3444	2233
11	5533	3310	3432	3422	3521	1321	5533	3422
12	0141	2100	1141	2121	0030	1010	1141	2121
13	2211	1321	0210	3533	0000	1311	2211	3533
14	2123	4447	2222	4358	0012	3459	2223	4459
15	6763	3321	8772	3333	7772	2220	8773	3333
16	3312	2214	3201	2232	0101	1123	3312	2234
17	1111	2100	0000	1110	0001	1000	1111	2110
18	1233	1000	0210	0001	0111	0000	1233	1001
19	1311	1110	1110	0232	0110	0111	1311	1232
20	2231	0000	2020	0010	0110	0000	2231	0010
21	0000	1000	0000	0021	0000	0010	0000	1021
22	0002	2111	0001	2234	0000	1123	0002	2234
23	0233	3112	1010	1033	0112	1021	1233	3133
24	4201	3211	1111	2223	3200	1111	4211	3223
25	3211	1000	3100	0122	3100	0100	3211	1122
26	3421	3230	1210	3322	1420	1101	3421	3332
27	1334	2111	1222	2222	0122	1111	1334	2222
28	4211	1010	3220	1020	1220	0010	4221	1020
29	1001	1102	2001	0123	1000	0012	2001	1123
30	2201	2201	1110	3233	1100	0011	2211	3233

May	D		H		Z		K		June D		H		Z		K	
1	4212	2211	2312	2212	4301	1102	4312	2212	2434	5422	2213	4433	1243	4222	2444	5433
2	6622	1100	5511	1110	7722	0000	7722	1110	3345	4320	2233	3341	1244	2210	3345	4341
3	0231	0000	0000	0021	0000	0000	0231	0021	3443	2100	1221	1112	1323	0001	3443	2112
4	0011	0122	0000	0035	0001	0024	0011	0135	1333	2121	1320	3222	1211	1001	1333	3222
5	2342	2431	2321	3434	1041	1322	2342	3434	1333	1111	2321	1132	0312	1111	2333	1132
6	2544	4112	2654	5233	1754	3122	2754	5233	2231	2442	1221	2343	1231	0232	2231	2443
7	4253	3212	3233	3313	2352	2122	4353	3313	0444	4333	2233	4443	0333	1222	2444	4443
8	1232	2112	1221	2133	0121	0022	1232	2133	5442	2222	3222	3233	2333	1122	5443	3233
9	0345	2111	0234	2212	0335	1011	0345	2212	0133	1011	1111	2222	0011	0011	1133	2222
10	2122	2112	2111	1114	1011	1112	2122	2114	2222	2000	1011	2100	0100	0010	2222	2110
11	2433	3222	2222	3343	2322	1222	2433	3343	0000	1100	0000	0010	0000	0000	0000	1110
12	5433	1123	3322	2333	2432	0122	5433	2333	1322	2100	1322	2111	0441	1100	1442	2111
13	6533	4310	4322	2212	5412	1111	6533	4312	0002	0101	0000	1112	0000	0010	0002	1112
14	3333	2000	3311	1110	2222	0010	3333	2110	0112	0012	0000	0014	0000	1002	0112	1014
15	0002	1001	0000	1013	0000	0021	0002	1023	1113	2111	2223	2322	0011	1210	2223	2322
16	4453	4322	3343	3333	3652	1121	4653	4333	4122	2211	3001	1221	2000	1120	4122	2221
17	3112	2201	3111	2011	1210	1000	3212	2211	2211	1001	1210	0122	0200	0011	2211	1122
18	1012	0000	1000	0010	0000	0000	1012	0010	1223	2323	1212	2334	0211	0123	1223	2334
19	1113	2213	1212	2233	0201	2223	1213	2233	1411	1101	2201	0122	1200	0012	2411	1122
20	2243	2210	3421	1221	1433	1110	3443	2221	1321	1022	2121	1134	0211	0012	2321	1134
21	1111	0111	1000	0123	1100	0011	1111	0123	5334	4345	4345	5256	5434	3257	5445	5357
22	1111	3222	3221	1332	0010	0121	3221	3332	7665	4433	7465	4445	8554	4233	8665	4445
23	1322	3321	2311	3231	1310	1121	2322	3331	3010	1211	4010	1232	3000	0111	4010	1232
24	3332	1211	2100	1213	1110	1001	3332	1213	3311	2011	3100	1222	2100	0111	3311	2222
25	4562	3110	3553	2232	3664	1131	4664	3232	2113	2212	2112	2113	0012	1012	2113	2213
26	5130	2100	3001	1111	3011	0000	5131	2111	1101	2210	1000	3231	0000	1010	1101	3231
27	1430	0000	2310	0111	1330	0010	2430	0111	0234	2100	0231	2101	0132	1010	0234	2111
28	2111	3213	1011	3234	1101	1123	2111	3234	0213	2111	0011	1111	0102	0110	0213	2111
29	0310	1000	1210	0111	0300	0110	1301	1111	2644	1111	3743	2222	1742	1111	3744	2222
30	0033	2201	1112	2212	0021	1101	1133	2212	3210	1010	2110	0122	1200	0100	3210	1122
31	2443	3321	4222	3434	1334	1122	4444	3434								

July	D		H		Z		K		August D		H		Z		K	
1	3332	2211	2231	2311	1332	1100	3332	2311	4412	1002	3111	1123	1200	1101	4412	1123
2	0332	1321	1231	1233	0332	1121	1332	1333	5674	3333	4774	3233	5764	3222	5774	3333
3	0033	4311	1133	3322	0042	2110	1143	4322	3434	3334	1443	2233	2433	1122	3444	3334
4	2113	3213	2112	2335	1001	1115	2113	3335	5442	2221	4232	2231	3442	0121	5442	2231
5	5643	4423	4532	4334	6654	2122	6654	4434	2224	3111	0223	2123	0223	1011	0224	3123
6	4522	1322	3411	2433	2321	1212	4522	2433	0011	3211	1111	2123	0000	1001	1111	3223
7	5341	2211	3221	2211	4342	1111	5342	2211	0001	1100	1100	1122	0000	0000	1101	1122
8	1334	2311	1132	2223	0133	1111	1134	2323	1255	3330	1233	2143	0153	1112	1255	3343
9	3352	1301	1432	2311	0241	0100	3452	2311	2320	0100	2200	0010	0320	0000	2320	0110
10	1433	2311	2332	2321	1442	1110	2433	2321	2354	3211	2243	2022	0333	2011	2354	3222
11	3122	2121	2111	0433	0111	0122	3122	2433	4534	4212	4422	4234	2323	4132	4534	4234
12	1034	1100	1121	1211	0032	1100	1134	1211	1330	1111	1210	0233	1210	0111	1330	1233
13	0104	6665	1115	7765	0004	4556	1115	7766	2100	0000	3100	0111	1000	0100	3100	0111
14	4256	6543	4377	6565	4358	6543	4378	6565	0001	3420	0001	3321	0001	1211	0001	3421
15	3534	2223	3343	3255	1542	2244	3544	3255	1032	2200	1131	2112	0041	1100	1142	2112
16	5423	3221	5322	3233	6331	1132	6433	3233	3300	0001	3300	1112	1300	0001	3300	1112
17	4323	3255	2222	3166	3323	2156	4323	3266	0014	1020	1112	1121	0001	0110	1114	1121
18	6655	5455	5665	6565	6774	5645	6775	6665	0003	2200	1010	2212	0000	1101	1013	2212
19	5310	1102	5310	2112	6320	0111	6320	2112	1433	2100	1212	1102	0333	3101	1433	3102
20	1331	1224	2331	1345	0340	0224	2341	1345	0102	2210	1001	2222	0001	0010	1102	2222
21	4673	2231	4563	2332	5672	2132	5673	2332	0221	2100	1100	1110	1110	0000	1221	2110
22	1132	2200	3232	2211	1144	1110	3244	2211	1000	0000	0010	0100	0000	0000	1010	0100
23	0114	3312	1012	2433	0003	1222	1114	3433	0100	1100	1000	0111	0000	0001	1100	1111
24	2444	3111	2422	1213	2433	0001	2444	3213	0001	2111	0000	1123	0000	0112	0001	2123
25	3444	2221	3332	2123	4443	1011	4444	2223	1113	4121	2211	3114	1011	1001	2213	4124
26	4413	1034	4212	1145	2301	0024	4413	1145	0434	3202	2322	1133	0222	0022	2434	3233
27	4477	5346	3399	5477	3599	4457	4599	5477	2222	2200	3121	1111	3230	0000	3232	2211
28	4334	2321	4323	2333	3343	1232	4344	2333	1402	1100	2001	1012	0100	1001	2402	1112
29	1522	2111	1311	2222	0310	1111	1522	2222	0102	1322	1001	1345	0000	0133	1102	1345
30	1142	1111	2211	1022	0120	1011	2242	1122	5423	6433	4224	4434	4224	5323	5424	6434
31	0011	2111	1100	2222	0001	1011	1111	2222	5653	3213	4551	2233	5543	1212	5653	3233

September

	D		H		Z		K	
1	3544	3324	3543	2334	3543	0123	3544	3334
2	1245	2213	2114	1113	1123	1001	2245	2213
3	3453	2110	2442	2121	0331	1110	3453	2121
4	0131	2101	0111	1113	0011	0111	0131	2113
5	3332	2211	3221	2122	2220	1112	3332	2222
6	1301	1000	0200	1110	0200	0000	1301	1110
7	1021	0000	1000	1011	0000	0000	1021	1011
8	0001	1000	0100	1111	0000	0001	0101	1111
9	1035	1100	1123	1112	0033	0001	1135	1112
10	3001	2121	1001	1223	0000	0011	3001	2223
11	0311	2233	1211	2224	0211	1233	1311	2234
12	0462	2003	1452	2113	1561	1111	1562	2113
13	1211	0112	0100	0133	0000	1112	1211	1133
14	3443	5214	2442	5233	3433	2114	3443	5234
15	1022	1101	1112	1011	1012	1000	1122	1111
16	2222	2110	1101	1122	0200	0110	2222	2122
17	3521	2100	4211	0011	2410	0000	4521	2111
18	2311	2100	2201	1200	0100	0000	2311	2200
19	0100	1000	0100	1100	0100	0000	0100	1100
20	1122	1210	1221	0231	0021	0110	1222	1231
21	0000	1000	0000	0010	0000	0100	0000	1110
22	0110	2201	0000	1121	0000	0110	0110	2221
23	0000	1000	1000	1121	0000	0111	1001	1121
24	0025	5434	1014	5444	0004	4234	1025	5444
25	6664	2203	4563	3223	5563	2111	6664	3223
26	4332	3334	3212	1212	2122	2112	4332	3334
27	4545	4211	3434	3122	3444	2101	4545	4422
28	1000	0003	0010	0113	0000	0001	1010	0113
29	1120	1100	1200	0221	0200	0000	1220	1221
30	1312	1016	1211	2137	0110	0017	1312	2137
31								

October

	D		H		Z		K	
1	7576	4111	8988	4133	7788	3111	8988	4133
2	0011	1110	1011	1121	0000	0010	1011	1121
3	0001	2100	1000	2121	0000	0000	1001	2121
4	0101	2113	0000	2122	0000	1011	0101	2123
5	2022	1000	1000	0010	0001	0000	2022	1010
6	0022	1100	0001	0011	0011	0001	0022	1111
7	4111	2000	2112	1001	2101	0100	4112	1101
8	0232	2100	0021	2211	0231	0001	0232	2211
9	2201	1000	1200	0000	0100	0000	1201	1000
10	0100	1000	0000	1111	0000	0000	0100	1111
11	1114	3211	1123	3032	0012	2121	1124	3232
12	6543	3202	5221	2122	5433	0001	6543	3222
13	1342	1201	1331	1212	1333	0100	1343	1212
14	3031	2100	2010	0100	1020	0000	3031	2100
15	0102	1100	0001	0110	0000	0100	0102	1110
16	0000	0000	0000	0000	0000	0000	0000	0000
17	0000	0000	0000	0002	0000	0001	0000	0002
18	0210	2000	0100	1110	0000	0000	0210	2110
19	2111	2011	2101	1122	1100	0010	2111	2122
20	4552	1100	3451	0110	5450	0100	5552	1110
21	3001	2122	1001	1122	0000	0011	3001	2122
22	1112	2110	1101	0110	0100	0000	1112	2110
23	0110	1211	0000	0122	0000	0111	0110	1222
24	0322	0000	1210	0010	0220	0000	1322	0010
25	1021	2221	1100	2222	0000	0111	1121	2222
26	3344	2234	2233	2244	1233	3034	3344	3244
27	4635	2233	3522	3223	4533	1034	4635	3234
28	2237	7577	1147	7697	1146	7697	2247	7697
29	5453	1101	5553	1101	6561	0100	6563	1101
30	0011	2100	0022	2200	0010	1000	0022	2200
31	1131	1000	0020	1110	0030	0000	1131	1110

November

	D		H		Z		K	
1	0322	1010	0101	1011	0110	0000	0322	1011
2	0023	1000	0012	2000	0021	1000	0023	2000
3	2311	0000	1110	0000	0210	0000	2311	0000
4	0100	1001	0100	1022	0000	0010	0100	1022
5	2433	4312	1222	4123	0323	2112	2433	4323
6	1343	2101	1332	2112	1344	0000	1344	2112
7	2345	4364	2334	3364	2244	4464	2345	4464
8	4441	3112	4231	2121	4540	0010	4541	3122
9	3142	2210	2121	2121	1011	1110	3142	2221
10	1301	1000	0200	1100	0200	0000	1301	1100
11	0000	1101	0000	0011	0000	0000	0000	1111
12	2242	2303	2222	2222	1131	1001	2242	2323
13	2100	1000	1100	0011	0000	0000	2100	1011
14	1351	1111	1340	1111	0241	0010	1351	1111
15	0000	1000	0000	0100	0000	0000	0000	1100
16	0000	1011	0000	0012	0000	0001	0000	1012
17	0201	3413	1000	2323	0000	1214	1201	3424
18	4465	5232	3355	4332	3445	3131	4465	5332
19	3342	3000	3330	1000	3230	0000	3342	3000
20	0342	3212	0231	2221	0130	1110	0342	3222
21	2321	0101	2300	0111	1200	0000	2321	0111
22	2101	1000	1000	0000	0000	0000	2101	1000
23	0000	1000	0000	0000	0000	0010	0000	1010
24	0100	1000	0010	0000	0000	0000	0110	1000
25	0023	2000	0011	0100	0011	0000	0023	2100
26	0122	1100	0110	0011	0100	0000	0122	1111
27	1010	1110	1000	1010	0000	0000	1010	1110
28	0100	0010	0100	0020	0000	0000	0100	0020
29	1211	1000	1100	0100	0100	0010	1211	1100
30	0020	1100	0000	0000	0100	0000	0020	1100
31								

December

	D		H		Z		K	
1	0145	7433	0134	6555	0033	4433	0145	7555
2	5335	5446	3334	5346	4433	3556	5435	5556
3	6555	5214	6556	3233	5556	5222	6556	5234
4	3334	2210	3112	1211	2112	1010	3334	2211
5	0220	3332	0200	2331	0100	1121	0220	3332
6	1401	2320	1211	3330	0200	1320	1411	3330
7	0013	3000	1111	3010	0011	1000	1113	3010
8	0011	1100	0001	1010	0000	0000	0011	1110
9	0011	1000	0111	1110	0000	0000	0111	1110
10	0002	2102	0101	1021	0000	0010	0102	1122
11	2232	1213	2132	1112	1023	1110	2233	1213
12	3300	1100	3200	0100	1100	0000	3300	1100
13	0001	1102	0000	0121	0000	0011	0001	1122
14	2110	0011	0000	0011	0000	0010	2110	0011
15	0322	0002	0200	0012	0100	0011	0322	0012
16	1111	1000	0110	0001	0010	0000	1111	1001
17	2110	0000	2100	0000	1000	0010	2110	0010
18	2100	0000	1100	0000	0000	0000	2100	0000
19	0000	0000	0100	0000	0000	0000	0100	0000
20	0021	1000	0010	0001	0010	0000	0021	1001
21	0201	0000	0200	0011	0000	0000	0201	0011
22	0201	2111	1101	1110	0000	0100	1201	2111
23	0232	4102	1121	2113	0011	1002	1232	4113
24	2322	2100	2201	1210	1100	1000	2322	2210
25	0001	1000	0000	0100	0000	0000	0001	1100
26	0111	0001	0000	0001	0000	0000	0111	0001
27	2221	2111	3111	2131	2110	0010	3221	2131
28	0224	4313	1114	3323	0021	1111	1224	4323
29	4212	2102	3201	2203	1101	1101	4212	2203
30	1422	2213	1313	2322	0311	1201	1423	2323
31	1211	1121	0110	1231	0100	1010	1211	1231

CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
Dominion Observatories

PUBLICATIONS

of the

DOMINION OBSERVATORY

OTTAWA

Volume XXVIII • No. 7

RECORD OF OBSERVATIONS AT MEANOOK MAGNETIC OBSERVATORY 1959 - 1960

Anne B. Cook

Price: 25 cents

ROGER DUHAMEL, F.R.S.C.
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OTTAWA, 1963

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MEANOOK MAGNETIC OBSERVATORY

Geographic Latitude 54° 37′N
Geographic Longitude 113° 20′W

Geomagnetic Latitude 61.8°N
Geomagnetic Longitude 301.0°E

Officer-in-Charge: Anne B. Cook

Assistants: A. E. Evans
G. A. Brown

Introduction

No change was made in the magnetic observatory program from that of the IGY and IGC. Observations with the vertical incidence ionospheric sounder, fixed ionospheric backscatter sounder, and the auroral intensity recorder were discontinued after IGC.

Magnetic Equipment

The photographic recording equipment at Meanook consisted of two sets, standard and low sensitivity of la Cour variometers installed originally for the Second Polar Year 1932–33. These are currently operating in the new magnetic observatory. Telluric current recorders were in operation at the station throughout 1959–1960. This report deals with the standard magnetic observatory only.

Scale Coefficients

Standard	H	7.84γ/mm Temp. 1γ/degree C.
	D	0.98′/mm
	Z	10.83γ/mm
Low	H	22.56γ/mm
	D	2.40′/mm
	Z	16.78γ/mm Nov. 1959
	Z	29.98γ/mm Jan. 1960

Absolute Instruments

The absolute instruments used at Meanook during 1959 and 1960 were, Cooke magnetometer No. 15 for declination and horizontal intensity with IMS corrections of −0.3′ for declination and −0.00106H for horizontal intensity; quartz horizontal magnetometer No. 259 for horizontal intensity with IMS correction of +0.00013H; Ruska earth inductor No. 6540; Dominion Observatory proton precession magnetometer; and a five-component electrical magnetometer as a stand-by instrument.

Absolute Observations of Base-line Values

Absolute observations were made on the average of once a week. Simultaneous marks were placed on the la Cour records and the base-line values determined by calculation from observed values and the measurement of the record ordinates at these points. The r.m.s. value of the observed minus adopted values for D, H, and Z were:

	D	H	Z
1959	±.8′	±2γ	±9γ
1960	±.6′	±2γ	±4γ

The lower r.m.s. values for Z in 1960 reflected the advantage of using the proton precession magnetometer and the formula $Z = F \sin I$.

The Magnetic Reductions

The time used throughout 1959–1960 was Universal Time (U.T.). The hourly values of D, H, and Z were obtained from the magnetograms by means of a ruled transparent scale. Each value represents the mean reading for 60 minutes, centred on the half hour. The product of the ordinates and the scale value is added to the adopted base-line value and the sum obtained is the appropriate hourly value printed in the text. From the tabulated mean values for each calendar month the mean value for each hour of the day and the mean daily value for each day of the month are derived.

The mean diurnal inequalities of the elements D, H, and Z not corrected for non-cyclic changes for all days and international quiet and disturbed days are given for the same period in the tables.

Magnetic Activity and Disturbance Indices

Maximum hourly ranges in all elements as well as disturbance indices and copies of magnetograms were sent upon request to eleven geophysical prospecting agencies operating in Canada. Similar data were supplied to foreign scientific centres. Three-day forecasts of magnetic activity were supplied to survey organizations operating in northern Alberta. Three-hour range indices from which the planetary K-indices were derived were sent to De Bilt, Netherlands and Göttingen, Germany, each month. Meanook K-indices are published in International Association of Geomagnetism and Aeronomy Bulletins edited by Bartels, Romana and Veldkamp.

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Mean values for the years 1956 to 1960 inclusive are as follows:

Year	D East	H	Z	X	Y East	I North	F
	° ′	γ	γ	γ	γ	° ′	γ
1956	24 22.5	12894	58735	11740	5321	77 37.1	60134
1957	23.1	921	801	768	35	36.4	204
1958	14.9	942	818	800	15	35.6	225
1959	13.0	960	787	817	16	34.1	198
1960	09.7	985	774	848	15	32.5	177

MEAN VALUES FOR MONTHS AND YEAR MEANOOK

Month	D East	H	Z	X	Y East	I North	F
	° ′	γ	γ	γ	γ	° ′	γ
1959							
January	24 15.0	12955	58796	11812	5321	77 34.4	60206
February	14.5	937	786	796	12	35.3	193
March	14.0	949	787	808	15	34.7	196
April	13.2	960	799	819	17	34.2	210
May	12.7	974	788	833	21	33.2	203
June	12.5	982	982	840	23	32.7	195
July	13.8	975	788	832	25	33.2	203
August	13.5	963	787	822	19	33.9	199
September	12.4	949	789	810	09	34.7	198
October	12.0	965	785	826	15	33.8	198
November	11.4	952	777	777	07	34.4	187
December	11.5	955	779	817	09	34.2	190
Year	24 13.0	12960	58787	11817	5316	77 34.1	60198
1960							
January	24 11.4	12983	58780	11843	5320	77 32.7	60194
February	10.2	996	768	857	21	31.8	185
March	10.3	990	762	851	19	32.1	176
April	11.1	967	792	829	12	33.7	181
May	9.9	993	788	854	19	32.2	185
June	8.7	13012	779	874	23	31.1	185
July	9.5	12990	764	852	16	32.1	166
August	8.8	992	768	855	15	32.1	185
September	9.7	993	782	855	18	32.2	166
October	9.6	943	774	809	5297	34.9	166
November	8.9	981	767	845	5311	32.6	167
December	7.9	983	765	848	21	32.5	166
Year	24 09.7	12985	58774	11848	5315	77 32.5	60177

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 1 **Meanook** H = 12,000 γ + **January 1959**

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	978	979	982	981	984	983	984	985	985	985	987	987	987	987	989	985	978	945	953	946	951	961	973	981	976
2 Q	989	989	989	993	993	992	989	989	989	992	992	1000	1000	999	1006	1001	1000	977	961	953	961	965	977	985	986
3	989	984	980	980	975	948	982	992	985	982	985	989	987	994	999	991	981	968	953	939	946	954	969	984	976
4	993	1000	1000	1000	1000	1000	993	1000	985	993	993	989	978	1000	1000	1001	977	954	953	949	938	937	962	977	982
5	981	989	989	985	985	989	989	985	977	973	957	844	875	864	931	989	989	914	918	961	989	1008	1024	1059	965
6 D	1041	982	981	979	990	1027	1002	988	963	931	710	883	946	884	838	932	924	838	837	899	946	931	966	977	933
7 D	1009	994	986	997	998	1001	994	978	963	899	930	963	974	974	978	977	963	946	939	946	939	938	979	994	969
8	1029	1017	1021	994	985	969	964	961	954	924	750	888	982	977	977	954	950	923	947	943	935	935	984	1009	957
9 D	994	1025	986	974	974	974	973	970	961	962	947	916	719	688	767	770	672	664	900	963	946	942	1033	1102	910
10 D	1135	1064	1025	990	1020	1009	790	884	759	671	548	382	472	488	644	594	760	680	915	916	961	962	978	1010	819
11	1010	1042	967	966	967	994	1000	991	962	948	948	951	956	944	924	924	956	956	939	937	925	936	963	955	961
12	1003	1035	1007	983	975	979	970	967	971	967	964	971	971	971	978	979	970	956	936	925	929	941	955	955	969
13	959	963	967	971	971	970	964	962	932	897	943	956	967	974	983	990	971	956	940	932	932	940	955	963	957
14	971	972	971	974	975	973	970	980	963	960	971	983	979	986	991	987	975	951	940	940	947	948	940	955	967
15	972	979	984	984	996	1023	1027	992	883	901	952	963	964	973	987	992	981	964	952	945	945	949	957	964	967
16	975	968	972	972	973	972	973	968	933	941	901	458	654	863	910	856	972	918	918	941	941	942	960	963	910
17	968	974	999	1019	1011	1003	981	925	913	842	778	807	788	847	752	843	970	966	957	946	948	952	956	964	921
18	972	976	966	992	1007	1019	979	957	908	941	950	901	941	945	952	980	941	929	941	953	947	949	949	973	957
19	964	971	968	964	976	976	975	965	948	941	972	972	952	936	949	979	972	956	934	913	934	941	949	954	957
20 Q	958	962	964	968	971	972	978	980	977	973	974	973	976	973	976	973	967	956	948	941	935	934	948	957	964
21 Q	965	971	972	976	976	976	973	979	971	972	979	981	983	980	980	984	973	948	949	948	944	941	948	963	968
22	971	976	976	987	981	976	984	996	1003	1003	988	980	988	991	995	992	988	979	965	945	945	949	960	968	979
23	964	964	981	979	979	979	984	979	979	983	971	975	987	991	995	994	987	971	955	948	941	944	960	973	974
24 Q	974	969	976	978	978	978	978	978	978	979	981	982	986	990	985	991	980	974	963	955	950	954	962	971	975
25	977	977	982	985	986	986	986	986	990	986	954	1002	978	921	915	931	903	893	943	954	955	959	955	954	961
26 D	966	970	970	985	1002	1002	986	971	968	968	951	825	317	913	979	972	962	969	964	950	946	946	949	955	933
27	958	955	956	961	970	977	970	954	952	954	939	958	982	1001	1001	986	955	943	927	935	935	939	958	966	960
28	964	974	997	993	994	997	974	966	961	954	939	955	974	966	955	954	962	946	933	939	930	939	959	964	962
29	975	975	978	975	978	979	979	955	806	877	970	974	947	954	931	935	962	967	946	923	938	946	962	958	950
30	978	987	1002	987	995	1019	1035	997	980	955	940	979	973	983	982	980	970	962	959	955	954	958	964	973	978
31	980	979	971	977	987	916	963	916	852	823	951	948	933	954	969	972	969	962	959	951	948	951	964	967	948
Mean	986	986	983	982	986	986	977	971	947	938	926	914	907	933	942	948	951	931	940	942	944	948	965	977	955

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 2 Meanook D = 24° E + ′ January 1959

Day \ Hour U. T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	Q	11.9	12.6	13.5	13.9	13.5	13.9	13.7	13.3	12.9	13.7	14.2	14.5	14.6	15.1	15.7	17.5	19.6	21.1	19.3	17.2	14.1	11.6	10.8	10.5	14.5
2	Q	12.1	12.3	13.3	14.1	14.3	14.2	13.7	13.3	13.2	13.3	13.9	14.0	14.5	13.2	15.1	18.4	22.1	21.3	20.0	16.7	13.3	11.3	10.3	10.9	14.5
3		12.3	12.4	13.4	13.9	12.1	17.1	20.2	16.4	15.4	14.4	15.1	12.1	14.4	14.6	14.9	17.6	19.9	21.8	24.0	19.4	17.9	12.0	10.3	09.2	15.5
4		09.3	09.3	11.3	12.3	12.8	12.4	12.8	12.8	12.8	17.1	18.7	19.1	19.1	16.4	19.1	21.0	24.7	18.1	16.1	16.0	12.8	09.2	08.8	09.3	14.6
5		11.2	12.8	15.1	15.7	15.1	14.5	14.7	15.2	15.2	17.3	23.1	34.7	39.7	42.6	10.8	20.0	21.1	13.3	03.8	17.3	17.7	17.7	12.2	10.2	18.0
6	D	09.3	10.2	12.0	13.4	15.7	19.6	17.7	16.0	16.2	19.1	23.1	22.1	20.7	19.1	20.1	16.9	22.1	10.4	04.4	11.2	14.3	12.6	08.5	08.3	15.1
7	D	12.6	10.8	14.8	14.3	22.1	15.2	18.1	16.0	16.7	10.0	15.1	14.5	15.2	16.3	17.1	17.7	20.6	19.3	16.2	15.2	15.7	10.8	12.2	08.7	15.2
8		08.3	06.4	02.9	11.3	14.4	14.2	14.2	14.2	16.3	15.7	07.4	15.5	13.3	17.1	17.3	18.6	18.4	14.7	16.5	13.5	11.7	11.6	08.8	13.6	13.2
9	D	09.6	07.5	09.3	12.2	13.3	13.7	13.6	13.7	13.7	13.3	17.1	21.2	19.4	17.2	27.9	16.7	23.5	13.2	-01.5	14.2	13.7	11.6	18.1	17.7	14.6
10	D	09.3	-01.0	04.7	13.3	16.5	16.3	13.2	16.2	16.1	46.6	21.0	50.3	33.0	05.9	22.1	10.2	17.9	04.7	17.3	17.1	12.4	12.5	12.3	11.7	16.6
11		07.7	06.9	12.3	14.0	14.5	16.3	17.7	18.1	17.1	17.0	14.8	15.1	15.3	17.3	17.3	22.2	23.6	23.3	20.6	17.5	14.7	11.2	07.5	10.0	15.5
12		07.5	09.0	07.8	12.9	15.6	12.6	12.6	13.2	13.8	14.5	15.3	15.1	14.3	15.6	16.2	18.1	21.0	23.1	23.3	13.3	09.3	09.3	12.0	12.1	14.1
13		12.3	12.7	13.3	13.7	14.2	15.3	17.7	16.8	14.7	22.1	23.0	21.1	18.1	19.1	20.0	19.6	19.5	17.5	20.6	16.7	13.2	11.5	10.8	10.7	16.4
14		11.4	12.2	13.2	13.3	13.3	13.3	13.5	12.6	13.5	14.3	13.3	14.2	13.3	13.3	18.1	20.1	21.2	20.7	16.7	14.7	11.8	10.2	11.0	08.3	14.1
15		07.9	07.2	08.1	11.0	12.7	16.3	16.1	13.3	12.8	21.2	19.1	19.1	18.1	18.0	19.0	19.1	20.1	21.1	20.0	17.1	13.2	10.8	10.6	11.7	15.1
16		11.6	12.3	13.0	13.3	13.2	12.9	14.2	13.3	07.7	14.7	26.0	28.9	20.2	25.9	18.1	12.6	17.1	16.2	13.0	14.3	14.1	12.4	13.2	12.0	15.4
17		11.6	10.9	11.8	20.5	23.1	15.2	22.0	20.1	23.9	19.1	15.0	13.5	27.1	23.1	20.4	15.7	17.7	22.0	17.7	16.6	13.7	13.3	12.8	12.8	17.5
18		11.3	08.3	13.3	16.3	14.1	21.0	15.2	13.7	13.3	12.6	15.2	11.2	14.0	14.4	14.4	23.5	17.0	08.4	08.6	15.7	14.3	11.4	14.3	12.6	13.9
19		11.4	12.2	13.3	19.6	13.7	13.3	13.3	14.3	14.7	17.2	17.7	15.1	12.3	10.6	11.9	16.0	19.1	19.0	17.3	13.7	10.7	08.3	09.6	11.6	14.0
20	Q	11.7	12.2	12.6	13.2	12.8	12.9	13.5	12.7	12.8	12.8	13.3	13.3	13.7	13.5	15.1	17.4	20.0	21.0	19.1	16.4	13.3	11.2	11.6	12.0	14.1
21	Q	11.7	11.2	11.8	13.2	13.3	13.2	12.9	14.1	13.2	14.1	14.5	14.2	14.3	14.2	15.2	19.1	21.0	21.2	18.1	16.3	14.6	13.2	12.4	11.8	14.5
22		10.8	11.2	12.4	12.8	12.8	16.2	14.6	11.4	18.1	15.7	18.2	20.6	17.9	17.3	18.1	18.2	20.0	18.6	16.7	16.3	13.2	11.2	10.8	10.9	15.2
23		10.8	11.7	11.3	13.0	12.9	12.8	12.4	13.7	13.2	12.8	15.7	13.3	14.2	14.2	16.2	17.2	19.0	19.4	16.7	15.1	12.8	09.0	08.3	08.3	13.5
24	Q	09.4	11.2	11.5	12.8	12.7	12.6	12.8	14.3	13.0	13.3	13.3	13.7	12.3	13.3	14.7	17.1	18.6	19.5	17.3	15.2	14.1	10.8	09.7	09.8	13.5
25		11.2	11.2	12.1	13.1	12.8	12.9	13.2	12.8	13.2	14.1	12.4	15.7	21.6	18.3	09.3	19.3	27.3	11.3	06.1	07.4	13.2	10.3	11.6	14.1	13.5
26	D	12.3	11.6	12.0	12.1	12.8	14.1	13.3	13.3	12.9	13.3	15.8	21.2	23.1	23.1	19.6	23.7	23.9	17.1	19.9	20.2	18.1	14.7	14.1	14.1	16.5
27		13.3	13.3	13.3	13.3	13.3	13.3	12.3	12.4	17.7	16.7	16.3	14.2	12.3	14.1	17.3	19.7	24.5	26.6	20.2	14.7	10.8	09.8	09.3	08.8	14.9
28		07.5	10.3	09.3	13.3	15.5	16.1	15.3	14.3	13.2	14.7	14.1	17.3	17.9	17.9	16.2	18.2	23.1	21.2	19.5	19.0	09.8	08.3	08.4	09.4	14.6
29		11.3	11.7	12.4	13.3	12.8	13.3	13.7	12.2	11.4	18.2	23.9	19.1	18.1	14.3	12.8	08.3	16.3	20.5	23.9	15.1	12.8	09.2	08.3	08.3	14.2
30		08.3	09.8	12.2	12.4	12.1	11.4	14.2	14.3	14.2	13.3	12.4	20.0	20.1	17.2	18.9	20.6	22.2	22.1	21.4	18.1	13.3	09.4	09.2	10.3	14.9
31		09.4	09.4	09.0	12.4	11.3	26.0	17.1	15.2	09.8	27.0	19.1	21.2	19.0	20.0	18.1	21.1	25.9	24.9	20.0	17.3	13.3	12.3	11.3	10.8	16.7
Mean		10.5	10.3	11.5	13.7	14.2	14.9	14.8	14.3	14.3	16.7	16.7	18.6	18.1	17.2	17.0	18.1	20.9	18.5	16.5	15.7	13.5	11.2	10.9	11.0	15.0

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 **Meanook** $Z = 58,000\ \gamma +$ **January 1959**

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	789	791	791	787	787	783	782	782	782	782	789	789	791	787	792	792	798	803	793	798	798	798	798	798	791
2 Q	798	798	798	798	798	798	799	799	799	799	800	800	799	798	799	799	804	804	814	814	814	814	813	814	803
3	808	808	829	832	826	834	850	826	811	804	801	804	795	819	838	(833	830	827)	822	826	817	817	819	819	821
4	814	815	819	817	824	820	824	825	814	814	813	791	781	808	803	803	813	813	819	825	814	808	819	818	815
5	814	814	814	814	814	813	814	814	814	814	780	641	629	651	750	809	817	814	835	846	879	857	869	889	799
6 D	841	841	857	857	863	863	857	846	828	814	749	770	765	716	749	815	761	770	778	807	820	835	841	857	812
7 D	861	857	842	852	879	890	867	834	834	780	809	792	824	825	819	819	815	815	815	826	835	858	868	868	837
8	902	889	900	884	845	825	825	824	814	802	651	695	787	814	814	802	792	772	813	835	850	861	857	861	821
9 D	857	850	845	834	830	825	820	814	803	803	782	743	637	612	613	690	651	662	750	801	804	825	837	728	767
10 D	830	869	890	873	868	722	793	804	726	878	748	900	641	629	802	607	770	772	861	885	884	857	846	830	804
11	845	863	834	835	846	857	835	845	845	825	815	814	808	798	784	760	786	804	819	819	818	819	826	825	822
12	853	858	827	827	821	831	815	804	804	804	802	800	804	805	809	812	815	815	814	815	808	809	815	815	816
13	809	809	809	807	805	804	799	782	739	675	755	770	782	793	804	814	804	804	804	814	813	812	809	804	793
14	799	799	797	794	794	792	788	788	761	761	770	792	791	794	793	788	791	793	792	793	795	799	803	809	791
15	814	826	839	854	870	869	858	831	776	714	767	768	768	781	792	797	801	812	814	814	812	812	809	806	808
16	806	803	803	803	803	803	802	799	716	674	686	687	572	664	741	735	789	784	773	793	802	809	819	813	762
17	814	815	844	845	870	847	803	727	734	717	664	664	616	719	703	675	719	774	800	805	809	805	799	794	765
18	796	810	827	853	847	831	807	762	728	739	760	706	728	777	776	771	755	781	782	794	804	820	827	820	788
19	805	804	804	816	816	807	793	783	771	739	781	777	766	761	755	788	799	793	793	806	814	809	804	794	791
20 Q	794	793	793	793	793	794	793	773	781	783	788	788	788	788	792	794	799	800	804	804	801	796	800	794	793
21 Q	793	792	793	793	793	793	793	777	777	782	792	792	788	788	785	788	788	792	797	797	792	792	793	793	790
22	793	793	793	794	804	793	799	804	755	777	792	781	778	782	782	788	788	788	788	788	788	788	789	789	788
23	793	793	799	794	793	788	787	783	782	771	750	738	771	783	782	785	785	785	788	788	788	789	792	792	783
24 Q	788	788	792	792	792	793	792	789	784	783	782	782	782	788	793	793	792	792	788	788	784	788	792	792	789
25	789	788	792	792	792	792	792	792	792	778	706	739	706	699	649	664	712	723	777	814	803	803	809	801	763
26 D	797	800	799	804	826	820	815	803	802	793	781	804	874	713	783	792	778	783	799	812	809	805	804	803	800
27	803	799	799	799	794	794	794	782	730	738	755	771	780	803	799	793	792	788	784	788	794	804	809	809	788
28	826	836	846	847	847	857	816	799	782	771	760	750	788	788	783	788	792	792	788	793	793	794	805	807	802
29	801	799	800	794	793	793	794	781	677	743	782	793	773	763	740	701	716	761	782	793	804	814	814	806	776
30	815	816	825	817	826	842	858	826	815	792	723	766	789	799	803	803	804	799	794	799	796	803	804	804	805
31	804	804	815	825	827	690	794	782	727	705	773	783	761	773	794	805	799	802	807	802	804	804	809	806	787
Mean	815	817	820	820	822	812	812	799	778	772	765	767	757	762	775	774	782	788	800	809	811	813	816	812	796

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 4 Meanook — January 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 Q	08	57	989	19	37	939	50	17	08	21.7	23	35	9.8	11.9	18	15	803	06	25	780	23
2 Q	13	38	1009	21	05	945	64	16	44	25.3	23	14	9.6	15.7	21	16	818	13	37	789	29
3	09	05	1021	08	44	909	112	05	57	37.7	23	40	7.9	29.8	05	52	897	05	09	765	132
4	15	22	1011	20	55	922	89	16	45	27.5	08	17	6.1	21.4	07	40	835	12	20	746	89
5	23	44	1119	13	34	729	390	13	19	52.5	18	26	-7.7	60.2	22	52	933	12	55	558	375
6 D	00	23	1104	10	21	594	510	10	25	39.2	17	47	-0.9	40.1	06	25	912	13	34	686	226
7 D	00	30	1095	09	29	747	348	04	17	31.4	10	49	-8.7	40.1	04	06	913	09	46	722	191
8	00	03	1059	10	12	679	380	11	48	26.4	10	32	-4.8	31.2	00	03	941	10	50	608	333
9 D	23	55	1292	12	47	575	717	16	20	62.7	18	03	-19.6	82.3	00	20	873	14	36	558	315
10 D	00	12	1229	12	53	132	1097	11	09	115.0	15	16	-87.2	202.2	11	23	1105	05	56	64	1041
11	01	09	1179	14	59	889	290	06	07	27.4	01	20	-3.4	30.8	01	04	897	15	11	743	154
12	01	14	1085	18	11	903	182	18	12	31.9	00	48	2.8	29.1	01	18	885	12	40	782	103
13	15	02	1016	09	40	834	182	10	01	27.6	00	30	11.4	16.2	15	02	831	09	11	640	191
14	14	08	995	21	10	919	76	16	14	23.1	08	39	10.3	12.8	23	59	810	08	39	734	76
15	06	44	1054	08	29	771	283	09	14	27.7	08	34	-4.3	32.0	04	38	893	08	51	684	209
16	21	10	1040	11	45	232	808	11	40	63.3	12	04	-19.7	83.0	22	13	859	12	36	479	380
17	03	30	1050	10	03	634	416	15	05	45.1	15	31	-0.8	45.9	04	45	903	13	05	565	338
18	05	00	1156	11	41	815	341	05	17	36.5	17	25	1.0	35.5	03	12	874	11	41	614	260
19	16	47	992	13	39	895	97	16	49	26.3	00	13	7.9	18.4	03	33	832	09	16	698	134
20 Q	14	04	1001	21	20	922	79	17	34	23.5	21	13	9.6	13.9	22	26	809	07	20	766	43
21 Q	07	01	996	17	36	935	61	17	11	24.1	07	10	9.3	14.8	22	29	802	07	08	766	36
22	08	17	1029	19	54	937	92	08	38	26.5	08	10	8.0	18.5	07	29	823	08	40	699	124
23	12	43	1019	20	42	935	84	17	17	22.7	23	59	7.1	15.6	02	26	805	11	00	713	92
24 Q	15	16	995	20	41	942	53	17	27	21.8	00	01	7.3	14.5	15	26	797	08	13	776	21
25	11	25	1022	14	07	847	175	16	00	36.5	14	11	1.9	34.6	19	43	827	15	17	613	214
26 D	16	45	1036	12	10	-316	1352	12	28	71.0	12	38	-17.7	88.7	12	27	1091	13	05	616	475
27	13	30	1031	10	44	911	120	17	54	28.6	23	44	7.5	21.1	13	32	823	08	18	696	127
28	02	23	1011	21	12	913	98	16	36	27.1	23	11	4.1	23.0	06	08	869	10	55	721	148
29	10	49	1020	08	16	737	283	09	59	29.1	07	14	-0.3	29.4	22	06	825	08	40	608	217
30	05	45	1062	10	38	846	216	11	07	25.5	10	35	-4.5	30.0	06	05	896	10	32	656	240
31	05	02	1057	08	56	633	424	09	36	48.5	08	59	-35.3	83.8	04	34	861	08	37	574	287
Mean			1057			752	305			36.6			-3.0	39.6			872			658	214
No. days			31			31	31			31			31	31			31			31	31

69026-3—3

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 5 Meanook — H = 12,000 γ + — February 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	970	959	978	973	980	979	980	971	936	868	925	979	955	948	966	964	962	956	936	926	935	943	967	968	955
2	969	973	976	981	983	1021	962	1012	970	706	878	959	775	771	909	879	919	918	903	919	938	941	970	970	926
3	959	984	988	981	999	984	984	982	960	943	670	756	854	974	850	822	942	968	932	945	941	977	957	956	930
4 D	1058	1082	1098	1051	1070	1075	1035	1004	941	909	662	831	686	729	909	996	929	878	932	918	887	909	1019	1020	943
5	980	964	972	996	1059	1074	1058	1003	941	885	745	854	752	705	777	840	902	926	941	945	949	952	957	960	922
6	941	984	988	987	981	972	980	979	972	814	811	937	960	949	908	940	981	964	926	886	913	933	953	978	943
7	972	971	987	987	979	987	987	985	979	967	972	971	911	916	971	963	960	964	956	955	951	951	951	963	965
8	967	972	975	980	976	980	986	983	979	987	972	940	955	970	979	980	980	979	967	955	956	936	940	978	970
9	1080	1010	1116	1057	1042	1033	1064	1056	873	786	869	901	909	907	932	964	978	971	951	940	940	945	951	956	964
10 Q	964	975	980	980	978	978	972	970	969	969	971	978	978	986	983	978	975	956	944	940	940	940	955	971	968
11	971	979	980	987	978	987	987	995	963	532	494	689	555	532	814	901	971	972	948	940	940	947	972	979	876
12	971	977	972	1010	1006	995	971	959	893	838	712	908	947	986	972	917	955	948	925	940	924	940	962	955	941
13	963	972	980	980	979	979	971	971	965	947	814	889	869	846	729	862	980	947	916	849	951	951	971	987	928
14	978	972	1002	1034	1011	1030	1071	1042	876	916	922	915	(520	371)	846	783	718	876	935	936	916	932	951	956	896
15	967	967	979	1120	1112	1112	1097	955	776	(395)	528	813	701	743	955	971	885	876	889	947	955	947	955	963	909
16 D	978	1002	1018	1014	983	1072	1010	983	1014	996	931	964	944	638	583	834	815	791	892	955	987	1042	1201	1120	948
17	1096	1129	1082	1053	1019	1019	1019	939	682	877	821	759	784	889	933	940	949	951	940	940	928	948	955	947	942
18 Q	951	962	964	967	971	971	970	971	971	964	972	970	971	970	959	962	963	955	956	955	944	944	940	955	962
19	971	963	972	979	987	995	967	924	936	900	917	932	737	853	814	908	979	964	962	955	963	960	956	963	936
20 Q	968	973	973	972	973	972	972	967	973	972	980	980	979	973	980	979	976	973	956	949	948	949	952	952	968
21 Q	964	972	980	980	980	979	973	971	908	981	981	980	980	984	973	972	971	956	957	941	935	938	948	956	965
22	974	988	993	987	1027	1078	1012	980	952	839	902	910	987	992	981	987	988	972	965	964	956	948	952	964	971
23	964	981	992	1019	1079	1051	1039	988	862	703	682	623	944	1003	988	980	972	965	957	948	949	952	952	956	940
24 Q	964	973	973	979	980	976	976	979	980	980	980	980	980	973	973	979	979	965	957	949	941	941	948	957	969
25 D	972	984	996	999	996	1019	948	862	909	874	(482	687	486	482	443	364)	690	713	890	917	972	941	957	988	816
26 D	972	996	1148	1278	1309	1144	949	506	956	948	654	876	811	847	988	902	909	941	933	934	972	963	972	965	953
27	974	992	996	1019	1043	871	1007	996	948	932	894	839	898	901	909	913	848	800	980	941	947	941	956	971	938
28 D	980	996	1070	1058	1003	965	972	963	901	886	854	632	325	678	615	697	792	887	879	918	929	1012	1012	1106	880
29																									
30																									
31																									
Mean	980	988	1005	1015	1017	1011	1005	957	928	869	821	873	827	840	880	899	924	926	937	936	943	951	969	977	937

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 6 Meanook D = 24° E + ′ February 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	10.0	10.2	12.3	12.3	13.3	15.7	15.1	14.1	12.2	07.9	20.0	18.9	20.1	17.2	16.8	13.2	18.6	17.0	17.2	17.3	12.4	08.4	08.3	09.4	14.1
2	10.3	10.3	11.3	12.3	10.4	28.8	22.0	15.7	12.3	15.3	23.1	21.0	21.1	39.2	35.8	29.9	26.0	25.0	17.1	15.2	08.3	08.3	07.5	07.5	18.1
3	07.4	08.3	09.3	13.2	13.3	13.3	14.2	14.1	13.2	15.1	08.3	35.7	23.1	16.1	21.0	09.2	13.3	24.5	18.2	19.0	13.7	10.2	11.3	04.4	14.5
4 D	03.4	04.5	-00.5	12.8	12.3	12.3	15.2	13.8	13.3	16.8	03.5	23.0	33.9	06.5	26.0	24.0	24.0	07.4	12.3	13.3	16.2	07.5	07.4	11.2	13.4
5	08.4	13.4	12.5	11.4	19.1	21.2	15.4	08.6	15.8	14.2	18.2	25.1	30.0	32.1	29.9	19.2	20.1	13.1	17.7	17.3	16.3	12.5	10.9	08.4	17.1
6	08.5	09.4	10.4	11.5	14.4	13.3	14.2	13.3	15.3	-04.3	13.8	20.1	19.1	19.2	18.3	21.1	21.3	21.3	19.2	16.0	08.4	05.6	09.4	08.4	13.6
7	11.4	10.4	11.4	12.9	14.3	12.3	13.4	14.8	16.3	14.4	15.2	16.0	15.2	07.4	15.3	17.2	17.4	21.2	17.3	18.2	12.9	10.3	10.4	11.3	14.0
8	12.3	11.4	11.4	11.3	12.4	12.0	13.4	14.3	21.1	15.3	14.6	12.4	09.4	11.5	12.5	15.3	22.3	18.4	16.3	15.4	16.3	13.4	07.4	04.5	13.5
9	05.5	05.4	07.6	13.4	16.9	14.3	13.4	14.2	16.3	26.6	19.1	19.1	21.3	22.7	14.2	24.0	25.0	24.2	21.3	19.2	14.3	12.3	10.8	09.5	16.3
10 Q	08.4	11.3	11.4	13.2	13.4	13.4	13.4	13.4	14.2	14.2	13.9	14.1	15.2	14.5	15.2	18.2	19.2	20.1	18.2	16.4	10.9	09.4	04.5	08.4	13.5
11	10.3	11.3	12.4	11.4	11.4	11.5	11.5	12.5	11.5	30.9	32.5	36.0	34.4	36.8	32.9	15.2	28.1	19.3	16.4	16.3	10.4	10.2	08.4	09.4	18.3
12	10.4	09.4	11.4	10.4	25.1	15.8	10.4	10.3	07.0	12.4	05.6	00.5	17.2	16.4	16.5	13.3	16.3	20.2	15.3	12.4	12.4	12.2	09.4	09.7	12.5
13	12.2	10.4	11.3	13.4	14.2	14.3	12.3	12.4	11.0	09.5	04.8	05.5	19.2	24.2	11.5	07.0	23.1	22.2	17.3	05.5	03.7	07.5	11.9	08.5	12.2
14	08.4	10.3	08.9	16.4	15.3	14.2	14.3	13.4	11.4	14.3	10.5	11.4	18.2	13.4	20.3	26.0	06.6	-06.2	04.4	10.4	08.4	09.5	11.3	11.9	11.8
15	12.4	11.4	12.4	07.6	14.2	10.4	19.2	07.6	04.5	07.6	58.4	30.5	31.1	15.8	25.1	26.2	21.7	13.3	-00.5	01.5	13.3	14.4	13.4	11.9	16.0
16 D	10.5	09.3	23.2	11.3		16.3	11.6	13.3	04.4	14.2	12.9	15.4	15.8	12.5	24.0	26.9	25.7	-00.9	15.3	18.3	12.3	19.2	21.2	12.5	14.3
17	15.3	12.9	14.2	14.3	11.5	12.3	09.4	11.3	04.4	10.3	20.2	16.3	20.7	15.8	13.4	19.1	19.0	19.3	18.2	13.4	14.3	15.2	13.4	15.2	14.6
18 Q	16.3	15.3	13.3	11.4	10.5	10.3	09.9	08.0	05.5	09.3	10.4	12.4	14.2	12.4	13.4	19.1	20.2	19.1	22.2	18.2	16.2	15.8	14.3	13.8	13.8
19	16.3	16.2	13.4	14.3	12.3	14.3	15.2	16.2	12.5	10.4	16.4	15.3	15.2	23.2	08.4	15.3	16.4	17.2	14.3	16.3	15.2	13.4	12.4	11.9	14.7
20 Q	11.4	11.5	12.3	12.5	12.4	12.4	12.3	12.4	12.4	13.4	13.4	13.4	13.4	14.2	14.3	15.4	16.2	16.4	15.3	15.2	14.2	13.3	11.9	11.2	13.4
21 Q	10.4	11.3	11.5	11.5	12.3	11.5	11.4	19.2	10.3	17.2	12.4	12.4	12.9	15.2	16.2	17.2	17.3	17.2	17.4	15.5	09.4	10.5	11.4	11.4	13.4
22	11.9	10.4	10.4	10.3	10.9	18.2	11.9	12.3	14.3	24.0	25.6	22.0	16.8	17.3	17.3	17.2	17.3	17.3	14.8	13.3	11.5	10.4	10.3	10.4	14.8
23	07.5	07.3	06.5	05.4	05.6	11.3	06.0	10.4	11.9	17.2	20.5	10.3	16.2	14.2	16.4	17.3	19.0	18.9	15.8	13.4	11.9	11.4	11.4	11.4	12.4
24 Q	11.3	11.4	11.9	12.3	12.4	12.4	12.3	12.4	13.4	13.3	13.3	12.6	13.5	13.4	15.8	19.1	21.1	20.7	17.2	15.3	14.2	11.4	10.4	10.4	13.8
25 D	09.9	09.5	09.4	10.4	11.3	10.4	-00.5	14.3	04.3	14.3	39.8	37.7	13.4	53.0	53.0	53.0	31.0	06.6	07.4	05.6	10.4	06.4	09.4	10.3	18.3
26 D	07.5	06.0	07.5	-00.4	04.6	15.2	08.4	53.4	17.8	13.3	14.2	11.3	18.2	28.0	17.8	23.1	21.3	22.1	17.3	19.2	23.0	13.4	09.2	06.6	15.7
27	06.0	10.4	09.4	11.5	14.2	06.4	14.4	16.3	11.5	16.4	26.2	27.1	21.7	24.1	29.1	27.1	15.3	25.2	03.0	08.9	12.5	10.9	11.5	10.3	15.4
28 D	08.5	09.4	08.4	20.1	10.5	13.3	13.3	14.3	14.2	15.3	17.3	20.1	18.2	14.2	13.4	11.4	09.3	20.1	12.4	03.8	11.3	14.8	11.5	08.4	13.1
29																									
30																									
31																									
Mean	10.1	10.3	10.9	11.7	12.4	13.8	12.6	14.5	11.8	14.2	19.0	17.9	21.9	20.4	19.3	18.2	19.7	16.1	14.9	14.0	12.6	11.3	10.7	09.9	14.5

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 7 Meanook $Z = 58{,}000\ \gamma +$ February 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	804	804	809	815	831	826	804	804	728	609	685	777	762	739	761	777	780	782	799	815	815	814	815	806	782
2	805	805	805	805	836	717	782	794	767	664	751	774	697	557	632	730	745	750	762	783	795	793	806	816	757
3	827	826	816	815	828	816	817	805	784	772	619	639	676	783	686	697	728	780	784	795	793	815	816	827	773
4 D	892	880	908	880	859	880	860	847	783	793	644	717	685	654	685	784	752	745	762	782	814	834	847	833	797
5	816	804	805	827	806	837	859	817	794	782	719	697	675	611	662	718	805	757	784	805	805	805	815	821	776
6	837	847	828	827	806	804	805	782	767	633	641	686	767	763	745	763	800	800	794	827	848	822	810	827	784
7	827	810	817	827	817	816	817	805	805	794	794	794	772	768	794	800	800	806	826	827	836	827	827	832	810
8	827	821	826	827	836	827	827	816	794	815	805	778	778	767	757	783	800	801	805	810	815	827	837	854	810
9	904	870	882	767	847	860	806	706	783	741	761	762	741	783	784	774	806	815	806	810	820	816	826	821	804
10 Q	817	817	816	816	810	806	805	806	805	804	805	805	803	804	805	804	804	804	806	815	815	815	810	810	809
11	806	805	806	814	826	810	806	805	805	740	762	713	827	631	631	716	816	826	825	806	815	816	827	836	786
12	870	821	816	836	839	829	818	805	752	709	340	659	739	804	772	778	815	804	805	811	816	816	827	835	780
13	821	806	811	815	815	815	810	805	784	764	676	729	697	686	718	705	817	806	805	816	821	821	829	837	784
14	836	836	854	871	859	879	870	826	793	784	785	783	676	724	653	675	686	718	794	815	827	832	837	827	793
15	826	837	839	863	820	767	685	640	332	158	628	750	836	664	696	762	783	806	806	814	815	806	815	815	732
16 D	816	860	871	821	789	816	774	745	793	804	796	800	782	716	596	633	730	767	804	901	908	881	837	815	794
17	837	751	774	847	859	839	832	784	767	756	702	643	588	670	741	784	793	806	816	816	806	816	826	821	778
18 Q	816	816	815	806	805	805	801	805	805	805	805	801	804	800	805	806	806	806	816	816	815	815	815	810	808
19	817	810	810	810	826	859	816	764	767	729	724	745	588	621	659	728	792	805	806	806	815	816	806	800	772
20 Q	795	795	795	795	795	795	795	793	793	794	794	794	794	793	794	794	794	794	794	800	805	805	800	794	796
21 Q	794	793	793	793	793	793	794	771	810	772	782	783	784	783	783	784	783	783	793	794	800	795	800	800	790
22	794	794	794	798	828	849	835	800	762	599	676	697	775	791	778	789	793	784	795	800	795	795	795	804	780
23	800	800	817	839	871	847	860	772	622	686	709	609	783	806	804	805	806	800	795	794	793	804	800	801	784
24 Q	795	795	794	794	792	789	795	790	789	790	785	775	784	778	784	785	794	795	794	794	794	794	792	794	790
25 D	790	785	784	785	794	816	753	762	948	913	772	710	465	703	912	673	642	768	817	807	816	838	888	844	781
26 D	855	849	818	817	742	783	710	568	806	806	753	717	710	751	849	817	825	833	827	818	844	850	871	848	794
27	838	848	848	850	794	677	828	838	806	784	708	644	746	764	796	783	725	778	801	810	806	806	817	838	789
28 D	850	828	807	849	855	827	818	784	784	746	671	707	556	471	652	667	691	795	817	807	818	846	838	871	765
29																									
30																									
31																									
Mean	825	818	820	822	821	814	806	780	769	734	718	732	725	721	741	754	776	790	801	811	816	819	821	823	786

39026-3—34

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 8 Meanook February 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	04	26	1004	09	23	814	190	10	34	26.1	09	44	-2.4	28.5	04	50	850	09	24	514	336
2	05	23	1190	09	27	580	610	05	32	65.1	09	00	-22.0	87.1	05	22	865	13	32	534	331
3	06	29	1008	10	49	502	506	11	30	49.6	10	37	-5.4	55.0	23	55	845	10	44	506	339
4 D	05	02	1176	12	59	433	743	12	44	49.5	10	15	-19.2	68.7	03	03	954	10	34	558	396
5	05	50	1170	13	33	589	581	14	11	58.5	05	02	-17.6	76.1	06	00	913	14	01	539	374
6	13	47	1026	10	02	618	408	16	08	28.5	09	48	-14.0	42.5	01	27	867	09	54	540	327
7	02	29	1024	13	02	841	183	17	31	25.9	13	28	-0.3	26.2	03	43	840	12	55	729	111
8	14	36	1010	11	43	906	104	16	45	29.8	23	17	1.4	28.4	23	14	865	14	18	705	160
9	02	44	1189	09	08	601	588	09	23	62.2	03	40	-44.1	106.3	00	14	954	09	25	516	438
10 Q	23	24	993	21	57	928	64	16	03	22.0	22	25	3.4	18.6	00	35	829	09	23	791	38
11	15	03	1398	(09	50	246	1152)	13	32	90.8	15	02	-28.0	118.8	09	17	954	13	57	417	537
12	03	57	1147	10	27	610	537	04	14	35.2	11	23	-10.5	45.7	04	18	874	10	25	294	580
13	16	31	1028	14	23	598	430	14	28	44.7	14	59	-9.5	54.2	16	41	858	10	27	619	239
14	06	37	1130	(13	35	50	1080)	13	28	83.5	13	38	-62.1	145.6	13	36	1068	13	18	385	683
15	04	10	1400	(09	35	89	1311)	10	00	99.3	09	45	-57.7	157.0	04	07	948	08	47	-533	1481
16 D	23	06	1332	(13	50	379	953)	15	37	70.1	17	42	-55.2	125.3	20	03	999	13	58	363	636
17	02	42	1185	(08	04	341	844)	07	55	51.3	08	12	-47.0	98.3	03	26	889	12	20	548	341
18 Q	10	52	987	22	20	933	54	18	13	23.8	08	37	4.1	19.7	01	20	824	11	09	786	38
19	05	51	1017	12	44	583	434	13	18	37.6	14	40	-7.7	45.3	05	14	869	12	37	528	341
20 Q	09	16	984	23	03	941	43	16	00	18.0	23	48	10.1	7.9	21	02	807	13	32	781	26
21 Q	09	11	996	08	25	831	165	07	38	28.1	08	17	-3.3	31.4	08	09	800	08	33	599	201
22	05	43	1130	09	52	792	338	11	13	30.5	23	03	4.6	25.9	05	43	910	09	38	555	355
23	04	54	1152	11	05	479	673	10	27	45.9	07	29	-13.8	59.7	04	31	899	08	35	501	398
24 Q	11	58	991	21	03	932	59	17	50	23.3	23	26	7.2	16.1	23	27	802	11	30	768	34
25 D	06	07	1147					(15	10	115.8)	15	21	-97.3	213.1	15	06	1690	12	40	-122	1812
26 D	04	04	1477	(07	45	198	1279)	07	35	86.7	03	04	-31.9	118.6	10	02	951	07	08	-349	1300
27	04	39	1213	14	12	695	518	05	17	52.7	04	50	-38.1	90.8	18	36	910	05	36	473	437
28 D	03	03	1283	(12	30	184	1099)	14	20	83.6	13	37	-28.0	111.6	03	47	939	13	00	309	630
29																					
30																					
31																					
Mean			1135			581	554			51.3			-20.9	72.2			920			459	461
No. days			27			27	27			28			28	28			28			28	28

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 9 Meanook — H = 12,000 γ + — March 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1129	1074	1004	1130	1208	1230	941	788	847	902	560	730	933	964	838	678	862	918	926	925	941	981	975	996	937
2	988	1011	1035	1003	1094	988	1004	1040	933	606	568	622	761	843	854	902	952	937	933	929	979	934	964	980	911
3	988	987	996	992	1011	996	996	965	936	905	923	869	870	910	980	963	933	901	937	941	948	1004	996	980	955
4	984	967	965	965	965	979	976	879	913	902	925	772	808	925	964	941	941	934	921	925	926	933	941	956	930
5	980	976	995	1035	1068	1035	1042	973	925	948	979	957	952	945	956	948	948	916	895	926	945	945	968	964	968
6	981	988	987	984	973	972	972	965	970	972	972	965	957	965	972	968	963	956	945	941	941	948	956	964	966
7	973	978	979	976	981	984	980	988	986	980	971	941	934	952	965	968	960	949	945	948	944	944	960	984	965
8	1016	1067	1075	996	993	1075	1013	980	965	972	975	977	977	977	980	961	949	958	949	941	934	935	942	949	981
9 Q	966	966	974	982	978	978	981	981	973	973	983	982	982	981	975	960	958	950	943	942	946	951	950	958	966
10 Q	966	970	974	974	978	982	982	982	982	990	990	990	998	998	994	989	982	966	954	954	950	945	951	959	975
11 Q	973	978	986	989	989	989	983	982	974	982	998	1005	998	998	1005	998	990	974	951	950	953	950	957	959	980
12	992	980	974	976	983	1029	1041	999	972	947	856	833	805	919	990	958	958	967	940	939	934	943	962	959	952
13	974	988	983	980	998	1017	988	974	976	970	950	903	897	884	935	984	980	966	954	938	943	932	937	951	958
14	974	982	984	983	986	986	987	983	962	966	956	935	954	976	982	988	978	958	939	929	927	928	939	953	964
15	967	986	983	976	987	990	991	990	989	987	982	959	990	995	995	994	980	964	943	934	931	939	945	960	973
16 Q	972	982	982	983	984	984	986	986	982	982	987	991	990	994	994	997	990	965	948	940	943	941	950	950	975
17	967	978	994	972	972	990	972	972	993	991	990	991	990	992	991	972	972	966	954	945	948	950	954	956	974
18	975	986	986	990	998	1003	997	994	992	989	987	990	989	990	998	1003	992	974	951	943	935	942	972	962	981
19	977	989	989	990	990	990	993	994	994	997	989	1000	998	996	996	993	983	969	955	944	944	943	947	957	980
20	971	981	986	985	985	985	990	990	989	989	989	993	990	988	988	985	977	969	964	958	943	940	949	957	977
21	974	982	983	986	989	989	990	993	993	989	989	989	993	989	990	981	961	952	935	935	942	948	946	950	974
22 Q	969	979	986	986	985	986	989	991	993	987	1000	997	995	996	997	987	972	953	946	946	941	948	950	965	977
23	985	993	989	987	985	1020	993	989	982	983	996	997	994	989	993	979	949	935	929	917	920	941	950	977	974
24	988	990	997	981	987	987	985	991	989	988	981	967	997	997	993	987	969	934	910	925	942	956	966	980	974
25	983	986	999	1037	1153	1079	1075	1051	1022	985	994	984	987	994	949	956	844	869	920	953	918	923	950	942	977
26 D	949	959	964	961	957	963	965	971	973	986	801	509	487	584	587	902	963	922	895	957	973	1161	1254	1239	912
27 D	1334	1153	989	895	826	605	433	590	781	522	770	565	514	(502	372	314)	903	544	841	903	1051	1129	1153	973	778
28 D	927	904	919	977	1000	1055	1063	1005	872	801	781	(394	418)	652	(361	339)	839	864	812	919	1051	1105	1228	1255	856
29 D	1311	1189	1106	1216	1060	918	832	699	793	432	547	417	546	577	649	738	848	918	942	946	934	927	932	942	851
30	965	966	981	989	977	957	640	966	753	655	926	800	895	957	934	950	949	949	949	949	950	973	958	949	914
31	958	989	989	989	993	993	1005	965	914	738	953	922	878	900	964	942	949	927	919	958	989	993	1060	1060	956
Mean	1002	997	991	996	1001	991	961	955	946	904	912	869	886	914	908	907	948	930	930	939	951	965	983	983	949

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 10 Meanook D = 24° E + ′ March 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	12.8	-00.5	07.3	09.3	23.1	13.3	14.2	22.1	-08.2	-05.2	06.2	17.2	19.0	18.1	25.1	27.0	05.5	16.2	14.2	14.2	15.7	15.7	11.3	04.4	12.4
2	07.2	09.3	09.2	08.3	22.1	13.1	19.0	17.3	16.7	-14.2	15.1	28.9	38.6	16.3	18.1	14.2	19.1	22.0	19.1	19.0	23.0	16.2	12.5	10.2	15.8
3	09.3	10.3	15.2	10.4	31.9	11.4	12.3	15.2	11.3	13.3	17.2	12.3	08.3	18.1	18.1	20.6	19.8	18.1	10.3	15.2	14.2	15.1	09.3	06.5	14.3
4	04.3	07.4	09.3	10.2	12.2	13.3	18.1	07.4	11.3	09.3	19.0	23.1	03.5	13.3	19.0	20.1	20.1	18.2	22.1	14.2	12.2	07.4	11.3	11.3	13.2
5	08.0	08.4	11.3	04.6	05.4	10.4	13.4	18.2	13.4	18.3	18.2	16.4	17.3	16.2	19.2	21.2	19.7	21.3	07.5	09.3	13.4	09.4	04.5	06.5	13.0
6	06.5	06.5	09.3	10.3	11.4	14.2	15.3	16.3	13.4	13.4	15.8	14.2	12.5	13.4	18.2	20.3	21.2	21.1	16.8	15.2	10.9	09.4	10.4	10.4	13.6
7	09.9	10.1	09.9	10.4	10.7	10.9	15.3	11.4	11.5	12.3	12.4	15.3	23.1	24.0	23.6	25.1	23.6	17.3	09.5	06.5	05.5	04.5	03.1	03.3	12.9
8	05.5	02.6	06.5	06.6	12.3	12.3	13.3	14.3	14.4	17.6	15.2	14.8	14.4	15.8	17.3	21.1	20.2	17.6	18.3	16.3	12.5	11.5	08.4	06.5	13.1
9 Q	07.6	07.4	06.5	08.4	08.3	10.9	12.3	11.9	14.3	16.3	14.3	13.3	13.4	14.3	18.2	17.3	17.3	17.4	15.8	13.4	11.7	10.9	10.9	11.0	12.6
10 Q	10.9	10.5	10.9	11.3	11.4	11.4	11.5	12.4	13.4	13.3	13.3	13.4	15.3	16.1	18.2	20.2	22.1	21.2	20.1	17.4	14.2	12.3	08.9	08.5	14.1
11 Q	08.4	09.4	09.9	10.2	10.4	10.4	10.4	12.4	14.3	13.8	14.4	13.3	13.4	14.4	18.2	20.2	21.5	21.3	19.7	17.9	12.8	07.8	06.5	07.5	13.3
12	05.0	07.0	08.4	10.9	12.2	09.4	10.1	12.2	11.1	15.6	20.1	19.2	15.3	18.7	18.7	16.2	18.2	16.8	18.2	08.9	09.4	10.1	09.3	10.6	13.0
13	09.9	09.4	10.1	10.7	11.4	09.9	10.5	12.5	14.3	13.8	13.5	12.8	10.9	08.4	12.9	20.2	23.2	21.7	22.1	18.2	14.3	11.1	07.2	07.5	13.2
14	08.0	08.9	10.3	11.1	10.5	11.9	25.6	18.2	14.3	15.2	13.8	08.5	09.4	12.9	13.8	20.7	23.2	23.2	21.2	16.3	13.3	09.4	08.2	07.5	14.0
15	07.8	07.8	12.1	14.6	10.4	10.7	10.9	11.9	12.7	13.4	14.3	06.0	13.3	15.2	17.8	21.1	23.2	23.6	22.1	17.8	13.2	10.3	08.4	07.5	13.6
16 Q	09.1	09.1	09.5	10.9	11.4	11.9	13.3	13.4	12.4	12.1	12.5	12.9	13.6	15.2	17.3	21.2	23.4	24.6	21.3	18.2	14.4	09.9	07.4	07.0	13.8
17	07.5	07.5	07.7	09.8	11.7	13.8	13.5	13.5	13.6	13.5	13.4	13.8	13.1	15.4	16.2	20.9	23.9	25.1	19.3	17.5	14.2	12.5	11.3	09.3	14.1
18	09.9	10.7	11.5	12.4	12.6	10.9	09.7	09.4	07.0	08.3	10.4	11.5	10.3	13.4	19.0	21.2	22.3	23.8	20.3	15.3	12.3	11.7	09.3	10.2	13.1
19	08.4	08.9	10.3	10.9	10.9	11.3	12.4	13.2	14.3	13.3	15.3	15.0	13.8	14.4	16.2	16.8	20.3	20.1	18.9	11.9	11.9	10.8	10.3	09.3	13.3
20	08.4	08.7	09.9	09.7	10.3	11.4	11.4	15.4	13.8	14.8	14.8	13.4	12.4	15.1	16.6	18.2	20.4	18.3	12.6	11.9	09.9	09.6	08.4	08.3	12.7
21	08.2	08.4	09.1	09.9	09.9	10.3	11.1	11.9	14.1	20.7	14.8	12.3	13.4	14.3	17.5	19.9	19.7	15.8	17.0	12.2	07.7	07.5	07.6	07.7	12.5
22 Q	09.1	08.5	09.3	09.9	10.9	11.2	11.4	12.1	12.9	11.9	15.8	14.2	14.8	16.0	18.2	20.1	23.0	19.2	15.5	12.4	09.2	07.6	06.3	07.0	12.8
23	07.0	06.5	07.3	08.7	09.9	11.7	15.3	10.1	14.8	20.0	14.3	12.5	11.9	13.8	21.0	23.6	22.0	17.0	17.6	11.7	09.6	08.3	08.2	01.8	12.9
24	08.0	07.8	04.8	08.1	09.6	10.9	12.7	11.6	11.9	12.0	10.9	08.5	14.6	18.3	23.1	25.0	24.1	23.2	12.1	02.3	02.1	04.4	07.5	08.6	11.8
25	09.5	08.7	08.6	06.5	10.9	04.4	04.5	07.5	11.5	13.1	13.4	14.6	16.4	18.7	26.6	36.2	18.7	19.5	20.5	15.2	-00.4	-00.7	06.0	09.9	12.5
26 D	11.4	10.4	10.3	10.4	11.5	11.4	11.4	12.4	12.3	13.4	15.3	24.6	67.7	54.8	51.1	31.9	39.6	38.3	28.0	06.6	07.5	06.5	18.3	12.4	21.6
27 D	16.3	07.5	-06.2	-08.2	-13.4	18.7	07.5	06.6	04.6	30.0	29.9	45.2	41.7	50.1	06.6	29.0	38.8	37.4	27.1	20.2	19.1	16.6	20.3	08.9	18.5
28 D	06.5	10.3	12.4	09.4	33.9	10.3	14.2	08.4	11.9	22.1	24.1	-08.2	12.2	51.7	59.3	00.9	08.9	34.7	23.1	21.2	30.1	34.9	34.9	15.8	20.1
29 D	17.3	18.2	-03.3	-11.8	09.4	04.5	44.2	09.4	11.4	01.6	-02.9	33.6	18.3	15.2	18.3	24.1	25.6	10.9	17.3	19.2	16.4	12.5	09.9	10.4	13.3
30	08.4	09.9	12.4	25.1	15.3	15.2	13.3	17.4	08.4	08.5	14.3	17.4	09.9	17.4	22.0	24.1	24.2	20.1	22.1	23.1	16.3	13.4	10.4	07.5	15.7
31	07.5	09.3	13.4	08.4	09.9	11.3	13.4	12.4	17.3	20.2	18.2	17.2	17.3	14.4	14.8	16.4	21.1	20.1	19.2	19.7	12.9	09.4	10.4	04.5	14.1
Mean	08.8	08.5	08.8	08.6	11.9	11.4	13.9	12.8	11.9	12.9	14.8	15.7	17.1	19.1	20.6	21.1	21.7	21.5	18.4	14.8	12.6	10.8	10.2	08.5	14.0

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 11 Meanook $Z = 58,000\ \gamma +$ March 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	882	913	893	868	795	698	710	665	770	775	816	676	676	764	676	710	775	795	794	796	822	838	848	851	784
2	855	848	887	871	838	784	829	849	795	720	671	568	676	783	773	794	794	784	817	837	861	882	855	848	801
3	838	840	848	837	848	828	855	806	784	807	740	699	699	730	783	779	784	805	816	819	838	871	838	849	806
4	838	818	807	811	811	806	730	622	699	707	731	688	699	730	783	772	773	784	806	827	829	827	811	806	771
5	817	828	837	870	924	881	827	753	687	719	764	775	773	762	773	771	773	775	772	784	806	816	818	807	796
6	817	837	837	818	807	805	806	785	779	790	784	784	775	779	785	795	796	796	810	811	811	808	801	795	801
7	801	801	801	801	801	801	795	797	796	795	763	807	708	725	752	757	757	757	757	763	783	806	828	849	783
8	866	871	871	838	829	849	830	817	801	795	796	792	790	795	796	794	784	784	785	784	784	795	805	806	811
9 Q	806	805	806	811	810	806	796	795	791	764	784	784	784	784	784	785	785	785	785	785	794	795	796	795	792
10 Q	794	785	789	789	789	789	790	784	779	784	784	775	784	785	785	785	794	794	790	790	790	790	790	790	787
11 Q	784	783	790	785	784	784	784	784	768	740	773	781	779	775	776	784	785	783	782	781	783	785	790	786	781
12	795	798	797	795	797	818	801	803	777	736	746	742	623	688	759	765	766	763	785	792	795	806	807	801	773
13	795	796	801	806	817	805	792	790	785	773	763	730	720	714	731	787	784	785	783	783	790	806	811	806	781
14	795	790	787	790	798	795	806	790	763	746	752	746	752	765	781	792	784	787	784	790	785	790	792	797	782
15	795	795	801	806	806	795	787	784	784	779	766	694	753	790	787	787	787	787	790	792	795	796	798	801	786
16 Q	805	801	790	790	790	792	790	784	775	763	764	773	784	784	787	790	792	794	795	790	785	784	785	783	786
17	784	784	(784	784	790	784	784	792	784	784	792	792	794	792	784	784	784	784)	784	782	784	790	792	785	787
18	783	784	783	783	783	781	779	777	777	779	781	781	784	785	783	784	779	772	768	772	773	784	779	775	780
19	775	775	776	776	775	775	779	773	770	766	736	757	763	773	773	773	773	773	764	764	768	772	773	773	770
20	776	783	782	784	784	784	783	775	779	772	772	772	771	775	781	781	776	770	764	765	772	775	783	784	777
21	779	781	779	776	776	776	773	773	764	751	768	763	768	768	775	779	773	766	766	772	784	795	794	787	774
22 Q	781	781	781	776	776	776	773	773	772	754	754	773	773	776	776	776	770	768	773	779	784	790	786	784	775
23	783	792	792	801	790	806	806	785	763	743	770	773	768	764	779	773	765	763	763	772	784	789	785	794	779
24	785	784	801	795	795	796	795	785	783	771	753	718	762	775	775	772	780	783	773	773	776	785	780	779	778
25	776	772	776	809	823	829	788	764	800	799	803	802	791	791	769	716	661	708	753	818	841	807	784	785	782
26 D	785	795	791	795	795	795	795	795	780	856	845	712	838	977	590	680	767	761	769	807	796	829	807	612	782
27 D	581	645	585	363	598	953	747	895	1026	1057	910	958	699	880	693	1209	1126	1174	992	991	954	926	895	852	863
28 D	841	845	845	861	753	861	850	808	772	784	888	946	580	715	753	504	623	774	829	894	877	828	721	667	784
29 D	708	797	741	708	849	730	612	741	888	698	601	732	796	732	601	719	828	818	834	849	856	839	819	818	763
30	823	823	845	839	839	797	676	796	730	580	774	731	765	795	796	817	808	807	818	818	828	829	818	807	790
31	817	828	830	841	829	818	826	821	790	682	765	742	720	720	797	791	807	807	808	839	851	850	883	862	805
Mean	795	803	801	793	800	803	784	783	784	767	771	760	747	773	759	778	785	793	794	804	809	812	806	795	787

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 12 Meanook — March 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	05	13	1317	10	28	433	884	05	11	52.3	10	23	-74.8	127.1	10	30	962	06	53	510	452
2	04	32	1356	10	20	424	932	11	51	65.5	09	36	-64.6	130.1	05	43	938	11	23	504	434
3	04	25	1103	11	58	767	336	04	44	69.4	08	58	-0.6	70.0	04	18	902	12	01	597	305
4	00	07	1030	11	46	625	405	11	40	40.9	07	33	-10.8	51.7	00	10	863	10	27	553	310
5	08	23	1036	08	33	815	221	07	41	27.3	08	33	-19.6	46.9	02	44	959	08	31	557	402
6	01	16	1003	20	33	932	71	07	42	22.4	00	22	4.5	17.9	01	22	847	08	19	754	93
7	23	58	1014	11	57	901	113	13	03	26.9	23	54	1.4	25.5	23	59	879	11	46	679	200
8	01	59	1150	20	56	928	222	15	43	23.3	01	42	-0.3	23.6	02	21	907	08	12	781	126
9 Q	08	34	991	19	43	934	57	15	16	19.2	02	00	5.3	13.9	03	26	822	09	13	749	73
10 Q	13	25	1001	21	33	942	59	17	00	23.4	23	59	7.5	15.9	00	10	802	08	48	764	38
11 Q	11	33	1009	23	21	940	69	17	23	23.6	23	37	4.5	19.1	07	04	792	09	25	686	106
12	05	57	1078	12	48	723	355	12	41	35.1	12	03	-1.0	36.1	11	03	850	12	34	575	275
13	05	20	1059	13	02	801	258	15	48	27.8	05	33	0.3	27.5	06	01	833	14	04	676	157
14	13	13	1003	20	40	921	82	06	28	31.7	11	52	3.1	28.6	06	17	824	12	06	718	106
15	11	03	1107	17	19	914	192	07	11	25.5	11	06	1.4	24.1	03	16	817	11	33	676	141
16 Q	09	04	1060	17	17	914	146	17	17	25.5	22	23	6.9	18.6	01	00	812	09	02	745	67
17	02	40	1005	20	40	937	68	17	40	32.9	01	13	5.1	27.8	22	37	803	00	20	778	25
18	22	18	1028	22	40	905	123	17	04	24.2	22	17	1.7	22.5	02	00	792	06	00	767	25
19	10	37	1017	21	25	936	81	17	06	24.3	23	00	7.7	16.6	02	53	786	10	18	701	85
20	07	16	1003	21	50	932	71	16	34	21.7	01	32	6.9	14.8	06	12	790	07	15	756	34
21	09	37	1001	19	47	924	77	15	40	23.6	22	01	5.3	18.3	22	03	811	09	12	725	86
22 Q	10	23	1011	19	53	933	78	16	35	22.0	23	07	6.7	15.3	02	18	792	09	15	728	64
23	05	37	1068	17	34	903	165	16	05	26.8	22	35	3.0	23.8	06	17	837	08	54	716	121
24	13	42	1011	18	30	899	112	17	16	28.2	20	20	-0.6	28.8	06	03	819	11	14	681	138
25	03	14	1255	16	25	776	479	15	34	46.0	06	50	-25.3	71.3	20	02	872	06	52	637	235
26 D	21	46	1408	11	57	253	1155	14	04	112.9	11	18	-55.0	167.9	13	33	1155	14	33	469	686
27 D	01	21	1443	06	30	213	1230)	06	21	136.5	05	43	-96.9	233.4	14	52	1878)	14	26	-177	(2055)
28 D	23	44	1381	15	20	91	1290)	13	58	100.1	14	46	-100.1	200.2	14	28	1063	14	50	-110	1173
29 D	00	15	1373	11	20	154	1219)	11	00	79.8	10	23	-45.4	125.2	08	55	979	05	55	164	815
30	03	35	1020	09	13	372	648	09	13	79.8	06	07	-30.3	110.1	07	23	842	09	23	439	403
31	23	07	1127	09	35	639	488	19	22	25.6	23	26	-0.3	25.9	22	35	910	09	30	591	319
Mean			1112			735	377			42.7			-14.7	57.4			901			593	308
No. days			31			31	31			31			31	31			31			31	31

69028-3—4

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 13 Meanook — H = 12,000 γ + — April 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	997	997	1029	1044	1050	1028	1029	974	969	966	965	965	966	965	965	964	957	942	939	934	933	939	942	946	975
2	952	956	964	967	964	964	972	976	973	972	948	939	933	956	952	956	956	949	948	949	970	968	979	987	960
3	987	1014	1024	1009	987	995	995	996	959	945	916	748	838	955	962	956	937	944	948	947	940	960	983	971	955
4	963	986	985	982	990	974	978	985	979	970	962	977	976	974	970	958	951	947	939	938	954	966	969	954	968
5 Q	957	975	976	989	984	976	980	984	984	987	989	982	977	989	984	972	965	953	942	942	952	960	957	960	971
6	981	973	974	981	985	985	989	986	985	978	996	996	1000	1001	993	971	938	914	929	934	934	942	942	954	969
7	969	970	977	977	984	993	1001	993	985	984	984	965	945	957	970	965	953	937	926	934	930	961	993	984	968
8	1008	1025	1142	1129	1070	1067	1051	961	844	742	737	819	636	863	1016	977	945	880	922	945	930	985	1004	1192	954
9 D	1345	1243	1360	1287	1127	972	866	961	764	675	906	931	985	1001	996	993	968	962	942	965	969	993	970	961	1006
10 D	969	965	1130	1087	984	1024	867	487	401	922	1055	985	761	(410	305	451)	702	906	913	970	996	996	939	948	841
11	967	971	960	965	1011	968	666	753	742	804	734	665	978	991	985	971	953	945	946	953	957	980	982	984	910
12	922	1001	976	969	985	1021	1008	996	975	937	973	970	945	960	978	971	954	953	938	938	943	973	953	961	967
13	961	962	976	977	985	984	993	945	1001	996	991	969	914	988	1000	985	970	947	953	953	973	954	954	961	971
14	962	989	1001	973	989	993	978	946	993	993	985	989	993	989	984	989	977	973	961	962	965	967	961	1004	980
15	1079	1075	985	968	973	984	1000	985	984	985	989	985	984	989	978	975	971	970	957	953	961	965	965	969	985
16	985	977	978	973	978	976	978	984	985	990	976	970	994	993	985	978	973	973	970	959	961	962	960	965	976
17	969	982	985	989	989	992	985	993	953	954	915	898	891	874	929	961	961	954	946	936	938	953	962	1000	955
18 Q	1009	985	977	977	978	981	985	985	989	989	999	1000	993	1000	988	984	969	954	965	965	963	967	967	962	980
19 Q	968	977	991	991	992	992	989	992	999	999	983	992	995	1000	1007	999	984	975	961	968	959	959	958	945	982
20 Q	960	972	983	983	988	995	995	992	999	1000	1000	1001	992	964	992	1007	986	967	952	956	956	952	958	969	980
21	988	976	995	1015	1030	999	985	988	983	757	862	945	988	999	985	977	977	988	984	977	972	962	960	966	969
22 Q	976	984	984	983	982	984	988	988	989	992	992	992	992	995	992	977	964	952	944	944	944	948	956	964	975
23 D	973	976	984	984	984	991	990	992	992	999	1016	1007	977	945	1007	914	914	874	866	901	999	1066	999	976	972
24 D	948	933	941	944	983	999	1015	999	952	882	952	912	623	716	870	925	920	929	948	944	977	980	966	976	926
25	984	992	1006	983	1020	935	922	890	836	858	906	922	883	937	953	953	901	868	937	968	984	1031	1093	970	947
26	943	1038	1076	1107	1002	933	889	881	827	943	976	949	887	943	959	940	933	912	936	960	971	967	1014	1109	962
27	1109	1045	1030	1123	1157	1085	951	905	903	904	798	783	738	880	921	916	935	928	943	963	984	984	1073	1122	966
28	1073	1057	1074	1092	1062	1065	1002	944	865	897	811	936	968	942	908	916	928	936	943	968	987	1038	1026	987	976
29 D	994	994	1018	1029	1061	1045	976	850	889	889	751	718	865	810	819	834	795	827	873	957	968	975	1019	1026	916
30	1021	991	998	1023	1046	1022	982	744	963	967	943	936	951	905	697	857	874	896	943	987	979	958	943	962	941
31																									
Mean	997	999	1016	1017	1011	997	967	935	922	929	934	928	919	930	935	940	937	935	941	952	962	974	978	988	960

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 14 Meanook D = 24° E + ′ April 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	00.7	00.5	03.6	-01.4	07.6	01.6	05.5	18.2	16.4	13.4	13.4	11.5	13.4	15.2	17.3	18.2	18.2	16.3	12.4	09.1	05.8	05.6	06.0	07.0	09.8
2	07.6	09.3	10.4	10.9	11.4	11.4	10.5	11.5	13.3	14.2	16.3	13.4	17.3	21.2	22.2	23.2	24.0	21.3	15.8	12.4	12.5	09.4	06.0	04.4	13.7
3	06.6	03.6	03.7	05.6	10.3	09.5	11.0	13.1	15.3	18.6	15.2	05.0	09.3	20.1	22.2	22.7	19.1	12.4	10.4	08.3	07.5	06.0	05.5	07.4	11.2
4	05.0	05.0	06.6	11.5	10.4	11.4	11.5	11.4	12.3	15.3	13.4	14.9	15.8	18.2	20.3	22.1	22.2	16.4	16.3	09.4	07.5	05.5	04.5	06.5	12.2
5 Q	08.2	08.3	10.5	09.5	08.5	11.0	11.4	11.9	13.3	14.1	13.4	14.2	13.9	17.4	20.2	23.2	22.1	20.2	14.2	08.4	07.0	06.5	06.6	05.5	12.5
6	07.0	09.4	10.5	10.9	10.4	10.4	11.5	12.4	13.6	12.5	13.8	13.3	14.2	16.3	19.1	25.0	25.0	20.2	13.4	11.4	08.0	04.5	02.6	05.5	12.5
7	05.8	08.0	09.3	10.4	11.4	10.5	09.4	09.3	12.3	13.2	16.3	23.2	19.3	18.2	24.1	27.0	29.5	24.1	17.3	14.4	08.4	06.0	03.6	01.9	13.9
8	-01.6	01.1	-01.4	03.6	11.4	10.5	09.3	10.3	18.2	16.4	21.1	21.3	-10.0	18.2	23.1	30.0	28.0	23.1	11.4	12.3	06.3	09.4	07.4	09.9	12.1
9 D	10.4	07.5	-00.4	05.5	16.2	-09.2	12.4	11.9	23.0	40.7	17.3	17.3	15.8	20.7	23.2	26.0	27.0	24.1	23.2	10.9	08.4	11.4	01.6	01.6	14.4
10 D	05.5	07.0	14.3	11.5	11.3	09.4	04.4	03.6	37.8	28.0	19.8	21.3	27.2	18.2	32.0	68.8	-25.4	24.1	12.9	15.8	14.3	10.9	05.5	07.5	18.8
11	10.4	15.2	16.4	19.1	16.4	13.4	01.6	11.2	30.0	15.8	21.1	28.0	18.7	24.1	30.0	33.0	29.9	27.1	26.1	16.7	14.3	09.4	07.5	04.4	18.3
12	06.5	06.5	08.4	09.4	09.4	11.2	15.3	11.3	11.4	12.3	12.9	10.9	11.4	16.3	20.2	24.2	24.0	22.2	17.2	11.5	07.5	07.5	06.4	07.5	12.6
13	07.4	08.0	08.7	09.8	09.9	11.3	10.3	17.3	19.2	11.4	11.4	09.4	08.9	18.2	24.0	25.2	24.6	23.1	14.4	11.9	08.4	08.5	04.5	04.5	12.9
14	07.5	09.4	13.3	12.9	11.3	13.8	16.3	20.3	18.2	14.3	14.3	15.2	17.3	18.2	21.1	23.2	21.1	19.2	16.4	13.4	08.9	09.3	07.3	02.5	14.4
15	00.6	07.4	07.0	10.3	10.4	11.3	11.6	12.3	11.9	12.4	12.4	11.3	12.4	17.2	17.2	21.2	20.7	18.2	20.7	05.5	07.5	08.4	08.4	09.3	11.9
16	09.3	12.4	11.9	11.3	12.5	12.9	12.9	14.3	15.3	14.2	10.5	12.5	16.4	18.3	19.1	20.3	21.2	19.3	15.4	13.3	08.4	08.0	07.5	07.5	13.5
17	07.4	07.5	08.4	10.4	10.6	11.3	13.3	11.5	08.4	13.8	17.3	24.1	16.3	13.3	18.3	21.2	21.3	19.7	20.2	13.4	08.0	07.6	05.5	04.4	13.0
18 Q	06.5	07.0	09.4	09.5	10.4	11.3	11.4	12.4	13.4	13.2	12.4	12.4	14.3	16.3	19.1	22.1	22.1	22.7	20.2	15.2	09.5	08.4	07.4	06.5	13.0
19 Q	07.4	08.4	09.4	10.4	11.3	11.4	12.3	12.3	12.4	15.8	13.4	13.4	13.3	17.3	19.3	21.1	22.7	22.7	14.9	12.6	11.2	10.6	08.5	08.5	13.4
20 Q	09.1	09.4	09.6	10.5	10.4	09.8	10.4	11.9	12.6	12.3	13.4	14.0	13.4	12.5	23.0	27.9	27.0	25.0	15.9	11.7	08.4	07.5	07.0	07.5	13.3
21	08.5	09.3	12.5	11.4	15.2	14.3	13.4	13.3	13.4	18.6	14.2	15.2	17.2	20.2	23.1	23.0	22.7	20.1	17.2	12.6	10.3	09.4	09.4	10.3	14.8
22 Q	10.4	10.4	11.4	11.4	11.4	11.3	11.4	11.4	12.3	12.3	11.5	14.3	17.2	19.3	21.2	22.1	24.2	20.1	16.2	09.5	06.0	07.0	07.5	08.3	13.3
23 D	08.4	09.4	09.4	10.3	10.3	10.2	10.4	11.4	12.4	12.5	13.3	13.4	15.3	25.1	28.1	37.8	34.8	28.0	25.0	19.7	28.5	05.5	00.5	01.5	15.9
24 D	-00.4	03.6	05.6	06.6	10.4	08.4	06.3	08.4	12.5	15.4	15.2	19.2	20.1	35.8	40.3	38.7	24.2	23.2	10.7	08.8	07.5	05.5	06.5	07.5	14.2
25	07.5	09.4	12.4	09.1	07.8	03.3	13.2	08.5	06.5	07.2	10.5	12.4	10.5	19.1	20.1	22.1	20.6	09.4	06.5	18.5	08.3	10.4	10.4	06.6	11.3
26	06.0	03.7	03.7	10.4	08.4	10.5	08.5	12.5	06.0	14.8	15.4	15.2	16.8	19.3	17.2	18.3	22.2	18.7	13.8	11.5	17.2	13.4	11.6	09.4	12.7
27	03.1	04.0	01.7	05.4	10.3	13.4	14.2	15.2	14.3	15.2	09.4	11.5	26.2	24.1	23.6	20.7	17.3	17.4	09.3	08.4	09.4	11.3	11.3	08.4	12.7
28	02.6	-01.4	-00.9	07.8	09.4	10.5	14.2	05.4	18.2	18.3	14.2	15.2	18.2	20.2	17.8	13.4	10.9	10.9	10.9	10.4	10.9	11.3	11.4	09.3	11.2
29 D	01.6	02.7	07.5	03.1	08.4	08.5	-01.8	13.8	09.9	13.3	09.3	30.9	23.2	34.4	27.0	21.1	26.0	21.1	07.0	-00.4	02.5	04.5	06.0	07.3	11.9
30	04.5	03.6	06.0	07.0	07.5	10.4	13.2	-02.2	09.3	09.4	10.9	12.9	15.4	20.1	20.3	22.3	18.2	15.2	16.2	10.4	04.5	03.1	02.6	06.0	10.3
31																									
Mean	06.0	06.9	08.0	09.1	10.7	09.8	10.5	11.5	14.8	15.3	14.1	15.6	15.3	19.8	22.5	25.7	23.5	20.2	15.4	11.6	09.4	08.1	06.5	06.5	13.2

89026-3—41

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 15 Meanook $z = 58{,}000\ \gamma +$ April 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	841	850	856	877	877	795	754	784	796	802	791	796	802	808	808	808	810	808	818	817	817	817	808	805	814
2	806	807	802	797	796	796	796	802	802	795	774	753	747	769	780	785	785	786	795	796	817	829	850	856	797
3	849	850	872	872	849	834	830	807	792	780	774	719	700	743	769	776	780	796	807	817	823	818	829	829	805
4	830	838	838	835	818	807	802	802	802	796	747	791	797	805	806	803	802	802	802	802	808	818	818	812	807
5 Q	806	813	811	807	817	807	807	800	796	785	795	791	785	786	796	796	796	796	797	797	797	802	798	806	800
6	807	807	802	802	796	795	796	795	785	764	785	795	796	797	796	790	786	784	795	802	808	818	812	807	797
7	796	795	796	796	796	798	820	823	808	797	796	774	765	754	774	780	785	785	785	790	808	829	839	849	798
8	862	883	927	937	894	873	838	802	807	799	838	769	645	732	808	797	794	790	804	807	817	850	880	893	827
9 D	753	872	841	871	847	743	839	838	916	849	785	785	802	806	806	808	806	807	818	818	819	856	841	829	819
10 D	817	817	861	860	838	808	708	580	402	867	861	926	1116	991	807	1002	753	828	811	851	904	883	850	850	833
11	856	856	838	831	852	839	753	797	722	747	764	834	829	829	829	818	807	807	796	807	818	838	856	880	817
12	839	839	820	817	829	845	838	823	807	752	776	791	780	796	806	804	802	807	808	808	808	823	829	823	811
13	818	817	807	802	807	802	812	672	765	795	795	764	682	754	802	797	796	795	802	802	817	818	818	818	790
14	808	807	830	817	818	823	812	741	769	802	797	796	806	795	786	786	786	791	796	796	807	819	819	839	802
15	883	881	818	797	797	807	820	796	787	785	795	791	796	802	797	797	797	802	807	802	806	807	807	807	808
16	812	819	818	807	802	797	797	747	774	786	754	731	776	795	795	794	795	791	791	791	795	796	796	796	790
17	795	793	795	795	795	795	796	795	708	709	773	774	676	668	730	773	786	796	802	806	807	812	818	829	776
18 Q	839	834	812	802	796	795	796	795	786	791	791	794	796	796	786	786	786	785	780	785	787	786	791	796	796
19 Q	791	791	791	791	795	795	796	791	785	780	754	774	791	791	795	795	795	791	790	791	796	806	812	807	791
20 Q	799	796	795	791	790	791	796	791	795	785	776	782	785	743	754	774	786	786	795	791	787	785	786	786	785
21	807	817	819	850	870	818	804	774	774	743	639	735	774	774	785	774	774	786	786	796	802	797	796	796	787
22 Q	796	787	792	791	786	791	786	786	785	786	786	786	787	786	788	785	786	786	786	786	786	796	796	795	789
23 D	796	786	786	785	786	786	786	786	786	786	786	774	743	698	764	742	742	753	774	776	834	906	829	820	784
24 D	823	825	819	818	808	807	828	818	818	726	780	765	786	656	624	689	764	791	808	817	844	862	841	831	789
25	838	838	829	818	829	764	784	796	742	712	715	755	753	784	777	785	774	774	829	833	849	862	893	818	798
26	797	838	862	796	785	764	704	708	655	715	779	765	715	773	785	786	795	794	807	818	831	839	867	894	786
27	861	856	893	927	907	850	677	729	774	765	769	754	628	672	682	698	743	786	820	829	834	841	888	888	795
28	872	890	925	915	888	867	764	764	687	785	688	741	791	784	774	774	791	797	812	823	839	774	795	774	805
29 D	872	882	829	849	861	849	772	807	753	776	763	661	698	624	569	612	720	758	817	829	829	841	842	855	778
30	850	845	850	862	872	865	774	624	785	773	764	763	769	742	639	688	795	818	872	904	856	839	841	851	802
31																									
Mean	824	831	831	830	823	810	790	772	766	778	773	774	770	769	767	780	784	793	804	809	818	826	828	828	799

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 16 Meanook — April 1959

Day	Horizontal Intensity						Declination							Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	05	28	1149	20	12	924	225	17	16	21.4	06	13	-12.4	33.8	03	55	925	05	37	714	211
2	23	14	995	11	58	921	74	16	28	26.5	23	59	3.8	22.7	23	16	871	12	23	739	132
3	01	52	1038	11	51	676	362	15	51	23.6	11	48	-7.3	30.9	03	35	889	11	47	647	242
4	04	13	1000	17	55	928	72	16	43	23.9	02	07	3.4	20.5	03	43	847	10	24	718	129
5 Q	03	35	1000	19	27	918	82	16	07	25.0	23	27	1.6	23.4	02	13	825	12	50	776	49
6	09	54	1001	18	05	898	103	15	52	27.3	22	13	1.3	26.0	21	25	826	09	20	746	80
7	07	11	1010	20	27	910	100	16	32	31.7	23	59	0.7	31.0	23	58	859	13	03	738	121
8	23	50	1345	12	33	528	817	10	39	37.8	12	25	-27.2	65.0	03	13	995	12	23	538	457
9 D	02	37	1591	05	43	440	1151	09	37	73.6	05	43	-68.7	142.3	08	43	990	05	55	213	777
10 D	03	08	1305	(14	00	118	1187)	15	45	103.5	08	34	-86.4	189.9	14	37	1352	(08	20	-364	1716)
11	04	40	1043	11	14	430	613	11	23	43.7	06	20	-42.0	85.7	11	04	1029	06	54	598	431
12	01	21	1063	00	52	893	170	15	47	25.7	01	26	0.1	25.6	05	54	869	09	37	717	152
13	07	08	1062	07	26	827	235	16	08	28.7	07	10	-0.9	29.6	20	52	833	07	21	578	255
14	23	38	1055	23	27	907	148	07	46	26.9	23	37	-2.4	29.3	02	58	852	07	29	690	162
15	01	19	1142	16	56	937	205	15	10	26.1	00	45	-2.8	28.9	01	22	917	08	56	771	146
16	00	59	1017	19	16	943	74	15	00	25.1	22	40	6.1	19.0	01	00	832	10	09	712	120
17	23	53	1025	13	43	827	198	11	28	30.4	08	11	0.5	29.9	23	54	843	12	38	607	236
18 Q	09	06	1124	23	41	935	189	17	08	27.0	00	31	4.8	22.2	01	01	846	18	52	778	68
19 Q	14	50	1019	23	47	934	85	17	07	29.2	00	06	5.8	23.4	22	18	820	10	18	744	76
20 Q	15	37	1015	21	17	940	75	16	50	29.5	23	58	5.4	24.1	06	13	809	13	43	719	90
21	03	57	1040	09	44	473	567	09	53	47.0	10	38	1.6	45.4	04	13	887	10	15	574	313
22 Q	12	28	1002	19	15	936	66	16	23	26.0	20	13	5.6	20.4	02	38	798	03	03	781	17
23 D	21	09	1170	19	22	836	334	15	34	44.9	21	51	-9.7	54.6	21	23	991	12	57	655	336
24 D	06	13	1059	12	36	425	634	13	56	55.5	00	38	-5.8	61.3	12	33	920	13	55	574	346
25	22	18	1130	05	23	717	413	15	49	29.9	05	21	-44.8	74.7	22	21	913	05	23	547	366
26	03	37	1201	08	43	740	461	07	47	30.2	04	31	-14.6	44.8	23	33	921	08	33	620	301
27	04	21	1190	12	07	649	541	12	38	38.0	11	04	-4.3	42.3	03	47	958	12	43	578	380
28	22	23	1172	10	11	731	441	08	40	34.4	07	50	-18.8	53.2	03	59	948	09	42	611	337
29 D	05	44	1140	10	35	629	511	11	29	46.6	06	33	-22.9	69.5	01	26	916	14	30	525	391
30	04	30	1063	14	17	472	591	14	32	40.7	07	20	-20.3	61.0	19	04	933	07	21	546	387
31																					
Mean			1105			748	357			36.0			-11.7	47.7			907			613	294
No. days			30			30	30			30			30	30			30			30	30

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 17 Meanook $H = 12,000\ \gamma +$ May 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	951	955	960	956	976	975	976	882	921	857	784	707	700	924	967	998	982	975	961	951	967	983	983	988	928
2	975	1006	1006	1053	1043	1022	959	996	994	991	986	987	982	969	971	967	965	966	963	974	990	999	975	984	988
3	965	979	991	987	988	991	996	994	994	1005	998	991	994	994	987	963	973	975	968	978	991	976	979	966	984
4	969	971	998	991	1006	994	1002	1002	1009	787	959	986	987	1009	968	967	968	991	990	1002	1001	1025	1023	1112	988
5	573	464	765	1240	1155	1073	1031	994	991	1159	943	881	885	893	912	960	982	967	955	963	963	962	967	967	1060
6 Q	967	971	976	983	983	983	987	987	994	999	991	995	1001	994	987	986	975	963	963	967	967	971	961	967	980
7	963	976	976	982	983	991	991	998	998	1010	1014	1006	1014	1014	1010	997	983	967	981	976	975	975	994	1038	992
8 D	1069	1002	988	1038	1014	981	1022	618	693	700	535	546	849	912	1037	1057	1034	1030	1019	999	988	973	1010	1089	925
9	988	994	1026	994	999	1015	1009	999	950	995	987	891	936	991	963	1001	986	949	979	982	967	978	998	987	982
10	991	987	980	988	987	1006	1004	951	943	618	983	1012	1010	1004	1010	1002	977	943	971	973	979	987	987	965	969
11	1012	1034	994	997	987	994	958	994	865	844	913	857	751	951	974	958	940	916	940	961	994	1014	1022	1147	959
12 D	1351	1359	1358	1622	1297	1300	1073	1157	787	707	759	748	413	718	680	870	484	674	949	998	983	971	982	1020	969
13	1002	995	987	984	990	1001	987	982	634	783	766	707	834	885	983	984	996	979	990	980	987	1014	1006	979	935
14 Q	976	976	965	966	967	974	979	976	976	977	982	951	878	858	936	969	987	974	979	979	966	967	974	971	963
15 D	982	949	1038	1021	983	974	971	999	1002	881	731	648	968	935	958	960	968	920	933	971	980	1095	1210	1197	970
16 D	1285	1189	1140	1201	1167	932	634	610	814	827	924	988	949	939	983	977	967	959	947	969	975	971	1030	982	973
17	971	970	970	969	967	976	1001	1018	958	847	877	842	673	991	999	959	936	935	966	974	971	977	991	1015	948
18	1035	1057	1053	1046	936	771	991	965	781	763	839	955	994	985	987	973	958	951	943	979	987	1010	1089	1031	962
19	1001	1043	1061	1010	996	987	983	983	983	858	750	802	777	951	975	971	958	1005	934	952	987	1007	1026	1038	960
20	1031	998	1013	983	991	989	996	976	889	959	968	969	984	991	982	963	921	913	911	931	957	993	1027	996	972
21	1027	1027	1045	999	1024	1036	1003	1000	916	809	882	929	951	966	963	968	940	924	915	930	955	974	1026	979	966
22	981	1063	1040	1040	977	982	998	1021	722	872	982	982	997	972	890	857	956	939	950	940	978	1006	1017	1036	967
23	1142	1112	1111	1040	997	990	1003	990	986	948	932	974	982	989	968	960	958	934	951	964	955	957	961	996	993
24 D	1066	1186	1138	1029	1022	1095	733	872	863	818	628	601	855	616	891	904	915	946	981	998	1084	1129	1497	1370	968
25	1318	1182	1022	959	974	990	1006	855	758	712	893	915	971	978	958	960	953	964	982	971	989	1013	1021	1004	973
26	1067	1025	970	955	962	968	975	977	981	982	959	978	973	966	966	967	951	935	946	951	962	962	1008	1005	975
27 Q	1021	1017	1052	991	990	990	990	990	988	970	970	982	990	1004	997	982	965	954	951	951	957	967	974	967	984
28 Q	977	981	990	990	996	993	997	997	997	997	997	986	978	993	1005	1008	997	980	975	974	972	981	993	998	990
29 Q	997	996	993	990	990	997	1001	1005	1006	1005	997	999	1004	1005	998	989	982	975	972	981	987	993	1009	990	994
30	1006	1009	1008	1010	1009	1005	1008	1009	1009	1012	1019	1017	1025	1028	1022	1004	983	979	959	964	964	975	990	1004	1001
31	1029	1015	1029	1031	1053	1022	1005	1012	1009	1002	986	985	964	863	885	888	939	957	933	978	1003	987	1030	1101	987
Mean	1053	1054	1040	1034	1013	1000	976	962	917	893	901	897	912	945	962	967	951	951	960	970	980	993	1024	1029	974

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 18 Meanook D = 24° E + ′ May 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		08.4	10.4	11.5	14.4	31.0	18.2	14.2	18.2	20.3	21.1	23.2	21.3	28.5	28.0	26.1	25.6	27.0	22.6	17.2	14.3	10.5	07.0	04.5	05.5	17.9
2		07.5	08.4	09.4	04.4	09.4	10.4	02.7	13.3	12.1	12.5	12.4	13.4	15.3	17.2	22.1	21.2	21.1	17.4	15.3	13.4	12.4	08.4	07.6	06.0	12.2
3		06.5	06.6	08.4	10.4	10.4	11.3	10.4	15.8	14.8	11.2	09.4	09.4	14.4	19.3	18.2	19.2	17.2	16.3	14.7	10.5	10.4	07.5	04.5	05.5	11.8
4		04.5	07.4	08.0	10.3	10.4	08.4	09.4	13.3	12.3	18.2	16.5	13.4	17.2	20.2	17.9	17.4	15.2	13.4	11.9	08.4	07.5	07.8	04.6	-02.3	11.3
5		18.7	-06.3	-10.1	00.6	09.5	10.5	10.4	11.3	09.0	11.3	10.4	13.4	18.2	22.2	24.1	23.2	24.1	22.0	15.7	11.8	10.3	08.3	07.4	07.6	11.8
6	Q	09.2	10.4	10.4	10.4	09.5	10.3	10.8	11.4	13.3	12.3	12.4	16.1	17.8	21.1	23.8	24.6	23.2	20.4	16.2	12.5	09.4	07.8	07.5	07.5	13.7
7		09.4	11.3	10.9	10.4	10.3	10.3	10.4	11.3	11.4	13.3	13.3	14.2	17.4	19.2	20.7	19.7	20.1	20.2	14.2	12.5	09.9	09.0	06.5	09.5	13.1
8	D	06.0	08.4	08.4	07.2	13.4	18.7	11.5	10.9	13.3	09.5	01.1	-06.3	26.2	27.1	28.0	31.9	32.8	26.1	20.3	13.4	04.5	03.5	01.6	04.0	13.4
9		05.7	08.5	12.4	12.5	09.5	11.6	12.0	11.5	11.5	12.5	09.4	08.5	13.4	19.3	20.2	22.8	20.9	23.3	13.5	08.5	08.5	04.6	06.1	08.1	12.3
10		07.6	09.5	10.5	11.4	11.4	13.5	24.0	17.5	15.9	29.1	15.4	13.5	16.4	20.3	23.2	23.3	24.7	23.3	11.4	07.5	06.6	00.8	00.8	03.7	14.2
11		07.5	14.4	13.4	10.5	11.5	11.1	17.3	09.5	14.4	15.9	09.4	11.5	15.6	24.3	28.1	27.1	29.1	23.9	18.8	09.5	08.5	10.5	09.6	02.1	14.7
12	D	04.8	08.4	00.7	16.4	04.6	-20.0	-04.3	-30.6	-25.3	-15.9	02.7	07.6	-13.0	31.2	53.4	54.7	75.5	31.6	21.4	15.3	11.4	11.4	14.3	15.3	11.3
13		14.4	14.3	12.5	11.5	15.3	12.6	09.4	07.6	-03.2	08.5	07.6	13.5	12.4	28.7	30.0	27.3	26.1	19.3	14.4	09.5	09.5	13.5	08.6	08.5	13.8
14	Q	09.1	11.3	11.5	12.0	10.5	10.6	11.0	10.5	11.0	11.5	11.7	06.7	08.6	18.3	17.9	22.4	24.7	21.4	16.5	11.6	09.4	07.7	06.6	05.9	12.4
15	D	07.6	09.5	14.3	13.5	10.5	09.5	09.6	08.5	09.0	11.5	33.0	45.8	22.8	20.3	28.1	28.1	29.2	28.2	13.0	15.4	20.8	16.4	24.1	18.8	18.7
16	D	23.3	15.3	10.5	02.8	-11.1	-13.8	-06.1	00.7	04.1	08.5	10.5	13.5	14.9	20.8	26.3	29.4	27.7	20.8	11.0	07.6	04.7	04.8	07.6	08.5	10.1
17		05.6	06.7	07.5	08.6	09.6	11.5	12.4	13.2	15.4	06.1	06.7	12.5	23.3	26.1	26.1	21.2	17.4	15.4	08.5	04.9	03.7	05.6	07.6	08.4	11.8
18		10.9	08.4	14.9	06.1	07.6	-16.0	14.4	08.5	21.6	04.6	19.3	-05.2	21.8	24.1	28.1	23.3	26.1	27.7	10.5	10.5	08.5	10.4	11.4	09.5	12.8
19		07.9	08.5	09.5	12.5	07.1	09.5	08.5	08.6	08.4	09.4	15.0	15.4	26.1	28.0	28.1	26.2	16.4	12.6	06.0	03.2	02.0	02.6	04.5	08.6	11.9
20		05.6	09.0	08.5	09.5	09.6	10.5	09.4	05.7	07.1	05.6	09.5	12.6	18.3	24.2	27.1	25.7	23.7	15.9	15.4	06.7	03.7	00.4	03.2	05.6	11.4
21		03.7	03.7	05.7	03.6	07.6	08.5	09.5	09.8	04.6	-04.3	08.5	10.6	18.8	20.4	20.4	22.5	24.3	21.3	13.4	12.8	08.3	04.1	03.6	04.3	10.2
22		02.8	02.6	05.9	07.1	09.7	09.6	08.4	08.5	04.9	13.0	13.8	18.3	22.3	21.9	19.2	22.3	21.3	21.3	17.9	08.5	04.5	06.2	01.8	07.1	11.6
23		08.5	07.6	10.4	10.4	07.6	08.5	13.1	11.7	11.5	11.4	13.1	15.3	17.3	20.8	21.2	23.2	21.8	17.3	07.0	07.1	04.3	01.7	00.7	02.6	11.4
24	D	03.2	00.7	08.5	09.1	06.7	-00.2	-15.9	01.3	00.7	11.5	15.4	39.9	32.6	37.5	28.1	35.0	24.2	17.3	15.8	10.7	13.9	27.3	47.7	06.9	15.8
25		-01.3	03.7	-01.3	07.1	06.5	09.9	10.5	05.9	09.6	02.7	10.5	11.5	14.4	20.8	25.3	26.2	25.4	24.2	19.2	14.5	13.9	12.6	11.4	06.7	12.1
26		11.0	06.2	08.5	08.5	09.4	10.4	10.0	10.4	09.5	08.5	08.2	14.3	16.4	20.3	22.7	23.5	24.1	23.3	16.5	11.0	07.6	04.4	05.6	04.8	12.3
27	Q	04.6	06.2	12.4	13.4	07.6	09.5	09.4	08.5	09.5	08.5	07.5	10.6	14.7	18.3	20.4	20.8	18.9	16.4	15.3	11.5	09.6	07.6	05.6	05.8	11.4
28	Q	06.2	07.7	09.0	09.5	09.4	11.8	11.0	11.0	11.6	12.7	13.5	13.5	13.9	15.5	17.9	17.3	15.4	13.8	11.5	09.9	08.1	04.6	02.9	03.2	10.9
29	Q	03.7	05.7	08.1	08.1	09.3	10.0	10.6	11.4	10.9	12.5	11.5	13.6	16.9	19.0	20.4	21.8	22.4	16.9	14.3	11.5	08.5	05.6	04.6	05.6	11.8
30		05.6	06.2	06.6	07.8	08.5	09.5	10.5	11.1	11.7	11.6	11.5	14.5	18.3	19.3	22.8	21.1	21.3	22.3	16.4	13.0	07.6	07.6	06.6	05.6	12.4
31		05.7	07.6	09.5	11.0	11.6	16.4	12.5	09.1	13.4	13.4	10.4	13.7	16.4	19.2	33.2	26.7	25.8	25.1	17.6	07.6	06.1	-00.4	00.8	05.7	13.3
Mean		07.5	07.7	08.6	09.4	09.5	08.1	09.3	08.9	09.5	10.3	12.0	13.8	17.3	22.4	24.8	25.0	24.7	20.6	14.5	10.5	08.5	07.4	07.7	06.6	12.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 19 Meanook $Z = 58,000\ \gamma +$ May 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	819	817	807	817	731	754	786	719	742	709	693	677	687	699	763	795	807	807	818	818	829	841	856	850	777
2	829	839	838	873	904	828	731	818	807	802	796	795	786	784	786	786	786	784	773	776	785	796	799	809	805
3	796	796	799	802	802	799	796	791	780	782	776	765	774	785	797	796	795	785	778	779	785	791	802	807	790
4	809	797	796	796	798	799	806	795	778	676	699	754	764	784	765	753	773	781	795	802	797	806	818	850	783
5	774	525	667	682	764	742	795	796	807	802	791	780	828	785	774	780	802	802	802	796	806	807	809	808	772
6 Q	807	802	797	796	796	796	796	796	795	796	786	795	802	796	795	785	785	776	776	785	785	795	791	796	793
7	796	795	791	791	791	786	785	785	785	785	785	780	785	786	790	785	784	776	780	780	782	791	803	770	786
8 D	856	844	803	818	617	535	769	868	850	953	958	888	739	691	802	812	802	804	807	807	808	808	823	861	805
9	823	834	861	834	819	818	812	797	743	774	776	720	743	776	774	786	795	795	796	786	795	807	818	829	796
10	819	812	807	807	796	807	792	732	743	646	720	794	807	796	797	786	776	769	791	796	796	807	816	807	784
11	839	851	819	807	806	795	687	719	678	623	632	654	699	774	785	780	785	785	808	817	830	839	839	883	772
12 D	927	948	927	936	834	666	719	721	925	839	872	937	861	786	711	770	796	720	796	803	797	807	829	833	823
13	829	819	818	829	839	819	806	774	531	773	708	699	661	699	774	786	785	785	795	796	808	850	839	818	777
14 Q	805	802	796	797	797	796	797	796	796	795	795	764	677	672	727	785	812	807	796	795	796	802	807	796	784
15 D	800	818	839	829	806	796	795	806	784	776	622	570	741	761	741	765	774	774	791	818	856	926	953	904	795
16 D	871	871	742	769	667	788	268	704	818	818	741	796	807	796	819	819	807	797	786	796	808	809	841	834	774
17	807	785	780	785	785	788	802	795	687	645	665	634	693	784	780	764	764	764	784	784	785	785	791	807	760
18	823	851	850	829	678	708	807	829	861	731	764	780	802	802	796	785	780	780	785	812	818	845	871	823	800
19	791	817	839	817	817	796	785	780	773	677	546	600	590	715	753	774	778	780	784	791	807	817	845	872	764
20	818	829	823	806	807	795	796	774	699	709	743	758	773	785	795	791	774	773	774	776	806	831	845	823	788
21	829	849	850	838	839	823	807	817	765	654	668	682	715	741	765	786	796	796	796	817	845	872	872	829	794
22	817	845	873	829	823	807	812	807	774	754	774	795	806	783	731	785	747	774	797	781	786	819	839	888	802
23	893	901	861	849	820	818	818	786	776	742	731	754	774	785	786	774	773	771	784	785	795	807	807	806	800
24 D	830	927	906	861	838	802	785	851	893	915	807	655	708	693	689	719	753	776	796	795	829	916	841	829	809
25	838	807	861	839	829	823	722	720	796	798	773	731	797	808	806	796	791	791	786	791	812	842	850	843	802
26	862	817	806	792	786	786	786	785	785	784	752	785	795	791	785	783	773	764	773	784	797	806	817	808	792
27 Q	822	828	834	784	785	790	796	795	784	765	747	774	785	802	802	802	796	796	793	791	787	793	796	786	793
28 Q	785	785	802	793	793	794	795	785	785	784	784	776	764	765	783	795	786	777	774	780	780	785	786	791	784
29 Q	785	785	785	784	784	784	784	784	776	764	764	774	774	780	780	776	774	764	753	758	763	764	774	774	774
30	774	776	773	774	774	774	776	776	776	774	776	781	785	784	774	776	776	769	764	765	764	773	780	785	775
31	784	787	795	791	829	829	806	792	748	764	764	765	752	637	607	623	719	758	774	828	872	819	823	883	773
Mean	821	818	818	811	792	782	768	784	775	762	749	749	757	762	769	777	782	780	787	793	803	818	826	826	788

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 20 Meanook — May 1959

Day		Horizontal Intensity						Declination						Vertical Intensity					
		Maximum 12,000 γ +			Minimum 12,000 γ +		Range	Maximum 24° E +			Minimum 24° E +		Range	Maximum 58,000 γ +			Minimum 58,000 γ +		Range
		h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1		04	13	1026	11	55	550	476	12	10	53.4	22	43	3.0	50.4	22	41	863	13	07	591	272
2		05	46	1027	06	20	906	121	15	57	43.6	06	23	-9.7	33.3	04	00	934	06	19	627	307
3		20	17	1002	16	22	951	51	07	48	23.1	22	40	3.6	19.5	03	35	810	11	53	745	65
4		23	59	1325	09	32	661	664	09	58	31.3	23	34	-7.1	38.4	23	59	953	09	24	595	358
5		01	14	1774	12	35	784	990	00	46	36.0	01	53	-27.6	63.6	00	02	967	01	30	453	514
6	Q	12	02	1013	18	00	957	56	15	00	27.4	22	26	6.5	20.9	00	12	813	18	13	767	46
7		23	53	1093	21	33	951	142	17	12	22.9	23	42	-0.6	23.5	23	53	837	17	55	769	68
8	D	23	04	1227	11	10	-34	1261	10	38	62.4	11	34	-45.7	108.1	09	52	961	13	43	504	457
9		02	03	1059	11	56	828	231	17	23	30.6	11	17	2.0	28.6	02	41	873	11	17	695	178
10		06	15	1038	09	26	446	592	09	33	59.6	21	45	-5.4	65.0	01	40	837	09	25	542	295
11		23	56	1350	12	10	591	759	23	35	39.5	23	58	-31.6	71.1	23	35	961	08	56	538	423
12	D	03	33	1872	(17 | 12 | 154 | 1718)	16	37	117.9	07	30	-117.0	234.9	11	52	1178	14	55	444	734
13		16	58	1032	08	52	406	626	14	43	36.5	08	53	-67.1	103.6	21	28	869	08	40	413	456
14	Q	16	07	1001	13	00	822	179	16	36	26.5	11	52	1.0	25.5	00	53	812	12	58	641	171
15	D	22	07	1256	10	57	403	853	11	22	74.4	09	37	-4.4	78.8	21	58	1005	11	18	457	548
16	D	00	38	1485	05	23	279	1206	07	37	34.5	02	43	-83.2	117.7	05	28	1024	06	18	-157	1181
17		23	56	1075	12	13	407	668	12	25	45.4	09	50	-4.7	50.1	00	02	831	12	12	487	344
18		04	08	952	04	19	555	397	05	13	47.0	05	17	-92.1	139.1	08	17	990	05	10	403	587
19		02	27	1099	10	11	635	464	13	12	35.0	10	55	-14.6	49.6	23	20	906	10	47	468	438
20		00	34	1059	08	28	825	234	14	29	30.1	21	44	-1.3	31.4	01	58	850	08	50	637	213
21		04	07	1100	09	37	726	374	16	55	26.1	09	53	-13.2	39.3	22	33	891	09	33	581	310
22		23	59	1225	08	32	638	587	15	35	27.4	09	00	-11.6	39.0	23	58	975	15	04	621	354
23		00	07	1229	10	00	912	317	16	07	25.7	22	03	-1.2	26.9	00	01	962	10	48	701	261
24	D	22	47	1641	06	43	416	1225	11	09	69.3	06	40	-143.8	213.1	06	54	1142	07	02	507	635
25		00	22	1356	09	07	613	743	17	21	29.7	09	16	-23.7	53.4	09	00	959	11	19	662	297
26		00	59	1095	10	15	934	161	16	23	26.0	10	14	0.5	25.5	00	27	890	10	16	716	174
27	Q	02	38	1090	09	40	948	142	15	04	23.2	09	37	4.6	18.6	02	33	877	09	40	737	140
28	Q	15	07	1014	12	35	968	46	15	03	18.5	22	17	2.2	16.3	05	21	804	12	48	754	50
29	Q	23	40	1021	23	55	968	53	16	32	23.3	00	08	2.7	20.6	00	26	793	09	12	743	50
30		14	17	1040	18	50	953	87	16	47	25.8	00	12	4.3	21.5	23	50	793	17	52	757	36
31		23	58	1211	13	37	775	436	14	22	38.4	22	00	-3.4	41.8	23	59	945	15	09	550	395
Mean				1187			675	512			38.4			-21.9	60.3			913			579	334
No. days				31			31	31			31			31	31			31			31	31

89025-3—5

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Meanook $H = 12,000\ \gamma +$ June 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1223	1136	1062	1023	1015	1041	1018	1013	995	966	932	988	998	986	983	982	975	973	955	947	964	986	1009	1010	1008
2	968	1001	982	997	1037	1048	896	959	899	925	878	895	871	944	964	929	961	946	939	986	985	1002	1077	1174	969
3	1271	1122	1149	1119	992	994	1022	1038	996	890	800	874	983	992	972	992	971	967	953	961	976	962	976	1006	999
4 D	1053	1099	1004	989	1014	1047	979	920	981	883	770	835	887	982	1001	977	981	994	993	973	1013	966	1055	1134	980
5	1066	1032	1035	1089	1044	1040	980	965	979	980	994	962	974	982	988	976	963	960	949	936	938	957	993	1000	991
6	1015	1012	992	986	993	1000	999	1001	977	999	969	1006	953	905	969	999	1013	954	977	985	990	1010	1024	1007	989
7	1016	1003	1000	1025	1031	1006	996	992	993	994	988	1007	1004	1009	1009	1014	1003	999	975	996	974	992	1007	1009	1002
8	1015	1019	1021	998	997	1001	1007	977	845	983	1002	1014	1025	1028	1008	986	993	1002	980	972	981	978	996	1015	993
9	1040	1049	1003	1015	1040	1026	1010	1019	730	581	424	489	676	977	1051	1039	1021	1030	1019	1007	993	983	1011	989	926
10	1060	1093	1083	1134	1111	1066	1017	985	954	813	972	1005	1018	1008	1009	991	1007	994	962	955	961	969	981	1017	1007
11	1021	1002	1003	1008	996	1000	1015	996	1003	1007	703	509	766	989	977	915	941	995	982	975	973	974	993	996	948
12 Q	1002	1007	1003	996	990	985	989	989	990	990	992	1000	1011	1014	1008	996	980	945	969	968	960	961	970	995	988
13 Q	1001	1009	1003	1007	993	995	1000	1001	1001	1003	1003	1007	1015	1016	1013	1008	1008	996	989	991	977	985	980	985	999
14	1002	1005	1003	998	1004	999	998	998	1004	1004	1010	990	939	931	956	996	992	989	983	985	991	1017	1019	1044	994
15	1011	1016	1013	1017	1017	1015	999	943	825	994	996	1003	1012	1029	1025	1019	1003	989	986	981	989	992	986	999	994
16 Q	1024	1012	1036	1067	1041	1009	1007	999	989	981	992	1002	1004	1021	1019	1012	1004	995	1006	996	999	984	974	982	1006
17 Q	1004	1013	1007	1001	997	998	997	1000	1002	1004	1007	1010	1016	1025	1033	1029	1003	974	959	966	981	1029	1014	999	1003
18	1005	1012	1019	1040	1020	1002	1014	1015	1001	976	989	965	941	950	981	989	975	977	956	957	958	949	973	997	986
19	1010	1026	1020	1028	1021	1027	1014	1002	997	976	1002	1016	998	1018	1012	1003	994	980	967	966	961	961	977	1000	999
20	1031	1043	1039	1010	1003	1005	1009	1007	1002	1006	1013	1017	1020	1016	1015	1016	1016	995	973	965	958	978	1008	1013	1007
21	1010	1023	1001	1005	1001	1012	1017	1003	1003	1001	999	998	998	996	991	996	998	965	940	924	949	950	980	995	990
22	1023	1011	1031	1026	1012	998	1015	1006	980	984	922	783	834	891	995	983	995	991	963	973	984	1000	995	1008	975
23	1018	1023	1012	1000	1011	1016	1009	1005	1010	1020	1004	1011	1006	1003	1012	987	976	960	960	977	998	1056	1160	1151	1016
24	1142	1332	1348	1206	1114	1066	948	833	915	973	973	971	986	1002	1002	980	952	937	944	991	1010	1018	1020	1002	1028
25 Q	1030	1006	1002	1001	995	992	987	987	990	988	988	973	982	989	986	979	965	955	955	968	969	983	1011	1018	987
26	1038	1024	1033	1034	1094	996	979	850	553	717	716	788	792	800	886	982	1015	1014	996	980	979	976	981	988	925
27 D	993	996	995	1001	992	998	1003	995	898	900	948	933	916	985	902	822	832	920	1006	1016	1015	1038	1208	1138	977
28 D	1178	1151	1277	1144	1144	1194	1154	1054	618	772	897	754	733	494	596	712	891	937	991	992	997	949	1009	1062	946
29 D	1124	1078	1043	1050	1112	1059	1051	1047	691	458	499	730	786	872	897	886	817	857	982	1004	1085	1352	1340	1108	955
30 D	1151	1113	1060	1062	1037	1028	1038	1015	567	562	483	454	642	516	433	556	821	936	1007	1002	1031	1096	1053	1014	862
31																									
Mean	1052	1049	1043	1036	1029	1022	1006	987	913	911	895	900	926	946	956	958	967	971	974	977	985	1002	1026	1029	982

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 22 Meanook D = 24° E + ′ June 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	10.0	04.7	09.4	08.6	08.5	08.5	06.7	04.6	08.5	06.7	05.6	11.4	14.1	15.3	19.3	22.8	26.1	22.3	15.4	08.0	05.2	03.8	01.5	00.8	10.3
2	05.9	07.4	09.6	09.0	09.5	06.7	10.2	09.6	09.5	13.2	13.2	17.2	18.3	25.6	27.8	21.8	24.3	23.3	10.2	08.1	02.6	00.4	03.4	07.9	12.3
3	04.9	06.5	01.2	09.4	09.6	11.5	08.5	11.2	10.4	12.2	18.3	22.1	19.9	21.9	25.0	25.7	25.8	19.8	14.5	05.9	03.6	-01.0	00.2	01.8	12.0
4 D	00.8	01.9	10.5	08.0	08.5	23.0	21.8	06.2	06.3	04.2	12.1	19.8	16.3	21.8	20.7	26.7	26.0	15.4	10.2	09.9	13.5	05.0	03.5	03.1	12.3
5	10.0	05.0	07.0	07.2	13.1	12.9	09.2	07.5	07.2	07.5	09.1	06.3	18.3	19.6	28.9	27.3	23.7	18.3	15.1	08.3	04.9	-00.7	02.4	03.3	11.3
6	06.3	09.0	09.9	10.1	11.0	10.7	11.8	09.0	22.4	12.9	14.8	12.0	11.1	16.8	20.8	23.7	23.5	21.7	07.3	08.0	08.2	09.0	09.1	08.5	12.8
7	09.0	08.2	08.7	10.2	18.3	14.3	09.2	10.2	10.2	10.9	09.6	12.5	13.5	18.9	22.8	25.8	24.4	21.7	18.8	11.9	10.2	06.4	06.7	07.0	13.3
8	06.4	07.4	08.4	09.0	08.4	09.7	11.0	14.3	20.4	17.3	13.5	12.6	15.0	18.3	19.5	21.7	21.1	15.8	14.5	07.5	04.7	01.2	02.5	04.1	11.8
9	05.5	08.3	10.7	12.5	13.5	21.0	14.1	12.9	-02.5	27.5	27.7	25.8	33.3	25.9	27.4	30.9	30.4	26.0	20.9	10.4	03.6	02.2	05.7	05.0	16.6
10	06.3	11.3	11.1	19.9	11.1	11.8	10.0	11.5	05.8	11.4	07.5	10.8	12.2	13.9	18.0	21.0	21.0	20.8	15.5	13.1	08.6	01.8	01.6	04.9	11.7
11	08.5	10.9	13.5	13.4	11.0	10.0	10.9	10.2	09.5	04.8	23.9	13.0	21.0	22.2	21.6	31.5	24.8	14.1	13.9	10.1	06.8	06.3	05.7	07.7	13.6
12 Q	09.0	10.1	11.1	11.7	11.6	11.5	11.6	10.7	11.3	12.0	13.7	15.3	16.5	18.8	20.8	22.9	22.8	23.8	17.8	12.0	09.9	05.3	04.8	03.9	13.3
13 Q	07.0	07.8	11.0	13.0	11.6	12.0	11.0	10.4	10.3	11.1	11.4	13.4	16.3	17.8	20.0	22.3	20.8	18.0	13.8	12.5	08.6	04.1	02.6	02.8	12.1
14	04.0	04.5	07.3	08.6	10.6	10.9	10.0	10.6	11.7	12.4	12.7	11.2	11.7	16.6	21.7	22.0	22.8	21.4	17.1	11.4	08.3	08.8	07.8	07.8	12.2
15	06.9	07.1	07.8	09.1	09.7	09.0	12.1	09.2	18.6	15.9	13.1	16.6	23.1	23.7	23.0	24.0	23.7	18.9	14.5	12.0	11.1	05.8	05.0	05.5	13.6
16 Q	09.7	09.9	11.0	13.4	08.7	10.2	08.9	09.1	07.5	09.8	09.9	15.2	17.8	20.8	19.9	18.8	18.9	19.5	17.9	15.6	14.3	10.0	07.0	05.7	12.9
17 Q	06.2	08.0	09.6	09.9	10.0	10.4	10.0	10.6	11.6	11.6	11.0	13.1	14.7	19.1	22.1	25.4	27.2	26.6	25.3	12.8	10.4	06.7	02.0	-00.3	13.1
18	02.2	05.2	06.2	07.5	10.0	08.3	07.1	04.8	10.1	08.7	10.0	12.1	19.1	21.0	22.9	24.6	24.5	24.7	17.8	09.3	00.8	-02.5	00.8	03.3	10.8
19	05.0	06.7	08.1	09.2	07.6	15.0	06.7	07.4	09.7	10.2	15.2	15.6	18.7	22.9	23.7	23.8	27.3	25.4	19.4	12.8	06.3	02.1	02.2	04.1	12.7
20	04.8	08.0	09.4	10.1	09.0	09.0	09.1	09.1	09.6	11.7	14.0	16.9	18.0	23.4	25.4	29.3	25.8	24.4	20.6	09.1	03.2	-00.8	-01.7	00.1	12.4
21	03.3	04.0	06.8	08.6	09.2	08.4	09.8	06.4	07.9	09.1	09.6	14.6	15.0	15.4	22.9	27.9	26.9	32.7	23.1	13.9	04.1	00.0	-02.9	-00.3	11.4
22	01.9	05.0	07.4	09.2	09.1	09.4	08.6	07.8	17.0	10.0	11.8	15.9	28.5	30.4	31.7	26.7	29.4	25.5	22.9	11.4	05.1	00.4	00.3	01.7	13.6
23	03.2	06.2	07.0	08.2	11.0	12.1	12.0	13.5	12.1	12.0	12.1	15.8	18.5	24.5	26.9	30.3	32.7	28.9	18.4	06.0	05.4	03.7	12.2	07.0	14.1
24	-00.8	03.4	-07.1	08.1	06.3	14.0	07.4	01.9	12.3	09.7	08.8	11.7	17.9	22.3	25.4	27.4	27.2	26.4	22.8	18.4	08.7	06.7	04.2	00.9	11.8
25 Q	02.7	05.5	08.7	09.5	12.6	09.0	09.2	09.6	09.9	09.8	09.5	11.6	17.2	22.7	26.9	27.9	26.2	24.3	17.1	09.2	04.2	01.3	-00.1	00.2	11.9
26	01.3	03.2	02.5	07.8	13.9	08.3	08.5	09.0	04.3	13.9	19.5	20.7	32.2	31.7	30.3	27.8	23.9	21.9	18.0	13.2	07.7	04.1	03.7	05.6	13.9
27 D	08.1	09.2	09.7	09.0	09.1	09.2	08.7	04.3	-01.7	04.2	15.6	19.9	26.5	31.6	31.3	20.3	26.6	16.2	08.1	13.5	16.9	11.1	12.8	06,2	13.6
28 D	-02.7	01.9	01.5	-07.6	06.4	07.5	-04.0	-07.9	06.4	09.1	03.3	-08.1	12.3	27.6	30.9	27.7	18.0	12.5	12.5	18.0	09.7	00.7	06.6	07.3	07.9
29 D	10.2	10.1	11.5	11.3	14.0	10.0	07.8	-06.2	-10.3	-04.2	11.7	17.8	17.2	24.2	23.1	21.4	26.6	19.8	19.9	15.4	15.9	26.0	17.1	02.1	13.0
30 D	02.3	08.1	05.1	02.4	06.2	07.8	10.5	07.1	-08.1	02.7	-01.4	09.9	27.0	36.7	39.7	37.7	26.3	27.6	24.6	16.4	11.9	11.8	07.3	04.2	13.5
31																									
Mean	05.3	06.8	07.8	09.2	10.3	11.2	09.6	07.8	08.5	10.3	12.2	14.1	18.7	22.4	24.5	25.6	25.0	21.9	16.9	11.5	07.8	04.7	04.5	03.9	12.5

69026-3—54

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 23 Meanook — Z = 58,000 γ + — June 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	884	899	882	867	850	856	830	818	796	764	716	773	795	785	785	795	796	786	783	778	780	797	829	851	812
2	830	807	791	792	815	780	634	767	758	727	739	707	679	709	753	740	753	780	791	796	807	817	850	904	772
3	883	850	899	880	711	770	812	802	755	677	638	662	743	787	782	779	787	786	781	785	792	792	786	784	780
4 D	806	861	830	792	797	809	665	674	785	818	779	732	756	769	753	709	715	745	779	782	812	822	871	888	781
5	895	834	833	841	833	847	804	773	785	768	764	732	756	763	756	773	771	766	774	778	791	806	813	808	794
6	795	792	787	787	792	792	795	773	705	757	694	752	731	687	719	754	764	761	765	772	791	817	842	846	770
7	848	804	784	796	826	810	792	776	755	753	732	766	780	781	782	781	786	785	780	778	780	784	791	790	785
8	784	786	791	784	779	781	780	704	602	713	743	769	776	783	769	731	739	753	758	757	773	795	810	820	762
9	815	818	795	793	832	765	780	782	706	615	550	838	661	711	769	776	757	756	776	787	786	791	822	810	762
10	829	852	865	848	828	846	819	759	724	607	733	784	793	781	769	742	767	770	768	773	784	786	780	799	784
11	813	807	799	796	785	780	783	774	774	729	700	820	656	699	741	667	666	733	763	779	791	788	797	798	760
12 Q	796	786	778	777	778	778	778	777	777	778	778	782	785	785	785	781	771	758	765	763	768	767	769	773	776
13 Q	777	777	777	783	779	780	779	778	778	780	781	782	782	783	782	780	778	776	760	759	765	774	777	774	777
14	773	773	776	773	776	776	773	773	773	773	773	759	704	677	704	751	767	760	765	771	771	786	804	833	765
15	815	795	777	777	780	783	755	732	763	752	750	764	770	786	793	793	793	792	780	778	780	780	781	791	777
16 Q	812	808	815	842	832	820	810	815	791	773	770	780	785	779	769	766	767	765	768	771	782	794	795	790	792
17 Q	781	780	777	777	776	776	776	776	776	776	774	776	776	780	781	778	766	758	755	755	761	782	816	820	777
18	805	798	799	817	807	782	777	774	755	753	771	755	735	718	731	769	774	768	770	768	780	780	773	779	773
19	787	792	792	806	795	784	788	783	773	721	746	771	761	772	779	779	771	768	764	757	758	763	777	786	774
20	800	812	804	787	781	781	777	777	773	772	778	781	775	761	755	756	758	754	744	742	747	766	782	794	773
21	811	807	791	787	781	781	780	783	777	775	771	770	770	759	752	760	765	760	761	757	770	787	798	793	777
22	795	787	804	803	798	777	779	751	728	710	695	720	663	627	733	765	761	759	765	768	769	781	787	789	755
23	801	800	794	789	795	777	777	778	772	777	770	772	771	769	769	757	741	749	758	764	784	829	912	890	787
24	871	884	722	670	833	818	779	702	738	768	777	785	795	804	796	789	781	778	791	811	808	809	816	813	789
25 Q	817	804	793	781	769	770	771	772	772	772	762	769	770	771	770	766	759	758	754	746	754	766	782	814	773
26	848	849	830	837	780	755	777	759	832	704	683	714	690	664	670	736	774	786	797	798	788	792	794	794	769
27 D	794	794	791	786	779	779	777	735	604	636	634	636	625	674	660	544	623	709	798	805	799	846	907	863	733
28 D	862	858	865	785	871	826	733	714	740	818	814	777	818	526	745	653	694	740	775	787	823	842	852	861	783
29 D	874	852	843	834	835	799	792	787	851	603	922	981	799	738	725	745	723	755	830	866	873	944	849	851	820
30 D	870	874	840	852	845	804	782	807	757	753	917	956	764	756	616	585	703	780	820	850	873	874	826	807	805
31																									
Mean	822	818	807	801	801	793	775	766	756	737	749	772	749	740	750	743	752	763	775	779	788	802	813	817	778

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 24 Meanook — June 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	00	15	1334	09	55	913	421	16	20	29.0	23	30	-0.2	29.2	00	08	968	10	22	709	259
2	23	55	1403	12	07	823	780	06	15	31.2	06	02	-28.6	59.8	23	58	968	06	22	531	437
3	00	21	1392	10	40	742	650	05	01	31.6	04	35	-28.8	60.4	00	01	945	04	42	533	412
4 D	23	20	1178	10	52	600	578	06	08	40.4	10	02	-9.2	49.6	23	59	923	06	29	607	316
5	04	04	1173	17	39	920	253	15	59	33.9	04	27	-4.3	38.2	00	03	932	11	22	708	224
6	22	36	1059	13	36	862	197	16	07	33.9	18	10	3.4	30.5	23	52	861	13	52	633	228
7	03	42	1070	18	24	959	111	04	01	31.1	21	07	3.2	27.9	00	40	862	10	24	712	150
8	02	07	1054	08	20	761	293	18	14	30.5	21	34	-0.8	31.3	23	35	823	08	12	548	275
9	05	00	1114	10	51	310	804	10	57	136.9	08	58	-32.1	169.0	10	55	1092	10	40	76	1016
10	03	41	1259	08	36	758	501	03	53	39.6	09	05	-5.2	44.8	03	34	885	09	15	583	302
11	09	15	1071	11	38	379	692	10	20	53.0	11	24	-11.6	64.6	11	35	933	10	16	499	434
12 Q	13	20	1017	17	43	927	90	17	42	29.5	23	28	3.1	26.4	00	01	802	17	30	750	52
13 Q	12	49	1023	20	36	965	58	15	51	24.7	23	22	1.2	23.5	13	25	788	18	45	753	35
14	23	34	1098	12	55	905	193	15	15	25.8	00	09	2.4	23.4	23	31	855	13	06	654	201
15	14	03	1036	08	33	722	314	08	38	32.8	22	29	3.4	29.4	00	01	828	07	59	708	120
16 Q	03	55	1075	22	32	963	112	13	13	21.4	04	41	1.4	20.0	04	09	856	17	20	759	97
17 Q	21	54	1060	18	34	953	107	17	49	28.1	23	28	-3.0	31.1	23	36	831	19	07	752	79
18	03	54	1051	13	11	927	124	16	04	30.7	21	09	-4.8	35.5	03	23	829	14	09	708	121
19	05	14	1043	21	11	953	90	16	40	29.5	21	39	1.2	28.3	03	36	813	09	40	713	100
20	01	12	1060	20	07	943	117	15	20	31.1	22	26	-3.5	34.6	01	42	820	19	13	739	81
21	06	25	1031	19	40	911	120	17	08	34.3	22	30	-3.6	37.9	00	47	820	14	38	746	74
22	23	50	1078	11	05	686	392	13	53	40.3	22	00	-3.6	43.9	00	55	810	13	18	588	222
23	22	55	1254	18	09	930	324	17	09	37.6	22	05	-7.2	44.8	22	41	967	16	38	736	231
24	01	17	1479	06	55	717	762	03	30	34.5	04	50	-47.4	81.9	00	58	974	03	34	285	689
25 Q	00	35	1054	17	57	940	114	15	27	29.1	23	25	-1.9	31.0	23	57	842	19	04	744	98
26	04	41	1166	08	31	361	805	09	55	41.8	05	22	-15.8	57.6	08	29	1116	09	27	625	491
27 D	22	39	1238	15	10	744	494	17	00	57.1	08	50	-17.6	74.7	22	04	928	15	12	488	440
28 D	03	06	1336	13	46	345	991	13	59	64.2	07	18	-63.6	127.8	08	20	957	07	11	382	575
29 D	21	35	1554	09	11	292	1262	09	10	125.3	09	38	-74.2	199.5	08	40	1145	09	30	267	878
30 D	00	08	1225	14	50	389	836	11	08	134.8	11	26	-43.9	170.4	11	17	1287	14	22	336	951
31																					
Mean			1166			753	413			44.8			-13.1	57.9			916			596	320
No. days			30			30	30			30			30	30			30			30	30

