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SUMMARY OF OBSERVATIONS AT
MAGNETIC OBSERVATORIES IN NORTHWEST
TERRITORIES FOR 1963

(With a Summary of Earlier Observations at Mould Bay)

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SUMMARY OF OBSERVATIONS AT MAGNETIC OBSERVATORIES IN NORTHWEST TERRITORIES FOR 1963

Introduction

The Division of Geomagnetism of the Dominion Observatory operates four magnetic observatories in the Canadian northern territories, three of which are located within the polar cap. The geographic and geomagnetic coordinates of the observatories and the dates of commencement of continuous photographic recording in three elements are shown in Table 1.

TABLE 1

Observatory	Geographic coordinates		Geomagnetic coordinates*		Date of commencement of continuous recording in three elements
	Lat.	Long.	Lat.	Long.	
	North	West	North	East	
Alert	82.5	62.5	85.7	168.7	October 1961 (X Y Z)
Baker Lake	64.3	96.0	73.9	314.8	March 1951 (H D Z); July 1957 (X Y Z)
Mould Bay	76.2	119.4	79.1	284.7	July 1962 (X Y Z)
Resolute Bay	74.7	94.9	83.1	287.7	November 1953 (X Y Z)

*Based on geomagnetic pole position 78.3° North, 69.0° West.

Magnetic Equipment

The magnetic equipment, observatory procedures, and techniques used in data reduction at Alert, Baker Lake, and Resolute Bay magnetic observatories are discussed in detail in previous publications; similar information for Mould Bay magnetic observatory to the end of 1963 is

included in this publication. A summary of the equipment in operation during 1963 at Alert, Baker Lake and Resolute Bay magnetic observatories together with the scale values adopted for the variometers and other relevant data is included with the tables of mean hourly values for these observatories.

Magnetic Reductions

This report presents a summary only of the observations obtained at the four northern magnetic observatories during 1963. Should there be a requirement for more detailed data, copies of standard-run magnetograms and mean hourly values for specific days may be obtained on request from the Division of Geomagnetism, Dominion Observatory, Ottawa, Canada. Photostat copies of standard-run magnetograms together with monthly lists of provisional base-line and scale values are also available at the World Data Centre A, Washington, D.C., U.S.A., for the period September to December, 1963.

Disturbance Indices

Tables of R-indices in the principal horizontal magnetic field component for each observatory follow the mean hourly value summary tables. R-indices are defined as the hourly ranges expressed in 10-gamma units. The adoption of these indices in two horizontal components for measuring magnetic disturbance in geomagnetic latitudes above 65° was recommended by I.A.G.A. Berkeley Assembly, August 1963.

Summary of Annual Mean Values

Observatory	Year	X	Y	Z	D East	I North	H	F
		γ	γ	γ	° ' "	° ' "	γ	γ
Alert	1962.5	720	-3776	55379	280 48	86 01.8	3844	55512
	1963.5	722	-3751	55392	280 54	86 03.3	3820	55524
Baker Lake	1951.6	3637	162	60237	2 33	86 32.5	3640	60347
	1952.5	3651	167	60224	2 37	86 31.6	3655	60335
	1953.5	3674	175	60232	2 44	86 30.3	3678	60344
	1954.5	3706	168	60238	2 36	86 28.5	3710	60352
	1955.5	3741	168	60299	2 34	86 26.8	3745	60415
	1956.5	3803	164	60322	2 28	86 23.3	3807	60442
	1957.5	3840	172	60341	2 34	86 21.3	3844	60463
	1958.5	3875	179	60346	2 39	86 19.3	3879	60471
	1959.5	3916	197	60379	2 53	86 17.1	3921	60506
	1960.5	3937	208	60402	3 01	86 16.0	3942	60530
	1961.5	3963	213	60415	3 05	86 14.5	3969	60545
	1962.5	3996	222	60420	3 11	86 12.6	4002	60553
	1963.5	4022	233	60408	3 19	86 11.0	4029	60542

Summary of Annual Mean Values—Concluded

Observatory	Year	X	Y	Z	D East	I North	H	F
		γ	γ	γ	° ' "	° ' "	γ	γ
Mould Bay	1962.8	983	2203	57951	65 57	87 37.0	2412	58001
	1963.5	1001	2208	57940	65 37	87 36.3	2424	57991
Resolute Bay	1954.5	-86	-920	57981	264 40	89 05.2	924	57988
	1955.5	-59	-911	58009	266 18	89 05.9	913	58016
	1956.5	-31	-909	58030	268 03	89 06.1	910	58037
	1957.5	-14	-908	58075	269 07	89 06.3	908	58082
	1958.5	19	-889	58045	271 13	89 07.3	889	58052
	1959.5	42	-866	58042	272 47	89 08.7	867	58048
	1960.5	64	-855	58062	274 17	89 09.3	857	58068
	1961.5	82	-849	58086	275 31	89 09.5	853	58092
	1962.5	95	-832	58113	276 31	89 10.5	837	58119
	1963.5	118	-820	58130	278 11	89 11.0	828	58136

Reports of Northern Magnetic Observatories

- Record of Observations at Alert Magnetic Observatory 1961-1962, by W. Darker. *Dom. Obs. Pub.* vol. XXVIII, no. 9.
- Record of Observations at Baker Lake Magnetic Observatory 1957-1958 (with a summary of earlier observations), by E. I. Loomer and F. Andersen. *Dom. Obs. Pub.* v. XXVI, no. 3
- Record of Observations at Baker Lake Magnetic Observatory 1959, by F. Andersen. *Dom. Obs. Pub.* v. XXVIII, no. 8
- Summary of Observations at Baker Lake Magnetic Observatory 1960-1962, by A. E. Evans, E. I. Loomer and F. Andersen. *Dom. Obs. Pub.* v. XXIX, no. 6
- Record of Observations at Resolute Bay Magnetic Observatory 1957-1958 (with a summary of earlier observations), by E. I. Loomer. *Dom. Obs. Pub.* v. XXVI, no. 2
- Record of Observations at Resolute Bay Magnetic Observatory 1959, by E. I. Loomer. *Dom. Obs. Pub.* v. XXVII, no. 7
- Summary of Observations at Resolute Bay Magnetic Observatory 1960-1962, by E. I. Loomer. *Dom. Obs. Pub.* v. XXIX, no. 5

ALERT MAGNETIC OBSERVATORY

1963

The Magnetic Equipment

No changes were made in the station equipment in 1963. A summary of the equipment in operation during 1963 is provided below:

The Photographic Variometers

A set of three-component photographic Ruska variometers is aligned to record the geographic components X, Y and Z of the earth's magnetic field. The time scale of the Ruska magnetograms is 20 mm/hr.

Scale values adopted for the Ruska variometers for the period 1963 were:

X	January—April	6.43 gammas/mm
	May	6.45
	June	6.48
	July 1—Aug. 5	6.51
	Aug. 6—Dec. 31	6.45
Y	January—April	6.02
	May	6.04
	June	6.07
	July 1—Aug. 5	6.10
	Aug. 6—Dec. 31	5.97
Z	Jan. 1—Mar. 31	6.59 increasing linearly to 6.68
	Apr. 1—May 13	5.75 “ “ 6.31
	May 14—Aug. 5	6.32 gamma/mm
	Aug. 8—Sept. 30	5.82 increasing linearly to 6.21
	Oct. 1—Oct. 31	6.21 “ “ 6.34
	Nov. 1—Dec. 31	6.34 “ “ 6.41

All variometers had to be readjusted Aug. 6 following a sudden displacement of the piers. The Z trace was not recorded for some hours of Aug. 6 and Aug. 7.

Thermostatically controlled electric heaters maintain the temperature in the variometer room constant to 1°C. Temperature coefficients of the variometers are small and temperature corrections to the measured values were not required.

The Stand-by Variometer and Storm Recorder

A three-component electrical magnetometer with an inked output records X, Y and Z. Chart speed is 20 mm/hr. Full-scale sensitivity is 1000 gammas normally, with automatic switching to 2000 gammas at times of heavy disturbance.

Absolute Instruments

A proton precession magnetometer is the primary standard of total intensity (F). A portable three-component electrical magnetometer of the saturable core type is used for the determination of declination (D) and inclination (I).

Base-line Values

The r.m.s. differences of the observed minus the adopted base-line values were: 3 gammas for 28 observations in X; 4 gammas for 28 observations in Y; and 2 gammas for 30 observations in Z. The scatter in any one set of base-line determinations (each a mean of eight) was of the order of a few gammas.

The Magnetic Reductions

A summary for 1963 by month, season and year of the mean hourly values of X, Y and Z for all days and for the international quiet and disturbed days, is given in Tables 1–9. The daily mean values of the three elements are given in Tables 10–12.

R_y indices of magnetic disturbance are given for each hour of 1963 in Tables 13–24. The R_y indices are the hourly ranges in Y, the principal horizontal magnetic field component recorded at Alert, expressed in 10-gamma units.

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 1 Alert

1963

U T	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	727	729	736	750	743	737	747	756	744	744	742	740	741	746	743	734
1-2	729	734	738	746	756	755	763	765	771	754	742	741	749	760	752	736
2-3	733	737	744	750	767	768	780	779	789	759	751	745	758	773	760	742
3-4	739	739	749	754	778	773	778	778	790	763	749	751	762	777	764	744
4-5	751	743	747	762	778	796	802	781	798	765	754	746	769	789	769	748
5-6	750	744	749	766	784	796	793	784	813	762	760	755	771	789	772	752
6-7	744	742	752	753	781	803	795	779	786	761	755	753	767	790	763	748
7-8	746	743	747	755	769	796	792	775	778	753	747	755	763	783	758	748
8-9	738	739	745	752	753	777	772	765	767	749	743	751	754	767	753	743
9-10	735	739	736	739	755	749	736	755	741	736	735	740	741	749	738	737
10-11	725	725	727	733	733	742	740	755	745	731	725	733	734	742	734	727
11-12	715	716	719	723	737	733	749	736	722	712	718	727	726	739	719	719
12-13	712	697	709	714	714	718	722	729	709	700	697	704	710	721	708	702
13-14	696	696	699	705	700	699	709	721	695	690	697	697	700	707	697	696
14-15	675	691	684	692	683	668	683	698	678	685	691	691	685	683	685	687
15-16	688	689	680	683	682	651	669	685	656	678	676	689	677	672	674	686
16-17	678	678	692	676	664	635	666	668	650	654	665	694	668	658	668	679
17-18	676	691	687	668	648	625	656	669	655	656	673	693	666	650	666	683
18-19	684	688	691	669	649	612	664	658	651	667	685	697	668	646	670	688
19-20	686	691	693	668	667	633	664	679	648	678	700	699	676	661	672	694
20-21	696	699	705	687	678	637	664	676	678	695	708	708	686	664	691	703
21-22	702	710	709	703	694	679	686	686	696	706	716	718	700	686	703	712
22-23	713	720	723	724	710	706	701	716	741	727	722	727	719	708	729	720
23-24	723	722	727	732	726	716	731	746	738	726	736	735	730	730	731	729
Mean	715	717	720	721	723	717	728	731	727	719	720	725	722	725	722	719

MEAN VALUES OF MAGNETIC ELEMENTS
NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 2		Alert											1963			
U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	722	729	727	745	733	729	741	729	744	729	731	737	733	733	736	730
1-2	720	728	731	742	756	744	744	742	743	731	729	735	737	746	737	728
2-3	723	729	731	739	742	742	752	742	744	734	730	738	737	744	737	730
3-4	722	724	732	738	738	751	760	742	745	745	729	734	738	748	740	727
4-5	721	726	732	736	748	761	755	734	743	736	728	735	738	750	737	728
5-6	723	730	733	734	749	767	749	737	755	729	731	735	739	750	738	730
6-7	722	725	728	727	743	773	761	743	738	738	733	735	739	755	733	729
7-8	725	725	732	726	753	786	761	725	740	733	731	736	740	756	734	729
8-9	723	727	733	732	737	745	756	706	730	734	729	739	733	736	732	730
9-10	721	721	729	732	753	742	731	709	734	728	728	738	730	733	731	727
10-11	720	720	725	728	733	711	729	723	727	724	724	730	724	724	726	723
11-12	717	718	718	720	717	714	736	735	722	715	723	733	722	725	719	723
12-13	713	714	713	711	712	710	723	725	727	713	720	724	717	717	716	718
13-14	712	712	707	709	707	709	709	722	717	706	715	722	712	712	710	715
14-15	709	711	705	709	700	691	689	705	718	702	707	722	706	696	709	712
15-16	705	709	694	705	693	682	684	700	709	705	712	724	702	690	703	713
16-17	704	712	700	706	690	665	675	682	711	707	712	724	699	678	706	713
17-18	708	711	705	689	675	655	680	680	711	705	714	720	696	673	702	713
18-19	711	707	691	682	673	651	671	683	700	705	713	719	692	670	694	712
19-20	713	714	696	695	684	677	679	678	698	704	716	722	698	680	698	716
20-21	714	714	705	706	704	692	697	686	692	713	720	727	706	695	704	719
21-22	715	720	719	714	720	698	693	707	695	716	719	731	712	704	711	721
22-23	715	718	728	725	728	698	720	720	720	723	726	732	721	716	724	723
23-24	716	723	729	727	731	703	744	722	733	726	728	731	726	725	729	724
Mean	716	719	718	720	722	716	722	716	725	721	723	730	721	719	721	722

MEAN VALUES OF MAGNETIC ELEMENTS
NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 3 Alert

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	741	743	756	765	771	787	775	797	738	780	779	749	765	782	760	753
1-2	741	768	763	746	802	830	796	777	780	798	761	753	776	801	772	756
2-3	763	771	771	745	797	812	773	834	923	807	800	759	796	804	812	773
3-4	794	785	783	767	826	815	787	824	872	798	774	775	800	813	805	782
4-5	848	793	778	774	810	876	839	821	892	803	772	767	814	836	812	795
5-6	811	798	783	780	805	819	820	805	942	797	791	793	812	812	826	798
6-7	788	796	802	739	800	843	861	806	858	809	796	778	806	827	802	790
7-8	788	781	778	765	788	861	800	802	851	791	771	785	797	813	796	781
8-9	766	767	772	742	772	804	798	802	802	790	760	782	780	794	777	769
9-10	761	782	733	741	798	720	742	802	721	753	736	745	753	766	737	756
10-11	742	732	727	710	718	683	766	749	768	740	720	737	733	729	736	733
11-12	708	709	705	691	720	724	776	713	720	704	702	712	715	733	705	708
12-13	729	653	694	696	706	710	705	719	654	669	640	665	687	710	678	672
13-14	664	687	669	685	682	685	695	687	627	634	651	664	669	687	654	666
14-15	609	666	657	641	630	626	698	647	620	633	674	634	645	650	638	646
15-16	666	662	633	640	663	637	654	639	573	629	600	669	639	648	619	649
16-17	629	635	658	640	622	644	632	624	570	551	542	649	616	630	605	614
17-18	631	678	631	647	614	622	591	622	636	551	605	654	623	612	616	642
18-19	648	658	664	673	631	569	614	546	634	631	640	651	630	590	651	649
19-20	657	631	666	613	682	597	637	625	621	656	660	659	642	635	639	652
20-21	683	653	701	646	683	573	624	651	673	685	691	667	661	633	676	674
21-22	686	702	706	712	715	646	656	641	673	714	692	698	687	665	701	695
22-23	729	724	718	743	696	663	675	689	787	755	704	714	716	681	750	718
23-24	729	734	744	730	727	735	760	724	749	731	762	759	740	736	738	746
Mean	721	721	720	710	727	720	728	723	737	717	709	717	721	724	721	717

MEAN VALUES OF MAGNETIC ELEMENTS .

WEST COMPONENT OF HORIZONTAL INTENSITY (All Days)

Table 4 Alert

3000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	791	782	790	812	833	847	830	837	833	800	776	773	809	837	809	781
1-2	784	778	782	793	818	841	816	825	818	791	773	764	799	825	796	775
2-3	779	772	777	779	810	826	815	809	814	780	768	759	791	815	788	770
3-4	772	769	772	770	793	800	790	788	794	769	765	760	778	793	776	766
4-5	769	761	758	763	768	791	786	774	767	751	755	750	766	780	760	759
5-6	757	754	754	755	760	761	761	767	744	739	745	747	754	762	748	751
6-7	749	746	748	741	735	754	738	747	726	725	735	738	740	743	735	742
7-8	742	739	737	731	718	728	718	736	711	717	723	728	727	725	724	733
8-9	724	722	728	723	703	704	703	720	694	707	718	723	714	707	713	722
9-10	718	731	725	709	696	690	691	707	681	698	711	720	706	696	703	720
10-11	715	730	718	708	684	682	691	702	664	698	704	716	701	690	697	716
11-12	718	728	718	707	684	670	676	694	656	698	707	716	698	681	695	717
12-13	724	715	717	708	688	663	646	677	656	704	697	701	691	668	696	709
13-14	721	719	719	711	686	666	649	677	669	706	706	701	694	669	701	712
14-15	713	727	719	710	701	671	655	685	687	720	716	709	701	678	709	716
15-16	731	737	728	708	717	694	683	703	698	734	722	726	715	699	717	729
16-17	742	748	750	717	720	697	702	720	717	741	735	741	728	710	731	742
17-18	755	761	759	736	729	726	728	733	743	756	749	752	744	729	749	754
18-19	769	766	769	758	740	742	759	749	762	774	765	765	760	748	766	766
19-20	774	776	780	771	775	779	772	787	786	794	780	779	779	778	783	777
20-21	782	781	793	796	800	793	794	804	818	802	789	784	795	798	802	784
21-22	786	787	796	803	820	830	811	822	842	810	789	787	807	821	813	787
22-23	793	791	802	805	838	860	833	825	862	819	783	787	816	839	822	788
23-24	793	786	795	802	836	853	832	844	843	798	781	784	812	841	809	786
Mean	754	754	756	751	752	753	745	755	749	751	746	746	751	751	752	750

MEAN VALUES OF MAGNETIC ELEMENTS
WEST COMPONENT OF HORIZONTAL INTENSITY (Quiet Days)

Table 5		Alert											3000 γ +			1963
U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	762	775	772	776	802	798	788	782	795	768	756	749	777	792	778	761
1-2	762	766	767	763	802	781	790	789	779	763	753	748	772	791	768	757
2-3	762	762	762	756	779	762	775	756	768	763	754	746	762	768	762	756
3-4	761	757	759	748	765	763	765	747	759	765	753	743	757	760	758	553
4-5	759	754	754	745	767	765	755	736	753	752	751	744	753	756	751	752
5-6	757	757	752	740	754	763	735	742	761	745	751	744	750	748	750	752
6-7	757	754	748	732	742	758	743	745	745	749	748	744	747	747	743	751
7-8	756	752	749	733	746	739	732	731	742	743	747	742	743	737	742	749
8-9	752	751	745	737	728	717	724	723	733	737	744	735	736	723	738	746
9-10	749	749	740	739	727	721	715	726	731	737	739	728	733	722	737	741
10-11	751	748	739	733	711	707	719	722	730	740	741	718	730	715	736	739
11-12	748	747	737	738	712	712	708	710	733	741	743	730	730	711	737	742
12-13	747	751	739	732	717	704	700	706	738	742	744	729	729	707	738	743
13-14	751	750	740	735	713	713	707	711	738	746	743	731	732	711	740	744
14-15	751	755	745	741	733	710	708	709	748	747	737	739	735	715	745	745
15-16	752	758	747	744	730	716	726	715	748	760	743	743	740	722	750	749
16-17	754	763	762	767	749	714	736	703	755	765	746	744	747	726	762	752
17-18	758	765	768	763	734	732	763	714	758	765	750	743	751	736	763	754
18-19	763	766	763	769	725	748	764	730	764	774	751	747	755	742	767	757
19-20	762	766	778	769	761	772	777	741	775	775	759	751	766	763	774	759
20-21	762	768	784	782	778	783	793	754	788	777	757	753	773	777	783	760
21-22	763	765	785	787	790	787	793	774	808	774	757	753	778	786	788	760
22-23	765	766	780	789	789	806	804	788	826	774	760	753	783	797	792	761
23-24	762	768	776	782	784	802	822	786	817	771	759	750	782	799	787	760
Mean	757	759	758	754	752	749	752	739	762	757	749	742	753	748	758	752

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (Disturbed Days)

Table 6 Alert

3000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	848	843	831	824	851	922	916	897	900	861	818	805	860	897	854	829
1-2	835	830	815	795	854	948	874	834	873	841	812	784	841	877	831	815
2-3	817	808	801	767	850	894	831	803	939	803	787	767	822	844	827	795
3-4	806	802	796	763	810	874	797	819	868	766	783	774	805	825	798	791
4-5	796	768	755	750	764	833	797	765	788	717	757	746	770	789	753	767
5-6	750	751	748	754	739	740	761	741	704	696	727	744	738	745	726	743
6-7	724	719	736	733	731	736	747	711	693	660	701	717	717	731	705	715
7-8	712	695	704	737	701	714	693	686	655	646	688	691	693	698	685	696
8-9	675	639	696	703	678	655	692	680	589	629	706	686	669	676	654	677
9-10	625	710	695	696	664	639	669	666	602	608	677	697	662	659	650	677
10-11	621	713	687	685	623	681	680	640	590	610	640	691	655	656	643	666
11-12	632	701	672	676	635	698	660	633	610	626	627	677	654	657	646	659
12-13	677	643	680	675	658	622	563	605	554	628	599	647	629	612	634	641
13-14	653	684	690	677	659	618	566	652	594	600	617	648	638	624	640	650
14-15	624	698	691	662	687	661	647	701	684	636	691	669	671	674	668	671
15-16	687	716	702	685	727	677	666	719	691	677	694	722	697	697	689	705
16-17	727	743	742	694	720	667	683	747	730	676	705	736	714	704	710	728
17-18	753	772	758	741	754	724	697	763	771	710	772	778	749	734	745	769
18-19	785	771	790	793	759	714	764	721	778	756	808	781	768	739	779	786
19-20	803	798	797	804	811	792	787	798	788	818	831	823	804	797	802	814
20-21	813	804	833	852	833	796	849	839	859	841	877	840	836	829	846	833
21-22	807	819	831	841	856	889	851	877	905	839	850	849	851	868	854	831
22-23	822	824	821	856	874	942	874	869	929	839	843	834	861	890	861	831
23-24	839	821	825	829	891	929	877	867	850	776	852	814	847	891	817	832
Mean	743	753	754	750	755	765	748	751	748	719	744	747	748	755	742	747

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 7 Alert

55,000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	387	385	383	380	362	330	359	398	426	434	435	430	392	362	406	409
1-2	389	383	384	381	364	341	362	400	430	433	435	428	394	367	407	409
2-3	391	383	385	383	370	350	362	398	430	434	434	427	396	370	408	409
3-4	386	383	384	384	373	352	357	398	430	433	436	425	395	370	408	407
4-5	386	382	384	382	369	361	360	401	428	432	435	424	395	373	406	407
5-6	387	381	384	382	368	347	362	403	430	433	435	423	395	370	407	407
6-7	386	382	383	382	365	345	367	401	429	434	434	423	394	369	407	406
7-8	384	381	383	381	363	342	362	402	428	433	432	423	393	367	406	405
8-9	383	382	383	379	364	330	362	405	426	431	431	424	392	365	405	405
9-10	383	385	382	381	358	330	366	410	422	428	429	422	391	366	403	405
10-11	384	382	380	379	371	335	357	411	421	426	429	422	391	368	401	404
11-12	385	379	382	379	369	339	345	409	415	428	431	422	390	365	401	404
12-13	383	377	381	379	358	332	338	403	412	428	431	422	387	358	400	403
13-14	381	380	381	378	360	320	324	404	419	429	435	424	386	352	402	405
14-15	384	379	379	378	358	317	341	398	416	426	435	428	387	354	400	407
15-16	387	381	378	377	354	312	347	393	415	424	436	431	386	351	398	409
16-17	388	383	376	375	360	324	349	391	415	424	439	431	388	356	398	410
17-18	389	383	374	375	360	328	350	395	415	429	441	432	389	358	398	411
18-19	388	381	376	376	358	324	352	399	417	431	440	433	390	358	400	411
19-20	387	384	376	375	366	335	352	397	418	433	440	435	391	362	400	411
20-21	390	386	377	375	365	340	356	397	419	433	441	436	393	365	401	413
21-22	391	385	379	374	360	342	359	404	421	436	441	436	394	366	403	413
22-23	391	385	382	374	360	337	361	408	419	436	439	434	394	367	403	412
23-24	389	384	382	377	360	333	362	408	421	434	436	433	393	366	403	410
Mean	387	382	381	379	363	335	355	401	422	431	435	428	392	364	403	408

MEAN VALUES OF MAGNETIC ELEMENTS
VERTICAL INTENSITY (Quiet Days)

Table 8 Alert

55,000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	376	381	376	376	351	329	351	384	407	426	427	422	384	354	396	402
1-2	376	378	377	375	353	338	352	377	410	423	427	421	384	355	396	401
2-3	376	379	378	378	357	347	352	372	407	427	426	421	385	357	398	400
3-4	377	377	380	379	364	349	356	379	405	426	425	420	386	362	397	400
4-5	375	379	379	379	370	356	355	384	406	428	425	421	388	366	398	400
5-6	375	379	378	377	374	350	355	390	406	430	427	420	388	367	398	400
6-7	375	377	379	379	374	354	354	386	406	429	426	419	388	367	398	399
7-8	375	376	379	377	372	340	343	391	409	427	426	417	386	362	398	398
8-9	375	375	377	370	381	327	341	403	409	423	425	415	385	363	395	397
9-10	375	376	375	370	369	314	360	414	410	425	426	417	386	364	395	399
10-11	375	375	375	368	363	309	361	423	413	425	426	417	386	364	395	398
11-12	374	377	376	369	377	329	338	423	418	427	426	419	388	367	398	399
12-13	375	376	377	373	380	337	335	422	417	427	424	416	388	368	398	398
13-14	373	376	374	383	374	341	331	416	414	426	422	415	387	366	399	396
14-15	373	377	372	384	364	348	351	391	412	422	424	415	386	364	397	397
15-16	373	374	368	377	355	344	340	373	403	421	425	416	381	353	392	397
16-17	374	373	362	373	356	344	338	377	406	422	424	417	381	354	391	397
17-18	374	375	361	368	350	343	343	381	405	418	426	419	380	354	388	398
18-19	374	373	361	366	350	332	342	390	400	418	426	417	379	354	386	397
19-20	373	373	368	362	355	335	335	389	398	418	427	418	379	353	386	398
20-21	373	372	368	360	356	339	337	391	395	421	424	419	380	356	386	397
21-22	373	372	368	363	357	347	337	395	398	418	424	417	381	359	387	397
22-23	375	374	370	364	355	349	342	391	404	420	425	417	382	359	389	398
23-24	375	375	372	370	358	350	347	386	407	422	424	417	384	360	393	398
Mean	375	376	373	373	363	340	346	393	407	424	425	418	384	360	394	399

MEAN VALUES OF MAGNETIC ELEMENTS
VERTICAL INTENSITY (Disturbed Days)

Table 9 Alert 55,000 γ + 1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	402	407	398	378	357	341	345	382	467	461	452	448	403	356	426	427
1-2	409	403	401	379	360	341	324	381	494	465	450	444	404	352	435	426
2-3	410	401	401	387	362	327	334	381	494	463	450	442	404	351	436	426
3-4	400	399	398	384	367	331	334	385	503	461	460	437	405	354	436	425
4-5	406	392	394	380	364	340	337	385	486	452	455	431	402	357	428	421
5-6	414	392	399	382	374	331	338	387	474	450	446	431	402	358	426	421
6-7	412	399	393	388	388	328	323	388	481	461	449	433	404	357	431	423
7-8	406	399	396	387	385	313	332	384	464	462	452	435	401	353	427	423
8-9	399	403	397	388	378	304	344	372	461	460	450	444	400	350	426	424
9-10	399	416	396	381	370	306	347	383	453	444	438	435	397	351	418	422
10-11	407	403	392	365	355	355	328	384	450	440	441	433	396	355	412	421
11-12	418	391	392	367	357	350	310	385	421	452	445	431	393	350	408	421
12-13	412	385	388	364	358	341	295	349	399	453	451	436	386	336	401	421
13-14	405	396	389	360	348	298	252	354	430	452	467	444	383	313	408	428
14-15	410	390	392	359	334	286	298	352	412	449	462	455	383	317	403	429
15-16	420	397	394	367	341	296	332	347	420	450	459	460	390	329	408	434
16-17	421	407	395	371	341	349	320	351	439	455	474	454	398	340	415	439
17-18	421	397	400	383	352	356	345	354	430	472	478	459	404	352	421	439
18-19	417	388	404	391	354	327	369	374	438	465	470	458	405	356	425	433
19-20	412	408	394	374	361	338	345	380	443	470	466	469	405	356	420	439
20-21	420	418	397	373	352	367	361	371	455	473	476	475	411	363	424	447
21-22	414	413	404	364	336	359	356	388	474	493	483	481	414	360	434	448
22-23	408	403	410	370	358	344	361	403	447	468	479	477	411	367	424	442
23-24	409	401	402	362	367	352	368	405	428	450	471	458	406	373	410	435
Mean	410	400	397	375	359	333	333	376	453	459	459	449	400	350	421	430