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 25 Meanook — H = 12,000 γ + — July 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	1005	999	1018	1015	988	979	981	981	968	966	973	966	968	973	972	961	975	967	968	963	970	999	1012	1070	985
2	1053	1102	1172	1194	995	1078	886	846	785	855	938	928	960	949	920	903	973	980	978	968	966	969	976	976	973
3 Q	995	1012	1022	993	982	986	988	990	990	995	995	1000	1010	1022	1027	1022	1008	988	970	962	953	956	960	976	992
4	995	1011	1016	1009	1004	1002	1010	1013	1016	1001	921	814	937	1004	1040	1020	995	1004	999	958	1014	988	1016	1038	993
5	1014	1032	1012	1053	1144	1064	936	888	926	936	877	952	937	849	968	1003	984	973	958	951	948	992	991	995	974
6	1003	1012	1031	1011	1004	1012	1003	1008	980	964	919	930	924	894	971	1022	1025	1010	969	957	936	971	984	953	979
7	1027	1047	1046	1038	1006	1010	1006	1007	922	753	851	821	948	933	988	1007	999	998	1013	995	984	984	985	1004	974
8	1016	1023	1031	1053	1056	1012	1010	999	832	669	722	824	944	866	936	976	1000	967	964	971	987	974	1004	1038	953
9	1019	1025	1019	1050	1060	1058	792	942	995	917	964	992	1015	937	1011	1019	954	972	975	989	968	952	969	1071	986
10	1127	1093	1158	1109	1110	1045	1031	983	982	1007	1001	1022	1022	1031	1031	1038	1030	1015	1014	1002	985	971	990	998	1033
11	1056	1114	1171	1203	1186	1057	1038	990	974	976	975	963	941	883	1000	1046	1000	1077	977	1048	1060	1030	1047	1203	1042
12	1513	1159	1057	1053	1020	1034	1016	976	1016	985	952	919	817	695	806	952	967	986	950	936	933	944	985	1007	987
13 Q	1000	1028	1038	1024	1016	1004	1003	984	946	979	985	982	933	889	907	928	975	982	974	952	944	962	1024	965	976
14	1030	1028	1078	1101	1077	979	988	973	785	819	654	782	719	759	841	1016	1024	969	981	970	966	973	971	980	936
15 D	1108	1233	1381	1514	1239	1067	1016	1038	580	698	733	993	789	748	651	909	846	552	378	868	1050	1148	1260	1288	962
16 D	1186	1051	1035	993	937	904	873	695	693	810	789	882	889	867	861	885	897	918	938	964	959	944	1053	1165	924
17 D	1006	962	963	1042	1056	1006	869	940	908	668	679	765	745	753	907	906	1013	1121	937	926	1108	1240	1045	1175	948
18 D	1187	1434	1481	1463	843	576	719	614	381	558	690	695	998	987	995	978	975	976	974	998	1088	1154	1202	1115	962
19	1215	1179	1130	1075	976	959	868	900	863	853	818	937	904	871	915	908	932	991	977	984	990	992	1040	1047	972
20	1046	1060	1056	1025	1014	1019	967	907	689	830	817	850	961	1019	1016	1006	979	951	953	952	945	946	991	1058	961
21	1015	1013	1018	1035	1031	1014	1014	948	976	993	966	932	937	966	959	969	969	937	930	935	933	952	973	1000	976
22	1008	1035	1006	1008	1000	1015	1005	954	975	991	992	968	991	979	942	955	995	984	971	959	962	1006	1010	1043	990
23	1192	1149	976	991	1043	984	986	1017	979	944	939	980	949	985	998	997	991	981	954	943	942	906	940	988	990
24	1000	1000	985	976	984	996	1022	1064	1016	821	911	937	991	978	968	970	994	966	944	990	982	1024	1122	1072	988
25 D	1031	1116	1097	1008	1041	904	994	970	749	614	871	952	969	939	935	998	973	958	922	981	1024	1028	1100	1035	967
26	1020	1008	1119	1104	1024	1024	850	693	624	799	759	922	975	968	970	991	984	958	964	971	1038	1041	1065	1230	963
27	1045	1052	1110	1035	1031	984	955	526	842	648	724	890	974	961	1002	1002	991	953	964	975	1002	1047	979	1007	946
28	1005	1068	1015	991	967	977	983	986	975	969	898	832	909	937	952	994	994	978	960	965	968	983	1013	999	972
29 Q	1000	1013	1021	1015	1022	983	946	988	987	977	978	894	959	1000	1008	996	971	958	944	939	948	950	962	974	977
30 Q	993	1005	1001	989	986	984	989	989	989	989	989	987	989	993	995	978	968	942	935	938	960	971	989	994	981
31	1004	1001	1014	1022	1044	1011	1040	989	986	773	651	952	955	928	996	1013	993	953	943	966	1009	1028	971	994	968
Mean	1062	1067	1072	1071	1028	991	961	929	882	863	869	912	934	921	951	980	980	967	944	964	985	1001	1020	1047	975

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 26 **Meanook** D = 24° E + ′ July 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	07.1	07.5	11.0	13.2	08.9	09.2	11.6	13.9	10.0	08.6	08.1	10.5	14.9	19.7	21.0	22.9	22.8	18.9	17.9	14.0	09.8	08.2	06.8	06.6	12.6
2	07.5	08.3	05.0	02.3	-02.4	-01.7	05.3	17.5	10.7	13.2	12.2	15.0	22.0	25.9	27.5	29.2	28.0	27.4	23.9	16.1	10.3	08.2	06.6	04.8	13.4
3 Q	05.2	07.1	08.2	08.7	08.7	09.6	10.2	09.8	10.9	12.2	13.1	15.3	16.9	18.1	21.1	22.0	21.9	17.7	13.9	12.1	10.0	08.7	06.3	03.9	12.2
4	04.8	06.5	08.4	09.2	09.3	09.3	09.5	10.1	09.9	08.4	11.4	17.4	23.4	28.8	28.6	28.0	22.3	27.0	23.8	13.3	09.3	03.3	06.1	03.2	13.8
5	05.6	06.6	09.1	09.2	22.5	11.8	22.0	28.6	13.3	09.8	14.8	15.7	22.0	19.5	24.9	26.0	23.1	17.8	14.5	09.3	06.0	07.6	06.5	06.3	14.7
6	07.6	09.9	12.1	13.4	12.3	11.5	13.0	13.4	15.0	13.1	13.8	13.5	17.2	18.0	26.3	28.9	27.0	24.1	21.3	14.0	09.4	06.6	04.2	02.1	14.5
7	06.1	08.3	11.2	16.0	11.1	10.0	11.6	11.2	16.7	01.6	08.1	18.3	20.9	18.1	25.6	25.8	23.5	20.2	12.2	09.0	05.1	04.2	04.3	05.9	12.7
8	07.1	10.1	13.2	13.3	14.2	15.9	13.3	10.0	21.1	12.0	16.2	12.5	11.5	14.3	21.9	26.8	30.5	30.2	19.3	15.3	10.9	03.8	02.8	06.3	14.7
9	07.8	09.2	10.7	13.7	19.6	15.1	-05.5	00.4	12.4	07.8	09.2	07.8	-04.4	03.4	19.5	22.6	16.6	09.2	08.6	08.1	11.0	02.7	02.9	09.1	09.1
10	14.8	15.2	25.8	21.9	26.7	15.5	11.5	14.0	14.2	14.4	08.3	10.1	15.5	20.7	24.1	29.2	30.9	28.8	24.0	16.9	09.6	05.3	02.4	02.3	16.8
11	05.5	12.1	14.4	11.4	12.5	12.3	18.3	09.6	07.9	10.1	10.4	10.2	09.4	20.1	20.8	27.5	29.6	35.5	18.7	14.2	03.5	05.2	11.6	27.1	14.9
12	41.8	07.4	03.3	02.0	07.2	08.1	06.3	05.2	06.0	06.4	10.6	12.8	12.6	23.2	36.7	33.8	35.8	29.7	21.9	12.1	07.1	05.0	04.2	04.7	14.3
13 Q	05.5	07.8	09.4	10.2	09.8	06.5	07.7	07.8	08.4	10.6	11.4	10.4	10.2	14.8	27.2	24.9	27.5	22.1	18.1	12.2	07.4	03.3	06.0	03.3	11.8
14	02.8	08.3	11.5	12.2	05.9	17.0	08.2	08.4	15.9	09.4	06.9	15.0	26.0	25.5	27.0	27.5	30.4	29.6	16.0	11.1	07.4	07.8	06.9	07.4	14.3
15 D	06.9	09.3	-00.9	-01.5	08.6	09.9	07.2	07.5	-07.7	16.2	58.7	56.6	60.3	108.3	77.0	72.1	70.9	20.4	70.8	82.4	74.2	38.8	43.2	27.3	38.6
16 D	16.0	08.7	00.9	12.2	14.0	09.2	14.1	-00.8	-04.4	01.6	02.4	06.2	13.5	19.7	26.1	29.1	26.9	21.9	22.1	23.2	11.7	-01.3	02.5	10.5	11.9
17 D	08.4	05.4	05.6	06.6	10.4	05.3	05.2	11.2	04.3	19.9	04.8	15.2	13.0	12.4	23.6	27.3	05.3	37.6			61.2	47.4	-06.1	02.0	14.8
18 D	02.0	03.6	04.7	-41.6	-31.4	-26.0	-21.5	-20.8	-06.7	-20.6	11.6	05.4	18.1	22.7	29.8	31.7	29.3	23.1	28.5	25.8	28.1	16.3	12.3	07.3	05.5
19	04.2	05.3	10.7	03.7	12.4	05.3	04.5	04.6	-04.2	04.8	01.6	13.4	14.7	19.2	25.9	23.8	25.8	25.2	23.1	16.3	15.6	14.4	13.2	08.4	12.2
20	07.1	11.4	07.3	13.8	10.6	12.9	13.1	09.7	04.8	00.6	06.0	11.0	11.4	20.1	24.8	29.8	32.6	26.0	18.2	08.6	00.8	00.1	02.9	10.4	12.3
21	10.3	05.8	07.3	15.2	14.1	10.2	14.0	17.1	12.1	10.7	09.6	09.9	10.1	21.2	27.3	29.8	29.6	30.9	21.0	11.9	04.3	03.5	-00.1	01.7	13.7
22	04.3	10.5	08.0	07.6	09.7	08.9	21.6	08.3	09.5	09.9	10.9	08.5	17.9	20.0	22.6	24.1	20.9	21.1	14.8	11.6	03.3	04.2	07.3	03.1	12.0
23	08.4	07.0	07.4	08.0	13.2	14.3	19.4	11.3	10.2	08.7	07.0	11.2	14.6	25.1	27.4	30.1	31.9	28.0	22.3	19.2	14.2	04.1	-00.6	-00.7	14.2
24	01.4	05.2	06.1	06.1	06.8	07.9	08.2	06.3	-01.5	00.5	10.4	08.0	16.4	17.3	24.7	26.6	29.7	35.7	18.8	18.1	02.4	06.6	07.8	03.6	11.4
25 D	00.4	-01.8	04.4	04.4	08.4	09.2	08.8	08.5	-05.5	18.9	07.9	12.7	13.8	16.1	22.7	20.0	21.2	32.5	33.9	12.4	05.5	03.9	10.7	08.6	11.6
26	00.1	03.9	05.5	12.2	13.1	09.2	-02.5	-05.6	-11.3	10.7	05.5	09.2	18.9	24.1	31.1	33.0	30.5	25.9	21.7	15.2	24.1	17.8	08.5	14.3	13.1
27	07.3	07.0	16.5	11.2	10.1	18.8	11.3	-15.3	12.9	04.8	08.8	00.7	12.8	20.6	27.4	30.0	29.1	30.0	20.4	17.6	19.2	21.1	07.9	06.3	14.0
28	06.2	15.3	10.7	09.7	08.4	08.2	18.3	12.0	11.4	09.5	03.4	-01.8	13.4	17.3	26.9	28.1	26.4	27.5	19.1	12.4	10.3	07.2	08.5	06.8	13.1
29 Q	06.4	11.4	09.5	16.3	14.7	10.1	18.7	11.9	10.2	09.7	10.4	08.3	16.2	20.3	24.0	25.1	23.2	18.1	14.1	08.4	04.8	03.7	04.4	06.0	12.8
30 Q	07.4	08.6	12.9	10.4	09.5	10.1	10.6	10.4	10.4	10.1	11.5	14.6	17.6	22.7	24.2	25.1	24.0	19.8	11.8	05.2	04.9	05.2	04.6	06.1	12.4
31	08.3	10.4	10.3	10.3	26.9	19.1	12.3	12.6	13.7	06.9	27.0	13.4	16.0	23.7	23.2	23.3	20.2	17.6	11.2	02.7	-00.3	07.6	05.8	04.2	13.6
Mean	07.6	08.1	09.0	08.4	10.5	09.5	09.9	08.0	07.4	08.4	11.4	12.5	16.7	22.6	27.1	28.5	27.3	25.1	20.9	15.6	12.9	09.0	06.8	07.1	13.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 27 Meanook — Z = 58,000 γ + — July 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	805	813	840	808	789	799	796	760	753	759	770	780	787	788	792	783	779	779	787	787	792	806	817	846	792
2	852	868	868	868	747	820	781	701	678	690	740	755	748	754	749	746	780	786	778	778	779	779	779	779	775
3 Q	787	793	808	797	781	781	781	779	778	781	783	786	789	789	787	783	779	770	761	759	765	771	780	785	781
4	788	786	783	781	782	783	780	778	772	758	713	699	707	727	747	755	713	716	738	751	755	798	843	840	762
5	864	861	818	818	769	775	718	712	701	744	681	702	694	699	734	752	765	755	765	771	782	812	811	801	763
6	793	793	806	811	808	804	794	785	740	629	660	704	688	666	691	743	772	777	771	779	788	807	813	814	760
7	827	833	839	843	800	791	785	765	630	473	592	560	685	702	765	766	732	736	765	771	781	791	792	801	743
8	800	798	807	832	823	796	800	777	628	603	705	609	731	657	726	729	766	758	768	772	791	792	798	822	754
9	797	796	792	804	821	782	496	620	760	622	680	770	585	599	785	821	801	796	780	788	801	806	807	857	749
10	889	909	937	868	863	835	804	780	769	794	780	800	808	809	804	801	795	782	780	771	774	781	783	793	813
11	816	863	889	896	874	806	804	833	762	757	748	745	726	663	768	801	788	771	753	774	778	779	826	954	799
12	1155	915	877	899	861	818	814	800	764	771	765	752	689	678	716	769	783	783	765	765	770	784	796	813	804
13 Q	824	830	831	820	781	793	804	742	629	739	764	764	715	683	718	721	760	782	782	785	793	798	814	807	770
14	818	823	842	848	793	733	787	743	612	636	692	712	623	635	663	777	798	781	793	772	772	786	791	793	751
15 D	845	908	926	826	770	783	847	734	350	878	686	801	986	1051	1396	1403	1669	1723	1571	683	499	971	1042	740	962
16 D	810	762	777	773	805	814	735	679	721	760	751	797	804	787	786	824	819	807	816	822	803	803	835	875	790
17 D	830	818	809	835	793	786	747	753	742	767	747	618	642	663	771	769	704	685	862	1049	980	969	840	859	793
18 D	831	859	792	363	723	785	881	831	1086	866	824	883	861	834	859	839	777	777	798	819	886	884	860	852	824
19	853	863	820	894	764	798	701	749	644	690	683	782	780	765	812	814	809	814	819	804	809	826	855	846	792
20	857	856	850	851	837	833	755	755	655	662	677	701	806	825	812	803	792	783	786	787	781	791	819	881	790
21	868	832	833	835	822	836	820	719	732	781	769	729	709	757	783	794	787	780	775	772	775	800	809	809	789
22	831	837	819	819	816	827	726	641	723	766	768	762	769	787	770	765	798	793	785	781	792	803	842	850	786
23	912	859	822	835	835	749	791	819	791	755	720	760	755	786	804	801	793	788	780	781	791	785	780	797	795
24	816	824	805	791	785	791	803	796	807	714	741	738	770	777	769	780	774	768	770	782	813	833	872	847	790
25 D	834	858	848	844	809	651	752	781	660	706	696	745	775	753	751	812	792	782	812	840	848	827	852	862	787
26	839	839	831	801	820	832	669	641	787	774	718	779	792	796	801	791	791	792	789	816	878	891	878	899	802
27	821	849	831	831	824	799	770	693	717	733	666	701	777	787	809	817	797	789	794	794	818	862	820	821	788
28	837	863	835	829	803	794	746	742	773	774	686	592	683	721	733	784	792	792	794	801	804	813	840	834	778
29 Q	816	831	824	845	835	742	703	786	792	785	775	728	761	793	804	801	797	787	782	780	783	783	792	804	789
30 Q	813	823	823	801	791	789	786	786	786	782	780	789	789	789	786	781	781	781	778	779	777	780	786	792	790
31	797	797	807	812	809	758	812	775	778	735	631	699	738	715	780	781	781	781	781	782	794	814	824	847	776
Mean	839	837	832	815	804	790	767	750	727	732	722	733	748	750	789	803	809	806	809	790	792	817	826	830	788

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 28 Meanook — July 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 Q	23	30	1090	14	50	945	145	07	10	24.0	04	00	3.8	20.2	02	46	868	07	16	717	151
2	04	11	1281	06	32	511	770	06	48	55.4	04	18	-66.0	121.4	04	28	976	06	25	478	498
3 Q	14	41	1042	18	58	940	102	14	40	24.3	23	50	3.9	20.4	02	40	816	18	59	753	63
4	23	55	1142	11	46	759	383	17	39	34.3	21	45	-0.1	34.4	23	58	882	11	38	635	247
5	04	18	1230	07	10	731	499	07	04	39.5	05	04	-3.9	43.4	00	01	879	10	27	585	294
6	02	28	1054	12	53	839	215	15	25	32.7	23	12	1.1	31.6	22	11	829	09	23	552	277
7	01	42	1080	09	12	583	497	14	37	30.7	09	46	-27.4	58.1	03	20	870	09	11	356	514
8	04	25	1123	09	55	606	517	10	15	60.6	13	35	-1.0	61.6	03	23	876	11	10	490	386
9																					
10	02	26	1256	07	34	940	316	04	43	36.8	22	34	0.2	36.6	02	30	984	07	38	733	251
11	23	59	1440	16	26	710	730	17	14	49.8	20	47	-4.1	53.9	23	59	1073	13	27	636	437
12	00	51	1658	13	43	568	1090	00	22	57.7	01	44	-4.5	62.2	00	25	1240	13	52	607	633
13 Q	22	28	1070	13	55	850	220	16	17	33.7	08	13	-2.3	36.0	03	17	845	08	05	543	302
14	03	49	1129	10	50	425	704	12	52	48.4	10	55	-7.5	55.9	03	21	866	08	43	517	349
15 D	21	55	1674	18	15	133	1541	15	29	153.4	08	55	-57.1	210.5			(850)	08	55	103	1747
16 D	00	43	1282	07	37	669	613	00	06	45.6	00	48	-25.2	70.8	23	27	916	07	03	559	357
17 D	21	15	1550	09	47	452	1098				22	31	-98.8		20	54	1521	17	03	101	1420
18 D	02	55	1897	07	03	-205	2102	04	50	86.0	06	51	-112.2	198.2	06	43	1221	04	56	246	975
19	02	18	1390	08	02	764	626	04	38	73.4	04	48	-69.4	142.8	03	45	911	04	31	203	708
20	00	55	1121	08	32	505	616	09	07	40.7	09	31	-20.0	60.7	23	46	902	08	25	536	366
21	05	56	1080	12	10	858	222	18	00	36.2	22	54	-1.8	38.0	00	15	889	12	10	657	232
22	06	13	1132	07	20	902	230	06	22	30.4	07	17	-0.6	31.0	22	38	866	07	05	607	259
23	00	55	1359	10	13	902	457	15	50	33.5	05	12	-5.8	39.3	00	45	987	05	12	683	304
24	22	34	1194	09	43	512	682	17	02	45.9	09	40	-20.6	66.5	22	16	896	09	30	579	317
25 D	04	50	1209	09	14	412	797	09	15	52.6	08	53	-30.1	82.7	09	14	1020	05	31	474	546
26	02	50	1374	08	15	380	994	16	58	40.3	08	07	-57.4	97.7	08	20	949	08	15	323	626
27	04	01	1212	07	15	343	869	17	39	37.7	07	40	-64.6	102.3	02	01	911	07	30	370	541
28	00	28	1100	11	36	759	341	15	45	34.9	11	28	-9.3	44.2	01	16	888	11	35	542	346
29 Q	03	42	1053	11	41	856	197	06	17	34.5	06	05	-12.8	47.3	03	43	874	05	55	565	309
30 Q	01	04	1099	18	39	928	171	16	06	26.7	22	09	3.5	23.2	02	10	832	17	55	771	61
31	04	14	1123	09	54	508	615	10	48	42.8	20	31	-5.5	48.3	03	17	888	10	31	525	363
Mean			1248			636	612			46.3			-20.6	66.9			978			515	463
No. days			30			30	30			29			29	29			30			30	30

69026-3—6

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 29 Meanook — H = 12,000 γ + — August 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1039	1062	1037	1097	1041	1012	988	664	903	985	1009	943	879	927	1040	1030	1011	967	994	971	977	976	979	1030	982
2	1091	989	1151	1248	1191	794	710	864	1010	1017	995	989	1001	1000	996	972	968	927	957	980	979	975	967	1004	991
3	1006	1035	1068	1109	1021	992	862	602	925	1039	984	888	701	818	865	971	1003	980	957	966	956	973	983	985	945
4	982	985	997	996	997	1000	998	947	993	819	774	886	628	925	760	920	964	931	957	973	996	1027	1068	1016	939
5	997	999	997	977	981	983	981	986	989	992	998	988	999	990	962	952	967	946	965	962	977	976	995	1003	982
6	1019	1021	992	1011	1024	1012	968	966	968	911	1017	840	763	934	997	982	941	877	925	963	1012	989	1060	1086	970
7	1123	1006	1011	1029	1015	999	973	973	999	996	966	805	968	1000	999	980	941	957	951	942	962	992	1028	1036	985
8	997	981	991	989	999	998	987	971	895	802	659	819	756	999	992	969	1006	989	970	958	963	985	1040	1060	949
9	1069	1049	1004	975	982	989	996	987	827	973	802	641	740	613	738	712	918	907	890	923	948	980	980	966	900
10	976	987	1108	1172	1019	1020	984	966	975	984	998	994	991	981	956	965	951	958	948	938	933	938	963	1028	989
11	1010	1034	1072	1038	1031	958	917	983	994	996	997	998	987	994	983	952	948	979	971	948	944	958	956	969	984
12 Q	988	1012	996	999	992	987	991	948	957	995	983	980	964	987	1011	991	952	948	960	961	958	965	975	1004	979
13 Q	971	988	998	1000	1010	1014	996	995	998	1003	1009	998	999	1003	984	976	966	940	941	951	957	966	991	997	985
14 Q	997	1006	1010	1018	996	998	1004	1004	1007	1002	999	1000	1009	1005	1001	1001	994	976	946	946	948	956	972	999	991
15	986	1024	1043	1003	1007	1007	1002	1003	1011	1011	1019	1004	1005	1001	979	949	955	954	939	943	978	1023	1019	1066	997
16 D	1115	1005	979	975	1013	1080	881	755	776	735	614	374	307	207	452	417	479	942	980	1011	1113	1317	1540	1327	850
17 D	1438	1311	1011	870	740	988	271	376	732	810	323	315	666	662	549	562	643	946	1048	1007	1031	1142	1099	1029	815
18	964	997	1041	1051	1033	1137	968	572	974	999	1026	1005	993	913	846	858	965	939	948	985	979	963	993	1026	966
19	996	1037	1053	1089	1087	1127	1073	1009	836	807	877	997	987	974	983	971	970	938	910	925	956	962	960	970	979
20 D	993	1005	1045	1218	1167	1174	1090	1152	979	938	907	939	985	931	966	983	965	962	947	951	952	964	963	1045	1009
21 D	1053	1079	1070	1044	1101	1079	980	968	823	562	828	937	1001	983	973	958	910	923	928	968	1036	1090	1037	1103	976
22	1182	1034	1016	1007	991	958	819	783	997	1004	970	990	990	991	1002	990	931	924	925	950	964	993	961	957	972
23 D	1033	1033	1013	1022	1075	1011	1067	878	875	790	744	840	851	923	935	999	971	955	957	942	958	1016	1009	1091	958
24	1066	1048	1042	1005	1026	1011	990	778	627	845	903	957	966	995	983	947	971	983	986	972	982	968	1004	1001	961
25	1021	1003	983	1002	1011	995	986	917	931	929	830	935	958	986	966	950	936	962	947	943	955	978	987	998	963
26	1008	1005	984	984	999	1006	989	860	816	960	976	997	1002	1000	995	988	971	947	955	963	965	963	958	980	970
27 Q	1005	1002	987	990	990	996	994	987	986	990	994	994	995	995	994	979	962	947	928	929	939	955	971	985	979
28 Q	990	990	987	994	994	998	999	1002	998	1002	999	998	1000	1000	994	979	963	947	936	940	956	975	994	1008	985
29	1017	1002	990	990	1001	1011	998	990	990	999	1010	991	965	990	954	946	998	958	955	946	965	987	999	1017	986
30	1018	990	986	995	1015	1019	1022	1014	1017	997	965	897	877	964	986	962	924	917	935	942	947	954	979	990	971
31	990	986	1010	991	992	992	992	1000	943	877	776	808	892	839	975	975	963	939	923	925	943	979	1018	1018	948
Mean	1037	1023	1022	1029	1017	1011	951	900	928	928	902	895	898	920	930	929	936	947	951	956	972	996	1014	1026	963

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 30 Meanook D = 24° E + ′ August 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	09.3	10.8	10.9	11.8	14.6	14.2	11.4	15.4	14.1	08.9	10.3	07.1	16.4	22.9	27.5	27.1	24.0	18.7	11.9	12.0	09.6	08.5	06.5	08.4	13.9
2	09.0	10.5	07.4	12.0	09.5	17.2	12.6	18.4	14.7	10.0	10.4	12.9	18.2	20.3	23.0	22.9	20.6	19.3	07.2	05.9	05.3	06.1	04.4	08.6	12.8
3	11.1	12.8	16.1	08.6	13.2	09.6	05.9	06.1	07.7	11.9	09.8	11.0	20.8	35.0	33.5	32.7	30.9	20.3	10.9	10.0	04.1	04.0	05.6	07.5	14.1
4	10.4	13.0	13.2	10.9	11.3	11.0	13.9	08.1	09.8	02.0	04.1	12.0	06.9	22.5	17.6	28.0	31.0	22.0	11.6	10.8	08.6	08.7	14.7	11.4	13.1
5	10.5	11.1	14.2	13.9	12.8	13.3	16.2	11.3	10.1	09.4	11.2	10.8	15.2	17.7	21.2	25.4	23.7	17.4	09.6	08.4	04.4	05.3	08.4	09.3	13.0
6	11.3	13.4	13.5	26.0	13.1	13.9	15.2	13.2	14.5	13.8	08.2	07.7	09.4	26.5	27.9	25.0	25.9	23.7	03.0	-02.8	05.1	01.5	05.4	12.8	14.0
7	21.5	13.0	13.4	20.5	12.6	15.1	18.0	20.3	10.0	07.7	04.9	-00.5	13.4	18.1	23.8	26.7	23.9	20.2	09.2	00.8	00.3	-00.5	04.3	08.6	12.7
8	11.4	12.6	12.4	11.4	12.3	12.2	24.9	20.6	18.4	12.6	06.3	11.3	03.2	18.5	24.4	27.0	23.0	19.3	16.8	13.1	08.5	06.5	07.2	10.0	14.3
9	08.5	10.3	11.3	08.5	09.5	11.2	11.3	18.4	16.4	13.4	11.5	17.1	36.0	35.9	37.8	33.7	33.2	31.1	19.1	03.5	-01.4	00.7	02.6	05.9	16.1
10	10.3	12.0	09.4	21.2	11.5	13.3	12.0	09.9	12.6	13.7	11.6	11.5	18.0	18.2	25.1	28.6	27.4	22.2	19.0	09.3	04.6	05.4	05.3	05.7	14.1
11	09.8	08.8	08.5	10.5	09.9	10.3	17.2	14.6	12.5	11.1	12.0	11.9	17.3	25.1	25.2	24.9	22.3	23.3	18.0	12.0	08.0	07.1	06.5	06.6	13.9
12 Q	08.7	09.9	10.5	11.5	12.1	09.5	09.4	06.6	09.4	13.5	11.9	13.6	15.3	23.2	27.9	29.6	29.6	21.5	17.0	08.6	04.6	04.6	04.9	05.1	13.3
13 Q	07.7	08.5	08.6	08.4	10.0	08.7	09.5	09.7	12.0	13.3	12.0	11.8	16.5	18.5	21.0	22.8	19.8	18.2	12.3	05.9	01.3	-00.5	02.3	05.1	11.0
14 Q	07.0	07.9	08.6	08.8	08.0	08.1	09.1	09.2	10.6	13.0	15.3	15.4	19.7	22.7	28.7	28.1	22.0	19.1	13.5	03.9	03.6	01.2	01.8	03.7	11.9
15	08.5	08.7	13.0	09.9	08.5	08.8	08.6	09.5	08.7	13.5	15.3	15.4	19.8	23.7	25.1	25.1	24.7	24.1	10.6	09.4	03.7	-02.1	-00.4	-04.8	12.0
16 D	-02.1	07.8	07.4	05.3	01.3	-02.2	05.8	-01.3	-08.7	04.6	16.7	18.6	18.4	-34.6	38.3	55.9	72.0	31.0	32.9	31.7	31.5	43.4	44.7	22.8	18.4
17 D	09.7	12.1	00.7	-23.1	-21.4	-07.7	10.5	11.0	07.5	12.4	45.8	42.8	16.5	25.3	46.6	38.4	29.8	19.3	28.7	22.7	24.1	24.4	19.1	06.4	16.7
18	09.6	11.5	19.4	33.6	24.4	-00.8	07.4	21.7	13.9	10.4	12.0	13.5	20.9	24.0	30.8	22.9	29.0	32.3	18.1	10.8	09.8	02.9	02.8	07.8	16.2
19	08.6	06.7	07.4	16.6	00.8	08.9	10.1	08.8	19.2	07.7	11.1	14.0	17.9	24.6	31.2	33.0	30.3	29.5	22.6	07.7	06.5	04.5	05.3	07.5	14.2
20 D	07.5	08.8	06.4	12.6	20.4	08.3	02.7	12.4	08.7	14.6	16.3	21.9	26.1	31.2	36.9	34.5	33.8	26.3	18.4	14.0	08.5	02.3	02.9	01.4	15.7
21 D	07.3	04.6	07.4	05.9	07.7	11.5	17.3	13.7	01.4	-15.2	13.1	16.5	18.9	21.2	23.8	26.4	28.3	23.8	24.6	19.4	16.2	18.3	08.6	08.7	13.6
22	07.7	05.7	08.3	12.0	11.8	17.0	19.8	18.6	14.5	10.4	09.9	10.4	12.9	15.0	21.4	25.8	34.1	27.2	21.2	15.6	14.3	06.7	01.8	-00.3	14.2
23 D	-01.1	10.6	05.6	06.3	09.8	12.1	-04.3	04.8	06.3	02.8	06.6	03.3	15.6	17.0	18.5	23.2	32.1	24.6	15.3	13.9	07.8	07.0	05.1	05.4	10.3
24	08.2	04.5	09.5	08.5	13.1	13.6	13.4	04.7	04.6	13.9	13.8	09.4	12.3	17.4	17.8	21.5	25.4	23.4	18.5	12.0	12.5	09.0	05.7	05.3	12.4
25	04.9	10.0	07.5	09.5	20.9	18.8	11.1	01.2	07.4	05.5	01.6	08.6	16.4	20.4	23.0	23.8	17.5	19.3	20.1	12.7	08.9	08.5	08.1	06.2	12.2
26	10.1	06.6	07.9	08.5	11.3	13.4	16.9	-03.6	-00.2	06.1	12.7	15.4	17.0	20.4	23.6	23.7	24.5	20.2	13.6	11.4	09.5	09.5	08.8	07.4	12.4
27 Q	08.4	13.7	10.4	09.3	09.4	09.7	16.9	10.3	10.4	11.2	12.4	13.6	14.9	18.7	23.1	24.5	22.5	19.3	15.9	09.3	06.6	05.2	06.1	07.6	12.9
28 Q	09.4	10.4	10.5	10.6	10.8	10.9	14.4	11.9	11.3	11.8	13.4	14.3	16.6	18.9	21.0	22.2	22.1	20.1	13.8	08.9	04.7	03.8	04.1	05.5	12.6
29	07.3	08.0	09.3	11.9	12.2	09.5	08.8	12.6	14.3	13.0	10.3	-01.7	10.0	14.9	06.1	22.9	21.4	12.4	09.6	07.2	10.1	05.9	14.3	18.3	11.2
30	13.5	13.5	11.3	12.4	13.8	10.2	05.3	02.6	00.8	-06.9	-07.3	-03.9	07.5	23.4	32.1	23.2	23.2	16.7	10.0	11.1	08.9	09.5	09.6	12.4	10.5
31	14.3	14.0	13.4	11.5	10.1	09.9	10.3	10.0	12.1	15.8	13.4	22.0	18.9	22.2	28.1	24.6	18.7	17.5	13.4	09.5	07.8	07.7	07.8	10.7	14.3
Mean	09.0	10.1	10.1	11.1	10.5	10.3	11.7	10.7	09.8	09.2	11.5	12.5	16.7	20.3	26.2	27.5	27.3	22.0	15.7	10.6	08.3	07.3	07.6	07.6	13.5

69026-3—61

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 31 Meanook $z = 58,000\ \gamma +$ August 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	895	870	861	857	775	818	809	569	710	770	781	739	712	693	789	801	780	770	787	793	809	810	812	825	785
2	863	875	907	842	812	647	723	766	804	803	792	796	799	796	791	781	781	766	769	787	796	803	803	820	797
3	819	842	894	896	861	814	647	338	652	780	762	725	582	592	602	728	778	787	789	803	807	792	797	799	745
4	801	812	816	822	816	808	780	690	770	582	631	693	609	680	647	713	765	766	785	809	830	848	889	860	759
5	807	798	803	798	791	787	754	788	792	786	788	785	798	792	775	759	778	782	791	786	797	805	811	819	790
6	816	827	821	814	810	809	739	722	686	640	781	710	664	694	757	745	727	731	755	797	831	842	866	886	770
7	902	840	839	858	846	825	749	738	798	791	766	650	742	785	794	789	766	767	779	792	801	810	834	842	796
8	837	829	814	803	803	801	746	730	635	617	657	696	661	787	796	787	810	803	803	801	803	811	836	862	772
9	896	886	836	792	789	788	788	717	627	703	673	602	582	599	575	646	765	787	796	813	846	836	817	801	748
10	803	811	874	875	845	844	813	775	782	764	791	800	804	798	779	781	771	781	789	803	789	801	809	844	805
11	855	869	886	856	845	729	721	791	796	791	780	786	786	792	793	780	769	789	792	792	791	799	799	798	799
12 Q	800	805	798	798	803	800	793	726	718	769	780	784	768	765	785	786	781	770	769	777	780	786	797	810	781
13 Q	805	796	792	789	797	822	808	791	771	775	782	780	781	782	777	777	779	778	775	780	782	780	789	792	787
14 Q	791	792	796	803	800	795	792	781	777	768	782	791	796	794	778	774	770	772	769	774	780	783	786	797	785
15	797	804	846	814	791	788	780	780	782	769	792	793	792	783	772	733	742	746	753	754	771	798	862	872	788
16 D	881	838	797	787	788	819	601	756	770	848	842	933	1082	797	592	712	732	814	827	885	912	883	679	527	796
17 D	370	337	516	653	789	817	599	896	966	965	814	836	986	933	740	553	571	757	814	811	842	918	869	842	758
18	830	826	855	814	796	703	755	614	771	781	810	836	832	791	728	706	783	804	816	816	825	830	835	842	792
19	814	835	877	840	812	858	806	758	820	837	797	831	839	835	820	813	807	791	794	801	811	813	816	819	819
20 D	827	830	863	935	850	852	804	823	798	809	804	760	797	772	777	784	777	777	783	785	787	785	792	827	809
21 D	862	874	883	873	924	810	736	744	755	687	642	743	799	806	800	797	786	797	831	845	889	901	866	887	814
22	888	846	843	832	805	705	576	634	793	813	791	803	807	810	817	817	807	798	794	800	831	852	843	817	797
23 D	842	852	835	850	852	858	822	787	786	712	687	690	661	748	755	803	808	814	831	829	831	848	853	884	802
24	852	851	885	866	819	820	832	775	652	690	753	797	797	817	813	787	814	812	797	794	808	809	825	831	804
25	831	831	803	812	835	786	798	715	753	690	615	696	733	783	792	787	781	805	809	812	813	819	827	830	782
26	835	813	798	798	808	791	785	659	635	695	748	786	801	803	796	791	786	785	774	774	786	791	793	804	777
27 Q	820	831	810	800	793	796	791	786	767	785	791	795	798	798	798	797	787	777	770	782	788	788	792	795	793
28 Q	793	794	794	793	794	794	785	783	787	786	787	792	796	794	793	793	791	792	792	792	792	793	795	801	792
29	798	789	785	791	792	795	795	797	786	785	786	789	792	793	761	760	786	786	796	809	830	836	846	840	797
30	810	793	792	793	793	796	803	791	786	781	764	717	783	819	787	770	734	754	778	801	819	820	819	806	788
31	798	795	803	800	794	792	788	788	738	666	655	708	716	667	766	781	791	793	798	824	846	866	887	885	781
Mean	817	813	823	821	814	796	759	736	757	756	756	763	771	771	760	762	771	782	791	801	814	821	821	821	787

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 32 Meanook — August 1959

Day	Horizontal Intensity							Declination							Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ++			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	04	05	1177	07	45	554	623	07	35	46.7	07	48	-12.1	58.8	00	32	917	08	38	368	549
2	03	27	1307	05	50	472	835	06	20	48.4	06	05	-35.1	83.5	02	32	933	05	40	416	517
3	03	22	1192	07	22	348	844	07	48	37.3	07	37	-64.6	101.9	03	01	916	07	15	-29	945
4	22	43	1090	12	18	373	717	15	17	34.5	09	03	-30.5	65.0	22	33	907	09	54	361	546
5	23	59	1017	17	45	926	91	15	40	27.2	20	13	2.5	24.7	00	01	825	06	35	719	106
6	23	59	1171	12	10	447	724	14	10	35.4	19	15	-12.4	47.8	23	59	947	09	00	461	486
7	00	11	1211	11	22	745	466	06	51	35.9	11	13	-7.2	43.1	00	01	954	11	17	586	368
8	23	38	1079	10	19	447	632	06	12	33.3	12	11	-20.5	53.8	23	59	884	10	20	414	470
9	00	16	1105	12	07	439	666	14	36	68.8	13	40	-32.6	101.4	00	11	912	08	00	461	451
10	03	30	1233	20	12	917	316	15	21	31.2	19	50	1.5	29.7	02	55	889	07	23	748	141
11	05	12	1136	05	53	823	313	05	12	32.3	05	21	-5.9	38.2	02	51	896	05	20	621	275
12 Q	01	20	1022	07	46	904	118	16	14	31.1	07	45	0.7	30.4	23	54	813	07	59	662	151
13 Q	05	09	1025	17	09	930	95	15	12	26.1	21	05	-1.3	27.4	05	45	837	08	29	759	78
14 Q	02	01	1041	19	25	935	106	14	15	30.6	21	25	0.1	30.5	04	39	810	09	42	757	53
15	23	52	1193	15	03	892	301	18	00	34.0	23	40	-13.0	47.0	23	53	907	15	11	722	185
16 D	22	00	1641	13	08	-155	1796	12	16	188.5	13	37	-125.9	314.4	12	24	1530	06	11	47	1483
17 D	00	57	1558	06	34	-128	1686				02	57	-118.4		11	58	1198	06	27	103	1095
18	05	12	1260	07	45	460	800	06	48	98.5	07	15	-59.5	158.0	02	15	884	07	00	362	522
19	03	21	1236	09	50	743	493	08	07	42.0	04	30	-12.4	54.4	03	21	921	04	04	678	243
20 D	03	49	1410	10	11	827	583	14	49	41.0	06	16	-18.7	59.7	03	37	979	04	18	683	296
21 D	05	19	1205	09	15	337	868	10	16	38.0	09	48	-50.4	88.4	21	08	965	09	07	343	622
22	00	38	1277	07	15	606	671	16	21	40.5	01	14	-2.4	42.9	00	33	927	07	08	441	486
23 D	06	28	1228	10	35	667	561	16	38	43.0	06	58	-42.4	85.4	07	06	924	12	20	575	349
24	04	41	1171	08	16	333	838	08	54	35.1	08	13	-68.6	103.7	02	15	910	08	08	245	665
25	04	49	1069	10	00	787	282	04	56	44.7	07	58	-15.9	60.6	05	52	874	10	07	576	298
26	01	18	1038	08	09	619	419	16	14	29.1	08	01	-45.5	74.6	00	04	856	08	00	542	314
27 Q	00	44	1019	19	07	921	98	15	19	26.0	21	19	4.8	21.2	02	25	842	08	20	748	94
28 Q	23	59	1026	18	25	932	94	16	09	23.0	22	10	3.5	19.5	23	36	804	06	21	778	26
29	00	13	1026	15	25	868	158	15	45	42.3	12	00	-3.2	45.5	22	37	858	15	26	727	131
30	00	20	1038	12	26	827	211	14	32	34.8	10	28	-11.6	46.4	13	22	836	11	19	692	144
31	02	44	1088	10	50	493	595	10	55	27.6	10	49	-9.2	36.8	23	09	894	13	00	579	315
Mean			1170			622	548			43.6			-22.9	66.5			921			521	400
No. days			31			31	31			30			30	30			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 33 Meanook — H = 12,000 γ + — September 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1023	1045	1072	1010	1001	1011	866	853	935	911	806	747	925	878	914	850	783	869	906	925	926	974	971	970	924
2	1056	1125	1160	1207	1104	990	554	828	473	540	827	998	1023	1009	997	979	923	940	898	900	952	1026	1012	979	937
3	1020	1007	993	971	996	997	1020	1011	737	644	808	876	979	996	997	946	939	872	845	937	975	1001	1077	1320	957
4 D	1066	1314	1233	974	919	868	708	782	223	382	791	837	829	979	730	486	680	903	927	911	917	1039	956	971	851
5	1085	1129	1141	991	974	1007	889	689	761	698	964	967	911	794	930	968	939	933	901	924	940	1005	1081	1121	948
6	1146	1037	1038	1033	1025	986	875	816	801	920	925	985	996	961	964	978	967	955	950	939	943	957	969	968	964
7 Q	971	969	975	975	982	979	986	989	994	975	961	971	981	1001	990	978	947	939	939	939	945	961	971	975	971
8 Q	979	979	994	997	987	990	1000	994	986	897	910	953	948	955	965	979	971	970	962	955	961	967	980	997	970
9 Q	995	988	995	1001	988	988	990	994	994	993	991	994	994	983	981	957	954	955	950	952	956	973	983	980	980
10 Q	998	986	994	995	999	1006	998	999	1003	1004	1008	1015	1017	1005	1007	1008	991	974	969	975	984	1001	1007	970	996
11	988	991	1010	1060	1113	1027	1066	1027	976	968	893	792	802	944	990	989	975	968	970	980	995	1000	1016	1034	982
12	1014	999	1096	1006	994	997	1012	1011	982	970	954	987	986	986	973	932	936	967	964	965	976	986	991	995	987
13	1000	993	996	996	995	995	999	1005	1008	1007	1002	1005	1002	998	991	990	976	972	965	976	976	1020	1021	997	995
14	967	1012	996	987	1051	1122	1023	936	989	1021	974	904	943	944	891	933	957	951	952	966	988	978	975	1009	978
15	989	1002	1006	996	1000	1003	1035	1006	977	1012	994	977	984	985	991	975	925	929	948	972	984	980	1002	1002	987
16	1020	1056	1133	1258	1130	1052	1031	1004	990	987	988	998	999	995	954	944	947	961	960	969	972	980	997	1008	1014
17	996	1002	1003	999	1004	1038	1030	1024	1007	935	881	947	997	1011	968	979	971	951	949	966	948	895	996	991	979
18	1011	999	1007	994	989	1007	1011	1013	984	669	704	912	968	928	907	954	953	942	902	928	972	1006	1075	1096	955
19	1096	1152	1154	1072	911	1100	1022	969	975	982	966	937	975	1007	991	998	983	972	958	972	980	990	991	987	1006
20 D	987	990	979	990	889	831	807	697	878	906	725	368	368	588	788	820	952	886	865	912	991	1046	1100	1135	854
21 D	1092	1067	1144	1273	999	605	624	794	394	657	655	545	581	526	878	809	893	957	972	971	976	979	977	1050	851
22 D	1064	1176	1287	1080	1008	808	686	599	443	503	472	664	822	843	739	871	951	936	940	979	988	986	990	987	868
23	979	991	987	988	1007	1010	993	880	773	909	921	816	927	958	938	870	873	945	928	921	963	1043	1092	1100	951
24	1000	1018	1061	1085	1079	954	983	958	735	934	988	977	749	450	818	950	955	932	956	963	996	993	993	1024	940
25 D	1093	1106	1064	1104	1053	838	804	826	783	650	672	666	834	682	655	755	764	867	940	977	968	1012	1114	1027	886
26	1002	1052	1020	1023	1004	1009	909	670	842	864	849	712	538	904	998	987	952	947	959	959	990	985	998	1006	924
27	1023	1000	1009	981	984	1018	913	896	857	816	569	686	798	842	771	920	880	973	962	964	972	1016	1034	980	911
28	1014	1026	1019	998	998	1004	972	971	700	907	963	984	964	969	954	985	972	950	920	928	980	969	999	991	964
29 Q	988	991	1009	997	991	987	985	994	986	899	976	986	963	947	944	976	980	978	982	984	993	1000	982	980	979
30	996	984	988	988	990	995	1000	1003	1002	946	824	901	948	865	894	929	965	969	955	954	957	984	991	984	959
31																									
Mean	1022	1040	1052	1034	1005	974	926	908	840	850	865	870	892	898	917	923	929	942	940	952	969	992	1011	1021	949

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 34 Meanook D = 24° E +′ September 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	13.3	14.1	06.5	14.9	11.4	11.5	12.5	13.6	15.7	12.4	13.6	05.6	12.0	21.1	26.2	22.5	20.4	06.1	05.4	07.4	11.5	02.5	04.5	09.6	12.3
2	12.4	13.3	07.4	09.5	11.1	-09.4	-12.1	02.9	28.2	09.2	19.6	19.1	21.3	25.1	25.8	27.0	25.4	20.2	16.2	13.8	05.3	13.3	11.6	08.0	13.5
3	14.2	10.8	11.3	12.8	11.3	14.8	15.0	11.4	01.8	23.7	22.1	14.3	16.7	19.3	19.5	19.2	16.2	16.0	03.0	-05.9	00.6	06.8	24.6	26.2	13.6
4 D	15.2	07.4	15.5	-15.0	-13.9	-09.2	17.9	-09.2	-04.8	59.6	24.0	19.2	21.0	25.1	34.7	12.4	03.4	05.7	28.1	16.8	02.6	12.1	22.3	16.6	12.8
5	09.7	14.4	21.6	08.8	09.4	15.3	18.6	-05.2	-03.1	03.0	13.1	16.4	17.6	17.2	18.3	24.9	26.6	25.7	18.9	11.6	06.9	12.3	19.7	13.3	14.0
6	08.9	09.3	07.7	13.0	11.7	17.8	02.5	-00.9	06.4	12.3	09.2	12.4	12.8	13.2	20.1	22.3	24.1	21.0	14.0	09.9	07.4	06.5	06.7	07.7	11.5
7 Q	08.9	11.1	10.4	11.4	12.4	13.8	11.5	11.8	12.2	11.4	13.3	13.8	16.8	19.0	22.3	24.7	25.1	16.7	16.8	11.4	08.5	06.2	04.6	05.7	13.3
8 Q	08.4	09.0	10.3	11.0	10.7	11.4	16.4	17.6	11.7	10.5	05.5	11.0	12.3	20.6	25.8	23.7	25.6	23.6	14.2	10.4	08.6	06.7	06.0	07.5	13.3
9 Q	06.1	08.0	09.3	09.1	09.7	09.8	10.5	11.1	11.8	13.2	15.6	15.0	17.3	20.1	22.2	22.7	20.1	18.3	13.8	10.6	07.5	05.7	06.3	08.7	12.6
10 Q	07.8	08.8	08.5	08.7	08.9	09.7	11.4	12.4	12.5	13.4	14.6	15.5	16.9	18.7	21.1	20.9	22.2	23.1	14.3	08.5	08.0	04.7	02.2	04.9	12.4
11	06.5	06.8	05.5	04.6	12.0	07.6	10.0	09.4	10.6	13.6	17.9	16.7	21.3	21.0	23.7	21.1	18.8	15.7	14.2	11.6	08.2	07.5	07.4	05.6	12.4
12	04.6	04.8	09.0	12.1	10.4	08.3	11.3	10.4	12.9	12.6	17.1	13.3	14.8	17.3	19.1	19.0	13.9	11.5	10.5	09.6	10.4	10.3	09.4	08.4	11.7
13	07.4	09.3	08.5	08.4	09.4	11.4	13.8	14.0	12.5	14.3	16.2	16.3	16.6	18.3	21.1	22.0	22.0	20.5	15.7	10.8	07.4	06.9	08.5	04.4	13.2
14	05.4	03.7	06.1	07.5	06.2	09.4	09.8	34.9	22.0	11.2	10.7	10.3	11.0	17.5	19.1	16.4	18.3	11.8	08.9	07.6	06.8	07.5	07.5	06.5	11.5
15	07.5	06.8	08.3	08.6	09.4	08.9	09.3	06.7	14.3	12.0	13.4	17.6	15.2	22.5	21.2	21.2	20.0	10.3	07.7	05.5	08.9	07.2	08.5	08.9	11.7
16	07.4	05.9	10.4	-00.6	16.2	14.3	08.7	08.8	10.2	12.3	13.7	14.8	14.8	18.3	20.2	17.2	16.1	16.2	11.2	09.4	09.3	08.6	08.6	08.7	11.7
17	10.1	08.3	08.4	08.6	07.4	13.4	12.8	11.4	12.2	11.5	16.3	25.9	22.9	21.7	25.4	22.4	21.8	19.2	16.8	10.2	14.6	-04.6	-01.5	04.9	13.3
18	03.4	06.1	08.0	08.4	08.8	10.7	10.7	11.9	12.5	11.6	17.6	17.4	23.0	19.2	18.3	18.5	17.1	16.1	07.6	-01.4	02.8	06.2	05.2	06.5	11.1
19	09.4	04.2	16.1	11.3	06.4	11.3	09.1	09.7	10.9	12.3	12.5	14.8	23.8	19.0	21.2	22.0	18.9	15.8	12.2	08.7	06.0	06.8	05.6	08.4	12.4
20 D	11.1	13.0	14.2	13.7	14.9	24.6	17.1	12.2	07.3	08.7	07.3	01.4	03.9	00.4	07.7	08.0	10.4	08.6	-01.7	00.7	14.0	10.8	17.0	15.2	10.0
21 D	17.0	15.1	28.1	29.5	09.0	-07.5	-01.1	06.5	37.6	07.4	15.0	-01.1	13.4	24.8	26.5	17.7	22.4	22.6	14.0	11.8	11.1	09.2	08.8	08.4	14.4
22 D	04.4	05.3	17.3	11.1	04.7	-05.4	10.6	37.1	-13.7	-12.3	20.9	08.7	16.4	32.6	28.6	24.8	17.8	15.9	14.2	12.7	10.8	10.2	11.7	12.6	08.2
23	13.9	13.2	11.3	11.4	29.2	13.6	12.1	07.0	23.1	18.5	20.9	11.9	18.4	25.5	22.9	22.8	15.2	10.8	15.0	07.5	05.5	07.9	08.3	12.1	14.9
24	11.0	09.7	10.5	10.5	23.4	21.8	11.5	14.2	12.0	14.1	13.6	15.0	15.9	05.2	24.2	22.5	18.6	18.8	08.3	10.7	11.5	10.6	10.6	09.1	13.9
25 D	07.1	16.7	11.0	04.1	11.0	-08.4	13.0	10.1	26.4	23.0	36.2	24.3	20.5	18.4	11.7	07.0	13.7	-02.2	04.1	07.1	06.4	09.3	16.6	08.1	12.3
26	06.3	04.7	12.0	08.4	15.0	11.9	04.4	03.7	30.7	24.5	17.6	18.0	08.0	19.8	19.9	19.9	16.1	12.8	12.0	08.7	10.4	09.5	08.3	08.0	12.9
27	06.0	06.1	08.1	09.9	09.7	10.2	16.9	04.5	18.3	11.5	-00.7	25.8	45.8	18.4	14.6	18.2	11.5	12.6	12.9	11.5	08.6	08.1	07.5	09.7	12.7
28	07.0	08.0	12.0	10.1	09.5	10.9	01.1	12.0	11.6	24.6	19.9	16.7	12.9	15.6	17.7	18.0	19.5	15.0	06.9	03.7	07.2	06.4	07.7	08.1	11.7
29 Q	06.1	09.5	15.3	11.0	09.9	08.7	10.6	11.7	13.2	17.5	20.8	17.8	12.2	08.6	08.9	16.9	14.9	12.5	12.1	12.0	12.1	11.5	10.4	09.0	12.2
30	08.6	10.9	08.9	09.3	09.9	10.1	10.9	12.1	14.8	13.1	31.7	29.1	14.7	11.8	11.6	10.3	11.7	09.3	13.9	09.1	04.8	04.8	05.7	07.2	11.9
31																									
Mean	08.8	09.1	11.2	09.4	10.5	09.0	10.2	10.5	09.7	14.3	16.3	15.2	17.0	18.5	20.7	19.5	18.3	15.0	12.0	08.7	08.1	07.7	09.3	09.3	12.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 35 Meanook — Z = 58,000 γ + — September 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	868	870	913	861	830	794	719	761	759	733	771	721	742	669	710	720	654	720	796	845	888	888	852	819	788
2	858	884	849	874	798	766	655	852	814	782	866	814	822	820	817	813	792	803	808	826	873	907	873	856	826
3	868	848	830	831	837	830	814	807	735	614	690	765	786	803	812	787	803	805	792	814	824	834	917	957	809
4 D	872	830	765	588	764	831	753	862	940	962	950	915	845	840	755	631	700	777	838	857	889	896	962	917	831
5	881	898	852	876	851	835	704	507	623	611	743	791	769	720	791	809	810	816	819	831	814	842	907	905	792
6	863	844	863	862	846	801	690	710	732	755	751	788	809	801	808	817	809	808	809	807	805	807	812	813	800
7 Q	812	809	804	804	805	803	803	801	796	787	756	781	787	804	803	800	793	787	786	785	792	798	807	807	796
8 Q	804	799	799	807	808	807	784	736	775	709	708	746	726	716	743	782	798	809	800	809	809	807	809	814	779
9 Q	811	801	798	803	803	798	796	797	796	793	780	793	798	796	796	791	788	781	783	789	789	789	795	797	794
10 Q	803	795	795	795	798	805	800	797	793	787	781	775	783	785	787	792	789	785	782	783	785	788	795	788	790
11	797	793	808	853	844	831	822	765	777	744	703	655	664	707	762	787	796	796	797	798	803	799	807	823	780
12	856	847	883	835	809	800	816	801	771	769	742	781	781	788	788	769	770	785	785	793	784	787	792	794	797
13	806	809	799	793	793	794	792	776	760	787	784	787	786	783	778	782	783	783	779	776	776	788	820	827	789
14	802	815	831	810	847	843	831	624	720	808	788	748	767	772	733	759	776	785	787	788	793	798	799	809	785
15	797	799	797	793	794	797	811	758	722	804	797	778	783	768	783	783	783	780	783	788	810	841	820	806	790
16	811	851	858	902	847	814	820	820	804	794	788	793	792	792	778	761	757	776	778	793	802	801	795	798	805
17	789	788	788	788	795	810	790	822	808	760	691	713	771	792	768	768	799	788	787	786	787	797	825	805	784
18	814	825	809	810	799	809	809	809	794	603	645	684	727	761	749	775	783	781	782	782	799	809	860	862	778
19	906	916	830	742	683	832	820	781	792	790	767	727	757	790	790	799	800	799	794	793	789	787	788	794	794
20 D	796	795	797	792	760	715	676	729	689	631	691	461	906	945	643	650	758	752	749	820	887	897	906	884	764
21 D	853	854	817	734	634	721	780	873	924	742	753	727	734	754	766	759	739	852	867	858	848	875	852	880	800
22 D	884	906	635	657	634	703	662	135	702	987	992	820	745	744	808	771	776	768	806	828	832	821	820	819	761
23	818	811	808	810	796	762	798	683	584	668	721	724	734	756	735	705	742	783	808	837	878	905	906	889	778
24	832	841	858	879	846	713	786	765	756	731	802	798	669	445	592	766	782	782	809	822	843	852	828	837	776
25 D	864	853	882	854	784	767	773	797	745	779	630	784	748	710	578	599	713	788	820	822	843	869	889	845	781
26	830	863	860	874	844	828	711	740	626	678	696	666	695	723	785	795	796	794	804	819	836	838	837	847	783
27	856	852	858	819	805	821	600	700	728	709	639	767	611	579	560	692	741	802	814	820	832	840	841	817	754
28	819	851	837	827	822	825	737	783	726	689	734	782	788	792	775	785	794	799	793	792	809	810	819	819	792
29 Q	835	837	838	831	802	801	799	809	804	637	727	765	762	756	756	765	783	788	801	801	804	809	806	806	788
30	806	810	796	797	797	804	814	811	804	718	615	700	755	719	691	711	749	767	792	818	832	843	838	832	776
31																									
Mean	834	837	822	810	796	795	766	747	760	745	750	752	762	754	748	757	772	788	798	809	822	831	839	836	789

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 36 Meanook September 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ + m			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 12,000 γ +			Minimum 12,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	02	10	1104	11	15	576	528	06	08	39.4	11	49	-9.9	49.3	02	43	960	16	05	614	346
2	03	29	1266	08	21	155	1111	08	19	54.1	06	17	-46.9	101.0	10	03	1015	06	11	303	712
3	23	46	1485	09	04	537	948	22	20	46.9	19	14	-18.8	65.7	23	34	1047	09	30	505	542
4 D	01	46	1496	08	54	-119	1615	09	02	104.3	08	15	-147.2	251.5	08	09	1299	03	54	284	1015
5	02	07	1304	09	23	471	833	02	05	49.6	07	24	-22.1	71.7	22	56	949	07	29	427	522
6	00	23	1364	08	09	683	681	16	42	36.9	07	06	-19.7	56.6	00	05	943	06	50	549	394
7 Q	13	08	1009	16	55	911	98	16	34	31.0	23	05	2.4	28.6	00	44	818	10	05	738	80
8 Q	06	52	1049	10	10	830	219	06	56	35.9	10	52	0.1	35.8	17	05	830	09	58	640	190
9 Q	03	08	1014	16	14	930	84	16	16	24.1	22	23	4.5	19.6	00	16	819	10	21	762	57
10 Q	22	40	1038	18	42	956	82	17	30	27.1	22	41	-0.4	27.5	05	55	811	11	40	766	45
11	04	11	1183	12	11	706	477	12	22	31.4	02	12	0.5	30.9	03	44	884	12	15	608	276
12	02	42	1198	09	57	893	305	03	09	22.3	02	21	-1.3	23.6	02	43	920	10	19	709	211
13	23	04	1056	18	36	959	97	15	48	23.7	23	50	1.5	22.2	23	05	846	08	30	739	107
14	05	11	1198	07	10	824	374	07	26	47.7	05	15	-2.2	49.9	04	48	873	07	20	557	316
15	07	39	1097	17	02	883	214	13	36	28.1	07	48	-2.6	30.7	21	23	856	08	05	618	238
16	03	21	1320	15	02	912	408	05	20	29.8	03	19	-6.3	36.1	03	22	947	05	32	745	202
17	05	39	1072	09	55	783	289	11	41	28.8	21	33	-14.0	42.8	22	41	843	10	05	638	205
18	23	42	1157	10	05	383	774	10	09	38.9	19	48	-10.0	48.9	22	56	901	10	00	288	613
19	02	21	1378	04	02	503	875	12	05	43.4	04	10	-76.1	119.5	01	08	945	(04	03	30	915)
20 D	23	46	1209	(12	10	-236	1445)	12	55	40.6	(12	18	-77.0	117.6)	(12	13	1305	11	15	252	1053)
21 D	04	03	1300	(08	06	-239	1539)	08	13	59.1	05	40	-79.8	138.9	08	41	1072	05	36	366	706
22 D	02	14	1524	06	53	-145	1669	07	13	77.7	(08	40	-201.9	279.6)	10	35	1201	07	26	-135	1336
23	23	08	1135	08	30	625	510	05	31	38.1	07	15	-0.6	38.7	21	11	935	08	28	500	435
24	02	29	1154	13	30	213	941	13	24	42.2	13	02	-33.6	75.8	04	04	930	13	43	277	653
25 D	01	02	1495	11	17	438	1057	11	15	69.3	05	07	-36.0	105.3	11	29	966	15	03	518	448
26	01	51	1110	12	15	272	838	08	11	50.7	07	10	-22.4	73.1	03	45	890	08	31	570	320
27	06	02	1110	10	42	358	752	12	23	69.5	07	05	-28.5	98.0	11	13	897	06	51	245	652
28	06	32	1183	08	36	416	767	09	18	34.6	06	44	-38.1	72.7	01	46	879	06	42	533	346
29 Q	02	09	1020	09	35	838	182	10	12	25.6	09	13	4.2	21.4	02	28	853	09	34	556	297
30	00	26	1022	11	01	777	245	11	02	37.9	09	31	3.2	34.7	22	07	853	10	19	582	271
31																					
Mean			1202			537	665			43.0			-29.3	72.3			943			493	450
No. days			30			30	30			30			30	30			30			30	30

69028-3—7

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 37 Meanook H = 12,000 γ + October 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1016	1025	1035	1171	1206	958	904	435	863	799	536	312	635	722	815	820	966	998	949	976	1007	1027	1006	995	882
2	1027	1003	976	1020	1104	979	985	974	579	882	1022	972	990	1004	1004	1000	992	989	987	984	994	997	991	988	977
3 D	987	987	989	993	1015	1096	1047	817	759	1009	998	848	869	931	847	739	846	769	884	995	1132	1141	1163	1172	960
4 D	1154	1259	1295	1158	726	1174	989	842	567	532	722	552	352	477	862	951	952	979	976	954	964	972	1028	998	889
5	996	1016	1155	1332	1176	1125	1030	982	956	853	791	846	751	870	970	933	950	909	944	986	966	1035	1009	1064	985
6 D	1004	1007	1144	1018	1125	1077	676	824	754	485	526	679	675	733	906	907	927	975	996	984	975	985	1009	991	891
7	994	992	997	998	1057	1001	988	991	990	947	861	926	962	980	992	987	975	960	960	956	964	973	981	1003	976
8	976	999	983	991	983	998	995	997	988	973	924	985	988	987	972	969	968	965	958	948	951	960	971	978	975
9	983	984	988	988	992	996	987	958	970	977	987	991	995	998	994	987	984	975	968	956	959	974	982	987	982
10 Q	991	990	990	992	992	995	995	987	992	995	994	1002	1003	1000	996	989	987	976	971	969	974	976	980	983	988
11 Q	987	996	1000	1000	1001	1001	1003	1006	1004	1002	1003	1003	1003	1003	998	991	984	980	976	976	976	985	983	980	993
12	988	995	1000	1001	1002	1001	1002	1003	1004	1007	1010	1010	1009	1010	998	994	980	984	972	960	954	965	972	984	992
13 Q	987	997	999	1002	1002	1003	1009	1009	1006	1010	1014	1020	1018	1011	1006	1004	995	987	982	984	996	998	996	997	1001
14	990	993	1002	1000	1003	1005	1007	1013	1014	1006	949	946	994	1003	1004	998	988	969	952	953	984	1002	1004	1005	991
15	1007	1010	1012	1030	1027	1016	1000	1002	1003	981	951	970	956	957	980	998	986	966	954	956	980	987	972	972	986
16 Q	988	988	992	995	998	998	998	998	999	1000	1000	1003	1004	1003	998	987	978	976	965	972	969	980	984	991	990
17	1004	1015	1017	1017	1020	1016	1019	1018	934	843	765	961	981	992	1001	991	973	965	970	960	969	984	992	1008	976
18	1008	1086	1258	1039	1031	985	957	939	738	613	617	965	949	935	949	977	945	970	973	969	969	962	1009	999	952
19	991	1023	1019	1037	1006	1019	992	985	967	966	898	976	992	992	992	985	976	959	937	949	965	976	989	989	982
20	969	996	998	1000	997	1000	992	820	970	991	982	992	1000	1004	993	992	981	970	962	965	970	973	978	985	978
21	992	996	999	996	993	996	996	1000	1000	1003	1004	1004	998	1000	1002	1001	1000	992	977	977	988	996	981	977	995
22	992	993	985	991	993	997	981	858	930	858	851	651	707	703	773	852	871	961	993	1001	992	1012	1028	1025	917
23	1025	1020	1047	1025	1028	995	981	967	886	770	632	965	1003	1004	999	993	985	977	973	970	965	965	969	976	963
24	983	988	992	992	996	995	996	955	876	992	992	981	965	913	996	1014	1004	992	984	981	977	970	985	976	979
25	982	986	1002	1080	1033	1005	1017	829	954	899	590	754	743	931	993	993	970	978	986	984	985	989	996	976	944
26	1005	986	997	986	1033	1033	986	974	805	621	891	982	939	923	731	793	899	985	990	976	993	989	991	1001	938
27	993	986	1000	1000	999	955	989	946	766	782	872	935	954	958	978	918	978	978	985	981	982	984	990	989	954
28 Q	989	994	996	996	997	1001	1010	993	977	998	1001	1008	1010	1009	1002	1000	1001	986	969	964	969	977	986	993	993
29	998	1002	1001	1001	1002	1013	1008	1002	1003	994	999	997	993	1008	1011	1008	1002	996	985	982	986	987	994	1009	999
30	1018	1021	1119	1119	1014	1010	1002	987	1000	1007	1014	1004	1017	1010	1003	1009	1006	982	967	957	973	966	1003	1051	1010
31 D	990	989	979	978	974	979	971	962	896	701	728	459	502	780	790	792	888	930	910	943	960	1022	1006	1026	881
Mean	1000	1010	1031	1030	1017	1010	984	938	908	887	875	894	902	931	953	954	966	967	966	970	980	991	998	1002	965

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 38 Meanook D = 24° E + ′ October 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	07.5	12.0	10.5	11.9	-06.7	07.2	06.1	01.2	19.7	16.8	29.9	52.6	46.3	36.7	21.7	14.3	12.9	13.5	08.8	11.3	07.4	10.9	09.9	09.1	15.5
2	09.0	09.9	10.1	08.9	16.3	06.7	10.8	05.1	05.0	16.7	17.9	21.2	13.5	17.9	21.4	22.3	22.4	16.1	16.8	11.6	10.4	07.9	07.9	06.5	13.0
3 D	06.9	07.2	08.9	09.9	08.8	13.7	14.6	06.4	04.8	18.8	15.8	18.3	30.3	33.0	33.0	11.5	17.0	02.1	04.2	12.8	23.5	17.7	18.9	13.8	14.7
4 D	13.6	04.7	13.2	-07.1	08.7	11.0	13.6	13.6	14.8	32.7	20.3	22.7	06.9	18.8	09.9	12.8	10.7	09.9	11.1	13.7	08.2	06.6	07.0	08.8	11.9
5	03.9	07.0	15.7	03.1	09.7	13.7	10.6	11.9	12.8	16.4	15.9	20.8	26.4	20.8	15.8	08.8	09.8	12.0	00.4	06.8	10.3	11.1	07.6	07.7	11.6
6 D	09.9	08.0	09.8	13.5	-02.8	00.9	19.1	21.2	21.6	36.2	57.2	34.3	24.4	21.5	16.2	16.8	14.7	12.0	10.8	16.5	13.5	12.7	09.2	06.9	16.8
7	09.1	10.7	10.8	16.5	14.8	22.5	10.9	14.5	14.0	12.9	12.7	11.6	15.5	14.3	18.7	21.5	21.6	19.5	15.8	11.6	09.7	08.5	10.2	07.8	14.0
8	07.9	10.6	18.1	11.7	15.6	13.3	10.0	10.9	11.6	11.6	02.6	12.7	12.8	14.3	15.8	14.5	15.7	14.2	13.3	10.8	09.7	09.2	07.9	07.6	11.8
9	08.7	09.9	10.8	11.4	10.5	09.9	13.0	10.4	18.5	14.6	14.5	15.1	14.8	15.1	16.6	17.2	16.4	17.1	14.2	11.8	07.6	06.8	06.7	06.7	12.4
10 Q	06.7	06.5	08.2	09.2	09.3	09.8	09.3	10.3	12.8	11.7	11.2	12.9	13.1	13.5	14.7	16.2	18.3	18.5	13.5	08.9	07.9	07.2	07.2	07.3	11.0
11 Q	07.6	07.6	08.1	08.4	08.5	08.8	09.1	10.8	10.7	11.5	12.2	12.3	12.5	14.0	15.2	16.7	16.7	14.0	11.0	08.0	06.6	05.4	05.6	06.4	10.3
12	06.4	07.6	08.2	09.1	09.6	10.3	10.4	11.0	11.7	12.1	12.6	13.2	13.6	15.0	16.7	19.6	22.5	14.7	14.2	13.5	05.8	03.7	07.1	07.7	11.5
13 Q	08.2	08.4	08.7	08.5	09.1	09.9	09.6	08.8	10.7	11.8	13.9	14.1	13.6	14.2	15.3	16.7	17.0	14.6	12.1	07.9	05.7	07.7	08.7	07.8	11.0
14	08.4	08.2	08.3	09.1	09.5	09.9	10.1	14.3	12.0	14.1	17.2	18.0	20.5	20.8	16.1	17.6	16.0	15.9	09.6	05.1	02.4	03.4	03.7	02.6	11.4
15	00.1	01.0	06.8	11.1	11.2	09.5	12.1	13.7	13.5	11.5	10.3	10.7	12.5	06.5	14.2	13.3	16.1	16.6	14.4	10.2	08.7	10.9	06.3	07.0	10.3
16 Q	07.6	08.4	10.3	10.0	10.4	10.1	10.0	11.0	10.9	11.6	12.7	12.8	12.8	13.9	16.1	17.9	17.4	15.9	13.6	11.0	10.1	09.1	09.1	08.4	11.7
17	09.0	09.1	09.1	10.0	10.8	09.1	09.6	10.6	11.0	19.8	17.9	18.9	21.8	18.4	18.8	17.9	20.9	20.4	10.7	08.1	03.6	02.3	01.3	04.2	12.2
18	02.8	01.6	13.1	10.6	09.1	08.9	06.1	08.1	04.7	-07.9	-25.6	26.8	21.8	18.4	15.1	18.4	18.9	13.1	08.1	08.9	07.2	06.1	05.8	06.1	08.6
19	08.1	10.1	09.2	09.5	11.1	11.1	10.9	09.5	10.2	14.0	05.3	11.2	12.6	13.0	15.1	18.8	19.4	20.2	16.0	12.5	09.0	08.1	07.0	07.2	11.6
20	09.9	09.7	10.0	10.1	10.1	09.7	13.4	-09.9	20.7	17.9	15.5	12.5	12.4	18.4	18.9	19.8	15.9	15.6	13.1	10.6	08.0	07.2	08.7	09.6	12.0
21	09.5	09.7	10.2	10.1	10.3	11.0	12.0	10.3	10.6	11.0	11.1	12.6	12.0	12.1	13.1	16.5	15.1	14.9	14.0	09.6	07.2	05.3	07.7	08.1	11.0
22	08.5	08.2	10.2	09.1	08.6	07.7	11.0	16.9	19.9	26.8	26.7	32.7	22.8	02.3	04.7	04.2	10.6	05.7	08.4	11.1	07.0	07.6	04.2	00.3	11.5
23	08.1	08.0	09.1	13.1	10.0	12.1	11.0	15.4	23.7	29.2	34.5	16.1	12.2	12.7	13.1	14.3	13.9	13.9	12.1	10.6	10.1	10.0	09.1	08.6	13.8
24	09.1	09.3	09.8	09.6	10.1	10.1	11.0	09.0	08.9	14.6	14.5	12.0	13.1	08.1	12.1	16.9	14.9	15.2	12.1	09.5	08.6	07.7	06.7	08.1	10.9
25	07.7	05.7	05.7	07.8	11.0	09.2	09.1	07.7	14.9	18.2	17.9	26.8	41.5	10.3	09.8	10.0	04.1	09.1	10.1	07.7	10.1	10.0	09.0	09.1	11.8
26	07.1	07.3	09.2	09.1	10.6	13.1	03.2	07.7	17.0	34.5	22.3	16.9	17.0	19.4	05.3	-02.6	-08.0	04.7	13.1	10.1	11.0	11.0	10.4	10.8	10.8
27	08.0	08.6	09.6	10.2	18.0	07.1	13.8	12.1	24.8	25.7	18.6	16.1	22.9	15.9	16.0	15.5	17.4	16.9	15.5	12.9	11.0	10.4	09.6	09.7	14.4
28 Q	09.8	09.1	09.6	09.6	09.6	09.6	11.7	06.2	09.1	16.9	15.5	14.6	14.0	14.0	14.9	16.8	16.3	16.5	15.9	14.0	10.5	08.7	08.5	08.6	12.1
29	09.0	09.1	09.4	09.4	09.4	14.0	11.4	13.0	12.8	12.8	13.0	10.9	11.9	13.9	14.8	13.8	15.0	14.0	12.0	10.0	08.9	08.0	08.9	08.0	11.4
30	06.5	04.1	08.4	14.4	09.4	08.9	08.9	09.5	10.6	11.5	12.4	13.9	14.2	14.4	13.3	15.2	15.3	14.8	06.0	06.7	06.7	01.8	00.6	01.7	09.6
31 D	06.6	08.4	11.7	11.5	10.1	08.4	08.6	13.1	19.1	15.2	25.4	38.6	12.6	30.5	13.0	10.2	02.9	10.6	03.6	01.8	08.6	11.4	08.3	06.5	12.0
Mean	07.8	07.9	10.0	09.7	09.7	10.2	10.7	10.1	13.7	16.8	16.2	18.8	17.8	16.5	15.3	14.6	14.8	13.9	11.4	10.2	08.9	08.2	07.7	07.4	12.0

69026-3—71

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 39 Meanook — Z = 58,000 γ + — October 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	857	862	859	870	779	583	775	218	731	875	932	892	879	755	782	743	798	817	814	851	875	885	845	815	795
2	839	838	834	836	765	771	810	820	768	707	810	787	787	795	802	802	797	789	782	781	787	792	793	793	795
3 D	788	792	797	804	821	820	721	841	792	815	821	768	703	696	668	648	721	739	813	885	903	880	854	862	790
4 D	864	882	770	653	602	756	821	805	423	556	853	947	833	743	713	765	769	787	814	822	843	853	858	858	775
5	859	867	905	912	889	874	844	820	789	741	664	695	600	599	710	733	742	762	811	846	851	917	862	874	799
6 D	873	849	810	715	766	750	767	863	883	951	875	787	813	723	755	805	832	843	821	821	845	846	838	825	819
7	831	824	817	836	845	753	756	795	797	770	740	784	789	790	806	810	806	797	797	798	800	814	833	830	801
8	815	822	820	810	813	812	804	795	787	778	713	766	786	786	788	797	802	804	808	807	805	802	804	805	797
9	804	805	805	804	798	796	792	747	760	767	779	776	781	782	788	794	797	796	799	796	804	806	806	807	791
10 Q	807	808	808	805	805	806	808	798	786	776	776	782	787	789	793	793	793	795	797	792	788	789	793	797	795
11 Q	797	797	797	797	799	800	806	799	797	797	790	789	789	788	792	793	793	788	783	783	786	794	799	797	794
12	795	794	794	793	792	792	793	793	793	792	790	788	783	787	786	786	783	782	782	779	781	790	794	795	789
13 Q	793	792	789	789	792	794	807	817	799	797	793	792	787	787	788	792	792	792	789	785	783	783	785	788	792
14	788	788	788	788	788	788	792	794	800	788	740	695	734	733	767	778	785	783	783	783	789	795	804	819	779
15	835	835	823	833	852	822	800	788	797	772	721	749	739	763	766	797	817	810	804	802	812	847	823	799	800
16 Q	795	796	796	796	795	795	794	793	787	787	785	787	788	788	789	790	787	786	786	786	778	778	779	786	789
17	788	792	792	793	788	793	799	804	702	701	592	724	756	755	771	778	771	767	775	778	778	789	797	808	766
18	830	884	873	852	825	798	745	756	609	554	788	744	771	799	771	798	798	814	808	809	819	831	850	836	790
19	817	830	814	810	702	820	819	799	778	773	692	774	796	797	804	799	799	797	798	798	794	790	793	798	791
20	799	798	788	787	787	796	804	728	746	761	760	766	787	787	788	793	794	797	793	793	789	789	789	789	784
21	789	787	787	787	787	789	793	787	783	783	779	786	778	779	781	782	787	787	786	782	787	793	794	798	786
22	798	798	797	797	804	820	773	679	706	636	580	484	552	603	706	722	755	797	831	841	841	843	858	884	746
23	853	858	879	885	873	828	804	787	702	652	608	739	779	787	787	788	797	797	809	808	798	793	793	794	792
24	792	788	788	787	787	787	793	766	717	760	760	749	734	706	733	767	776	786	786	787	787	788	797	793	772
25	797	804	820	814	851	820	766	798	776	797	798	591	647	739	755	771	776	787	788	793	799	804	820	831	781
26	853	831	820	799	831	821	711	619	635	576	690	765	722	722	637	615	705	755	782	779	793	809	820	819	746
27	821	807	819	820	798	678	745	732	690	723	750	756	771	759	779	798	784	792	799	797	796	795	797	793	775
28 Q	788	788	787	787	788	797	820	734	717	766	787	786	786	788	787	787	787	787	787	787	787	785	786	786	783
29	784	784	783	786	793	797	785	788	776	766	776	773	755	767	781	787	787	784	782	783	784	788	788	792	782
30	789	821	874	854	792	790	793	787	782	780	781	771	778	772	776	785	782	778	769	778	795	814	861	876	799
31 D	819	798	798	798	794	799	786	723	726	721	683	789	686	492	615	600	706	766	790	817	840	870	833	861	755
Mean	815	817	814	806	797	789	788	760	746	749	755	761	757	747	760	768	781	789	796	801	807	815	814	816	785

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 40 Meanook — October 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	03	49	1270	07	20	-157	1427	11	19	121.2	10	49	-77.1	198.3	11	29	1109	07	06	-134	1243
2	04	31	1187	08	39	202	985	08	51	39.4	08	36	-43.4	82.8	08	42	979	09	00	545	434
3 D	22	11	1524	07	53	571	953	14	40	44.0	08	10	-17.3	61.3	20	30	949	15	14	593	356
4 D	01	44	1353	13	00	80	1273	11	29	64.8	03	38	-32.3	97.1	11	44	1099	09	18	227	872
5	03	34	1360	12	36	656	704	08	50	39.5	08	38	-44.0	83.5	02	15	956	13	01	533	423
6 D	02	56	1378	10	00	259	1119	10	18	118.0	05	39	-40.2	158.2	09	44	1177	03	00	228	949
7	04	18	1097	10	53	787	310	05	35	30.4	06	22	-4.1	34.5	04	21	866	05	41	680	186
8	01	36	1020	10	20	870	150	02	53	21.2	10	15	-6.9	28.1	03	02	831	10	22	648	183
9	13	44	1003	07	45	929	74	08	09	23.5	07	31	2.5	21.0	23	46	810	07	30	691	119
10 Q	12	30	1006	18	52	967	39	17	17	20.3	07	07	4.9	15.4	06	08	818	09	18	769	49
11 Q	07	52	1019	23	40	972	47	15	55	18.1	23	17	4.6	13.5	07	03	809	07	59	779	30
12	13	29	1016	21	01	941	75	16	31	24.0	21	26	1.4	22.6	00	01	801	18	00	775	26
13 Q	12	19	1030	19	20	976	54	16	36	21.6	20	46	4.3	17.3	07	33	825	21	52	778	47
14	13	01	1050	11	10	875	175	13	03	36.6	23	56	-1.5	38.1	23	58	836	13	13	669	167
15	03	54	1051	12	00	919	132	16	07	21.9	00	53	-3.0	24.9	04	07	873	10	25	695	178
16 Q	13	55	1007	20	30	953	54	15	18	19.3	00	40	6.2	13.1	02	55	802	21	03	775	27
17	23	31	1059	10	04	623	436	17	19	27.7	22	19	-7.1	34.8	09	53	822	10	15	519	303
18	02	22	1437	08	53	403	1034	11	17	35.0	09	59	-76.7	111.7	01	52	940	08	53	384	556
19	03	54	1231	10	30	855	376	04	10	34.9	04	28	-11.4	46.3	03	16	850	04	15	589	261
20	07	00	1012	07	23	524	488	07	50	26.4	07	20	-37.9	64.3	06	45	814	07	19	546	268
21	21	40	1021	22	45	963	58	16	10	23.5	21	44	3.5	20.0	23	55	799	08	59	776	23
22	23	25	1051	12	02	529	522	11	57	73.1	13	21	-13.3	86.4	23	30	901	11	20	435	466
23	02	03	1081	10	13	484	597	10	26	74.3	10	00	-6.4	80.7	02	04	911	10	06	511	400
24	15	13	1028	08	16	818	210	16	00	21.9	13	04	2.4	19.5	22	50	802	13	50	683	119
25	03	07	1165	10	09	463	702	11	58	49.4	06	41	-6.5	55.9	09	49	874	12	04	539	335
26	06	04	1112	09	39	454	658	09	38	70.7	06	42	-57.7	128.4	09	15	918	09	39	183	735
27	05	42	1044	08	06	702	342	09	04	43.9	05	31	-12.8	56.7	03	15	824	05	23	560	264
28 Q	07	21	1065	08	08	927	138	09	26	18.3	07	36	-0.9	19.2	06	36	830	07	29	653	177
29	23	52	1053	12	46	974	79	05	35	21.3	23	59	4.2	17.1	05	36	810	12	45	740	70
30	02	53	1230	19	17	930	300	17	18	21.9	23	01	-4.8	26.7	23	09	928	14	37	741	187
31 D	22	08	1075	11	59	103	972	11	51	98.3	12	14	-42.7	141.0	21	47	897	13	54	377	520
Mean			1130			663	467			42.1			-16.6	58.7			886			564	322
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 41 Meanook — H = 12,000 γ + — November 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1076	1041	1058	1004	1035	1060	1040	503	303	401	666	430	425	426	808	833	942	920	990	1005	968	1022	1029	1029	834
2 D	1053	1052	1081	1100	1083	1126	939	427	291	621	579	612	423	557	878	920	861	847	934	993	1066	1053	1072	1134	863
3 D	1018	1092	1131	1067	1057	1005	846	873	682	537	811	989	941	902	842	804	939	888	934	931	960	1008	991	950	925
4	974	982	981	977	978	1022	965	971	653	645	637	495	666	792	898	859	833	934	965	935	1007	1002	1051	1031	886
5	1076	1000	1035	1017	996	803	904	649	706	843	560	787	996	944	981	971	970	970	957	955	966	980	986	991	918
6	989	984	1057	1026	1000	998	982	962	974	916	759	896	967	999	1001	972	956	945	934	943	955	934	984	985	963
7	989	992	993	992	982	993	1005	998	968	988	988	987	981	981	990	983	974	969	947	946	942	946	978	986	979
8	993	998	1000	988	1016	1040	925	879	973	905	826	946	983	972	882	974	998	985	960	967	974	978	981	989	964
9	989	992	996	1004	1007	1001	999	1000	1005	1006	1006	1006	1006	1005	1005	998	999	990	980	974	974	971	987	998	996
10	996	991	1008	1015	1022	1029	1014	1005	1004	990	982	988	944	989	1003	1000	994	991	989	974	974	974	971	990	993
11 Q	1005	996	997	997	1001	1004	998	998	991	974	990	1004	1005	1001	997	997	991	982	974	970	968	966	980	986	991
12 Q	996	1001	999	1004	1006	1007	1006	1004	997	997	995	999	1002	1003	1000	997	989	990	979	982	981	990	998	993	996
13	995	997	1005	1005	1004	1011	1006	997	989	990	978	973	1011	1008	1005	1006	1000	991	989	986	988	1000	993	997	997
14	1026	1051	1104	1114	1084	1058	1060	961	782	924	947	757	735	828	880	933	946	929	974	969	969	984	988	985	958
15 Q	984	1000	993	998	999	996	989	986	989	986	973	973	986	991	993	989	978	967	960	960	966	978	982	986	983
16	992	996	996	996	996	997	998	1000	999	1005	999	999	1002	1000	982	974	970	944	933	942	946	958	974	982	983
17	988	989	993	1000	999	1018	1003	1001	987	982	936	810	747	929	984	997	982	974	973	974	974	980	981	982	966
18	982	983	979	984	997	986	978	974	947	(936	926	976	998	986	964	965)	985	963	926	950	975	964	976	986	970
19	993	998	996	993	991	990	989	889	739	848	938	933	932	982	973	951	994	985	973	967	974	979	986	983	957
20 Q	990	982	984	995	995	989	984	989	970	982	989	1003	999	999	1000	997	989	981	974	974	974	982	988	990	987
21	996	998	1001	993	989	997	998	1001	982	914	943	833	700	670	714	865	1000	996	981	950	971	974	990	1000	936
22	1016	989	987	1006	989	990	976	932	952	953	973	887	919	995	1021	1007	999	977	971	962	970	977	991	1000	977
23	1167	1253	1333	1257	1011	974	855	525	855	652	559	699	739	790	725	909	977	971	974	972	976	989	992	990	923
24 Q	992	991	988	991	1005	997	996	989	992	995	997	997	988	971	950	982	993	981	969	964	968	977	979	989	985
25	990	990	999	999	998	999	1001	999	937	908	920	818	812	939	1000	1002	1001	991	980	975	970	965	971	975	964
26	991	1004	1005	1016	1014	1012	990	897	972	788	672	815	1011	1015	1009	1009	1001	1000	996	993	990	986	985	994	965
27	1014	1005	1009	1017	1019	1014	1011	1014	1001	995	994	984	992	995	994	997	999	988	984	956	972	974	992	997	997
28 D	1018	1095	1317	1235	1011	838	638	954	888	819	301	710	965	1030	1015	991	983	977	968	951	956	975	1001	1003	943
29	979	978	993	977	970	974	961	951	951	874	761	724	739	774	857	914	971	969	941	951	964	982	983	983	922
30 D	984	983	975	975	989	993	991	906	461	473	740	559	500	584	652	749	805	900	975	966	982	984	999	1042	841
31																									
Mean	1009	1014	1033	1025	1008	997	968	908	865	862	845	853	870	902	933	952	967	963	966	965	974	981	992	998	952

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 42 Meanook D = 24° E + ′ November 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	08.0	07.1	16.3	12.3	10.2	26.8	09.5	05.3	39.5	30.5	31.1	34.3	28.7	28.8	01.1	03.0	07.5	03.8	07.7	09.6	10.4	14.8	16.3	15.0	15.7
2 D	15.5	15.3	13.4	10.4	08.9	04.6	16.4	24.1	-16.7	05.5	25.1	32.8	24.3	00.6	17.4	07.2	-02.0	01.9	06.8	07.4	12.5	14.5	09.4	14.4	11.2
3 D	14.0	08.8	21.4	24.4	11.7	22.2	-12.4	07.8	04.3	17.4	01.6	13.5	20.5	17.7	21.4	13.0	04.4	11.1	09.7	04.6	11.6	11.4	10.6	11.3	11.7
4	09.7	11.5	12.0	11.9	11.1	19.0	10.9	17.3	-01.4	-03.8	01.6	-08.0	12.8	27.8	19.2	12.4	-11.8	-01.2	13.5	17.0	16.5	08.6	07.9	07.2	09.2
5	10.4	08.8	14.4	17.3	23.3	-07.0	14.5	-03.8	14.5	14.3	01.6	13.0	13.4	13.8	14.2	11.1	15.1	17.1	14.4	11.9	12.4	11.5	10.7	11.1	11.6
6	09.5	12.1	19.2	11.5	12.6	20.4	13.8	14.3	12.4	09.7	-03.3	04.7	16.4	14.2	10.4	08.1	06.7	06.2	07.5	09.0	08.0	08.1	07.7	08.0	10.3
7	08.6	09.6	09.5	09.5	19.2	14.8	15.3	11.0	06.5	08.6	11.5	10.7	10.1	10.8	11.0	13.2	12.4	15.9	14.2	12.5	07.8	03.7	05.2	07.4	10.8
8	08.9	09.6	08.8	16.5	10.4	11.1	03.3	03.1	12.7	10.4	11.4	13.5	17.9	16.0	07.6	03.7	10.1	13.5	09.1	04.1	05.0	08.0	08.5	09.3	09.7
9	09.9	10.0	10.3	10.5	11.1	10.6	10.6	10.5	10.5	10.6	11.1	11.5	11.9	12.3	13.3	12.5	15.3	13.9	12.4	10.5	06.6	06.6	05.8	02.8	10.5
10	03.1	05.9	07.6	09.6	07.9	08.9	08.5	13.1	11.0	12.3	14.2	13.6	14.7	17.3	18.0	18.3	20.9	17.0	15.0	12.1	09.4	06.7	05.2	04.9	11.5
11 Q	01.2	06.5	08.8	11.3	11.5	11.4	11.5	11.5	12.8	13.7	13.3	11.5	10.7	11.9	13.0	13.0	14.5	15.4	13.0	10.9	08.7	07.7	06.5	08.1	10.8
12 Q	07.7	06.5	07.8	08.1	09.4	11.9	11.6	10.8	10.6	11.3	12.7	11.6	11.9	12.3	13.0	16.0	17.6	16.6	16.6	09.6	08.5	07.8	05.8	04.8	10.8
13	06.0	08.2	08.0	08.5	08.6	08.4	08.6	11.0	13.0	12.8	09.6	13.5	10.8	13.4	15.4	17.0	17.3	18.5	13.8	12.0	07.5	05.2	04.8	04.6	10.7
14	-02.3	-01.8	03.8	12.6	09.2	13.7	14.4	04.0	07.8	09.4	18.7	21.4	10.1	09.1	13.9	16.6	07.3	08.7	06.6	08.9	08.5	07.2	08.9	10.3	09.5
15 Q	09.9	09.1	10.6	12.0	11.2	11.0	10.6	10.5	10.5	10.9	10.3	10.3	12.8	13.4	15.7	16.5	15.8	15.0	12.3	09.8	08.1	08.2	08.8	09.8	11.4
16	09.7	09.9	10.2	10.2	10.2	10.3	10.3	10.6	11.4	12.9	10.8	10.9	12.0	12.5	10.9	08.8	11.6	08.6	-02.2	00.5	-00.4	01.1	03.8	08.1	08.4
17	09.9	11.1	11.4	23.3	30.7	13.4	13.3	09.0	08.1	10.8	12.5	16.3	09.6	13.3	12.5	13.6	13.8	13.0	10.4	08.0	08.4	08.9	10.5	11.5	12.6
18	10.0	09.1	11.4	11.5	09.2	11.3	11.9	15.2	19.2	10.0	08.9	14.3	08.9	10.3	03.4	09.9	13.7	17.7	07.5	01.9	03.4	05.7	07.4	08.7	10.0
19	10.3	09.8	10.5	10.4	09.5	10.5	16.0	13.3	07.0	19.6	12.8	09.9	06.0	13.4	14.5	08.5	10.7	14.4	11.9	09.6	07.7	07.5	06.5	07.6	10.7
20 Q	09.3	10.1	08.5	11.2	11.0	10.6	11.6	09.9	07.1	07.6	08.5	11.8	12.5	12.4	13.0	14.2	15.3	14.8	13.8	11.6	10.5	09.4	09.5	08.9	11.0
21	09.5	10.4	10.2	11.4	12.4	11.4	13.0	10.2	13.5	08.9	12.5	18.3	19.6	14.3	06.4	14.3	06.6	09.4	09.4	04.6	03.1	05.6	06.5	07.5	10.4
22	08.5	12.0	12.6	17.6	16.4	10.6	10.3	13.0	17.6	17.2	15.0	12.4	08.7	14.8	17.3	15.3	14.8	13.7	10.0	09.8	08.3	09.4	09.0	08.1	12.6
23	11.8	09.9	00.0	-05.0	03.9	01.9	-02.1	19.3	14.8	18.2	04.5	23.8	31.0	33.1	11.6	-02.4	06.7	08.9	06.4	08.4	10.3	09.0	09.4	10.7	10.2
24 Q	10.0	10.3	10.8	11.3	11.1	11.4	12.5	10.6	09.7	09.4	10.5	11.4	13.8	11.7	09.9	10.0	14.2	15.8	14.3	11.1	08.0	06.5	08.1	08.5	10.9
25	08.6	10.0	10.5	10.5	11.0	11.7	11.2	14.4	16.3	21.1	20.3	13.5	33.7	27.1	15.2	15.6	14.3	12.6	08.5	07.4	07.6	06.5	06.2	07.5	13.4
26	08.9	09.2	08.6	12.5	10.3	12.6	11.4	13.2	18.6	14.8	39.1	39.8	17.5	13.3	15.1	14.7	14.4	14.3	11.1	10.4	08.4	08.6	08.0	06.4	14.2
27	04.8	06.5	09.3	09.8	08.1	08.0	06.8	08.9	10.5	11.6	13.7	15.5	15.5	16.0	15.4	16.6	16.1	17.3	14.2	09.0	05.0	04.2	05.3	06.4	10.6
28 D	00.6	03.2	12.6	13.1	62.0	71.5	09.4	17.5	10.1	03.9	06.4	23.5	28.9	20.2	13.8	10.9	13.0	11.9	12.1	12.0	08.5	11.4	08.3	11.0	16.5
29	11.7	12.5	15.5	13.2	11.9	10.6	06.0	08.0	09.0	05.6	09.1	37.2	30.0	13.0	10.7	08.0	08.3	09.5	07.1	08.4	08.3	08.5	09.4	09.7	11.7
30 D	10.8	11.9	12.1	13.0	13.2	12.5	12.6	21.7	11.3	02.3	40.0	43.0	14.0	34.1	23.0	03.8	03.4	06.9	09.6	07.9	06.6	07.5	09.4	09.1	14.2
31																									
Mean	08,5	09.0	10.9	12.0	13.6	13.5	10.0	11.5	11.1	11.6	13.2	17.0	16.3	16.0	13.2	11.4	10.9	12.1	10.5	09.0	08.2	08.0	08.0	08.6	11.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 43 Meanook — Z = 58,000 γ + — November 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	870	850	880	840	808	691	766	536	767	572	745	635	783	705	653	722	810	814	836	843	834	848	850	851	771
2 D	863	857	810	853	822	767	768	563	391	551	870	821	700	434	675	773	748	759	836	850	875	876	870	878	759
3 D	853	845	879	840	851	746	570	756	733	698	694	782	734	763	775	734	814	806	848	824	850	860	848	820	789
4	815	812	804	802	797	812	754	754	755	670	549	597	447	645	716	713	710	740	782	841	906	880	860	853	751
5	891	853	836	817	763	713	785	669	778	768	737	767	809	788	825	799	810	820	814	812	814	812	805	806	796
6	804	835	871	846	808	780	677	757	769	729	629	711	707	776	793	782	792	788	801	822	827	827	852	810	783
7	805	798	798	802	820	815	793	789	754	760	774	782	784	782	788	788	793	799	804	813	822	812	801	795	795
8	793	795	802	836	840	823	705	742	753	702	654	717	728	741	723	760	781	793	798	796	800	802	800	801	770
9	794	793	793	793	797	793	796	797	790	790	790	786	786	786	786	781	781	781	772	773	790	806	804	799	790
10	804	807	813	812	815	831	810	802	793	781	770	768	710	752	778	787	787	785	783	781	786	793	797	798	789
11 Q	812	814	800	793	789	793	792	787	788	756	752	775	786	786	786	789	789	789	792	792	792	793	795	793	789
12 Q	793	796	802	806	819	809	795	790	786	786	780	775	786	786	787	787	783	781	778	784	788	793	794	794	791
13	798	801	810	808	811	817	825	814	790	782	758	726	767	772	776	776	776	769	766	765	770	779	783	802	785
14	809	851	859	839	865	841	793	755	572	707	724	757	702	705	664	754	788	788	794	796	800	814	813	808	775
15 Q	808	814	808	812	804	792	787	785	789	783	765	760	771	782	789	789	789	789	794	794	795	798	798	795	791
16	794	793	790	790	790	790	788	788	788	780	788	788	790	787	776	761	769	771	772	790	803	805	805	808	788
17	811	814	834	846	825	833	816	809	791	790	757	587	632	727	772	797	799	801	803	805	802	801	803	800	786
18	799	802	805	818	838	831	805	793	753	(697	733	724	793	773	742	743)	786	794	803	818	806	800	802	801	786
19	803	802	795	793	797	809	759	690	622	622	725	732	731	742	741	737	777	784	793	795	798	800	806	802	761
20 Q	798	805	810	803	801	799	799	787	757	772	775	789	787	786	788	790	791	790	793	794	794	794	794	791	791
21	788	789	790	803	810	805	810	793	776	692	707	622	514	376	378	617	774	775	789	797	809	814	818	815	728
22	850	815	806	818	796	800	787	760	697	738	757	753	740	754	775	779	784	781	788	789	794	800	800	802	782
23	847	899	714	606	573	799	825	671	786	809	529	586	548	623	708	725	746	760	774	801	811	805	800	799	731
24 Q	799	798	805	805	814	813	783	781	784	794	794	794	783	770	736	745	770	782	784	788	793	795	794	797	787
25	796	796	805	803	802	802	806	786	717	688	696	630	526	619	716	761	763	763	771	781	787	794	800	800	750
26	797	800	813	833	828	822	787	573	744	730	594	508	771	798	794	793	788	790	791	795	797	795	799	800	764
27	832	819	810	808	811	813	819	822	809	800	794	779	763	769	779	790	790	787	788	783	790	791	805	807	798
28 D	815	863	912	342	549	674	820	766	857	852	1179	993	862	821	823	820	822	809	805	816	826	833	822	828	813
29	833	838	834	827	811	801	783	777	788	730	559	508	657	710	743	746	756	776	784	800	811	821	815	816	764
30 D	812	812	813	815	819	809	799	690	557	627	718	839	823	807	624	649	675	766	822	834	826	828	833	861	769
31																									
Mean	816	819	817	794	796	794	780	746	741	732	737	726	724	729	740	759	778	784	795	802	810	812	812	811	777

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 44 Meanook — November 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	06	02	1152	08	59	114	1038	08	57	119.0	07	51	-96.5	215.5	08	39	1306	07	42	309	997
2 D	23	43	1310	07	40	-175	1485	08	36	105.0	07	36	-94.6	199.6	07	30	1148	07	36	-101	1249
3 D	00	11	1326	09	20	136	1190	09	20	52.4	06	10	-41.0	93.4	02	45	951	06	38	455	496
4	22	17	1124	11	25	70	1054	11	25	61.9	11	43	-75.4	137.3	20	10	975	12	13	271	704
5	03	13	1196	10	25	374	822	06	51	62.5	07	16	-55.3	117.8	07	55	963	07	14	377	586
6	02	34	1086	10	35	480	606	05	57	42.8	10	48	-20.7	63.5	02	35	896	10	35	470	426
7	06	01	1029	20	08	924	105	04	53	30.5	21	14	2.1	28.4	20	32	834	08	28	739	95
8	05	13	1063	06	03	731	332	10	44	25.8	08	00	-28.7	54.5	03	50	859	06	57	546	313
9	16	31	1021	21	38	950	71	16	34	17.3	23	36	1.7	15.6	21	08	813	19	04	766	47
10	03	24	1044	12	13	912	132	16	47	22.6	22	54	0.7	21.9	05	26	838	12	38	690	148
11 Q	10	54	1014	09	27	954	60	17	45	17.2	00	24	-0.9	18.1	00	40	823	10	09	726	97
12 Q	05	59	1013	18	30	966	47	16	47	20.6	23	49	3.3	17.3	04	48	823	11	08	766	57
13	12	14	1025	11	29	922	103	15	01	25.1	21	00	-2.2	27.3	16	01	832	11	29	698	134
14	03	05	1197	11	59	518	679	11	50	34.4	08	57	-15.7	50.1	02	00	901	08	15	446	455
15 Q	01	25	1014	19	52	958	56	15	36	18.3	21	55	7.4	10.9	01	22	824	11	02	749	75
16	09	26	1012	18	38	923	89	09	47	14.5	18	34	-4.8	19.3	23	59	812	15	04	751	61
17	04	49	1068	12	36	675	393	04	38	42.6	12	18	-16.2	58.8	03	36	884	11	29	540	344
18	20	12	1014	(09	29	880	134)	17	35	22.7	19	13	-4.8	27.5	(05	00	848	09	29	629	219)
19	06	17	1036	08	12	638	398	09	18	28.7	07	59	-14.5	43.2	05	26	814	08	55	523	291
20 Q	07	15	1005	08	32	950	55	16	43	16.1	08	28	0.4	15.7	02	22	815	08	34	724	91
21	18	00	1033	14	29	536	497	13	24	46.8	14	34	-55.6	102.4	23	59	829	13	16	224	605
22	03	44	1036	11	51	753	283	09	12	25.6	19	03	2.0	23.6	00	21	870	08	57	638	232
23	02	09	1428	08	34	284	1144	09	44	64.3	06	36	-107.6	171.9	06	50	1002	04	30	365	637
24 Q	06	13	1012	14	21	921	91	06	14	19.3	21	51	5.6	13.7	05	35	818	14	24	718	100
25	07	50	1026	12	28	697	329	12	21	49.8	11	37	0.0	49.8	02	43	811	12	29	456	355
26	12	08	1053	09	58	470	583	10	22	62.6	08	54	-16.4	79.0	03	37	840	11	28	443	397
27	23	55	1142	23	52	831	311	23	52	26.2	23	57	-3.8	30.0	23	54	886	23	52	735	151
28 D	02	47	1699	10	00	-18	1717	06	11	57.0	04	04	-149.2	206.2	10	50	1470	03	59	-179	1649
29	02	42	1017	12	08	620	397	11	17	57.7	09	05	-2.3	60.0	02	49	850	11	21	453	397
30 D	23	45	1117	08	54	-26	1143	11	38	95.7	09	15	-61.8	157.5	13	00	1113	08	53	250	863
31																					
Mean			1110			599	511			42.8			-28.2	71.0			915			506	409
No. days			30			30	30			30			30	30			30			30	30

69026-3—8

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 45 Meanook H = 12,000 γ + December 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1030	1009	1050	1037	1070	942	865	660	732	529	297	516	570	805	969	979	958	969	975	965	970	986	997	995	870
2	972	983	1001	999	975	914	1012	886	881	826	560	598	881	842	833	863	955	975	947	919	956	976	1006	1000	907
3 D	979	1026	1023	1042	1023	999	724	517	195	261	628	544	467	868	862	873	1021	991	988	967	983	972	979	1001	831
4	1002	1014	1017	1077	1019	1040	994	967	914	936	976	974	954	983	1002	1003	992	983	971	972	973	965	975	983	987
5 D	989	992	993	996	995	993	990	969	757	763	842	681	605	372	386	451	428	755	613	867	929	952	969	976	803
6	979	983	991	1019	1037	1034	999	1005	979	924	990	983	969	967	983	978	969	961	953	953	980	975	983	981	982
7 Q	982	991	1005	1012	994	985	983	980	983	986	986	986	990	988	994	996	1000	979	969	967	973	979	976	985	986
8	990	999	997	999	995	999	1007	998	994	989	990	1000	999	998	996	990	982	971	971	975	965	962	974	990	989
9	994	1001	1005	1008	1018	1021	1049	1087	1021	1012	997	1005	996	990	998	997	989	974	970	977	983	986	993	1005	1004
10 Q	1005	1009	1012	1018	1026	1019	1014	1011	1008	1002	1000	1000	1001	1001	1000	994	989	989	977	969	978	981	990	997	1000
11 Q	1000	1006	1007	1011	1009	1010	1005	1002	1002	1000	1000	999	1001	1001	1002	1003	996	993	989	989	988	990	989	993	999
12	1005	1017	1014	1014	1017	1017	1017	1010	944	957	1005	989	984	965	1004	1005	998	989	982	981	974	966	970	996	992
13	1034	1079	1091	1014	997	1000	993	996	971	982	999	996	997	996	993	992	984	968	974	978	970	959	1026	1052	1002
14 D	1047	1077	1091	1076	1036	1048	994	919	532	396	695	793	936	646	788	906	938	947	979	967	974	980	963	987	905
15	1001	999	1001	1006	1014	822	895	895	826	804	815	878	908	957	981	982	969	956	916	974	981	996	982	982	939
16	1008	1005	1000	1006	1008	1004	995	982	918	826	840	967	998	902	900	963	935	945	964	968	976	978	982	980	960
17	974	1002	1004	1006	1007	999	1005	993	959	965	935	983	959	997	1000	998	993	989	976	967	974	978	989	993	985
18	990	997	1000	998	997	994	984	996	952	918	942	858	861	826	969	985	993	990	981	981	984	989	998	1000	966
19	1011	1008	1007	1032	1032	984	802	900	856	730	557	539	558	855	982	1029	1022	1000	985	982	980	987	994	997	910
20	992	993	996	996	988	990	992	992	991	991	973	986	989	998	1005	1009	1002	971	966	974	973	974	981	989	988
21 Q	993	997	998	1001	993	996	998	999	998	996	998	1000	1004	1005	1014	1016	1009	996	982	981	981	982	987	992	997
22 Q	1000	1004	1004	1005	1007	1007	1007	1007	1005	1006	1011	1010	1013	1013	1012	1014	1004	991	993	993	997	989	983	996	1003
23	1020	1011	1020	1014	1025	1021	1069	1012	992	1002	994	989	993	985	995	991	904	956	982	959	962	971	994	980	993
24	1044	1057	1014	997	993	990	988	970	663	559	595	861	888	982	1016	1040	1010	989	981	985	989	996	1007	1012	943
25	1002	990	989	974	974	980	982	991	974	928	944	959	995	1007	1000	993	989	989	979	969	978	982	989	989	981
26	989	997	1008	996	985	1018	1051	1030	1011	981	946	681	893	946	824	839	917	968	959	987	996	982	978	1008	958
27 D	1051	1040	1018	1009	989	1029	987	838	857	691	(339)	677	909	863	877	943	961	978	959	972	998	998	990	1007	916
28 D	1044	1051	1030	1036	982	910	869	939	833	930	768	793	873	929	636	756	840	943	888	928	974	989	994	1002	914
29	1005	1030	1005	998	996	1013	997	804	912	800	875	661	863	980	997	1003	985	976	982	982	989	986	986	983	950
30	994	1001	1001	996	982	991	962	983	942	936	970	832	837	937	862	964	989	989	974	980	981	994	996	997	962
31	1000	997	993	993	996	997	989	950	970	977	968	992	996	982	986	998	989	986	980	982	975	989	991	997	986
Mean	1004	1012	1012	1012	1006	992	975	945	879	858	853	862	900	922	931	953	958	970	958	968	977	980	988	995	955

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 46 Meanook D = 24° E + ′ December 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	09.8	12.3	13.4	15.5	14.3	25.4	19.3	33.1	16.5	17.0	32.2	20.2	38.2	22.4	20.6	18.4	08.7	09.9	12.5	10.4	09.5	08.3	09.5	08.6	16.9
2	09.5	11.7	14.3	12.3	23.6	09.6	16.0	-02.6	09.4	05.6	21.7	01.9	26.5	01.6	08.5	07.0	08.9	11.0	10.5	06.5	-01.7	04.7	10.6	09.4	09.9
3 D	11.5	15.6	15.1	17.0	19.9	16.1	15.0	-12.5	40.6	-11.3	28.9	63.1	33.2	15.2	05.8	08.5	11.1	11.0	10.8	07.9	11.6	08.9	10.1	09.7	15.1
4	11.4	11.1	07.2	10.0	12.0	15.6	10.2	11.4	10.7	13.1	11.5	11.9	09.9	10.7	15.5	16.4	13.4	10.4	07.3	06.6	09.1	09.6	10.5	10.4	11.1
5 D	10.5	10.8	11.0	11.1	11.7	11.2	11.0	10.6	02.8	-15.3	12.3	24.8	21.3	18.1	13.4	07.1	05.6	25.4	26.2	08.5	13.5	-01.3	01.7	06.9	10.8
6	10.3	10.5	09.8	11.4	20.1	09.5	11.6	13.2	10.8	02.6	13.3	15,3	16.5	15.3	12.1	13.6	17.2	14.1	14.0	12.4	09.3	09.1	10.1	09.4	12.1
7 Q	08.4	07.2	07.5	11.5	12.8	12.5	10.5	10.1	10.6	11.1	11.0	11.0	10.6	09.9	09.3	08.8	14.5	14.5	14.4	12.0	09.6	07.9	08.4	07.1	10.5
8	08.0	08.0	09.3	10.5	11.5	10.9	10.4	09.0	09.6	12.0	15.3	15.1	13.5	13.0	12.8	15.2	19.5	15.2	13.0	10.1	10.2	05.6	04.7	06.6	11.2
9	08.9	09.5	10.5	11.5	11.5	09.7	10.8	12.3	08.4	07.5	12.5	12.2	13.3	14.2	13.0	14.6	16.3	14.9	12.0	10.5	07.7	07.3	08.0	07.5	11.0
10 Q	08.0	07.9	09.2	10.4	07.6	08.3	10.4	09.4	09.9	10.4	11.0	11.4	11.5	11.8	12.5	13.8	15.5	12.6	12.4	10.7	08.4	08.1	08.0	08.1	10.3
11 Q	08.8	09.5	10.4	10.3	09.6	08.9	09.0	09.7	09.5	10.9	10.6	12.5	12.2	11.6	12.5	15.5	13.9	13.8	13.0	09.7	08.5	07.2	07.6	08.1	10.6
12	08.4	07.2	04.2	16.3	09.6	08.7	09.7	09.6	09.7	13.7	14.4	15.8	16.3	08.5	14.6	16.8	16.6	17.0	11.5	09.5	09.1	07.5	01.8	00.3	10.7
13	00.6	07.6	13.5	13.2	13.0	11.7	11.0	10.7	10.2	11.1	12.5	13.0	12.2	11.7	12.9	14.2	17.5	14.3	12.4	10.1	09.6	08.1	-03.4	-00.4	10.3
14 D	02.2	05.7	14.3	22.4	12.8	15.3	10.6	10.1	-03.4	-02.6	11.6	46.9	19.5	05.3	23.1	03.7	09.3	13.3	08.9	06.7	06.6	07.5	06.7	09.4	11.1
15	10.5	12.2	16.0	14.7	15.3	-01.6	16.2	16.5	08.4	18.2	21.6	21.1	14.0	11.6	13.2	13.4	08.5	09.4	01.8	05.7	07.7	08.2	07.7	08.9	11.6
16	08.0	10.0	13.2	13.1	16.3	16.4	16.1	10.6	11.1	09.3	07.3	20.1	13.9	13.8	03.7	04.3	04.8	03.1	02.9	04.1	04.6	04.7	05.6	06.6	09.3
17	08.5	08.9	12.2	12.5	13.0	12.4	12.6	17.5	10.8	10.5	04.8	07.7	08.6	12.5	14.5	15.4	15.3	13.9	11.6	07.5	05.4	06.5	07.6	08.4	10.8
18	09.6	10.4	11.9	12.4	12.5	11.8	16.3	33.1	10.7	10.6	20.5	08.6	07.5	14.4	14.2	12.0	13.9	13.9	11.5	08.9	07.5	06.5	07.0	07.4	12.2
19	08.2	10.4	08.5	11.3	14.2	12.4	07.0	27.5	15.5	27.4	35.1	37.0	15.8	06.4	13.5	12.8	14.3	09.7	07.9	10.3	09.6	08.4	07.7	08.5	14.1
20	09.7	09.7	12.4	12.0	13.4	12.3	11.8	10.6	09.5	11.3	08.9	10.4	10.6	10.2	13.4	15.5	17.2	13.0	07.5	08.0	07.7	08.0	08.6	08.6	10.8
21 Q	09.6	09.7	11.2	11.3	11.6	13.7	12.8	09.5	10.0	08.8	09.6	09.6	09.6	10.6	12.2	14.4	16.6	17.1	06.0	13.0	10.0	08.6	07.9	07.6	11.3
22 Q	07.5	07.6	08.5	12.4	11.5	11.2	10.4	09.5	09.0	09.6	10.0	10.1	10.5	11.0	12.6	13.9	18.5	15.3	11.5	10.8	08.1	07.5	06.5	06.7	10.4
23	05.7	08.7	10.2	12.3	11.1	09.9	15.5	11.6	09.4	07.7	10.4	13.6	10.7	13.2	15.3	22.2	23.8	00.5	04.0	10.9	10.7	07.6	05.2	05.2	10.6
24	09.6	05.1	11.5	13.4	12.9	11.8	13.6	12.5	-10.5	-16.6	10.3	25.6	33.7	19.9	18.8	14.7	16.4	15.7	14.3	12.3	09.3	08.0	07.3	06.9	11.2
25	11.0	11.5	11.3	13.4	15.5	15.3	09.4	11.3	11.5	13.5	19.4	10.8	12.6	13.4	14.4	13.8	15.8	13.3	11.1	08.0	08.5	09.4	09.9	09.8	12.3
26	10.5	11.1	10.1	11.6	24.3	15.7	16.7	10.3	08.3	10.1	16.1	23.3	34.1	24.6	13.5	01.6	07.2	05.6	07.8	09.2	08.3	07.5	07.6	06.0	12.5
27 D	11.4	09.5	14.8	20.2	19.5	26.8	15.4	13.5	19.3	12.6	66.7	09.9	17.6	12.3	11.1	07.7	09.3	05.7	04.7	07.7	09.4	08.5	08.8	09.6	14.7
28 D	22.6	07.5	11.1	11.2	14.4	17.3	16.4	10.8	-05.1	13.5	14.4	26.3	27.7	27.7	22.8	-06.4	-12.1	06.8	-01.1	-10.2	00.6	07.8	09.3	10.6	10.2
29	11.4	17.8	12.2	14.5	27.6	19.4	12.9	-08.5	04.7	15.2	13.1	01.4	15.0	17.5	15.1	14.6	14.8	12.5	12.7	10.9	09.2	08.0	09.3	10.7	12.2
30	11.3	10.9	11.4	10.1	16.4	12.9	15.1	14.0	07.5	12.3	14.4	17.8	11.6	16.1	07.2	07.6	08.6	06.5	06.0	08.9	07.6	08.5	10.6	11.5	11.0
31	11.6	11.6	13.1	13.0	11.6	12.4	10.6	06.4	10.2	08.5	08.6	12.4	10.5	09.5	10.9	15.2	14.2	12.2	11.4	10.8	09.3	08.9	09.6	10.4	11.0
Mean	09.2	09.9	11.3	13.0	14.5	13.0	12.7	11.3	09.5	08.7	16.4	17.4	16.7	13.4	13.3	11.8	12.8	12.0	10.3	08.7	08.2	07.5	07.5	07.9	11.5

69026-3—81

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 47 Meanook $Z = 58,000\ \gamma +$ December 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	836	812	843	841	830	700	721	509	703	845	769	715	585	656	741	794	792	819	834	830	827	823	821	823	769
2	821	823	828	815	775	697	807	717	632	574	593	700	681	539	579	703	760	779	798	828	841	839	830	844	742
3 D	844	856	822	846	847	791	773	614	681	655	748	471	716	612	577	661	766	782	797	798	815	834	850	821	749
4	829	834	839	870	834	828	800	785	708	672	768	775	753	763	777	782	782	783	785	793	802	804	802	804	791
5 D	799	799	799	799	798	798	796	768	729	635	701	777	392	668	863	913	879	1030	995	827	850	866	840	824	798
6	817	818	829	856	847	822	844	835	740	768	826	814	801	800	808	807	804	804	812	816	817	814	814	808	813
7 Q	807	829	859	833	817	803	798	798	798	798	799	797	798	789	788	779	789	792	796	799	803	808	805	808	804
8	807	807	808	809	809	808	793	796	796	798	805	817	807	805	799	799	798	796	795	797	798	798	798	807	802
9	803	797	798	797	808	817	828	838	808	801	791	797	786	779	788	792	797	797	796	797	796	796	796	797	800
10 Q	795	796	796	799	807	803	797	796	796	796	792	792	789	789	789	791	791	792	797	802	799	799	797	796	796
11 Q	796	796	796	797	802	816	821	811	800	793	793	785	786	787	788	788	788	785	785	785	785	785	786	786	793
12	790	798	815	851	824	826	825	808	763	721	785	783	770	731	774	780	780	780	789	790	792	798	818	835	793
13	849	886	902	873	819	817	808	801	775	774	794	791	788	789	789	794	794	789	790	788	786	785	875	892	815
14 D	888	901	873	836	798	830	797	679	824	789	783	597	744	675	656	686	778	812	849	825	812	816	812	818	786
15	830	818	819	825	817	798	722	693	675	643	734	814	812	805	791	800	800	818	798	808	808	815	818	826	787
16	840	830	829	821	805	776	777	770	709	712	625	718	780	701	710	745	739	753	788	801	809	808	819	818	770
17	815	823	818	813	809	801	790	743	728	737	732	785	757	787	792	796	794	794	796	798	798	794	800	805	788
18	807	807	804	800	799	796	812	721	706	682	692	693	640	686	764	799	789	791	796	796	793	793	796	799	765
19	814	817	822	851	821	833	739	603	651	617	672	768	629	609	691	743	778	774	786	796	796	797	802	802	750
20	801	807	804	803	805	798	790	785	785	778	744	763	764	776	782	785	782	775	781	782	786	788	796	796	786
21 Q	792	794	795	795	795	798	791	773	778	785	785	785	784	784	785	786	786	783	784	785	789	789	789	789	787
22 Q	794	795	796	794	788	784	783	783	784	784	784	781	783	783	783	785	786	788	795	795	788	788	786	787	787
23	795	787	791	791	796	812	769	792	778	798	796	773	782	765	774	754	715	748	763	786	785	794	806	817	782
24	861	846	819	806	802	806	801	791	675	697	633	619	630	733	771	815	806	798	797	793	787	791	791	793	769
25	791	794	798	800	805	793	741	771	766	675	706	749	776	791	790	786	786	782	784	785	788	795	800	795	777
26	794	794	802	798	815	821	839	819	803	781	745	560	632	690	654	661	679	729	796	808	814	816	821	836	763
27 D	880	846	846	798	748	782	784	718	715	601	515	651	709	686	745	752	826	802	805	817	833	825	808	846	764
28 D	879	845	837	849	805	666	707	758	661	785	762	596	706	708	639	599	675	773	792	804	805	814	821	825	755
29	825	837	821	827	825	822	815	637	707	655	718	635	675	728	755	782	792	781	783	787	790	792	793	794	766
30	796	792	792	792	791	786	733	707	708	705	754	636	487	625	653	691	708	744	768	786	791	794	794	794	734
31	792	792	792	793	791	785	771	669	725	748	713	740	767	777	770	782	780	781	786	792	793	796	798	795	762
Mean	819	818	819	818	807	794	786	745	739	729	737	725	720	730	747	765	778	792	800	800	803	805	809	812	779

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 48 Meanook — December 1959

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° E +			Minimum 24° E +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	02	49	1173	10	13	61	1112	12	32	82.8	10	07	-48.1	130.9	10	21	1137	07	34	269	868
2	06	06	1059	10	47	-82	1141	04	48	52.1	07	52	-50.3	102.4	19	31	882	08	55	416	466
3 D	15	45	1116	09	11	-68	1184	08	46	162.4	09	26	-92.2	254.6	09	02	1078	12	29	252	826
4	03	47	1103	08	53	811	292	05	37	25.8	08	43	-1.3	27.1	03	16	889	09	02	575	314
5 D	20	46	1132	14	01	32	1100	14	14	189.5	16	00	-106.5	296.0	14	13	1229	14	06	157	1072
6	08	27	1110	09	30	843	267	04	58	37.9	08	46	-12.0	49.9	03	40	882	08	40	630	252
7 Q	03	38	1023	19	08	960	63	17	04	16.5	01	54	1.0	15.5	02	30	862	15	54	771	91
8	06	37	1028	20	48	951	77	16	50	23.2	21	45	3.2	20.0	11	25	826	06	41	781	45
9	07	20	1138	18	10	966	172	07	51	22.8	07	05	0.8	22.0	07	29	867	13	08	769	98
10 Q	04	32	1040	19	22	965	75	16	24	17.6	03	44	3.6	14.0	04	30	813	12	30	788	25
11 Q	15	31	1017	20	46	981	36	15	28	19.9	21	54	5.2	14.7	06	44	828	11	47	775	53
12	03	28	1039	08	46	812	227	03	51	32.1	23	49	-1.4	33.5	03	51	873	09	20	657	216
13	02	08	1150	21	40	937	213	02	13	26.1	22	33	-10.1	36.2	02	00	938	08	49	749	189
14 D	03	51	1254	08	52	13	1241	11	22	64.2	08	45	-67.4	131.6	08	59	1058	08	43	457	601
15	05	00	1057	05	37	480	577	07	04	38.1	05	35	-80.8	118.9	05	38	974	09	40	523	451
16	12	24	1048	09	28	755	293	11	19	30.2	18	15	-5.8	36.0	00	11	862	10	34	580	282
17	06	56	1029	10	39	887	142	07	13	27.2	10	34	-3.1	30.3	01	53	827	10	39	694	133
18	07	32	1024	13	18	692	332	07	04	44.7	11	40	-5.7	50.4	06	52	817	13	08	555	262
19	04	04	1091	12	14	399	692	11	18	84.1	12	55	-10.1	94.2	11	27	946	07	19	469	477
20	15	15	1013	10	22	942	71	16	38	19.3	10	21	-0.3	19.6	01	48	811	10	31	710	101
21 Q	15	17	1021	19	18	974	47	16	32	20.2	23	10	7.1	13.1	05	48	802	07	24	763	39
22 Q	14	25	1026	22	27	975	51	17	11	21.2	22	46	3.6	17.6	02	35	799	07	34	778	21
23	06	08	1135	16	38	866	269	16	45	31.0	17	58	-34.4	65.4	23	59	843	06	12	631	212
24	01	07	1084	10	14	356	728	12	26	42.2	09	24	-57.0	99.2	00	40	874	10	08	539	335
25	06	04	1019	09	32	853	166	10	12	31.7	06	19	-0.1	31.8	04	12	807	09	32	615	192
26	06	15	1087	11	39	479	608	12	00	57.5	15	10	-7.2	64.7	23	59	903	11	32	407	496
27 D	05	07	1128	(10	04	143	985)	10	40	123.0	11	21	-14.5	137.5	00	05	924	10	35	277	647
28 D	03	15	1131	14	31	440	691	05	24	61.4	14	54	-41.0	102.4	00	03	923	05	29	498	425
29	11	16	1074	07	38	563	511	04	37	35.6	07	37	-34.6	70.2	01	14	871	07	31	446	425
30	07	13	1043	11	42	753	290	12	00	25.8	15	04	-9.0	34.8	00	06	801	12	37	406	395
31	15	15	1015	07	44	900	115	15	18	16.8	07	39	-6.6	23.4	23	22	803	07	38	578	225
Mean			1078			634	444			47.8			-21.8	69.6			895			565	330
No. days			31			31	31			31			31	31			31			31	31

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (All Days)

Table 49 Meanook — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+31	+31	+28	+27	+31	+31	+22	+16	-8	-17	-29	-41	-48	-22	-13	-7	-4	-24	-15	-13	-11	-7	+10	+22
February	+43	+51	+68	+78	+80	+74	+68	+20	-9	-68	-116	-64	-110	-97	-57	-38	-13	-11	0	-1	+6	+14	+32	+40
March	+63	+48	+42	+47	+52	+42	+12	+6	-3	-45	-37	-80	-63	-35	-41	-42	-1	-19	-19	-10	+2	+16	+34	+34
April	+37	+39	+56	+57	+51	+37	+7	-25	-38	-31	-26	-32	-41	-30	-25	-20	-23	-25	-19	-8	+2	+14	+18	+28
May	+79	+80	+66	+60	+39	+26	+2	-12	-57	-81	-73	-77	-62	-29	-12	-7	-23	-23	-14	-4	+6	+19	+50	+55
June	+70	+67	+61	+54	+47	+40	+24	+5	-69	-71	-87	-82	-56	-36	-26	-24	-15	-11	-8	-5	+3	+20	+44	+47
July	+87	+92	+97	+96	+53	+16	-14	-46	-93	-112	-106	-63	-41	-54	-24	+5	+5	-8	-31	-11	+10	+26	+45	+72
August	+74	+60	+59	+66	+54	+48	-12	-63	-35	-35	-61	-68	-65	-43	-33	-34	-27	-16	-12	-7	+9	+33	+51	+63
September	+73	+91	+103	+85	+56	+25	-23	-41	-109	-99	-84	-79	-57	-51	-32	-26	-20	-7	-9	+3	+20	+43	+62	+72
October	+35	+45	+66	+65	+52	+45	+19	-27	-57	-78	-90	-71	-63	-34	-12	-11	+1	+2	+1	+5	+15	+26	+33	+37
November	+57	+62	+81	+73	+56	+45	+16	-44	-87	-90	-107	-99	-82	-50	-19	0	+15	+11	+14	+13	+22	+29	+40	+46
December	+49	+67	+87	+67	+51	+37	+20	-10	-76	-97	-102	-93	-55	-33	-24	-2	+3	+15	+3	+13	+22	+25	+33	+40
Year	+57.3	+60.3	+65.3	+63.8	+51.8	+38.8	+11.8	-18.4	-53.4	-68.7	-76.5	-70.8	-61.9	-42.8	-26.5	-17.2	-8.5	-9.7	-9.1	-2.1	+8.8	+21.5	+37.7	+46.3
Winter	+45.0	+50.2	+58.5	+58.8	+54.5	+46.8	+31.5	-4.5	-45.0	-68.0	-88.5	-74.3	-73.8	-50.5	-28.2	-11.8	+0.2	-2.3	+0.5	+3.0	+9.7	+15.2	+28.8	+37.0
Equinox	+49.5	+55.8	+66.8	+63.5	+52.8	+37.5	+3.8	-21.8	-51.8	-63.2	-59.2	-65.5	-56.0	-37.5	-27.5	-24.8	-10.8	-12.2	-11.5	-2.5	+9.8	+24.8	+36.8	+42.8
Summer	+77.5	+74.8	+70.7	+69.0	+48.2	+32.2	0.0	-29.0	-63.5	-74.8	-81.8	-72.5	-56.0	-40.5	-23.8	-15.0	-15.0	-14.5	-16.2	-6.8	+7.0	+24.5	+47.5	+59.2

DECLINATION (minutes) (All Days)

Table 50 Meanook — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-4.5	-4.7	-3.5	-1.3	-0.8	-0.1	-0.2	-0.7	-0.7	+1.7	+1.7	+3.6	+3.1	+2.2	+2.0	+3.1	+5.9	+3.5	+1.5	+0.7	-1.5	-3.8	-4.1	-4.0
February	-4.4	-4.2	-3.6	-2.8	-2.1	-0.7	-1.9	0.0	-2.7	-0.3	+4.5	+3.4	+7.4	+5.9	+4.8	+3.7	+5.2	+1.6	+0.4	-0.5	-1.9	-3.2	-3.8	-4.6
March	-5.2	-5.5	-5.2	-5.4	-2.1	-2.6	-0.1	-1.2	-2.1	-1.1	+0.8	+1.7	+3.1	+5.1	+6.6	+7.1	+7.7	+7.5	+4.4	+0.8	-1.4	-3.2	-3.8	-5.5
April	-7.2	-6.3	-5.2	-4.1	-2.5	-3.4	-2.7	-1.7	+1.5	+2.1	+0.9	+2.4	+2.1	+6.6	+9.3	+12.5	+10.3	+7.0	+2.2	-1.6	-3.8	-5.1	-6.7	-6.7
May	-5.2	-5.0	-4.1	-3.3	-3.2	-4.6	-3.4	-3.8	-3.2	-2.4	-0.7	+1.1	+4.6	+9.7	+12.1	+12.3	+12.0	+7.9	+1.8	-2.2	-4.2	-5.3	-5.0	-6.1
June	-7.2	-5.7	-4.7	-3.3	-2.2	-1.3	-2.9	-4.7	-4.0	-2.2	-0.3	+1.6	+6.2	+9.9	+12.0	+13.1	+12.5	+9.4	+4.4	-1.0	-4.7	-7.8	-8.0	-8.6
July	-6.2	-5.7	-4.8	-5.4	-3.3	-4.3	-3.9	-5.8	-6.4	-5.4	-2.4	-1.3	+2.9	+8.8	+13.3	+14.7	+13.5	+11.3	+7.1	+1.8	-0.9	-4.8	-7.0	-6.7
August	-4.5	-3.4	-3.4	-2.4	-3.0	-3.2	-1.8	-2.8	-3.7	-4.3	-2.0	-1.0	+3.2	+6.8	+12.7	+14.0	+13.8	+8.5	+2.2	-2.9	-5.2	-6.2	-5.9	-5.9
September	-3 6	-3.3	-1.2	-3.0	-1.9	-3.4	-2.2	-1.9	-2.7	+1.9	+3.9	+2.8	+4.6	+6.1	+8.3	+7.1	+5.9	+2.6	-0.4	-3.7	-4.3	-4.7	-3.1	-3.1
October	-4.2	-4.1	-2.0	-2.3	-2.3	-1.8	-1.3	-1.9	+1.7	+4.8	+4.2	+6.8	+5.8	+4.5	+3.3	+2.6	+2.8	+1.9	-0.6	-1.8	-3.1	-3.8	-4.3	-4.6
November	-2.9	-2.4	-0.5	+0.6	+2.2	+2.1	-1.4	+0.1	-0.3	+0.2	+1.8	+5.6	+4.9	+4.6	+1.8	0.0	-0.5	+0.7	-0.9	-2.4	-3.2	-3.4	-3.4	-2.8
December	-2.3	-1.6	-0.2	+1.5	+3.0	+1.5	+1.2	-0.2	-2.0	-2.8	+4.9	+5.9	+5.2	+1.9	+1.8	+0.3	+1.3	+0.5	-1.2	-2.8	-3.3	-4.0	-4.0	-3.6
Year	-4.78	-4.32	-3.20	-2.60	-1.52	-1.82	-1.72	-2.05	-2.05	-0.65	+1.44	+2.72	+4.42	+6.01	+7.33	+7.54	+7.53	+5.20	+1.74	-1.30	-3.12	-4.61	-4.93	-5.18
Winter	-3.52	-3.22	-1.95	-0.50	+0.57	+0.70	-0.58	-0.20	-1.42	-0.30	+3.22	+4.63	+5.15	+3.65	+2.60	+1.78	+2.97	+1.58	-0.05	-1.25	-2.47	-3.60	-3.82	-3.75
Equinox	-5.05	-4.80	-3.40	-3.70	-2.20	-2.80	-1.58	-1.68	-0.40	+1.92	+2.45	+3.43	+3.90	+5.58	+6.88	+7.32	+6.67	+4.75	+1.40	-1.58	-3.15	-4.20	-4.48	-4.98
Summer	-5.78	-4.95	-4.25	-3.60	-2.92	-3.35	-3.00	-4.28	-4.32	-3.58	-1.35	+0.10	+4.22	+8.80	+12.52	+13.52	+12.95	+9.28	+3.88	-1.08	-3.75	-6.02	-6.48	-6.82

VERTICAL INTENSITY (gammas) (All Days)

Table 51 Meanook — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+19	+21	+24	+24	+26	+16	+16	+3	-18	-24	-31	-29	-39	-34	-21	-22	-14	-8	+4	+13	+15	+17	+20	+16
February	+39	+32	+34	+36	+35	+28	+20	-6	-17	-52	-68	-54	-61	-65	-45	-32	-10	+4	+15	+25	+30	+33	+35	+37
March	+8	+16	+14	+6	+13	+16	-3	-4	-3	-20	-16	-27	-40	-14	-28	-9	-2	+6	+7	+17	+22	+25	+19	+8
April	+25	+32	+32	+31	+24	+11	-9	-27	-33	-21	-26	-25	-29	-30	-32	-19	-15	-6	+5	+10	+19	+27	+29	+29
May	+33	+30	+30	+23	+4	-6	-20	-4	-13	-26	-39	-39	-31	-26	-19	-11	-6	-8	-1	+5	+15	+30	+38	+38
June	+44	+40	+29	+23	+23	+15	-3	-12	-22	-41	-29	-6	-29	-38	-28	-35	-26	-15	-3	+1	+10	+24	+35	+39
July	+51	+49	+44	+27	+16	+2	-21	-38	-61	-56	-66	-55	-40	-38	+1	+15	+21	+18	+21	+2	+4	+29	+36	+42
August	+30	+26	+36	+34	+27	+9	-28	-51	-30	-31	-31	-24	-16	-16	-27	-25	-16	-5	+4	+14	+27	+34	+34	+34
September	+45	+48	+33	+21	+7	+6	-23	-42	-29	-44	-39	-37	-27	-35	-41	-32	-17	-1	+9	+20	+33	+42	+50	+47
October	+30	+32	+29	+21	+12	+4	+3	-25	-39	-36	-30	-24	-28	-38	-25	-17	-4	+4	+11	+16	+22	+30	+29	+31
November	+39	+42	+40	+17	+19	+17	+3	-31	-36	-45	-40	-51	-53	-48	-37	-18	+1	+7	+18	+25	+33	+35	+35	+34
December	+40	+39	+40	+39	+28	+15	+7	-34	-40	-50	-42	-54	-59	-49	-32	-14	-1	+13	+21	+21	+24	+26	+30	+33
Year	+33.6	+33.9	+32.1	+25.2	+19.5	+11.1	-4.8	-22.6	-28.4	-37.2	-38.1	-35.4	-37.7	-35.9	-27.8	-18.2	-7.4	+0.8	+9.2	+14.1	+21.2	+29.3	+32.5	+32.3
Winter	+34.2	+33.5	+34.5	+29.0	+27.0	+19.0	+11.5	-17.0	-27.8	-42.8	-45.2	-47.0	-53.0	-49.0	-33.8	-21.5	-6.0	+4.0	+14.5	+21.0	+25.5	+27.8	+30.0	+30.0
Equinox	+27.0	+32.0	+27.0	+19.8	+14.0	+9.2	-8.0	-24.5	-26.0	-30.2	-27.8	-28.2	-31.0	-29.2	-31.5	-19.2	-9.5	+0.8	+8.0	+15.8	+24.0	+31.0	+31.8	+28.6
Summer	+39.5	+36.2	+34.8	+26.8	+17.5	+5.0	-18.0	-26.2	-31.5	-38.5	-41.2	-31.0	-29.0	-29.5	-18.2	-14.0	-6.8	-2.5	+5.2	+5.5	+14.0	+29.2	+35.8	+38.2

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 52 Meanook 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-1	0	+3	+5	+7	+6	+6	+8	+6	+6	+9	+11	+12	+12	+13	+13	+6	-14	-19	-25	-26	-23	-12	-3
February	-4	+5	+7	+9	+10	+9	+6	+5	-6	+7	+10	+11	+11	+11	+7	+8	+6	-5	-12	-19	-25	-24	-18	-8
March	-5	0	+6	+8	+8	+9	+9	+10	+6	+8	+17	+18	+18	+18	+18	+11	+4	-13	-26	-28	-28	-28	-23	-16
April	-4	+1	+4	+7	+7	+8	+9	+10	+14	+15	+15	+16	+12	+12	+15	+10	-4	-17	-25	-23	-23	-20	-19	-18
May	+5	+5	+13	+2	+3	+6	+9	+9	+10	+8	+5	+1	-12	-11	+3	+5	-1	-13	-14	-12	-12	-6	0	-3
June	+15	+13	+13	+18	+7	-1	-1	-2	-2	-4	0	+2	+9	+16	+15	+8	-5	-24	-21	-19	-20	-8	-7	-1
July	+17	+29	+38	+25	+17	+5	-1	+4	-6	-1	+2	-16	-10	-6	0	-5	-3	-15	-24	-31	-27	-14	+7	+14
August	+6	+16	+12	+16	+12	+15	+13	+3	+5	+14	+13	+10	+9	+14	+13	+1	-17	-33	-42	-39	-32	-21	-3	+14
September	+7	+3	+14	+14	+10	+11	+12	+15	+13	-26	-10	+5	+1	-1	-2	0	-11	-16	-19	-18	-12	+1	+5	+1
October	-5	0	+2	+4	+5	+7	+10	+5	+2	+8	+9	+14	+14	+12	+7	+1	-4	-12	-21	-20	-16	-10	-7	-4
November	+5	+6	+4	+8	+13	+10	+6	+5	-1	-2	0	+7	+7	+4	-1	+4	0	-8	-17	-19	-17	-10	-3	0
December	-1	+4	+8	+12	+9	+6	+4	+3	+2	+1	+2	+2	+5	+5	+7	+8	+3	-7	-15	-17	-13	-13	-12	-4
Year	+2.9	+6.8	+10.3	+10.7	+9.0	+7.6	+6.8	+6.2	+3.6	+2.8	+6.0	+6.8	+6.3	+7.2	+7.9	+5.3	-2.2	-14.8	-21.2	-22.5	-20.9	-14.7	-7.7	-2.3
Winter	-0.2	+3.7	+5.5	+8.5	+9.8	+7.8	+5.5	+5.2	+0.2	+3.0	+5.2	+7.8	+8.8	+8.0	+6.5	+8.2	+3.8	-8.5	-15.7	-20.0	-20.2	-17.5	-11.2	-3.8
Equinox	-1.8	+1.0	+6.5	+8.2	+7.5	+8.8	+10.0	+10.0	+8.8	+1.2	+7.8	+13.2	+11.2	+10.2	+9.5	+5.5	-3.8	-14.5	-22.8	-22.2	-19.8	-14.2	-11.0	-9.2
Summer	+10.8	+15.8	+19.0	+15.3	+9.8	+6.2	+5.0	+3.5	+1.8	+4.2	+5.0	-0.7	-1.0	+3.8	+7.8	+2.2	-6.5	-21.3	-25.2	-25.2	-22.8	-12.3	-0.8	+6.0

DECLINATION (minutes) (Quiet Days)

Table 53 Meanook 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-2.9	-2.4	-1.7	-0.8	-0.9	-0.9	-0.9	-0.7	-1.2	-0.8	-0.4	-0.2	-0.3	-0.4	+0.9	+3.7	+6.0	+6.6	+4.5	+2.1	-0.3	-2.6	-3.3	-3.2
February	-2.0	-1.4	-1.5	-1.4	-1.4	-1.6	-1.7	-0.5	-2.4	-0.1	-0.9	-0.6	+0.2	+0.4	+1.4	+4.2	+5.2	+5.1	+4.4	+2.6	-0.6	-1.5	-3.1	-2.5
March	-4.3	-4.3	-4.1	-3.2	-2.8	-2.2	-1.6	-0.9	+0.1	+0.2	+0.7	+0.1	+0.8	+1.9	+4.7	+6.5	+8.1	+7.4	+5.2	+2.5	-0.9	-3.6	-5.3	-5.1
April	-4.8	-4.4	-3.0	-2.8	-2.7	-2.1	-1.7	-1.1	-0.3	+0.4	-0.3	+0.6	+1.3	+3.5	+7.5	+10.2	+10.5	+9.0	+3.2	-1.6	-4.7	-5.1	-5.7	-5.8
May	-5.5	-3.8	-1.8	-1.4	-2.8	-1.6	-1.5	-1.5	-0.8	-0.5	-0.7	+0.1	+2.4	+6.4	+8.0	+9.3	+8.9	+5.8	+2.7	-0.6	-3.0	-5.4	-6.6	-6.4
June	-5.7	-4.4	-2.4	-1.2	-1.7	-2.0	-2.5	-2.6	-2.5	-1.8	-1.5	+1.1	+3.8	+7.2	+9.3	+10.8	+10.5	+9.8	+5.7	-0.2	-3.1	-7.2	-9.4	-10.2
July	-6.0	-3.9	-2.1	-0.6	-2.0	-3.2	-0.6	-1.6	-2.4	-2.1	-1.4	-0.5	+2.8	+6.8	+11.2	+11.7	+11.5	+7.0	+2.8	-2.0	-4.9	-6.5	-6.7	-7.2
August	-4.1	-2.3	-2.6	-2.6	-2.3	-3.0	-0.5	-2.8	-1.6	+0.2	+0.6	+1.4	+4.3	+8.0	+12.0	+13.1	+10.8	+7.3	+2.1	-5.0	-8.2	-9.5	-8.5	-7.0
September	-5.3	-3.5	-2.0	-2.5	-2.4	-2.1	-0.7	+0.2	-0.5	+0.4	+1.2	+1.8	+2.3	+4.7	+7.3	+9.0	+8.8	+6.0	+1.5	-2.2	-3.8	-5.8	-6.8	-5.6
October	-3.2	-3.2	-2.2	-2.0	-1.8	-1.6	-1.3	-1.8	-0.4	+1.5	+1.9	+2.1	+2.0	+2.7	+4.0	+5.6	+5.9	+4.7	+2.0	-1.3	-3.1	-3.6	-3.4	-3.6
November	-3.3	-2.5	-1.7	-0.2	-0.1	+0.3	+0.6	-0.3	-0.8	-0.4	+0.1	+0.3	+1.4	+1.4	+2.0	+3.0	+4.5	+4.6	+3.0	-0.4	-2.2	-3.0	-3.2	-2.9
December	-2.1	-2.2	-1.2	+0.6	0.0	+0.2	0.0	-1.0	-0.8	-0.4	-0.2	+0.3	+0.3	+0.4	+1.2	+2.7	+5.2	+4.0	+2.8	+0.6	-1.7	-2.8	-2.9	-3.1
Year	-4.10	-3.19	-2.19	-1.51	-1.74	-1.64	-1.03	-1.22	-1.13	-0.28	-0.07	+0.54	+1.77	+3.58	+5.79	+7.48	+7.99	+6.44	+3.33	-0.46	-3.04	-4.72	-5.41	-5.22
Winter	-2.58	-2.12	-1.52	-0.45	-0.60	-0.48	-0.50	-0.63	-1.30	-0.42	-0.35	-0.05	+0.40	+0.45	+1.38	+3.40	+5.22	+5.07	+3.68	+1.22	-1.20	-2.48	-3.12	-2.93
Equinox	-4.40	-3.85	-2.82	-2.62	-2.42	-2.00	-1.32	-0.90	-0.28	+0.62	+0.88	+1.15	+1.60	+3.20	+5.88	+7.82	+8.32	+6.78	+2.98	-0.65	-3.12	-4.52	-5.30	-5.03
Summer	-5.32	-3.60	-2.22	-1.45	-2.20	-2.45	-1.28	-2.13	-1.82	-1.05	-0.75	+0.52	+3.32	+7.10	+10.12	+11.22	+10.42	+7.47	+3.32	-1.95	-4.80	-7.15	-7.80	-7.70

VERTICAL INTENSITY (gammas) (Quiet Days)

Table 54 Meanook 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-1	-1	0	-1	-1	-1	-1	-9	-8	-7	-3	-3	-4	-4	-1	0	+3	+5	+6	+7	+5	+4	+6	+5
February	+5	+5	+4	+2	+1	-1	0	-5	+2	-5	-4	-7	-5	-7	-4	-4	-2	-2	+2	+5	+7	+6	+5	+3
March	+10	+7	+7	+6	+5	+5	+2	0	-7	-24	-12	-7	-3	-4	-3	0	+1	+1	+1	+1	+3	+4	+5	+3
April	+14	+12	+8	+4	+5	+4	+4	+1	-2	-7	-13	-7	-3	-12	-8	-5	-2	-3	-2	-2	-2	+3	+5	+6
May	+15	+15	+17	+5	+5	+6	+8	+6	+2	-5	-10	-9	-25	-23	-8	+3	+5	-2	-7	-4	-3	+2	+5	+3
June	+18	+12	+9	+13	+8	+6	+4	+4	0	-3	-6	-1	+1	+1	-2	-5	-11	-16	-19	-20	-13	-2	+9	+15
July	+25	+36	+41	+30	+11	-3	-10	-14	-37	-15	-10	-15	-16	-16	-7	-10	-5	-5	-6	-6	-3	+3	+13	+22
August	+14	+16	+10	+9	+10	+14	+6	-14	-24	-11	-3	+1	0	-1	-2	-2	-6	-10	-13	-7	-3	-2	+4	+11
September	+23	+19	+17	+18	+13	+13	+7	-2	+3	-47	-39	-18	-18	-18	-13	-4	+1	0	+1	+4	+6	+9	+13	+13
October	+6	+6	+5	+5	+5	+8	+16	-2	-13	-6	-4	-3	-3	-2	0	+1	0	-1	-2	-4	-6	-5	-2	+1
November	+12	+15	+15	+14	+15	+11	+1	-4	-9	-12	-17	-11	-7	-8	-12	-10	-5	-4	-2	0	+2	+4	+5	+4
December	+3	+8	+15	+10	+8	+7	+4	-1	-2	-2	-3	-6	-6	-7	-7	-7	-5	-5	-2	0	-1	0	-1	0
Year	+12.0	+12.5	+12.3	+9.6	+7.1	+5.8	+3.4	-3.3	-7.9	-12.0	-10.2	-7.2	-7.4	-8.4	-5.6	-2.6	-2.2	-3.5	-3.6	-2.2	-0.7	+3.2	+5.6	+7.2
Winter	+4.8	+6.8	+8.5	+6.2	+5.8	+4.0	+1.0	-4.8	-4.2	-6.5	-6.8	-6.8	-5.5	-6.5	-6.0	-5.2	-2.2	-1.5	+1.0	+3.0	+3.2	+3.5	+3.8	+3.0
Equinox	+13.2	+11.0	+9.2	+8.2	+7.0	+7.5	+7.2	-0.7	-4.8	-21.0	-16.7	-8.8	-6.8	-9.0	-6.0	-2.0	0.0	-0.8	-0.5	-0.2	+0.2	+2.8	+5.2	+5.8
Summer	+18.0	+19.8	+19.2	+14.3	+8.5	+5.8	+2.0	-4.5	-14.8	-8.5	-7.2	-6.0	-10.0	-9.8	-4.8	-3.5	-4.3	-8.2	-11.2	-9.3	-5.5	+0.2	+7.8	+12.8

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 55 Meanook 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+116	+94	+77	+72	+84	+96	+36	+45	+10	-26	-95	-119	-225	-124	-72	-64	-57	-89	-4	+22	+35	+31	+68	+95
February	+85	+104	+158	+172	+164	+147	+75	-45	+36	+15	-191	-110	-258	-233	-200	-150	-81	-66	-3	+20	+41	+65	+124	+132
March	+263	+189	+130	+169	+144	+88	-20	-56	-13	-138	-174	-343	-287	-211	-305	-273	+16	-33	+17	+63	+123	+194	+242	+214
April	+114	+90	+154	+134	+96	+74	+11	-74	-132	-59	+4	-21	-90	-156	-132	-109	-72	-32	-24	+15	+50	+70	+47	+45
May	+189	+176	+171	+221	+135	+95	-75	-110	-130	-175	-246	-255	-154	-137	-51	-8	-88	-55	+5	+26	+41	+66	+185	+170
June	+156	+144	+132	+105	+116	+121	+101	+62	-193	-229	-225	-203	-151	-174	-178	-153	-76	-15	+52	+53	+84	+136	+189	+147
July	+151	+207	+239	+252	+71	-61	-58	-101	-290	-283	-200	-95	-74	-94	-83	-17	-12	-48	-123	-5	+93	+151	+179	+203
August	+205	+165	+102	+104	+98	+145	-64	-96	-85	-155	-238	-241	-160	-181	-147	-138	-128	+24	+50	+54	+96	+184	+208	+197
September	+199	+269	+279	+122	+112	-72	-136	-122	-318	-242	-199	-246	-175	-138	-104	-114	-14	+48	+67	+88	+106	+150	+166	+172
October	+130	+153	+188	+163	+109	+136	+17	-125	-133	-195	-199	-331	-294	-172	-57	-59	+15	+29	+42	+70	+107	+129	+142	+136
November	+149	+172	+231	+195	+154	+123	+10	-149	-355	-311	-261	-221	-230	-161	-42	-22	+25	+25	+79	+88	+105	+127	+137	+150
December	+148	+164	+157	+158	+131	+122	+39	-37	-239	-265	-219	-176	-116	-138	-162	-88	-36	+49	+12	+66	+98	+104	+105	+121
Year	+158.8	+160.6	+168.2	+163.9	+117.8	+84.0	-5.3	-67.3	-153.5	-171.9	-186.9	-196.8	-184.5	-161.6	-127.8	-99.6	-42.3	-13.6	+14.2	+46.7	+81.6	+117.2	+149.3	+148.5
Winter	+124.5	+133.5	+155.8	+149.2	+133.2	+120.5	+40.0	-46.5	-137.0	-146.8	-191.5	-156.5	-207.2	-169.0	-119.0	-81.0	-37.2	-20.2	+21.0	+49.0	+69.8	+81.8	+108.5	+124.5
Equinox	+176.5	+175.2	+187.8	+172.0	+115.2	+56.5	-32.0	-94.2	-149.0	-158.5	-142.0	-235.3	-211.5	-169.2	-149.5	-138.8	-13.8	+3.0	+25.5	+59.0	+96.5	+135.7	+149.2	+141.8
Summer	+175.2	+173.0	+161.0	+170.5	+105.0	+75.0	-24.0	-61.2	-174.5	-210.5	-227.2	-198.5	-134.6	-146.5	-114.8	-79.0	-76.0	-23.5	-4.0	+32.0	+78.5	+134.2	+190.2	+179.2

DECLINATION (minutes) (Disturbed Days)

Table 56 Meanook 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-5.0	-7.8	-5.0	-3.6	+0.4	+0.2	-0.5	-0.6	-0.5	+4.8	+2.8	+10.2	+6.7	+0.7	+5.8	+1.4	+6.0	-2.7	-4.4	0.0	-0.8	-3.2	-2.6	-3.5
February	-7.0	-7.2	-5.3	-4.1	-7.5	-1.5	-5.4	+6.9	-4.2	-0.2	+2.6	+3.9	+19.5	+12.3	+7.4	+2.5	+7.3	-3.9	-2.0	-2.5	-0.3	-2.7	-3.2	-5.2
March	-4.4	-8.0	-13.1	-17.4	-6.3	-5.5	+1.1	-5.4	-10.8	-4.8	-2.7	+5.3	+14.6	+20.8	+14.9	+5.4	+6.5	+10.3	+4.7	-0.9	+0.6	0.0	+1.8	-6.8
April	-9.9	-9.0	-7.8	-7.7	-3.7	-9.6	-8.7	-5.2	+4.1	+6.9	-0.1	+5.4	+5.2	+11.8	+15.1	+24.6	+14.3	+9.1	+0.7	-4.1	-2.8	-7.5	-11.0	-10.0
May	-4.9	-5.4	-5.4	-4.1	-9.0	-15.0	-14.9	-15.7	-13.5	-8.8	-1.3	+6.2	+2.8	+13.5	+19.0	+22.0	+24.0	+11.0	+2.4	-1.4	-2.8	-1.2	+5.2	-3.1
June	-8.3	-5.8	-4.4	-7.4	-3.2	-0.6	-3.1	-11.4	-13.5	-8.8	-3.8	-0.2	+7.8	+16.3	+17.1	+14.7	+12.6	+6.2	+3.0	+2.6	+1.5	-1.1	-2.6	-7.5
July	-10.0	-11.7	-13.8	-20.8	-14.8	-15.2	-14.0	-15.6	-20.8	-9.5	+0.3	+2.5	+7.0	+19.1	+19.1	+19.3	+14.0	+10.3	+22.1	+19.1	+19.2	+4.2	-4.3	-5.6
August	-10.7	-6.2	-9.5	-13.6	-11.4	-10.6	-8.6	-6.9	-12.0	-11.1	+4.7	+5.6	+4.1	-3.0	+17.8	+20.7	+24.2	+10.0	+9.0	+5.3	+2.6	+4.1	+1.1	-6.0
September	-0.6	-0.1	+5.6	-2.8	-6.4	-12.7	-0.1	-0.2	-21.0	+5.7	+9.1	-1.1	+3.5	+8.7	+10.3	+2.4	+2.0	-1.4	+0.2	-1.7	-2.6	-1.2	+3.7	+0.6
October	-5.3	-6.1	-3.4	-6.2	-10.5	-5.9	-1.7	-3.1	+1.8	+9.8	+15.5	+19.1	+9.9	+13.9	+4.6	-3.1	-2.6	-4.6	-6.4	-3.0	-1.9	-2.3	-3.5	-5.1
November	-4.1	-5.0	+1.3	+0.8	+7.4	+13.6	-6.8	+1.4	-4.2	-1.9	+7.0	+15.6	+9.4	+6.4	+1.5	-6.3	-8.6	-6.7	-4.7	-5.6	-3.9	-1.9	-3.0	-1.7
December	-0.7	-2.6	+0.9	+4.0	+3.3	+5.0	+1.3	-5.9	-1.5	-13.0	+14.4	+21.8	+11.5	+3.4	+2.9	-8.2	-7.7	+0.1	-2.4	-8.2	-4.0	-6.2	-5.0	-3.1
Year	-5.91	-6.24	-4.99	-6.83	-5.14	-4.82	-5.12	-5.14	-8.01	-2.58	+4.04	+7.86	+8.50	+10.32	+11.29	+7.95	+7.67	+3.14	+1.85	-0.03	+0.40	-1.58	-1.95	-4.75
Winter	-4.20	-5.65	-2.02	-0.48	+0.90	+4.32	-2.85	+0.45	-2.60	-2.58	+6.70	+12.88	+11.78	+5.70	+4.40	-2.65	-0.75	-3.30	-3.38	-4.08	-2.25	-3.50	-3.45	-3.38
Equinox	-5.05	-5.80	-4.68	-8.52	-6.72	-8.42	-2.35	-3.48	-6.48	+4.40	+5.44	+7.18	+8.30	+13.80	+11.22	+7.32	+5.05	+3.35	-0.20	-2.42	-1.68	-2.75	-2.25	-5.32
Summer	-8.48	-7.28	-8.28	-11.48	-9.60	-10.35	-10.15	-12.40	-14.95	-9.55	-0.02	+3.52	+5.42	+11.47	+18.27	+19.18	+18.70	+9.38	+9.12	+6.42	+5.12	+1.50	-0.15	-5.55

VERTICAL INTENSITY (gammas) (Disturbed Days)

Table 57 Meanook 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+33	+39	+42	+40	+49	+20	+26	+16	-5	+10	-30	-2	-56	-105	-51	-59	-49	-44	-3	+22	+27	+32	+35	+13
February	+54	+54	+51	+44	+22	+38	-3	-45	+37	+26	-59	-56	-147	-127	-47	-71	-57	-4	+19	+37	+54	+64	+60	+56
March	-36	+4	-24	-75	-37	+12	-52	-14	+52	+39	+17	+10	-77	+18	-134	-31	+29	+70	+49	+72	+66	+57	+23	-35
April	+12	+36	+27	+36	+8	-2	-14	-35	-66	0	-6	-18	+28	-46	-87	-30	-44	-13	+5	+17	+45	+69	+40	+36
May	+56	+80	+42	+41	-49	-84	-134	-11	+53	+59	-1	-32	-30	-55	-49	-24	-15	-27	-6	+3	+18	+52	+60	+51
June	+57	+64	+49	+26	+41	+19	-35	-41	-37	-59	+29	+32	-32	-92	-85	-137	-93	-38	+16	+34	+52	+81	+77	+70
July	-1	+10	-1	-103	-51	-67	-89	-76	-119	-36	-90	-62	-18	-14	+81	+98	+121	+123	+141	+12	-28	+60	+55	+6
August	-39	-49	-17	+22	+45	+36	-63	+6	+20	+9	-38	-1	+69	+16	-63	-66	-61	-6	+22	+35	+57	+72	+16	-2
September	+67	+61	-8	-62	-72	-40	-58	-108	+13	+33	+16	-46	+9	+12	-77	-106	-50	0	+29	+50	+73	+84	+99	+82
October	+54	+50	+20	-19	-34	-45	-13	-97	-76	-3	+46	+50	-4	-105	-80	-75	-21	+3	+24	+52	+75	+80	+59	+58
November	+63	+65	+79	-42	-10	-43	-36	-118	-119	-120	+61	+34	0	-74	-70	-40	-6	+11	+49	+53	+62	+69	+64	+68
December	+88	+79	+65	+55	+29	+3	+1	-63	-49	-77	-68	-152	-118	-101	-74	-48	+15	+69	+77	+44	+53	+61	+56	+56
Year	+34.0	+41.1	+27.1	-3.1	-4.9	-12.8	-36.7	-48.8	-24.7	-9.9	-10.3	-20.2	-31.3	-56.1	-61.3	-49.0	-19.2	+12.0	+35.2	+35.9	+46.2	+65.1	+53.7	+38.2
Winter	+59.5	+59.2	+59.2	+24.2	+22.5	+4.5	-3.0	-52.5	-34.0	-40.2	-24.0	-44.0	-80.2	-101.8	-60.5	-54.5	-24.2	+8.0	+35.5	+39.0	+49.0	+56.5	+53.8	+48.2
Equinox	+24 2	+37.8	+3 8	-30.0	-33.8	-18.8	-34.2	-63.5	-19.2	+17.2	+18.2	-1.0	-11.0	-30.2	-94.5	-60.2	-21.5	+15.0	+26.8	+47.8	+64.8	+72.5	+55.2	+35.2
Summer	+18.2	+26.2	+18.2	-3.6	-3.5	-24.0	-72.8	-30.5	-20.8	-6.8	-25.0	-15.7	-2.8	-36.2	-29.0	-32.2	-12.0	+13.0	+43.2	+21.0	+24.8	+66.2	+52.0	+31.2

THREE-HOUR RANGE INDICES, MEANOOK, 1959

Table 58

January	D	H	Z	K
1	0000 0000	0000 0000	0000 0000	0000 0000
2	0000 1100	0000 1001	0000 0000	0000 1101
3	0031 0120	0031 0000	0021 0000	0031 0120
4	0020 1200	0021 2210	0021 2001	0021 2211
5	0003 4332	1004 5433	0004 4233	1004 5433
6	2233 3432	4325 5432	2133 3321	4335 5432
7	2333 1111	3235 1113	2333 0002	3335 1113
8	2203 2212	2215 1323	3304 2222	3315 2323
9	2002 4542	3113 5545	1003 4445	3113 5545
10	4456 5531	4466 7632	5657 6631	5667 7632
11	3130 1112	4230 2222	3230 2201	4230 2222
12	2100 1221	4100 2322	2100 1100	4100 2322
13	0112 0220	0123 1310	0033 0200	0133 1320
14	0011 1001	0011 0001	0021 1000	0021 1001
15	0332 1000	0354 1000	0243 0000	0354 1000
16	0025 5322	1037 6433	0045 5412	1047 6433
17	1233 3422	2345 5522	2344 5310	2345 5522
18	2312 3322	2434 3322	2334 3311	2434 3322
19	1212 2200	1122 3220	0113 1100	1223 3220
20	0010 1000	0010 2000	0010 0000	0010 2000
21	0011 0100	0010 0100	0010 0000	0011 0100
22	0132 2100	0022 1100	0031 0000	0132 2100
23	0001 2100	1002 2100	0002 1000	1002 2100
24	0010 0000	0010 0000	0000 0000	0010 0000
25	0001 3321	0003 4321	0003 3321	0003 4321
26	0102 8300	0305 6400	0104 6200	0305 8400
27	0021 1100	0122 2100	0032 2000	0132 2100
28	1001 1211	2102 1112	0112 1101	2112 1212
29	0033 1311	0054 2322	0043 2200	0054 2322
30	0133 2010	1224 2100	1224 2000	1234 2110
31	0345 1200	1555 2100	1554 2100	1555 2200

February	D	H	Z	K
1	0223 2200	1134 2300	0145 2100	1245 2300
2	0544 4311	0566 5312	0545 5211	0566 5312
3	1014 3322	1116 4513	1115 4411	1116 4523
4	2324 4432	4435 6544	3335 4322	4435 6544
5	2433 4322	3445 5432	2434 4411	3445 5432
6	1124 3221	3125 4332	2125 4331	3125 4332
7	1111 2210	2112 4220	2112 2010	2112 4220
8	0021 1202	0012 3212	0012 3201	0022 3212
9	2545 3100	4465 4201	3555 3200	4565 4201
10	1000 0101	2000 0102	0000 0000	2000 0102
11	0115 5533	0236 7644	0136 6532	0236 7644
12	1323 2321	2445 3432	1335 4411	2445 4432
13	0012 4432	2115 5442	0004 4421	2115 5442
14	1332 6530	2355 6532	1344 6421	2355 6532
15	1466 4330	2677 6432	1576 5421	2677 6432
16	3431 6533	3654 6645	3742 6543	3754 6645
17	4453 2210	5474 5111	5254 4000	5474 5211
18	0011 1101	0001 0110	0000 0000	0011 1111
19	1222 4200	1233 5411	0233 4300	1233 5411
20	0000 0000	0001 1001	0000 0000	0001 1001
21	0032 0110	0041 1110	0042 0000	0042 1110
22	0313 2301	2434 3312	0344 3201	2444 3312
23	1244 3100	2455 5010	1265 3000	2465 5110
24	0000 1000	0001 1001	0000 0000	0001 1001
25	0255 6732	3366 6643	1366 7831	3366 7843
26	4554 4323	5676 6534	4565 5323	5676 6534
27	2523 3343	3644 5544	2634 4442	3644 5544
28	3424 6442	5636 6645	4434 6523	5636 6645

March	D	H	Z	K
1	3445 3432	4566 6633	3556 5522	4566 6633
2	2526 4232	3556 5433	3545 5322	3556 5433
3	2433 2223	3443 5223	3454 4202	3454 5223
4	1144 3311	3145 5221	2054 3111	3155 5321
5	2342 1211	2353 1212	1353 1001	2353 1212
6	0021 1000	1010 1000	1021 1000	1021 1000
7	0021 1110	0012 1002	0003 1000	0023 1112
8	2210 0100	4430 0100	2220 0000	4430 0100
9	0001 0100	0011 0100	0002 0000	0012 0100
10	0000 0000	0000 0000	0000 0000	0000 0000
11	0002 0020	0002 0001	0013 0000	0013 0021
12	0013 4331	2334 5321	0114 4111	2334 5331
13	0211 2201	1323 4312	0322 3100	1323 4312
14	0032 2100	0022 2101	0022 2000	0032 2101
15	1202 0000	1102 0001	0003 1000	1203 1001
16	0000 0000	0001 0001	0010 0000	0011 0001
17	0030 0200	0000 0101	0000 0000	0000 0201
18	0000 2102	0000 0003	0000 0001	0000 2103
19	0002 1220	0002 1111	0002 0000	0002 1221
20	0010 1010	0010 0000	0010 0000	0010 1010
21	0012 1200	0001 0111	0012 0000	0012 1211
22	0001 1101	0001 0111	0002 0000	0002 1111
23	1122 2220	2301 1211	1232 1000	2332 2221
24	1112 1220	1002 1111	0013 0000	1113 1221
25	0340 3432	2543 3433	0241 2332	2543 3433
26	1015 5444	3137 7556	1016 7435	3137 7556
27	5665 7633	7776 6765	5876 8733	7876 8765
28	1545 6744	3556 6765	0555 7645	3556 7765
29	6556 5421	6665 5532	6666 6421	6666 6553
30	1466 3111	3366 4212	2455 2101	3466 4212
31	2233 2122	2145 4234	1224 4122	2245 4234

April	D	H	Z	K
1	2310 1000	2341 1101	2421 0000	2441 1101
2	0001 1111	0001 1121	0002 1011	0002 1121
3	1213 3100	3225 4102	2224 3001	3225 4102
4	1201 0210	1112 0101	0103 0000	1213 0211
5	0100 0011	2100 0101	1000 1000	2100 1111
6	0001 0200	1002 0111	0002 0000	1002 0211
7	0012 2210	1111 2111	0011 2010	1112 2211
8	3334 4323	4455 6425	3344 5113	4455 6425
9	3545 2233	6756 2354	5655 1142	6756 2354
10	3265 6632	5577 6754	3365 7732	5577 7754
11	1254 2122	2466 4233	1455 2112	2466 4233
12	2011 1000	4313 1103	2113 1001	4313 1103
13	0030 3100	1151 3121	0051 3110	1151 3121
14	1120 1112	2131 2123	1230 1012	2131 2123
15	2000 1130	4110 1221	3120 0010	4121 1231
16	1111 0110	2112 1111	1033 0010	2133 1111
17	0022 3110	0033 3112	0043 3001	0043 3112
18	0000 1110	1001 0110	0000 0000	1001 1110
19	0000 1200	0001 0111	0002 0000	0002 1211
20	0011 2100	0000 1010	0010 2000	0011 2110
21	1214 1100	2216 1100	0215 0000	2216 1100
22	0000 0100	0000 0000	0000 0000	0000 0100
23	0002 3234	0003 3344	0002 3234	0003 3344
24	2233 4301	3234 6432	2224 5312	3234 6432
25	2522 2331	1542 3234	1542 2223	2542 3334
26	1442 1212	3543 2214	2443 2112	3543 2214
27	2333 3211	3454 5214	2444 3103	3454 5214
28	2243 1011	2255 1013	1344 0003	2355 1013
29	2244 3320	4355 4322	3254 4421	4355 4422
30	1141 4230	2261 6331	1251 4431	2261 6431

THREE-HOUR RANGE INDICES, MEANOOK 1959

May	D	H	Z	K	June	D	H	Z	K
1	0323 3120	0345 5111	1443 4111	1445 5111		2122 1221	5223 1222	4223 1013	5223 1223
2	0330 1101	2330 1112	1540 0012	2540 1113		1553 2232	3444 4336	3553 3324	3554 4336
3	0020 2110	1111 1112	1111 1001	1121 2112		3533 2211	5445 3223	4643 4211	5645 4223
4	0113 1123	2115 3227	0014 3224	2125 3225		2444 2332	4455 4335	3344 3334	4455 4335
5	5412 2210	6534 4310	6522 4200	6534 4210		2312 3222	4433 4333	3433 3222	4433 4333
6	0001 0100	2001 1101	0001 1000	2101 1111		1033 2221	3234 4323	1044 3222	3244 4323
7	0001 1101	1011 1113	0001 0002	2001 1113		1311 2111	2312 2332	3323 1111	3323 2322
8	2345 3233	3576 5335	3456 5213	3577 5335		1032 1331	3153 3322	2153 3222	3153 3332
9	2122 2221	3234 4333	2233 3212	3244 4333		1346 3221	4478 6333	2457 4222	4478 6333
10	1134 2322	3257 2333	2145 1212	3246 2333		2433 2111	4545 2323	3445 2322	4545 2323
11	2033 3235	3265 6335	3154 4224	3255 6335		1105 4311	3226 6421	1116 4422	3226 6422
12	5555 5533	6777 7853	5666 7734	6777 7854		1000 1320	1101 1322	2001 0210	2101 1322
13	1255 4222	3276 4333	1265 4223	2266 4333		1000 1111	1101 1122	1000 0001	1101 1122
14	1002 3120	1003 4221	1003 4300	1003 4211		0012 2221	1113 3223	0002 3213	1113 3223
15	1115 3133	3247 4336	2245 4234	3236 4335		0132 2211	1252 1212	2132 2002	2252 2212
16	4554 2222	6776 3234	6665 2123	6776 3234		1212 1111	3321 1123	2222 1021	3322 1123
17	1133 4210	2145 7333	2045 5222	2145 7333		0000 1221	1000 1223	0000 1113	1000 1223
18	3644 2322	3765 2324	3654 2223	3765 2324		1121 1231	2232 3222	1222 2111	2232 3232
19	1204 3222	3315 5223	3315 4123	3315 5223		0312 2220	2222 2112	1223 1001	2323 2222
20	1132 1121	3242 2223	2243 1022	3243 2223		1011 2120	2211 1222	1000 1001	2211 2222
21	1223 1121	3344 2223	2234 2123	3344 2223		1021 2231	2121 2323	2010 1011	2121 2333
22	2233 2222	4365 4434	3333 4424	4365 4434		1033 3231	2235 5223	2234 4102	2235 5231
23	2222 1221	4323 2223	3223 1112	4323 2223		1211 1334	3221 1335	1221 1224	3221 1335
24	2565 4335	4576 6346	4576 4335	4576 6346		3551 1121	6652 2233	7751 2121	7752 2233
25	3244 2221	5355 2323	4355 1121	5355 2323		1101 1121	2211 2123	2101 0013	2211 2123
26	2002 1020	4002 1122	3003 0021	4003 1122		1444 3201	3575 5311	2464 3310	3575 5311
27	3211 1000	3112 2001	3122 1001	3212 2001		0034 3533	1144 5524	0053 3523	1154 5534
28	0110 0000	0101 1101	0000 2000	0111 2101		3455 5332	5476 6524	4565 6432	5576 6534
29	0011 0000	0001 0002	0001 0001	0011 0002		1267 4434	3476 6546	1267 5434	3477 6546
30	0001 1210	1001 2212	0000 1000	1001 2212		3356 6533	4476 5733	3357 6533	4477 6733
31	0222 3332	3322 4435	1233 4434	3333 4435					

July	D	H	Z	K	August	D	H	Z	K
1	2231 1111	2221 2123	3332 1012	3332 2123		1353 3321	4465 5333	3464 5212	4465 5333
2	3652 1220	4664 3311	3663 2200	4664 3321		2552 1231	5762 2332	3641 0211	5762 2332
3	0000 1100	2111 1121	1100 0000	2111 1121		1362 4220	3476 6331	3374 4310	3476 6331
4	0003 2232	1005 4334	0004 3313	1005 4334		1235 4322	2336 6423	1146 4313	2346 6423
5	1443 3221	4555 5233	2444 4122	4555 5233		0021 2221	1111 3222	2031 1110	2131 3222
6	0133 3222	2133 4333	1144 3211	2144 4333		0324 3233	2246 6445	1255 4234	2356 6445
7	1244 3210	3266 3322	2265 3311	3266 3322		3232 3222	5335 3323	4344 3212	5345 3323
8	0334 3231	2355 4323	1355 4312	2355 4333		0334 4212	3246 6313	2145 4202	3346 6313
9	1462 5322	2474 6335	1464 5323	2474 6335		2044 5332	3156 6633	3054 6521	3156 6633
10	3322 0111	5443 1222	3332 0012	5443 1222		1321 2231	4522 3323	3232 2122	4532 3333
11	2331 2434	4532 4646	3422 4435	4532 4646		1431 2110	4541 2322	2531 1200	4541 2322
12	5223 4221	7435 6423	6332 4312	7435 6423		0121 2210	2131 3211	0042 2000	2142 3211
13	0231 3211	3231 3324	2352 3312	3352 3324		0101 1111	2131 3202	0220 0000	2231 3212
14	2433 4221	3466 6322	2454 4321	3466 6322		0111 2120	2111 1222	0012 0000	2112 2222
15	3456 6765	6668 7787	4578 6697	6678 7797		2103 2233	3112 4335	2212 3122	3213 4335
16	5443 3233	6554 3335	5454 3223	6554 3335		3556 8645	5477 7746	2377 8646	5577 8746
17	1345 3777	4546 5898	2445 5876	4546 5898		7666 5533	8788 5745	7777 6634	8788 6745
18	5775 4533	7986 5645	6776 4543	7986 5645		2561 2332	4573 4433	3563 3322	4573 4433
19	5643 3332	5664 4443	5654 4322	5664 4443		1443 2231	4555 2333	3554 1122	4555 2333
20	2245 3333	3356 4424	3354 2213	3356 4434		1443 2232	3565 4244	3543 3013	3565 4244
21	2331 3232	3343 4333	3343 4222	3343 4333		2355 3333	3577 3455	3546 3234	3577 3455
22	2131 2222	3252 3323	2241 2213	3252 3323		3331 2332	5563 2344	3562 1233	5563 2344
23	3432 2122	6433 3113	4433 3101	6433 3123		3353 3333	4464 5444	3354 4323	4464 5444
24	1034 3343	2236 3445	2135 2233	2236 3445		2463 2222	4574 3333	3364 2222	4574 3333
25	3444 3343	5666 4455	3556 3333	5666 4455		2433 3221	3344 3323	2344 3201	3344 3323
26	4353 3433	6576 4445	4365 3343	6576 4445		2252 0211	3162 1222	2253 0110	3263 1222
27	3354 3234	5476 3334	4365 3233	5476 3334		1029 0010	2110 0011	2020 0000	2120 0011
28	3133 3221	4335 3323	3235 4112	4335 4323		0020 0000	0010 0001	0000 0000	0020 0001
29	2441 2220	2434 3312	2543 3100	2544 3322		0112 3422	3112 3422	1011 2311	3112 3422
30	1001 1110	2101 1112	1101 0000	2101 1112		1112 3211	2114 4322	1023 3211	2114 4322
31	0434 2132	2446 4324	1435 3022	2446 4334		0124 2211	2136 5222	1034 4111	2136 5222

THREE-HOUR RANGE INDICES, MEANOOK 1959

September	D	H	Z	K
1	3344 3321	3356 3533	3334 4432	3356 4533
2	3575 2222	4676 2344	3676 1233	4676 2344
3	2244 2244	3266 3444	3155 3224	3266 3444
4	4676 4543	6686 6745	5775 5634	6686 6745
5	4344 3333	5366 5445	4365 4223	5366 5445
6	3342 2310	6453 3422	4353 2200	6453 3422
7	0111 1211	1112 2322	0003 2001	1112 2322
8	0032 2220	2134 2221	0044 3200	2134 2221
9	0001 0100	2101 1212	0002 0000	2102 1212
10	0000 0221	2100 1223	0000 0001	2100 1223
11	0323 3221	1445 5322	2334 4202	2445 5322
12	3322 2210	5233 2322	3333 2210	5333 2322
13	0010 1011	2011 1023	1021 0003	2021 1023
14	2341 2211	3454 4423	2353 3201	3454 4423
15	1032 2331	2142 3323	2042 2122	2142 3333
16	2420 2211	4521 3312	3421 1200	4521 3312
17	0324 2333	2325 3344	0234 2213	2335 3344
18	2124 2332	3237 4444	2246 3223	3247 4444
19	3414 3111	6744 5222	5733 4000	6744 5222
20	1466 6643	1567 6644	0567 6543	1567 6644
21	4665 5544	5776 7655	4666 5543	5776 7655
22	4576 4420	6686 6642	6586 5421	6686 6642
23	0343 3322	2365 3434	1353 3333	2365 3434
24	3432 5221	4554 7323	3544 6322	4554 7323
25	4555 4432	6665 5434	4556 5523	6666 5534
26	2254 4220	4366 7233	3354 4112	4366 7233
27	1155 5311	3366 5423	2265 4412	3366 5423
28	2153 2221	2174 3232	2154 2121	2174 3232
29	2113 2100	2124 3212	2015 2100	2125 3212
30	1014 3220	2015 4312	1014 3211	2015 4322
31				

October	D	H	Z	K
1	2577 5222	3688 6433	3676 6323	3688 6433
2	1454 2220	3576 2222	2455 2100	3576 2222
3	0242 3433	1365 4455	0354 3443	1365 4455
4	4655 6221	5776 7333	5677 6222	5777 7333
5	3313 4332	5545 5443	3334 4333	5545 5443
6	4546 4332	6766 6433	5666 5321	6766 6433
7	2332 2122	3424 3122	2433 2012	3434 3122
8	2213 0100	2213 1111	1104 0000	2214 1111
9	0030 0000	1031 0011	0031 0000	1031 0011
10	0020 0100	0011 0100	0021 0000	0021 0100
11	0010 0000	0010 0001	0010 0000	0010 0001
12	0000 1221	1000 1212	0000 0000	1000 1222
13	0000 0111	0001 1111	0010 0000	0011 1111
14	0023 3221	1114 3222	0013 3111	1124 3222
15	2212 3211	2213 3221	1223 3212	2223 3222
16	1000 0000	1100 0020	0000 0000	1100 0020
17	0023 2322	0146 3233	0045 3112	0146 3333
18	3246 4322	6377 5434	4366 4322	6377 5434
19	2422 1110	3534 2132	2524 1011	3534 2132
20	1051 0000	2162 1000	0052 1000	2162 1000
21	0010 1211	1010 0212	0000 0000	1010 1212
22	0245 5312	2256 5422	0255 6312	2256 6422
23	2235 1000	3246 1000	2235 2000	3246 2000
24	0021 2211	0042 4112	0032 3001	0042 4212
25	2334 4221	3456 6222	2345 4211	3456 6222
26	1265 5421	2366 6532	2257 4421	2367 6532
27	1434 2210	2455 3210	1544 3200	2555 3210
28	0020 0000	0041 1010	0042 0000	0042 1010
29	0221 0001	0111 2002	0211 2001	0221 2002
30	3201 2222	4422 3224	3311 2123	4422 3224
31	2026 6432	2146 6543	2136 6533	2146 6543

November	D	H	Z	K
1	3577 7311	4487 7533	3576 7422	4587 7533
2	2476 7443	4585 7655	3577 7433	4587 7655
3	4455 3443	5577 5544	4666 4433	5677 5544
4	1356 5543	3377 6544	1256 6443	3377 6544
5	2665 3330	4676 4432	4664 4321	4676 4432
6	3434 2221	3336 4223	3345 4212	3446 4223
7	0321 0110	1230 1122	0221 1011	1331 1122
8	0343 3210	1354 4321	0354 2200	1354 4321
9	0000 1121	0100 1212	0000 0010	0100 1222
10	1121 2112	1112 3122	0101 3011	1122 3122
11	1001 0011	1112 0011	1003 0000	1113 0011
12	0100 0120	1001 0111	0101 0000	1101 0121
13	0112 2212	1123 2212	0013 2001	1123 2212
14	2244 3321	3366 6432	3355 4421	3366 6432
15	0000 1000	2111 1000	1101 0000	2111 1000
16	0001 1211	0001 2311	0001 0110	0001 2311
17	1413 4000	1314 5000	2325 4000	2425 5000
18	1122 2231	0133 2332	0222 2222	1233 2332
19	1143 3210	2265 3311	0154 2200	2265 3311
20	1021 0000	1021 0000	0031 0000	1031 0000
21	0123 6421	0135 5522	0124 5521	0135 6522
22	1222 3221	2345 5121	3244 3011	3345 5221
23	4566 5321	6676 6531	5666 5321	6676 6531
24	0120 1100	1120 3210	0020 2000	1120 3210
25	0023 4100	0044 5100	0034 5100	0044 5100
26	0246 3211	1256 4212	1256 4001	1256 4212
27	1121 1222	2141 1125	2031 1014	2141 1225
28	5666 4321	7878 5532	6667 5322	7878 5532
29	2215 4210	2225 5421	2125 5211	2225 5421
30	0156 6432	1177 7644	0167 7532	1177 7644
31				

December	D	H	Z	K
1	2456 5321	4567 7432	3467 6320	4567 7432
2	0455 5432	2467 5533	1566 5432	2567 5533
3	3377 7332	3477 7643	3466 6533	3477 7643
4	2332 1211	2344 3211	2254 2100	2354 3211
5	0036 7743	0066 7774	0056 7653	0066 7774
6	1443 2220	3344 3322	2443 2110	3444 3322
7	2000 1200	1200 2110	2100 1100	2200 2210
8	0021 0211	1011 0111	0012 0000	0122 0211
9	0132 1200	1032 2101	0021 1000	1132 2201
10	0100 0110	0100 0010	0100 0000	0100 0110
11	0000 0200	0001 0200	0100 0000	0001 0200
12	1322 2201	1253 3112	1243 3001	1353 3212
13	4210 0213	3222 1223	3322 0014	4322 1224
14	3565 5431	3577 6533	3566 5431	3577 6533
15	1654 3221	3665 5333	2645 3221	3665 5333
16	1233 3201	2245 5312	1244 4202	2245 5312
17	0032 2000	2033 3011	0033 2000	2033 3011
18	0043 3210	0035 5311	0043 5200	0045 5311
19	1345 4210	1456 7310	1356 5300	1456 7310
20	0102 1100	0102 1111	0002 2000	0102 2111
21	0120 0110	0010 0100	0010 0000	0120 0110
22	1000 1210	0000 1112	0000 0000	1000 1212
23	1142 2542	2242 2443	1142 2441	2242 2543
24	2045 3121	3166 5211	2055 5100	3166 5221
25	0223 1110	1134 2110	0234 2100	1234 2110
26	1334 5322	2336 6533	1235 4322	2336 6533
27	2436 4332	3557 5543	3446 5433	3557 5543
28	3544 5542	3656 6653	3655 5532	3656 6653
29	2343 3210	3265 5310	2264 4200	3365 5310
30	0233 3320	1245 4320	0135 5210	1245 5320
31	0032 1110	1133 2111	0043 1100	1143 2111

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 1 Meanook — H = 12,000 γ + — January 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	999	1004	1005	1010	1005	995	997	996	990	982	982	1004	1003	989	996	1000	992	983	975	974	982	987	992	997	993
2 Q	1000	1000	1003	1003	997	1004	1000	996	990	989	989	982	982	1004	1007	1001	994	993	981	967	973	982	989	989	992
3	988	993	996	990	989	998	993	997	988	995	1003	1003	990	958	976	992	991	990	977	972	972	980	988	999	988
4	998	1003	1003	1010	1007	1007	1010	1007	997	995	1052	1019	1005	1010	1009	1019	1017	1003	992	988	992	994	1003	1005	1006
5	1007	1007	1027	1121	1170	1123	1041	1003	841	676	728	605	642	675	837	980	1007	988	977	981	989	990	991	982	933
6	1005	1006	1029	1082	1061	1014	1008	1005	1003	1003	1003	1003	1002	1002	998	988	1003	994	990	985	980	983	988	994	1005
7	1003	1008	1013	1013	1018	1021	1019	999	1010	1008	988	957	1013	1017	1017	1017	1012	1000	997	988	984	982	988	995	1003
8	1004	1005	1013	1013	1017	1017	1011	1008	1006	1004	1004	1003	1007	1012	1013	1017	1011	1006	997	989	981	981	993	1002	1005
9 Q	1007	1012	1017	1011	1010	1007	1004	1003	1002	1003	1005	1010	1016	1016	1019	1018	1008	1001	993	988	988	992	1000	1008	1006
10 D	1013	1019	1021	1021	1028	1032	1032	1061	993	823	435	650	708	673	727	950	854	959	983	981	944	1005	995	994	913
11 D	1001	996	1004	1032	1024	1017	999	974	561	677	769	750	814	786	840	979	986	1004	992	989	980	981	993	992	923
12	991	990	1004	1002	1000	1006	1000	952	1003	1003	987	967	917	936	975	990	1012	987	981	980	973	990	998	996	985
13	1012	998	995	993	1003	996	993	993	965	941	899	933	987	988	997	1010	1010	1000	991	977	988	996	1006	1004	986
14 D	1025	1086	1119	1067	1064	1036	1026	980	698	614	526	578	877	1024	1013	1013	999	995	973	924	938	981	1073	1264	954
15 D	996	1315	1504	1335	1093	1012	995	985	930	958	977	905	909	973	981	956	951	966	965	957	966	970	978	981	1023
16	989	990	990	987	981	988	988	988	988	991	990	989	983	981	1000	996	991	981	973	972	972	984	981	977	985
17	990	1003	992	993	993	987	988	965	951	975	982	1011	1011	999	1013	1004	1005	1001	992	988	993	1000	1011	1010	994
18	1011	1010	1013	1010	1007	1004	1003	1004	682	670	528	644	669	996	1028	1013	996	981	975	981	992	996	994	995	925
19	990	1003	1005	999	992	989	991	989	987	920	986	999	989	978	988	989	996	988	981	981	976	982	996	1002	987
20	1007	1012	1017	1028	1021	1017	1010	1029	1022	998	901	676	994	1027	1010	965	928	1008	989	995	998	999	996	1006	985
21 D	1014	1178	1169	1125	1119	1019	1000	937	799	714	741	427	578	995	988	1001	962	908	917	955	1007	1021	995	1009	941
22	1021	1019	1032	1013	1008	1003	988	967	901	900	540	814	1004	1003	1004	995	993	984	984	976	988	985	995	992	963
23	1003	999	1006	1005	1000	1011	978	979	930	971	958	962	897	842	954	999	1013	988	985	969	966	988	987	993	974
24	996	1005	995	1012	1011	999	997	965	973	917	940	980	1003	963	981	1008	1009	988	989	991	987	977	986	989	986
25	994	988	991	997	1003	996	996	998	987	973	972	992	1004	1003	977	1012	1013	995	995	996	988	988	988	990	993
26	996	1000	1005	998	1005	1006	1003	1011	996	973	1001	1010	1010	1003	1012	1010	997	992	981	971	973	969	977	989	995
27	1003	1002	1003	999	1005	1018	1005	1003	997	987	942	999	1011	1007	1012	1007	1004	997	986	981	985	989	993	995	997
28	1003	1003	996	1003	1004	1004	1006	1005	999	1004	1011	1009	1003	994	1004	1009	1003	996	985	988	988	997	1004	1003	1001
29	1005	1010	1023	1013	1021	1024	1019	1021	1017	989	972	851	966	1010	1016	1011	999	992	988	988	997	1004	1001	1001	997
30 Q	1007	1012	1013	1013	1012	1012	1011	1011	1011	1011	1011	1013	1014	1014	1012	1008	997	982	978	981	986	995	1002	1005	1005
31 Q	1007	1009	1014	1016	1015	1015	1012	1012	1012	1013	1017	1020	1023	1023	1021	1014	1002	999	994	994	997	998	1002	1007	1010
Mean	1004	1023	1034	1030	1023	1013	1005	996	944	926	899	897	937	966	983	1000	993	990	983	980	982	990	997	1006	983

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 2 Meanook D = 24° E + January 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	9.8	10.9	12.0	11.4	10.7	14.6	9.9	9.2	7.6	7.0	7.3	12.7	12.8	9.5	13.9	15.4	15.4	14.2	11.2	8.3	6.9	7.3	8.3	9.3	10.6
2 Q	9.5	10.2	11.3	12.0	12.4	17.1	9.5	7.7	8.5	8.4	8.7	8.9	9.5	14.0	14.3	13.9	12.6	11.6	9.8	5.2	4.6	5.2	7.1	8.3	10.0
3	9.4	10.3	12.6	14.2	14.5	13.2	12.2	10.4	11.4	8.8	9.3	11.5	11.5	7.4	14.5	18.1	17.3	16.2	14.1	12.4	8.7	7.1	7.4	7.1	11.6
4	6.6	7.5	8.1	10.2	12.2	13.2	11.4	10.8	7.7	12.5	11.0	15.4	19.0	19.3	19.2	17.2	15.4	15.1	14.1	11.4	8.4	7.9	7.6	7.4	12.0
5	6.5	8.0	6.7	5.7	10.7	13.6	7.5	5.1	12.9	15.0	23.2	37.4	31.7	40.4	19.1	27.8	18.6	17.1	13.1	9.6	6.7	5.2	4.6	3.1	14.6
6	3.5	6.9	8.5	8.2	9.1	11.3	10.4	9.5	10.8	11.2	12.9	12.9	12.4	12.7	13.5	13.3	15.5	15.9	15.6	14.6	12.3	8.3	7.5	7.4	11.0
7	7.6	8.6	9.7	10.5	10.5	10.7	10.7	11.3	13.3	13.2	13.4	13.4	12.3	14.3	14.0	15.7	17.3	18.3	15.4	13.3	10.5	8.4	9.2	7.4	12.0
8	5.7	6.7	6.5	9.6	10.5	11.6	11.2	10.4	10.5	10.6	11.0	10.4	10.4	11.2	11.8	12.9	15.2	15.1	15.2	14.4	12.0	7.9	7.4	6.1	10.6
9 Q	5.6	7.7	9.1	10.4	11.7	10.9	11.5	11.6	11.5	12.7	12.5	11.2	11.1	12.4	13.7	13.6	16.0	16.0	15.6	13.2	10.2	7.5	6.9	7.3	11.2
10 D	8.0	9.4	11.4	11.0	11.4	9.5	9.2	3.5	10.2	18.4	26.2	38.0	49.8	26.3	7.4	15.2	9.6	-1.1	7.6	8.6	13.5	7.9	3.1	6.7	13.3
11 D	8.4	8.0	12.4	17.8	7.7	16.9	10.5	11.7	14.5	16.5	19.1	2.2	9.6	24.4	17.0	8.3	1.1	11.0	10.5	10.3	8.6	7.9	8.3	8.5	11.3
12	7.3	8.4	10.4	9.7	9.5	9.4	3.9	-9.0	15.2	12.8	13.3	10.7	6.2	11.3	12.6	17.0	11.7	7.3	9.2	9.5	7.1	5.1	7.1	7.9	8.9
13	8.0	9.8	11.1	13.8	11.5	9.5	9.6	10.5	11.1	9.6	10.4	9.5	12.9	15.0	15.2	13.2	9.4	9.2	9.4	6.3	4.1	7.5	6.1	7.6	10.0
14 D	9.6	17.2	18.4	11.1	7.4	8.4	8.7	8.0	19.4	31.1	32.4	43.3	27.3	17.0	18.2	15.9	14.4	13.2	18.2	16.9	2.8	12.4	15.4	23.6	17.1
15 D	13.4	15.6	3.6	11.6	16.1	9.5	7.8	7.0	10.4	10.5	14.1	16.7	16.8	16.2	17.7	14.9	9.8	9.9	10.5	11.8	10.5	10.5	11.1	10.7	11.9
16	10.0	10.6	11.4	11.8	13.6	11.6	11.3	9.4	10.5	11.0	11.2	10.7	10.2	10.1	12.3	14.3	15.4	15.0	14.0	13.8	11.4	8.5	8.2	7.5	11.4
17	9.3	10.6	11.3	12.3	11.5	17.2	10.4	10.5	10.1	10.4	12.4	13.0	10.7	19.0	20.1	17.1	14.8	17.5	15.5	14.5	10.6	8.4	7.4	7.8	12.6
18	8.5	9.3	10.4	10.7	10.4	10.5	9.4	12.7	-1.4	41.0	16.2	12.7	19.6	17.8	18.1	16.8	16.6	15.5	9.5	7.5	7.0	6.6	7.7	7.8	12.5
19	8.8	6.0	10.3	11.6	12.4	10.5	11.1	9.0	10.4	2.4	10.9	11.7	12.9	12.1	11.3	14.5	12.9	15.4	13.5	13.4	11.3	10.0	8.3	7.3	10.7
20	7.2	7.6	9.3	8.3	8.6	8.6	11.7	9.6	11.5	11.4	14.3	9.5	27.0	15.5	16.9	19.3	10.2	8.3	8.4	9.7	8.4	6.8	8.4	8.3	11.0
21 D	7.9	10.7	17.0	15.3	15.0	10.2	16.0	17.6	11.5	5.7	10.0	63.5	20.1	15.0	17.7	17.6	10.7	9.0	-0.4	10.0	6.1	8.3	7.3	5.7	13.6
22	9.8	8.5	13.1	10.5	17.8	13.0	11.4	10.8	16.4	13.1	15.1	7.6	16.0	14.5	12.9	14.7	15.3	14.1	13.3	11.4	9.3	7.6	7.3	8.4	12.2
23	8.3	9.7	11.2	10.4	13.2	16.8	10.4	8.9	8.8	11.2	12.4	22.5	9.2	4.8	11.0	8.7	13.3	9.6	7.4	10.1	11.2	8.2	9.4	10.8	10.7
24	10.3	10.2	14.3	13.1	14.5	15.3	10.2	4.3	14.1	10.9	7.8	19.6	16.6	10.7	3.9	8.9	10.9	8.3	9.2	9.2	12.0	11.8	10.0	9.4	11.1
25	8.7	10.0	13.1	11.4	12.5	10.4	8.4	8.8	9.9	10.4	11.3	11.5	11.2	9.9	2.5	9.4	13.2	12.5	10.4	9.4	10.3	9.4	9.4	9.4	10.1
26	9.4	8.8	8.8	10.3	15.8	8.9	11.3	9.9	8.8	8.9	15.2	12.1	11.1	8.1	10.1	11.4	12.5	11.4	11.3	11.0	8.5	8.2	8.3	8.8	10.4
27	7.9	10.4	11.4	11.2	11.1	13.5	8.6	9.3	9.4	8.3	5.8	12.3	12.2	11.6	11.5	12.0	13.2	13.4	13.1	11.3	10.0	8.8	8.4	9.4	10.6
28	8.3	9.0	10.3	9.9	10.1	9.8	9.7	10.3	9.7	9.8	12.3	11.6	11.5	7.6	9.5	14.0	13.4	12.7	11.3	10.4	8.1	7.4	8.2	9.4	10.2
29	9.3	8.8	7.5	6.8	7.4	8.2	9.8	10.3	9.2	9.4	14.1	0.9	10.7	18.2	16.0	15.8	14.3	13.8	12.3	11.3	9.3	7.3	8.2	8.4	10.3
30 Q	9.1	9.3	9.5	10.1	10.1	9.8	9.4	9.0	8.8	8.9	9.3	9.6	10.3	10.7	11.2	13.4	15.2	14.6	12.2	9.7	8.2	8.1	8.3	8.8	10.2
31 Q	9.2	9.2	9.3	9.7	9.6	9.1	9.3	8.9	9.0	9.1	9.5	10.4	11.3	11.5	12.3	12.3	10.1	9.4	9.8	8.9	8.4	8.8	8.5	8.3	9.7
Mean	8.4	9.5	10.6	11.0	11.6	11.7	10.1	8.9	10.7	12.3	13.3	15.9	15.3	14.5	13.5	14.6	13.3	12.6	11.6	10.9	8.9	8.1	8.1	8.5	11.4

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 Meanook $Z = 58,000\ \gamma +$ January 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	791	792	792	789	789	792	791	771	769	760	753	765	777	771	771	780	783	788	793	793	793	793	794	793	783
2 Q	788	788	788	788	788	782	782	778	778	770	771	756	720	760	781	783	771	771	779	781	785	792	793	793	778
3	794	800	805	805	805	803	777	767	768	781	793	791	771	738	729	742	742	760	779	782	786	791	792	792	779
4	791	797	812	818	822	812	802	799	791	791	813	764	786	793	793	792	793	792	786	787	791	791	791	791	796
5	792	797	822	864	824	808	806	778	823	790	815	813	964	793	713	757	790	796	799	802	797	795	791	797	805
6	803	801	810	846	836	807	793	789	790	792	794	794	793	793	791	792	797	796	801	802	803	808	802	797	801
7	796	801	803	804	804	807	806	790	803	798	780	707	769	795	803	802	802	799	801	801	801	803	801	802	795
8	802	802	807	814	809	801	796	792	792	791	789	782	783	791	791	792	791	791	792	791	791	793	793	790	794
9 Q	794	796	796	798	793	792	793	788	788	782	772	769	781	783	783	784	786	789	788	788	788	789	788	786	787
10 D	785	786	785	786	786	788	793	806	756	837	815	644	647	730	623	700	730	796	779	782	810	856	839	815	770
11 D	792	799	801	827	825	818	756	780	612	623	656	674	647	531	703	762	744	767	780	780	782	788	788	789	743
12	796	802	796	797	799	799	755	702	762	783	771	740	692	692	743	762	788	765	770	788	789	813	812	793	771
13	804	800	801	800	794	789	784	770	754	725	681	710	747	754	756	752	755	766	777	789	814	823	829	813	774
14 D	805	897	936	886	858	845	804	740	606	886	817	728	644	766	772	773	780	777	778	780	787	826	847	817	798
15 D	829	789	600	753	826	804	792	798	804	798	794	774	743	779	782	770	784	778	787	796	799	799	799	798	782
16	798	795	798	798	796	789	787	784	784	786	784	783	778	776	786	787	786	786	786	787	788	793	794	804	789
17	804	805	803	796	793	792	763	712	678	753	761	784	778	753	756	769	770	773	775	775	773	776	776	776	771
18	776	776	776	776	776	776	774	773	726	621	929	874	663	713	756	772	776	777	777	777	779	787	789	789	771
19	804	814	805	792	787	783	778	768	765	723	753	774	772	764	770	765	766	776	787	787	787	787	787	779	778
20	778	779	779	787	782	799	799	800	776	778	695	629	740	773	765	731	676	731	760	780	788	789	783	781	762
21 D	790	853	864	843	835	805	788	767	696	690	586	617	703	738	740	781	751	765	799	839	844	848	832	868	777
22	846	834	836	816	822	805	790	745	584	653	610	685	761	751	783	771	787	793	797	796	804	800	797	792	769
23	804	800	803	809	818	820	792	799	723	757	728	734	695	652	724	754	778	793	796	803	819	830	831	815	778
24	814	814	822	799	816	808	778	757	747	724	647	711	754	734	775	782	787	788	799	800	808	801	804	800	778
25	795	793	799	799	800	776	757	778	760	743	730	764	771	767	750	773	782	782	797	799	797	797	796	794	779
26	790	790	790	791	797	790	790	787	766	717	747	777	776	775	778	782	782	782	787	788	788	789	789	791	781
27	797	799	799	799	817	804	792	789	777	756	689	744	777	778	782	782	779	780	787	790	791	791	789	789	782
28	789	789	790	789	789	789	788	788	777	771	770	774	770	766	776	782	782	781	782	788	788	788	788	788	783
29	788	785	790	808	833	830	819	808	801	773	756	630	684	719	760	777	782	780	787	788	788	788	788	785	777
30 Q	784	782	782	782	782	782	782	781	781	780	780	779	779	778	778	778	779	781	782	784	784	780	780	779	781
31 Q	778	777	777	777	777	777	776	776	776	775	772	770	768	768	769	772	769	769	772	778	776	774	774	774	774
Mean	797	801	799	804	806	799	786	776	752	758	753	743	749	751	762	771	773	780	786	790	794	799	799	796	780

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 4 Meanook — January 1960

Day	Horizontal Intensity							Declination							Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 Q	03	32	1014	10	16	969	45	05	39	20.6	10	24	3.8	16.8	05	53	800	10	44	742	58
2 Q	13	37	1013	19	51	963	50	05	30	20.5	20	58	3.6	16.9	00	01	794	12	14	706	88
3	07	44	1010	13	40	945	65	15	10	21.2	13	47	4.4	16.8	04	00	807	14	19	716	91
4	10	51	1108	09	41	957	151	11	52	24.0	10	52	0.4	23.6	10	39	844	11	09	705	139
5	05	11	1231	13	00	373	858	13	10	66.3	07	49	-20.0	86.3	12	23	1079	14	26	646	433
6	03	25	1130	15	49	963	167	04	05	24.9	04	34	-10.7	35.6	03	25	876	04	18	768	108
7	12	48	1029	11	03	934	95	17	26	22.1	23	55	5.5	16.6	06	56	812	11	34	683	129
8	05	42	1020	21	02	974	46	17	02	18.7	00	34	4.9	13.8	03	21	819	12	10	781	38
9 Q	14	56	1026	20	08	985	41	17	09	17.5	00	17	5.1	12.4	03	35	800	10	33	763	37
10 D	07	22	1233	10	29	070	1163	12	08	105.8	18	07	-28.0	133.8	10	32	1025	12	26	484	541
11 D	03	57	1078	08	44	246	832	08	51	61.6	11	43	-17.3	78.9	03	18	864	08	37	418	446
12	15	45	1052	13	15	860	192	15	07	25.5	07	32	-24.7	50.2	21	55	832	13	18	625	207
13	00	08	1035	10	14	855	180	14	16	17.0	20	40	-3.4	20.4	22	23	839	10	15	650	189
14 D	23	24	1413	09	14	382	1031	11	27	89.8	20	16	-6.8	96.6	02	56	1054	08	04	508	546
15 D	02	07	1655	12	07	769	886	01	42	37.9	02	00	-41.1	79.0	01	09	882	02	45	470	412
16	22	26	1019	22	37	956	63	17	09	18.2	22	25	3.1	15.1	23	51	818	13	30	773	45
17	13	50	1056	08	46	915	141	14	06	28.0	13	40	1.1	26.9	01	56	814	08	40	634	180
18	07	35	1117	12	09	327	790	10	16	116.3	08	27	-24.2	140.5	10	36	1064	12	46	522	542
19	02	05	1017	09	40	866	151	17	00	21.2	09	34	-4.4	25.6	01	36	820	09	39	658	162
20	07	46	1093	11	12	530	563	11	55	42.6	11	16	-10.6	53.2	07	40	828	11	10	519	309
21 D	11	45	1479	12	10	148	1331	11	36	101.1	12	35	-25.1	126.2	11	54	920	10	50	474	446
22	01	20	1093	11	34	154	939	10	33	56.2	10	55	-37.6	93.8	00	06	887	10	30	453	434
23	14	47	1059	13	31	734	325	11	45	27.3	13	39	-10.2	37.5	21	32	854	13	33	573	281
24	03	08	1065	09	45	807	258	03	02	36.0	14	32	-4.8	40.8	02	55	864	10	29	571	293
25	15	49	1041	09	32	919	122	17	30	19.5	06	09	-1.8	21.3	18	31	805	09	35	700	105
26	14	46	1021	09	52	950	71	04	43	19.1	13	15	5.4	13.7	04	25	805	09	35	693	112
27	05	44	1028	10	16	915	113	05	09	19.7	10	24	1.4	18.3	04	48	827	10	39	663	164
28	09	40	1021	20	19	980	41	15	44	17.2	13	19	5.4	11.8	02	48	794	13	36	753	41
29	02	10	1043	11	20	796	247	13	05	22.6	11	22	-5.3	27.9	04	40	843	11	40	578	265
30 Q	11	25	1018	18	10	976	42	16	16	16.6	21	06	7.2	9.4	19	45	788	14	48	775	13
31 Q	12	49	1026	17	40	990	36	15	28	13.7	17	54	5.4	8.3	00	01	780	18	05	768	12
Mean			1105			749	356			37.0			-7.1	44.1			859			638	221
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 5 Meanook — H = 12,000 γ + — February 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1011	1012	1012	1011	1003	1006	1006	1000	955	945	921	929	930	929	1011	1007	998	988	984	988	999	1006	1003	1007	986
2	1009	1008	1016	1017	1015	1021	1024	1017	1017	1014	1009	1003	1023	1015	1004	1008	986	966	929	954	1023	1024	997	996	1004
3	985	994	1001	1017	1021	1025	1025	1008	1019	985	992	977	829	960	976	930	947	954	976	977	973	980	1001	1015	982
4	1025	1043	1024	1009	1021	1056	1017	1029	998	991	963	926	774	1010	1011	996	983	945	938	969	989	963	969	988	993
5	988	993	995	997	1001	1007	1024	1026	997	1007	883	454	791	900	954	916	986	996	970	964	981	990	997	986	950
6	1018	1037	1083	1124	1116	1111	1132	1024	967	1008	1002	959	907	954	986	993	989	1001	987	975	978	985	994	1008	1014
7 Q	1003	1001	1008	1008	1004	1006	1009	999	985	973	1012	1009	1004	1008	1008	1008	1006	998	993	990	990	993	1000	999	1001
8	1002	1008	1012	1010	1017	1016	1027	1034	1012	986	978	867	797	1008	1017	1012	985	986	993	986	991	997	1001	1010	989
9 Q	1015	1006	1002	1012	1012	1008	1008	1008	1011	1012	1013	1015	1020	1019	1017	1017	1012	1001	994	992	990	993	1001	1008	1008
10 Q	1015	1017	1014	1008	1001	1016	1020	1009	1009	1008	1004	1004	1006	1020	1015	1015	1009	1003	993	993	997	1001	1006	1007	1008
11	1008	1011	1011	1011	1011	1011	1010	1012	1013	1018	1018	1016	1013	1020	1020	1014	1009	981	958	986	974	971	985	1020	1004
12	1010	996	1001	1011	1017	1009	1004	998	951	985	999	1002	1008	1015	1011	1006	1002	996	990	989	990	994	996	1001	999
13	1008	1014	1017	1020	1020	1019	1016	1015	1010	996	1006	1018	1026	1025	1024	1018	1016	1010	1001	982	965	971	993	1076	1011
14 D	1114	1001	1039	1067	1094	1050	807	971	987	945	887	670	922	908	870	993	1026	990	963	958	963	1004	997	986	967
15	994	998	997	1002	1006	1008	1008	1006	1000	1002	1001	1003	1000	950	844	932	986	937	960	978	993	992	994	997	983
16 D	1001	1003	1000	1003	1015	1020	1028	1020	1013	1018	1008	982	1012	992	853	782	1018	1017	998	993	1000	1000	1003	1001	991
17 D	1016	1025	1055	1041	1026	1062	1066	1005	1088	1103	986	883	948	968	1008	1023	997	954	981	1021	1022	1022	1021	1067	1016
18 D	1095	1083	1197	1135	1105	1061	769	979	888	715	942	960	935	981	1037	1016	998	1004	956	953	995	993	997	1011	992
19	1000	1002	1006	1009	1013	1020	1030	1048	1000	836	947	899	948	1009	1015	974	979	981	952	935	978	1002	994	1001	982
20	1102	1107	1108	1061	1068	1032	1018	1001	942	878	989	984	950	950	993	1021	1008	1002	1002	993	993	1001	1002	995	1008
21 D	1010	1014	1030	1030	1021	1009	867	945	1009	947	699	801	977	964	948	990	982	1003	994	989	986	993	997	1008	967
22	1009	1010	1008	1009	1008	1006	1002	1022	1000	1001	994	970	969	1008	1018	1016	1012	1001	987	978	971	975	994	997	999
23	1003	1003	1006	1010	1008	1023	1016	1012	1005	1009	1010	1002	1002	1001	1009	1018	982	979	1001	993	982	987	995	1002	1002
24 Q	1009	1010	1009	1008	994	1004	1002	1007	1007	1009	1011	1014	1013	1012	1012	1013	1006	994	980	974	973	979	988	998	1001
25 Q	1002	1001	1006	1006	1009	1009	1009	1016	999	1017	1019	1019	1019	1017	1022	1020	1012	998	981	979	981	983	991	1001	1005
26	1005	1009	1010	1013	1015	1011	1010	1008	1006	1015	1025	1026	1031	1030	1028	1016	1024	1019	996	984	981	987	993	997	1010
27	1005	1009	1041	1143	1081	1111	1104	1049	1035	999	958	864	993	1011	1027	1016	1002	983	972	979	983	986	1002	994	1015
28	998	1004	1009	1019	1017	1010	1011	985	919	963	994	1027	1015	1010	1013	1012	1003	991	985	978	979	987	994	1010	997
29	1003	994	1003	1017	1023	1023	1019	1056	1016	1001	873	994	1014	1018	995	993	1016	999	986	978	972	974	976	998	997
30																									
31																									
Mean	1016	1014	1025	1029	1026	1027	1003	1011	995	979	970	941	968	990	991	992	999	989	979	979	986	991	996	1006	996

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 6 Meanook D = 24° E + ′ February 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	8 7	9.3	9.4	9.4	10.8	8.6	6.8	8.2	12.4	16.4	32.1	31.2	27.6	17.3	13.0	15.8	13.0	10.4	7.5	6.5	6.4	6.6	8.0	8.6	12.7
2	8.5	8.4	8.6	8.5	11.2	10.1	7.8	7.8	8.9	10.0	12.1	15.5	18.1	18.4	22.9	20.3	22.6	13.0	13.3	-3.5	0.5	4.3	5.0	4.8	10.7
3	5.7	7.5	8.3	7.7	7.6	7.5	8.3	8.3	12.1	11.7	14.2	19.2	21.3	14.7	20.2	23.9	14.5	6.0	3.4	9.7	7.9	6.8	4.3	4.7	10.6
4	5.0	5.4	8.5	10.5	7.2	11.6	9.4	8.8	16.8	13.8	17.9	12.4	13.5	14.1	12.9	16.0	18.0	19.2	15.5	9.3	6.2	3.9	5.5	8.2	11.2
5	8.5	9.7	9.4	10.1	9.6	11.2	10.5	14.0	13.2	9.7	14.1	3.3	48.6	28.1	30.3	25.6	6.2	11.4	9.5	8.2	5.2	5.0	5.3	4.5	13.0
6	3.5	2.1	10.9	5.4	0.3	10.3	7.4	1.6	16.7	18.0	15.3	15.0	15.0	14.6	17.4	17.3	14.8	11.2	9.2	8.9	7.4	6.5	7.3	6.4	10.1
7 Q	5.8	8.3	8.9	9.4	12.8	14.2	11.8	11.3	11.6	9.1	9.8	10.5	10.2	10.3	11.4	13.2	13.9	13.0	10.3	7.6	6.6	7.9	8.0	8.2	10.2
8	7.8	8.4	9.3	9.7	9.3	9.4	14.1	13.2	8.3	10.4	14.4	13.1	16.5	12.8	13.7	14.2	13.9	7.1	4.6	6.2	7.5	8.4	8.4	6.6	10.3
9 Q	5.5	5.5	9.3	8.7	8.7	8.4	9.0	9.3	9.7	10.2	10.6	11.3	12.4	12.7	13.0	14.6	16.6	15.1	13.2	10.3	9.6	9.7	8.2	8.2	10.4
10 Q	8.4	9.3	9.3	8.5	8.9	10.4	7.5	8.2	9.2	10.1	8.3	13.6	14.2	10.2	10.1	12.4	13.1	11.3	10.2	9.4	8.3	8.2	8.4	8.8	9.9
11	9.1	9.3	9.3	9.6	9.5	9.3	9.2	8.5	8.7	9.2	10.0	9.9	10.3	12.1	12.2	11.6	10.8	9.3	-4.5	-2.5	1.5	-0.4	3.6	5.2	7.5
12	5.2	9.1	10.4	11.2	11.1	9.7	9.8	10.2	11.4	17.3	15.1	13.2	14.2	14.4	14.2	15.4	16.2	14.7	11.4	9.3	8.9	9.2	9.3	8.8	11.7
13	8.3	9.2	9.4	9.6	9.6	9.3	9.1	9.5	10.2	16.2	16.3	12.3	11.3	11.6	12.3	13.0	13.1	11.7	10.9	9.5	6.1	7.7	7.8	6.0	10.4
14 D	7.4	7.6	8.3	10.8	9.0	14.3	27.1	16.5	14.1	15.2	15.0	5.3	19.1	23.1	-1.2	8.3	12.3	14.3	12.0	11.2	9.1	4.2	3.3	1.5	9.1
15	4.9	8.2	10.8	11.1	10.4	9.6	9.5	11.1	10.9	11.0	10.7	11.2	11.1	7.7	0.4	0.9	14.3	8.8	3.7	2.2	7.0	7.4	8.6	7.8	8.3
16 D	7.1	5.7	5.9	8.3	7.7	7.6	7.2	7.4	9.6	12.6	15.7	18.0	12.3	13.3	9.3	3.4	14.7	12.9	10.3	9.3	6.9	6.7	5.3	4.3	9.2
17 D	4.7	7.1	10.0	13.1	22.1	10.0	19.1	18.0	15.6	9.8	12.3	13.7	9.8	15.0	14.5	12.3	17.2	22.2	4.9	1.7	4.8	5.4	1.7	-1.7	10.9
18 D	4.3	3.0	5.4	11.6	14.1	15.9	15.8	11.4	6.5	16.3	15.3	13.6	4.6	3.8	8.8	7.4	1.4	6.9	1.0	-3.3	7.4	7.7	8.8	7.4	8.0
19	8.1	8.6	9.8	9.4	9.2	9.4	10.4	22.0	13.7	8.0	9.6	9.2	10.5	10.4	15.1	12.3	13.7	11.7	16.2	9.1	2.8	3.6	4.5	3.4	10.0
20	9.0	9.7	6.8	10.2	15.5	12.5	14.5	14.5	14.1	13.9	17.7	12.8	5.9	9.5	9.8	10.7	12.1	11.0	11.1	9.8	9.9	7.0	7.3	7.5	10.9
21 D	9.1	9.2	20.0	11.1	9.5	9.4	2.9	12.4	13.1	14.5	-4.8	8.3	19.1	13.1	5.7	9.6	10.3	13.1	11.6	11.2	10.2	9.6	9.0	8.3	10.2
22	8.5	8.5	9.3	10.0	9.7	9.9	15.0	12.2	11.8	10.4	13.5	9.1	9.2	8.5	11.6	13.1	14.0	14.4	12.7	12.5	7.8	6.3	7.4	7.3	10.5
23	8.3	8.7	8.7	8.6	8.6	23.8	11.5	9.5	10.3	14.0	13.1	10.3	10.0	7.3	7.4	12.4	13.0	7.4	7.5	7.6	8.2	7.5	7.2	6.8	9.9
24 Q	7.4	8.2	9.3	9.2	13.4	13.4	9.6	10.0	9.2	9.5	10.1	10.6	10.7	10.8	11.3	12.7	14.7	14.1	12.7	10.2	8.6	7.1	7.2	7.7	10.3
25 Q	7.7	8.4	8.4	8.9	9.0	9.4	10.3	10.4	8.7	12.0	10.6	10.6	11.2	10.8	12.9	15.2	16.7	16.1	14.2	12.2	9.3	7.5	7.7	8.3	10.7
26	8.3	8.4	8.7	8.9	8.9	9.1	8.8	8.5	10.3	10.4	10.5	12.3	11.6	12.4	13.2	11.2	14.3	14.2	12.5	10.1	7.3	5.0	4.2	5.2	9.8
27	5.4	3.4	-0.5	8.1	12.7	5.8	10.2	5.1	8.4	9.6	14.0	12.6	20.9	21.1	12.8	14.3	14.3	14.2	4.9	3.5	4.0	3.9	5.8	7.5	9.3
28	8.3	8.9	9.0	8.6	7.4	7.9	13.3	6.6	3.8	4.4	10.3	12.4	12.3	12.5	13.7	16.4	17.6	17.9	14.3	10.4	7.5	6.2	6.2	4.5	10.0
29	6.4	5.8	13.2	9.3	6.7	8.2	13.3	7.8	8.4	18.3	7.2	20.1	17.2	13.5	14.3	11.2	13.4	15.8	11.9	11.4	6.5	4.6	2.8	4.3	10.5
30																									
31																									
Mean	7.1	7.6	9.1	9.5	10.0	10.6	9.4	10.4	11.0	12.1	12.8	12.8	14.8	13.3	12.5	13.3	13.8	12.7	9.5	7.5	6.9	6.3	6.4	6.2	10.2

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 7 Meanook $Z = 58,000\ \gamma +$ February 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	770	770	770	772	779	783	785	785	741	659	622	688	689	670	741	766	771	775	778	777	778	777	778	776	750
2	774	772	774	776	781	779	778	778	778	778	768	741	756	761	741	759	744	725	733	745	801	796	797	800	768
3	790	792	798	809	806	804	800	783	777	749	769	778	712	735	746	712	764	736	748	777	785	783	796	820	774
4	821	820	811	788	797	840	806	813	785	780	771	749	741	768	789	781	778	771	772	789	804	797	788	795	790
5	790	790	788	790	790	794	800	761	733	761	735	736	511	660	713	727	762	774	764	767	774	782	790	796	754
6	814	824	844	875	914	880	793	758	762	772	791	750	707	730	755	767	758	767	774	780	786	788	788	790	790
7 Q	794	790	791	806	813	795	788	778	757	720	767	772	770	770	772	772	772	770	768	772	774	776	776	774	777
8	771	771	771	771	771	774	789	763	772	756	706	701	685	756	755	755	756	766	769	772	780	780	777	781	760
9 Q	781	784	796	789	775	775	774	774	774	772	771	771	769	769	770	772	772	768	768	774	776	775	775	770	775
10 Q	768	768	768	768	770	775	796	778	772	764	741	715	738	752	752	758	762	769	769	771	777	777	776	772	765
11	769	768	768	769	769	769	771	771	765	759	759	759	742	750	758	764	762	753	737	754	769	773	769	798	764
12	802	801	792	784	778	771	771	779	743	736	755	769	768	769	775	773	772	770	773	777	779	778	777	775	774
13	771	769	769	769	769	769	768	769	763	718	720	751	757	762	765	766	768	768	767	769	771	787	832	853	770
14 D	833	807	823	815	822	740	650	733	760	720	693	558	618	621	634	697	740	742	751	767	810	827	812	798	740
15	791	801	787	779	777	780	781	781	778	770	770	770	768	728	632	671	732	742	757	755	765	770	775	777	760
16 D	778	779	786	791	791	794	801	798	790	783	767	742	772	753	606	525	739	762	766	768	771	778	782	792	759
17 D	796	792	827	822	801	792	747	714	759	807	783	750	767	765	757	780	775	749	727	746	760	780	790	811	775
18 D	843	833	877	824	805	755	747	781	725	608	705	716	692	704	768	757	759	762	779	779	781	781	784	795	765
19	785	784	785	787	793	804	816	785	780	741	703	680	713	752	757	746	753	772	785	828	833	850	831	822	779
20	900	923	918	873	844	823	807	801	732	612	729	733	718	727	762	763	775	779	780	784	790	793	792	794	790
21 D	797	797	824	812	819	807	635	706	785	743	567	591	708	737	753	769	769	806	804	805	804	803	796	792	759
22	784	784	784	784	784	783	793	747	741	742	747	746	737	757	765	773	773	773	769	770	786	785	786	780	770
23	785	780	779	779	781	786	766	779	763	739	758	761	753	747	743	764	757	770	782	782	780	782	778	774	769
24 Q	774	773	773	774	779	778	771	769	770	771	771	770	771	771	772	774	776	776	774	779	781	781	778	778	774
25 Q	774	772	772	772	772	772	773	751	718	747	764	765	764	761	767	767	768	768	767	765	766	767	769	769	765
26	769	768	767	767	767	767	767	769	754	763	764	758	759	759	759	757	751	747	750	753	763	765	769	771	762
27	776	785	830	843	845	823	813	830	802	779	725	606	682	725	771	769	765	771	776	777	773	774	774	774	774
28	772	769	769	769	772	778	791	729	651	661	694	757	763	761	763	766	766	766	768	769	771	773	773	779	755
29	777	778	788	779	780	802	805	823	795	761	650	699	757	764	747	743	754	757	763	761	769	771	782	782	766
30																									
31																									
Mean	791	791	798	796	795	789	775	772	760	740	733	727	727	741	744	748	762	764	766	773	781	785	786	789	768

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 8 Meanook — February 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	14	40	1023	10	47	858	165	10	44	40.8	08	59	3.4	37.4	07	18	800	10	49	580	220
2	21	07	1047	18	57	902	145	16	16	27.9	19	46	-10.4	38.3	20	46	818	18	57	713	105
3	08	39	1055	12	44	706	349	15	43	32.9	18	08	-2.2	35.1	23	59	833	12	45	628	205
4	05	16	1157	11	05	827	330	08	44	32.0	04	58	-0.3	32.3	05	18	859	11	04	709	150
5	07	34	1057	11	32	191	866	12	22	82.8	11	57	-72.1	154.9	11	23	962	12	25	438	524
6	07	22	1268	07	40	765	503	03	00	41.7	07	33	-51.7	93.4	04	09	939	07	30	492	447
7 Q	10	39	1018	09	00	924	94	05	11	17.9	00	03	2.6	15.3	04	02	823	09	18	683	140
8	07	59	1060	12	10	633	427	07	06	28.0	09	40	-1.1	29.1	09	01	810	12	18	628	182
9 Q	12	46	1029	19	51	986	43	17	37	20.0	01	34	3.9	16.1	02	50	802	17	40	763	39
10 Q	05	38	1049	04	41	987	62	11	59	17.9	06	09	1.5	16.4	06	26	827	11	59	704	123
11	23	36	1033	18	16	924	109	17	03	15.6	18	34	-21.3	36.9	23	46	814	18	44	731	83
12	00	29	1029	08	31	895	134	09	10	22.1	00	29	2.5	19.6	00	31	815	08	32	705	110
13	23	55	1157	20	08	954	203	10	11	22.8	23	20	2.9	19.9	23	35	870	10	09	672	198
14 D	00	11	1145	11	25	415	730	13	10	30.8	06	08	-71.0	101.8	00	15	861	11	24	374	487
15	00	46	1025	14	45	798	227	16	37	17.9	15	03	-14.1	32.0	01	02	811	14	19	603	208
16 D	17	16	1062	15	09	395	667	15	56	32.7	15	08	-25.2	57.9	06	45	807	15	07	397	410
17 D	09	00	1189	11	42	781	408	04	25	38.6	23	20	-4.7	43.3	04	17	866	06	27	650	216
18 D	02	24	1273	06	37	474	799	06	35	36.2	08	20	-14.1	50.3	02	06	902	09	30	536	366
19	07	27	1108	09	27	722	386	07	25	37.4	20	20	-11.5	48.9	21	55	883	11	46	610	273
20	00	47	1196	09	22	786	410	09	46	25.3	00	06	-3.5	28.8	00	49	977	09	20	496	481
21 D	15	48	1064	10	17	534	530	02	32	29.0	07	04	-55.1	84.1	02	28	859	06	48	388	471
22	07	26	1059	12	02	910	149	08	06	20.6	08	33	3.3	17.3	06	05	808	07	37	655	153
23	05	53	1041	17	48	947	94	05	39	33.8	13	14	3.8	30.0	05	27	818	09	12	709	109
24 Q	14	56	1019	20	35	964	55	04	43	19.0	21	00	5.9	13.1	05	18	785	07	28	760	25
25 Q	07	28	1034	20	00	973	61	16	22	18.2	08	30	2.6	15.6	00	01	780	08	39	690	90
26	10	47	1041	19	41	979	62	18	09	17.3	22	40	2.8	14.5	23	59	776	17	58	741	35
27	03	51	1263	11	27	736	527	03	53	32.4	06	12	-9.8	42.2	04	49	872	11	46	474	398
28	03	32	1032	08	20	861	171	17	38	19.6	07	46	-4.5	24.1	06	35	800	07	51	589	211
29	07	49	1075	10	21	780	295	09	26	23.5	10	30	-12.4	35.9	07	39	844	10	37	560	284
30																					
31																					
Mean			1090			780	310			28.8			-12.0	40.8			842			610	232
No. days			29			29	29			29			29	29			29			29	29

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 9 Meanook — H = 12,000 γ + — March 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	995	1018	1030	1034	1033	1059	1045	1015	978	946	874	893	959	1027	1012	1001	972	966	960	956	943	979	980	979	986
2 D	998	1016	1093	1023	1038	1112	1085	1017	735	903	1015	974	708	943	1022	1006	991	994	959	988	983	987	982	998	982
3 D	1026	1014	1031	1053	1085	1070	1068	924	998	880	850	966	889	817	921	975	999	974	955	983	968	990	998	991	976
4	994	1006	1013	1009	1015	1014	1021	999	1006	1005	994	959	889	893	811	834	936	951	989	990	979	988	975	990	969
5	1013	1001	1007	1021	1057	1084	1107	992	1029	1018	1010	986	983	968	1010	1014	1013	998	987	982	979	987	996	1002	1010
6	1015	1015	1069	1022	1099	1029	1022	1018	988	853	849	1007	1015	1012	1005	1013	1006	998	981	968	952	975	998	991	996
7 Q	991	998	1005	1006	1007	1009	1011	1013	1013	1014	1014	1015	1021	1018	1013	1009	1007	994	983	976	979	982	991	998	1003
8	1005	1012	1014	1017	1015	1030	998	999	998	959	825	677	762	905	994	1006	1026	1006	991	998	997	1010	998	998	968
9	1006	1013	1015	1006	1006	1014	1033	1021	1013	1007	967	1023	1013	1013	1014	1010	1021	1005	1009	1002	1003	1002	1002	1009	1010
10	1005	1010	1011	1010	1010	1013	1014	1004	821	710	956	1024	994	1003	1011	983	938	973	969	961	991	1005	1009	1009	977
11 D	1017	1004	1003	1004	1034	987	1007	990	837	936	876	326	724	979	1034	1017	957	916	947	987	998	995	994	995	940
12	994	1003	1001	999	1001	996	1000	1003	971	964	964	987	1004	995	1012	991	979	978	980	981	987	995	994	993	990
13 Q	999	998	1006	1009	1008	1008	1011	1009	1006	1006	1010	1011	1010	1008	1005	1001	986	984	979	975	978	987	985	999	999
14	1001	1011	1010	1009	1013	1011	1010	1006	1001	851	971	1033	1024	1019	1019	1025	1023	1009	992	991	994	998	1004	1016	1002
15	1009	1018	1023	1023	1021	1021	1022	1023	1020	1018	1019	1019	1019	1018	1001	979	980	952	896	973	1001	988	1032	1101	1007
16 D	1264	1336	1252	1382	1203	1160	998	897	360	650	914	964	961	996	1021	1019	962	942	899	954	960	1007	1000	1003	1007
17	1001	999	1000	1038	1013	1009	1018	896	617	872	940	914	958	992	1007	994	987	987	979	971	970	981	984	998	964
18	995	1000	997	1002	1017	1009	998	1006	952	948	1002	987	994	1006	1009	1005	995	983	972	971	979	988	1002	1002	993
19	1002	1007	1009	1013	1013	1013	1014	1010	1009	955	956	939	947	962	963	987	1027	1013	1001	994	987	987	994	994	992
20 Q	998	1009	1006	1010	1006	1009	1018	1017	1017	1016	1019	1019	1020	1021	1020	1023	1021	1006	994	987	992	991	994	994	1009
21	1000	1006	1008	1010	1009	1009	1001	937	918	1009	1024	1019	969	790	983	1016	1013	997	987	987	989	993	993	999	986
22 Q	997	1004	1005	1008	1009	1012	1016	1012	1017	1022	1019	1018	994	968	1009	1025	1015	1001	990	987	993	988	996	1002	1004
23 Q	1005	1016	1017	1017	1013	1023	1018	1019	1022	1016	1008	1008	1032	1028	1025	1024	1017	1006	993	988	987	993	997	1001	1012
24	1009	1021	1023	1024	1028	1019	1019	1033	1009	875	977	1026	1029	1026	1032	1001	986	994	1002	985	994	1001	1001	987	1004
25	997	1002	1006	1009	1009	1010	1008	1019	1018	1018	1020	1020	1009	1021	1029	1024	1009	993	978	978	977	980	1002	1016	1006
26	997	998	1011	1013	1016	1017	1019	1017	972	974	1028	1033	1030	1018	1017	1012	1004	990	973	982	988	998	1006	1010	1005
27	1010	1025	1019	1032	1004	1018	1028	1040	1025	955	993	1023	1032	1033	1033	1030	1016	998	987	982	982	987	1001	1005	1011
28	1013	1017	1019	1023	1023	1030	1024	1007	999	919	586	724	1007	1039	1025	996	927	966	974	978	998	1016	1043	1065	976
29	1185	1092	1087	1135	1094	1024	1011	827	782	997	913	1003	1027	1020	1011	1014	999	980	969	969	983	974	993	1028	1005
30	1038	1025	1004	1008	1018	1025	1016	1010	1004	971	992	1035	999	1016	988	965	909	942	932	930	970	1015	1022	1063	996
31 D	1065	1075	1118	1178	1134	1119	1061	961	751	594	590	340	557	655	961	936	505	415	887	986	1078	1130	1328	1088	896
Mean	1021	1025	1029	1037	1034	1029	1023	982	934	931	942	935	954	975	1000	998	975	965	971	979	986	997	1010	1011	990

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 10 Meanook D = 24° E + ′ March 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	4.5	2.7	1.8	7.9	7.2	8.8	11.4	11.7	9.1	20.1	16.2	15.1	18.0	12.3	16.1	18.5	17.3	12.5	14.9	10.3	2.1	-2.0	2.0	2.4	10.0
2 D	4.0	2.0	7.0	5.8	6.0	12.8	8.8	10.7	12.8	17.6	14.3	14.6	13.7	15.2	15.6	18.6	17.6	16.7	14.5	3.3	3.0	4.8	3.8	4.9	9.3
3 D	1.6	4.2	3.0	0.1	11.7	9.7	2.9	10.9	13.0	8.8	12.8	20.6	10.4	13.6	6.0	11.8	15.5	17.8	7.2	4.9	3.0	4.7	5.4	7.8	8.6
4	5.8	4.4	5.9	8.1	8.8	8.7	10.9	8.8	11.8	12.9	12.3	14.8	10.7	12.8	19.6	4.3	6.2	7.8	4.0	6.8	8.8	7.8	7.1	4.9	8.9
5	2.8	3.0	4.2	6.6	7.8	5.9	5.0	10.7	16.7	15.8	14.2	15.6	17.2	19.6	16.7	16.2	18.0	17.3	13.8	8.8	7.4	7.0	7.4	4.0	10.9
6	4.8	6.9	8.8	10.8	20.4	20.1	8.8	8.8	8.8	6.9	-0.9	10.5	12.8	11.8	8.9	11.3	12.7	11.3	13.6	9.8	3.8	4.8	4.0	5.3	9.4
7 Q	7.4	7.8	8.6	8.9	8.9	8.7	8.8	10.0	9.8	10.8	10.8	10.8	11.4	11.4	12.8	12.8	13.8	14.8	12.7	9.6	8.8	6.9	6.4	6.4	10.0
8	6.8	7.3	7.4	7.8	7.4	11.7	34.7	25.6	7.0	12.1	16.6	4.4	10.6	22.6	18.1	17.7	13.7	10.6	6.9	6.4	7.6	6.9	6.7	7.8	11.8
9	7.8	7.8	7.8	7.9	7.9	7.8	12.8	14.6	9.8	9.3	16.4	14.2	15.5	9.8	12.8	11.9	14.6	13.5	10.5	8.5	7.4	7.1	8.6	9.2	10.6
10	9.3	8.6	8.1	8.4	8.2	8.5	12.3	10.2	25.9	26.6	9.8	14.3	13.1	11.0	14.4	14.3	7.4	7.7	2.6	-0.2	2.5	6.3	9.4	9.4	10.7
11 D	9.3	8.9	8.0	8.9	16.0	26.6	13.1	13.0	-7.7	11.2	17.1	18.0	24.9	27.2	18.1	19.0	16.3	7.5	3.3	6.5	8.7	9.9	9.5	9.3	12.6
12	9.4	9.4	9.3	9.1	9.0	9.2	11.3	17.5	14.3	11.9	9.0	10.7	13.7	9.7	12.3	13.5	12.4	12.2	12.8	11.3	8.1	6.9	6.4	6.2	10.6
13 Q	6.1	7.6	9.2	8.5	9.4	10.3	9.8	9.9	10.3	8.9	10.2	10.6	11.3	12.2	13.3	15.7	16.5	15.0	13.3	9.5	7.2	5.4	6.4	6.8	10.1
14	7.8	7.8	7.6	13.3	12.7	11.2	8.9	12.4	8.4	0.1	15.5	12.3	12.8	12.9	14.2	16.7	16.3	15.1	12.3	8.4	5.2	4.5	5.5	5.1	10.3
15	6.8	6.4	6.9	7.5	8.3	8.6	8.8	8.8	9.5	10.2	12.2	13.7	13.6	14.7	15.5	21.1	21.1	20.3	10.0	0.5	-0.1	5.6	-1.6	3.0	9.6
16 D	11.9	10.2	7.6	-54.4	-19.4	-28.5	1.9	5.2	-9.5	13.1	17.3	11.5	10.6	10.7	16.2	18.3	16.5	12.8	6.4	-4.3	-1.1	4.4	7.3	7.8	3.0
17	9.3	10.7	12.0	14.2	14.0	9.4	17.1	13.8	26.1	14.3	14.8	18.1	12.9	11.1	16.6	17.1	14.8	16.0	8.3	10.4	5.4	3.1	5.1	6.6	10.4
18	8.1	7.9	8.7	8.8	13.1	28.5	31.1	9.8	10.6	5.6	10.3	8.6	10.9	14.0	15.7	16.2	16.1	16.2	14.1	10.3	8.5	7.4	5.8	6.0	12.2
19	7.5	7.2	7.2	7.2	7.9	8.2	8.6	9.2	10.3	19.9	17.4	17.9	20.4	15.6	11.4	10.7	11.2	14.2	13.2	10.8	7.5	7.3	6.1	6.2	11.0
20 Q	6.5	7.3	7.4	7.8	9.7	13.3	8.4	7.8	8.2	9.0	10.0	9.7	9.4	10.6	12.3	16.3	17.6	17.1	14.4	10.9	7.9	6.5	6.1	6.8	10.0
21	7.4	7.9	8.3	8.8	8.6	9.0	7.9	6.5	7.4	12.8	12.8	12.5	12.3	0.0	10.7	18.2	18.3	15.3	12.4	8.9	6.3	5.4	6.4	6.7	9.6
22 Q	6.7	7.8	8.6	8.6	8.9	9.1	10.4	7.4	11.5	9.8	10.9	10.4	8.2	4.3	9.6	15.2	16.3	15.4	13.8	10.2	7.1	6.6	5.0	4.6	9.4
23 Q	5.8	6.9	7.4	8.2	12.5	13.8	9.4	10.1	9.3	10.2	9.2	11.5	12.3	11.4	12.6	15.3	18.1	18.6	18.3	15.1	11.2	6.5	2.7	2.8	10.8
24	2.7	3.5	10.9	8.4	10.4	8.2	8.8	16.2	15.1	10.2	9.7	12.5	12.8	13.7	15.8	19.3	11.2	11.4	10.4	7.8	1.9	4.3	4.4	7.4	9.9
25	7.8	8.0	8.3	8.1	8.3	8.4	12.8	9.9	9.5	11.6	11.8	11.6	11.1	11.4	15.2	16.5	17.5	17.2	15.2	5.5	3.6	3.4	4.4	5.2	10.1
26	5.9	6.8	8.3	7.8	8.4	8.3	9.2	9.5	16.2	12.5	12.5	10.6	11.3	11.4	15.1	16.2	18.0	19.2	16.2	7.5	4.0	3.2	3.8	3.8	10.2
27	4.6	5.4	7.1	6.9	15.2	14.3	8.3	9.7	13.3	6.4	15.3	16.3	16.7	14.6	14.4	16.3	18.0	18.2	16.4	12.5	7.8	4.7	3.4	4.4	11.3
28	5.4	6.2	7.5	8.2	7.6	8.2	11.5	7.3	17.0	26.4	18.2	39.9	20.7	14.2	20.5	25.4	17.4	7.4	10.9	6.3	2.6	1.5	-0.5	2.4	12.2
29	4.4	0.6	1.4	8.9	19.0	13.3	9.3	-5.4	17.7	15.3	9.9	8.7	11.3	13.8	16.1	18.5	20.0	19.9	16.6	12.3	8.2	3.5	0.5	-1.4	10.1
30	1.5	-0.7	3.5	7.4	7.1	7.7	8.9	9.0	10.9	11.6	13.0	9.1	12.3	12.5	15.4	21.7	16.0	10.7	13.2	-1.6	1.9	2.1	0.9	-6.8	7.8
31 D	-4.4	-1.3	0.0	9.3	2.5	0.4	-0.4	-0.2	8.2	-3.3	9.2	-20.5	57.4	69.7	45.8	47.6	67.2	33.7	46.6	12.4	4.2	8.6	30.4	2.7	17.7
Mean	6.0	6.1	7.0	6.3	9.2	9.7	10.7	10.0	8.5	11.9	12.8	12.6	14.8	14.7	15.4	17.2	17.2	14.9	12.9	7.7	5.5	5.3	5.8	5.1	10.3

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 11 Meanook $Z = 58,000\ \gamma +$ March 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	771	792	833	832	798	829	818	791	773	730	748	702	708	773	761	769	757	756	753	764	797	817	785	776	776
2 D	785	813	850	796	818	837	841	807	536	655	763	747	677	688	753	763	764	773	763	774	774	784	784	797	764
3 D	801	800	808	840	840	842	818	647	733	734	601	731	742	785	651	685	764	770	774	775	777	792	795	787	762
4	792	797	796	791	797	797	774	765	755	765	760	721	657	722	637	694	722	742	742	755	765	786	800	808	756
5	803	797	803	807	831	851	852	679	770	781	775	755	710	721	777	781	774	766	766	773	775	787	803	803	781
6	803	787	830	803	818	748	797	785	727	625	612	721	754	770	764	765	765	764	774	780	785	781	786	785	764
7 Q	777	775	775	774	774	775	775	775	765	765	765	766	770	770	769	770	770	766	765	766	766	770	773	774	770
8	766	765	765	765	766	777	591	677	732	743	766	657	579	623	688	710	755	770	765	770	775	775	786	777	731
9	775	766	774	774	786	786	796	786	766	754	688	742	743	753	759	754	764	755	759	761	768	770	770	771	762
10	767	767	767	767	770	772	785	771	521	391	683	764	740	762	769	752	735	753	761	761	777	786	777	774	736
11 D	781	782	786	787	796	707	743	754	552	629	698	706	706	713	794	775	760	753	783	788	788	783	783	786	747
12	783	788	782	780	776	776	787	782	729	731	750	749	752	761	771	762	760	768	773	774	778	782	785	779	769
13 Q	781	775	781	778	779	780	781	776	766	768	766	771	771	771	771	771	769	771	772	778	779	784	784	782	775
14	774	774	774	780	770	772	769	761	748	604	654	763	770	771	771	768	763	760	756	757	760	761	763	763	755
15	761	761	765	765	766	766	767	767	765	765	756	752	753	754	743	743	734	729	740	790	789	793	795	831	764
16 D	799	676	431	427	713	718	709	801	817	743	766	774	745	766	785	792	784	783	782	799	794	808	819	818	744
17	793	810	799	833	822	802	756	571	461	648	683	684	734	754	765	772	768	780	776	783	801	799	794	796	749
18	790	793	795	790	818	767	680	772	695	700	731	745	759	771	781	783	776	776	772	771	773	781	784	787	766
19	783	781	775	776	775	778	774	771	740	641	665	642	655	691	723	719	755	771	773	773	776	775	780	780	745
20 Q	775	775	773	775	779	795	781	774	771	760	746	763	769	770	771	770	771	770	766	765	766	771	778	778	771
21	772	769	769	769	771	772	774	690	648	719	761	762	727	651	729	767	767	768	770	771	775	775	775	775	751
22 Q	774	775	774	774	776	775	771	727	750	765	768	768	749	727	749	772	771	770	768	770	771	770	772	776	765
23 Q	778	775	775	775	775	752	761	771	761	730	701	728	755	766	771	772	770	766	762	766	766	770	773	782	763
24	783	805	853	825	828	792	788	775	755	674	670	736	770	774	782	772	760	754	765	771	779	773	772	773	772
25	773	773	773	773	773	773	771	773	762	754	760	765	755	756	776	778	774	771	770	768	768	774	782	793	770
26	794	784	783	776	773	772	772	773	718	701	745	772	772	767	767	770	767	763	759	760	764	772	780	773	766
27	770	772	772	775	785	783	800	783	735	703	702	743	755	768	773	775	775	775	776	776	772	771	772	774	766
28	772	772	772	773	775	780	788	719	720	603	664	667	749	787	776	755	714	702	735	753	803	829	832	836	753
29	865	852	868	855	789	789	795	594	604	746	742	754	777	783	783	788	779	775	772	769	767	770	772	796	773
30	815	809	794	777	781	800	793	781	755	696	663	756	750	772	762	754	738	721	744	745	783	836	868	846	772
31 D	840	861	878	851	904	862	822	803	849	751	813	1050	897	797	728	710	690	704	795	768	779	774	416	367	780
Mean	787	785	783	780	791	785	775	748	715	702	721	747	740	750	755	758	759	759	766	770	777	784	775	776	762

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 12 Meanook — March 1960

Day	Horizontal Intensity						Declination						Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ +		Range	Maximum 24° East +			Minimum 24° East +		Range	Maximum 58,000 γ +			Minimum 58,000 γ +		Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	05	41	1099	10	37	806	293	08	55	26.4	21	29	-5.0	31.4	03	08	872	11	49	676	196
2 D	02	37	1179	08	43	418	761	09	53	32.8	08	42	-39.2	72.0	02	25	910	08	39	255	655
3 D	07	04	1241	10	17	623	618	07	09	32.3	07	03	-43.1	75.4	04	25	884	10	06	390	494
4	06	23	1053	15	03	703	350	14	16	27.4	12	55	-10.7	38.1	23	15	819	14	43	557	262
5	06	57	1161	07	38	872	289	07	17	31.4	07	22	-4.0	35.4	06	10	874	07	05	571	303
6	04	51	1264	10	09	732	532	05	44	48.9	10	33	-9.8	58.7	02	43	915	10	12	549	366
7 Q	11	43	1023	20	26	968	55	17	36	16.5	03	03	5.4	11.1	07	01	786	08	58	749	37
8	06	04	1164	11	26	615	549	06	12	49.3	11	37	-16.6	65.9	10	36	809	12	17	493	316
9	06	22	1075	10	06	921	154	07	14	22.5	05	46	4.1	18.4	06	10	812	10	23	654	158
10	21	03	1036	09	45	508	528	09	19	43.7	16	23	-5.3	49.0	21	05	808	09	37	260	548
11 Q	04	57	1100	11	23	14	1086	12	00	76.6	08	45	-40.1	116.7	11	10	909	11	46	360	549
12	14	52	1031	09	03	916	115	07	56	24.2	23	55	4.3	19.9	07	02	801	08	46	700	101
13 D	06	50	1026	17	03	961	65	16	59	20.8	21	19	3.9	16.9	00	44	790	08	40	755	35
14	11	29	1042	09	29	784	258	16	22	24.0	09	35	-10.2	34.2	03	42	783	09	40	523	260
15	23	59	1223	18	20	861	362	17	51	32.7	20	20	-7.3	40.0	23	53	901	17	23	717	184
16 D	03	03	1577	08	19	119	1458	02	47	86.7	03	17	-158.3	245.0	08	48	1008	02	53	-262	1270
17	03	39	1096	08	27	454	642	06	40	35.4	08	26	-57.9	93.3	03	33	860	08	33	381	479
18	05	44	1085	08	28	893	192	06	04	60.7	09	36	2.9	57.8	04	40	866	06	19	590	276
19	16	01	1044	11	21	866	178	12	40	27.0	02	00	3.8	23.2	00	10	793	11	22	598	195
20 Q	16	12	1031	19	47	984	47	16	01	21.8	22	27	5.2	16.6	05	40	806	10	26	735	71
21	10	11	1031	13	38	705	326	15	34	23.0	13	38	-11.1	34.1	06	51	785	07	49	535	250
22 Q	15	10	1033	13	03	946	87	16	43	17.7	14	04	0.4	17.3	23	23	785	13	05	710	75
23 Q	12	41	1033	20	36	981	52	05	05	22.1	23	27	1.5	20.6	23	27	787	10	31	680	107
24	07	23	1080	09	41	754	326	15	42	27.0	20	30	-2.2	29.2	02	10	869	09	31	626	243
25	23	04	1040	18	50	959	81	18	17	19.1	23	00	2.4	16.7	23	05	795	12	20	745	50
26	10	44	1043	08	35	883	160	08	49	23.2	09	34	-0.4	23.6	00	35	800	09	44	642	158
27	07	53	1058	09	39	881	177	05	10	24.9	09	26	-2.6	27.5	06	49	812	09	40	664	148
28	22	46	1111	10	28	517	594	11	05	86.8	10	40	-12.2	99.0	21	36	861	11	07	501	360
29	00	41	1346	08	16	523	823	08	15	33.7	07	47	-47.5	81.2	00	37	922	07	45	302	620
30	23	49	1094	16	45	887	207	15	50	25.0	23	43	-10.3	35.3	22	57	885	10	10	581	304
31 D	22	59	1580	17	02	63	1517	18	08	121.4	11	08	-83.2	204.6	11	38	1241	22	57	98	1143
Mean			1129			713	416			37.6			-17.5	55.1			856			527	329
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 13 Meanook — H = 12,000 γ + — April 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	836	1101	1025	978	1031	819	836	869	975	1025	(727	436	244	209)	580	978	919	726	580	992	947	1159	1208	1197	850
2	1181	1208	1159	921	916	751	516	425	(176	-208	-343	63)	806	1032	1015	1004	999	982	968	969	971	978	991	1003	770
3 D	1031	1239	1270	1218	1058	451	596	717	775	721	977	1003	988	999	993	989	985	975	977	992	989	980	980	974	953
4	982	977	985	974	972	982	988	997	993	993	994	992	991	989	993	965	964	918	946	972	1002	1044	1002	970	983
5	1004	1009	988	1055	1064	956	1003	1001	996	977	977	970	964	982	920	757	862	946	971	976	977	976	986	986	971
6	986	987	994	993	1016	1009	1017	1000	932	970	987	1001	971	907	970	1000	986	973	978	973	987	959	958	999	981
7	1023	1022	1061	1088	1096	1032	993	973	1001	1008	1008	1008	1005	1000	967	928	954	876	859	907	1029	986	1010	1000	993
8	1009	1051	1036	1076	1010	997	957	1002	967	710	747	891	950	1017	994	977	958	965	986	981	978	982	997	1015	969
9 Q	996	1036	1017	1067	1018	1040	964	892	768	877	1022	1008	1013	1022	1017	1008	994	969	974	980	992	993	1001	1013	987
10	995	1009	1013	1022	1061	1150	1078	1055	908	899	963	710	643	820	980	1008	1008	1004	966	967	1000	1016	1170	1368	992
11	1073	1046	1048	1075	1030	968	979	978	979	962	963	1001	1004	1015	1015	987	1003	978	978	977	978	996	998	1058	1004
12	1105	1187	1190	1189	993	1011	830	802	595	907	1021	1009	922	866	999	993	1005	969	980	987	978	1008	994	1002	981
13	1037	1034	1126	1040	1054	1055	946	785	736	971	1033	1027	1025	1020	1025	1033	1026	1004	996	979	982	982	995	1002	996
14	1032	1017	1017	1020	1018	1006	1008	969	926	971	887	872	1002	1011	1033	1025	1016	993	985	978	987	979	993	1024	990
15	1008	1040	1006	1030	1053	1122	1064	1028	1006	982	959	952	1025	1033	1033	1021	1024	1023	1016	1011	986	985	978	1000	1016
16	1018	1017	1014	1033	1024	1014	1021	1006	930	939	945	790	469	619	523	664	844	909	978	996	978	1004	1051	1151	914
17	1134	1057	1237	1057	1036	1061	797	875	915	632	881	1010	1020	1014	1017	1004	978	951	925	966	983	983	993	991	980
18	1067	1193	1095	1033	1042	1026	819	920	1029	984	863	784	985	1009	1009	989	971	972	978	983	983	987	1003	998	988
19 Q	1010	1008	1016	1002	1008	1012	1012	1017	1011	1018	1017	1015	1004	1004	1003	992	980	977	977	977	974	977	991	998	1000
20 Q	1005	1009	1008	1009	1011	1016	1014	1020	1021	1019	1022	1024	1019	1017	1020	1009	997	985	981	977	970	975	986	1000	1005
21 Q	1007	1017	1019	1016	1016	1018	1021	1024	1025	1025	1025	1024	1032	1038	1036	1032	1013	992	985	986	991	992	1003	1014	1015
22 Q	1011	1019	1026	1017	1021	1016	1017	1012	1018	1025	1032	1031	1031	1031	1024	1016	1001	1006	1002	1008	1004	1003	1005	1011	1016
23	1025	1019	1027	1025	1020	1017	1030	1028	1028	1031	1038	1033	1041	1041	1039	1024	1007	997	992	1003	1035	1041	1041	1167	1031
24 D	1362	1235	1275	1151	1072	1124	1053	553	876	1035	971	941	909	557	903	953	962	897	898	937	1019	1268	1393	1120	1019
25	1395	1379	1278	1058	1018	714	607	861	485	719	725	568	570	627	789	892	918	980	974	996	1061	1184	1149	1101	919
26	1083	1122	1159	1076	1033	999	865	562	723	785	851	953	1008	976	930	913	922	936	954	961	966	972	1023	1072	952
27	1053	984	984	984	1002	1016	1030	984	1003	990	973	976	973	923	890	969	976	976	972	976	1078	1137	1406	1576	1036
28 D	1478	1375	1218	1170	1111	1093	1028	799	736	501	326	571	509	543	662	657	887	900	893	1014	1038	1024	1074	1038	902
29	1210	1416	1228	1118	1227	999	733	485	726	780	928	723	570	865	955	995	980	993	959	986	1002	1016	1030	1110	960
30 D	1211	1062	1401	1429	1420	1351	673	838	901	519	590	788	517	433	574	628	505	185	726	671	877	1052	947	952	844
31																									
Mean	1079	1096	1097	1064	1048	994	917	882	872	859	870	872	874	887	930	947	955	932	945	969	991	1021	1045	1063	967

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 14 Meanook D = 24° E + ′ April 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	-32.8	5.0	2.6	21.0	20.1	-8.9	-2.8	0.9	20.7	22.7	-28.9	-69.7	58.5	-1.3	47.5	66.6	54.0	96.5	50.3	24.4	50.8	33.2	31.1	24.8	20.3
2	24.6	15.3	16.0	15.4	20.0	15.1	10.0	32.2	58.8	7.8	56.9	-13.6	17.7	18.2	22.0	23.6	21.1	17.1	10.9	7.8	5.7	4.1	4.4	4.3	17.1
3 D	4.3	10.3	24.7	9.5	-5.5	-54.6	-7.5	-0.4	11.3	3.5	12.8	14.3	16.9	21.5	23.3	22.3	22.1	16.4	13.1	7.4	5.2	5.0	6.6	7.6	7.9
4	7.5	7.6	6.2	7.4	8.0	8.2	9.7	9.0	10.1	10.9	10.9	11.8	12.8	13.7	15.4	16.1	16.2	11.4	6.3	6.4	15.1	9.1	4.3	2.5	9.9
5	3.4	6.6	6.1	6.3	7.2	11.2	12.4	5.6	8.3	9.4	11.4	7.4	10.2	14.8	18.1	17.9	7.3	6.6	6.8	7.4	6.3	4.3	5.4	6.6	8.6
6	7.4	7.5	7.5	7.5	6.7	13.6	15.2	9.2	6.2	8.2	9.8	10.6	10.3	6.3	11.4	17.1	21.2	17.1	11.2	15.3	12.1	1.6	-1.5	-1.5	9.6
7	-2.6	1.5	2.7	3.5	8.6	6.3	4.2	6.4	7.8	8.8	9.9	11.4	12.8	14.4	16.3	8.5	9.4	13.1	12.4	-15.1	-3.3	-2.5	2.1	4.2	5.9
8	5.0	7.1	17.0	7.7	8.3	7.5	9.2	16.3	6.3	9.3	13.1	19.5	18.5	18.1	17.6	17.2	15.2	12.4	10.3	9.7	2.3	2.5	2.9	3.7	10.7
9 Q	3.5	3.4	7.4	17.5	22.0	6.8	2.4	4.3	2.5	15.3	10.3	10.1	10.4	14.2	17.0	18.2	18.7	18.0	13.3	6.5	3.5	2.7	3.3	3.5	9.8
10	6.3	4.5	4.6	5.2	2.4	22.9	14.3	11.0	8.2	12.3	15.3	15.1	25.9	27.5	25.1	28.3	22.9	20.0	12.5	7.4	9.0	8.4	6.4	6.3	13.4
11	-2.4	-5.5	-1.7	10.2	8.3	17.3	13.6	9.6	10.0	9.4	9.2	10.0	13.6	16.1	19.3	20.0	19.9	20.3	9.7	7.3	6.7	7.4	5.8	5.1	10.0
12	7.5	4.0	15.8	2.2	3.5	13.3	-7.4	9.4	-4.8	12.2	13.2	14.1	12.3	15.0	16.3	22.6	22.2	21.6	12.6	9.4	7.3	7.3	3.4	3.5	9.8
13	1.2	3.0	19.2	21.9	8.1	5.6	31.0	10.1	14.1	16.1	14.9	13.1	13.2	16.3	17.2	22.1	25.1	24.9	21.2	16.1	11.2	6.4	3.4	3.0	14.1
14	2.5	7.4	5.4	14.4	11.6	9.5	10.7	19.6	12.3	10.4	3.5	0.6	8.4	9.3	15.9	18.5	21.0	19.0	15.2	10.2	8.5	4.6	2.5	1.5	10.1
15	1.4	1.5	7.5	10.3	9.1	10.4	10.3	10.2	11.4	11.2	12.6	14.1	11.7	15.2	17.6	21.4	20.1	21.0	20.1	16.1	10.3	6.1	4.5	2.6	11.5
16	2.9	5.4	6.5	12.3	15.2	10.1	11.0	9.3	6.2	8.3	6.8	12.3	7.5	32.6	33.7	26.4	24.9	14.3	8.3	14.0	5.4	4.4	5.6	8.7	12.2
17	10.2	3.3	14.4	17.7	8.6	12.4	-4.3	12.4	21.2	7.3	13.5	14.3	13.2	16.3	22.6	23.6	27.2	21.2	11.7	3.5	4.8	0.4	-2.1	-1.4	11.3
18	-2.0	9.2	14.9	10.4	9.4	9.3	0.3	12.5	10.5	8.0	5.8	-1.6	12.1	15.1	17.7	18.7	19.2	17.6	12.1	6.7	3.7	2.8	2.7	2.5	9.1
19 Q	3.9	6.7	8.2	9.1	11.5	7.5	8.5	12.3	7.8	8.8	8.7	10.3	11.9	15.4	19.0	21.2	21.2	18.2	15.1	9.4	5.4	3.1	2.6	3.1	10.4
20 Q	4.3	6.0	7.3	7.5	7.9	8.0	9.8	10.4	8.7	7.5	8.3	10.3	11.5	15.4	19.6	21.1	21.5	19.9	16.6	13.0	9.7	6.9	5.6	3.7	10.9
21 Q	3.9	4.8	6.6	7.4	7.5	7.5	8.1	8.5	9.2	9.5	9.5	11.6	13.0	14.4	17.4	21.1	21.8	17.3	12.7	9.7	5.8	4.3	3.5	3.2	9.9
22 Q	4.3	5.2	6.9	8.7	8.7	10.3	12.2	13.2	11.8	9.3	10.4	11.4	13.8	16.3	18.6	19.1	17.9	14.3	11.4	6.9	5.8	3.1	2.4	3.3	10.2
23	4.5	6.5	6.8	7.3	7.5	6.4	6.5	7.8	9.1	9.9	9.8	12.1	13.4	15.3	17.3	18.0	18.6	14.4	8.4	8.3	9.2	8.1	6.3	9.4	10.0
24 D	16.5	12.3	11.0	0.9	-10.7	-4.0	3.2	-8.3	13.1	10.7	10.6	14.5	17.0	13.9	21.7	21.5	24.6	22.6	14.6	1.4	5.6	27.8	15.5	7.9	11.3
25	-6.1	-20.7	-5.5	10.3	5.4	-11.4	-0.4	6.4	-82.4	16.0	20.5	50.7	37.6	43.6	35.7	26.8	18.3	16.9	4.6	4.6	12.4	17.7	10.8	7.9	11.2
26	8.2	6.2	5.4	11.7	10.8	9.9	11.3	-6.4	20.7	14.1	13.1	14.6	18.1	19.3	21.1	17.2	12.2	8.3	8.4	1.6	-0.7	-1.3	1.4	3.6	9.5
27	5.2	6.5	6.8	7.6	7.3	6.4	10.3	10.4	6.0	8.3	11.3	15.1	18.2	17.1	21.0	21.2	17.5	14.1	12.0	4.2	16.3	6.3	1.5	10.4	10.9
28 D	7.7	-12.6	0.5	-8.5	-7.1	1.3	-9.8	-5.3	-8.4	-12.0	8.7	32.9	40.8	55.1	36.0	32.4	21.7	17.2	6.0	-1.1	4.8	4.5	6.9	3.9	9.0
29	8.4	14.0	5.1	6.6	5.2	-7.3	-11.4	8.7	11.4	14.6	18.3	7.9	-7.0	27.1	29.4	28.8	23.6	19.3	15.1	9.6	1.9	3.8	6.7	8.6	10.4
30 D	12.3	5.6	-0.7	-13.6	-7.8	-1.6	-34.8	-6.7	1.1	-17.7	-7.5	17.9	10.5	79.5	(78.4	102.8	93.2	32.8	31.1	28.5	11.4	-5.8	-2.1	8.4	17.3
31																									
Mean	4.0	4.6	7.8	8.5	7.3	5.0	4.9	8.0	9.1	9.0	10.8	10.1	16.2	20.8	23.6	25.3	23.3	20.1	13.8	8.6	8.4	6.2	5.1	5.4	11.1

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 15 Meanook Z = 58,000 γ + April 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	493	463	508	327	508	744	691	735	801	820	646	300	795	1170	1322	1336	1277	1438	1327	978	1094	1068	938	919	862
2	744	786	789	733	701	723	922	741	1017	919	443	696	893	816	833	827	821	811	811	811	812	818	819	826	796
3 D	839	870	841	736	615	793	803	861	971	950	844	811	819	822	818	811	810	798	798	800	802	806	809	808	818
4	809	809	809	809	805	808	811	812	803	805	799	799	805	807	808	806	800	789	794	802	814	871	853	814	810
5	808	820	809	833	772	678	761	785	803	788	773	766	756	794	751	703	730	784	785	794	799	806	807	808	780
6	805	798	798	796	813	816	822	798	769	780	789	790	775	740	760	774	789	776	776	783	801	812	824	808	791
7	815	833	850	865	818	822	756	740	776	793	794	793	794	789	782	740	738	766	797	837	837	816	826	814	800
8	815	847	848	879	847	821	773	794	786	766	722	729	755	794	794	794	796	806	809	805	806	798	805	814	800
9 Q	811	831	837	858	823	839	757	721	667	696	781	793	805	811	809	805	805	800	789	788	788	786	793	802	784
10	796	794	790	787	801	718	753	750	707	654	724	728	643	615	707	748	763	776	783	800	834	849	880	870	761
11	853	845	874	845	776	747	787	771	757	740	721	776	794	797	795	790	799	787	794	796	805	809	833	859	798
12	861	896	842	796	733	692	657	699	538	753	810	798	746	733	786	789	801	801	801	807	795	811	822	823	775
13	810	816	871	821	818	751	590	745	809	761	793	803	800	800	798	799	796	787	774	772	779	787	798	806	787
14	820	811	797	800	779	756	771	728	659	719	671	642	742	776	799	800	786	787	787	795	799	803	809	818	769
15	810	827	815	831	793	703	803	815	786	753	744	682	757	787	799	788	795	796	794	793	783	793	793	800	785
16	813	826	814	837	763	794	803	766	671	648	675	650	729	813	733	484	633	730	781	805	839	845	853	885	758
17	859	828	865	844	848	846	680	769	695	746	672	768	798	799	794	793	777	768	763	774	788	831	825	801	789
18	831	873	864	842	852	816	550	674	779	769	671	630	754	777	798	800	800	808	803	806	805	805	805	801	780
19 Q	802	795	805	798	805	794	787	767	755	779	784	785	788	788	788	788	786	783	779	783	787	790	791	790	787
20 Q	788	785	785	786	785	786	780	773	783	771	769	781	786	786	786	785	777	770	768	772	773	778	785	787	780
21 Q	784	784	784	785	785	784	783	782	782	782	783	784	784	782	774	773	773	774	763	764	774	774	783	787	779
22 Q	787	786	787	787	787	788	796	786	777	778	770	745	780	788	784	784	776	776	780	781	781	781	781	781	781
23	784	784	784	784	794	789	789	783	780	777	777	777	778	777	775	775	775	775	775	780	790	789	821	895	789
24 D	790	469	414	623	595	726	734	797	757	804	795	790	769	734	757	780	790	786	791	840	848	877	827	812	746
25	748	712	816	869	846	679	708	733	469	660	658	547	734	574	619	713	741	826	829	816	833	877	864	841	738
26	864	876	927	903	860	809	767	660	704	788	711	745	786	790	764	757	763	770	784	792	807	810	830	861	797
27	834	804	794	795	797	817	806	721	796	785	762	763	784	732	730	756	773	785	789	788	788	800	809	595	775
28 D	543	579	511	485	745	751	685	709	981	886	949	999	996	777	548	507	627	736	784	875	875	860	881	855	756
29	891	762	867	888	777	628	780	767	798	855	782	910	799	692	741	801	808	804	800	827	821	827	842	893	807
30 D	942	845	776	692	797	658	659	864	834	704	758	835	1068	1395	1374	907	916	1935	1638	1102	1070	952	907	914	981
31																									
Mean	798	785	789	781	774	763	752	762	767	774	746	747	794	802	804	784	794	844	835	816	824	828	827	823	792

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 16 Meanook — April 1960

Day	Horizontal Intensity						Declination							Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ +		Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +		Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	16	25	1439	(12	20	-226	1665)	(17	10)	171.0	10	54	-187.5	358.5	13	24	1904	11	48	-230	2134
2	00	53	1310	(11	50	-1091	2401)	09	59	118.6	11	35	-147.0	265.6	09	28	1383	10	39	84	1299
3 D	02	56	1450	(05	50	-127	1577)	02	57	37.9	05	20	-114.2	152.1	09	14	1070	05	39	512	558
4	21	57	1104	17	07	884	220	17	06	25.1	21	50	-4.3	29.4	22	00	938	17	59	761	177
5	04	41	1260	15	21	640	620	05	39	35.9	05	06	-15.5	51.4	03	52	854	05	48	628	226
6	16	29	1072	08	08	837	235	16	32	32.9	22	04	-5.3	38.2	05	40	838	13	28	720	118
7	20	42	1079	18	20	828	251	18	19	24.8	19	08	-28.4	53.2	03	51	884	06	34	674	210
8	03	24	1119	09	30	586	533	07	02	29.3	09	00	-2.9	32.2	03	26	909	10	10	664	245
9 Q	03	10	1144	08	59	466	678	04	13	32.8	06	31	-22.0	54.8	03	31	880	08	57	505	375
10	23	04	1551	11	52	409	1142	12	15	59.2	12	00	-13.2	72.4	22	51	939	08	55	462	477
11	04	16	1207	04	56	831	376	05	51	33.4	04	55	-24.8	58.2	23	58	919	04	23	635	284
12	03	01	1448	08	04	315	1133	05	33	66.8	08	28	-96.5	163.3	01	42	944	08	18	185	759
13	02	28	1261	08	29	616	645	05	58	60.3	05	48	-23.0	83.3	08	15	941	06	49	511	430
14	00	40	1079	11	01	760	319	03	49	27.8	11	00	-9.2	37.0	00	40	838	11	03	606	232
15	05	30	1214	11	05	894	320	05	31	30.0	05	10	-16.5	46.5	03	06	848	05	04	448	400
16	23	57	1294	14	44	151	1143	14	42	108.1	12	29	-72.7	180.8	13	13	1028	15	15	367	661
17	02	45	1373	09	45	512	861	06	11	37.7	06	50	-47.4	85.1	00	01	948	06	23	519	429
18	01	20	1265	06	54	562	703	07	06	41.6	06	51	-37.6	79.2	02	12	916	06	47	394	522
19 Q	00	33	1047	20	15	971	76	16	33	23.8	08	05	1.6	22.2	00	34	815	08	14	727	88
20 Q	09	25	1028	20	53	963	65	16	47	22.1	23	42	3.0	19.1	06	23	790	09	48	758	32
21 Q	14	08	1039	19	42	972	67	15	55	23.2	23	55	2.1	21.1	23	58	794	19	44	762	32
22 Q	10	25	1039	16	45	977	62	14	53	22.0	21	59	1.8	20.2	06	05	804	11	19	730	74
23	23	59	1268	18	15	977	291	15	18	20.5	00	01	3.4	17.1	23	31	920	15	49	768	152
24 D	22	50	1442	07	45	326	1116	13	58	43.1	07	17	-44.0	87.1	06	13	942	03	03	333	609
25	00	58	1643	06	03	241	1402	12	11	112.0	08	52	-98.9	210.9	12	04	940	08	39	291	649
26	02	28	1188	08	20	272	916	08	22	46.6	07	28	-47.1	93.7	03	01	959	07	13	366	593
27	23	40	1665	14	06	811	854	23	47	33.9	21	35	-9.7	43.6	22	05	899	23	37	519	380
28 D	00	26	1608	12	44	125	1483	12	48	95.2	09	23	-88.2	183.4	11	00	1173	03	36	252	921
29	01	43	1521	(07	23	-77	1598)	07	17	110.6	07	42	-114.4	225.0	07	48	1058	07	22	320	738
30 D	13	36	1739	(17	30	-541	2280)	14	55	189.4	(17	22	-188.2	377.6)	17	18	2429	06	08	75	2354
31																					
Mean			1296			462	834			71.5			-60.3	131.8			1017			478	539
No. days			30			30	30			30			30	30			30			30	30

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 17 Meanook — H = 12,000 γ + — May 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	944	1003	1051	995	1008	996	998	998	832	1013	943	941	838	897	957	955	953	948	930	939	962	987	1010	979	961
2	983	1003	995	1023	991	992	973	930	956	947	935	875	942	937	960	952	961	967	964	967	984	991	1008	991	968
3	994	999	1004	1006	1008	1006	998	996	968	875	787	974	997	988	990	1005	1001	1000	991	987	990	994	997	994	981
4 Q	1000	1005	1001	1002	1005	1009	1005	1010	1015	1017	1022	1014	1006	1014	1023	1019	1012	997	998	1001	1019	1010	985	985	1007
5	1000	1015	1012	1014	1012	1017	1023	997	947	1015	1017	1019	1003	997	1009	1012	994	980	980	994	998	994	999	1067	1005
6 D	1014	1042	1009	1041	1077	1052	907	742	727	756	671	814	611	740	788	898	903	874	829	889	997	1069	1092	1160	904
7 D	1124	1254	1264	1214	572	548	727	1017	990	802	867	965	922	787	849	989	939	947	947	986	1037	1005	1085	1140	957
8 D	1053	1043	1034	1009	1133	1148	1102	885	945	929	754	784	587	344	(226	-37)	794	1059	1071	1051	1041	1027	1012	1052	877
9	1033	1018	1009	991	994	1003	1012	1012	994	1001	939	1000	909	931	947	979	997	1005	1021	1025	1009	1003	1002	997	993
10	1015	1005	1009	988	995	1001	1000	992	978	997	1008	968	879	983	998	950	976	997	1001	1006	1010	1050	1029	1009	993
11	1044	1041	1049	1015	1036	934	913	852	524	881	906	892	978	1020	1004	981	1023	1034	1033	1023	1020	1056	1014	1022	971
12	1014	1025	1011	1021	1026	986	989	782	731	891	568	818	687	891	987	1020	993	1015	1005	998	999	1017	1041	1028	939
13	1009	1036	1001	1010	1008	1027	1021	1020	1017	988	991	1007	1026	1013	994	997	1009	1005	996	983	989	1023	1031	1023	1010
14	1020	1050	1049	1026	1039	1049	1017	954	800	785	981	1003	975	1000	1016	1026	1010	1005	1000	1007	1005	1004	1008	1017	994
15	1014	1015	1012	1022	1016	1020	1023	1013	965	964	910	706	774	915	996	1013	1004	999	978	983	999	1003	1006	1018	974
16	1024	1017	1007	1012	1020	1016	996	1016	1021	990	980	1026	1037	1063	1034	988	976	1023	1017	1023	1083	1018	1044	1043	1020
17	1015	1016	1011	1002	1009	1014	1027	885	953	903	913	957	991	1003	1009	996	978	1009	1001	1002	1009	1012	1018	1009	989
18 Q	1009	1018	1025	1010	1017	1027	1014	1019	1016	1013	1012	1011	1012	1008	1004	990	998	1003	1002	1001	998	1013	1014	1020	1011
19 Q	1021	1009	1008	1009	1017	1033	1021	1027	1014	979	1024	1020	1027	1027	1029	1027	1013	1009	998	1004	1019	1019	1027	1042	1018
20 Q	1037	1027	1014	1019	1022	1020	1036	1019	1019	1020	1020	1020	1015	1020	1015	1020	999	979	1013	1015	1016	1018	1017	1022	1017
21	1036	1032	1016	1019	1024	1027	1029	1025	1017	1016	1014	1017	1038	1030	1041	1031	1012	998	991	993	1004	991	1006	1017	1018
22 Q	1031	1029	1022	1020	1021	1019	1021	1024	1031	1030	1032	1036	1040	1041	1038	1032	1015	1002	994	1006	1011	1012	1020	1027	1023
23	1036	1034	1034	1027	1033	1038	1035	1034	1040	1048	1050	1052	1072	1085	1044	1013	1009	956	969	997	1046	1010	1059	1006	1030
24	1052	1046	1076	1144	1085	1014	497	829	900	790	693	670	708	946	1018	933	976	976	966	995	1018	1064	1086	1122	942
25	1238	1120	1168	1191	1099	1122	1121	1060	940	776	898	1010	1001	922	835	948	983	960	964	1007	1021	1050	1053	1111	1025
26	1189	1140	1214	1110	1096	1064	1019	959	991	959	934	929	954	992	992	983	959	972	982	998	1007	1001	1052	1131	1026
27	1160	1187	1395	1107	1024	1009	991	989	998	995	998	994	991	980	980	967	978	963	951	935	980	1020	1022	977	1024
28	1016	1021	1042	1023	1016	1021	1020	1024	989	999	1013	1021	1024	1016	1016	1002	1005	998	990	991	1034	1033	1064	1112	1020
29 D	1478	1442	1474	1165	1107	1073	1095	1006	1035	1043	1030	1039	1044	1052	1034	967	1030	1034	1029	967	966	989	1003	1038	1089
30	1027	1025	1011	1014	1003	1006	1027	983	826	943	1002	693	598	842	616	843	904	976	1008	1015	1005	1011	1009	1020	934
31	1038	1036	1039	1044	1028	1027	1019	1028	1033	1039	1047	1045	1046	1052	1046	1025	1013	1007	998	1003	1037	1026	1067	1055	1033
Mean	1054	1057	1067	1042	1018	1011	990	972	943	949	935	946	927	953	952	953	982	991	988	994	1011	1017	1029	1040	993

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 18 Meanook $D = 24^\circ\ E + \ '$ May 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	14.8	26.0	10.7	15.2	7.9	2.2	7.2	10.6	-4.6	5.4	13.3	14.3	11.6	16.4	21.3	21.3	18.1	17.1	10.9	4.5	3.1	6.5	4.5	4.7	11.0
2	6.1	6.5	9.1	15.0	12.3	9.4	9.2	3.2	3.1	6.7	9.8	2.0	13.3	18.9	22.1	21.6	17.2	15.8	10.7	7.3	1.4	3.6	3.2	5.4	9.7
3	5.6	6.4	7.2	12.4	17.3	10.2	9.0	16.1	8.8	4.5	-1.4	10.3	16.1	18.9	22.0	20.5	18.2	13.0	8.7	6.3	4.4	2.6	3.0	4.5	10.2
4 Q	6.4	8.0	8.3	7.5	7.3	7.8	9.7	9.7	8.5	7.9	7.6	8.0	12.2	18.2	21.2	21.0	19.0	15.0	10.5	7.6	4.6	3.9	0.1	2.7	9.7
5	3.7	4.8	5.7	4.7	6.0	5.6	8.2	7.9	7.1	11.7	11.5	11.1	11.9	18.1	21.3	24.3	19.8	15.2	9.7	3.8	5.5	2.5	4.4	3.6	9.5
6 D	6.3	6.2	7.8	4.9	17.2	12.5	4.3	-11.2	-3.9	8.7	17.7	23.0	34.0	41.0	38.5	34.0	25.9	33.2	22.1	-7.5	-13.3	13.8	16.0	7.2	14.1
7 D	0.0	9.3	4.9	9.5	-6.8	-50.0	-1.9	8.3	11.9	10.0	15.6	16.5	18.2	28.7	32.8	22.6	22.1	16.8	12.1	7.9	10.5	4.9	11.0	14.7	9.6
8 D	9.6	6.8	5.3	8.1	14.8	-4.8	-8.5	-23.4	-4.7	-14.8	8.3	18.3	19.9	18.7	56.0	43.2	17.7	20.1	6.6	5.6	-2.0	-0.8	2.2	2.1	8.5
9	4.7	2.7	1.8	4.3	7.0	6.6	6.9	9.9	15.4	10.3	8.8	14.9	8.7	9.4	16.3	13.9	15.9	11.4	8.7	7.1	7.0	7.5	5.7	5.5	8.8
10	7.1	8.5	9.9	8.0	7.5	8.5	9.9	12.3	19.3	8.9	10.3	5.2	4.9	17.5	20.3	20.6	19.8	17.2	13.8	13.4	8.5	10.6	6.9	5.5	11.4
11	7.9	8.8	13.8	8.5	11.4	35.0	6.6	-4.0	22.0	13.8	11.9	9.5	14.9	22.6	22.2	22.4	19.5	15.0	11.7	7.6	3.6	7.0	4.4	5.1	12.6
12	5.4	4.9	6.3	13.0	28.7	25.0	17.6	10.2	7.4	6.2	22.3	3.6	15.0	14.4	21.1	22.8	24.3	18.1	11.1	6.6	2.5	1.5	3.9	2.8	12.3
13	5.5	2.7	3.4	5.9	6.3	7.8	12.7	10.8	7.1	4.1	4.9	8.0	14.8	18.7	21.8	20.8	18.6	13.6	11.2	9.1	5.7	9.9	5.9	5.1	9.8
14	4.4	6.6	10.0	7.8	10.7	14.6	14.1	14.2	14.0	20.3	9.0	13.0	13.6	24.5	22.6	21.1	16.7	11.6	10.3	7.9	6.1	4.0	3.8	5.0	11.9
15	6.9	7.1	7.3	8.7	8.3	10.1	7.4	6.9	8.4	6.1	10.6	6.8	19.2	21.8	20.1	17.2	16.0	11.7	10.4	7.2	4.6	2.8	2.6	4.2	9.7
16	4.8	5.1	6.5	6.8	9.5	8.0	4.8	8.5	7.3	7.9	11.9	14.9	18.7	18.5	25.0	19.7	18.5	2.6	7.6	4.8	2.2	-6.8	-5.7	-3.0	8.3
17	3.6	7.5	8.0	7.9	8.1	6.2	9.1	2.9	5.0	9.3	7.2	16.7	19.9	23.4	18.7	17.8	14.4	9.4	8.0	4.9	3.6	4.8	6.7	7.9	9.6
18 Q	8.5	9.7	11.0	10.1	12.9	7.7	7.8	8.6	8.1	9.4	10.1	14.2	16.8	14.2	17.5	16.4	14.9	12.7	9.4	7.8	6.6	5.3	6.5	7.2	10.5
19 Q	8.0	7.2	7.9	7.2	7.9	10.4	15.9	10.5	10.3	14.5	13.5	15.0	15.9	18.4	19.7	19.1	16.6	11.2	9.2	5.0	3.1	3.5	3.0	4.0	10.6
20 Q	6.2	9.1	10.0	10.1	12.4	11.2	6.2	6.2	6.2	7.4	8.3	10.0	12.9	14.6	17.5	17.7	17.5	22.9	9.6	6.0	3.1	1.4	2.8	4.0	9.7
21	5.3	6.3	5.6	5.4	6.1	7.2	8.4	9.0	11.7	17.0	12.1	12.2	18.0	17.7	22.0	17.8	18.0	14.0	10.4	7.8	6.5	4.9	3.9	4.1	10.5
22 Q	5.1	6.8	7.2	7.5	7.9	7.2	7.4	7.9	7.3	7.9	9.1	11.9	14.0	17.4	19.8	20.9	18.6	16.1	11.4	5.7	0.4	-1.2	-0.7	1.9	9.0
23	4.8	5.4	7.3	6.4	6.2	5.7	6.3	7.5	6.2	8.9	8.6	12.0	16.0	18.6	17.0	25.3	19.5	23.9	4.9	2.5	4.8	-6.1	0.9	-4.0	8.7
24	-1.9	0.8	6.7	9.3	9.4	4.9	24.6	-3.1	7.8	15.0	2.1	9.1	14.9	23.7	22.2	24.2	18.7	18.9	13.5	8.2	2.2	2.0	2.2	3.9	10.0
25	3.1	-1.0	1.1	9.1	14.2	6.2	4.9	10.0	3.6	8.5	6.7	12.4	13.9	15.0	11.0	18.2	20.5	21.6	10.8	5.2	3.2	2.4	0.8	-0.2	8.4
26	2.4	4.2	4.9	3.5	7.9	8.0	16.5	10.5	11.2	6.0	9.0	5.4	14.6	18.8	22.7	27.8	24.8	17.0	8.1	7.5	4.3	0.2	0.8	0.2	9.9
27	-4.9	-0.2	-1.9	-2.0	8.0	5.8	4.3	4.1	4.7	4.8	6.0	8.1	12.1	15.1	18.9	22.2	22.5	20.9	12.9	4.4	1.6	-1.4	-1.7	-2.7	6.7
28	-0.7	1.3	4.8	7.1	6.1	5.9	6.4	9.1	8.1	5.6	8.2	10.7	13.9	15.9	19.5	19.6	20.0	17.9	12.4	9.4	7.8	0.2	-2.9	-8.1	8.3
29 D	-11.7	-7.8	-8.5	3.7	4.3	1.6	5.1	6.6	6.3	9.1	11.5	13.2	15.4	19.8	18.7	21.9	19.6	17.3	15.3	11.1	10.2	-4.3	-1.4	1.9	7.5
30	4.1	5.6	8.0	6.1	7.1	9.0	11.0	14.5	12.0	9.5	10.0	9.1	12.9	11.2	26.2	10.0	16.1	17.0	12.8	9.8	7.9	5.3	6.2	6.7	10.3
31	7.0	8.6	11.9	14.6	10.0	9.6	9.8	7.5	6.2	5.7	9.2	12.6	16.8	21.0	22.8	21.4	21.5	17.7	12.9	7.9	3.8	2.0	-3.6	-3.7	10.5
Mean	4.5	5.9	6.5	8.0	9.5	7.0	8.4	6.5	7.8	8.3	9.8	11.4	15.3	19.1	22.6	21.5	19.1	16.3	10.9	6.5	4.0	3.0	3.1	3.2	9.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 19 Meanook $Z = 58,000\ \gamma +$ May 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	907	903	878	858	841	787	789	790	853	790	789	810	788	843	854	836	834	827	817	827	838	865	838	828	833
2	823	832	838	829	737	817	790	730	747	762	744	664	743	767	785	788	795	804	806	810	817	816	817	810	786
3	810	811	813	819	808	799	798	763	736	697	608	757	796	800	796	799	800	800	800	798	803	804	806	803	784
4 Q	802	802	802	799	799	800	806	807	799	800	800	789	768	781	791	797	797	795	797	799	808	811	816	813	799
5	807	808	811	804	808	811	799	719	665	717	763	782	777	752	778	780	782	788	788	790	799	809	808	822	782
6 D	829	825	798	813	821	801	496	626	613	695	638	665	711	591	680	756	746	760	799	864	841	839	956	927	754
7 D	886	864	852	754	684	873	908	854	798	853	745	754	764	765	685	749	754	752	789	817	846	834	875	907	807
8 D	856	840	853	850	825	732	718	709	769	990	929	991	930	840	1156	773	664	827	822	808	797	795	796	794	836
9	811	804	799	800	809	808	820	810	773	775	679	728	723	741	712	768	778	790	806	814	820	821	816	811	784
10	811	812	820	812	809	810	809	778	717	732	762	728	689	751	783	756	758	772	784	800	802	823	823	833	782
11	854	852	860	825	811	628	722	871	792	746	785	777	784	788	802	786	799	802	795	799	803	829	832	815	798
12	813	808	809	810	775	710	745	787	691	688	652	754	667	760	786	789	778	788	799	800	791	795	803	808	767
13	811	816	808	801	792	814	804	792	787	744	737	768	789	786	778	771	775	776	781	784	797	827	848	842	793
14	817	833	826	829	830	787	784	721	670	590	697	764	755	762	787	803	798	791	797	796	799	806	801	799	777
15	797	798	797	806	809	816	799	783	665	626	645	571	650	690	755	775	777	786	792	795	797	798	797	800	755
16	809	798	796	798	789	748	723	782	788	722	691	762	770	792	749	719	732	743	767	776	778	784	800	819	768
17	811	821	811	806	804	802	778	760	742	710	651	733	762	745	765	776	745	774	789	794	799	798	800	796	774
18 Q	792	797	809	808	801	797	794	808	804	796	797	795	795	788	781	767	765	768	778	780	783	789	792	801	791
19 Q	814	812	798	788	787	799	784	767	765	730	778	786	798	800	797	798	789	781	789	801	802	800	801	801	790
20 Q	804	804	804	808	820	823	814	806	802	788	791	799	799	796	796	796	789	787	771	776	773	780	782	787	796
21	798	803	788	785	784	787	793	791	758	717	738	755	775	786	778	785	779	776	769	782	789	788	793	795	779
22 Q	788	784	782	781	783	788	784	783	785	779	778	789	790	788	789	777	771	755	749	761	757	765	774	776	777
23	778	779	781	781	782	783	784	782	779	779	778	781	785	784	775	766	755	745	749	755	788	835	823	795	780
24	826	855	881	848	843	760	791	822	793	859	833	727	756	695	732	711	735	765	787	797	833	857	874	934	805
25	937	870	894	880	867	840	793	810	813	669	722	774	773	718	637	750	781	793	805	814	826	837	852	881	806
26	869	855	842	783	850	836	738	720	757	752	739	696	712	785	788	776	771	776	792	812	815	822	852	889	793
27	876	864	848	821	849	815	809	793	788	788	787	788	784	779	783	778	777	774	787	786	809	821	822	795	805
28	798	809	823	800	787	788	798	777	738	756	785	790	792	789	787	786	785	786	781	775	798	807	827	841	792
29 D	863	787	863	860	828	779	784	787	809	807	799	797	709	791	784	755	772	787	785	776	804	766	763	769	796
30	787	788	781	778	777	787	788	735	614	646	731	659	615	664	603	679	717	784	796	795	796	800	809	811	739
31	817	823	823	825	807	802	790	789	779	777	789	795	778	773	774	763	762	749	763	757	766	771	789	796	786
Mean	826	821	822	812	804	791	779	776	755	751	747	758	762	764	776	771	770	781	788	795	802	809	819	822	788

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 20 Meanook May 1960

Day	Horizontal Intensity						Declination							Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ +		Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +		Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	02	43	1285	08	44	490	795	01	23	40.3	08	40	-33.0	73.3	09	00	987	09	45	660	327
2	03	55	1054	11	18	843	211	03	26	39.2	03	49	-11.9	51.1	03	33	860	11	01	631	229
3	00	55	1030	10	13	666	364	15	39	25.1	10	25	-12.2	37.3	02	55	827	10	21	542	285
4 Q	20	42	1036	22	13	967	69	15	28	22.4	22	29	-1.4	23.8	22	55	828	12	38	762	66
5	23	25	1124	08	27	868	256	15	09	26.0	08	25	-9.5	35.5	22	07	832	07	44	582	250
6 D	23	35	1393	13	02	517	876	12	34	78.1	07	17	-47.1	125.2	22	27	1012	06	41	422	590
7 D	01	43	1371	04	48	75	1296	04	28	60.3	(05	54	-159.6	219.9)	06	02	1160	04	29	193	967
8 D	04	50	1373	(15	00	-331	1704)	14	00	108.4	07	20	-86.5	194.9	14	36	1429	16	16	476	953
9	00	16	1094	10	42	863	231	11	04	23.6	10	18	-6.2	29.8	06	28	839	10	43	626	213
10	21	35	1095	12	33	847	248	08	26	26.6	11	54	-0.9	27.5	23	44	859	12	07	634	225
11	05	23	1284	(08	05	295	989)	08	22	93.6	07	56	-42.3	135.9	08	00	1086	05	23	420	666
12	04	40	1080	08	01	246	834	09	43	54.1	07	58	-84.2	138.3	10	58	925	10	14	496	429
13	05	46	1081	(09	00	422	659)	15	16	24.1	20	03	-1.4	25.5	22	48	869	09	58	706	163
14	01	28	1112	00	50	943	169	09	01	56.2	09	04	-5.2	61.4	02	50	864	(09	00	336	528)
15	04	10	1040	11	36	617	423	12	10	32.7	12	17	-10.7	43.4	05	19	834	11	53	483	351
16	23	05	1177	15	39	904	273	14	48	34.2	21	31	-14.6	48.8	23	46	837	10	12	659	178
17	06	42	1067	07	23	817	250	13	33	30.6	07	19	-4.9	35.5	07	32	850	10	12	612	238
18 Q	02	23	1049	15	41	961	88	14	25	25.0	06	23	3.1	21.9	07	09	827	15	43	756	71
19 Q	23	17	1049	09	20	939	110	06	05	26.1	19	44	2.1	24.0	00	50	820	09	18	659	161
20 Q	09	36	1058	16	41	972	86	04	59	18.4	21	22	0.7	17.7	04	58	829	19	06	767	62
21	14	46	1051	21	12	979	72	14	23	25.8	22	04	2.9	22.9	00	54	811	09	16	668	143
22 Q	14	43	1046	17	32	987	59	14	44	25.7	22	03	-2.9	28.6	14	44	801	19	03	748	53
23	22	39	1121	17	37	933	188	15	06	33.2	21	08	-12.2	45.4	21	24	852	17	41	734	118
24	03	24	1223	06	35	272	951	06	07	64.1	07	31	-66.3	130.4	10	10	1075	10	45	537	538
25	00	24	1207	09	14	708	499	04	18	24.9	06	58	-25.4	50.3	00	14	970	14	02	548	422
26	03	10	1339	10	48	893	446	06	35	34.7	03	19	-24.6	59.3	00	02	919	03	03	502	417
27	02	54	1513	19	18	917	596	16	06	25.9	03	08	-42.8	68.7	03	43	1010	03	04	603	407
28	23	20	1188	20	18	958	230	20	21	26.5	23	54	-16.7	43.2	23	18	863	08	31	722	141
29 D	00	58	1915	15	14	896	1019	20	25	32.3	01	06	-59.6	91.9	02	52	941	01	18	629	312
30	21	49	1093	12	14	405	688	14	21	45.8	12	04	-16.3	62.1	23	30	817	08	58	381	436
31	23	42	1110	16	45	973	137	15	14	28.4	23	42	-8.1	36.5	03	31	855	19	50	747	108
Mean			1183			705	478			39.1			-25.7	64.8			912			588	324
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Meanook — H = 12,000 γ + — June 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1096	1147	1211	1437	1359	903	880	950	740	759	601	549	467	494	981	1051	1045	1035	1019	1020	1018	1002	1026	1018	950
2 Q	1025	1015	1013	1011	1011	1013	1020	1023	1025	1026	1031	1033	1030	1012	1030	1042	1030	1027	1023	1022	1021	1020	1012	1007	1022
3	1012	1018	1011	1010	1009	1011	1014	1020	1026	1027	1029	1034	1031	1025	1025	1020	1014	1009	1002	996	1017	1017	1047	1070	1021
4 D	1080	1117	1189	1364	1272	1283	1090	857	997	1062	1062	917	985	1044	951	1036	992	998	1021	1032	1034	1111	1029	1072	1066
5	1235	1433	1361	1021	1028	938	463	795	506	504	397	355	357	762	971	1028	1025	1051	1025	1015	1050	1076	1062	1127	899
6	1114	1083	1250	1281	1265	1119	962	850	877	909	564	593	880	989	1069	1040	1044	1006	998	1018	1027	1018	1035	1106	1004
7	1045	1068	1156	1124	1051	1028	1054	1027	911	714	941	909	1019	1021	1015	1031	1021	1004	990	997	1022	1019	1030	1029	1009
8	1030	1045	1106	1148	1154	1109	957	841	731	971	934	845	1029	1046	1041	1039	1018	987	974	980	998	1077	1203	1188	1019
9	1196	1262	1074	1083	1020	924	845	1007	931	973	908	902	989	943	967	1006	1009	982	969	1003	1009	1013	1009	1016	1002
10 Q	1028	1035	1013	1012	1009	1021	1025	1023	1016	1022	1026	1020	1013	1006	996	1001	1011	1007	996	997	999	978	1009	1021	1012
11 Q	1044	1073	1054	1025	1023	1012	1020	1018	1020	1023	1020	1031	1034	1032	1028	1023	1006	990	980	976	980	989	1001	1017	1017
12 Q	1024	1027	1028	1023	1028	1026	1028	1029	1031	1020	1020	1024	1032	1045	1036	1019	1017	991	991	992	995	994	999	1012	1018
13	1027	1049	1024	1032	1020	1021	1033	1034	1029	1028	1030	1037	1044	1046	1036	1021	1020	1027	1034	1024	1012	1012	1011	1024	1028
14	1032	1070	1045	1044	1031	1042	1057	1040	1034	1032	1042	961	826	835	992	1045	1044	1037	1018	1016	1031	1020	1020	1024	1014
15	1038	1062	1028	1020	1013	1012	1031	1046	853	963	1024	963	809	991	1053	1047	1024	1020	1024	1028	1012	1006	1012	1044	1005
16 Q	1031	1045	1082	1057	1034	1032	1027	1032	1021	1016	1015	1022	1021	1029	1027	1020	1008	993	1012	1011	1014	1012	1021	1032	1026
17	1037	1072	1025	1007	1012	1027	1016	1020	1021	1023	1031	1026	1028	1031	1027	1000	971	991	1019	1016	1024	1025	1021	1024	1021
18	1067	1064	1034	1031	1016	1042	1034	1028	1027	1039	939	825	997	982	1011	1037	1031	991	1003	1024	1027	1029	1050	1050	1016
19	1070	1084	1101	1117	1136	1009	896	847	623	583	722	901	1002	952	934	969	997	981	1006	1013	1005	1007	1047	1065	961
20	1064	1087	1089	1086	1078	1083	1020	996	1006	1003	1013	993	969	963	1028	1041	1039	1021	1006	1010	1028	1048	1062	1061	1033
21	1076	1061	1086	1104	1075	1015	1019	983	875	828	837	783	836	1000	1050	1020	999	991	994	1014	1032	1041	1044	1065	993
22	1047	1071	1085	1086	1083	927	1063	1042	1046	1062	1004	1009	959	1022	1045	1038	1046	1029	1005	1004	990	998	1040	1031	1030
23	996	938	1010	1064	1033	1006	1056	1030	1025	1014	1038	1033	1031	1006	1009	1010	998	1005	1005	986	963	966	997	1022	1010
24	1029	1076	1043	1066	1058	1029	1066	1065	1032	1014	984	960	983	1003	1038	1029	1022	998	1004	999	1024	1022	1024	1049	1026
25	1044	1069	1072	1029	1026	1024	1014	993	996	1001	1004	974	883	874	951	951	986	960	992	1029	1051	1145	1260	1178	1021
26	1196	1215	1267	1161	1234	938	952	1029	587	933	980	1029	1027	1044	1051	1041	1046	1036	1029	1032	1025	1029	1034	1046	1040
27 D	1114	1114	1236	881	1254	1029	1074	1065	902	547	865	1022	1022	1022	1020	1001	935	926	889	946	982	1007	1146	1043	1002
28 D	989	1025	1004	1007	990	1029	1044	997	833	909	873	375	753	996	1042	1037	1000	978	965	993	1044	1000	1022	1140	960
29 D	1068	1061	1107	1098	1066	1170	1106	793	1059	964	1036	1057	1048	1048	1050	1033	1036	1034	1031	1053	1036	1008	1209	1334	1063
30 D	1719	1698	1357	1150	1129	1060	989	978	837	920	755	936	1011	1018	1021	974	968	957	1002	1028	1015	989	1016	1018	1064
31																									
Mean	1086	1106	1105	1086	1084	1030	995	982	921	930	924	904	937	975	1016	1022	1013	1002	1001	1009	1016	1023	1050	1064	1012