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 10 Alert

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	713	693	724	743	717	744	727	733	729	724	717	723
2	714	719	729	705	731	703	716	756	717	722	705	714
3	712	712	724	726	736	722	721	752	724	726	736	717
4	700	716	724	699	738	725	705	758	726	731	719	713
5	718	716	721	725	734	712	731	792	727	720	723	714
6	716	721	709	712	718	665	755	803	725	720	710	724
7	713	716	714	729	724	735	748	---	725	718	698	724
8	718	721	714	717	726	718	716	---	741	726	722	731
9	717	712	725	726	746	738	734	747	736	723	703	734
10	717	725	713	724	713	719	731	702	731	708	720	731
11	702	720	726	721	734	707	---	699	709	716	727	728
12	713	727	722	722	727	701	723	720	742	696	720	731
13	720	709	717	713	724	740	734	713	731	725	718	731
14	698	725	721	718	744	707	728	724	734	714	731	716
15	731	716	723	745	718	724	737	692	702	724	723	729
16	707	710	721	720	725	710	665	722	716	718	726	724
17	716	722	712	724	723	733	761	723	760	724	707	724
18	719	714	720	711	715	708	716	741	715	711	724	730
19	702	718	726	716	698	696	734	657	718	721	724	723
20	723	712	725	717	726	738	726	760	718	705	725	719
21	716	708	727	716	696	753	735	742	707	731	716	722
22	714	721	718	713	724	722	734	724	763	720	710	720
23	720	717	709	760	726	713	696	751	733	710	727	726
24	707	719	713	720	719	713	723	724	705	748	704	720
25	716	720	723	723	713	712	720	727	737	725	740	731
26	721	719	717	715	715	719	737	729	725	718	730	732
27	719	720	716	738	724	727	731	707	711	713	728	734
28	718	725	719	718	726	692	747	714	716	695	731	720
29	707		726	721	727	688	710	736	729	671	719	718
30	727		726	694	715	722	739	712	738	756	725	726
31	730		726		709		746	724		722		731
Mean	715	717	720	721	723	717	728	721	727	719	720	725

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 11 Alert

3000 γ +

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	759	746	756	755	740	737	755	754	725	742	745	752
2	759	759	752	756	753	738	738	798	754	746	752	746
3	757	755	752	750	725	749	753	801	732	746	750	741
4	753	759	749	770	758	749	735	779	740	735	753	759
5	748	748	752	757	752	746	735	826	749	741	754	747
6	760	751	760	741	758	758	738	---	748	752	743	747
7	755	757	769	744	748	754	716	---	753	753	744	735
8	760	757	745	752	748	737	737	776	741	741	738	743
9	756	766	756	745	752	758	739	724	733	753	748	731
10	757	740	754	749	745	723	736	719	748	754	754	752
11	759	758	759	750	736	772	---	731	752	738	750	750
12	760	767	747	747	749	749	739	733	738	740	739	751
13	749	745	741	722	763	775	752	740	765	767	746	753
14	747	754	760	725	752	740	740	751	708	730	753	740
15	751	740	755	746	751	758	747	745	758	765	749	744
16	755	750	762	758	760	753	771	740	749	738	751	747
17	751	757	757	751	749	751	686	773	715	758	731	751
18	765	757	745	744	755	729	736	763	740	758	749	748
19	749	758	757	784	752	768	737	760	733	749	749	755
20	752	760	767	731	772	740	771	751	746	763	751	739
21	756	747	758	753	746	795	711	742	755	757	745	752
22	757	757	758	763	749	753	735	762	782	756	745	743
23	760	752	751	747	745	743	767	748	734	756	746	747
24	757	761	761	756	754	743	743	760	760	745	737	755
25	754	759	755	753	725	777	757	768	770	765	731	743
26	755	751	754	758	764	807	748	745	770	754	744	747
27	754	760	756	743	754	759	752	746	781	761	748	746
28	754	753	758	762	774	746	777	742	776	768	747	752
29	759		753	753	763	749	781	733	760	772	744	735
30	733		759	753	774	737	742	750	768	740	736	747
31	734		760		751		774	740		749		748
Mean	754	754	756	751	752	753	745	755	749	751	746	746

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (gammas)

Table 12 Alert

55,000 γ +

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	385	405	391	381	351	265	330	439	417	431	447	429
2	381	389	385	367	352	263	335	425	405	426	443	429
3	380	387	378	372	365	303	343	451	417	421	448	453
4	380	385	381	366	392	317	377	421	410	417	439	452
5	379	380	383	377	354	338	418	462	410	414	429	461
6	377	383	376	374	355	345	408	444	407	413	427	453
7	378	382	382	376	349	396	405	---	405	418	454	447
8	379	379	384	381	376	378	368	---	408	426	472	450
9	377	375	383	375	393	381	413	377	410	419	467	435
10	376	401	415	375	408	397	375	337	406	411	465	424
11	376	400	410	384	398	338	---	360	402	427	453	419
12	378	398	388	392	396	350	385	380	424	447	446	420
13	393	405	380	388	387	380	374	404	408	436	433	426
14	407	398	378	396	404	280	368	401	410	447	431	428
15	409	393	384	384	370	294	354	377	403	435	425	424
16	417	381	377	394	389	290	268	420	400	440	422	422
17	401	379	382	392	350	339	325	400	409	425	433	420
18	396	373	389	396	371	321	324	339	415	421	429	416
19	409	369	388	363	317	294	405	367	400	423	424	416
20	390	372	382	365	317	363	387	376	396	428	423	423
21	380	379	375	358	368	368	277	382	404	420	422	419
22	378	375	376	368	348	380	311	395	480	417	420	427
23	375	368	365	388	369	373	298	389	435	424	424	422
24	377	371	368	387	368	363	334	388	458	463	438	422
25	380	371	374	390	384	316	320	415	471	446	442	415
26	377	371	370	392	395	328	346	421	453	438	424	416
27	371	371	362	399	386	311	351	416	442	424	420	412
28	368	370	372	360	315	316	377	416	466	428	421	417
29	370		377	361	314	326	318	425	445	467	415	426
30	398		376	363	329	345	353	404	442	473	429	422
31	446		373		312		420	429		452		416
Mean	387	382	381	379	363	335	355	401	422	431	435	428

Table 13 Alert

Ry (Hourly Ranges in 10 γ units)

January 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	2	2	3	2	2	1	2	2	2	3	4	5	4	5	3	3	3	4	2	1	2	1	2	2	2	3
2	1	1	2	2	2	1	1	1	1	1	1	1	2	1	1	2	3	2	2	2	1	1	1	1	1	1
3	1	1	1	2	1	2	1	1	2	2	2	2	4	2	2	1	2	2	3	2	2	1	1	1	2	2
4	4	5	2	2	2	1	2	1	1	1	1	3	3	5	9	4	5	4	5	4	4	2	1	2	2	3
5	1	2	1	1	1	2	1	2	6	2	4	2	6	5	3	3	3	2	1	2	1	3	2	2	2	2
6	2	2	2	1	1	1	1	2	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1
7	1	4	4	5	2	2	1	1	2	1	1	2	3	5	3	3	3	3	3	2	2	1	1	1	1	2
8	1	2	2	2	1	2	1	2	1	2	2	2	2	2	2	2	1	1	1	2	2	3	3	2	2	2
9	1	1	2	2	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	1	1	1	1	0	1	1
10	3	2	2	2	1	1	2	2	2	2	2	2	2	3	4	2	2	2	1	1	1	1	1	1	1	2
11	1	1	1	1	1	1	1	1	1	1	1	2	3	5	5	3	4	2	3	5	2	2	3	2	2	2
12	2	1	2	2	2	1	2	1	2	2	2	2	1	2	2	3	4	4	3	2	3	4	5	7	3	3
13	7	21	14	5	13	7	4	9	10	14	33	41	16	12	9	7	4	5	6	8	9	6	14	8	12	12
14	11	10	9	15	14	7	8	6	12	10	27	43	6	9	20	26	8	9	8	11	7	6	5	9	12	12
15	14	11	12	7	8	10	7	8	8	18	11	14	19	16	16	18	12	6	8	7	8	6	7	9	11	11
16	12	30	20	6	7	8	5	8	8	13	8	12	14	10	13	17	17	5	6	5	11	9	7	12	11	11
17	13	5	5	8	7	9	7	7	20	8	9	8	11	5	8	6	11	12	5	14	7	5	6	4	8	8
18	8	7	7	7	7	3	3	3	4	6	5	6	9	11	5	9	8	5	6	11	7	6	6	16	7	7
19	11	5	12	8	4	6	5	3	11	15	9	10	11	10	13	9	8	10	3	4	8	8	7	8	8	8
20	7	5	2	5	2	5	5	4	4	6	7	6	7	4	6	4	2	1	2	2	2	3	2	2	4	4
21	2	1	1	2	4	2	1	2	1	2	2	4	5	2	3	3	2	2	2	2	2	1	1	2	2	2
22	2	1	2	1	1	3	4	3	2	2	1	2	5	3	3	1	1	3	5	2	2	2	4	5	2	2
23	6	8	8	4	5	4	2	3	2	4	5	4	8	7	4	3	5	4	3	3	4	5	8	3	5	5
24	5	3	3	2	5	5	2	3	3	6	9	9	7	4	7	3	8	8	6	5	6	8	8	4	5	5
25	5	3	5	4	3	2	2	2	2	3	6	7	5	8	7	7	2	4	5	3	3	2	2	2	4	4
26	2	2	2	3	2	1	1	2	2	4	2	2	2	3	2	2	2	2	1	2	2	1	1	2	2	2
27	1	1	2	2	2	1	2	2	2	2	2	2	5	2	2	1	2	1	2	1	1	1	1	1	1	2
28	4	1	3	1	1	1	1	2	1	1	1	1	2	2	1	2	1	1	1	1	1	2	2	1	1	1
29	2	1	1	1	1	1	1	1	1	1	1	4	3	2	2	3	2	4	2	4	3	8	5	3	2	2
30	5	5	9	10	7	5	3	4	6	17	9	5	8	7	8	11	12	6	5	9	14	10	5	11	8	8
31	11	7	10	5	7	5	7	4	14	5	6	5	8	26	14	17	9	16	5	2	4	5	4	5	8	8
Mean	5	5	5	4	4	3	3	3	4	5	6	7	6	6	6	6	5	4	3	4	4	4	4	4	4	4

Table 14 Alert

Ry (Hourly Ranges in 10 γ units)

February 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	2	2	2	1	2	1	2	7	3	5	8	16	10	14	5	5	7	3	5	10	7	6	6	5
2	2	2	2	4	1	1	2	1	1	1	1	1	3	1	2	1	1	1	2	1	2	1	1	1	1
3	2	2	2	2	1	2	1	1	1	1	1	4	4	3	5	4	1	2	3	2	2	2	1	1	2
4	2	1	2	1	2	2	1	1	1	1	1	1	1	2	3	3	3	4	2	3	5	2	3	2	2
5	1	1	1	2	2	1	2	1	2	3	3	7	9	4	2	6	3	2	2	1	2	2	2	1	3
6	1	2	3	3	2	2	1	1	1	2	3	3	2	3	4	5	5	3	3	2	2	2	2	2	2
7	1	2	2	1	3	2	2	1	0	2	4	4	3	1	2	3	1	2	1	1	3	5	4	2	2
8	2	1	1	1	1	1	1	1	1	1	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1
9	1	1	1	1	2	4	1	1	1	1	1	2	2	2	6	2	1	1	3	1	2	4	15	9	3
10	12	6	10	7	6	6	8	21	10	16	18	20	19	29	12	9	8	9	10	7	22	23	8	8	13
11	13	9	11	12	9	12	3	6	7	11	8	20	16	9	14	12	12	8	10	8	7	13	7	10	10
12	16	11	18	17	14	10	6	8	19	11	10	9	8	12	5	13	5	5	8	9	11	17	14	11	11
13	13	14	11	9	8	7	12	12	12	10	17	14	18	23	18	8	15	12	9	18	6	5	10	5	12
14	9	8	13	9	9	4	5	9	28	7	6	14	14	11	12	6	3	5	5	7	5	4	5	10	9
15	6	9	6	6	10	4	2	5	5	6	8	10	6	12	25	4	6	9	5	5	4	2	2	2	7
16	6	2	5	4	2	3	3	1	3	3	5	4	12	7	4	5	10	3	3	2	2	2	2	1	4
17	2	2	1	2	3	4	2	2	2	2	5	5	4	3	4	4	3	5	2	4	1	3	1	2	3
18	2	2	5	1	3	2	1	2	1	1	4	5	4	3	4	4	7	5	3	2	2	2	2	2	3
19	2	1	2	1	1	1	1	1	1	1	1	4	3	7	2	3	4	3	1	1	1	3	2	2	2
20	1	2	2	2	3	5	3	4	2	4	5	4	8	7	5	7	4	3	4	3	4	4	14	14	5
21	7	2	8	2	2	2	2	3	2	2	4	6	6	7	4	9	7	6	5	2	4	5	5	2	4
22	2	5	3	4	4	4	3	2	6	6	4	5	4	3	5	5	4	5	8	4	2	5	2	3	4
23	2	1	2	2	5	2	4	3	3	4	7	8	11	5	2	5	6	5	3	3	2	4	1	3	4
24	2	1	2	1	1	2	1	1	1	2	3	3	2	2	3	4	4	3	4	2	2	2	4	4	2
25	3	7	6	6	3	1	2	1	1	2	3	3	7	6	6	4	3	3	2	2	3	2	2	2	3
26	2	2	2	2	4	3	3	3	3	2	5	7	9	8	5	4	3	2	4	4	2	2	3	2	4
27	2	9	2	1	1	1	1	1	2	1	1	1	1	1	2	2	1	2	3	1	1	2	2	2	2
28	4	3	1	2	3	2	2	1	3	5	3	3	6	6	14	3	2	2	2	2	2	4	4	3	3
29																									
30																									
31																									
Mean	4	4	5	4	4	3	3	3	4	4	5	6	7	7	7	5	5	4	4	4	4	5	4	4	5

Table 15 Alert

Ry (Hourly Ranges in 10 γ units)

March 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	3	3	4	4	10	8	7	8	15	5	5	5	6	4	7	8	7	3	8	2	2	2	2	4	5	
2	4	3	5	2	4	5	2	2	2	3	6	13	9	8	14	4	4	6	2	4	2	2	2	4	5	
3	2	1	2	2	2	2	4	5	5	3	3	4	10	4	8	2	2	3	3	3	3	8	8	4	4	
4	4	4	4	2	4	3	2	2	3	2	3	4	4	7	7	4	2	2	3	3	2	2	1	2	3	
5	2	1	1	2	1	2	1	2	2	2	4	4	5	5	4	2	3	1	4	2	4	5	3	5	3	
6	4	5	5	2	4	2	2	1	1	1	2	2	3	4	4	5	4	4	4	3	4	3	2	3	3	
7	2	3	4	2	2	3	1	2	2	2	2	1	1	1	1	1	1	1	3	5	4	9	18	24	4	
8	17	13	5	13	4	8	9	6	5	6	15	21	24	13	17	9	9	17	9	11	17	11	11	10	12	
9	14	11	10	8	14	13	7	2	6	4	16	11	15	23	10	9	9	7	8	6	10	10	7	6	10	
10	9	11	14	7	10	6	7	5	10	13	15	18	10	7	15	28	17	25	11	22	12	11	9	12	13	
11	14	19	12	11	7	6	5	4	6	5	4	4	7	8	17	11	15	11	13	13	9	8	12	8	10	
12	11	8	7	9	5	8	5	5	8	8	12	11	10	10	14	7	17	3	6	10	8	3	3	3	8	
13	4	5	2	2	3	3	2	4	4	3	7	4	10	13	20	36	6	6	6	6	3	2	3	3	7	
14	7	3	2	2	1	2	1	1	1	1	1	2	2	3	2	2	2	5	3	5	2	4	3	4	2	
15	2	2	2	2	3	3	1	3	2	2	2	2	2	1	1	2	2	2	2	2	1	1	2	2	2	
16	2	1	1	1	1	1	1	1	2	1	2	1	1	2	4	2	2	3	2	1	2	3	2	2	2	
17	2	4	1	1	1	1	1	1	1	2	1	2	4	4	2	2	4	2	7	6	7	5	11	4	3	
18	5	3	3	5	6	2	2	3	2	5	2	4	5	6	5	5	5	5	5	5	3	5	3	5	4	
19	5	3	3	6	5	4	6	3	2	3	2	3	4	4	4	4	5	3	3	11	2	2	8	9	4	
20	2	2	4	2	2	2	2	1	1	1	1	2	2	1	3	4	4	2	4	5	4	7	8	9	3	
21	5	4	5	4	5	4	5	2	2	2	2	2	3	3	2	4	2	2	2	1	1	2	2	2	3	
22	1	1	2	1	1	1	1	1	1	3	2	1	2	4	3	7	3	2	4	2	2	1	2	2	2	
23	4	10	8	3	2	4	4	4	2	5	14	7	11	8	20	13	7	6	4	4	2	4	5	3	6	
24	2	6	3	2	2	2	2	2	3	2	3	6	5	2	8	7	4	9	2	2	2	3	5	6	4	
25	4	2	2	2	1	2	2	1	1	2	2	2	5	4	4	3	4	6	2	4	4	2	2	2	3	
26	2	2	2	2	1	1	1	1	1	1	2	3	2	4	8	4	3	6	8	5	5	3	2	1	3	
27	2	3	3	2	1	1	1	1	1	1	1	2	3	2	2	2	2	3	2	2	4	1	1	2	2	
28	1	1	2	1	2	2	1	2	2	3	3	2	2	4	2	2	3	2	2	2	4	4	5	6	3	
29	5	3	2	6	2	7	2	2	2	2	2	3	4	4	4	5	5	5	8	4	5	4	3	3	4	
30	3	5	2	1	3	2	2	2	1	1	3	2	4	2	1	2	3	1	2	3	3	5	1	1	2	
31	1	2	1	3	2	2	2	2	2	2	1	3	3	3	6	2	2	2	1	2	3	3	9	5	2	
Mean	5	5	4	4	4	4	3	3	3	3	4	5	6	5	7	7	5	5	5	5	4	4	5	5	5	

Table 16 Alert

Ry (Hourly Ranges in 10 γ units)

April 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	4	8	5	9	7	5	6	3	2	3	2	2	4	12	5	6	6	5	5	6	3	2	1	1	5
2	3	4	4	3	1	2	1	2	1	1	1	1	3	2	2	5	4	7	3	7	5	2	2	3	3
3	6	3	2	5	4	2	1	2	4	3	3	2	4	5	3	5	3	2	2	2	2	2	1	2	3
4	1	2	2	1	3	3	4	5	6	5	7	6	13	9	15	20	7	13	11	10	12	12	21	15	8
5	23	29	11	16	13	11	13	8	10	7	9	8	12	13	18	17	12	16	9	7	7	8	8	12	12
6	9	14	9	8	9	13	9	11	14	9	11	19	9	11	9	11	12	8	11	18	12	13	5	8	11
7	8	5	8	15	6	8	11	13	11	16	9	14	7	15	12	10	12	6	5	5	3	6	8	8	9
8	8	7	11	8	4	4	3	4	5	8	7	11	15	3	3	6	7	5	11	7	8	5	5	5	7
9	2	2	3	3	7	5	5	5	5	4	4	4	10	9	8	8	5	10	5	4	6	6	2	3	5
10	1	2	2	2	1	1	1	2	1	3	2	2	5	6	4	3	2	1	6	5	6	2	3	2	3
11	1	2	3	1	1	1	2	3	6	5	2	2	2	5	5	2	4	2	4	5	3	1	5	6	3
12	14	14	3	9	4	3	3	6	4	5	9	8	3	16	8	3	8	9	5	4	3	7	2	3	6
13	2	2	2	4	2	2	4	2	5	8	5	2	4	5	9	5	3	8	9	4	13	5	7	4	5
14	7	7	8	7	3	8	7	7	5	12	9	7	15	7	7	12	11	8	8	10	7	9	8	14	8
15	8	6	10	8	9	5	13	5	4	5	3	9	8	15	5	7	3	5	4	3	3	7	6	6	7
16	4	2	5	8	10	7	9	4	5	5	3	3	6	8	5	10	4	4	8	5	11	6	4	8	6
17	5	5	2	5	6	4	2	3	4	3	3	3	5	8	3	4	4	4	7	10	4	3	2	2	4
18	4	2	2	2	6	6	2	4	5	2	2	6	7	9	9	16	15	8	9	5	18	7	5	9	7
19	8	6	7	8	11	9	12	11	5	4	5	4	5	3	7	9	15	8	21	16	13	7	7	3	8
20	21	6	3	6	15	11	7	5	2	6	7	5	8	3	4	11	14	5	3	2	6	4	2	2	7
21	1	1	2	3	5	2	1	1	2	2	3	4	5	3	5	4	4	5	8	4	4	4	3	6	3
22	6	18	16	7	5	3	5	8	7	3	3	6	9	3	8	9	7	4	7	9	12	11	4	4	7
23	3	5	7	6	5	4	5	3	5	3	4	4	2	4	3	4	3	7	10	4	6	2	2	2	4
24	2	1	1	4	2	4	3	2	2	3	2	2	4	3	4	2	8	4	5	3	3	2	2	2	3
25	2	1	4	2	3	3	5	5	3	3	1	2	2	2	3	2	4	5	2	2	3	7	2	6	3
26	3	5	5	2	4	4	3	3	2	2	2	2	4	5	6	4	4	3	2	3	6	4	5	6	4
27	5	7	13	6	3	5	3	4	9	3	4	5	8	18	14	17	10	12	8	8	3	2	2	5	7
28	7	2	1	1	2	2	4	3	5	3	2	4	1	3	2	2	5	2	2	2	3	3	4	3	3
29	2	4	1	12	4	3	5	3	2	2	1	4	2	2	2	4	2	2	3	4	5	3	3	3	3
30	2	1	4	5	4	3	4	3	2	5	6	4	5	6	8	11	27	8	34	33	20	25	23	58	13
31																									
Mean	6	6	5	6	5	5	5	5	5	5	4	5	6	7	7	8	7	6	8	7	7	6	5	7	6

Table 17 Alert

Ry (Hourly Ranges in 10γ units)

May 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	21	25	21	27	10	18	23	14	15	7	9	12	18	15	17	18	14	16	7	11	10	13	19	19	16	
2	18	12	16	7	14	16	18	10	11	19	11	24	30	14	18	15	11	17	12	10	8	6	31	18	15	
3	9	16	19	12	13	12	10	16	15	14	7	9	14	12	7	15	12	15	18	17	13	11	10	9	13	
4	7	8	9	14	11	8	5	4	19	12	21	10	19	9	10	10	10	14	9	7	6	9	18	9	11	
5	8	17	19	18	14	11	10	16	6	6	6	10	6	6	9	7	9	13	14	14	9	7	3	5	8	10
6	8	4	9	8	9	8	10	9	3	5	3	6	3	8	5	9	12	14	8	7	10	6	6	5	7	
7	5	3	6	4	8	8	6	11	4	9	12	7	6	10	6	4	5	11	14	4	7	14	8	8	7	
8	14	18	12	11	12	11	9	10	17	10	6	9	5	11	13	9	14	5	9	12	15	30	8	8	12	
9	6	7	9	8	13	9	13	8	6	11	5	11	10	11	21	25	16	8	19	16	7	10	7	10	11	
10	4	8	11	21	15	8	9	7	7	9	10	8	22	13	13	10	15	9	6	20	7	7	8	10	11	
11	13	5	15	12	17	8	6	10	11	6	7	8	19	9	12	9	9	4	13	10	6	5	11	7	10	
12	8	7	12	7	6	8	7	9	4	4	6	4	10	15	10	7	6	17	17	18	8	7	11	8	9	
13	6	8	20	30	21	11	12	7	8	9	9	18	15	9	15	18	8	11	8	5	11	29	22	21	14	
14	22	9	4	8	7	11	15	7	10	9	2	5	9	7	5	10	9	8	11	13	8	11	7	8	9	
15	7	8	11	7	6	4	7	6	5	4	4	4	5	5	10	6	8	6	5	5	5	9	5	6	6	
16	7	6	8	4	3	3	2	2	3	2	2	2	2	3	3	5	2	3	2	2	3	5	4	2	3	
17	2	2	2	4	3	5	17	3	9	7	10	4	3	8	7	5	9	13	13	3	5	4	3	3	6	
18	1	5	2	6	6	2	3	10	5	5	2	5	9	5	2	5	4	4	8	10	6	3	2	5	5	
19	2	6	2	5	2	2	7	6	2	6	5	2	7	9	6	5	16	12	12	4	8	4	5	8	6	
20	6	8	4	7	9	5	5	7	5	5	2	2	2	4	2	4	2	4	3	2	5	8	7	2	5	
21	3	5	5	6	8	4	1	4	3	4	5	3	3	10	9	4	9	10	8	6	10	4	2	7	6	
22	5	5	2	5	4	6	5	6	3	3	1	2	2	5	7	7	4	7	2	2	4	3	2	3	4	
23	1	1	2	2	6	3	2	6	6	3	3	2	5	6	9	4	6	6	5	4	4	2	1	2	4	
24	4	2	2	3	1	2	4	5	2	2	2	1	4	3	3	2	4	8	7	2	3	2	1	1	3	
25	3	6	6	2	5	5	13	8	16	13	10	11	20	6	13	17	10	9	9	10	6	8	4	4	9	
26	8	6	5	6	3	5	4	4	4	3	5	6	6	13	7	7	5	7	7	8	5	6	5	12	6	
27	6	4	5	3	8	9	8	3	7	3	5	7	5	7	5	3	10	19	13	8	5	9	8	12	7	
28	13	21	18	15	23	23	23	25	17	12	8	18	17	6	11	7	15	6	11	10	14	16	21	26	16	
29	14	16	28	18	28	15	15	17	13	8	12	11	12	13	22	21	13	18	36	19	13	9	7	6	16	
30	14	9	14	10	11	7	19	10	10	7	20	18	7	9	8	11	12	9	8	14	13	14	8	8	11	
31	7	2	5	5	3	21	11	12	9	6	12	12	22	25	9	13	9	10	13	12	19	20	7	8	11	
Mean	8	8	10	9	10	9	10	9	8	7	7	8	10	9	9	10	9	10	11	9	8	9	9	8	9	

Table 18 Alert

Ry (Hourly Ranges in 10 γ units)

June 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	7	11	10	8	13	11	12	6	10	12	16	16	13	16	27	15	28	15	6	6	10	10	8	11	13	
2	12	11	8	9	10	11	15	19	14	20	12	4	13	10	7	7	13	19	12	18	17	3	8	5	12	
3	15	9	11	18	15	8	10	9	8	7	10	10	18	17	17	9	6	15	9	20	13	17	5	15	12	
4	7	6	4	9	8	8	11	8	7	9	9	7	3	4	13	7	5	6	9	12	5	9	3	5	7	
5	7	3	3	2	7	8	3	5	3	3	2	2	2	2	2	2	2	3	2	3	2	2	3	1	3	
6	5	3	2	2	5	10	2	6	5	4	2	4	2	4	2	12	7	11	17	11	15	8	25	31	8	
7	11	23	10	16	9	14	10	13	11	17	9	14	16	16	22	9	8	15	13	9	22	20	18	6	14	
8	10	12	9	12	7	10	18	14	11	19	17	17	8	12	18	15	6	16	18	11	11	10	27	12	13	
9	10	5	11	15	20	18	14	10	12	7	8	14	10	10	17	11	7	14	5	6	8	8	8	4	11	
10	10	9	11	5	6	4	13	16	4	5	7	8	4	13	8	7	9	9	9	7	7	8	6	8	8	
11	7	5	6	13	21	19	7	7	10	6	3	5	7	14	8	15	8	12	4	2	5	4	6	3	8	
12	8	9	9	5	4	3	6	5	2	3	6	3	5	2	5	7	3	6	6	16	3	5	4	3	5	
13	3	4	6	8	5	8	7	4	6	7	5	8	7	11	5	2	10	9	5	4	10	6	5	3	6	
14	9	12	5	4	5	7	9	10	15	7	7	5	5	7	17	19	18	14	6	2	4	2	5	13	9	
15	7	9	10	10	8	8	6	6	2	4	5	7	6	4	5	6	11	5	14	9	5	21	3	5	7	
16	8	4	3	2	4	4	5	5	4	4	5	4	3	3	4	10	4	11	8	8	6	5	3	8	5	
17	6	17	5	12	14	4	10	12	13	5	6	3	6	6	5	7	6	8	7	8	6	15	5	8	8	
18	7	4	5	8	9	14	23	26	8	12	15	46	27	18	29	12	11	4	10	20	8	12	7	8	14	
19	10	7	5	9	8	8	18	5	5	4	3	3	2	3	17	9	22	18	18	14	8	9	8	7	9	
20	11	16	24	14	14	10	11	8	6	8	14	14	10	11	9	5	8	9	10	4	9	5	15	10	5	
21	14	10	2	10	4	6	7	14	6	7	4	5	4	4	5	11	13	11	8	8	6	5	5	5	7	
22	4	10	6	8	13	6	2	10	9	2	8	3	4	5	5	5	11	8	5	7	8	5	7	8	7	
23	8	10	4	8	7	13	7	2	11	10	5	5	3	5	3	3	4	9	7	8	18	7	7	3	7	
24	3	2	3	3	7	15	8	4	2	5	9	3	8	11	10	17	11	8	2	8	13	6	8	4	7	
25	8	9	9	9	24	13	12	13	11	4	9	5	6	27	46	40	31	16	40	43	42	28	32	29	21	
26	41	44	37	20	17	14	25	26	20	17	11	14	15	17	11	12	10	12	19	19	17	13	24	30	20	
27	14	15	17	16	22	15	15	20	13	15	18	12	15	19	16	15	22	20	26	17	14	18	8	10	16	
28	12	10	8	7	12	13	9	14	17	10	8	5	13	14	12	19	5	12	24	22	24	12	4	11	12	
29	9	15	20	25	9	15	22	9	11	6	11	8	5	8	15	18	16	15	13	18	12	15	9	5	13	
30	8	4	19	7	24	11	13	14	12	9	8	5	12	15	14	13	17	7	19	14	5	6	19	11	12	
31																										
Mean	10	10	9	10	11	10	11	11	9	8	8	9	8	10	12	11	11	11	12	12	11	10	10	9	10	

Table 19 Alert

Ry (Hourly Ranges in 10γ units)

July 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	9	9	15	22	13	9	6	12	12	9	6	4	3	3	4	4	3	4	7	5	3	4	3	1	7	
2	2	2	4	3	4	7	5	4	5	4	3	5	4	3	9	4	7	13	10	2	5	5	7	4	5	
3	7	7	4	3	7	2	3	2	8	2	3	3	4	6	4	2	2	1	3	4	2	3	5	2	4	
4	2	1	6	3	2	5	4	8	13	6	3	11	15	15	14	18	12	15	15	13	8	11	16	16	10	
5	24	25	11	19	37	30	27	39	15	10	4	16	11	8	26	8	7	16	12	17	24	19	15	11	18	
6	13	14	23	26	8	11	20	18	7	7	12	13	15	11	14	15	8	11	11	16	9	9	9	7	13	
7	7	7	12	8	10	7	5	10	12	5	13	6	10	7	20	14	16	18	14	16	12	5	17	10	11	
8	10	11	15	16	17	14	24	12	9	7	4	6	12	12	16	20	17	23	5	15	17	13	12	13	13	
9	12	9	19	14	24	14	18	6	12	13	12	16	17	15	21	13	16	13	14	10	12	9	7	13	14	
10	9	9	12	11	11	17	10	9	5	8	7	13	9	8	8	19	23	20	11	16	7	8	14	11	11	
11	7	8	12	11	14	14	9	5	4	2	4	2	5	6												
12	5	5	6	2	3	9	9	4	7	5	4	5	5	6	3	8	5	13	5	10	9	6	5	3	6	
13	5	6	4	4	9	3	5	6	2	4	4	4	10	5	5	10	6	6	4	3	4	5	4	5	5	
14	4	3	6	3	3	3	2	2	5	2	2	3	2	8	9	9	5	5	5	4	5	3	2	2	4	
15	4	2	2	1	6	5	3	6	3	3	2	5	7	4	3	10	2	5	1	2	2	9	6	5	4	
16	5	4	11	5	11	11	4	8	8	7	5	8	12	8	22	5	6	17	14	6	5	4	8	9	8	
17	7	10	5	8	7	5	7	3	5	12	3	13	7	3	5	6	9	11	8	8	4	2	4	6	7	
18	4	5	10	17	7	12	18	7	13	7	10	11	5	12	21	13	16	13	7	21	17	9	16	13	12	
19	5	3	3	15	8	9	8	7	3	2	3	6	7	12	12	7	9	8	5	7	6	4	6	9	7	
20	4	4	3	5	16	7	7	9	5	3	3	8	9	8	6	5	29	16	7	16	9	9	8	5	8	
21	9	9	9	7	12	13	16	17	10	11	14	10	25	25	14	28	43	44	9	9	9	6	6	5	15	
22	6	4	5	9	16	19	9	7	12	6	7	8	8	14	13	12	13	8	20	5	5	8	13	15	10	
23	10	6	10	11	14	7	13	10	4	7	10	9	16	21	42	28	18	14	22	13	18	26	26	38	16	
24	19	15	21	11	9	13	18	17	13	9	12	14	38	37	17	11	15	16	15	7	16	41	15	11	17	
25	10	10	7	13	20	10	9	18	5	6	8	7	7	16	18	8	16	13	28	6	4	8	8	10	11	
26	9	19	8	20	19	9	12	20	13	10	11	13	15	10	14	10	10	12	22	16	13	8	14	8	13	
27	8	30	16	20	13	13	21	13	10	8	6	9	9	16	18	15	16	15	5	12	18	12	13	8	13	
28	16	8	10	12	11	5	6	6	6	7	3	5	5	6	6	5	5	9	6	2	2	4	2	6	6	
29	2	3	3	2	3	4	5	4	2	2	4	3	2	5	6	9	9	7	3	5	6	6	10	8	5	
30	10	19	9	7	18	10	13	8	6	10	10	6	31	15	29	33	13	24	21	21	39	20	17	7	17	
31	22	35	15	11	13	14	18	10	7	5	6	9	27	17	17	13	11	14	15	9	11	19	14	24	15	
Mean	9	10	10	10	12	10	11	10	8	7	7	8	12	11	14	12	12	13	11	10	10	10	10	9	10	

Table 20 Alert

Ry (Hourly Ranges in 10γ units)

August 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	18	14	15	24	16	20	16	9	6	15	12	16	17	23	17	20	12	12	14	30	15	9	15	18	16
2	16	8	14	16	24	8	10	14	15	12	9	9	18	15	25	21	9	13	15	13	19	14	15	13	14
3	8	7	10	11	16	12	9	12	9	5	4	6	7	9	9	15	8	9	10	6	8	12	10	20	10
4	13	5	19	11	6	20	13	13	10	12	7	11	10	13	12	7	4	7	12	13	16	16	10	18	12
5	10	9	5	6	9	4	13	12	11	5	12	11	23	7	9	8	16	5	7	21	10	9	7	6	10
6																									
7																	4	7	13	11	9	7	9	7	
8	5	4	6	8	5	6	7	7	6	5	3	6	9	5	10	5	7	6	4	3	3	2	2	5	5
9	3	3	5	9	6	10	11	7	7	5	4	6	8	10	9	7	4	10	8	8	5	4	6	6	7
10	4	3	6	2	8	3	4	5	4	3	3	6	8	7	7	16	6	4	9	6	4	4	2	7	6
11	5	11	6	4	4	7	14	4	2	2	1	4	2	5	8	8	7	8	6	3	5	6	7	9	6
12	5	3	8	8	5	8	6	4	3	1	4	6	4	4	5	6	2	4	5	4	6	5	5	3	5
13	2	3	2	2	1	4	5	2	2	2	1	3	1	3	2	5	4	4	3	3	4	2	4	4	3
14	3	2	4	4	3	3	6	4	3	1	1	2	4	4	7	6	2	7	7	4	4	3	4	6	4
15	2	2	2	1	2	2	3	3	4	3	3	4	7	12	24	13	6	11	10	3	10	10	11	7	6
16	11	7	4	4	8	11	6	3	3	2	6	8	15	9	16	13	10	7	12	5	5	6	6	7	8
17	9	7	13	5	8	2	5	4	3	4	4	5	4	4	5	10	13	8	7	10	22	10	19	6	8
18	8	4	6	6	11	5	7	6	22	21	15	11	24	21	36	18	17	11	7	24	16	19	14	7	14
19	15	14	6	8	4	10	4	4	7	3	2	4	5	6	14	16	27	15	17	23	16	21	16	13	11
20	16	15	10	28	13	17	9	9	8	21	20	19	37	23	8	9	14	18	17	7	9	14	6	16	15
21	22	6	15	12	12	11	16	19	10	13	15	16	16	8	19	11	24	18	15	5	9	12	10	10	13
22	10	9	7	4	4	12	13	6	11	5	5	8	5	11	4	6	10	4	5	6	9	10	17	12	8
23	10	9	6	6	7	5	8	5	6	4	7	9	11	9	10	16	3	10	9	7	6	2	2	6	7
24	10	10	12	8	4	8	6	7	11	7	7	6	7	3	13	8	7	5	7	6	7	9	6	5	8
25	6	5	4	5	6	7	7	10	8	8	7	5	7	7	12	6	8	4	12	10	6	13	12	9	8
26	4	9	7	13	9	12	10	7	7	8	7	7	13	15	8	11	5	10	9	10	10	3	7	7	9
27	6	4	11	7	5	8	9	8	6	4	2	8	8	13	10	10	19	27	10	11	13	22	21	10	11
28	14	9	7	19	15	9	9	7	8	15	16	11	15	16	19	14	13	13	15	14	16	8	16	10	13
29	7	6	7	14	12	7	6	12	11	10	20	10	11	16	10	6	7	10	13	8	5	6	7	9	10
30	9	10	6	10	13	7	5	11	5	3	8	10	14	8	14	9	6	8	11	4	14	5	7	14	9
31	13	9	8	5	16	8	8	5	4	4	4	5	10	10	13	6	13	7	3	8	4	13	9	9	8
Mean	9	7	8	9	9	8	8	8	7	7	7	8	11	10	12	11	10	9	10	9	9	9	9	9	9

Table 21 Alert

Ry (Hourly Ranges in 10 γ units)

September 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	9	8	12	6	7	6	9	6	14	8	11	12	11	19	10	5	7	7	7	7	10	7	4	8	9	
2	5	4	4	4	4	8	4	2	4	3	3	2	2	3	5	3	7	11	10	9	14	13	9	4	6	
3	9	8	7	13	16	13	6	4	3	4	6	6	4	8	4	11	4	7	4	4	7	5	6	7	7	
4	1	5	7	4	3	2	3	3	4	4	5	4	3	5	7	3	4	6	7	6	5	8	8	8	5	
5	7	6	4	2	3	3	2	2	3	5	3	7	7	10	14	16	10	11	7	11	8	6	5	12	7	
6	5	8	6	5	3	8	10	4	4	4	4	3	5	4	6	6	4	3	3	3	4	7	5	9	5	
7	4	3	2	5	4	5	5	4	4	1	2	2	3	2	2	5	2	5	3	3	3	3	5	10	4	
8	4	5	4	4	8	9	4	4	4	2	8	12	12	11	11	5	5	6	5	6	1	5	4	2	6	
9	6	8	5	8	9	7	7	4	5	7	5	8	15	17	19	7	9	7	6	3	7	6	4	3	8	
10	2	5	10	3	3	4	7	7	3	5	7	8	4	12	6	11	12	8	7	4	10	10	11	7	7	
11	6	8	5	8	10	7	7	5	7	10	4	14	17	13	10	11	6	13	7	16	7	7	7	11	9	
12	11	7	13	8	5	7	9	6	8	6	6	8	13	10	10	4	5	9	11	4	7	9	3	2	8	
13	4	3	6	3	4	2	3	4	4	2	2	2	4	2	5	4	3	4	5	10	7	14	5	12	5	
14	16	7	6	8	13	8	9	9	11	26	36	18	4	35	20	19	20	24	21	19	13	28	21	5	18	
15	13	14	3	10	10	8	10	10	8	6	8	19	18	35	28	11	19	35	15	20	14	17	14	22	15	
16	19	6	14	10	9	12	12	10	16	10	12	28	24	16	13	15	17	11	15	17	15	8	14	10	14	
17	20	11	7	10	14	12	17	16	10	7	14	27	20	17	13	18	10	10	16	18	10	5	8	16	13	
18	15	17	16	12	13	11	7	11	13	7	8	22	11	10	9	7	15	21	11	6	6	7	12	8	11	
19	9	12	16	14	11	16	10	14	7	15	10	27	30	9	10	6	11	9	7	7	6	6	5	5	11	
20	4	7	4	4	4	4	1	2	6	9	4	12	8	16	13	12	6	5	4	7	7	3	12	8	7	
21	12	10	6	4	7	4	6	7	6	10	7	7	3	6	60	35	21	22	44	16	13	5	35	16	15	
22	10	12	19	11	26	10	10	24	26	16	39	20	17	16	10	7	32	26	26	22	36	22	23	44	21	
23	45	35	38	30	19	34	20	16	19	16	25	29	21	60	43	51	21	26	12	19	13	7	6	4	25	
24	2	4	6	13	12	8	4	5	3	4	10	17	10	20	9	4	7	4	14	15	8	11	8	14	9	
25	11	12	19	41	15	17	7	10	16	13	12	16	18	12	14	10	11	25	10	13	20	10	13	8	15	
26	9	6	6	17	8	8	7	5	9	11	13	11	13	15	7	15	21	15	11	9	14	13	13	18	11	
27	18	20	12	20	13	9	10	6	9	12	8	10	14	20	20	15	10	12	19	22	33	17	26	31	16	
28	20	16	20	11	14	5	7	7	15	8	10	16	17	9	19	8	9	10	17	17	21	11	11	14	13	
29	8	9	7	5	13	6	9	10	11	6	10	11	19	15	13	10	14	19	9	12	8	10	10	8	11	
30	5	8	11	4	8	7	7	6	4	14	17	9	14	12	6	5	4	7	12	5	5	12	5	2	8	
31																										
Mean	10	9	10	10	10	9	8	7	8	8	10	13	13	15	14	11	11	13	11	11	11	10	10	11	11	

Table 22 Alert

Ry (Hourly Ranges in 10 γ units)

October 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	2	6	7	4	4	2	3	2	4	5	1	1	2	4	4	2	2	2	4	3	3	3	3	2	3	3
2	3	2	2	3	2	2	2	2	2	1	2	2	5	4	5	4	3	3	3	5	2	2	4	3	3	3
3	2	2	1	3	3	2	2	2	3	4	2	2	3	5	4	4	3	2	2	3	4	2	2	4	3	3
4	3	4	2	4	4	4	2	1	4	6	10	2	7	4	6	2	7	3	2	1	3	2	2	2	4	4
5	2	3	3	1	6	5	1	1	4	11	10	7	7	6	6	4	3	3	6	7	6	2	4	1	5	5
6	5	4	5	4	4	4	2	1	1	1	1	1	1	2	2	4	2	3	2	4	5	2	1	2	3	3
7	2	2	4	6	4	2	3	1	2	6	6	7	3	5	4	4	4	5	2	3	4	17	11	11	5	5
8	8	13	5	9	8	7	7	4	4	4	8	9	8	9	6	7	4	5	3	3	3	5	2	2	6	6
9	2	2	2	4	2	2	4	4	2	3	3	4	6	5	2	4	5	4	5	6	2	3	7	5	4	4
10	8	1	2	4	2	2	3	3	3	7	3	5	7	5	5	3	2	3	11	9	15	5	8	3	5	5
11	4	5	5	6	4	2	3	13	5	15	7	9	23	14	5	7	10	5	7	8	6	9	6	11	8	8
12	11	10	16	13	8	6	7	4	11	8	10	13	32	33	24	16	13	14	10	12	19	15	11	5	13	13
13	13	5	16	8	5	10	5	3	12	10	7	10	15	10	9	14	7	7	15	8	14	10	8	16	10	10
14	6	13	11	12	8	9	8	14	16	20	15	10	13	7	21	10	12	13	14	11	12	7	5	10	12	12
15	8	4	6	8	4	5	7	3	3	7	9	11	7	16	7	3	5	5	9	11	6	8	16	16	8	8
16	13	10	13	5	8	7	13	3	4	5	10	8	12	5	5	3	10	13	5	11	6	4	3	6	8	8
17	3	2	2	4	3	3	2	2	2	2	1	7	3	2	2	2	5	4	2	2	2	1	2	2	3	3
18	2	5	1	2	4	2	1	2	1	2	2	8	11	7	4	4	5	3	4	4	2	1	3	2	3	3
19	8	6	2	4	2	2	2	3	2	2	2	3	5	4	3	7	5	4	2	2	4	2	2	4	3	3
20	5	2	1	4	1	1	2	2	2	10	8	13	13	18	15	4	3	4	6	4	2	2	18	15	6	6
21	2	2	4	9	3	1	9	4	3	3	7	4	4	4	5	2	3	1	2	1	2	1	3	1	3	3
22	4	2	1	1	1	1	1	1	2	3	1	2	3	3	4	6	3	2	2	3	2	1	1	2	2	2
23	1	1	2	2	2	1	1	1	1	1	1	3	5	8	1	2	3	4	3	3	5	4	4	4	3	3
24	12	10	14	11	4	4	4	17	9	9	21	16	16	19	10	9	8	9	5	11	7	10	8	11	10	10
25	19	17	7	10	4	5	2	3	3	8	7	9	5	4	6	5	5	5	3	4	7	4	4	6	6	6
26	9	5	8	9	3	3	3	2	1	2	4	6	2	5	6	7	4	4	6	2	3	6	2	4	4	4
27	3	3	4	3	2	4	2	1	1	1	1	1	3	2	3	2	2	1	2	6	5	1	0	1	2	2
28	2	1	2	2	1	1	1	1	1	2	3	5	2	2	1	4	8	10	16	21	6	6	4	4	4	4
29	8	5	7	6	4	5	3	5	2	2	3	10	10	8	25	10	37	28	33	19	20	47	30	21	15	15
30	9	15	11	23	11	15	15	15	16	8	10	11	7	6	6	5	3	3	4	2	3	2	2	3	8	8
31	3	2	2	3	4	2	2	2	3	5	2	8	4	8	2	6	9	4	5	4	5	5	4	4	4	4
Mean	6	5	5	6	4	4	4	4	4	6	6	7	8	8	7	5	6	6	6	6	6	6	6	6	6	6

Table 23 Alert

Ry (Hourly Ranges in 10γ units)

November 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	3	2	4	3	4	6	3	7	4	4	5	10	5	11	9	14	7	5	9	4	4	4	3	3	5
2	6	4	5	7	7	5	5	4	3	5	11	13	7	13	11	9	10	7	8	8	4	4	8	7	7
3	4	6	10	5	4	7	4	4	7	8	10	9	5	7	3	2	3	3	7	5	6	17	16	1	6
4	5	6	6	3	2	4	3	3	4	9	9	3	8	4	4	2	4	6	3	4	2	3	2	3	4
5	2	1	2	4	2	1	1	1	1	3	2	2	2	1	2	3	4	2	2	1	1	2	1	1	2
6	3	4	5	3	2	2	3	3	7	4	3	8	10	10	9	9	6	2	5	7	5	13	13	4	6
7	8	5	6	6	10	4	5	2	5	7	13	13	16	12	10	17	13	16	20	12	18	12	9	13	10
8	18	16	10	12	9	17	9	6	8	7	14	17	24	12	17	13	10	7	5	12	12	12	10	9	12
9	8	7	12	10	5	6	3	19	8	10	14	11	23	22	12	7	18	14	10	5	9	11	13	8	11
10	8	6	14	14	10	6	4	7	10	13	20	13	13	7	13	10	6	19	7	8	6	9	7	9	10
11	10	8	10	7	8	8	3	11	4	7	10	16	7	2	8	8	8	7	14	8	11	7	8	4	8
12	8	7	6	5	3	3	3	11	8	5	10	15	4	4	8	7	9	12	8	4	4	3	4	4	7
13	1	4	2	5	3	1	2	1	1	3	4	6	6	5	3	4	4	2	4	1	3	3	2	1	3
14	4	4	4	2	1	4	3	2	1	2	2	2	9	7	4	2	3	2	1	2	1	3	3	1	3
15	3	4	1	5	4	2	2	1	2	3	2	4	4	6	4	3	2	2	1	2	1	1	1	1	3
16	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	2	2	1
17	3	1	1	1	1	1	1	1	3	12	7	13	4	16	16	25	4	10	19	5	4	4	3	4	7
18	2	1	1	2	2	3	1	1	1	1	1	2	2	2	4	4	2	2	6	1	1	1	1	1	2
19	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	2	3	2
20	1	3	5	11	4	2	1	1	1	2	1	2	4	5	2	3	3	1	1	2	1	1	1	1	3
21	1	1	1	1	1	2	1	1	1	2	1	1	3	3	6	3	1	1	1	1	1	1	1	1	2
22	1	1	1	1	3	1	1	1	1	4	4	4	3	2	3	7	7	4	4	9	2	3	3	4	3
23	4	5	6	4	1	3	1	5	7	9	4	6	4	5	4	6	4	1	2	2	3	3	2	1	4
24	2	2	3	2	4	5	3	4	3	4	5	3	16	14	6	7	7	7	6	6	7	4	11	9	6
25	6	10	4	6	5	7	6	6	5	8	5	8	5	8	8	6	7	3	3	1	1	1	1	1	5
26	1	1	1	2	1	1	1	2	7	4	4	2	4	2	2	2	1	1	1	1	1	1	1	1	2
27	1	1	2	2	1	1	3	2	1	7	3	5	4	4	3	1	2	2	2	3	2	5	4	1	3
28	2	2	6	2	3	6	2	1	1	2	3	4	4	2	3	2	1	1	2	1	1	1	1	1	2
29	2	1	2	2	1	2	2	1	1	2	5	4	2	5	4	10	2	1	1	1	2	9	10	7	3
30	7	5	4	1	2	2	3	1	1	5	7	5	34	19	8	4	4	4	6	3	2	5	4	2	6
31																									
Mean	4	4	5	4	4	4	3	4	4	5	6	7	8	7	6	7	5	5	5	4	4	5	5	4	5

Table 24 Alert

Ry (Hourly Ranges in 10 γ units)

December 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	2	2	2	4	2	2	2	2	2	2	3	2	2	2	2	9	3	2	2	2	2	2	3	3	3
2	6	5	2	4	6	4	2	2	6	5	3	4	5	4	14	11	6	4	4	3	4	7	7	6	5
3	3	7	8	8	7	5	4	32	34	14	13	10	8	12	14	12	8	9	6	11	14	20	13	5	12
4	8	9	6	7	4	7	12	6	4	8	7	9	17	13	11	10	8	8	5	8	6	11	8	12	8
5	19	16	10	8	6	5	5	5	6	13	13	10	12	9	8	17	9	11	6	17	7	9	7	7	10
6	8	7	7	8	6	4	7	4	8	8	7	12	10	11	12	6	6	10	6	8	5	10	7	9	8
7	5	7	8	4	8	8	4	5	10	9	8	17	13	15	12	10	8	5	6	6	4	4	4	4	8
8	3	5	4	4	4	6	3	3	4	9	8	10	12	7	8	6	5	4	6	3	3	7	6	3	6
9	6	2	3	4	4	4	3	6	7	8	6	6	8	6	8	4	4	2	1	2	1	1	1	1	4
10	1	1	1	1	1	1	1	1	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	2	3	2	3	2	2	1	1	2	1	2	1	2	1	1
12	1	3	1	2	2	2	1	2	2	2	4	2	2	1	2	2	2	1	2	2	2	2	2	8	2
13	7	3	2	3	4	5	2	1	3	2	2	2	2	4	2	5	1	1	2	1	2	2	2	2	3
14	2	2	2	2	2	2	2	2	1	2	5	7	7	13	4	12	3	3	4	7	5	6	5	5	4
15	4	6	4	4	4	3	2	2	4	4	8	7	5	6	5	5	4	3	2	4	6	2	2	4	4
16	3	4	4	4	4	3	1	1	2	2	4	4	4	6	5	3	4	6	1	2	2	2	2	4	3
17	8	4	2	1	2	2	2	1	1	1	1	2	1	2	3	4	3	2	2	2	2	2	3	2	2
18	2	3	2	2	1	1	1	1	2	2	2	2	1	2	2	2	2	2	1	2	1	1	1	1	2
19	2	1	2	1	2	1	1	1	1	1	1	1	2	1	3	2	3	2	2	2	2	3	15	12	3
20	5	6	2	4	2	5	7	7	4	3	4	5	8	7	8	4	2	2	2	11	10	6	6	9	5
21	2	2	1	1	1	1	1	2	2	2	2	1	8	9	8	10	4	3	4	3	2	3	12	14	4
22	4	2	3	3	2	3	9	8	4	5	2	5	3	15	12	4	4	4	5	9	5	3	5	4	5
23	4	6	2	5	3	2	2	3	8	10	4	4	4	1	2	11	6	10	14	7	4	5	2	8	5
24	6	6	4	5	5	1	2	2	1	1	1	1	4	9	12	4	4	2	3	4	10	2	6	3	4
25	1	2	4	2	2	1	2	2	3	5	10	5	4	4	4	4	2	1	2	2	1	2	2	1	3
26	2	2	2	4	2	2	2	1	2	3	2	5	4	4	2	2	3	2	1	1	2	5	5	3	3
27	2	2	3	3	1	2	2	2	2	2	4	2	4	6	8	2	1	2	1	1	1	1	2	1	2
28	2	2	2	2	5	2	2	1	4	4	4	5	4	4	4	4	3	3	2	4	10	7	4	5	4
29	4	3	5	5	2	3	4	2	1	6	4	10	5	4	8	4	9	6	6	7	4	3	6	8	5
30	6	4	3	5	2	2	2	1	1	1	2	2	2	2	4	4	3	4	2	2	2	2	4	4	3
31	2	3	2	2	2	1	1	1	2	1	2	2	2	4	2	2	2	2	1	1	2	1	4	4	2
Mean	4	4	3	4	3	3	3	4	4	4	4	5	5	6	.6	6	4	4	3	4	4	4	5	5	4

BAKER LAKE MAGNETIC OBSERVATORY

1963

The Magnetic Equipment

In November 1963 a field-type proton precession magnetometer manufactured by Barringer Research Limited was put into operation to facilitate accurate determination of the Z variometer base line. No other changes were made in the station equipment during 1963. A summary of the equipment in operation during 1963 is provided below.

The Photographic Variometers

A set of three-component photographic Ruska variometers is aligned to record the geographic components X, Y and Z of the earth's magnetic field. The time scale of the Ruska magnetograms is 20 mm/hr. Scale values adopted for the Ruska variometers for 1963 were:

X	Jan. 1—July 29, 01 hrs	4.19 gammas/mm
	July 29, 01 hrs—	
	Sept. 30, 0530 hrs	4.92
	Sept. 30, 0530 hrs—Dec. 31	8.33
Y	Jan. 1—Sept. 30, 0530 hrs	5.95 gammas/mm
	Sept. 30, 0530 hrs—Dec. 31	6.28
Z	Jan. 1—July 29, 01 hrs	6.84 increasing linearly to 7.26
	July 29, 01 hrs—Aug. 31	4.70
	Sept. 1—Sept. 15	4.61
	Sept. 16—Sept. 30	4.50
	Oct. 1—Oct. 28, 01 hrs	4.33 increasing linearly to 5.03
	Oct. 28, 01 hrs—Nov. 30	6.55 “ “ 7.70
	Dec. 1—Dec. 31	7.75

The scale value of the Ruska Z variometer again drifted considerably.