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 22 Meanook D = 24° E + ′ June 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	-4.7	-2.0	-3.3	-8.6	-12.8	-5.2	9.9	-1.2	9.0	6.9	0.9	8.7	-2.3	-1.9	21.0	19.1	20.9	19.9	15.4	12.3	3.3	2.9	3.0	2.9	4.7
2 Q	3.2	6.1	8.7	9.3	9.1	8.8	8.6	7.2	6.6	7.7	9.3	10.1	12.3	12.7	15.1	16.5	14.1	14.0	14.3	11.8	9.0	6.6	4.3	2.9	9.5
3	3.7	6.2	8.2	8.1	7.4	7.5	7.8	7.9	8.9	9.2	10.4	10.0	13.3	18.6	20.8	19.5	20.0	23.6	14.5	8.1	2.3	-3.7	-1.7	-0.4	9.6
4 D	-3.0	-3.5	-6.5	-10.7	-52.5	-15.3	-22.9	-16.3	-4.0	2.2	19.3	21.7	22.5	24.9	30.6	29.8	25.8	16.4	11.1	47.9	8.6	10.8	1.2	4.6	5.9
5	12.5	6.9	-16.3	-11.6	11.7	1.8	-47.8	7.9	1.2	14.2	1.4	59.4	59.9	29.6	24.5	17.0	21.7	13.5	9.6	4.3	5.3	4.5	5.9	4.3	10.1
6	6.6	8.4	4.7	-3.9	2.6	17.1	13.1	10.5	3.6	3.4	-1.4	-2.4	17.5	21.3	19.1	17.4	15.5	10.5	6.0	3.9	2.4	1.2	3.0	5.2	7.7
7	8.1	9.0	10.0	14.1	9.3	8.5	13.1	4.9	1.4	4.6	3.7	0.9	12.4	18.7	22.7	20.8	17.9	14.6	9.6	1.3	3.0	-2.1	0.0	4.2	8.8
8	7.4	7.9	8.9	11.1	-2.1	5.2	10.1	1.8	-2.0	10.3	5.0	12.4	18.6	22.8	24.7	25.8	20.6	16.8	10.8	14.9	3.1	6.0	11.8	6.4	10.8
9	3.6	11.7	10.2	7.9	18.7	0.9	9.9	9.8	5.4	8.1	1.3	6.3	10.8	17.3	21.3	25.8	21.0	20.3	17.7	7.1	2.6	1.5	1.6	2.5	10.1
10 Q	4.5	7.1	9.1	8.1	9.4	9.1	6.9	7.9	9.1	8.1	6.8	9.7	11.9	13.7	15.4	19.7	20.2	16.9	13.6	9.1	5.9	-0.3	-3.0	-0.3	9.1
11 Q	1.6	3.4	9.7	8.7	7.4	7.2	8.2	11.4	10.4	6.3	6.8	8.2	10.2	12.5	14.7	16.8	18.8	13.3	11.2	4.7	1.0	-0.1	-1.4	-0.1	8.0
12 Q	3.0	5.5	6.1	7.7	6.9	7.1	6.5	9.1	6.7	6.3	7.9	9.4	13.9	18.4	20.6	21.0	21.9	20.2	16.1	6.9	3.0	0.6	-1.8	-0.4	9.3
13	0.7	4.1	7.4	6.8	6.2	6.7	6.3	10.4	10.9	7.3	8.6	10.1	12.9	14.1	16.1	21.6	19.0	16.3	8.4	7.1	4.3	1.2	0.0	0.6	8.6
14	3.5	7.0	11.2	6.9	6.2	8.2	12.8	16.8	9.8	7.9	6.5	1.4	17.6	17.5	20.1	20.5	22.7	21.1	18.4	13.7	8.1	2.6	1.5	3.7	11.1
15	6.5	8.3	10.6	6.9	6.8	7.3	6.8	3.8	12.1	9.4	10.2	4.8	11.8	20.6	23.5	22.7	19.9	16.2	12.9	6.2	3.4	3.1	3.1	4.0	10.0
16 Q	6.8	7.3	10.4	16.5	10.9	13.7	15.7	9.8	6.3	6.4	7.8	10.9	13.4	14.5	15.9	18.0	17.0	16.1	10.7	8.0	4.6	4.1	3.7	4.6	10.5
17	5.6	7.7	10.9	8.7	6.3	7.2	6.7	7.2	7.5	8.6	9.1	10.1	13.1	16.0	15.0	13.7	16.8	10.1	3.1	0.3	0.8	3.8	2.9	2.8	8.1
18	3.5	8.2	10.2	8.1	6.1	5.4	7.3	6.1	3.3	5.4	-0.9	0.3	20.7	24.7	19.7	16.4	16.6	12.9	5.6	3.5	1.4	-0.2	1.8	4.5	7.9
19	2.2	4.9	7.3	8.5	9.2	16.7	10.4	9.4	-10.7	12.9	4.9	16.1	22.9	26.8	24.9	17.7	17.6	17.9	13.8	12.7	6.7	3.9	5.0	8.3	11.3
20	9.1	10.9	11.0	10.2	9.6	10.1	8.2	9.8	5.0	8.4	9.1	8.5	11.7	13.2	17.8	17.3	15.3	12.4	11.1	7.3	5.4	4.1	4.2	5.1	9.8
21	6.8	8.7	5.0	4.4	10.9	10.0	9.4	9.1	10.0	3.9	13.1	20.6	21.4	29.6	23.1	24.8	24.3	18.9	14.8	5.2	5.0	3.1	-1.1	-4.6	11.5
22	-6.0	-2.8	1.9	2.2	2.1	-0.8	6.9	6.1	5.4	9.2	10.0	15.9	18.2	17.0	22.6	22.7	20.8	18.8	16.6	14.7	6.7	3.1	3.9	-1.7	8.9
23	0.9	-0.7	1.2	1.9	1.0	13.1	3.8	5.3	5.9	6.0	8.5	11.1	13.7	16.7	19.5	21.9	12.9	9.1	5.6	3.3	2.8	2.2	0.7	1.9	7.0
24	2.1	-1.1	1.9	-1.2	3.0	2.3	6.5	10.1	6.8	6.2	7.9	12.5	6.7	18.9	22.8	24.8	24.7	22.8	12.7	12.6	4.4	3.6	2.6	10.4	8.9
25	-1.1	2.7	3.7	5.5	3.3	6.4	7.3	5.6	9.5	10.7	9.7	12.3	10.0	3.9	13.2	24.8	21.2	25.2	15.5	4.4	3.9	11.8	12.6	4.4	9.4
26	1.2	-0.5	4.4	0.7	5.3	-6.8	0.7	3.1	-6.0	14.7	13.5	13.1	14.5	17.8	20.0	21.9	22.0	19.9	16.9	12.5	8.3	2.5	4.1	0.5	8.5
27 D	3.1	-0.8	-15.5	-19.7	-9.9	-4.1	9.2	5.0	-7.1	-46.5	2.8	12.3	17.7	21.6	22.1	23.5	29.6	23.0	20.8	-1.3	0.6	-1.7	8.4	-0.8	4.9
28 D	17.3	16.6	13.0	8.8	5.5	3.0	1.0	-0.7	4.2	17.3	12.9	-5.2	26.3	19.1	22.6	24.7	25.7	20.1	8.4	8.3	9.2	11.5	2.5	3.1	11.5
29 D	-2.0	-0.7	2.5	10.6	-1.4	0.2	7.8	-4.5	5.4	4.5	4.9	9.4	13.3	15.7	18.6	21.1	20.2	18.8	13.1	7.9	3.5	12.4	3.6	-5.1	7.5
30 D	-12.8	-13.0	-31.8	-24.1	5.1	8.9	6.2	3.4	4.6	10.7	-3.7	4.2	11.3	17.2	19.2	22.6	22.3	26.0	4.3	11.7	-4.1	-4.9	0.5	3.7	3.6
31																									
Mean	3.1	3.8	4.6	3.4	3.4	5.3	5.2	5.9	4.6	6.3	7.3	10.8	15.9	17.8	20.2	21.0	20.2	17.5	12.1	8.5	4.1	3.2	2.8	2.3	8.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 23 Meanook $Z = 58,000\ \gamma +$ June 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	833	887	906	850	848	657	733	820	716	782	712	690	711	756	730	783	789	786	787	798	795	786	799	796	782
2 Q	796	790	796	796	793	790	786	785	781	775	778	783	778	774	778	782	777	774	770	774	777	781	785	789	783
3	790	795	788	788	785	785	781	779	782	774	775	783	777	770	771	774	773	774	775	772	776	777	800	822	782
4 D	850	896	934	874	579	553	697	853	811	841	874	943	826	796	768	800	781	788	788	786	798	828	808	829	804
5	896	855	784	740	741	775	842	853	888	686	1025	632	561	577	721	806	801	809	799	806	822	814	828	851	788
6	861	854	884	851	765	752	684	615	744	773	691	545	643	687	804	811	808	802	792	797	799	800	801	831	766
7	823	853	888	918	863	831	825	782	735	806	764	735	766	788	769	791	790	778	794	791	812	813	812	809	805
8	812	825	849	856	835	836	752	780	792	732	712	760	808	812	791	783	780	777	790	800	850	886	942	901	811
9	876	887	826	865	779	776	740	777	725	753	715	700	760	726	736	779	789	786	794	816	804	783	779	780	782
10 Q	797	802	796	784	778	779	778	775	774	779	774	777	775	756	748	751	758	759	759	766	784	788	803	812	777
11 Q	799	810	838	811	786	777	767	762	759	762	769	773	777	778	779	770	769	760	771	772	771	772	773	774	778
12 Q	778	776	775	769	782	778	787	785	776	759	744	747	760	770	773	758	758	748	747	738	749	750	756	766	763
13	773	792	790	791	780	776	777	782	789	778	779	777	775	777	774	758	757	751	757	759	760	769	777	783	774
14	788	805	810	791	779	775	801	785	759	748	765	657	550	480	669	770	786	793	788	787	804	800	784	777	752
15	779	797	805	786	773	769	777	780	584	660	728	707	606	710	769	782	766	770	790	791	780	779	790	813	753
16 Q	808	799	824	837	810	786	745	788	778	778	779	780	779	780	782	786	783	777	769	774	772	770	774	792	786
17	797	811	802	782	782	777	775	773	774	775	778	777	777	774	769	758	756	745	753	764	769	775	782	777	775
18	790	813	821	799	777	788	808	782	776	775	692	580	708	701	700	738	762	769	770	771	772	769	773	780	760
19	784	805	836	866	780	722	640	739	792	738	777	635	745	719	708	739	767	777	797	799	812	816	842	829	770
20	821	844	848	835	821	817	773	753	751	739	776	757	734	715	751	771	775	771	771	777	782	793	808	814	783
21	826	836	831	834	747	760	783	767	788	812	851	739	694	670	771	769	747	736	746	757	772	788	803	821	777
22	800	805	822	826	813	641	823	803	788	791	766	763	734	749	775	767	777	777	778	779	791	793	826	855	785
23	892	888	865	823	833	794	813	803	778	767	778	779	773	754	747	758	738	735	764	764	763	775	788	809	791
24	810	832	832	842	825	791	804	781	778	771	776	701	726	749	783	783	770	754	753	770	799	787	786	800	784
25	818	840	809	810	786	792	765	733	732	707	723	705	646	615	683	711	733	759	777	780	801	872	943	856	766
26	887	856	858	874	863	596	763	829	671	716	718	764	779	804	803	786	783	780	773	772	788	795	811	817	787
27 D	840	817	712	536	680	754	783	787	772	670	764	798	811	799	797	786	764	763	745	778	779	789	865	810	766
28 D	778	783	783	791	788	783	789	770	702	637	759	1088	788	735	780	789	777	763	759	791	844	877	854	845	793
29 D	826	830	865	830	836	819	679	679	784	790	794	804	800	795	797	785	776	770	771	776	766	809	841	845	794
30 D	666	532	350	681	798	775	786	780	710	741	739	776	793	809	812	797	791	791	790	784	811	805	818	811	748
31																									
Mean	813	817	811	808	787	760	769	776	761	753	770	748	738	737	761	774	773	771	774	779	790	798	812	813	779

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 24 Meanook — June 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	03	41	1680	11	02	-1	1681	11	02	85.8	08	12	-44.9	130.7	11	07	1074	10	55	262	812
2 Q	15	43	1059	01	37	986	73	15	11	17.8	23	44	2.7	15.1	00	12	804	12	57	762	42
3	23	22	1097	19	11	980	117	17	34	26.0	21	54	-5.4	31.4	23	22	830	19	07	763	67
4 D	04	03	1524	07	07	713	811	14	47	43.1	04	18	-78.9	122.0	07	13	991	04	14	419	572
5	02	16	1541	06	23	-37	1578	12	53	118.1	06	30	-150.0	268.1	10	25	1240	11	20	386	854
6	03	46	1384	10	56	217	1167	05	41	41.8	11	16	-41.8	83.6	02	07	928	11	20	383	545
7	02	36	1189	09	09	568	621	09	18	31.0	09	59	-6.8	37.8	03	16	951	08	54	678	273
8	22	39	1320	08	19	468	852	15	12	30.1	04	31	-27.0	57.1	22	33	967	10	42	636	331
9	01	13	1372	06	03	503	869	06	17	34.3	06	02	-35.7	70.0	01	11	935	06	01	589	346
10 Q	01	03	1052	21	50	958	94	16	27	22.7	22	16	-4.0	26.7	22	59	826	14	33	725	101
11 Q	01	39	1089	19	31	969	120	16	13	21.2	22	40	-1.8	23.0	02	48	851	08	04	751	100
12 Q	13	32	1050	18	27	976	74	15	58	23.9	22	35	-2.2	26.1	06	06	793	10	47	727	66
13	01	21	1071	22	30	995	76	17	28	23.9	21	58	-1.2	25.1	01	28	803	18	06	737	66
14	07	03	1100	11	57	717	383	13	43	35.5	11	38	-4.6	30.1	06	43	829	13	23	424	405
15	01	47	1090	12	14	719	371	14	46	25.2	07	59	-5.6	30.8	23	53	827	08	29	476	351
16 Q	02	16	1121	17	07	980	141	05	52	22.4	21	47	3.3	19.1	03	40	862	06	28	710	152
17	01	23	1089	17	02	943	146	16	19	20.2	19	07	-0.4	20.6	01	28	823	17	04	740	83
18	00	54	1121	11	06	725	396	13	15	29.3	10	48	-9.2	38.5	02	33	829	11	32	550	279
19	06	11	1197	08	36	397	800	09	30	41.6	08	33	-52.3	93.9	08	36	925	06	13	558	367
20	02	49	1118	13	25	934	184	14	58	19.6	08	31	3.0	16.6	02	52	873	13	40	707	166
21	04	17	1206	11	27	660	546	11	36	56.1	09	51	-11.4	67.5	10	39	912	12	49	602	310
22	04	52	1187	05	45	865	322	15	49	25.4	05	46	-18.9	44.3	23	58	881	05	26	571	310
23	05	17	1290	21	28	945	345	05	31	34.5	01	47	-5.8	40.3	00	58	928	05	38	728	200
24	01	08	1137	11	30	914	223	16	20	29.0	11	30	-10.4	49.4	04	03	859	11	45	646	213
25	22	55	1328	12	59	781	547	17	07	36.9	20	40	-5.2	42.1	22	19	968	12	50	592	376
26	04	52	1357	08	10	314	1043	07	15	26.8	08	24	-53.2	80.0	07	20	1048	08	00	442	606
27 D	02	49	1284	09	14	520	764	09	25	41.2	02	51	-115.7	156.9	09	19	965	02	52	80	885
28 D	23	25	1188	11	43	56	1132	12	17	45.5	11	40	-88.7	134.2	11	19	1302	09	24	576	726
29 D	23	59	1444	07	10	625	819	06	03	24.1	07	00	-26.9	51.0	23	05	887	07	07	477	410
30 D	00	50	1968	10	37	650	1318	17	43	38.2	03	03	-77.4	115.6	04	28	914	02	16	161	753
31																					
Mean			1255			668	587			35.7			-29.2	64.9			921			562	359
No. days			30			30	30			30			30	30			30			30	30

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 25 Meanook — H = 12,000 γ + — July 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1045	1029	1117	1076	1106	1016	826	704	924	953	980	943	971	1008	976	904	925	989	987	1010	1044	1067	1054	1044	987
2	1076	1067	1058	1084	1062	1067	999	726	1024	1022	920	739	953	1037	1037	1037	1030	1010	1004	1010	1013	1005	1003	1006	1000
3	1029	1050	1048	1046	1047	1020	1028	1003	1009	1022	1005	950	1011	1051	1049	1040	1011	1037	1036	1026	1036	1034	1051	1066	1029
4	1091	1169	1111	1091	1053	1022	1041	989	750	734	819	975	1037	991	970	1029	1007	1036	1014	1013	1003	997	994	1016	998
5	1055	1038	1152	1132	1041	1042	1052	943	887	635	860	838	811	948	1030	1025	1034	1027	1027	1026	1024	1020	1034	1029	988
6	1111	1141	1094	1038	1015	1007	1016	1016	1008	875	818	858	897	946	1002	1030	1038	1038	1031	1029	1019	1002	991	1005	1001
7 Q	1011	1020	1023	1022	1027	1027	1018	1016	991	984	1023	1026	1024	1035	1034	1031	1032	1023	1020	1007	1002	1011	1023	1014	1018
8 Q	1024	1038	1029	1016	1015	1023	1020	1027	1030	1025	998	1016	1034	1038	1050	1048	1039	1024	1022	1016	1018	1018	1016	1024	1025
9 Q	1010	1015	1024	1020	1020	1020	1018	1018	1020	1024	1017	1022	1035	1044	1048	1036	1012	995	977	973	975	993	1013	1020	1015
10	1020	1035	1049	1017	1018	1015	1021	1019	1017	1023	1027	1020	1024	1029	1034	1037	1031	996	988	986	991	996	1008	1020	1018
11	1033	1036	1028	1018	1032	1042	1051	1035	1026	1002	1003	1005	1021	1020	1052	1058	1053	1054	1023	1003	1004	972	995	1013	1024
12	1029	1045	1038	1042	1020	1023	993	1006	1020	959	981	994	970	1000	1031	1048	1036	1003	988	1000	1005	1008	1004	1026	1011
13	1027	1056	1015	1029	1036	1024	996	1016	961	908	950	895	954	998	1024	1057	1020	1018	1005	995	1001	1005	1022	1028	1002
14 D	1027	1011	996	997	1028	1136	1045	1027	1013	871	675	589	643	741	927	1010	1009	948	1012	1002	1036	1055	1032	1045	953
15 D	1026	1009	1010	1042	1107	1054	931	695	748	436	689	538	287	025	161	211	204	409	713	1020	1108	1361	1513	1225	772
16 D	1201	1379	1409	1053	1042	1028	568	571	532	495	620	251	564	574	676	625	668	719	923	993	1037	1035	1115	1205	845
17	1293	1245	1270	1228	834	895	982	867	546	746	837	854	879	864	895	926	943	965	1025	1017	1015	1046	1032	1049	968
18	1088	1031	1112	1101	1034	1118	1071	1087	1038	1007	991	948	989	977	944	997	1026	1020	1012	1005	1001	1000	988	996	1024
19 D	1003	1009	1009	1012	1020	1058	951	459	660	519	592	496	918	1097	1029	1004	1013	981	995	1024	1046	1028	1012	1063	917
20	1081	1063	1052	1026	1010	1003	996	1013	1019	1012	951	608	649	979	979	988	994	1000	972	997	995	1079	1093	1113	986
21	1059	1069	1008	1019	1060	995	1028	1015	1004	1012	1026	1026	965	949	1019	1023	1002	994	987	1002	1012	1010	1020	1034	1014
22	1034	1041	1010	1029	1034	987	1010	1019	1026	1013	983	1011	990	1023	1030	1030	1022	1004	998	1004	1011	1013	1034	1089	1018
23	1143	1024	1022	999	1015	1012	1019	1012	1019	1025	1024	1026	1019	1025	1021	1011	995	990	984	982	979	996	1016	1027	1016
24	1034	1034	1030	1037	1014	1032	1019	1012	959	1039	1039	1009	1001	1003	1016	1001	989	989	986	994	1004	994	1010	1026	1011
25 Q	1020	1023	1026	1034	1023	1024	1026	1026	1027	1028	1028	1034	1041	1045	1040	1027	1018	1001	987	987	994	1004	1019	1033	1021
26	1020	1035	1031	1023	1025	1026	1024	1027	1034	1034	1034	1031	994	986	1042	1053	1042	1026	1016	1016	1009	1056	1050	1018	1027
27 Q	1010	1019	1019	1033	1023	1030	1024	1048	948	1034	1023	1034	1038	1048	1037	1026	1014	1003	1001	994	996	1016	1035	1034	1020
28	1026	1020	1018	1018	1034	1035	1040	1041	1034	1036	1049	1019	972	1002	1053	1061	1041	1010	981	983	998	1009	1013	1033	1022
29	1062	1087	1252	1294	1209	1008	976	1013	1040	1000	856	994	1054	1043	1046	907	885	928	968	974	983	1016	1034	1056	1029
30	1135	1250	1169	1157	1064	1038	1041	1024	835	975	986	555	680	964	1075	1061	1045	1036	1019	1006	1007	1003	1017	1040	1008
31 D	1112	1194	1366	1155	1131	1158	883	(348	303)	566	546	556	741	864	1020	1024	955	971	1019	1019	1025	1012	1038	1075	920
Mean	1063	1074	1084	1061	1038	1032	990	929	918	903	915	867	909	947	979	978	972	976	991	1004	1013	1028	1041	1048	990

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 26 Meanook D = 24° E + ′ July 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	-0.4	2.2	15.3	4.8	7.5	6.4	4.2	8.7	14.2	10.4	8.3	1.7	9.4	15.4	16.1	13.9	16.2	20.6	20.0	8.9	1.7	5.0	4.0	6.8	9.2
2	8.2	12.1	8.9	8.4	11.6	10.4	5.6	24.5	14.2	5.6	-0.7	14.2	18.5	14.2	20.9	21.1	20.9	17.7	15.3	7.4	4.4	1.8	2.8	3.1	11.3
3	3.7	6.6	9.2	9.9	10.5	9.6	11.1	9.8	7.5	8.1	1.7	1.6	10.4	15.7	20.0	19.4	18.9	13.1	13.1	9.1	11.3	4.9	5.3	4.1	9.8
4	3.5	5.6	5.3	10.4	11.2	5.9	7.3	4.9	-9.2	10.6	9.5	18.8	13.9	21.2	20.5	20.3	21.1	12.5	11.5	7.0	6.2	4.5	2.6	3.5	9.5
5	5.5	7.6	9.4	6.1	6.9	6.4	12.4	14.2	8.7	17.8	12.6	10.0	11.0	24.1	23.2	21.2	20.2	18.7	14.0	11.9	5.7	4.4	7.3	4.6	11.8
6	5.1	5.8	5.7	5.5	10.6	6.6	7.7	7.4	8.5	9.4	12.8	12.9	12.9	17.6	20.4	19.9	16.2	11.4	11.6	9.5	5.9	4.1	2.6	4.2	9.8
7 Q	5.4	6.4	7.1	8.3	8.9	8.5	6.6	10.5	5.5	3.0	9.5	11.3	13.7	16.3	15.9	18.7	20.1	19.2	15.7	11.7	10.2	5.7	4.5	3.2	10.3
8 Q	3.4	5.3	7.1	7.0	5.5	6.5	9.2	6.2	4.7	4.5	3.4	5.5	12.2	16.1	17.7	18.9	18.7	15.8	10.4	6.5	3.7	0.6	-0.5	0.7	7.9
9 Q	2.4	4.0	6.6	7.0	6.5	4.6	4.6	5.7	9.4	7.6	6.6	9.2	13.8	19.1	21.8	23.5	23.4	20.6	12.7	5.8	3.1	2.5	1.8	2.9	9.4
10	3.8	5.5	8.5	9.4	8.2	5.6	6.4	13.7	11.0	4.5	4.4	6.3	14.2	20.2	23.0	23.9	21.9	18.9	12.3	4.9	2.4	0.7	0.5	2.5	9.7
11	7.2	7.8	8.2	5.9	5.0	6.0	5.5	5.4	9.0	4.0	2.5	7.4	12.4	17.0	21.1	21.1	23.7	17.2	13.3	10.3	9.7	0.6	-1.2	-0.3	9.1
12	3.1	6.5	9.7	9.8	11.5	11.9	18.2	10.7	7.5	3.2	6.4	7.9	14.5	19.3	19.1	17.7	17.7	16.9	14.8	9.0	6.6	5.1	1.3	3.2	10.5
13	5.9	5.5	8.3	6.4	10.0	15.4	16.3	10.9	7.2	8.4	10.3	11.4	16.4	20.3	19.7	17.0	18.5	13.4	13.6	12.5	12.2	4.0	0.6	0.5	11.0
14 D	3.7	6.5	7.5	6.4	8.3	24.0	13.3	4.6	6.0	10.2	13.6	18.2	11.4	10.5	18.4	20.9	20.4	24.9	7.6	-1.9	-0.3	-0.6	-8.3	-7.1	9.3
15 D	-5.1	-1.9	4.1	5.8	10.3	7.2	10.3	10.6	20.0	16.3	10.5	9.9	23.2	7.9	27.5	4.3	13.3	16.7	17.8	24.1	39.9	76.3	74.7	17.6	16.9
16 D	11.0	-53.6	-31.0	-25.7	-8.1	-4.0	-15.5	-31.0	8.5	-8.8	2.1	6.6	11.4	43.9	23.2	20.4	24.0	14.2	11.5	9.7	6.6	5.7	9.3	14.2	1.9
17	13.0	12.4	9.2	3.9	-6.5	-1.4	7.7	7.7	15.9	8.9	5.3	5.5	13.5	20.4	19.5	24.5	23.0	14.9	8.2	2.3	0.3	3.4	2.0	4.3	9.1
18	0.9	2.5	6.3	0.5	4.3	6.3	4.7	7.7	7.6	5.7	8.3	8.5	16.5	19.4	17.9	19.9	14.9	16.5	4.0	13.6	4.3	1.5	-1.2	-0.5	7.9
19 D	1.6	4.0	5.3	5.3	5.5	7.0	-20.0	-3.3	19.9	5.2	31.0	8.9	23.6	20.2	27.4	32.0	28.5	22.7	10.4	11.0	7.1	4.7	5.5	8.5	11.3
20	11.4	1.7	2.5	3.9	3.1	3.5	3.9	5.2	9.5	8.5	9.4	13.1	15.3	18.7	22.4	19.8	17.7	17.4	17.8	13.2	-3.1	4.5	6.2	4.8	9.6
21	2.3	-1.4	2.5	3.1	12.6	12.9	4.6	3.9	4.4	6.6	7.5	9.5	8.5	11.3	17.3	20.5	22.0	19.0	9.9	9.0	5.1	3.7	3.6	3.6	8.4
22	4.8	4.9	5.0	7.8	21.0	11.4	13.5	7.4	7.1	6.6	5.4	10.8	11.4	17.3	22.3	20.2	20.2	19.1	11.4	5.4	1.5	0.5	2.6	4.0	10.1
23	9.5	5.1	4.5	4.4	4.6	9.3	6.9	4.6	7.8	6.8	7.3	9.2	11.4	13.4	16.7	19.2	19.3	15.8	12.2	4.9	-0.7	-1.8	-1.4	1.1	7.9
24	3.4	4.6	5.5	5.1	15.2	9.9	8.7	5.7	-1.5	4.7	6.1	7.5	14.1	21.1	22.7	21.2	24.1	14.2	8.0	-0.4	-2.8	-4.2	-2.4	1.3	8.0
25 Q	5.7	7.4	7.2	6.5	8.0	6.8	5.7	5.8	6.6	7.7	8.4	9.8	12.1	14.5	16.2	17.4	16.9	14.5	8.3	3.5	-0.8	-1.4	0.5	2.6	7.9
26	5.5	7.3	7.5	8.1	8.1	5.7	6.4	7.3	7.0	6.6	9.8	8.7	6.5	17.2	23.1	24.2	22.2	17.7	11.4	6.7	3.4	6.7	3.9	-0.3	9.6
27 Q	1.6	3.1	5.0	4.9	5.5	4.9	5.7	7.7	13.9	15.0	9.3	11.2	15.8	18.6	20.1	20.2	16.9	11.4	7.5	1.3	-2.7	-3.8	-2.3	-0.2	7.9
28	4.1	5.7	6.0	5.9	5.5	5.4	5.1	7.4	6.4	8.2	8.6	8.2	12.0	11.4	19.2	24.0	22.7	19.6	12.9	7.1	-0.8	-3.8	-3.7	-1.3	8.2
29	-0.3	3.1	7.9	0.7	11.2	7.0	8.9	10.8	6.9	4.1	1.0	7.6	11.8	12.9	18.8	23.1	13.6	14.2	6.0	3.1	-7.6	-0.5	1.9	5.9	7.2
30	10.2	9.9	8.0	12.9	19.9	12.7	15.8	9.6	13.6	10.5	6.3	12.9	32.5	18.0	14.2	19.8	17.5	13.8	8.3	4.4	3.0	0.3	2.0	2.1	11.6
31 D	2.7	5.7	20.3	7.3	6.1	6.4	-6.1	19.4	39.6	6.9	13.1	20.0	21.8	12.5	20.7	25.4	22.1	12.7	12.1	7.6	7.3	3.5	5.6	6.7	12.5
Mean	4.6	3.5	6.2	5.3	8.0	7.7	6.3	7.2	9.6	7.3	8.1	9.8	13.4	17.6	20.2	20.4	19.9	16.6	11.7	7.7	4.6	4.5	4.2	3.4	9.5

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 27 Meanook — Z = 58,000 γ + — July 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	809	830	894	835	835	726	765	614	755	748	775	721	751	767	755	713	742	762	787	790	820	814	799	811	776
2	824	827	817	817	814	814	741	602	733	729	639	563	647	738	765	777	771	771	774	776	778	787	783	788	753
3	799	817	819	830	819	765	783	734	755	777	722	556	712	776	787	780	761	775	780	787	809	832	832	820	776
4	830	867	846	841	799	765	788	784	501	538	710	738	776	722	669	746	755	775	759	765	787	799	792	798	756
5	818	828	875	882	855	820	787	735	719	799	699	702	679	683	747	772	781	777	767	771	787	799	819	831	781
6	867	888	856	814	788	776	787	766	749	634	515	518	561	661	738	773	778	777	776	776	775	778	780	780	746
7 Q	780	776	776	776	776	777	771	750	716	691	754	775	776	776	767	760	760	754	749	745	754	764	777	777	762
8 Q	781	786	780	776	766	770	766	765	759	745	712	732	754	757	757	758	757	758	754	752	754	759	760	766	759
9 Q	774	776	783	777	776	774	770	770	742	754	749	759	767	776	772	765	755	754	751	751	752	757	768	780	765
10	787	793	810	799	787	777	767	761	709	721	748	757	763	754	753	755	757	754	754	753	762	784	804	820	768
11	837	841	833	812	812	819	821	799	759	739	700	722	734	734	748	755	755	755	754	756	771	784	804	810	777
12	810	811	831	823	806	796	712	723	763	647	663	704	689	702	727	750	776	776	766	776	787	788	790	798	759
13	808	821	818	807	806	790	746	765	711	619	637	615	658	690	719	754	747	740	749	760	777	799	795	781	746
14 D	781	779	777	776	788	788	791	780	761	668	526	632	604	692	713	749	749	762	762	753	774	764	759	767	737
15 D	758	767	780	802	823	786	725	565	644	689	614	679	543	553	556	671	586	619	767	907	953	919	619	485	700
16 D	539	350	491	579	747	811	841	955	1026	937	983	854	745	553	515	608	624	701	782	850	857	873	916	933	753
17	892	826	877	845	707	747	812	856	617	653	682	693	674	688	725	736	758	787	808	794	780	807	807	836	767
18	844	836	876	869	849	837	814	750	790	784	760	719	740	741	746	760	805	801	788	779	776	777	772	767	791
19 D	772	775	774	776	777	793	551	406	832	991	941	919	745	830	796	765	766	766	776	794	810	786	792	830	782
20	820	814	821	814	801	792	784	777	772	756	728	692	730	743	745	743	756	766	776	799	798	821	843	855	781
21	816	815	799	796	794	721	807	788	782	782	795	795	766	743	787	799	790	787	777	777	776	782	788	789	786
22	808	820	814	818	777	677	733	777	787	786	743	725	736	766	772	765	760	761	755	756	761	776	800	839	771
23	885	843	811	788	787	764	753	755	764	776	777	778	778	780	777	777	776	767	766	765	761	755	762	778	780
24	788	790	786	788	787	778	774	739	669	755	759	755	746	751	766	764	755	751	751	750	756	764	776	785	762
25 Q	788	787	780	787	786	777	775	775	774	774	774	777	779	779	778	776	767	764	764	762	762	767	777	788	776
26	788	796	790	788	782	777	775	775	774	755	722	738	717	689	737	764	765	764	766	769	771	786	810	831	768
27 Q	819	784	777	786	777	780	778	789	651	747	746	751	776	777	767	765	765	754	746	748	746	748	756	764	762
28	765	765	765	765	766	766	771	788	778	771	766	746	701	713	754	763	756	756	763	766	772	768	769	775	761
29	790	832	889	858	790	692	771	778	775	761	667	714	782	781	772	671	636	695	721	747	761	784	792	849	763
30	898	901	880	836	792	804	795	770	605	666	698	724	644	673	787	790	778	779	781	786	789	790	790	800	773
31 D	833	892	844	864	862	706	810	640	507	471	791	839	793	684	780	792	734	720	762	778	798	800	800	799	762
Mean	804	801	809	804	795	773	770	743	732	731	726	722	718	725	741	752	749	756	766	775	784	791	788	792	764

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 28 Meanook — July 1960

Day	Horizontal Intensity						Declination							Vertical Intensity					
	Maximum 12,000 γ +			Minimum 12,000 γ +		Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +		Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	04	46	1220	07	48	557	663	05	14	38.0	06	24	-23.9	61.9	02	22	952	07	18	507	445
2	00	37	1124	07	34	502	622	07	43	50.6	10	44	-8.3	58.9	00	40	867	07	40	533	334
3	23	59	1113	11	19	779	334	15	28	22.7	10	54	-8.7	31.4	21	39	864	11	16	471	393
4	01	29	1212	08	24	437	775	10	23	35.1	08	19	-45.9	81.0	01	36	927	08	21	331	596
5	02	34	1178	09	45	422	756	09	15	44.5	10	19	-8.1	52.6	09	37	930	10	11	611	319
6	01	51	1184	10	12	753	431	15	06	24.4	03	04	1.6	22.8	01	26	907	10	46	454	453
7 Q	14	01	1046	09	31	961	85	16	26	21.1	08	57	-0.4	21.5	22	35	787	09	28	671	116
8 Q	15	11	1054	10	32	978	76	15	47	20.4	22	10	-1.1	21.5	01	58	790	10	35	689	101
9 Q	14	17	1050	20	37	966	84	15	47	25.0	22	25	1.2	23.8	02	38	788	08	40	700	88
10	02	51	1071	20	43	972	99	15	44	25.1	22	04	-1.6	26.7	23	45	830	08	42	674	156
11	16	18	1078	21	35	955	123	16	25	31.0	21	40	-3.3	34.3	01	52	846	11	00	680	166
12	01	54	1107	09	30	809	298	06	13	31.9	09	15	-7.2	39.1	02	32	842	09	32	560	282
13	01	25	1097	09	02	769	328	05	52	29.0	09	11	-7.6	36.6	01	26	841	09	01	537	304
14 D	05	30	1242	11	41	478	764	11	30	64.3	11	42	-39.9	104.2	13	04	868	11	43	621	247
15 D	22	05	1635	13	24	-583	2218	(13	03	134.9	13	30	-147.6	282.5)	13	27	1351	13	33	55	1296
16 D	01	47	1699	11	33	-64	1763	13	34	93.3	(01	20	-161.1	254.4)	09	52	959	(01	20	-395	1354)
17	00	55	1358	08	32	303	1055	08	20	41.3	(04	41	-153.2	194.5)	07	55	1039	04	40	7	1032
18	07	12	1203	15	00	828	375	15	17	25.9	03	37	-5.2	31.1	02	40	911	07	24	628	283
19 D	12	58	1169	(07	18	155	1014)	10	23	65.2	06	51	-116.8	182.0	11	20	1186	06	45	66	1120
20	23	30	1154	11	58	360	794	11	35	42.0	11	48	-19.8	61.8	23	17	877	11	52	603	274
21	04	37	1182	13	16	917	265	04	45	29.2	01	36	-2.8	32.0	04	33	852	05	05	659	193
22	23	56	1146	05	58	925	221	04	17	28.4	05	39	-11.2	39.6	23	59	881	05	37	593	288
23	00	40	1168	16	55	972	196	15	50	22.7	21	43	-5.8	28.5	00	26	919	05	57	712	207
24	09	25	1062	08	40	885	177	16	24	29.9	08	36	-12.1	42.0	06	05	802	08	35	588	214
25 Q	03	44	1053	20	00	964	89	15	20	21.7	22	00	-6.3	28.0	00	38	798	20	00	755	43
26	22	53	1112	13	00	927	185	15	42	27.5	23	16	-3.0	30.5	23	00	843	12	55	638	205
27 Q	07	50	1067	08	23	893	174	08	55	24.6	21	05	-4.6	29.2	00	08	837	08	18	589	248
28	15	14	1070	12	45	936	134	15	37	25.2	22	03	-6.7	31.9	07	13	795	12	48	660	135
29	02	57	1449	05	53	812	637	15	33	28.4	20	07	-16.0	44.4	02	46	944	05	32	605	339
30	01	55	1353	11	47	53	1300	12	10	81.0	11	38	-17.8	98.8	01	35	922	08	54	478	444
31 D	02	05	1460	(08	03	-7	1467)	10	01	103.0	08	15	-132.9	235.9	06	35	1053	08	47	231	822
Mean			1197			633	564			41.5			-31.5	73.0			903			500	403
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 29 Meanook — H = 12,000 γ + — August 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1053	1039	1027	1042	1060	1027	1020	973	844	893	855	904	962	895	947	1030	1020	1014	999	996	988	1005	1012	1044	985
2	1051	1062	1053	1077	1027	1026	1017	989	939	896	737	933	962	971	1006	1028	1027	988	1004	1011	991	1022	1029	1043	995
3	1060	1017	1017	1017	1015	1017	1010	999	995	986	965	964	1019	1020	1020	1031	1032	1017	1013	1010	1014	1015	1021	1020	1012
4 Q	1046	1069	1035	1027	1028	1019	1017	1018	896	798	903	799	1031	1044	1035	1042	1037	1024	1018	1011	1002	1003	999	1016	997
5 Q	1025	1027	1017	1020	1024	1026	1021	1020	1021	1016	1031	1033	1036	1042	1048	1042	1032	1012	994	986	998	1010	1026	1035	1023
6	1032	1026	1012	1027	1034	1041	1047	1036	923	824	1012	1048	1044	1054	1059	1044	1016	1001	979	983	990	994	1003	1020	1010
7	1056	1058	1048	1041	1054	1073	1041	1024	1008	879	1028	1038	1041	1044	1044	1043	1026	1009	994	989	986	999	1012	1022	1023
8	1031	1026	1037	1046	1038	1041	1045	943	936	1040	1050	1000	1030	1038	1016	1001	950	956	987	991	1028	1048	1076	1155	1021
9	1171	1045	999	994	1038	990	715	820	675	1016	1009	597	983	1053	1034	1004	979	991	985	991	990	995	1014	1043	964
10	1048	1016	1026	1033	1030	1046	1072	1005	808	834	1016	1055	1062	1065	1037	1076	1103	945	972	997	993	1005	1006	1037	1012
11	1001	1008	1070	1193	1131	1077	1055	936	891	983	937	570	899	1051	1020	1009	1008	1022	986	990	985	990	1002	1053	994
12	1052	1059	1073	1025	1201	1041	664	561	772	805	772	529	664	892	1013	1041	1032	1039	1019	1004	1023	1028	1016	1028	931
13	1038	1020	1038	1026	1023	1037	1039	1028	1023	1004	1019	1022	1009	914	969	1008	1009	1001	989	992	995	1015	1014	1010	1010
14	1008	1022	1032	1013	1038	1037	1036	1022	1003	972	981	931	952	937	1008	1055	1037	993	1006	1030	1040	1018	1018	1065	1011
15	1053	1022	1040	1032	1012	1018	1023	1024	1015	1011	1013	1015	1033	1041	1037	1035	1019	1004	1044	985	989	1000	1011	1020	1019
16 D	1042	1032	1023	1016	1019	1025	1030	1034	1037	1040	1036	1011	987	981	895	601	686	874	957	971	993	994	989	1155	976
17 D	1312	1375	1190	1299	1091	765	934	450	158	734	989	959	924	1029	1029	946	731	565	779	856	977	1015	1091	1060	927
18	998	977	980	1015	1003	1039	762	775	718	662	854	895	828	815	984	1011	991	964	968	978	978	981	983	1004	923
19	988	993	1005	1006	1005	1005	1004	1005	1010	901	826	999	1014	1019	1024	1014	974	969	956	952	974	1055	1113	1002	992
20	1016	1001	992	1001	1066	1064	915	646	717	886	1005	1029	1001	994	1009	1004	967	947	943	941	994	1017	1029	1103	970
21 D	1053	1058	1052	1072	983	895	1019	923	359	736	965	1020	1021	1011	983	959	958	940	939	970	1009	1010	1034	1086	961
22	1102	1166	1054	1017	1016	995	1011	1009	1017	1016	1020	1018	1020	1019	1005	992	955	963	958	986	1013	1009	1036	1028	1018
23	1035	1027	1025	1027	1026	1022	1017	998	1012	1006	1029	1037	1033	1034	1026	1004	962	940	945	970	996	1005	1025	1036	1010
24 Q	1029	1021	1017	1028	1031	1028	1032	1032	1038	943	955	1021	1045	1041	1031	1007	986	967	970	979	986	1005	1007	1014	1009
25 Q	1027	1033	1025	1029	1030	1029	1027	1027	1032	1035	1036	1037	1040	1036	1033	1016	1002	990	985	991	1001	1009	1016	1022	1021
26 Q	1030	1034	1033	1032	1031	1035	1031	1033	1038	1043	1051	1047	1045	1043	1036	1022	1009	998	986	983	987	991	1023	1055	1026
27	1076	1080	1057	1039	1018	1031	1037	1041	1026	1016	1006	1021	1047	1044	1035	1029	992	932	975	990	975	1007	1008	1033	1021
28	1039	1026	1063	1111	1112	1072	966	814	1041	1027	1023	1027	987	950	926	998	995	982	991	998	1002	1014	1026	1042	1010
29 D	1074	1036	1044	1060	1099	1169	1154	1162	1076	1028	1013	1005	1008	1038	1010	988	1003	987	1010	997	1010	1027	1070	1118	1049
30 D	1252	1343	1413	1077	1020	1011	795	283	019	335	351	708	640	658	740	929	1013	990	978	995	1011	1017	1011	1022	859
31	1022	1026	1044	1056	1033	1028	1008	928	552	757	856	871	918	986	1010	1023	1017	1013	1001	1002	1005	998	1019	1017	966
Mean	1059	1056	1049	1048	1043	1023	986	921	858	907	947	940	977	992	1002	1001	986	969	977	984	997	1010	1024	1045	992

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 30 Meanook D = 24° E + ′ August 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	7.3	7.0	6.5	8.7	20.8	12.2	7.1	4.9	-0.3	-0.4	-11.7	-1.0	8.6	13.7	13.1	19.1	20.9	18.6	11.3	3.8	3.1	2.4	2.1	5.1	7.7
2	5.8	5.9	9.3	16.2	19.2	11.0	9.4	11.1	12.6	3.3	-1.3	-1.6	11.8	12.9	22.7	22.3	22.3	20.6	7.5	6.1	4.6	4.8	6.4	5.1	10.3
3	5.5	7.1	6.0	7.0	6.9	7.8	8.9	9.6	6.7	5.9	9.4	7.2	11.4	14.0	17.6	20.1	20.5	17.1	7.9	4.5	2.6	2.6	2.5	3.8	8.9
4 Q	8.3	11.2	9.6	8.5	10.5	13.9	9.1	8.6	11.0	25.4	10.0	3.1	10.8	15.4	17.3	19.4	17.7	15.3	9.8	5.2	2.4	2.1	1.6	4.0	10.4
5 Q	6.0	8.2	8.0	7.9	7.6	8.3	7.6	7.9	8.2	4.6	6.3	8.3	11.8	15.1	16.9	17.9	17.1	13.1	9.4	8.3	10.7	10.2	8.8	4.7	9.7
6	7.3	8.9	8.7	6.7	5.6	4.6	6.7	8.3	-1.2	16.6	10.2	9.6	15.2	20.5	21.7	21.1	21.4	13.5	10.9	7.0	2.6	-0.8	-1.7	1.6	9.4
7	3.7	5.3	10.0	7.9	7.1	6.0	4.1	6.1	6.3	4.7	7.9	7.9	10.2	18.8	19.1	19.4	19.8	14.9	10.1	4.0	-0.1	-0.9	1.0	4.1	8.2
8	6.2	6.8	6.7	5.4	5.1	4.8	1.2	23.7	17.8	9.1	3.8	6.0	9.0	16.9	19.8	17.3	10.2	7.0	4.2	1.3	-1.1	-2.9	4.1	7.1	7.9
9	9.0	8.6	7.7	7.1	8.4	5.0	-0.7	6.8	-10.8	5.3	1.6	29.8	13.8	15.0	19.4	18.1	16.8	11.2	9.6	2.9	0.6	0.8	1.8	4.2	8.0
10	6.1	7.3	7.1	4.8	4.1	5.0	7.0	22.5	21.7	8.8	9.6	10.1	12.9	18.6	20.7	22.5	16.9	14.9	4.6	0.0	-2.5	-0.8	0.1	4.6	9.4
11	7.2	7.9	8.4	23.4	21.4	10.2	7.3	7.5	12.1	7.9	11.5	16.7	8.2	18.3	19.4	17.8	17.5	15.4	18.3	7.2	5.7	3.0	2.3	3.2	11.6
12	6.7	6.4	6.1	5.8	7.6	1.2	-10.5	-5.9	15.2	13.7	2.7	8.1	21.7	32.2	17.3	17.4	17.9	15.5	11.2	7.2	3.4	1.2	1.5	3.2	8.6
13	4.8	4.9	5.4	6.9	7.3	4.8	4.2	5.1	6.8	11.3	10.8	10.1	10.9	12.6	18.2	19.3	20.9	17.7	15.9	10.9	5.5	5.2	5.0	6.0	9.6
14	5.9	5.4	7.8	14.3	8.6	7.0	7.8	7.5	6.7	11.9	12.6	7.9	10.7	11.8	21.8	19.2	15.7	11.0	5.1	3.8	3.8	-5.6	-1.5	4.3	8.5
15	7.9	9.8	11.0	12.9	7.0	7.8	8.8	7.9	11.0	17.0	9.3	10.9	12.3	14.1	17.8	20.0	17.0	16.2	9.3	4.2	3.4	1.1	2.8	4.8	10.2
16 D	6.5	8.5	8.4	6.7	6.0	6.2	7.3	7.4	8.3	7.5	7.0	3.7	8.5	15.0	14.1	36.7	31.6	8.7	4.0	13.0	11.4	-4.4	-2.7	1.7	9.2
17 D	20.5	31.4	-48.3	-17.6	-20.3	-1.2	2.3	9.9	46.1	9.9	12.7	11.1	15.6	19.2	31.4	30.2	23.7	17.1	5.5	-6.2	4.8	5.7	13.5	10.6	9.5
18	9.6	12.2	12.2	8.7	7.3	5.0	1.3	34.2	5.2	10.1	27.1	13.6	12.7	19.0	26.7	20.6	12.6	7.2	4.6	3.1	0.0	2.4	5 1	6.0	11.1
19	7.6	8.5	7.3	7.8	7.1	8.3	8.6	7.8	7.3	4.0	1.0	15.8	16.3	22.6	25.8	21.6	21.5	7.5	3.1	10.0	2.4	-1.6	6.3	2.4	9.5
20	4.3	3.7	3.6	4.1	3.1	-0.2	-3.8	-9.4	-9.7	1.8	12.3	14.0	17.5	24.3	26.1	21.4	22.1	12.6	8.6	-4.0	-3.8	-1.0	-0.7	0.4	6.1
21 D	6.7	-1.6	2.4	3.1	5.7	-0.9	5.4	8.6	3.1	13.8	0.3	12.9	16.0	18.9	23.4	18.7	20.4	17.2	12.9	2.2	-2.4	0.2	2.4	3.0	8.0
22	1.9	4.0	3.2	4.0	7.9	6.9	5.8	5.5	5.1	1.2	8.1	10.8	15.0	18.3	18.4	20.8	17.0	14.5	3.5	-0.7	-1.6	-0.3	3.1	5.2	7.4
23	1.6	6.2	5.3	11.0	5.9	7.0	-1.0	3.1	3.7	2.9	7.4	10.8	14.2	17.5	19.4	20.2	17.9	10.1	-0.6	-2.9	-3.2	-1.0	2.1	3.8	6.7
24 Q	6.5	8.1	8.1	5.9	4.2	5.0	7.9	6.2	11.9	0.8	4.3	11.9	17.5	19.0	19.9	21.4	20.9	16.0	8.9	7.2	4.2	2.4	2.3	3.2	9.3
25 Q	5.2	5.7	6.5	6.2	6.7	7.2	7.8	8.6	9.7	9.8	9.8	11.1	13.2	16.1	18.6	20.9	19.4	17.7	11.1	6.2	2.3	0.5	0.7	1.2	9.3
26 Q	2.2	4.0	4.7	5.9	6.5	6.7	7.3	8.3	9.5	9.2	10.9	11.6	12.7	18.0	15.8	22.7	22.1	17.7	15.4	9.2	5.1	-0.5	-0.4	-1.1	9.3
27	0.3	1.9	4.2	9.1	6.2	4.5	5.7	7.8	9.1	7.8	5.3	7.1	12.2	17.3	20.9	23.7	25.6	20.4	-3.2	-1.5	-1.1	-2.5	-1.7	-0.6	7.4
28	1.0	3.7	4.2	11.7	23.9	6.2	-5.1	-17.5	10.1	7.8	9.8	10.0	8.6	11.7	15.7	18.9	18.0	15.0	7.2	4.9	3.2	3.1	3.1	3.9	7.5
29 D	1.8	2.3	1.5	1.6	1.3	13.5	2.3	5.1	7.5	10.0	9.7	9.0	11.2	14.3	15.7	14.5	16.7	10.1	7.9	5.7	2.4	2.1	7.4	9.7	7.6
30 D	17.7	6.3	6.2	-15.6	-21.6	-4.0	5.1	-16.0	-33.9	14.8	8.7	-6.7	12.2	22.5	20.1	16.5	21.5	16.1	5.3	2.0	1.4	5.2	5.6	7.1	4.0
31	8.3	8.5	6.3	17.8	13.3	10.0	7.2	-1.4	-3.1	27.1	14.3	14.8	22.7	21.8	25.2	23.9	19.0	15.0	10.6	7.3	4.5	3.5	5.2	7.2	12.0
Mean	6.4	7.2	5.0	6.9	6.8	6.1	4.6	6.4	6.9	9.2	7.8	9.5	13.1	17.6	20.0	20.8	19.4	14.3	8.1	4.3	2.4	1.2	2.8	4.2	8.8

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 31 Meanook — $Z = 58,000\ \gamma +$ — August 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	806	786	788	809	810	800	793	754	645	653	624	636	674	669	724	764	767	764	762	758	765	777	794	816	747
2	819	826	813	806	809	809	791	711	618	592	489	597	650	658	728	763	764	754	765	776	777	801	830	833	741
3	841	810	787	788	776	776	762	737	712	700	672	676	723	739	754	764	776	777	777	777	779	779	788	798	761
4 Q	810	823	820	812	800	798	786	765	691	518	637	628	755	776	770	773	776	768	775	771	771	777	775	781	756
5 Q	784	785	773	774	768	773	775	774	759	725	757	770	774	774	775	773	776	775	777	773	777	778	777	781	772
6	785	785	777	774	775	786	810	795	671	605	680	750	775	776	776	777	771	774	771	772	780	787	789	790	764
7	792	806	836	825	843	839	786	770	753	646	751	773	775	774	767	768	770	768	768	763	760	768	777	778	777
8	784	781	778	781	792	792	774	527	594	719	773	749	737	752	738	728	710	726	733	767	801	833	883	916	757
9	882	812	790	778	791	771	759	870	840	800	778	627	728	801	790	778	774	781	784	773	778	783	784	795	785
10	814	805	797	792	778	780	751	682	608	719	727	758	797	793	767	762	761	760	768	778	784	795	789	792	765
11	780	778	811	864	806	851	815	702	622	648	662	604	607	741	749	735	725	747	762	779	767	775	783	799	746
12	831	850	862	859	854	762	682	858	733	759	736	723	627	602	746	789	778	789	778	776	787	790	780	781	772
13	783	777	793	792	789	790	792	781	765	745	710	747	764	662	697	725	757	761	758	765	768	779	787	783	761
14	780	768	791	795	784	791	792	765	718	654	706	680	682	673	720	774	774	755	759	765	774	792	790	813	754
15	833	817	831	826	783	773	772	767	735	744	745	760	778	775	766	776	777	778	775	772	766	765	773	785	778
16 D	793	786	778	775	767	768	771	767	762	758	754	727	712	688	676	694	593	746	803	822	903	884	802	854	766
17 D	748	522	476	793	726	650	779	944	698	702	772	831	814	828	819	793	708	606	785	816	856	866	920	854	763
18	840	833	819	811	805	803	748	669	865	823	800	753	749	674	735	767	785	781	770	781	788	787	790	801	782
19	792	798	791	789	785	781	772	765	761	614	541	702	767	781	773	765	759	749	783	783	795	854	880	850	768
20	801	795	776	777	793	750	736	810	699	758	749	795	803	785	784	786	785	785	788	778	801	813	811	830	782
21 D	878	849	844	845	715	693	800	637	681	529	675	766	781	778	763	744	747	758	776	795	788	790	803	841	762
22	850	893	830	819	768	754	780	779	765	714	784	791	790	788	776	775	777	783	781	787	789	789	795	802	790
23	810	795	795	812	791	787	712	729	734	735	764	778	786	789	788	780	772	764	770	778	786	787	784	784	775
24 Q	789	787	784	783	779	778	773	711	740	698	705	750	781	780	778	771	770	767	768	767	774	783	787	785	766
25 Q	778	777	776	777	778	779	777	776	774	777	775	776	776	777	775	771	765	761	752	753	754	763	767	771	771
26 Q	771	768	767	772	773	774	774	768	764	765	768	773	775	774	768	766	765	760	760	759	763	765	778	793	769
27	846	859	877	862	793	773	784	776	760	754	747	750	781	781	772	765	759	750	754	767	770	779	778	771	784
28	772	773	800	845	814	729	630	590	788	789	776	773	758	712	670	728	776	772	778	778	776	776	773	781	757
29 D	800	798	780	781	787	682	783	733	786	779	777	770	774	793	787	771	772	764	779	793	823	857	893	895	790
30 D	872	786	577	597	702	692	841	1073	1024	976	849	793	605	806	737	798	816	793	781	787	793	800	802	809	796
31	826	825	828	830	800	793	763	727	545	555	671	670	659	719	752	765	761	762	776	778	787	789	790	786	748
Mean	809	795	785	798	785	771	770	759	729	708	721	732	741	749	756	764	760	761	772	777	786	796	802	808	768

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 32 Meanook — August 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	04	18	1114	10	46	704	410	04	23	34.5	10	38	-29.1	63.6	04	15	866	11	47	491	375
2	03	23	1123	10	17	634	489	04	05	34.2	10	19	-13.7	47.9	03	23	876	10	45	429	447
3	00	48	1085	10	03	932	153	15	01	22.4	21	00	0.6	21.8	00	06	853	10	05	633	220
4 Q	01	30	1082	11	13	572	510	09	12	41.2	11	12	-7.0	48.2	02	12	837	09	22	426	411
5 Q	14	55	1054	19	35	980	74	16	12	18.9	09	08	-1.6	20.5	00	47	791	09	12	701	90
6	14	03	1070	08	51	648	422	14	14	24.9	08	50	-29.2	54.1	06	35	816	08	58	464	352
7	05	24	1094	09	22	775	319	16	55	24.3	09	34	-4.6	28.9	04	12	854	09	11	605	249
8	23	57	1224	07	48	848	376	07	18	36.4	06	53	-3.4	39.8	23	40	939	07	46	439	500
9	00	29	1216	11	21	428	788	11	31	60.8	08	30	-32.9	93.7	08	13	953	11	17	530	423
10	06	24	1147	09	02	711	436	08	17	38.5	19	56	-6.1	44.6	00	29	823	08	18	542	281
11	03	44	1279	11	05	355	924	03	47	41.3	11	35	-46.6	87.9	03	12	897	11	25	449	448
12	04	59	1280	11	32	217	1063	12	41	48.2	07	04	-139.0	187.2	07	34	995	11	40	502	493
13	00	30	1056	13	40	863	193	16	08	22.8	06	49	1.6	21.2	03	58	819	13	43	626	193
14	23	27	1125	11	26	877	248	15	12	27.6	21	23	-9.2	36.8	23	24	833	09	33	620	213
15	00	36	1075	08	53	975	100	09	14	21.5	00	11	3.4	18.1	03	07	866	09	10	674	192
16 D	23	37	1313	15	53	281	1032	15	56	59.3	21	38	-9.8	69.1	21	13	933	16	08	460	473
17 D	02	37	1562	07	46	-78	1640	08	14	110.8	02	45	-145.1	255.9	07	36	1087	08	30	427	660
18	05	47	1072	09	25	349	723	07	28	61.0	06	44	-31.1	92.1	06	51	994	06	20	568	426
19	21	56	1168	09	58	753	415	17	27	34.8	20	55	-10.7	45.5	22	10	911	10	04	439	472
20	23	38	1131	07	46	90	1041	07	42	96.3	07	55	-75.1	171.4	07	40	1007	07	48	446	561
21 D	04	06	1141	08	48	27	1114	08	51	67.2	08	22	-54.1	121.3	00	45	915	09	23	407	508
22	01	38	1242	16	43	931	311	15	47	22.3	05	02	-9.5	31.8	01	29	928	04	57	661	267
23	00	01	1055	17	50	932	123	15	37	21.0	06	53	-16.5	37.5	03	31	838	06	51	653	185
24 Q	08	18	1059	10	03	799	260	15	47	22.8	09	45	-16.5	39.3	01	15	793	09	53	543	250
25 Q	12	08	1041	17	55	979	62	15	44	22.1	21	48	-0.2	22.3	22	30	791	18	30	750	41
26 Q	23	50	1071	21	14	968	103	16	13	25.4	21	34	-2.1	27.5	23	59	806	08	25	748	58
27	00	42	1104	17	52	895	209	17	28	30.7	20	23	-8.3	39.0	02	45	897	11	07	707	190
28	06	13	1194	07	00	683	511	04	09	40.5	07	02	-47.6	88.1	03	34	864	06	51	373	491
29 D	07	03	1320	05	30	787	533	05	19	37.3	05	09	-55.1	92.4	23	54	911	05	30	584	327
30 D	02	53	1535	08	13	-792	2327	09	24	111.0	03	16	-155.3	266.3	07	08	1413	03	20	447	966
31	06	46	1107	08	19	289	818	09	25	52.7	08	30	-39.9	92.6	03	28	861	08	44	345	516
Mean			1166			594	572			42.3			-32.1	74.4			902			538	364
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 33 Meanook — H = 12,000 γ + — September 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	1012	1011	1009	1009	1013	1014	1017	1020	1020	1023	1024	1023	1021	1017	1008	1009	998	989	991	994	1002	1010	1011	1016	1011
2	1019	1016	1014	1021	1021	1020	1035	1031	950	952	974	993	872	808	925	963	996	997	997	1013	1018	1055	1099	1084	995
3 D	1222	1271	1111	1150	954	837	459	852	1006	1085	1053	1031	1002	979	1026	1017	991	977	983	998	1027	1020	1048	1040	1006
4 D	1048	1004	1036	1043	1128	1079	956	726	731	539	526	710	358	594	823	982	990	939	906	1032	1180	1318	1374	1293	939
5 D	1472	1190	1015	624	820	837	626	605	485	593	508	506	486	773	644	598	899	985	939	994	1006	1051	1040	1111	825
6	1062	1028	1032	1088	1108	1094	980	906	922	1030	1024	1040	1006	1005	978	968	970	960	975	978	1001	1055	1067	1106	1016
7 D	1025	1023	1013	1008	1007	1009	1007	948	986	961	967	787	432	894	925	1020	996	962	956	995	1008	973	1010	1065	957
8	1042	1025	1046	1041	1056	1065	1026	745	552	923	975	831	953	925	1020	1004	945	978	988	974	974	995	1010	1041	964
9	1045	1046	1160	1058	1053	1116	1033	922	904	887	910	1009	959	881	1009	1010	994	966	950	970	998	1001	1013	1013	996
10	1012	1020	1013	1031	1042	1045	1044	955	951	963	904	948	1027	1018	1008	935	901	929	937	948	984	1027	1030	995	986
11	1034	1051	1107	1035	1015	1022	1035	1024	1026	1021	1017	1021	1005	1016	999	990	948	944	952	967	998	1006	1010	1011	1010
12	1023	1036	1032	1031	1014	1036	1037	874	811	861	974	1021	998	985	977	974	995	993	980	977	990	1004	1021	1028	985
13	1042	1035	1060	1199	1155	1060	916	918	730	842	745	915	984	1030	989	991	992	983	986	1003	1032	1028	1072	1080	990
14	1169	1001	987	1029	1014	1027	1039	1028	1004	1018	995	936	1003	1011	1012	1019	1011	988	988	995	1000	1004	1005	1006	1012
15 Q	1003	1002	1010	1014	1014	1027	1029	1028	1027	1026	1030	1029	1027	1025	1014	1005	989	979	985	991	1001	999	999	1004	1010
16 Q	1015	1012	1026	1023	1026	1028	1028	1029	1030	1033	1036	1034	1034	1023	1019	1002	995	996	1001	998	998	1004	1005	1011	1016
17	1012	1020	1035	1021	1019	1025	1025	1030	1032	1035	1033	1030	1028	1025	1018	1016	999	986	985	986	997	998	1010	1053	1018
18	1076	1120	1245	1104	1160	1083	1035	1019	1016	841	805	1010	1021	1020	994	991	976	979	982	994	1006	1014	1016	1010	1022
19 Q	1011	1010	1018	1020	1025	1028	1035	1030	1026	1025	1024	1025	1022	1020	1014	1004	987	982	985	986	998	1002	1014	1015	1013
20	1020	1013	1017	1021	1022	1023	1024	1026	1033	1028	1004	1034	1035	1027	1019	1006	987	966	974	986	1002	1020	1033	1021	1015
21	1014	1018	1020	1020	1023	1021	1024	1026	1033	1008	980	991	991	1029	1027	1005	987	979	981	978	986	1001	1025	1026	1008
22	1030	1031	1034	1037	1049	1022	1016	1030	1023	1021	1024	1023	1018	1017	1020	1010	998	977	974	983	987	1000	1023	1049	1017
23	1050	1088	1096	1054	1017	1016	1032	982	868	958	786	1013	1052	1032	1022	1012	993	984	978	985	995	1001	1033	1031	1003
24	1023	1095	1261	1075	1019	1088	1040	838	901	580	736	1071	1042	1037	1032	1017	970	977	991	997	1010	1013	1012	1017	993
25 Q	1012	1012	1013	1012	1015	1015	1016	1017	1016	1018	1015	1014	1012	1015	1012	1005	994	982	978	976	981	995	1009	1017	1006
26	1023	1020	1021	1027	1025	1031	1037	1026	958	989	1023	1026	1024	1032	1021	1014	1011	1007	1005	1006	1009	1013	1032	1065	1018
27	1117	1153	1188	1107	1042	1138	1057	699	805	916	959	992	1020	1026	1020	1009	1010	998	993	978	997	1002	1004	1006	1011
28	1010	1017	1012	1009	1015	1017	1015	1017	982	794	859	1012	1034	1028	1009	997	998	1000	998	1001	1005	1012	1015	1003	994
29	1009	1014	1015	1020	1019	1017	1021	986	931	965	975	964	973	932	982	1032	1005	990	997	1006	1030	1022	1021	1065	1000
30 D	1110	1135	1146	1103	1102	1071	1041	869	755	789	915	790	678	641	783	907	1004	990	967	970	975	996	1018	1043	950
31																									
Mean	1059	1051	1060	1034	1034	1030	990	940	917	924	927	961	937	962	978	984	984	979	977	989	1007	1021	1036	1044	993

DECLINATION
Mean values for periods of sixty minutes, Universal Time

Table 34 Meanook D = 24° E + ′ September 1960

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	Q	7.7	7.5	7.3	7.5	7.2	6.9	7.0	7.8	9.4	10.1	10.0	11.1	12.7	16.8	17.1	16.8	15.0	11.4	5.1	3.3	2.5	3.5	4.8	6.3	8.9
2		6.8	5.7	6.0	5.9	7.2	17.5	8.4	5.3	4.2	10.4	10.1	14.4	16.9	21.5	26.6	22.3	21.1	15.0	4.1	-0.7	3.2	5.1	6.7	8.4	10.5
3	D	4.3	10.0	4.3	7.5	24.3	6.5	-6.7	5.3	6.3	10.1	10.0	8.1	8.2	11.2	17.5	17.0	14.2	10.6	4.1	-1.4	3.0	4.0	2.4	1.9	7.6
4	D	11.4	10.2	6.6	5.0	5.3	14.3	-2.3	-4.8	17.6	11.7	16.5	12.3	44.2	53.0	41.3	28.7	15.9	12.9	9.0	28.6	29.6	43.0	46.4	26.9	20.1
5	D	38.9	8.6	16.5	-28.3	2.3	-20.2	4.0	-15.1	-39.0	-3.8	26.8	27.9	49.8	46.6	49.1	60.0	30.7	17.7	14.6	1.8	-3.1	6.2	9.4	10.3	13.0
6		12.7	7.7	5.5	24.7	12.4	1.2	-3.1	-2.5	6.5	6.2	9.1	10.6	14.4	18.9	21.8	21.7	17.8	10.1	5.3	3.0	1.6	3.0	7.4	17.7	9.7
7	D	7.9	6.4	10.3	7.8	6.3	11.1	9.1	3.9	8.5	6.3	9.0	5.9	17.0	21.7	18.8	24.5	27.6	16.3	7.8	8.9	6.7	2.1	5.6	3.7	10.5
8		7.5	8.6	10.4	11.7	11.7	10.9	8.0	-23.7	-30.1	18.1	13.0	0.8	12.6	15.2	23.0	22.5	17.7	11.4	9.5	11.3	6.4	5.0	4.6	5.8	8.0
9		6.7	5.3	14.5	19.4	14.3	8.3	14.6	5.0	11.1	13.7	12.4	11.7	11.0	11.3	21.7	23.2	20.7	16.3	7.5	0.2	1.7	2.0	2.0	5.0	10.8
10		6.6	8.0	8.0	7.6	7.0	8.3	17.3	2.4	0.9	8.1	7.3	15.4	14.4	19.4	20.1	15.9	6.6	2.3	-1.0	-12.4	-7.2	0.3	4.1	6.0	6.9
11		6.3	7.7	10.1	8.7	5.4	4.9	10.1	8.9	1.7	9.9	10.9	11.0	13.0	17.0	18.6	19.7	17.7	7.1	0.7	-4.0	2.0	1.7	1.1	6.6	8.2
12		6.5	13.3	11.2	8.7	7.5	7.7	10.9	11.0	17.4	18.1	12.4	9.9	10.0	13.6	19.2	19.9	16.1	11.3	8.9	5.8	3.2	5.9	7.2	8.3	11.0
13		9.1	8.5	5.9	0.3	-4.1	-7.9	8.0	2.1	5.0	13.6	17.1	20.7	16.1	19.8	15.0	16.9	16.5	12.8	9.0	10.1	7,1	6.7	5.4	4.3	9.1
14		4.1	5.4	5.9	9.8	24.7	8.9	7.8	9.5	10.0	11.6	10.4	9.2	15.1	15.6	17.8	18.7	18.0	15.8	11.0	9.0	8.0	8.5	8.1	9.1	11.3
15	Q	8.0	6.9	7.1	6.4	8.3	13.6	7.6	9.0	8.9	10.0	11.1	12.4	13.9	16.2	17.3	19.6	18.5	15.2	10.1	7.1	7.3	7.2	7.4	6.8	10.7
16	Q	4.8	4.7	4.6	5.4	6.2	6.5	7.0	7.6	8.0	9.4	10.1	10.8	14.9	15.2	18.6	21.3	17.2	13.2	10.5	8.4	6.3	5.3	4.8	3.9	9.4
17		4.1	4.2	5.6	5.7	6.0	6.9	6.5	8.4	8.3	9.7	10.4	11.1	12.6	14.7	18.8	20.9	19.5	16.8	8.6	7.0	7.2	1.3	0.7	-1.0	9.0
18		-4.1	-1.9	14.4	2.6	2.0	13.9	6.1	6.6	9.5	9.8	-9.5	12.4	13.8	14.7	15.6	14.7	12.9	9.2	4.8	4.0	3.9	4.7	5.9	5.7	7.2
19	Q	5.2	5.4	5.3	5.8	5.1	5.1	9.8	6.8	8.2	9.8	10.6	10.8	11.9	14.1	15.1	16.5	17.1	10.7	5.8	2.0	0.9	1.4	3.8	5.9	8.0
20		5.9	14.0	6.0	6.2	7.1	7.7	7.9	8.2	10.8	8.5	7.9	13.0	14.4	16.6	18.6	18.4	16.8	12.7	6.0	1,0	0.3	0.6	1.5	4.1	8.9
21		6.7	6.2	6.1	6.9	7.2	8.1	8.2	8.2	10.7	7.0	12.2	18.1	20.2	19.8	18.5	20.6	14.2	9.8	7.5	5.8	2.4	-0.1	1.3	1.0	9.4
22		-0.3	1.3	4.7	6.2	4.2	2.4	9.1	8.9	8.8	10.4	10.3	10.4	11.9	15.3	19.2	24.4	23.2	18.0	10.4	8.8	2.5	-2.9	-1.6	-4.0	8.4
23		-5.0	-3.7	8.9	9.4	7.8	7.3	7.9	21.0	19.6	11.6	3.2	13.0	12.6	13.8	17.2	19.5	19.7	15.1	11.5	5.1	2.3	2.6	1.9	-0.8	9.2
24		-5.1	-5.7	-1.2	3.5	2.0	5.3	17.8	22.2	12.1	-16.2	12.1	15.7	16.1	16.7	19.4	22.2	20.9	5.9	7.4	6.9	4.8	4.5	4.4	5.7	8.2
25	Q	6.7	7.8	7.8	8.5	8.4	8.5	7.8	8.3	8.6	9.9	10.0	10.1	11.5	12.8	15.8	17.3	17.6	15.6	13.1	8.4	3.8	3.5	4.8	5.5	9.7
26		5.9	9.7	12.0	6.2	6.0	5.9	6.8	11.6	18.5	16.1	11.0	9.3	8.8	11.8	15.4	15.8	15.8	14.7	12.8	9.6	9.3	3.6	3.7	2.9	10.1
27		6.9	3.1	-4.6	8.0	13.3	3.8	-1.4	5.7	12.2	15.6	17.7	12.3	10.1	11.4	11.9	13.4	12.8	12.6	10.9	3.0	-0.3	2.8	5.3	6.6	8.0
28		7.4	8.4	8.0	7.9	7.9	6.1	8.1	9.3	7.8	5.8	26.5	18.8	15.5	14.2	15.2	12.0	13.1	10.2	7.5	5.1	3.8	5.9	7.3	8.5	10.0
29		8.6	7.8	7.8	7.7	6.7	7.2	7.6	5.0	14.6	19.7	25.4	22.7	27.7	30.1	23.7	12.8	12.1	7.2	4.2	-0.5	2.9	3.1	3.6	2.5	11.3
30	D	-0.2	7.9	10.0	12.5	5.2	6.8	4.6	-0.9	7.1	11.4	14.8	21.8	27.4	24.2	13.6	6.7	8.9	7.7	4.2	-2.0	4.8	0.8	0.3	4.6	8.4
31																										
Mean		6.4	6.3	7.5	6.8	7.8	6.4	7.2	5.4	6.8	9.8	12.0	13.1	16.6	18.8	20.1	20.1	17.2	12.2	7.7	4.8	4.2	4.7	5.7	5.9	9.7

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 35 Meanook $Z = 58,000\ \gamma +$ September 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	778	772	771	771	772	773	773	767	770	777	773	772	773	775	772	773	772	771	781	779	778	783	780	779	774
2	779	777	777	779	783	779	780	784	697	688	697	722	689	616	619	692	758	781	789	797	805	815	855	930	758
3 D	926	833	890	879	687	749	572	675	752	816	818	790	777	762	788	801	798	799	805	806	814	810	809	810	790
4 D	817	804	806	803	803	779	823	917	994	1095	878	896	880	855	745	777	784	775	798	821	930	915	815	845	848
5 D	537	463	539	759	777	771	814	1005	1195	1245	1123	1080	1051	953	879	799	726	787	810	832	824	823	838	868	854
6	858	837	838	853	827	790	636	784	794	805	811	842	823	819	811	814	803	802	805	814	822	826	853	866	814
7 D	834	840	836	809	810	804	715	695	758	738	728	668	696	753	740	779	793	788	791	799	815	821	822	837	778
8	858	845	834	831	840	840	815	669	684	734	752	695	757	789	800	802	785	780	788	801	803	800	800	809	788
9	817	836	822	747	791	818	726	662	705	732	747	779	756	735	776	779	782	787	792	793	801	811	812	814	776
10	811	808	792	788	803	801	778	767	693	722	704	724	780	782	783	753	734	737	761	761	772	798	816	808	770
11	813	855	905	845	797	802	747	792	799	789	784	782	776	780	779	779	773	771	772	773	788	808	824	836	799
12	823	825	810	813	814	808	794	682	708	739	757	780	762	759	749	736	765	779	780	794	803	791	789	793	777
13	800	805	838	823	751	802	615	773	685	808	802	735	776	777	774	778	793	789	782	788	811	815	843	851	784
14	871	802	784	803	804	808	811	808	661	764	767	673	740	765	772	777	786	783	788	792	793	796	791	780	780
15 Q	775	774	777	782	787	794	779	789	788	778	775	773	775	776	774	772	772	771	772	773	775	777	777	780	778
16 Q	776	774	775	772	773	773	772	772	772	771	770	766	767	770	771	767	758	754	760	762	762	766	767	767	768
17	769	771	772	780	773	770	769	769	767	767	766	766	765	765	766	764	761	757	754	760	767	783	810	816	772
18	836	863	811	829	747	801	800	791	792	736	632	759	757	780	773	775	776	773	774	778	780	781	781	785	780
19 Q	789	781	779	781	784	789	795	785	780	771	772	773	773	772	772	768	763	759	758	761	767	770	772	771	774
20	773	771	772	771	770	768	770	770	758	760	725	740	762	767	766	764	761	758	766	765	766	771	779	783	765
21	784	779	778	775	776	773	772	770	761	729	642	661	674	727	738	744	748	745	761	767	778	785	795	800	753
22	819	814	802	797	799	746	747	784	779	774	773	770	767	768	767	762	761	757	758	761	767	778	798	820	777
23	823	934	929	842	793	783	778	718	805	741	735	724	784	785	783	785	785	786	781	779	776	775	788	798	791
24	813	850	776	818	813	811	640	590	810	853	745	789	795	792	797	784	774	779	784	788	794	798	791	784	782
25 Q	780	778	779	778	778	777	779	778	777	776	775	773	774	778	779	779	777	772	777	778	777	781	781	780	778
26	781	786	787	776	774	780	800	779	671	712	762	771	771	778	780	782	780	775	773	779	784	791	810	845	776
27	860	884	937	860	812	862	782	694	697	706	714	751	781	788	795	795	798	793	790	791	794	796	781	782	794
28	780	782	785	782	785	778	778	779	734	533	633	750	771	780	769	764	772	774	773	777	779	780	785	780	759
29	778	778	779	776	777	775	781	774	737	726	719	721	723	661	633	726	769	767	772	781	792	801	830	862	780
30 D	879	880	844	818	829	827	802	695	663	614	654	625	723	498	536	648	754	788	800	800	836	864	814	815	750
31																									
Mean	804	803	804	801	788	791	758	760	766	773	758	762	773	764	759	767	772	775	780	785	795	800	804	813	782

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 36 Meanook — September 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 Q	07	53	1030	17	33	980	50	14	44	18.0	20	23	0.7	17.3	09	06	789	07	57	755	34
2	22	24	1132	13	32	725	407	13	50	41.9	18	38	-9.1	51.0	23	16	960	13	43	507	453
3 D	01	03	1464	06	42	-24	1488	04	32	48.9	07	02	-75.7	124.6	06	23	1040	07	57	601	439
4 D	22	39	1518	12	54	147	1371	13	07	123.4	07	58	-70.8	194.2	09	31	1291	12	24	570	721
5 D	00	30	1727	08	24	-16	1743	12	35	126.2	08	06	-106.7	232.9	10	28	1464	02	56	394	1070
6	00	08	1192	05	41	797	395	04	00	38.3	06	56	-48.3	86.6	00	01	922	06	16	567	355
7 D	23	41	1111	12	31	110	1001	12	23	58.0	12	55	-17.4	75.4	12	24	892	12	18	503	389
8	03	04	1094	08	15	323	771	09	24	30.1	08	13	-109.3	139.4	08	31	888	08	03	258	630
9	02	40	1310	13	40	784	526	06	43	32.5	06	22	-33.5	66.0	02	27	896	06	59	500	396
10	05	53	1078	10	58	715	363	06	26	27.8	19	48	-16.7	44.5	22	55	828	08	15	594	234
11	02	37	1148	17	18	930	218	06	27	27.0	19	02	-9.1	36.1	02	43	931	06	35	672	259
12	06	44	1079	08	00	668	411	09	05	43.3	20	19	2.1	41.2	01	13	852	08	02	622	230
13	03	42	1265	08	35	591	674	06	26	50.8	06	56	-30.2	81.0	09	28	909	06	43	422	487
14	00	27	1252	11	19	880	372	04	37	36.4	11	05	-8.9	45.3	00	15	904	11	15	625	279
15 Q	05	38	1053	17	14	973	80	15	57	20.6	06	43	2.1	18.5	05	38	817	14	47	763	54
16 Q	10	30	1040	16	03	987	53	15	26	23.3	00	52	3.3	20.0	05	07	780	17	23	749	31
17	23	56	1071	21	04	955	116	15	15	23.0	23	59	-4.0	27.0	23	11	827	18	14	733	94
18	02	27	1332	10	05	647	685	05	19	25.0	10	18	-16.5	41.5	02	47	889	10	05	520	369
19 Q	06	07	1049	18	28	969	80	16	35	19.1	19	50	0.3	18.8	06	24	822	17	58	753	69
20	08	32	1060	17	48	967	93	15	27	19.6	22	09	-1.6	21.2	23	59	787	10	53	702	85
21	13	44	1044	10	27	958	86	12	38	24.5	21	34	-0.8	25.3	23	57	816	10	17	619	197
22	23	53	1068	17	58	965	103	15	12	27.4	23	54	-7.8	35.2	23	57	840	06	01	679	161
23	02	16	1142	10	34	554	588	07	15	36.3	10	22	-22.9	59.2	02	24	965	10	28	607	358
24	02	34	1309	09	53	413	896	10	32	62.4	09	47	-98.2	160.6	09	24	1018	06	53	442	576
25 Q	02	54	1033	17	54	923	110	17	35	23.4	21	00	1.3	22.1	17	39	793	17	32	747	46
26	23	51	1110	08	38	874	236	08	14	33.6	23	20	0.3	33.3	23	54	878	08	36	586	292
27	02	20	1223	07	27	559	664	07	38	55.3	07	56	-44.2	99.5	02	47	980	07	44	436	544
28	12	53	1044	12	53	641	403	10	16	35.8	09	27	-1.3	37.1	08	03	791	09	45	446	345
29	23	54	1102	07	58	798	304	13	18	33.1	08	02	-6.3	39.4	23	57	877	13	57	584	293
30 D	01	44	1241	13	11	481	760	12	26	48.5	18	58	-12.4	60.9	01	40	919	13	19	432	487
31																					
Mean			1177			676	501			40.5			-24.7	65.2			912			580	332
No. days			30			30	30			30			30	30			30			30	30

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 37 Meanook H = 12,000 γ + October 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1062	1095	1164	1235	1039	677	828	823	686	542	849	718	754	528	754	948	901	975	977	989	1002	1030	1060	1061	904
2	1031	1095	1066	1149	1114	1063	928	635	508	480	367	478	456	743	552	739	855	959	982	1030	1030	1029	1066	1080	852
3	1023	1026	1018	1018	1030	1025	1023	1015	1007	873	708	906	903	1005	1015	1013	997	1003	996	1001	1000	1006	1022	1014	985
4	1008	1014	1015	1018	1015	1015	1013	996	1007	959	932	1008	1005	1022	988	852	882	904	912	945	974	982	1030	1061	982
5	1059	1108	1034	1022	1088	929	871	936	749	810	986	1002	1015	960	931	982	1000	969	986	985	993	1027	1068	1052	982
6 D	1012	1062	1218	718	844	913	957	585	801	790	767	217	467	630	-174	533	235	684	1028	882	1061	1171	1189	738	764
7 D	830	1000	1084	773	684	608	635	962	812	248	272	398	643	334	289	311	612	904	953	960	1021	1007	1108	1055	729
8	1073	1149	1039	1059	1031	930	865	950	739	886	555	889	919	904	881	934	963	940	959	953	983	1018	1035	1065	947
9	1055	1079	1150	914	1117	851	859	799	908	796	492	768	904	900	906	891	957	940	963	985	994	1012	1101	1074	934
10	1047	1076	1116	1020	1031	1012	970	982	983	979	997	1000	1007	1007	997	991	969	959	959	955	970	975	990	1007	1000
11	1017	1019	1007	1014	1022	1037	808	648	913	667	873	939	928	953	1008	1015	1015	1007	994	990	994	990	994	1000	952
12 Q	1001	1001	1003	1007	1008	1008	1012	1014	1015	984	1007	1002	1019	1021	1019	1007	1004	1000	997	995	995	992	990	999	1004
13 Q	1012	1017	1022	1022	1017	1025	1030	1024	1022	1022	1023	1022	1022	1022	1024	1021	1011	999	990	983	992	999	1011	1014	1014
14 Q	1018	1022	1021	1023	1024	1026	1027	1027	1029	1029	1030	1027	1026	1026	1022	1019	1014	1004	993	990	990	991	994	1012	1016
15	1015	1025	1030	1031	1034	1038	1046	1040	1037	1033	990	882	902	965	1009	1015	990	888	924	966	1002	1016	1032	1015	997
16	992	1000	1015	1016	1021	1015	1015	1015	1008	1013	1013	1006	979	934	1007	1011	1005	1002	990	990	997	1007	998	1007	1002
17	1000	1007	1019	1013	1014	1014	1015	1015	982	1008	1023	1022	1019	1018	1008	1013	1012	1000	985	982	990	1000	1012	1006	1007
18	1015	1077	1070	1063	1059	1108	1046	971	810	747	693	802	968	1013	921	942	983	909	937	939	1035	1133	1054	1007	971
19	1013	1004	1003	1024	1040	1037	1022	992	1012	1007	1006	968	991	1015	1016	1003	975	975	975	975	989	995	995	997	1001
20	1007	1008	1008	1012	1030	1015	968	960	984	805	953	990	994	982	982	968	960	1008	991	993	1006	1017	1005	1015	986
21	1038	1021	1006	1007	1006	1008	1007	904	926	999	960	984	1030	1022	1015	1008	998	990	977	991	1000	999	999	1006	996
22 Q	1008	1015	1016	1019	1015	1014	1015	1012	1008	1026	1022	1023	1026	1022	1022	1019	1008	1003	998	1000	1006	1009	1014	1018	1014
23 Q	1023	1028	1029	1030	1029	1029	1027	1024	1024	1030	1033	1031	1030	1030	1022	1019	1009	1004	999	1004	1008	1002	1012	1022	1021
24	1026	1029	1030	1029	1026	1027	1030	1030	1029	1027	1006	1006	1015	1035	1026	955	856	946	968	984	1008	998	995	991	1003
25 D	1000	1009	1015	1014	1021	1020	954	656	779	622	125	443	661	928	604	599	604	511	857	985	1008	1008	1052	1046	813
26 D	1143	1160	1149	1140	1069	825	360	606	334	269	466	102	448	725	699	855	937	999	1019	1012	1024	1022	1030	1038	810
27	1031	1031	1062	1046	1030	1094	1040	987	884	641	434	552	733	983	961	958	912	911	987	944	998	1069	1063	1016	932
28	1033	1054	1093	1046	1054	925	744	773	610	356	238	217	405	671	780	789	911	931	1003	1023	1025	1030	1013	1025	823
29	1032	1107	1037	1022	1027	1036	1026	1015	962	573	159	459	646	715	1014	987	825	910	981	1018	1010	1041	1061	1044	904
30	1029	1018	1027	1033	1018	1029	973	577	628	571	576	619	838	955	929	937	958	994	983	981	975	1001	1034	1031	905
31	1036	1042	1031	1032	1024	1024	1023	938	977	938	711	954	983	976	961	970	986	937	913	957	1000	1030	1013	1013	988
Mean	1022	1045	1051	1018	1019	980	940	900	877	798	751	788	863	905	877	913	914	941	973	980	1003	1020	1034	1017	943

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 38 Meanook D = 24° E + ′ October 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	0.7	6.4	3.7	3.6	10.2	5.3	10.3	9.4	14.5	38.8	29.6	29.7	21.8	23.1	9.1	2.7	7.4	7.5	8.1	5.3	6.5	8.3	7.7	5.1	11.5
2	8.2	15.2	28.0	10.0	6.2	3.5	2.2	-14.4	26.3	-5.3	59.6	35.4	17.2	8.4	10.6	-6.4	2.5	10.6	4.4	6.6	8.4	9.5	10.5	10.2	11.2
3	8.9	9.4	8.5	9.5	10.4	9.2	11.3	7.7	9.4	8.2	18.1	20.0	8.2	11.6	15.9	15.5	12.0	9.8	7.7	5.1	2.9	3.8	5.7	7.7	9.9
4	7.5	7.7	8.8	8.1	7.5	7.5	7.5	6.7	10.5	9.0	8.6	8.2	16.9	17.9	11.6	15.0	13.0	12.4	-4.4	8.7	-7.9	-4.1	5.9	4.4	7.8
5	4.6	10.5	7.8	9.3	12.7	2.0	6.9	14.9	5.5	6.9	15.5	17.5	16.9	13.0	12.4	12.8	15.3	9.8	9.0	7.5	5.7	7.8	18.0	7.9	10.4
6 D	6.1	2.1	18.2	61.6	-5.5	-3.3	-15.7	-40.2	15.6	21.9	28.5	22.4	34.1	27.3	31.2	46.9	52.1	29.9	-1.4	9.6	25.3	30.0	22.2	18.7	18.2
7 D	-3.8	-25.9	3.5	26.2	-16.7	-17.4	15.9	-1.5	27.1	15.3	-68.2	26.3	4.9	17.3	8.8	-16.5	-28.8	11.4	10.4	5.1	12.3	13.3	12.2	10.6	1.7
8	5.1	15.4	15.1	8.1	9.1	-5.1	-1.5	7.4	-8.1	11.3	-37.8	1.3	4.5	10.8	8.0	6.3	11.1	7.7	6.9	6.1	8.0	8.6	6.7	10.0	4.8
9	6.5	7.9	17.4	7.6	4.3	18.8	18.0	8.2	3.4	-6.4	13.2	17.3	13.8	12.3	12.0	15.8	9.7	8.0	3.1	9.4	8.1	8.3	14.0	8.1	10.0
10	2.4	4.2	9.2	14.8	8.0	10.6	3.1	8.8	8.9	10.0	9.7	9.5	9.6	10.7	13.0	15.9	17.5	15.0	9.0	7.0	6.1	6.4	6.1	5.4	9.2
11	10.9	8.1	7.0	9.0	8.1	9.7	8.5	8.1	14.1	5.2	20.1	18.1	12.7	16.4	13.6	11.6	14.1	14.9	12.6	10.1	8.4	7.8	7.9	7.8	11.0
12 Q	7.4	7.6	7.7	8.2	7.7	8.0	8.1	18.8	10.0	8.9	10.1	10.2	10.9	11.7	14.0	16.4	16.4	17.5	15.2	11.7	8.5	8.0	5.8	6.4	10.2
13 Q	6.4	6.6	7.0	7.3	7.2	6.7	5.0	7.9	8.5	9.6	11.1	11.1	10.4	11.5	14.2	16.0	17.3	16.7	13.0	8.1	5.4	4.8	3.8	4.2	9.1
14 Q	4.2	6.0	7.1	7.2	7.4	7.7	8.3	8.5	9.1	9.7	9.7	10.4	10.5	11.1	12.4	13.9	15.4	15.5	14.2	11.2	8.0	5.6	4.8	3.8	9.2
15	4.2	3.9	4.2	4.9	4.0	4.2	6.6	6.5	7.5	9.3	8.1	12.9	22.3	22.9	16.0	19.9	18.2	11.0	1.7	4.0	4.2	5.8	1.5	3.5	8.6
16	4.1	5.9	5.5	8.0	7.5	9.1	8.3	9.3	9.6	10.1	9.7	9.2	8.9	5.3	8.2	14.3	16.5	14.7	10.3	6.3	5.1	4.3	6.3	4.3	8.4
17	5.7	7.4	6.8	7.1	7.3	8.1	8.0	9.2	12.2	16.1	12.8	12.2	11.0	10.2	10.6	10.2	12.1	12.5	8.5	4.3	3.7	3.2	2.7	5.1	8.6
18	3.7	8.9	20.8	5.7	4.8	7.1	8.2	10.0	9.2	28.1	29.2	30.6	20.4	17.8	14.3	7.8	10.6	1.8	3.1	-0.4	10.9	7.5	4.2	2.8	11.1
19	5.9	8.3	10.1	9.8	9.8	26.1	11.0	5.1	8.9	9.3	9.6	8.0	9.5	12.8	13.7	13.0	8.6	8.9	6.7	3.7	2.7	3.2	3.3	5.3	8.9
20	6.2	7.2	7.2	8.7	6.5	17.7	4.2	13.9	14.3	10.6	13.9	14.6	16.9	16.3	15.5	8.4	5.7	10.0	7.2	5.7	5.1	5.7	4.3	5.1	9.6
21	4.1	3.6	6.9	8.1	7.9	7.2	7.0	1.2	13.3	13.0	7.1	6.8	9.4	11.4	12.9	14.8	13.3	12.7	5.7	2.6	3.5	3.9	4.1	6.1	7.8
22 Q	7.1	7.8	8.0	8.0	8.2	10.1	7.6	6.0	6.0	7.5	8.0	8.1	9.2	10.0	12.4	14.7	13.9	12.4	8.9	6.8	5.5	5.5	6.1	6.1	8.5
23 Q	5.7	6.2	6.6	6.9	7.1	7.5	7.6	8.1	9.3	8.9	9.3	10.0	10.7	10.9	13.2	13.4	13.0	12.6	9.6	5.5	4.5	5.1	5.9	3.7	8.4
24	3.9	5.3	6.4	6.7	7.1	8.0	8.2	8.0	8.0	8.0	7.1	11.6	11.7	13.8	12.5	8.9	13.9	-1.9	0.4	0.6	6.8	6.9	6.5	6.7	7.3
25 D	6.6	6.4	6.6	6.9	8.1	9.0	14.5	36.0	27.8	34.5	28.4	57.1	34.6	48.5	14.3	19.4	25.0	1.2	-7.3	-3.3	8.2	1.3	7.1	6.2	16.5
26 D	8.6	17.8	9.1	16.4	15.0	6.1	-18.8	21.8	-13.6	3.6	24.1	21.3	10.4	1.6	-3.6	-9.6	-4.8	4.7	11.0	12.2	10.3	6.4	10.6	7.7	7.0
27	7.5	16.1	13.5	19.9	3.5	8.8	9.0	9.9	0.6	-4.3	-5.2	-2.3	36.3	16.7	16.2	9.8	6.5	-4.4	4.8	0.0	3.5	7.3	9.5	6.7	7.9
28	6.8	6.5	29.0	11.5	13.9	17.3	26.1	12.2	19.4	3.3	59.4	5.1	-7.6	2.1	-13.2	-13.9	-2.3	7.6	3.8	2.8	8.8	11.6	12.0	12.6	9.8
29	8.0	25.3	8.7	9.1	8.8	24.8	31.3	19.5	11.2	0.5	-9.6	70.0	48.3	22.4	10.1	6.2	-3.6	-5.4	4.8	8.8	9.3	11.6	14.6	11.8	14.4
30	10.7	13.5	22.6	11.5	7.9	23.8	-5.4	2.3	-16.9	7.4	21.8	8.6	28.3	25.2	13.8	7.1	6.7	5.9	3.9	3.8	3.9	7.3	9.8	12.8	9.8
31	24.7	14.0	10.5	18.6	16.1	8.9	20.8	12.7	8.4	6.7	-4.1	9.0	16.8	17.4	12.5	10.0	10.1	5.5	2.4	-2.4	6.1	8.6	8.9	11.3	10.6
Mean	6.4	7.9	10.7	11.6	7.1	8.6	7.8	7.5	9.4	10.2	11.5	17.1	15.8	15.1	11.8	10.3	10.9	9.6	6.2	5.6	6.7	7.2	8.0	7.4	9.6

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 39 Meanook — z = 58,000 γ + — October 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	854	909	898	746	712	573	723	786	894	592	638	681	714	723	765	735	752	778	816	831	844	863	832	823	770
2	823	860	821	865	854	790	714	745	897	660	811	550	725	679	654	733	745	811	836	810	803	803	830	839	777
3	810	799	789	789	789	785	764	769	769	679	569	602	680	764	776	778	777	784	778	780	788	788	794	790	758
4	787	781	777	774	774	777	786	721	746	692	658	728	735	754	734	654	698	755	812	831	855	812	853	854	764
5	821	862	837	831	811	776	702	754	746	767	746	756	767	745	754	767	788	787	795	789	789	807	865	884	790
6 D	832	821	715	606	909	919	963	971	885	884	929	951	649	1102	1187	1422	1069	906	898	896	1001	845	700	514	899
7 D	578	463	626	703	659	506	804	787	687	506	992	770	604	921	1068	792	811	813	854	841	865	854	896	855	761
8	886	909	865	866	822	756	756	769	700	725	607	733	725	736	765	770	789	795	802	822	844	856	874	877	794
9	876	899	854	609	822	729	724	604	713	650	481	595	746	748	786	789	796	800	797	822	824	846	886	866	761
10	843	845	821	813	861	801	769	788	790	786	796	796	800	801	801	802	801	801	801	809	821	824	832	842	810
11	856	844	832	831	833	799	568	516	751	801	637	713	715	720	779	801	797	796	799	799	803	807	811	805	767
12 Q	801	795	795	795	795	795	794	793	786	757	756	754	768	781	789	787	786	780	778	778	779	780	788	789	783
13 Q	789	787	785	786	787	797	808	801	790	789	789	789	788	786	786	786	783	780	776	774	768	773	778	779	786
14 Q	778	778	779	779	779	779	779	779	779	779	779	779	779	780	782	782	780	779	777	777	777	779	779	779	779
15	779	779	779	780	789	800	812	800	788	780	755	618	643	671	736	762	747	726	757	791	803	807	823	821	764
16	801	800	802	806	803	795	792	791	779	780	780	786	750	703	768	777	780	780	778	778	778	789	789	791	782
17	790	792	790	783	783	783	790	790	712	706	742	768	774	777	780	790	781	780	779	783	787	789	792	789	776
18	796	866	853	876	855	848	801	811	788	638	648	703	724	766	707	737	773	759	800	817	864	866	853	833	791
19	828	821	811	813	822	805	822	794	791	777	777	743	736	762	774	774	770	774	783	790	799	801	800	793	790
20	795	796	800	811	828	744	747	736	764	694	697	734	736	702	681	720	718	768	785	791	795	808	807	811	761
21	840	820	806	794	789	791	777	583	647	733	733	745	778	782	781	781	778	775	774	777	787	798	798	798	769
22 Q	788	787	784	785	787	789	788	767	743	778	777	777	777	777	777	777	778	778	779	782	786	784	778	778	779
23 Q	777	777	777	777	777	778	777	777	765	769	769	769	769	773	774	774	773	771	766	767	772	772	776	777	773
24	777	777	777	778	778	777	776	776	776	772	724	701	720	751	766	722	710	743	779	772	784	785	789	784	762
25 D	779	779	777	781	788	790	651	681	664	519	851	839	735	508	698	776	885	930	849	792	852	838	833	829	768
26 D	874	701	716	795	736	764	646	920	815	764	957	799	852	719	676	705	746	755	788	809	809	818	839	828	785
27	831	852	876	797	755	861	835	772	699	538	438	484	458	733	752	776	757	763	820	809	829	854	841	829	748
28	822	863	865	843	851	734	700	626	883	948	563	461	525	527	471	513	670	773	843	795	810	814	802	804	729
29	813	889	801	793	799	812	710	685	688	491	731	249	759	687	763	755	698	752	792	814	823	839	849	819	742
30	812	813	825	810	808	761	638	432	517	664	667	530	589	648	745	772	784	801	806	797	802	804	818	840	728
31	862	818	818	819	806	806	717	594	688	709	558	710	739	743	744	754	769	775	788	808	815	809	805	808	761
Mean	810	808	802	788	799	775	756	739	756	714	721	687	718	744	768	776	777	786	800	801	815	813	816	807	774

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 40 Meanook — October 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	03	41	1397	13	40	339	1058	11	55	74.2	05	25	-77.8	152.0	08	52	1016	(05	20	327	689)
2	03	26	1228	12	09	-99	1327	12	04	145.1	15	00	-32.5	177.6	12	09	1158	(11	55	252	906)
3	06	06	1053	10	02	400	653	10	40	47.8	10	03	-17.3	65.1	00	25	820	(09	58	353	467)
4	23	54	1117	17	53	806	311	17	54	45.4	20	01	-28.4	73.8	19	59	927	15	15	605	322
5	01	30	1248	08	56	569	679	05	53	67.4	05	26	-35.5	102.9	22	48	968	06	00	521	447
6 D	21	39	1421	14	29	-643	2064	11	15	156.6	05	45	-56.8	213.4	15	22	1611	03	10	390	1221
7 D	01	54	1503	10	09	-768	2271	03	47	136.5	10	20	-118.0	254.5	10	14	1373	05	44	-295	1668
8	01	11	1268	10	16	401	867	02	15	27.1	10	22	-74.7	101.8	01	06	973	10	36	485	488
9	03	24	1295	10	41	395	900	03	23	48.9	06	59	-66.2	115.1	22	30	939	10	32	264	675
10	02	47	1265	06	35	937	328	03	02	38.6	00	52	-1.6	40.2	02	45	899	06	46	738	161
11	05	49	1095	07	02	352	743	06	40	63.6	06	05	-37.6	101.2	09	22	895	06	47	176	719
12 Q	12	24	1026	09	09	967	59	17	55	20.9	09	07	3.6	17.3	00	01	804	11	32	741	63
13 Q	06	35	1038	21	47	944	94	16	51	19.0	06	49	2.4	16.6	06	09	820	21	47	757	63
14 Q	00	35	1043	21	55	982	61	16	50	16.5	00	34	2.5	14.0	00	35	789	10	59	772	17
15	21	30	1069	11	59	795	274	13	49	28.6	19	04	-4.0	32.6	23	05	826	11	47	565	261
16	04	33	1030	13	30	896	134	16	03	17.9	13	04	0.0	17.9	03	24	817	13	31	678	139
17	10	51	1040	08	26	954	86	09	01	19.4	22	54	1.6	17.8	15	04	801	08	28	679	122
18	21	34	1165	10	14	590	575	09	45	44.9	07	47	-8.6	53.5	01	50	903	10	00	551	352
19	05	10	1117	11	48	929	188	05	30	36.7	07	31	0.9	35.8	05	07	843	11	48	712	131
20	05	07	1051	09	35	576	475	05	30	38.5	09	38	-11.4	49.9	05	48	833	09	38	590	243
21	00	16	1069	07	31	779	290	07	02	24.5	07	24	-12.8	37.3	00	14	866	07	33	506	360
22 Q	09	05	1030	08	01	979	51	15	21	15.4	07	58	-3.3	18.7	05	24	798	08	02	694	104
23 Q	12	19	1038	18	40	995	43	14	48	15.5	23	57	3.0	12.5	07	45	779	08	11	746	33
24	14	52	1087	16	40	831	256	16	21	22.3	17	40	-12.5	34.8	18	45	812	16	16	676	136
25 D	23	03	1140	10	17	-404	1544	11	38	112.4	12	42	-47.8	160.2	17	27	1072	06	58	229	843
26 D	00	45	1262	11	32	-206	1468	05	49	176.6	08	50	-90.2	266.8	12	20	1284	06	48	154	1130
27	02	04	1180	09	57	138	1042	12	18	53.7	10	00	-54.3	108.0	02	02	942	10	47	243	699
28	02	34	1157	11	46	-298	1455	10	57	136.5	12	15	-116.2	252.7	09	49	1156	11	24	70	1086
29	01	13	1189	10	24	-153	1342	12	07	121.7	10	23	-79.4	201.1	10	15	1157	11	33	-82	1239
30	12	54	1087	09	25	240	847	10	25	51.0	08	00	-98.2	149.2	23	59	883	07	49	144	739
31	01	01	1071	10	21	591	480	07	12	35.5	10	29	-17.0	52.5	00	07	882	10	30	489	393
Mean			1154			446	708			60.0			-35.1	95.1			956			443	513
No. days			31			31	31			31			31	31			31			31	31

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 41 Meanook — H = 12,000 γ + — November 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1023	1015	1033	1032	1042	1023	1028	961	1005	1009	991	980	935	1000	993	993	1005	992	992	984	993	1001	1009	1009	1002
2	1009	1025	1016	1016	1038	1050	1016	825	656	858	826	898	898	932	1023	1009	1009	1000	995	996	1003	999	1022	1020	964
3	1031	1047	1038	1029	1020	1020	1024	981	909	795	682	913	928	1037	1031	1022	999	993	991	991	1000	1009	1063	1111	986
4 D	1165	1188	1227	1226	1117	1124	820	672	838	639	820	725	920	919	750	915	976	976	992	1009	1008	1031	1025	1093	966
5	1046	1032	1017	1025	1035	1009	1013	961	868	914	907	953	970	958	920	997	1001	995	991	990	991	998	1004	1006	983
6	1009	1010	1011	1009	1009	1009	998	992	980	983	1023	1009	990	1026	1022	1014	999	991	979	976	985	995	1009	1012	1002
7 Q	1008	1014	1009	1017	1021	1020	1030	988	961	956	987	1011	1014	1022	1026	1019	1003	995	985	987	995	1005	1013	1016	1004
8 Q	1019	1023	1024	1023	1023	1018	1018	1021	1017	1035	1030	1028	1031	1027	1024	1019	1012	1001	993	993	1000	1002	1002	1008	1016
9 Q	1013	1016	1016	1017	1014	1016	1023	1008	1016	1025	1017	987	1017	1024	1025	1024	1012	1002	994	995	999	1001	1005	1010	1011
10	1016	1019	1024	1025	1024	1024	1025	1033	1034	1032	1032	1024	1002	1037	1040	1033	1024	1008	999	1003	1013	1018	1031	1038	1023
11	1039	1032	1033	1038	1034	1042	1037	1025	1017	895	661	826	1042	1055	1039	1029	1014	1000	999	1002	1009	1014	1023	1014	997
12	1017	1019	1021	1022	1019	1018	1023	1026	1015	1006	994	1011	1025	1022	1019	1034	1021	797	499	993	1073	1169	1136	1050	1001
13 D	1302	1569	1268	1172	1488	1191	268	295	432	426	-290	125	473	545	552	-110	1025	1017	891	1021	1046	1038	1078	1042	786
14 D	1331	1340	1040	1002	992	985	1002	987	962	937	941	953	982	969	962	981	979	916	954	1025	1050	1057	973	1014	1014
15 D	1018	1022	1046	1017	1017	1021	1016	885	917	974	994	894	869	620	664	727	610	745	869	1039	1010	1225	1563	1699	978
16 D	1183	1771	1256	1414	1184	1012	658	717	681	819	892	893	752	755	845	930	1021	984	970	969	974	986	985	1006	986
17	995	1007	1008	1018	999	1000	984	1001	838	954	972	986	979	954	978	979	956	924	913	967	992	983	987	1014	974
18 Q	1017	1032	1024	1025	1017	1009	1010	1010	1007	990	1003	1001	996	993	997	998	996	992	991	992	992	994	996	1001	1003
19 Q	1006	1009	1014	1014	1015	1017	1013	1014	1009	1008	1017	1026	1025	1026	1017	1009	1000	990	987	988	997	1010	1011	1017	1010
20	1017	1008	1002	1001	1001	1002	986	962	926	956	959	975	1016	1002	981	1019	1010	1009	1009	1006	1010	1012	1020	1023	996
21	1017	1022	1024	1023	1014	1057	977	857	569	546	906	615	574	913	873	643	664	771	985	1025	1002	1024	1040	1024	882
22	1030	1095	1072	1064	1048	822	986	846	605	938	868	812	850	962	1007	1010	999	986	992	999	1018	1016	1009	1017	961
23	1011	1018	1009	1008	1011	993	979	977	963	946	906	958	1010	1001	984	1009	1006	1006	1002	1002	1001	1009	1008	1014	993
24	1015	1035	1027	1035	1036	1016	1016	800	904	981	992	1007	1020	1019	1031	1036	1032	1026	1023	1023	1023	1031	1024	1061	1009
25	1015	1023	1016	1031	993	1077	1031	931	573	530	318	645	922	933	757	946	953	946	969	968	1047	1086	1054	1041	908
26	1023	1024	1005	1006	1021	1008	1004	943	892	883	938	909	809	975	1020	1026	1021	1017	1006	1005	984	991	1008	1009	980
27	1010	1009	1022	1016	1017	1009	1023	922	795	985	962	990	984	987	923	993	969	962	933	977	1008	997	1009	1020	980
28	1019	1046	1031	1027	1023	1006	1016	962	923	691	875	937	953	962	1014	1031	1013	1005	1001	1001	1007	1008	1009	1015	982
29	1009	1015	1018	1022	1024	1020	1016	1013	1012	1000	984	954	986	1032	1030	1023	1016	1009	1005	1004	1001	1004	1013	1017	1009
30	1023	1024	1023	1024	1023	1027	1020	1023	1016	990	992	1018	1023	1018	1015	1016	1022	1005	988	994	995	1011	1057	1038	1016
31																									
Mean	1048	1084	1046	1047	1044	1021	969	921	878	890	873	902	933	958	952	946	979	969	963	998	1007	1024	1040	1049	981

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 42 Meanook D = 24° ⁎ + ′ November 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	11.0	9.1	9.3	10.4	23.6	12.9	6.4	2.9	8.1	8.2	10.5	8.1	5.2	11.5	13.5	11.3	10.6	11.4	8.9	7.9	6.9	7.6	9.5	8.0	9.7
2	8.2	9.0	7.5	9.3	7.0	11.1	11.9	-18.2	-11.5	12.9	16.2	22.6	24.6	16.3	17.6	18.9	12.8	11.8	8.1	6.7	6.0	6.6	6.5	7.0	9.5
3	4.1	12.0	12.8	8.0	8.2	11.0	7.9	12.5	-2.7	-4.8	-7.7	-15.4	16.3	12.0	15.0	15.5	14.9	9.6	7.9	4.2	6.0	5.1	4.2	3.3	6.7
4 D	7.1	3.1	3.2	-5.8	2.1	11.9	-3.3	-6.3	1.8	9.1	27.1	22.4	17.5	14.0	9.1	2.0	-0.9	0.1	-0.6	5.5	6.6	7.0	7.9	13.8	6.4
5	10.3	9.8	10.1	23.9	15.8	13.6	12.5	11.4	12.7	13.7	8.1	8.9	10.2	6.2	13.6	13.7	14.0	12.1	9.5	7.1	6.8	7.6	9.4	9.5	11.3
6	9.0	8.8	8.7	8.7	8.8	7.8	7.4	9.6	11.6	14.9	10.3	11.1	10.5	12.4	13.4	15.8	15.1	13.7	9.6	3.6	3.6	4.1	4.6	5.8	9.5
7 Q	7.5	6.7	10.8	9.7	8.5	10.7	11.6	8.2	17.3	8.6	10.3	8.7	7.9	8.2	11.4	12.5	12.6	11.5	8.1	6.1	5.3	5.7	6.7	7.4	9.2
8 Q	7.4	8.0	8.4	8.4	7.6	7.6	7.5	8.8	5.5	8.9	8.2	9.7	10.6	10.5	12.0	13.1	14.1	13.0	9.7	7.4	6.1	5.4	5.6	5.8	8.7
9 Q	5.0	5.5	6.7	7.6	11.0	7.1	11.6	10.0	9.8	9.0	8.9	4.7	10.9	12.0	13.1	14.0	14.8	12.3	10.4	8.1	7.1	7.1	7.3	7.3	9.2
10	7.8	8.1	8.6	8.4	8.2	8.0	7.9	7.9	8.9	7.5	10.9	11.9	14.3	18.6	19.1	19.7	18.6	15.8	13.1	8.1	5.6	5.4	5.8	5.1	10.6
11	6.4	6.8	7.7	7.4	7.5	4.8	2.5	11.1	9.2	4.4	18.4	37.1	14.9	14.0	13.5	14.6	13.2	10.7	7.4	7.4	4.8	5.7	5.3	4.5	10.0
12	5.3	6.4	6.7	7.0	6.4	5.7	6.4	6.3	8.2	8.7	8.9	8.8	9.2	10.5	21.2	22.4	23.4	39.2	48.2	19.1	-5.4	12.0	25.4	1.5	13.0
13 D	38.2	53.8	41.5	26.2	16.6	-34.0	9.0	-18.2	-65.4	-43.8	-0.8	-4.6	7.5	54.0	26.5	55.3	9.6	16.8	68.6	25.4	6.8	8.2	14.6	19.8	13.8
14 D	32.8	37.5	12.9	11.6	8.3	17.8	8.5	6.8	4.0	5.9	6.1	10.6	9.1	11.1	12.6	16.5	16.9	12.3	17.6	18.5	17.7	9.9	5.0	11.0	13.4
15 D	12.0	9.7	13.6	9.0	6.6	4.1	7.1	-3.2	-2.6	10.3	7.9	6.6	1.9	-10.1	1.6	24.5	27.5	5.9	15.0	18.1	20.3	20.1	69.3	23.2	12.4
16 D	42.3	18.2	10.1	-14.4	-14.5	1.3	-22.6	-4.8	-10.1	-3.2	6.6	4.0	11.3	16.1	8.1	10.2	14.8	12.0	8.7	10.5	10.5	10.4	9.9	9.0	6.0
17	9.7	12.8	12.7	11.2	10.0	9.1	7.9	9.8	-3.9	6.2	12.0	14.8	11.4	10.8	10.3	11.3	13.3	10.8	0.2	1.2	5.1	3.0	4.9	7.6	8.4
18 Q	8.3	10.5	11.0	8.9	7.7	6.7	7.2	6.4	5.2	5.0	8.8	8.7	10.4	8.9	10.5	11.5	10.7	9.6	7.8	6.5	6.0	6.4	6.5	6.7	8.2
19 Q	7.2	7.4	7.4	7.4	7.4	6.7	6.4	6.3	6.4	7.9	9.5	12.7	10.8	9.9	9.8	10.4	10.5	10.2	8.7	7.0	6.3	5.9	6.2	6.2	8.1
20	7.1	8.0	8.7	10.1	10.9	8.0	12.3	9.8	8.7	7.9	14.9	5.0	14.6	11.7	0.0	9.1	7.4	4.4	3.6	3.9	5.0	4.0	6.8	7.0	7.9
21	7.0	7.4	7.8	7.8	7.4	16.7	15.9	-5.2	17.9	2.1	13.7	33.4	17.2	22.4	16.4	9.0	-5.3	11.9	-8.7	-4.8	0.2	4.7	7.2	9.9	8.8
22	8.6	11.0	31.4	12.4	6.2	-25.6	7.2	11.7	13.6	7.5	10.0	5.0	8.4	16.7	14.2	9.8	7.9	1.7	1.0	3.7	4.6	5.2	8.8	9.4	7.9
23	8.9	9.3	11.3	11.5	7.5	6.4	18.1	11.2	8.3	7.5	3.8	12.4	17.7	9.4	7.2	11.3	8.3	6.4	5.2	4.4	4.5	4.2	4.7	4.4	8.5
24	4.0	5.8	9.5	9.1	7.7	7.4	9.1	-14.9	6.8	6.6	9.9	11.1	10.6	7.5	9.8	9.9	5.9	3.4	3.0	1.3	0.9	5.0	6.9	1.3	5.6
25	9.9	9.6	7.4	11.0	31.4	10.9	8.9	19.0	10.8	21.8	15.0	9.7	13.4	16.0	-8.1	-7.0	-3.7	-2.9	-6.5	3.9	12.4	7.5	4.2	5.4	8.3
26	7.7	7.6	7.9	10.9	15.7	8.5	7.6	5.2	-2.1	14.0	12.5	1.9	-4.4	-3.2	9.5	11.8	9.7	8.8	7.1	6.5	2.6	2.4	6.1	8.1	7.4
27	8.9	8.4	8.1	8.6	8.4	7.6	12.5	-0.6	-7.3	4.7	13.3	8.0	10.4	9.8	3.2	4.7	5.4	1.2	-11.5	-5.8	2.2	4.6	7.1	6.4	4.9
28	11.3	11.3	8.7	8.6	18.7	12.4	4.8	9.1	9.0	0.3	4.0	13.7	17.7	17.4	6.4	14.8	14.2	10.5	9.0	6.0	6.0	6.0	6.6	6.6	9.7
29	5.8	7.7	8.6	7.8	9.9	9.8	5.4	7.0	8.3	6.7	6.9	7.1	11.7	11.3	12.5	10.9	9.7	9.9	8.0	6.1	4.4	3.7	4.1	6.4	7.9
30	6.8	6.0	6.3	10.9	10.0	7.1	7.8	7.7	7.0	8.0	7.9	11.4	12.0	8.9	9.1	8.0	12.8	10.0	5.3	3.4	-2.6	-0.5	-3.0	7.4	7.0
31																									
Mean	10.9	11.2	10.9	9.1	9.7	6.4	7.4	4.2	3.1	5.9	9.7	10.3	11.8	12.7	11.1	13.5	11.3	10.1	9.4	6.9	5.7	6.3	9.0	7.8	8.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 43 Meanook — Z = 58,000 γ + — November 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	810	803	805	815	769	763	794	708	744	771	763	745	728	740	735	756	772	776	777	787	794	798	806	793	773
2	786	796	799	811	819	821	688	592	701	730	679	733	724	754	786	785	785	785	792	797	806	818	823	808	767
3	827	862	853	815	805	808	805	720	580	526	703	751	762	796	793	786	784	788	795	796	808	818	862	875	780
4 D	861	872	751	753	645	652	641	924	807	733	671	687	667	722	687	795	798	800	808	827	829	833	838	868	770
5	816	802	800	829	823	820	793	752	689	708	710	739	762	770	734	776	785	785	787	790	789	796	795	788	777
6	786	784	782	782	783	784	776	760	732	712	764	759	722	768	784	783	783	781	782	786	791	794	788	796	773
7 Q	787	791	807	808	794	800	796	733	716	690	736	762	763	771	782	786	782	783	785	787	788	791	787	782	775
8 Q	781	780	778	778	778	778	780	772	746	781	784	781	777	776	777	778	775	773	777	783	785	787	785	785	778
9 Q	789	794	801	800	804	796	751	749	761	773	757	729	745	768	775	781	780	776	781	783	784	783	783	783	776
10	781	781	780	780	779	779	776	772	771	751	740	748	692	729	757	761	768	768	764	769	770	774	772	770	764
11	770	771	769	773	775	789	747	769	768	651	471	498	735	774	780	781	776	773	780	781	781	782	788	784	744
12	786	785	781	781	780	787	785	767	768	748	745	756	775	766	741	755	749	722	720	692	802	905	902	802	775
13 D	506	531	451	193	261	298	207	315	350	1021	425	1277	1317	1230	1085	1046	881	853	900	956	890	903	891	867	736
14 D	782	815	846	815	804	761	700	788	786	771	771	772	804	794	802	826	805	780	812	858	867	838	820	847	803
15 D	850	836	836	820	805	805	784	707	750	765	794	697	697	504	629	686	630	671	739	913	888	941	943	944	776
16 D	198	526	192	324	593	740	802	773	576	761	814	792	662	718	782	782	836	815	814	823	820	817	813	826	692
17	834	837	815	815	804	804	793	793	681	692	750	782	790	772	794	794	799	790	781	804	823	814	823	837	793
18 Q	826	836	824	814	812	817	811	804	813	785	796	800	790	790	795	802	799	797	794	794	794	793	793	793	803
19 Q	792	792	792	792	792	790	790	789	782	771	760	783	782	782	783	788	787	785	790	790	790	788	788	788	786
20	787	786	785	785	781	782	760	718	663	653	684	740	745	749	729	747	748	763	776	783	784	787	785	785	754
21	783	783	782	782	792	761	674	588	794	543	618	634	728	599	643	648	669	753	835	822	793	804	826	834	729
22	845	870	868	855	747	562	759	715	605	759	745	718	706	727	773	770	767	761	769	780	794	804	805	803	763
23	800	801	804	805	793	766	710	712	710	706	640	695	743	759	744	766	770	778	784	793	793	793	801	803	761
24	822	843	834	805	792	793	792	598	702	726	745	764	768	769	770	771	765	764	770	777	777	792	822	928	779
25	845	814	814	766	725	813	794	666	456	595	749	565	696	701	639	685	716	781	786	810	864	865	847	824	742
26	805	803	800	800	730	755	759	683	582	598	680	680	670	715	753	779	784	779	784	793	797	799	805	798	747
27	810	797	794	796	798	804	785	710	680	744	752	769	765	752	675	719	725	767	796	801	811	819	834	824	772
28	857	835	805	805	791	718	755	720	705	674	706	675	706	727	757	780	781	774	783	785	791	791	792	792	763
29	794	801	794	793	780	779	781	781	779	766	749	694	736	769	764	770	777	777	781	783	784	786	791	794	775
30	793	793	792	810	821	802	790	781	769	738	738	770	773	770	769	780	778	773	774	784	782	783	823	821	784
31																									
Mean	777	791	771	763	759	758	746	722	699	721	715	743	758	759	761	775	772	776	787	801	806	813	818	818	767

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 44 Meanook November 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +			Range	Maximum 24 ° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1	04	35	1070	12	14	883	187	04	36	39.4	07	26	-5.7	45.1	03	21	828	07	36	645	183
2	05	40	1086	08	06	568	518	11	05	32.3	07	05	-44.3	76.6	05	41	839	07	01	426	413
3	23	59	1163	01	05	518	645	10	25	48.0	09	27	-17.0	65.0	22	38	920	10	01	458	462
4 D	03	36	1350	07	12	159	1191	09	11	70.2	06	44	-56.7	126.9	07	33	1034	(06	38	280	754)
5	00	01	1093	08	07	820	273	03	43	39.0	13	51	-1.6	40.6	03	32	882	08	07	666	216
6	13	20	1033	09	10	932	101	09	33	21.4	19	28	1.4	20.0	23	02	808	09	14	683	125
7 Q	06	43	1065	07	53	882	183	08	17	27.1	07	40	-4.1	31.2	03	01	826	07	53	636	190
8 Q	09	21	1046	19	51	991	55	17	16	17.0	08	22	0.1	16.9	09	44	795	08	30	709	86
9 Q	06	31	1040	11	41	964	76	16	05	16.0	11	40	-0.8	16.8	04	17	814	11	44	696	118
10	13	46	1049	12	32	977	72	15	16	25.6	09	47	5.6	20.0	00	25	782	12	34	668	114
11	06	42	1117	10	47	505	612	11	25	50.1	06	52	-9.6	59.7	13	23	806	10	54	205	601
12	22	26	1511	18	50	335	1176	19	12	92.3	21	56	-28.9	121.2	22	29	1020	19	07	462	558
13 D	(01	08	2338	06	27	-1462	3800)	03	59	136.6	08	15	-158.3	294.9	12	22	1827	09	57	-575	2402
14 D	00	36	1590	18	27	769	821	00	37	77.9	06	19	-28.2	106.1	00	35	925	00	50	587	338
15 D	22	31	2200	13	28	367	1833	21	25	133.7	13	31	-48.9	182.6	22	24	1303	13	28	264	1039
16 D	01	00	2078	07	20	215	1863	01	00	105.5	04	15	-108.8	214.3	07	29	1009	00	45	-191	1200
17	07	17	1042	08	22	680	362	16	45	17.7	08	11	-15.5	33.2	23	52	870	09	05	619	251
18 Q	01	50	1068	09	20	969	99	01	56	15.7	08	20	0.1	15.6	01	49	858	09	20	769	89
19 Q	12	24	1054	19	24	978	76	11	56	18.2	08	35	3.7	14.5	11	11	798	10	30	735	63
20	15	16	1039	08	40	869	170	10	45	21.7	14	18	-8.9	30.6	05	40	795	08	56	598	197
21	07	20	1124	11	56	84	1040	11	58	106.5	11	54	-52.9	159.4	11	54	1110	09	32	405	705
22	01	38	1197	08	21	402	795	02	22	48.3	05	52	-147.1	195.4	01	36	933	05	33	330	603
23	06	38	1042	09	59	828	214	06	45	33.1	10	57	-2.4	35.5	03	02	814	10	45	590	224
24	23	48	1115	07	53	631	484	06	57	16.6	07	34	-32.8	49.4	23	54	963	07	46	534	429
25	04	20	1276	10	51	-283	1559	11	04	87.1	09	04	-55.8	142.9	09	00	1118	08	36	-79	1197
26	04	27	1076	12	08	653	423	04	21	54.3	08	03	-19.7	74.0	04	07	834	08	00	398	436
27	06	05	1071	08	26	608	463	06	06	18.7	08	24	-22.8	41.5	22	06	857	08	27	566	291
28	04	42	1077	09	21	490	587	04	54	53.2	09	50	-17.7	70.9	00	51	878	09	47	595	283
29	04	40	1047	11	25	925	122	05	11	17.0	11	05	-2.6	19.6	01	50	804	11	26	657	147
30	22	50	1147	19	12	945	202	09	13	19.0	22	44	-12.2	31.2	22	56	919	09	41	715	204
31																					
Mean			1240			573	667			48.7			-29.7	78.4			932			468	464
No. days			30			30	30			30			30	30			30			30	30

HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 45 **Meanook** $H = 12,000\ \gamma +$ **December 1960**

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	1029	1045	1057	1027	1105	744	881	661	749	738	687	725	682	357	405	536	505	899	969	926	1003	1047	1062	1101	831
2 D	1048	1016	1041	1001	1014	984	1023	970	922	829	921	948	680	781	984	991	978	991	999	1001	984	998	1009	1008	964
3	1013	1015	1016	1016	1031	1020	1000	997	968	858	922	1008	994	1019	1016	1020	1014	1007	1008	1008	1008	1009	1006	1006	999
4 Q	1009	1014	1016	1016	1016	1009	1007	1007	1014	1014	1009	998	969	982	989	989	1000	993	991	991	1000	999	1003	1007	1002
5	1008	1010	1016	1023	1023	1009	1007	1008	1009	1004	993	875	961	1016	977	1020	1023	1001	991	993	1005	1010	1016	1022	1001
6	1025	1027	1028	1023	1016	1023	1021	998	892	846	837	565	641	910	919	945	905	915	907	923	1002	1034	1025	1010	935
7	1009	1014	1017	1024	1022	1038	1031	1009	990	955	980	934	915	838	995	1009	1016	1008	1009	1007	994	977	1049	1059	996
8	1118	1122	1102	1088	1009	1058	1070	1023	990	906	762	1008	1033	1026	1016	1022	1017	1007	1008	1007	1007	1008	1012	1021	1018
9	1021	1029	1027	1040	1048	978	1034	1010	884	800	854	901	916	986	946	1015	1000	1008	991	1000	1009	1013	1013	1014	981
10	1019	1036	1026	1014	1022	1028	1023	1016	1013	1000	946	962	1006	1032	1025	1020	1016	1009	1004	1000	994	999	1013	1019	1010
11 Q	1024	1023	1028	1027	1023	1021	1012	1012	992	991	953	922	944	968	1023	1015	1031	1027	1016	1019	1012	993	1012	1025	1005
12	1022	1036	1034	1037	1055	1035	1013	974	972	879	915	906	1016	1023	985	982	978	989	967	954	1007	1031	1115	1070	1000
13	1030	1030	1030	1034	1064	1061	1071	960	772	890	866	857	789	1015	1031	1027	1018	1008	1004	1004	1004	1006	1014	1022	984
14 Q	1027	1030	1031	1030	1029	1023	1023	1013	1018	1022	1033	1039	1039	1037	1033	1030	1028	1024	1017	1015	1015	1022	1023	1022	1026
15 D	1015	1006	1003	1005	1002	977	913	814	622	496	435	545	614	474	538	724	814	893	945	1000	1052	1102	1124	1112	843
16 D	1146	1303	1334	1350	1247	1143	1037	934	928	670	681	786	776	1000	1017	1007	1008	1000	1005	999	1001	1007	1008	1014	1017
17 Q	1015	1022	1027	1022	1022	1015	1004	1005	976	1004	1023	1017	1014	1015	1013	1023	1022	1014	1011	1007	1007	1008	1023	1031	1014
18	1025	1026	1018	1008	1030	1030	967	957	834	520	403	772	924	968	936	835	841	1005	1020	976	1020	1022	1022	1022	924
19	1015	1023	1040	1040	1031	1024	1031	1015	1014	889	852	937	1016	1016	1038	1040	1023	1024	1022	1022	1018	999	1007	1019	1007
20	1028	1031	1041	1031	1052	1027	1015	1015	957	796	772	814	920	991	1046	1046	1030	1007	1000	982	977	1015	1015	1043	986
21	1070	1103	1038	1022	1022	1030	1022	1022	1005	958	960	1014	1019	1022	979	864	1000	1013	1013	1006	983	953	991	1037	1006
22	1060	1033	1022	1021	1008	977	1007	996	993	810	872	928	1006	1026	1034	1023	981	997	1014	1008	1007	1015	1019	1015	995
23	1031	1034	1037	1034	1022	1022	1017	999	930	957	935	802	901	914	1007	1052	1039	1021	1013	1009	1023	1025	1034	1038	996
24	1033	1030	1027	1033	1028	1030	1030	1026	1012	960	1016	1019	998	933	1030	1050	1021	994	1008	1026	1020	1020	1018	1030	1016
25 Q	1037	1023	1031	1041	1037	1033	1027	1022	1022	1015	1002	1027	1029	1022	1020	1034	1028	1018	1008	1008	1012	1014	1016	1023	1023
26	1007	1021	1036	1040	1024	1037	1052	1030	888	1007	1024	999	854	1007	1048	1048	1031	1020	1020	1023	1030	1032	1039	1041	1015
27 D	1043	1048	1045	1040	1041	1037	1018	960	1010	970	956	708	666	684	935	877	900	825	928	997	1015	1099	1096	1054	956
28	1038	1030	1028	1019	1015	1015	999	990	855	772	518	797	1017	991	832	904	974	1006	1012	992	1015	1015	1023	1020	953
29	1026	1018	1044	1037	1026	1021	1000	963	990	898	937	1016	985	1014	1002	935	884	994	1033	1014	1013	1006	1020	1020	996
30	1013	1018	1022	1027	1042	1038	1026	1015	912	1000	1014	936	949	979	995	1037	1037	995	956	992	1008	1008	1026	1024	1003
31	1028	1022	1022	1023	1034	1046	1038	976	986	764	967	986	917	959	999	950	979	975	1004	1009	998	1004	1007	1021	988
Mean	1033	1040	1041	1039	1037	1017	1014	981	939	878	872	895	909	935	962	970	972	974	997	997	1008	1016	1028	1031	983

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 46 Meanook D = 24° E + ′ December 1960

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	7.9	3.9	3.1	31.4	1.0	-7.7	-2.2	-10.7	-10.8	9.8	14.6	20.5	23.1	40.0	16.8	1.2	-23.4	-7.3	-1.3	-0.8	0.5	5.3	9.7	5.1	5.4
2 D	5.2	9.1	9.4	9.6	12.0	5.1	2.7	5.2	5.9	-5.6	0.9	16.5	27.9	11.6	7.2	3.1	1.4	2.3	3.8	3.8	4.0	6.0	5.9	6.0	6.6
3	7.8	8.3	8.0	11.0	17.2	8.2	8.6	5.3	5.1	1.3	3.7	9.6	11.8	10.4	10.6	10.8	9.9	7.7	4.5	3.8	4.9	6.1	6.3	6.8	7.8
4 Q	6.9	7.8	7.8	7.7	6.8	6.4	-0.4	5.9	7.6	6.3	7.0	5.3	7.0	10.8	11.8	9.8	7.0	3.9	3.0	1.4	2.8	3.2	4.1	5.9	6.1
5	6.9	7.7	7.9	8.8	6.7	9.9	7.8	7.4	7.5	7.1	8.0	2.9	16.5	13.3	7.8	8.2	7.0	3.8	-0.4	-0.3	4.5	7.1	7.0	6.9	7.1
6	6.9	6.9	7.0	7.1	6.5	13.0	5.5	7.5	8.5	13.0	15.9	24.2	29.2	26.3	8.5	6.9	-4.5	-5.8	-6.6	-12.3	-1.8	3.6	4.6	4.5	7.3
7	6.1	7.7	7.5	8.0	20.1	7.6	7.3	6.8	4.6	2.9	13.8	19.5	24.2	12.5	13.5	15.4	11.1	9.4	9.5	5.4	6.6	-1.4	1.3	2.6	9.3
8	5.6	10.8	17.3	29.8	18.2	17.9	8.9	6.0	6.5	9.8	15.2	11.2	9.5	9.8	12.3	11.6	11.0	9.6	9.0	7.6	6.8	5.9	5.5	5.9	10.9
9	7.0	7.4	6.7	7.9	12.0	6.8	12.0	7.8	-1.1	-11.5	-8.1	11.8	18.6	11.9	2.7	2.5	4.5	5.5	5.6	5.2	6.0	3.1	4.6	4.6	5.6
10	6.3	5.2	6.2	9.5	8.5	8.8	9.4	6.9	7.0	4.7	-1.1	3.4	7.3	10.4	10.3	11.5	10.8	9.6	7.3	7.4	6.7	5.9	5.3	6.1	7.2
11 Q	7.0	7.2	7.1	7.1	7.3	7.4	14.4	11.1	8.9	7.3	5.6	13.2	9.9	4.5	7.3	6.9	7.7	9.2	7.5	6.0	5.3	2.6	0.3	3.5	7.3
12	4.4	4.5	4.2	7.8	8.6	7.5	4.7	2.4	9.8	5.9	12.0	3.3	10.2	10.8	2.5	3.8	-0.1	0.8	7.8	-8.7	0.0	3.9	3.5	5.0	4.8
13	7.9	7.3	6.5	8.8	8.9	13.8	12.7	-1.9	-8.6	11.6	10.9	9.3	1.0	12.7	12.7	10.7	9.9	8.6	7.7	8.4	8.0	7.0	6.8	6.8	7.8
14 Q	6.9	6.9	7.9	7.8	7.7	7.2	10.9	7.0	7.0	2.0	7.3	9.8	10.6	10.9	9.7	9.0	9.5	9.4	7.9	7.3	6.3	6.3	6.8	7.1	7.9
15 D	7.2	6.0	9.0	10.7	9.5	11.9	15.6	14.0	37.6	38.6	67.1	39.2	23.2	-8.8	9.9	3.9	8.6	6.6	9.8	8.7	10.8	10.9	4.1	3.7	14.9
16 D	5.9	-5.8	-5.2	-19.0	-10.2	10.4	10.9	3.9	15.9	8.5	32.2	24.2	16.8	17.4	15.7	14.8	10.9	9.6	8.9	8.0	6.9	4.3	3.9	4.1	8.0
17 Q	5.7	6.7	7.9	8.8	7.7	10.0	14.8	8.6	13.2	13.7	10.8	8.8	8.8	8.0	9.6	10.7	11.9	9.9	8.8	7.0	4.7	1.9	4.5	6.3	8.7
18	7.8	8.3	7.3	9.8	10.7	9.0	9.0	9.6	5.8	24.7	47.2	42.1	17.7	3.6	2.8	-9.7	-8.0	-7.5	1.9	0.0	1.1	4.0	6 3	7.1	8.9
19	8.8	8.4	9.0	8.3	9.4	8.6	14.8	18.5	8.7	8.9	-0.9	7.9	10.8	14.4	13.8	13.2	10.1	10.0	7.8	6.8	6.9	6.7	5.7	6.2	9.3
20	6.0	7.8	6.6	17.5	28.4	5.8	6.4	9.0	-5.0	-19.5	12.8	6.3	5.9	9.5	15.6	14.3	10.4	3.9	2.4	5.9	5.7	2.5	4.1	7.8	7.1
21	7.7	27.2	9.7	8.8	11.7	11.8	7.0	7.7	8.7	8.9	8.8	7.8	8.7	11.8	12.8	1.3	-2.1	6.9	7.6	5.8	2.0	-5.0	-2.9	5.9	7.4
22	8.7	11.9	11.0	11.9	14.0	15.8	9.9	5.2	3.8	-4.9	-4.0	1.3	10.0	11.7	9.9	9.8	2.5	2.1	4.7	3.5	3.9	5.3	6.9	7.9	6.8
23	13.0	9.7	10.9	8.9	11.8	11.7	7.6	5.8	3.7	3.6	13.5	-3.9	5.6	10.0	10.2	14.7	12.5	8.6	7.8	6.4	3.6	3.8	4.0	4.6	7.8
24	6.2	7.2	9.4	9.6	9.7	10.1	10.8	7.1	5.9	0.7	5.0	10.4	10.2	-2.9	6.9	16.7	12.5	2.3	2.4	3.7	2.5	4.7	3.7	4.8	6.6
25 Q	6.0	9.0	13.7	10.9	9.5	8.4	8.1	8.1	9.6	11.0	3.0	7.2	7.2	6.6	7.9	12.7	13.7	12.8	10.2	9.0	6.7	5.5	5.7	6.0	8.7
26	10.1	11.3	9.2	10.0	8.9	23.9	9.1	10.5	-2.9	14.2	10.4	11.2	-2.9	6.5	14.4	12.3	11.7	11.5	10.4	7.7	5.0	5.5	5.9	6.1	9.2
27 D	5.7	5.5	7.8	7.9	8.8	7.3	10.2	32.9	13.0	3.0	10.7	20.8	32.6	29.6	20.8	14.9	-12.9	-5.1	-7.4	1.0	3.0	3.5	7.3	6.8	9.5
28	10.2	12.4	11.8	11.3	9.4	7.9	6.9	3.8	5.6	28.5	26.4	6.8	12.8	15.6	5.1	3.9	-5.0	4.1	7.7	7.8	4.9	3.9	5.5	6.9	8.9
29	5.1	12.8	16.7	9.8	7.3	6.9	17.5	3.8	4.1	10.7	7.0	11.4	12.9	9.7	12.8	7.7	-8.9	-1.0	6.1	5.5	4.0	5.5	6.9	6.8	7.5
30	7.1	7.3	7.3	7.9	22.7	11.8	4.0	6.6	-4.8	7.0	9.8	8.9	7.6	10.8	15.6	15.6	10.7	7.9	-2.0	-6.0	-1.9	2.9	6.9	7.4	7.1
31	6.9	7.0	8.1	9.1	13.6	22.6	6.0	7.7	23.4	10.4	13.6	13.3	15.6	1.2	9.6	6.0	3.0	1.0	4.8	4.9	4.8	4.1	3.9	5.9	8.6
Mean	7.1	8.2	8.3	9.8	10.5	9.9	8.7	7.4	6.7	7.5	12.2	12.4	13.2	11.3	10.6	8.8	4.6	4.9	5.1	3.9	4.4	4.3	5.0	5.8	7.9

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 47 Meanook $Z = 58,000\ \gamma +$ December 1960

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	800	835	791	681	662	721	847	767	927	878	925	865	855	759	718	779	739	782	792	818	820	838	835	858	804
2 D	833	822	833	802	823	783	770	771	725	585	687	725	653	760	716	733	733	747	780	792	802	813	823	811	763
3	802	799	802	818	792	797	788	776	739	650	733	768	767	780	780	786	781	781	780	781	788	791	792	791	778
4 Q	785	785	784	784	785	787	758	753	769	778	776	764	715	707	737	745	757	760	769	771	785	791	793	794	768
5	792	792	792	790	769	800	792	780	783	769	761	649	662	746	714	745	751	755	755	765	777	783	782	781	762
6	780	778	778	779	784	811	792	760	673	651	616	657	602	645	594	621	641	675	741	754	799	809	789	790	722
7	797	798	801	804	810	809	810	789	765	705	733	695	689	693	749	763	762	763	776	776	782	792	836	846	773
8	876	887	841	732	708	782	778	792	784	782	775	768	790	789	780	785	787	786	789	787	786	786	785	785	789
9	786	787	795	830	816	685	767	768	757	613	633	681	675	756	698	778	766	787	791	801	809	801	796	798	757
10	798	804	815	803	796	784	776	778	779	771	710	690	749	770	773	777	781	786	787	792	787	792	794	792	779
11 Q	790	784	784	787	784	784	787	787	768	749	714	673	690	678	721	749	771	777	781	783	782	785	791	789	762
12	786	798	812	824	821	812	765	705	710	658	668	624	719	747	727	710	703	727	770	810	822	836	874	822	761
13	820	812	812	832	856	834	812	746	606	663	714	702	672	737	778	779	781	781	780	780	780	780	781	780	767
14 Q	778	778	778	779	779	779	777	776	729	738	777	768	765	761	768	777	777	778	778	775	771	775	777	777	771
15 D	778	779	790	798	786	746	702	709	605	701	647	490	372	549	763	757	789	814	855	856	822	822	802	810	732
16 D	866	813	722	688	737	761	758	818	808	810	746	854	820	789	797	788	795	790	790	790	793	796	793	790	788
17 Q	790	791	792	791	800	798	712	778	755	767	791	786	781	785	778	785	783	783	781	781	781	780	783	783	781
18	785	790	793	810	793	757	733	701	743	789	638	639	659	727	717	671	653	730	784	791	810	803	807	810	747
19	809	804	791	790	779	779	778	749	774	745	703	724	765	756	771	780	775	786	782	789	790	789	795	795	775
20	796	792	811	821	778	790	778	714	654	543	561	669	757	754	789	791	788	779	790	805	843	842	832	814	762
21	861	920	839	796	794	777	764	786	778	749	741	777	778	777	724	654	725	745	763	776	798	800	821	827	782
22	879	852	807	803	790	683	748	754	756	665	659	692	737	781	789	771	749	758	772	778	784	790	800	809	767
23	831	802	800	796	782	749	756	756	689	714	704	670	649	704	725	744	757	762	768	768	774	779	781	780	752
24	786	786	789	789	788	789	781	775	763	685	738	753	733	674	766	781	762	764	759	767	775	781	790	804	766
25 Q	802	809	803	797	779	775	772	772	768	758	742	762	769	770	772	781	781	781	783	783	784	786	780	783	779
26	790	801	789	780	783	800	817	785	567	718	769	744	643	726	775	772	776	779	774	770	767	770	769	768	760
27 D	772	774	776	803	816	780	791	740	761	770	779	749	630	517	562	715	756	785	810	847	823	853	835	815	761
28	842	811	801	798	790	793	768	726	619	562	553	665	756	754	689	736	715	745	778	789	798	800	800	788	745
29	802	829	852	820	784	779	774	689	724	683	658	746	730	767	748	699	690	709	757	766	771	778	786	789	755
30	785	785	785	790	789	745	761	756	636	720	768	723	724	724	712	757	766	767	754	755	778	779	789	789	756
31	788	791	783	788	798	778	778	745	720	624	705	740	680	736	745	730	730	746	788	801	797	790	791	800	757
Mean	806	806	798	790	786	776	774	758	730	709	714	717	709	730	738	750	752	765	779	787	793	797	800	799	765

DAILY EXTREMES OF MAGNETIC ELEMENTS

Table 48 Meanook — December 1960

Day	Horizontal Intensity							Declination							Vertical Intensity						
	Maximum 12,000 γ +			Minimum 12,000 γ +.			Range	Maximum 24° East +			Minimum 24° East +			Range	Maximum 58,000 γ +			Minimum 58,000 γ +			Range
	h.	m.	γ	h.	m.	γ	γ	h.	m.	′	h.	m.	′	′	h.	m.	γ	h.	m.	γ	γ
1 D	03	46	1305	07	43	-43	1348	15	19	153.8	07	59	-90.9	244.7	10	18	862	07	43	115	747
2 D	00	02	1092	12	58	239	853	12	57	55.4	12	59	-26.8	82.2	13	22	863	09	45	519	344
3	04	10	1059	09	43	745	314	04	10	38.0	09	44	-15.1	53.1	04	11	859	09	47	549	310
4 Q	06	30	1033	12	52	953	80	13	51	15.7	06	45	-9.8	25.5	23	08	800	13	02	692	108
5	04	07	1048	11	37	796	252	12	38	20.0	11	42	-3.9	23.9	05	10	815	11	39	572	243
6	21	57	1059	11	56	242	817	11	54	71.1	11	42	-33.2	104.3	05	24	831	11	45	462	369
7	22	30	1088	13	18	727	361	12	48	26.6	09	17	-2.9	29.5	22	30	877	13	15	636	241
8	01	06	1206	10	05	590	616	03	36	67.7	04	23	-16.3	84.0	01	04	934	04	24	548	386
9	04	51	1174	08	56	599	575	04	56	33.7	09	01	-40.3	74.0	15	27	855	09	32	490	365
10	01	38	1050	10	56	908	142	17	00	16.2	10	36	-4.8	21.0	02	00	823	11	05	663	160
11 Q	16	06	1044	11	47	867	177	06	56	20.4	22	23	-1.1	21.5	23	22	807	12	04	641	166
12	22	57	1148	09	24	797	351	10	43	16.3	19	11	-15.7	32.0	22	10	914	11	19	563	351
13	06	45	1110	08	17	663	447	05	07	22.5	07	57	-48.8	71.3	04	31	899	07	51	509	390
14 Q	11	58	1054	07	56	984	70	06	35	17.2	09	18	-6.9	24.1	11	01	789	08	20	689	100
15 D	23	51	1248	10	17	173	1075	10	26	123.1	14	12	-98.2	221.3	11	14	987	12	52	224	763
16 D	02	45	1420	09	30	389	1031	10	09	46.1	07	12	-62.5	108.6	09	35	968	04	14	461	507
17 Q	06	01	1103	07	58	930	173	06	03	31.9	07	53	0.0	31.9	04	50	809	06	18	666	143
18	06	55	1110	09	55	256	854	10	35	105.7	15	53	-17.9	123.6	09	45	1130	10	20	446	684
19	06	43	1103	09	41	787	316	06	41	26.4	10	53	-11.9	38.3	00	01	820	11	00	659	161
20	04	27	1095	11	00	489	606	04	11	48.5	09	18	-31.3	79.8	21	16	874	10	55	409	465
21	01	06	1249	15	36	783	466	01	40	34.9	22	04	-14.1	49.0	01	06	1006	15	36	614	392
22	00	52	1098	09	32	631	467	05	26	53.3	09	59	-14.7	68.0	00	29	919	09	26	562	357
23	15	30	1070	11	20	695	375	13	16	23.3	11	46	-17.5	40.8	00	32	845	11	19	594	251
24	15	18	1076	13	36	774	302	15	17	21.3	13	37	-11.3	32.6	23	09	816	13	38	593	223
25 Q	00	56	1058	10	08	973	85	02	50	17.9	10	14	-3.1	21.0	00	55	821	10	27	717	104
26	06	00	1075	12	15	728	347	05	20	39.6	08	32	-35.6	75.2	06	07	834	08	19	449	385
27 D	21	49	1143	13	25	404	739	13	27	79.6	16	53	-32.5	112.1	19	36	886	13	26	362	524
28	13	00	1062	10	50	-201	1263	10	50	76.2	10	55	-22.5	98.7	00	38	865	10	45	431	434
29	07	20	1062	09	40	803	259	06	40	31.4	07	36	-23.3	54.7	03	03	865	07	37	573	292
30	04	35	1091	08	45	790	301	04	44	37.1	08	45	-26.9	64.0	04	32	834	08	46	490	344
31	06	01	1092	09	07	538	554	08	26	33.1	09	14	-16.7	49.8	04	55	822	09	08	540	282
Mean			1117			613	504			45.3			-24.4	69.7			872			530	342
No. days			31			31	31			31			31	31			31			31	31