Thermostatically controlled electric heaters maintain the temperature in the variometer room constant to 1°C. Temperature coefficients of the variometers are small and temperature corrections to the measured values were unnecessary.

A set of three component photographic la Cour variometers, aligned to record H, D and Z, serves as a low sensitivity recorder with the following approximate scale values:

H,	32.5 gammas/mm
D,	9.5 mins/mm (or 11 gammas/mm.)
Z,	34 gammas/mm

The Stand-by Variometer and Storm Recorder

A three-component electrical magnetometer with an inked output records X, Y and Z. Chart speed is 20 mm/hr. Full-scale sensitivity is 2000 gammas normally, with automatic switching to 4000 gammas at times of heavy disturbance.

Absolute Instruments

Quartz horizontal magnetometer No. 257 is the primary standard of horizontal field intensity (H). A portable three component electrical magnetometer of the saturable core type is used for the determination of declination (D) and inclination (I). Absolute determinations of F were made in July using a Varian, and in November and December using a Barringer field-type proton precession magnetometer.

Base-line Values

The Z base line was calculated from the relation $Z = F \sin I$, using the absolute values of F obtained in July, November and December. For the remainder of the year the Z base lines were estimated from these calculated values, using information on trace discontinuities and quiet day trends obtained from examination of the magnetograms. The Z base lines determined in this way are believed to be good to within 25 gammas.

The r.m.s. difference between the observed and adopted base line values for 19 observations in X and Y was 2 gammas.

The Magnetic Reductions

A summary for 1963 by month, season and year of the mean hourly values of X, Y and Z for all days and for the international quiet and disturbed days, is given in Tables 25–33. The daily mean values of the three elements are given in Tables 34–36.

R_x indices of magnetic disturbance are given for each hour of 1963 in Tables 37–48. The R_x indices are the hourly ranges in X, the principal horizontal magnetic field component recorded at Baker Lake, expressed in 10-gamma units.

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 25 Baker Lake

3500 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	521	528	542	539	553	569	563	543	510	529	527	544	539	557	530	530
1-2	511	525	529	535	537	547	549	537	505	511	525	541	529	542	520	525
2-3	513	522	522	527	539	543	551	531	492	507	508	536	524	541	512	520
3-4	514	522	520	529	526	539	551	537	504	505	508	526	523	538	517	514
4-5	492	508	507	523	538	550	548	538	497	508	503	517	519	544	509	505
5-6	474	515	522	526	542	547	564	553	493	507	490	524	521	552	512	501
6-7	492	519	530	539	544	555	561	545	511	513	510	528	529	551	523	512
7-8	504	523	532	544	547	563	562	552	540	522	528	525	537	556	535	520
8-9	512	521	532	541	557	556	568	549	539	522	528	530	538	558	534	523
9-10	500	526	533	540	550	549	569	541	536	525	519	530	535	552	534	519
10-11	501	520	526	537	542	555	564	542	530	516	514	527	531	551	527	516
11-12	499	519	515	527	539	543	564	534	513	506	510	516	524	545	515	511
12-13	490	509	509	516	532	534	543	523	498	505	491	507	513	533	507	499
13-14	485	497	504	490	503	518	516	486	475	485	481	489	494	506	489	488
14-15	468	482	488	467	472	493	486	453	456	476	463	465	472	476	472	469
15-16	459	472	469	444	459	460	484	449	448	480	458	467	462	463	460	464
16-17	469	487	477	457	481	470	481	460	482	480	478	482	475	473	474	479
17-18	495	506	495	493	504	478	508	492	491	489	498	500	496	496	492	500
18-19	509	519	513	522	528	513	535	507	527	506	505	526	518	521	517	515
19-20	520	531	527	550	568	554	550	541	529	525	532	538	539	553	533	530
20-21	523	541	547	562	585	565	569	564	548	539	538	553	553	571	549	539
21-22	527	542	556	555	591	585	582	557	544	548	541	558	557	579	551	542
22-23	523	545	545	557	573	591	578	555	533	535	545	559	553	574	543	543
23-24	523	534	541	547	564	583	565	559	513	535	541	552	546	568	534	537
Mean	501	517	520	524	536	540	546	527	509	511	510	522	522	537	516	513

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 26 Baker Lake

3500 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	530	546	538	544	561	575	575	573	542	538	541	550	551	571	541	541
1-2	528	536	528	537	545	548	577	557	541	530	539	552	543	557	534	539
2-3	525	532	527	533	544	529	556	537	532	529	533	546	535	542	530	534
3-4	522	526	526	529	538	530	548	537	532	530	531	537	532	538	529	529
4-5	518	526	526	528	531	537	548	538	523	528	529	539	531	539	526	528
5-6	515	527	527	529	534	540	550	540	536	531	528	537	533	541	531	527
6-7	522	526	532	532	536	538	555	545	531	535	528	536	535	544	532	528
7-8	523	532	531	532	545	519	561	545	539	535	531	539	536	543	534	531
8-9	523	533	529	532	551	546	558	541	535	535	528	537	537	549	533	530
9-10	520	529	527	536	555	547	555	535	532	532	527	534	536	548	532	528
10-11	517	525	524	537	555	549	553	532	530	528	525	520	533	547	530	522
11-12	514	522	523	530	547	541	551	523	521	525	525	531	525	540	525	523
12-13	509	520	519	521	523	518	538	509	511	521	522	525	520	522	518	519
13-14	506	516	502	505	493	493	503	477	501	505	514	510	502	492	503	512
14-15	503	513	491	477	445	472	471	458	481	480	499	515	484	462	482	508
15-16	497	510	479	473	469	469	475	470	479	484	492	512	484	471	479	503
16-17	503	507	485	493	505	493	494	468	497	499	502	518	497	490	494	508
17-18	512	513	502	512	506	501	512	504	512	505	508	524	509	506	508	514
18-19	521	521	511	526	530	511	525	524	529	524	519	532	523	523	523	523
19-20	522	528	524	537	554	540	543	553	542	539	533	539	538	548	536	531
20-21	528	534	541	549	557	562	563	574	579	550	542	547	552	564	555	538
21-22	531	536	550	562	575	578	582	578	593	560	549	551	562	578	566	542
22-23	532	544	541	559	575	604	584	582	558	546	548	553	560	586	551	544
23-24	536	541	542	555	575	608	591	577	539	539	548	548	558	588	544	543
Mean	519	527	522	528	535	535	545	532	530	526	527	535	530	537	527	527

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 27 Baker Lake

3500 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	496	486	526	529	537	562	548	503	418	478	463	518	505	537	488	491
1-2	474	492	492	535	494	526	560	542	472	465	506	528	507	530	491	500
2-3	490	494	507	516	523	567	560	512	410	442	446	519	499	541	468	487
3-4	495	512	514	528	488	569	561	535	483	480	493	482	512	538	501	496
4-5	406	438	440	510	555	582	555	513	504	501	513	440	496	551	489	449
5-6	362	469	496	502	525	588	577	563	451	468	456	520	498	563	479	452
6-7	462	485	525	531	531	569	573	567	472	453	468	515	513	560	495	483
7-8	473	489	510	548	547	599	571	546	570	498	509	450	526	566	532	480
8-9	503	492	515	535	550	532	585	542	510	517	535	510	527	552	519	510
9-10	450	521	533	550	532	553	578	534	541	516	521	531	530	549	535	506
10-11	455	521	526	542	539	559	587	551	528	502	481	527	527	559	525	496
11-12	472	515	508	533	542	554	620	494	517	512	478	515	522	553	518	495
12-13	450	495	592	537	556	538	549	499	512	502	453	488	506	536	511	472
13-14	461	489	514	495	525	545	497	512	501	479	413	465	491	520	497	457
14-15	419	482	501	492	511	507	499	518	499	445	412	442	477	509	484	439
15-16	402	460	489	425	467	407	488	484	486	499	485	451	462	462	475	450
16-17	430	500	518	423	502	409	480	496	478	465	510	492	475	472	471	483
17-18	492	545	516	490	502	404	524	501	465	458	545	530	498	483	482	528
18-19	507	521	524	565	527	451	531	444	498	446	487	546	504	488	508	515
19-20	508	542	527	603	574	506	533	474	464	440	518	531	518	522	508	525
20-21	488	536	544	609	590	526	568	524	464	452	489	538	527	552	517	513
21-22	512	529	545	542	575	562	578	503	502	479	488	514	527	554	517	511
22-23	519	567	532	541	561	589	577	470	513	498	508	540	535	549	521	534
23-24	498	522	517	517	562	539	535	513	495	517	503	549	522	537	512	518
Mean	468	504	513	525	534	531	551	514	490	480	487	506	508	532	502	491

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 28 Baker Lake

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	226	232	233	215	202	214	203	209	186	209	226	225	215	207	211	227
1-2	224	230	226	207	186	180	187	191	177	205	219	227	197	186	204	200
2-3	223	228	220	203	173	175	184	178	160	194	216	225	198	177	194	223
3-4	215	221	217	204	164	170	173	176	152	187	218	220	193	171	190	218
4-5	191	217	208	197	170	164	153	175	142	182	204	193	183	166	182	201
5-6	181	214	213	193	184	182	175	189	135	174	180	183	184	183	179	190
6-7	195	199	209	209	205	195	188	203	154	180	195	194	194	198	188	196
7-8	206	226	226	229	217	211	204	222	208	216	218	203	215	213	220	213
8-9	225	229	235	236	230	213	229	235	241	231	233	214	229	227	236	225
9-10	229	241	248	250	234	225	241	244	258	249	237	230	240	236	251	234
10-11	238	248	254	250	245	239	248	251	265	252	249	237	248	246	255	243
11-12	246	248	254	252	250	252	253	257	271	252	255	240	252	253	257	247
12-13	244	253	252	259	263	263	265	270	277	255	258	247	259	265	261	251
13-14	249	254	2602	267	277	277	274	284	290	258	259	251	267	278	269	253
14-15	252	255	266	272	274	284	284	289	283	260	252	253	269	283	270	253
15-16	248	248	264	265	263	275	281	278	279	264	256	247	264	274	268	250
16-17	241	242	249	250	249	264	269	259	280	260	256	238	255	260	260	244
17-18	240	237	241	244	240	255	254	249	271	254	253	230	247	249	252	240
18-19	237	239	238	241	248	261	249	251	284	249	243	230	247	252	253	237
19-20	238	240	244	250	261	270	257	254	284	250	239	230	251	260	257	237
20-21	234	244	245	249	269	269	263	273	283	248	240	230	254	269	256	237
21-22	232	243	248	245	254	259	253	262	255	239	233	228	246	257	247	234
22-23	230	242	239	236	241	250	239	240	223	226	236	230	236	242	231	235
23-24	228	238	235	222	226	238	217	229	207	218	233	228	227	228	221	232
Mean	228	236	238	235	230	233	231	236	232	230	234	226	233	233	234	231

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 29 Baker Lake

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	233	238	236	235	229	240	232	235	231	233	239	230	234	234	233	235
1-2	233	238	233	232	204	220	229	226	237	228	240	231	229	220	232	236
2-3	233	238	234	230	214	209	221	217	226	221	236	232	226	215	228	235
3-4	232	234	233	230	214	197	215	216	222	207	233	231	222	211	223	233
4-5	228	233	233	231	208	198	213	219	212	209	228	229	220	210	221	230
5-6	225	229	232	232	208	197	214	224	223	212	227	225	221	211	225	227
6-7	223	225	234	235	220	198	216	223	223	219	226	223	222	214	228	224
7-8	226	233	236	236	225	200	227	226	238	233	234	225	228	220	236	229
8-9	229	236	241	236	227	220	234	238	246	241	234	228	234	230	241	232
9-10	232	241	242	240	230	230	234	245	251	247	239	231	239	235	245	236
10-11	233	241	244	241	240	238	245	250	250	244	239	237	242	243	245	238
11-12	234	244	244	241	238	250	247	254	254	241	239	231	243	247	245	237
12-13	236	243	242	249	262	262	257	260	256	241	241	230	248	260	247	238
13-14	238	244	248	258	269	262	265	270	259	241	243	231	252	266	251	239
14-15	237	245	252	259	273	264	271	261	261	245	244	232	254	267	254	240
15-16	236	245	248	248	253	255	252	259	251	240	244	230	247	255	247	239
16-17	233	239	245	235	238	242	240	249	238	235	234	228	238	242	238	234
17-18	229	236	233	235	229	222	228	229	229	228	228	224	229	227	231	229
18-19	229	233	233	230	228	222	224	223	237	221	228	218	227	224	230	227
19-20	227	230	232	227	230	223	222	235	238	229	226	216	228	228	232	225
20-21	229	234	231	229	228	236	229	248	263	234	229	219	234	235	239	228
21-22	231	235	234	243	235	239	249	250	283	239	235	223	241	243	250	231
22-23	234	240	232	238	237	259	238	248	228	236	239	228	238	246	234	235
23-24	236	242	235	232	235	255	225	248	215	234	241	228	235	241	229	236
Mean	232	237	238	238	232	231	234	240	240	232	235	227	235	234	237	233

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 30 Baker Lake

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	202	203	211	197	180	170	174	185	85	128	180	204	177	177	155	197
1-2	189	204	198	185	141	106	176	159	82	122	171	220	163	146	147	196
2-3	188	193	189	194	122	135	179	135	-2	114	163	206	151	143	124	187
3-4	157	173	183	200	141	113	154	140	53	120	206	202	154	137	139	185
4-5	82	161	145	188	141	98	129	145	85	138	197	83	133	128	139	131
5-6	82	169	166	162	164	170	170	179	7	131	118	107	135	171	116	119
6-7	170	100	175	187	204	177	183	206	87	52	141	131	151	193	125	136
7-8	143	216	199	221	223	228	182	223	190	184	185	173	197	214	199	179
8-9	225	203	207	241	246	172	223	226	238	224	215	193	218	217	228	209
9-10	204	219	256	263	228	224	257	233	279	260	244	237	242	235	265	226
10-11	236	253	263	265	267	264	263	260	294	268	258	243	261	263	272	248
11-12	283	258	277	270	276	256	261	233	312	274	276	257	269	256	283	268
12-13	274	277	276	270	282	263	266	266	315	278	294	272	278	269	285	279
13-14	285	273	285	274	292	288	285	296	337	298	312	290	293	290	299	290
14-15	285	280	299	299	282	305	304	316	312	294	265	296	295	302	301	282
15-16	278	266	306	287	282	294	298	295	309	312	314	276	293	292	304	283
16-17	266	267	277	264	269	287	302	267	316	315	331	271	286	281	293	284
17-18	280	239	282	272	268	279	297	283	290	314	314	263	282	282	290	274
18-19	265	279	260	258	272	290	279	293	300	280	275	260	276	283	275	270
19-20	252	266	280	297	275	300	289	269	313	262	260	258	277	283	288	259
20-21	235	260	267	267	278	285	304	285	301	232	246	243	267	288	267	246
21-22	230	254	259	249	258	264	248	272	200	195	207	217	238	261	226	227
22-23	231	258	237	230	258	276	236	218	174	192	207	220	228	247	208	229
23-24	216	228	223	196	235	232	197	190	181	194	193	217	209	214	199	214
Mean	219	229	238	239	233	228	236	232	211	216	232	222	228	232	226	226

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 31 Baker Lake

60,000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	389	381	353	329	311	305	273	274	290	362	402	383	338	291	334	389
1-2	397	387	365	348	333	319	287	301	322	375	403	391	352	310	352	394
2-3	401	394	369	368	357	338	309	340	360	392	418	398	370	336	372	403
3-4	410	403	376	379	387	368	338	365	371	408	419	410	386	364	383	411
4-5	426	408	379	399	419	420	397	397	411	430	425	423	411	408	405	420
5-6	434	411	393	420	437	446	409	416	440	454	445	423	427	427	427	428
6-7	449	444	412	424	466	474	450	428	438	464	465	451	447	454	435	452
7-8	469	454	431	431	464	474	444	434	436	464	476	486	455	454	441	471
8-9	480	477	434	444	446	479	438	428	442	470	485	481	459	448	448	481
9-10	486	458	414	436	461	479	428	439	437	470	491	475	456	452	439	478
10-11	484	444	420	438	483	484	424	441	442	484	490	470	459	458	446	472
11-12	477	445	433	443	481	502	426	445	458	476	492	478	463	464	453	473
12-13	477	448	437	453	480	514	454	462	487	462	502	492	473	478	460	480
13-14	472	459	434	469	479	503	495	486	484	467	495	494	478	491	464	480
14-15	475	461	429	450	467	490	468	480	461	469	496	493	470	476	452	481
15-16	454	441	409	426	428	466	427	437	430	446	478	466	442	440	427	460
16-17	439	421	385	403	394	426	386	398	409	421	429	438	412	401	404	432
17-18	421	410	375	395	387	418	357	359	381	403	406	415	394	379	389	413
18-19	403	400	372	391	383	394	352	355	360	391	402	399	384	371	379	401
19-20	389	399	373	375	378	384	335	347	329	378	387	384	372	361	364	390
20-21	391	385	363	341	354	345	316	309	309	356	378	379	352	331	342	383
21-22	391	376	348	343	318	330	286	266	266	342	380	376	335	300	325	381
22-23	387	370	344	335	308	309	265	269	266	343	382	372	329	287	322	378
23-24	386	376	345	325	309	302	269	266	283	350	386	375	331	286	326	381
Mean	433	419	391	399	405	415	376	381	388	420	439	431	408	394	400	431

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Quiet Days)

Table 32 Baker Lake

60,000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	411	386	381	383	365	357	329	301	302	375	411	407	367	338	360	404
1-2	411	390	380	385	356	349	323	317	303	383	410	407	368	336	363	404
2-3	411	390	376	383	363	358	329	329	332	381	411	405	372	345	368	404
3-4	405	392	374	384	373	374	336	337	341	397	408	401	377	355	374	401
4-5	407	393	377	384	389	391	345	346	364	398	409	407	384	368	381	404
5-6	408	394	378	388	395	415	361	353	366	407	415	411	391	381	385	407
6-7	411	407	387	389	404	438	362	355	377	406	436	417	399	390	390	418
7-8	424	410	391	396	400	485	371	372	367	399	437	426	406	407	388	424
8-9	422	404	389	398	404	460	373	371	364	411	438	433	406	402	391	424
9-10	422	406	393	398	422	431	381	374	368	414	432	442	407	402	393	425
10-11	421	405	398	410	426	430	380	374	373	410	427	449	409	403	398	425
11-12	420	409	403	412	436	441	387	380	380	401	424	442	411	411	399	424
12-13	423	405	411	423	443	440	405	391	385	399	427	434	416	420	405	422
13-14	422	404	418	432	458	432	428	394	377	409	431	432	420	428	409	422
14-15	413	400	409	411	434	396	377	393	361	410	428	414	404	400	398	414
15-16	409	394	399	391	374	389	340	374	342	388	419	405	385	369	380	407
16-17	400	391	383	376	364	387	334	350	338	384	407	398	376	359	370	399
17-18	404	390	374	384	369	393	335	332	344	381	405	402	376	357	371	400
18-19	400	391	377	391	371	393	345	348	343	386	414	407	380	364	374	403
19-20	404	392	376	386	368	394	356	353	354	389	417	408	383	368	376	405
20-21	407	392	387	391	376	395	364	341	337	384	417	412	384	369	375	407
21-22	407	391	385	386	374	395	329	327	268	378	416	405	372	356	354	405
22-23	406	391	386	379	373	375	313	324	258	381	411	403	367	346	351	403
23-24	405	383	381	364	358	346	302	314	289	383	415	404	362	330	354	402
Mean	411	396	388	393	391	403	354	352	343	394	419	415	388	375	379	410

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Disturbed Days)

Table 33 Baker Lake

60,000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	357	349	326	336	303	291	214	292	294	358	436	345	325	275	328	372
1-2	372	369	371	344	349	315	253	311	343	384	421	376	350	307	360	384
2-3	383	397	381	357	344	328	316	394	472	454	477	403	392	345	416	415
3-4	428	444	384	386	369	387	357	413	425	456	438	453	412	382	413	441
4-5	443	457	399	402	435	494	423	463	516	488	464	467	454	454	451	458
5-6	475	439	400	405	483	458	421	441	600	529	546	435	469	451	483	474
6-7	518	544	442	432	527	506	528	480	564	626	561	480	517	510	516	526
7-8	525	569	543	423	502	512	497	510	533	605	628	601	537	505	526	581
8-9	547	617	513	476	483	560	471	482	570	601	545	570	536	499	540	570
9-10	638	547	429	448	515	507	431	527	497	596	529	533	516	495	492	562
10-11	643	492	447	435	560	465	424	491	463	635	605	530	516	485	495	568
11-12	595	487	480	437	543	463	435	542	476	568	636	547	517	496	490	566
12-13	581	500	507	461	518	541	535	582	526	501	652	585	541	544	499	580
13-14	556	530	481	531	504	558	658	592	532	552	637	599	561	578	524	581
14-15	595	544	455	532	520	551	526	567	474	596	667	564	549	541	514	592
15-16	543	490	411	520	506	496	457	518	460	535	563	556	505	494	482	538
16-17	499	470	394	467	476	412	474	474	442	432	471	495	459	459	434	484
17-18	445	448	373	445	440	432	434	456	406	407	417	431	428	441	408	435
18-19	396	416	352	422	394	396	421	371	317	379	399	379	387	395	368	398
19-20	351	413	353	417	397	397	332	339	271	348	332	319	356	366	347	354
20-21	362	345	308	288	360	267	282	315	249	332	337	312	313	306	294	339
21-22	370	335	291	302	305	237	242	258	221	346	337	330	298	261	290	343
22-23	374	320	288	273	263	252	204	259	245	334	328	338	290	245	285	340
23-24	370	331	306	294	261	251	208	252	294	357	357	358	312	243	338	354
Mean	474	452	401	410	432	420	398	430	425	476	491	459	439	420	428	469

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 34 Baker Lake

3500 γ +

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	514	511	506	529	549	551	538	502	527	525	507	533
2	517	521	520	529	541	543	534	529	533	526	511	517
3	517	509	526	524	519	544	543	528	520	525	501	508
4	511	517	515	553	495	527	522	523	523	516	511	501
5	512	515	524	528	534	537	537	528	528	522	524	498
6	530	512	530	522	524	496	529	536	534	521	510	505
7	507	526	521	525	548	523	520	530	534	522	483	513
8	515	534	523	528	545	525	535	535	519	515	468	515
9	515	516	554	519	534	540	534	552	525	531	486	506
10	510	502	488	523	517	531	537	551	526	526	509	536
11	513	505	484	526	528	546	554	528	519	495	495	534
12	510	495	522	517	545	551	558	537	516	500	497	534
13	495	506	515	462	534	532	560	537	533	505	514	534
14	483	514	525	488	535	563	549	532	515	505	522	509
15	463	515	518	520	557	557	548	527	535	507	520	530
16	478	526	523	524	537	539	578	529	499	487	533	525
17	492	528	511	519	544	568	575	549	507	516	477	534
18	481	522	517	505	539	476	555	555	498	526	528	537
19	475	528	519	542	543	559	530	491	525	514	532	530
20	509	526	529	526	548	513	547	534	489	514	523	518
21	513	519	524	526	534	539	563	508	515	530	518	528
22	515	526	520	519	532	537	555	525	448	529	514	515
23	517	516	525	523	529	537	587	538	489	529	521	522
24	487	526	526	529	541	534	551	520	480	471	486	524
25	494	513	514	533	528	557	560	538	514	500	498	527
26	518	513	521	542	532	538	544	519	494	515	523	520
27	517	526	521	529	530	562	544	492	474	525	535	532
28	517	519	529	535	563	562	533	482	488	525	519	528
29	511		525	534	551	562	545	516	483	442	527	505
30	447		522	533	531	552	521	534	493	478	510	528
31	451		524		539		533	529		513		539
Mean	501	517	520	524	536	540	546	527	509	511	510	522

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 35 Baker Lake

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	225	252	230	225	245	232	221	234	241	229	228	239
2	228	235	236	241	242	224	234	235	241	233	237	239
3	231	231	239	235	245	236	229	230	240	228	212	227
4	233	233	235	251	233	229	232	239	236	234	234	227
5	228	237	242	219	235	232	216	223	236	239	234	208
6	230	242	239	238	225	221	211	234	246	226	243	214
7	227	239	238	235	214	209	227	224	238	239	233	222
8	231	240	244	235	211	231	225	233	222	230	218	209
9	227	233	255	231	195	219	213	232	233	236	233	224
10	229	226	244	232	235	235	231	243	240	246	230	226
11	236	222	218	233	230	233	219	241	247	230	238	224
12	235	232	242	243	242	232	229	238	226	245	226	226
13	221	247	245	232	222	223	230	247	241	207	231	223
14	246	219	238	238	216	250	233	233	250	221	228	233
15	194	238	231	230	236	232	228	255	244	227	232	225
16	216	248	238	234	221	236	232	240	226	224	232	230
17	226	238	245	233	239	264	234	250	203	225	239	230
18	219	236	235	239	233	256	237	242	248	235	233	228
19	226	241	237	222	248	236	223	241	251	235	239	224
20	230	243	242	244	222	218	235	226	229	243	234	233
21	232	242	233	239	241	223	257	216	251	224	239	226
22	235	239	240	237	229	222	236	241	173	232	243	227
23	227	233	244	219	232	234	242	224	182	239	236	220
24	232	235	244	239	247	240	231	234	243	206	248	228
25	228	229	236	235	228	234	265	235	222	230	219	230
26	233	233	241	228	225	204	236	228	227	233	239	226
27	234	236	232	238	236	239	226	243	222	236	238	226
28	238	236	241	244	230	241	217	237	226	246	234	228
29	236		239	238	222	253	248	238	230	226	238	240
30	210		234	250	216	245	235	244	231	181	241	229
31	224		235		244		224	243		232		230
Mean	228	236	238	235	230	233	231	236	232	230	234	226

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (gammas)

Table 36 Baker Lake

60,000 γ +

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	424	479	395	383	427	469	358	363	377	385	403	428
2	411	422	401	373	448	494	368	348	350	377	395	433
3	409	426	416	388	381	434	357	344	351	394	425	485
4	417	412	393	402	463	433	368	381	344	404	380	460
5	437	423	375	420	414	399	336	362	335	393	407	448
6	410	417	360	440	433	366	405	370	341	385	433	434
7	419	392	368	436	382	412	412	377	346	363	451	494
8	413	376	411	391	374	408	371	389	385	407	508	485
9	406	380	357	422	409	423	367	387	368	381	503	488
10	399	454	445	399	387	387	368	378	346	383	492	428
11	400	434	398	383	413	397	371	372	365	478	447	429
12	395	441	429	384	396	386	360	362	379	440	457	426
13	456	465	422	412	389	409	355	341	333	423	418	411
14	442	465	390	417	413	404	349	344	431	471	415	430
15	454	430	388	432	391	436	351	337	410	422	422	428
16	473	445	388	370	382	399	363	340	415	475	419	406
17	455	410	370	378	428	485	412	350	472	430	447	414
18	441	407	388	365	389	404	382	446	414	452	421	417
19	454	395	386	411	393	411	356	379	450	471	415	405
20	459	416	376	440	389	396	350	494	424	429	424	466
21	439	416	390	412	382	407	461	444	419	419	433	430
22	424	410	385	398	398	394	452	395	416	401	419	454
23	435	421	404	438	396	389	423	462	467	383	436	442
24	433	396	386	386	392	426	427	408	353	498	500	411
25	443	392	388	383	393	391	364	357	405	413	502	419
26	430	419	381	358	379	441	371	380	391	415	456	408
27	415	391	396	403	381	451	406	342	353	413	433	413
28	414	392	386	382	423	417	369	389	404	377	423	383
29	394		388	381	431	398	347	384	380	481	436	419
30	474		386	369	433	399	340	378	428	488	458	383
31	541		386		461		336	403		392		385
Mean	433	419	391	399	405	415	376	381	388	420	439	431

Table 38 Baker Lake

R_x (Hourly Ranges in 10γ units)

February 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	1	1	0	1	0	1	1	1	19	6	9	10	9	19	15	17	6	16	11	21	8	3	5	3	8
2	1	1	1	1	0	0	1	1	0	0	1	1	3	3	6	5	9	4	3	2	2	1	2	1	2
3	1	0	1	2	1	6	8	11	3	1	1	3	1	6	5	8	3	8	5	4	6	3	3	3	4
4	1	1	1	0	1	1	0	1	1	0	0	1	1	3	5	4	6	7	3	9	3	2	4	2	2
5	1	1	1	1	1	1	1	1	1	1	6	4	3	4	7	8	8	3	4	5	2	2	2	1	3
6	1	2	3	2	3	1	1	1	2	1	4	2	2	4	13	8	7	10	6	3	2	4	4	1	4
7	1	1	2	1	1	0	0	0	1	4	2	1	2	4	4	4	2	1	3	1	2	2	3	4	2
8	3	2	1	1	1	1	0	0	0	0	0	1	1	4	3	3	2	1	0	1	2	0	1	3	1
9	1	3	1	0	1	0	1	1	1	1	1	2	2	5	6	5	2	2	5	3	3	7	13	11	3
10	6	8	7	5	33	17	5	47	27	9	5	6	20	7	26	17	30	27	23	8	16	18	11	10	16
11	4	5	3	3	65	81	54	9	6	8	7	5	8	19	25	16	16	17	22	13	12	21	4	6	18
12	6	14	10	52	38	12	10	11	20	12	9	5	6	13	11	12	18	9	12	22	13	22	8	17	15
13	6	5	4	18	19	6	37	19	18	11	6	8	5	13	13	10	39	18	19	27	13	13	8	11	14
14	4	5	4	8	78	63	5	8	44	12	7	6	13	10	22	12	8	13	18	11	7	9	5	6	16
15	7	2	2	2	2	3	3	21	4	6	8	5	7	15	16	19	8	19	10	5	5	3	8	3	8
16	6	1	1	0	0	2	1	0	0	1	4	4	4	6	9	9	8	4	2	2	2	2	4	2	3
17	2	1	0	1	1	2	10	2	4	5	5	2	3	3	5	6	7	4	6	8	3	4	1	1	4
18	1	1	1	1	1	1	8	5	3	3	4	3	2	5	10	5	5	6	5	5	2	2	2	2	3
19	2	1	1	0	1	1	1	2	2	1	1	1	1	6	5	4	3	1	1	3	1	8	2	1	2
20	0	1	1	0	1	2	4	3	3	3	4	1	10	6	6	6	5	10	8	4	6	14	6	11	5
21	6	1	3	1	0	1	3	3	3	8	3	4	5	6	4	14	4	8	9	5	11	9	7	4	5
22	2	3	1	2	2	3	1	1	8	2	3	5	5	6	15	8	10	8	6	5	8	4	2	5	5
23	1	1	2	1	1	1	28	18	13	2	2	7	4	8	5	6	11	6	3	3	2	4	1	5	6
24	2	1	1	0	1	1	10	0	1	1	2	2	1	2	4	3	5	2	4	1	2	4	8	5	3
25	2	2	2	2	1	2	1	1	2	3	1	5	2	4	7	6	4	5	4	3	4	6	3	2	3
26	2	0	1	1	2	13	12	4	4	5	3	2	5	5	13	13	11	5	3	7	4	9	6	2	5
27	2	4	0	0	1	1	0	0	2	3	1	1	1	2	4	2	2	4	5	4	0	1	2	3	2
28	3	0	0	3	2	3	3	2	3	10	5	2	4	9	10	4	3	3	3	1	2	5	3	9	4
29																									
30																									
31																									
Mean	3	3	2	4	9	8	8	6	7	4	4	4	5	7	10	8	9	8	7	7	5	6	5	5	6

Table 40 Baker Lake

R_x (Hourly Ranges in 10γ units)

April 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	2	3	4	4	1	3	5	1	2	3	2	2	2	6	9	5	6	2	2	4	4	1	1	2	3
2	2	1	2	1	0	1	1	1	0	0	1	2	3	5	5	8	5	4	7	6	5	7	4	4	3
3	5	4	4	1	3	1	2	2	5	2	2	1	4	3	2	5	1	2	2	3	3	3	1	1	3
4	1	2	2	1	1	2	1	2	5	6	7	4	9	12	10	17	30	30	16	32	11	20	17	12	10
5	7	7	18	4	84	47	24	7	3	3	5	11	9	14	15	29	22	25	25	7	31	10	12	6	17
6	4	3	3	39	6	2	8	4	24	5	6	8	14	15	13	15	14	20	16	12	21	9	10	9	12
7	4	3	2	4	3	5	9	9	6	13	4	6	7	16	27	18	18	29	15	2	3	8	6	12	10
8	3	3	4	2	3	8	2	1	2	2	4	6	4	6	15	10	6	8	8	12	6	4	5	8	6
9	1	1	1	1	45	11	2	6	6	2	2	2	7	10	12	15	4	20	12	3	10	3	2	3	7
10	2	2	1	1	1	0	1	8	10	2	1	2	4	6	4	2	2	3	7	4	5	4	2	2	3
11	1	2	2	1	0	1	1	1	2	1	4	3	2	2	4	2	2	1	2	7	2	2	8	9	2
12	2	3	1	1	2	1	3	7	3	3	15	12	2	19	14	6	6	6	4	6	9	7	2	2	6
13	2	1	4	8	10	16	6	2	1	4	7	6	8	7	14	20	9	21	20	20	8	11	4	6	9
14	5	3	2	4	2	2	2	2	1	4	4	4	15	12	6	50	55	8	6	9	8	6	18	11	10
15	6	6	13	4	2	6	6	24	16	5	4	9	5	21	8	7	6	3	2	4	4	4	6	4	7
16	4	1	6	5	2	2	2	2	3	2	3	4	8	6	3	6	4	2	7	3	6	4	7	6	4
17	2	4	9	6	2	2	2	2	2	2	2	2	3	7	8	6	4	4	6	5	4	6	5	5	4
18	1	2	1	1	1	2	2	1	2	6	3	3	6	9	9	10	10	5	12	26	33	17	6	10	7
19	9	3	3	2	3	21	12	8	13	4	4	4	6	5	8	25	18	14	11	6	6	7	5	5	8
20	3	3	3	2	2	2	2	3	13	6	6	6	6	4	4	16	17	10	5	2	2	4	2	2	5
21	2	1	1	0	2	0	0	0	0	1	2	4	5	4	11	4	11	6	4	4	7	7	8	3	4
22	10	19	5	2	3	1	2	2	2	1	3	5	12	12	2	8	5	6	6	8	14	17	6	9	7
23	3	4	2	4	5	2	3	4	5	7	3	8	5	8	6	8	5	3	6	4	3	1	1	2	4
24	2	2	1	1	0	1	1	0	1	1	2	1	6	2	3	2	3	4	4	3	2	2	2	2	2
25	2	3	1	6	29	48	21	2	2	1	2	1	1	4	2	4	3	2	1	2	6	4	2	4	6
26	4	3	2	33	28	16	8	3	1	3	2	1	4	7	3	3	5	3	3	5	7	7	6	6	7
27	4	2	4	2	1	2	2	3	2	2	7	6	13	6	10	20	5	7	18	15	3	1	2	6	6
28	2	2	1	1	1	0	1	0	2	1	2	5	2	6	2	3	4	6	2	2	2	4	3	2	2
29	1	1	1	3	1	11	2	2	2	2	2	3	3	6	2	6	1	4	1	4	7	3	2	4	3
30	2	2	2	1	1	1	1	2	1	2	4	5	3	6	9	17	19	17	17	44	48	60	20	17	13
31																									
Mean	3	3	3	5	8	7	4	4	5	3	4	4	6	8	8	12	10	9	8	9	9	8	6	6	6

Table 42 Baker Lake

R_x (Hourly Ranges in 10γ units)

June 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	5	4	5	6	5	9	4	4	4	25	26	39	10	12	12	7	10	8	8	7	6	5	6	5	10	
2	6	5	3	16	5	61	14	5	3	6	4	17	20	28	6	31	32	10	14	7	10	5	4	7	13	
3	8	3	6	4	4	4	6	7	5	3	6	4	5	13	14	6	5	11	9	7	7	13	4	6	7	
4	5	2	1	2	3	2	5	29	8	5	2	2	3	13	8	11	5	5	7	5	5	7	5	3	6	
5	4	2	2	0	2	1	1	1	2	1	2	2	2	4	3	3	5	3	1	1	2	3	2	1	2	
6	0	2	1	2	1	2	1	1	1	2	2	2	3	5	6	5	6	8	6	25	14	19	18	14	6	
7	4	12	6	6	5	3	5	5	5	6	8	13	13	12	12	38	39	12	20	11	8	17	12	7	12	
8	5	5	4	3	5	4	11	2	6	13	17	10	8	14	11	10	5	26	10	20	23	14	21	6	11	
9	7	8	9	5	7	13	10	4	4	5	8	10	13	13	23	17	8	7	7	5	7	9	8	4	9	
10	6	9	4	2	4	2	1	1	1	6	14	4	9	13	11	7	5	9	9	15	7	7	4	5	6	
11	8	8	4	3	24	35	5	1	1	3	2	3	6	6	7	15	9	4	8	5	7	6	6	5	8	
12	6	3	5	6	2	1	2	2	1	3	5	6	3	3	3	5	3	4	7	4	7	4	4	6	4	
13	3	4	5	1	3	3	1	4	2	4	5	7	10	5	4	2	4	10	5	5	6	8	9	9	5	
14	10	4	1	1	1	1	1	1	3	6	5	5	4	5	14	27	11	6	5	5	7	4	9	4	6	
15	6	3	4	4	30	34	7	4	4	4	5	12	10	2	21	10	10	9	7	14	13	5	5	2	9	
16	2	3	1	3	1	6	2	1	1	2	1	3	4	2	3	5	2	8	11	5	4	3	14	12	4	
17	9	7	3	3	7	7	8	5	23	11	16	10	5	8	10	8	9	17	12	20	6	7	5	7	9	
18	6	4	4	3	9	5	3	5	6	4	6	16	16	19	32	8	8	19	23	7	10	4	4	5	9	
19	11	7	6	5	3	3	3	3	2	2	3	3	3	5	7	9	16	9	17	12	7	6	6	12	7	
20	10	11	11	8	5	5	9	18	3	4	5	18	10	9	11	11	11	9	9	8	5	5	10	7	9	
21	4	4	5	3	24	32	29	5	8	10	6	4	4	4	1	8	14	5	5	3	6	6	9	5	8	
22	4	5	1	2	8	8	21	16	7	2	2	3	4	10	5	5	5	3	2	3	4	12	6	6	6	
23	4	8	1	3	3	10	6	2	2	3	2	3	3	2	6	4	5	5	3	6	8	6	2	2	4	
24	4	5	2	1	2	5	22	2	2	1	3	4	3	13	19	40	20	10	9	4	7	3	11	6	8	
25	4	6	3	8	8	5	24	14	5	7	6	2	13	13	8	11	14	5	24	16	24	61	41	29	15	
26	15	35	14	6	56	11	9	15	25	27	8	6	11	12	13	9	9	14	12	12	12	12	11	6	15	
27	5	9	11	10	12	16	11	5	31	10	10	14	9	13	20	14	16	19	11	23	23	12	11	9	14	
28	8	3	5	4	7	15	13	5	10	5	5	3	8	9	11	10	12	12	7	12	8	8	7	3	8	
29	5	4	4	6	2	3	6	6	4	4	4	3	8	9	10	16	18	32	22	22	9	12	10	7	9	
30	8	6	3	4	5	19	16	10	17	4	6	7	7	5	6	24	11	9	11	20	10	11	13	13	10	
31																										
Mean	6	6	4	4	8	11	9	6	7	6	6	8	8	9	11	13	11	10	10	10	9	10	9	7	8	

Table 43 Baker Lake

R_x (Hourly Ranges in 10 γ units)

July 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	6	4	44	43	7	4	4	4	3	3	4	4	5	3	8	8	3	3	3	2	3	3	2	2	2	7
2	2	3	2	1	1	1	2	1	4	3	2	3	3	5	8	3	7	5	4	2	2	2	4	8	3	3
3	6	3	5	3	3	1	1	1	2	1	3	3	2	5	4	3	1	1	1	3	1	6	4	3	3	3
4	1	1	3	3	3	10	11	5	4	5	4	5	9	20	19	26	13	6	15	37	13	7	28	7	11	11
5	12	13	2	5	12	5	6	5	8	4	6	4	5	5	12	5	8	12	13	5	15	8	26	10	9	9
6	4	6	6	7	69	31	8	36	36	6	4	5	10	6	12	18	15	14	19	6	10	12	10	6	15	15
7	2	2	8	3	6	5	4	3	3	22	22	8	9	8	13	20	18	7	2	5	7	10	12	7	9	9
8	7	6	8	6	30	24	5	4	6	3	6	6	8	18	18	12	14	10	10	10	7	10	16	11	11	11
9	9	15	9	56	55	5	4	3	3	8	5	7	7	10	13	14	17	10	10	18	9	14	6	6	13	13
10	5	5	3	69	29	3	11	4	6	7	6	6	5	9	21	29	22	18	16	12	19	11	4	8	14	14
11	5	11	5	5	18	22	26	13	3	3	2	5	4	6	7	11	14	4	4	6	8	3	4	5	8	8
12	2	4	3	3	2	26	12	3	2	2	3	4	3	6	3	3	5	3	3	6	2	4	4	5	5	5
13	4	5	2	3	4	2	1	11	5	2	4	4	4	8	3	6	3	5	3	4	5	4	5	4	4	4
14	7	3	2	1	2	2	2	2	2	1	2	2	3	8	6	9	7	3	2	3	2	6	1	2	3	3
15	2	2	1	2	2	2	1	1	2	1	3	3	3	8	5	5	1	2	1	2	2	5	2	4	3	3
16	6	5	3	5	2	4	7	3	3	3	2	1	5	10	8	13	18	8	13	8	7	9	9	8	7	7
17	7	11	7	6	4	4	3	2	2	8	10	15	11	7	6	18	37	42	4	5	3	3	10	4	10	10
18	5	3	2	2	3	4	7	9	3	3	2	4	3	16	7	16	21	10	10	10	5	13	5	5	7	7
19	5	2	4	4	1	1	3	3	2	1	3	4	4	11	18	5	5	6	5	4	3	5	4	4	4	4
20	4	3	2	1	1	1	1	1	1	1	1	3	4	5	4	4	12	11	5	10	4	6	3	4	4	4
21	6	4	3	3	5	3	4	21	7	8	5	9	72	43	11	33	30	22	10	21	8	3	5	6	14	14
22	3	5	3	3	3	6	33	46	5	6	3	6	12	5	9	19	12	14	14	9	4	6	5	4	10	10
23	9	2	5	3	3	6	16	4	11	5	7	5	10	8	26	18	15	20	33	36	30	47	14	30	15	15
24	6	81	20	29	22	4	21	20	6	10	7	9	8	12	25	31	37	43	18	5	15	19	6	5	19	19
25	7	4	5	8	37	24	4	12	15	5	6	9	7	8	6	31	19	16	13	10	10	6	8	5	11	11
26	8	5	10	9	7	16	14	9	6	6	10	13	8	5	18	13	15	21	8	19	26	9	9	5	11	11
27	11	20	12	6	39	13	6	5	6	5	5	8	6	20	13	11	17	11	8	7	10	15	9	6	11	11
28	25	25	9	3	3	4	29	7	2	9	6	3	5	4	5	6	3	4	3	3	3	3	4	2	7	7
29	2	3	2	3	1	1	1	1	2	1	2	2	3	8	7	14	8	6	5	5	7	7	14	6	5	5
30	16	8	4	5	15	11	6	4	9	9	5	14	28	28	13	14	14	14	16	27	40	33	8	11	15	15
31	18	11	5	4	4	5	34	27	8	4	3	5	17	10	14	17	13	29	10	11	6	11	16	15	12	12
Mean	7	9	6	10	13	8	9	9	6	5	5	6	9	10	11	14	14	12	9	10	9	10	8	7	9	9

Table 44 Baker Lake

 R_x (Hourly Ranges in 10 γ units)

August 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	10	4	14	7	7	22	6	4	2	6	4	11	6	11	18	30	21	24	26	21	18	24	28	11	14	
2	7	5	9	4	3	24	81	27	6	3	8	8	11	10	17	18	4	9	13	15	11	15	8	10	14	
3	9	2	3	13	24	4	4	5	3	4	5	3	5	4	6	9	8	8	6	7	11	10	9	13	7	
4	13	6	7	3	1	3	2	17	8	6	4	3	13	24	18	12	27	9	14	12	23	13	17	7	11	
5	10	5	9	10	37	37	26	5	4	10	8	6	8	9	6	6	7	10	6	7	14	17	5	7	11	
6	4	1	4	5	7	7	7	9	2	2	4	5	10	6	5	11	9	15	5	9	12	11	6	9	7	
7	15	11	10	46	15	4	2	2	2	3	5	8	8	10	13	5	2	4	6	8	5	6	5	9	9	
8	4	2	3	7	5	5	3	2	3	3	4	5	4	10	11	5	5	6	3	2	3	4	4	5	4	
9	3	5	6	3	2	1	3	3	3	6	6	3	6	6	7	16	9	7	5	10	3	6	5	5	6	
10	4	1	3	1	2	1	1	1	1	1	3	4	7	7	14	16	18	11	8	5	3	2	2	2	5	
11	6	5	2	1	0	1	2	1	1	1	1	4	3	5	5	7	6	8	7	3	5	7	7	2	4	
12	2	2	6	4	2	1	3	2	1	1	3	5	3	3	5	5	7	6	5	4	6	6	4	1	4	
13	2	4	1	1	1	1	1	1	1	1	2	2	3	3	5	3	3	3	2	4	3	4	4	4	3	
14	4	3	2	1	2	1	1	2	3	2	3	2	2	5	2	4	1	3	3	2	1	1	4	5	3	
15	1	1	1	0	1	1	0	0	1	1	1	3	7	7	13	10	10	4	13	13	23	19	17	6	6	
16	7	3	2	1	1	1	1	1	1	1	2	5	7	5	12	5	7	7	8	4	5	6	6	6	4	
17	8	4	3	1	1	2	4	11	4	2	8	6	9	5	5	5	8	5	7	9	11	12	9	5	6	
18	5	9	6	5	22	5	4	3	31	33	7	14	11	30	30	22	18	14	8	17	9	17	7	4	14	
19	7	6	2	3	2	9	8	2	2	1	2	3	8	5	16	5	19	46	13	11	7	10	6	18	9	
20	9	18	51	37	21	20	35	5	6	9	11	7	24	19	14	26	19	35	30	7	7	9	10	18	19	
21	28	8	67	46	59	10	10	53	28	13	6	7	10	8	26	11	23	7	17	11	8	20	8	8	21	
22	4	3	2	1	1	2	16	8	19	7	7	6	3	8	7	8	4	7	5	6	11	16	6	4	7	
23	4	5	12	13	6	4	11	9	5	12	10	8	13	8	22	5	6	14	10	12	5	4	5	12	9	
24	9	11	5	4	1	2	1	3	12	14	5	4	5	9	6	8	10	8	8	4	8	10	10	4	7	
25	6	3	2	3	2	5	9	2	3	3	4	5	5	8	7	4	8	3	4	5	10	6	20	13	6	
26	12	12	2	2	30	19	14	3	3	2	4	4	5	5	18	14	16	10	7	7	13	6	5	6	9	
27	2	1	3	3	1	1	2	2	2	2	5	7	6	20	22	17	19	37	25	17	25	17	15	7	11	
28	5	5	3	4	4	3	3	3	3	5	11	52	44	12	22	28	26	28	44	38	18	17	15	11	17	
29	4	8	24	7	2	3	4	2	10	10	13	8	10	12	20	24	21	16	10	8	12	5	8	4	10	
30	5	4	3	3	2	1	1	3	1	2	3	5	6	8	15	17	23	9	17	9	7	3	9	17	7	
31	5	4	3	2	4	5	7	3	6	6	5	6	5	11	7	24	23	35	6	9	9	15	12	6	9	
Mean	7	5	9	8	9	7	9	6	6	6	5	7	9	9	13	13	13	13	11	10	10	10	9	8	9	

Table 45 Baker Lake

R_x (Hourly Ranges in 10 γ units)

September 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	4	3	3	3	2	7	4	5	10	9	11	9	14	16	7	16	13	6	15	6	7	4	6	8	
2	6	4	2	2	6	2	18	1	1	1	1	2	3	11	11	5	9	10	11	5	13	18	7	7	6	
3	7	6	10	3	3	2	19	19	1	2	2	3	5	6	4	14	5	17	6	6	4	6	7	6	7	
4	2	3	4	3	22	7	1	3	3	4	4	3	4	7	9	4	4	5	4	4	7	13	6	7	6	
5	5	6	2	2	2	1	1	1	1	3	4	4	15	8	7	10	9	6	8	9	5	8	4	15	6	
6	6	6	2	1	1	2	2	1	3	2	3	4	4	4	12	7	9	9	6	5	7	14	10	8	5	
7	3	2	2	1	1	1	2	2	2	1	1	2	4	5	2	4	1	3	2	4	4	3	6	12	3	
8	5	4	1	2	5	29	38	5	4	1	2	8	34	29	9	8	6	9	10	5	3	4	3	2	9	
9	5	4	4	5	46	36	3	1	1	11	6	6	8	10	18	21	30	15	8	6	5	6	6	2	11	
10	2	2	3	5	2	1	3	2	7	5	5	3	5	6	5	7	6	3	4	2	8	18	14	7	5	
11	6	3	2	2	4	5	5	1	3	31	25	19	9	10	14	22	33	34	19	39	18	9	7	8	14	
12	3	15	6	6	2	68	53	2	13	13	6	5	5	10	11	11	9	9	6	6	6	4	5	1	12	
13	5	2	6	2	1	1	1	2	1	2	2	3	3	4	5	3	2	1	3	17	12	12	8	14	5	
14	10	2	5	2	92	32	36	32	14	16	12	7	26	27	11	22	41	47	44	27	10	19	21	4	23	
15	5	29	6	2	42	74	89	8	7	8	8	10	14	51	45	33	47	30	27	26	52	20	21	13	28	
16	9	10	5	62	79	16	26	28	17	8	3	42	53	22	38	28	25	24	30	65	15	11	22	15	27	
17	9	5	4	25	58	28	62	30	29	38	34	31	16	16	18	29	22	20	20	18	13	15	10	7	23	
18	4	7	32	18	9	2	2	2	2	4	4	6	7	14	6	28	12	22	18	10	3	9	8	7	10	
19	20	14	3	6	54	41	32	6	8	6	7	10	14	17	5	7	15	8	13	4	4	7	7	6	13	
20	6	5	3	4	6	36	20	2	3	7	4	6	4	18	20	16	6	16	9	4	7	4	10	4	9	
21	3	4	2	23	25	3	2	3	4	3	3	2	3	9	93	44	56	37	57	34	46	11	27	17	21	
22	6	5	4	9	66	60	89	17	62	10	14	18	42	20	12	7	26	29	57	67	42	37	25	48	32	
23	41	34	16	36	32	69	15	12	30	14	13	21	13	11	9	7	22	10	16	8	9	5	5	2	19	
24	2	1	2	2	2	3	2	3	1	3	4	3	14	18	7	11	8	5	21	9	17	7	5	5	7	
25	9	9	48	11	11	4	3	2	7	15	7	7	11	22	14	27	29	47	26	15	16	24	11	6	16	
26	4	1	3	3	73	76	35	9	3	4	8	5	10	8	12	23	44	32	29	17	19	22	15	6	19	
27	9	5	51	28	6	14	4	3	8	8	5	9	16	8	15	23	20	16	21	27	52	22	16	9	17	
28	9	5	76	31	53	52	53	20	8	5	6	12	9	7	6	13	26	16	30	18	16	20	11	14	22	
29	6	12	8	72	25	15	6	6	8	12	7	5	8	28	23	18	12	15	14	15	11	23	9	13	16	
30	2	55	13	15	1	2	5	18	5	9	8	3	6	14	12	20	10	8	4	4	7	20	7	2	10	
31																										
Mean	7	9	11	13	24	23	21	8	9	9	7	9	12	14	16	16	19	17	18	16	15	13	11	9	14	

Table 46 Baker Lake

 R_x (Hourly Ranges in 10 γ units)

October 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	1	2	3	3	3	3	2	2	2	3	3	2	7	11	9	3	4	3	5	4	4	4	3	4
2	2	1	1	1	1	1	2	0	2	2	2	3	5	9	8	3	3	4	6	6	3	2	1	3	3
3	1	2	1	7	9	3	2	1	3	3	6	2	3	8	5	3	3	3	3	3	3	3	2	2	3
4	3	2	4	3	3	2	3	2	6	3	5	2	6	2	8	10	16	5	4	3	4	4	3	3	4
5	2	2	2	1	1	2	1	1	2	9	8	5	4	8	10	7	8	3	5	7	15	13	3	2	5
6	4	2	1	3	46	2	1	1	2	2	2	2	4	5	5	6	5	3	5	8	4	3	2	3	5
7	2	2	2	3	1	2	2	2	3	3	4	2	3	7	11	8	18	6	4	8	11	12	9	8	6
8	5	5	11	58	30	3	2	3	5	5	4	6	6	8	11	13	11	12	5	5	12	4	3	3	10
9	2	2	2	3	2	7	3	2	9	3	3	1	5	5	3	8	4	4	5	7	8	7	5	3	4
10	2	1	2	1	1	1	1	1	4	8	7	4	8	9	9	10	6	3	9	10	9	11	3	3	5
11	4	3	2	2	49	28	3	35	25	12	13	56	35	5	8	19	20	10	8	8	10	9	11	7	16
12	3	66	60	15	11	28	31	8	5	4	5	8	23	9	17	26	19	41	27	27	26	21	10	3	21
13	6	3	7	9	85	76	85	14	6	5	6	4	9	7	18	27	25	13	15	17	22	19	8	13	21
14	10	5	8	8	13	70	58	20	9	16	7	5	7	10	18	20	9	17	16	15	13	12	10	6	16
15	3	9	7	8	56	41	20	16	5	5	8	10	10	18	11	20	11	6	5	17	12	13	12	9	14
16	5	3	48	43	3	8	38	55	21	23	13	6	18	25	33	7	14	17	17	11	11	6	7	4	18
17	4	1	1	2	38	27	22	15	3	2	3	5	3	3	3	6	8	5	3	4	4	3	4	4	7
18	2	2	2	14	5	3	3	2	3	2	2	15	10	9	5	6	7	13	9	3	3	3	4	3	5
19	4	3	3	3	3	4	3	5	3	3	9	3	5	13	8	6	7	7	7	3	5	3	2	4	5
20	2	3	3	3	2	2	1	3	8	4	4	8	6	5	15	10	7	9	10	8	3	4	10	14	6
21	3	3	3	3	4	3	3	3	2	6	5	5	3	5	5	5	4	5	1	1	2	2	3	2	3
22	2	1	1	2	2	1	2	2	1	1	2	2	3	3	3	6	3	3	2	2	2	2	2	2	2
23	2	1	1	2	2	2	2	2	1	2	1	3	3	7	3	4	1	3	2	5	3	7	14	3	3
24	12	8	7	10	11	3	48	41	27	31	57	37	11	15	8	14	21	12	17	28	18	17	8	5	19
25	30	94	4	5	2	18	22	7	5	4	4	4	5	13	12	6	11	13	8	9	4	8	5	7	13
26	3	5	5	10	6	2	1	1	2	2	3	5	3	8	17	18	10	12	10	8	8	12	5	4	7
27	3	2	3	2	1	2	1	1	1	2	3	2	4	7	8	6	5	4	5	3	3	4	1	1	3
28	3	1	2	1	1	1	3	3	2	1	7	8	3	3	2	8	7	17	21	20	5	5	4	6	5
29	5	3	7	4	13	6	9	6	15	7	5	6	6	8	24	27	46	13	5	12	12	24	21	26	13
30	8	16	49	23	22	28	22	24	11	10	5	6	4	4	5	4	4	3	5	8	4	3	3	3	11
31	3	3	2	2	1	2	1	1	3	3	3	5	6	5	4	8	10	3	3	4	3	3	4	2	3
Mean	5	8	8	8	14	12	13	9	6	6	7	7	7	8	10	11	10	9	8	9	8	8	6	5	8