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (All Days)

Table 49 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+3	+5	+6	+6	+5	+4	+3	+2	-5	-7	-11	-11	-6	-2	0	+2	+1	+1	0	0	0	+1	+2	+3
February	+20	+18	+29	+33	+30	+31	+7	+15	-1	-17	-26	-55	-28	-6	-5	-4	+3	-7	-17	-17	-10	-5	0	+10
March	+31	+35	+39	+47	+44	+39	+33	-8	-56	-59	-48	-55	-36	-15	+10	+8	-15	-25	-19	-11	-4	+7	+20	+21
April	+112	+129	+130	+97	+81	+27	-50	-85	-95	-108	-97	-95	-93	-80	-37	-20	-12	-35	-22	+2	+24	+54	+78	+96
May	+61	+64	+74	+49	+25	+18	-3	-21	-50	-44	-58	-47	-66	-40	-41	-40	-11	-2	-5	+1	+18	+24	+36	+47
June	+74	+94	+93	+74	+72	+18	-17	-30	-91	-82	-88	-108	-75	-37	+4	+10	+1	-10	-11	-3	+4	+11	+38	+52
July	+73	+84	+94	+71	+48	+42	0	-61	-72	-87	-75	-123	-81	-43	-11	-12	-28	-14	+1	+14	+23	+38	+51	+58
August	+67	+64	+57	+56	+51	+31	-6	-71	-134	-85	-45	-52	-15	0	+10	+9	-6	-23	-15	-8	-5	+18	+32	+53
September	+66	+58	+67	+41	+41	+37	-3	-53	-76	-69	-66	-32	-56	-31	-15	-9	-9	-14	-16	-4	+14	+28	+43	+51
October	+79	+102	+108	+75	+76	+37	-3	-43	-66	-145	-192	-155	-80	-38	-66	-30	-29	-2	+30	+37	+60	+77	+91	+74
November	+67	+103	+65	+66	+63	+40	-12	-60	-103	-91	-108	-79	-48	-23	-29	-35	-2	-12	-18	+17	+26	+43	+59	+68
December	+50	+57	+58	+56	+54	+34	+31	-2	-44	-105	-111	-88	-74	-48	-21	-13	-11	-9	+14	+14	+25	+33	+45	+48
Year	+58.6	+67.8	+68.3	+55.9	+49.2	+29.8	-1.7	-34.7	-66.1	-74.9	-77.1	-75.0	-54.8	-30.3	-16.8	-11.2	-9.8	-12.7	-6.5	+3.5	+14.6	+27.4	+41.2	+48.4
Winter	+35.0	+45.8	+39.5	+40.2	+38.0	+27.2	+7.2	-11.2	-38.2	-55.0	-64.0	-58.2	-39.0	-19.8	-13.8	-12.5	-2.2	-6.8	-5.2	+3.5	+10.2	+18.0	+26.5	+32.2
Equinox	+72.0	+81.0	+86.0	+65.0	+60.5	+35.0	-5.8	-47.2	-73.2	-95.2	-100.8	-84.2	-66.2	-41.0	-27.0	-12.8	-16.2	-19.0	-6.8	+6.0	+23.5	+41.5	+58.0	+60.5
Summer	+68.8	+76.5	+79.5	+62.5	+49.0	+27.2	-6.5	-45.8	-86.8	-74.5	-66.5	-82.5	-59.2	-30.0	-9.5	-8.2	-11.0	-12.2	-7.5	+1.0	+10.0	+22.8	+39.2	+52.5

DECLINATION (minutes) (All Days)

Table 50 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-3.0	-2.0	-0.8	-0.4	+0.2	+0.3	-1.4	-2.5	-0.7	+0.9	+1.9	+4.6	+3.9	+3.1	+2.2	+3.3	+1.9	+1.2	+0.2	-0.5	-2.5	-3.4	-3.4	-3.0
February	-3.1	-2.6	-1.1	-0.7	-0.2	+0.4	-0.8	+0.2	+0.8	+1.9	+2.6	+2.6	+4.6	+3.1	+2.3	+3.1	+3.6	+2.5	-0.7	-2.7	-3.3	-3.9	-3.8	-4.0
March	-4.3	-4.2	-3.3	-4.0	-1.1	-0.6	+0.4	-0.3	-1.8	+1.6	+2.5	+2.3	+4.5	+4.4	+5.1	+6.9	+6.9	+4.6	+2.6	-2.6	-4.8	-5.0	-4.5	-5.2
April	-7.1	-6.5	-3.3	-2.6	-3.8	-6.1	-6.2	-3.1	-2.0	-2.1	-0.3	0.0	+5.1	+9.7	+12.5	+14.2	+12.2	+9.0	+2.7	-2.5	-2.7	-4.9	-6.0	-5.7
May	-5.4	-4.0	-3.4	-1.9	-0.4	-2.9	-1.5	-3.4	-2.1	-1.6	-0.1	+1.5	+5.4	+9.2	+12.7	+11.6	+9.2	+6.4	+1.0	-3.4	-5.8	-6.9	-6.8	-6.7
June	-5.6	-4.9	-4.1	-5.3	-5.3	-3.4	-3.5	-2.8	-4.1	-2.4	-1.4	+2.1	+7.2	+9.1	+11.5	+12.3	+11.5	+8.8	+3.4	-0.2	-4.6	-5.5	-5.9	-6.4
July	-4.9	-6.0	-3.3	-4.2	-1.5	-1.8	-3.2	-2.3	+0.1	-2.2	-1.4	+0.3	+3.9	+8.1	+10.7	+10.9	+10.4	+7.1	+2.2	-1.8	-4.9	-5.0	-5.3	-6.1
August	-2.4	-1.6	-3.8	-1.9	-2.0	-2.7	-4.2	-2.4	-1.9	+0.4	-1.0	+0.7	+4.3	+8.8	+11.2	+12.0	+10.6	+5.5	-0.7	-4.5	-6.4	-7.6	-6.0	-4.6
September	-3.3	-3.4	-2.2	-2.9	-1.9	-3.3	-2.5	-4.3	-2.9	+0.1	+2.3	+3.4	+6.9	+9.1	+10.4	+10.4	+7.5	+2.5	-2.0	-4.9	-5.5	-5.0	-4.0	-3.8
October	-3.2	-1.7	+1.1	+2.0	-2.5	-1.0	-1.8	-2.1	-0.2	+0.6	+1.9	+7.5	+6.2	+5.5	+2.2	+0.7	+1.3	0.0	-3.4	-4.0	-2.9	-2.4	-1.6	-2.2
November	+2.0	+2.3	+2.0	+0.2	+0.8	-2.5	-1.5	-4.7	-5.8	-3.0	+0.8	+1.4	+2.9	+3.8	+2.2	+4.6	+2.4	+1.2	+0.5	-2.0	-3.2	-2.6	+0.1	-1.1
December	-0.8	+0.3	+0.4	+1.9	+2.6	+2.0	+0.8	-0.5	-1.2	-0.4	+4.3	+4.5	+5.3	+3.4	+2.7	+0.9	+3.3	-3.0	-2.8	-4.0	-3.5	-3.6	-2.9	-2.1
Year	-3.4	-2.9	-1.8	-1.7	-1.3	-1.8	-2.1	-2.4	-1.8	-0.5	+1.0	+2.6	+5.0	+6.4	+7.1	+7.6	+6.2	+3.8	+0.3	-2.8	-4.2	-4.7	-4.2	-4.2
Winter	-1.2	-0.5	+0.1	+0.2	+0.8	+0.1	-0.7	-1.9	-1.7	-0.1	+2.4	+3.3	+4.2	+3.3	+2.3	+3.0	+1.2	+0.5	-0.7	-2.3	-3.1	-3.4	-2.5	-2.5
Equinox	-4.5	-4.0	-1.9	-1.9	-2.3	-2.8	-2.5	-2.5	-1.7	0.0	+1.6	+3.3	+5.7	+7.2	+7.6	+8.1	+7.0	+4.9	0.0	-3.5	-4.0	-4.3	-4.0	-4.2
Summer	-4.6	-4.1	-3.7	-3.3	-2.3	-2.7	-3.1	-2.7	-2.0	-1.5	-1.0	+1.2	+5.2	+8.8	+11.5	+11.7	+10.4	+7.0	+1.5	-2.5	-5.5	-6.3	-6.0	-6.0

VERTICAL INTENSITY (gammas) (All Days)

Table 51 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+17	+21	+19	+24	+26	+19	+6	-4	-28	-22	-27	-37	-31	-29	-18	-9	-7	0	+6	+10	+14	+19	+19	+16
February	+23	+23	+30	+28	+27	+21	+7	+4	-8	-28	-35	-41	-41	-27	-24	-20	-6	-4	-2	+5	+13	+17	+18	+21
March	+25	+23	+21	+18	+29	+23	+13	-14	-47	-60	-41	-15	-22	-12	-7	-4	-3	-3	+4	+8	+15	+22	+13	+14
April	+6	-7	-3	-11	-18	-29	-40	-30	-25	-18	-46	-45	+2	+10	+12	-8	+2	+52	+43	+24	+32	+36	+35	+31
May	+38	+33	+34	+24	+16	+3	-9	-12	-33	-37	-41	-30	-26	-24	-12	-17	-18	-7	0	+7	+14	+21	+31	+34
June	+34	+38	+32	+29	+8	-19	-10	-3	-18	-26	-9	-31	-41	-42	-18	-5	-6	-8	-5	0	+11	+19	+33	+34
July	+40	+37	+45	+40	+31	+9	+6	-21	-32	-33	-38	-42	-46	-39	-23	-12	-15	-8	+2	+11	+20	+27	+24	+28
August	+41	+27	+17	+30	+17	+3	+2	-9	-39	-60	-47	-36	-27	-19	-12	-4	-8	-7	+4	+9	+18	+28	+34	+40
September	+22	+21	+22	+19	+6	+9	-24	-22	-16	-9	-24	-20	-9	-18	-23	-15	-10	-7	-2	+3	+13	+18	+22	+31
October	+36	+34	+28	+14	+25	+1	-18	-35	-18	-60	-53	-87	-56	-30	-6	+2	+3	+12	+26	+27	+41	+39	+42	+33
November	+10	+24	+4	-4	-8	-9	-21	-45	-68	-46	-52	-24	-9	-8	-6	+8	+5	+9	+20	+34	+39	+46	+51	+51
December	+41	+41	+33	+25	+21	+11	+9	-7	-35	-56	-51	-48	-56	-35	-27	-15	-13	0	+14	+22	+28	+32	+35	+34
Year	+27.7	+26.3	+23.5	+19.7	+15.0	+3.5	-6.6	-16.5	-30.6	-37.9	-38.7	-38.0	-30.2	-22.8	-13.7	-8.2	-6.3	+2.4	+9.2	+13.3	+21.5	+27.0	+29.8	+30.6
Winter	+22.8	+27.2	+21.5	+18.2	+16.5	+10.5	+0.2	-13.0	-34.8	-38.0	-41.2	-37.5	-34.3	-24.8	-18.8	-9.0	-5.2	+1.2	+9.5	+17.7	+23.5	+28.5	+30.8	+30.5
Equinox	+22.2	+17.8	+17.0	+10.0	+10.5	+1.0	-17.2	-25.3	-26.5	-36.8	-41.0	-41.8	-21.2	-12.5	-6.0	-6.2	-2.0	+13.5	+17.8	+15.5	+25.2	+28.8	+28.0	+27.2
Summer	+38.2	+33.8	+32.0	+30.8	+18.0	-1.0	-2.8	-11.2	-30.5	-39.0	-33.8	-34.8	-35.0	-31.0	-16.2	-9.5	-11.8	-7.6	+0.2	+6.8	+15.8	+23.8	+30.5	+34.0

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 52 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-3	-6	-9	-9	-7	-5	-4	-3	0	+1	0	-5	-6	-8	-10	-7	+3	+10	+17	+20	+16	+10	+4	0
February	+4	+3	+3	+4	0	+4	+5	+3	-2	0	+7	+8	+8	+11	+10	+10	+5	-5	-16	-19	-18	-14	-7	-2
March	-7	0	+3	+5	+3	+7	+9	+9	+10	+10	+9	+9	+10	+3	+9	+11	+4	-7	-18	-23	-19	-17	-13	-6
April	+1	+13	+13	+18	+10	+16	+1	-12	-36	-12	+19	+16	+15	+18	+15	+7	-7	-18	-21	-19	-18	-16	-7	+3
May	+4	+2	-1	-3	+1	+6	+4	+4	+4	-3	+7	+5	+5	+7	+7	+2	-8	-17	-14	-10	-3	-1	-3	+4
June	+12	+20	+19	+7	+2	+2	+5	+6	+4	+2	+3	+7	+7	+6	+5	+2	-5	-17	-18	-19	-17	-20	-10	-1
July	-5	+3	+4	+5	+1	+5	+1	+7	-17	-1	-2	+6	+14	+22	+22	+14	+3	-11	-19	-24	-23	-12	+1	+5
August	+16	+22	+11	+12	+14	+12	+11	+11	-10	-48	-20	-28	+24	+26	+22	+11	+2	-17	-24	-25	-21	-11	-1	+13
September	-1	-2	+4	+4	+7	+11	+14	+13	+12	+14	+14	+13	+12	+8	+2	-7	-19	-26	-24	-15	-23	-9	-4	+1
October	-1	+3	+4	+6	+5	+6	+8	+6	+6	+4	+9	+7	+11	+10	+8	+3	-5	-12	-18	-19	-16	-15	-10	-1
November	+3	+10	+8	+10	+9	+7	+10	-1	-7	-6	+2	+2	+8	+9	+9	+5	-4	-13	-19	-18	-13	-7	-4	+1
December	+8	+9	+13	+14	+11	+6	+1	-2	-9	-5	-10	-13	-15	-9	+2	+5	+8	+1	-5	-6	-5	-7	+2	+8
Year	+2.6	+6.4	+6.0	+6.1	+4.6	+6.4	+5.4	+3.4	-3.8	-3.7	+3.2	+2.2	+7.8	+8.6	+8.4	+4.6	-1.9	-11.0	-14.9	-14.8	-13.3	-9.9	-4.3	+2.1
Winter	+3.0	+4.0	+3.8	+4.8	+3.2	+3.0	+3.0	-0.8	-4.5	-2.5	-0.2	-2.0	-1.2	+0.8	+2.8	+3.2	+3.0	-1.8	-5.8	-5.8	-5.0	-4.5	-1.2	+1.8
Equinox	-2.0	+3.5	+6.0	+8.2	+6.2	+10.0	+8.0	+4.0	-2.0	+4.0	+12.8	+11.2	+12.0	+9.8	+8.5	+3.5	-6.8	-15.8	-20.2	-19.0	-19.0	-14.2	-8.5	-0.8
Summer	+6.8	+11.8	+8.2	+5.2	+4.5	+6.2	+5.2	+7.0	-4.8	-12.5	-3.0	-2.5	+12.5	+15.2	+14.0	+7.2	-2.0	-15.5	-18.8	-19.5	-16.0	-11.0	-3.2	+5.2

DECLINATION (minutes) (Quiet Days)

Table 53 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-1.7	-0.9	-0.1	+0.4	+0.5	+2.0	-0.4	-1.1	-1.3	-1.1	-0.9	+0.2	+0.6	+1.3	+2.7	+3.4	+3.5	+2.8	+1.4	-1.3	-2.7	-3.0	-2.5	-1.9
February	-3.3	-2.3	-1.2	-1.3	+0.3	+0.9	-0.7	-0.4	-0.6	-0.1	-0.4	+1.0	+1.4	+0.7	+1.5	+3.3	+4.7	+3.6	+1.8	-0.4	-1.8	-2.2	-2.4	-3.0
March	-3.6	-2.6	-1.8	-1.7	-0.2	+1.0	-0.7	-1.0	-0.2	-0.3	+0.2	+0.5	+0.4	-0.1	+2.0	+5.0	+6.4	+6.1	+4.4	+1.0	-1.6	-3.7	-4.8	-4.6
April	-6.2	-5.0	-3.0	-0.2	+1.3	-2.2	-2.0	-0.5	-2.2	-0.1	-0.8	+0.5	+1.9	+4.9	+8.1	+9.9	+10.0	+7.3	+3.6	-1.1	-4.2	-6.2	-6.8	-6.8
May	-3.1	-1.8	-1.1	-1.5	-0.3	-1.1	-0.6	-1.4	-1.9	-0.5	-0.2	+1.9	+4.4	+6.6	+9.2	+9.1	+7.4	+5.6	+0.1	-3.6	-6.4	-7.4	-7.6	-6.0
June	-5.5	-3.4	-0.5	+0.8	-0.6	-0.1	-0.1	-0.2	-1.5	-2.3	-1.6	+0.4	+3.1	+5.1	+7.1	+9.1	+9.1	+6.8	+3.9	-1.2	-4.6	-7.1	-8.9	-7.9
July	-5.0	-3.4	-2.1	-1.9	-1.8	-2.4	-2.3	-1.5	-0.6	-1.1	-1.2	+0.7	+4.8	+8.2	+9.7	+11.1	+10.5	+7.6	+2.2	-2.9	-6.0	-8.0	-7.9	-6.8
August	-4.0	-2.2	-2.2	-2.7	-2.5	-1.4	-1.7	-1.7	+0.5	+0.4	-1.3	-0.4	+3.6	+7.1	+8.1	+10.9	+9.8	+6.4	+1.3	-2.4	-4.7	-6.7	-7.0	-7.2
September	-2.8	-2.9	-2.9	-2.6	-2.3	-1.2	-1.5	-1.4	-0.7	+0.5	+1.0	+1.7	+3.6	+5.7	+7.4	+9.0	+7.7	+3.9	-0.4	-3.5	-5.2	-5.1	-4.2	-3.7
October	-3.0	-2.3	-1.8	-1.6	-1.6	-1.1	-1.7	-1.2	-0.5	-0.2	+0.6	+0.9	+1.2	+1.9	+4.1	+5.8	+6.1	+5.8	+3.1	-0.4	-2.7	-3.3	-3.8	-4.2
November	-1.6	-1.1	+0.2	-0.2	-0.2	-0.9	+0.2	-0.7	+0.1	-0.8	+0.5	+0.2	+1.4	+1.2	+2.7	+3.6	+3.9	+2.6	+0.3	-1.7	-2.6	-2.6	-2.2	-2.0
December	-1.2	-0.2	+1.2	+0.2	+0.1	+0.7	+1.8	+0.4	+1.6	+0.3	-1.0	+1.1	+1.0	+0.4	+1.6	+2.1	+2.3	+1.3	-0.2	-1.6	-2.6	-3.8	-3.4	-3.0
Year	-3.4	-2.3	-1.3	-1.0	-0.6	-0.5	-0.8	-0.9	-0.6	-0.4	-0.4	+0.7	+2.3	+3.6	+5.3	+6.9	+6.8	+5.0	+1.8	-1.6	-3.7	-4.9	-5.1	-4.6
Winter	-2.0	-1.1	0.0	-0.2	+0.2	+0.7	+0.2	-0.5	-0.1	-0.4	-0.4	+0.6	+1.1	+0.9	+2.1	+3.1	+3.6	+2.6	+0.8	-1.2	-2.4	-2.9	-2.6	-2.0
Equinox	-3.9	-3.2	-2.4	-1.5	-0.7	-0.9	-1.5	-1.0	-0.9	0.0	+0.2	+0.9	+1.8	+3.1	+5.4	+7.4	+7.6	+5.8	+2.7	-1.0	-3.4	-4.6	-4.9	-4.8
Summer	-4.4	-2.7	-1.5	-1.3	-1.3	-1.2	-1.2	-1.2	-0.9	-0.9	-1.1	+0.7	+4.0	+6.8	+8.5	+10.1	+9.2	+6.6	+1.9	-2.5	-5.4	-7.3	-7.9	-7.0

VERTICAL INTENSITY (gammas) (Quiet Days)

Table 54 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-7	-7	-7	-7	-6	-4	-4	+2	+2	+7	+11	+13	+15	+8	+4	+1	+3	+1	-2	-4	-5	-5	-5	-4
February	+7	+6	+9	+11	+11	+8	+9	-1	-13	-16	-8	-12	-9	-6	-4	-2	-1	-1	-2	+1	+3	+4	+3	+2
March	+8	+6	+7	+6	+8	+6	+5	-4	-6	-11	-20	-10	-6	-8	-3	+2	+1	0	-2	0	0	+4	+7	+10
April	-11	-12	-16	-19	-13	-14	+3	+18	+31	+23	+7	+6	-5	-7	-4	-3	0	+3	+8	+6	+3	+2	-3	-6
May	+10	+9	+8	+6	+7	+11	+6	+3	+1	-12	-2	+1	-1	0	0	-4	-8	-14	-14	-7	-6	-2	+2	+5
June	+18	+18	+28	+22	+12	+5	-5	+2	-4	-7	-9	-5	-3	-6	-5	-8	-9	-14	-15	-13	-7	-5	+1	+9
July	+24	+17	+15	+16	+11	+11	+7	+5	-36	-23	-18	-6	+6	+8	+3	0	-4	-8	-12	-13	-11	-6	+3	+10
August	+19	+21	+17	+16	+13	+13	+10	-8	-21	-70	-39	-28	+5	+9	+6	+4	+3	-1	0	-2	+1	+6	+10	+15
September	+5	+1	+2	+3	+4	+7	+5	+4	+3	0	-2	-3	-2	0	-1	-2	-6	-9	-5	-4	-2	+1	+1	+1
October	+6	+5	+4	+4	+5	+8	+10	+3	-7	-5	-6	-6	-4	-1	+2	+1	0	-2	-5	-4	-4	-3	0	0
November	+11	+15	+17	+15	+12	+13	+2	-14	-20	-24	-17	-13	-12	-6	-1	+3	+1	-1	+2	+4	+5	+5	+3	+2
December	+17	+17	+16	+16	+13	+13	-11	+1	-14	-14	-12	-22	-28	-32	-17	-5	+2	+4	+6	+6	+9	+11	+13	+13
Year	+8.9	+8.0	+8.3	+7.4	+6.4	+6.4	+3.1	+0.9	-7.0	-12.7	-9.6	-7.1	-3.7	-3.4	-1.7	-1.1	-1.5	-3.5	-3.4	-2.5	-1.2	+1.0	+2.9	+4.7
Winter	+7.0	+7.8	+8.8	+8.8	+7.5	+7.5	-1.0	-3.0	-11.2	-11.8	-6.5	-8.5	-8.5	-9.0	-4.5	-0.8	+1.2	+0.8	+1.0	+1.8	+3.0	+3.8	+3.5	+3.2
Equinox	+2.0	0.0	-0.8	-1.5	+1.0	+1.8	+5.8	+5.2	+5.2	+1.8	-5.2	-3.2	-4.2	-4.0	-1.5	-0.5	-1.2	-2.0	-1.0	-0.5	-0.8	+1.0	+1.2	+1.2
Summer	+17.8	+16.2	+17.0	+15.0	+10.8	+10.0	+4.5	+0.5	-15.0	-28.0	-17.0	-9.5	+1.7	+2.8	+1.0	-2.0	-4.5	-9.2	-10.2	-8.8	-5.8	-1.8	+4.0	+9.8

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 55 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	+59	+168	+213	+165	+115	+72	+60	+37	-153	-193	-261	-289	-174	-58	-41	+29	0	+16	+15	+11	+16	+40	+56	+97
February	+61	+38	+78	+68	+66	+54	-79	-3	+10	-41	-82	-127	-28	-24	-43	-26	+18	+7	-8	-4	+6	+16	+16	+28
March	+114	+129	+139	+168	+138	+129	+83	-2	-212	-167	-111	-246	-192	-82	+31	+30	-77	-112	-31	+19	+37	+61	+100	+55
April	+270	+289	+324	+276	+225	+54	-77	-159	-61	-154	-196	-166	-280	-365	-171	-72	-62	-177	-99	+7	+60	+183	+207	+143
May	+164	+199	+209	+127	+22	+6	+8	-28	-52	-49	-105	-49	-158	-194	-187	-203	-34	+15	+4	+9	+43	+57	+83	+116
June	+163	+172	+148	+69	+111	+83	+29	-93	-106	-151	-113	-170	-67	-5	-14	-15	-45	-53	-50	-21	-9	-8	+53	+90
July	+193	+239	+277	+170	+184	+205	-6	-261	-230	-304	-255	-396	-251	-221	-119	-107	-111	-76	+51	+130	+169	+217	+260	+241
August	+192	+214	+190	+150	+88	+19	+32	-184	-425	-180	-84	-14	-38	-11	-23	-70	-76	-83	-22	+3	+46	+58	+85	+134
September	+242	+191	+131	+52	+69	+33	-116	-133	-141	-140	-140	-169	-342	-157	-93	-29	+42	+37	+17	+64	+106	+134	+164	+177
October	+205	+261	+322	+172	+127	+4	-57	-78	-121	-310	-308	-428	-209	-175	-370	-155	-146	+11	+163	+162	+219	+243	+284	+184
November	+254	+432	+221	+220	+214	+120	-193	-234	-180	-187	-274	-228	-147	-184	-191	-257	-24	-18	-10	+67	+72	+122	+179	+225
December	+134	+162	+174	+163	+160	+55	+52	-54	-76	-181	-186	-180	-239	-263	-146	-95	-81	-1	+47	+63	+89	+129	+137	+136
Year	+170.9	+207.8	+202.2	+150.0	+126.6	+69.5	-22.0	-99.3	-145.6	-171.4	-176.3	-205.1	-177.1	-144.9	-113.9	-80.8	-49.7	-36.1	+6.4	+42.5	+71.2	+104.3	+135.3	+135.5
Winter	+127.0	+200.0	+171.5	+154.0	+138.8	+75.2	-40.0	-63.5	-99.8	-150.5	-200.8	-206.0	-147.0	-132.2	-105.2	-87.2	-21.8	+1.0	+11.0	+34.2	+45.8	+76.8	+96.8	+121.5
Equinox	+207.8	+217.5	+229.0	+167.0	+139.8	+55.0	-41.8	-93.0	-133.8	-192.8	-188.8	-252.2	-255.8	-194.8	-150.8	-56.5	-60.8	-60.2	+12.5	+63.0	+105.5	+155.2	+188.8	+139.8
Summer	+178.0	+206.0	+206.0	+129.0	+101.2	+78.2	+15.8	-141.5	-203.2	-171.0	-139.2	-157.2	-128.5	-107.8	-85.8	-98.8	-66.5	-49.2	-4.2	+30.2	+62.2	+81.0	+120.2	+145.2

DECLINATION (minutes) (Disturbed Days)

Table 56 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-4.0	-1.3	-0.9	-0.1	-2.0	-2.6	-3.0	-3.9	-0.3	+3.0	+6.9	+19.3	+11.2	+6.3	+2.1	+0.9	-4.3	-5.0	-4.2	-2.0	-5.2	-4.0	-4.4	-2.4
February	-3.0	-3.0	+0.4	+1.4	+3.0	+1.9	-4.8	+3.6	+2.2	+4.1	+1.2	+2.3	+3.4	+4.2	-2.1	-1.3	+1.6	+4.3	-1.6	-3.5	-1.9	-2.8	-3.9	-5.6
March	-5.8	-5.4	-5.2	-16.3	-6.9	-6.1	-5.0	-2.3	-12.0	-0.7	+3.9	-1.4	+13.2	+17.0	+10.1	+12.8	+16.4	+7.4	+5.3	-5.7	-6.7	-3.8	+1.2	-3.7
April	-11.6	-9.1	-5.6	-11.3	-15.4	-26.6	-23.5	-17.1	-5.6	-11.7	-14.0	-11.2	+15.6	+22.3	+28.2	+36.0	+30.0	+23.9	+9.9	-1.0	+2.4	-0.2	-1.6	-2.6
May	-6.3	-2.0	-6.1	-1.8	-2.6	-17.8	-8.9	-11.9	-9.1	-6.4	+3.2	+7.0	+9.7	+14.8	+23.3	+18.5	+10.6	+10.8	+3.3	-5.8	-8.4	-6.1	-3.7	-4.0
June	-6.0	-6.8	-14.1	-13.5	-17.1	-7.9	-6.2	-9.1	-5.9	-8.9	+0.8	+2.0	+11.7	+13.2	+16.1	+17.9	+18.2	+14.4	+5.1	+6.4	-2.9	-0.9	-3.2	-5.4
July	-7.6	-18.2	-9.1	-10.6	-6.0	-2.3	-14.0	-10.3	+8.4	-4.4	+3.7	+2.4	+1.8	+8.6	+13.1	+10.2	+11.3	+7.8	+1.5	-0.3	+1.7	+7.6	+7.0	-2.4
August	+3.0	+1.7	-13.6	-12.0	-13.5	-4.9	-3.2	-3.7	-1.5	+3.5	0.0	-1.7	+5.0	+10.3	+13.3	+14.7	+15.1	+6.2	-0.5	-4.3	-4.2	-5.9	-2.4	-1.3
September	+0.5	-3.3	-2.4	-11.1	-3.3	-8.2	-10.2	-14.2	-11.8	-4.8	+3.5	+3.3	+17.4	+19.4	+16.1	+15.4	+7.5	+1.1	-4.0	-4.7	-3.8	-0.7	+0.9	-2.5
October	-7.4	-9.6	-2.8	+11.9	-8.8	-11.1	-9.8	-5.9	+3.3	+11.8	-2.5	+20.4	+10.2	+12.6	+1.0	-2.4	-0.8	-0.1	-6.8	-5.2	+1.5	+0.9	+1.0	-1.3
November	+16.1	+14.1	+5.9	-5.1	-6.6	-10.2	-10.7	-15.6	-24.9	-14.8	-1.0	-2.6	-0.9	+6.6	+1.2	+11.3	+3.2	-1.0	+11.5	+5.2	+2.0	+0.7	+10.9	+5.0
December	-2.5	-5.2	-4.1	-0.8	-4.7	-3.5	-1.4	+0.2	+3.4	+2.0	+16.2	+15.3	+15.8	+9.1	+5.2	-1.3	-12.0	-7.7	-6.1	-4.7	-3.9	-2.9	-2.7	-3.8
Year	-2.9	-4.0	-4.8	-5.8	-7.0	-8.3	-8.4	-7.5	-4.5	-2.3	+1.8	+4.6	+9.5	+12.0	+10.6	+11.1	+8.1	+5.2	+1.1	-2.0	-2.4	-1.5	0.0	-2.5
Winter	+1.6	+1.1	+0.3	-1.2	-2.6	-3.6	-5.0	-3.9	-4.9	-1.4	+5.8	+8.6	+7.4	+6.5	+1.6	+2.4	-2.9	-2.4	-0.1	-1.2	-2.2	-2.2	0.0	-1.7
Equinox	-6.1	-6.8	-4.0	-6.7	-8.6	-13.0	-12.1	-9.9	-6.5	-1.4	-2.3	+2.8	+14.1	+17.8	+13.8	+15.5	+13.3	+8.1	+1.1	-4.2	-1.6	-1.0	+0.4	-2.5
Summer	-4.2	-6.3	-10.7	-9.5	-9.8	-8.2	-8.1	-8.8	-2.0	-4.1	+1.9	+2.4	+7.0	+11.8	+16.4	+15.3	+13.8	+9.8	+2.4	-0.5	-3.4	-1.3	-0.4	-3.3

VERTICAL INTENSITY (gammas) (Disturbed Days)

Table 57 Meanook 1960

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-26	-51	-23	-45	-52	-38	-13	-4	+79	+7	+40	+87	+97	+65	+50	+17	+16	-3	-11	-21	-30	-49	-47	-43
February	+50	+42	+68	+53	+48	+18	-44	-13	+4	-28	-57	-88	-48	-44	-56	-54	-3	+4	+5	+13	+26	+34	+33	+38
March	+42	+27	-9	-19	+55	+34	+27	+3	-62	-57	-31	+42	-6	-10	-17	-15	-7	-3	+20	+22	+23	+29	-40	-48
April	-111	-187	-223	-260	-181	-98	-118	-39	+36	0	-34	-86	+57	+147	+131	+36	+51	+306	+235	+86	+105	+80	+40	+29
May	+63	+39	+44	+22	-5	-11	-66	-52	-37	+22	-25	-2	-8	-39	+27	-31	-51	-14	-3	+13	+20	+15	+41	+40
June	+11	-10	-53	-39	-45	-45	-35	-8	-26	-45	+5	+100	+22	+5	+9	+10	+4	-6	-11	+2	+18	+40	+56	+47
July	-10	-34	-14	+12	+52	+30	-3	-78	+7	+4	+24	+37	-61	-85	-75	-30	-55	-33	+23	+70	+91	+81	+30	+18
August	+43	-27	-84	-17	-36	-78	+19	+56	+15	-26	-10	+2	-38	+4	-19	-15	-48	-42	+10	+27	+57	+64	+69	+75
September	-6	-40	-21	+9	-23	-18	-59	-7	+68	+97	+36	+8	+21	-40	-67	-43	-33	-17	-3	+7	+40	+42	+15	+31
October	-13	-62	-50	-70	-36	-86	-39	+32	-7	-143	+77	+12	-86	-2	+83	+96	+56	+40	+46	+37	+78	+47	+23	-27
November	-116	-39	-140	-174	-134	-104	-128	-54	-101	+55	-60	+90	+74	+38	+42	+72	+35	+29	+59	+120	+104	+111	+106	+115
December	+40	+35	+13	-15	-5	-11	+4	-8	-4	-20	-13	-33	-104	-94	-58	-15	-7	+14	+36	+51	+42	+55	+48	+47
Year	-2.7	-25.6	-41.0	-45.2	-30.2	-33.9	-37.9	-14.3	-2.4	-11.2	-4.0	+14.1	-6.7	-4.6	+4.2	+1.8	-3.5	+22.9	+33.8	+35.6	+47.8	+45.8	+31.2	+26.7
Winter	-13.0	-3.2	-20.5	-45.2	-35.8	-33.8	-45.2	-19.8	-5.8	+3.5	-22.5	+14.0	+4.7	-8.8	-5.5	+5.0	+10.2	+11.0	+22.2	+40.8	+35.5	+37.8	+35.0	+39.2
Equinox	-22.0	-65.5	-75.8	-85.0	-46.2	-42.0	-47.2	-2.7	+8.8	-25.8	+12.0	-6.0	-3.5	+23.8	+32.5	+17.0	+16.8	+81.5	+74.5	+38.0	+61.5	+49.5	+9.5	-3.7
Summer	+26.8	-8.0	-26.8	-5.5	-8.5	-26.0	-21.2	-20.5	-10.2	-11.2	-1.5	+34.2	-21.2	-28.8	-14.5	-16.5	-37.5	-23.8	+4.8	+28.0	+46.5	+50.0	+49.0	+44.5

THREE-HOUR RANGE INDICES, MEANOOK, 1960

Table 58

January	D	H	Z	K	February	D	H	Z	K
1	0212 1000	0112 1000	0011 0000	0212 1000		0124 2200	0144 3100	0043 3000	0144 3200
2	0210 1010	0101 2110	0002 2000	0212 2110		0101 2232	0002 2333	0002 2131	0102 2333
3	0111 2200	0111 2100	0010 2100	0111 2200		1022 3321	1133 5322	0033 4312	1133 5322
4	0023 2110	0014 2210	0014 2000	0024 2210		1233 2212	3445 3223	2333 2011	3445 3223
5	1345 5322	2455 6422	2345 6300	2455 6422		0026 5421	1037 6422	0036 5310	1037 6422
6	1401 0221	2300 0211	1310 0100	2411 0221		4452 1201	3364 3221	2353 3100	4464 3221
7	0012 0100	0023 3100	0023 3000	0023 3100		1221 0000	1133 1000	0223 0000	1233 1000
8	0000 0100	0000 0000	0000 0000	0000 0100		0033 2211	0135 6211	0034 4100	0135 6211
9	0000 0000	0000 0000	0000 0000	0000 0000		1000 0210	1000 1100	0000 0000	1000 1210
10	0066 5433	0167 6645	0056 5433	0167 6645		0222 1000	0221 1000	0222 1000	0222 1000
11	3355 4321	3376 5432	2354 5310	3376 5432		0001 2232	0001 1232	0000 1012	0001 2232
12	1141 2311	2142 4422	1042 4312	2142 4422		1022 0000	2133 1000	1032 0000	2133 1000
13	0112 1132	1124 1242	1023 0121	1124 1242		0012 1012	0012 1024	0003 0013	0013 1024
14	3245 4343	5376 6346	5356 5224	5376 6346		2264 4321	5456 4332	2455 3331	5466 4332
15	5522 2310	7644 5421	6523 3310	7644 5421		1000 3320	2000 4420	1000 4310	2000 4420
16	0110 0102	0100 2103	0000 1001	0110 2103		0112 4512	1113 6732	0003 5511	1113 6732
17	1221 3210	2232 3212	0132 2200	2232 3212		2443 2222	3356 4324	3343 3222	3456 4324
18	0046 4220	1176 7322	0046 6110	1176 7322		3244 2332	4465 3233	3354 3222	4465 3333
19	2013 1200	2014 2211	1013 1100	2014 2211		0133 3242	1145 5344	0134 4233	1145 5344
20	0134 3311	0236 5521	0235 3400	0236 5521		3323 2212	4445 4223	4445 3211	4445 4223
21	3236 5432	5456 7555	3346 4443	5456 7555		3354 3311	2366 4422	3365 4311	3366 4422
22	2235 1311	4247 3322	3245 3301	4247 3322		0032 2110	1033 3112	0043 3010	1043 3112
23	1333 3322	2343 5333	2243 4222	2343 5333		0332 1210	1211 2320	0322 2100	1332 2320
24	3433 3221	3335 4332	3334 3221	3435 4332		0210 0000	1210 0110	0100 0000	1210 0110
25	1232 2211	1233 2321	0223 1210	1233 2321		0021 0010	0021 0010	0031 0000	0031 0010
26	0212 1200	1113 2211	0023 1100	1223 2211		0011 1110	0011 1211	0010 0000	0011 1211
27	2202 1001	2113 1101	0213 0000	2213 1101		2433 2420	3545 4422	3335 4310	3545 4422
28	0011 1120	0012 2111	0011 1000	0012 2121		0032 1101	1143 1111	0043 0000	1143 1111
29	0103 2100	2124 4110	0224 3000	2224 4110		2124 1211	2135 2222	1234 1001	2235 2222
30	0000 0000	0000 0000	0000 0000	0000 0000					
31	0000 0100	0000 0100	0000 0000	0000 0100					

March	D	H	Z	K	April	D	H	Z	K
1	1132 2221	2244 3223	2333 3132	2344 3233		6667 7674	7878 8875	5768 8675	7878 8875
2	3244 3231	4475 6223	4364 4112	4475 6233		5468 5123	5679 7235	6578 5113	6679 7235
3	1355 3221	2366 5322	1366 4421	2366 5422		4755 3231	6977 3343	5655 2111	6977 3343
4	1021 4321	2122 4523	1122 4321	2122 4523		1211 2333	3412 3434	2211 2223	3412 3434
5	1141 2221	2252 3322	1252 3111	2252 3322		2422 2320	3633 4521	2532 3410	3633 4521
6	2413 1210	4535 1122	4444 1010	4545 1222		0231 2322	1243 3423	0232 2212	1243 3423
7	0010 0010	0001 1110	0000 0000	0011 1110		1330 1242	3430 2443	1340 1332	3440 2443
8	0344 4211	0356 5212	0255 4201	0356 5212		3233 2121	3355 4213	3344 2111	3355 4223
9	0022 2311	1133 2322	0123 1100	1133 2322		1443 1020	3476 1212	2355 1001	3476 1222
10	0044 2331	1166 3432	0066 3222	1166 3432		1435 5224	2566 6226	0456 5223	2566 6226
11	0356 4432	2457 7543	1466 5331	2467 7543		3422 2221	3633 2324	2533 1213	3633 2324
12	0021 1110	2133 3211	1032 2100	2133 3211		3663 3222	6775 5333	4664 3122	6775 5333
13	0020 0210	2010 0211	0020 0000	2020 0211		4553 1222	5675 3333	4563 1122	5675 3333
14	0223 0200	1115 1101	0125 0000	1225 1201		2333 2211	3544 3323	2344 2301	3544 3323
15	0000 1333	2000 2345	0000 1233	2000 2345		2423 2220	3534 2232	2633 2121	3634 2232
16	7665 3332	6776 3443	7765 2322	7776 3443		1424 6533	2346 6635	2443 6623	2446 6635
17	1253 2220	3376 3322	2264 2221	3376 3322		4354 2332	6667 2334	4355 1222	6667 2334
18	0442 2000	2333 3112	0443 2001	2443 3112		3253 2220	5465 3312	3565 1211	5565 3322
19	1012 3210	2124 4311	0033 3200	2134 4311		0130 1110	2120 1000	1020 0000	2130 1110
20	0111 1100	1101 0101	0101 0000	1111 1101		0011 1000	0010 0000	0011 0000	0011 1000
21	0022 3200	0043 5210	0052 4100	0053 5210		0000 0100	0001 1111	0000 0000	0001 1111
22	0020 2011	0020 3102	0020 2000	0020 3112		0110 0110	2011 1211	0112 1000	2112 1211
23	0211 0000	1102 0001	0223 0000	1223 0001		0001 0111	2111 1125	0000 0014	2111 1125
24	2222 1321	2135 1322	3224 0200	3235 1322		4552 4344	5674 6356	6552 4234	6674 6356
25	0020 1020	0011 1122	0010 1000	0021 1122		5566 5323	6776 7444	6666 6433	6776 7444
26	0023 1110	1043 1111	0033 0000	1043 1111		3253 0221	4575 3214	3364 2113	4575 3224
27	0323 1000	1234 1010	0133 1000	1334 1010		1032 2134	4242 4246	3142 3026	4242 4246
28	0036 3322	0036 4333	0045 3332	0046 4333		5557 6432	6677 6652	5677 7542	6677 7652
29	3452 0111	5574 1112	3563 0001	5574 1112		4574 5232	6677 7434	5675 5323	6677 7434
30	1112 1332	2124 2323	1124 1223	2124 2333		6565 7732	7777 8834	6676 7712	7777 8834
31	2556 7666	4567 7877	2557 6647	4567 7877					

THREE-HOUR RANGE INDICES, MEANOOK 1960

May	D	H	Z	K	June	D	H	Z	K
1	4454 3232	5575 4323	3345 3222	5575 4333		3466 5220	5867 7222	4778 6122	5878 7222
2	1433 2221	3334 3322	1444 2110	3444 3322		1010 0111	2112 2212	1001 1011	2112 2212
3	0223 1210	1235 2221	0235 1000	1235 2221		1121 2221	0011 1223	1011 1112	1121 2223
4	0010 1121	0011 1122	0000 1001	0011 1122		3554 3322	6675 5434	4664 3223	6675 5434
5	0031 2222	3254 2234	1152 2122	3254 2234		3545 3223	5557 5335	3455 5213	5557 5335
6	1455 5354	3466 6456	2464 6334	3466 6456		5556 7211	6677 7324	4667 6312	6677 7324
7	4763 4433	5766 6445	3774 4334	5766 6445		2344 3232	4456 4233	3444 3221	4456 4233
8	2456 6643	3677 7845	3466 7643	3677 7845		2443 2233	4475 3345	2444 2233	4475 3345
9	2233 2210	3334 4322	2234 3300	3334 4322		3443 2242	5764 3232	4453 3121	5764 3242
10	0023 3122	3124 4333	2034 4222	3124 4333		1223 2311	2111 2223	1101 2222	2223 2323
11	2564 2232	3776 4334	3664 2212	3776 4334		0121 0210	2211 1111	2211 0011	2221 1111
12	1465 4221	3477 6423	1456 4312	3477 6423		1112 0121	1112 1221	2110 1101	2112 1221
13	1222 1222	3213 2233	2223 1022	3223 2233		1021 1211	3211 2222	0112 1111	3212 2222
14	2255 2210	3376 3312	2356 2210	3376 3312		2132 4221	2235 5221	2235 5222	2235 5222
15	0133 4220	1246 5222	0154 4110	1246 5222		1132 3120	3155 5233	2154 4112	3155 5233
16	0232 3433	2223 3444	0333 3222	2333 3444		1221 1110	3221 0212	2330 0102	3331 1212
17	2033 2210	3254 3312	2144 3200	3254 3312		1100 1211	3100 2321	2100 1101	3100 2321
18	0221 1100	2211 1221	0120 1100	2221 1221		1123 3221	3225 3322	2225 3201	3225 3322
19	0332 0010	2123 0111	1133 0000	2333 0111		2355 2111	3566 3323	2555 3202	3566 3323
20	0201 1200	1100 0111	0000 0011	1201 1211		1222 2010	3233 3211	2333 3000	3333 3211
21	0012 2110	1012 2211	2134 2110	2134 2111		2334 4222	2555 5323	1435 5211	2555 5323
22	0000 1121	0100 1122	0001 1111	0100 1122		1333 2121	3534 3214	2533 2103	3534 3224
23	0012 3333	2011 4434	1001 2233	2012 4434		2420 1211	4522 2223	3421 2102	4522 2223
24	3464 4222	4775 6434	3667 6434	4777 6434		1133 3221	3333 3223	2334 2122	3333 3223
25	2343 3221	4555 5534	4456 3334	4556 5534		2222 3333	3223 4335	2233 3224	3233 4335
26	2442 3322	5553 3234	6754 4223	6754 4234		3452 1222	4675 3323	3663 2111	4675 3323
27	4410 0021	6621 2133	4611 1122	6621 2133		6656 2343	7777 2456	8888 2234	8888 2456
28	2021 0133	2132 1244	3243 1133	3243 1244		3345 4322	4468 7434	2357 5243	4468 7444
29	5331 2342	7653 3444	6532 3333	7653 3444		3342 1134	4573 2246	4463 1124	4573 2246
30	1244 4311	3367 6522	2277 6512	3377 6522		5534 2342	6655 3343	7644 2232	7655 3343
31	0211 1222	2222 2333	1211 2122	2222 2333					

July	D	H	Z	K	August	D	H	Z	K
1	3442 3232	4563 4333	4553 3322	4563 4333		1334 3221	3355 4222	2344 3101	3355 4222
2	2344 3221	4366 4322	2244 3211	4366 4322		2433 3131	3345 3233	2444 3112	3445 3233
3	1313 3232	3325 2333	2335 3222	3335 3333		1022 2111	3223 2222	2033 2101	3233 2222
4	3354 3222	4476 4323	3475 4211	4476 4323		2234 2121	2256 2121	1245 2000	2256 2121
5	1234 3132	4456 5222	3345 4111	4456 5232		1012 1111	1022 1112	1023 0101	1023 1112
6	2313 3210	4215 3222	3324 3100	4325 3222		1144 2221	2166 1222	1155 1011	2166 2222
7	0032 0110	0123 1112	0023 0000	0133 1112		2223 2211	2245 2221	2244 1011	2245 2221
8	0011 0110	2112 0111	0102 0000	2112 0111		0142 2223	1153 3334	0153 2334	1153 3334
9	0021 1120	0011 0111	0031 0000	0031 1121		2545 3221	4567 5322	3555 4112	4567 5322
10	1231 1121	2211 1222	1132 0010	2232 1222		0143 2222	3265 2333	2254 2122	3265 2333
11	0122 1222	3223 2223	0223 1001	3223 2223		1445 3231	3467 5323	3455 5223	3467 5333
12	1232 2022	3234 3222	2244 3111	3244 3222		2474 5221	3667 6323	3465 5222	3677 6323
13	1333 2221	3355 4223	2253 3211	3355 4223		0111 2120	2212 4222	1223 4211	2223 4222
14	0436 5544	2546 6444	0336 6233	2546 6544		1222 2333	1223 3423	2233 3322	2233 3433
15	2256 7646	4466 7676	2366 8767	4466 8777		2222 1110	3222 1111	2333 1002	3333 1112
16	7576 7522	8777 6544	8677 5433	8777 7544		0001 3533	2102 5735	1002 4644	2102 5745
17	3643 3222	5775 4233	4575 3222	5775 4233		7673 3443	7885 4654	6674 3544	7885 4654
18	3332 2221	4443 4422	3342 2300	4443 4422		2554 3211	4367 5212	2265 4211	4567 5212
19	0176 4322	1376 3244	0176 4222	1376 4344		0133 2333	2125 3334	1135 3223	2135 3334
20	3225 4331	3337 7334	3225 4122	3337 7334		1374 3332	3475 3333	2464 3232	3475 3333
21	1311 2210	3522 3322	2421 3100	3522 3322		2465 2332	3677 3434	3356 2323	3677 3434
22	0432 2221	3433 3224	2543 2013	3543 3224		2312 1121	5311 1223	3433 1111	5433 1223
23	2220 0121	4220 1212	3220 0001	4220 1222		1123 1211	2132 1212	2232 0110	2233 1212
24	0231 2321	2242 2222	1142 1010	2242 2322		0023 1010	2125 1211	0034 0010	2135 1211
25	0100 0120	1200 0121	0000 0000	1200 0121		0000 0110	1000 0101	0000 0101	1000 0111
26	0001 3222	2101 3223	1002 3002	2102 3223		0011 1111	0011 1112	0021 0002	0021 1112
27	0032 1220	2142 1111	2042 0000	2142 1221		2121 2322	2223 1333	3332 2111	3333 2333
28	0011 2121	0212 3223	0012 3011	0212 3223		2451 2210	3561 4212	3460 4301	3561 4312
29	3443 2332	6755 3433	3544 3433	6755 3433		3521 3334	5653 4434	3542 3323	5653 4434
30	2335 5321	5558 7233	3355 5222	5558 7333		5777 5310	4797 6422	6677 6222	6797 6422
31	3466 4322	6476 5434	4577 5432	6577 5434		2365 3101	3375 4112	2465 4111	3475 4112

THREE-HOUR RANGE INDICES, MEANOOK 1960

Setpember	D	H	Z	K	October	D	H	Z	K
1	0000 1000	1010 1001	0010 0000	1010 1001		3657 5322	4767 6433	4566 5333	4767 6433
2	0322 4232	1144 5344	0244 5324	1344 5344		4466 7521	4477 7543	4467 6433	4477 7543
3	3561 2221	5683 4323	4582 2122	5683 4323		1125 3111	2236 5212	2226 4101	2236 5212
4	1456 6445	3576 7555	2466 7344	3576 7555		0032 3443	1034 4454	0044 3443	1044 4454
5	5766 6543	7777 6745	5777 6533	7777 6745		3643 2323	5666 4325	3654 3214	5666 4325
6	3452 2223	5653 2223	3553 2123	5653 2223		5767 6655	5788 8867	6777 8757	6788 8867
7	2343 5322	3246 7334	2144 6222	3346 7334		7767 6633	9887 7755	6868 7634	9888 7755
8	1264 3221	3375 4322	3274 3211	3375 4322		3446 3222	5566 4333	4545 3222	5566 4333
9	3452 3221	5565 5222	4453 3111	5565 5222		3664 4423	4666 4434	4665 4423	4666 4434
10	0243 2332	2255 3323	2253 1222	2255 3333		3420 0110	4431 1112	4420 0011	4431 1112
11	2130 2331	4341 2233	4341 1122	4341 2333		2455 2210	2476 4211	2575 3100	2576 4211
12	2234 2210	2265 2211	2244 2211	2265 2211		0001 0121	0112 1112	0001 1000	0112 1122
13	1454 2111	3666 3123	3465 2122	3666 3123		0110 0111	0111 1013	0010 0002	0111 1113
14	1313 1100	5324 1200	3234 2101	5334 2101		0000 0010	1001 0102	0000 0000	1001 0102
15	0220 0110	0210 1111	0210 0000	0220 1111		0103 3322	1215 5433	0224 4222	1225 5433
16	0000 0100	1001 1111	0000 0100	1001 1111		0100 2111	2111 3101	1111 3000	2111 3101
17	0000 1221	1100 1223	0100 0122	1100 1223		1022 1111	2032 2212	0033 1101	2033 2212
18	3424 2200	5426 3221	4525 2100	5526 3221		3344 3232	4365 4444	3445 4332	4465 4444
19	0020 0100	1111 1111	0120 0110	1121 1111		1330 1110	2433 2211	1323 2000	2433 2211
20	0022 0111	1022 1112	0023 0001	1023 1112		0434 1210	1346 2322	0434 3301	1446 3322
21	0013 2200	1003 2211	0024 3112	1024 3212		1042 0110	2054 1011	2053 1000	2054 1111
22	1220 2221	1330 2212	2430 1113	2430 2223		0120 0000	0020 0000	0030 0000	0130 0000
23	3244 1222	3256 3212	4345 1012	4356 3222		0010 0110	0010 0001	0010 0000	0010 0111
24	3246 2310	5566 4322	5366 2221	5566 4322		0002 3431	0002 3532	0003 3331	0003 3532
25	1000 1220	1101 1331	0000 0210	1101 1331		1166 7643	2268 7664	1167 7643	2268 7664
26	2032 1111	1143 1113	1143 1113	2143 1113		5867 5422	5977 7532	6777 7423	6977 7533
27	3362 2020	4463 2221	4463 2111	4463 2221		3435 4333	4557 6444	4656 6323	4657 6444
28	0124 1110	1136 2111	1045 2111	1146 2111		4457 7431	4677 7553	3667 7642	4677 7553
29	0032 2222	1053 5223	0032 4323	1053 5323		4447 6422	4448 7643	4258 6432	4458 7643
30	3344 4332	4465 6534	4354 6533	4465 6534		3465 4323	3377 6533	2566 5423	3377 6533
31						3343 2322	2246 4433	3255 2332	3356 4433

November	D	H	Z	K	December	D	H	Z	K
1	1432 2201	2343 4211	1442 2101	2443 4211		4766 7633	5775 7744	6676 6632	6776 7744
2	1253 3211	2365 4123	1264 3022	2365 4223		2334 5311	3445 7332	2345 5321	3445 7332
3	3135 3212	3246 4314	3256 3213	3256 4314		1423 2100	1335 2101	1335 1100	1435 2101
4	4466 4323	5677 6535	5575 4423	5677 6535		0031 2210	0021 2210	0032 2210	0032 2210
5	2433 3100	3353 4101	3343 3100	3453 4101		0212 2220	1214 4221	0314 4210	1314 4221
6	0022 2111	0023 2112	0033 3011	0033 3112		0225 4331	1257 7332	0255 5432	1257 7432
7	1233 1000	1243 1100	2243 1000	2243 1100		0323 3232	1334 5234	1243 3123	1344 5234
8	0021 0100	0021 0000	0032 0000	0032 0100		3523 2100	4656 4211	4534 2000	4656 4211
9	0112 1100	0123 2100	1133 2000	1133 2100		0554 3321	2665 5432	1555 4421	2665 5432
10	0011 2210	0012 3111	0002 3000	0012 3211		1112 1100	2113 3111	2213 2100	2213 3111
11	1134 2211	1146 3222	0146 4111	1146 4222		0223 2201	1134 4222	0023 3201	1234 4222
12	0221 4465	0122 4687	0132 3354	0222 4687		0233 3232	1244 3244	2244 3333	1244 3344
13	6777 7774	8999 9975	7888 8854	8999 9975		1353 3000	2365 6101	1354 4000	2365 6101
14	5553 1333	7434 3454	5553 2343	7554 3454		0032 2200	0122 2200	0033 1000	0133 2200
15	4442 5646	4355 6668	4254 6557	4455 6668		1156 7523	1367 6544	1366 7533	1367 7544
16	7664 4333	8775 7545	8764 5433	8775 7545		4655 3210	4566 6211	5656 4100	5666 6211
17	2232 2222	2253 3332	2244 2232	2254 3332		0331 0111	1343 1112	0243 1001	1343 1112
18	1121 0100	3122 1100	2122 1000	3122 1100		0235 4321	1377 5532	1347 4422	1377 5532
19	0002 2100	0002 2011	0003 1000	0003 2111		1133 2221	2244 3223	1133 3211	2244 3223
20	0123 3201	1133 3211	0144 2210	1144 3211		2445 3332	3256 5333	3355 3233	3456 5333
21	0367 4533	1477 7644	0467 5633	1477 7644		3222 3323	5234 4534	4233 4433	5234 4534
22	4753 3211	4775 6322	3664 4321	4775 6322		3533 2212	3436 4322	3544 3212	3546 4322
23	1133 3100	2134 3111	1344 2111	2344 3111		1334 4210	2355 5221	2344 4211	2355 5221
24	2041 2222	2262 2223	2152 1114	2262 2224		2222 3321	1124 5322	1124 4222	2224 5322
25	1556 5332	2588 6343	4586 5443	4588 6443		2202 1120	2112 1121	2112 1010	2212 1121
26	1543 3121	2355 6122	2465 5122	2565 6122		2443 3210	2253 5211	2263 4100	2463 5211
27	0243 3332	1263 4453	2152 4332	2263 4453		1255 5543	1257 7654	0345 5543	1357 7654
28	3434 3220	3446 4220	3444 3210	3446 4220		1135 3321	3158 5532	3155 4321	3158 5532
29	1212 1101	1213 3111	1213 3101	1213 3111		3143 2322	2245 4532	3354 3422	3355 4532
30	0211 1133	1122 1135	1223 1034	1223 1035		0442 2221	1353 4332	0453 3221	1453 4332
31						0334 3220	1356 5422	1345 3321	1356 5422

CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
Dominion Observatories

PUBLICATIONS

of the

DOMINION OBSERVATORY

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RECORD OF OBSERVATIONS AT BAKER LAKE MAGNETIC OBSERVATORY 1959

Frede Andersen

Price 25 cents

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1963

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BAKER LAKE MAGNETIC OBSERVATORY 1959

Geographic Latitude 64.3°N
Geographic Longitude 96.0°W
Geomagnetic Latitude 73.9°N*
Geomagnetic Longitude 314.8°E*

Introduction

Following the establishment of a permanent geomagnetic observatory at Baker Lake, N.W.T., in 1951, observations and recording of the geomagnetic elements have been carried out on a full-time basis. A previous publication, by Loomer and Andersen (1961), describes the site, equipment and observing procedure of the station.

In October 1959 a proton precession magnetometer, designed by P. H. Serson of the Dominion Observatory was put into operation to facilitate accurate determination of the Z variometer base line. The internationally accepted value of the gyromagnetic ratio for protons in water leads to a precession frequency of 4257.60 ±.03 cps per oersted.

The base-line values adopted for the Ruska magnetograph are as follows:

X northward	Jan 1–Dec 31	4,040γ ± 11
Y eastward	Jan 1–July 31	228γ ± 9
	Aug 1–Dec 31	235γ ± 7
Z vertical downward	Jan 1–Jan 25(09h)	60,345γ
	Jan 25(09h)–July 20	60,325γ
	July 21–Aug 2	60,012γ
	Aug 3	60,150γ
	Aug 4–6	60,085γ
	Aug 8	59,885γ
	Aug 9	60,013γ
	Aug 10–31	60,100γ
	Sept 1–30	60,170γ
	Oct 1–Dec 31	60,300γ ± 2γ by proton magnetometer

Reliable determinations of the Z base line were made in August 1958 using a recently calibrated fluxgate magnetometer, and again in October, November and December, 1959, using a proton magnetometer. The base-line values for the period Jan 1 – Aug 6 were derived using the measured value in August 1958 and adjusting the base line only when visible discontinuities occurred. Base-line values for the period Aug 8 – Dec 31 were derived using the values determined by the proton magnetometer and adjusting the base line when visible discontinuities occurred. It is interesting to note that during the period October to December, when accurate determinations were possible, the Ruska Z variometer exhibited very good base-line stability.

*Assuming the position of the geomagnetic pole is 78.3°N, 69.0°W (Finch and Leaton, 1957)

No discontinuities in the X and Y base line were evident in 1959.

The scale values adopted for the X and Y variometers are as follows:

X	Jan 1–Dec 31	4.24γ/mm ± .02
Y	Jan 1–Dec 31	5.96γ/mm ± .03

The scale value for the Z variometer underwent a great deal of non-uniform long-period drift as the following table shows.

Jan 1–July 3	7.64 to 7.20γ/mm
July 4–July 9	7.20 to 7.00
July 10–July 31	7.00 to 4.30
Aug 1–Aug 8	4.27
Aug 9–Dec 31	5.51 to 6.24

The adopted scale values were obtained by fitting straight-line segments to the observed values. The r.m.s. difference of adopted minus observed values is ±0.04γ/mm.

The annual mean values observed since the beginning of operation are:

Year	H	D	Z	X	Y
	γ	° ′	γ	γ	γ
1951.6	3640	2 33	60,237	3637	162
1952.5	3655	37	224	3651	167
1953.5	3678	44	232	3674	175
1954.5	3710	36	238	3706	168
1955.5	3745	34	299	3741	168
1956.5	3807	28	322	3803	164
1957.5	3844	34	341	3840	172
1958.5	3879	39	346	3875	179
1959.5	3921	53	379	3916	197

The secular change in X appears monotonic and increasing at about 35γ per year. Secular change in Y is periodic and currently increasing at about 11γ per year. After an initial decrease in 1952.5, Z is now monotonic increasing at about 22γ per year.

The accuracy of the hourly mean values recorded in the tables is expected to be about ±10γ. Where a few values from the lower sensitivity stand-by instruments are used the accuracy may be only ±30γ. Such values have been underlined.

References

Finch, H. F., and Leaton, B. R., 1957. *Monthly Notices Roy. Astron. Soc. (Geophys. Suppl.)*, v. 7, 314.

Loomer, E. I., and Andersen, F., 1961. *Dom. Obs. Pub.*, Ottawa, v. XXVI, no. 3.

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 1 Baker Lake — X = 3500 γ + — January 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	415	405	405	400	400	400	400	395	400	400	395	395	395	390	385	380	375	375	380	385	390	395	405	405	395
2 Q	410	405	400	400	400	400	405	405	405	405	405	405	405	400	355	345	340	360	365	380	390	400	405	405	391
3	405	400	390	390	405	425	390	395	400	405	395	390	390	400	390	385	365	365	370	385	405	420	430	425	397
4	415	410	405	405	410	410	410	425	410	415	415	400	390	390	355	370	365	320	315	370	380	395	410	415	392
5	415	410	405	395	395	395	400	400	395	390	405	310	325	365	355	300	330	310	280	270	255	255	270	335	349
6 D	335	370	395	390	380	365	330	375	385	390	330	330	360	365	320	225	275	290	285	315	340	340	375	350	342
7 D	340	345	360	380	245	300	295	355	400	400	405	375	365	375	365	365	305	335	305	345	305	355	400	340	348
8	275	345	365	370	375	385	390	385	385	395	365	360	395	370	370	335	315	240	280	285	280	330	330	330	344
9 D	325	350	395	385	380	365	375	390	395	380	400	395	360	335	355	285	340	295	260	235	235	255	240	270	333
10 D	250	315	385	385	390	390	455	430	425	410	400	370	330	335	360	310	360	310	325	240	290	305	310	315	350
11	345	340	385	375	385	390	395	380	380	385	385	385	380	365	355	295	260	330	355	365	325	375	340	325	358
12	335	335	370	385	385	385	390	400	395	400	390	390	390	380	385	380	360	330	400	335	320	385	410	410	377
13	400	405	395	390	390	390	400	405	415	300	345	365	365	345	340	350	380	410	365	450	395	410	420	430	386
14	415	405	390	390	395	400	410	405	400	395	405	400	395	395	355	325	315	315	340	375	395	420	370	380	383
15	380	405	395	360	340	400	415	415	410	405	380	390	390	370	315	320	355	370	390	400	405	420	430	420	387
16	425	405	400	405	405	405	410	415	410	325	375	390	330	360	405	325	330	175	205	400	380	370	375	395	367
17	400	400	395	355	345	425	430	425	440	405	380	365	365	360	285	290	270	355	475	415	420	420	410	405	385
18	390	380	360	345	375	400	420	420	405	410	410	395	395	370	285	280	415	405	400	365	385	360	385	435	383
19	415	405	380	260	320	375	390	410	420	345	395	400	385	380	345	385	365	345	365	360	385	445	415	400	379
20 Q	405	410	400	395	395	400	405	390	385	395	395	395	395	375	380	365	365	370	370	395	430	415	410	415	394
21 Q	410	415	415	410	405	405	410	410	410	400	395	400	395	385	380	355	320	360	370	400	400	400	400	410	394
22	415	410	400	405	395	380	320	415	375	365	355	360	370	385	365	365	360	400	405	395	405	410	415	420	387
23	400	395	405	400	410	405	405	410	410	405	395	390	400	380	380	360	380	380	390	405	420	425	420	400	399
24 Q	405	395	405	400	400	405	410	410	400	395	400	395	395	400	385	375	375	375	380	385	390	405	405	410	396
25	405	400	405	405	405	395	400	400	405	410	385	395	420	415	310	310	345	345	410	395	380	415	410	370	389
26 D	385	395	395	405	380	380	385	400	395	405	395	400	265	345	355	285	230	425	370	380	390	395	400	400	373
27	400	400	400	395	390	400	430	430	460	410	390	410	405	415	385	330	285	250	265	290	315	410	455	445	382
28	395	350	380	380	380	380	400	415	415	410	415	390	360	325	325	300	270	325	345	350	350	385	420	410	370
29	385	400	405	395	400	400	395	420	400	350	390	425	395	405	395	310	260	315	320	405	390	420	385	355	380
30	375	395	390	380	410	400	400	445	415	410	360	425	395	390	375	345	345	345	335	390	405	410	420	415	391
31	425	410	380	365	395	445	365	430	420	355	400	405	385	370	335	285	265	325	375	400	420	425	430	430	385
Mean	384	387	392	384	383	394	395	407	405	389	389	387	377	375	356	330	330	337	348	363	367	386	390	389	377

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 2 Baker Lake — Y in gammas — January 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	178	183	178	178	178	178	178	178	178	183	183	183	183	183	188	188	188	183	178	173	168	168	173	173	179
2 Q	178	183	183	183	183	183	183	183	183	188	188	193	193	203	203	193	193	178	173	168	168	173	178	178	184
3	178	173	163	148	158	168	168	173	188	188	188	193	193	193	198	198	198	188	193	198	188	183	183	183	183
4	183	178	178	173	168	168	173	183	183	193	198	213	218	218	218	238	248	238	223	193	183	168	168	173	195
5	188	188	193	183	178	178	178	178	183	203	203	203	253	283	203	213	208	273	228	188	143	133	128	123	193
6 D	138	183	178	173	168	98	108	158	173	178	228	188	198	258	258	223	253	278	243	163	163	163	148	128	185
7 D	108	148	168	143	83	93	33	78	173	193	203	203	188	193	183	193	208	213	233	218	188	168	168	133	163
8	88	103	108	138	173	178	178	183	183	183	223	228	198	198	198	213	238	238	263	238	193	173	143	153	184
9 D	133	148	173	168	158	148	158	168	183	183	188	198	233	258	268	283	313	293	183	163	153	148	103	83	187
10 D	43	98	138	163	153	123	168	158	188	228	253	283	308	278	288	293	273	283	238	238	203	163	128	123	200
11	118	98	163	148	143	143	143	128	158	183	188	188	188	183	193	208	198	183	178	183	198	168	133	143	165
12	138	143	148	168	178	168	178	183	188	193	198	193	198	193	203	193	203	213	268	183	158	178	178	183	184
13	183	183	178	173	173	168	173	163	183	143	188	203	208	208	198	198	213	188	193	228	178	178	188	198	187
14	193	183	173	173	173	168	183	183	193	203	198	198	193	198	208	208	198	183	163	178	168	188	173	173	185
15	173	158	138	118	98	113	128	153	198	208	188	218	223	223	223	193	198	198	183	183	183	188	198	193	178
16	183	188	183	183	183	173	168	173	213	183	223	278	273	293	288	233	213	233	208	198	203	183	173	183	209
17	178	163	133	48	83	148	173	208	188	208	238	228	243	253	263	218	188	228	223	213	188	193	188	183	191
18	168	138	138	133	123	128	173	188	208	208	198	208	223	228	248	208	278	258	223	188	223	173	178	178	192
19	183	178	158	128	163	163	178	178	183	153	183	183	193	208	243	198	198	213	228	243	213	188	178	178	188
20 Q	178	178	178	178	173	168	178	173	178	183	183	183	183	188	193	188	193	203	188	193	183	183	173	178	182
21 Q	178	178	183	183	173	178	173	178	188	193	193	193	198	198	203	203	198	213	188	183	173	178	178	183	187
22	183	183	183	178	153	138	123	163	148	118	133	188	208	213	208	203	203	193	198	198	183	178	178	178	176
23	183	183	178	193	193	183	183	188	193	198	203	213	203	203	208	208	198	193	198	203	193	183	183	178	193
24 Q	183	188	188	183	178	173	178	173	188	188	193	188	193	193	198	203	198	193	188	173	173	178	178	183	185
25	183	178	188	188	183	178	178	178	178	188	218	213	223	263	283	263	293	278	248	158	158	178	168	173	206
26 D	173	173	178	163	158	168	178	178	158	193	198	218	283	203	203	228	258	183	183	188	183	188	183	188	192
27	183	183	178	173	148	168	138	153	178	188	173	223	223	223	223	218	238	268	213	188	183	193	188	183	193
28	133	138	153	143	148	123	158	183	173	183	203	223	208	213	218	233	223	218	183	208	198	188	198	198	185
29	173	183	188	188	183	183	178	193	233	163	183	208	213	213	258	273	268	213	238	213	198	193	173	173	203
30	168	173	178	168	158	128	123	168	188	198	193	173	208	213	208	213	218	208	188	188	178	173	178	178	182
31	178	173	143	158	138	123	103	158	183	213	193	203	208	218	213	208	213	223	198	213	198	193	178	183	184
Mean	162	165	167	162	158	155	158	170	184	187	198	207	215	219	222	217	223	221	208	195	183	177	170	169	187

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 Baker Lake — $z = 60{,}000\ \gamma +$ — January 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	370	365	360	370	370	365	370	370	365	375	370	370	375	375	370	370	375	375	370	375	375	370	370	375	371
2 Q	365	365	365	365	365	365	365	365	365	370	370	370	380	400	390	375	365	360	365	365	365	370	365	360	369
3	365	360	360	365	395	420	435	405	390	395	390	380	385	370	365	360	365	360	360	350	355	345	340	320	372
4	310	315	325	325	345	355	375	390	445	410	405	420	430	400	410	435	390	380	345	300	300	335	350	345	368
5	350	345	355	365	360	360	370	370	370	395	410	585	760	560	440	425	380	355	395	340	340	350	355	365	404
6 D	345	340	340	370	385	410	280	410	375	410	485	560	520	525	485	510	540	425	415	445	370	340	320	325	414
7 D	375	370	355	375	485	415	510	515	485	485	445	445	425	415	395	410	405	415	375	315	310	320	325	335	404
8	335	340	350	355	355	365	380	385	405	400	450	495	435	425	425	475	475	565	425	330	330	335	345	355	397
9 D	360	330	325	360	365	385	390	415	405	395	395	410	440	515	515	505	515	540	580	410	335	370	375	380	417
10 D	365	325	340	365	385	405	535	490	460	535	555	550	555	545	480	475	430	385	325	305	315	335	365	365	425
11	380	340	325	370	390	405	415	490	470	430	405	420	420	435	450	535	485	410	380	360	340	355	335	385	405
12	375	350	340	360	375	370	370	375	385	390	400	410	400	405	400	405	410	395	440	370	355	365	365	370	383
13	375	380	385	385	390	400	405	465	440	635	555	515	505	480	445	425	500	475	430	405	390	375	375	365	438
14	370	375	385	385	385	405	410	400	410	410	395	400	390	400	425	460	430	395	370	360	355	320	315	300	385
15	290	300	330	360	395	405	415	435	440	540	525	490	490	515	505	440	410	415	400	395	395	385	375	380	418
16	370	375	385	380	385	395	400	405	460	635	605	540	495	495	425	500	440	405	400	420	310	285	320	330	423
17	350	365	380	420	375	415	455	495	505	450	465	480	530	485	590	755	580	485	425	390	370	385	380	380	455
18	370	365	380	390	405	450	435	450	440	435	435	440	460	465	495	575	485	345	415	365	325	285	330	340	408
19	360	360	370	435	365	380	400	410	420	560	450	440	430	465	545	470	425	450	405	340	320	325	370	380	411
20 Q	375	375	380	385	380	385	420	505	465	415	400	395	390	405	400	395	375	385	380	385	360	360	360	375	394
21 Q	375	370	370	370	370	370	375	445	440	445	415	395	400	395	395	405	420	435	440	390	360	370	370	375	396
22	370	365	370	375	375	435	365	395	545	545	455	475	475	455	420	420	375	360	365	385	380	370	365	345	408
23	330	335	330	325	350	360	375	375	380	385	390	425	420	385	390	360	345	350	355	345	345	335	330	310	360
24 Q	320	340	355	360	365	365	360	410	405	395	375	375	365	365	360	370	360	365	370	370	365	360	365	360	367
25	345	345	345	345	350	355	350	360	355	370	390	415	495	415	455	495	405	300	210	325	340	330	320	345	365
26 D	340	345	355	360	350	355	365	340	375	365	380	410	495	505	455	430	400	485	405	390	375	365	365	365	391
27	365	360	355	355	380	380	365	380	450	495	445	390	420	380	380	365	360	325	330	275	255	310	290	285	362
28	295	280	215	270	310	340	360	365	375	385	375	420	420	405	415	420	365	395	360	320	200	215	295	265	336
29	310	325	335	340	345	340	345	385	440	565	485	415	410	405	400	500	560	480	345	355	270	270	255	265	381
30	265	305	330	330	335	385	450	405	370	385	480	440	435	405	380	400	380	360	335	335	345	345	350	360	371
31	340	340	345	345	365	520	520	460	455	520	490	475	475	490	455	430	375	340	345	325	345	330	340	305	405
Mean	349	347	350	363	373	389	399	415	422	449	438	444	452	441	434	445	423	404	383	359	339	339	345	345	394

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 4 Baker Lake $X = 3500.\gamma +$ February 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		405	390	405	400	375	360	375	415	415	390	375	385	395	380	375	350	285	300	365	415	440	455	455	445	390
2		425	410	400	395	390	385	305	410	430	430	440	415	390	320	335	335	260	120	75	135	260	340	405	355	340
3		340	370	425	405	390	395	385	350	395	405	365	175	345	405	370	315	275	315	320	340	310	355	370	290	351
4	D	300	340	405	395	405	385	415	405	400	410	375	405	415	275	270	365	235	235	235	235	225	285	300	340	336
5		405	410	405	400	350	260	390	420	395	400	365	370	385	355	350	365	245	240	360	405	365	425	400	385	369
6		335	355	375	390	395	400	400	410	410	395	380	395	395	375	385	290	290	320	365	305	305	375	410	400	369
7		360	420	415	385	370	400	410	410	420	335	405	390	385	360	325	240	295	295	300	380	405	415	425	445	375
8		420	415	400	390	375	390	405	415	370	355	390	385	400	390	355	405	275	365	385	400	385	400	420	375	386
9		315	335	380	415	430	415	420	405	445	370	415	400	375	360	295	230	305	315	360	380	415	440	415	380	376
10	Q	370	400	420	410	405	395	395	405	405	400	400	395	390	385	390	345	340	365	365	390	410	430	445	470	397
11		435	410	415	410	390	400	420	415	460	495	180	460	390	335	370	330	420	505	450	365	335	385	415	380	399
12		380	405	410	395	335	350	380	385	415	410	350	345	360	370	400	415	395	355	415	420	415	425	395	325	385
13		395	430	425	405	400	400	410	415	415	410	390	395	395	395	380	360	400	400	425	335	385	430	360	395	399
14		380	370	400	360	325	330	290	390	390	430	430	410	370	285	340	375	345	425	570	630	570	460	440	425	406
15		380	355	355	390	80	320	220	405	475	440	260	420	440	380	430	410	410	345	375	400	385	410	415	410	371
16	D	410	365	265	390	360	85	195	365	420	410	430	410	420	395	315	320	350	350	280	285	330	300	175	290	330
17		340	330	390	365	370	400	430	440	460	460	450	450	430	450	475	440	430	380	440	470	395	380	440	430	419
18	Q	415	410	410	405	405	415	435	460	490	445	465	385	385	390	375	390	380	385	390	400	385	385	390	410	409
19		420	390	450	415	380	420	445	420	455	440	415	415	380	405	430	460	500	455	450	415	425	455	420	405	428
20	Q	400	405	405	400	400	400	405	410	385	395	405	400	395	380	390	390	385	395	390	385	390	395	405	405	396
21	Q	405	410	415	410	405	410	415	415	395	405	405	400	395	385	340	355	345	355	365	425	465	395	415	410	397
22		420	420	430	415	400	385	425	415	420	365	390	445	400	395	395	390	365	360	400	420	420	445	445	400	407
23		385	375	370	380	410	390	385	460	300	465	440	330	370	405	385	380	385	385	395	400	420	410	410	405	393
24	Q	405	405	410	410	405	405	410	410	410	410	410	405	410	390	345	320	360	375	380	385	395	405	415	410	395
25	D	410	410	420	420	430	440	460	450	460	455	395	340	420	420	395	285	335	295	185	75	220	270	330	315	360
26	D	300	330	375	330	385	405	405	430	370	415	390	380	395	370	380	325	270	320	360	360	310	290	270	360	355
27		370	380	395	370	400	450	410	385	430	420	385	390	420	375	315	275	295	320	340	395	365	355	370	325	372
28	D	375	380	395	325	380	400	405	420	430	395	425	425	275	315	415	300	385	330	310	430	325	230	295	315	362
29																										
30																										
31																										
Mean		382	387	399	392	377	378	387	412	417	413	390	390	390	372	369	349	341	343	359	371	373	384	387	382	381

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 5 Baker Lake — Y in gammas — February 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	173	173	183	163	98	118	158	173	198	218	218	198	213	233	258	243	198	193	203	223	203	203	203	188	193
2	188	178	178	178	143	73	78	118	183	218	198	203	238	268	273	243	268	248	198	228	163	163	168	143	189
3	158	183	188	188	173	173	153	148	178	188	233	173	208	208	258	283	228	198	258	223	163	163	173	108	192
4 D	108	133	128	158	133	118	143	178	198	193	248	223	253	238	238	213	288	258	228	233	218	193	118	153	191
5	148	178	173	148	8	48	108	158	178	193	238	208	238	303	273	308	263	238	208	218	208	183	183	153	190
6	123	143	153	173	178	173	178	183	193	218	233	223	193	218	243	238	213	208	278	273	188	168	183	178	198
7	168	188	173	158	158	153	168	173	173	158	183	198	203	233	213	233	238	208	198	198	203	188	203	198	190
8	193	183	178	153	153	168	168	173	153	158	188	208	218	243	238	223	213	188	178	193	238	188	163	103	186
9	43	78	93	108	108	133	138	103	148	178	188	213	228	233	248	233	218	198	203	203	208	203	188	163	169
10 Q	163	188	188	188	183	178	178	178	183	188	188	188	193	198	198	213	203	193	183	213	193	208	188	198	190
11	188	183	178	153	143	168	173	178	158	233	183	263	278	338	323	273	248	233	203	218	143	188	168	153	207
12	183	173	168	123	58	113	173	168	173	198	253	213	233	203	233	268	233	213	258	208	213	188	173	133	190
13	183	193	173	183	173	168	163	178	193	193	218	223	218	268	318	318	238	283	288	253	188	203	178	148	214
14	163	163	153	93	83	38	18	108	158	178	203	203	253	333	283	348	378	368	283	293	243	218	193	178	205
15	148	118	108	23	-252	-27	-72	98	178	218	123	228	248	328	338	283	303	323	308	198	168	178	183	188	164
16 D	173	108	118	148	-22	-172	-12	48	88	203	218	203	203	218	263	303	343	323	308	358	263	188	103	73	169
17	103	103	88	28	58	83	103	133	168	113	173	218	238	233	223	273	268	208	298	258	208	188	193	213	174
18 Q	213	208	193	178	178	158	168	178	168	163	178	183	193	183	198	218	203	193	218	198	178	183	183	188	188
19	208	208	188	133	-72	78	123	93	138	178	198	208	238	278	288	293	263	243	233	223	208	218	188	178	189
20 Q	173	178	178	178	178	178	173	178	188	188	193	193	188	188	188	198	198	188	183	178	178	178	173	173	183
21 Q	173	178	188	183	183	178	173	153	178	178	198	198	203	198	198	203	198	208	178	243	248	183	173	173	190
22	193	173	173	158	123	63	143	183	193	228	213	228	213	208	218	223	213	193	188	208	208	213	198	163	187
23	148	138	133	133	128	108	88	143	93	183	238	268	198	198	208	208	203	193	183	183	178	183	183	183	171
24 Q	178	178	178	183	183	183	178	183	188	188	188	198	193	193	198	203	203	198	188	168	168	183	183	183	186
25 D	178	178	178	173	133	103	98	83	153	228	288	248	323	328	398	328	333	393	278	128	138	143	168	133	214
26 D	118	118	83	-32	68	118	88	58	148	198	218	228	228	233	233	278	248	248	238	228	228	173	153	153	169
27	128	118	108	123	118	178	148	138	173	183	183	188	218	233	248	273	288	398	208	183	183	168	163	133	187
28 D	118	128	68	38	138	173	178	178	183	213	223	213	248	288	288	383	318	258	313	228	213	138	128	88	198
29																									
30																									
31																									
Mean	158	160	153	136	105	115	128	145	168	192	207	212	225	244	253	261	250	243	232	220	198	185	173	158	188

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 6 Baker Lake $Z = 60,000\ \gamma +$ February 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	310	315	330	350	405	365	355	400	390	565	640	485	480	475	475	450	465	405	335	335	320	310	330	325	401
2	325	340	335	345	355	495	435	460	410	505	515	455	470	640	665	585	615	575	415	380	255	275	310	325	437
3	345	320	305	335	360	365	385	385	390	390	445	805	665	465	510	600	555	405	395	335	355	275	290	305	416
4 D	320	305	305	325	355	400	385	385	385	390	425	445	490	565	670	455	565	480	385	340	375	365	285	290	404
5	285	335	345	365	560	565	440	425	395	400	470	540	550	580	590	540	520	505	380	315	280	295	280	305	428
6	340	335	345	350	365	370	375	400	405	450	495	520	465	465	525	525	435	345	355	340	330	255	280	250	388
7	275	295	340	345	365	365	365	375	410	460	415	425	425	455	495	550	500	460	355	335	310	285	310	330	385
8	345	345	360	350	365	350	365	375	525	410	395	405	410	515	480	485	430	385	360	335	255	260	275	280	378
9	310	335	350	390	410	400	395	515	515	630	530	495	535	505	530	505	385	360	355	355	310	320	285	325	419
10 Q	355	345	345	365	365	370	375	375	390	385	380	385	395	380	385	400	365	365	355	335	340	260	305	335	361
11	335	350	350	370	360	345	355	360	375	595	1155	675	515	525	560	435	345	425	425	360	385	360	320	335	446
12	320	345	365	390	455	440	385	385	395	430	550	580	585	490	520	440	400	415	405	360	345	335	265	300	413
13	315	355	355	370	380	385	395	395	390	415	445	455	525	525	535	535	445	405	355	370	370	310	280	270	399
14	290	320	315	380	420	475	535	515	430	390	385	420	510	600	825	600	480	435	350	370	395	350	310	330	435
15	335	290	310	420	745	610	490	530	545	605	850	660	560	560	615	645	535	505	380	395	380	370	375	375	504
16 D	325	320	375	330	550	500	580	435	525	445	410	435	435	495	690	690	580	480	510	255	205	255	280	285	433
17	340	365	400	430	440	460	470	455	575	560	545	555	625	615	575	530	535	525	450	400	425	410	390	395	478
18 Q	390	380	385	390	390	395	405	385	360	390	400	465	410	425	435	435	445	440	405	405	405	405	405	395	406
19	360	315	305	365	315	400	400	470	455	445	445	475	530	565	495	510	460	545	490	425	375	320	345	365	424
20 Q	375	375	380	380	390	375	385	395	420	400	390	385	390	400	400	400	395	395	385	365	365	365	375	375	386
21 Q	380	380	380	375	375	375	380	465	515	495	405	395	405	395	430	425	445	530	390	405	380	365	355	360	409
22	365	355	365	360	375	415	405	395	415	630	635	505	435	425	465	430	380	365	365	370	350	345	355	295	408
23	325	350	355	345	355	395	450	435	715	595	535	555	560	435	420	415	410	395	395	395	390	390	395	385	433
24 Q	385	385	385	385	385	385	385	385	385	385	385	405	405	430	450	415	380	385	385	385	385	380	385	375	400
25 D	380	365	365	370	395	420	540	685	585	475	565	905	850	625	485	555	620	560	605	500	395	350	340	365	508
26 D	370	365	400	480	405	405	435	795	660	485	485	485	530	535	485	575	455	385	425	355	310	325	315	310	449
27	360	395	400	400	455	495	455	455	445	465	605	650	530	505	515	555	690	515	395	345	315	285	285	285	450
28 D	320	375	395	500	375	395	405	415	425	445	475	500	640	945	590	675	595	580	435	385	380	320	400	365	472
29																									
30																									
31																									
Mean	339	345	355	377	409	418	419	445	458	473	513	517	512	519	529	513	480	449	401	366	346	326	326	330	424

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 7 Baker Lake — X = 3500 γ + — March 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	305	340	385	400	300	340	455	385	420	415	420	240	290	350	335	350	355	350	230	350	360	330	310	305	347
2	340	380	370	395	385	340	340	315	440	410	395	325	360	405	370	330	190	250	470	375	300	375	345	370	357
3	415	375	355	405	345	350	405	435	410	410	425	400	350	305	290	200	220	190	410	375	295	310	340	405	351
4	385	380	400	415	420	425	435	405	425	440	410	420	375	370	300	175	240	210	300	265	315	395	460	440	367
5	425	375	350	370	385	440	435	440	440	385	380	390	380	365	260	100	120	280	155	355	380	405	435	435	352
6	450	400	370	385	400	410	420	425	425	410	415	410	405	360	275	265	265	335	390	425	445	445	435	430	391
7	445	430	420	405	405	410	425	420	425	420	410	400	375	315	250	165	155	210	220	290	335	400	415	400	356
8	365	385	365	415	415	415	435	430	430	415	405	395	400	390	390	345	295	320	355	380	415	450	435	405	394
9 Q	390	390	405	405	400	410	410	410	430	420	415	405	400	410	445	490	505	415	365	395	415	430	420	410	420
10 Q	405	405	405	405	405	410	415	415	415	415	415	410	405	395	390	375	380	375	380	390	395	400	415	405	401
11 Q	410	410	410	410	410	415	425	440	430	420	410	405	415	395	370	370	375	385	365	405	430	425	450	430	409
12	450	395	390	410	415	450	430	430	430	430	450	400	415	465	500	560	555	395	535	445	425	425	460	405	444
13	410	440	415	405	400	440	430	430	420	405	400	415	410	390	380	340	345	390	365	375	430	460	420	440	406
14	425	415	410	420	410	415	430	360	430	415	415	405	420	435	390	340	325	370	370	400	405	440	445	435	405
15	435	430	385	370	385	410	420	420	420	420	425	375	390	395	365	360	360	360	365	380	395	445	470	465	402
16 Q	420	430	435	420	415	415	420	425	420	415	415	420	410	390	375	360	370	370	390	385	395	430	465	425	409
17	420	420	420	415	410	420	435	420	415	415	415	415	400	400	400	375	375	375	410	400	420	495	475	415	415
18	410	415	420	420	430	455	450	450	455	470	465	445	475	500	405	365	360	350	375	415	410	390	435	415	424
19	410	420	415	410	415	420	420	420	415	415	410	405	415	405	400	375	355	390	370	415	400	400	410	405	405
20	415	420	415	405	415	415	425	440	425	420	415	410	395	390	380	360	380	385	400	420	420	420	470	430	411
21	420	415	400	400	410	410	415	420	420	420	420	420	400	385	360	340	310	360	385	415	445	465	455	415	404
22 Q	420	410	415	410	410	415	425	430	420	420	410	415	410	390	360	360	340	365	385	405	430	490	455	435	405
23	445	425	415	415	420	450	430	430	445	430	430	435	445	420	360	370	520	375	360	400	445	485	450	475	428
24	440	405	400	425	430	420	440	435	430	430	440	420	410	370	330	315	335	485	480	450	475	485	445	435	422
25	420	420	440	415	355	420	455	460	450	430	420	415	405	415	395	370	300	-70	120	180	200	420	415	380	366
26 D	410	425	415	410	405	405	410	415	415	430	490	440	340	560	115	240	290	100	-50	105	180	180	230	295	319
27 D	310	320	440	380	420	520	490	500	480	460	380	415	160	440	475	450	400	380	340	260	270	285	325	335	385
28 D	400	395	390	395	405	415	410	425	460	380	420	435	355	340	340	260	195	200	235	225	240	170	175	250	329
29 D	190	340	410	385	440	455	230	420	460	440	365	360	400	435	385	405	400	110	305	290	170	335	435	405	360
30	410	420	360	265	300	435	430	365	430	330	395	405	385	350	305	290	270	300	375	365	325	370	415	395	362
31	420	410	360	380	420	420	420	430	440	415	400	440	430	415	410	275	320	340	275	230	325	295	290	340	371
Mean	400	401	400	399	399	418	418	421	431	418	415	403	388	398	361	331	338	315	336	354	364	395	406	401	392

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 8 Baker Lake — Y in gammas — March 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	68	83	138	88	33	73	118	93	148	173	223	198	193	218	303	378	328	283	213	208	228	198	148	108	177
2	118	128	63	38	115	-23	13	73	173	223	243	213	213	228	258	278	218	243	328	293	253	198	168	133	175
3	138	118	113	123	53	48	93	158	163	188	193	208	218	228	228	243	248	313	203	228	228	193	193	173	179
4	108	148	188	173	178	168	148	138	173	208	218	218	223	223	223	233	243	243	333	268	253	203	193	183	204
5	158	128	118	78	78	123	143	163	178	163	183	193	198	203	238	238	203	278	208	168	218	198	198	198	177
6	158	138	143	163	178	173	173	173	188	188	193	188	193	208	218	213	203	193	213	213	198	173	178	173	185
7	173	178	168	163	163	163	148	148	173	183	193	223	203	213	223	248	253	248	213	218	213	213	173	128	193
8	113	113	103	158	163	113	133	163	193	198	193	188	188	198	203	218	248	193	198	223	188	233	208	158	179
9 Q	158	163	163	163	148	168	173	178	183	218	208	203	203	208	228	243	258	218	183	168	178	183	188	183	190
10 Q	183	183	178	178	178	183	183	188	188	193	198	208	208	208	213	208	203	193	183	178	173	173	173	173	189
11 Q	173	173	173	173	178	173	168	173	183	208	208	208	198	203	208	208	203	188	188	213	183	178	183	173	188
12	148	153	168	173	173	138	153	183	193	198	213	248	258	258	253	278	288	188	308	208	213	198	198	178	207
13	178	178	168	148	148	158	188	198	198	198	208	208	218	243	238	233	208	183	178	173	223	248	188	188	196
14	168	168	178	173	158	168	118	123	178	213	203	203	208	213	228	218	208	198	208	198	178	188	198	173	186
15	178	168	143	123	143	178	188	193	188	203	208	218	198	208	213	218	213	193	183	168	173	208	198	183	187
16 Q	178	198	198	183	183	178	173	183	198	208	208	203	208	218	213	218	218	213	188	183	183	183	193	178	195
17	178	178	173	173	168	163	153	183	193	193	193	188	193	203	193	208	198	208	193	198	183	238	223	178	190
18	178	183	183	188	188	178	163	168	138	168	183	188	168	198	248	208	188	183	178	188	188	173	173	183	183
19	173	183	183	183	183	188	193	198	208	208	218	208	203	213	208	213	203	193	208	188	183	178	183	178	195
20	183	183	178	168	173	173	188	193	208	208	203	203	203	198	198	198	188	183	168	193	178	193	203	183	189
21	183	178	163	168	163	178	178	188	198	213	198	198	198	203	208	208	213	153	168	198	198	178	203	178	188
22 Q	178	173	173	178	178	178	178	188	198	203	208	193	198	203	218	208	213	178	168	178	188	218	203	183	191
23	173	153	153	148	158	148	123	173	198	218	208	198	198	208	218	213	263	168	173	183	188	223	253	268	192
24	153	128	118	158	163	168	158	168	193	198	203	213	213	218	223	218	198	288	278	203	228	228	188	178	195
25	168	168	158	108	28	108	138	128	173	198	208	208	218	218	248	258	278	338	288	328	213	148	178	163	194
26 D	163	163	173	173	178	183	183	183	193	198	208	263	263	413	273	343	328	258	228	108	143	148	103	28	204
27 D	-23	0	-20	-105	-10	133	13	28	148	258	218	188	183	283	448	413	438	468	373	348	268	128	68	153	184
28 D	148	148	153	118	-12	43	88	113	128	208	193	228	258	258	358	403	318	408	488	368	278	203	98	-2	208
29 D	-12	8	18	-47	73	78	-32	88	183	233	228	223	228	263	313	273	413	228	313	253	163	168	183	158	167
30	148	143	98	48	68	143	163	113	183	178	173	183	208	208	223	238	228	218	228	268	218	218	173	148	176
31	148	108	98	88	138	118	103	158	158	203	193	168	188	213	218	223	238	278	288	288	268	198	173	148	183
Mean	146	146	142	131	132	140	139	155	181	202	204	206	208	225	241	248	247	236	234	219	205	194	180	162	188

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 9 Baker Lake — $Z = 60{,}000\ \gamma +$ — March 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1D	330	330	345	410	565	505	465	680	640	535	535	845	720	610	725	585	575	455	365	385	325	265	325	355	495
2	360	375	390	380	485	575	370	455	495	515	540	715	665	595	610	645	465	445	440	350	280	215	310	365	460
3	335	375	405	405	545	580	390	455	560	585	505	495	555	715	595	555	510	570	455	320	260	240	325	290	459
4	295	350	345	370	390	410	585	730	590	545	560	545	525	610	550	600	575	455	445	415	375	335	365	385	473
5	345	360	370	390	455	445	450	470	505	635	545	485	505	500	545	535	405	465	565	360	250	255	245	285	432
6	300	350	360	355	365	390	415	430	450	445	430	440	450	490	505	465	415	395	405	385	385	400	410	405	410
7	390	385	380	380	385	395	425	475	430	415	425	495	605	650	645	645	570	530	465	385	315	275	240	265	440
8	295	330	340	330	370	410	465	425	435	440	415	405	415	415	420	460	490	375	370	360	375	305	280	305	385
9Q	335	340	340	355	365	375	385	395	410	455	445	420	425	460	505	465	460	555	450	380	375	385	395	380	411
10Q	390	395	390	385	390	395	390	405	410	405	410	405	410	405	395	395	395	385	375	385	375	380	375	380	393
11Q	385	380	375	380	375	375	385	415	425	415	415	395	405	420	420	400	385	375	385	410	405	380	370	370	394
12	335	350	350	360	365	385	395	405	405	410	410	400	470	480	490	430	520	460	435	425	340	350	335	350	402
13	360	350	360	385	395	415	400	410	400	405	410	405	445	490	590	460	555	475	365	375	380	295	285	320	405
14	350	365	380	375	380	385	470	535	495	480	445	415	430	500	445	375	395	415	430	430	405	380	365	360	417
15	365	360	370	395	370	375	385	385	395	400	415	480	475	425	455	420	400	395	395	400	395	370	355	320	396
16Q	340	335	365	370	375	385	395	405	400	395	405	410	405	405	420	405	385	390	380	385	370	380	355	370	385
17	365	355	360	360	375	390	475	425	400	395	395	405	435	410	415	405	405	455	385	415	415	410	410	390	402
18	390	380	380	375	370	340	370	375	360	360	375	375	390	460	485	380	370	370	370	365	385	395	340	370	380
19	375	370	375	370	375	375	380	385	390	390	405	420	435	420	450	460	425	415	390	410	385	375	365	365	396
20	375	370	370	370	380	385	390	440	420	415	410	395	400	415	430	395	365	375	385	415	390	375	370	365	392
21	380	375	370	370	375	375	375	380	390	425	415	405	420	505	425	465	430	390	390	435	370	305	290	365	393
22Q	370	365	365	370	375	375	375	375	380	385	405	390	405	415	435	405	375	375	405	400	410	355	335	370	384
23	345	340	350	360	380	400	450	405	405	435	415	405	425	450	455	485	530	455	400	365	360	300	310	305	397
24	270	325	320	315	345	370	405	415	405	405	395	415	445	455	435	400	400	555	475	460	395	370	380	360	397
25	365	360	360	355	385	375	385	415	410	415	390	395	415	460	625	665	725	485	290	220	310	230	280	325	402
26D	345	355	375	385	385	385	395	395	395	420	445	625	705	535	735	575	425	175	235	345	370	380	280	295	415
27D	305	345	400	450	435	475	780	775	620	600	645	665	920	925	745	615	525	450	385	300	215	180	105	250	504
28D	335	385	415	405	585	535	470	475	490	625	570	535	665	770	875	935	735	675	555	490	415	360	345	345	541
29D	330	350	400	465	440	465	975	745	565	590	700	810	645	645	765	745	585	535	405	325	355	295	370	380	537
30	400	385	425	505	470	465	625	580	505	840	565	580	605	575	615	475	445	415	415	375	305	245	245	285	473
31	345	380	430	420	410	455	525	500	515	595	555	555	535	575	535	535	480	525	505	395	275	315	255	210	451
Mean	349	360	373	384	408	418	456	470	455	477	464	488	508	522	540	509	475	445	428	383	354	325	323	338	427

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 10 Baker Lake — X = 3500 γ + — April 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	415	400	380	400	430	435	445	455	435	410	420	415	395	395	350	360	370	370	395	405	410	415	405	405	405
2	415	415	405	405	405	405	410	420	420	415	405	395	370	285	205	85	150	180	230	295	290	290	325	385	334
3	395	410	420	420	425	435	440	465	460	445	430	390	385	355	245	195	245	330	400	425	455	465	435	395	394
4	370	405	420	405	405	410	410	425	430	425	410	425	395	380	355	310	335	405	395	440	445	395	405	385	399
5 Q	420	425	395	415	420	410	415	425	420	425	415	420	410	395	370	315	365	395	405	430	425	425	420	470	410
6	465	410	405	405	410	415	425	425	420	410	420	420	415	410	400	330	330	365	435	465	575	585	485	445	428
7	405	405	400	405	410	415	415	430	425	420	425	415	370	330	255	245	255	280	295	370	355	435	370	390	372
8	380	385	410	445	450	460	465	485	485	480	465	450	470	475	370	195	155	200	130	335	335	315	280	320	373
9 D	315	360	415	425	470	540	525	475	475	415	430	435	425	465	375	370	340	430	700	625	380	430	455	360	443
10 D	410	425	465	350	405	435	465	375	35	400	440	495	585	410	525	380	350	420	420	320	225	260	340	455	391
11	440	385	375	400	415	430	445	450	450	455	480	445	395	360	310	275	280	340	375	445	360	290	455	430	395
12	430	465	410	390	405	410	390	415	420	420	445	455	415	415	390	360	340	380	405	420	435	470	400	410	412
13	395	395	405	410	410	410	430	455	450	435	430	465	505	460	395	310	345	385	440	410	485	535	525	515	433
14	445	430	430	380	415	440	450	460	410	415	405	400	400	405	490	430	345	370	385	410	510	580	415	415	405
15	345	355	405	410	410	420	430	445	430	425	430	435	440	390	350	290	355	355	415	560	435	445	440	440	411
16	440	415	405	410	415	415	425	435	445	435	445	455	385	380	370	370	360	360	405	450	510	480	450	435	421
17	405	410	405	415	410	410	420	425	440	425	435	450	465	445	400	335	330	365	400	470	445	480	515	485	424
18 Q	445	425	420	410	405	410	415	420	420	410	420	435	400	390	345	315	335	355	375	425	415	430	440	455	405
19 Q	430	415	415	420	415	420	415	420	435	450	445	450	455	470	465	375	360	370	395	415	435	505	550	465	433
20 Q	455	415	400	400	415	420	425	430	430	450	460	430	495	505	415	315	365	380	395	425	425	440	440	445	424
21	490	450	425	430	465	460	435	435	460	460	470	490	425	450	495	505	395	365	390	410	425	420	435	445	443
22 Q	430	410	415	405	410	410	410	415	410	420	420	415	400	370	365	350	320	330	380	405	415	425	430	425	399
23 D	415	415	410	415	405	410	410	410	410	420	445	395	460	515	610	60	-160	90	85	15	115	200	135	200	304
24 D	335	395	405	410	415	390	400	405	395	410	380	350	415	245	-70	-50	95	340	420	440	370	285	380	460	335
25	415	390	435	450	430	455	440	445	440	440	440	450	370	275	245	185	195	365	265	355	345	325	330	460	373
26	465	465	390	405	435	445	460	445	445	435	440	470	460	415	370	280	265	155	275	310	290	320	300	340	378
27	350	415	435	430	440	450	480	480	460	460	465	450	450	295	190	220	160	185	260	295	270	275	260	330	354
28	380	415	440	455	450	465	465	470	475	485	450	365	355	340	280	215	170	265	295	300	295	295	300	300	364
29 D	375	415	405	445	435	445	445	495	490	465	445	410	375	320	365	495	445	440	270	115	225	305	345	350	388
30	435	475	460	425	430	450	460	475	460	455	460	435	395	445	430	420	495	435	320	340	605	475	450	445	445
31																									
Mean	410	413	414	413	422	431	436	444	426	434	436	430	423	393	354	295	290	334	359	384	390	400	397	409	397

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 11 Baker Lake — Y in gammas — April 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	128	93	58	88	113	78	63	148	203	203	188	188	203	193	203	198	198	183	168	158	158	163	163	168	154
2	173	178	173	178	178	178	178	188	183	178	193	193	183	213	258	283	258	248	223	208	208	208	193	173	201
3	133	103	83	108	143	153	168	168	183	203	198	203	228	223	243	248	243	193	173	178	188	188	188	163	179
4	143	133	128	118	118	163	168	168	173	183	213	198	203	203	213	218	228	173	238	243	243	208	183	163	184
5 Q	173	143	143	148	143	153	168	178	188	193	193	183	208	218	208	228	203	193	208	193	173	163	163	168	181
6	163	158	163	168	173	173	173	178	193	203	198	193	198	218	213	258	238	243	278	323	333	308	223	183	215
7	158	163	163	173	178	173	148	158	178	173	183	193	203	228	218	223	238	213	203	248	253	253	193	168	195
8	113	78	58	98	123	138	158	188	178	193	218	213	253	263	263	278	298	343	253	213	173	203	133	108	190
9 D	33	33	13	73	128	143	188	193	228	288	208	218	213	263	233	233	253	233	303	193	193	233	168	128	183
10 D	138	153	103	103	153	163	133	53	-12	148	213	198	308	448	468	383	393	353	243	228	178	198	173	183	213
11	153	133	128	108	78	103	193	188	168	173	218	278	238	238	238	223	208	198	228	258	278	188	178	198	191
12	173	128	138	138	128	128	148	173	193	203	188	208	183	213	208	208	203	208	193	183	188	248	188	148	180
13	158	168	173	173	168	178	153	173	193	203	188	183	218	233	258	233	208	213	203	198	228	308	233	213	202
14	188	168	138	158	153	153	143	178	183	203	208	223	223	178	218	218	208	198	188	203	268	303	173	138	192
15	98	93	138	178	173	168	148	188	188	198	193	188	193	218	203	223	193	183	343	248	193	198	178	188	188
16	173	153	148	173	153	153	178	203	183	198	188	198	208	218	208	208	183	193	173	218	233	218	188	178	189
17	158	168	168	178	178	173	168	178	213	203	208	223	238	258	278	258	213	178	243	258	188	213	238	198	207
18 Q	168	168	173	173	178	178	183	193	198	188	193	198	208	218	208	218	203	208	193	218	163	178	178	173	190
19 Q	178	173	168	173	173	173	178	183	193	203	203	188	193	218	218	193	198	223	178	183	188	248	278	213	197
20 Q	193	173	163	158	163	168	163	183	193	188	193	203	193	238	243	238	213	203	178	183	168	183	183	183	189
21	183	158	128	63	128	178	183	188	198	208	178	193	208	218	218	263	273	208	183	183	183	188	188	198	187
22 Q	193	178	178	173	178	178	178	183	178	188	183	198	218	208	198	203	193	193	168	153	183	178	178	178	189
23 D	178	178	178	178	178	178	178	188	193	198	208	203	233	273	273	338	468	398	338	243	293	128	13	43	220
24 D	108	118	128	148	148	108	123	168	193	198	183	153	168	193	328	358	328	188	198	183	208	118	188	213	185
25	178	133	118	163	113	108	103	138	183	198	193	223	213	258	258	268	338	373	320	405	188	188	168	198	209
26	193	113	88	68	113	163	178	208	193	203	203	188	213	248	263	263	278	298	323	298	238	228	173	108	202
27	-12	68	68	48	73	113	103	133	153	168	173	193	208	213	268	303	318	298	288	248	188	188	173	148	172
28	98	68	48	88	98	123	123	148	153	163	188	188	198	228	258	283	238	263	293	268	253	213	193	143	180
29 D	93	48	93	88	108	103	113	158	153	153	158	188	203	213	283	363	378	378	373	103	123	128	108	158	178
30	148	148	128	88	88	118	148	168	158	153	158	178	203	258	268	353	373	423	478	393	398	303	238	183	231
31																									
Mean	145	132	126	132	147	139	188	171	179	192	193	199	212	234	245	256	256	247	246	217	215	209	181	167	193

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 12 Baker Lake — $Z = 60,000\ \gamma +$ — April 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	220	300	375	385	390	420	505	490	445	420	420	445	450	430	445	415	395	395	395	395	400	395	380	385	404
2	410	405	405	405	405	400	400	405	415	440	440	470	575	570	560	480	370	350	360	360	320	330	280	230	408
3	270	275	315	350	375	390	405	425	435	445	430	455	545	565	565	515	500	400	390	405	405	410	235	290	408
4	310	290	325	385	395	385	400	410	405	415	425	425	420	430	450	425	400	380	380	355	290	230	260	295	370
5 Q	335	340	350	370	375	400	400	395	395	400	400	410	435	450	455	420	375	395	395	400	390	385	380	375	402
6	345	355	365	370	375	385	390	395	400	400	400	410	415	420	415	530	465	495	485	345	335	295	330	355	395
7	365	375	380	385	385	380	390	405	405	410	410	460	540	505	480	475	415	400	330	290	235	170	175	180	373
8	200	265	310	335	365	385	395	405	440	460	450	440	475	610	505	480	490	545	325	310	250	280	305	315	389
9 D	305	295	300	315	360	415	460	430	430	485	500	480	455	455	470	470	520	525	620	645	410	300	275	250	424
10 D	310	345	355	365	370	375	455	870	840	675	505	410	485	490	670	535	510	485	470	280	345	345	340	315	465
11	310	370	395	430	470	485	505	515	585	545	505	490	505	505	495	485	405	365	365	340	260	275	230	190	418
12	335	335	365	380	395	420	465	435	405	405	425	435	475	470	500	505	560	475	470	450	440	330	295	305	420
13	340	360	375	385	390	395	405	515	525	445	445	455	485	545	535	400	390	585	625	535	425	305	350	335	440
14	380	365	370	370	390	410	450	485	535	430	435	420	405	455	580	500	465	400	380	390	435	385	280	295	417
15	295	290	285	350	375	385	410	435	410	400	405	420	480	440	435	435	415	435	355	550	440	385	375	380	399
16	355	335	320	380	410	475	425	445	480	430	425	465	460	430	400	370	420	455	380	465	470	380	360	380	413
17	385	375	375	380	385	380	400	405	445	470	505	555	550	530	515	495	430	380	380	395	390	360	305	260	419
18 Q	245	275	330	370	380	385	390	400	395	395	395	400	430	430	485	450	395	375	400	415	380	370	385	370	385
19 Q	370	375	375	375	380	385	390	390	385	400	425	445	470	485	505	435	510	310	365	365	385	375	305	310	396
20 Q	365	375	375	385	395	390	395	410	400	405	415	435	465	490	640	530	380	360	375	375	375	375	380	375	411
21	335	360	365	415	420	415	395	400	400	445	515	485	515	540	545	435	535	505	415	385	365	365	385	385	430
22 Q	375	370	370	385	385	385	390	390	390	390	405	420	420	405	405	385	425	390	375	385	395	390	385	375	391
23 D	385	385	385	385	385	385	385	385	385	385	385	415	465	430	375	605	555	510	395	445	370	485	485	375	423
24 D	320	335	365	395	395	405	410	415	425	450	495	495	595	965	1055	765	475	475	445	420	255	285	275	285	467
25	280	335	355	350	405	465	495	475	465	470	465	470	530	565	665	540	675	655	325	260	255	155	95	265	417
26	345	315	325	375	405	425	450	475	515	525	475	500	505	480	500	470	395	425	385	285	245	300	300	250	410
27	170	220	255	355	385	400	490	500	460	450	460	515	635	855	935	860	710	395	305	270	265	335	265	155	444
28	170	220	285	335	380	390	430	435	490	495	530	570	520	580	590	610	435	400	355	340	330	305	275	265	406
29 D	200	235	335	365	375	385	405	460	470	460	460	635	650	785	830	650	605	575	575	415	275	270	205	225	452
30	195	260	290	350	380	390	405	475	490	450	455	520	525	635	615	735	530	475	375	250	285	270	265	260	412
31																									
Mean	307	324	346	373	389	403	423	449	455	446	447	465	496	531	557	514	472	445	406	384	347	328	305	301	413

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 13 Baker Lake — $X = 3500\gamma +$ — May 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	430	420	430	440	350	470	475	490	490	510	540	560	550	515	470	490	370	390	435	460	455	400	435	485	461
2	490	470	410	415	435	425	440	440	430	425	420	430	435	410	340	325	355	380	400	425	475	440	400	475	421
3	440	425	435	425	415	430	440	450	460	475	490	495	495	410	340	260	300	350	400	435	410	440	450	415	420
4	440	455	450	430	450	435	460	450	475	515	510	555	560	550	595	700	660	580	755	770	720	405	275	320	521
5	295	395	480	480	445	440	410	410	450	455	470	495	470	450	405	315	320	385	400	420	425	450	445	445	371
6 Q	435	420	415	420	415	415	420	420	430	450	440	435	430	400	370	340	380	400	425	420	425	445	445	435	418
7	455	430	410	405	410	415	415	425	420	450	480	480	445	400	375	360	320	345	420	445	450	460	565	565	431
8 D	520	495	450	485	460	480	495	530	520	530	505	445	445	240	280	320	290	355	405	425	425	450	490	480	438
9	395	450	440	430	430	430	445	430	430	455	460	500	480	515	515	525	395	565	585	470	480	485	540	530	474
10	450	420	430	420	405	450	455	495	445	505	470	450	430	420	425	395	475	540	590	440	470	520	480	515	462
11	535	480	445	445	420	435	495	380	530	510	540	605	530	450	350	355	420	505	470	710	580	630	680	640	506
12 D	485	725	355	680	485	680	605	725	810	630	690	660	715	670	575	570	670	730	720	480	285	350	500	505	596
13	490	495	455	460	460	445	475	540	585	620	615	630	620	555	415	310	295	340	390	440	640	660	715	425	504
14 Q	405	435	410	395	400	400	430	440	450	430	460	535	530	470	450	485	440	405	375	425	430	470	470	450	441
15 D	450	490	395	390	405	400	380	420	540	500	605	440	405	415	540	435	360	620	590	550	410	330	315	300	445
16 D	325	390	440	340	440	480	510	530	525	465	460	440	430	430	405	355	350	385	385	420	500	550	440	415	434
17	410	405	390	405	410	425	475	450	485	500	485	520	440	350	350	345	575	485	430	440	440	440	480	555	445
18	525	455	425	460	530	525	505	510	495	490	450	415	410	390	325	325	250	375	465	390	305	470	280	465	426
19	480	480	440	355	430	430	425	435	435	465	370	460	420	340	270	135	300	330	390	390	450	450	320	455	394
20	440	410	440	440	450	440	445	460	450	465	445	390	355	280	275	240	160	225	225	245	255	365	440	425	365
21	425	455	405	475	475	455	470	450	440	460	460	465	440	330	240	170	215	275	590	560	390	410	365	450	411
22	485	480	400	420	440	430	450	460	435	455	440	400	370	380	460	275	255	335	285	360	375	370	335	405	396
23	415	420	450	440	435	440	445	465	475	500	460	430	370	350	300	160	245	180	370	420	340	355	440	425	389
24 D	345	425	450	440	455	480	520	505	530	510	520	395	340	320	180	290	305	385	430	425	370	225	100	260	383
25	345	385	415	440	445	465	510	500	520	500	505	475	445	380	320	300	290	310	405	455	385	335	305	355	408
26	355	470	460	425	420	415	415	415	425	440	430	415	370	355	260	255	300	315	390	435	515	550	530	425	408
27 Q	430	440	450	450	435	430	440	460	450	450	435	430	430	410	375	370	375	390	415	450	460	475	505	455	434
28 Q	445	430	445	430	425	430	430	430	425	430	420	420	405	390	380	405	410	415	410	420	450	480	485	450	427
29 Q	445	445	440	420	420	420	430	430	440	460	445	435	410	395	385	380	390	395	415	420	435	440	505	460	427
30	420	430	435	435	430	430	440	440	450	470	500	460	400	370	345	370	360	375	395	425	445	450	475	500	427
31	520	480	485	520	515	495	460	455	475	450	425	390	320	490	270	100	-50	175	165	315	345	320	380	365	369
Mean	436	452	432	439	437	450	458	466	481	483	482	473	448	414	374	344	348	395	436	449	437	439	438	447	436

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 14 Baker Lake — Y in gammas — May 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	178	168	163	128	8	103	158	163	168	168	153	193	228	248	278	233	243	213	233	258	303	263	218	208	195
2	178	123	93	68	98	128	163	178	183	183	193	203	208	218	238	238	218	168	163	178	243	228	178	208	178
3	178	168	178	168	168	173	178	188	193	188	183	198	218	243	218	233	203	193	213	188	243	258	213	188	199
4	173	193	178	178	163	168	183	198	203	233	188	188	213	253	253	273	258	268	348	378	348	283	188	48	223
5	-122	-152	-22	43	73	128	178	203	208	208	168	198	248	238	298	268	248	203	208	173	168	198	193	188	146
6 Q	188	178	168	178	178	183	188	188	198	203	208	218	223	223	228	213	178	178	168	158	163	178	188	183	190
7	198	188	178	168	178	168	178	188	188	203	198	218	228	233	218	188	203	203	183	198	188	203	258	198	198
8 D	103	148	178	143	43	-12	138	178	153	208	198	228	188	228	283	263	243	178	203	213	188	203	183	158	177
9	138	158	158	143	143	143	173	188	208	198	188	188	238	238	228	248	193	315	268	188	258	248	218	243	205
10	193	178	188	158	158	183	153	168	163	223	218	218	238	218	238	223	248	328	298	208	193	218	223	228	211
11	208	168	178	143	143	178	138	48	133	243	208	208	268	328	298	173	278	368	443	433	370	348	288	228	243
12 D	18	168	38	-52	-2	-37	173	93	48	98	148	173	348	388	333	323	218	303	473	198	183	213	308	268	184
13	198	203	168	88	78	48	68	118	218	193	208	268	233	348	288	208	213	188	198	178	368	588	383	183	218
14 Q	178	198	168	133	138	138	153	153	158	183	183	158	248	318	278	243	208	198	193	178	183	208	203	188	191
15 D	178	163	53	-2	88	108	128	158	148	88	168	178	228	248	283	228	238	398	498	538	528	383	168	133	221
16 D	-33	0	23	-193	-35	60	60	43	123	208	233	238	203	258	268	248	208	208	183	228	278	308	268	203	150
17	178	163	148	153	163	183	168	173	198	198	228	233	228	228	238	198	303	248	203	193	188	178	228	253	203
18	173	98	68	108	68	108	108	148	228	223	208	268	248	218	228	198	268	288	358	333	288	173	183	203	199
19	163	118	88	48	108	153	168	173	173	168	68	123	163	253	268	293	188	218	268	278	248	278	148	218	182
20	128	133	113	133	128	118	123	153	188	173	138	188	208	203	248	243	268	243	243	238	273	193	248	238	190
21	133	118	78	128	98	98	128	158	153	198	173	183	193	213	253	298	318	373	478	503	283	288	178	213	218
22	193	103	68	83	153	153	153	153	218	223	198	223	263	218	263	278	273	313	308	258	198	218	118	133	201
23	93	88	83	103	98	133	138	148	168	133	173	233	233	258	278	273	268	278	248	363	228	138	173	128	186
24 D	68	-12	48	98	103	78	88	113	108	198	213	263	238	193	283	383	298	213	203	193	183	163	103	103	163
25	38	8	88	168	153	163	123	98	173	208	223	228	203	243	253	233	263	268	273	288	238	208	133	128	183
26	93	133	173	178	173	178	173	173	168	163	178	208	233	248	273	258	243	273	268	333	338	228	208	173	211
27 Q	153	128	68	68	108	138	143	158	173	178	208	243	253	263	243	238	218	213	213	218	208	223	223	198	187
28 Q	173	173	163	158	158	138	148	183	188	203	203	188	223	253	243	223	218	198	168	178	203	208	198	183	191
29 Q	178	168	163	163	163	173	183	188	178	178	198	218	228	223	213	198	198	178	183	168	173	173	198	213	187
30	168	153	158	168	178	183	188	188	198	193	178	218	248	248	248	203	198	188	173	178	188	188	203	228	194
31	218	198	173	158	73	148	188	183	198	178	148	163	173	228	318	253	208	323	318	238	308	208	178	123	204
Mean	139	130	122	110	114	129	149	156	174	188	186	208	229	249	260	244	236	249	264	253	252	238	206	187	195

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 15 Baker Lake — $z = 60,000\ \gamma +$ — May 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	340	370	375	385	695	540	475	510	465	460	495	535	690	685	610	545	595	390	415	425	270	225	215	205	455
2	270	290	335	385	380	395	430	415	395	400	425	415	465	495	515	420	385	390	375	355	290	210	220	255	371
3	345	385	380	380	375	385	400	405	415	405	410	425	445	500	425	420	465	375	410	410	260	210	235	265	380
4	295	345	368	365	380	385	385	385	390	425	525	500	470	415	380	495	600	610	600	585	425	135	230	295	416
5	265	225	295	340	355	375	385	370	360	380	395	400	405	425	455	500	370	345	350	350	340	345	345	350	364
6 Q	360	365	375	380	380	380	380	380	380	380	395	395	405	435	415	375	345	335	335	340	355	345	345	365	373
7	360	365	365	375	375	375	375	380	375	375	375	390	435	430	420	455	495	510	405	390	360	365	325	280	390
8 D	200	225	330	340	400	555	485	445	490	460	465	575	710	805	505	425	400	415	380	345	325	325	305	195	421
9	270	325	345	335	355	380	395	395	385	380	395	430	455	465	525	475	465	605	620	395	395	300	240	325	402
10	325	330	335	365	395	380	415	475	510	460	495	475	465	515	490	455	595	535	470	320	290	275	185	325	411
11	290	245	260	335	385	390	500	615	490	490	600	575	540	595	485	455	615	565	410	430	200	215	185	95	415
12 D	-295	20	245	200	80	240	270	310	345	420	520	540	565	445	550	525	460	435	735	695	595	405	435	340	378
13	325	325	305	325	380	305	420	425	490	635	480	540	620	680	590	455	560	450	475	415	665	630	460	325	470
14 Q	295	340	330	325	385	375	370	435	425	425	415	425	540	665	590	545	405	335	360	335	365	365	340	305	404
15 D	335	275	325	365	385	345	395	325	345	710	660	705	575	505	545	520	605	495	435	340	135	80	55	75	397
16 D	205	85	325	365	435	425	625	615	520	455	405	405	435	425	450	345	385	335	325	315	295	255	215	250	370
17	265	280	325	335	355	375	360	380	415	435	450	450	550	470	370	505	575	625	355	340	340	335	355	310	398
18	195	270	330	320	435	565	490	540	440	440	455	445	425	445	440	405	375	385	425	240	170	40	100	210	358
19	240	225	275	290	305	365	365	375	370	405	695	710	725	610	575	445	305	335	325	205	140	145	220	85	363
20	215	215	260	325	360	390	395	380	415	485	505	525	505	470	395	365	350	295	300	250	205	90	120	160	332
21	140	185	235	240	320	365	385	385	390	440	500	540	645	665	590	445	435	485	440	300	210	175	145	185	369
22	285	230	285	275	300	340	355	370	405	455	470	445	405	475	535	900	535	480	290	260	150	155	275	240	371
23	240	255	295	340	335	355	375	400	450	460	435	455	425	420	420	470	500	445	325	155	205	185	250	265	352
24 D	245	180	225	275	315	345	385	490	485	420	445	700	600	715	650	725	265	315	320	305	85	90	150	200	372
25	185	235	245	300	350	370	410	515	495	475	445	445	455	475	500	430	455	445	240	325	115	50	125	270	348
26	155	195	275	325	345	365	365	365	375	385	405	415	435	460	460	335	335	375	265	300	140	220	75	145	313
27 Q	185	255	355	405	335	355	395	395	395	405	425	420	435	405	355	340	335	340	335	340	340	330	275	340	354
28 Q	360	365	335	345	335	355	365	360	365	370	380	395	425	445	365	330	330	335	340	345	355	330	235	215	349
29 Q	255	290	310	335	335	345	350	350	350	370	380	390	380	340	325	310	305	305	300	320	325	325	275	255	326
30	290	295	330	345	350	350	350	350	350	355	390	425	405	375	335	315	330	305	335	340	355	370	365	325	347
31	300	285	260	315	395	350	355	360	380	380	420	470	545	675	940	870	435	225	195	225	155	190	165	205	375
Mean	250	267	311	337	389	382	400	416	415	437	460	483	503	514	490	471	439	414	383	345	272	249	241	244	380

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 16 Baker Lake — X = 3500 γ + — June 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	350	455	475	480	470	460	465	455	465	445	440	435	430	420	375	345	320	385	395	460	495	565	630	565	441
2	495	500	445	450	480	440	475	500	475	470	445	425	395	360	180	165	260	320	225	270	215	270	355	325	373
3	355	490	440	425	480	485	470	485	490	490	515	530	475	375	290	250	250	300	330	270	280	345	475	475	407
4 D	485	380	380	415	460	485	465	480	500	555	525	510	615	610	620	465	515	445	415	450	505	160	405	260	463
5	360	465	450	495	420	485	465	450	460	490	530	565	465	515	495	435	300	365	375	445	540	520	520	470	462
6	460	450	430	435	445	460	470	495	515	520	530	570	600	605	420	295	325	400	530	450	460	625	635	530	486
7	495	475	450	480	485	435	455	455	470	480	470	465	490	530	540	525	380	395	400	430	490	525	495	465	470
8	445	460	445	420	405	420	440	520	460	440	510	510	530	510	425	465	340	470	440	520	620	725	620	610	490
9	505	505	450	460	515	505	505	490	530	530	560	610	565	570	445	360	395	495	530	490	445	455	540	485	497
10	465	430	395	420	390	415	450	455	480	495	520	500	540	595	600	385	340	380	355	380	485	495	455	555	457
11	555	465	475	455	425	415	465	445	450	555	610	630	660	620	660	550	500	510	385	365	470	490	460	450	503
12 Q	445	440	430	420	415	420	425	420	415	415	410	420	430	390	385	390	370	335	385	415	495	445	430	445	416
13 Q	450	440	455	470	440	435	430	445	440	450	440	420	425	400	390	395	410	410	410	425	430	490	475	460	435
14	455	450	440	445	450	440	420	425	445	435	445	430	420	480	480	365	340	405	415	430	495	555	515	540	447
15	595	505	460	445	460	475	470	480	465	445	520	515	500	450	375	390	330	400	435	420	495	510	490	485	463
16 Q	540	485	480	445	450	485	470	470	505	520	530	470	380	335	335	355	370	380	440	440	530	620	540	500	461
17 Q	470	445	435	425	420	415	415	410	435	435	435	420	425	410	395	400	370	305	340	425	410	445	465	575	422
18	525	495	435	410	410	435	475	490	465	480	430	415	405	370	290	250	290	350	360	350	520	510	510	525	427
19	500	480	470	440	440	460	460	480	465	445	430	465	290	280	330	365	365	370	425	445	520	470	515	520	435
20	490	435	440	420	440	450	445	455	430	430	450	420	420	360	285	220	395	395	420	470	490	550	510	395	426
21	480	530	490	480	470	455	455	450	445	425	390	380	400	415	300	140	385	335	435	430	525	540	570	515	435
22	495	460	440	465	455	450	470	475	485	505	530	465	430	365	260	270	340	420	420	440	455	540	515	510	444
23	475	455	470	450	460	480	470	460	445	460	440	440	415	360	310	200	145	200	340	360	320	270	320	455	383
24	310	305	405	405	485	470	460	475	465	475	495	500	475	465	400	310	315	310	360	410	440	305	310	340	404
25 Q	400	420	425	450	455	440	440	440	445	445	460	425	405	355	300	330	330	355	405	460	520	540	545	450	427
26	495	510	525	510	520	500	540	530	520	535	540	530	490	460	385	320	340	400	480	455	505	515	505	500	484
27 D	470	460	430	420	420	420	430	445	440	480	450	480	400	380	470	475	320	380	630	315	485	155	180	380	412
28 D	345	350	380	525	490	485	490	485	535	490	500	520	565	570	570	555	435	390	20	260	260	730	690	595	468
29 D	545	540	555	520	480	510	500	530	520	560	555	475	405	360	280	515	630	360	50	410	280	105	220	315	424
30 D	300	335	385	445	445	460	400	410	510	260	550	625	630	665	620	510	495	305	160	170	160	255	355	475	414
31																									
Mean	458	453	447	451	453	456	460	467	472	472	485	485	469	453	407	366	361	376	377	402	445	457	475	472	442

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 17 Baker Lake — Y in gammas — June 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	18	48	68	93	103	108	133	138	163	183	188	223	243	228	233	268	278	243	243	213	258	198	153	163	174
2	193	173	153	148	148	103	108	128	153	173	173	213	218	238	298	373	313	343	283	258	153	128	148	113	197
3	18	78	-2	18	43	78	108	178	173	173	208	228	288	283	298	313	348	288	298	218	203	148	198	168	181
4 D	138	88	148	153	158	73	23	48	123	153	228	248	268	268	193	263	308	208	173	233	473	108	163	73	180
5	188	163	118	113	68	83	148	173	168	193	218	218	238	248	308	238	238	178	198	248	323	293	228	213	200
6	183	163	168	163	148	178	173	173	198	178	188	223	238	248	243	238	213	288	208	198	268	373	183	248	212
7	203	193	173	158	133	108	158	178	183	198	213	208	188	258	218	243	248	203	233	193	268	238	213	213	201
8	178	173	158	158	138	158	178	168	128	148	178	218	253	248	213	258	228	228	303	288	368	418	338	248	224
9	193	158	183	138	128	28	138	168	163	138	203	228	103	258	258	268	173	278	328	208	193	243	283	213	195
10	128	118	108	-22	-62	53	168	198	198	243	208	243	223	233	273	298	218	228	168	228	298	228	168	228	182
11	248	213	168	178	178	163	163	178	203	178	238	273	238	278	228	418	383	238	128	168	198	228	183	198	220
12 Q	198	173	178	173	178	183	168	178	188	198	213	223	203	218	223	218	208	248	213	178	258	178	168	153	197
13 Q	188	168	193	198	188	178	188	178	188	198	203	218	223	218	233	223	208	198	178	178	173	178	178	168	193
14	168	168	178	183	178	163	158	173	203	193	198	183	178	228	263	228	198	178	173	188	218	343	218	168	197
15	238	198	183	158	183	168	113	68	128	128	173	198	263	308	253	183	203	203	178	168	268	233	218	208	193
16 Q	213	163	138	43	-22	118	138	148	158	153	168	208	223	233	218	193	178	193	198	203	328	348	278	228	185
17 Q	203	188	183	178	178	158	143	178	188	183	198	218	218	228	243	253	238	223	283	228	288	333	263	243	218
18	173	173	143	93	108	153	158	118	143	178	193	218	218	238	258	308	253	268	303	208	208	273	208	198	201
19	193	168	168	133	123	43	83	128	178	193	198	218	218	268	283	273	238	238	228	203	238	173	198	218	192
20	178	148	118	138	148	148	163	163	168	213	223	223	218	248	268	308	213	208	253	208	238	233	168	108	196
21	163	183	193	188	183	158	128	128	148	173	193	218	228	218	273	338	203	263	283	293	358	288	248	203	219
22	168	168	118	138	128	168	158	148	158	173	153	158	218	238	333	348	288	258	348	228	188	198	193	213	204
23	173	158	163	168	163	158	188	198	208	213	188	213	243	273	288	283	338	358	418	358	308	228	78	108	228
24	23	-63	-48	0	58	128	153	188	208	193	193	208	248	268	288	283	248	263	338	373	268	173	118	138	177
25 Q	138	153	138	133	93	153	163	173	188	193	198	233	248	273	278	253	213	213	213	213	233	233	238	183	198
26	158	148	128	148	128	98	108	158	188	118	158	178	243	248	298	298	258	248	243	208	218	223	203	213	192
27 D	193	178	173	163	163	153	158	143	188	188	148	198	208	228	298	293	538	498	248	158	438	228	188	188	231
28 D	98	73	43	-15	-7	43	58	53	113	73	113	148	218	248	218	348	423	488	398	258	263	353	388	243	193
29 D	138	133	158	148	103	118	98	78	98	188	78	128	258	228	243	388	498	588	393	508	413	173	193	158	229
30 D	108	53	83	88	128	118	58	58	98	-52	123	253	228	253	333	338	318	428	363	298	163	123	138	203	179
31																									
Mean	160	184	136	125	120	125	136	146	166	169	185	212	227	245	262	288	274	276	261	237	269	235	205	187	201

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 18 Baker Lake — Z = 60,000 γ + — June 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	100	85	175	275	325	360	365	375	390	395	425	420	410	430	460	355	305	325	315	305	155	225	185	35	300
2	165	280	305	305	290	330	430	405	390	440	475	480	485	485	520	665	525	405	155	95	250	280	270	220	360
3	15	85	195	300	445	455	400	365	375	400	415	510	490	465	520	510	415	305	265	155	170	200	265	300	334
4 D	230	235	280	330	335	375	570	505	455	465	565	560	500	385	500	735	735	715	425	340	300	225	185	240	425
5	185	225	295	330	400	415	395	370	385	385	360	405	465	515	490	520	355	320	365	470	415	295	235	235	368
6	305	310	325	330	345	360	400	385	385	445	495	420	385	480	675	535	435	555	615	345	305	310	235	95	395
7	195	285	320	325	350	405	370	355	360	370	380	390	445	435	435	485	445	325	445	370	390	315	260	295	365
8	305	275	270	295	330	340	340	395	565	525	475	480	465	455	485	680	610	715	500	590	505	375	270	215	435
9	245	285	325	345	375	475	400	365	360	495	525	515	685	645	625	480	680	820	610	405	265	275	195	285	445
10	245	260	255	375	405	375	425	415	415	455	435	445	475	425	485	605	405	345	380	430	435	335	330	320	395
11	250	280	275	305	320	325	330	355	365	370	400	385	600	565	575	545	610	595	410	455	345	345	245	235	395
12 Q	270	295	340	325	340	340	345	360	355	370	375	350	375	375	355	355	325	420	465	350	400	315	345	340	354
13 Q	330	330	330	335	335	345	355	355	375	355	380	400	345	385	365	350	335	320	310	305	290	280	285	285	337
14	295	310	320	330	320	320	325	355	345	345	395	420	475	555	615	455	360	315	315	335	335	285	175	160	352
15	180	275	325	340	340	335	375	445	465	490	465	505	505	455	355	370	405	325	320	320	360	355	330	325	374
16 Q	225	270	325	305	335	340	355	375	385	375	415	485	455	415	375	380	360	375	355	335	255	285	220	275	345
17 Q	320	315	320	320	325	315	325	350	335	335	375	375	370	365	335	295	290	340	305	235	170	225	145	105	300
18	195	195	225	235	275	300	330	335	365	390	425	415	480	545	675	360	325	245	150	95	80	185	295	320	302
19	305	280	275	270	305	395	385	375	360	395	385	400	465	385	305	295	280	280	285	310	345	360	310	260	334
20	225	215	225	225	260	295	325	330	345	365	330	340	365	415	435	340	275	270	245	285	285	185	40	115	280
21	95	170	230	265	270	290	340	345	350	380	365	365	400	525	655	395	295	295	245	205	185	135	185	245	301
22	200	235	235	210	255	285	320	330	405	425	445	445	525	545	520	385	285	280	245	235	240	215	170	265	321
23	235	245	285	305	325	340	345	355	335	340	365	380	375	385	315	345	235	210	180	110	25	125	160	125	268
24	160	85	165	275	305	295	325	355	345	345	355	375	375	400	435	395	340	325	255	125	20	5	55	135	260
25 Q	175	190	250	285	400	335	330	330	335	340	345	365	425	405	370	285	295	285	305	290	220	150	125	140	291
26	95	150	220	270	320	375	360	350	385	555	565	505	505	555	535	530	340	350	325	315	315	300	310	315	369
27 D	285	285	295	300	300	310	325	325	340	415	545	635	740	710	725	900	975	375	540	285	250	160	125	150	428
28 D	150	210	195	280	280	290	325	365	395	425	390	405	420	560	625	745	820	625	435	300	240	70	270	235	377
29 D	170	175	230	300	335	355	360	350	380	585	635	535	525	595	705	705	725	675	455	80	135	195	55	145	392
30 D	185	205	205	225	290	335	390	420	445	750	680	545	650	500	685	725	815	645	255	215	175	155	160	225	412
31																									
Mean	211	235	267	297	322	347	365	370	383	424	440	441	473	478	505	491	453	413	349	290	263	239	214	222	354

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 19 Baker Lake — X = 3500 γ + — July 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	495	465	430	380	450	440	445	460	450	455	465	440	420	330	380	300	330	390	415	430	460	525	420	375	423
2	405	440	460	470	515	495	520	490	465	465	425	385	350	250	295	220	275	385	400	415	425	420	430	450	410
3 Q	460	485	455	430	425	430	420	410	405	425	430	425	420	395	375	370	395	410	405	385	390	405	445	455	419
4	455	455	455	440	440	435	445	455	470	480	490	520	500	525	510	465	460	230	340	210	350	740	660	625	465
5	530	515	460	490	550	560	530	565	535	530	570	615	615	595	395	365	360	395	550	530	470	540	540	485	512
6	470	485	480	450	440	470	460	485	495	520	555	585	600	610	485	500	390	345	360	420	505	560	525	470	486
7	535	520	500	410	410	450	460	475	535	435	525	585	590	540	520	585	495	525	495	440	470	475	440	460	495
8	440	435	425	470	430	430	500	505	525	545	505	530	580	500	540	445	440	460	305	395	725	680	565	700	503
9	470	465	470	465	465	470	480	495	520	540	565	530	530	550	575	420	285	350	515	450	525	520	485	500	485
10	540	525	650	645	550	535	535	540	540	515	505	525	500	460	440	420	425	420	410	440	445	470	490	485	500
11	510	380	305	280	455	510	475	520	550	485	515	485	640	625	645	550	450	490	1000	680	340	600	1275	800	565
12	140	375	530	530	455	440	450	460	485	485	460	465	530	565	530	405	305	385	385	390	425	475	500	365	439
13 Q	385	365	390	385	460	450	465	470	500	480	440	410	545	555	410	450	310	420	420	455	510	440	390	370	436
14	490	410	460	510	555	525	460	530	530	575	615	570	580	560	550	330	390	290	430	380	410	445	465	460	480
15 D	540	395	450	430	420	410	415	430	375	250	300	560	470	640	600	735	700	500	100	-150	-350	-150	265	150	353
16 D	140	300	460	435	440	415	440	450	425	420	425	435	410	395	355	245	190	310	390	380	440	485	410	325	384
17 D	460	470	450	480	330	445	490	460	480	500	475	470	430	430	350	340	370	500	595	590	505	530	325	340	451
18 D	540	520	440	295	415	440	535	545	630	590	495	440	395	415	420	620	440	440	50	70	80	75	135	240	386
19	325	320	445	380	485	460	505	475	495	510	525	500	465	410	450	505	520	470	485	435	335	340	445	475	448
20	385	430	460	410	460	470	460	490	480	505	500	525	505	470	430	350	325	350	320	380	470	500	450	380	438
21	400	465	475	465	465	460	470	470	460	455	440	430	410	425	430	320	375	310	385	470	475	445	515	460	436
22	445	425	440	445	430	470	500	480	455	475	500	485	445	415	360	295	395	415	425	450	490	470	310	380	433
23	360	415	475	465	500	515	360	440	470	460	445	430	430	395	365	370	370	410	405	430	370	330	435	490	422
24	420	420	480	465	460	470	470	445	450	460	490	400	350	310	265	385	295	390	245	470	385	490	310	350	403
25 D	385	430	400	450	500	395	440	460	500	495	490	445	400	345	390	400	315	250	190	245	235	310	250	365	379
26	515	435	500	460	485	455	470	485	490	460	490	500	430	380	270	280	520	520	540	380	380	320	250	360	432
27	315	315	265	335	330	335	350	340	350	355	340	340	335	340	300	325	390	350	440	470	340	330	465	475	355
28	450	380	485	590	425	435	475	390	445	425	440	390	365	385	270	330	325	385	475	490	500	395	430	540	426
29 Q	495	445	460	390	400	470	490	450	445	430	450	390	430	400	375	365	385	405	410	440	480	500	515	510	439
30 Q	490	460	400	460	440	430	435	425	435	440	440	435	420	370	360	350	370	375	395	415	435	480	495	505	428
31	480	475	465	470	425	460	510	530	515	515	510	525	590	535	460	400	440	505	555	605	510	330	490	605	496
Mean	435	433	452	445	452	457	471	472	479	474	478	476	479	459	423	401	388	399	410	406	404	435	456	450	443

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 20 Baker Lake — Y in gammas — July 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	193	173	128	-42	108	123	138	128	158	178	183	198	213	258	243	253	233	188	218	228	213	258	208	183	182
2	153	88	8	18	63	63	103	168	158	158	148	203	223	233	258	278	288	213	203	183	163	163	168	178	162
3 Q	163	163	148	148	183	188	183	173	183	198	203	228	213	228	238	223	218	188	173	158	143	153	178	173	185
4	178	178	183	178	173	178	178	178	183	163	178	238	243	268	243	238	248	228	278	388	313	428	458	303	243
5	188	168	163	148	123	118	208	178	183	198	198	163	248	258	263	258	188	193	308	293	263	268	278	208	211
6	208	208	163	163	138	133	158	178	198	183	173	238	258	233	178	263	228	218	228	188	323	388	228	198	212
7	203	173	158	118	128	158	173	178	188	88	153	193	228	288	328	243	278	308	213	188	208	178	168	183	197
8	178	168	158	148	83	33	138	93	148	153	193	153	228	113	268	258	273	258	288	243	453	333	298	308	207
9	198	198	178	143	58	98	158	173	148	138	193	243	273	298	283	338	238	308	358	283	333	248	188	168	132
10	123	118	178	183	128	113	163	168	198	243	263	198	243	243	233	268	258	233	218	208	178	208	178	173	197
11	188	123	23	-112	-72	43	-12	93	138	193	228	203	218	323	298	263	268	228	238	238	193	278	738	458	199
12	-190	110	138	148	148	68	153	158	103	168	218	218	68	218	338	363	413	203	188	148	148	213	188	160	170
13 Q	168	108	108	48	58	78	68	88	78	118	168	188	203	188	268	288	288	228	198	203	268	243	168	208	168
14	163	143	53	28	58	78	108	108	98	98	158	128	268	193	218	288	248	348	278	173	173	198	203	198	167
15 D	143	63	-87	-92	-37	28	58	73	-370	-325	-330	90	-20	185	215	715	840	1040	1225	680	480	360	10	20	207
16 D	-47	-7	-92	-42	48	108	123	148	153	153	158	173	188	228	248	348	318	273	368	408	253	268	213	118	171
17 D	188	153	148	58	-197	-82	38	33	78	93	93	103	143	228	323	303	418	825	1000	840	1050	600	560	-170	284
18 D	80	63	0	-360	-140	-120	28	68	178	100	143	153	268	278	308	398	353	368	338	328	328	303	148	108	185
19	-92	3	-17	-42	58	83	113	153	173	153	198	253	218	288	308	323	358	378	413	293	255	198	198	193	186
20	138	48	38	13	43	98	8	78	148	163	148	193	263	268	223	253	338	338	288	263	288	208	183	158	174
21	188	133	123	58	-42	113	143	173	203	208	188	198	213	223	288	328	268	368	308	328	263	243	178	163	202
22	138	103	138	133	143	133	138	198	193	188	193	213	278	253	288	288	278	248	213	248	218	258	183	143	200
23	-7	-22	158	138	78	78	58	108	158	178	218	228	188	268	273	258	253	218	218	293	273	183	123	138	169
24	123	133	178	183	168	158	118	98	108	168	208	168	248	248	328	353	298	438	423	358	358	228	133	143	224
25 D	103	-42	-22	108	83	10	93	158	178	218	213	193	203	248	278	248	248	373	638	378	153	108	123	213	190
26	128	133	98	-57	83	98	118	188	203	123	228	218	243	263	303	353	353	415	335	250	220	155	73	110	193
27	130	60	10	90	110	105	105	150	125	140	163	180	163	175	205	240	280	350	280	305	268	288	213	143	178
28	158	28	128	128	168	153	108	73	168	168	198	203	173	233	348	313	203	253	278	253	268	178	203	223	192
29 Q	198	128	138	43	33	98	148	168	178	173	193	203	253	233	233	228	228	188	198	178	198	198	218	208	178
30 Q	168	148	68	188	173	173	178	183	183	183	188	213	228	243	248	223	198	188	168	143	148	198	203	218	186
31	198	198	173	143	18	88	158	173	183	198	243	248	218	303	278	238	193	258	288	318	208	188	273	268	211
Mean	131	111	96	65	70	90	118	138	166	147	171	194	213	242	273	298	293	318	334	290	268	249	222	177	195

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Baker Lake — Z = 60,000 γ + — July 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	Q	266	232	275	359	367	350	367	451	443	418	335	360	393	402	468	435	342	350	359	359	350	173	123	148	339
2		165	207	283	300	359	384	409	409	409	418	477	485	468	611	620	696	275	275	275	275	291	325	325	325	378
3	Q	325	300	258	266	325	342	350	350	350	350	367	359	350	375	333	333	308	308	308	308	308	342	359	359	331
4		342	333	333	325	333	333	342	342	342	342	358	383	550	550	483	483	542	525	258	325	175	209	217	200	359
5		159	234	292	317	392	408	375	408	416	367	416	491	408	483	675	450	408	699	661	500	400	217	242	300	405
6		292	283	308	333	333	342	292	300	325	550	491	441	441	458	707	333	375	325	375	292	466	292	192	176	363
7		161	202	235	292	292	309	325	341	407	710	587	619	521	431	399	382	669	661	480	341	325	276	300	300	399
8		284	292	292	300	431	382	350	341	382	472	440	399	358	415	423	603	431	464	570	488	350	292	309	210	387
9		273	260	284	300	399	431	554	538	407	423	472	488	480	735	627	448	378	505	603	448	440	440	341	194	436
10		50	204	147	260	317	374	349	374	357	341	341	341	390	349	374	349	325	301	293	285	268	325	309	268	304
11		122	163	196	212	357	374	446	406	380	374	422	422	414	487	462	519	487								
12		2	122	50	163	276	341	325	285	285	365	365	349	380	454	519	545	414	252	276	293	301	325	179	115	291
13	Q	165	133	133	197	285	293	317	341	605	540	485	445	477	556	651	763	460	253	269	285	245	54	53	102	338
14		133	158	190	253	293	285	325	341	429	492	454	468	557	620	746	460	325	429	333	309	269	269	277	301	363
15	D	152	89	129	247	294	286	419	466				553	451	679	482	403	325	443	522	482	512	105	25	82	
16	D	130	248	333	480	433	402	402	425	418	433	456	480	318	580	611	602	525	402	302	310	225	294	155	125	379
17	D	92	227	295	280	308	400	423	475	423	460	595	670	587	580	565	587	796		206	345	743	436	388	493	
18	D	547	575	517	547	443	547	465	428	472	480	458	488	369	421	377	436	561	469	429	443	450	525	708	765	497
19		175	168	268	203	346	375	396	396	453	475	468	446	468	482	332	568	515	446	389	204	103	97	82	98	331
20		191	233	276	262	311	318	113	240	233	198	191	205	226	381	374	339	325	395	240	226	170	138	114	156	244
21		229	222	243	345	460	359	365	433	398	385	434	419	514	575	535	332	318	284	325	325	148	87	175	120	335
22		186	186	232	265	299	345	472	512	446	413	426	458	452	506	566	559	333	293	326	298	293	159	155	119	346
23		192	186	212	269	334	450	577	437	398	385	398	411	462	425	321	295	263	276	269	147	12	102	269	102	300
24		145	177	202	278	303	303	328	379	392	417	252	404	404	366	278	290	290	82	138	-1	101	-127	-64	63	225
25	D	109	146	97	110	274	524	426	304	353	475	487	440	402	402	293	341	341	307	244	110	12	-31	12	-12	257
26		72	102	232	352	346	335	328	370	418	442	388	357	358	394	418										
27																					179	-57	6	98	87	
28		150	238	122	172	205	237	315	497	331	304	342	452	541	562	497	452	452	166	133	149	12	-54	-76	78	262
29	Q	82	87	141	260	357	292	357	276	260	254	238	303	345	378	260	206	184	184	189	195	212	189	157	174	233
30	Q	89	115	136	131	187	202	213	218	218	218	233	233	259	264	208	277	182	177	192	197	192	197	172	192	196
31		172	157	162	167	402	402	232	277	237	217	282	342	372	327	332	327	352	437	432	422	112	-38	22	92	260
Mean		193	219	232	275	337	359	371	376	402	394	412	419	466	462	435	381	356	333	290	240	195	196	195	198	329