Table 47 Baker Lake

 R_x (Hourly Ranges in 10 γ units)

November 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	2	2	4	1	3	36	15	4	4	5	2	6	5	9	17	22	11	7	10	9	8	2	3	2	8	
2	8	3	3	8	5	3	2	1	5	12	12	9	7	9	9	12	8	19	26	17	17	10	6	7	9	
3	5	3	2	5	57	33	19	3	10	12	8	6	7	8	11	7	4	12	13	10	14	10	17	2	12	
4	4	3	2	2	6	35	42	7	9	4	4	2	12	7	18	10	9	9	5	4	6	5	3	2	9	
5	3	1	1	2	1	2	8	9	2	2	3	2	2	1	3	4	4	2	2	2	2	3	2	2	3	
6	2	4	3	1	2	2	1	3	9	12	5	8	5	11	7	22	15	7	14	11	11	7	6	3	7	
7	2	3	2	2	35	47	52	7	2	2	13	15	21	7	16	20	8	13	17	22	17	19	7	17	15	
8	46	3	18	9	10	122	72	47	8	5	4	13	15	35	57	22	17	27	12	22	12	22	8	8	26	
9	44	20	14	7	32	8	4	18	25	7	6	15	16	26	38	21	47	41	23	24	21	12	7	6	20	
10	5	17	141	10	12	40	10	5	7	12	17	13	9	15	23	20	15	25	15	9	10	10	17	7	19	
11	3	23	30	16	29	27	10	7	4	12	6	5	12	9	17	9	8	15	14	14	17	10	7	4	13	
12	4	2	4	37	36	15	15	12	40	27	7	11	18	28	33	26	12	24	21	8	12	11	6	6	17	
13	2	3	2	5	27	6	6	2	2	2	4	3	4	11	5	4	7	7	6	6	8	5	5	2	6	
14	2	2	1	2	4	112	10	17	3	1	3	3	6	5	10	5	9	2	3	5	4	8	4	3	9	
15	2	5	5	3	2	2	2	3	5	3	2	4	5	4	2	5	4	5	4	4	2	2	2	2	3	
16	2	2	2	1	1	1	12	3	6	4	2	2	3	3	4	3	2	2	1	2	2	3	2	2	3	
17	2	1	1	2	1	3	5	2	3	4	5	7	9	11	21	21	22	37	42	12	6	4	3	4	9	
18	2	2	1	2	2	2	2	1	1	1	2	2	2	2	5	7	4	4	3	2	1	2	1	1	2	
19	1	1	1	1	1	1	1	2	1	2	3	2	3	3	5	5	3	2	2	3	2	2	2	3	2	
20	2	2	4	4	2	2	1	2	1	1	1	1	2	3	2	3	5	4	2	3	2	1	1	1	2	
21	1	2	1	1	2	2	1	1	2	1	2	1	3	2	11	10	2	4	5	4	4	2	2	2	3	
22	1	1	1	1	1	1	1	2	1	3	2	2	5	5	6	12	7	12	12	17	9	2	2	4	5	
23	4	2	3	2	2	2	2	2	18	5	2	6	3	4	6	7	6	4	5	2	3	3	2	2	4	
24	4	2	3	7	7	11	3	6	7	7	4	10	6	23	25	11	6	11	11	4	3	7	8	4	8	
25	6	4	7	9	6	54	22	13	15	20	6	4	8	17	13	6	14	7	7	6	7	3	2	3	11	
26	1	1	1	1	1	0	1	2	16	11	3	2	5	5	6	5	3	3	3	3	2	2	1	1	3	
27	1	0	1	1	1	2	3	7	2	3	4	2	4	3	5	3	3	8	4	9	6	6	2	2	3	
28	2	2	2	2	34	10	13	16	2	1	2	2	5	2	7	7	2	3	2	1	1	1	1	1	5	
29	2	3	3	9	6	6	2	2	2	2	3	3	2	6	15	11	5	5	4	5	3	2	5	8	5	
30	3	2	2	1	1	1	1	5	5	2	5	5	71	51	15	10	18	12	6	3	7	5	4	2	10	
31																										
Mean	6	4	9	5	11	20	11	7	7	6	5	6	9	11	14	11	9	11	10	8	7	6	5	4	8	

Table 48 Baker Lake

R_x (Hourly Ranges in 10 γ units)

December 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	2	2	2	2	2	2	2	2	2	3	3	4	6	5	6	15	16	6	6	3	4	8	5	4	5
2	3	2	2	3	11	13	2	3	9	9	4	2	3	9	8	8	14	12	11	11	6	14	13	6	7
3	4	3	9	3	48	58	14	76	36	10	9	5	12	12	14	19	15	20	22	8	7	15	12	5	18
4	7	4	8	60	11	3	21	9	8	6	6	5	6	24	25	40	22	23	25	10	12	10	9	14	15
5	15	6	4	4	52	77	44	28	10	6	7	13	22	10	12	17	29	32	36	19	12	6	5	6	20
6	9	5	5	2	65	69	12	7	9	11	13	18	7	16	14	27	24	21	14	18	10	10	9	9	17
7	8	4	4	3	4	12	20	21	14	6	6	9	9	15	14	31	40	15	14	14	12	6	4	4	12
8	6	5	2	4	65	82	23	17	19	8	5	9	10	15	12	12	12	8	8	7	5	8	4	2	14
9	4	1	2	1	1	18	13	42	14	5	12	8	9	8	6	6	10	2	4	6	2	2	0	1	7
10	1	0	0	0	0	0	1	1	0	0	1	1	1	1	2	1	2	4	1	1	2	0	0	0	1
11	0	1	0	1	0	1	0	2	2	1	1	2	4	3	4	2	2	2	1	1	2	2	2	2	2
12	1	3	1	1	1	2	2	2	2	4	3	2	4	2	5	4	4	4	3	1	2	4	4	2	3
13	4	2	1	4	8	4	1	3	1	1	1	1	1	3	4	10	6	4	3	3	2	3	3	3	3
14	2	1	3	4	2	2	4	1	2	3	3	2	10	20	15	9	12	9	8	16	17	14	5	7	7
15	5	3	2	2	1	2	4	2	9	5	5	6	4	11	21	18	14	10	6	8	6	3	2	2	6
16	4	3	3	2	2	2	2	2	1	2	2	1	2	13	14	29	14	5	5	8	5	2	4	3	5
17	5	3	2	1	1	1	1	1	1	1	1	1	1	4	5	8	8	6	6	5	2	5	7	2	3
18	2	2	1	1	0	1	1	1	1	2	1	2	2	3	5	2	3	2	2	3	3	3	2	1	2
19	1	1	1	1	0	0	0	0	0	0	0	1	2	2	4	6	4	8	6	4	7	6	6	8	3
20	3	3	2	2	1	1	5	48	3	4	6	4	6	8	12	9	6	8	8	5	9	4	3	4	7
21	1	2	1	2	1	1	2	2	4	3	2	1	5	4	5	17	8	6	6	4	6	4	9	5	4
22	2	2	2	1	1	2	14	15	4	6	6	6	8	12	15	10	9	17	18	9	4	4	3	2	7
23	2	3	0	2	2	1	44	10	33	24	5	4	4	4	3	9	15	22	9	9	11	6	4	5	10
24	3	3	5	2	2	1	1	1	0	1	1	1	2	8	5	11	6	4	10	7	5	5	6	3	4
25	1	1	1	1	1	0	2	2	2	2	10	2	2	3	7	8	3	7	4	4	2	2	3	1	3
26	3	2	1	3	4	26	13	1	2	2	4	8	4	6	4	6	7	4	2	4	6	4	2	2	5
27	2	2	2	1	2	1	10	9	3	2	2	2	2	9	11	7	3	2	2	2	2	3	2	2	4
28	1	2	1	2	1	2	12	12	3	4	4	2	3	5	11	10	7	6	7	8	6	7	6	6	5
29	4	3	4	4	3	2	1	38	5	2	2	24	16	8	10	7	12	18	17	14	5	5	8	5	9
30	5	3	3	3	2	2	2	2	1	1	2	2	4	6	4	10	13	6	5	4	6	4	3	3	4
31	1	1	3	3	2	1	0	1	1	2	4	1	2	4	4	6	5	3	2	2	3	2	3	1	2
Mean	4	3	3	4	10	13	9	12	6	4	4	5	6	8	9	12	11	10	9	7	6	6	5	4	7

MOULD BAY MAGNETIC OBSERVATORY

1962-63

Introduction

In the summer of 1961 the Division of Geomagnetism of the Dominion Observatory established a combined magnetic and seismic observatory in the vicinity of the Joint Arctic Weather Station, Mould Bay, Prince Patrick Island, N.W.T. The observatory serves principally as a control station for magnetic and seismic surveys mounted by the Polar Continental Shelf Project and the Dominion Observatory.

The Site

The station is underlain by sandstones, siltstones and shales of the Devonian Melville Island formation. A building site was suggested by the Meteorological Office of the Department of Transport, and a magnetic survey of this site was subsequently carried out in the spring of 1959 using a Varian portable proton precession magnetometer. The magnetic field intensity gradients were found to be very small, of the order of a few gammas in 100 feet. Owing to problems of construction relating to the drainage of the area, and for reasons of accessibility to power and convenience of operation, the site finally selected for the magnetic-seismic observatory was somewhat closer to the Joint Arctic Weather station than originally planned. The building is situated north of the weather station and about 225 feet from the nearest building.

The Building

An insulated wooden building of non-magnetic construction, 24 feet by 16 feet in size, and resting on a gravel pad, serves as the magnetic observatory building. This building is situated with its long axis approximately geographic east-west and is connected by a 20-foot corridor to the seismic observatory. The magnetic components of the instruments and the power distribution facilities are located at the end of the corridor remote from the magnetic observatory. A light-tight room, 14 feet by 9 feet, is partitioned off in the magnetic observatory building for a set of Ruska photographic variometers. The photographic variometers and absolute instruments are mounted on concrete piers set into the permafrost. Care was taken to ensure that the piers were decoupled from the wooden floor. Unfortunately, gradual pier movements have occurred. These are reflected in the observed drifting of variometer base-line and scale values, and have necessitated occasional releveling of the variometers.

The building is electrically heated by thermostatically controlled glass heat panels, capable of maintaining the temperature in the building constant to within 2 degrees under normal conditions.

The Magnetic Equipment

The Photographic Variometers

A three-component Ruska variometer is aligned to record the geographic components X, Y, Z of the geomagnetic field. Initially there was considerable difficulty in obtaining a satisfactory recording of the X component, owing apparently to the instability of the system magnet. As a result continuous recording in three elements began only in July 1962, following the installation of a new magnet in the X variometer. The time scale of the magnetograms is 20 mm/hr. Hour marks correct to within a few seconds are provided by a Mercer chronometer. Parallax corrections to be applied to times measured on the magnetograms are less than one-half minute.

Scale values adopted for the Ruska variometers were:

X	Aug. 1—Oct. 31, 1962	5.19 gammas/mm
	Nov. 1—Nov. 30	5.27
	Dec. 1—Dec. 31	5.41
	Jan. 1—Jan. 27, 1963	5.53
	Jan. 28—Apr. 13	5.26
	Apr. 14—Apr. 30	5.65
	May 1—May 31	5.63 decreasing linearly to 5.42
	June 1—Sept. 30	5.36
	Oct. 1—Oct. 31	5.33
	Nov. 1—Dec. 31	5.24
	Y	Aug. 1, 1962—Sept. 30, 1963
Oct. 1—Dec. 31		5.76
Z	Aug. 1—Aug. 31, 1962	5.50 gammas/mm
	Sept. 1—Sept. 30	5.56
	Oct. 1—Oct. 26 (0800 UT)	5.30
	Oct. 26 (0900 U.T.), 1962—	
	Jan. 31, 1963	5.40
	Feb. 1—Mar. 31	5.40 increasing linearly to 5.64
	Apr. 1—July 31	5.66 decreasing linearly to 5.62
Aug. 1—Sept. 30	5.62 “ “ 5.42	
Oct. 1—Dec. 31	5.42 increasing linearly to 5.52	

The temperature coefficients determined in February 1963 were +3 gammas/°C in Z, -1.5 gammas/°C in Y, and less than -0.5 gammas/°C in X. The sensitivity of the Ruska temperature trace was 1.4°C/mm. Since temperature variations in the variometer room were normally very small, temperature corrections were not applied to base-line and mean hourly values, except for periods of power failure when temperature changes were large.

The Stand-by Variometers and Storm Recorder

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. 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

A proton precession magnetometer built at the Dominion Observatory, Ottawa is the primary standard of total intensity. The value adopted for the gyromagnetic frequency is 4257.60 ± 0.03 cycles/second/oersted. A portable electrical magnetometer of the saturable core type (Serson and Hannaford, 1956) is used to determine declination (D) and inclination (I).

Base-line Values

The r.m.s. differences of the observed minus adopted base-line values were 4 gammas for 49 observations in X,

4 gammas for 50 observations in Y, and 3 gammas for 46 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.

The Magnetic Reductions

A summary by month (1962) and by month, season and year (1963) of the mean hourly values of X, Y and Z for all days and for the international quiet and disturbed days is given in Tables 49–57 for August to December 1962, and in Tables 61–69 for 1963. The daily mean values of the three elements are given in Tables 58–60 for August to December 1962, and in Tables 70–72 for 1963.

R_y indices of magnetic disturbance are given for each hour of the period August 1962 to December 1963 in Tables 73–89. The R_y indices are the hourly ranges in Y, the principal horizontal magnetic field component recorded at Mould Bay, expressed in 10-gamma units.

References

- 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.

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 49 Mould Bay

1962

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								941	951	956	963	964				
1-2								947	958	959	965	967				
2-3								954	961	969	965	973				
3-4								973	969	983	972	979				
4-5								989	990	994	975	986				
5-6								1012	1002	1001	982	986				
6-7								1027	1019	1015	985	985				
7-8								1037	1033	1030	990	994				
8-9								1048	1044	1034	1007	991				
9-10								1043	1046	1049	1014	1013				
10-11								1051	1049	1054	1012	1014				
11-12								1047	1038	1039	1008	1006				
12-13								1046	1034	1028	991	1000				
13-14								1041	1026	1016	990	990				
14-15								1032	1016	1006	981	974				
15-16								1011	1011	988	961	968				
16-17								994	994	985	954	957				
17-18								962	967	975	951	943				
18-19								961	955	942	941	936				
19-20								961	937	941	942	929				
20-21								927	944	928	936	926				
21-22								927	935	942	932	936				
22-23								921	934	945	939	946				
23-24								951	938	957	953	955				
Mean								992	990	989	971	972				

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 50 Mould Bay

1962

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								985	962	949	967	974				
1-2								968	963	967	966	974				
2-3								970	964	984	968	978				
3-4								977	979	987	977	978				
4-5								986	986	993	977	981				
5-6								985	994	1008	977	984				
6-7								991	991	1013	978	982				
7-8								989	993	1033	980	986				
8-9								998	999	1049	979	991				
9-10								999	1002	1053	981	1000				
10-11								1011	1004	1045	980	1001				
11-12								1021	1004	1017	978	995				
12-13								1022	1006	1015	975	988				
13-14								1021	1007	1010	972	986				
14-15								1010	989	1017	970	977				
15-16								990	990	1002	968	975				
16-17								973	985	1002	967	974				
17-18								953	949	982	968	974				
18-19								960	958	954	964	972				
19-20								971	948	978	961	965				
20-21								962	955	958	959	965				
21-22								971	938	957	960	962				
22-23								941	950	947	953	977				
23-24								945	934	966	960	978				
Mean								983	977	995	970	980				

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 51 Mould Bay

1962

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								878	969	932	958	933				
1-2								930	961	909	951	941				
2-3								939	958	939	946	962				
3-4								985	947	994	971	983				
4-5								993	983	998	976	1001				
5-6								1028	1008	1001	1003	987				
6-7								1047	1056	1028	998	980				
7-8								1086	1078	1050	1031	1017				
8-9								1101	1086	1032	1035	945				
9-10								1086	1077	1062	1028	1020				
10-11								1093	1084	1069	1022	1029				
11-12								1077	1088	1049	1004	1014				
12-13								1058	1066	1039	968	1008				
13-14								1056	1058	1016	1006	1005				
14-15								1030	1045	997	989	960				
15-16								1029	1020	974	952	947				
16-17								979	1016	940	953	906				
17-18								985	975	942	929	833				
18-19								979	930	911	904	849				
19-20								956	852	907	908	846				
20-21								878	891	843	897	844				
21-22								869	898	882	883	859				
22-23								841	888	913	889	889				
23-24								922	911	945	939	907				
Mean								993	994	974	964	944				

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (All Days)

Table 52 Mould Bay

2000 γ +

1962

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								169	157	157	182	179				
1-2								145	156	151	180	180				
2-3								135	133	152	175	176				
3-4								138	129	151	178	179				
4-5								129	130	148	174	178				
5-6								127	138	148	170	174				
6-7								132	139	157	163	181				
7-8								147	144	170	159	185				
8-9								176	173	175	173	176				
9-10								191	189	195	193	199				
10-11								216	219	223	223	207				
11-12								227	236	249	230	213				
12-13								245	240	264	231	221				
13-14								264	253	261	234	240				
14-15								268	271	271	231	251				
15-16								275	290	266	232	246				
16-17								288	302	268	225	240				
17-18								279	289	279	230	238				
18-19								264	286	266	220	229				
19-20								256	263	239	207	211				
20-21								231	235	217	202	204				
21-22								220	191	194	183	191				
22-23								195	180	177	175	182				
23-24								193	161	173	175	178				
Mean								205	204	206	198	202				

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (Quiet Days)

Table 53 Mould Bay

2000 γ +

1962

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								204	161	151	185	192				
1-2								173	167	155	187	189				
2-3								178	165	175	185	192				
3-4								175	169	158	196	188				
4-5								175	180	158	196	184				
5-6								176	174	161	190	187				
6-7								183	175	154	189	193				
7-8								189	185	156	190	194				
8-9								192	191	181	195	195				
9-10								204	195	213	196	208				
10-11								212	203	208	201	206				
11-12								216	217	241	203	209				
12-13								228	228	228	203	214				
13-14								239	241	225	205	215				
14-15								245	234	242	207	216				
15-16								253	240	242	206	219				
16-17								250	247	232	209	213				
17-18								232	258	246	208	214				
18-19								221	236	241	205	222				
19-20								227	225	238	199	213				
20-21								217	220	207	196	200				
21-22								214	163	199	192	203				
22-23								206	172	172	187	195				
23-24								176	157	169	185	196				
Mean								208	200	198	196	202				

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (Disturbed Days)

Table 54 Mould Bay

2000 γ +

1962

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								140	165	140	186	133				
1-2								91	165	103	156	138				
2-3								69	115	143	147	114				
3-4								104	102	165	166	141				
4-5								71	75	143	139	152				
5-6								84	91	145	126	147				
6-7								114	100	150	117	155				
7-8								114	106	144	154	168				
8-9								171	151	135	166	95				
9-10								162	183	164	191	205				
10-11								193	229	232	248	216				
11-12								228	227	295	244	215				
12-13								274	237	313	244	242				
13-14								267	280	280	231	264				
14-15								293	302	293	235	303				
15-16								306	345	294	246	298				
16-17								304	353	312	234	301				
17-18								295	325	313	234	310				
18-19								265	345	275	238	267				
19-20								281	337	251	210	205				
20-21								228	265	212	212	202				
21-22								229	207	151	164	166				
22-23								141	169	157	157	155				
23-24								138	101	179	165	137				
Mean								190	207	208	192	197				

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 55 Mould Bay

57,000 γ +

1962

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								906	911	919	925	923				
1-2								894	910	912	926	922				
2-3								898	907	921	926	921				
3-4								905	910	921	926	923				
4-5								909	920	928	927	926				
5-6								914	933	938	933	931				
6-7								935	938	952	944	937				
7-8								949	955	958	959	939				
8-9								970	971	982	969	935				
9-10								971	975	1000	971	967				
10-11								975	976	1001	985	979				
11-12								969	994	1005	995	977				
12-13								974	977	1016	998	970				
13-14								982	966	1005	997	971				
14-15								982	971	1003	981	984				
15-16								978	978	997	971	980				
16-17								984	984	986	963	974				
17-18								981	979	967	961	969				
18-19								966	971	965	965	968				
19-20								953	955	946	955	954				
20-21								947	918	929	943	949				
21-22								943	893	910	933	937				
22-23								922	890	912	932	929				
23-24								916	901	917	928	926				
Mean								947	945	958	955	950				

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Quiet Days)

Table 56 Mould Bay

57,000 γ +

1962

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								911	923	922	933	930				
1-2								911	920	910	929	925				
2-3								908	924	924	924	924				
3-4								910	927	923	924	923				
4-5								911	933	925	924	924				
5-6								923	931	934	925	927				
6-7								933	933	954	925	933				
7-8								938	936	955	929	936				
8-9								938	936	966	930	938				
9-10								943	937	987	930	946				
10-11								940	940	995	933	961				
11-12								939	945	977	932	955				
12-13								947	950	970	934	948				
13-14								953	951	963	937	948				
14-15								961	954	957	933	946				
15-16								963	960	959	934	947				
16-17								967	965	953	935	944				
17-18								969	983	949	933	947				
18-19								959	981	966	938	952				
19-20								953	963	944	934	946				
20-21								927	928	924	935	935				
21-22								920	931	921	933	930				
22-23								919	910	922	929	929				
23-24								916	891	929	929	930				
Mean								936	940	947	931	938				

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Disturbed Days)

Table 57 Mould Bay

57,000 γ +

1962

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1								926	953	898	931	917				
1-2								864	939	897	922	923				
2-3								858	901	920	921	919				
3-4								887	897	924	920	931				
4-5								892	907	920	919	946				
5-6								912	938	939	939	965				
6-7								930	945	966	978	975				
7-8								938	976	957	982	961				
8-9								1009	1003	1014	997	913				
9-10								1035	1013	1057	993	1016				
10-11								1018	1025	1009	1023	1022				
11-12								985	1069	1016	1036	1014				
12-13								987	1009	1064	1082	1010				
13-14								987	1000	1060	1081	1011				
14-15								988	1000	1037	1035	1024				
15-16								999	1013	1024	1004	1032				
16-17								1011	1005	1006	978	1026				
17-18								1008	964	1007	970	1040				
18-19								962	986	987	973	1043				
19-20								950	978	974	971	978				
20-21								964	930	971	965	973				
21-22								957	880	919	946	954				
22-23								931	886	903	947	938				
23-24								930	902	918	944	933				
Mean								955	963	974	977	978				

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 58 Mould Bay

1962

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1								1035	1024	983	988	975
2								1027	1021	1002	975	973
3								1012	1007	1010	987	967
4								1017	1002	998	982	966
5								1036	1026	986	980	970
6								1042	1006	1000	953	975
7								1023	1034	992	973	983
8								1054	1014	961	972	974
9								1003	999	978	974	981
10								1035	---	982	973	961
11								981	999	987	979	956
12								1007	976	984	965	950
13								964	966	989	968	979
14								945	979	981	968	974
15								956	963	980	952	975
16								925	976	987	960	985
17								933	980	995	975	944
18								994	967	972	974	956
19								996	960	990	964	926
20								974	980	976	971	943
21								942	960	987	955	960
22								948	974	1008	969	988
23								978	985	989	967	989
24								985	967	973	961	986
25								960	986	972	963	979
26								1005	981	976	978	973
27								974	994	998	977	986
28								991	986	997	979	985
29								987	982	1011	980	989
30								1020	1005	1001	987	987
31								994		1018		991
Mean								992	990	989	971	972

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1								196	238	218	205	203
2								245	228	215	199	203
3								224	237	206	210	202
4								226	190	204	207	222
5								238	240	221	187	197
6								240	229	193	198	199
7								241	222	201	199	202
8								248	216	190	198	214
9								216	225	185	195	194
10								233	---	193	195	203
11								206	204	185	202	204
12								233	190	184	191	191
13								193	196	204	197	189
14								164	180	189	203	199
15								174	166	185	190	189
16								176	197	209	189	206
17								173	196	201	197	209
18								193	187	186	198	198
19								187	192	214	208	179
20								200	184	213	202	195
21								185	183	230	199	201
22								164	190	209	192	202
23								177	184	221	194	203
24								211	185	221	197	210
25								192	212	215	181	205
26								210	199	232	201	218
27								194	210	212	201	206
28								206	222	205	201	209
29								208	219	218	204	207
30								222	203	217	193	207
31								170		216		211
Mean								205	204	206	198	202

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY

Table 60 Mould Bay 57,000 γ + 1962

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1								929	928	960	938	953
2								913	959	973	938	949
3								940	953	963	967	933
4								942	976	948	963	986
5								936	939	930	949	952
6								922	933	934	939	941
7								915	928	921	964	937
8								919	912	962	954	953
9								928	925	974	927	926
10								951	---	966	928	933
11								940	907	958	949	957
12								933	976	949	928	942
13								934	956	979	928	950
14								959	952	970	930	950
15								970	951	951	982	937
16								974	944	975	979	934
17								994	936	936	952	966
18								967	942	938	940	985
19								957	952	990	942	993
20								938	950	931	929	988
21								951	963	945	958	987
22								970	955	954	1006	959
23								951	956	950	982	939
24								976	957	938	986	944
25								976	937	990	993	926
26								946	947	986	942	958
27								937	953	975	967	935
28								933	926	962	950	931
29								942	960	952	949	930
30								933	934	981	981	923
31								966		951		944
Mean								947	945	958	955	950

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 61 Mould Bay

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	970	984	981	963	958	991	959	938	926	969	991	993	968	961	960	984
1-2	972	990	981	964	965	961	969	951	943	978	991	1000	972	962	966	988
2-3	980	993	987	977	966	984	989	971	954	986	996	1002	982	975	978	993
3-4	985	994	993	991	985	990	998	983	977	997	999	1005	991	989	989	996
4-5	983	997	997	1002	1006	1014	1009	998	994	1002	1003	1005	1001	1007	999	997
5-6	989	999	1002	1009	1022	1040	1026	1016	1016	1004	1008	1004	1011	1026	1008	1000
6-7	997	1002	1010	1016	1042	1053	1044	1028	1021	1014	1009	1005	1020	1042	1015	1003
7-8	1001	1013	1016	1025	1043	1069	1055	1037	1032	1027	1025	1016	1030	1051	1025	1014
8-9	1005	1002	1022	1033	1050	1078	1066	1049	1054	1036	1031	1024	1037	1060	1036	1015
9-10	1015	1021	1023	1032	1063	1078	1062	1057	1058	1045	1035	1028	1043	1065	1040	1025
10-11	1016	1024	1028	1029	1059	1084	1071	1059	1060	1042	1035	1028	1045	1068	1040	1026
11-12	1008	1016	1025	1023	1059	1086	1076	1057	1056	1028	1029	1026	1041	1070	1033	1020
12-13	1009	1008	1017	1028	1055	1088	1080	1060	1048	1016	1020	1018	1037	1071	1027	1014
13-14	997	1005	1010	1024	1046	1085	1082	1052	1028	1010	1010	1009	1030	1066	1018	1005
14-15	978	1000	1004	1018	1035	1083	1056	1041	1019	1007	1007	1006	1021	1054	1012	998
15-16	985	997	1003	1011	1024	1069	1041	1023	1009	1003	993	995	1013	1039	1007	993
16-17	976	984	997	999	998	1034	1020	1005	993	992	976	989	997	1014	995	981
17-18	960	984	989	985	988	1024	998	972	970	971	972	978	983	996	979	974
18-19	956	982	983	978	975	1008	985	959	952	967	965	973	974	982	970	969
19-20	950	972	979	964	967	987	972	950	940	961	964	967	964	969	961	963
20-21	951	973	979	959	978	967	957	944	942	989	963	967	962	962	960	964
21-22	954	976	974	964	976	987	957	920	931	956	972	971	961	960	956	968
22-23	959	980	973	964	978	1018	969	933	939	953	981	978	969	975	957	975
23-24	966	981	974	957	978	994	969	945	923	966	987	986	969	972	955	980
Mean	982	995	998	996	1009	1032	1017	998	991	995	998	999	1001	1014	995	994

Mean Hourly values for April 6 are incomplete and have not been included in this table.

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 62 Mould Bay

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	983	996	981	983	980	1002	988	947	956	992	1002	1005	984	979	978	996
1-2	984	998	986	980	978	978	993	976	978	992	1002	1004	987	981	984	997
2-3	986	999	992	983	988	982	995	983	987	995	999	1004	991	987	989	997
3-4	987	996	996	990	992	995	1004	985	997	1001	1003	1005	996	994	996	998
4-5	986	996	997	997	999	1009	1008	998	999	998	1002	1006	1000	1004	998	998
5-6	986	997	998	1000	1008	1023	1010	1007	1008	999	1006	1005	1004	1012	1001	998
6-7	988	998	999	1001	1012	1028	1020	1009	1003	1006	1006	1005	1006	1017	1002	999
7-8	988	999	1001	1004	1020	1053	1030	1006	1010	1011	1007	1007	1011	1027	1006	1000
8-9	990	1002	1004	1010	1023	1050	1043	1008	1014	1019	1010	1013	1016	1031	1012	1004
9-10	991	1004	1009	1015	1035	1051	1037	1011	1022	1022	1014	1023	1020	1034	1017	1008
10-11	991	1006	1012	1020	1036	1053	1040	1017	1018	1015	1013	1025	1020	1036	1016	1009
11-12	990	1004	1009	1017	1027	1046	1051	1020	1012	1009	1010	1018	1018	1036	1012	1006
12-13	990	1001	1006	1016	1025	1042	1054	1014	1008	1005	1008	1011	1015	1034	1009	1002
13-14	988	1000	1007	1008	1032	1039	1048	1011	997	1006	1004	1006	1012	1032	1004	1000
14-15	985	997	1008	1005	1018	1036	1031	1021	997	1006	998	1003	1009	1026	1004	996
15-16	983	1001	1014	1002	1006	1034	1031	1014	999	999	1000	1004	1007	1021	1004	997
16-17	980	999	1016	1001	999	1021	1013	998	987	1006	999	1003	1002	1008	1002	995
17-18	976	1000	1002	1006	994	1004	1005	968	988	1009	997	1000	996	993	1001	993
18-19	978	1003	1000	1002	979	999	1005	946	991	1003	992	996	991	982	999	992
19-20	981	995	989	1006	991	999	1019	919	988	998	990	993	989	982	995	990
20-21	981	996	992	1011	994	991	1033	898	984	998	991	996	989	979	996	991
21-22	979	998	1004	1010	1010	1008	1010	924	964	1002	989	998	991	988	995	991
22-23	980	994	1004	1004	997	1017	990	962	949	994	991	999	990	992	988	991
23-24	979	999	994	968	981	987	993	961	936	991	994	1001	982	980	972	993
Mean	985	999	1001	1002	1005	1019	1019	983	991	1003	1001	1005	1001	1006	999	998

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 63 Mould Bay

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	940	938	970	953	986	967	993	959	799	913	967	965	946	976	909	952
1-2	941	971	970	954	968	945	1007	955	863	937	971	994	956	969	931	969
2-3	965	983	978	968	948	1003	991	995	866	963	987	996	970	984	944	983
3-4	977	988	994	1002	986	1004	1012	999	923	992	992	1000	989	1000	978	989
4-5	963	993	990	1011	1019	1039	1024	1019	1020	1006	1014	1001	1008	1025	1007	993
5-6	992	1000	1003	1013	1023	1054	1049	1042	1051	998	1022	996	1020	1042	1016	1002
6-7	1024	1012	1025	1014	1051	1095	1097	1057	1051	1007	1003	973	1034	1075	1024	1003
7-8	1026	1054	1042	1020	1054	1145	1078	1080	1079	1052	1040	1024	1058	1089	1048	1036
8-9	1057	953	1050	1028	1071	1123	1096	1096	1126	1084	1034	1038	1063	1096	1072	1020
9-10	1043	1039	1034	1055	1091	1096	1094	1099	1090	1100	1053	1046	1070	1095	1070	1045
10-11	1068	1048	1045	1046	1080	1078	1112	1094	1086	1089	1060	1045	1071	1091	1066	1055
11-12	1050	1038	1052	1038	1078	1094	1123	1088	1082	1043	1064	1046	1066	1096	1054	1049
12-13	1060	1014	1041	1046	1067	1109	1144	1119	1063	1030	1042	1022	1063	1110	1045	1034
13-14	1029	1018	1016	1048	1045	1118	1162	1094	1030	1021	1031	1020	1053	1105	1029	1024
14-15	969	1013	1012	1046	1035	1121	1088	1070	1016	1015	1028	1007	1035	1078	1022	1004
15-16	997	993	995	1018	1038	1081	1062	1051	998	993	992	993	1018	1058	1001	994
16-17	968	965	967	996	1013	1023	1076	1029	977	939	923	973	987	1035	970	957
17-18	931	969	944	954	981	1045	993	1014	967	907	913	946	964	1008	943	940
18-19	910	971	950	946	990	1021	982	949	904	918	912	938	949	985	929	933
19-20	899	920	947	960	996	991	957	979	922	909	901	916	941	981	934	909
20-21	922	915	944	906	1029	903	909	968	898	899	901	909	925	952	912	912
21-22	937	949	934	910	1012	931	903	908	853	909	918	921	924	938	902	931
22-23	959	974	949	901	927	969	941	930	939	925	936	947	941	942	928	954
23-24	943	960	963	909	1020	940	962	914	932	969	956	982	954	959	943	960
Mean	982	987	992	989	1021	1037	1036	1021	981	984	986	987	1000	1029	986	986

Mean hourly values for April 6 are incomplete and have not been included in this table.

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 64 Mould Bay

2000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	182	181	173	162	161	190	156	146	153	170	189	194	171	163	164	186
1-2	182	182	171	162	153	133	142	142	141	167	189	199	164	143	160	188
2-3	181	183	170	165	137	139	142	144	134	167	188	198	162	140	159	188
3-4	179	180	173	170	143	131	143	145	141	165	187	196	163	140	162	186
4-5	169	178	175	168	148	121	123	143	135	167	181	194	158	134	161	180
5-6	167	176	174	168	150	133	134	147	127	161	174	189	158	141	158	176
6-7	172	173	173	176	154	135	138	158	150	164	180	183	163	146	166	177
7-8	175	178	177	184	166	153	154	170	167	175	189	181	173	161	176	181
8-9	183	154	183	190	185	169	173	185	184	186	194	188	181	178	186	180
9-10	182	187	195	208	198	182	191	199	218	210	207	204	198	192	208	195
10-11	205	204	209	215	214	200	207	209	231	219	219	216	212	208	218	211
11-12	212	211	214	223	222	216	226	231	257	233	233	223	225	224	232	220
12-13	218	231	223	237	244	235	256	243	265	241	241	243	240	244	242	233
13-14	229	232	226	246	259	253	266	255	273	247	243	253	248	258	248	239
14-15	243	231	237	251	271	274	275	270	276	252	247	251	256	272	254	243
15-16	233	229	243	254	275	291	286	279	284	252	252	246	260	283	258	240
16-17	233	232	241	261	284	289	279	281	296	267	255	241	263	283	266	240
17-18	230	234	241	268	287	311	293	267	287	265	250	239	264	290	265	238
18-19	222	233	232	265	273	308	277	269	283	256	231	227	256	282	259	228
19-20	218	221	232	252	255	280	268	249	277	246	217	218	244	263	252	218
20-21	200	208	217	238	254	267	259	236	251	223	205	205	230	254	232	204
21-22	191	198	205	210	240	248	236	197	225	205	197	199	212	230	211	196
22-23	183	186	185	194	216	256	220	159	177	180	194	194	195	213	184	189
23-24	181	183	176	166	193	209	196	164	157	179	192	193	182	190	170	187
Mean	199	200	202	210	212	213	210	204	212	208	211	211	208	210	208	205

Mean hourly values for April 6 are incomplete and have not been included in this table.

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 65 Mould Bay

2000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	198	189	180	183	178	196	186	155	172	204	204	204	188	179	185	199
1-2	199	192	186	186	161	157	169	163	188	200	208	205	184	162	190	201
2-3	199	194	184	187	170	147	174	167	185	196	205	207	185	165	188	201
3-4	199	192	191	193	173	157	177	169	201	190	207	209	188	169	194	202
4-5	199	192	194	198	166	153	184	185	194	194	206	208	189	172	195	201
5-6	199	191	193	199	177	162	186	181	195	195	202	208	191	176	196	200
6-7	201	192	194	205	180	150	189	189	198	195	203	206	192	177	198	200
7-8	196	194	193	206	182	154	193	182	205	202	202	204	193	178	202	199
8-9	198	192	195	206	186	184	192	194	210	201	204	204	197	189	203	200
9-10	200	196	198	209	189	202	196	199	220	207	208	203	202	196	208	202
10-11	204	202	203	213	203	217	208	206	226	212	215	225	211	208	214	212
11-12	209	207	208	219	211	219	221	212	228	218	215	217	215	216	218	212
12-13	213	206	210	232	222	224	243	222	226	224	218	222	222	228	223	215
13-14	210	207	215	233	242	230	252	231	241	230	221	223	228	239	230	215
14-15	211	207	223	237	256	239	264	240	241	237	230	219	234	250	234	217
15-16	214	213	231	235	254	244	278	244	243	235	224	219	236	255	236	218
16-17	214	213	243	246	250	250	286	252	246	239	224	216	240	260	244	217
17-18	210	220	245	264	246	266	274	241	243	253	218	220	242	257	251	217
18-19	204	228	246	271	239	253	266	216	253	244	215	218	238	244	254	216
19-20	204	214	238	260	235	233	272	210	252	241	209	216	232	238	248	211
20-21	200	211	225	252	216	205	265	181	260	225	209	211	222	217	240	208
21-22	197	198	225	240	207	227	253	158	230	222	207	207	214	211	229	202
22-23	197	195	200	212	176	232	207	174	177	201	202	205	198	197	198	200
23-24	199	192	195	177	183	199	206	156	160	203	203	206	190	186	184	200
Mean	203	202	209	219	204	204	223	197	216	215	211	212	210	207	215	207

MOULD BAY MAGNETIC OBSERVATORY, 1962-63

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 66 Mould Bay 2000 γ + 1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	146	144	144	123	178	187	213	140	72	107	156	174	149	180	112	155
1-2	148	158	147	150	139	104	175	133	49	90	157	189	137	138	109	163
2-3	144	150	144	161	115	121	136	120	-26	92	152	186	125	123	93	158
3-4	123	139	143	168	129	72	125	105	19	108	166	178	123	108	110	152
4-5	71	126	137	149	125	38	104	119	31	103	164	170	111	96	105	133
5-6	95	126	146	157	100	98	129	125	-20	81	145	152	111	113	91	130
6-7	122	106	135	169	103	105	117	142	54	71	127	135	115	117	107	122
7-8	137	141	143	183	160	136	137	166	100	104	150	139	141	150	132	142
8-9	163	16	158	189	185	140	160	178	148	152	167	169	152	166	162	129
9-10	115	160	201	217	181	176	205	179	228	211	216	200	191	185	214	173
10-11	201	199	216	238	244	215	214	233	232	221	216	212	220	226	227	207
11-12	231	224	241	240	258	221	231	240	290	254	267	239	245	238	256	240
12-13	225	283	250	271	264	235	321	253	319	270	286	271	271	268	278	266
13-14	274	268	256	282	279	277	313	290	327	296	302	295	288	290	290	285
14-15	321	265	267	306	308	329	288	326	317	308	272	295	300	313	300	288
15-16	270	257	279	305	309	316	295	323	319	286	309	264	294	311	297	275
16-17	262	268	269	298	351	286	300	332	360	324	340	275	305	317	313	286
17-18	260	260	265	276	343	346	345	354	319	325	316	262	306	347	296	274
18-19	236	273	245	259	314	342	318	365	269	283	256	255	285	335	264	255
19-20	232	241	252	308	292	312	290	331	327	230	243	228	274	306	279	236
20-21	189	206	206	264	324	328	282	291	236	180	188	202	241	306	222	196
21-22	179	194	174	132	277	288	226	244	200	146	181	174	201	259	163	182
22-23	164	169	157	226	199	266	242	162	152	146	170	170	185	217	170	168
23-24	161	166	157	140	224	133	226	171	148	154	157	171	167	188	150	164
Mean	186	189	197	217	225	211	225	222	186	189	213	209	206	221	197	199

Mean hourly values for April 6 are incomplete and have not been included in this table.

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 67 Mould Bay

57,000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	916	920	915	905	884	849	859	895	921	928	942	930	905	872	917	927
1-2	919	920	916	905	888	849	861	893	919	929	942	930	906	873	917	928
2-3	919	920	919	904	884	859	866	895	913	933	941	929	907	876	917	927
3-4	918	921	920	905	887	871	871	895	919	933	941	928	909	881	919	927
4-5	920	922	924	908	893	877	877	900	924	939	945	931	913	887	924	929
5-6	926	927	928	915	902	888	889	907	943	943	951	940	922	897	932	936
6-7	931	939	929	921	915	899	903	919	954	950	969	943	931	909	938	946
7-8	935	936	932	928	930	913	919	932	963	967	968	955	940	924	948	948
8-9	949	955	940	931	934	927	929	940	971	971	974	964	949	933	953	961
9-10	965	961	945	939	941	930	935	954	986	977	982	965	957	940	962	968
10-11	973	956	952	944	951	929	932	960	991	980	991	973	961	943	967	973
11-12	970	950	956	943	950	934	933	962	998	984	993	972	962	945	970	971
12-13	963	956	955	945	950	942	941	964	1002	980	997	977	964	949	970	973
13-14	961	959	952	951	954	941	954	968	1002	984	1001	987	968	954	972	977
14-15	973	959	955	952	954	944	954	975	992	984	994	992	969	957	971	980
15-16	975	957	959	962	952	947	953	979	993	974	996	982	969	958	972	978
16-17	965	954	960	972	958	949	951	975	995	974	992	975	968	958	975	972
17-18	958	949	958	970	965	951	963	976	996	980	990	975	969	964	976	968
18-19	949	948	952	960	962	951	949	977	993	968	987	965	963	960	968	962
19-20	947	941	943	952	944	948	939	963	976	953	972	958	953	948	956	954
20-21	939	931	925	929	913	937	926	943	936	943	958	947	936	930	933	944
21-22	928	913	919	902	900	909	906	923	902	929	951	937	918	910	913	932
22-23	921	907	911	904	885	881	884	905	888	925	946	931	907	889	907	926
23-24	916	914	916	907	886	862	871	907	915	928	941	931	908	882	916	926
Mean	943	938	937	931	924	912	915	938	958	956	970	955	940	922	946	952

Mean hourly values for April 6 are incomplete and have not been included in this table.

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Quiet Days)

Table 68 Mould Bay

57,000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	924	915	922	937	906	899	901	898	916	938	947	937	920	901	928	931
1-2	923	920	922	934	892	895	880	899	918	942	945	934	917	891	929	930
2-3	921	923	929	924	888	898	883	899	907	941	942	933	916	892	925	930
3-4	921	925	928	921	891	902	890	900	913	936	939	932	916	896	924	929
4-5	920	925	930	925	890	898	897	903	920	939	942	933	918	897	928	930
5-6	921	926	930	926	900	900	902	900	924	944	942	935	921	900	931	931
6-7	922	928	931	930	909	899	904	907	926	946	944	935	923	905	933	932
7-8	922	929	931	929	913	914	906	908	932	950	948	936	926	910	935	934
8-9	924	928	932	929	919	931	911	915	937	950	952	937	930	919	937	935
9-10	928	930	934	926	924	929	919	921	942	954	953	940	933	923	939	938
10-11	930	932	938	927	926	926	916	923	947	953	953	963	936	923	941	944
11-12	931	937	939	930	928	926	919	924	947	951	950	957	937	924	942	944
12-13	933	935	939	936	931	927	923	936	942	951	950	952	938	929	942	942
13-14	931	934	936	938	939	926	927	948	943	951	952	955	940	935	942	943
14-15	932	935	940	939	945	931	928	945	936	953	957	950	941	937	942	944
15-16	931	934	941	940	937	945	929	945	937	950	958	948	941	939	942	943
16-17	933	934	939	947	937	952	928	960	941	951	958	944	944	944	945	942
17-18	930	932	937	940	949	951	921	967	943	957	963	947	945	947	944	943
18-19	927	938	942	928	970	937	920	967	947	950	964	947	945	948	942	944
19-20	926	923	940	931	961	943	923	959	940	936	958	948	941	946	937	939
20-21	922	916	933	918	940	928	904	949	931	926	950	941	930	930	927	932
21-22	920	911	927	918	928	913	900	914	925	921	951	933	922	914	923	929
22-23	919	912	917	904	913	909	889	899	913	924	946	932	915	903	914	927
23-24	920	914	923	913	923	877	869	897	904	931	946	932	912	891	918	928
Mean	925	927	932	929	923	919	908	924	930	944	950	942	929	918	934	936

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Disturbed Days)

Table 69 Mould Bay

57,000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	900	911	913	897	893	839	802	866	954	919	934	921	896	850	921	916
1-2	907	903	918	896	879	837	817	870	954	918	935	925	897	851	922	918
2-3	912	908	924	908	854	819	850	885	920	927	939	927	898	852	920	922
3-4	907	911	919	910	881	819	858	872	941	936	949	930	903	858	926	924
4-5	920	922	931	908	896	846	868	900	937	952	955	939	914	877	932	934
5-6	935	945	943	931	916	880	879	910	1002	955	968	967	936	896	958	954
6-7	952	1003	942	922	936	895	906	930	1008	947	1062	976	957	917	955	998
7-8	965	981	950	924	945	920	937	964	1009	1008	1040	998	970	942	973	996
8-9	981	1069	974	929	954	949	931	961	1042	1025	1038	1028	990	949	992	1029
9-10	1054	1058	982	940	953	954	944	991	1062	1043	1013	1012	1000	960	1007	1034
10-11	1077	1008	984	954	982	934	938	999	1038	1039	1077	1024	1004	963	1004	1046
11-12	1072	982	998	953	981	924	929	1014	1051	1041	1093	1017	1005	962	1011	1041
12-13	1031	1002	1004	951	975	937	958	1014	1050	1027	1110	1025	1007	971	1008	1042
13-14	1024	1003	991	972	966	944	1019	994	1063	1058	1129	1058	1018	981	1021	1053
14-15	1079	992	988	979	959	964	978	983	1021	1075	1096	1055	1014	971	1016	1056
15-16	1093	996	985	1003	935	961	964	971	1006	1033	1057	1024	1002	958	1007	1042
16-17	1023	977	989	1010	949	970	954	947	1008	1038	1058	1015	995	955	1011	1018
17-18	1001	953	979	984	959	970	984	943	1024	1075	1044	998	993	964	1016	999
18-19	974	942	963	914	934	986	958	958	1005	1025	1005	980	970	959	977	975
19-20	967	928	950	893	902	962	957	962	1013	983	982	971	956	946	960	962
20-21	956	904	911	857	880	956	928	921	923	948	956	943	924	921	910	940
21-22	930	882	910	795	880	920	919	889	860	929	946	933	899	902	873	923
22-23	912	873	912	850	865	845	875	895	833	933	943	930	889	870	882	914
23-24	907	895	923	865	841	827	853	936	896	950	934	931	896	864	908	917
Mean	978	956	953	923	921	911	917	941	984	991	1011	980	955	922	963	981

Mean hourly values for April 6 are incomplete and have not been included in this table.

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 70 Mould Bay

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	984	985	996	993	1011	1074	1022	968	1006	1010	1006	956
2	984	998	1007	988	1027	1064	1017	979	997	1011	1009	952
3	981	988	1003	996	1009	1039	1013	963	994	1022	1024	970
4	973	989	--	994	1015	1022	991	983	987	1010	1016	978
5	989	995	995	1000	1027	1002	957	976	992	1009	1024	987
6	979	990	992	--	1004	966	990	1015	1000	1002	1020	995
7	972	988	986	1013	999	982	999	1006	1008	990	1001	1005
8	976	993	1001	994	999	982	975	1029	1010	1002	1004	1002
9	977	983	999	1009	1012	1012	985	1007	993	995	996	1018
10	984	992	985	1001	974	986	1004	1031	995	1000	1003	1006
11	972	989	980	986	978	1044	984	1005	993	1013	1012	1007
12	983	979	1004	990	993	1016	985	992	998	993	1016	1008
13	979	988	1004	960	996	1049	1003	967	994	987	1010	1002
14	974	986	994	980	986	1073	1005	992	1028	1009	997	1001
15	976	1000	992	1021	987	1057	1020	980	995	1008	1005	1008
16	952	997	1003	981	976	1061	1067	961	1008	1019	1002	1001
17	987	999	990	995	1024	1080	1045	998	1021	1019	985	1004
18	977	1002	990	988	1017	1043	1020	1066	1003	1012	985	1007
19	976	1001	993	1041	1017	1057	986	961	1021	1011	988	998
20	994	996	1002	1004	1035	1006	1029	1066	995	979	987	1006
21	991	996	1005	1019	996	1029	1106	1022	1003	1006	981	999
22	988	1005	1003	1006	1015	1005	1067	1007	928	983	975	1003
23	986	1004	1010	1012	1009	1002	1039	1045	991	965	986	1005
24	977	1002	1001	980	1009	1024	1066	1015	949	979	976	998
25	986	1002	1003	971	974	1052	1051	985	969	972	1004	1014
26	990	1007	1000	959	972	1048	1045	977	977	982	992	1007
27	987	1001	1004	1008	1007	1061	1031	974	952	995	989	1013
28	995	1002	996	1022	1063	1049	1019	990	963	979	986	999
29	984	996	996	1004	1058	1037	1038	986	980	941	984	1004
30	992	1003	983	1037	1040	1001	988	983	979	987	1003	1003
31	989	994	1052	967	996	974	996	974	974	974	1008	1008
Mean	982	995	998	996	1009	1032	1017	998	991	995	998	999

MEAN VALUES OF MAGNETIC ELEMENTS

EAST COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 71 Mould Bay

2000 γ +

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	206	215	194	182	243	244	205	176	231	228	191	210
2	206	198	199	213	233	248	218	182	230	218	206	216
3	207	198	199	199	211	216	217	182	228	210	189	204
4	217	195	184	225	207	207	215	200	227	200	203	211
5	210	206	199	212	226	204	164	180	231	210	204	212
6	207	195	206	---	213	215	157	213	236	210	214	201
7	205	198	193	221	224	161	181	195	246	207	212	213
8	201	196	203	212	208	179	187	209	219	195	193	204
9	201	200	201	215	192	181	180	175	222	205	210	215
10	198	184	205	215	188	169	194	233	237	220	203	211
11	204	191	183	205	179	234	175	216	245	209	207	216
12	199	180	207	203	200	205	190	199	221	217	211	212
13	196	201	219	210	203	220	201	189	243	199	212	205
14	204	191	208	199	177	252	216	202	244	213	201	223
15	174	192	197	201	201	226	212	217	243	203	215	211
16	188	210	210	202	183	244	297	179	212	213	210	215
17	194	200	210	203	222	235	179	211	174	215	223	213
18	188	209	196	212	225	226	231	237	220	221	207	211
19	199	205	194	237	251	241	183	242	221	221	207	210
20	197	206	206	213	229	172	239	213	210	217	207	216
21	201	205	200	232	213	199	281	211	235	216	216	212
22	200	192	213	230	208	182	241	221	124	211	220	216
23	197	207	226	181	202	184	253	206	164	206	208	209
24	203	206	215	209	203	211	240	225	195	170	226	212
25	203	199	207	190	203	239	231	206	165	197	199	214
26	195	204	207	183	178	205	222	191	195	209	211	208
27	201	204	207	198	208	225	203	209	184	219	223	209
28	199	199	198	236	229	242	197	207	185	231	226	213
29	203		194	215	238	230	253	178	189	227	235	219
30	181		189	233	211	205	182	212	185	135	231	209
31	175		190		258		168	204		201		206
Mean	199	200	202	210	212	213	210	204	212	208	211	211

MOULD BAY MAGNETIC OBSERVATORY, 1962-63

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (gammas)

Table 72 Mould Bay

57,000 γ +

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	937	977	940	915	940	891	902	960	954	952	984	946
2	929	935	934	926	909	915	906	945	918	945	969	955
3	929	942	942	927	947	903	901	934	939	939	979	993
4	935	932	936	893	939	927	926	959	934	947	963	975
5	940	939	930	915	926	930	916	957	909	948	952	993
6	923	934	927	---	910	927	937	926	916	939	967	982
7	929	930	930	932	924	949	933	921	905	943	999	989
8	928	923	954	927	932	952	924	937	928	951	1039	982
9	924	922	945	936	931	944	940	902	944	944	1025	980
10	922	965	964	931	954	943	936	915	936	942	1003	945
11	931	959	944	927	962	888	919	919	936	971	988	952
12	928	945	950	947	938	921	918	923	947	990	988	940
13	950	966	953	981	927	899	910	922	915	946	968	934
14	978	947	939	975	943	902	913	924	963	997	954	959
15	968	956	934	943	936	898	915	924	959	956	952	947
16	969	944	934	937	924	913	856	933	959	987	946	946
17	962	929	939	941	907	897	882	915	989	950	982	938
18	949	924	952	953	909	930	913	881	979	943	952	935
19	981	923	942	898	917	867	939	942	981	952	947	935
20	948	928	918	930	889	924	901	943	985	943	945	958
21	933	947	930	927	935	904	920	948	959	930	955	941
22	933	930	933	922	926	917	919	945	1006	941	958	967
23	927	936	934	926	932	908	882	941	991	959	948	954
24	943	926	926	930	925	904	915	943	991	991	987	943
25	940	929	929	939	935	895	916	928	991	964	977	947
26	934	932	935	935	915	898	919	946	973	958	951	942
27	928	926	928	938	922	902	914	967	975	940	945	936
28	923	932	929	927	888	901	928	988	994	951	946	939
29	925		934	926	884	900	904	979	1001	1006	949	966
30	970		928	907	900	926	924	942	963	971	969	951
31	1025		929		924		944	963		951		940
Mean	943	938	937	931	924	912	915	938	958	956	970	955