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 22 Baker Lake — X = 3500 γ + — August 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		455	510	490	525	515	525	510	525	500	510	515	565	575	585	505	420	440	565	530	425	475	500	525	505	512
2		485	425	455	385	495	525	475	510	490	450	450	450	495	455	405	515	560	490	480	430	430	495	485	590	476
3		465	470	420	490	480	450	515	415	530	525	535	510	550	550	550	630	660	490	405	400	350	430	440	450	488
4		500	490	450	420	405	425	435	460	455	510	415	550	545	545	545	445	545	440	375	500	520	400	325	470	465
5		495	465	485	440	420	440	450	425	430	475	505	545	540	545	565	480	460	495	510	475	530	670	475	490	492
6		480	475	440	440	485	485	480	480	520	495	480	640	550	620	580	485	580	575	605	825	640	600	550	415	538
7		370	480	495	445	475	465	490	470	455	460	525	530	530	500	525	580	650	580	650	705	570	520	570	565	525
8		475	475	425	420	440	445	485	475	490	515	525	530	525	450	455	470	415	400	365	410	430	500	455	450	459
9		445	485	395	420	425	425	445	480	460	500	530	530	565	540	570	575	570	495	440	565	585	730	565	485	510
10		425	450	505	385	440	460	445	440	460	470	475	490	440	500	585	530	605	410	565	615	430	470	505	470	482
11		400	460	450	440	440	470	460	450	440	450	460	520	540	385	330	465	310	350	415	420	440	505	465	450	439
12	Q	445	475	435	430	440	435	435	440	455	440	435	420	395	350	350	375	330	360	380	435	515	500	495	425	425
13	Q	495	490	465	440	455	440	435	440	440	440	465	470	450	400	380	300	360	390	420	460	495	480	490	440	439
14	Q	450	470	480	475	435	450	450	440	450	455	455	415	395	370	280	280	350	390	395	435	475	480	490	520	429
15		475	450	445	455	470	455	440	440	465	470	430	445	420	400	405	250	250	315	430	380	250	280	305	395	397
16	D	350	375	420	450	470	505	320	170	430	515	545	470	635	400	490	440	340	90	50	140	140	270	200	240	352
17	D	400	375	415	555	500	535	515	525	535	520	450	590	540	520	475	390	370	350	330	385	195	155	320	360	427
18		380	400	460	440	440	475	515	400	490	465	445	440	430	435	375	170	200	265	440	470	380	310	370	450	402
19		480	500	420	470	470	485	500	480	470	450	455	435	445	440	380	310	340	320	390	435	445	490	380	440	435
20	D	440	475	450	440	255	455	410	520	520	460	415	330	340	255	255	385	360	365	390	435	395	425	405	450	401
21	D	320	400	435	460	440	485	460	455	460	425	435	410	460	420	370	315	360	285	350	310	380	250	365	355	392
22		365	430	440	460	475	510	300	350	460	450	450	470	480	465	420	370	260	375	365	420	395	290	335	445	407
23	D	450	380	440	440	410	415	460	485	460	445	420	435	500	470	415	330	380	600	600	410	385	370	415	360	437
24		380	450	420	450	475	400	460	480	455	470	425	420	435	400	440	415	375	395	440	475	470	340	325	375	424
25		405	400	450	470	450	440	455	440	445	450	425	480	470	390	425	550	400	340	415	455	475	515	400	345	437
26		475	505	435	425	455	470	475	455	440	450	450	440	425	380	370	380	385	385	415	460	465	450	450	500	439
27	Q	440	380	425	440	420	430	445	440	445	440	435	435	435	390	390	390	390	395	400	420	445	460	470	455	426
28	Q	445	440	425	425	425	430	440	440	440	440	440	430	420	405	395	395	390	410	420	425	440	460	490	475	431
29		480	450	440	435	440	470	455	460	460	490	550	610	590	540	570	560	340	410	415	640	870	905	900	595	545
30		425	415	420	430	445	455	540	560	625	615	620	625	600	525	530	580	440	455	530	510	440	445	455	440	505
31		440	435	450	425	415	430	430	460	480	490	510	510	500	480	430	450	435	415	525	630	590	530	535	485	478
Mean		436	448	445	446	445	461	456	452	473	476	472	488	491	455	444	427	413	410	434	468	453	459	450	433	451

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 23 Baker Lake — Y in gammas — August 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	120	165	135	115	185	155	175	140	220	210	240	225	270	335	310	225	250	300	235	205	215	250	255	205	214
2	130	165	65	115	75	150	100	140	195	210	215	235	245	265	260	240	225	325	270	195	205	225	200	235	195
3	195	140	125	150	125	150	175	170	205	185	185	185	245	295	365	300	200	210	175	285	155	165	165	185	197
4	205	175	175	140	115	130	140	195	190	200	115	210	210	240	285	250	285	315	260	335	345	235	230	260	218
5	230	205	225	195	185	205	165	155	175	185	200	195	240	230	195	290	280	275	260	265	340	445	280	235	236
6	195	180	175	80	110	140	185	210	215	220	165	195	205	250	285	250	325	420	445	410	425	405	335	135	248
7	115	195	165	95	120	175	185	165	185	185	175	235	260	255	255	255	335	375	355	385	385	245	320	265	237
8	210	195	165	180	170	170	155	175	205	205	225	235	225	225	270	300	275	235	220	190	175	255	265	205	214
9	175	155	155	185	185	185	175	160	205	190	185	185	220	315	345	345	355	450	510	490	455	355	300	205	270
10	180	180	95	55	105	135	170	185	195	200	185	195	245	185	265	270	275	205	400	400	195	205	225	190	206
11	175	155	100	125	125	170	215	205	195	195	205	195	215	275	275	280	305	240	225	215	190	240	215	205	206
12 Q	200	190	180	160	155	155	150	190	210	195	200	210	215	270	270	245	255	175	170	170	225	230	230	200	203
13 Q	220	195	180	160	170	120	165	180	195	210	205	190	240	230	235	285	230	205	215	275	245	205	200	200	206
14 Q	170	165	155	155	135	170	180	195	200	190	205	235	265	240	265	275	215	205	205	155	235	205	200	205	201
15	210	130	45	135	190	180	185	185	160	170	205	235	260	255	255	290	265	265	235	235	210	135	185	80	196
16 D	125	145	145	185	135	90	-5	-15	95	130	145	120	280	305	395	470	470	455	300	445	315	190	125	50	213
17 D	-132	-173	-58	-32	-49	74	50	105	171	183	148	200	252	303	389	365	389	406	252	320	286	260	232	174	171
18	205	135	95	-55	15	30	85	35	155	180	235	260	245	200	255	315	280	325	325	275	270	115	150	210	181
19	195	145	100	25	-55	65	110	145	195	215	225	235	220	235	310	285	255	305	415	245	275	235	170	175	197
20 D	168	138	109	5	-168	18	70	190	224	231	207	224	254	258	290	242	233	181	150	154	145	159	140	150	157
21 D	115	135	105	65	75	115	85	150	170	250	230	230	245	245	255	295	345	310	405	415	300	190	190	125	210
22	-45	110	155	135	150	135	30	65	185	205	195	225	230	260	260	265	325	265	210	265	330	210	150	150	186
23 D	85	75	100	115	30	-35	60	180	205	215	225	205	235	265	315	315	345	265	335	310	235	210	210	90	191
24	70	110	85	115	115	70	155	175	230	205	200	230	235	245	230	280	290	255	245	250	275	215	185	170	193
25	95	105	185	160	120	90	175	205	195	215	215	220	235	295	255	285	345	225	235	220	205	240	175	140	146
26	205	185	170	170	155	160	175	210	235	210	220	230	235	240	245	210	215	205	175	235	265	235	195	195	207
27 Q	140	115	170	175	165	155	145	175	205	195	215	220	230	235	235	225	205	190	195	175	195	185	195	195	189
28 Q	195	195	185	180	180	175	165	180	195	205	215	215	225	235	230	225	205	185	185	175	180	190	210	190	197
29	180	180	185	195	190	155	155	185	200	195	155	55	220	220	160	325	175	155	175	305	525	620	600	320	227
30	170	195	195	190	195	120	75	210	175	75	155	210	195	255	310	295	295	290	245	280	225	215	200	200	207
31	210	200	180	165	165	165	175	175	140	115	175	160	235	215	215	240	205	200	310	415	415	365	250	210	221
Mean	151	148	133	124	115	128	136	162	191	193	196	206	236	254	274	282	279	272	269	280	272	246	231	186	207

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 24 Baker Lake — Z = 60,000 γ + — August 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		42	47	132	192	342	257	222	367	307	247	227	202	382	422	352	397	477	472	272	152	112	142	102	102	249
2		47	87	122	212	272	292	392	362	272	257	257	232	242	327	342	432	432	432	312	157	162	187	177	112	255
3		122	142	172	212	192	192	227	617	377	252	242	237	412	432	367	307	432	252	187	262	-8	87	127	142	249
4		165	160	165	165	175	165	200	215	185	220	440	310	365	320	430	580	515	350	340	375	160	60	20	25	254
5		100	125	115	125	155	155	185	175	150	155	145	165	160	160	255	235	210	275	200	150	100	100	45	15	152
6		40	50	75	170	190	170	180	160	185	275	205	205	335	305	195	350	305	225	115	260	155	145	-65	-35	175
7																										
8		125	200	240	235	245	265	305	350	385	330	305	295	380	445	415	355	250	220	195	225	235	205	105	90	267
9		88	133	223	233	253	268	258	313	438	338	308	428	513	493	513	573	413	393	293	243	93	213	213	348	316
10		300	300	285	320	330	340	350	355	355	370	375	410	390	405	415	410	460	380	410	410	335	315	280	185	354
11		170	205	250	320	345	380	380	360	350	360	360	385	390	445	455	490	375	310	310	315	320	310	330	295	342
12	Q	310	290	300	315	330	340	355	365	395	375	390	405	395	445	335	315	305	305	305	300	320	300	185	155	326
13	Q	220	290	310	315	305	330	335	340	350	345	335	390	385	470	410	435	315	300	305	280	220	260	275	230	323
14	Q	270	270	265	300	320	325	330	335	340	370	390	395	365	355	390	340	280	285	295	315	290	300	285	170	316
15		240	275	275	255	290	315	330	330	320	345	395	375	370	405	430	415	360	220	235	35	10	90	90	125	272
16	D	170	245	295	310	325	270	450	385	550	500	560	730	590	810	860	690	670	560	420	375	405	325	270	240	459
17	D																									
18		220	295	350	620	515	475	460	685	530	450	395	370	380	510	550	750	440	350	300	260	110	120	155	170	394
19		290	270	250	420	525	400	380	410	390	385	395	380	380	445	455	370	335	325	460	205	265	215	160	220	347
20	D	200	250	205	290																					
21	D	180	220	260	300	310	350	445	390	365	450	495	455	390	450	450	390	465	340	230	170	90	75	210	210	320
22		215	220	270	335	360	455	565	600	420	360	365	350	370	405	380	360	370	330	315	265	150	200	190	235	337
23	D	225	215	250	200	400	460	440	395	380	385	400	440	485	465	475	340	390	380	255	200	120	75	160	170	321
24		100	220	290	310	350	470	400	380	440	430	430	385	405	390	450	470	350	315	309	325	321	103	179	217	335
25		200	205	265	315	355	480	375	375	370	400	445	480	405	455	495	465	475	360	335	340	330	205	160	230	355
26		230	250	310	320	330	385	385	400	495	430	400	390	390	355	335	330	320	320	335	335	270	240	305	260	338
27	Q	235	270	240	290	315	340	385	380	410	370	365	365	365	360	330	325	320	330	340	350	360	350	330	330	336
28	Q	335	335	335	330	335	340	400	400	360	360	360	365	370	355	350	345	340	335	340	340	340	340	320	300	347
29		275	300	310	320	320	310	335	380	360	360	330	385	490	425	450	550	410	350	390	570	330	365	390	405	380
30		260	290	320	320	305	280	350	320	160	260	350	440	390	415	380	410	450	450	485	415	295	290	310	305	344
31		325	335	325	330	330	320	355	350	405	485	445	485	445	560	565	535	440	450	500	310	180	140	50	90	365
Mean		196	223	250	289	315	326	349	375	359	352	361	373	391	423	423	427	389	343	314	284	217	206	191	191	315

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 25 Baker Lake — X = 3500 γ + — September 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		460	400	400	430	430	455	480	500	500	510	510	510	580	560	585	625	540	675	675	495	555	745	590	430	527
2		510	450	425	455	485	465	505	520	485	470	460	370	425	400	400	365	490	670	675	460	520	420	465	480	474
3		410	415	465	430	430	445	485	475	485	490	510	520	525	490	520	715	720	660	565	750	700	445	370	285	513
4	D	505	465	430	480	570	575	360	530	530	280	445	450	445	390	480	530	440	735	740	380	445	415	350	290	469
5		385	415	395	410	435	440	455	470	450	435	435	470	530	495	500	420	370	330	365	540	365	385	305	350	423
6		285	360	405	435	445	460	455	455	430	445	440	480	505	510	450	405	365	385	435	440	440	460	480	465	435
7	Q	440	415	415	410	395	400	420	420	435	430	420	425	390	415	350	320	340	360	385	425	455	460	465	465	511
8	Q	435	435	435	430	415	430	465	455	460	445	430	480	490	465	465	465	375	375	405	460	460	450	410	450	441
9	Q	475	455	440	440	415	415	420	430	430	430	410	415	395	345	320	260	310	390	410	440	465	485	485	485	415
10	Q	500	435	440	435	430	440	440	430	440	440	430	420	425	390	395	400	340	360	425	435	470	430	375	375	421
11		420	440	440	445	420	420	470	460	440	450	435	425	400	385	300	330	390	390	410	440	490	455	460	400	421
12		355	395	440	435	420	425	440	440	435	430	435	430	425	430	400	305	270	390	400	460	470	460	475	480	414
13		440	420	425	430	430	430	450	455	440	430	435	425	415	395	355	340	370	385	405	455	460	390	340	355	411
14		420	455	400	415	440	460	465	485	460	415	445	450	410	400	360	300	270	350	425	450	470	415	460	495	421
15		395	430	445	430	435	440	455	475	400	455	450	440	425	400	380	345	390	375	440	475	400	430	470	470	427
16		430	375	370	425	445	470	465	430	445	440	440	440	440	425	410	340	280	280	375	470	470	460	460	500	420
17		445	445	440	430	435	460	480	430	440	440	410	420	405	410	270	400	370	370	395	420	220	270	370	410	399
18		430	425	425	420	420	440	450	440	440	435	420	400	450	415	365	380	315	345	290	275	290	390	290	330	487
19		265	365	405	480	385	385	440	430	410	410	420	395	345	450	410	420	435	420	405	415	395	340	400	465	404
20	D	450	420	325	355	455	315	475	475	435	470	470	400	505	495	530	455	630	515	450	465	435	475	395	300	446
21	D	300	445	365	230	440	380	230	475	470	450	450	415	455	465	330	380	325	520	480	240	310	300	350	400	384
22	D	415	400	355	395	485	510	500	515	490	460	440	450	390	365	375	435	150	315	430	505	505	505	480	410	428
23		420	430	425	430	405	370	465	465	360	455	480	430	420	440	380	360	415	650	380	375	380	415	405	380	422
24		405	410	430	380	445	475	460	455	425	425	430	450	515	380	445	460	470	375	530	550	550	500	455	450	453
25	D	385	375	385	440	430	480	485	485	470	460	455	470	445	480	460	430	460	480	515	500	415	450	335	435	447
26		450	410	375	415	430	425	470	435	410	400	460	485	440	455	360	335	410	380	475	540	455	495	455	395	432
27		360	400	410	420	425	455	490	420	480	450	400	410	500	485	450	520	500	405	400	495	515	500	480	440	450
28		470	410	385	395	420	440	460	470	460	420	460	435	440	420	490	405	360	525	480	380	490	450	455	460	441
29	Q	420	410	405	385	415	430	440	445	445	430	425	445	485	535	450	340	310	340	415	450	495	505	465	460	431
30		420	390	415	430	435	445	455	455	440	440	450	440	415	475	455	475	485	325	360	460	430	495	440	450	440
31																										
Mean		417	417	411	418	435	439	451	461	448	438	443	440	448	439	415	409	397	436	451	452	457	446	428	419	434

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 26 Baker Lake — Y in gammas — September 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	170	110	40	120	150	165	130	155	170	175	195	225	210	275	300	295	395	455	485	450	490	375	260	200	250
2	155	85	90	65	75	95	225	195	235	165	195	250	245	235	205	215	215	290	415	475	415	315	265	235	223
3	135	155	175	155	145	135	145	165	185	225	230	220	225	215	215	290	315	360	520	395	355	290	140	0	225
4 D	180	15	50	-15	95	95	-25	125	255	125	185	235	290	295	315	365	420	370	395	405	285	285	165	180	212
5	115	45	10	135	160	160	190	215	215	235	230	190	235	290	280	250	225	270	365	355	210	195	175	60	200
6	35	85	60	115	155	165	205	215	220	215	230	225	235	235	255	255	205	180	185	195	190	205	210	210	187
7 Q	190	180	180	180	155	155	185	195	195	195	215	210	220	235	245	255	265	190	205	200	215	195	180	190	201
8 Q	185	185	180	175	175	185	185	200	195	215	240	215	235	275	285	275	235	200	200	235	265	215	175	185	213
9 Q	195	180	175	165	165	175	180	190	190	190	215	215	215	220	225	245	215	195	180	225	225	240	255	220	204
10 Q	185	175	180	180	180	170	185	185	195	195	215	215	225	220	220	220	225	235	225	165	205	220	160	185	199
11	155	165	140	105	85	140	165	205	210	220	225	235	245	265	260	235	215	195	205	235	260	210	180	135	195
12	110	120	75	135	180	175	175	190	215	205	220	220	220	220	215	260	255	215	275	250	220	215	200	185	208
13	155	155	170	180	180	185	200	200	215	215	220	220	225	225	220	220	220	215	205	220	215	235	135	155	199
14	180	135	140	140	115	125	170	155	165	215	200	220	240	235	255	240	235	190	200	215	220	220	200	185	191
15	150	155	170	180	180	180	165	180	165	205	205	200	235	225	225	230	285	215	225	245	265	245	195	175	204
16	135	55	55	75	125	115	135	155	205	205	205	215	215	230	235	245	255	225	205	265	275	200	195	195	184
17	185	175	175	175	165	165	170	180	195	205	245	230	240	205	235	255	235	215	280	280	255	215	155	175	209
18	110	140	135	155	175	185	190	195	205	255	255	245	240	235	240	240	240	285	255	165	165	185	125	130	198
19	90	70	125	135	-0	125	190	215	215	215	215	195	235	255	255	235	230	200	185	170	145	145	190	185	176
20 D	205	185	90	85	125	55	140	235	205	245	275	340	330	370	415	295	285	285	375	305	425	260	105	45	237
21 D	70	110	-5	75	110	110	-25	135	255	240	250	235	285	305	345	415	345	385	315	195	225	195	195	115	203
22 D	125	55	-5	30	75	120	185	215	245	275	300	230	240	245	355	375	235	220	295	295	280	235	215	180	209
23	200	185	180	175	60	60	145	195	165	175	205	245	220	250	280	325	350	375	385	330	270	235	170	125	221
24	175	135	65	75	95	95	170	195	235	240	210	200	210	365	325	290	235	225	255	325	300	230	195	165	208
25 D	70	10	80	75	115	175	170	155	205	240	280	245	275	295	335	345	400	395	360	335	215	210	190	185	223
26	145	105	105	105	140	140	170	220	175	195	215	235	305	255	245	220	240	205	280	315	285	270	195	155	205
27	100	135	105	165	175	135	145	145	190	220	245	215	245	285	300	300	305	210	255	275	290	255	225	205	214
28	170	105	105	145	140	150	145	140	215	235	195	205	215	215	255	230	220	295	295	210	255	200	205	175	197
29 Q	135	135	115	135	160	170	195	200	210	235	215	215	230	235	280	210	200	200	190	195	240	265	235	200	200
30	160	150	175	185	195	195	195	205	205	225	265	240	225	285	320	305	290	200	270	270	260	255	200	200	228
31																									
Mean	146	123	114	127	135	143	160	185	205	213	226	226	243	257	271	271	266	257	283	274	264	234	190	165	207

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 27 Baker Lake $Z = 60,000\ \gamma +$ September 1959

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		140	240	280	330	355	375	450	470	445	420	410	445	505	490	500	460	550	465	305	180	45	120	225	315	355
2		270	335	345	380	410	445	455	460	560	670	545	410	405	425	435	385	620	570	370	230	145	160	145	225	392
3		250	240	300	335	260	290	415	470	460	470	480	470	410	450	510	420	300	320	270	470	435	225	50	170	353
4	D	230	330	340	380	415	445	700	605	550	920	600	500	480	460	590	810	580	620	420	290	200	190	155	140	456
5		190	270	470	330	325	370	395	470	445	520	520	485	460	460	600	530	430	455	385	330	250	100	85	165	377
6		255	305	355	355	360	380	390	390	390	375	370	385	390	415	475	500	460	450	395	370	355	355	325	300	379
7	Q	320	320	330	340	350	390	360	360	350	360	390	400	420	395	380	340	385	420	310	330	350	320	310	290	355
8	Q	325	335	335	340	350	350	365	420	420	420	420	405	410	470	500	420	370	310	325	330	300	230	195	210	356
9	Q	245	310	340	350	340	340	340	345	350	360	370	385	385	405	390	410	370	330	330	290	315	275	185	260	334
10	Q	295	320	330	330	340	345	360	360	355	360	360	360	355	390	360	390	330	280	305	310	305	155	225	275	325
11		280	300	315	345	390	370	355	355	360	350	360	385	430	485	440	370	330	330	325	280	280	210	170	200	334
12		250	280	325	325	340	345	350	350	360	350	370	360	370	370	415	480	380	350	325	300	280	265	270	290	338
13		280	300	315	325	330	340	350	370	390	365	360	360	365	385	385	335	310	300	310	320	295	170	200	230	320
14		270	320	315	340	360	380	370	420	475	415	390	390	410	455	490	480	370	335	330	335	260	200	255	255	358
15		280	290	315	325	335	340	340	410	530	400	385	405	385	435	430	405	430	295	250	280	210	190	230	270	340
16		260	310	345	330	345	390	410	360	350	360	365	365	370	385	485	460	480	330	300	275	240	310	320	260	351
17		300	310	325	335	370	420	420	420	385	385	395	440	420	370	460	430	355	310	275	255	265	370	190	240	353
18		260	270	315	340	345	345	360	360	350	395	415	440	440	435	435	435	340	265	290	220	245	160	150	220	326
19		270	280	320	350	490	430	365	360	375	360	375	435	410	380	435	435	430	375	320	270	245	245	255	320	355
20	D	340	320	340	405	445	720	610	480	640	500	490	760	550	490	620	450	390	350	355	285	35	75	110	170	414
21	D	275	330	525	480	400	590	700	570	525	480	450	500	515	565	525	485	455	290	280	215	305	270	245	250	426
22	D	300	320	380	420	420	435	455	735	530	530	545	500	520	570	560	560	480	455	410	290	265	320	315	255	440
23		310	345	345	360	500	545	460	445	630	560	490	470	650	645	625	565	450	415	405	280	215	130	170	240	427
24		260	310	385	385	400	520	430	410	435	460	400	435	480	610	670	520	450	505	505	280	170	200	285	285	408
25	D	330	410	355	385	405	445	500	480	510	470	470	465	420	430	480	495	440	410	305	275	220	165	210	175	385
26		280	315	350	360	375	420	460	545	620	615	500	495	560	670	565	460	540	470	445	310	265	250	255	255	433
27		255	250	310	335	365	370	480	520	455	430	505	670	630	550	510	455	425	470	395	320	280	235	215	335	407
28		310	335	370	335	350	390	405	490	445	550	495	445	440	455	495	430	420	460	360	375	260	285	220	280	392
29	Q	310	340	375	385	380	380	380	390	390	465	510	455	445	445	475	520	450	405	355	370	350	260	310	330	395
30		345	345	340	360	375	370	380	390	390	400	495	470	460	460	455	430	395	395	340	280	220	170	225	270	365
31																										
Mean		274	309	343	356	378	409	427	440	449	457	441	450	450	465	490	462	424	391	343	298	254	220	217	249	375

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 28 Baker Lake — X = 3500 γ + — October 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	415	405	380	380	445	485	510	515	495	490	470	485	475	475	490	480	575	485	635	480	530	445	430	450	476
2	455	420	400	420	255	365	490	510	475	455	440	460	450	425	415	395	380	405	405	410	420	435	420	430	422
3 D	425	445	440	420	425	440	470	460	475	440	405	380	310	245	400	380	400	380	325	340	265	290	315	280	381
4 D	325	375	400	435	445	480	475	470	410	470	460	445	405	385	420	515	500	450	430	540	435	470	360	360	436
5	425	430	335	340	370	380	430	410	445	440	415	455	410	350	330	445	590	490	695	665	480	480	540	440	449
6 D	390	410	400	480	420	420	265	500	500	470	355	445	440	445	415	500	610	670	540	440	460	360	445	405	449
7	390	390	405	335	320	455	455	455	435	430	410	405	430	380	360	360	365	380	395	425	455	375	400	430	407
8	405	415	340	415	350	340	385	390	425	440	395	430	405	360	395	390	360	405	435	445	465	475	495	460	409
9	440	410	395	390	400	425	440	450	440	440	430	420	410	370	375	405	380	380	410	430	475	500	495	480	425
10 Q	445	425	410	420	430	425	435	440	440	435	430	425	415	405	395	345	335	390	430	445	460	475	475	455	424
11 Q	420	440	435	430	430	430	435	440	440	425	410	425	415	405	385	355	365	385	405	435	485	525	515	480	430
12	460	460	455	430	430	420	420	410	405	405	415	395	400	380	330	290	290	360	380	385	385	450	460	445	403
13 Q	430	430	430	435	435	435	445	450	430	430	450	440	425	405	380	400	385	405	425	430	445	440	445	460	429
14	425	430	440	435	430	435	440	450	440	430	435	390	375	365	335	320	390	390	405	360	380	415	430	410	406
15	380	435	445	430	390	440	435	450	450	430	440	425	435	390	420	460	410	400	400	425	390	350	420	445	421
16 Q	450	430	415	425	425	430	450	440	435	435	435	430	430	415	385	355	330	375	400	430	455	445	440	430	420
17	440	445	450	440	440	440	440	440	440	460	420	410	420	395	375	345	300	280	375	425	345	385	335	410	402
18	425	405	335	420	445	425	440	445	455	395	395	430	410	445	400	360	395	425	425	425	330	355	390	395	407
19	375	395	415	435	450	410	415	430	435	445	395	430	420	410	380	365	375	370	395	410	440	445	455	400	412
20	380	440	435	430	430	440	450	335	400	425	430	420	415	405	365	370	385	395	405	410	420	440	430	430	412
21	430	425	430	430	425	430	435	430	430	430	430	425	415	400	375	375	380	415	415	430	495	495	450	460	427
22	440	410	390	435	450	455	455	445	475	455	445	425	425	430	415	445	400	510	515	480	515	415	390	395	442
23	435	400	380	395	440	440	435	445	450	445	375	415	410	395	370	355	355	375	410	430	435	430	430	425	411
24	430	435	435	430	430	430	435	440	435	440	450	450	445	455	455	365	385	390	425	440	445	480		435	
25	435	435	445	415	455	470	480	475	460	435	415	420	415	450	515	585	560	390	420	470	490	480	410	350	453
26	380	405	415	420	430	435	465	485	475	455	455	430	420	435	400	305	375	430	410	370	460	455	425	435	424
27	435	440	425	415	430	390	380	465	415	430	445	435	435	435	440	410	310	390	400	420	440	465	480	460	425
28 Q	435	440	440	440	435	440	445	455	440	450	440	445	425	410	400	385	410	420	415	430	440	455	455	450	433
29	435	435	435	425	430	440	425	450	445	445	445	445	435	405	390	390	380	415	435	450	455	460	450	450	432
30	460	425	415	430	430	450	450	440	440	440	450	430	445	435	445	455	410	505	530	550	420	385	355	335	439
31 D	425	435	420	405	420	435	445	450	460	430	450	400	255	360	410	375	375	420	345	380	320	315	380	400	397
Mean	420	423	412	419	417	430	438	448	445	440	427	427	413	400	397	397	402	416	434	439	433	430	431	422	423

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 29 Baker Lake — Y in gammas — October 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	135	125	90	35	60	110	135	190	180	215	250	275	280	295	290	275	270	290	350	355	280	240	210	185	213
2	155	160	175	135	-15	-65	100	155	260	275	235	235	225	225	225	225	225	185	220	185	205	190	185	165	178
3 D	175	195	195	185	170	125	125	190	235	210	215	220	225	250	295	345	315	370	390	320	225	170	105	45	221
4 D	55	50	40	40	-15	125	190	200	220	240	235	235	300	345	305	310	305	200	200	355	240	230	195	170	209
5	170	145	30	-15	20	80	155	170	200	220	260	220	255	305	285	345	405	390	320	350	315	235	260	105	218
6 D	145	135	90	20	0	105	105	160	245	295	305	265	295	345	330	320	335	340	205	320	270	195	185	155	215
7	145	145	150	130	85	145	185	195	200	225	225	235	210	230	230	215	210	205	200	225	245	220	190	170	192
8	175	155	120	135	120	45	100	100	185	195	240	215	215	215	235	235	210	195	205	215	215	210	220	200	181
9	190	180	155	160	175	170	155	165	185	210	210	215	220	220	220	230	215	205	220	240	240	220	215	200	201
10 Q	185	175	175	195	185	175	185	205	215	215	215	210	205	205	205	220	225	220	220	205	215	215	210	195	203
11 Q	190	190	185	180	175	185	185	185	195	200	215	205	205	210	215	220	215	200	205	220	255	245	230	215	205
12	185	150	135	140	110	135	140	185	185	185	205	205	205	225	225	235	245	185	210	255	225	210	200	190	190
13 Q	185	185	185	185	185	185	180	190	200	205	210	215	215	210	210	210	210	195	195	180	180	195	195	185	195
14	185	185	185	190	190	190	190	200	215	205	220	250	235	225	225	225	210	235	235	190	170	175	190	170	204
15	135	170	175	135	125	170	195	195	205	215	225	225	225	235	250	245	235	235	235	235	230	185	175	195	202
16 Q	180	170	170	185	185	185	195	195	200	205	205	205	200	205	220	225	205	180	200	190	220	195	190	185	196
17	190	190	195	195	195	195	190	190	225	235	275	235	235	235	230	225	230	235	195	235	190	170	150	150	208
18	180	115	70	155	165	190	195	210	230	285	255	205	235	260	265	280	285	235	190	235	170	165	145	170	204
19	170	160	160	150	-15	110	180	195	210	200	245	210	210	215	225	225	215	220	235	185	190	190	190	175	185
20	175	190	185	190	185	170	155	155	155	200	205	215	205	205	205	195	190	185	185	180	180	190	190	190	187
21	195	195	195	195	195	195	190	200	205	205	205	205	210	210	215	215	195	185	190	190	220	230	225	205	203
22	190	160	115	165	175	165	190	170	205	235	255	285	280	260	265	260	380	280	280	290	285	205	155	130	225
23	155	125	85	105	130	175	195	185	220	220	255	215	205	205	205	205	200	195	195	185	180	185	185	190	183
24	190	190	195	185	190	190	190	200	235	225	225	225	240	265	265	225	215	205	200	205	210	230		210	213
25	180	155	135	-25	135	175	195	215	220	210	265	270	280	260	250	250	230	195	195	215	250	220	175	130	199
26	125	155	165	170	115	90	110	155	205	245	235	245	255	250	275	355	310	225	265	205	220	235	190	190	208
27	185	190	165	160	140	75	140	180	215	230	235	250	240	265	260	215	210	205	200	205	210	210	210	210	200
28 Q	205	195	190	195	185	190	170	210	240	225	220	215	220	220	215	215	205	205	200	195	200	205	205	205	205
29	200	195	190	185	180	145	155	200	215	220	220	225	230	230	230	215	210	200	190	210	205	205	200	200	202
30	175	145	90	90	170	195	195	205	215	225	220	225	225	225	225	240	215	280	250	285	185	140	105	100	193
31 D	175	190	190	185	175	175	185	205	205	250	250	295	340	315	265	280	295	285	225	235	210	175	170	175	227
Mean	170	162	146	138	129	144	165	185	210	223	234	231	236	243	243	248	247	232	228	236	221	204	188	172	202

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 30 Baker Lake — $z = 60,000\ \gamma +$ — October 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	300	325	350	410	415	435	435	560	490	415	440	555	470	450	380	360	370	410	355	220	65	130	240	300	371
2	280	310	330	320	455	545	420	420	430	455	405	410	400	420	440	440	380	335	280	285	200	200	220	255	360
3 D	290	315	330	335	350	375	415	420	485	465	425	430	585	685	550	500	470	430	390	285	225	240	250	250	395
4 D	290	295	340	380	655	435	410	410	650	570	465	455	445	500	690	550	505	495	385	255	220	240	250	265	423
5	255	305	375	440	450	450	415	380	395	410	435	455	475	660	570	415	360	300	270	225	170	130	235	225	367
6 D	295	305	340	525	510	430	565	585	565	550	680	560	470	445	440	360	290	335	500	300	250	265	230	230	418
7	285	320	345	435	460	440	425	440	440	425	395	390	455	450	430	390	360	375	340	355	270	190	215	245	369
8	300	335	385	370	425	475	410	365	375	395	425	425	425	465	495	440	385	360	355	355	355	355	335	335	389
9	320	310	335	335	330	340	365	475	480	435	420	425	450	465	490	500	380	330	330	295	295	300	300	280	374
10 Q	280	290	305	320	320	345	350	370	370	380	380	390	380	390	400	410	360	345	355	375	355	335	320	295	351
11 Q	315	325	325	320	330	345	345	355	370	370	360	355	370	385	375	345	310	310	310	320	280	255	250	265	329
12	287	316	319	322	333	336	339	337	330	330	340	350	355	360	380	380	385	355	285	230	230	235	295	320	323
13 Q	335	335	340	330	330	340	355	365	365	340	345	345	350	370	370	350	345	315	300	300	300	300	305	310	335
14	320	320	325	330	335	335	340	355	350	355	355	395	470	480	410	350	315	340	300	215	145	185	190	210	322
15	235	240	280	330	360	335	345	350	350	345	355	365	395	380	485	365	285	295	300	255	185	200	220	290	314
16 Q	310	310	320	320	330	330	340	340	340	340	340	340	345	355	355	380	330	320	320	325	300	320	330	330	332
17	330	325	315	315	320	320	325	335	340	365	390	380	380	380	360	340	310	240	235	265	160	165	215	250	307
18	270	300	335	295	320	335	345	350	385	555	550	495	430	430	425	410	340	330	330	290	225	240	220	275	353
19	315	310	310	340	545	380	350	355	350	370	395	390	375	375	360	350	335	340	330	330	315	295	300	280	350
20	290	320	330	330	330	330	360	470	510	470	430	395	365	375	375	355	340	330	345	355	350	340	340	340	366
21	340	340	340	340	340	345	350	340	340	340	345	345	350	365	365	365	340	345	360	355	330	260	245	305	337
22	305	305	310	335	350	355	390	560	470	505	520	550	470	415	390	375	350	350	265	210	230	215	200	210	360
23	260	300	335	380	370	355	340	360	430	450	550	490	415	400	400	410	390	375	370	355	335	335	335	335	378
24	335	335	330	330	335	335	345	355	365	380	380	370	360	380	445	430	450	380	340	348	305	320		325	
25	320	310	345	570	375	375	380	410	430	415	410	440	450	400	380	335	350	405	360	325	280	280	230	270	369
26	260	270	315	320	360	420	410	390	400	520	525	420	400	415	410	520	420	395	390	290	280	255	245	270	371
27	270	290	305	325	345	570	475	470	600	510	420	405	380	420	385	395	380	345	330	320	325	325	305	305	383
28 Q	315	320	330	325	335	340	355	370	400	425	390	365	360	340	335	330	325	335	330	330	330	330	330	320	344
29	320	320	325	330	340	405	485	400	380	385	385	365	375	405	370	350	320	300	320	340	335	325	325	315	355
30	290	310	325	375	355	340	345	335	340	340	340	345	345	355	345	360	390	490	420	195	145	195	255	220	323
31 D	250	300	305	320	340	345	355	400	435	480	495	455	610	620	400	385	330	315	315	270	290	275	290	290	370
Mean	294	309	329	357	380	383	385	402	420	424	424	416	418	432	419	394	358	352	336	298	259	258	268	280	358

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 31 Baker Lake — X = 3500 γ + — November 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	400	405	380	370	410	365	450	490	445	260	480	410	390	365	435	485	515	515	575	575	570	540	440	420	445
2 D	360	315	380	285	280	400	445	490	110	405	485	435	315	315	445	445	415	260	350	540	340	340	365	330	369
3 D	285	355	345	200	395	430	400	395	445	445	395	395	340	415	365	295	385	410	325	320	405	310	330	380	365
4	420	425	420	415	415	420	420	325	420	405	415	335	300	335	390	320	310	410	395	340	295	390	380	375	378
5	345	370	295	360	285	300	295	300	320	365	415	415	375	415	480	385	345	390	400	455	455	450	445	450	380
6	410	310	265	360	430	435	190	350	430	420	385	395	325	400	425	490	460	410	420	425	460	410	440	460	396
7	440	430	430	425	375	400	325	360	430	425	425	410	410	405	385	415	390	375	420	410	415	440	440	430	409
8	445	440	435	350	385	450	445	450	445	425	400	400	410	400	390	360	315	415	440	485	465	440	435	435	419
9	430	430	425	440	435	430	430	430	435	435	435	435	435	425	415	360	355	350	315	260	360	370	455	420	405
10	400	395	425	430	425	420	405	435	435	445	435	420	380	355	345	360	335	390	420	435	445	390	385	465	407
11 Q	420	430	460	440	425	430	430	430	430	425	430	415	425	420	405	400	390	405	415	430	460	465	420	410	425
12 Q	450	445	410	410	420	430	430	430	425	430	430	425	420	420	405	375	365	370	350	400	430	450	425	375	413
13	420	430	420	430	435	435	440	440	440	440	410	430	410	385	350	360	345	320	350	380	385	335	365	465	401
14	410	400	405	380	435	440	440	460	435	430	440	420	365	385	390	380	400	265	345	425	405	385	360	415	401
15 Q	430	430	415	410	420	430	435	430	430	420	415	415	395	365	350	350	360	385	405	425	440	460	455	440	413
16	440	435	435	435	430	430	430	435	435	430	430	430	425	425	425	375	420	420	425	430	415	405	455	455	428
17	445	435	420	355	220	295	410	445	445	450	450	410	360	385	410	400	400	395	415	430	435	435	435	425	404
18	435	415	370	395	400	470	465	490	475	430	435	415	425	435	395	375	400	455	380	445	470	450	415	435	428
19	430	425	420	420	425	420	450	435	420	405	430	415	400	335	380	375	350	360	390	425	430	445	460	445	412
20 Q	420	380	390	420	420	415	430	430	425	420	425	420	410	400	400	395	405	410	415	425	435	430	430	430	416
21	430	430	425	405	370	345	440	455	460	445	440	380	320	290	330	385	450	515	520	435	395	385	395	375	409
22	400	410	420	405	345	425	445	440	440	445	440	420	380	315	390	370	380	420	470	490	355	415	435	425	412
23	340	305	375	395	465	465	465	450	445	470	365	295	365	380	340	320	330	360	420	400	400	445	455	445	396
24 Q	445	420	410	405	375	425	430	430	430	430	430	425	420	420	400	400	340	390	430	435	470	450	455	445	421
25	435	425	430	430	430	420	435	450	445	410	445	415	360	365	380	380	420	435	455	465	425	410	405	405	420
26	425	435	430	445	445	450	455	440	450	460	370	335	415	425	390	375	365	405	425	445	455	445	385	380	419
27	355	420	420	430	425	430	435	415	400	430	430	410	385	365	335	315	320	350	385	380	405	400	395	425	394
28 D	310	340	305	315	440	485	455	365	445	480	425	380	415	425	445	465	460	450	445	480	405	380	375	425	413
29	390	370	350	375	400	325	455	435	420	415	365	300	410	395	390	410	475	485	445	445	455	460	460	450	412
30 D	435	410	400	375	395	420	420	440	430	330	415	425	355	375	300	300	325	325	435	405	445	425	380	340	388
31																									
Mean	407	402	397	390	398	414	420	426	421	421	423	401	385	385	386	381	384	394	413	428	424	418	416	419	406

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 32 Baker Lake — Y in gammas — November 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	145	135	110	145	105	60	115	175	225	155	255	305	285	335	290	280	295	330	325	280	330	270	220	220	225
2 D	150	60	30	-80	-50	0	145	195	125	190	285	275	295	370	360	325	315	280	255	235	175	200	140	100	184
3 D	85	105	40	75	125	115	145	50	170	275	280	250	235	270	320	320	295	340	265	235	225	185	155	190	198
4	185	190	190	185	175	135	150	20	140	195	225	270	285	280	310	320	335	200	235	275	205	150	115	135	204
5	65	120	105	135	120	105	45	-75	125	195	245	245	220	245	275	245	215	225	225	225	225	210	195	195	172
6	175	105	75	110	160	145	-65	155	205	210	235	235	215	195	205	225	275	245	245	280	245	205	185	205	186
7	190	190	185	180	125	155	175	175	215	225	205	205	215	210	210	240	230	230	255	245	235	190	195	195	203
8	205	205	180	110	100	165	205	220	215	220	240	235	240	245	255	210	200	260	235	230	195	195	195	195	206
9	195	195	195	195	190	195	200	200	205	205	205	205	215	215	215	220	250	220	195	225	210	175	195	185	204
10	165	175	175	190	175	155	135	185	205	205	210	220	240	240	240	235	250	225	225	210	200	175	170	215	201
11 Q	155	205	220	215	205	195	205	200	205	225	230	220	215	215	215	215	215	215	205	205	220	220	190	195	209
12 Q	205	185	185	170	165	190	195	200	205	205	210	215	215	215	215	220	230	215	245	190	200	200	180	170	201
13	185	195	185	190	195	185	170	195	215	220	225	230	215	220	230	225	225	230	215	200	190	165	180	200	204
14	140	150	140	160	180	200	190	205	245	235	210	250	275	265	295	260	225	265	210	235	220	175	165	200	212
15 Q	205	185	195	185	185	195	205	205	205	205	220	225	220	215	220	220	210	205	190	200	205	210	225	215	206
16	200	200	200	200	195	195	195	195	200	215	210	205	210	215	225	235	255	245	250	245	220	205	215	205	214
17	205	190	170	125	55	70	90	205	205	195	205	265	275	240	215	210	195	200	205	195	195	195	205	205	188
18	205	195	185	150	105	170	195	185	215	240	235	245	230	235	240	225	210	300	265	225	215	210	215	210	213
19	205	195	195	200	185	180	195	185	235	240	235	235	235	245	245	265	205	190	180	195	195	200	205	200	210
20 Q	195	175	180	200	185	175	185	200	210	210	215	215	210	210	210	210	205	205	210	195	205	195	200	200	200
21	200	200	190	140	130	90	180	195	215	230	220	275	330	340	325	305	245	235	275	235	205	190	175	160	220
22	160	180	165	130	125	165	180	205	225	215	225	235	265	215	210	205	205	250	235	225	165	185	185	165	197
23	85	45	65	80	95	125	170	175	200	240	315	270	300	315	290	275	220	235	230	225	205	195	195	195	198
24 Q	195	185	175	165	155	185	195	205	210	205	205	205	220	220	245	255	200	205	220	225	205	200	200	185	203
25	190	195	190	185	185	175	185	190	215	225	240	255	315	305	245	215	220	235	245	230	220	185	175	190	217
26	195	190	175	165	175	170	180	205	210	225	300	275	225	215	210	205	195	215	195	215	220	200	175	185	205
27	175	190	190	185	185	175	160	180	190	205	210	205	220	220	225	230	220	245	240	245	210	180	180	210	203
28 D	120	180	85	-70	-55	75	55	130	165	235	315	290	295	265	250	245	215	190	235	255	215	190	185	210	177
29	160	145	65	125	145	60	140	180	195	200	200	265	275	275	310	320	285	270	235	255	225	215	215	205	207
30 D	205	175	165	150	145	165	165	160	225	100	235	290	325	300	305	355	285	275	225	215	190	195	170	170	216
31																									
Mean	171	168	153	143	139	147	156	170	201	211	235	244	251	252	254	251	238	239	232	228	212	195	187	190	203

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 33 Baker Lake $z = 60,000\ \gamma +$ November 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 tc 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	305	310	350	370	380	545	490	505	575	845	600	590	515	560	440	390	295	265	230	200	250	260	220	210	404
2 D	220	270	410	460	485	460	435	495	735	655	555	450	525	625	415	385	385	475	280	140	205	220	245	300	410
3 D	340	315	365	275	335	475	620	515	540	510	480	500	565	495	495	570	270	360	315	350	260	255	285	310	408
4	320	335	350	360	360	400	450	400	430	495	510	525	670	580	555	500	515	390	400	230	285	250	315	315	414
5	340	345	410	440	485	490	335	420	470	530	525	515	435	480	415	480	415	390	390	375	335	320	330	335	417
6	355	380	490	415	390	445	655	540	465	435	470	515	585	460	430	545	405	395	360	305	295	280	280	340	426
7	350	355	360	365	420	420	415	430	395	410	420	410	405	430	465	470	440	415	395	305	240	335	360	365	391
8	360	350	350	410	440	395	420	440	435	415	450	490	520	510	500	540	460	410	335	350	350	335	350	345	415
9	355	355	355	355	355	360	360	360	355	350	355	360	355	365	380	410	440	385	320	255	180	200	240	235	335
10	285	305	300	320	335	350	385	375	360	375	380	375	410	460	410	365	320	320	320	335	285	245	265	270	340
11 Q	275	260	300	335	350	345	350	360	370	380	385	385	360	360	370	350	340	335	345	345	325	295	290	310	338
12 Q	330	330	325	325	345	350	345	345	350	355	360	365	360	355	360	360	330	310	290	275	305	300	285	305	332
13	315	315	315	325	335	345	360	375	380	375	365	395	360	370	405	375	355	300	265	245	200	220	270	245	325
14	255	285	320	350	325	340	350	375	445	405	405	420	410	470	480	400	300	350	260	240	220	220	305	305	343
15 Q	295	310	320	345	345	355	360	350	350	360	370	405	420	400	360	330	335	335	340	335	335	325	315	335	347
16	340	340	340	340	340	345	340	340	340	360	345	345	350	365	380	420	410	300	280	240	230	270	260	310	330
17	325	325	335	420	590	520	325	365	340	365	380	435	475	520	435	380	365	375	360	355	350	350	350	325	390
18	322	334	362	400	420	400	396	474	510	606	528	498	436	456	452	472	418	406	360	348	368	394	384	388	422
19	350	335	350	345	360	370	420	480	485	550	440	460	445	500	490	470	425	360	365	365	365	365	315	325	406
20 Q	335	340	315	330	345	365	360	380	380	370	375	380	370	370	370	365	360	360	360	365	360	360	345	340	358
21	335	340	340	360	410	425	405	380	400	420	410	525	675	620	520	395	265	405	385	365	310	300	290	315	400
22	320	325	350	400	415	355	380	375	410	400	385	385	395	425	430	425	380	390	350	290	315	285	300	300	366
23	330	325	330	335	360	410	405	585	510	440	655	685	600	545	455	475	455	430	395	315	305	340	350	350	433
24 Q	325	340	350	355	365	355	355	350	360	355	350	355	405	390	430	460	395	350	345	320	345	280	325	325	358
25	315	320	330	335	340	345	345	350	435	535	490	450	520	525	460	455	455	440	365	315	275	295	305	310	388
26	330	330	330	345	350	375	375	535	490	430	525	690	465	395	405	385	365	350	360	335	290	310	320	350	393
27	265	265	305	330	335	345	370	370	355	365	360	385	390	420	420	380	340	300	260	250	235	235	280	260	326
28 D	285	310	305	450	575	440	465	535	475	400	475	445	380	365	365	365	410	410	360	295	275	275	280	285	384
29	310	330	345	270	385	450	450	440	395	400	590	765	585	460	440	450	430	375	400	370	335	270	315	315	411
30 D	330	335	365	395	405	395	410	440	480	780	650	530	455	420	435	435	390	285	265	320	300	260	305	270	402
31																									
Mean	317	324	345	362	390	399	405	423	434	456	453	468	462	456	432	427	382	366	335	303	291	288	303	370	383

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 34 Baker Lake — X = 3500 γ + — December 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	390	420	400	380	410	445	450	420	415	435	420	400	375	365	315	410	475	450	430	395	460	465	450	465	418
2	405	395	400	385	385	345	360	400	450	370	400	40	295	335	390	365	350	480	475	330	350	435	440	425	375
3 D	355	370	425	305	280	320	485	435	310	360	495	380	360	130	330	345	430	455	355	310	340	320	385	425	363
4	410	420	405	400	400	430	440	445	435	395	415	415	415	370	350	375	415	430	415	450	470	440	430	435	417
5 D	430	435	425	425	425	425	440	420	410	420	420	475	295	305	305	300	325	360	255	220	240	265	370	405	366
6	415	410	395	395	395	430	385	390	450	450	445	410	410	405	405	380	345	400	435	420	425	445	460	415	413
7 Q	390	355	375	440	425	420	420	420	425	425	425	425	425	415	415	375	345	400	395	415	435	450	450	440	413
8	445	450	450	435	420	420	430	440	440	445	435	425	430	425	410	370	345	375	380	410	385	345	395	445	415
9	455	445	430	430	435	440	445	440	425	460	440	440	410	415	400	385	380	385	420	425	435	440	445	450	428
10 Q	455	460	425	415	405	440	425	425	415	410	440	435	430	425	415	390	340	400	425	460	450	445	450	455	426
11 Q	445	450	445	435	435	435	435	420	440	435	445	430	420	420	410	355	375	365	415	440	445	460	455	430	427
12	460	475	450	365	350	445	445	460	455	430	400	435	420	375	380	385	390	390	405	420	410	345	330	370	408
13	400	410	410	425	410	440	420	435	430	425	430	425	425	415	415	390	365	320	340	380	305	300	305	385	392
14 D	440	430	400	445	310	350	425	375	460	410	430	300	430	330	265	360	375	365	460	420	440	425	405	430	395
15	440	425	380	365	390	340	315	305	345	425	415	450	405	425	425	450	495	500	395	425	470	470	400	400	411
16	430	435	410	410	415	405	250	315	445	425	365	360	400	390	380	370	395	405	530	500	460	455	425	380	407
17	400	425	430	425	425	420	415	265	345	445	435	420	400	395	370	375	370	410	415	435	455	465	465	445	410
18	430	440	435	425	430	430	435	350	315	420	405	450	390	405	380	385	360	385	430	440	455	455	430	425	413
19	420	430	420	435	450	455	465	340	390	425	445	415	400	330	355	380	435	505	510	425	430	445	455	450	425
20	435	420	420	430	420	425	390	425	440	440	440	440	415	400	380	380	380	425	465	410	435	435	450	445	423
21 Q	430	435	430	430	430	440	445	450	450	420	425	430	430	415	415	400	385	400	405	420	450	460	450	440	429
22 Q	420	440	465	435	435	430	435	430	440	435	445	440	440	425	415	410	355	430	465	440	445	400	370	465	430
23	455	450	455	430	435	440	365	440	435	435	430	425	415	395	370	300	325	155	255	380	390	400	375	325	387
24	360	420	430	415	415	420	430	425	430	405	390	345	360	410	430	455	460	430	410	380	395	430	445	455	414
25	435	410	405	385	380	410	435	415	430	405	400	400	390	385	365	395	345	360	430	420	430	455	475	455	409
26	450	435	425	420	350	245	265	410	460	450	445	295	180	380	385	350	325	425	460	410	395	440	400	365	382
27 D	345	360	370	395	485	325	395	440	455	360	345	385	400	395	360	370	405	450	495	450	430	465	420	320	401
28 D	225	350	405	390	395	380	360	290	375	395	395	330	250	270	300	250	310	400	225	410	480	415	420	420	351
29	410	390	380	395	260	295	415	400	415	385	415	390	330	285	325	390	410	370	405	430	450	460	455	430	387
30	430	440	430	410	320	300	420	385	440	410	410	410	295	360	360	200	380	480	420	460	445	455	440	435	395
31	435	425	390	385	410	370	400	380	340	445	430	405	430	430	345	375	380	395	430	450	480	460	450	445	412
Mean	414	421	417	408	398	397	408	400	416	419	422	394	383	375	373	368	380	403	411	412	422	424	424	422	405

EAST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 35 Baker Lake — Y in gammas — December 1959

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	165	190	125	65	120	130	170	245	225	235	260	265	305	295	260	245	265	230	235	255	210	200	200	200	212
2	170	175	145	145	105	-50	170	165	215	215	245	270	285	300	320	325	240	265	280	205	180	185	185	155	204
3 D	145	105	55	20	60	-15	145	210	180	145	95	290	345	250	335	285	270	240	255	225	220	185	200	195	185
4	175	180	140	135	185	165	180	180	225	235	215	220	225	215	205	205	215	190	190	210	215	205	195	195	196
5 D	200	200	195	190	195	180	190	170	190	255	185	285	330	315	345	345	340	320	285	235	195	170	165	175	236
6	185	185	165	145	125	130	175	185	190	225	215	215	220	225	220	215	215	235	225	245	220	195	200	185	197
7 Q	170	140	165	195	185	190	190	195	200	200	195	200	205	215	230	225	175	210	205	190	190	200	205	200	195
8	210	210	205	195	190	180	185	205	200	205	215	220	205	205	205	215	235	215	205	215	205	155	185	205	203
9	200	200	200	200	195	180	175	130	180	205	210	210	215	215	210	210	210	215	195	190	200	210	210	195	198
10 Q	220	210	195	195	165	190	195	185	185	180	200	210	210	215	215	220	220	195	215	240	210	210	210	205	204
11 Q	205	210	210	195	190	180	175	185	195	200	205	210	205	205	210	225	220	205	215	215	205	205	205	210	204
12	215	195	165	115	140	165	170	190	195	220	220	215	225	235	215	220	205	235	195	220	215	170	160	190	195
13	150	140	65	135	160	185	185	200	205	215	210	210	210	210	205	215	215	225	190	200	195	160	140	155	182
14 D	150	145	140	135	5	80	115	125	200	290	265	285	290	285	285	300	245	270	245	215	215	185	185	195	202
15	185	190	170	135	115	75	-70	35	135	195	220	265	280	245	265	270	275	265	225	205	215	215	185	195	187
16	180	185	170	180	170	120	10	35	195	230	255	240	235	275	275	290	300	310	275	250	230	205	185	170	207
17	190	205	195	190	185	180	190	35	125	220	225	220	230	225	225	215	210	205	225	220	215	215	215	195	198
18	210	215	205	200	195	180	180	80	150	215	220	235	270	275	250	235	210	205	210	210	220	215	205	180	207
19	200	200	175	155	160	190	215	110	145	235	280	310	285	320	295	245	230	270	235	195	200	205	205	205	219
20	195	195	190	175	175	185	195	195	205	210	220	220	230	220	225	215	230	250	225	190	215	200	205	200	207
21 Q	200	200	200	190	180	170	185	205	205	210	205	205	215	215	220	220	215	205	200	195	215	220	220	200	204
22 Q	190	205	220	215	215	210	205	200	200	200	205	205	210	215	220	220	235	235	205	205	205	200	190	230	210
23	195	220	225	215	210	185	105	200	200	205	215	210	215	230	235	265	340	255	205	185	180	195	170	155	209
24	150	180	210	220	210	205	205	190	240	245	260	250	255	245	280	235	225	210	190	185	175	190	200	200	215
25	210	195	185	155	145	170	205	200	200	235	220	230	235	215	220	215	200	195	220	210	200	205	220	215	204
26	215	205	175	185	125	35	45	110	150	215	210	250	250	285	280	305	325	300	290	220	210	195	175	145	204
27 D	135	140	160	155	130	45	85	190	195	200	285	315	280	280	260	275	275	280	265	235	230	215	200	125	206
28 D	180	140	170	180	185	110	200	185	125	140	195	220	225	275	280	355	300	320	260	185	205	190	190	205	209
29	190	145	160	145	175	245	225	215	145	160	225	250	270	245	195	210	220	210	185	200	200	210	215	210	202
30	225	210	195	135	95	10	155	90	185	215	225	260	275	270	275	215	235	260	205	215	205	195	200	205	198
31	205	195	185	185	165	95	135	165	155	210	215	220	220	220	220	215	195	195	225	215	220	210	200	205	194
Mean	188	184	173	164	157	139	158	162	185	212	220	239	247	247	248	247	242	239	225	212	207	197	194	190	203

VERTICAL INTENSITY
Mean values for periods of sixty minutes, Universal Time

Table 36 Baker Lake — Z = 60,000 γ + — December 1959

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	285	325	345	420	420	445	460	530	555	555	550	530	570	570	580	470	380	335	350	310	325	345	325	320	421
2	325	355	380	425	480	415	490	460	485	640	570	935	675	590	480	390	475	445	300	280	240	290	310	300	448
3 D	320	380	495	495	460	530	505	520	675	785	930	760	640	855	640	500	390	395	300	290	335	320	335	335	508
4	330	330	340	360	370	390	385	395	405	490	440	415	415	430	440	440	440	445	400	375	315	290	355	355	390
5 D	350	360	360	355	360	380	380	450	490	480	590	520	520	525	525	435	415	380	370	450	410	315	265	290	416
6	355	360	360	375	415	430	405	390	420	425	395	395	440	430	400	410	410	390	370	320	290	305	330	320	381
7 Q	340	335	305	290	340	355	365	370	365	365	370	380	390	410	425	485	390	365	350	360	355	355	320	290	361
8	315	320	325	340	350	350	370	375	375	380	380	370	355	350	355	380	380	360	310	310	285	320	330	300	345
9	320	325	340	335	335	340	345	395	415	335	365	350	370	375	365	360	345	325	335	335	330	305	325	315	345
10 Q	320	325	320	330	325	295	335	360	345	345	350	350	355	355	345	350	330	325	325	320	320	320	335	340	334
11 Q	340	340	330	325	330	340	350	375	340	345	345	350	360	350	350	370	345	320	300	305	305	325	295	280	334
12	315	310	300	380	290	330	360	380	360	460	410	395	410	410	415	385	345	345	325	290	240	280	285	280	346
13	265	305	360	330	315	330	345	360	350	350	355	350	355	355	360	375	360	355	350	325	260	315	250	190	328
14 D	205	280	320	390	415	405	440	560	510	480	510	630	455	440	625	485	360	350	275	315	290	290	310	310	402
15	315	335	360	380	415	500	430	590	655	585	565	465	435	475	435	390	270	220	320	330	315	295	275	300	402
16	280	305	345	360	380	510	615	595	505	475	580	600	485	505	460	420	315	435	355	295	235	290	280	315	414
17	325	315	340	355	360	390	410	475	520	475	430	395	430	420	390	365	375	395	390	380	315	325	325	310	384
18	280	315	335	345	360	370	390	610	545	525	555	480	455	480	465	420	410	390	370	360	315	310	305	320	405
19	275	295	325	360	395	410	425	620	635	695	610	585	490	510	500	450	455	410	360	365	350	345	340	330	439
20	340	345	350	365	380	385	375	390	370	375	375	380	420	415	410	395	420	400	355	380	325	340	340	330	373
21 Q	345	345	345	355	360	380	385	385	400	415	390	385	385	385	380	365	350	345	355	355	340	330	300	290	361
22 Q	300	295	295	325	340	345	350	360	360	360	350	365	370	360	375	360	385	385	360	335	300	250	265	290	337
23	270	320	325	335	335	345	490	395	380	360	360	385	375	400	420	500	495	485	405	340	315	280	295	340	373
24	305	300	310	335	350	355	360	370	400	450	465	575	650	495	415	380	395	400	395	355	345	325	325	300	390
25	340	350	355	390	455	440	455	425	415	450	530	455	435	425	430	410	395	430	430	365	350	360	320	335	406
26	330	345	330	350	460	515	355	385	430	405	395	560	665	610	475	485	435	365	260	345	275	280	275	280	400
27 D	295	295	365	395	515	530	415	420	470	615	685	515	590	490	510	485	290	380	290	220	260	285	285	320	413
28 D	375	325	345	355	355	535	560	400	440	470	465	650	590	560	600	600	455	315	380	300	355	320	300	310	432
29	335	375	365	375	485	375	365	470	570	590	510	500	655	635	555	480	430	415	395	395	375	360	365	340	446
30	345	360	355	335	435	400	510	635	520	540	485	500	655	600	475	605	575	415	405	350	370	365	360	360	456
31	360	345	330	340	385	415	420	525	505	470	450	505	450	430	450	410	410	435	410	375	340	350	355	350	409
Mean	316	330	344	361	386	404	414	451	458	474	476	484	479	472	453	431	394	378	352	336	315	316	312	311	394

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 37 Baker Lake — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	7	10	15	7	6	17	18	30	28	12	12	10	0	-2	-21	-47	-47	-40	-29	-14	-10	9	13	12
February	1	6	18	11	-4	-3	6	31	36	32	9	9	9	-9	-12	-32	-40	-38	-22	-10	-6	3	6	1
March	8	9	8	7	7	26	26	29	39	26	23	11	-4	106	-31	-61	-54	-77	-56	-38	-28	3	14	9
April	13	16	17	16	25	34	39	47	29	37	39	33	26	-4	-43	-102	-107	-63	-38	-13	-7	3	0	12
May	0	16	-4	3	1	14	22	30	44	47	46	37	12	-22	-62	-92	-88	-41	0	13	1	3	2	11
June	16	11	5	9	11	14	18	25	30	30	43	43	27	11	-35	-76	-81	-66	-65	-40	3	15	33	30
July	-8	-10	9	2	9	14	28	29	36	31	35	33	36	16	-20	-42	-55	-44	-33	-37	-39	-8	13	7
August	-15	-3	-6	-5	-6	10	5	1	22	25	21	37	40	4	-7	-24	-38	-41	-17	17	2	8	-1	-18
September	-17	-17	-23	-16	1	4	17	27	14	4	9	6	14	5	-19	-25	-37	2	17	18	23	12	-6	-15
October	-3	-1	-11	-5	-7	6	14	24	21	16	3	4	-10	-22	-25	-28	-22	-9	9	15	9	8	7	-2
November	1	-4	-9	-16	-8	8	14	20	15	15	17	-5	-21	-21	-20	-25	-22	-12	7	22	18	12	10	13
December	9	16	12	3	-7	-8	3	-5	11	14	17	-11	-22	-30	-32	-37	-25	-2	6	7	17	19	17	17
Year	1	4	3	1	2	11	17	24	27	24	23	17	9	3	-27	-49	-51	-36	-18	-5	-2	7	9	6
Winter	4	7	9	1	-3	4	10	19	23	18	14	1	-9	-16	-21	-33	-34	-23	-10	1	4	11	12	11
Equinox	0	2	-2	1	6	18	24	32	26	21	19	14	7	21	-30	-54	-55	-37	-17	-5	-1	7	4	1
Summer	-2	3	1	2	4	13	18	21	33	33	36	38	29	2	-31	-59	-66	-48	-29	-12	-8	5	12	8

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 38 Baker Lake — 1959

January	-25	-22	-20	-25	-29	-32	-29	-17	-3	0	11	20	28	32	35	30	36	34	21	8	-4	-10	-17	-18
February	-30	-28	-35	-52	-83	-73	-60	-43	-20	4	19	24	37	56	65	73	62	55	44	32	10	-3	-15	-30
March	-42	-42	-46	-57	-56	-48	-49	-33	-7	14	16	18	20	37	53	60	59	48	46	31	17	6	-8	-26
April	-48	-61	-67	-61	-46	-54	-5	-22	-14	-1	0	6	17	41	52	63	63	54	53	24	22	16	-12	-26
May	-56	-65	-73	-85	-81	-66	-46	-39	-21	-7	-9	13	34	54	65	49	41	54	69	58	57	43	11	-8
June	-41	-17	-65	-76	-81	-76	-65	-55	-35	-32	-16	11	26	44	61	87	73	75	60	36	68	34	4	-14
July	-64	-84	-99	-130	-125	-105	-77	-57	-29	-48	-24	-1	18	47	78	103	98	123	139	95	73	54	27	-18
August	-56	-59	-74	-83	-92	-79	-71	-45	-16	-14	-11	-1	31	47	67	75	72	65	62	73	65	39	24	-21
September	-61	-84	-93	-80	-72	-64	-47	-22	-2	6	19	19	36	50	64	64	59	50	76	67	57	27	-17	-42
October	-32	-39	-54	-62	-71	-57	-36	-16	8	21	31	29	34	42	42	46	44	29	25	33	18	3	-20	-29
November	-32	-35	-50	-60	-66	-56	-47	-33	-2	8	32	41	48	49	51	48	35	36	29	25	9	-8	-16	-13
December	-15	-19	-30	-39	-46	-64	-45	-41	-18	9	17	36	44	44	45	44	39	36	22	9	4	-6	-9	-13
Year	-42	-46	-59	-68	-71	-65	-48	-35	-13	-3	7	18	31	45	57	62	57	55	54	41	33	16	-4	-22
Winter	-26	-26	-34	-44	-56	-56	-45	-34	-11	5	20	30	39	45	49	49	43	40	29	19	5	-7	-14	-19
Equinox	-46	-57	-65	-65	-61	-56	-34	-23	-4	10	17	18	27	43	53	58	56	45	50	39	29	13	-14	-31
Summer	-54	-56	-78	-96	-95	-82	-65	-49	-25	-25	-15	6	27	48	68	79	71	79	83	66	66	43	17	-15

VERTICAL INTENSITY (gammas) (All Days)

Table 39 Baker Lake — 1959

January	-45	-47	-44	-31	-21	-5	5	21	28	55	44	50	58	47	40	51	29	10	-11	-35	-55	-55	-49	-49
February	-85	-79	-69	-47	-15	-6	-5	21	34	49	89	93	88	95	105	89	56	25	-23	-58	-78	-98	-98	-94
March	-78	-67	-54	-43	-19	-9	29	43	28	50	37	61	81	95	113	82	48	17	1	-44	-73	-102	-104	-89
April	-106	-89	-67	-40	-24	-10	10	36	42	33	34	52	83	118	144	101	59	32	-7	-29	-66	-85	-106	-112
May	-130	-113	-69	-43	9	2	20	36	35	57	80	103	123	134	110	91	59	34	3	-35	-108	-131	-139	-136
June	-143	-119	-87	-57	-32	-7	11	16	29	70	86	87	119	124	151	137	99	59	-5	-64	-91	-115	-140	-132
July	-150	-123	-103	-57	3	26	33	47	47	72	70	92	92	143	133	125	79	30	4	-37	-76	-138	-138	-134
August	-118	-91	-66	-26	0	11	34	60	44	37	46	58	76	108	108	112	74	28	-1	-31	-98	-109	-124	-124
September	-101	-66	-32	-19	3	34	52	65	74	82	66	75	75	90	115	87	49	16	-32	-78	-121	-155	-158	-126
October	-62	-48	-29	-3	21	24	25	43	60	64	64	57	58	72	62	37	3	-6	-22	-59	-97	-98	-90	-77
November	-66	-59	-38	-21	7	16	22	40	51	73	70	85	79	73	49	44	-1	-17	-48	-80	-92	-95	-80	-13
December	-78	-64	-50	-33	-8	10	20	57	64	80	82	90	85	76	59	37	0	-16	-42	-58	-79	-78	-82	-83
Year	-97	-80	-59	-35	-6	7	21	40	45	60	64	75	85	98	99	83	46	18	-15	-51	-86	-105	-109	-97
Winter	-69	-62	-50	-33	-9	4	11	35	44	64	71	80	78	73	63	55	21	1	-31	-58	-76	-82	-77	-60
Equinox	-87	-68	-46	-26	-5	10	29	47	51	57	50	61	74	94	109	77	40	15	-15	-53	-89	-110	-115	-101
Summer	-136	-112	-82	-46	-5	8	25	40	39	59	70	85	102	127	125	116	74	38	0	-42	-94	-124	-136	-132

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 40 Baker Lake — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	18	12	11	7	6	8	12	8	6	5	4	4	3	-4	-17	-30	-39	-26	-21	-5	6	9	11	15
February	0	7	13	8	5	6	13	21	18	12	18	-2	-4	-13	-31	-39	-37	-24	-21	-2	10	3	15	22
March	1	1	6	2	0	5	11	16	15	10	5	3	0	-24	-20	-17	-34	-26	-31	-12	5	27	33	13
April	22	4	-5	-4	-1	0	2	8	9	17	18	16	18	12	-22	-80	-65	-48	-24	6	9	31	42	38
May	2	4	2	-7	-11	-11	0	6	9	14	10	21	11	-17	-32	-34	-31	-29	-22	-3	10	32	52	20
June	29	14	13	10	4	7	4	5	16	21	23	-1	-19	-54	-71	-58	-62	-75	-34	1	45	76	59	42
July	27	16	-1	-17	7	16	23	15	19	18	17	-8	19	-18	-48	-61	-70	-28	-17	-3	17	32	25	15
August	26	22	17	13	6	7	12	11	17	14	17	5	-10	-46	-86	-81	-75	-40	-26	6	45	47	58	34
September	30	6	3	-4	-10	-1	13	12	18	11	-1	13	13	6	-28	-67	-89	-59	-16	18	45	42	16	23
October	9	6	-1	3	4	5	15	18	10	8	6	6	-5	-19	-38	-59	-62	-32	-12	7	30	41	39	28
November	15	3	-1	-1	-6	8	12	11	10	7	8	2	-4	-13	-26	-34	-46	-26	-15	5	29	33	19	2
December	3	3	3	6	1	8	7	4	9	0	11	7	4	-5	-11	-39	-65	-26	-4	10	20	18	10	21
Year	15	8	5	1	0	5	10	11	13	11	11	6	2	-16	-36	-50	-56	-37	-20	2	23	33	32	23
Winter	8	6	7	5	2	8	11	11	11	6	10	3	0	-9	-21	-36	-47	-26	-15	2	16	16	14	13
Equinox	16	4	1	1	-2	2	10	14	13	12	7	10	7	-6	-27	-56	-63	-41	-21	5	22	35	33	26
Summer	21	14	8	0	2	5	10	9	15	17	17	4	0	-46	-59	-59	-60	-43	-25	0	29	47	49	28

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 41 Baker Lake — 1959

January	4	-3	-4	-4	-8	-9	-7	-8	-2	2	3	3	5	8	12	10	9	9	-2	-7	8	-9	-9	-6
February	-7	-1	-2	-5	-6	-12	-13	-13	-6	-6	2	5	7	5	9	20	14	9	3	13	6	0	-7	-4
March	-17	-13	-14	-16	-18	-15	-16	-9	-1	15	15	12	12	17	25	26	28	7	-9	-7	-10	-4	-3	-13
April	-7	-21	-23	-23	-21	-17	-14	-4	2	4	5	6	16	32	27	28	14	16	-3	-2	-13	3	8	-5
May	-15	-20	-43	-49	-40	-35	-26	-15	-10	0	11	16	46	67	52	34	15	4	-4	-9	-3	9	13	4
June	-10	-29	-32	-53	-75	-40	-38	-27	-32	-13	-2	22	27	36	41	30	11	17	19	2	58	56	27	-3
July	-2	-36	-62	-103	-69	-48	-37	-32	-24	-10	7	26	42	50	66	63	53	16	11	2	14	30	15	18
August	-14	-27	-25	-33	-38	-44	-38	-15	2	0	9	15	36	43	48	52	23	-7	-5	-9	17	4	8	-1
September	-25	-32	-37	-36	-36	-32	-17	-9	-6	3	17	11	22	24	48	38	25	1	-3	1	27	24	-2	-7
October	-12	-18	-20	-13	-18	-17	-18	-4	9	9	12	9	8	9	12	17	11	-1	3	-3	13	9	5	-4
November	-13	-17	-13	-17	-25	-16	-7	-2	3	6	12	12	12	11	17	20	8	5	10	-1	3	1	-5	-11
December	-6	-10	-5	-5	-16	-15	-13	-9	-6	-5	-1	3	6	10	16	19	10	7	5	6	2	4	3	6
Year	-10	-19	-23	-30	-31	-25	-20	-12	-6	0	8	12	20	26	31	30	18	7	2	-1	10	11	4	-2
Winter	-6	-8	-6	-8	-14	-13	-10	-8	-3	-1	4	6	8	9	14	18	10	8	4	3	5	-1	-5	-4
Equinox	-15	-21	-24	-22	-23	-20	-16	-7	1	8	12	10	15	21	28	27	20	6	-3	-3	4	8	2	-7
Summer	-10	-28	-41	-60	-56	-42	-35	-22	-16	-6	6	20	38	49	52	45	26	8	5	-4	22	25	16	5

VERTICAL INTENSITY (gammas) (Quiet Days)

Table 42 Baker Lake — 1959

January	-18	-16	-13	-9	-9	-9	-1	40	29	21	7	2	3	9	4	4	0	5	6	-2	-14	-13	-13	-10
February	-14	-18	-16	-12	-10	-11	-5	23	23	20	1	16	10	15	29	24	15	32	-7	-12	-16	-36	-26	-23
March	-29	-30	-26	-21	-18	-12	-7	6	12	18	23	11	17	28	43	21	7	23	6	-1	-6	-17	-27	-19
April	-57	-48	-35	-18	-12	-6	-2	2	-2	3	13	27	49	57	103	49	22	-29	-13	-7	-10	-16	-28	-34
May	-70	-38	-20	-3	-7	1	11	23	22	29	38	44	76	97	49	19	-17	-31	-27	-25	-13	-22	-67	-65
June	-61	-45	-12	-11	22	10	17	29	32	30	53	70	69	64	35	8	-4	23	23	-12	-58	-74	-101	-96
July	-102	-114	-98	-44	17	9	34	40	88	69	45	53	78	108	97	116	8	-33	-24	-18	-26	-96	-114	-92
August	-56	-39	-40	-20	-9	5	31	34	41	34	38	54	46	67	33	22	-18	-19	-13	-13	-24	-20	-51	-93
September	-54	-28	-11	-4	-1	8	8	22	20	40	57	48	50	68	68	63	28	-4	-28	-27	-29	-105	-108	-80
October	-27	-22	-14	-15	-9	2	11	22	31	33	25	21	23	30	29	25	-4	-13	-15	-8	-25	-30	-31	-34
November	-35	-31	-25	-9	3	7	7	10	15	17	21	31	36	28	31	26	5	-9	-11	-19	-13	-35	-35	-24
December	-17	-18	-27	-21	-7	-3	11	24	16	20	15	20	26	26	29	40	14	2	-8	-11	-22	-30	-43	-48
Year	-45	-37	-28	-16	-3	0	10	23	27	28	28	33	40	50	46	35	5	-4	-9	-13	-21	-41	-54	-52
Winter	-21	-21	-20	-13	-6	-4	3	24	21	20	11	17	19	20	23	24	9	8	-5	-11	-16	-26	-29	-26
Equinox	-42	-32	-22	-15	-10	-2	3	13	15	23	30	27	35	46	61	40	13	-6	-13	-11	-18	-42	-49	-42
Summer	-72	-59	-43	-20	6	6	23	32	46	41	44	55	67	84	54	41	-8	-15	-10	-17	-30	-53	-83	-87

DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 43 Baker Lake — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-22	6	37	40	6	11	19	41	51	48	37	25	-13	2	2	-75	-47	-18	-40	-46	-37	-18	-4	-14
February	11	17	24	24	44	-5	28	66	68	69	55	44	37	7	7	-29	-33	-42	-74	-71	-66	-73	-74	-24
March	-24	17	61	47	47	80	52	82	100	78	68	31	-38	78	-17	-6	-19	-119	-135	-101	-103	-87	-52	-29
April	-1	30	48	37	54	72	77	60	-11	50	56	45	80	19	-11	-121	-158	-28	7	-69	-109	-76	-41	-7
May	-34	46	-41	8	-10	45	43	83	126	68	97	17	8	-44	-63	-65	-64	36	47	1	-61	-78	-90	-67
June	-7	-23	-10	29	23	36	21	34	65	33	80	86	87	81	76	68	43	-60	-181	-115	-98	-155	-85	-31
July	23	33	50	28	31	31	74	79	92	61	47	80	31	55	33	78	13	10	-125	-163	-208	-140	-113	-106
August	-9	0	31	68	14	78	32	20	80	62	52	46	94	12	0	-29	-39	-63	-56	-65	-102	-107	-60	-48
September	-24	-14	-63	-55	39	17	-25	61	44	-11	17	2	13	4	0	11	-34	78	88	-17	-13	-6	-53	-68
October	-32	-14	-20	-4	3	24	5	51	40	32	0	3	-51	-46	-1	22	64	53	27	8	-26	-52	-42	-49
November	-38	-31	-34	-87	-12	24	38	40	-21	-12	44	13	-33	-17	2	2	24	-4	30	68	37	3	-18	-17
December	-16	14	30	17	4	-15	46	17	27	14	42	-1	-28	-89	-63	-50	-6	31	-17	-13	11	3	25	25
Year	-14	7	4	13	20	33	34	53	55	41	50	33	16	5	-3	-16	-21	-11	-36	-49	-65	-66	-51	-36
Winter	-16	2	14	-2	11	4	35	41	31	30	45	20	-9	-24	-13	-38	-16	-8	-25	-16	-14	-21	-18	-8
Equinox	-20	5	7	6	36	48	27	64	43	37	35	20	1	14	-7	-24	-38	-4	-3	-45	-63	-55	-47	-36
Summer	-7	14	-8	33	15	48	43	54	91	56	69	58	55	26	12	13	-12	-19	-79	-86	-118	-120	-87	-63

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 44 Baker Lake — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-67	-36	-19	-24	-42	-60	-57	-38	-11	9	28	32	56	52	54	58	75	64	30	8	-8	-20	-40	-55
February	-50	-56	-54	-92	-99	-121	-90	-80	-35	18	50	34	62	72	95	112	117	107	84	46	23	-21	-55	-69
March	-117	-107	-95	-162	-135	-33	-113	-126	-27	27	27	33	38	100	152	175	178	142	137	70	29	-18	-67	-98
April	-86	-90	-93	-78	-53	-57	-49	-44	-45	1	18	-4	29	82	121	119	168	114	94	-6	3	-35	-66	-51
May	-112	-96	-111	-180	-140	-140	-62	-62	-63	-19	13	37	62	84	111	110	62	81	133	95	93	75	27	-6
June	-67	-97	-81	-95	-93	-101	-123	-126	-76	-92	-64	-7	34	43	55	124	215	220	113	89	148	-5	12	-29
July	-117	-154	-211	-266	-249	-211	-134	-104	-157	-152	-145	-58	-44	33	74	202	235	376	514	327	253	127	11	-142
August	-116	-124	-108	-120	-183	-136	-136	-66	-15	14	3	-2	65	87	141	149	168	135	100	140	68	14	-9	-70
September	-87	-142	-175	-167	-113	-106	-128	-44	16	8	41	40	67	85	136	142	120	114	131	90	69	20	-43	-76
October	-79	-77	-95	-123	-138	-88	-48	-27	1	26	35	42	72	94	81	90	88	81	58	101	29	-14	-43	-70
November	-59	-69	-114	-156	-146	-117	-75	-58	-18	-9	74	82	87	108	105	105	81	83	61	44	27	8	-26	-22
December	-46	-62	-64	-72	-93	-128	-61	-32	-30	-2	-3	71	86	73	93	104	78	78	54	11	5	-19	-20	-29
Year	-84	-93	-102	-128	-124	-108	-90	-67	-38	-14	6	25	51	76	102	124	132	133	126	85	62	9	-27	-60
Winter	-56	-56	-63	-86	-95	-107	-71	-52	-24	4	37	55	73	76	87	95	88	83	57	27	12	-13	-35	-44
Equinox	-92	-104	-115	-133	-110	-71	-85	-60	-14	16	30	28	52	90	123	132	139	113	105	66	33	-12	-55	-74
Summer	-103	-118	-128	-165	-166	-147	-114	-90	-78	-62	-48	-8	29	62	95	146	170	203	215	163	141	53	10	-62

VERTICAL INTENSITY (gammas) (Disturbed Days)

Table 45 Baker Lake — 1959

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
January	-51	-65	-66	-42	-14	-14	8	26	12	30	44	67	79	43	58	58	50	42	12	-35	-67	-62	-58	-54
February	-111	-108	-86	-53	-38	-30	15	89	62	-6	18	100	134	179	130	136	109	43	18	-87	-119	-131	-130	-131
March	-170	-146	-112	-76	-17	-26	118	115	43	55	100	177	232	198	270	192	70	-41	-110	-130	-163	-203	-214	-174
April	-142	-127	-98	-81	-69	-53	-23	66	64	45	23	41	84	179	234	159	87	68	55	-5	-115	-109	-130	-156
May	-250	-231	-98	-79	-65	-6	44	49	49	110	111	197	189	191	152	120	35	11	51	12	-101	-157	-156	-176
June	-203	-185	-166	-120	-99	-74	-13	-14	-4	121	156	129	160	143	241	255	307	200	15	-163	-187	-246	-248	-208
July	-181	-130	-113	-54	-37	45	40	33	30	75	112	139	38	145	79	87	123	18	-46	-49	1	-121	-129	-96
August *	-173	-134	-114	-92	-22	-7	78	23	65	78	118	175	121	209	228	108	143	62	-65	-118	-162	-209	-154	-160
September	-129	-82	-36	-10	-7	103	169	150	126	156	87	121	73	79	131	136	45	1	-70	-153	-219	-220	-217	-226
October	-110	-87	-62	-1	59	9	41	80	130	101	106	96	121	145	97	36	-2	2	-6	-129	-185	-165	-143	-128
November	-106	-94	-43	-12	34	63	82	96	159	236	150	101	86	91	28	27	-52	-43	-112	-141	-144	-139	-135	-127
December	-124	-105	-56	-35	-12	43	27	37	84	133	203	182	126	141	147	68	-51	-69	-110	-134	-173	-127	-134	-120
Year	-146	-125	-87	-55	-24	4	49	63	68	95	102	127	120	145	150	115	72	25	-31	-94	-130	-157	-154	-146
Winter	-98	-93	-63	-36	-8	16	33	62	79	98	104	112	106	114	91	72	14	-7	-51	-99	-108	-115	-114	-108
Equinox	-138	-112	-77	-42	-9	8	76	103	91	89	79	109	128	150	183	131	50	8	-33	-104	-171	-174	-176	-171
Summer	-202	-170	-123	-86	-56	-11	38	23	35	96	124	160	127	172	175	143	152	73	-11	-80	-112	-183	-172	-160

* based on four days only.

MEAN HOURLY VALUES OF MAGNETIC ELEMENTS

Departure from mean of the day not adjusted for non-cyclic change

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 46 Baker Lake — 3500 γ +

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	384	387	392	384	383	394	395	407	405	389	389	387	377	375	356	330	330	337	348	363	367	383	390	389	377
February	382	387	399	392	377	378	387	412	417	413	390	390	390	372	369	349	341	343	359	371	373	384	387	382	381
March	400	401	400	399	399	418	418	421	431	418	415	403	388	498	361	331	338	315	336	354	364	395	406	401	392
April	410	413	414	413	422	431	436	444	426	434	436	430	423	393	354	295	290	334	359	384	390	400	397	409	397
May	436	452	432	439	437	450	458	466	481	483	482	473	448	414	374	344	348	395	436	449	437	439	438	447	436
June	458	453	447	451	453	456	460	467	472	472	485	485	469	453	407	366	361	376	377	402	445	457	475	472	442
July	435	433	452	445	452	457	471	472	479	474	478	476	479	459	423	401	388	399	410	406	404	435	456	450	443
August	436	448	445	446	445	461	456	452	473	476	472	488	491	455	444	427	413	410	434	468	453	459	450	433	451
September	417	417	411	418	435	439	451	461	448	438	443	440	448	439	415	409	397	436	451	452	457	446	428	419	434
October	421	423	413	419	417	430	438	448	445	440	427	428	414	402	399	396	402	415	433	439	433	432	431	422	424
November	407	402	397	390	398	414	420	426	421	421	423	401	385	385	386	381	384	394	413	428	424	418	416	419	406
December	414	421	417	408	398	397	408	400	416	419	422	394	383	375	373	368	380	403	411	412	422	424	422	422	405
Year	417	420	418	417	418	419	433	440	443	440	439	433	425	418	388	366	364	380	397	411	414	423	425	422	416
Winter	397	399	401	394	389	396	403	411	415	411	406	393	384	377	371	357	359	369	383	394	397	402	404	403	392
Equinox	412	414	407	412	418	430	436	444	438	433	430	425	418	433	382	358	357	375	395	407	411	418	416	413	412
Summer	441	447	444	445	447	431	461	464	476	476	479	481	472	445	412	385	378	397	414	431	435	448	455	451	443

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 47 Baker Lake

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	162	165	167	162	158	155	158	170	184	187	198	207	215	219	222	217	223	221	208	195	183	177	170	169	187
February	158	160	153	136	105	115	128	145	168	192	207	212	225	244	253	261	250	243	232	220	198	185	173	158	188
March	146	146	142	131	132	140	139	155	181	202	204	206	208	228	241	248	247	236	234	219	205	194	180	162	188
April	145	132	126	132	147	139	188	171	179	192	193	199	212	234	245	256	256	247	246	217	215	209	181	167	193
May	139	130	122	110	114	129	149	156	174	188	186	208	229	249	260	244	236	249	264	253	252	238	206	187	195
June	160	184	136	125	120	125	136	146	166	169	185	212	227	245	262	288	274	276	261	237	269	235	205	187	201
July	131	111	96	65	70	90	118	138	166	147	171	194	213	242	273	298	293	318	334	290	268	249	222	177	195
August	151	148	133	124	115	128	136	162	191	193	196	206	236	254	274	282	279	272	269	280	272	246	231	186	207
September	146	123	114	127	135	143	160	185	205	213	226	226	243	257	271	271	266	257	283	274	264	234	190	165	207
October	170	163	148	140	131	145	166	186	210	223	233	231	236	244	244	248	246	231	227	235	220	205	182	173	202
November	171	168	153	143	139	147	156	170	201	211	235	244	251	252	254	251	238	239	232	228	212	195	187	190	203
December	188	184	173	164	157	139	158	162	185	212	220	239	247	247	248	247	242	239	225	212	207	197	194	190	203
Year	156	151	139	130	127	133	149	162	184	194	205	215	229	243	254	259	254	252	251	238	230	214	194	176	197
Winter	170	169	162	151	140	139	150	162	185	201	215	226	235	241	244	244	238	236	224	214	200	189	181	177	195
Equinox	152	141	133	133	136	142	163	174	194	208	214	216	225	241	250	256	254	243	248	236	226	211	183	167	198
Summer	145	143	122	106	105	118	135	151	174	174	185	205	226	248	267	278	271	279	282	265	265	242	216	184	200

VERTICAL INTENSITY (gammas) (All Days)

Table 48 Baker Lake — 60,000 γ +

Month / Season \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	349	347	350	363	373	389	399	415	422	449	438	444	452	441	434	445	423	404	383	359	339	339	345	345	394
February	339	345	355	377	409	418	419	445	458	473	513	517	512	519	529	513	480	449	401	366	346	326	326	330	424
March	349	360	373	384	408	418	456	470	455	477	464	488	508	522	540	509	475	445	428	383	354	325	323	338	427
April	307	324	346	373	389	403	423	449	455	446	447	465	496	531	557	514	472	445	406	384	347	328	305	301	413
May	250	267	311	337	389	382	400	416	415	437	460	483	503	514	490	471	439	414	383	345	272	249	241	244	380
June	211	235	267	297	322	347	365	370	383	424	440	441	473	478	505	491	453	413	349	290	263	239	214	222	354
July	182	209	229	275	335	358	365	379	379	404	402	424	424	475	465	457	411	362	336	295	256	194	194	198	332
August	197	224	249	289	315	326	349	375	359	352	361	373	391	423	423	427	389	343	314	284	217	206	191	191	315
September	274	309	343	356	378	409	427	440	449	457	441	450	450	465	490	462	424	391	343	298	254	220	217	249	375
October	296	310	329	356	379	382	383	401	418	422	422	415	416	430	420	395	361	352	336	299	261	260	268	281	358
November	317	324	345	362	390	399	405	423	434	456	453	468	462	456	432	427	382	366	335	303	291	288	303	370	383
December	316	330	344	361	386	404	414	451	458	474	476	484	479	472	453	431	394	378	352	336	315	316	312	311	394
Year	282	299	320	344	373	386	400	419	424	439	443	454	464	477	478	462	425	397	364	325	293	274	270	282	379
Winter	330	337	349	366	390	403	409	434	443	463	470	478	476	472	462	454	420	399	368	341	323	317	322	339	399
Equinox	307	326	348	367	389	403	422	440	444	451	444	455	468	487	502	470	433	408	378	331	304	283	278	292	393
Summer	210	234	264	300	340	353	370	385	384	404	416	430	448	473	471	462	423	383	346	305	255	222	210	214	345

MEAN HOURLY VALUES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 49 Baker Lake — 3500 γ +

Month / Season	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	409	406	405	401	400	402	406	402	400	399	398	398	397	390	377	364	355	368	373	389	400	403	405	409	394
February	399	406	412	407	404	405	412	420	417	411	417	397	395	386	368	360	362	375	378	397	409	402	414	421	399
March	409	409	414	410	408	413	419	424	423	418	413	411	408	384	388	391	374	382	377	396	413	435	441	421	408
April	436	418	409	410	413	414	416	422	423	431	432	430	432	426	392	334	349	366	390	420	423	445	456	452	414
May	432	434	432	423	419	419	430	436	439	444	440	451	441	413	392	396	399	401	408	427	440	462	482	450	430
June	461	446	445	442	436	439	436	437	448	453	455	431	413	378	361	374	370	357	396	433	477	508	491	474	432
July	465	444	427	409	435	444	451	443	447	446	445	420	447	410	380	367	358	400	409	425	445	470	453	443	428
August	455	451	446	442	435	436	441	440	446	443	446	434	419	383	343	348	364	389	403	435	474	476	487	463	429
September	454	430	427	420	414	423	437	436	442	435	423	437	437	430	396	357	335	365	408	442	469	466	440	447	424
October	436	433	426	430	431	432	442	445	437	435	433	433	422	408	389	368	365	395	415	434	457	468	466	455	427
November	433	421	417	417	412	426	431	430	428	425	426	420	414	405	392	384	372	392	403	423	447	451	437	420	418
December	428	428	428	431	426	433	432	429	434	425	436	432	429	420	414	386	360	399	421	435	445	443	435	446	425
Year	435	427	424	420	419	424	430	430	432	430	430	425	421	403	383	369	364	382	398	421	442	452	451	442	419
Winter	417	415	417	414	411	417	420	420	420	415	419	412	409	400	388	374	362	384	394	411	425	425	423	424	409
Equinox	434	423	419	418	417	421	429	432	431	430	425	428	425	412	391	363	356	377	398	423	441	454	451	444	418
Summer	453	444	438	429	431	435	440	439	445	447	447	434	430	396	367	371	373	387	404	430	459	479	478	456	430

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 50 Baker Lake

Month / Season	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	189	182	181	181	171	176	178	177	183	187	188	188	190	193	197	195	194	194	183	178	193	176	176	179	185
February	180	186	185	182	181	175	174	174	181	181	189	192	194	192	196	207	201	196	190	200	193	187	180	183	187
March	174	178	177	175	173	176	175	182	190	206	206	203	203	208	216	217	219	198	182	184	181	187	188	178	191
April	181	167	165	165	167	171	174	184	190	192	193	194	204	220	215	216	202	204	185	186	175	191	196	183	188
May	174	169	146	140	149	154	163	174	179	189	200	205	235	256	241	223	204	193	185	180	186	198	202	193	189
June	188	169	166	145	123	158	166	171	166	185	196	220	225	234	239	228	209	215	217	200	256	254	225	195	198
July	178	144	118	77	111	132	143	148	156	170	187	206	222	230	246	243	233	196	191	182	194	210	195	198	180
August	185	172	174	166	161	155	161	184	201	199	208	214	235	242	247	251	222	192	194	190	216	203	207	198	199
September	178	171	166	167	167	171	186	194	197	206	220	214	225	227	251	241	228	204	200	204	230	227	201	196	203
October	189	183	181	188	183	184	183	197	210	210	213	210	209	210	213	218	212	200	204	198	214	210	206	197	201
November	191	187	191	187	179	188	197	202	207	210	216	216	216	215	221	224	212	209	214	203	207	205	199	193	204
December	197	193	198	198	187	188	190	194	197	198	202	206	209	213	219	232	213	210	208	209	205	207	206	209	203
Year	184	175	171	164	163	169	174	182	188	194	202	206	214	220	225	224	212	201	196	193	204	205	198	192	194
Winter	189	187	189	187	180	182	185	187	192	194	199	201	202	203	208	212	205	202	199	198	200	194	190	191	195
Equinox	181	175	172	174	173	176	180	189	197	204	208	205	210	216	224	223	215	202	193	193	200	204	198	189	196
Summer	181	164	151	132	136	150	157	167	176	186	198	211	229	241	243	236	217	199	197	188	213	216	207	196	192

VERTICAL INTENSITY (gammas) (Quiet Days)

Table 51 Baker Lake — 60,000 γ +

Month / Season	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	361	363	366	370	370	370	378	419	408	400	386	381	382	388	383	383	379	384	385	377	365	366	366	369	379
February	377	373	375	379	381	380	386	414	414	411	392	407	401	406	420	415	406	423	384	379	375	355	365	368	391
March	364	363	367	372	375	381	386	399	405	411	416	404	410	421	436	414	400	416	399	392	387	376	366	374	393
April	338	347	360	377	383	389	393	397	393	398	408	422	444	452	498	444	417	366	382	388	385	379	367	361	395
May	291	323	341	358	354	362	372	384	383	390	399	405	437	458	410	380	344	330	334	336	348	339	294	296	361
June	264	280	313	314	347	335	342	354	357	355	378	395	394	389	360	333	321	348	348	303	267	251	224	229	325
July	185	173	189	243	304	296	321	327	375	356	332	340	365	395	384	403	295	254	263	269	261	191	173	195	287
August	274	291	290	310	321	335	361	364	371	364	368	384	376	397	363	352	312	311	317	317	306	310	279	237	330
September	299	325	342	349	352	361	361	375	373	393	410	401	403	421	421	416	381	349	325	326	324	248	245	273	353
October	311	316	324	323	329	340	349	360	369	371	363	359	361	368	367	363	334	325	323	330	313	308	307	304	338
November	312	316	322	338	350	354	354	357	362	364	368	378	383	375	378	373	352	338	336	328	334	312	312	323	347
December	329	328	319	325	339	343	357	370	362	366	361	366	372	372	375	386	360	348	338	335	324	316	303	298	346
Year	309	317	326	338	350	354	363	377	381	382	382	387	394	404	400	389	359	349	345	340	332	313	300	302	354
Winter	345	345	346	353	360	362	368	390	387	385	377	383	385	385	389	389	374	373	361	355	350	337	337	340	366
Equinox	328	338	348	355	360	368	372	383	385	393	399	397	405	416	431	409	383	367	357	359	352	328	321	328	370
Summer	254	267	283	306	332	332	349	357	372	366	369	381	393	410	379	367	318	311	316	306	296	273	243	239	323

MEAN HOURLY VALUES OF MAGNETIC ELEMENTS
Departure from mean of the day not adjusted for non-cyclic change

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 52 Baker Lake — 3500 γ +

Month / Season (Hour U.T.)	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	327	355	386	389	355	360	368	390	400	397	386	374	336	351	351	274	302	331	309	303	312	331	345	335	349
February	359	365	372	372	392	343	376	414	416	417	403	392	385	355	355	319	315	306	274	277	282	275	274	324	348
March	323	364	408	394	394	427	399	429	447	425	415	378	309	425	330	341	328	228	212	246	244	260	295	318	347
April	371	402	420	409	426	444	449	432	361	422	428	417	452	391	361	251	214	344	379	303	263	296	331	365	372
May	425	505	418	467	449	504	502	542	585	527	556	476	467	415	396	394	395	495	506	460	398	381	369	392	459
June	429	413	426	465	459	472	457	470	501	469	516	522	523	517	512	504	479	376	255	321	338	281	351	405	436
July	413	423	440	418	421	421	464	469	482	451	437	470	421	445	423	468	403	400	265	227	182	250	277	284	390
August	392	401	432	469	415	479	433	421	481	463	453	447	495	413	401	372	362	338	344	336	299	294	341	353	401
September	411	421	372	380	476	452	410	496	479	424	452	437	448	439	435	446	401	513	523	418	422	429	382	367	435
October	396	414	408	424	431	452	433	479	468	460	428	431	377	382	427	450	492	481	455	436	402	376	386	379	428
November	358	365	362	309	384	420	434	436	375	384	440	409	363	379	398	398	420	392	426	464	433	399	378	379	396
December	359	389	405	392	379	360	421	392	402	389	417	374	347	286	312	325	369	406	358	362	386	378	400	400	375
Year	380	401	404	407	415	428	429	448	450	436	444	427	410	400	392	379	373	384	359	346	330	329	344	359	397
Winter	351	369	381	366	378	371	400	408	398	397	412	387	358	343	354	329	352	359	342	352	353	348	349	360	367
Equinox	375	400	402	402	432	444	423	459	439	433	431	416	397	409	388	372	359	392	392	351	333	340	349	357	396
Summer	415	436	429	455	436	469	464	476	512	478	491	479	478	448	433	435	410	402	343	336	304	302	335	359	422

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 53 Baker Lake

Month / Season (Hour U.T.)	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	119	150	167	162	144	126	129	148	175	195	214	218	242	238	240	244	261	250	216	194	178	166	146	131	186
February	139	133	135	97	90	68	99	109	154	207	239	223	251	261	284	301	306	296	273	235	212	167	134	120	189
March	70	80	92	25	52	154	74	61	160	214	214	220	225	287	339	362	365	329	323	257	216	169	120	89	187
April	110	106	103	118	143	139	147	152	151	197	214	192	225	278	317	315	364	310	290	190	199	161	130	145	196
May	67	83	68	-1	39	39	117	117	116	160	192	216	241	263	290	289	241	260	312	274	272	254	206	173	179
June	135	105	121	107	109	101	79	76	124	110	138	195	236	245	257	326	417	422	315	291	350	197	214	173	202
July	83	46	-11	-66	-49	-11	68	96	43	48	55	142	156	233	274	402	435	576	714	527	453	327	211	58	200
August	72	64	80	68	5	52	52	122	173	202	191	186	253	275	329	337	356	323	288	328	256	202	179	118	188
September	130	75	42	50	104	111	89	173	233	225	258	257	284	302	353	359	337	331	348	307	286	237	174	141	217
October	137	139	121	93	78	128	168	189	217	242	251	258	288	310	297	306	304	297	274	317	245	202	173	146	216
November	141	131	86	44	54	83	125	142	182	191	274	282	287	308	305	305	281	283	261	244	227	208	174	178	200
December	162	146	144	136	115	80	147	176	178	206	205	279	294	281	301	312	286	286	262	219	213	189	188	179	208
Year	114	105	96	69	74	89	108	130	159	183	204	222	249	273	299	322	329	330	323	282	259	207	171	138	197
Winter	140	140	133	110	101	89	125	144	172	200	233	251	269	272	283	291	284	279	253	223	208	183	161	152	196
Equinox	112	100	90	72	94	133	120	144	190	220	234	232	256	294	327	336	343	317	309	268	237	192	149	130	204
Summer	89	75	65	27	26	45	79	103	114	130	144	185	222	254	288	339	362	395	407	355	333	245	203	131	192

VERTICAL INTENSITY (gammas)

Table 54 Baker Lake — 60,000 γ +

Month / Season (Hour U.T.)	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	1959 Mean
January	357	343	343	366	394	394	416	434	420	438	452	475	487	451	466	466	458	450	420	373	341	346	350	354	408
February	343	346	368	401	416	424	469	543	516	448	472	554	589	633	584	590	563	497	472	367	335	323	324	323	454
March	329	353	387	423	482	473	617	614	542	554	599	676	731	697	769	691	569	458	389	339	336	296	285	325	499
April	304	319	348	365	377	393	423	512	510	491	469	487	530	625	680	605	533	514	501	441	331	337	316	290	446
May	138	157	290	309	323	382	432	437	437	493	499	585	577	579	540	508	423	399	439	400	287	231	232	212	388
June	204	222	241	287	308	333	394	393	403	528	563	536	567	550	648	762	814	607	422	244	220	161	159	199	407
July	206	257	274	333	350	432	427	420	417	462	499	526	425	532	466	474	510	405	341	338	388	266	258	291	387
August	194	233	253	275	345	360	445	390	432	445	485	542	488	575	595	473	508	427	302	248	205	158	213	207	360
September	295	342	388	414	417	527	593	574	551	580	511	545	497	503	555	560	469	425	354	271	205	204	207	198	424
October	285	308	333	394	454	404	436	475	525	496	501	491	516	540	492	431	393	397	389	266	210	230	252	267	395
November	296	308	359	390	436	465	484	498	561	638	552	503	488	493	430	429	350	359	290	261	258	263	267	275	402
December	309	328	377	398	421	476	460	470	517	566	636	615	559	574	580	501	382	364	323	299	330	306	299	313	433
Year	272	293	330	363	393	422	466	480	486	512	520	545	538	563	567	541	498	442	387	323	279	260	264	271	417
Winter	326	331	362	389	417	440	457	486	504	523	528	537	531	538	515	497	438	418	376	325	316	310	310	316	424
Equinox	303	331	364	399	433	449	517	544	532	530	520	550	569	591	624	572	491	449	408	337	271	267	265	270	441
Summer	186	217	265	301	332	377	425	410	422	482	512	547	514	559	562	554	564	460	376	308	250	204	216	227	386

CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
Dominion Observatories

PUBLICATIONS

of the

DOMINION OBSERVATORY

OTTAWA

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OTTAWA, 1964

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ALERT MAGNETIC OBSERVATORY

Geographic Latitude 82.5°N
Geographic Longitude 62.5°W

Geomagnetic Latitude 85.7°N*
Geomagnetic Longitude 168.7°E*

1961-1962

Introduction

In the summer of 1961 the Dominion Observatories of the Department of Mines and Technical Surveys, established a combined magnetic and seismic observatory at Alert, Ellesmere Island, Northwest Territories. The choice of Alert Meteorological Station as a new magnetic observatory site resulted from studies of magnetic data recorded there during the IGY. (Whitham, Loomer and Niblett, 1960; Whitham and Andersen, 1962).

The Site

The observatory building rests on recent unconsolidated marine sediments that are underlain by metamorphosed sediments of early Palaeozoic age. Magnetic field intensity gradients are extremely small: prior to the construction a survey using a Varian M-49 proton precession magnetometer indicated a maximum gradient in the total field intensity of only 10 gammas in 100 feet. The site is 700 feet northwest of the Dept. of Transport Meteorological Station.

The Building

The building is non-magnetic and constructed of wood. It rests on a 3-foot pad of gravel and is connected by a 20-foot corridor to the seismic observatory where the magnetic components of the instruments, as well as the power distribution facilities are installed.

The building dimensions are 24 feet by 16 feet. The photographic variometer room which is separately insulated from and heated independently of the rest of the building, is 13 feet by 9 feet. The remainder of the building is used for absolute instruments and the head of the stand-by variometer.

The instrument piers are concrete set one foot into the permafrost. Care was taken to ensure that the piers were decoupled from the floor. Unfortunately the concrete for the piers was mixed initially from aggregate containing 10 per cent magnetite by volume. This error produced total field intensity gradients of 20 gammas/foot in the horizontal plane and 50 gammas/foot in the vertical plane. Consequently an external magnetic station was established some 50 feet west of the observatory at a location substantially free from artificial field disturbances and marked with a brass plug. The results in this publication are all reduced to this reference site for uniformity.

In July 1962, the piers were replaced with non-magnetic concrete, necessitating the closing of the observatory from July 9 to July 14. The corrections applied to the absolute observations made inside the observatory to reduce the data to the external reference point are listed below.

	October 1961 to July 9, 1962	After July 15, 1962
X	−56	−10
Y	−206	−19
Z	+24	+28

The observatory is electrically heated with six 1000-watt glass heat panels. Each room has 3 panels and each has its own thermostat capable of regulating the room to ±1°C.

Magnetic Equipment

The Photographic Variometer

A three-component Ruska variometer is used to record variations in the geographic components of the geomagnetic field X, Y, and Z. The time scale of the magnetograms is 20 mm/hr with hour-marks of 1 minute duration being provided by a Times chronometer. When the Times chronometer is inoperative the Ruska clock is used for timing and provides marks on the quarter-hour as well as on the hour.

*Assuming the position of the geomagnetic pole is 78.3°N, 69.0°W. (Finch and Leaton, 1957)

The scale values of the variometer were normally checked twice per month. Scale values were adopted by fitting the best straight lines to the observed values. The adopted values are tabulated below.

Scale Values in gammas/mm

Year	1961			1962												
Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul		Aug		Sep	Oct	Nov	Dec
Day	0–31	0–30	0–31	0–31	0–28	0–31	0–30	0–31	0–30	1–9	15–31	1–15	16–31	0–30	0–31	0–30	0–31
X	6.60	6.60	6.60	6.55	6.55	6.55	6.47	6.47	6.47	6.47	6.47	6.50	6.50	6.46	6.46	6.46	6.46
Y	6.01	6.01	5.94	5.94	5.88	5.88	5.81	5.81	5.81	5.81	6.06	6.02	6.02	6.02	6.02	6.02	6.02
Z	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.90	6.12	6.30	6.44	6.56

The r.m.s. differences of the observed minus the adopted scale values were 0.04 gamma/mm for 34 observations in X, 0.03 gamma/mm for 32 observations in Y, and 0.10 gamma/mm for 35 observations in Z. The sensitivity of the Ruska temperature trace is 2.0°C/mm and the Z temperature coefficient was determined to be −1.5 gammas/°C. Normally, temperature corrections are unnecessary, and are only made to compensate for large temperature effects occurring during power failures.

The Stand-by Variometer

A three-component electrical magnetometer built commercially to an Observatory design (Serson 1957) is used as a stand-by variometer. The inked output chart moves at 20 mm/hr and the scale value is normally 8.3 gammas/mm, corresponding to a full scale sensitivity of 1000 gammas in all components. X, Y, and Z are again recorded and the chart values used to interpolate for missing values of the Ruska record. Such interpolated values have been underlined in the tables. By means of limit switches and a relay, the sensitivity of the electrical magnetometer is halved whenever any one element goes off scale, thus converting the instrument into a storm recorder.

Previous to October 1961, this electrical recorder was operated from June 1957 continuously until September 1959 by Defence Research Board and thence intermittently until October 1961 by Department of Transport personnel.

Absolute Instruments

A proton precession magnetometer* built at the Dominion Observatory, Ottawa is the primary standard of total intensity. A portable electrical magnetometer of the saturable core type (Serson and Hannaford, 1956) is used to determine declination and inclination.

Base-line Values

Absolute measurements of the base lines commenced in March 1962 and were made twice each month on the average. Simultaneous marks were placed on the Ruska record and the base-line values determined by calculation from the observed values and the measurement of the record ordinates of these points. Since the disturbance level is high and in general appreciable even at quiet times, it was necessary to make allowances for the natural field changes that occurred between absolute observations of different elements. In addition the reduction of the absolute recordings of D, I and F to determine the X, Y and Z base lines involved considerable calculation.

The base-line values were adopted by fitting the best straight lines to the observed values between known discontinuities. The r.m.s. differences of the observed minus adopted base-line values were 3 gammas for 19 observations in X, 5 gammas for 22 observations in Y, and 4 gammas for 24 observations in Z. The scatter in any one set of base-line determinations (each a mean of 6) was of the order of a few gammas in each component.

Prior to March 1962 the base lines were estimated from measurements in March, using information on trace discontinuities and quiet-day trends obtained from examination of the magnetograms. The base lines determined in this way are believed to be good to within 20 gammas.

For the period October 1961 to December 1962, discontinuities occurred in the X base line on July 15, 1962, August 22, 1962 and August 23, 1962. Discontinuities in the Y base line occurred on March 2, 1962, July 15, 1962, July 28, 1962, August 9, 1962, August 14, 1962 and August 16, 1962. Discontinuities in the Z base line occurred on July 15, 1962 and August 16, 1962. These discontinuities were due to adjustments necessary

*The value adopted for the gyromagnetic frequency is 4257.60 ± 0.03 cycles/second/oersted.

to compensate for changes in the levels of the piers. The changes in pier level are believed to be the result of changes in the permafrost layer. Also in the Y component the slope of the best straight line was quite steep for short periods.

Magnetic Reductions

The time used throughout is Universal Time (U.T.). The hourly values of X, Y, and Z were obtained from the magnetograms by means of a ruled transparent scale. Each value is that ordinate estimated to be the mean reading for 60 minutes centred on the half hour. The product of the ordinate measured to the nearest half millimeter, and scale value is added to the adopted base-line value and the sum obtained is the appropriate hourly value printed in the tables. From the tabulated values for each calendar month, the mean hourly value for each hour of the day and the mean daily value for each day of the month are derived. These values are given in Tables 1-9 for the period October 1961 to December 1961 and Tables 19-54 for the period January 1962 to December 1962.

Tables 10-18 and 55-63 list the monthly hourly mean values for each of the 24 hours and the hourly mean value for each month, for all days, quiet days, and disturbed days. Tables 10-18 refer to the period October 1961 to December 1961 and Tables 55-63 to the calendar year 1962.

Disturbance Indices

Tables 64-78 give the hourly range in Y, the principal horizontal field component recorded at Alert, for the period October 1961 to December 1962. The hourly range was chosen as the index to represent irregular magnetic activity at Canadian observatories (Whitham, Loomer and Niblett, 1960).

References

Finch, H. F. and Leaton, B. R., 1957. The earth's main magnetic field, epoch 1955.0. *MN, RAS, Geophys. Suppl.*, v. 6, p. 314.

Serson, P. H., and Hannaford, W. L. W., 1956. A portable electrical magnetometer. *Can. J. Technol*, v. 34, p. 232.

Serson, P. H., 1957. An electrical recording magnetometer. *Can. J. Phys.*, v. 35, p. 1387.

Whitham, K., Loomer, E. I., and Niblett, E. R., 1960. The latitudinal distribution of magnetic activity in Canada. *J. Geophys. Res.*, v. 65, no. 12, p. 3961.

Whitham, K., and Andersen, F., 1962. Anomaly in geomagnetic variations at Alert in the Arctic Archipelago of Canada. *Geophys. J.*, v. 7, no. 2.

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 1 Alert — 10 γ + — October 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D						1002	1030	996	918	850	756	870	630	838	790	796	761	704	808	750	698	741	750	756	
2	759	770	759	759	759	767	770	767	759	741	715	756	753	732	704	713	698	681	723	767	761	756	753	753	745
3	759	759	761	750	780	750	767	767	753	767	776	744	726	747	698	720	729	698	653	678	698	726	738	747	736
4	770	764	773	773	764	767	764	767	767	761	747	732	741	698	710	704	644	653	687	726	670	698	717	743	733
5	750	750	750	767	764	761	750	756	767	750	744	732	729	717	720	710	720	710	704	715	726	744	750	747	739
6	756	756	750	750	756	750	767	773	779	756	744	713	664	681	678	664	676	624	642	704	744	710	729	750	720
7	761	796	859	825	813	786	738	753	753	744	735	756	738	732	715	738	741	747	738	738	738	738	738	747	758
8	738	732	738	732	738	761	773	808	793	767	744	717	717	715	715	698	696	690	749	755	759	755	759	768	740
9	768	782	768	788	785	782	775	752	755	759	749	749	742	729	736	732	742	742	742	749	759	759	759	762	756
10 Q	765	762	768	768	762	759	762	755	755	755	755	752	749	749	742	745	742	736	739	736	736	755	768	768	753
11	768	782	768	768	775	775	762	772	788	775	782	752	745	745	709	712	749	749	732	699	702	755	749	795	755
12	805	848	880	834	815	802	815	795	782	802	785	742	722	682	627	669	716	695	689	735	732	772	719	788	761
13	798	815	802	828	834	828	802	795	782	775	749	745	735	732	725	722	670	593	695	755	755	742	752	802	760
14	808	775	785	788	772	782	792	805	792	782	765	749	735	712	729	735	716	755	749	749	742	755	755	765	762
15 Q	762	765	762	768	772	775	775	775	768	765	755	749	735	735	735	719	722	726	716	735	793	762	755	755	751
16 Q	759	762	762	765	765	765	762	762	755	755	755	753	749	749	742	742	742	745	752	749	749	755	755	762	761
17 Q	755	762	762	762	759	755	749	749	749	749	749	749	745	745	742	749	742	745	749	755	765	762	768	762	753
18 Q	765	762	762	768	768	775	768	762	755	755	752	749	742	730	730	749	752	752	749	745	755	755	759	742	754
19	762	768	808	829	795	802	775	762	755	752	742	742	749	742	730	745	745	742	745	742	742	729	729	748	758
20	850	815	802	829	840	821	838	805	748	742	752	742	742	748	742	742	732	709	729	745	758	755	755	752	771
21	762	772	759	752	752	752	752	755	746	749	746	739	719	683	693	703	686	660	653	729	753	749	733	739	731
22	756	772	772	762	759	769	756	752	759	756	756	739	736	713	677	680	713	756	759	746	736	752	759	756	745
23	752	752	756	759	756	766	766	766	759	752	746	752	746	733	726	686	716	739	710	739	729	706	729	759	742
24	769	759	779	769	756	805	785	779	799	762	749	742	719	696	699	699	686	689	686	693	699	726	679	759	740
25	759	766	752	756	756	759	759	759	759	759	749	739	710	680	653	653	693	680	587	703	753	772	756	756	728
26 D	759	772	779	819	792	812	847	772	746	766	772	726	723	713	706	633	726	753	703	680	643	650	696	729	738
27 D	805	769	818	911	891	851	825	805	769	739	733	739	729	719	726	706	673	583	557	653	673	673	656	733	739
28 D	792	802	812	812	759	749	752	752	773	831	799	719	436	619	567	531	422	557	633	475	534	863	950	923	702
29 D	877	907	875	851	815	772	808	818	749	726	736	766	726	726	726	736	739	733	739	733	739	729	733	759	771
30	752	752	749	746	746	746	752	756	765	752	752	739	733	716	706	696	673	614	736	736	739	742	752	752	735
31	752	762	759	759	775	779	792	782	759	752	742	733	729	699	719	733	736	739	739	739	742	736	739	746	748
Mean	775	779	785	787	781	777	779	775	767	762	755	744	723	717	713	707	707	705	710	720	728	744	750	766	747*

* 30 days only

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 2 Alert 3260 γ + October 1961

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D									397	346	315	471	333	461	479	510	549	459	611	551	522	592	621	562	
2	564	582	572	570	575	580	582	575	562	562	570	570	554	551	536	554	536	575	611	602	598	582	582	580	572
3	582	582	580	572	572	564	572	572	556	556	546	551	525	530	541	541	551	562	546	554	598	616	628	623	567
4	616	608	605	592	582	577	567	567	561	546	536	495	490	469	497	530	570	605	638	621	602	618	633	685	575
5	621	595	582	587	582	567	562	556	541	525	551	556	562	564	562	541	575	600	602	608	608	602	600	611	578
6	582	598	575	580	582	570	577	554	536	520	515	515	481	505	530	562	592	592	615	628	659	659	628	638	575
7	638	633	648	623	598	572	546	551	546	536	554	515	530	528	577	577	585	592	592	592	587	592	587	587	579
8	572	575	568	570	575	588	568	547	519	521	532	537	562	562	568	572	568	568	593	599	605	593	584	593	568
9	587	593	575	593	569	557	557	551	557	557	563	551	569	557	575	587	581	578	581	587	584	584	575	578	573
10 Q	575	575	580	578	563	563	563	563	563	563	563	563	563	563	569	578	578	581	581	599	599	611	593	599	576
11	605	593	572	572	575	575	557	557	526	454	436	418	533	575	545	575	626	605	605	605	647	641	638	632	570
12	650	647	641	599	575	539	533	520	448	460	502	508	533	472	472	526	605	599	608	614	641	683	683	707	574
13	683	662	605	608	563	545	533	508	466	526	569	557	566	563	580	587	575	563	593	602	611	623	620	677	582
14	713	633	580	575	563	566	560	526	533	526	517	490	514	523	551	575	563	596	593	593	593	593	599	599	570
15 Q	584	578	578	578	575	566	569	560	551	533	545	557	557	563	563	557	572	584	587	608	617	599	581	578	572
16 Q	581	578	578	578	578	575	569	563	563	563	560	560	557	563	569	578	581	581	587	587	584	584	584	581	575
17 Q	584	578	575	575	569	569	569	569	569	569	569	569	569	572	572	580	584	584	581	587	593	587	593	584	577
18 Q	593	581	575	575	575	569	563	563	560	560	560	560	566	563	572	580	584	581	584	584	581	581	581	584	574
19	587	599	611	611	569	560	551	554	554	554	551	551	557	560	557	566	569	569	576	578	587	593	614	629	576
20	735	726	653	632	608	569	520	533	548	545	545	569	569	566	569	575	575	563	576	593	587	587	581	587	588
21	587	593	580	575	578	569	575	575	569	575	563	542	536	514	539	515	523	551	590	635	640	656	671	623	579
22	602	602	600	578	566	563	563	563	557	539	545	545	533	533	523	557	572	596	599	590	605	605	602	581	571
23	581	578	578	578	578	575	569	560	557	563	554	563	581	554	536	533	566	587	563	587	599	635	608	599	575
24	608	593	602	593	572	578	554	545	533	502	508	526	536	526	554	575	575	593	602	617	623	626	614	605	573
25	605	605	580	580	578	575	572	566	557	533	545	545	520	508	496	523	581	602	605	644	662	647	683	629	581
26 D	605	617	593	593	572	545	547	496	418	400	418	375	394	451	508	496	593	638	617	626	789	771	716	635	558
27 D	659	605	656	656	635	563	534	508	515	484	469	533	520	548	587	575	575	545	593	659	695	762	710	575	590
28 D	665	653	620	611	557	566	569	560	418	315	375	330	330	330	317	372	421	599	698	861	780	810	768	750	553
29 D	629	605	575	548	490	490	448	523	575	557	511	593	569	572	569	580	575	587	593	593	599	593	602	597	566
30	576	576	578	578	575	575	578	575	560	554	557	569	563	551	557	572	566	569	608	608	593	599	602	611	576
31	599	599	599	584	590	575	548	554	566	551	554	551	554	533	554	580	587	587	584	587	590	587	590	587	575
Mean	613	608	596	589	575	565	556	551	536	525	530	529	533	532	542	554	570	584	597	612	622	627	622	615	574*

* 1 day missing

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 3 Alert — 55,000 γ + — October 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	448	402	462	373	382	350	370	393	402	439	604	485	419	485	516	510	471	462	467	467	456	456	453	448	444
2	439	439	422	425	414	416	416	422	427	439	453	450	416	414	439	430	416	419	416	422	422	427	433	438	427
3	427	427	427	425	419	419	427	433	439	442	439	442	404	416	430	439	427	422	433	433	433	433	433	433	429
4	427	427	427	427	427	427	427	427	422	410	393	410	416	410	399	405	401	401	410	416	428	433	438	438	419
5	435	435	433	431	431	431	433	428	422	428	438	444	444	438	433	428	435	428	410	410	422	422	422	422	429
6	422	422	423	422	428	428	425	422	425	422	419	413	410	410	405	405	402	405	396	399	405	405	405	413	414
7	410	410	413	419	428	428	428	428	422	422	422	410	410	416	422	428	428	430	422	425	416	416	410	410	420
8	410	410	408	408	410	413	410	413	416	422	422	425	416	413	413	405	393	396	410	414	410	399	399	399	410
9	396	396	399	399	399	399	405	405	402	399	407	405	393	393	393	393	393	399	399	396	393	399	399	399	398
10 Q	399	402	399	393	393	393	399	402	402	402	402	405	405	405	405	399	399	405	405	399	393	396	393	393	399
11	399	399	399	399	399	399	399	393	387	382	387	399	405	393	405	405	405	399	393	382	399	399	399	399	397
12	410	416	416	425	430	425	422	419	402	410	410	399	399	382	393	402	405	393	390	393	402	405	416	422	408
13	428	428	428	422	422	425	422	416	405	416	422	422	408	402	393	393	382	399	385	388	388	399	393	405	408
14	433	430	419	416	413	410	410	410	416	408	402	399	402	398	398	396	393	399	402	402	402	405	405	402	407
15 Q	402	402	405	405	405	405	405	402	402	402	405	405	402	398	396	393	393	393	399	393	396	396	396	399	400
16 Q	404	404	404	404	404	404	408	408	408	408	408	408	408	408	402	405	402	405	408	405	402	405	405	405	405
17 Q	408	404	404	404	408	408	405	405	405	405	405	405	405	408	408	405	402	408	405	405	405	399	399	399	405
18 Q	393	393	396	396	399	399	396	399	399	399	402	405	405	403	399	405	410	410	405	396	399	399	396	399	400
19	396	408	410	410	410	405	405	405	408	399	402	410	410	410	410	413	410	410	408	408	408	413	416	419	408
20	427	439	442	433	433	430	427	425	422	413	408	410	416	416	413	413	410	405	402	408	408	405	408	410	418
21	408	413	413	416	416	416	410	410	410	413	405	399	393	399	405	408	416	416	416	410	408	405	416	416	409
22	410	410	410	410	410	410	410	408	405	399	410	413	410	405	405	405	402	405	408	408	408	399	399	399	406
23	405	405	405	405	405	405	405	405	405	405	405	402	405	408	410	405	405	405	408	413	416	422	422	413	408
24	405	402	402	399	402	399	405	405	405	402	402	402	396	408	399	399	399	399	399	402	405	410	410	408	402
25	405	405	405	399	399	399	399	399	393	396	399	393	387	387	390	393	399	393	413	410	405	405	410	405	400
26 D	405	408	399	403	405	410	410	410	405	422	422	428	436	439	433	427	427	413	405	413	456	459	450	442	422
27 D	430	425	430	430	459	456	450	445	438	427	430	428	410	422	431	407	393	405	427	425	431	442	442	436	430
28 D	425	425	419	416	419	422	416	410	367	376	382	405	433	487	479	479	510	520	523	564	559	513	503	514	457
29 D	513	510	502	496	496	496	485	575	479	459	456	453	447	442	450	448	450	445	445	442	433	433	438	445	466
30	438	436	433	433	430	433	427	427	427	427	427	427	430	425	427	425	422	442	433	427	422	427	430	427	430
31	431	431	431	427	427	425	422	427	427	422	422	422	419	419	422	425	425	427	425	425	425	422	419	422	425
Mean	419	419	420	416	417	416	416	417	413	413	419	417	411	415	417	416	415	415	416	418	418	418	418	420	416

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 4 Alert — 10 γ + — November 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	746	742	746	752	779	759	769	766	766	759	746	720	730	720	726	726	716	700	680	683	700	720	733	739	733
2	742	739	746	739	739	742	749	766	779	772	759	742	660	693	710	706	713	710	720	726	726	736	739	739	733
3	739	749	759	759	775	772	759	756	742	736	730	726	730	726	723	723	716	720	713	720	726	723	723	746	738
4	739	733	733	736	735	742	739	736	736	736	736	736	723	720	716	710	703	700	710	714	713	720	736	746	728
5 D	779	746	746	742	792	779	762	769	779	769	772	736	700	588	590	666	663	720	720	716	736	713	739	749	727
6	753	739	766	842	842	835	753	792	785	756	766	746	736	706	726	717	713	706	730	730	739	739	739	736	753
7 D	739	752	759	766	786	835	799	842	826	792	673	683	693	640	547	627	479	532	568	624	660	643	743	779	696
8 D	806	873	876	806	806	792	799	779	762	746	736	720	710	660	730	742	736	736	726	700	598	567	726	746	747
9	752	775	809	772	786	789	782	779	752	769	746	726	720	713	723	680	720	686	667	634	700	706	726	733	732
10	739	753	749	769	792	772	749	762	749	739	736	730	720	693	713	696	696	680	686	713	726	730	749	742	733
11	741	739	739	739	739	742	739	739	739	739	739	739	733	726	720	726	726	720	733	736	733	733	742	726	734
12	779	802	766	739	792	789	784	789	795	769	766	716	660	667	647	670	605	663	739	730	730	706	726	785	733
13	736	759	766	749	749	746	742	746	742	739	736	736	733	733	733	733	730	733	726	723	730	739	726	742	738
14	739	752	749	786	809	782	785	792	826	749	733	730	720	726	726	723	683	700	667	673	726	746	766	746	743
15 Q	739	739	739	739	746	739	746	742	739	739	736	733	733	733	733	726	730	726	733	726	733	733	739	740	736
16	739	739	739	739	739	746	739	742	742	749	733	733	726	730	730	726	720	730	726	713	723	720	720	742	727
17 D	716	723	730	736	733	743	733	736	753	730	724	720	716	684	594	644	766	730	706	703	670	730	753	779	713
18 D	786	726	769	776	753	763	779	832	760	793	870	720	463	700	634	608	693	697	660	641	602	743	773	766	721
19	773	773	806	793	806	763	779	766	753	736	740	713	667	740	740	707	727	700	733	724	724	740	736	726	745
20	740	736	736	769	769	766	806	778	793	760	746	720	670	640	707	664	624	605	627	634	680	713	733	773	718
21	753	829	782	806	779	763	740	733	733	726	730	724	727	733	724	720	710	720	720	710	730	730	740	746	742
22 Q	750	746	733	746	733	733	733	753	736	736	736	733	727	730	720	707	720	707	727	730	733	733	736	733	732
23 Q	733	733	733	726	726	726	726	726	726	730	726	726	717	720	723	727	727	697	717	720	727	730	727	740	726
24 Q	733	740	743	743	736	740	746	743	746	743	736	733	723	720	713	707	697	720	727	727	720	727	723	733	731
25	733	743	736	733	743	746	736	746	740	760	740	733	733	716	710	680	693	693	700	700	720	727	740	733	727
26	733	736	733	730	740	746	746	753	750	746	740	730	740	720	723	720	713	707	693	707	717	710	736	720	729
27	750	753	730	750	733	740	740	740	740	736	730	726	713	693	713	720	697	713	690	694	746	740	740	740	729
28	740	730	733	736	736	740	730	726	730	730	733	726	716	710	703	700	700	687	608	690	720	727	736	740	718
29	736	740	746	746	746	736	746	740	746	740	736	724	716	723	713	716	720	726	730	720	727	723	733	727	731
30 Q	736	736	730	733	727	736	740	746	733	733	727	724	727	720	713	707	710	687	693	707	713	727	730	720	724
31																									
Mean	747	751	754	756	761	760	755	760	754	748	741	726	704	703	699	700	698	698	698	701	710	722	729	735	731

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 5 Alert — 3260 γ + — November 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	593	581	581	575	578	563	563	551	520	520	523	508	532	557	569	575	572	572	575	605	611	605	596	581	567
2	581	575	581	581	572	575	572	557	523	487	487	499	438	472	538	566	581	387	596	593	596	593	590	611	556
3	611	599	593	587	578	569	557	551	554	544	557	563	566	566	566	569	566	569	575	581	584	587	596	599	574
4	593	575	575	575	575	572	569	563	563	560	563	560	563	563	563	560	554	566	575	590	590	593	611	634	575
5 D	689	617	575	557	593	560	538	532	502	454	478	523	478	389	411	548	581	632	611	640	623	611	647	665	567
6	611	587	590	617	581	551	532	520	472	429	472	496	548	560	578	572	575	575	593	593	593	587	584	587	558
7 D	584	605	581	587	584	590	560	548	432	454	344	332	399	408	363	502	514	557	617	683	563	751	689	605	536
8 D	653	695	707	599	575	544	538	505	548	548	548	523	508	490	554	578	581	581	584	590	623	640	617	593	580
9	596	626	614	611	590	575	557	544	493	496	472	472	478	541	557	538	581	572	596	605	605	613	617	613	565
10	603	587	587	593	587	563	557	553	541	535	544	544	557	538	563	563	557	557	569	581	581	587	581	575	567
11	575	572	569	569	569	569	569	566	566	557	557	557	544	544	544	551	572	569	575	581	581	587	605	611	569
12	640	665	617	575	605	581	551	544	502	460	466	460	417	454	490	532	542	554	590	590	596	617	611	683	556
13	628	605	596	569	557	563	557	560	557	557	551	560	563	563	560	566	563	569	569	566	574	581	575	578	570
14	584	587	587	605	569	563	557	505	484	557	538	563	538	563	563	569	538	563	581	596	602	593	605	575	566
15 Q	563	563	563	566	569	563	566	563	563	563	563	560	563	563	566	557	557	563	569	566	574	572	587	587	566
16	569	566	566	563	566	572	563	563	557	557	554	557	554	563	560	557	557	569	575	569	574	587	640	656	574
17 D	602	605	569	581	572	572	560	557	557	551	557	563	557	514	469	469	596	590	596	605	611	659	677	674	578
18 D	718	647	605	581	527	502	484	466	426	305	411	380	202	374	441	472	569	653	611	617	650	671	689	695	527
19	640	611	581	569	569	535	514	511	544	551	526	514	475	557	581	560	581	569	581	575	574	581	581	569	561
20	563	569	563	593	593	554	551	514	511	608	520	496	478	466	544	532	563	575	599	605	605	629	623	626	558
21	634	653	629	617	563	544	538	548	548	554	554	551	551	569	563	563	551	566	575	581	575	575	587	605	574
22 Q	593	387	563	563	563	563	563	563	557	551	538	542	557	569	569	551	563	563	575	575	572	569	572	572	565
23 Q	566	566	566	566	566	569	566	566	566	566	563	557	541	557	569	575	575	563	578	581	581	581	581	587	569
24 Q	575	581	581	575	563	569	563	557	551	551	551	557	563	557	551	551	554	575	575	575	581	611	605	581	569
25	572	572	575	563	575	569	563	557	542	490	520	532	557	554	548	538	557	569	575	581	581	587	578	569	559
26	569	566	569	563	572	569	563	551	544	541	520	508	557	551	554	563	569	569	575	581	584	581	605	599	564
27	599	599	557	569	557	563	557	557	551	551	551	538	532	517	538	557	569	563	593	575	581	575	569	566	561
28	575	569	563	566	566	566	563	557	557	557	551	557	544	542	538	544	557	563	557	538	605	593	587	575	561
29	575	581	575	569	569	557	563	557	554	538	535	538	544	557	557	563	575	572	572	572	569	572	575	572	563
30 Q	569	569	563	569	560	563	557	548	548	548	544	544	557	554	551	551	557	551	569	575	581	569	575	569	560
31																									
Mean	600	595	584	578	572	562	553	543	531	520	520	521	515	526	537	550	555	565	582	589	589	601	610	609	564

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 6 Alert — 55,000 γ + — November 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	425	428	428	425	425	428	425	425	422	425	425	422	428	428	422	425	422	422	422	428	428	422	422	422	424
2	419	419	416	422	425	422	416	416	416	419	428	431	431	433	431	431	428	428	422	419	416	416	413	422	423
3	422	422	425	425	422	422	422	422	422	416	419	422	422	422	422	422	425	428	428	425	422	422	422	422	423
4	422	422	422	422	422	422	422	422	419	416	416	416	416	414	416	416	422	425	422	425	416	410	410	419	419
5 D	428	428	425	422	416	416	419	410	405	414	422	422	405	408	428	422	419	419	416	428	416	410	422	439	420
6	436	422	419	410	410	422	425	405	405	410	419	419	422	416	416	410	408	405	402	399	396	391	391	393	410
7 D	399	405	405	410	408	410	416	416	416	428	425	451	451	451	456	468	474	482	485	485	485	482	471	434	442
8 D	439	451	513	488	465	454	439	436	439	431	428	422	410	427	431	439	428	425	416	410	436	445	431	428	439
9	422	422	422	433	431	433	428	422	416	416	416	416	419	422	422	422	422	416	419	436	428	428	428	425	424
10	422	416	418	414	410	410	410	410	410	410	410	410	408	408	408	410	414	422	416	416	416	416	413	410	414
11	410	408	408	408	405	408	405	405	405	405	405	408	405	408	410	416	410	405	405	398	393	399	396	405	402
12	402	408	416	422	419	416	416	416	410	408	408	405	405	414	410	410	413	416	416	414	416	419	414	419	414
13	416	410	410	410	410	410	410	408	408	408	405	408	405	405	405	399	402	402	405	405	408	405	405	405	407
14	405	405	396	396	396	399	399	399	416	427	410	410	405	405	405	405	402	402	410	416	410	408	405	402	406
15 Q	402	402	405	402	399	399	399	399	399	399	402	405	405	405	402	402	405	408	410	405	405	410	410	402	404
16	408	408	408	408	408	408	405	405	405	405	405	405	403	405	405	405	405	408	405	405	408	411	408	422	407
17 D	411	414	405	405	405	403	397	397	397	397	403	403	405	411	405	425	423	417	414	411	422	422	422	417	409
18 D	440	434	428	425	414	411	411	408	400	440	480	463	477	502	485	474	457	454	440	457	463	440	434	446	445
19	446	443	434	434	434	434	425	428	428	422	411	408	411	422	422	417	411	411	408	408	405	405	408	405	421
20	411	411	411	411	405	411	417	417	425	422	417	411	411	422	425	411	431	431	434	440	440	440	428	417	421
21	417	422	440	434	428	428	422	420	417	411	408	411	405	408	411	411	411	411	411	411	411	408	408	411	415
22 Q	408	417	417	417	411	408	405	405	405	405	400	408	405	405	405	405	405	411	411	405	405	405	405	405	407
23 Q	403	405	403	403	403	405	405	405	403	403	405	405	403	405	405	405	405	400	394	397	394	397	397	400	402
24 Q	400	403	405	405	405	405	405	405	405	408	403	403	400	397	394	394	403	400	400	400	400	400	400	405	402
25	400	400	394	397	400	400	400	400	394	394	400	400	400	394	388	391	394	394	397	397	400	400	394	394	397
26	394	394	394	394	394	394	397	400	400	405	394	391	400	400	400	400	394	394	394	397	394	400	405	402	398
27	402	402	402	402	400	400	397	394	394	400	400	400	400	400	402	400	400	400	408	405	405	397	397	397	400
28	394	391	391	394	397	391	394	394	394	394	391	394	388	388	394	388	397	394	405	405	400	394	394	394	395
29	394	397	397	397	397	397	394	394	391	394	394	394	394	394	391	391	394	394	394	394	394	394	394	394	395
30 Q	394	394	394	394	394	394	391	391	391	388	388	388	388	388	388	388	388	391	394	394	391	388	388	388	391
31																									
Mean	410	410	411	410	410	410	408	407	406	409	409	409	408	412	412	410	411	408	411	412	412	410	408	409	410

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 7 Alert — 10 γ + — December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	721	727	720	721	757	747	780	767	790	777	694	628	671	246	470	648	758	760	744	767	727	747	754	803	704
2 D	752	843	760	747	770	787	757	764	744	734	589	651	681	500	516	603	487	631	616	648	674	558	740	734	674
3 D	873	817	859	949	929	865	859	827	773	747	787	780	549	681	651	619	631	727	700	704	700	727	677	727	758
4	737	760	757	760	754	757	740	754	754	751	763	727	700	717	707	651	573	714	724	707	727	707	727	740	728
5	730	729	734	734	730	734	747	737	740	730	727	727	727	707	697	691	596	513	622	603	744	727	747	754	705
6	744	740	767	770	773	727	727	720	720	734	734	727	700	658	654	596	603	649	674	691	730	757	740	740	712
7	747	747	754	730	747	740	740	734	747	747	727	693	664	773	741	734	734	721	721	730	734	727	727	730	736
8 Q	727	727	727	727	727	727	734	734	740	737	734	727	720	720	710	714	710	714	710	721	717	721	721	734	725
9	734	737	727	730	727	727	727	747	740	734	727	714	727	730	717	714	710	714	701	697	691	714	727	721	723
10	727	734	727	750	721	721	724	727	727	727	717	694	714	730	727	714	674	622	631	634	674	687	681	744	703
11	758	783	740	767	780	773	773	760	707	780	751	727	714	691	661	619	589	589	603	616	671	721	734	727	705
12	740	754	770	767	721	727	727	730	727	727	724	721	707	767	697	714	717	721	721	727	727	721	727	727	726
13	727	727	721	724	724	730	727	727	724	721	721	717	720	720	710	701	694	707	710	721	710	701	707	714	717
14	737	747	750	750	740	747	744	734	745	734	727	721	714	714	714	717	717	714	714	721	710	707	717	724	727
15	724	739	739	737	760	760	744	747	737	730	721	694	681	659	687	704	717	714	710	707	701	701	707	717	718
16	709	722	732	729	729	729	739	752	742	729	715	715	709	676	689	682	702	705	692	712	715	709	702	715	715
17	728	728	758	762	742	722	719	722	729	729	712	702	715	705	695	689	676	682	699	705	709	722	705	719	716
18 Q	722	728	742	748	735	729	722	722	722	719	719	715	715	709	709	709	712	715	715	715	715	719	719	715	720
19 Q	722	715	715	722	722	722	715	719	719	715	715	712	709	709	709	702	699	669	686	699	715	722	715	719	712
20 Q	722	728	732	729	729	732	735	745	739	732	719	702	715	719	709	695	695	675	695	702	709	729	729	722	717
21	715	722	725	742	742	719	722	722	742	722	722	712	712	715	712	709	709	709	709	715	715	719	715	715	719
22	722	722	729	732	729	729	722	729	722	719	715	709	702	649	676	676	669	642	669	676	682	722	722	729	704
23	735	735	749	782	775	762	778	740	748	722	715	695	689	699	715	672	702	691	699	702	702	695	712	625	713
24	729	748	735	742	735	739	742	729	719	725	715	709	682	695	679	652	666	682	691	702	729	715	722	729	712
25 Q	725	722	725	722	722	725	725	735	729	719	722	715	715	715	719	702	715	712	709	712	709	719	715	722	719
26	722	722	729	725	729	735	725	745	742	735	722	709	695	689	709	689	675	666	682	699	709	719	729	729	714
27	732	768	749	722	729	732	735	749	762	748	735	715	689	709	702	725	702	709	712	722	696	722	722	719	725
28 D	729	722	729	732	755	722	729	755	752	732	675	702	742	679	612	448	550	696	755	722	729	689	689	755	701
29	735	778	762	755	715	732	719	725	735	738	708	715	709	682	692	689	649	689	722	682	709	722	715	689	715
30	715	735	750	748	775	755	782	745	748	722	729	676	650	709	646	615	560	656	752	722	702	705	702	748	701
31 D	735	729	722	755	742	749	755	732	739	732	729	689	702	692	709	702	682	695	523	519	715	715	735	729	711
Mean	735	740	742	747	746	742	742	741	739	733	719	707	697	682	679	674	664	680	693	697	706	711	718	723	715

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 8 Alert — 3260 γ + — December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	554	548	551	551	587	575	587	563	536	443	376	315	360			536	659	641	629	605	593	632	620	677	
2 D	617	656	563	520	520	503	503	533	524	478	297	309	406	309	345	499	551	623	653	671	793	769	751	695	546
3 D	787	763	671	662	593	536	496	466	418	340	424	418	227	436	445	484	521	593	593	605	635	695	599	605	542
4	585	590	587	578	569	557	548	545	505	448	364	496	481	539	545	518	508	575	569	572	578	578	585	596	547
5	569	557	566	557	560	563	563	545	557	557	551	551	554	539	527	548	505	518	575	569	623	605	617	605	562
6	614	560	581	581	557	551	551	551	551	551	548	526	490	443	443	424	472	560	605	611	623	617	575	575	549
7	572	560	563	542	560	557	551	551	536	530	527	466	406	545	563	560	563	563	560	566	563	557	557	556	544
8 Q	557	557	554	554	557	557	557	551	545	557	551	533	554	551	551	557	557	563	563	563	560	563	563	563	555
9	566	563	557	557	557	557	551	551	539	533	533	508	534	551	545	545	539	551	557	572	593	587	569	563	553
10	551	557	554	575	557	551	557	557	551	542	520	460	484	539	554	557	557	563	569	587	605	632	621	593	558
11	587	605	590	575	575	557	533	514	430	430	457	443	443	449	463	466	493	527	587	629	660	650	632	611	538
12	593	581	593	581	539	545	551	554	554	548	539	539	536	527	533	557	560	566	563	563	566	557	560	557	557
13	554	554	551	557	557	560	557	557	554	551	551	551	551	554	548	545	551	563	569	566	566	599	623	641	564
14	605	581	569	560	551	548	545	542	542	545	545	551	551	554	551	557	554	551	554	557	551	560	581	587	558
15	557	557	563	557	563	539	539	530	524	518	518	503	484	478	520	554	575	572	569	566	563	593	581	602	547
16	575	572	572	566	560	554	545	525	521	521	513	530	545	521	539	557	563	563	563	566	572	572	593	587	554
17	590	575	575	566	551	551	551	551	545	533	527	524	539	548	536	539	539	551	563	569	572	578	575	569	555
18 Q	569	569	575	569	563	557	551	551	551	545	545	542	548	551	551	557	557	557	563	563	557	563	563	566	558
19 Q	557	557	557	563	560	557	554	554	554	554	554	554	554	554	557	554	554	539	560	569	569	569	557	563	557
20 Q	563	566	569	563	557	554	551	539	526	526	521	503	524	557	557	545	551	545	569	569	572	587	575	566	552
21	569	563	563	575	560	545	551	551	539	542	542	551	551	551	551	551	554	557	557	557	563	566	563	566	555
22	566	563	563	569	554	545	551	545	545	545	536	518	503	475	503	530	551	545	587	596	593	587	575	569	550
23	578	569	575	584	575	551	536	527	521	518	502	478	472	503	554	530	560	560	563	569	572	581	677	545	550
24	587	605	563	560	551	545	545	539	545	525	508	499	484	508	490	493	539	557	585	587	605	605	569	557	548
25 Q	560	557	557	554	554	557	554	554	545	536	539	545	545	551	557	545	557	554	551	557	557	563	560	566	553
26	557	557	563	557	560	551	551	542	524	514	514	496	493	502	545	542	542	548	560	575	575	572	569	605	547
27	539	605	584	548	539	563	557	539	530	521	514	503	460	496	463	563	551	551	560	569	563	566	566	557	544
28 D	557	563	569	557	569	545	539	521	514	647	406	427	511	520	466	406	502	605	641	617	623	608	623	611	541
29	597	590	593	566	533	548	539	545	536	533	508	514	502	514	539	542	527	563	575	569	584	599	677	587	558
30	572	575	585	581	575	542	566	542	524	481	521	454	430	496	484	484	521	539	587	578	605	599	584	611	543
31 D	587	581	560	572	557	557	548	539	545	533	536	503	481	493	514	539	536	560	551	557	587	578	575	584	549
Mean	582	579	572	567	559	551	547	541	530	515	506	493	490	511	515	529	544	564	576	580	592	596	595	587	551

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 9 Alert 55,000 γ + December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	394	394	394	394	385	377	382	388	388	368	371	394	405	437	523	483	474	440	431	440	426	428	423	440	416
2 D	451	444	466	444	431	428	451	434	423	411	405	454	451	466	494	503	505	488	486	486	497	542	526	511	468
3 D	505	543	563	580	560	546	520	503	483	488	491	483	486	500	486	483	486	468	457	457	457	468	468	451	497
4	444	437	434	440	440	440	428	426	422	428	440	440	440	434	428	431	437	440	423	420	417	428	423	423	432
5	422	420	426	422	428	422	422	422	422	422	420	420	417	414	405	411	411	437	440	428	434	422	426	417	422
6	422	411	414	411	428	434	428	426	422	422	420	414	411	414	434	440	440	451	437	434	431	420	420	417	426
7	417	411	411	417	417	417	411	411	411	414	422	420	428	437	428	428	417	417	417	417	414	414	417	414	418
8 Q	411	411	411	417	411	411	411	414	414	414	411	405	405	405	405	405	405	405	400	400	405	405	405	400	408
9	403	405	405	405	405	405	408	408	408	411	411	408	414	414	414	411	408	411	417	414	414	411	405	405	410
10	405	403	403	400	400	405	405	405	405	403	397	400	411	417	414	403	405	417	417	426	428	428	426	411	410
11	405	405	414	414	414	411	411	405	400	414	422	422	428	428	431	434	440	440	443	443	434	428	423	417	411
12	417	417	417	417	417	420	417	417	414	411	408	405	405	405	403	405	405	408	405	405	405	403	403	405	410
13	403	403	403	403	403	400	400	403	400	400	400	403	403	400	400	400	403	405	403	400	400	403	411	417	403
14	414	408	403	400	400	400	400	403	403	403	403	403	400	400	400	400	400	400	400	400	400	403	403	403	402
15	397	394	394	394	394	397	397	394	394	394	394	394	400	403	403	400	400	397	394	394	397	405	400	394	397
16	406	406	406	406	400	400	398	400	400	400	400	406	406	403	409	406	398	398	400	395	395	398	394	406	401
17	406	406	406	403	406	406	403	403	398	398	398	398	398	398	395	395	400	406	403	400	400	398	403	400	401
18 Q	398	400	400	400	400	400	398	398	398	395	395	395	392	395	395	395	395	395	395	395	395	395	395	395	396
19 Q	395	395	395	395	395	395	398	395	395	395	395	395	395	395	395	392	389	389	392	392	386	383	392	392	392
20 Q	392	392	395	395	395	395	392	395	398	392	389	389	395	398	395	392	389	395	395	392	392	392	392	395	392
21	988	392	392	392	395	395	392	389	389	389	389	392	389	386	389	392	395	389	389	392	395	392	389	389	391
22	389	392	392	392	389	389	389	386	386	386	386	380	383	386	398	395	395	395	400	400	398	392	392	389	390
23	392	392	392	395	403	403	400	403	400	395	392	392	395	403	403	395	395	395	395	392	389	395	420	434	398
24	412	406	400	398	395	392	392	389	392	386	392	395	395	398	398	403	406	400	398	398	400	406	398	395	398
25 Q	392	392	389	389	392	392	392	389	389	392	395	395	392	392	389	389	389	389	392	394	392	392	389	389	391
26	389	389	389	389	389	389	389	386	383	383	383	386	386	389	392	389	389	392	395	392	389	389	389	395	389
27	392	389	392	398	395	395	392	395	395	395	395	395	398	400	400	392	389	392	389	392	392	389	380	383	392
28 D	383	383	392	392	392	389	386	380	380	389	398	403	400	394	392	429	446	426	409	398	395	406	409	406	398
29	403	406	406	409	403	400	398	398	395	389	389	398	392	392	398	398	400	415	400	398	395	395	409	432	400
30	420	406	403	395	400	406	412	403	400	392	398	389	406	409	412	420	432	423	415	406	417	417	409	406	405
31 D	406	409	403	403	400	400	403	403	398	398	392	389	395	406	406	400	394	398	411	426	406	400	392	394	401
Mean	409	408	410	410	409	408	407	406	404	401	404	405	407	410	414	413	414	413	411	410	409	411	410	410	409

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (All Days)

Table 10 Alert 10 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct*	Nov	Dec	Year	Summer	Equinox	Winter
0-1										775	747	735				
1-2										779	751	740				
2-3										785	754	742				
3-4										787	756	747				
4-5										781	761	746				
5-6										777	760	742				
6-7										779	755	742				
7-8										775	760	741				
8-9										767	754	739				
9-10										762	748	733				
10-11										755	741	719				
11-12										744	726	707				
12-13										723	709	697				
13-14										717	703	682				
14-15										713	699	679				
15-16										707	700	674				
16-17										707	698	664				
17-18										705	698	680				
18-19										710	698	693				
19-20										720	701	697				
20-21										728	710	706				
21-22										744	722	711				
22-23										750	729	718				
23-24										766	735	723				
Mean										747	731	715				

*30 days only

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (All Days)

Table 11 Alert 3260 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct *	Nov	Dec	Year	Summer	Equinox	Winter
0-1										613	600	582				
1-2										608	595	579				
2-3										596	584	572				
3-4										589	578	567				
4-5										575	572	559				
5-6										565	562	551				
6-7										556	553	547				
7-8										551	543	541				
8-9										536	531	530				
9-10										525	520	515				
10-11										530	520	506				
11-12										529	521	493				
12-13										533	515	490				
13-14										532	526	511				
14-15										542	537	515				
15-16										554	550	529				
16-17										570	555	544				
17-18										584	565	564				
18-19										597	582	576				
19-20										612	589	580				
20-21										622	589	592				
21-22										627	601	596				
22-23										622	610	595				
23-24										615	609	587				
Mean										574	564	551				

* 1 day missing

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 12 Alert 55,000 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1										419	410	409				
1-2										419	410	408				
2-3										420	411	410				
3-4										416	410	410				
4-5										417	410	409				
5-6										416	410	408				
6-7										416	408	407				
7-8										417	407	406				
8-9										413	406	404				
9-10										413	409	401				
10-11										419	409	404				
11-12										417	409	405				
12-13										411	408	407				
13-14										415	412	410				
14-15										417	412	414				
15-16										416	410	413				
16-17										415	411	414				
17-18										415	408	413				
18-19										416	411	411				
19-20										418	412	410				
20-21										418	412	409				
21-22										418	410	411				
22-23										418	408	410				
23-24										420	409	410				
Mean										416	410	409				

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (Quiet Days)

Table 13 Alert 10 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1										761	738	724				
1-2										763	739	724				
2-3										763	736	728				
3-4										766	737	730				
4-5										765	734	727				
5-6										766	735	727				
6-7										763	738	726				
7-8										761	742	731				
8-9										756	736	730				
9-10										756	736	724				
10-11										753	732	722				
11-12										750	730	714				
12-13										744	725	715				
13-14										742	725	714				
14-15										738	720	711				
15-16										741	715	704				
16-17										740	717	706				
17-18										741	707	697				
18-19										741	719	703				
19-20										744	722	710				
20-21										749	725	713				
21-22										758	730	722				
22-23										761	731	720				
23-24										758	733	722				
Mean										754	730	719				

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (Quiet Days)

Table 14 Alert 3260 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1										583	573	561				
1-2										578	573	561				
2-3										577	567	563				
3-4										577	568	561				
4-5										572	564	558				
5-6										568	565	557				
6-7										567	563	554				
7-8										564	559	550				
8-9										561	557	544				
9-10										558	556	544				
10-11										559	552	542				
11-12										562	552	535				
12-13										562	555	545				
13-14										565	560	553				
14-15										569	561	555				
15-16										575	557	552				
16-17										580	561	555				
17-18										582	563	552				
18-19										584	573	561				
19-20										593	574	564				
20-21										595	578	563				
21-22										592	580	568				
22-23										586	584	564				
23-24										585	579	565				
Mean										575	566	555				

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Quiet Days)

Table 15 Alert 55,000 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1										401	401	398				
1-2										401	404	398				
2-3										402	405	398				
3-4										400	404	399				
4-5										402	402	399				
5-6										402	402	399				
6-7										403	401	398				
7-8										403	401	398				
8-9										403	401	399				
9-10										403	401	398				
10-11										404	400	397				
11-12										406	402	396				
12-13										405	400	396				
13-14										404	400	397				
14-15										402	399	396				
15-16										401	399	395				
16-17										401	400	393				
17-18										404	402	395				
18-19										404	400	395				
19-20										400	400	395				
20-21										399	399	394				
21-22										399	400	393				
22-23										398	400	395				
23-24										399	400	394				
Mean										402	401	396				

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (Disturbed Days)

Table 16 Alert 10 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1										808	765	762				
1-2										813	764	768				
2-3										821	776	758				
3-4										848	765	781				
4-5										814	774	791				
5-6										796	782	774				
6-7										808	774	776				
7-8										787	792	769				
8-9										759	776	760				
9-10										766	766	744				
10-11										761	755	695				
11-12										738	716	690				
12-13										653	656	669				
13-14										694	654	560				
14-15										681	619	592				
15-16										652	657	604				
16-17										640	667	622				
17-18										657	683	702				
18-19										658	676	668				
19-20										635	677	672				
20-21										647	653	709				
21-22										729	699	687				
22-23										759	747	719				
23-24										786	764	750				
Mean										738	721	710				

* 1 Oct missing

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (Disturbed Days)

Table 17 Alert 3260 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct *	Nov	Dec *	Year	Summer	Equinox	Winter
0-1										639	649	637				
1-2										620	634	640				
2-3										611	607	591				
3-4										602	581	578				
4-5										564	570	560				
5-6										541	554	535				
6-7										525	536	522				
7-8										522	522	515				
8-9										482	493	500				
9-10										439	462	500				
10-11										443	468	416				
11-12										458	464	414				
12-13										453	429	406				
13-14										475	435	440				
14-15										495	448	443				
15-16										506	514	482				
16-17										541	568	528				
17-18										592	603	595				
18-19										625	604	614				
19-20										685	627	613				
20-21										716	614	660				
21-22										734	666	663				
22-23										699	664	637				
23-24										639	646	624				
Mean										567	557	546				

* 1 day missing

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Disturbed Days)

Table 18 Alert 55,000 γ + 1961

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct*	Nov	Dec	Year	Summer	Equinox	Winter
0-1										444	419	428				
1-2										434	426	435				
2-3										442	435	444				
3-4										424	430	443				
4-5										432	422	434				
5-6										427	419	428				
6-7										426	416	428				
7-8										447	413	422				
8-9										418	411	414				
9-10										425	422	411				
10-11										459	432	411				
11-12										440	432	425				
12-13										429	430	427				
13-14										455	440	441				
14-15										462	441	460				
15-16										454	446	460				
16-17										450	440	461				
17-18										449	439	444				
18-19										453	434	439				
19-20										462	438	441				
20-21										467	444	436				
21-22										461	440	449				
22-23										457	436	444				
23-24										457	433	440				
Mean										445	431	436				

* 1 day missing

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 19 Alert — 10 γ + — January 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	714	727	730	766	763	724	717	720	714	717	720	714	697	701	701	704	707	701	714	714	714	707	704	727	718
2	733	733	753	763	753	733	760	746	753	707	707	727	675	688	701	691	655	658	688	717	714	694	710	710	715
3	717	717	717	717	720	724	727	724	714	710	707	704	684	691	707	710	707	707	707	701	694	691	648	661	704
4 Q	720	714	727	727	717	717	720	714	720	720	707	714	707	704	701	704	710	707	707	707	707	714	743	743	715
5 Q	740	740	740	740	740	743	743	746	746	746	740	733	730	733	733	730	730	730	733	733	733	733	740	740	738
6	740	740	746	760	750	750	756	746	749	743	743	740	740	740	727	714	701	695	695	740	747	740	743	737	738
7	740	743	743	743	740	740	740	740	740	740	740	737	740	730	720	720	707	720	727	707	701	704	714	743	731
8	753	753	773	763	651	651	746	746	746	746	743	740	720	723	681	671	675	668	733	750	747	747	743	743	734
9	740	747	747	760	760	743	746	746	746	740	740	724	697	714	671	671	704	701	701	681	688	714	737	753	724
10 D	750	760	780	832	885	766	733	746	753	753	727	626	622	697	573	544	622	720	671	638	655	688	740	795	718
11 D	782	760	786	780	812	773	780	780	753	750	743	727	697	678	707	724	727	710	681	714	722	733	743	750	743
12	743	743	760	763	766	766	756	746	753	746	743	740	733	733	737	737	737	717	697	701	722	730	730	756	740
13	753	760	763	760	760	766	769	756	753	766	750	740	720	733	720	730	734	734	730	727	722	737	747	743	745
14	747	750	750	746	743	737	756	753	760	766	760	756	747	740	710	632	563	678	635	697	720	697	707	714	720
15	786	763	766	763	773	763	766	792	773	760	750	760	743	740	697	710	727	734	704	714	740	710	770	740	748
16 D	727	730	780	766	750	780	789	812	776	756	753	733	655	766	743	720	688	710	714	694	714	704	707	756	738
17	737	750	741	757	768	768	754	741	750	744	741	737	731	724	727	708	721	721	714	734	727	741	741	741	737
18	731	741	734	734	741	741	744	741	741	741	741	737	734	727	721	702	675	734	727	734	731	734	737	741	732
19 D	737	741	754	727	734	768	760	780	774	747	737	731	678	544	642	620	564	636	652	737	727	741	747	741	713
20	747	754	747	727	754	750	741	760	747	737	737	737	740	734	731	724	718	714	714	691	724	727	741	744	736
21	744	737	760	747	754	768	734	767	767	760	754	727	673	620	747	727	734	727	721	737	708	721	701	747	733
22 Q	737	737	751	734	747	756	750	760	747	741	734	734	734	734	734	734	734	731	731	737	740	734	734	734	739
23 Q	741	741	741	734	741	741	741	737	737	734	741	734	734	727	727	727	727	734	727	727	727	731	734	737	734
24 Q	741	734	737	741	737	741	734	734	734	734	737	734	734	727	727	724	708	704	711	714	718	721	727	737	729
25	741	734	741	741	741	747	750	760	754	744	727	734	727	718	724	727	718	714	721	721	734	731	727	737	735
26	727	734	744	747	747	750	744	747	750	737	727	721	718	702	666	695	666	695	665	714	750	740	740	747	724
27 D	750	760	744	741	777	806	786	757	768	768	724	767	734	711	711	701	731	692	721	741	708	695	714	708	731
28	747	741	744	754	760	760	754	744	754	741	741	731	731	734	721	711	708	698	714	727	718	727	737	731	735
29	734	747	747	763	790	754	754	754	754	747	731	718	718	675	688	721	734	727	734	731	734	741	714	741	736
30	757	747	750	754	754	764	757	760	760	741	741	727	718	721	675	721	747	737	734	727	711	708	711	744	736
31	741	741	751	741	747	744	741	747	747	741	734	734	734	734	731	727	727	727	727	731	732	737	737	741	738
Mean	743	744	746	752	758	752	751	751	751	744	737	730	720	712	707	703	701	709	709	716	722	723	730	743	731

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 20 Alert — 3500 γ + — January 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	336	321	333	333	327	309	303	306	300	297	297	303	291	297	309	309	315	315	318	315	318	315	324	357	314
2	366	351	345	333	315	291	291	261	258	211	190	270	238	268	297	315	291	309	327	333	333	339	333	330	300
3	321	312	312	312	312	309	300	297	297	297	288	279	270	279	303	312	318	312	312	312	315	321	342	333	307
4 Q	327	321	324	315	306	306	309	303	303	294	276	273	291	291	300	309	315	309	312	312	312	312	309	309	306
5 Q	309	309	309	309	309	306	303	303	300	297	291	279	285	297	309	303	303	303	309	309	309	309	315	315	304
6	309	306	312	318	309	306	303	303	300	291	291	285	285	303	297	288	291	303	309	321	318	309	309	306	303
7	306	306	303	303	306	303	306	306	303	297	291	291	291	285	279	285	285	303	314	309	321	339	333	315	304
8	309	315	333	321	303	300	297	297	291	288	282	285	285	279	255	261	282	297	327	327	321	315	309	312	300
9	309	315	312	312	312	309	297	303	297	291	282	276	232	261	249	258	297	303	314	327	354	351	330	321	301
10 D	315	330	357	369	339	312	294	309	268	273	217	22	16	154	121	160	282	375	363	381	393	378	399	399	284
11 D	363	342	333	312	333	300	297	291	273	279	268	264	220	202	247	279	309	312	306	321	333	327	333	339	300
12	333	318	318	312	309	309	297	297	285	291	285	297	294	297	297	303	309	303	306	312	327	327	321	321	310
13	318	327	315	309	303	297	297	297	279	276	268	285	276	279	285	303	309	309	309	315	315	318	321	318	297
14	309	306	306	309	309	300	312	300	294	279	268	261	285	285	255	214	175	249	279	345	357	345	428	384	301
15	387	315	315	303	300	297	294	282	285	268	249	261	273	285	264	282	309	309	294	321	327	333	399	345	304
16 D	312	315	345	333	315	315	297	276	303	279	297	243	127	255	268	285	268	309	321	309	327	345	345	357	296
17	327	327	318	327	312	297	306	297	297	297	294	285	285	285	288	282	291	291	303	318	318	321	312	309	304
18	306	315	309	306	306	309	303	300	300	294	288	285	294	294	288	279	268	306	309	315	309	306	309	309	300
19 D	309	321	333	327	309	336	300	282	261	279	276	279	244	112	184	220	243	327	345	345	339	348	333	324	290
20	306	309	321	297	321	309	303	303	297	291	297	288	297	303	300	303	297	294	303	309	315	324	330	333	305
21	324	321	315	309	312	309	297	289	249	232	249	255	214	166	297	294	315	309	312	315	315	348	330	324	292
22 Q	315	315	318	309	312	315	303	296	291	297	303	300	297	303	303	306	309	309	309	312	309	309	309	309	307
23 Q	303	306	309	306	306	306	306	303	303	297	297	300	297	285	297	303	309	309	312	309	315	321	318	312	305
24 Q	309	309	312	312	306	303	303	303	303	303	303	297	300	297	303	300	291	297	309	312	315	327	327	321	307
25	318	312	309	309	309	312	306	300	276	268	268	291	303	297	309	315	312	309	312	315	315	309	315	333	305
26	327	315	312	306	303	303	297	291	288	288	255	226	247	270	241	297	285	321	309	339	339	330	327	321	297
27 D	345	345	300	300	324	309	291	273	255	235	184	273	291	276	303	297	324	300	309	324	324	339	366	333	301
28	324	300	300	318	321	309	291	291	285	285	288	303	303	309	307	297	297	291	312	315	315	318	327	324	299
29	327	321	306	330	318	306	294	285	288	279	300	279	238	223	268	303	321	315	321	315	321	315	321	339	301
30	366	327	327	312	300	312	297	279	273	273	276	252	238	270	241	291	327	321	318	315	309	333	321	324	301
31	321	309	315	306	312	306	309	303	297	297	300	300	297	303	303	309	306	309	309	309	309	309	306	303	300
Mean	325	318	318	315	312	306	300	294	288	281	273	269	261	268	282	288	295	313	313	320	325	327	332	328	302

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 21 Alert — 55,000 γ + — January 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	400	400	403	400	406	412	406	406	403	400	395	395	398	398	398	400	398	398	395	395	395	392	392	395	399
2	400	406	409	412	412	409	404	406	406	400	412	412	412	406	406	406	400	400	400	398	398	400	395	395	405
3	395	398	398	398	398	392	395	398	398	398	392	392	395	395	398	398	395	395	395	398	398	398	400	397	396
4 Q	400	400	400	400	400	400	400	400	395	392	389	395	395	395	395	395	395	392	395	395	395	392	395	395	396
5 Q	395	395	395	395	395	395	395	395	395	392	392	389	392	392	392	392	392	395	395	395	395	395	392	392	393
6	389	392	392	392	395	400	398	395	395	395	392	395	395	395	395	395	400	395	395	392	389	389	392	392	393
7	392	392	392	392	392	392	392	389	389	389	389	392	389	389	392	395	395	395	392	395	400	402	400	395	393
8	392	389	395	395	395	395	395	389	389	389	386	389	383	386	389	395	398	406	392	389	389	389	389	386	391
9	389	389	386	386	389	392	392	389	386	386	386	386	389	398	398	404	406	400	400	400	406	406	398	395	394
10 D	395	395	395	395	406	412	423	412	389	389	392	398	440	458	452	475	472	443	429	440	449	435	435	429	423
11 D	420	417	417	420	429	432	426	429	417	415	412	406	404	412	423	418	412	415	417	420	412	406	406	409	416
12	412	412	406	406	406	400	400	404	400	404	400	404	404	406	406	406	404	400	404	406	406	406	409	406	405
13	406	406	400	460	400	398	400	400	400	398	395	398	400	400	400	397	400	398	398	395	398	398	398	400	398
14	398	395	395	395	395	398	395	395	395	395	395	395	395	395	395	400	420	429	429	423	412	412	423	440	405
15	412	400	404	400	400	400	398	395	400	398	398	409	404	406	400	404	404	395	395	406	400	406	415	406	403
16 D	406	403	406	409	406	398	392	400	409	406	400	395	406	423	412	412	409	406	406	400	406	412	417	409	406
17	410	410	410	415	406	400	403	403	400	406	400	400	400	400	400	406	412	406	406	403	403	400	397	397	404
18	400	400	398	400	400	400	400	398	400	400	400	398	400	397	397	400	406	406	400	400	398	400	400	397	399
19 D	398	398	403	403	400	398	398	400	403	406	400	395	392	403	432	435	444	446	432	406	406	406	406	400	409
20	403	406	403	400	406	400	400	400	403	400	400	400	400	397	397	397	395	395	397	406	403	400	395	395	399
21	395	406	403	398	395	392	395	389	392	395	400	397	395	412	412	392	395	392	395	395	398	400	403	403	397
22 Q	400	395	398	398	400	398	398	398	400	400	400	400	397	395	395	395	397	400	397	395	395	395	398	398	397
23 Q	395	398	395	395	395	398	395	395	398	398	395	395	395	395	392	397	397	395	395	395	395	395	392	392	395
24 Q	389	389	395	392	392	392	392	392	392	397	392	389	389	389	389	392	392	392	395	395	397	400	400	400	393
25	395	395	392	392	392	392	392	389	389	389	389	389	386	386	389	386	386	386	383	386	383	389	389	392	389
26	397	397	389	389	389	386	386	386	386	389	383	386	395	395	395	400	395	395	406	397	386	389	395	392	392
27 D	395	392	392	392	392	395	400	400	398	398	398	406	395	392	389	389	392	395	397	397	400	403	412	412	397
28	397	395	392	395	395	392	395	395	395	395	392	395	392	395	389	383	386	386	389	389	389	389	389	392	392
29	395	395	395	398	395	395	395	389	389	389	392	375	386	383	395	392	389	389	389	392	392	389	392	397	391
30	403	400	400	395	395	395	395	392	392	389	389	386	395	397	397	400	395	392	389	389	386	397	400	392	394
31	395	392	392	389	389	389	389	386	386	389	389	389	386	389	389	389	389	389	386	389	389	389	392	389	389
Mean	399	398	398	398	398	398	398	396	396	395	395	395	397	399	400	401	402	401	400	399	399	399	401	400	398

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 22 Alert — 10 γ + — February 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	728	728	731	735	735	732	732	732	732	728	725	725	725	722	725	722	718	722	718	725	715	725	721	708	726
2	718	741	735	728	728	735	787	764	767	754	748	741	725	712	698	695	725	708	689	698	708	695	715	735	724
3	741	689	735	715	718	744	787	781	715	725	735	721	725	722	718	722	741	728	679	708	725	695	715	728	726
4 D	731	721	751	735	735	751	761	774	741	725	718	692	673	533	539	574	558	636	620	679	741	761	783	770	695
5	695	745	790	718	708	721	725	735	728	728	722	735	728	725	735	728	735	709	741	735	735	731	731	731	730
6	728	735	735	741	735	747	735	725	725	728	741	728	728	732	718	735	728	725	708	754	728	735	741	761	734
7 D	751	780	771	761	735	800	764	768	757	747	761	748	718	708	643	558	604	676	676	728	754	744	735	738	726
8 Q	735	741	735	741	738	747	735	741	741	738	728	718	715	735	712	715	715	709	715	728	735	735	728	728	730
9	738	741	768	738	728	738	748	757	748	744	744	721	705	692	712	718	715	715	715	718	721	715	735	738	730
10 Q	751	744	731	741	751	741	735	728	741	731	731	728	715	715	728	722	722	721	718	728	728	728	731	735	732
11	728	741	757	761	748	744	751	735	735	735	735	715	718	731	718	715	718	709	649	604	597	626	610	754	710
12 D	835	774	728	728	748	764	797	774	761	748	751	738	728	712	715	702	646	686	646	643	630	715	731	741	727
13	741	738	767	800	829	728	748	748	768	754	728	695	771	754	735	695	682	695	669	718	715	718	731	761	736
14	754	741	748	774	783	758	748	761	757	761	748	741	735	692	698	722	708	663	682	669	708	649	692	728	725
15	741	738	741	784	829	738	748	731	764	735	728	718	715	715	728	715	640	584	545	748	770	767	757	738	726
16 D	739	742	732	725	729	729	729	752	791	835	768	634	696	565	519	568	637	605	677	559	598	732	755	842	693
17	788	794	778	768	778	768	762	788	781	781	778	758	722	735	699	690	709	683	677	674	677	709	739	745	741
18	735	735	738	738	738	742	728	734	765	748	745	729	729	709	729	715	709	706	601	627	715	706	742	742	721
19 Q	742	742	742	735	748	755	755	755	748	729	729	725	696	690	696	709	716	703	715	715	719	729	735	732	727
20	729	735	738	742	742	745	752	762	755	755	742	722	686	699	709	699	709	719	729	719	703	683	729	722	726
21	745	738	742	742	742	768	745	742	729	729	739	729	690	699	683	591	677	539	677	696	722	765	729	745	712
22	755	745	748	832	768	819	775	788	755	729	742	715	680	703	660	605	719	715	693	722	725	719	725	745	738
23	742	732	745	758	775	771	735	735	748	758	729	690	742	686	627	686	693	709	686	694	709	725	735	709	721
24	735	738	765	735	781	781	781	748	775	768	768	715	715	706	647	690	672	643	598	646	686	699	729	729	719
25	755	745	758	745	745	771	813	762	732	739	729	729	715	712	709	715	693	722	696	667	702	722	690	726	727
26 D	719	745	732	748	771	788	748	735	743	735	732	735	718	742	686	680	716	670	568	572	742	788	775	765	724
27	758	758	748	738	745	755	742	742	762	788	784	735	715	677	690	578	588	693	650	650	709	755	755	742	719
28 Q	745	745	742	742	755	742	755	758	742	745	742	729	725	715	706	703	725	729	722	722	735	752	739	735	735
29																									
30																									
31																									
Mean	741	743	748	747	751	753	752	752	750	747	741	721	718	701	688	682	689	686	674	687	709	723	728	740	724

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 23 Alert — 3500 γ + — February 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	300	300	300	303	303	297	297	297	297	297	297	297	300	297	303	306	306	306	309	303	303	303	309	309	302
2	327	354	321	315	291	309	330	309	285	289	285	289	285	297	289	321	300	303	265	282	300	300	339	357	306
3	333	315	321	321	303	315	330	315	279	291	289	285	273	276	282	294	315	303	250	285	306	285	285	306	298
4 D	345	327	345	345	315	312	303	291	279	265	262	232	166	18	113	187	208	270	291	312	336	324	309	330	270
5	285	327	381	306	255	273	291	291	294	291	291	303	312	309	300	300	309	289	309	309	312	309	306	306	302
6	309	312	315	309	294	297	294	291	294	294	291	300	297	297	276	303	300	303	291	327	315	337	337	404	306
7 D	390	330	324	300	282	303	262	270	250	179	255	289	259	267	241	185	246	321	333	337	337	321	315	312	290
8 Q	309	309	306	303	297	303	297	297	291	282	273	255	250	279	291	297	303	303	315	315	315	324	327	321	298
9	321	321	321	300	297	300	303	291	276	278	255	255	255	255	285	303	300	303	309	309	315	321	315	321	295
10 Q	321	305	297	303	312	297	297	291	294	291	285	279	279	285	291	300	303	309	309	309	309	309	306	306	300
11	315	315	330	321	294	300	291	291	291	291	270	238	232	289	295	291	315	309	273	327	387	416	366	410	311
12 D	446	410	306	285	297	300	306	273	267	258	267	270	270	267	273	285	262	289	303	327	375	354	381	360	309
13	321	309	339	337	327	285	294	294	279	273	232	155	250	273	273	252	285	300	282	333	327	321	333	422	295
14	413	357	333	315	336	291	285	285	282	267	262	265	267	243	238	273	282	273	291	295	381	378	351	327	304
15	337	315	315	333	333	289	297	289	339	294	270	255	267	279	297	297	223	232	279	375	366	348	327	303	302
16 D	309	315	303	294	294	297	297	303	285	214	112	-94	136	134	101	166	339	354	404	398	395	398	393	422	274
17	398	375	357	318	309	279	282	267	190	199	217	243	267	294	279	297	318	315	337	337	351	348	333	345	302
18	315	306	303	309	300	309	291	294	291	262	285	291	297	279	312	300	303	318	279	303	330	333	337	327	303
19 Q	321	309	309	297	309	309	291	285	276	286	289	273	250	253	276	303	306	303	315	315	321	318	309	332	297
20	309	309	306	309	309	303	303	297	273	265	270	265	229	238	279	291	309	327	327	327	327	327	327	422	298
21	210	303	303	303	306	324	294	282	289	291	279	267	243	243	273	205	309	250	324	351	339	333	315	422	293
22	303	309	312	387	297	273	265	267	250	252	238	205	211	262	232	217	327	336	324	333	321	310	321	321	295
23	315	324	333	333	321	312	291	291	291	270	238	214	295	230	172	273	297	312	321	351	351	348	375	357	300
24	324	309	339	300	333	300	297	279	265	250	226	205	220	236	179	243	291	279	300	333	382	345	357	348	289
25	324	297	315	318	306	300	309	282	282	282	285	285	276	267	257	297	303	324	318	285	351	345	345	387	306
26 D	375	327	324	297	303	309	282	285	285	279	273	279	252	300	289	279	309	294	336	360	416	384	333	321	312
27	297	297	295	291	297	297	289	289	279	220	148	74	77	146	214	214	270	336	351	375	366	345	321	422	266
28 Q	312	309	315	303	306	303	303	294	273	279	273	246	255	299	318	315	321	333	339	333	324	324	315	422	304
29																									
30																									
31																									
Mean	332	322	320	313	304	299	295	289	279	266	258	240	249	252	258	271	295	303	311	326	342	337	332	339	297

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 24 Alert — 55,000 γ + — February 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 Q	395	395	392	395	392	395	395	395	392	392	395	392	395	392	395	395	392	392	389	389	384	384	384	387	391
2	390	395	395	401	392	384	369	355	349	355	364	366	358	366	381	378	372	389	392	400	406	406	406	387	382
3	378	384	381	384	398	392	375	361	384	384	381	381	378	378	389	389	412	421	404	406	400	404	406	404	391
4 D	404	401	398	387	390	390	375	375	381	378	361	346	344	375	410	416	421	418	421	418	416	410	424	395	393
5	418	429	395	378	392	401	401	395	389	395	395	422	404	410	410	406	406	400	404	400	389	387	387	387	400
6	384	387	390	390	390	392	392	398	398	401	404	406	400	400	400	403	400	400	400	410	389	389	384	389	396
7 D	398	392	398	407	401	398	398	398	395	404	418	400	398	395	392	406	429	432	416	410	404	400	400	398	404
8 Q	395	395	395	395	395	395	392	395	395	398	390	390	390	395	395	390	390	390	386	386	386	390	395	392	392
9	395	395	395	395	392	392	392	387	390	393	395	395	392	395	392	390	390	392	395	395	395	395	392	392	393
10 Q	390	390	390	390	390	390	387	390	390	390	387	384	390	390	390	392	392	392	392	389	389	389	389	387	390
11	390	392	390	390	390	392	390	390	390	390	384	378	395	400	395	395	384	386	395	416	421	429	438	424	397
12 D	421	432	424	421	412	407	401	398	401	404	410	410	406	406	404	400	404	400	407	412	429	418	429	421	411
13	418	412	412	407	410	410	401	404	398	401	395	398	422	422	412	410	406	404	401	412	404	401	406	412	407
14	427	424	421	412	412	407	407	404	404	404	404	404	404	400	400	404	404	404	407	407	412	424	421	412	409
15	407	404	407	407	404	413	407	407	401	401	398	398	401	401	401	404	401	435	450	413	396	398	396	393	406
16 D	396	393	390	393	396	393	410	404	398	404	407	418	447	435	453	461	464	438	433	441	458	441	430	416	422
17	418	432	430	430	427	424	418	410	404	419	424	422	422	424	418	407	413	416	410	413	418	410	398	407	417
18	404	404	407	410	407	410	407	410	404	401	407	410	410	401	404	407	401	398	387	413	393	401	398	401	404
19 Q	401	398	401	401	404	401	401	404	401	407	404	396	393	390	390	390	393	390	390	390	390	393	396	398	396
20	401	398	401	398	396	396	396	396	398	396	398	396	384	387	384	381	378	378	384	384	378	381	390	396	391
21	390	393	396	396	390	393	393	396	401	401	390	372	372	367	367	372	387	384	390	390	378	384	378	404	387
22	396	387	372	378	367	372	383	387	383	390	383	383	396	387	370	378	381	375	381	378	378	378	390	401	382
23	381	396	396	393	390	393	393	396	387	378	383	383	401	381	381	387	384	390	372	378	381	384	384	390	387
24	387	373	401	387	387	387	393	387	381	390	396	398	396	396	404	401	393	396	410	406	410	401	401	395	396
25	398	390	396	390	396	396	396	396	396	393	396	393	396	390	396	390	384	393	387	384	410	395	395	413	395
26 D	416	401	401	401	396	390	390	396	390	398	404	413	401	401	398	384	404	407	395	404	390	390	395	401	398
27	398	398	401	396	393	393	390	390	390	390	393	410	416	418	407	404	407	384	378	384	384	384	384	393	395
28 Q	398	390	390	393	396	393	396	398	407	404	401	398	401	396	393	390	390	401	381	378	381	384	378	393	393
29																									
30																									
31																									
Mean	400	400	399	397	396	396	394	394	393	394	395	395	397	396	398	398	399	400	399	400	399	398	399	399	397

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 25 Alert 10 γ + March 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	735	735	739	735	755	742	745	781	768	748	729	700	709	690	722	650	677	686	719	729	729	722	719	716	724
2	748	735	745	748	742	742	768	775	742	745	742	748	709	716	729	706	643	660	601	690	771	748	742	735	726
3	735	739	742	735	739	735	745	738	729	735	722	722	716	716	686	650	670	637	614	605	760	657	657	716	700
4	719	742	739	748	742	735	745	732	735	729	742	719	716	723	722	722	709	719	706	706	722	716	722	742	727
5 D	729	742	735	742	742	735	729	765	765	771	742	742	690	503	824	660	625	559	667	683	758	758	762	775	717
6 D	781	748	748	791	916	854	788	768	758	748	722	703	539	696	677	614	680	703	663	683	712	725	748	742	730
7	758	748	748	751	755	758	788	762	755	732	735	725	716	677	706	709	690	637	722	629	732	729	732	735	730
8 Q	735	742	745	755	751	755	762	745	738	735	725	725	716	716	716	716	719	712	722	722	735	729	735	735	733
9 Q	735	735	735	732	735	735	729	729	729	729	722	716	716	700	703	709	722	709	703	703	735	732	735	732	723
10	729	748	781	762	781	775	768	781	778	781	762	749	709	647	703	709	667	670	673	696	709	725	693	722	727
11	748	735	775	765	896	831	804	781	748	748	732	735	729	725	729	719	618	618	663	673	677	709	742	729	735
12 D	748	738	745	749	735	768	781	781	771	762	742	709	712	690	683	637	624	605	579	631	631	729	748	722	710
13	788	742	762	778	755	745	738	748	771	778	765	745	742	748	723	735	706	696	738	732	735	735	722	735	746
14	739	739	749	745	749	742	762	762	762	762	742	748	732	723	709	667	696	696	670	670	716	716	739	729	727
15	748	755	775	814	788	801	735	748	729	735	733	735	732	716	716	709	716	722	704	723	719	719	716	709	737
16 Q	732	748	742	732	755	729	748	748	733	733	722	703	696	700	696	716	716	709	709	716	720	716	725	742	724
17	736	733	723	740	743	736	756	750	750	736	717	717	687	723	717	691	710	720	723	717	723	727	736	736	727
18	733	740	740	743	740	746	746	730	720	740	704	710	694	684	684	675	675	678	704	681	687	720	736	730	714
19 D	742	763	750	736	782	736	736	730	736	730	736	717	615	655	638	665	717	635	520	553	638	766	766	753	700
20	742	750	756	753	769	763	743	723	730	727	714	717	704	684	678	687	691	599	586	740	743	684	730	759	716
21 D	762	742	742	743	739	763	795	816	750	743	733	697	707	704	635	651	658	651	612	582	642	648	766	704	708
22	742	762	759	733	759	750	740	733	736	720	707	704	697	704	697	700	704	710	710	710	717	645	697	730	719
23	736	742	730	733	736	730	730	759	710	736	743	678	720	700	717	697	697	707	687	694	710	714	743	736	721
24	700	769	756	720	730	730	743	740	763	736	714	704	710	684	687	697	687	655	714	730	736	743	736	736	722
25	719	723	792	782	795	736	776	789	802	789	759	750	743	730	710	671	675	681	697	671	687	710	723	733	735
26	729	756	789	753	736	743	743	750	740	736	720	717	710	714	714	723	717	707	720	714	733	750	736	736	733
27 Q	727	750	746	730	746	717	756	730	710	697	691	697	678	678	665	661	661	700	717	727	740	736	727	736	714
28	742	740	743	740	740	736	730	730	717	714	691	668	645	631	665	638	645	612	652	710	652	684	704	714	691
29	802	795	791	789	776	782	792	795	730	700	720	714	714	678	710	704	704	691	671	720	717	730	723	767	736
30 Q	736	750	743	723	740	743	733	723	736	730	720	704	700	710	704	697	697	697	675	655	661	665	704	736	712
31	742	740	743	746	743	750	730	733	704	704	700	697	681	697	710	704	710	687	727	723	717	714	704	750	719
Mean	742	747	752	750	766	753	756	755	744	739	728	717	699	692	703	687	685	674	677	689	709	714	728	733	722

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 26 Alert 3500 γ + March 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	312	303	303	297	315	297	294	273	238	267	262	244	232	238	226	265	297	321	321	327	321	336	315	309	289
2	342	339	339	322	304	292	295	298	278	280	275	269	257	211	245	234	228	240	263	321	336	316	309	304	288
3	304	310	304	295	292	292	295	287	287	287	287	283	269	275	240	205	222	222	257	298	387	369	321	363	290
4	369	342	298	304	298	287	289	280	283	275	251	243	251	257	280	298	309	316	312	304	304	310	321	339	297
5 D	310	298	287	292	292	287	280	292	275	228	219	228	193	-43	333	292	355	237	287	321	371	398	357	322	276
6 D	336	304	298	333	345	287	266	240	234	205	165	175	28	146	245	228	316	342	333	345	327	327	321	322	270
7	339	325	304	304	316	298	275	269	266	263	269	263	263	228	287	298	304	295	316	316	312	312	309	316	294
8 Q	310	310	307	310	298	292	292	275	263	280	280	280	287	292	287	292	298	292	298	301	307	298	307	304	294
9 Q	307	304	292	292	289	287	287	287	287	287	283	283	275	275	280	287	304	304	310	318	316	312	301	298	294
10	316	333	342	322	322	304	287	266	263	234	228	234	193	158	205	263	257	280	280	287	359	384	375	369	286
11	365	345	339	322	351	357	375	240	263	245	211	222	257	257	251	280	231	243	280	298	339	325	339	316	293
12 D	333	339	310	304	292	316	292	280	257	240	237	167	170	170	170	170	214	211	275	345	333	342	351	345	269
13	419	359	345	333	292	280	292	275	263	251	257	292	225	251	211	214	243	263	318	316	316	316	309	322	290
14	322	301	304	292	304	292	292	287	269	263	278	245	234	237	260	301	333	342	357	363	351	312	328	312	299
15	310	333	339	333	292	310	263	269	269	269	269	249	275	292	301	309	304	322	328	342	339	398	372	310	306
16 Q	301	322	307	278	301	280	287	280	272	357	263	272	266	269	269	318	316	295	310	327	327	316	321	307	298
17	316	310	292	304	295	287	289	272	266	263	240	245	222	240	257	257	292	316	312	309	309	309	309	310	284
18	304	295	304	304	295	298	275	278	278	275	269	245	205	205	245	245	278	304	318	312	345	327	330	328	286
19 D	336	348	316	289	322	284	275	260	266	269	245	228	118	141	187	309	360	292	292	327	351	357	339	310	284
20	304	301	316	304	312	287	280	269	272	263	269	255	211	193	228	245	304	263	316	369	351	357	401	401	294
21 D	345	322	310	287	275	304	280	269	249	237	243	251	269	228	181	196	245	240	322	321	345	321	451	345	285
22	310	316	316	275	298	280	266	260	263	263	272	275	287	298	298	309	328	333	333	339	336	287	375	345	302
23	328	316	336	289	287	280	280	287	263	275	251	181	240	280	292	309	316	339	322	322	330	339	333	325	297
24	316	360	354	289	287	284	284	275	283	266	266	266	275	283	283	283	245	234	304	359	339	304	304	304	293
25	316	333	360	345	322	280	269	243	214	240	222	199	193	228	222	222	228	249	269	269	304	327	339	316	271
26	345	363	369	333	298	292	280	283	275	275	260	269	275	275	283	287	287	283	295	298	309	330	325	310	300
27 Q	298	322	316	280	292	266	298	272	255	266	275	269	280	283	339	312	304	298	295	316	312	327	321	318	296
28	322	307	298	287	287	275	269	269	263	257	245	225	228	222	280	295	309	322	322	327	345	381	351	360	293
29	393	393	354	322	295	280	251	240	245	266	263	251	211	243	292	289	309	304	304	399	307	316	312	333	296
30 Q	325	322	298	287	298	298	287	275	280	272	275	272	280	278	287	298	304	316	280	251	281	292	312	328	292
31	333	322	298	292	280	292	275	275	263	280	280	292	292	304	322	298	336	322	351	339	325	336	345	325	309
Mean	328	326	317	304	301	292	284	272	264	264	255	248	234	233	261	271	287	288	306	320	330	331	335	326	291

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 27 Alert — 55,000 γ + — March 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	400	400	402	397	397	397	397	391	391	397	391	391	394	408	411	414	405	403	397	397	397	397	385	391	398
2	400	414	420	420	417	414	414	411	414	414	417	417	408	402	402	400	408	403	411	414	408	402	402	397	409
3	402	402	400	397	400	400	400	402	402	400	400	402	397	391	379	397	382	385	400	414	411	408	414	419	400
4	431	423	414	414	411	411	405	402	402	397	382	379	388	397	397	397	388	379	379	385	391	397	397	402	399
5 D	402	402	402	400	400	397	400	397	394	391	397	397	379	400	437	385	382	400	405	408	408	400	385	379	398
6 D	391	397	397	408	402	419	417	417	408	397	400	400	408	408	408	414	419	419	405	411	408	405	408	402	407
7	405	402	402	411	411	411	402	408	408	408	408	405	402	400	408	400	394	397	397	402	402	402	402	400	403
8 Q	397	397	400	402	400	400	397	402	402	402	405	402	397	397	397	397	394	403	408	402	408	402	402	397	400
9 Q	400	397	397	397	400	402	402	402	405	397	397	397	385	385	385	379	391	391	391	391	397	397	397	397	395
10	402	405	405	408	408	411	408	405	402	402	405	411	400	400	411	408	394	397	408	417	420	408	414	414	407
11	417	419	414	414	411	417	417	420	422	414	408	425	425	419	411	414	402	408	408	411	425	420	411	411	415
12 D	414	414	414	411	414	411	414	408	405	405	408	402	408	408	419	417	425	431	419	417	420	425	420	420	414
13	442	440	431	419	419	417	414	414	414	420	431	425	431	419	417	411	414	408	402	402	400	397	397	402	416
14	402	400	400	400	400	402	402	405	408	408	414	408	400	402	397	385	382	382	385	385	379	382	397	397	397
15	397	394	397	397	400	408	419	417	417	408	400	402	420	419	411	397	402	402	385	379	374	379	397	394	401
16 Q	400	397	391	391	391	391	397	394	397	397	397	394	379	379	388	374	379	391	397	385	382	385	388	391	390
17	391	391	394	394	391	391	387	387	385	385	379	379	385	388	397	397	397	395	402	397	397	397	397	397	392
18	391	391	391	391	391	391	377	382	391	371	382	357	354	374	397	374	377	388	391	382	391	400	388	388	383
19 D	385	385	391	391	394	391	387	391	391	385	391	374	368	385	388	385	379	374	391	408	397	377	382	379	386
20	397	397	391	391	385	385	391	397	400	385	385	368	362	385	385	385	382	368	382	368	362	357	362	379	381
21 D	385	388	391	391	391	394	391	397	411	402	379	388	397	377	385	391	385	394	402	385	400	385	420	400	392
22	394	391	385	391	391	388	385	388	382	379	382	379	385	391	388	377	371	371	379	374	371	368	414	400	384
23	388	391	385	394	391	394	391	379	385	382	362	377	368	374	382	371	362	368	357	359	362	362	365	374	376
24	374	394	408	408	397	394	385	374	371	382	382	374	368	377	391	394	408	402	405	397	382	394	394	380	389
25	391	400	400	400	402	408	388	379	388	400	400	391	388	411	425	414	400	397	397	400	405	408	411	405	400
26	402	397	397	402	402	402	400	395	391	397	397	402	402	402	397	391	391	391	400	400	402	402	391	374	397
27 Q	385	388	379	385	385	388	385	374	379	394	385	359	342	354	371	348	339	360	385	391	397	385	382	385	376
28	385	382	379	379	377	371	374	368	362	347	342	328	328	317	317	312	325	328	331	334	348	359	354	362	350
29	365	379	382	385	382	385	379	385	385	385	374	359	402	351	365	368	362	359	365	358	362	368	374	379	370
30 Q	374	371	374	379	385	379	388	397	397	397	379	365	365	379	374	362	357	357	351	371	385	397	400	402	378
31	402	402	402	388	385	377	385	388	385	397	379	374	351	357	374	385	374	351	351	358	354	358	334	328	359
Mean	397	398	398	398	398	398	397	396	397	395	392	388	387	389	394	388	386	387	390	390	392	391	393	392	393

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 2 8 Alert — 10 γ + — April 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	733	743	733	769	778	798	781	753	781	740	717	671	613	616	636	649	665	668	681	668	720	707	707	710	709
2	723	740	736	743	740	723	720	727	720	720	685	688	694	688	675	662	603	622	681	616	652	668	691	759	695
3	642	720	733	759	762	791	815	762	688	710	707	701	671	685	688	655	688	610	623	659	694	733	659	746	704
4	740	733	733	769	746	785	772	795	772	778	785	720	688	707	697	681	675	675	688	678	688	691	678	762	727
5	781	775	762	746	736	707	714	707	727	720	736	697	704	697	701	694	691	701	694	714	727	717	720	740	721
6 D	727	727	746	765	772	785	791	798	753	759	781	772	762	707	658	649	714	621	543	572	603	553	649	755	706
7 D	811	766	720	838	785	870	928	889	840	772	755	707	678	752	610	546	720	658	685	579	616	636	720	811	738
8 D	791	726	805	811	808	778	733	753	759	743	733	752	691	720	723	620	363	569	603	613	694	741	691	707	706
9	785	697	714	740	740	785	772	785	736	720	720	726	726	701	598	678	704	668	668	611	688	762	743	755	718
10 D	745	720	736	746	755	740	714	717	805	805	824	772	752	668	569	543	707	572	569	540	636	671	733	714	699
11	759	765	883	867	755	765	798	775	798	759	794	720	717	704	662	616	553	629	639	688	678	681	694	694	725
12	701	723	830	714	723	752	723	736	730	727	714	717	707	707	688	649	598	604	645	642	642	616	642	736	695
13 Q	781	736	736	727	755	759	733	720	752	736	720	714	714	720	701	675	636	613	633	663	668	688	701	714	708
14 Q	759	742	723	720	720	730	726	726	733	723	720	701	704	694	694	685	688	697	694	694	697	701	710	727	714
15	733	740	752	788	791	717	733	707	733	714	701	714	691	681	675	626	553	566	649	649	701	755	785	766	705
16	772	766	802	760	714	730	724	714	737	708	695	672	646	614	585	582	592	598	620	643	665	701	682	721	686
17	721	740	753	818	812	760	708	737	721	714	717	701	650	656	659	682	662	646	659	643	701	688	724	695	709
18	727	730	766	785	824	824	834	821	802	799	766	691	665	688	623	633	579	653	662	595	675	669	721	730	719
19	746	753	805	802	760	701	812	695	714	688	711	662	650	659	663	675	665	669	679	682	695	682	708	685	706
20	701	763	760	753	775	721	717	711	734	750	698	665	663	659	679	669	627	643	662	688	656	711	701	746	703
21	844	827	799	750	763	724	766	546	517	501	582	637	714	775	747	675	575	488	485	643	643	646	763	763	674
22 D	779	792	831	867	812	831	841	775	831	824	746	714	675	650	646	562	514	585	592	604	646	637	721	669	714
23	760	772	821	812	869	851	799	802	805	760	760	662	650	630	582	604	585	672	701	663	669	688	701	734	722
24 Q	714	740	737	734	753	763	750	746	727	760	688	633	724	601	688	714	682	575	623	663	695	708	779	746	707
25	734	727	740	743	756	761	761	792	785	743	750	727	675	669	630	610	582	572	556	675	643	737	766	743	704
26	721	753	769	753	761	812	795	818	841	779	760	753	734	727	695	695	662	692	708	695	650	665	701	691	735
27	714	695	698	759	782	812	805	779	721	766	795	785	756	730	688	672	705	675	665	660	662	623	675	701	722
28	701	708	730	769	740	799	815	792	783	792	760	750	721	711	672	607	610	701	675	660	669	656	691	662	715
29 Q	727	734	756	753	746	727	766	753	708	737	737	740	737	721	650	691	669	665	637	643	617	675	760	734	712
30 Q	747	724	714	727	727	730	753	734	743	775	785	766	746	740	704	656	659	669	682	637	601	643	669	734	712
31																									
Mean	744	741	760	770	766	768	771	752	749	740	735	712	697	689	663	645	631	631	643	647	667	682	709	729	710

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 29 Alert 3500 γ + April 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	303	327	303	316	275	275	245	239	213	205	208	164	175	234	289	324	336	333	336	327	310	339	330	315	285
2	303	321	298	310	269	263	269	269	257	254	251	283	275	269	283	280	257	292	342	315	432	410	413	459	306
3	292	298	286	295	301	304	269	242	245	257	260	263	286	286	292	254	289	251	263	357	371	365	321	347	290
4	336	286	280	342	298	295	225	245	164	146	193	228	263	280	289	283	292	286	342	333	327	321	339	418	284
5	406	389	330	316	263	251	260	257	266	266	254	239	263	269	275	298	303	327	315	319	327	327	310	303	297
6 D	306	298	315	327	292	283	263	228	254	216	136	146	216	199	181	210	239	193	216	237	350	430	345	398	262
7 D	462	471	345	392	298	315	239	245	193	115	216	79	17	158	118	175	298	254	321	315	380	369	436	543	281
8 D	508	333	339	298	298	298	257	245	231	210	222	190	88	79	154	76	99	181	298	266	400	404	333	350	256
9	441	339	321	333	298	315	286	277	263	263	269	263	234	231	128	167	222	239	286	286	350	377	357	369	286
10 D	315	289	363	330	283	292	239	269	292	181	128	124	231	172	82	47	263	164	307	321	398	404	436	353	263
11	404	406	404	387	286	251	239	216	216	193	169	128	169	184	231	222	208	234	243	292	345	369	375	392	270
12	330	357	427	303	277	303	277	280	269	269	266	263	222	181	210	231	169	187	220	286	339	339	350	387	281
13 Q	387	310	345	292	301	301	275	263	275	257	269	269	269	263	257	228	222	231	257	298	303	327	315	321	285
14 Q	375	339	303	286	283	277	269	269	275	269	266	269	280	286	286	286	298	298	312	312	327	327	339	318	298
15	303	315	336	336	303	257	275	245	266	257	263	263	275	280	286	234	245	298	353	310	310	330	353	321	293
16	359	333	353	277	219	243	260	234	263	237	225	225	222	231	254	239	330	345	357	365	383	424	380	380	297
17	336	372	356	356	324	278	257	260	266	277	272	263	231	254	272	280	307	321	336	356	365	378	362	312	308
18	307	318	366	360	338	312	286	283	254	240	199	225	266	237	234	303	251	377	371	330	401	356	412	389	309
19	342	348	378	345	324	248	342	219	257	263	269	263	295	318	321	333	336	360	354	345	348	348	354	360	320
20	366	395	354	348	318	275	266	269	292	286	272	280	301	307	336	336	307	357	354	371	389	401	350	383	330
21	468	372	339	257	248	217	248	121	99	176	330	381	384	342	330	289	181	228	315	462	511	470	489	458	321
22 D	519	424	374	360	321	286	269	231	149	228	202	149	169	135	190	181	169	330	406	424	424	429	518	441	306
23	476	436	381	338	348	318	280	237	217	181	158	158	237	357	242	356	225	332	354	354	354	384	381	360	311
24 Q	368	384	318	298	328	330	318	298	269	295	248	312	246	167	295	328	324	283	365	277	330	318	386	365	310
25	360	324	333	330	333	328	295	278	246	254	202	237	318	312	237	231	272	254	213	330	339	354	371	342	295
26	328	324	389	318	313	338	312	301	205	211	208	196	208	254	298	330	303	315	371	368	360	374	427	409	311
27	384	333	366	372	372	348	342	312	275	237	240	231	205	205	196	184	242	272	260	301	348	342	384	395	298
28	387	387	384	404	330	362	324	315	289	266	260	237	283	231	213	184	214	307	295	286	339	386	412	348	310
29 Q	350	366	354	336	336	318	332	310	286	289	275	266	225	219	137	190	205	214	236	283	289	360	436	389	291
30 Q	354	318	324	324	301	312	332	312	295	277	260	240	222	237	225	213	231	234	275	315	324	315	333	350	288
31																									
Mean	373	350	345	330	303	293	278	260	246	236	234	226	236	237	239	243	255	277	309	325	359	370	378	376	295

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 30 Alert — 55,000 γ + — April 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	355	364	364	361	361	370	370	373	358	367	353	347	341	335	333	313	316	321	335	335	341	350	358	364	349
2	370	373	370	373	375	375	381	375	364	358	355	370	364	347	341	347	390	390	350	387	378	375	364	375	364
3	398	398	398	387	370	364	361	398	415	407	401	364	370	367	355	347	407	358	364	378	367	353	373	368	375
4	375	381	390	393	393	390	390	384	364	373	384	378	387	398	390	384	370	384	370	364	364	370	381	381	380
5	387	387	393	398	401	404	404	404	395	387	387	384	398	395	395	395	387	381	373	375	381	381	375	378	389
6 D	384	375	381	381	373	375	378	375	393	412	415	427	407	419	436	410	410	421	427	446	459	459	556	453	411
7 D	436	455	455	438	425	415	421	433	433	427	447	415	427	432	427	453	427	425	430	430	438	427	427	433	433
8 D	464	433	421	404	410	410	425	412	410	401	410	433	436	444	436	427	450	433	436	433	421	415	413	438	426
9	436	467	455	447	433	427	419	427	427	441	438	450	415	387	375	387	413	433	421	410	412	393	384	373	420
10 D	373	384	410	404	410	421	415	427	407	375	401	404	444	453	412	433	418	410	438	436	415	410	425	433	415
11	438	415	415	413	419	410	398	404	398	410	398	425	438	450	441	387	378	398	415	427	421	413	433	427	415
12	415	438	436	425	415	415	421	415	410	412	410	415	393	398	407	398	410	404	412	415	407	415	427	430	414
13 Q	425	418	427	415	413	410	407	410	412	415	418	418	410	410	395	381	384	390	387	387	390	398	404	412	406
14 Q	421	415	415	415	419	415	407	404	398	393	387	395	398	393	387	378	370	378	378	373	375	375	375	381	395
15	384	390	378	375	375	384	395	398	393	390	387	375	370	381	395	344	348	355	353	323	364	404	398	387	377
16	340	323	338	340	349	363	369	363	340	323	312	312	300	312	312	318	323	315	329	320	323	334	334	340	330
17	349	358	360	362	369	375	380	375	363	397	378	326	309	315	323	340	355	340	335	340	335	338	343	358	351
18	380	392	369	354	354	354	352	360	378	380	375	338	315	293	326	312	309	335	314	286	323	323	323	323	340
19	340	352	352	362	352	362	352	338	343	346	312	318	318	318	318	326	323	332	335	338	346	352	355	340	339
20	355	380	383	380	380	380	372	375	366	372	346	340	340	338	352	352	309	320	332	346	320	314	318	329	350
21	317	289	292	300	295	312	303	258	300	315	383	432	420	458	406	375	366	332	358	369	340	332	406	395	352
22 D	352	355	363	358	358	360	366	369	358	352	349	338	348	320	329	315	326	329	340	340	338	331	323	315	343
23	338	340	332	332	332	332	338	338	320	309	412	406	275	278	261	293	275	323	329	340	315	300	300	306	312
24 Q	312	312	320	346	358	326	340	309	298	284	267	300	243	264	290	375	380	246	283	343	386	403	409	343	322
25	326	323	343	352	352	346	332	323	315	318	289	335	358	355	309	300	389	335	355	400	386	403	412	398	345
26	363	372	360	352	355	346	363	378	369	360	386	380	363	358	375	369	369	383	366	346	326	326	348	352	360
27	352	369	395	400	392	386	392	403	418	420	423	415	412	412	403	403	406	403	409	415	409	412	418	420	403
28	403	415	415	415	400	403	403	418	429	443	446	437	406	369	386	397	395	386	380	400	403	389	386	380	404
29 Q	397	409	409	397	395	400	403	403	412	406	415	395	397	392	395	395	392	409	406	412	409	418	386	363	400
30 Q	363	377	397	409	406	415	426	446	464	466	455	460	443	429	400	363	360	380	403	400	395	415	415	424	413
31																									
Mean	378	382	386	383	381	382	383	384	382	382	381	381	375	373	371	367	366	367	372	377	377	378	383	381	378

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 31 Alert — 10 γ + — May 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	705	748	718	738	768	794	748	718	715	712	722	741	731	712	699	676	669	666	669	676	630	614	624	715	705
2	692	715	741	780	758	770	791	787	767	781	768	748	748	728	712	698	610	586	627	640	636	656	670	753	711
3	728	755	722	738	755	770	758	781	780	741	751	738	669	695	689	702	705	676	673	682	686	689	670	708	722
4 Q	722	728	735	735	748	755	744	748	715	712	689	686	689	689	689	676	669	669	676	686	682	695	722	735	702
5	738	720	722	728	715	741	728	728	686	682	702	702	686	689	682	669	676	679	673	682	741	627	592	705	703
6 D	768	764	815	735	718	712	712	689	702	656	808	741	702	656	573	579	569	630	586	560	579	630	624	682	675
7	702	794	735	735	748	741	735	738	784	774	748	712	761	731	722	715	695	715	689	650	670	643	630	686	719
8	709	761	722	722	728	801	715	712	692	682	666	676	689	689	695	682	663	621	640	656	642	617	630	604	684
9	682	751	744	725	748	774	741	748	715	708	722	728	705	686	679	676	663	650	663	682	699	715	715	728	710
10	738	699	741	777	767	725	728	767	748	735	741	712	663	673	682	653	650	660	682	682	682	695	702	735	710
11	738	738	735	735	744	741	731	712	689	692	692	722	712	692	689	610	586	614	586	669	689	643	770	715	693
12	755	761	752	748	735	774	741	738	728	768	689	669	692	695	689	689	689	695	679	702	689	712	722	715	718
13 D	755	741	730	787	767	531	748	755	722	722	771	761	695	702	636	617	653	624	607	695	547	620	671	633	687
14 D	728	761	801	531	819	808	744	808	777	787	751	731	592	617	643	637	617	610	617	653	560	633	676	748	698
15 D	695	748	811	801	808	761	768	801	744	755	761	663	689	656	689	682	573	547	397	586	705	731	761	761	703
16	761	708	770	748	797	808	825	801	787	774	801	809	722	666	617	630	666	676	646	590	679	702	663	738	721
17	746	746	746	746	740	713	700	707	707	765	700	716	690	637	690	683	664	690	670	680	703	677	729	700	708
18 Q	723	733	740	733	713	740	740	733	710	697	697	654	716	716	680	657	648	651	664	693	703	723	716	716	704
19	707	681	713	713	746	759	740	769	804	819	781	723	644	576	573	547	525	648	696	677	529	716	743	677	690
20	752	667	799	736	700	729	700	720	703	792	624	635	654	647	641	634	644	693	677	651	674	687	684	710	686
21	740	726	742	707	713	716	723	733	700	693	681	674	683	690	680	657	664	664	628	631	680	670	657	641	656
22	687	746	759	726	726	720	716	746	687	660	769	716	703	696	670	660	644	641	690	654	680	677	723	736	700
23 Q	720	740	657	700	736	759	713	827	779	762	759	700	687	618	621	643	628	651	667	634	667	710	700	674	698
24 Q	736	733	707	733	723	727	707	720	713	726	694	681	667	674	664	651	648	670	667	670	657	687	703	713	694
25 Q	710	716	720	740	740	740	733	729	700	707	710	710	684	674	674	674	657	654	651	661	684	703	700	723	701
26	729	720	729	733	746	716	726	694	687	697	697	700	716	716	697	670	667	638	625	651	700	654	615	697	719
27	726	709	736	769	819	795	756	852	816	759	792	726	716	703	638	586	628	570	644	638	674	723	651	621	709
28	693	720	720	726	729	727	677	680	799	819	772	726	696	638	621	618	583	573	554	625	628	621	653	713	684
29	674	733	759	759	779	765	776	829	823	746	733	707	693	703	697	684	687	687	631	648	667	664	700	730	717
30	746	716	713	733	733	746	740	703	716	756	752	726	690	683	683	674	664	651	680	696	732	719	723	726	713
31 D	733	733	713	720	772	825	849	602	829	878	852	779	749	732	667	625	611	515	535	602	591	690	667	703	708
Mean	725	734	741	743	751	757	741	745	740	741	737	714	699	681	666	653	646	641	637	655	660	676	682	700	698

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 32 Alert 3500 γ + May 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	386	412	342	348	313	296	269	267	269	263	249	249	246	231	217	214	228	243	243	278	314	377	377	366	292
2	377	380	392	392	354	319	284	267	261	243	240	193	185	179	243	228	220	246	275	313	345	383	377	383	295
3	369	380	342	319	322	343	313	296	263	196	214	208	223	272	252	267	263	255	267	290	325	363	340	351	293
4 Q	331	334	331	307	313	307	284	278	261	267	272	278	293	296	296	304	304	307	301	313	310	319	334	325	302
5	322	310	301	296	284	307	296	275	255	267	269	284	296	307	298	287	284	304	313	325	351	275	261	310	295
6 D	336	298	290	343	287	261	269	267	272	249	290	150	116	92	73	114	135	231	240	298	293	377	383	398	252
7	395	407	407	331	331	298	307	296	301	281	228	228	202	214	240	249	246	304	284	255	304	313	310	322	294
8	331	366	313	304	287	375	267	252	252	261	257	281	281	243	243	296	313	290	319	310	293	313	375	348	299
9	357	337	386	346	319	316	307	298	275	272	261	258	281	290	301	307	319	313	325	340	331	343	337	337	315
10	333	325	337	340	310	267	252	296	261	240	255	240	255	258	296	237	343	372	369	343	343	354	351	348	305
11	331	334	331	290	304	307	275	237	234	261	267	261	220	243	226	138	147	205	272	398	395	331	421	372	283
12	354	340	304	301	313	337	284	290	272	278	278	284	278	284	278	310	325	340	310	354	345	354	357	377	314
13 D	354	319	299	377	351	319	275	284	267	252	257	226	107	231	255	269	383	357	281	383	220	389	491	471	308
14 D	497	471	395	337	246	252	158	249	211	170	214	170	231	173	334	325	319	296	310	328	272	354	383	424	296
15 D	409	360	395	372	267	249	278	290	208	249	255	240	255	267	155	246	167	211	191	301	436	430	418	372	292
16	345	348	313	284	395	366	377	263	249	176	138	176	246	332	313	337	395	372	301	284	372	366	377	372	309
17	336	319	299	281	296	269	272	267	267	267	234	249	261	269	267	269	290	301	313	331	340	337	372	334	293
18 Q	333	313	342	322	290	301	284	272	246	258	267	272	301	261	249	249	278	261	357	377	377	372	342	345	301
19	325	310	337	310	284	337	331	319	249	240	220	214	220	249	310	249	386	360	340	348	287	343	413	334	306
20	357	313	337	319	293	269	272	267	269	272	220	284	296	272	226	214	167	278	354	354	375	360	366	383	296
21	348	366	325	301	301	255	275	284	269	278	275	284	278	231	287	299	325	313	319	325	357	357	354	319	306
22	351	389	351	325	307	290	281	298	272	261	299	255	237	226	237	345	348	337	363	343	348	319	372	369	313
23 Q	366	331	313	331	354	348	296	348	290	249	252	220	196	243	325	337	325	360	360	354	333	351	342	342	315
24 Q	354	331	354	360	325	287	263	278	278	281	263	267	296	298	278	284	307	316	331	337	331	337	337	331	308
25 Q	328	319	310	313	301	293	275	272	255	261	261	267	269	290	307	296	290	281	267	278	319	334	337	337	294
26	333	328	322	319	307	287	263	237	237	261	261	255	267	223	208	199	237	258	284	301	322	313	301	351	278
27	331	331	287	281	398	398	334	360	299	261	226	153	114	170	129	67	61	114	214	240	307	395	427	340	260
28	354	331	310	322	319	304	261	255	310	272	226	167	158	155	155	231	217	255	226	307	369	380	372	360	276
29	368	342	418	383	348	296	310	331	261	234	249	202	228	205	255	263	296	328	278	255	278	275	319	348	295
30	348	325	348	368	351	322	306	261	272	278	255	243	275	296	301	293	293	284	307	307	319	319	316	307	304
31 D	301	301	296	307	400	400	363	220	299	269	144	21	-37	39	89	191	203	246	243	267	267	345	386	433	249
Mean	354	343	337	327	320	306	286	280	264	254	245	228	213	237	246	256	271	289	295	317	328	348	363	357	295

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 33 Alert 55,000 γ + May 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	430	410	413	417	396	373	379	385	399	425	419	396	390	387	376	379	385	402	407	417	425	425	413	413	402
2	430	430	425	413	410	402	390	387	396	436	413	430	433	430	410	385	402	390	385	396	390	385	379	405	406
3	402	407	407	413	419	417	419	396	387	359	373	396	365	402	402	393	405	413	402	396	390	382	367	379	396
4 Q	385	388	388	388	390	376	373	376	390	387	379	379	379	379	379	379	370	367	376	385	385	388	390	388	382
5	379	373	376	376	379	379	376	373	376	382	373	373	402	396	379	367	376	379	370	376	399	407	485	474	389
6 D	476	451	402	393	413	407	407	422	433	447	413	385	359	367	367	387	385	385	373	396	393	417	407	436	405
7	430	428	430	433	445	428	425	442	453	447	465	510	419	425	436	430	419	407	393	413	428	430	433	456	434
8	465	456	447	447	433	402	382	367	362	370	367	367	350	379	402	385	367	342	350	356	362	390	413	448	392
9	470	442	428	419	417	407	413	422	442	465	465	422	390	373	365	359	350	347	339	345	362	362	362	359	397
10	356	362	390	390	373	370	356	350	339	328	333	310	327	325	367	316	308	308	316	335	335	330	330	347	341
11	356	356	339	350	353	368	376	356	345	339	313	282	271	339	417	367	350	356	350	330	305	316	353	325	342
12	333	333	333	339	347	350	359	373	376	350	362	399	485	373	362	353	345	345	350	353	345	342	339	327	353
13 D	327	327	356	339	327	330	342	362	379	379	362	339	333	294	282	305	299	274	279	293	322	365	357	347	330
14 D	359	345	345	330	322	322	310	310	271	234	189	253	265	253	288	282	305	308	316	305	327	379	362	387	307
15 D	379	365	379	365	345	330	305	339	319	251	271	327	291	291	322	350	365	350	359	373	327	310	310	313	329
16	322	345	339	339	342	347	367	370	336	327	373	356	316	305	288	288	299	293	310	308	316	325	336	318	326
17	340	346	349	338	341	352	349	335	340	315	312	343	352	355	349	360	366	369	360	355	355	346	341	328	345
18 Q	346	346	355	340	352	358	352	338	335	329	320	346	346	284	281	292	301	295	301	303	303	301	307	321	324
19	326	363	386	392	360	358	380	418	383	315	318	238	226	198	216	243	289	289	318	340	295	301	329	315	317
20	338	389	358	318	346	352	386	335	352	289	295	329	352	355	304	278	307	360	335	307	298	312	318	292	329
21	292	312	315	346	383	366	369	352	346	380	369	332	284	278	309	315	326	326	301	289	298	301	307	307	325
22	375	349	332	326	341	352	375	363	375	352	323	278	307	278	269	278	272	284	301	266	266	301	309	309	316
23 Q	295	301	341	400	409	381	412	380	383	338	295	249	233	223	243	289	278	284	286	243	261	307	323	340	312
24 Q	329	323	332	343	358	369	360	369	360	338	323	318	340	326	315	289	315	338	329	318	320	323	329	332	333
25 Q	340	346	355	355	346	349	343	340	340	340	329	318	320	323	340	343	340	338	335	346	355	358	355	363	342
26	355	363	366	355	346	349	355	352	338	363	398	413	400	392	415	415	415	409	375	375	386	380	403	412	380
27	403	415	409	415	386	406	426	449	443	455	426	484	501	521	375	363	363	398	409	426	449	443	409	420	425
28	432	426	426	432	435	443	478	498	464	386	349	258	301	301	323	318	324	335	324	346	340	340	349	363	375
29	369	378	386	366	369	358	378	363	346	355	352	389	392	409	447	443	415	403	360	389	398	403	409	403	387
30	395	386	398	380	380	380	386	392	389	380	380	383	386	372	352	346	340	343	340	352	366	352	369	366	372
31 D	381	381	389	409	420	392	363	458	530	467	386	340	301	338	369	409	415	432	415	424	452	455	443	438	408
Mean	375	376	377	376	377	373	377	380	379	363	355	352	345	344	347	345	348	350	347	350	353	360	364	369	362

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 34 Alert — 10 γ + — June 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	791	788	774	764	761	777	761	813	795	761	774	801	748	703	661	683	654	686	641	615	497	605	586	657	710
2	719	764	742	723	742	738	735	738	735	732	748	732	712	722	709	667	670	625	504	625	632	719	683	693	705
3	722	706	716	716	709	712	709	703	709	767	725	699	716	683	654	625	625	654	690	683	732	677	657	657	694
4	680	738	719	710	686	719	801	804	833	811	785	761	648	641	632	645	673	642	638	599	596	599	654	602	693
5	683	742	687	729	703	761	729	807	748	852	757	725	693	729	735	667	667	651	574	471	586	592	622	725	693
6	683	774	751	722	781	788	826	826	820	804	742	738	758	738	735	661	667	670	657	732	648	696	690	716	734
7	745	745	729	716	742	712	794	817	696	748	722	680	632	638	625	625	605	586	568	619	652	696	699	729	689
8 Q	722	722	725	748	732	788	716	761	729	664	677	683	722	693	651	638	635	651	642	651	664	632	670	605	690
9 D	761	722	693	829	845	868	833	791	781	709	761	638	628	605	619	686	638	612	523	530	503	670	574	745	690
10 D	761	771	729	810	852	748	859	814	735	875	878	788	756	670	632	651	693	680	664	625	612	670	742	707	740
11	748	764	748	748	823	794	761	788	774	696	784	503	696	690	673	615	625	632	628	642	664	580	615	709	702
12	774	735	761	751	722	771	836	817	794	801	732	742	677	654	562	552	625	629	565	587	587	602	683	725	695
13	755	735	703	826	795	774	761	774	742	716	774	716	645	645	638	619	615	571	612	645	625	670	719	693	699
14	735	729	716	722	788	842	716	764	833	767	703	729	735	706	651	645	645	586	542	555	539	583	612	645	686
15	742	773	833	758	814	814	605	761	788	771	842	823	778	651	615	622	549	590	605	539	654	664	712	745	706
16	571	732	706	722	703	706	788	782	742	735	703	664	622	680	651	625	648	612	568	599	599	703	696	712	678
17 Q	716	735	758	735	758	761	716	693	677	632	654	729	710	632	641	625	638	599	635	674	680	641	693	645	683
18 Q	687	761	754	771	754	722	751	775	693	606	651	625	629	635	631	651	648	625	658	628	677	703	716	729	687
19 Q	687	696	696	722	741	778	768	725	725	703	638	761	723	675	644	612	583	579	599	635	664	677	703	693	685
20 Q	716	725	738	758	768	741	774	745	771	726	722	709	684	664	631	638	628	599	579	625	661	696	683	710	695
21	703	716	735	735	732	729	735	712	670	716	818	738	639	657	661	618	820	625	537	583	700	732	651	687	694
22	716	696	729	775	811	839	670	703	690	742	738	657	645	677	709	677	670	632	599	592	648	667	722	716	696
23 D	775	742	622	782	788	716	658	814	859	757	820	732	680	693	700	632	586	579	530	373	507	574	651	732	678
24	751	719	703	735	722	741	797	751	748	755	742	732	693	706	690	654	658	625	606	589	677	687	706	687	703
25	677	706	696	710	768	788	814	670	775	729	696	742	690	687	677	664	651	589	628	658	648	687	722	683	697
26	716	710	712	703	735	712	722	716	691	709	690	687	735	716	696	651	658	670	602	606	574	579	788	761	689
27 D	774	801	722	735	778	796	801	849	814	842	827	814	778	754	725	690	622	568	555	666	638	625	782	716	733
28 D	670	795	745	696	716	808	811	719	872	716	833	700	683	670	716	635	664	573	638	599	558	609	742	641	700
29	687	751	761	729	748	670	722	795	722	703	755	795	729	722	625	602	651	683	598	683	683	651	664	735	703
30	735	703	690	768	754	833	722	798	795	729	801	729	751	693	654	628	574	568	687	712	664	645	651	703	707
31																									
Mean	721	736	726	745	759	764	755	768	758	742	749	723	697	681	664	635	642	619	608	609	625	652	683	698	699

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 35 Alert — 3500 γ + — June 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	406	395	365	292	330	319	272	280	196	240	161	152	155	213	240	228	251	286	266	260	207	327	333	388	274
2	383	383	295	295	351	313	295	286	284	237	234	225	207	213	289	266	231	196	266	278	251	327	342	336	283
3	342	336	321	336	324	295	277	260	260	260	246	237	202	176	119	113	80	127	210	275	330	354	406	380	261
4	400	468	420	345	242	242	336	321	301	231	190	149	116	131	170	167	219	248	257	280	307	295	362	388	275
5	406	406	395	377	348	348	283	316	248	248	219	219	155	119	178	143	143	128	125	92	170	266	342	458	254
6	465	510	446	362	388	354	351	289	286	231	207	128	161	155	196	187	176	219	228	324	277	348	336	333	290
7	337	319	330	277	278	257	295	330	155	149	119	98	196	231	196	152	228	222	219	266	330	351	330	325	250
8 Q	304	298	292	313	319	354	272	275	257	248	248	266	286	266	269	313	319	348	365	371	362	345	336	319	306
9 D	388	321	319	330	406	327	242	231	231	113	143	190	207	222	137	374	368	213	260	307	348	423	360	446	287
10 D	586	527	392	388	441	304	313	254	222	202	196	158	103	225	275	283	304	333	392	348	365	333	360	377	320
11	348	336	304	307	371	225	246	272	246	202	246	210	216	184	213	225	263	327	319	371	365	272	357	383	283
12	412	360	351	321	251	275	354	260	193	213	242	196	246	149	100	213	298	322	286	345	345	336	371	360	280
13	313	333	342	385	324	295	269	246	239	231	201	254	266	301	313	354	298	272	301	318	339	371	377	362	307
14	316	330	345	289	377	348	248	283	304	257	231	231	161	172	283	389	354	251	178	348	295	269	420	301	292
15	412	342	435	383	330	289	155	283	263	225	184	137	198	50	62	112	184	362	388	365	377	400	360	388	279
16	266	400	357	371	283	254	307	289	246	231	210	225	213	187	190	289	324	310	325	354	339	377	345	342	293
17 Q	345	301	283	301	292	310	263	242	237	237	248	263	248	257	295	292	301	248	313	330	354	316	348	322	290
18 Q	380	423	412	362	324	242	272	301	225	207	248	257	292	324	354	313	321	318	333	324	345	360	362	351	319
19 Q	348	345	342	324	360	307	260	242	246	234	228	272	172	231	283	246	222	330	336	354	385	383	360	342	298
20 Q	383	365	342	310	304	272	289	310	257	246	225	216	225	246	222	254	280	278	287	354	351	357	327	330	293
21	339	351	337	295	286	263	260	246	219	254	254	137	190	71	77	74	327	231	190	237	301	333	336	418	251
22	456	386	383	412	412	365	219	213	219	248	240	269	316	234	213	237	298	327	237	266	277	283	336	423	303
23 D	438	360	283	330	397	324	231	316	269	207	167	143	83	127	98	149	240	207	266	184	228	342	324	371	254
24	374	351	260	310	278	295	342	280	260	222	170	213	266	219	219	181	231	193	193	193	289	295	374	385	267
25	354	342	280	237	377	374	324	242	263	228	167	155	181	196	248	254	213	137	216	260	283	310	324	316	262
26	319	295	289	307	313	278	278	272	248	246	231	187	178	164	176	116	155	254	184	231	225	251	365	394	248
27 D	476	400	339	339	354	362	360	324	266	242	172	100	42	89	228	184	155	184	228	207	260	307	357	380	265
28 D	339	400	345	275	278	395	342	260	289	190	161	161	131	86	228	190	219	137	248	272	219	319	513	362	265
29	383	327	392	356	354	254	260	307	234	231	181	131	105	116	119	122	152	219	228	289	307	278	295	362	250
30	360	292	345	397	391	383	248	307	239	204	193	140	102	122	135	172	181	219	295	310	295	280	283	348	260
31																									
Mean	379	367	345	331	336	307	282	278	247	223	205	191	186	183	204	220	245	249	265	293	305	326	355	367	279

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 36 Alert — 55,000 γ + — June 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	394	368	342	331	342	339	354	334	325	365	377	382	420	371	342	348	348	351	321	345	359	397	405	409	361
2	394	394	382	397	417	417	422	434	437	480	483	460	466	457	400	357	362	382	411	399	417	422	420	431	419
3	422	417	411	417	420	422	420	428	425	417	417	460	445	434	428	431	417	431	471	460	457	420	402	397	426
4	397	409	414	400	417	434	460	428	388	351	357	374	371	319	274	308	371	409	399	454	417	439	443	451	393
5	477	417	434	443	451	445	434	403	443	448	420	434	466	428	414	425	417	428	451	463	488	483	483	480	445
6	460	422	405	414	420	411	409	405	423	425	437	428	385	365	400	400	388	405	420	420	411	414	409	400	412
7	391	374	362	354	354	354	342	331	314	262	254	254	274	282	263	274	294	305	325	357	385	379	377	379	326
8 Q	379	382	382	379	348	339	348	342	337	368	368	345	295	280	285	260	280	303	280	269	278	286	317	305	323
9 D	334	337	359	337	311	291	271	280	251	282	188	208	294	236	245	291	297	331	317	314	342	359	348	397	301
10 D	397	365	308	314	365	379	382	425	463	380	388	374	374	348	374	374	399	382	314	297	300	308	348	325	362
11	325	311	314	314	317	297	291	288	291	262	251	271	251	294	300	289	297	328	319	322	303	319	374	371	305
12	362	339	319	297	305	311	285	280	268	388	214	266	234	294	337	300	246	269	258	283	314	311	337	325	291
13	317	331	345	357	331	339	337	308	331	388	385	308	251	251	251	254	294	286	297	319	311	314	314	300	313
14	325	322	305	325	328	319	334	314	311	280	263	274	263	246	207	251	275	246	292	303	286	342	388	380	300
15	454	440	405	354	345	305	348	348	491	497	500	466	460	434	422	371	314	305	292	319	297	308	308	297	378
16	335	405	393	413	430	327	361	295	259	236	239	216	304	373	401	344	310	310	298	298	281	301	304	293	325
17 Q	299	324	335	333	327	301	293	335	350	421	453	370	290	262	270	253	285	285	293	315	324	307	324	321	322
18 Q	350	327	327	304	290	290	304	295	281	287	281	279	296	293	301	315	310	293	310	310	321	321	315	307	305
19 Q	293	276	313	324	335	321	299	299	287	278	265	265	298	245	213	259	253	230	236	247	244	259	281	304	280
20 Q	287	287	282	287	287	285	270	304	307	321	344	333	313	321	330	330	333	333	341	315	310	315	324	330	312
21	324	321	313	313	321	333	333	341	355	381	355	395	470	487	407	384	481	481	398	407	418	447	453	467	391
22	413	390	395	393	381	375	384	364	390	430	421	453	413	453	450	462	430	315	355	398	384	410	401	405	406
23 D	338	324	367	387	384	410	441	450	390	444	470	447	493	458	441	418	315	378	327	353	393	421	430	435	399
24	430	424	418	433	424	424	410	407	430	433	424	401	413	384	410	405	373	387	430	441	441	424	433	421	417
25	439	430	435	433	453	401	390	413	395	401	493	413	321	327	361	338	358	407	413	416	424	416	413	398	402
26	390	401	387	393	378	367	364	370	367	373	398	456	410	430	453	424	424	424	418	430	435	435	427	407	407
27 D	367	333	353	355	390	392	395	384	384	378	373	418	384	387	441	476	458	456	401	418	439	453	430	421	404
28 D	430	398	367	390	405	418	405	421	398	407	424	447	490	421	410	430	438	462	473	441	427	462	424	378	426
29	407	395	407	410	416	439	433	424	427	435	470	384	390	353	395	393	387	410	439	413	441	436	453	462	418
30	430	427	435	453	424	398	395	401	427	462	476	458	462	444	450	424	384	393	384	390	393	413	436	378	423
31																									
Mean	379	371	367	368	370	365	365	361	365	370	373	368	363	360	355	343	353	357	356	364	368	379	389	379	366

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 37 Alert — 10 γ + — July 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	704	713	723	736	730	726	704	717	755	798	720	668	713	678	681	632	674	552	607	590	620	649	639	678	679
2	776	736	691	691	723	665	765	684	713	805	687	671	700	697	665	662	620	555	488	584	620	580	600	613	666
3	675	678	717	717	710	717	700	749	779	713	717	734	713	671	630	671	600	649	678	694	645	681	694	665	687
4 D	713	745	739	779	736	782	717	789	749	730	704	684	694	597	620	562	662	720	713	559	501	439	630	665	676
5 D	779	792	752	759	886	802	824	726	776	710	749	730	590	577	616	600	587	674	645	562	607	645	745		
6	675	749	847	872	779	765	821	743	749	779	723	717	671	658	655	590	603	527	451	559	574	610	730	728	690
7	726	739	749	736	745	779	749	739	730	668	684	652	645	642	639	616	613	539	497	616	642	620	694	559	670
8	694	645	745	847	769	765	809	812	749	636	723	717	639	649	658	626	610	600	577	584	556	671	562	652	679
9 Q	776	688	697	733	782	809	765	694	704	700	687	717	668	668											
10																									
11																									
12																									
13																									
14																									
15		704	677	700	781	775	739	723	706	706	733	703	706	671	687	661	655	658	668	603	597	704	606	668	
16 Q	729	775	749	736	768	765	755	742	723	733	700	684	706	681	658	638	655	661	674	671	668	677	687	704	705
17 Q	684	713	726	745	726	726	700	690	681	710	703	723	658	648	648	626	638	629	622	629	632	677	674	730	681
18 Q	716	661	706	719	726	733	781	697	713	749	720	694	716	683	651	597	616	606	616	603	655	687	733	719	687
19	723	706	694	710	713	716	697	713	903	677	823	730	771	713	664	683	651	612	642	594	584	584	668	655	695
20	733	752	719	729	733	813	736	820	865	833	765	733	671	683	664	694	642	561	613	671	638	668	700	697	711
21	703	723	736	752	736	742	700	718	716	781	700	668	700	700	683	690	609	555	548	587	613	630	700	697	683
22	690	713	716	736	745	759	791	794	762	690	703	723	713	700	710	658	620	568	600	651	651	630	697	625	694
23	716	706	719	745	771	836	836	758	810	830	787	730	683	733	668	684	690	600	508	486	539	609	706	765	705
24	690	697	690	726	726	723	752	719	729	706	677	677	729	697	671	632	600	548	521	594	626	632	674	710	673
25	733	845	814	814	855	848	836	862	843	804	755	681	726	629	539	521	609	613	630	681	687	719	700	671	726
26 D	687	739	758	671	862	833	938	906	817	758	903	810	742	638	739	638	629	600	578	642	648	626	726	648	730
27 D	823	784	752	720	778	797	719	736	719	742	710	733	726	687		479	616	677	736	726	651	661	658	651	
28 D																									
29																								681	
30 Q	716	716	771	758	742	807	758	729	739	752	736	719	719	706	706	690	706	710	703	703	690	694	687	723	725
31	746	710	726	723	739	716	742	694	716	697	736	671	668	651	655	630	587	578	179	519	603	591	749	749	657
Mean	711	718	737	747	752	761	764	754	762	742	733	704	699	673	660	637	632	599	572	611	620	634	682	683	691*

* 20 days only

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 38 Alert 3485 γ + July 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	287	305	336	330	284	290	260	249	225	220	267	110	126	155	144	179	184	199	246	243	301	272	290	307	238
2	365	368	296	293	325	202	307	231	234	231	132	211	145	167	144	147	155	176	132	182	237	310	374	409	241
3	380	362	304	299	266	281	258	272	266	222	228	155	167	173	167	135	123	225	260	302	321	327	313	342	256
4 D	376	382	327	324	252	272	214	284	225	141	190	126	116	2	123	161	321	307	362	299	301	417	435	365	266
5 D	380	381	316	356	350	304	187	196	205	187	208	155	182	186	179	184	243	170	234	237	371	362	388	371	256
6	333	350	394	405	299	184	234	184	204	214	110	138	190	208	173	281	327	225	217	307	272	293	368	360	267
7	353	316	281	252	249	281	228	225	220	225	287	220	220	220	240	222	184	161	173	321	268	374	445	391	265
8	365	316	388	365	278	278	249	181	170	176	231	181	202	167	220	281	281	263	272	290	278	397	350	415	275
9 Q	323	305	275	281	319	252	217	176	293	287	287	199	205	225											
10																									
11																									
12																									
13																									
14																									
15		471	346	268	314	280	244	247	238	244	225	232	205	153	150	129	147	223	290	225	286	429	328	368	263
16 Q	389	392	325	298	317	316	298	268	241	244	247	250	238	189	217	272	319	325	335	328	316	310	328	341	296
17 Q	341	333	319	311	293	277	244	229	235	262	262	259	253	256	235	213	277	307	314	322	337	356	353	350	289
18 Q	335	344	344	293	283	268	305	250	256	259	253	244	208	192	189	192	283	305	317	301	358	395	374	350	287
19	316	311	305	271	277	314	256	250	318	232	152	171	208	171	159	217	220	247	247	241	235	277	283	323	250
20	392	453	401	362	332	362	228	262	244	195	208	213	213	225	180	220	180	208	232	290	189	356	314	337	285
21	371	374	368	358	265	277	244	274	280	283	256	250	247	210	210	238	147	171	189	244	346	335	386	423	282
22	374	343	337	313	307	365	344	319	265	237	222	225	274	310	304	222	289	277	340	334	272	338	480	355	310
23	370	340	338	310	359	353	310	292	283	225	180	259	204	222	289	365	361	289	231	355	443	468	462	419	322
24	365	392	298	277	268	268	301	283	292	286	277	292	240	192	144	129	180	222	225	370	422	440	446	462	295
25	483	504	450	365	316	292	231	246	210	183	162	123	195	216	304	355	428	410	395	422	419	440	395	355	329
26 D	313	310	325	265	501	471	428	367	325	207	177	36	301	132	240	147	216	198	401	343	319	349	444	373	298
27 D	543	520	444	313	334	367	268	271	250	292	271	245	177	147	46	138	165	265	389	392	343	367	398	398	306
28 D																									
29																							284	284	
30 Q	272	278	344	323	280	308	232	201	217	211	196	163	147	226	193	163	217	253	247	253	232	247	244	271	238
31	268	265	290	238	241	217	250	205	223	217	247	229	232	241	244	271	280	326	150	360	435	311	284	281	263
Mean	362	357	343	315	303	298	268	252	246	225	208	194	204	187	198	216	245	252	269	307	324	352	371	364	278*

* 22 days only

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 39 Alert — 55,000 γ + — July 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	412	417	417	380	363	374	394	391	380	314	308	300	289	351	346	414	346	363	346	348	343	377	377	386	363
2	386	377	368	386	403	386	400	417	426	412	446	472	458	454	435	429	414	377	388	400	417	440	437	420	414
3	397	412	414	420	412	420	431	431	437	449	412	429	420	391	388	380	386	394	374	394	360	323	314	320	396
4 D	314	306	314	331	343	346	337	354	331	286	294	255	252	306	328	289	314	337	360	292	320	386	360	357	321
5 D	348	328	328	331	334	351	326	323	289	326	357	283	247	243	271	269	269	289	323	354	380	357	343	283	315
6	291	320	326	317	317	320	283	294	320	294	294	286	320	311	314	311	263	249	323	340	323	377	386	337	313
7	337	331	323	320	308	289	280	255	271	280	294	300	243	277	326	326	331	317	351	346	311	300	300	334	306
8	328	386	409	354	320	340	303	283	283	294	269	260	263	300	323	320	297	257	263	271	294	300	323	374	309
9 Q	320	297	348	357	366	328	306	326	340	311	314	311	311	337	345	354	363	346	346	346	357	354	354	346	337
10	337	326	326	337	346	366	383	397	348	348	363	380	363	363	363	363	363	388	420	403	394	340	289	320	360
11	374	348	371	380	388	357	391	388	371	388	363	363	354	346	348	363	371	380	380	412	458	454	454	420	384
12	388	403	380	365	371	380	363	346	320	289	275	271	255	300				512		412	412	391	363	346	
13	346	337	354	380	400	435	417	388	380	354	383	354	320	263	255						326	303	371	400	
14	354	388	357	328	328	328	346	380	346	371	374	363	354	337	346	366	388	426	477	429	354	388	346	346	367
15	308	337	349	374	348	319	311	322	334	359	423	437	414	414	414	426	440	431	385	377	411	371	331	380	383
16 Q	382	360	345	342	342	336	339	345	345	337	322	302	282	308	302	302	328	337	342	348	348	354	365	377	337
17 Q	391	385	377	380	380	380	374	371	371	359	365	351	299	308	279	291	311	314	322	322	314	328	322	337	343
18 Q	351	351	382	387	387	382	359	359	363	337	331	311	299	316	305	299	279	274	300	314	337	314	319	311	332
19	337	371	388	397	426	503	494	486	495	500	498	536	377	365	420	417	405	394	377	411	448	471	483	520	438
20	503	457	448	460	451	437	445	451	423	411	440	457	530	486	457	426	437	440	420	437	457	431	428	434	448
21	440	434	442	494	434	428	428	417	411	380	408	492	560	509	431	417	437	443	431	426	440	443	457	451	444
22	420	442	465	468	451	457	451	442	434	442	463	465	465	465	457	380	351	354	357	363	391	431	414	420	427
23	423	440	442	411	394	365	363	411	440	414	351	337	377	391	380	371	377	357	354	405	400	385	350	319	386
24	319	388	411	440	448	454	451	448	454	437	420	426	417	434	405	411	405	388	394	385	377	371	371	374	409
25	377	377	368	368	363	360	357	345	331	308	302	276	285	288	288	260	271	262	288	331	339	325	302	322	321
26 D	363	385	394	411	498	426	457	445	497	568	477	520	517	397	489	503	500	483	471	411	417	451	465	442	458
27 D	465	457	448	442	460	437	431	440	454	454	451	445	457	380	384	388	399	457	474	434	428	423	426	426	436
28 D	434	419	440	448	434	434	448	457	454	463	434	426	408	426	414	426	426	428	426	417	391	434			
29	454	454	445	454	448	457	445	434	457	434	408	426	420	420	426	417	397	399	403	403	408	434	437	434	430
30 Q	437	457	477	463	445	441	431	448	471	477	486	517	512	509	474	454	445	434	428	417	417	428	428	442	456
31	428	423	423	420	408	411	411	411	388	365	357	357	345	342	339	331	334	308	325	308	351	351	357	377	370
Mean	378	384	389	391	390	386	383	386	386	381	378	381	372	370	371	367	365	364	372	372	378	382	376	379	378*

* 3 days missing

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 40 Alert — 10 γ + — August 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	684	941	836	830	903	900	791	866	826	836	888	781	681	664	578	555	578	581	623	629	537	619	600	794	731
2	658	736	768	768	765	820	726	723	716	719	713	713	700	671	661	616	597	606	635	594	597	655	713	733	691
3															742	704	658	661	635	623	655	597	603	759	
4	728	749	719	787	749	797	781	775	758	752	681	687	739	645	655	629	609	626	651	668	681	700	704	729	707
5	706	716	743	749	784	752	800	810	723	742	758	710	749	677	700	642	635	651	616	658	681	681	700	745	714
6	719	778	797	729	810	817	849	820	797	749	700	736	710	726	683	574	619	651	713	619	661	542	651	623	711
7	794	723	762	804	813	820	713	645	826	716	719	749	723	622	668	638	521	499	539	578	723	632	755	726	699
8 D	697	820	826	765	768	817	833	830	813	791	736	736	655	674	560	578	489	539	613	645	645	574	704	729	702
9																									
10	597	661	655	671	683	713	739	784	817	758	730	726	642	683	655	629	454	530	645	687	690	736	730	723	680
11 Q	697					710	724	719	716	674	671	684	700	719	700	706	697	683	690	684	694	700	706	713	
12 Q	733	745	733	736	745	736	739	706	710	658						645	642	635	645	655	690	668	675	677	
13 Q	710	713	733	736	745	739	749	690	697	726	765	719	690	694	694	700	697	674	664	726	668	704	642	775	708
14	742	723	704	733	749	720	749	695	697	716	720	762	784	716	742	723	677	671	648	661	671	710	716	762	716
15	681	726	736	736	839	956	804	820	755	713	681	664	687	726	690	687	600	613	671	694	613	632	629	719	711
16	793	791	697	713	784	863	810	706	674	655	681	687	739	710	719	733	710	674	658	591	642	597	742	651	706
17 D	710	736	778	788	729	794	752	823	710	781	661	706	739	694	642	581	651	645	655	626	616	671	706	690	701
18	768	749	762	791	791	888	950	794	807	713	729	687	749	765	645	651	584	587	642	726	703	733	723	703	735
19	869	749	752	810	820	820	817	804	800	748	771	739	719	719	700	651	687	687	651	681	622	664	733	736	739
20 Q	739	736	726	739	736	736	736	733	745	710	706	719	710	677	694	687	661	670	729	729	729	706	661	703	713
21	716	736	736	739	739	743	733	736	733	690	681	713	719	733	733	771	723	746	694	745	642	694	657	710	712
22 D	726	733	771	771	857	847	871	887	741	710	764	761	777	777	745	712	715	725	754	626	638	641	715	777	752
23	806	735	806	819	780	750	816	796	753	731	711	760	786	780	689	608	643	692	627	705	724	763	718	786	731
24	760	750	757	868	763	705	858	796	832	747	711	737	737	514	744	685	585	507	656	744	653	714	640	675	715
25	780	789	711	796	789	692	799	753	747	721	767	714	682	704	692	666	630	576	627	643	646	630	605	711	703
26	770	740	734	737	747	789	744	737	757	744	763	705	682	698	711	675	653	666	666	705	695	672	721	731	718
27	740	744	718	714	760	750	740	760	714	711	705	702	705	702	698	692	692	689	682	698	705	711	708	724	715
28 Q	731	737	724	734	724	724	724	711	727	708	705	714	708	711	685	672	672	695	702	702	708	708	705	702	710
29	727	740	740	744	753	847	826	770	757	757	727	646	678	672	675	672	637	659	646	608	576	585	643	780	703
30	786	799	760	731	809	770	822	780	718	731	702	747	705	620	495	672	602	608	605	623	678	695	705	747	705
31 D	760	874	847	874	908	809	847	757	800	776	724	714	682	721	718	724	698	688	692	643	650	666	675	718	749
Mean	737	757	752	766	781	792	792	770	757	735	726	720	714	692	677	660	630	635	656	665	659	668	693	726	714*

* 27 days only

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 41 Alert 3485 γ + August 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	384	474	402	250	335	293	202	169	157	-58	58	55	129	150	41	106	226	348	372	350	302	363	305	513	247
2	402	357	320	293	268	247	208	214	214	229	214	196	163	199	196	182	175	232	354	372	348	344	350	323	266
3																									
4	317	317	293	299	259	320	283	223	223	205	199	196	211	257	226	214	196	190	284	293	302	326	329	326	263
5	302	332	335	302	308	257	290	253	193	226	160	58	166	202	275	250	314	305	332	338	354	338	323	338	273
6	338	338	350	238	314	314	247	217	178	175	175	160	100	220	190	85	271	369	435	311	366	277	423	369	269
7	489	390	363	350	293	293	193	211	317	247	205	205	160	154	265	178	119	187	335	393	463	402	489	432	297
8 D	378	474	432	317	296	271	250	271	157	202	220	202	163	125	129	220	150	290	393	483	417	420	516	420	300
9																									
10	388	340	333	321	315	282	267	194	191	200	134	134	96	273	231	210	152	182	306	327	333	346	349	318	257
11 Q	261	289	297	288	249	243	246	243	237	237	258	267	261	249	234	249	258	249	276	273	285	289	294	291	264
12 Q	291	291	270	294	289	258	243	231	237	228						218	237	249	291	300	315	306	330	322	
13 Q	340	315	306	285	304	291	276	221	237	258	270	234	249	276	306	276	252	231	218	279	267	304	306	398	279
14	321	273	360	355	303	269	291	251	251	266	254	215	209	248	206	254	218	209	252	248	276	318	357	379	275
15	312	348	333	312	394	352	248	266	160	218	260	300	264	266	227	264	233	206	236	321	285	330	342	488	290
16	497	487	330	260	305	366	215	205	245	272	299	299	330	315	233	233	236	175	229	224	281	343	406	403	289
17 D	393	345	378	351	299	348	287	315	233	263	227	181	227	239	148	148	175	224	281	338	257	345	500	333	285
18	387	357	336	378	330	351	254	257	245	202	263	272	229	193	157	214	154	275	287	318	351	415	375	393	291
19	483	345	378	369	336	278	275	278	254	215	172	266	263	190	175	214	245	290	281	333	302	324	396	403	295
20 Q	338	327	320	299	302	287	290	281	275	269	263	251	248	233	227	254	233	260	327	338	327	302	281	336	286
21	360	345	330	321	305	318	287	284	278	251	269	275	281	248	215	293	248	290	229	302	227	327	369	415	295
22 D	460	375	421	324	290	321	305	242	205	245	242	239	154	172	263	211	215	239	293	236	375	363	324	375	287
23	421	366	369	357	315	269	315	284	254	242	245	229	160	211	245	178	208	287	296	294	333	342	315	369	287
24	330	338	360	424	345	272	336	193	257	239	148	175	139	-62	148	199	181	211	318	403	315	415	418	381	270
25	454	393	320	342	308	239	293	257	245	245	254	266	211	187	211	236	196	193	251	248	284	378	354	387	281
26	399	320	305	290	293	321	257	257	254	245	239	205	184	211	281	266	242	257	287	333	318	321	338	320	281
27	333	324	308	284	315	287	269	275	242	251	257	263	272	278	278	254	239	257	272	278	302	299	302	320	282
28 Q	315	320	305	290	278	278	272	260	272	257	263	254	257	236	239	263	284	302	302	302	299	302	293	293	280
29	308	305	302	296	305	342	293	257	217	190	163	260	296	227	269	284	281	284	254	299	348	333	336	342	283
30	337	334	277	252	325	243	240	240	222	225	225	192	186	158	103	240	243	313	361	343	325	304	322	313	264
31 D	421	445	409	339	333	236	212	133	85	138	116	190	122	138	193	245	233	260	281	245	299	327	348	357	257
Mean	373	356	342	314	308	292	264	241	225	220	216	216	205	207	211	222	221	253	298	315	319	339	359	369	278 *

* 28 days only

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 42 Alert — 55,000 γ + — August 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	385						394	377			377	374	382											411	
2	397	411			399	397															319	334	316		
3	311	371	351	325	319	311	334	380	417	417	374	337	363	383	383	368	348	345							
4	357	368	363	377	360	374	383	377	374	348	351	380	351	319	331	334	325	359	363	351	359	371	363	363	358
5	365	377	380	377	374	374	380	360	348	357	328	337	334	348	374	351	331	334	351	345	345	331	337	351	354
6	331	328	345	354	371	345	348	354	328	319	316	385	402	377	319	311	331	328	302	282	282	339	394	371	339
7	408	382	385	348	354	337	342	403	405	388	417	359	380	354	299	302	365	351	382	354	282	322	365	345	360
8 D	331	363	354	357	371	363	354	328	357	399	380	368	331	314	334	322	314	311	294	268	260	322	351	365	338
9	348	325	357	345	408	391	391	365	354	325	348	348	328	328	334	371	374	345	334	341	348	365	363	348	354
10	322	328	311	296	299	251	308	299	311	319	305	297	285	288	294	288	291	294	285	279	277	274	274	279	296
11 Q	288	305	316	308	316	328	334	339	331	342	359	380	374	368	371	354	348	351	342	334	331	337	342	342	339
12 Q	339	331	322	328	325	322	319	322	319	325						279	285	291	297	285	285	279	294	299	
13 Q	311	314	322	322	319	339	342	342	351	342	314	311	342	363	371	363	368	380	385	377	363	348	339	354	345
14	328	325	365	374	377	380	414	417	388	383	417	423	391	408	411	420	408	402	371	368	377	377	363	371	386
15	365	363	368	374	377	331	348	360	354	363	380	388	417	405	377	322	314	342	371	359	331	377	382	388	364
16	346	341	346	382	391	358	329	352	376	391	382	397	400	414	382	432	414	400	420	397	408	407	406	394	386
17 D	414	411	411	400	391	406	391	388	385	376	394	370	326	397	373	358	355	367	370	376	391	417	426	397	386
18	394	358	367	385	361	346	335	370	403	411	403	417	414	367	335	332	338	346	341	364	355	361	329	338	365
19	332	320	338	329	332	329	340	355	361	373	367	394	444	376	346	373	370	358	373	370	352	364	367	346	359
20 Q	346	349	352	358	358	361	355	355	344	346	344	335	320	320	329	338	358	373	382	364	352	355	358	367	351
21	370	364	358	358	349	361	364	364	364	364	370	382	388	391	408	394	400	382	376	382	373	400	388	370	376
22 D	370	358	370	370	364	346	346	346	388	411	417	458	464	418	382	376	385	388	367	341	370	376	376	394	382
23	432	343	411	408	385	376	373	367	364	382	399	420	417	378	358	361	364	346	367	387	358	352	355	376	378
24	358	367	376	385	388	402	388	355	385	402	405	364	313	346	376	376	364	367	355	346	320	367	364	385	369
25	376	367	362	367	367	376	364	352	382	402	355	358	358	370	361	337	320	335	364	361	373	393	396	382	366
26	364	358	364	361	352	343	352	361	361	364	334	334	334	317	331	334	337	370	355	346	334	325	328	334	345
27	328	337	343	352	349	340	358	358	364	368	364	355	349	361	367	370	367	364	352	352	358	349	349	346	354
28 Q	334	334	325	328	343	355	358	368	370	368	368	368	334	331	328	320	317	320	325	325	334	334	334	343	340
29	352	343	334	340	352	355	352	368	355	331	304	355	405	364	287	293	317	311	352	334	340	352	376	361	343
30	340	314	314	334	334	331	325	334	361	352	382	343	328	320	320	299	314	320	305	299	292	320	334	328	326
31 D	325	331	340	340	346	358	352	343	328	320	311	304	299	334	373	399	393	393	373	385	396	393	379	361	353
Mean	353	347	355	357	359	354	357	359	363	365	363	368	364	358	351	349	351	353	354	348	343	357	361	359	356

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 43 Alert — 10 γ + — September 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	757	776	760	750	796	809	838	826	822	776	688	637	705	653	589	450	559	426	595	731	599	669	714	750	694
2 D	744	711	789	819	881	816	842	842	796	708	767	718	640	543	637	559	653	615	485	621	559	612	770	750	703
3 D	796	776	868	844	865	760	744	773	776	783	652	793	724	678	457	507	617	543	531	319	608	685	692	809	691
4 D	666	753	806	878	890	832	769	767	799	744	718	839	786	744	592	643	465	650	621	643	637	618	692	727	723
5	740	757	747	859	796	786	793	760	799	793	757	678	678	682	566	625	525	525	576	688	737	705	737	731	700
6	760	744	776	802	867	832	891	842	767	721	692	595	675	650	627	609	553	550	608	592	621	550	659	714	696
7	750	776	813	888	789	757	783	802	767	789	717	692	656	653	656	678	672	665	689	662	737	685	652	711	720
8	767	734	776	835	698	692	776	816	847	789	750	734	714	633	609	643	620	612	646	721	727	727	652	650	715
9	789	786	750	750	760	753	711	711	714	718	760	711	702	727	672	646	620	653	656	579	637	665	731	659	702
10	702	718	783	842	816	786	731	744	767	744	702	714	721	688	692	685	688	698	692	705	692	705	692	705	725
11	711	727	753	708	721	731	734	767	786	747	737	711	711	711	702	705	705	715	711	718	685	714	750	750	725
12 D	744	711	718	702	705	802	832	907	868	800	792	692	665	669	714	669	514	559	456	488	643	744	633	799	701
13	685	727	734	727	727	802	799	783	727	682	724	724	685	685	652	640	624	524	436	653	695	734	705	753	693
14	757	763	747	744	802	750	802	786	731	718	731	698	685	698	705	688	679	656	666	666	666	711	721	714	720
15	711	744	714	809	835	760	832	750	695	753	731	678	695	708	705	718	724	637	643	620	646	714	714	734	719
16	737	731	718	744	724	737	724	714	711	714	731	737	711	714	705	659	675	659	679	646	621	599	627	744	699
17 Q	750	721	724	753	747	753	724	721	727	711	711	702	688	659	708	708	676	695	653	698	711	672	731	718	710
18 Q	727	714	718	718	708	734	724	737	724	721	718	698	711	711	705	692	685	702	702	678	711	672	695	666	707
19 D	721	724	714	727	789	887	878	819	721	695	702	685	695	659	621	615	550	621	540	495	698	665	737	826	700
20	789	702	744	750	734	721	743	757	731	731	718	678	692	695	688	688	692	675	692	692	718	692	688	708	713
21	750	734	744	711	744	734	760	731	731	718	718	714	621	715	640	556	475	650	699	652	718	753	692	718	700
22	757	718	828	757	744	767	705	773	744	757	682	708	724	624	550	718	633	653	627	678	688	685	718	714	707
23	737	776	780	796	786	786	734	744	724	760	737	695	744	695	695	685	688	675	663	688	714	678	711	714	725
24 Q	754	747	727	744	750	776	702	714	718	718	721	718	702	702	705	708	675	675	659	637	617	672	711	731	707
25 Q	718	734	721	724	718	711	721	721	718	711	714	718	708	692	663	582	595	656	695	627	698	718	750	757	703
26	750	850	878	822	760	789	750	767	727	718	705	675	679	656	650	579	371	643	605	624	672	678	711	727	703
27	744	776	767	753	753	767	767	737	734	734	721	632	672	692	675	617	599	689	675	678	688	695	705	695	707
28 Q	734	740	783	734	719	721	744	718	721	718	715	688	685	643	615	646	608	556	637	637	711	678	682	760	691
29	747	750	757	753	783	799	781	802	731	740	665	708	702	617	652	608	572	556	501	609	602	702	605	678	684
30	731	767	789	822	819	829	822	815	815	819	737	688	637	637	605	656	678	692	682	685	698	640	718	685	727
31																									
Mean	740	745	764	775	774	772	765	771	765	741	720	702	697	674	640	636	614	628	626	641	671	681	703	726	707

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 44 Alert 3485 γ + September 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	390	375	325	319	346	292	295	243	204	131	222	295	255	292	198	80	177	216	338	502	357	474	415	355	295
2 D	310	310	394	397	379	331	258	247	201	145	192	168	123	-31	56	156	328	352	313	391	497	415	433	331	279
3 D	376	382	412	403	301	241	261	238	201	195	38	143	274	156	141	162	238	292	364	319	443	535	497	605	300
4 D	425	347	347	361	352	261	274	235	214	134	63	128	205	229	171	183	201	298	289	397	427	403	394	355	277
5	364	328	340	369	376	277	274	244	201	192	217	186	222	222	125	65	159	264	376	446	433	397	379	400	286
6	458	412	376	325	322	280	216	261	241	216	156	57	177	222	222	226	253	258	335	394	400	400	397	382	290
7	337	369	340	391	295	235	261	222	162	153	141	229	219	222	229	271	298	310	316	319	379	319	322	352	279
8	343	343	421	425	289	226	292	256	192	189	186	198	183	198	250	264	268	283	310	348	319	322	283	310	279
9	394	358	313	289	286	258	247	258	258	264	241	189	108	159	162	171	177	292	343	322	376	367	461	376	278
10	376	367	364	349	286	268	225	247	250	229	220	222	232	232	247	217	232	258	261	277	277	295	272	307	272
11	316	316	313	271	280	280	271	280	253	165	156	256	247	271	238	238	250	264	271	292	310	361	355	328	275
12 D	286	261	325	261	261	304	301	201	222	162	123	165	289	174	247	271	214	226	232	277	346	372	367	449	264
13	391	277	295	280	264	283	268	235	205	235	238	222	226	183	201	192	238	198	201	367	361	310	292	313	261
14	313	343	316	295	307	264	274	198	222	253	244	258	271	253	250	247	214	198	310	280	283	328	331	310	274
15	316	310	304	355	325	283	258	180	235	244	214	244	256	258	244	232	256	195	235	322	286	325	319	355	273
16	316	301	295	304	256	264	261	259	256	253	235	192	180	195	222	235	268	271	292	295	391	372	313	319	272
17 Q	301	286	261	301	277	271	241	253	256	247	244	244	222	201	244	256	250	277	238	283	292	261	335	337	266
18 Q	313	271	283	271	261	280	264	261	247	250	238	241	241	247	264	247	235	261	277	264	286	274	301	307	266
19 D	307	286	295	301	343	313	256	195	134	207	222	189	235	261	207	183	183	283	261	397	355	343	406	452	275
20	418	286	295	280	247	250	258	244	229	207	198	168	235	222	235	261	247	226	258	258	322	289	261	274	257
21	335	295	286	253	307	271	253	247	241	247	235	250	198	162	128	195	156	205	271	247	313	319	264	283	248
22	367	328	415	298	271	280	232	256	195	186	140	183	232	134	86	220	247	316	268	313	379	304	289	286	259
23	319	325	391	313	289	244	235	222	186	226	195	150	241	256	264	244	253	280	259	283	319	292	295	295	264
24 Q	319	328	301	280	274	271	241	247	261	259	256	247	259	247	229	241	207	226	235	250	277	301	295	289	264
25 Q	277	268	268	271	264	256	261	256	259	222	244	217	238	235	186	153	210	261	298	322	319	316	343	335	262
26	355	397	379	319	229	247	219	225	213	222	222	195	213	180	217	205	168	280	338	298	335	313	313	316	264
27	329	324	287	290	269	250	233	229	208	199	196	127	178	233	269	223	175	235	277	290	290	290	341	308	251
28 Q	302	314	302	259	253	253	262	250	250	241	238	233	229	158	181	235	269	235	287	293	323	320	377	426	270
29	358	316	286	255	249	219	192	183	144	138	95	110	183	162	159	168	162	192	222	350	365	437	413	395	240
30	373	356	344	350	316	298	262	235	189	192	143	120	113	137	192	273	307	316	313	298	301	255	301	262	260
31																									
Mean	346	327	329	315	293	268	256	238	218	208	190	195	217	204	221	211	236	259	287	324	345	344	347	348	271

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 45 Alert — 55,000 γ + — September 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	351	333	330	327	315	309	321	324	330	324	333	349	315	293	263	257	269	306	324	300	281	358	324	306	314
2 D	327	355	358	337	361	385	355	352	342	330	324	321	290	300	284	308	296	287	315	315	351	345	330	327	329
3 D	355	330	345	364	355	376	361	345	345	324	296	324	336	306	284	278	251	272	296	349	345	345	351	385	329
4 D	394	334	355	364	370	370	370	379	370	358	330	394	412	406	388	382	403	379	342	351	373	373	376	361	376
5	355	351	345	342	351	355	337	367	358	358	382	367	306	306	330	339	337	349	345	324	312	318	324	327	341
6	367	367	355	349	342	351	339	358	337	318	300	306	312	300	281	275	300	318	324	337	339	355	370	336	331
7	321	351	330	342	339	349	345	327	337	324	330	342	318	303	318	314	306	306	312	318	306	290	293	315	322
8	324	330	361	370	367	358	345	312	330	345	337	324	290	278	278	266	284	281	266	274	300	324	324	367	318
9	361	330	333	339	345	339	349	355	355	351	345	337	330	324	327	330	330	333	309	312	324	324	333	324	335
10	345	358	352	342	345	349	352	355	355	364	370	382	382	376	379	370	367	373	382	376	379	379	373	367	365
11	364	370	373	364	370	373	373	373	358	345	339	373	394	397	400	397	391	391	391	373	355	333	315	312	368
12 D	318	337	349	358	367	367	327	330	388	385	373	364	361	361	391	379	358	361	388	403	385	382	391	400	368
13	416	400	398	398	392	367	.367	370	382	394	385	373	379	364	364	358	358	367	382	379	385	379	385	388	380
14	373	370	373	376	379	382	367	349	392	394	391	382	361	382	376	373	361	373	370	349	361	373	370	361	372
15	361	367	376	376	376	392	376	385	403	379	367	391	388	382	394	391	385	367	364	367	370	385	373	379	378
16	370	376	373	376	379	373	373	376	379	379	385	379	385	382	382	376	373	349	339	351	376	388	385	379	374
17 Q	367	364	364	361	364	364	361	361	361	364	358	361	336	327	367	370	339	355	351	351	367	361	376	373	359
18 Q	373	370	370	370	370	373	367	367	367	367	364	373	376	382	370	358	364	364	361	355	358	364	367	376	368
19 D	373	367	379	382	373	352	361	364	373	400	392	392	388	373	358	367	376	374	379	416	385	385	391	388	378
20	391	391	400	391	388	385	376	370	373	361	351	349	379	376	364	370	373	373	373	370	364	351	361	364	373
21	370	349	357	367	379	388	382	376	367	367	392	406	403	385	382	361	358	370	370	394	400	379	394	400	379
22	385	376	385	379	376	376	385	379	373	361	361	394	391	379	394	385	358	358	355	370	376	373	370	370	375
23	367	364	373	370	370	367	373	364	361	382	373	370	385	373	373	370	373	364	351	358	361	364	361	370	368
24 Q	364	364	367	376	376	367	373	376	373	367	370	367	373	373	376	376	373	379	382	370	373	376	370	367	372
25 Q	370	370	367	370	367	370	367	367	370	367	364	364	361	361	367	376	370	358	349	358	351	345	349	339	362
26	351	355	376	392	394	385	385	382	379	373	370	349	349	344	330	321	382	361	339	330	358	370	373	373	363
27	373	373	367	364	367	367	367	373	373	364	361	361	355	344	349	337	336	342	342	345	349	349	367	361	357
28 Q	361	361	361	361	361	367	358	361	355	351	339	333	330	312	315	315	318	318	321	327	337	339	364	364	343
29	358	358	358	361	358	358	358	358	351	355	339	342	336	336	336	333	333	345	361	364	367	379	388	397	349
30	397	382	382	385	388	392	388	392	376	358	345	339	336	318	312	327	312	315	321	318	327	318	345	345	350
31																									
Mean	366	361	364	365	365	366	362	362	364	360	355	360	356	348	348	345	344	346	346	350	351	357	360	361	357

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 46 Alert — 10 γ + — October 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	750	844	776	753	809	839	862	826	809	767	711	571	692	711	579	556	469	436	563	672	377	662	788	650	686
2	770	819	898	776	770	802	802	770	757	750	702	678	620	566	624	672	563	439	624	705	774	744	727	744	712
3	711	731	724	767	822	829	763	757	750	783	737	731	688	585	652	721	617	678	675	692	692	688	714	731	719
4 Q	760	770	802	822	793	757	789	793	770	740	727	695	714	685	669	691	637	525	517	653	640	705	737	753	714
5	727	737	724	731	753	757								711	695	656	646	650	615	576	521	705	711	708	
6	776	747	868	835	839	835	770	708	714	724	718	705	688	665	553	750	721	705	718	727	708	721	698	708	733
7	718	740	760	789	776	780	773	747	744	708	727	711	705	698	698	682	659	620	646	698	737	615	770	727	718
8 D	704	777	671	736	733	743	717	721	724	753	740	721	727	714	708	711	695	610	574	630	685	734	734	659	706
9 D	811	750	691	753	779	785	766	793	763	770	702	682	545	607	659	653	656	711	659	672	689	679	689	744	709
10	782	753	701	767	730	746	777	711	763	705	737	692	610	790	737	682	591	624	630	558	675	708	714	731	706
11	730	765	805	812	864	847	760	744	740	731	711	711	685	614	727	714	666	682	682	682	604	689	679	708	724
12 Q	743	759	750	707	759	717	744	747	763	731	747	721	727	717	695	685	705	714	711	721	705	711	717	714	725
13	720	720	727	730	727	730	724	724	744	766	724	737	620	663	663	685	714	717	663	689	656	675	711	740	707
14	767	759	727	767	789	858	832	773	714	750	711	740	750	659	640	672	705	637	601	620	672	711	689	763	721
15 Q	712	751	732	755	757	794	751	781	735	719	712	709	706	696	667	660	680	696	677	709	709	693	706	699	717
16	709	735	715	732	712	719	738	722	722	716	719	693	751	683	660	758	722	683	650	696	709	690	683	722	705
17 Q	748	738	715	738	738	742	725	735	742	722	719	693	703	703	709	709	716	716	703	716	699	706	699	712	719
18	745	810	889	755	771	729	709	722	719	722	716	703	690	686	673	667	667	591	602	625	729	693	690	732	710
19	719	719	715	715	719	712	742	735	771	738	774	722	548	574	670	551	683	755	712	663	670	670	696	709	696
20	722	716	729	729	732	716	728	716	712	719	709	712	706	683	612	591	686	696	667	716	693	657	696	716	698
21	738	735	774	764	777	748	738	722	722	722	715	693	654	690	591	637	637	500	551	602	722	696	738	742	692
22	719	728	761	813	803	824	791	755	738	725	693	728	657	561	651	663	709	660	670	680	644	712	625	706	709
23	732	738	843	813	722	712	758	725	738	722	716	660	683	651	618	541	625	558	598	641	628	663	722	738	689
24	745	728	758	810	765	771	719	699	728	722	735	709	631	644	637	608	637	558	461	567	728	774	667	732	689
25 D	761	748	728	774	781	807	797	778	748	735	725	608	564	686	709	567	397	660	605	612	618	696	631	722	686
26 D	787	869	748	728	732	709	787	765	778	771	725	584	641	529	496	608	545	571	418	522	644	758	738	735	675
27	764	764	794	752	787	787	852	774	748	725	722	696	612	654	503	578	778	699	644	703	660	722	712	752	716
28	715	755	725	817	787	735	752	748	748	735	735	696	680	667	634	687	663	670	634	644	654	703	709	696	708
29	728	752	784	784	735	728	768	752	735	722	712	696	693	677	690	696	605	587	670	683	706	712	690	738	710
30	706	716	735	758	761	768	755	758	738	764	719	622	699	677	667	641	647	654	654	654	667	732	725	690	704
31 Q	732	751	755	735	761	751	797	771	758	722	706	631	683	657	644	647	699	670	625	667	680	670	722	709	706
Mean	740	744	757	765	768	768	766	749	745	736	722	688	669	664	652	656	651	635	627	656	664	698	708	723	708*

* 1 day missing

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 47 Alert 3485 γ + October 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	325	400	335	267	255	234	168	156	132	68	47	-36	53	216	162	228	132	171	246	361	385	440	467	322	231
2	355	336	348	255	249	240	186	110	186	171	158	110	92	107	140	226	249	171	316	328	307	319	328	345	235
3	298	301	255	295	282	268	237	186	104	143	134	177	255	110	174	277	237	295	298	283	298	286	376	361	247
4 Q	380	344	326	293	235	220	205	175	168	123	136	166	202	235	235	275	235	196	202	332	329	336	356	308	250
5	266	280	259	259	275	268								217	238	223	253	260	299	299	365	317	320	320	
6	337	350	359	344	281	247	214	193	241	247	241	250	214	190	75	284	314	302	311	314	314	317	326	349	276
7	276	316	298	301	276	249	249	231	215	162	210	234	250	267	246	258	258	246	270	289	311	335	419	410	274
8 D	322	386	398	276	249	264	234	228	234	192	168	183	222	215	174	210	213	234	243	291	316	365	404	346	264
9 D	437	416	320	335	391	379	364	218	189	210	243	195	44	110	210	240	273	314	283	301	322	356	368	413	270
10	377	331	271	313	259	265	274	247	232	211	148	120	59	253	223	220	235	278	325	295	295	295	349	347	259
11	398	334	365	328	274	271	253	217	211	235	199	241	199	168	268	277	255	304	295	310	310	370	340	340	282
12 Q	334	365	304	277	319	262	274	253	235	187	202	253	265	262	244	238	277	286	268	292	274	301	301	298	274
13	281	284	284	281	284	281	272	266	260	205	121	130	133	166	181	245	257	293	272	293	305	315	323	384	255
14	423	399	293	311	311	272	245	211	236	187	90	160	242	169	184	257	269	281	345	345	393	375	314	320	277
15 Q	302	327	287	335	302	275	242	260	248	251	223	275	251	254	248	242	293	299	260	299	297	308	332	366	282
16	351	300	288	293	258	267	276	258	261	258	170	-65	146	200	185	282	288	273	264	330	321	318	312	364	259
17 Q	342	321	285	309	293	282	261	264	222	209	261	258	276	276	288	288	297	293	290	312	297	297	297	315	285
18	342	373	434	330	296	264	261	261	264	264	273	270	267	276	276	267	276	288	285	293	324	303	309	306	295
19	289	286	283	277	280	274	283	265	181	84	202	211	102	130	190	174	298	337	319	295	359	377	316	331	257
20	328	298	301	298	292	274	283	274	274	271	262	265	259	241	202	202	277	307	307	344	331	347	349	337	288
21	353	319	341	304	286	280	265	262	253	229	232	235	217	271	193	250	271	202	295	344	362	344	353	356	283
22	290	299	320	337	302	271	245	230	218	188	100	175	131	91	173	275	330	336	305	317	333	402	399	345	269
23	348	353	348	353	245	251	271	257	251	236	194	137	194	187	215	194	290	308	305	311	338	402	348	314	277
24	336	336	348	374	296	290	260	260	278	251	233	178	85	169	224	268	278	314	317	336	435	488	414	377	297
25 D	378	297	267	309	291	234	222	204	186	177	213	78	30	168	273	264	177	315	361	376	382	467	400	325	266
26 D	359	315	297	270	255	260	291	219	147	144	159	74	155	107	98	249	279	318	361	336	400	437	352	321	258
27	352	343	334	309	294	270	231	237	210	213	231	132	120	170	101	189	364	331	327	315	355	334	336	370	269
28	321	321	306	331	288	276	267	243	201	177	207	216	222	210	195	240	264	276	300	349	364	382	360	288	275
29	321	331	334	306	273	261	261	225	231	207	222	207	225	231	246	243	228	291	294	297	315	315	340	343	272
30	297	300	294	318	291	285	257	222	192	219	207	98	192	210	222	237	282	318	336	343	340	361	336	327	270
31 Q	327	336	334	300	300	257	257	228	222	216	207	147	216	183	228	252	303	303	321	327	321	327	360	315	274
Mean	338	334	317	307	280	263	251	228	215	197	191	169	177	194	202	244	266	282	296	319	332	353	352	338	269

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 48 Alert — 55,000 γ + — October 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1 D	377	370	377	367	364	361	358	367	370	364	364	364	374	352	352	361	326	386	377	345	406	396	377	389	368
2	399	389	402	412	399	389	389	386	409	370	374	370	367	364	377	383	377	377	383	374	374	374	358	358	381
3	367	383	380	370	364	374	370	364	370	377	370	364	367	333	370	367	326	339	345	377	370	364	370	361	364
4 Q	383	377	383	389	389	393	380	377	367	364	370	358	349	352	339	349	336	342	352	364	355	355	358	361	364
5	361	374	361	364	364	361								364	349	358	349	326	323	333	358	358	355	383	
6	367	380	393	409	405	405	399	399	396	389	374	380	367	339	349	367	367	361	361	367	355	355	349	377	375
7	386	377	374	377	389	383	380	374	364	358	364	374	355	364	355	343	343	333	352	355	364	342	345	358	362
8 D	365	397	429	397	387	390	397	394	403	384	362	385	410	416	450	416	413	384	390	397	394	394	413	403	399
9 D	410	435	485	441	422	419	412	400	403	412	412	390	384	397	394	381	394	400	378	390	397	394	410	432	406
10	416	390	387	387	387	387	384	387	375	378	368	359	372	392	413	384	397	394	375	413	406	403	410	406	392
11	414	390	389	392	382	408	411	395	392	389	386	386	386	379	399	392	382	386	386	382	389	395	392	392	391
12 Q	389	392	386	389	395	392	386	376	373	376	389	395	405	402	382	382	392	392	386	382	382	386	386	382	387
13	389	386	379	376	379	379	376	382	379	367	363	376	376	370	369	386	399	389	370	389	392	395	398	405	386
14	414	426	421	402	393	389	399	408	414	386	383	408	408	393	408	405	399	383	389	413	402	399	405	399	402
15 Q	412	396	386	389	393	386	389	396	399	389	383	396	393	393	383	383	389	386	383	399	389	383	389	405	391
16	412	396	389	386	386	386	383	386	383	389	370	376	418	405	408	412	399	389	383	393	393	376	393	405	393
17 Q	396	387	383	383	383	380	383	377	367	374	383	376	383	380	380	377	377	374	374	374	367	374	374	377	378
18	380	380	405	418	408	405	399	386	390	383	386	380	374	364	380	370	364	374	374	377	390	383	390	387	385
19	383	380	377	370	370	376	370	374	370	383	402	396	383	402	399	408	421	396	393	390	402	412	402	405	391
20	390	383	387	383	377	380	374	377	374	374	377	380	383	374	383	399	387	377	368	377	374	383	377	387	380
21	390	377	374	374	377	377	371	371	368	368	371	368	361	371	355	371	371	383	402	393	390	374	380	374	375
22	374	383	390	387	396	399	399	399	383	371	377	390	364	374	387	380	383	387	364	371	387	387	421	402	386
23	393	387	396	428	406	396	380	384	380	378	374	380	387	374	378	387	393	403	390	375	390	415	396	396	390
24	387	379	379	379	376	387	398	385	388	373	370	366	404	397	426	391	360	373	429	420	407	417	429	410	391
25 D	417	401	391	395	382	391	395	401	398	401	370	379	404	420	407	410	445	423	420	448	448	480	483	426	415
26 D	405	402	399	402	396	393	377	380	380	402	396	390	393	386	415	409	396	412	494	487	475	443	412	399	410
27	409	402	402	412	405	405	418	434	421	412	406	399	412	405	396	421	412	393	402	396	396	386	386	399	405
28	396	393	396	396	405	412	399	390	386	393	402	386	390	386	396	412	405	409	409	405	431	405	418	402	401
29	399	393	399	402	396	393	380	386	386	384	380	380	380	374	380	393	393	402	393	374	377	377	384	384	387
30	383	393	396	386	389	408	402	386	380	389	380	377	389	380	377	377	383	380	368	374	368	358	351	358	381
31 Q	374	380	380	383	380	377	380	377	383	374	377	370	374	377	374	370	377	374	383	377	364	364	368	364	375
Mean *	394	392	395	394	390	393	391	388	385	383	381	381	385	383	386	387	384	384	386	390	396	390	392	392	387

* 30 days only

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 49 Alert 10 γ + November 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	725	738	748	761	735	716	716	738	732	712	725	712	703	683	650	663	657	650	634	683	690	693	703	690	703
2	719	725	735	728	722	725	725	732	728	732	716	696	628	696	637	677	693	677	654	699	683	657	677	722	699
3	712	706	719	725	728	735	755	752	742	725	677	650	683	670	637	644	634	680	654	650	670	696	687	768	696
4	732	719	722	735	738	755	755	752	729	712	722	657	683	654	612	562	637	686	686	647	667	612	725	716	692
5	716	716	716	716	722	725	771	791	752	738	716	709	696	690	693	690	696	699	699	696	696	683	703	709	715
6 D	713	732	729	710	772	713	742	726	726	719	713	713	700	694	661	677	677	641	553	612	632	67 0	670	690	691
7	742	752	775	755	765	716	719	710	723	726	697	690	638	667	706	726	719	710	703	716	710	697	723	736	717
8	710	710	703	719	723	736	726	729	732	723	706	710	697	703	667	651	648	713	690	706	694	690	697	710	704
9	713	736	716	716	716	719	716	716	716	713	713	710	707	707	703	700	703	710	710	706	700	687	719	726	711
10 Q	713	710	732	710	716	713	713	713	710	713	710	710	710	707	710	710	710	706	703	706	706	706	710	697	710
11	703	713	724	719	719	759	768	775	739	729	700	703	664	694	670	619	638	690	677	703	680	700	719	706	704
12 Q	732	745	735	719	713	713	713	713	716	713	713	710	710	707	710	700	703	710	697	703	706	700	710	713	713
13 Q	710	706	719	723	713	713	716	713	716	716	710	706	706	710	703	697	694	703	694	700	700	706	697	713	707
14	718	716	713	713	710	716	713	716	713	710	713	710	706	703	680	664	651	661	654	670	674	710	723	719	699
15 D	718	716	710	710	716	778	794	732	765	713	706	661	443	749	742	713	719	703	622	612	635	648	595	732	694
16 D	726	749	781	729	729	778	742	772	745	723	687	680	716	749	612	566	609	592	592	661	706	703	713	736	700
17	745	703	755	742	732	729	713	716	729	716	716	690	710	677	605	703	700	716	706	713	710	713	716	716	711
18 Q	713	713	713	716	713	716	713	710	713	713	713	710	710	706	706	703	700	700	710	706	697	710	706	716	710
19	713	710	710	710	710	713	713	713	713	710	713	713	697	690	687	687	690	670	661	697	677	667	710	719	700
20 Q	710	710	710	713	716	742	729	729	710	713	710	706	710	703	700	703	703	706	697	703	710	703	713	713	711
21	723	729	726	745	742	752	775	824	788	752	732	716	625	684	654	658	582	575	592	612	651	684	735	745	700
22 D	732	759	762	778	807	814	811	804	768	785	684	700	648	622	667	632	632	664	629	641	654	697	690	732	713
23	745	749	755	759	755	762	742	745	742	762	661	703	726	641	667	664	700	690	674	690	664	674	684	703	711
24	732	726	732	745	735	752	719	765	732	821	729	667	664	658	677	697	687	687	586	690	703	719	680	703	709
25	755	759	765	742	762	732	807	807	781	719	664	739	748	664	710	670	661	664	697	700	677	706	703	713	718
26	742	716	729	719	726	710	723	713	716	719	706	703	697	674	703	700	703	703	690	716	703	713	706	710	711
27	726	732	729	762	771	742	739	739	765	739	716	719	690	661	684	658	635	569	719	697	677	674	726	716	708
28	736	723	729	749	745	745	762	749	742	736	719	690	710	687	697	677	670	638	697	713	706	713	710	713	714
29	739	732	718	713	719	716	719	726	736	729	710	726	739	710	710	677	713	645	645	657	674	719	716	719	708
30 D	723	762	853	798	807	824	804	781	788	716	654	723	658	622	677	680	703	684	723	680	697	684	680	703	725
31																									
Mean	725	728	735	733	736	739	742	744	737	728	705	699	681	687	678	672	676	675	668	683	685	691	701	717	707

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 50 Alert — 3485 γ + — November 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	313	316	316	319	297	276	267	270	249	219	231	252	264	261	231	246	273	285	303	318	322	343	373	349	287
2	322	297	297	282	273	279	279	273	261	243	231	201	156	246	223	294	294	288	303	328	360	397	373	397	287
3	306	276	279	285	285	282	264	237	225	229	153	135	183	219	237	270	285	306	288	297	340	346	355	363	268
4	346	303	297	300	285	276	270	249	223	186	213	149	198	201	189	229	267	294	313	313	352	355	300	297	266
5	291	303	285	291	294	285	276	246	235	229	249	270	276	279	282	282	282	288	288	285	291	294	313	315	280
6 D	303	325	303	270	303	255	279	258	261	255	264	273	261	267	243	267	279	282	319	340	325	458	352	285	292
7	328	343	322	328	303	249	264	267	270	240	171	156	159	210	258	291	294	291	279	297	291	294	303	335	272
8	303	285	279	297	282	282	273	279	261	255	225	213	219	249	235	237	267	294	276	291	306	300	303	294	271
9	303	310	300	291	285	279	279	276	273	273	273	273	273	276	276	282	285	288	291	288	285	294	340	325	288
10 Q	313	303	303	279	273	273	279	276	273	273	273	276	279	276	279	282	282	279	279	285	288	288	306	285	283
11	291	282	285	288	282	288	258	229	229	204	207	223	204	229	247	240	255	291	291	303	306	319	315	300	265
12 Q	303	306	310	285	276	276	273	273	273	267	270	267	270	273	279	273	276	276	276	285	282	282	297	316	282
13 Q	310	279	276	291	276	279	279	276	276	273	273	267	273	270	279	270	282	291	276	282	282	291	291	297	281
14	303	291	282	273	273	276	276	276	276	273	261	261	270	267	247	243	252	279	273	340	382	306	282	276	281
15 D	279	276	273	279	285	291	297	267	231	261	229	122	-154	120	247	282	300	294	285	306	325	403	394	379	261
16 D	355	343	349	273	291	294	252	231	243	252	183	141	210	279	183	204	255	282	291	313	343	315	335	363	274
17	325	285	346	282	276	282	279	273	264	252	243	228	231	240	204	270	300	294	285	285	285	285	282	276	274
18 Q	279	279	282	279	276	279	279	279	279	276	273	267	276	276	279	276	276	279	285	288	285	294	279	282	279
19	279	279	282	279	276	279	276	276	279	276	270	267	258	255	252	264	273	273	273	306	340	340	335	300	283
20 Q	273	279	279	276	279	288	270	264	267	270	273	276	276	279	279	279	285	288	288	288	288	285	294	285	280
21	300	306	291	288	279	264	249	171	186	180	168	186	168	243	237	276	294	318	355	313	322	322	318	358	266
22 D	328	373	336	313	291	217	189	186	122	186	127	149	123	114	207	261	294	316	322	310	335	406	328	331	256
23	346	313	318	307	285	267	252	240	162	219	138	165	213	189	235	255	276	294	276	291	306	328	340	318	263
24	336	276	291	297	273	279	258	252	135	223	216	138	149	165	213	279	285	291	273	300	335	367	243	340	262
25	322	349	325	285	270	255	243	192	237	186	110	183	192	186	273	273	276	294	294	310	328	335	306	309	263
26	333	313	297	282	285	270	273	273	267	264	267	237	249	223	270	285	285	291	282	294	282	291	288	282	278
27	306	313	316	303	291	258	249	210	229	229	225	246	243	240	255	255	279	229	306	306	328	300	310	313	272
28	325	303	285	285	282	270	261	246	235	231	229	192	225	219	261	267	276	276	297	300	294	303	306	303	269
29	306	297	273	273	282	279	276	273	261	243	168	144	192	243	264	252	297	249	264	346	306	300	300	291	266
30 D	303	328	382	288	279	217	195	141	153	149	62	189	171	180	255	291	313	294	297	291	310	335	325	313	252
31																									
Mean	312	305	302	295	283	271	264	248	238	237	217	212	210	232	247	266	281	286	290	303	315	326	320	316	274

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 51 Alert — 55,000 γ + — November 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	379	379	379	385	388	391	382	375	372	369	385	385	382	376	376	379	372	376	372	385	379	379	382	382	380
2	379	379	379	379	375	375	372	372	369	369	369	369	372	379	369	382	379	376	369	366	376	408	418	408	379
3	391	391	395	385	382	379	372	375	379	382	375	382	388	388	388	391	388	382	376	385	395	395	395	391	386
4	391	387	387	385	379	375	375	375	379	375	382	375	382	379	379	398	385	385	385	388	391	405	395	391	384
5	387	385	382	379	379	379	379	385	395	395	391	388	382	379	382	379	382	382	382	379	379	382	385	382	383
6 D	379	379	376	379	379	382	382	385	385	385	388	382	379	379	369	379	382	379	408	431	408	434	437	418	390
7	408	402	411	408	398	395	391	388	388	379	376	391	398	398	391	391	391	388	385	388	382	382	388	391	392
8	385	387	385	388	385	385	382	382	379	379	376	382	382	385	388	388	398	391	385	385	388	385	391	388	386
9	385	382	387	385	382	379	376	376	376	376	379	376	376	379	382	379	379	376	372	376	372	379	385	391	379
10 Q	387	385	382	382	379	376	376	376	372	376	379	376	376	379	376	376	376	379	376	379	379	376	382	376	378
11	379	376	372	372	372	369	369	369	376	372	379	379	379	385	379	385	382	382	379	382	382	385	382	382	378
12 Q	379	379	382	382	379	376	379	379	376	376	372	372	372	372	372	369	376	379	379	379	379	379	379	379	377
13 Q	385	382	379	379	375	375	372	372	372	372	366	363	369	366	372	372	376	372	369	379	379	379	382	376	374
14	376	376	372	372	372	372	372	369	372	369	372	372	372	372	376	376	382	376	385	391	391	376	372	376	376
15 D	376	369	369	372	372	375	385	385	372	385	372	369	385	463	431	421	411	405	402	415	415	424	468	434	399
16 D	418	418	408	402	402	395	391	395	398	402	388	402	421	415	405	424	408	421	424	428	418	408	415	418	409
17	405	405	402	398	398	391	395	391	385	385	382	382	382	376	385	398	395	385	388	388	385	382	385	382	390
18 Q	382	382	385	382	382	379	379	379	382	382	382	382	382	382	379	382	379	385	382	382	382	382	379	379	381
19	379	379	382	382	379	375	375	372	375	372	372	372	372	376	376	376	376	372	372	379	385	391	382	379	377
20 Q	372	372	376	372	372	375	375	372	372	375	372	379	372	372	369	372	372	372	366	359	363	363	366	366	371
21	369	372	372	372	375	379	375	385	391	385	385	382	385	382	379	382	391	391	395	391	391	391	388	402	384
22 D	391	415	408	395	388	382	402	402	402	415	405	408	405	424	428	411	418	402	398	402	415	437	421	405	408
23	398	398	395	395	398	398	395	388	385	398	388	405	408	405	402	402	411	402	405	405	405	415	418	408	401
24	395	382	385	385	382	382	382	382	376	415	388	379	408	405	411	405	391	385	398	398	391	391	405	405	393
25	391	402	398	398	388	388	379	405	408	388	402	405	402	411	405	398	415	408	402	402	395	391	395	382	398
26	382	402	395	385	385	382	382	382	379	385	385	385	382	382	379	379	379	376	379	376	379	372	376	379	382
27	379	385	391	388	385	388	385	372	385	385	382	379	379	379	379	372	385	398	395	385	391	391	385	385	384
28	385	385	382	382	379	379	379	376	379	376	376	379	388	382	379	372	372	379	379	376	372	376	376	379	379
29	379	376	379	382	382	379	379	372	369	366	359	379	382	379	379	372	379	372	382	391	385	372	369	372	376
30 D	376	369	379	388	398	391	398	391	405	398	405	408	398	405	405	391	388	391	385	382	388	388	402	411	394
31																									
Mean	386	386	386	384	383	381	381	381	382	383	381	383	385	388	386	386	387	385	386	388	387	390	394	390	385

NORTH COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Times

Table 52 Alert 10 γ + December 1962

Day \ Hour U.T.		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1		723	736	732	716	710	713	716	735	723	726	723	716	713	713	677	635	677	670	680	670	690	713	723	726	707
2	Q	719	716	719	729	723	735	729	742	729	713	726	713	703	694	664	664	719	697	694	706	697	700	716	719	711
3		723	723	716	723	732	729	729	723	716	713	710	710	703	687	700	664	710	670	645	690	719	723	716	719	708
4		713	716	713	719	726	710	732	723	729	716	690	641	723	670	514	592	579	648	667	703	700	735	716	713	687
5		762	739	706	723	716	726	736	723	713	723	726	703	719	697	684	684	710	716	703	710	710	703	716	723	715
6	Q	729	716	716	723	732	729	719	723	723	716	719	716	713	706	703	703	697	706	703	697	716	706	716	713	714
7	Q	716	719	723	726	729	719	713	723	729	723	719	710	723	703	709	700	684	694	673	684	684	680	775	719	709
8		719	716	719	723	739	726	723	739	745	735	738	719	703	680	615	658	632	602	609	632	667	710	706	716	695
9		732	732	742	742	762	830	755	723	716	726	723	719	710	706	709	706	706	713	713	713	716	690	775	719	726
10		713	716	713	716	710	713	710	710	716	716	716	713	710	713	709	697	667	664	651	645	670	703	713	729	701
11	D	736	739	736	742	791	794	775	768	749	710	710	723	680	651	575	569	569	599	619	651	657	694	726	694	694
12		745	739	775	752	723	732	726	719	719	719	716	719	716	716	716	716	713	700	657	537	619	667	661	716	705
13		718	729	758	729	765	775	755	719	732	745	765	749	726	632	687	729	726	735	723	723	667	690	677	732	724
14		726	723	736	775	729	745	726	723	723	739	726	726	742	700	680	680	677	651	697	694	697	684	680	687	711
15		723	732	745	755	772	794	742	729	735	732	710	713	710	716	706	697	703	690	674	677	694	700	706	710	719
16		710	716	719	723	719	719	719	719	739	723	726	726	710	677	683	697	697	706	700	700	697	706	713	716	711
17	D	726	716	742	729	719	716	719	729	742	749	732	716	710	671	661	599	521	265	586	710	710	742	543	772	676
18	D	824	814	940	804	723	736	726	719	716	723	726	690	697	654	525	589	519	599	632	619	465	615	755	775	696
19	D	742	791	794	892	804	827	755	804	830	781	739	632	687	671	670	572	543	625	553	553	638	749	736	703	712
20	D	742	758	804	814	827	749	762	765	768	739	752	719	716	664	595	642	599	553	540	582	732	745	827	687	711
21		775	752	745	794	785	771	781	778	749	762	729	706	671	615	645	664	632	638	612	625	606	670	752	739	708
22		732	729	758	762	749	729	736	745	742	739	710	713	755	703	677	661	677	690	677	667	684	687	710	739	715
23	Q	713	723	742	739	752	742	726	739	732	723	723	726	716	713	706	709	713	716	719	716	716	723	723	716	723
24		719	723	723	719	719	739	732	732	745	734	726	710	706	710	670	677	716	700	697	694	684	719	716	726	714
25	Q	745	739	729	739	742	739	723	716	723	719	716	716	710	719	716	719	703	706	700	680	706	700	710	723	718
26		719	726	719	729	739	735	741	736	726	712	752	723	637	559	619	664	671	674	710	694	651	687	759	706	701
27		723	736	729	729	719	723	729	732	736	729	723	719	716	718	706	709	706	680	694	661	703	706	694	719	714
28		736	726	736	726	716	729	732	723	716	719	719	713	716	651	718	703	703	719	706	710	684	687	706	710	713
29		736	726	719	732	755	762	745	739	732	726	719	713	710	680	677	677	697	687	703	697	706	716	725	726	717
30		719	723	719	726	726	723	723	723	723	723	716	719	713	710	710	710	706	703	706	677	690	694	703	752	715
31		713	726	726	729	739	745	742	742	745	739	719	752	736	687	664	582	632	677	667	729	726	697	716	725	711
Mean		731	732	742	744	741	743	741	734	734	730	724	712	711	684	667	666	668	659	668	673	680	701	712	721	709

WEST COMPONENT OF HORIZONTAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 53 Alert 3485 γ + December 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	315	318	294	273	273	276	279	279	267	238	238	235	258	276	261	240	279	276	288	330	303	297	288	282	277
2 Q	282	279	285	291	285	282	270	264	260	238	243	249	252	264	243	246	294	279	282	300	303	303	279	276	273
3	291	300	282	285	282	276	276	273	276	270	263	270	270	252	267	243	285	273	306	306	294	291	282	279	279
4	282	282	279	282	282	270	279	273	234	110	125	78	192	232	150	240	300	315	294	300	303	303	294	313	251
5	366	330	288	276	270	276	282	270	267	249	246	246	264	246	226	240	270	288	285	288	288	288	294	288	276
6 Q	294	285	276	279	285	282	273	270	264	260	267	270	264	258	264	270	267	273	282	285	285	279	282	276	275
7 Q	288	294	288	288	288	279	273	276	267	264	264	246	270	246	267	264	261	273	264	279	297	300	294	282	275
8	282	279	282	282	288	273	270	264	226	195	210	216	228	238	198	246	249	270	291	325	340	337	337	316	268
9	313	313	309	297	282	279	264	255	264	246	246	264	270	273	276	276	279	282	282	282	282	276	282	279	277
10	282	276	270	273	270	270	270	270	276	273	273	276	273	276	276	267	258	261	270	273	303	331	366	355	283
11 D	336	328	303	282	291	276	252	235	220	186	192	213	192	186	177	198	261	303	335	415	300	325	375	390	274
12	346	316	343	282	258	273	273	270	267	267	267	270	276	279	276	273	273	258	249	234	276	334	355	363	286
13	352	336	372	328	318	297	270	258	252	210	222	216	210	120	162	240	291	300	291	291	294	331	369	328	277
14	309	300	297	318	282	288	267	264	260	246	177	168	232	228	216	255	258	264	300	318	331	306	312	328	272
15	352	336	325	306	276	285	240	238	246	252	258	261	264	273	273	267	270	264	273	276	297	297	294	297	280
16	282	282	279	276	279	276	276	267	264	258	243	249	243	234	252	267	267	273	279	285	300	291	288	285	271
17 D	325	288	294	282	270	264	270	267	240	207	234	232	243	216	240	216	165	87	273	415	421	491	445	460	285
18 D	427	358	397	325	204	234	238	249	252	255	228	168	186	180	90	195	240	246	328	372	378	372	355	325	275
19 D	375	463	336	372	240	246	222	180	141	235	204	135	159	201	207	198	204	294	328	312	303	358	366	355	268
20 D	366	358	340	325	260	246	270	240	204	150	159	192	207	195	168	226	222	288	288	303	354	491	493	378	280
21	348	331	288	330	273	267	228	240	201	228	228	235	189	159	192	228	219	288	291	321	321	318	318	294	264
22	331	303	291	297	276	270	270	264	220	238	180	240	288	252	234	238	267	276	291	294	297	306	306	334	273
23 Q	297	303	300	282	276	267	264	264	255	246	243	267	258	264	267	270	270	273	279	279	276	276	273	276	272
24	282	276	276	273	270	282	273	258	228	252	238	238	228	246	219	246	276	270	279	291	294	300	288	291	265
25 Q	300	297	288	291	285	270	267	267	264	264	258	246	255	261	273	276	267	276	276	273	288	291	294	306	276
26	285	279	270	276	279	270	264	258	255	216	204	213	123	65	135	276	303	316	325	318	340	352	372	340	264
27	276	276	264	276	270	270	273	264	267	260	258	255	260	264	246	264	270	261	279	288	306	343	297	288	274
28	294	279	288	273	267	276	270	264	264	264	258	243	252	204	252	261	270	285	276	282	297	325	328	294	274
29	294	276	267	276	288	273	358	258	258	258	258	255	249	226	226	252	270	267	282	279	285	294	300	279	268
30	273	282	276	276	273	270	270	267	264	258	252	261	264	267	270	270	270	270	273	273	282	288	291	321	274
31	288	285	291	279	288	282	270	264	249	204	122	183	213	226	204	156	220	282	297	316	303	282	285	279	253
Mean	314	307	298	292	275	272	265	259	247	236	228	229	237	230	227	245	261	272	288	303	308	322	323	315	273

VERTICAL INTENSITY

Mean values for periods of sixty minutes, Universal Time

Table 54 Alert — 55,000 γ + — December 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	401	391	384	384	388	384	384	384	388	388	388	384	384	378	378	378	384	378	384	395	384	378	375	375	384
2 Q	378	375	378	375	378	378	378	382	378	375	375	375	372	372	365	378	372	365	368	372	375	375	372	378	374
3	378	378	375	375	375	378	378	378	378	375	375	372	368	368	368	368	372	365	378	382	375	368	365	365	373
4	368	368	368	365	358	352	355	358	358	358	378	384	397	384	391	411	414	404	408	397	401	391	388	391	382
5	395	401	391	388	378	378	378	378	375	368	372	375	384	384	384	388	388	384	382	382	382	382	382	375	382
6 Q	375	378	375	375	372	372	375	372	372	372	372	375	372	375	375	375	375	375	378	378	375	375	378	371	374
7 Q	375	378	378	378	378	378	372	368	368	368	368	357	372	372	372	372	375	375	378	378	378	382	375	371	374
8	372	372	372	368	365	365	365	365	361	361	372	375	368	372	375	375	372	384	388	391	388	388	388	385	374
9	378	378	382	378	378	378	388	388	378	372	368	368	372	372	372	372	372	375	372	365	368	372	365	365	373
10	368	365	368	365	365	368	368	365	368	368	372	372	372	372	372	372	375	378	382	384	388	384	388	388	373
11 D	391	388	382	378	375	378	378	388	378	375	378	375	372	375	384	395	404	408	408	414	401	401	397	424	389
12	404	404	397	395	391	384	384	388	384	384	384	384	382	378	384	384	382	382	394	408	421	431	428	418	396
13	415	404	421	424	408	401	397	391	384	384	395	391	391	388	408	408	391	384	384	384	384	384	397	388	396
14	382	384	388	397	401	391	384	384	378	375	368	384	395	388	391	391	382	382	382	384	397	397	408	421	389
15	404	397	391	388	384	382	384	388	382	382	382	378	378	375	372	375	378	382	382	384	384	378	384	384	383
16	384	382	378	375	375	372	372	372	368	368	372	375	372	368	375	372	368	368	372	378	381	375	372	372	373
17 D	378	372	372	372	368	368	365	365	365	365	372	368	368	365	365	365	378	431	457	438	421	434	491	447	391
18 D	464	454	471	503	454	428	411	404	401	395	384	382	404	397	424	431	438	435	438	444	510	500	444	431	436
19 D	441	558	471	454	434	424	424	411	467	434	411	411	418	424	404	438	454	444	457	521	494	441	447	475	448
20 D	457	444	428	421	424	434	421	408	404	404	424	411	404	404	421	418	431	448	480	484	444	463	491	467	435
21	424	421	431	421	404	401	397	411	397	408	411	401	388	397	411	411	418	428	431	438	441	451	428	408	416
22	408	401	397	401	401	401	397	388	384	391	382	401	404	391	391	397	401	394	394	401	404	411	397	404	397
23 Q	411	404	391	391	391	388	388	382	378	378	378	384	378	382	382	378	382	382	384	384	382	378	378	378	384
24	384	384	384	384	384	378	378	375	378	384	378	378	382	385	382	388	388	384	384	388	388	384	378	378	382
25 Q	378	378	382	382	384	384	378	375	375	371	371	371	371	378	375	375	375	375	371	371	371	371	375	371	376
26	372	372	372	372	368	368	372	378	375	365	371	371	378	385	415	401	397	384	384	388	397	401	401	421	383
27	397	391	384	382	382	384	378	378	378	378	378	378	378	382	372	375	378	379	375	382	384	388	388	378	382
28	378	378	375	372	375	375	372	372	375	375	371	371	365	361	378	375	368	368	375	375	382	384	388	378	374
29	372	372	368	372	368	372	375	378	378	378	371	371	368	368	372	375	375	368	368	368	371	371	375	371	372
30	368	372	372	368	368	368	365	365	365	368	365	368	368	365	365	365	361	361	358	361	365	365	371	378	366
31	375	372	372	368	372	368	368	368	361	358	365	388	385	382	378	388	395	391	382	378	375	371	378	375	376
Mean	392	394	390	389	385	384	382	381	380	378	379	380	381	380	384	387	389	389	392	396	396	396	396	395	387

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (All Days)

Table 55 Alert — 10 γ + — 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul *	Aug *	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	743	741	742	744	725	721	711	737	740	740	725	731	734	724	742	735
1-2	744	743	747	741	734	736	718	757	745	744	728	732	739	736	744	737
2-3	746	748	752	760	741	726	737	752	764	757	735	742	747	739	758	743
3-4	752	747	750	770	743	745	747	766	775	765	733	744	753	750	765	744
4-5	758	751	766	766	751	759	752	781	774	768	736	741	759	761	768	747
5-6	752	753	753	768	757	764	761	792	772	768	739	743	760	769	765	747
6-7	751	752	756	771	741	755	764	792	765	766	742	741	759	763	765	747
7-8	751	752	755	752	745	768	754	770	771	749	744	734	754	759	758	745
8-9	751	750	744	749	740	758	762	757	765	745	737	734	748	754	748	743
9-10	744	747	739	740	741	742	742	735	741	736	728	730	739	740	739	737
10-11	737	741	728	735	737	749	733	726	720	722	705	724	730	736	726	727
11-12	730	721	717	712	714	723	704	720	702	688	699	712	712	715	705	716
12-13	720	718	699	697	699	697	699	714	697	699	681	711	700	702	691	708
13-14	712	701	692	689	681	681	673	692	674	664	687	684	686	682	680	696
14-15	707	688	703	663	666	664	660	677	640	652	678	667	672	667	665	685
15-16	703	682	687	645	653	635	637	660	636	656	672	666	661	646	656	680
16-17	701	689	685	631	646	642	632	630	614	651	676	668	655	637	645	684
17-18	709	686	674	631	641	619	599	635	628	635	675	659	649	624	642	682
18-19	709	674	677	643	637	608	572	656	626	627	668	668	647	618	643	680
19-20	716	687	689	647	655	609	611	665	641	656	683	673	661	635	658	690
20-21	722	709	709	667	660	625	620	659	671	664	685	680	673	641	678	699
21-22	723	723	714	682	676	652	634	668	681	698	691	701	687	658	694	710
22-23	730	728	728	709	682	683	682	693	703	708	701	712	705	685	712	718
23-24	743	740	733	729	700	698	683	726	726	723	717	721	720	702	728	730
Mean	731	724	722	710	698	699	691	714	707	708	707	709	710	701	712	718

* Days missing; July 5, 9, 10, 11, 12, 13, 14, 15, 27, 28, 29.
Aug. 3, 9, 11, 12.

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (All Days)

Table 56 Alert 3500 γ + 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	***Jul	**Aug	Sep	*Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	325	332	328	373	354	379	347	358	331	323	297	299	337	360	339	313
1-2	318	322	326	350	343	367	342	341	312	319	290	292	327	348	327	306
2-3	318	320	317	345	337	345	328	327	314	302	287	283	319	334	320	302
3-4	315	313	304	330	327	331	300	299	300	292	280	277	306	314	307	296
4-5	312	304	301	303	320	336	288	293	278	265	268	260	294	309	287	286
5-6	306	299	292	293	306	307	283	277	253	248	256	257	281	293	272	280
6-7	300	295	284	278	286	282	253	249	241	236	249	250	267	268	260	274
7-8	294	289	272	260	280	278	237	226	223	213	233	244	254	255	242	265
8-9	288	279	264	246	264	247	231	210	203	200	223	232	241	238	228	256
9-10	281	266	264	236	254	223	210	205	193	182	222	221	230	223	219	248
10-11	273	258	255	234	245	205	193	201	175	176	202	213	219	211	210	237
11-12	269	240	248	226	228	191	179	201	180	154	197	214	211	200	202	230
12-13	261	249	234	236	213	186	189	190	202	162	195	222	212	195	209	232
13-14	268	252	233	237	237	183	172	192	189	179	217	215	214	196	210	238
14-15	282	258	261	239	246	204	183	196	206	187	232	212	225	207	223	246
15-16	288	271	271	243	256	220	201	207	196	229	251	230	239	221	235	260
16-17	295	295	287	255	271	245	230	206	221	251	266	246	256	238	254	276
17-18	313	303	288	277	289	249	237	238	244	267	271	257	269	253	269	286
18-19	313	311	306	309	295	265	254	283	272	281	275	273	286	274	292	293
19-20	320	326	320	325	317	293	292	300	309	304	288	288	307	301	315	306
20-21	325	342	330	359	328	305	309	304	330	317	300	293	320	312	334	315
21-22	327	337	331	370	348	326	337	324	329	338	311	307	332	334	342	321
22-23	332	332	335	378	363	355	356	344	332	337	305	308	340	355	346	319
23-24	328	339	326	376	357	367	349	354	333	323	301	300	338	357	340	317
Mean	302	297	291	295	295	279	263	263	256	254	259	258	276	275	274	279

* 1 day missing
** 3 days missing
*** 9 days missing

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 57 Alert 55,000 γ + 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul * *	Aug ***	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	399	400	397	378	375	379	378	353	366	394	386	392	383	371	384	394
1-2	398	400	398	382	376	371	384	347	361	392	386	394	382	370	383	395
2-3	398	399	398	386	377	367	389	355	364	395	386	390	384	372	386	393
3-4	398	397	398	383	376	368	391	357	365	394	384	389	383	373	385	392
4-5	398	396	398	381	377	370	390	359	365	390	383	385	383	374	384	391
5-6	398	396	398	382	373	365	386	354	366	393	381	384	381	370	385	390
6-7	398	394	397	383	377	365	383	357	362	391	381	382	381	371	383	389
7-8	396	394	396	384	380	361	386	359	362	388	381	381	381	372	383	388
8-9	396	393	397	382	379	365	386	363	364	385	382	380	381	373	382	388
9-10	395	394	395	382	363	370	381	365	360	383	383	378	379	370	380	388
10-11	395	395	392	381	355	373	378	363	355	381	381	379	377	367	377	388
11-12	395	395	388	381	352	368	381	368	360	381	383	380	378	367	378	388
12-13	397	397	387	375	345	363	372	364	356	385	385	381	376	361	376	390
13-14	399	396	389	373	344	360	370	358	348	383	388	380	374	358	373	391
14-15	400	398	394	371	347	355	371	351	348	386	386	384	374	356	375	392
15-16	401	398	388	367	345	343	367	349	345	387	386	387	372	351	372	393
16-17	402	399	386	366	348	353	365	351	344	384	387	389	373	354	370	394
17-18	401	400	387	367	350	357	364	353	346	384	385	389	374	356	371	394
18-19	400	399	390	372	347	356	372	354	346	386	386	392	375	357	374	394
19-20	399	400	390	377	350	364	372	348	350	390	388	396	377	358	377	396
20-21	399	399	392	377	353	368	378	343	351	396	387	396	378	361	379	395
21-22	399	398	391	378	360	379	382	357	357	390	390	396	381	370	379	396
22-23	401	399	393	383	364	389	376	361	360	392	394	396	384	373	382	398
23-24	400	399	392	381	369	379	379	359	361	392	390	395	383	372	382	396
Mean	398	397	393	378	362	366	378	356	357	387	385	387	379	366	379	392

* 1 day missing
** 3 days missing
*** 4 days missing

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (Quiet Days)

Table 58 Alert — 10 γ + — 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul **	Aug *	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	736	740	733	746	722	706	711	727	737	739	716	724	728	717	739	729
1-2	733	740	745	735	730	728	716	729	731	754	717	723	731	726	741	728
2-3	739	736	742	733	712	734	738	727	735	751	722	726	733	728	740	731
3-4	735	739	734	732	728	747	740	736	735	751	716	731	735	738	738	731
4-5	736	745	745	740	732	751	741	735	728	762	714	736	739	740	744	733
5-6	740	743	736	742	744	758	758	733	739	752	719	733	742	748	742	734
6-7	738	742	746	746	727	745	749	736	723	761	716	722	737	739	744	729
7-8	738	743	735	736	751	740	715	711	722	765	716	729	734	729	740	731
8-9	737	741	729	733	723	719	714	723	722	754	713	727	728	720	734	729
9-10	735	734	725	746	720	666	736	715	716	727	714	719	721	709	729	725
10-11	732	731	716	730	710	668	715	725	716	722	711	721	717	705	721	724
11-12	730	725	709	711	686	701	705	717	705	690	708	716	708	702	704	720
12-13	728	715	701	725	689	694	700	703	699	707	709	713	707	697	708	716
13-14	725	715	700	695	674	660	680	694	681	692	707	707	694	677	692	713
14-15	724	713	697	687	666	640	666	691	679	677	706	700	688	666	685	711
15-16	724	714	700	684	660	633	638	686	667	678	703	699	682	654	682	710
16-17	722	719	703	667	650	626	654	677	648	687	702	703	680	652	676	712
17-18	721	717	705	644	659	611	652	680	650	664	705	704	677	651	666	712
18-19	722	718	705	654	665	623	654	698	669	647	700	697	679	660	669	709
19-20	724	724	705	660	669	643	652	719	655	693	704	697	687	671	678	712
20-21	725	726	718	656	679	669	661	702	690	687	704	704	694	678	688	714
21-22	727	734	716	683	704	670	684	706	682	697	705	702	702	691	695	717
22-23	736	731	725	724	708	693	695	669	713	716	707	728	712	691	720	726
23-24	738	728	736	731	712	676	719	727	726	717	710	718	720	709	729	723
Mean	731	730	721	711	700	688	700	711	704	716	710	715	711	700	713	722

* 2 days missing
** 1 day missing

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (Quiet Days)

Table 59 Alert 3500 γ + 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul*	Aug*	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	313	313	308	367	342	352	319	299	287	322	281	277	315	328	321	296
1-2	312	306	315	343	326	346	322	298	278	324	274	277	310	323	315	292
2-3	315	305	304	329	330	334	318	292	268	292	275	272	303	319	298	292
3-4	308	302	289	307	307	322	291	276	261	288	267	271	290	300	286	287
4-5	308	305	296	310	317	320	278	268	251	275	261	269	287	296	282	284
5-6	307	302	285	308	307	297	277	260	251	244	264	261	280	286	272	283
6-7	305	297	290	305	280	271	255	256	239	233	261	254	270	266	266	279
7-8	302	293	278	290	290	274	222	236	238	221	257	253	262	256	256	276
8-9	300	285	271	280	266	244	222	240	240	204	259	247	254	244	248	272
9-10	298	287	272	277	263	234	229	240	229	182	257	239	250	242	240	270
10-11	295	283	275	263	263	240	225	249	229	191	257	240	250	245	239	268
11-12	290	270	275	271	261	259	214	237	221	205	255	246	249	243	243	264
12-13	294	267	275	248	271	245	197	239	223	227	260	245	249	239	243	266
13-14	295	283	279	234	278	265	201	234	203	227	260	243	250	245	235	270
14-15	302	296	292	240	291	285	194	237	206	234	264	248	257	252	243	277
15-16	304	304	301	249	294	284	195	246	211	244	261	250	261	255	251	279
16-17	305	308	305	256	301	289	259	242	219	266	265	257	272	273	261	283
17-18	305	311	301	252	305	304	283	246	237	260	268	260	277	285	262	286
18-19	310	317	299	289	323	327	288	266	252	253	263	262	287	301	273	288
19-20	311	315	303	297	332	347	286	283	267	297	271	268	298	312	291	291
20-21	312	316	309	315	334	359	296	280	284	289	270	275	303	318	299	293
21-22	316	316	309	329	343	352	312	284	279	299	273	275	307	324	304	295
22-23	316	313	312	362	338	347	310	279	315	314	278	269	312	319	325	294
23-24	313	338	311	349	336	333	313	314	324	305	278	268	315	324	322	299
Mean	306	301	295	294	304	301	263	262	251	258	266	259	280	283	274	283

* 4 days only

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Quiet Days)

Table 60 Alert 55,000 γ + 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	*Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	396	396	392	384	339	322	376	320	367	391	381	383	371	339	384	389
1-2	394	394	391	386	341	319	370	325	366	386	380	383	369	339	382	388
2-3	396	394	388	394	354	328	385	329	366	384	381	381	373	349	383	388
3-4	396	395	391	396	365	325	385	329	368	387	379	380	375	351	386	387
4-5	396	395	392	398	371	317	384	334	368	388	377	381	376	352	387	387
5-6	397	395	393	393	367	307	373	346	368	386	376	380	373	348	385	387
6-7	396	394	394	397	368	303	362	347	365	384	376	378	372	345	385	386
7-8	396	396	394	394	361	315	370	351	366	381	375	378	373	349	384	387
8-9	396	397	398	397	362	312	378	349	365	378	375	374	374	350	385	386
9-10	396	398	397	393	346	335	364	350	363	375	377	373	372	349	382	386
10-11	394	395	393	388	339	342	364	346	359	380	374	373	371	348	380	384
11-12	394	392	383	394	322	318	358	349	360	379	374	372	366	337	379	383
12-13	394	394	374	378	324	298	340	343	355	381	374	373	361	326	372	384
13-14	393	393	379	378	307	280	356	346	351	381	374	376	359	322	372	384
14-15	393	393	383	373	312	280	341	350	359	372	374	374	358	321	372	384
15-16	393	391	372	378	318	283	340	344	359	372	374	376	358	321	370	384
16-17	395	391	372	377	321	292	345	348	353	374	376	376	360	327	370	384
17-18	395	393	380	361	324	289	341	356	355	374	377	374	360	329	367	385
18-19	395	388	386	371	325	292	347	349	353	376	374	376	360	328	371	383
19-20	395	386	388	383	319	291	349	350	352	379	376	377	362	327	376	384
20-21	395	386	394	391	325	295	355	345	357	371	376	376	364	330	378	383
21-22	395	388	393	402	335	298	356	343	357	372	376	376	366	333	381	383
22-23	395	390	394	398	341	312	358	343	365	375	378	376	369	339	383	384
23-24	395	391	394	385	349	313	363	352	364	378	375	374	369	344	380	384
Mean	395	392	388	387	339	307	361	344	361	379	376	376	367	338	378	385

* 1 day missing

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (Disturbed Days)

Table 61 Alert $10\gamma +$ 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul*	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	749	755	752	771	736	748	700	715	734	762	722	754	742	725	755	745
1-2	750	752	753	746	749	766	742	821	735	798	744	764	760	770	758	752
2-3	769	749	744	768	774	702	748	812	779	723	767	803	762	759	753	773
3-4	769	739	752	805	715	770	725	806	794	749	745	796	764	754	775	763
4-5	792	744	783	786	777	796	799	833	826	767	766	773	787	801	791	768
5-6	779	766	771	801	727	787	807	833	819	777	781	764	785	789	792	773
6-7	770	760	766	801	764	792	828	819	813	786	779	747	786	801	792	764
7-8	775	761	772	786	731	797	848	833	823	777	763	757	786	802	790	764
8-9	765	759	756	798	755	812	783	778	792	764	758	761	774	782	778	761
9-10	755	758	751	781	760	780	744	779	746	759	731	740	757	766	759	747
10-11	737	746	735	768	789	824	804	755	726	720	689	732	752	793	737	726
11-12	717	709	714	743	735	734	747	740	745	633	695	696	717	739	709	704
12-13	677	707	653	712	685	705	718	707	702	634	633	698	686	704	675	679
13-14	679	652	650	699	673	678	618	706	659	649	687	662	668	669	664	670
14-15	675	620	691	641	642	678	680	649	604	630	672	605	649	662	642	643
15-16	662	616	645	584	628	659	600	630	598	619	654	594	624	629	612	632
16-17	666	632	661	604	605	641	645	626	560	552	668	550	619	629	594	629
17-18	694	655	631	601	585	602	660	636	598	598	657	528	620	621	607	633
18-19	688	637	608	598	548	582	645	667	527	564	624	586	606	611	574	633
19-20	705	636	626	582	619	559	600	634	513	622	641	623	613	603	586	651
20-21	705	693	676	639	596	564	575	617	629	603	665	640	633	588	637	676
21-22	712	748	725	648	661	630	532	634	665	706	680	709	671	614	686	713
22-23	730	756	758	703	668	698	678	680	705	716	670	717	707	681	721	718
23-24	750	771	738	731	705	720	656	742	782	702	719	726	731	706	738	749
Mean	729	713	713	713	693	709	703	727	704	692	705	698	708	708	706	711

* 3 days missing

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (Disturbed Days)

Table 62 Alert 3500 γ + 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul *	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	329	373	332	422	379	445	388	392	326	349	299	351	367	401	357	338
1-2	331	342	322	363	350	402	383	408	302	348	314	344	350	386	334	333
2-3	334	320	304	347	335	336	356	393	340	308	314	319	334	355	325	322
3-4	328	304	301	341	347	332	300	301	330	276	270	302	311	320	312	301
4-5	324	298	305	298	310	375	344	296	312	253	275	238	303	333	292	283
5-6	314	304	296	295	296	342	339	279	275	239	240	238	288	315	276	274
6-7	297	290	279	253	269	298	257	236	255	221	227	235	260	277	252	262
7-8	286	284	268	244	262	277	265	211	208	190	202	219	243	255	227	247
8-9	272	273	256	224	251	255	236	152	179	163	187	196	221	225	205	232
9-10	269	239	236	190	238	191	193	143	154	143	206	192	200	192	180	226
10-11	248	234	222	181	232	168	197	157	113	151	158	188	188	190	166	207
11-12	216	195	210	138	161	150	116	158	144	84	160	173	159	146	144	186
12-13	180	217	156	144	134	113	179	144	210	86	107	182	155	144	149	171
13-14	200	197	128	149	160	150	102	150	143	148	177	181	157	141	142	189
14-15	225	203	223	145	181	193	132	140	149	168	212	161	178	163	171	200
15-16	248	220	239	138	229	236	143	171	176	223	246	192	205	196	194	226
16-17	285	273	298	214	241	257	221	185	218	200	273	203	239	227	232	258
17-18	325	306	264	224	268	214	220	257	275	255	279	229	260	241	254	284
18-19	329	333	302	310	253	279	332	309	277	284	288	295	299	295	293	311
19-20	336	347	332	312	315	264	303	315	341	318	297	348	319	301	325	332
20-21	343	372	345	390	298	284	319	315	399	346	313	336	338	305	370	341
21-22	347	356	349	407	379	345	359	349	399	398	368	392	371	359	388	365
22-23	355	346	364	414	412	382	401	384	404	343	332	392	378	396	381	356
23-24	350	349	329	417	420	387	362	385	423	330	319	367	370	390	374	346
Mean	294	291	277	273	280	278	267	260	264	243	252	261	270	273	264	274

* 1 day missing

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Disturbed Days)

Table 63 Alert 55,000 γ + 1962

G.M.T.	Jan	Feb	Mar	Apr	May	Jun	Jul*	Aug*	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	403	407	395	402	384	373	373	360	353	395	388	426	388	375	386	406
1-2	401	404	397	400	374	331	369	366	345	401	390	443	385	360	386	409
2-3	403	402	399	406	374	351	371	369	357	416	388	425	389	366	396	404
3-4	404	402	400	397	367	357	379	367	361	400	387	426	387	368	389	405
4-5	407	399	400	395	365	371	409	368	365	390	388	411	389	378	388	401
5-6	407	396	402	396	356	378	390	368	370	391	385	406	387	373	389	399
6-7	408	395	402	401	373	379	388	361	354	388	392	400	387	375	386	399
7-8	408	394	402	403	378	392	391	351	354	388	392	395	387	378	387	397
8-9	403	393	402	400	386	377	393	365	364	391	392	402	389	380	390	397
9-10	403	398	396	393	356	378	409	377	359	393	397	395	388	380	386	398
10-11	400	400	395	404	324	369	395	376	343	381	392	394	381	366	381	397
11-12	400	397	392	403	329	379	376	375	359	382	394	389	381	365	384	395
12-13	407	399	392	412	310	407	368	355	357	393	398	393	383	360	389	400
13-14	419	402	396	414	309	370	332	366	349	394	417	393	380	344	388	408
14-15	422	411	407	408	326	382	368	366	341	404	408	400	387	361	392	410
15-16	426	413	398	408	347	398	362	364	343	395	405	409	389	368	386	413
16-17	426	424	398	406	354	381	371	362	337	395	401	421	390	367	384	419
17-18	421	419	404	404	350	402	392	365	335	401	399	433	392	377	386	419
18-19	416	414	404	414	348	366	407	351	344	412	403	448	394	368	394	421
19-20	413	417	406	417	358	365	373	343	367	413	412	460	396	360	401	426
20-21	413	419	407	414	364	380	386	354	368	424	409	454	400	371	404	424
21-22	412	412	398	408	385	401	404	377	366	421	418	448	404	392	398	422
22-23	415	416	403	429	376	396	399	383	368	419	429	454	407	389	404	429
23-24	412	406	396	414	384	391	377	379	372	410	417	449	401	383	398	422
Mean	410	406	400	406	357	378	383	365	356	400	400	420	390	371	391	409

* 3 days missing

MEAN HOURLY RANGES in mms.

Table 64 Alert — Scale Value: 6.01 γ/mm — October 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	79.5	138.5	93.0	73.5	85.5	22.0	52.0	61.5	24.0	69.0	77.0	44.5	34.0	27.0	28.0	15.0	32.5	34.5	23.5	9.0	15.5	23.0	10.0	10.5	45.1
2	8.5	5.5	4.5	10.0	8.5	15.5	7.0	5.0	5.5	5.5	3.5	8,5	7.0	10.0	10.0	13.5	12.0	19.5	10.0	7.5	5.5		4.5	5.5	8.4*
3	1.5	7.0	7.5	8.0	4.5	5.0	4.5	8.5	4.5	4.5	11.0	7.5	9.0	16.5	11.0	13.5	14.0	9.0	7.0	10.5	9.5	6.0	5.5	6.5	8.0
4	4.5	4.5	6.0	4.5	5.0	4.0	2.5	1.5	5.0	5.5	8.5	7.0	7.0	19.9	19.0	9.5	12.0	7.0	6.0	15.0	13.5	9.5	7.5	22.0	8.6
5	17.0	2.5	10.0	8.0	10.0	3.5	2.5	3.5	5.0	9.0	5.0	2.5	5.5	4.5	5.5	4.0	8.5	3.0	4.5	4.5	4.0	3.0	3.0	5.0	5.6
6	8.0	5.0	4.5	2.5	2.5	2.5	6.5	4.5	4.5	11.5	8.0	11.0	8.0	13.0	8.0	4.5	5.5	7.0	8.0	10.0	4.0	6.0	8.5	5.0	6.6
7	8.0	8.0	7.0	9.5	7.0	8.5	3.5	3.5	2.5	6.5	9.5	5.0	11.5	4.5	12.0	3.0	3.5	3.5	1.0	3.0	4.5	4.5	2.5	5.5	5.7
8	2.5	1.5	1.5	2.5	8.0	6.5	2.5	4.5	5.0	11.0	13.0	11.5	4.5	7.5	4.5	4.5	9.0	9.5	6.5	4.0	4.5	2.0	5.5	4.5	5.7
9	3.0	6.0	4.0	5.5	6.5	2.5	1.5	2.0	2.0	4.0	1.5	7.0	3.5	3.0	6.5	5.0	2.5	3.0	2.0	3.0	3.0	3.5	2.0	1.0	3.5
10	1.5	2.5	5.0	5.0	2.0	1.5	2.0	2.5	2.0	2.0	2.0	2.0	3.0	3.5	6.0	6.5	2.5	6.0	7.5	4.0	4.5	5.0	5.5	6.0	3.8
11	5.0	6.5	2.0	9.0	5.0	8.0	2.5	5.0	10.0	17.0	10.0	12.0	22.0	10.0	7.0	18.0	5.5	2.0	2.0	8.0	18.0	13.0	20.5	14.0	9.7
12	7.5	11.5	13.0	14.0	6.0	8.5	8.0	4.5	21.0	12.0	7.0	10.5	13.0	6.0	8.5	25.0	3.0	6.0	10.0	8.5	6.0	13.0	8.0	10.0	10.0
13	10.0	11.0	11.0	9.0	9.0	7.5	5.0	6.0	11.0	18.0	2.0	8.5	6.0	7.5	15.0	5.5	5.0	10.0	6.5	6.0	5.0	7.0	6.5	18.5	8.5
14	18.5	9.5	5.0	14.0	8.0	4.0	5.0	3.0	5.0	7.5	9.0	7.5	4.0	13.5	11.0	8.0	6.5	3.5	4.0	3.0	3.5	2.5	4.0	5.5	6.9
15	4.0	4.0	2.0	2.5	1.5	1.5	2.0	2.0	3.0	3.5	4.0	3.5	4.0	2.0	5.0	6.5	7.0	3.5	3.5	3.5	6.0	5.0	2.0	4.0	3.6
16	2.0	2.5	1.5	2.0	4.0	2.0	1.0	1.5	1.5	1.0	2.0	2.5	2.5	4.5	7.0	2.0	3.5	3.0	1.5	2.0	2.0	2.5	1.5	2.5	2.4
17	2.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.5	2.0	2.0	1.5	4.0	3.5	2.5	2.0	3.0	3.0	3.0	2.5	1.9
18	3.0	3.0	2.5	2.0	2.0	1.5	1.5	1.0	1.0	1.0	1.5	2.0	7.0	7.5	4.0	4.0	2.5	3.0	4.5	1.5	2.0	3.0	2.5	2.5	2.8
19	4.0	4.5	5.5	10.0	4.0	2.0	3.5	3.0	3.5	3.0	6.0	3.0	3.5	4.5	7.5	2.5	3.0	2.0	1.5	2.5	9.5	11.0	7.5	9.5	4.9
20	21.0	19.0	11.0	8.5	8.5	11.5	7.5	5.0	3.5	7.5	9.5	3.0	5.0	4.0	5.0	3.5	7.0	7.5	3.0	3.5	3.5	2.5	2.0	3.0	6.9
21	3.0	5.5	4.0	1.5	3.0	3.5	2.5	2.0	4.0	2.0	9.5	12.0	6.5	11.0	10.5	7.0	8.0	10.0	8.0	5.5	9.0	6.0	12.0	9.0	6.5
22	6.5	5.5	6.0	5.0	5.0	3.5	3.0	4.0	5.5	9.0	2.5	7.0	9.5	14.0	5.0	4.0	11.0	4.0	5.0	5.0	3.0	5.0	5.0	3.5	5.7
23	8.5	4.5	3.0	3.0	3.5	2.0	2.0	1.0	2.0	1.5	7.0	10.5	1.5	9.0	4.5	7.0	8.0	4.0	8.5	6.0	9.0	10.0	5.0	6.5	5.3
24	7.0	14.0	9.0	5.0	2.0	6.0	5.0	3.0	6.0	3.5	7.0	5.5	8.0	6.5	5.0	6.0	3.5	4.0	4.5	4.0	3.0	3.5	3.5	4.0	5.4
25	5.0	10.5	3.5	2.5	7.0	3.0	2.0	2.5	2.5	6.0	4.0	3.5	15.0	13.0	5.5	15.0	9.0	6.5	8.0	15.0	5.0	7.0	8.0	7.0	6.9
26	6.0	8.0	4.5	6.0	5.0	4.5	5.0	8.0	22.5	10.0	9.0	8.0	13.0	8.0	9.0	13.0	24.0	3.5	4.0	17.0	25.0	10.0	24.0	7.0	10.6
27	10.0	22.0	25.0	17.0	19.0	12.0	7.0	6.0	6.0	24.0	26.5	41.5	24.0	32.0	12.5	16.0	14.0	17.5	12.5	12.5	11.0	16.5	14.5	14.5	17.2
28	7.0	10.0	4.5	10.5	5.5	2.5	1.0	3.0	55.0	24.0	39.0	62.0		41.0	36.5	12.5	25.0	37.0	24.0	34.0	32.0	17.0	44.0	34.0	24.4*
29	12.0	11.5	8.0	20.5	5.5	5.0	31.0	16.0	9.5	22.0	32.5	26.0	14.5	6.0	5.5	3.5	7.5	8.5	5.0	4.5	4 0	2.5	9.5	8.0	11.6
30	5.0	1.5	2.0	2.5	3.0	4.0	3.0	4.0	5.5	3.5	5.5	7.0	8.0	13.0	9.0	6.0	9.0	5.0	3.5	4.0	5.5	6.0	5.0	5.0	5.2
31	2.0	4.0	5.0	3.0	3.5	3.0	10.0	9.0	3.0	10.0	6.0	5.5	8.0	7.0	11.5	8.0	4.5	3.0	2.0	2.5	2.0	4.0	1.0	2.0	4.8
Mean	9.1	11.3	8.8	9.0	8.1	5.4	6.2	6.0	7.6	10.2	11.0	11.2	9.3*	10.7	9.6	8.2	8.8	8.0	6.5	7.1	7.6	7.1*	7.9	7.5	8.4

* one hour missing

MEAN HOURLY RANGES in mms.

Table 65 Alert — Scale Value: 6.01 γ/mm — November 1961

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	5.0	2.0	2.0	4.0	2.5	5.0	3.0	1.5	7.0	2.5	4.5	6.5	10.0	4.5	7.5	2.0	2.5	2.0	2.5	7.5	4.5	4.0	3.0	4.0	3.8
2	2.0	5.5	7.5	4.0	1.5	2.0	2.5	6.0	6.0	8.0	4.0	6.0	12.0	18.5	6.5	8.0	4.0	5.5	3.0	2.5	3.0	3.0	3.0	7.0	5.5
3	4.0	4.5	2.5	4.5	2.0	2.0	2.0	3.0	6.5	3.0	1.0	4.0	5.0	3.0	3.0	3.0	5.0	3.0	2.5	2.0	2.0	2.0	5.0	5.0	3.3
4	3.0	1.0	2.5	2.0	2.0	1.5	1.0	1.0	1.5	2.0	1.0	1.5	2.5	1.0	4.5	5.0	2.0	4.0	4.5	6.0	5.0	4.5	6.0	14.5	3.3
5	17.0	10.0	15.5	14.5	11.0	8.0	2.5	4.5	9.5	10.0	16.5	20.0	17.0	32.0	41.0	8.0	14.0	11.5	6.0	13.0	6.0	5.0	12.0	21.0	13.6
6	16.5	21.0	14.0	6.0	9.0	10.5	2.0	7.5	17.0	26.0	19.5	8.5	6.0	6.5	2.0	3.0	3.0	6.5	2.5	1.5	2.5	3.0	2.5	12.5	8.5
7	11.5	8.0	7.5	11.5	17.0	12.0	5.0	10.5	15.5	6.5	37.0	26.0	7.0	9.0	22.5	27.5	24.0	22.5	20.5	14.0	26.0	23.5	11.0	8.0	16.0
8	19.0	31.0	34.5	10.0	11.5	6.0	9.0	5.0	7.0	10.0	4.0	12.0	17.0	15.5	9.5	7.0	2.0	2.5	3.0	3.5	18.5	19.0	13.5	6.0	11.5
9	10.0	7.0	6.5	8.0	11.0	6.0	2.5	4.5	10.0	9.0	7.0	9.0	19.0	10.5	13.5	10.5	9.0	6.0	6.5	5.5	4.0	3.0	3.0	3.5	7.8
10	4.5	4.0	4.5	4.5	4.0	4.5	3.0	2.0	3.0	4.0	4.0	7.0	6.0	9.0	7.0	10.0	5.0	3.0	4.0	4.0	3.5	5.0	2.0	2.0	4.6
11	4.0	4.0	3.0	2.0	3.0	1.0	1.5	1.5	3.5	2.0	5.0	2.0	5.5	4.0	6.0	11.0	4.0	3.0	6.0	2.0	2.0	4.0	8.5	8.5	4.0
12	10.0	10.0	14.0	10.0	5.0	8.0	4.5	4.5	9.0	7.0	6.0	6.0	9.0	9.5	5.0	11.0	12.5	18.0	6.5	7.0	7.0	6.5	3.0	7.0	8.4
13	11.5	6.0	6.0	6.0	2.5	1.5	1.0	1.5	1.0	2.0	9.0	3.0	3.0	3.0	2.0	2.0	2.0	1.5	3.5	4.5	2.5	5.0	5.0	2.5	3.6
14	6.0	9.0	5.0	10.0	6.5	6.5	7.5	16.0	28.0	5.5	11.5	4.0	8.0	5.5	5.5	8.0	5.0	5.0	5.0	6.0	4.0	3.5	4.0	5.0	7.6
15	4.5	2.0	3.5	4.0	7.5	5.0	3.5	1.0	1.0	2.5	2.0	4.0	2.0	3.0	2.0	3.0	3.5	2.0	3.0	3.0	2.5	2.0	5.0	2.0	3.1
16	3.0	2.0	3.0	3.0	1.0	3.0	1.5	2.0	2.0	3.0	5.5	3.0	5.0	5.0	7.0	2.0	2.0	3.0	2.0	4.5	2.0	9.5	7.0	14.0	3.9
17	5.5	16.0	3.0	4.0	3.5	2.0	3.0	2.0	3.5	4.0	5.5	4.0	2.8	14.0	29.5	32.0	12.5	4.0	4.0	4.0	8.5	9.0	9.5	12.0	8.2
18	2.5	20.0	12.0	6.0	10.5	7.0	19.0	14.0	52.0	25.0	20.0	46.0	33.5	32.5	12.5	17.0	15.0	29.0	21.0	13.0	14.0	4.0	10.0	10.5	18.1
19	8.0	10.0	6.0	5.0	5.5	5.0	9.5	12.5	5.5	6.0	7.5	10.0	20.0	12.0	3.5	5.5	6.0	2.5	3.0	2.0	1.0	2.0	2.0	5.0	6.5
20	4.0	7.0	5.0	8.0	5.0	7.0	3.0	9.0	20.0	19.0	7.5	12.0	8.0	8.0	10.5	15.0	10.0	6.5	6.0	6.0	6.5	7.0	4.5	7.0	8.5
21	6.5	7.0	9.5	6.5	8.0	5.0	2.5	4.0	4.0	4.0	4.0	5.5	6.5	5.5	2.0	7.0	7.5	7.0	3.5	3.5	3.5	3.0	5.0	9.0	5.4
22	11.0	8.0	1.0	2.0	1.0	1.0	1.5	4.0	2.0	5.0	6.0	9.5	7.0	2.5	4.5	7.0	4.0	2.5	5.0	2.0	2.5	1.0	1.0	1.0	3.8
23	1.0	2.0	2.0	2.0	1.0	2.0	1.0	0.5	0.5	1.5	1.5	3.0	5.0	4.0	2.5	1.0	1.0	3.0	2.0	1.5	1.5	1.0	2.0	4.0	1.9
24	2.0	4.0	2.5	2.0	2.5	2.0	1.0	1.5	1.5	7.0	3.0	2.5	3.0	3.5	2.5	2.5	4.0	4.5	5.0	2.1	1.5	8.0	4.0	5.0	3.2
25	5.0	6.0	7.0	6.0	3.5	4.0	2.5	2.0	9.5	9.5	4.5	5.0	5.0	4.5	1.0	4.0	5.0	1.5	4.0	2.5	4.0	3.0	3.0	3.0	4.4
26	5.0	3.0	2.5	4.0	1.5	4.0	5.0	2.5	3.0	3.0	5.0	9.0	6.5	8.5	4.5	5.0	5.0	2.0	2.0	4.0	1.5	4.0	11.0	7.0	4.5
27	6.0	7.5	4.5	3.5	2.0	2.0	1.0	2.0	2.0	2.0	4.0	3.5	2.5	6.5	7.5	7.0	3.0	3.0	8.0	6.0	3.0	2.0	2.0	1.5	3.8
28	3.0	2.0	1.0	1.5	1.0	1.0	2.5	1.0	1.0	2.5	3.5	4.5	5.0	4.0	7.0	4.0	4.0	4.0	6.0	8.0	4.0	4.0	4.0	3.0	3.4
29	6.0	2.5	3.0	3.0	4.0	2.0	4.0	2.0	4.0	3.0	3.5	5.0	6.0	2.5	2.0	3.0	3.5	1.0	1.0	2.0	1.5	2.5	3.0	1.5	3.0
30	2.5	3.0	2.0	4.0	4.0	4.0	2.5	2.0	2.0	3.0	2.0	3.0	2.0	6.0	3.0	3.5	3.0	2.0	5.0	4.0	2.0	3.0	3.0	3.5	3.1
31																									
Mean	7.4	7.8	6.4	5.2	4.9	4.3	3.6	4.3	7.7	6.6	7.2	8.2	7.8	8.5	7.9	7.8	6.1	5.8	5.1	4.9	5.0	5.2	4.9	6.1	5.3

MEAN HOURLY RANGES in mms.

Table 66 Alert — Scale Value: 6.01 γ/mm — December 1961

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	2.0	2.5	2.0	3.0	12.0	10.0	10.0	14.0	18.0	21.0	26.5	28.0	24.5	77.0	123.0	35.0	23.0	18.0	22.5	15.5	13.0	14.5	9.0	21.5	22.7
2	13.0	19.5	11.0	9.0	8.0	13.0	14.0	17.0	8.5	12.5	50.5	62.5	8.5	17.0	27.5	20.5	13.0	13.0	15.5	11.5	25.0	21.5	10.5	23.5	18.6
3	46.5	28.5	17.0	12.0	9.5	9.0	6.0	9.0	41.5	38.0	16.5	14.5	35.5	20.0	11.0	11.0	16.0	7.5	6.5	5.0	21.0	27.0	7.5	10.5	17.0
4	9.5	8.0	10.0	9.0	7.0	9.5	2.0	4.0	11.0	7.0	8.0	10.0	11.5	9.0	14.0	12.5	13.5	10.0	6.5	5.5	4.0	4.0	9.0	8.0	8.4
5	3.5	5.0	6.0	3.5	9.0	4.0	7.0	4.5	2.0	1.5	1.0	2.0	1.0	12.0	26.0	13.0	10.0	21.0	13.0	11.5	7.0	6.0	8.0	7.5	7.7
6	12.5	6.5	12.0	9.0	6.5	4.0	3.0	2.0	2.0	2.5	4.0	8.0	7.5	19.0	17.0	18.5	18.0	14.0	7.0	12.0	10.5	8.0	3.0	4.0	8.8
7	2.5	3.5	6.5	11.0	4.0	1.5	2.5	3.5	7.0	3.0	10.5	26.0	17.0	18.0	4.0	4.5	5.0	3.0	3.5	4.0	2.5	2.0	1.5	3.0	6.2
8	2.0	2.0	1.5	2.5	1.0	1.5	2.0	2.0	2.0	2.5	4.5	9.0	4.0	4.0	2.5	4.0	4.5	3.0	2.0	2.0	3.0	2.0	1.0	1.0	2.7
9	2.5	2.5	2.5	4.5	4.0	4.0	5.5	7.0	3.0	4.5	11.0	6.0	11.0	3.0	2.0	3.0	5.5	2.0	2.5	5.0	5.0	3.0	4.0	6.0	4.5
10	3.0	4.0	2.5	6.0	7.0	2.0	1.5	1.0	2.0	2.0	12.0	5.5	20.5	7.0	5.0	5.0	5.0	3.0	7.5	5.0	6.5	8.0	10.5	4.0	5.6
11	6.0	8.0	12.5	8.0	4.0	4.5	4.0	3.5	26.5	19.0	4.0	6.0	5.5	5.5	4.5	5.0	5.0	16.0	5.0	13.0	7.0	3.0	5.5	5.5	7.8
12	3.5	3.5	4.0	10.0	3.5	2.0	2.0	1.0	1.5	1.5	4.5	2.5	3.0	2.5	4.5	4.0	3.0	5.0	3.0	4.0	2.0	3.0	1.5	2.0	3.2
13	1.0	1.5	1.0	2.0	1.5	3.0	1.0	1.0	1.5	1.5	7.0	2.5	4.5	3.0	3.0	4.5	4.0	3.0	2.0	3.0	4.5	10.0	12.0	11.0	3.7
14	9.0	3.0	3.5	3.0	3.0	2.5	1.0	2.0	1.5	1.5	3.0	3.0	2.5	3.0	3.5	2.0	1.0	3.0	5.0	1.0	2.0	1.5	6.5	6.5	3.0
15	4.5	7.5	7.0	2.0	5.5	4.5	6.0	3.0	5.5	6.0	6.0	7.0	7.0	5.5	11.0	10.0	3.0	4.0	2.0	3.0	1.5	12.5	14.0	4.0	5.9
16	2.5	2.5	3.0	4.0	2.0	5.0	3.0	5.0	5.0	6.0	9.0	9.5	4.0	12.0	12.0	4.5	2.0	3.0	4.0	2.0	3.0	3.0	5.0	2.0	4.7
17	6.0	2.0	4.0	6.0	4.5	5.0	3.5	1.5	3.5	3.0	5.0	6.0	5.5	3.0	3.0	2.5	3.5	1.5	3.0	1.5	2.0	3.0	3.0	2.0	3.5
18	3.0	4.0	4.0	5.5	3.0	2.0	1.0	1.0	3.0	3.0	1.0	2.0	2.5	2.0	3.0	1.0	1.0	2.0	1.0	1.0	1.0	2.5	1.5	2.5	2.2
19	2.0	3.5	2.0	3.0	1.0	2.0	1.5	1.0	0.5	1.0	2.0	1.0	1.5	1.5	2.0	2.0	2.0	6.5	2.5	2.0	2.0	2.0	2.0	1.5	2.0
20	2.0	4.0	3.5	6.0	3.5	3.0	3.0	4.5	2.0	5.0	6.0	7.0	12.5	2.5	5.5	4.0	2.0	4.0	3.5	4.0	3.0	8.0	6.5	2.5	4.5
21	3.5	2.0	2.0	5.0	4.0	2.0	0.5	1.0	3.0	5.0	4.5	2.0	3.5	2.5	2.0	1.5	3.0	1.0	2.0	4.0	5.5	2.0	5.0	4.0	2.9
22	6.0	2.5	2.0	3.0	3.5	3.0	2.0	2.5	1.0	3.0	3.5	9.0	6.0	13.5	10.0	4.5	6.0	2.0	9.5	5.0	4.0	2.0	6.5	3.0	4.7
23	3.0	3.5	3.0	3.5	4.0	4.0	2.0	4.0	6.0	8.0	6.0	7.0	8.5	7.0	9.0	6.5	6.0	4.0	3.5	3.0	3.0	3.5	24.5	36.0	7.0
24	13.0	18.0	8.5	5.0	3.5	2.0	2.0	4.0	3.0	6.0	6.5	9.5	8.5	4.5	11.0	11.0	9.0	3.5	4.0	4.0	7.5	8.5	3.0	2.0	6.6
25	3.0	2.0	1.0	1.0	1.0	1.5	1.0	2.0	2.0	2.5	4.0	4.0	3.0	4.0	2.0	5.0	7.0	2.5	4.0	2.0	1.0	2.0	2.0	3.5	2.5
26	2.5	2.5	7.0	4.0	3.0	2.0	2.0	3.5	4.0	5.0	8.0	4.0	4.0	4.0	9.5	3.0	4.0	3.0	4.0	1.5	1.5	1.0	4.0	5.5	3.8
27	13.0	17.0	25.5	8.0	4.5	5.0	5.5	2.0	3.5	3.0	4.0	7.0	6.0	11.0	8.0	5.0	8.0	5.5	3.0	3.0	2.5	3.0	6.0	2.5	6.7
28	2.5	5.5	5.5	5.0	9.0	6.0	2.5	6.5	5.0	15.0	21.0	26.5	30.0	16.0	34.5	18.5	32.5	10.0	8.0	6.5	8.0	10.0	9.0	10.0	12.6
29	16.5	16.0	17.5	14.0	3.0	5.0	2.0	2.5	7.0	10.0	12.5	7.0	22.0	10.0	15.0	7.0	12.0	19.5	4.0	6.0	4.5	10.5	24.0	9.5	10.7
30	11.0	10.0	17.5	16.0	8.0	11.5	4.5	6.5	6.5	16.5	11.0	26.0	16.0	7.5	10.0	8.0	11.0	12.0	4.0	4.0	8.0	6.5	3.5	8.5	10.2
31	9.0	6.0	11.0	7.0	6.0	4.0	3.5	4.0	4.5	3.0	7.0	19.0	10.0	6.0	5.5	6.0	10.0	12.0	18.5	11.0	8.0	5.0	6.0	4.0	7.8
Mean	7.1	6.7	7.0	6.2	4.8	4.4	3.6	4.1	6.2	7.1	8.7	10.9	9.9	10.1	12.9	7.8	8.0	7.0	5.9	5.2	5.8	6.4	6.9	7.0	7.1

MEAN HOURLY RANGES in mms.

Table 67 Alert — Scale Value: 5.94 γ/mm — January 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	8.0	4.5	5.0	7.0	9.0	7.0	4.0	3.0	1.0	3.0	5.5	4.0	4.5	9.0	4.0	2.5	4.5	6.5	2.0	2.0	2.0	1.0	3.0	10.5	4.7
2	5.5	6.5	5.0	5.5	10.0	5.0	7.0	5.0	3.0	26.0	30.5	11.0	9.0	13.0	15.0	8.0	9.0	6.5	10.0	1.0	3.0	5.	4.0	3.0	8.6
3	4.0	3.0	2.0	3.0	3.0	3.0	2.0	1.5	1.5	3.0	4.0	3.0	1.5	4.0	5.0	1.5	3.0	3.5	1.5	1.5	3.5	3.0	2.0	3.0	2.8
4	3.0	4.0	3.5	1.5	1.0	1.0	1.0	1.5	1.0	4.0	9.0	7.0	3.0	4.0	2.0	4.0	3.0	2.5	1.5	1.0	0.5	1.0	1.0	0.5	2.6
5	1.0	1.0	1.0	1.0	1.0	1.5	2.0	1.5	1.0	2.0	3.0	4.5	6.0	3.0	2.0	2.5	2.0	1.0	1.0	1.0	1.0	1.0	2.0	1.5	1.8
6	2.0	1.0	3.5	2.5	3.5	2.0	2.0	1.0	1.0	3.0	4.0	2.0	4.5	2.0	2.0	4.0	5.0	3.0	3.0	2.0	2.0	2.0	1.0	1.0	2.5
7	1.0	1.0	2.0	3.0	2.0	1.0	1.0	1.5	3.0	2.0	2.5	3.5	4.0	2.5	4.0	5.0	3.0	5.0	2.0	2.5	4.0	3.0	3.0	2.5	2.7
8	1.5	3.0	5.0	4.0	3.0	3.5	1.5	2.0	2.0	4.0	5.0	6.0	6.5	4.5	7.0	9.0	5.0	11.0	2.0	2.0	2.0	1.5	2.0	1.5	3.9
9	6.0	2.0	2.0	2.0	4.0	2.0	1.0	2.0	2.0	1.5	3.0	6.0	4.0	7.5	10.0	8.5	4.0	9.0	6.0	9.0	6.0	4.5	7.0	6.0	4.8
10	6.0	6.5	13.0	15.0	10.0	12.0	11.0	10.0	13.0	17.0	15.0	38.0	22.5	31.0	11.0	22.5	22.0	19.0	20.0	16.5	11.5	12.5	8.0	18.5	15.7
11	14.5	15.5	15.5	19.0	10.5	14.0	6.0	5.0	9.0	10.0	10.5	11.0	11.0	9.5	13.0	9.0	4.0	8.5	10.0	5.0	7.0	5.5	6.0	7.0	9.8
12	9.0	8.0	6.0	4.0	3.0	7.0	5.0	3.5	4.0	5.0	4.0	5.0	5.0	3.0	2.0	4.0	2.0	2.5	2.5	3.0	3.0	3.0	4.0	5.5	4.3
13	6.0	3.0	3.0	4.0	2.0	5.0	3.0	3.0	7.0	6.5	4.0	6.0	7.5	5.5	4.5	5.0	2.5	3.0	2.0	3.0	2.0	2.0	2.0	2.5	3.9
14	4.0	1.0	2.0	2.0	5.5	2.0	4.0	2.0	4.0	3.0	5.5	10.0	7.5	8.5	10.5	19.0	9.5	14.5	12.5	11.5	7.0	11.0	22.0	26.0	8.5
15	15.0	13.5	7.0	10.0	6.0	6.0	5.5	8.0	4.5	11.0	15.0	17.0	6.0	10.5	14.0	9.0	7.5	6.0	9.0	8.5	5.0	5.5	14.0	21.5	9.8
16	7.5	8.0	9.0	11.5	9.0	7.0	9.0	16.0	8.0	12.5	11.0	18.0	33.0	23.0	8.0	12.0	13.0	9.0	5.5	6.5	5.0	5.5	8.8	8.8	11.0
17	6.5	7.0	6.0	7.0	6.0	3.5	2.0	3.0	2.0	1.5	3.5	4.0	3.5	3.0	4.0	4.5	3.5	5.5	5.0	1.5	2.0	4.5	1.0	2.0	3.8
18	4.0	3.5	2.0	3.0	2.0	1.0	1.0	2.5	1.0	2.0	4.0	6.0	4.0	9.0	4.5	5.0	9.0	7.0	4.0	4.0	2.5	1.5	2.0	2.5	3.6
19	2.0	10.0	4.0	18.0	6.0	8.5	8.0	6.0	4.0	3.5	3.0	9.5	16.5	41.0	16.0	13.5	15.5	30.0	15.0	7.0	4.0	4.0	6.0	6.0	10.7
20	4.0	6.5	9.0	4.5	9.5	3.0	1.5	3.0	3.0	2.0	3.0	9.0	4.0	4.0	5.5	3.0	4.0	2.5	4.0	6.0	3.5	3.0	4.0	5.0	4.4
21	4.0	6.0	8.5	11.0	8.0	8.0	6.0	10.0	7.0	10.0	17.0	18.5	23.0	23.0	13.5	5.0	8.0	11.0	3.0	2.5	4.0	9.0	8.0	4.0	9.5
22	7.5	4.0	6.0	6.5	3.0	3.5	2.0	3.0	3.0	3.0	1.0	3.0	3.5	2.0	1.5	1.0	1.0	2.5	1.5	1.5	1.5	1.0	1.0	1.5	2.8
23	0.5	1.5	2.5	2.5	2.5	1.0	1.0	1.5	1.0	1.5	1.0	3.0	2.0	4.0	2.5	3.0	2.0	1.0	1.5	2.0	1.5	3.0	3.0	1.0	1.9
24	2.0	2.0	1.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	2.0	1.0	3.0	6.0	1.0	3.5	2.0	3.0	1.0	2.0	3.0	3.5	4.0	2.0
25	3.0	2.5	2.5	2.0	3.0	3.0	3.0	4.0	4.0	6.0	5.5	8.0	2.0	5.0	4.0	3.0	5.5	3.0	2.0	2.0	3.0	3.5	3.0	5.5	3.7
26	4.5	9.0	10.0	2.0	4.0	4.0	2.0	3.0	2.0	4.0	8.0	8.0	12.0	8.0	12.5	9.0	15.0	9.5	13.0	6.0	4.0	5.0	5.0	5.5	6.9
27	8.0	9.0	5.0	8.0	6.0	8.5	10.0	5.0	8.5	6.0	10.0	15.0	16.0	18.0	22.5	18.0	7.5	6.0	5.5	5.5	11.0	5.0	11.0	9.5	9.8
28	6.0	4.0	5.0	5.0	4.0	3.0	4.0	2.0	4.0	3.0	3.5	4.0	6.5	2.5	2.5	3.5	2.0	5.0	6.0	4.0	2.5	3.0	2.5	2.0	3.6
29	2.5	2.0	3.0	5.0	4.0	7.0	1.5	2.0	4.0	3.5	2.0	16.5	8.5	9.0	8.0	9.0	2.5	3.0	2.0	2.5	4.0	2.0	7.0	15.0	5.2
30	11.0	8.5	5.0	5.5	4.5	9.0	4.5	7.0	8.0	10.0	7.0	9.0	12.5	9.0	13.5	18.5	6.0	4.0	3.0	4.0	2.5	5.0	3.0	3.0	7.2
31	2.0	4.0	2.0	3.5	6.0	2.5	3.5	1.0	1.5	1.5	0.5	1.0	2.0	2.0	1.0	0.5	1.5	1.0	1.5	2.0	1.0	1.0	1.0	1.0	1.8
Mean	5.2	5.2	5.0	5.7	4.9	4.7	3.7	3.9	3.7	5.5	6.5	8.7	8.1	9.1	7.5	7.2	6.0	6.6	5.2	4.1	3.7	3.9	4.8	6.0	5.5

MEAN HOURLY RANGES in mms.

Table 68 Alert — Scale Value: 5.94γ/mm — February 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	1.0	1.0	1.0	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.5	1.5	2.0	2.0	2.0	1.5	2.0	1.0	1.5	2.0	2.0	5.0	1.6
2	9.5	9.0	6.5	8.0	5.0	7.0	8.0	7.0	4.0	3.0	2.0	4.0	5.5	4.0	4.0	6.0	6.0	8.0	14.5	9.0	6.0	4.5	12.0	12.0	6.9
3	14.0	23.0	14.5	9.5	10.5	5.5	6.0	15.0	5.5	4.0	3.0	4.5	7.5	8.0	8.5	13.5	6.0	4.0	18.0	14.5	3.0	6.0	7.0	6.0	9.0
4	7.0	10.5	18.0	19.0	10.0	12.5	5.5	6.5	5.5	20.0	31.5	42.0	24.0	27.0	14.5	10.5	9.0	16.5	6.5	10.0	13.0	10.0	18.5	20.0	15.3
5	15.0	9.0	19.5	26.5	7.0	7.0	6.5	4.0	5.0	2.0	7.0	12.5	9.5	12.0	12.5	5.0	8.5	10.0	7.0	5.0	3.0	3.0	3.5	2.5	8.4
6	3.0	6.0	5.5	6.5	4.0	11.5	9.0	2.0	2.0	3.0	4.0	3.0	4.5	4.5	11.0	5.0	3.5	7.0	14.0	15.0	5.0	8.5	11.0	15.0	6.8
7	22.0	18.5	20.0	12.0	13.0	13.0	8.5	6.5	20.5	28.0	25.0	28.0	28.0	17.0	30.0	18.0	24.5	24.0	11.5	3.0	5.0	3.0	2.0	2.5	16.0
8	3.0	2.0	3.0	3.5	1.5	3.5	2.0	3.0	4.0	5.0	13.5	9.0	12.0	15.0	4.0	5.0	4.0	4.0	4.5	2.0	3.0	4.0	3.0	3.0	4.9
9	4.0	3.0	8.5	6.0	4.0	1.5	3.0	4.5	4.0	4.5	6.0	9.5	16.0	12.5	5.5	3.5	4.0	3.0	4.0	4.0	2.0	3.5	3.5	2.0	5.1
10	4.0	4.0	4.0	4.0	3.0	3.0	3.0	2.0	1.5	3.0	4.0	2.5	3.0	6.0	11.0	3.0	2.5	2.0	2.5	2.0	2.0	2.0	2.0	1.0	3.2
11	3.0	2.5	4.0	5.0	4.0	3.0	2.0	1.5	1.5	4.0	8.0	15.0	17.0	9.5	9.0	27.0	5.0	7.0	8.0	13.0	15.0	10.0	15.0	16.0	8.5
12	14.0	12.5	14.5	4.5	10.0	6.5	6.0	5.0	6.5	8.0	10.0	8.5	10.5	9.0	9.0	7.0	6.0	10.0	5.0	16.0	16.0	14.0	9.0	20.0	9.9
13	6 5	6.0	7.0	5.5	10.5	3.5	4.0	6.0	6.0	3.5	14.0	14.5	18.0	13.0	14.0	14.0	5.5	6.0	9.5	7.0	4.5	7.5	8.5	16.0	8.8
14	6.5	9.0	8.0	15.0	5.0	7.0	4.5	1.0	3.0	4.0	6.0	11.5	11.0	7.5	12.5	5.5	6.0	11.0	17.0	9.0	26.5	20.0	5.0	10.5	9.2
15	5.5	3.0	4.0	6.0	11.5	3.0	4.0	4.0	7.5	4.0	6.5	3.0	2.0	11.0	6.0	10.0	22.0	19.5	22.0	18.5	12.5	5.0	5.0	6.5	8.4
16	5.5	5.5	7.5	4.5	5.0	10.5	10.5	4.5	14.0	10.5	42.0	35.0	31.5	23.0	20.5	21.0	32.0	11.5	8.0	21.0	21.0	9.0	6.5	17.0	15.7
17	10.0	7.5	14.0	10.0	9.0	7.0	8.0	11.5	17.0	5.5	14.5	16.5	6.5	8.0	8.0	9.0	4.0	4.5	5.0	8.0	7.0	6.0	4.0	4.0	8.5
18	4.0	2.5	1.0	5.0	3.5	8.0	3.5	5.0	7.5	6.0	5.0	3.0	4.0	9.0	3.5	4.0	8.0	2.0	15.5	13.0	8.0	10.0	10.0	5.0	6.1
19	4.0	3.0	2.0	2.5	4.5	5.0	6.0	3.0	3.0	3.0	7.0	6.0	5.0	5.5	7.0	5.0	2.0	2.5	4.0	3.0	1.0	2.0	2.0	2.5	3.8
20	1.0	2.0	1.5	1.5	1.0	3.0	2.5	3.0	3.0	4.0	5.0	7.0	16.5	21.0	5.0	6.0	3.0	4.0	2.0	2.0	1.5	3.0	4.0	5.0	4.4
21	2.5	3.5	2.0	2.5	6.5	7.5	4.0	3.0	2.5	2.0	4.0	15.0	13.5	22.0	17.0	22.5	14.0	20.0	14.0	9.0	6.0	10.0	11.0	18.5	9.6
22	14.0	7.0	29.0	33.0	17.5	15.0	14.5	17.5	11.0	9.0	13.0	22.0	23.0	19.5	14.0	13.0	28.5	6.0	4.0	4.0	2.0	5.0	3.5	11.5	14.0
23	8.0	7.5	6.0	14.5	13.0	12.0	5.0	2.5	4.5	7.0	12.0	14.0	15.0	23.0	17.0	17.5	14.0	12.0	7.0	6.0	11.5	9.0	9.5	7.0	10.6
24	7.0	7.0	7.0	13.0	14.0	8.5	9.5	4.0	6.0	7.5	8.0	9.0	10.0	9.0	14.0	16.0	16.0	10.0	9.0	11.0	9.0	7.0	9.5	9.0	9.7
25	8.0	4.0	6.5	17.0	7.0	8.0	13.0	6.5	3.0	2.0	7.0	6.5	9.0	6.5	11.5	8.0	10.0	9.0	6.5	12.0	19.0	9.0	10.0	5.0	8.5
26	10.5	4.0	5.0	8.0	8.0	7.0	8.0	2.0	5.5	5.5	8.0	8.0	20.0	30.0	21.0	35.0	20.0	14.5	19.0	25.5	8.0	11.0	7.5	8.0	12.5
27	5.5	5.0	20.0	5.0	5.0	14.0	10.0	11.0	9.5	14.5	17.0	17.5	12.5	15.0	13.0	7.0	16.0	15.5	9.0	8.0	5.5	6.0	3.0	2.0	10.3
28	2.0	3.5	7.5	2.0	4.0	3.5	5.5	5.0	3.0	6.0	6.0	7.5	7.0	8.0	6.0	10.5	8.0	10.0	4.5	3.0	4.0	3.0	2.0	2.5	5.2
29																									
30																									
31																									
Mean	7.1	6.5	8.8	9.0	7.0	7.0	6.2	5.3	6.0	6.4	10.4	12.0	12.3	12.7	11.1	11.1	10.3	9.1	9.2	9.2	7.9	7.0	6.8	8.4	8.7

MEAN HOURLY RANGES in mms.

Table 69 Alert — Scale Value: 5.88 γ/mm — March 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	3.0	2.0	2.0	4.0	4.0	4.5	4.0	9.0	10.0	9.0	7.0	21.0	15.5	13.0	9.0	15.0	16.0	6.5	5.0	7.0	7.0	7.0	5.5	9.0	8.1
2	12.0	4.0	7.5	5.0	7.0	2.0	3.5	6.5	4.0	2.5	3.0	6.0	22.0	6.5	11.0	6.0	18.0	8.0	13.0	13.5	4.5	5.0	4.0	7.0	7.5
3	9.0	9.0	9.0	5.0	6.0	5.5	4.0	2.5	1.5	2.5	5.0	5.5	8.0	17.5	16.0	14.0	6.5	3.5	10.0	20.0	6.0	7.0	6.5	6.0	7.7
4	4.5	12.0	5.0	8.0	7.5	3.0	5.5	5.0	3.0	4.0	7.0	6.5	5.0	9.0	3.0	6.0	9.0	5.5	7.0	6.0	3.5	3.0	3.0	5.0	5.7
5	8.0	3.5	2.5	3.0	3.0	2.0	3.0	11.0	5.0	8.5	17.0	16.0	30.0	65.0	42.5	21.0	12.0	10.0	20.5	21.0	6.0	12.5	12.0	13.0	14.5
6	23.5	17.0	34.5	19.0	16.5	13.0	9.0	7.5	11.5	21.0	20.0	29.0	57.0	51.0	35.5	33.5	13.5	8.0	17.0	11.0	9.5	14.0	6.0	6.0	20.8
7	6.0	7.0	5.0	5.0	7.5	7.0	9.0	5.0	5.5	11.0	8.5	7.5	17.0	16.0	12.5	8.5	9.0	11.5	3.5	6.0	4.0	2.0	2.0	4.0	7.6
8	3.5	7.0	8.0	3.0	3.0	7.5	5.0	4.0	6.0	2.0	2.0	3.0	4.0	5.0	4.0	3.0	3.0	3.0	3.0	4.0	1.0	4.0	2.0	2.0	3.8
9	3.0	3.0	1.5	2.0	2.0	1.5	2.0	1.0	2.0	2.0	2.0	2.0	3.0	4.0	6.5	4.0	5.0	3.0	7.5	6.0	3.5	2.0	2.5	3.0	3.1
10	5.0	5.0	5.5	4.5	5.0	4.0	5.5	6.5	6.5	8.0	8.0	8.0	9.0	10.0	15.0	11.5	8.0	6.0	8.0	13.0	16.0	12.0	8.0	10.0	8.2
11	6.5	16.5	9.5	11.0	7.0	13.0	10.0	6.0	3.5	11.0	16.0	22.0	7.0	12.5	12.0	3.5	5.0	11.0	9.0	13.0	6.0	3.5	2.5	3.5	9.4
12	6.5	5.0	9.0	8.0	8.0	9.5	7.0	6.5	3.5	11.0	19.0	20.0	16.0	12.5	10.0	15.0	22.0	11.0	15.0	10.5	10.0	12.0	7.0	13.5	11.3
13	13.5	16.5	12.0	12.5	13.0	7.0	5.0	3.0	5.5	4.0	6.5	14.0	15.0	11.0	22.0	9.0	5.0	10.5	5.5	2.5	2.0	2.0	4.0	7.0	8.7
14	6.5	2.5	3.0	2.5	3.5	1.0	5.0	5.5	5.0	8.5	4.5	6.0	8.5	9.5	9.5	5.0	6.0	3.5	7.0	4.0	12.5	6.0	6.0	7.0	5.8
15	7.0	5.0	6.5	6.0	9.0	6.5	7.0	2.0	2.0	3.0	3.5	19.0	13.5	4.0	6.0	8.0	6.0	6.0	7.0	5.0	7.0	13.0	14.0	8.0	7.3
16	3.5	12.0	14.0	2.5	6.5	6.5	6.5	6.0	4.0	2.0	10.0	6.0	10.0	5.0	9.0	7.5	6.5	5.0	6.5	5.0	4.0	3.0	8.0	3.5	6.4
17	5.0	3.0	5.0	8.5	4.0	7.5	4.0	2.0	2.0	3.0	7.5	4.0	10.0	11.0	9.0	8.5	6.0	2.0	1.0	3.5	3.0	1.0	3.0	4.5	4.9
18	2.0	2.0	2.0	8.5	4.5	3.0	1.5	4.0	3.0	8.5	5.5	4.0	4.0	16.5	11.5	5.5	10.0	3.0	3.0	8.5	9.5	6.5	5.5	5.5	5.7
19	6.0	8.0	12.0	8.0	17.0	18.0	6.5	2.0	3.0	4.5	11.0	10.0	27.5	12.0	24.0	19.0	9.0	20.0	11.0	13.0	15.0	17.0	10.0	4.0	12.1
20	5.5	6.0	7.0	3.0	6.5	5.0	4.0	3.0	6.0	8.0	7.0	11.0	11.0	13.0	15.5	20.0	9.0	19.0	8.5	11.0	10.5	11.0	10.0	9.5	9.2
21	12.5	8.0	17.0	13.0	12.0	18.5	18.0	10.0	7.0	8.0	16.5	7.0	6.0	8.0	16.0	14.0	7.0	6.0	25.5	21.0	28.0	14.0	41.5	32.0	15.3
22	6.0	5.5	7.5	6.0	8.5	10.5	2.5	4.5	5.0	3.0	4.0	8.0	4.0	6.5	4.0	10.0	8.0	5.0	3.0	3.5	4.0	16.5	34.5	18.5	7.8
23	9.0	8.0	9.5	2.0	3.5	2.5	3.0	7.5	6.5	5.0	5.0	21.0	13.0	6.0	9.5	12.5	10.0	3.0	5.5	4.0	4.0	3.5	4.5	5.5	6.8
24	12.0	13.0	23.5	17.0	3.5	4.0	5.5	3.5	5.5	7.0	3.5	4.0	9.5	10.0	14.5	15.5	40.0	19.5	25.0	4.5	4.0	4.5	10.0	6.5	11.1
25	11.5	6.5	7.0	10.0	9.0	12.5	8.0	6.0	5.5	8.5	9.0	9.0	14.0	4.0	4.0	6.5	5.0	12.0	5.0	7.5	6.0	5.5	4.0	4.5	7.5
26	10.0	9.0	7.0	9.5	9.0	5.0	5.0	4.0	2.0	5.0	5.0	4.0	4.0	4.0	7.0	9.0	3.0	3.5	3.0	5.0	9.0	3.5	3.5	5.5	5.6
27	3.0	11.0	12.0	3.0	10.0	4.0	13.0	11.0	8.0	7.5	3.0	4.0	7.0	14.0	8.0	4.0	11.0	7.5	9.0	4.0	4.0	3.0	7.5	5.0	7.2
28	3.0	4.0	3.0	3.0	3.0	7.0	2.5	4.0	2.0	4.5	4.5	9.0	9.5	10.5	15.5	13.5	21.0	15.0	7.0	4.5	9.0	7.0	4.0	8.0	7.3
29	5.5	11.0	7.0	8.5	12.5	11.5	7.0	3.5	4.0	3.0	5.5	12.0	9.0	11.0	4.0	6.0	6.0	3.0	8.0	6.0	9.0	4.0	3.5	4.0	6.9
30	6.5	8.0	4.5	3.0	5.0	7.0	5.5	2.0	2.0	2.0	2.0	2.5	5.5	4.0	5.0	2.0	4.5	2.5	12.0	5.5	5.0	8.0	4.0	2.0	4.6
31	5.0	6.0	6.0	5.5	3.0	13.0	3.5	6.5	7.0	3.0	2.5	4.0	4.0	4.0	5.5	11.5	6.0	3.0	6.0	8.0	5.0	7.0	8.5	10.5	6.0
Mean	7.2	7.6	8.5	6.8	7.1	7.2	5.8	5.2	4.7	6.1	7.4	9.8	12.2	12.5	12.1	10.7	9.9	7.6	8.9	8.3	7.3	7.1	8.0	7.5	8.2

MEAN HOURLY RANGES in mms.

Table 70 Alert — Scale Value: 5.88 γ/mm — April 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	7.0	15.0	14.5	15.5	20.5	11.0	14.5	10.5	11.5	13.0	11.0	7.0	13.0	21.0	11.5	14.0	10.0	11.0	5.0	7.5	10.0	16.5	3.0	7.0	11.6
2	6.0	8.5	10.0	11.0	3.0	6.0	5.5	2.5	7.5	5.0	4.0	8.0	8.0	4.5	7.0	4.0	8.5	15.5	13.0	18.0	12.0	7.0	11.0	37.0	9.3
3	37.0	7.0	11.5	10.0	25.0	8.0	21.5	17.5	5.0	9.5	6.0	4.0	7.5	6.5	19.0	16.5	24.0	24.0	20.0	18.0	12.0	11.5	15.5	14.0	14.6
4	15.0	6.0	3.0	16.5	10.0	7.0	15.0	17.5	18.0	15.5	17.0	12.0	7.0	8.0	5.0	11.0	8.5	13.0	16.5	8.5	4.5	7.5	21.0	7.5	11.3
5	9.0	7.0	21.5	20.5	8.0	6.0	3.0	2.5	3.0	6.5	6.0	9.5	5.5	5.0	14.0	3.5	9.0	3.0	6.0	6.5	3.0	2.0	9.0	5.0	7.3
6	4.5	4.0	8.0	5.5	12.0	14.0	19.0	15.5	10.5	29.0	18.5	29.0	18.5	17.5	11.0	17.0	16.0	10.0	8.0	11.0	26.0	31.5	21.0	18.5	15.6
7	33.0	56.5	30.0	20.0	18.0	25.0	12.0	12.0	15.0	26.0	17.5	36.5	39.0	38.0	19.0	54.0	22.0	13.0	12.5	30.0	13.5	23.0	8.5	22.5	25.4
8	19.5	29.0	13.0	16.5	17.0	11.0	11.0	10.0	12.0	17.0	17.5	28.0	22.0	9.0	23.0	12.0	21.0	36.5	7.5	20.5	12.0	20.0	15.5	13.5	17.3
9	32.5	17.0	4.5	11.0	10.0	18.0	20.0	9.5	8.0	6.0	6.5	22.5	14.0	14.0	30.5	22.0	13.0	18.5	7.5	9.0	23.0	13.0	3.5	10.5	14.3
10	10.0	8.0	18.0	22.0	16.0	23.5	5.5	15.5	12.5	29.0	16.0	24.0	15.0	36.0	32.0	43.0	27.0	19.0	25.0	15.0	11.0	31.0	27.0	13.0	20.6
11	24.5	24.0	11.0	18.0	16.5	10.0	9.0	11.0	12.5	23.0	18.5	29.0	25.5	13.5	7.0	13.0	24.5	8.0	13.0	21.5	15.5	11.0	15.5	8.0	16.0
12	13.0	14.0	8.5	22.0	5.0	8.0	4.0	3.0	2.0	4.0	9.0	5.0	12.5	10.0	15.0	15.0	13.5	20.0	12.0	15.0	9.5	9.0	7.0	12.0	10.4
13	19.0	6.5	8.5	13.0	10.0	6.0	9.5	5.5	6.0	3.0	2.0	4.0	3.5	4.0	10.0	6.0	6.0	8.5	10.0	3.0	5.0	7.0	3.0	6.5	6.7
14	7.0	7.5	9.5	6.5	7.0	3.0	2.0	1.0	3.5	2.5	2.0	2.0	2.0	2.0	2.0	3.0	6.0	3.0	3.5	5.0	7.0	6.0	3.0	7.0	4.3
15	5.0	7.5	6.0	5.0	3.5	9.5	9.0	6.0	4.0	3.0	4.0	2.0	4.5	3.5	3.0	13.5	10.0	12.5	9.5	33.0	20.5	30.0	41.0	24.0	11.2
16	10.0	11.5	14.5	18.0	6.0	9.5	6.0	4.5	10.0	4.5	7.5	6.5	5.0	9.5	12.0	9.0	18.5	9.0	16.0	11.0	13.0	7.5	16.0	6.5	10.0
17	15.0	9.0	9.0	8.5	15.0	10.5	5.0	10.0	9.5	7.0	4.5	5.5	10.0	15.0	10.0	12.5	12.0	11.0	9.0	4.5	6.0	4.5	8.5	8.0	9.2
18	4.0	4.5	15.0	6.0	6.0	7.5	8.0	8.0	13.0	9.5	10.5	11.5	12.0	20.5	32.0	21.0	29.0	12.0	9.0	19.5	16.5	13.0	14.0	8.0	12.9
19	17.0	11.0	13.0	7.5	24.5	6.0	25.0	10.0	12.5	5.0	4.5	5.0	8.5	3.0	8.0	6.0	12.0	6.0	5.0	8.0	7.0	10.0	2.0	6.5	9.3
20	4.5	10.0	9.5	7.0	8.0	9.0	5.0	3.5	9.0	6.0	4.0	5.5	7.5	6.0	3.5	21.5	31.0	14.0	5.5	7.0	16.0	12.5	13.0	25.0	10.1
21	23.0	20.0	23.0	13.0	23.0	14.5	32.0	28.5	25.5	28.5	45.5	14.5	13.0	25.5	16.5	27.0	23.0	30.0	18.5	32.5	17.0	14.5	6.0	30.0	22.7
22	17.0	18.0	10.0	13.0	10.5	8.5	7.0	6.5	13.0	18.5	20.5	13.0	18.0	18.5	11.5	15.0	20.0	24.0	14.5	5.0	10.0	13.0	23.0	9.5	14.0
23	13.0	13.5	7.0	10.0	11.5	13.0	11.5	15.5	15.5	15.5	15.5	4.5	18.5	16.5	24.5	14.5	38.0	16.5	10.0	21.0	24.5	7.5	5.5	4.5	14.5
24	6.0	7.5	9.0	11.5	23.0	18.0	9.5	7.0	15.0	17.5	12.5	21.0	23.0	24.5	18.5	9.0	28.0	30.0	20.5	25.0	37.0	8.0	12.0	8.0	16.7
25	2.5	7.5	5.0	3.0	7.0	9.0	6.0	7.5	6.5	7.0	17.5	29.0	13.0	19.0	40.0	12.5	26.0	36.0	11.0	20.0	11.5	11.0	10.5	6.0	13.5
26	11.5	15.0	7.0	7.0	14.0	21.0	10.5	15.0	15.5	8.0	6.5	9.0	16.0	13.0	15.0	13.0	20.0	23.0	6.0	9.0	8.5	13.0	11.0	7.5	12.3
27	6.5	15.5	21.0	16.5	7.5	4.0	5.0	3.5	10.0	13.0	6.5	8.5	5.0	5.0	14.0	18.0	16.0	9.0	6.5	15.5	7.0	6.5	7.0	12.0	10.0
28	8.5	9.5	10.0	7.0	15.0	7.0	9.0	9.5	4.5	12.0	12.0	14.0	14.0	6.5	6.5	9.0	7.5	20.0	16.5	15.0	17.0	9.5	8.0	15.5	11.0
29	9.0	10.5	9.5	5.0	10.5	18.0	8.0	7.5	5.5	4.5	4.5	9.0	9.0	12.5	16.5	12.0	10.0	10.0	7.0	10.0	11.0	20.0	8.0	7.5	9.7
30	8.5	5.5	6.0	5.5	5.0	11.0	9.0	6.0	8.0	2.0	8.0	3.0	5.5	2.0	9.0	6.0	6.0	7.0	10.0	13.5	13.0	15.5	6.5	6.0	7.4
31																									
Mean	13.3	12.6	11.5	11.7	12.3	11.1	10.6	9.4	10.1	11.7	11.2	12.7	12.5	13.0	14.9	15.1	17.2	15.8	11.1	14.6	13.3	13.1	11.9	12.2	12.6

MEAN HOURLY RANGES in mms.

Table 71 Alert — Scale Value: 5.81 γ/mm — May 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	19.5	24.5	9.5	5.5	8.0	6.5	5.5	3.0	4.0	4.0	5.5	7.5	6.0	5.5	6.0	5.0	6.0	7.0	9.0	7.5	10.5	12.0	8.5	7.0	8.6
2	7.0	7.5	4.0	4.0	9.5	8.0	5.5	10.0	10.5	6.0	5.5	16.0	9.0	9.5	17.0	6.0	12.0	10.0	6.0	8.0	8.5	7.5	13.0	12.5	8.9
3	11.5	6.0	6.0	8.5	6.0	9.0	5.5	9.0	6.0	19.0	12.0	7.0	5.5	8.0	10.0	5.5	3.5	5.5	10.0	4.0	12.5	6.0	4.0	4.0	7.7
4	2.5	6.0	7.5	2.5	6.5	6.0	1.5	4.5	2.5	3.0	1.0	2.5	4.0	1.0	1.0	2.0	3.5	5.5	3.5	3.0	3.0	6.0	2.0	2.5	3.5
5	3.0	2.0	3.0	1.5	4.0	4.0	8.0	6.5	3.0	3.5	3.0	6.0	4.0	5.5	4.0	7.5	7.0	8.0	8.0	20.0	12.0	36.0	17.5	8.0	7.7
6	11.0	7.0	17.5	22.0	26.0	8.0	8.5	12.0	10.5	9.0	38.5	20.0	14.0	8.5	7.0	13.0	17.5	15.5	11.5	18.5	10.5	25.0	15.5	18.0	15.2
7	20.0	18.5	19.5	7.0	6.5	14.5	8.0	11.5	7.5	12.0	15.0	20.0	13.0	16.5	11.0	14.5	9.5	8.0	8.0	6.0	10.0	10.0	12.0	7.0	11.9
8	9.0	10.5	8.0	10.0	24.0	27.0	14.0	6.0	8.0	4.5	4.0	3.0	4.0	16.0	20.0	8.5	10.0	5.0	7.0	8.0	11.0	25.0	10.0	10.0	10.9
9	6.5	8.5	11.5	6.0	7.0	10.5	3.0	6.0	4.0	3.5	5.0	10.0	8.0	2.0	5.0	5.0	6.0	5.5	6.5	12.5	5.0	3.0	2.5	3.0	6.1
10	3.0	6.5	11.5	13.5	11.0	9.5	6.0	19.0	5.5	6.0	5.0	8.0	16.5	12.0	8.5	27.0	11.5	5.5	3.5	5.5	5.5	5.5	6.5	9.0	9.1
11	4.5	5.5	9.5	12.5	7.0	10.0	13.5	5.0	3.0	9.0	8.0	8.0	15.0	27.0	23.0	14.0	10.0	18.5	22.0	12.0	15.5	15.0	11.0	13.0	12.2
12	8.0	10.0	8.0	7.0	7.5	13.5	8.0	6.0	6.0	8.5	4.0	6.0	4.0	4.0	4.5	7.0	8.5	16.0	20.0	6.5	7.0	9.0	7.5	7.5	8.1
13	8.0	18.5	23.5	3.0	14.0	15.0	19.0	9.5	7.5	9.0	8.0	5.5	22.0	23.0	38.0	42.5	17.0	20.0	32.0	29.0	38.0	20.0	23.0	12.5	19.1
14	11.0	22.0	14.0	19.0	17.5	40.0	28.0	23.0	20.0	18.5	18.5	27.0	36.0	45.0	24.0	9.0	12.0	28.0	17.5	28.5	12.5	32.0	55.0	10.5	23.7
15	12.5	21.0	10.0	17.0	12.0	12.5	30.0	43.5	26.0	18.0	18.0	11.0	11.0	15.0	31.5	12.5	25.0	21.5	45.5	60.5	5.0	6.0	6.0	10.0	20.0
16	9.0	14.0	10.0	15.0	8.0	17.5	19.0	25.0	16.0	35.0	13.0	15.5	15.0	20.5	9.0	15.0	7.0	7.5	22.0	16.0	24.0	13.5	26.0	25.5	16.6
17	14.0	14.0	15.5	7.0	9.5	12.0	21.5	25.5	9.5	9.0	7.5	6.0	8.0	6.0	7.0	18.0	17.0	8.5	4.5	15.5	8.5	8.0	9.5	15.0	11.5
18	7.0	8.0	10.0	14.0	7.0	12.0	8.5	9.5	3.5	5.0	4.5	7.0	10.0	5.0	9.5	13.0	14.0	5.0	6.0	3.0	6.5	6.5	11.0	5.5	8.0
19	6.0	5.0	15.0	7.5	11.0	13.5	8.0	11.5	26.0	24.0	22.0	10.5	8.0	27.0	28.5	56.0	24.5	14.5	22.0	18.0	30.0	45.0	15.0	34.0	20.1
20	27.0	9.0	17.0	33.0	22.5	9.0	11.5	21.0	21.0	16.0	17.5	10.5	6.0	23.0	12.5	9.0	21.0	36.0	6.0	7.0	5.0	7.0	5.0	7.0	15.0
21	13.5	14.0	17.5	8.0	20.0	12.0	12.5	18.0	6.0	6.0	4.0	2.0	3.0	14.0	19.0	7.0	8.0	5.0	5.0	6.0	5.0	7.0	8.0	18.5	10.0
22	21.5	14.0	6.0	6.0	3.5	3.0	5.0	7.0	9.0	7.0	10.0	5.0	8.5	6.5	16.5	9.0	5.0	14.5	7.5	7.0	12.5	21.5	10.5	9.5	9.4
23	3.0	9.0	9.0	12.0	7.0	16.0	7.0	18.5	11.5	7.5	7.0	6.0	5.0	10.0	17.5	7.0	6.0	5.0	7.0	9.5	5.5	3.0	2.5	8.0	8.3
24	8.5	4.0	8.0	6.0	9.5	6.0	12.0	8.0	3.5	3.5	2.0	5.0	3.0	2.5	7.0	10.0	4.5	4.5	3.5	3.0	3.0	2.5	2.5	2.0	5.2
25	3.5	3.0	3.5	2.0	3.0	2.0	4.0	3.0	4.5	2.0	3.0	3.0	3.0	4.0	3.5	5.0	5.5	7.0	3.5	6.0	6.0	3.0	2.5	6.5	3.8
26	2.0	4.0	7.0	10.5	7.0	13.0	9.0	7.5	4.5	7.0	5.0	6.0	7.5	13.0	10.0	5.0	12.0	4.0	7.0	13.5	10.5	28.0	15.0	11.0	9.1
27	12.0	10.5	9.0	15.5	27.5	16.0	27.0	18.0	17.0	11.0	12.0	24.5	33.0	25.5	7.0	17.0	7.5	21.0	12.0	14.0	10.0	32.0	30.0	7.0	17.4
28	6.0	11.5	7.5	7.0	7.5	9.0	8.5	24.0	14.0	9.0	11.0	10.0	12.0	21.0	25.5	10.0	5.0	16.0	6.0	24.0	6.0	14.0	12.0	10.5	12.7
29	8.0	7.0	14.5	9.5	9.0	13.0	25.0	14.5	10.0	9.0	8.0	14.0	23.0	17.0	11.0	5.5	12.0	19.0	12.5	12.0	12.0	11.0	7.0	6.0	12.1
30	7.0	6.0	12.0	7.0	7.0	5.0	16.0	7.0	7.0	8.0	3.5	4.0	8.0	10.0	11.5	6.5	5.5	8.0	8.0	5.0	3.5	11.0	10.0	16.0	8.0
31	8.0	5.0	5.0	6.5	28.5	29.0	25.0	22.0	7.0	17.5	30.5	10.0	11.0	26.0	35.0	37.0	32.0	22.0	36.0	34.0	29.5	24.0	20.0	12.5	21.4
Mean	9.5	10.1	10.6	10.0	11.8	12.3	12.4	13.4	9.5	10.0	10.1	9.6	10.8	13.9	14.2	13.2	11.1	12.2	12.2	13.6	11.1	14.4	12.4	10.6	11.5

MEAN HOURLY RANGES in mms.

Table 72 Alert — Scale Value: 5.81 γ/mm — June 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	10.5	12.0	11.5	16.0	24.0	28.0	23.0	17.5	13.5	24.0	15.0	12.0	8.5	23.0	22.0	29.0	23.5	10.0	36.0	19.0	16.0	26.0	11.0	9.0	18.3
2	12.5	16.5	11.0	18.0	25.0	12.0	10.5	8.5	17.0	6.0	6.0	4.5	7.0	19.5	6.0	24.0	19.5	13.0	22.5	13.5	14.0	14.0	11.0	6.5	13.3
3	8.5	7.0	6.0	7.5	6.0	5.0	6.5	8.5	11.5	9.5	4.0	8.0	6.5	13.0	15.5	10.0	11.5	15.0	33.0	28.0	17.5	16.0	22.0	19.0	12.3
4	17.0	18.0	13.0	28.0	14.5	32.5	24.0	15.0	10.0	8.0	9.0	14.5	47.0	20.0	8.0	20.0	14.0	25.0	19.0	19.0	14.5	7.0	27.5	27.5	18.8
5	13.5	17.0	14.0	11.0	28.5	12.0	19.0	11.0	15.0	13.0	22.0	26.5	20.0	8.0	20.0	33.0	13.0	10.0	9.0	21.0	35.0	14.0	23.0	22.0	18.0
6	18.0	15.0	13.0	8.0	9.0	7.5	10.0	10.0	5.0	10.0	12.0	9.5	7.0	9.5	17.0	19.0	9.0	7.0	11.5	16.0	16.0	19.0	5.5	9.0	11.4
7	8.0	7.5	11.0	9.0	9.0	13.5	37.0	72.5	22.0	25.0	25.0	14.5	23.0	9.5	11.0	11.5	14.5	17.0	9.5	14.0	15.0	5.5	4.0	3.0	16.3
8	3.5	2.0	4.0	6.0	6.5	8.0	16.0	8.0	11.5	7.0	4.0	7.0	9.0	13.0	20.0	12.0	8.5	8.0	6.5	7.5	11.0	9.5	8.0	13.0	8.7
9	25.0	15.0	14.5	28.5	7.0	45.0	42.0	56.0	58.0	29.5	15.0	19.0	34.5	37.0	45.5	65.0	22.0	16.0	22.0	27.0	47.0	52.0	32.5	55.5	33.8
10	40.5	24.5	23.0	19.5	22.5	21.0	26.0	21.0	19.0	34.0	11.0	36.0	25.0	36.5	40.0	36.0	24.0	12.0	11.0	14.5	19.0	38.5	31.5	17.5	24.7
11	19.0	14.0	13.0	18.5	19.0	21.0	17.0	21.0	21.5	13.5	18.5	24.0	7.5	24.0	28.5	16.0	19.0	9.5	17.0	25.0	30.0	15.0	31.5	22.5	19.4
12	14.0	26.5	16.5	12.5	14.0	21.0	25.0	12.0	23.0	16.0	19.0	13.0	18.0	43.5	28.5	55.5	9.5	10.0	10.0	16.0	36.0	16.0	8.0	15.0	20.0
13	7.0	11.0	19.0	17.5	14.0	8.0	12.5	15.0	15.5	20.0	7.0	13.0	8.5	10.0	9.0	13.5	18.0	5.0	15.0	17.0	26.5	14.0	7.5	10.5	13.1
14	8.5	7.5	8.0	19.0	2.0	18.0	8.0	19.5	10.0	9.5	5.0	12.5	21.0	20.0	36.0	12.0	21.0	7.5	21.5	27.0	19.0	31.5	19.0	32.5	16.5
15	45.0	34.0	38.5	24.0	24.0	27.0	31.0	18.0	22.5	39.5	19.0	14.0	24.0	25.5	24.0	16.0	25.0	27.0	15.0	16.0	27.5	14.0	35.0	10.0	24.8
16	30.0	23.0	26.0	36.0	10.5	8.0	32.0	27.0	13.0	28.0	14.0	15.5	34.0	25.0	16.5	23.0	17.5	16.0	13.0	7.0	14.0	17.0	6.0	5.5	19.1
17	7.5	3.5	5.5	12.0	11.5	9.0	16.5	17.0	5.5	2.5	4.0	9.0	7.5	13.0	9.5	11.5	11.5	13.0	8.5	6.5	4.0	8.5	9.0	9.0	9.0
18	13.0	17.0	14.5	15.0	15.5	12.0	23.5	15.0	14.0	13.5	9.0	9.0	7.0	5.0	5.5	6.0	4.0	5.0	8.5	5.5	8.5	4.0	3.0	7.0	10.0
19	5.5	4.5	2.5	8.0	11.5	17.0	9.0	12.5	8.5	6.5	7.5	9.0	19.5	23.0	13.0	27.0	26.0	9.0	13.0	13.0	11.0	9.5	6.5	20.0	12.2
20	6.5	8.0	15.0	6.0	4.5	9.5	10.0	20.0	7.0	11.0	5.5	5.0	5.5	7.5	7.0	13.5	10.0	13.0	11.5	10.0	9.0	8.0	10.0	5.0	9.1
21	6.5	6.0	6.0	6.0	16.0	8.0	5.0	8.0	5.5	7.0	12.5	18.5	26.0	9.5	15.0	13.5	53.0	42.0	23.5	11.0	33.5	27.5	16.0	27.5	16.8
22	15.5	11.5	14.0	26.0	21.0	11.0	25.0	11.5	15.0	4.0	9.0	13.5	8.5	20.0	36.5	20.5	32.0	14.0	20.0	30.5	14.5	24.0	22.0	31.0	18.8
23	24.5	12.0	9.0	13.5	25.0	30.5	23.5	25.0	18.5	12.0	19.0	20.0	19.0	21.5	35.0	46.0	19.0	29.0	27.5	37.0	35.0	17.0	15.0	29.5	23.5
24	19.0	29.5	7.0	33.0	15.0	22.0	22.5	12.5	6.5	7.0	13.5	14.0	19.0	21.0	22.0	28.0	21.0	17.0	12.0	13.0	13.0	14.0	23.5	16.0	17.5
25	16.5	19.0	12.5	8.0	33.0	12.5	5.0	24.0	9.5	12.5	9.0	5.0	12.0	20.0	17.0	22.5	36.5	15.0	13.0	5.0	9.5	13.0	6.5	8.0	14.4
26	15.5	5.5	4.0	4.5	5.0	7.5	10.5	14.0	9.0	12.5	10.0	14.0	12.0	9.5	12.0	9.0	25.0	17.0	11.0	4.0	13.5	19.5	12.5	22.5	11.6
27	6.0	22.0	16.0	16.0	15.0	10.0	7.0	9.5	15.0	9.0	8.5	22.0	17.0	50.5	37.5	33.0	12.0	20.5	28.0	19.0	15.0	19.0	12.0	21.0	18.4
28	27.0	36.0	31.0	17.5	16.0	39.5	15.5	14.0	19.5	15.0	35.5	52.0	34.0	28.5	23.5	46.0	27.0	26.0	13.5	11.0	18.0	27.5	38.0	14.0	26.1
29	27.0	18.0	30.0	35.5	32.0	24.5	20.5	29.0	27.0	21.0	9.0	10.0	35.0	28.0	26.0	17.0	18.0	21.0	29.0	15.5	16.0	10.0	11.0	16.0	21.9
30	17.0	19.0	40.5	22.0	24.0	14.0	25.5	18.0	17.5	12.0	16.0	35.0	10.0	14.0	17.0	17.0	12.5	38.0	12.0	17.5	29.0	13.0	10.0	22.0	19.7
31																									
Mean	16.3	15.4	15.0	16.7	16.0	17.2	18.6	19.0	15.5	14.6	12.5	16.0	17.8	20.2	20.8	23.5	19.2	16.3	16.8	16.2	19.6	17.1	15.9		17.3

MEAN HOURLY RANGES in mms.

Table 73 Alert — Scale Value: 6.06 γ/mm — July 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	8.0	4.5	12.5	20.5	15.0	18.0	14.0	17.5	17.0	8.5	19.5	12.0	10.5	22.0	20.0	13.5	29.5	22.0	22.0	20.0	22.5	20.0	11.5	9.0	16.5
2	17.0	15.0	22.5	17.0	30.0	6.0	21.5	21.5	11.0	21.5	13.0	18.0	25.0	13.5	16.5	10.0	20.5	26.5	7.0	17.0	10.5	12.5	20.5	10.5	17.1
3	9.0	16.5	11.5	17.5	4.0	8.5	13.5	8.5	6.5	9.0	6.5	18.0	28.0	5.5	10.5	12.5	22.0	19.0	26.0	10.0	20.5	8.5	15.0	9.5	13.2
4	10.0	13.5	18.5	12.0	7.5	20.0	26.5	17.0	21.0	13.0	17.0	21.0	39.5	28.5	33.5	19.0	21.0	17.0	18.0	30.5	44.0	30.5	23.5	23.0	21.9
5	25.0	18.5	29.5	18.0	13.5	19.0	22.0	35.5	21.0	10.5	10.0	10.5	21.0	28.5	27.0	18.0	29.0	34.5	32.5	17.0	30.5	20.5	17.0	20.0	22.0
6	13.5	23.0	18.0	23.0	21.0	15.0	15.5	15.5	12.0	12.0	25.5	22.0	21.0	32.5	27.0	15.0	11.5	30.5	17.0	32.5	33.5	13.0	17.0	10.5	19.9
7	14.5	5.5	16.5	11.0	7.5	19.5	8.5	9.5	24.0	13.0	8.5	11.0	6.0	27.0	12.0	22.5	30.5	7.5	29.0	34.5	13.0	8.5	43.0	29.0	17.2
8	24.0	18.0	10.5	17.5	30.5	11.5	27.5	27.0	15.0	20.5	15.5	18.0	11.0	25.0	22.5	11.5	14.5	24.5	17.0	19.0	29.0	14.5	28.0	19.5	19.5
9	20.5	22.5	30.5	26.0	17.0	25.5	11.5	7.5	9.5	7.5	7.0	7.5	8.5	10.5		12.5	12.5	7.5	7.5	11.0	14.0	5.0			
10	15.0	21.5	5.5	5.5	16.5	11.0	5.0	5.5	8.5	8.5	8.5	5.5	23.5	12.5			22.0	32.5	32.0	16.5	18.5	14.0	15.0	16.0	
11	25.0	14.0	7.5	12.5	12.5	9.5	25.0	15.0	9.5	5.5	16.5	11.0	20.0	21.0	22.0	26.0	22.0	24.0	18.0	29.0	21.0	39.0	16.5	5.5	17.8
12	15.0	9.5	12.5	28.0	14.5	16.5	7.5	10.5	14.0	12.5	12.5	11.0	8.5	18.0	15.0			18.0			7.0	9.5	12.5	5.5	
13	9.5	18.0	5.5	5.0	12.5	12.5	29.0	9.5	11.0	12.5	7.0	5.5	12.5	22.0								11.0	19.5	25.0	
14	12.5	22.0	29.0	26.5	18.0	11.0	18.5	16.5	7.5	8.5	12.5	7.0	8.5	5.5	3.5	16.5	7.0	11.0	11.0			6.0	3.0	5.5	
15	7.0	12.0	27.5	15.0	8.5	10.0	6.0	14.0	14.5	9.0	9.0	8.5	8.0	13.5	10.0	8.0	12.0	24.0	13.0	14.5	15.0	22.0	13.5	16.0	13.1
16	6.0	4.0	3.0	5.5	3.0	5.0	15.0	8.0	6.5	5.5	3.0	3.5	10.5	8.0	4.5	10.0	8.0	7.5	3.5	3.0	3.5	3.0	4.0	3.0	5.7
17	14.5	9.5	10.5	6.5	5.5	2.0	8.5	4.5	8.5	9.5	6.5	4.5	7.5	7.0	6.0	12.0	7.0	6.5	5.0	5.0	7.0	4.0	8.0	7.0	7.2
18	5.5	3.0	7.0	5.0	5.5	6.0	23.5	8.0	4.5	5.0	3.0	5.5	5.0	7.0	6.5	11.0	11.0	8.0	13.0	10.5	11.0	6.5	4.0	10.0	7.7
19	4.0	4.0	7.5	7.0	12.5	31.5	20.5	14.0	14.0	16.0	20.0	13.0	25.5	15.0	8.0	10.5	14.5	19.0	17.5	12.5	18.0	15.0	8.0	13.0	14.2
20	20.0	19.5	21.0	23.5	33.5	22.0	21.5	15.0	27.0	11.0	21.5	26.0	29.5	34.0	29.0	26.0	25.0	18.0	14.0	22.5	28.0	27.0	15.5	15.0	22.7
21	8.0	29.5	29.5	22.5	41.0	31.0	6.0	15.0	10.5	8.0	12.0	9.0	14.0	22.5	33.0	16.0	29.5	12.5	24.5	22.5	16.0	19.0	18.5	15.0	19.4
22	17.5	7.5	20.0	17.0	28.0	18.0	9.5	9.0	10.5	7.0	13.0	16.0	18.0	12.0	7.0	20.0	10.0	6.5	22.5	15.0	10.0	31.0	27.0	11.5	15.2
23	14.5	11.5	16.0	13.0	16.5	10.0	8.0	7.5	10.5	10.0	10.5	11.0	25.5	25.5	23.5	4.5	6.0	13.5	14.5	34.0	12.0	6.0	8.0	8.0	13.3
24	16.0	18.0	18.5	6.5	7.5	5.5	9.0	8.0	4.0	7.0	3.5	10.5	11.0	8.5	17.0	21.5	18.5	19.0	47.0	11.5	10.0	6.5	10.0	4.5	12.5
25	6.5	13.5	24.5	10.0	6.0	11.0	8.5	12.0	6.5	11.0	4.0	18.5	13.0	10.0	18.5	10.0	11.0	8.0	7.0	13.0	13.5	16.5	15.0	13.0	11.7
26	6.0	6.5	18.0	43.0	99.0	38.0	26.0	27.0	31.0	25.0	17.0	36.0	65.0	67.0	18.0	12.0	29.5	20.0	47.0	18.0	12.5	29.0	14.0	21.0	30.2
27	47.0	26.0	34.5	35.0	33.0	30.0	19.0	21.0	20.5	13.0	16.0	25.0	28.0	26.5	44.5	20.0	17.0	37.5	27.5	19.5	29.0	19.5	24.0	30.5	26.8
28																									
29																								15.5	
30	6.5	13.0	7.5	20.5	9.0	17.5	15.0	5.0	4.0	6.0	6.5	8.0	9.0	10.5	10.0	7.0	12.5	2.5	6.0	9.0	5.5	4.5	3.0	10.5	8.7
31	6.0	4.0	11.5	7.0	5.0	7.0	20.0	7.0	14.0	9.5	9.0	3.0	3.5	3.5	8.0	8.0	7.5	9.0	49.0	50.0	32.0	49.0	25.5	19.0	15.3
Mean	13.7	12.9	16.8	15.8	18.9	15.5	16.3	14.3	13.5	11.1	11.9	14.1	19.0	19.8	18.1	14.4	17.5	17.4	20.7	19.6	18.6	17.7	16.3	14.5	16.2

* 7 days missing from means

MEAN HOURLY RANGES in mms.

Table 74 Alert — Scale Value: 6.06 γ/mm — August 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	30.5	35.0	42.0	6.5	19.0	10.0	18.0	29.5	29.0	53.0	20.0	16.0	36.0	10.0	32.0	12.0	31.5	27.0	13.5	9.5	15.5	28.0	26.0	43.5	24.7
2	30.0	18.5	12.5	15.0	23.0	16.5	16.0	16.5	9.0	8.0	9.0	10.0	20.0	18.5	20.0	31.0	22.0	36.5	13.5	24.5	18.0	15.0	16.0	9.0	17.8
3																11.0	17.0	38.0	35.0	40.0	30.0	9.0	12.0	14.5	
4	10.0	7.0	20.0	19.0	18.0	18.5	10.0	10.0	7.0	12.0	11.5	22.0	12.5	8.5	22.0	19.0	19.0	16.0	25.5	13.0	14.0	10.5	6.0	5.0	14.0
5	10.0	9.0	3.0	7.5	23.5	13.0	16.0	26.0	9.5	15.0	31.0	19.5	11.5	15.0	16.0	20.0	20.0	21.0	22.5	12.5	4.5	7.0	5.5	5.0	14.3
6	12.5	21.5	20.5	11.5	33.5	21.0	9.0	15.5	6.0	9.0	18.0	24.0	24.5	33.0	38.5	46.5	25.5	26.0	9.0	31.0	26.5	39.5	30.0	39.5	23.8
7	31.5	47.5	17.0	14.5	19.5	15.0	21.5	19.0	24.5	13.5	17.0	14.0	14.0	51.0	26.0	31.0	26.5	20.0	39.5	37.5	22.5	29.0	19.0	26.5	24.8
8	13.0	34.0	36.0	17.5	28.0	27.0	42.0	23.5	35.0	18.0	9.0	26.5	13.0	26.0	23.5	43.5	41.0	18.0	51.5	13.0	24.0	18.5	34.5	32.0	27.0
9																						27.0	12.5	6.5	
10	27.0	29.0	10.0	29.0	12.0	27.0	13.0	10.0	12.5	14.0	23.0	12.0	31.0	26.0	20.0	10.5	15.0	20.0	13.5	9.0	11.0	10.0	8.0	7.0	16.6
11	10.0	7.0	5.5	10.5	9.0	4.0	5.0	6.0	9.0	2.0	2.5	3.5	5.5	11.0	5.5	6.0	5.0	10.5	6.0	5.5	4.0	4.5	1.0	2.0	5.9
12	3.0	4.0	7.0	10.5	8.0	5.0	9.5	3.5	9.5	5.0							9.5	10.0	9.0	12.0	4.0	4.0	6.5	6.0	
13	6.0	3.5	3.0	6.0	7.0	7.5	6.0	7.0	4.0	10.0	8.5	6.0	10.5	11.0	5.5	5.0	5.0	4.0	15.0	4.0	6.5	8.5	11.0	19.0	7.5
14	13.5	16.5	23.0	20.0	13.0	16.0	10.5	9.5	9.0	10.0	3.0	12.5	28.0	16.5	14.5	18.5	22.5	23.0	24.0	23.0	15.0	21.0	14.5	27.0	16.8
15	14.0	22.0	18.0	25.0	33.0	26.5	9.0	20.0	23.5	12.0	12.0	13.5	20.0	19.5	24.5	13.5	31.0	21.0	36.5	19.5	27.0	14.0	17.0	30.0	20.9
16	9.0	17.0	32.0	7.0	31.0	20.0	28.5	20.5	7.0	10.0	7.5	8.5	4.5	18.0	23.0	15.5	26.0	20.0	26.5	25.0	19.0	31.0	37.0	38.0	20.1
17	22.5	26.0	27.0	15.5	21.0	45.5	28.5	24.0	15.5	11.0	12.0	25.0	31.5	21.0	23.5	36.0	51.5	20.0	43.0	32.5	9.0	32.0	30.5	20.0	26.0
18	19.5	26.0	17.0	26.0	21.0	20.5	10.0	15.0	7.5	30.0	10.0	10.0	21.5	25.0	43.0	33.5	21.5	18.0	17.0	33.0	31.0	30.0	23.0	11.0	21.6
19	27.0	15.5	13.5	15.5	7.5	17.5	13.0	14.0	9.5	16.0	23.5	13.0	21.0	23.5	12.0	12.5	26.0	15.5	22.0	17.0	12.5	4.0	22.5	29.0	16.8
20	12.5	12.0	7.5	5.0	10.5	14.5	8.5	7.0	6.0	11.5	7.0	9.5	8.0	12.0	13.5	15.5	9.5	10.5	15.5	6.0	4.5	7.0	10.0	8.5	9.7
21	7.0	6.0	6.5	5.5	10.0	5.0	11.0	9.5	9.5	8.0	6.5	6.0	12.5	13.5	15.5	17.0	16.0	25.0	16.0	12.5	17.0	27.0	22.0	17.0	12.1
22	18.0	22.0	16.0	19.0	24.5	35.0	20.0	19.0	10.5	7.5	9.0	11.5	24.5	31.5	19.0	27.0	22.0	29.5	32.0	14.0	33.0	20.0	20.0	20.0	21.0
23	21.5	36.5	30.0	27.0	37.0	31.0	23.0	28.0	12.0	13.0	12.0	13.0	27.0	38.0	19.0	34.5	46.5	23.0	21.0	37.0	26.0	10.5	16.0	15.5	24.9
24	19.5	16.0	26.0	33.0	23.5	21.5	31.0	31.0	18.0	10.0	24.5	30.5	20.0	55.5	37.0	23.0	26.5	29.0	18.0	14.0	25.0	47.5	26.0	32.5	26.6
25	18.0	17.0	16.5	24.0	22.0	32.5	16.0	22.0	9.0	9.0	13.5	10.0	18.0	15.5	32.5	14.0	8.0	15.0	11.0	13.0	12.5	23.0	22.0	17.5	17.1
26	19.0	13.5	15.0	18.0	12.5	12.0	11.0	7.5	10.0	8.5	7.0	19.0	9.5	21.0	14.0	10.0	11.0	14.0	15.0	10.0	25.0	9.5	6.0	6.5	12.7
27	11.0	13.0	10.0	7.5	8.0	10.0	10.0	10.0	6.5	5.5	4.0	5.0	7.0	4.0	3.0	5.5	3.5	9.5	11.0	7.0	8.0	3.0	6.0	4.5	7.2
28	7.0	6.5	11.5	4.0	12.0	3.5	11.0	7.0	8.0	5.0	3.5	11.0	10.0	6.0	17.0	12.0	7.0	2.5	1.5	6.0	6.0	3.0	3.0	2.5	6.9
29	6.5	6.5	8.0	9.5	15.0	9.0	8.5	9.5	9.5	19.5	12.0	19.0	13.0	29.0	19.0	13.5	12.5	11.0	12.5	29.0	15.5	18.0	23.0	5.0	13.9
30	11.5	9.0	12.0	12.0	15.5	19.5	13.5	10.0	14.5	10.5	5.5	19.0	15.0	18.0	43.5	23.0	24.0	18.0	17.5	13.5	10.0	5.5	8.0	21.0	15.4
31	11.5	15.0	15.5	17.0	9.0	20.0	11.0	36.0	19.0	13.0	11.0	12.5	17.0	13.5	10.0	12.0	11.0	28.5	24.0	8.5	16.5	11.5	7.5	5.5	14.8
Mean	16.0	18.1	16.9	15.3	18.5	18.5	15.3	16.5	12.5	13.0	11.9	14.4	17.4	21.1	21.2	20.0	20.9	19.0	20.5	17.1	17.4	16.3	16.8	17.8	17.2

* 3 days missing

MEAN HOURLY RANGES in mms.

Table 75 Alert — Scale Value: 6.02 γ/mm — September 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	3.0	7.0	11.0	17.5	19.5	10.5	12.5	12.5	14.5	13.0	31.0	12.5	41.0	23.0	18.5	35.5	31.5	26.5	41.0	23.0	40.0	32.5	17.0	15.0	21.2
2	10.0	11.0	33.5	19.0	8.5	18.5	17.0	15.0	20.0	12.0	13.0	18.5	38.0	75.0	50.5	37.0	31.0	26.0	29.5	17.0	36.5	26.5	20.0	24.5	25.3
3	27.0	15.0	10.0	13.0	26.0	23.0	13.0	25.0	13.0	12.0	61.0	77.0	44.5	39.5	27.0	50.5	48.5	29.0	36.5	33.0	29.5	23.0	24.5	24.0	30.1
4	43.0	22.5	22.5	12.0	18.0	31.0	20.0	23.0	26.0	23.0	41.0	30.0	25.5	27.0	21.5	19.0	23.0	20.0	20.0	34.0	18.0	7.5	12.0	8.5	22.8
5	8.0	6.5	11.5	7.5	20.0	8.5	13.0	13.0	20.0	21.0	17.0	14.0	5.0	9.5	34.0	27.5	25.5	24.5	17.5	11.5	13.5	7.0	9.0	30.0	15.6
6	24.0	13.0	10.5	20.0	20.0	13.0	22.5	13.5	9.5	8.0	45.0	34.0	16.0	11.0	15.5	20.5	12.0	18.5	16.5	10.5	24.5	28.5	31.0	15.0	18.9
7	23.5	32.0	12.5	14.0	19.0	13.0	13.5	12.0	12.0	10.5	12.0	15.0	19.0	15.5	12.0	12.5	15.0	13.5	7.0	20.5	12.0	6.5	14.0	6.0	14.3
8	6.0	15.0	15.0	12.5	22.5	8.0	17.0	21.0	10.0	15.0	9.5	4.5	4.5	5.0	21.5	12.5	7.0	12.5	21.0	14.5	7.0	11.5	16.0	12.5	12.6
9	10.0	12.5	11.0	10.0	4.5	8.5	5.0	2.5	2.0	6.0	3.0	20.5	11.0	9.0	4.0	6.5	5.0	28.0	5.5	7.5	14.0	10.0	27.0	9.0	9.7
10	16.5	22.0	14.0	13.0	16.0	18.5	8.0	11.5	8.0	9.0	10.0	10.5	14.5	5.5	7.0	9.0	8.0	2.0	6.0	4.5	4.5	4.0	6.5	8.0	9.9
11	7.5	10.0	14.0	13.0	4.5	7.0	8.5	6.5	11.5	15.5	30.0	11.5	17.0	13.0	9.5	6.0	5.5	8.0	16.0	7.5	10.0	10.0	11.0	8.5	10.9
12	8.0	14.0	30.0	10.5	8.0	39.0	34.0	25.5	12.0	23.0	26.0	34.0	16.0	19.0	36.0	23.0	28.0	17.0	11.0	32.0	20.5	13.0	22.0	18.0	21.6
13	22.5	23.5	30.0	13.0	12.0	12.0	9.0	15.5	13.5	5.0	11.0	22.0	20.0	17.0	15.5	16.0	19.5	22.0	18.0	40.0	22.5	5.0	7.0	15.5	18.0
14	23.5	6.5	8.0	17.0	21.0	23.5	14.5	14.5	10.0	7.5	11.0	4.0	9.5	12.0	8.0	15.0	8.5	19.0	12.0	9.0	10.0	19.0	12.5	13.5	12.9
15	7.0	11.5	23.0	14.5	24.0	15.5	16.0	18.0	5.0	11.0	11.0	9.5	7.5	7.0	8.0	8.0	11.0	23.0	10.5	20.0	12.0	18.0	10.0	17.5	13.3
16	12.5	13.0	9.0	6.0	11.0	10.0	8.0	8.0	3.5	3.0	6.5	9.0	7.5	16.0	14.0	11.0	17.5	13.0	18.0	10.5	19.0	15.0	16.5	17.0	11.4
17	8.0	13.0	5.0	14.5	10.5	10.5	7.5	6.0	6.5	5.0	6.0	9.0	3.0	13.5	3.5	6.0	20.0	10.0	11.0	6.0	7.5	7.0	17.5	12.0	9.1
18	11.5	6.0	8.5	9.5	9.0	12.0	8.0	6.5	2.5	2.0	4.5	6.0	6.0	5.5	17.5	7.5	7.5	8.5	4.0	6.0	10.0	14.5	11.5	11.5	8.2
19	15.0	12.0	32.5	10.0	14.5	25.0	13.5	15.5	12.0	11.0	15.5	13.0	20.0	18.0	26.0	27.0	30.0	24.5	47.0	39.0	15.0	19.0	25.0	23.0	21.0
20	8.5	35.5	31.0	16.0	9.0	8.0	7.0	5.5	7.0	14.5	12.5	29.0	4.5	12.5	12.0	8.5	7.5	6.0	6.0	14.5	7.0	12.5	8.5	14.5	12.4
21	9.5	16.0	8.5	6.0	12.5	10.5	11.0	5.0	9.0	11.5	11.0	4.0	15.0	18.0	22.5	21.0	17.0	23.5	13.5	24.5	19.5	15.5	7.5	15.0	13.6
22	25.0	24.0	19.0	28.5	19.5	13.0	7.5	8.0	11.5	14.0	31.0	32.0	26.5	27.5	34.0	14.5	23.5	19.0	10.0	18.0	11.0	18.5	11.0	12.0	19.1
23	18.0	19.0	18.0	7.0	10.0	13.5	12.0	13.0	11.0	8.0	11.0	23.0	20.0	9.0	12.5	12.5	10.5	11.5	9.0	7.0	7.0	16.5	10.0	15.5	12.7
24	12.5	17.0	15.5	6.5	10.0	8.0	10.0	3.0	4.0	4.0	5.5	5.0	4.0	6.5	6.0	7.0	9.5	3.0	6.5	9.0	12.0	4.5	4.5	5.5	7.5
25	5.0	3.0	7.0	9.0	8.0	3.0	3.5	5.0	4.5	2.5	7.0	6.0	8.5	11.0	14.0	16.0	13.5	9.5	6.0	11.5	5.0	13.0	12.0	16.0	8.3
26	28.5	15.0	10.5	22.0	11.0	10.5	6.0	7.0	6.0	7.0	12.0	16.5	21.0	22.5	15.0	16.5	17.0	32.0	11.5	13.0	19.5	6.0	11.0	7.0	14.3
27	8.5	10.5	15.5	4.5	9.5	7.0	8.5	6.5	9.5	7.0	5.0	24.0	25.0	15.5	7.5	12.0	12.0	16.0	6.5	6.5	4.5	4.0	13.5	5.0	10.2
28	6.0	3.5	4.0	8.5	5.5	2.0	5.0	3.5	3.0	3.0	6.5	7.0	18.0	26.5	17.5	14.0	17.5	22.0	18.0	22.5	10.0	11.5	40.0	9.0	11.8
29	10.0	7.0	8.0	4.0	4.0	5.0	7.5	10.0	12.0	10.0	26.5	17.0	6.5	15.0	18.0	6.0	8.5	10.0	16.0	17.0	10.5	26.5	23.0	11.5	12.1
30	5.5	12.0	8.0	10.0	5.0	4.5	13.5	13.5	7.5	8.0	7.0	9.5	8.5	19.5	20.0	24.0	8.0	10.5	6.0	13.5	17.0	13.5	19.5	9.0	11.4
31																									
Mean	14.1	14.3	15.2	12.3	13.1	13.1	11.7	11.5	9.9	10.1	16.6	17.6	16.1	17.5	17.6	15.1	16.6	17.0	15.2	16.8	14.9	14.0	15.7	13.6	14.6

MEAN HOURLY RANGES in mms.

Table 76 Alert — Scale Value: 6.02 γ/mm — October 1962

Day \ Hour U.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	22.5	22.5	15.0	19.5	24.0	18.0	26.0	17.0	30.0	29.0	15.0	50.5	54.5	38.0	36.5	16.5	58.5	51.0	38.0	19.0	23.0	26.0	31.0	30.5	29.6
2	28.0	16.0	16.0	18.0	19.5	24.0	12.0	31.0	21.0	21.5	32.0	25.5	22.0	25.0	30.0	23.0	21.5	36.0	24.5	16.5	13.5	11.0	13.0	23.0	21.8
3	16.0	17.5	8.0	20.0	14.0	6.5	11.0	16.0	8.5	5.5	11.0	23.5	16.0	31.0	62.5	11.0	19.0	5.5	15.5	16.0	8.5	13.5	29.0	12.0	16.5
4	12.5	18.0	9.0	9.0	16.0	10.0	16.0	9.0	7.5	8.0	9.5	7.0	15.0	6.5	6.5	10.0	19.5	11.0	16.0	18.5	10.0	8.5	9.0	15.0	11.5
5	3.0	9.5	7.0	3.5	15.0	20.0								13.0	15.0	24.5	32.0	10.5	9.0	13.5	36.5	11.0	12.0	16.5	
6	24.0	16.5	11.0	19.0	6.5	8.5	6.5	15.0	2.0	3.5	4.5	3.5	16.0	27.0	26.0	22.0	4.0	6.0	5.0	6.5	5.0	8.5	11.5	18.0	11.5
7	9.5	16.5	7.5	6.0	7.5	5.5	3.5	3.5	4.0	13.5	10.0	9.5	12.0	5.0	16.0	9.5	10.5	6.5	8.0	4.5	13.5	20.0	20.5	24.0	10.3
8	26.0	28.0	63.0	16.5	14.5	13.5	20.5	10.0	10.0	18.0	18.0	23.5	33.0	20.5	24.5	28.0	31.0	25.0	12.0	20.0	21.5	21.5	24.0	20.5	22.6
9	11.5	36.0	21.5	29.0	34.0	14.5	12.5	14.0	16.5	16.5	13.0	32.5	23.0	32.0	20.0	15.5	16.5	14.5	19.0	11.5	11.5	16.0	12.0	14.0	19.0
10	23.0	15.0	19.0	17.0	11.0	7.5	5.5	6.5	9.0	13.0	16.0	6.5	46.0	19.5	22.0	18.5	13.5	21.0	16.0	22.5	16.0	14.5	16.5	10.0	16.0
11	11.0	17.5	19.5	10.0	14.5	11.0	8.0	11.5	12.5	15.5	14.0	27.0	20.5	38.0	13.0	20.0	29.5	7.0	7.5	10.5	22.0	15.0	15.0	16.0	16.1
12	15.0	15.5	10.5	11.0	8.0	7.0	8.0	10.0	4.5	23.0	16.0	9.0	12.0	13.0	12.0	10.0	14.0	5.0	6.5	4.5	9.5	5.0	10.5	7.5	10.3
13	4.0	2.5	4.5	3.5	4.0	6.0	6.0	5.5	4.0	14.0	12.0	12.0	19.5	12.5	22.0	11.0	7.5	13.5	15.0	9.5	13.0	7.5	9.5	18.0	9.9
14	14.5	31.0	20.5	20.0	13.0	9.0	7.0	10.0	6.0	23.0	19.0	21.5	17.5	23.5	26.5	16.5	18.5	18.0	27.0	13.0	16.0	14.0	13.0	9.5	17.0
15	13.0	23.5	15.0	24.0	12.5	15.5	14.5	6.5	6.0	9.0	15.5	6.0	11.0	8.0	11.0	9.5	11.5	11.0	11.5	10.0	10.5	7.5	15.0	8.5	11.9
16	17.0	10.0	6.5	15.5	6.0	4.0	11.5	8.0	4.5	4.5	36.0	30.5	33.5	37.0	34.0	6.5	4.5	14.0	23.5	9.5	13.0	13.0	8.5	12.0	15.1
17	8.0	13.0	10.5	11.0	9.5	10.0	6.5	8.0	11.0	18.0	12.0	12.0	7.0	9.5	6.5	5.0	8.0	6.5	6.5	4.0	4.5	4.5	4.5	5.5	8.4
18	2.5	10.0	14.5	32.5	11.0	7.5	4.0	3.0	5.5	8.0	13.0	14.0	15.5	9.5	8.5	13.0	9.5	15.0	12.5	8.0	6.0	9.5	10.0	7.5	10.4
19	3.0	4.0	6.5	4.5	4.5	3.5	3.0	7.0	30.5	31.0	17.5	24.0	26.5	30.5	24.5	11.5	31.0	13.0	10.0	16.5	15.0	17.0	10.5	6.5	14.6
20	8.0	5.5	7.0	12.5	10.0	2.5	3.5	3.0	2.0	11.0	9.0	11.0	14.5	15.0	15.0	15.0	17.0	13.5	22.0	8.5	11.5	11.5	10.0	9.5	10.3
21	18.0	11.5	8.5	6.5	7.5	10.5	9.0	4.0	7.0	23.0	13.5	15.0	16.5	14.5	16.0	15.5	14.5	13.5	28.0	9.0	4.5	10.0	4.0	10.0	12.1
22	5.0	13.0	8.0	5.5	6.5	4.0	6.5	5.5	12.5	16.0	10.5	24.5	33.0	26.0	28.5	15.5	10.0	8.5	18.0	21.0	10.0	38.5	48.0	16.0	16.3
23	21.5	15.0	19.5	19.0	16.5	4.0	12.0	7.0	9.5	13.0	9.0	12.0	14.0	14.0	9.0	12.5	19.0	7.5	12.5	9.0	25.0	24.5	10.0	7.5	13.4
24	15.5	6.0	11.0	16.0	16.5	18.0	7.5	6.0	5.0	14.0	12.0	17.5	40.5	42.5	18.0	17.0	10.0	25.0	20.0	14.5	16.5	34.5	15.0	16.0	17.3
25	17.5	19.5	10.0	26.5	8.5	13.5	9.5	10.5	17.5	19.0	27.0	42.0	23.0	37.5	11.0	20.0	27.5	17.5	19.5	20.0	39.5	43.0	24.0	12.5	21.5
26	15.0	14.5	21.0	17.5	9.5	6.5	21.5	15.0	14.5	11.0	15.5	36.5	25.5	38.0	37.0	32.0	29.5	22.0	39.5	32.0	38.0	12.0	24.5	12.5	22.5
27	16.5	13.0	13.0	18.0	11.5	8.0	17.0	5.0	20.0	22.0	18.5	22.0	22.0	42.0	53.5	34.0	7.0	10.0	12.0	5.0	12.5	10.5	20.5	14.5	17.8
28	13.0	20.0	18.0	19.5	13.0	15.5	8.5	12.0	15.5	12.0	17.5	16.5	8.0	22.0	13.0	29.0	13.5	11.0	8.0	19.0	18.0	21.0	25.0	6.5	15.6
29	14.0	13.5	11.5	16.5	13.5	7.5	12.0	6.5	10.0	15.5	20.0	25.5	22.0	12.0	13.0	10.5	13.5	14.5	8.5	6.0	10.0	7.0	11.0	12.0	12.8
30	15.5	16.0	18.5	12.5	8.5	5.0	9.0	9.5	8.5	10.5	17.0	18.0	15.0	17.0	10.0	9.0	18.0	9.5	9.5	7.0	7.5	12.5	5.0	8.0	11.5
31	7.5	10.0	6.5	9.0	5.5	11.5	7.0	7.5	7.0	14.0	10.0	15.5	10.0	10.5	5.5	13.0	17.0	10.0	10.5	6.5	5.0	10.0	9.5	6.0	9.4
Mean *	14.2	15.6	14.3	15.3	11.9	9.6	10.2	9.4	10.7	15.2	15.5	19.8	21.5	22.6	21.1	16.0	17.5	14.7	16.1	12.6	14.3	15.6	16.0	13.1	15.1

* 30 days only

MEAN HOURLY RANGES in mms.

Table 77 Alert — Scale Value: 6.02 γ/mm — November 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	5.5	6.0	6.0	4.5	7.0	3.0	3.5	3.5	4.0	14.0	12.0	6.5	7.0	12.5	5.5	6.0	7.5	5.0	5.5	8.0	8.0	10.0	6.5	10.5	7.0
2	9.0	5.5	9.0	2.0	3.5	2.5	1.5	2.0	4.5	2.0	5.0	13.0	18.0	29.0	31.0	11.5	14.5	16.5	17.0	5.0	17.5	15.5	11.5	14.5	10.9
3	11.0	7.5	8.0	9.0	2.5	3.0	4.0	6.0	7.5	7.5	22.5	6.5	17.5	8.5	8.0	11.0	7.5	4.5	7.5	11.0	12.5	12.0	17.0	19.5	9.6
4	15.0	6.5	5.0	10.0	6.0	7.0	5.0	5.5	5.5	11.0	12.0	22.0	18.0	5.5	7.5	24.5	4.0	11.0	5.0	4.0	15.0	30.0	3.5	5.0	10.1
5	13.0	16.5	3.0	4.0	5.5	5.5	7.0	8.5	5.0	7.0	7.5	5.0	3.0	12.5	5.0	3.0	4.0	3.0	2.0	4.5	4.0	2.5	6.0	6.0	6.0
6	8.0	9.5	11.5	22.0	24.0	11.5	10.5	5.5	8.0	6.5	7.5	8.5	10.0	7.0	19.5	12.0	12.0	7.5	16.5	8.0	16.5	24.0	20.5	11.5	12.4
7	11.5	9.5	8.0	20.0	8.0	11.5	5.0	2.5	3.0	7.5	24.0	17.5	7.0	13.5	16.0	4.5	5.5	6.5	5.5	6.5	6.5	6.5	9.0	10.0	9.4
8	14.0	6.5	10.0	8.0	4.5	5.5	7.0	3.0	4.5	5.0	10.5	10.5	8.0	7.0	17.0	11.0	7.0	7.5	5.0	4.5	5.0	3.5	4.0	3.5	7.2
9	5.0	5.0	5.5	2.5	4.0	3.5	4.0	3.5	2.0	1.5	1.5	2.0	3.0	2.5	3.5	7.0	3.5	5.5	5.0	3.5	3.0	8.5	20.0	12.5	4.9
10	10.0	7.0	4.0	3.5	4.5	1.5	2.0	2.5	2.0	2.0	1.0	2.0	2.0	3.5	2.0	3.5	3.0	2.0	2.5	7.0	3.5	3.0	9.0	5.5	3.7
11	2.5	2.0	4.0	5.0	6.5	4.5	7.5	6.0	6.5	11.0	10.0	15.0	20.0	25.0	12.5	18.0	7.5	8.5	7.0	6.0	6.5	4.0	10.0	4.5	8.8
12	8.0	7.5	13.0	5.0	3.5	2.5	1.5	1.0	2.0	7.5	2.5	2.0	2.5	4.0	2.0	7.5	7.0	4.0	6.5	3.0	2.5	2.0	5.0	11.0	4.7
13	9.5	6.5	3.0	1.5	2.0	2.5	3.5	2.0	2.0	2.0	6.0	4.0	4.5	3.5	6.5	5.5	8.5	2.0	6.0	3.0	5.0	3.0	3.5	3.5	4.1
14	3.5	5.0	3.0	3.0	4.0	2.0	1.5	1.0	1.0	2.5	3.5	4.5	3.5	2.5	10.5	9.5	12.5	11.5	8.5	30.5	28.0	9.5	2.0	2.5	6.9
15	2.0	3.0	3.5	6.0	5.0	3.5	9.5	12.0	11.5	6.5	16.0	32.5	60.5	60.0	13.0	7.0	6.5	9.0	9.0	13.5	20.0	21.5	16.0	13.0	15.0
16	27.0	19.0	21.0	12.5	11.5	13.0	7.0	6.0	7.0	7.5	24.0	13.5	22.0	14.0	21.5	22.0	15.5	12.5	5.0	8.0	9.5	8.5	12.5	13.0	13.9
17	14.5	5.5	17.5	7.5	5.5	6.5	3.0	4.0	4.5	9.0	9.0	10.0	9.0	9.5	13.5	18.5	10.0	7.5	3.0	4.0	3.0	2.5	1.5	1.5	7.5
18	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	2.0	3.5	2.0	1.5	1.0	2.0	1.5	1.0	3.5	2.0	3.0	2.5	8.0	2.0	2.5	2.1
19	6.0	2.0	2.0	1.0	2.0	1.5	1.0	1.0	0.5	1.5	2.0	3.0	3.5	5.0	4.5	4.5	5.0	3.5	3.0	6.5	11.5	8.5	8.0	5.5	3.9
20	2.5	3.5	3.5	3.0	3.0	7.0	4.0	3.0	2.0	2.0	3.0	4.5	2.0	2.0	1.5	3.0	1.5	1.5	2.5	1.5	1.5	2.5	4.0	1.5	2.8
21	7.5	4.5	3.5	7.0	4.0	6.0	7.5	19.5	5.5	11.5	13.0	6.0	17.0	17.0	19.0	9.5	13.0	11.0	13.5	15.0	18.0	15.0	16.5	17.0	11.5
22	13.0	9.5	14.5	14.5	16.0	17.0	15.0	16.0	19.5	19.5	28.0	12.5	21.5	16.5	22.0	12.0	8.0	6.5	15.5	15.5	20.0	18.5	14.5	17.0	15.9
23	15.5	13.0	18.0	14.0	10.5	17.0	7.0	13.5	17.0	12.5	47.5	28.5	22.5	26.5	18.5	22.0	25.0	17.5	12.5	12.5	11.0	9.5	15.0	16.0	17.6
24	11.5	6.5	10.5	5.0	7.0	13.0	5.0	6.5	26.0	24.5	22.0	31.0	35.0	24.5	23.0	14.0	12.0	6.5	7.0	19.5	7.5	14.0	7.5	7.0	14.4
25	9.5	16.5	14.5	15.5	10.5	10.0	20.0	14.5	6.5	26.5	53.0	30.5	29.5	40.0	22.0	15.5	29.0	11.5	10.0	10.0	10.5	12.0	8.0	5.0	17.9
26	9.5	13.0	10.5	12.5	9.5	4.0	4.5	3.0	6.5	5.0	4.0	11.5	10.0	17.0	10.5	8.0	5.5	8.5	9.5	5.0	7.0	5.0	3.5	4.0	7.8
27	9.5	5.5	6.0	6.0	5.5	5.5	7.5	7.0	9.0	10.5	5.5	14.0	9.0	9.0	12.0	6.0	11.0	13.5	11.0	5.5	6.5	8.5	4.5	8.0	8.2
28	15.0	8.0	7.5	5.5	4.0	4.0	3.0	5.0	4.0	3.0	3.5	9.0	6.0	9.5	10.5	5.0	3.0	5.0	5.0	2.5	2.0	2.0	3.0	3.0	5.3
29	3.0	4.0	4.5	2.5	2.5	3.5	4.0	3.0	3.0	8.0	15.5	15.0	19.5	4.5	13.5	5.0	6.0	15.0	11.5	21.0	6.5	5.5	4.0	7.0	7.8
30	7.5	27.5	19.0	13.0	11.5	16.5	7.0	17.5	14.5	21.0	36.0	6.5	9.0	12.0	16.5	5.5	7.0	3.0	3.0	8.0	4.0	10.5	5.5	13.0	12.3
31																									
Mean	9.4	8.1	8.4	7.2	6.5	6.5	5.7	6.2	6.5	8.6	13.7	11.6	13.4	13.5	12.3	9.8	8.8	7.7	7.5	8.5	9.2	9.5	8.5	8.5	9.0

MEAN HOURLY RANGES in mms.

Table 78 Alert — Scale Value: 6.02 γ/mm — December 1962

Day \ Hour U. T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	14.5	7.0	3.5	5.0	3.0	2.0	2.0	3.0	4.0	5.5	12.5	12.0	9.5	9.0	10.5	9.5	12.0	11.5	14.5	7.5	6.0	4.5	2.0	2.0	7.2
2	1.5	1.5	3.0	3.5	3.0	2.5	2.5	2.0	2.5	9.5	9.5	3.0	4.5	4.0	10.5	13.5	4.0	5.0	4.0	3.5	3.0	4.5	4.0	3.0	4.5
3	3.5	2.5	2.5	2.5	2.5	2.0	1.5	1.5	4.0	3.0	7.0	8.0	2.5	6.0	8.0	6.0	6.5	4.5	14.5	5.0	3.0	2.0	2.0	2.0	4.3
4	1.5	1.5	2.0	19.0	4.5	7.0	5.5	7.5	16.0	18.0	14.0	12.0	24.0	7.0	23.0	26.5	10.0	8.0	6.5	3.5	8.0	4.0	4.0	9.5	10.1
5	5.5	12.5	14.0	6.5	5.0	3.0	5.0	4.0	4.5	8.0	7.5	6.0	7.5	13.5	9.0	15.0	8.0	4.0	4.5	4.5	2.0	3.5	2.0	3.0	6.6
6	2.5	4.5	2.5	4.5	4.5	5.0	3.0	2.5	2.5	6.0	6.0	1.5	5.5	6.5	3.5	2.5	4.5	1.5	2.5	3.5	2.5	2.0	1.5	1.5	3.4
7	2.0	3.0	4.0	3.0	3.0	3.5	1.0	1.5	3.0	3.0	6.0	8.0	4.0	9.5	4.0	6.5	6.5	5.0	3.5	3.5	4.5	4.0	4.5	2.5	4.1
8	3.5	2.0	6.0	4.0	3.0	2.0	2.0	4.0	7.5	5.0	8.0	6.0	3.5	4.0	12.0	5.5	3.0	5.5	7.5	4.0	4.5	4.0	4.0	3.5	4.8
9	4.5	7.5	2.5	5.0	6.0	8.5	7.0	2.5	2.5	6.0	6.0	5.0	2.0	2.5	3.0	3.5	2.0	1.5	3.0	2.0	1.5	2.0	1.5	2.0	3.7
10	5.5	3.5	3.0	4.0	4.0	3.5	2.5	2.0	2.5	2.5	2.0	1.5	1.5	1.0	2.0	3.5	3.5	4.0	4.5	4.5	5.0	8.5	9.5	6.0	3.8
11	4.5	5.0	4.0	4.5	4.0	6.5	4.5	6.0	3.5	10.0	6.0	8.5	10.5	8.0	8.5	18.0	8.5	9.0	8.0	33.5	9.5	11.0	27.0	31.5	10.4
12	14.0	20.0	18.0	12.5	5.0	3.5	1.5	3.0	2.0	2.0	2.5	3.5	1.5	2.5	1.5	1.5	3.5	12.5	13.5	13.5	17.0	15.0	14.0	9.5	8.0
13	6.0	10.0	9.5	8.0	5.5	4.5	7.5	4.0	7.5	7.0	6.5	8.5	5.0	25.0	5.0	23.0	7.0	3.0	2.0	3.5	11.0	23.0	23.5	6.5	9.3
14	15.0	4.0	5.5	13.0	13.5	11.5	7.5	5.5	3.5	12.0	9.5	8.5	10.5	12.5	11.0	6.5	6.5	10.0	8.0	8.0	6.0	5.5	7.5	8.5	8.7
15	7.5	5.0	6.5	7.5	10.0	11.0	10.0	11.0	6.0	11.0	2.5	4.5	8.5	6.0	4.0	6.5	5.0	4.0	3.5	4.5	4.0	6.0	5.5	4.5	6.4
16	3.5	5.0	5.5	4.0	3.0	3.5	3.0	4.0	5.0	6.0	5.5	4.0	4.5	10.5	12.5	5.0	4.5	5.5	4.0	3.0	4.0	4.0	2.5	6.0	4.9
17	10.5	4.5	6.0	8.0	5.5	2.5	2.0	3.0	11.5	10.0	9.5	16.5	11.0	12.5	9.0	15.0	21.0	56.0	55.0	11.5	14.5	48.0	55.5	24.5	17.6
18	18.5	7.0	16.0	41.0	8.0	4.5	4.0	5.5	5.0	9.5	14.5	20.5	19.5	30.0	29.0	11.0	13.0	16.5	10.0	18.0	13.0	19.5	24.5	30.5	16.2
19	17.0	52.5	32.0	16.5	10.5	10.0	7.5	53.0	69.0	20.5	24.0	31.0	11.5	30.0	24.0	23.0	23.0	18.5	10.0	22.0	8.5	13.0	21.0	18.0	25.3
20	9.0	18.5	15.0	10.5	21.5	15.5	17.5	6.0	20.5	17.5	21.0	13.5	27.0	25.0	40.0	20.0	20.0	13.0	12.0	19.0	30.0	30.0	25.0	19.5	19.4
21	9.5	17.5	16.0	11.0	16.0	9.0	11.5	11.0	15.5	9.5	11.0	17.5	17.5	25.5	18.5	20.5	26.0	7.5	19.5	11.0	19.5	15.0	7.0	8.0	14.6
22	18.0	12.5	6.5	10.5	7.0	4.0	3.0	7.0	6.0	8.5	17.5	28.5	9.5	13.5	6.5	13.0	12.0	9.5	7.5	11.0	8.0	7.5	13.0	7.5	10.3
23	8.0	10.0	8.5	6.0	6.0	4.0	2.5	3.0	2.0	4.5	7.0	6.0	4.0	5.0	4.0	3.0	3.0	3.0	2.0	1.0	2.0	1.0	1.5	4.0	4.2
24	3.0	2.0	1.5	1.0	1.5	4.5	2.0	8.0	4.5	4.0	9.0	6.5	8.0	7.5	9.5	8.0	4.0	2.0	3.0	4.5	3.5	4.5	3.5	4.0	4.6
25	7.0	4.0	4.0	5.0	5.5	5.5	4.0	2.0	1.5	3.5	6.5	8.5	3.5	10.0	6.0	3.5	10.0	3.5	4.0	4.0	3.0	4.5	2.0	6.5	4.9
26	3.5	5.0	5.0	3.5	3.5	3.0	7.5	4.0	6.0	13.0	15.0	15.0	23.5	27.5	42.0	13.5	13.5	10.5	5.5	12.5	13.5	8.5	21.0	19.5	12.3
27	3.5	5.0	3.0	4.0	3.5	4.5	3.0	3.5	5.0	6.0	2.5	3.0	2.0	2.5	11.5	5.0	2.5	3.5	4.0	5.0	9.0	15.5	9.0	5.0	5.0
28	5.0	4.0	6.0	4.0	4.0	3.0	1.5	3.0	1.0	1.0	4.5	7.0	11.5	18.5	19.0	8.0	8.0	5.0	2.5	2.0	6.0	6.5	4.0	6.0	5.9
29	6.5	5.0	3.0	3.0	3.0	4.5	1.5	2.5	2.5	3.5	4.5	5.5	7.0	11.0	7.5	6.0	4.0	5.0	3.5	2.0	2.5	4.0	6.0	2.5	4.4
30	4.0	7.5	4.0	1.5	1.5	1.0	1.0	1.0	6.0	4.0	5.0	3.0	4.0	3.0	2.0	1.0	4.5	2.0	1.5	1.5	4.5	5.0	3.5	24.0	4.0
31	12.0	8.0	4.5	6.0	4.5	5.0	4.0	2.0	4.5	14.0	16.0	19.5	22.0	19.0	17.0	7.0	18.0	10.0	6.0	3.0	3.0	5.5	5.0	2.0	9.1
Mean	7.4	8.3	7.2	7.7	5.8	5.2	4.5	5.8	7.6	7.9	9.0	9.7	9.2	11.9	12.0	10.0	8.9	8.4	8.1	7.6	7.5	9.4	10.2	9.2	8.3