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	3	4	4	5	4	4	3	5	5	2	4	4	4	4	7	6	3	10	7	6	2	2	2	4
2	4	5	4	2	2	3	4	3	3	3	4	4	10	5	4	3	4	5	4	11	8	4	4	9	5
3	3	1	2	2	2	2	6	6	5	5	3	3	4	5	5	2	2	3	6	6	6	4	3	3	4
4	5	5	4	2	3	2	1	2	3	3	2	2	1	1	1	2	3	2	3	3	6	8	2	2	3
5	3	2	2	2	2	3	2	1	2	4	3	2	2	4	5	3	4	2	4	4	7	6	5	5	3
6	8	5	5	1	2	4	4	1	1	1	1	2	2	1	2	6	5	3	5	10	5	7	5	4	4
7	3	4	4	2	1	4	4	2	2	2	1	1	1	1	1	1	3	4	20	13	13	13	14	5	5
8	25	15	7	8	5	6	4	5	7	6	7	13	11	6	10	10	15	13	15	10	19	20	10	9	11
9	14	9	9	5	9	8	3	3	6	4	13	9	6	12	9	6	7	6	22	16	12	25	8	9	10
10	11	14	8	7	15	13	6	6	15	16	8	17	6	10	16	16	11	12	20	20	20	24	20	13	14
11	13	21	11	13	4	5	2	3	4	20	4	4	4	2	4	6	7	10	12	14	17	12	8	13	9
12	11	9	12	6	5	7	3	5	12	8	9	8	9	5	6	5	13	9	14	14	11	7	13	11	9
13	9	7	4	2	2	1	4	2	3	3	5	4	8	5	18	32	6	10	12	10	10	6	10	8	8
14	11	6	2	1	1	1	1	1	1	0	1	1	1	2	3	2	4	5	4	4	5	4	3	4	3
15	3	4	2	2	2	2	2	1	1	2	2	1	0	1	1	1	2	2	2	2	2	3	2	5	2
16	5	3	1	1	1	0	0	1	1	3	2	1	1	1	1	2	3	2	3	4	8	9	6	4	3
17	3	1	1	1	0	0	1	1	1	1	1	1	2	5	5	2	6	5	6	8	5	5	6	5	3
18	4	6	4	5	5	3	2	2	2	4	1	1	1	8	3	5	2	14	4	7	6	9	2	6	4
19	6	9	4	6	4	4	6	6	1	2	1	2	2	2	2	4	3	4	4	9	6	7	5	5	4
20	2	2	2	4	2	1	1	2	2	2	1	2	3	1	2	2	3	3	4	8	14	9	12	8	4
21	5	5	5	3	6	2	2	3	2	2	1	1	2	1	1	2	2	3	4	4	3	2	4	2	3
22	2	1	1	1	1	0	1	1	1	1	1	1	2	2	3	3	1	4	5	8	8	4	7	6	3
23	3	10	9	3	2	1	4	3	3	2	20	12	4	11	5	8	6	9	12	14	16	10	12	4	8
24	2	8	4	1	1	2	1	1	1	1	1	6	5	2	3	3	4	6	4	8	13	12	8	6	4
25	2	3	2	2	2	1	2	1	1	1	4	2	1	2	4	4	2	6	7	8	9	5	10	6	4
26	3	1	1	1	0	0	1	1	1	1	1	1	2	2	1	2	3	5	5	3	6	11	5	3	2
27	6	3	5	2	0	0	1	2	1	1	1	2	2	1	2	2	1	3	5	7	6	6	7	5	3
28	3	1	2	1	1	1	2	3	2	2	2	1	2	2	1	1	2	2	8	10	10	14	6	3	3
29	10	8	4	6	2	4	1	2	2	2	2	4	7	3	2	1	3	4	3	5	6	4	7	4	4
30	6	6	2	1	3	2	2	1	1	2	5	5	2	2	1	1	2	2	2	8	7	8	2	2	3
31	2	2	1	3	1	1	1	1	1	2	1	2	1	2	2	1	2	2	4	2	4	10	11	7	3
Mean	6	6	4	3	3	3	3	2	3	4	4	4	4	4	4	5	4	5	7	8	9	9	7	6	5

Table 81 Mould Bay

R_y (Hourly Ranges in 10 γ unit)

April 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	5	6	6	9	8	6	6	4	3	2	3	1	3	3	4	2	2	2	4	6	8	4	3	5	4	
2	6	9	8	1	1	1	1	0	1	1	1	1	1	2	1	2	6	2	3	8	7	8	8	4	3	
3	2	5	3	5	4	2	2	2	5	4	3	1	0	1	2	2	3	4	5	5	4	5	3	3	3	
4	2	3	1	2	2	1	3	2	4	5	6	5	4	10	7	6	15	12	10	18	31	54	56	32	12	
5	16	14	9	10	21	14	10	6	9	4	13	7	12	8	5	5	8	10	19	23	21	30	12	8	12	
6																										
7	12	9	5	11	3	5	6	6	6	13	4	8	6	5	5	8	8	10	7	7	13	16	24	15	9	
8	10	10	6	8	5	4	2	2	3	4	4	12	14	3	3	3	4	9	6	11	5	12	11	13	7	
9	2	4	4	6	5	5	3	3	5	4	2	6	4	4	3	4	4	4	4	5	13	11	7	7	5	
10	4	3	2	1	1	1	1	2	2	2	2	2	3	3	2	1	2	4	3	6	4	5	12	6	3	
11	2	3	3	3	1	1	1	1	2	3	4	3	2	2	1	1	2	1	4	11	4	5	9	6	3	
12	5	6	2	6	4	2	2	4	4	3	5	4	3	4	4	3	3	8	8	7	8	11	4	9	5	
13	3	2	4	2	3	1	2	1	3	10	5	5	3	5	6	6	7	13	14	12	6	15	15	12	6	
14	14	10	9	6	5	7	4	3	3	12	9	5	14	8	8	12	11	6	12	36	34	35	14	13	12	
15	7	7	12	5	5	3	9	13	6	2	2	5	5	7	4	3	4	4	5	5	17	18	19	12	7	
16	9	5	4	7	5	6	9	1	3	5	2	6	5	4	3	3	4	6	10	10	13	11	11	7	6	
17	5	10	5	5	4	4	2	2	3	5	6	4	2	3	2	2	3	3	9	9	13	9	10	3	5	
18	2	5	2	2	6	4	2	2	5	5	3	4	4	4	8	8	6	8	23	23	15	10	9	8	7	
19	7	11	9	6	9	9	7	8	8	6	4	3	4	3	3	8	8	7	6	8	9	12	7	13	7	
20	15	5	9	10	6	4	4	8	4	7	4	6	3	4	3	14	13	5	12	5	7	6	6	4	7	
21	4	1	2	1	4	2	1	1	1	1	3	3	8	4	2	2	3	4	5	6	6	9	7	11	4	
22	10	11	11	2	3	2	1	2	2	4	3	4	6	6	5	7	6	3	5	10	10	16	14	10	6	
23	10	11	4	4	5	3	4	5	4	6	4	2	2	2	3	2	3	2	12	2	10	6	4	5	5	
24	5	3	1	2	1	1	1	2	1	1	2	1	3	2	2	1	5	5	4	3	7	4	4	2	3	
25	4	4	2	1	3	4	2	3	1	1	1	2	1	1	4	2	3	9	10	6	9	7	8	10	4	
26	6	4	2	9	9	3	2	4	2	3	2	1	2	2	1	1	2	4	16	11	8	11	26	10	6	
27	8	10	8	4	4	4	2	4	4	5	4	3	6	5	4	5	5	5	12	13	6	4	7	21	6	
28	9	2	2	3	2	2	1	2	1	1	1	2	1	2	2	2	6	4	4	8	11	13	8	4	4	
29	6	2	4	8	2	3	2	2	1	1	1	3	1	1	2	2	1	1	2	8	10	8	12	6	4	
30	4	2	5	5	2	3	2	1	2	6	4	2	2	5	8	8	9	11	42	31	21	76	80	46	16	
31																										
Mean	7	6	5	5	5	4	3	3	3	3	4	4	4	4	4	4	5	6	10	11	11	15	14	11	6	

Table 82 Mould Bay R_y (Hourly Ranges in 10 γ units) May 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	37	21	21	4	9	8	8	7	7	6	8	9	10	12	4	35	36	17	17	19	27	36	16	16
2	13	13	16	9	15	9	11	8	4	5	13	16	11	10	6	10	8	12	11	9	11	17	31	55	13
3	29	13	20	16	8	6	8	6	10	7	5	5	6	4	3	4	12	9	9	32	18	14	12	9	11
4	23	13	10	11	6	6	4	7	24	25	17	6	9	6	12	9	14	12	11	8	6	8	26	16	12
5	8	12	18	11	18	5	7	14	8	10	6	9	4	5	4	5	3	7	8	10	14	17	26	16	10
6	9	5	12	12	6	6	6	4	5	4	2	5	2	6	4	5	7	12	10	6	7	18	16	10	7
7	17	3	5	4	3	3	5	6	2	9	10	3	7	7	3	4	4	5	10	22	28	12	40	27	10
8	12	13	9	7	4	5	2	4	9	6	2	3	4	9	5	12	5	10	6	10	20	16	19	14	9
9	7	16	9	8	10	8	10	7	5	7	4	4	7	5	7	5	10	10	10	32	13	38	18	14	11
10	16	14	8	10	4	3	4	3	4	12	11	6	5	4	7	9	6	9	15	23	29	17	15	16	10
11	6	7	14	15	20	4	4	7	6	4	6	6	22	16	9	8	8	5	14	23	27	30	21	14	12
12	13	12	10	6	5	6	4	4	4	4	5	4	4	6	4	8	4	13	17	16	13	13	24	19	9
13	13	16	13	21	20	14	8	5	10	10	7	16	5	4	6	4	6	6	13	20	27	13	16	9	12
14	8	15	11	9	6	7	6	8	13	17	5	8	3	4	2	2	1	4	14	9	13	29	7	16	9
15	10	9	13	4	5	3	5	5	5	3	6	3	3	3	5	2	2	4	8	8	15	10	9	7	6
16	6	2	6	4	3	2	1	2	3	4	2	2	1	2	1	2	2	2	5	5	10	9	7	4	4
17	8	7	2	3	2	5	8	4	3	3	4	9	7	6	7	6	4	5	20	3	6	12	8	8	6
18	3	4	2	5	2	3	3	2	3	2	3	3	4	7	3	5	6	5	5	12	8	6	4	11	5
19	8	6	2	5	2	1	2	3	4	3	1	2	5	8	3	6	12	6	4	8	12	6	7	6	5
20	5	5	11	9	6	3	3	2	2	2	3	4	2	3	6	4	6	3	4	6	14	21	27	9	7
21	6	5	4	2	4	2	2	2	1	2	1	1	4	3	2	2	2	10	6	11	9	13	5	13	5
22	8	5	5	5	3	4	2	2	1	1	1	2	8	9	4	1	2	5	2	4	9	12	4	4	4
23	3	2	2	2	2	1	3	2	4	3	4	2	2	2	5	4	4	4	10	6	4	5	2	7	4
24	6	2	1	5	2	1	2	4	2	2	1	1	1	2	3	6	4	3	5	7	6	4	5	2	3
25	6	12	5	3	5	3	4	4	2	3	4	2	11	9	6	5	5	5	18	35	22	19	14	14	9
26	10	4	2	2	4	3	3	3	4	4	3	6	4	2	4	3	6	15	8	26	23	22	10	9	8
27	9	5	6	5	4	4	2	3	4	1	2	4	4	3	1	6	9	8	8	10	18	42	17	51	9
28	28	18	21	13	16	12	9	11	10	6	12	13	8	6	7	6	11	9	13	25	28	47	59	48	18
29	28	32	32	21	25	9	5	13	4	8	7	3	13	8	9	11	9	14	43	28	12	33	48	34	19
30	36	16	21	15	4	7	13	8	6	6	14	18	5	6	4	7	9	5	6	13	12	14	8	21	11
31	8	4	4	4	4	3	4	3	4	8	9	6	23	13	8	13	4	10	14	16	20	9	19	14	9
Mean	12	11	10	9	7	5	5	5	6	6	6	6	7	6	5	6	7	8	11	15	15	18	18	17	9

Table 83 Mould Bay

R_y (Hourly Ranges in 10 γ units)

June 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean	
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24		
1	15	20	13	7	11	12	7	12	4	5	8	10	7	8	6	7	15	9	10	17	19	12	38	35	13	
2	17	14	14	6	9	14	5	7	3	2	5	9	12	4	3	8	7	11	13	25	31	14	25	32	12	
3	32	13	18	18	9	4	6	7	6	10	8	20	11	5	6	4	2	6	11	10	16	28	12	16	12	
4	12	7	7	8	3	5	10	6	8	4	2	3	2	5	9	3	1	5	6	10	4	25	19	18	8	
5	15	4	3	1	4	4	1	1	2	1	2	2	1	1	2	2	2	3	3	4	5	4	5	4	3	
6	8	3	3	2	3	3	1	3	2	1	2	2	2	4	3	6	3	8	17	9	16	18	30	41	8	
7	19	12	17	14	5	8	8	10	5	7	7	9	8	9	7	18	4	17	17	39	46	29	19	12	14	
8	18	21	16	5	10	6	4	4	3	6	6	10	7	7	5	5	6	10	12	19	42	25	22	22	12	
9	15	13	13	14	8	10	4	9	9	6	5	17	6	3	6	9	8	8	18	13	20	16	19	7	11	
10	22	9	6	6	4	4	4	5	2	3	6	5	2	4	5	4	6	7	6	10	29	16	11	19	8	
11	13	4	6	13	11	9	9	3	6	4	6	8	5	11	8	11	7	9	5	3	7	7	11	11	8	
12	14	16	16	8	4	2	3	3	2	4	3	6	3	1	1	3	4	6	10	13	12	14	13	8	7	
13	5	4	4	5	2	4	5	2	4	2	3	3	3	6	2	4	6	19	6	6	25	39	26	30	9	
14	17	6	6	5	3	4	4	4	4	6	6	7	3	4	12	10	14	7	7	4	5	14	19	24	8	
15	21	6	7	16	4	12	14	4	6	2	3	4	4	2	3	3	5	4	20	7	8	31	10	24	9	
16	17	4	5	3	3	3	2	1	2	2	2	2	1	1	2	3	4	10	3	4	12	11	18	8	5	
17	11	5	7	6	10	4	4	2	4	5	3	7	6	5	3	3	6	5	7	13	6	15	12	13	7	
18	11	16	17	6	8	8	9	10	11	3	5	12	11	15	13	9	8	13	13	9	6	14	7	4	10	
19	5	14	7	9	9	4	6	3	4	2	1	2	2	3	6	9	4	6	9	7	21	14	10	15	7	
20	12	17	6	9	6	8	10	8	6	6	12	12	4	6	5	5	6	8	11	17	22	19	14	13	10	
21	14	8	7	6	7	6	3	3	4	9	5	5	6	2	2	5	8	6	8	16	22	22	27	16	9	
22	11	7	8	6	7	7	4	4	6	4	3	4	3	5	2	1	3	3	4	10	14	13	7	13	6	
23	6	11	4	7	2	5	2	2	6	6	8	3	4	3	1	3	2	4	10	10	12	10	10	8	6	
24	8	5	6	4	4	2	5	4	4	5	6	2	8	5	8	14	10	8	5	9	13	14	13	14	7	
25	13	5	9	10	13	6	18	18	6	7	8	6	10	27	14	17	9	20	20	16	22	25	54	36	16	
26	45	20	30	25	15	15	8	12	10	12	11	5	8	9	9	14	5	13	32	9	35	30	34	42	19	
27	22	30	17	12	24	15	6	4	10	6	13	6	9	12	9	12	8	12	13	10	30	61	41	34	17	
28	28	9	5	6	12	11	9	10	12	8	8	11	11	8	8	14	16	13	22	46	62	28	9	14	16	
29	23	20	19	15	5	6	5	8	6	3	6	7	6	8	6	15	9	19	21	28	24	22	22	18	13	
30	27	10	9	4	10	8	11	9	11	6	7	7	9	6	10	8	6	13	18	18	26	11	33	21	12	
31																										
Mean	17	11	10	9	8	7	6	6	6	5	6	7	6	6	6	8	6	9	12	14	20	20	20	19	10	

Table 84 Mould Bay

R_y (Hourly Ranges in 10 γ units)

July 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	14	8	14	18	8	4	5	2	2	3	2	4	5	4	2	1	2	3	8	7	8	8	13	6	6
2	5	4	4	2	2	4	2	3	5	5	4	4	5	3	3	4	3	9	14	8	5	7	8	10	5
3	16	5	6	4	4	3	1	1	1	2	4	2	4	4	3	1	1	1	5	6	4	12	12	12	5
4	3	3	4	3	6	9	5	4	7	2	5	6	10	6	6	10	7	10	31	16	13	16	21	28	10
5	39	31	14	9	14	5	10	27	11	6	4	6	6	5	6	4	4	12	14	16	69	55	42	21	18
6	22	18	12	18	14	11	9	6	6	5	9	5	4	5	10	8	7	9	20	17	17	39	34	16	13
7	6	8	8	8	5	5	9	4	4	6	7	5	5	5	20	11	13	6	8	20	30	18	16	22	10
8	17	16	12	11	11	6	4	8	14	6	3	6	10	6	9	9	7	4	12	23	24	41	16	12	12
9	20	14	19	19	20	10	9	4	9	6	6	8	8	7	9	10	9	12	20	29	13	22	18	22	13
10	19	12	9	9	9	6	12	6	12	4	4	4	6	3	5	7	11	13	18	18	12	21	22	14	11
11	12	10	9	12	7	6	13	7	4	6	3	4	4	2	4	5	3	5	5	9	25	9	18	10	8
12	7	8	8	5	2	5	3	4	4	2	3	2	2	5	1	1	2	8	14	9	11	7	5	9	5
13	9	14	4	4	5	3	3	6	7	2	5	4	4	2	3	3	2	3	5	10	14	10	15	11	6
14	7	4	4	2	2	1	2	1	3	2	2	1	5	3	5	5	6	5	3	6	7	14	11	7	4
15	8	4	4	2	3	2	2	2	2	2	3	2	9	5	3	3	4	3	6	4	4	30	12	12	5
16	9	4	10	10	7	6	6	4	4	3	5	2	5	7	3	5	4	16	4	9	16	20	13	17	8
17	18	31	8	7	5	3	9	7	6	7	6	15	17	5	5	10	8	13	6	17	11	15	7	7	10
18	8	10	7	8	6	9	6	3	4	8	5	5	4	14	9	14	13	9	8	12	21	16	4	14	9
19	8	8	4	18	8	5	6	2	2	4	3	8	6	5	7	3	3	8	6	17	15	8	14	20	8
20	13	6	3	5	8	4	2	2	2	2	2	5	8	4	4	4	8	17	8	32	5	8	17	11	8
21	30	11	5	3	4	8	8	9	10	8	8	5	24	10	7	25	27	13	12	11	19	19	22	22	13
22	21	16	6	7	10	14	5	8	7	8	4	5	9	11	21	9	8	4	16	14	6	10	27	20	11
23	16	17	14	6	5	12	7	4	8	6	10	9	8	10	23	13	10	15	19	15	22	51	41	49	16
24	36	34	10	10	17	9	6	8	4	9	14	8	36	26	7	8	8	20	10	11	20	38	18	25	16
25	28	22	12	9	21	19	8	13	7	8	3	6	8	6	5	13	8	17	16	12	15	14	14	23	13
26	14	17	10	19	17	4	8	14	10	6	10	12	7	18	12	5	4	5	19	26	20	35	47	38	16
27	22	26	28	20	12	6	14	12	10	8	8	6	6	13	7	6	8	8	12	9	16	17	16	13	13
28	11	8	9	10	7	5	7	6	5	6	6	2	3	4	2	3	5	1	6	5	5	6	17	11	6
29	6	8	4	3	3	3	2	1	3	3	4	2	5	10	5	5	2	3	4	9	8	15	13	14	6
30	14	12	22	9	14	7	8	3	6	5	5	8	22	16	12	8	16	25	18	36	32	37	43	22	17
31	21	25	27	10	13	8	6	18	6	3	5	4	32	12	9	6	5	11	9	22	26	59	44	28	17
Mean	15	13	10	9	9	7	6	6	6	5	5	5	9	8	7	7	7	9	11	15	17	22	20	18	10

Table 85 Mould Bay

R_y (Hourly Ranges in 10 γ units)

August 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	22	17	22	34	13	14	10	5	3	5	9	6	8	9	10	11	16	16	20	32	38	30	46	25	18
2	16	9	11	12	12	16	9	8	15	8	5	7	7	4	6	8	6	13	16	19	22	49	17	18	13
3	12	13	11	11	7	5	6	4	6	4	4	4	2	4	7	7	6	6	5	14	17	42	33	16	10
4	10	9	13	9	6	4	3	8	4	11	4	10	5	13	6	6	17	8	16	20	19	36	38	31	13
5	17	7	9	4	9	4	8	4	4	4	6	18	8	6	3	4	9	5	14	23	11	28	12	15	10
6	9	8	12	3	6	3	6	4	7	5	7	13	5	7	6	5	8	2	9	15	30	13	13	12	9
7	24	5	9	6	5	6	4	6	4	5	5	6	9	12	5	4	4	3	7	8	9	17	23	22	9
8	10	7	4	8	4	4	8	3	2	6	6	7	6	3	5	6	4	7	7	4	5	12	5	10	6
9	8	8	5	6	4	2	9	5	8	8	7	4	4	3	4	4	4	5	5	8	6	13	17	10	7
10	9	6	7	3	6	4	4	1	2	2	2	8	6	7	5	17	10	3	4	7	9	6	8	30	7
11	8	16	8	3	3	3	4	2	2	3	1	2	2	4	5	3	3	6	4	8	12	14	40	20	7
12	9	6	2	2	4	5	6	5	2	1	4	3	3	2	4	4	3	4	7	15	13	15	8	5	5
13	6	6	4	4	2	3	3	3	1	1	2	1	4	2	2	2	3	3	3	8	10	12	6	7	4
14	4	3	5	4	1	3	3	2	2	2	3	2	2	2	3	2	2	2	4	3	10	9	14	19	4
15	2	4	3	4	2	3	2	2	2	2	2	2	2	7	8	4	6	13	10	9	6	11	36	16	7
16	21	12	5	2	4	5	2	2	2	1	2	5	3	5	5	8	9	6	9	6	14	21	14	9	7
17	11	14	10	5	6	4	3	2	2	2	8	2	2	4	3	3	3	8	12	34	15	5	18	20	8
18	15	12	7	4	11	6	7	7	12	16	15	4	11	12	9	12	12	13	9	22	13	23	35	24	13
19	20	10	12	7	3	4	4	2	2	2	3	4	6	6	8	4	11	8	38	21	6	8	4	19	9
20	9	11	19	22	12	11	10	9	3	14	19	18	86	13	15	6	14	13	19	10	19	23	46	38	19
21	17	7	14	11	16	5	9	8	9	16	7	17	6	11	31	38	16	11	17	10	21	20	9	20	14
22	19	11	10	6	3	8	6	7	22	5	5	6	2	4	4	3	6	4	4	11	16	19	15	15	9
23	7	7	12	13	4	7	5	4	8	6	6	14	12	9	10	11	5	9	10	20	10	8	12	19	10
24	8	17	7	8	3	3	2	3	5	13	8	8	9	4	9	8	4	8	5	7	16	13	11	8	8
25	13	7	5	3	4	7	4	6	4	8	4	3	3	7	5	2	8	9	19	19	34	21	23	10	10
26	12	10	9	16	10	12	6	3	6	5	4	3	4	6	5	11	7	9	10	20	19	18	20	10	10
27	10	6	9	10	4	4	3	3	2	3	3	7	8	7	5	10	14	21	20	17	12	19	32	13	10
28	13	6	6	12	7	9	8	4	2	7	12	14	9	5	3	5	18	9	22	26	34	22	18	12	12
29	9	11	7	13	10	5	4	4	12	22	12	7	10	8	10	11	7	14	23	22	16	24	26	12	12
30	13	13	8	8	9	4	3	4	4	2	4	6	4	8	4	8	10	5	22	14	21	9	20	9	9
31	11	12	8	6	7	9	6	5	7	8	3	6	5	10	7	10	7	10	15	20	10	24	11	8	9
Mean	12	9	9	8	6	6	5	4	5	6	6	7	8	7	7	8	8	8	12	15	16	19	20	16	9

Table 86 Mould Bay R_y (Hourly Ranges in 10γ units) September 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	8	13	3	5	4	3	3	11	11	11	8	11	18	4	3	9	12	6	12	10	9	8	11	9	
2	12	7	5	6	5	4	2	1	2	2	2	2	2	4	4	4	5	4	8	9	14	22	10	8	6	
3	12	7	8	10	9	4	4	3	3	2	5	4	5	2	6	6	5	7	9	17	9	16	11	11	7	
4	5	4	6	2	2	2	2	4	4	5	6	3	2	6	4	3	2	4	7	14	11	8	8	15	5	
5	9	8	5	2	3	4	2	2	4	4	4	8	5	5	3	4	5	6	8	19	13	10	12	6	6	
6	6	7	7	6	3	6	7	2	3	2	4	4	2	3	4	3	4	3	8	12	17	9	12	14	6	
7	10	6	2	4	3	3	3	2	2	1	2	2	2	3	2	2	1	5	5	5	5	6	6	9	4	
8	7	9	9	4	6	19	12	5	4	2	4	11	4	10	3	4	8	6	6	9	8	9	13	5	7	
9	11	10	3	10	8	10	2	3	4	8	6	4	11	17	14	6	8	9	13	26	12	13	14	8	10	
10	5	15	13	4	3	2	3	5	8	3	3	11	9	4	5	3	4	6	10	6	17	19	16	9	8	
11	9	10	12	4	7	3	3	4	3	5	6	14	9	4	2	7	5	11	9	15	17	12	16	14	8	
12	16	8	13	8	5	9	4	8	10	6	5	2	5	4	9	3	6	6	10	8	8	14	9	7	8	
13	7	5	4	2	3	2	2	2	2	2	1	1	2	2	2	2	2	2	8	10	24	22	12	6	5	
14	6	6	5	7	16	5	12	10	6	32	22	6	31	25	9	12	12	21	11	21	18	19	8	13	14	
15	11	13	4	10	15	10	6	8	7	10	9	13	13	66	13	6	12	6	17	17	21	22	7	12	14	
16	14	7	10	12	9	10	7	6	15	9	9	17	7	4	6	20	18	11	18	20	20	23	12	24	13	
17	16	13	7	18	13	15	13	25	16	8	21	20	14	11	14	10	10	11	8	44	14	24	14	24	16	
18	18	14	10	14	7	6	2	8	8	7	8	18	10	9	14	8	30	43	8	9	8	8	17	13	12	
19	10	4	8	10	8	10	9	10	13	8	10	34	29	18	8	8	10	8	19	9	13	8	13	16	12	
20	10	6	5	3	4	8	4	5	2	16	8	5	4	8	16	12	14	19	14	12	4	5	6	2	8	
21	5	7	3	17	9	6	4	5	3	14	12	5	4	2	20	17	13	58	49	41	27	12	64	12	17	
22	16	9	14	11	32	12	18	21	25	24	23	12	9	5	4	4	30	36	53	40	54	27	30	53	23	
23	24	24	24	25	18	50	29	38	61	31	42	23	16	18	8	8	21	15	18	17	16	17	17	8	24	
24	6	10	10	6	6	5	5	4	8	4	6	5	9	6	4	8	14	11	19	10	8	12	5	10	8	
25	15	21	18	30	9	7	6	8	10	11	22	7	5	6	6	15	11	11	16	20	25	24	20	6	14	
26	7	6	4	9	18	16	8	6	6	4	9	6	9	10	6	10	10	14	16	29	23	13	9	12	11	
27	14	22	18	16	13	10	7	5	7	12	6	12	10	9	7	10	16	8	16	73	39	29	24	24	17	
28	23	23	12	8	11	6	10	12	16	10	6	10	18	13	11	11	12	17	17	14	19	18	18	9	14	
29	14	11	8	6	11	5	6	5	20	12	10	6	14	18	8	6	8	10	10	18	14	18	9	8	11	
30	6	14	17	3	4	7	7	6	4	10	13	5	10	10	3	4	8	9	7	6	12	14	12	7	8	
31																										
Mean	11	10	9	9	9	9	7	8	9	9	10	9	9	11	7	7	10	13	14	19	17	15	14	13	11	

Table 87 Mould Bay

R_y (Hourly Ranges in 10 γ units)

October 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	3	4	4	2	3	2	3	2	2	2	1	2	2	2	3	5	9	4	4	6	6	8	7	4	4
2	6	3	1	3	1	1	2	1	2	2	2	1	3	2	2	2	4	4	3	8	9	7	6	3	3
3	3	2	3	2	3	2	3	2	3	5	1	2	2	3	4	5	5	4	9	12	6	6	3	6	4
4	3	5	5	5	4	3	3	4	3	6	4	2	2	1	6	4	9	4	4	3	5	9	5	4	4
5	3	2	5	2	4	3	2	1	2	10	6	4	2	3	3	2	4	4	3	4	6	5	3	2	4
6	6	6	5	3	5	6	2	1	2	2	1	2	2	1	1	2	2	3	3	10	8	4	3	1	3
7	2	2	3	5	2	2	1	2	2	4	2	2	2	1	1	5	6	10	6	11	24	11	12	6	5
8	14	12	9	12	6	8	5	4	6	5	6	3	6	6	4	6	3	7	11	7	15	10	4	3	7
9	5	5	4	4	2	4	3	2	3	4	4	4	5	4	2	3	7	10	6	12	8	7	4	6	5
10	8	4	4	3	3	2	3	3	4	5	10	6	7	4	4	4	2	4	8	10	10	6	6	4	5
11	6	4	4	6	4	2	2	5	10	8	9	10	6	8	5	12	3	9	10	8	18	12	15	14	8
12	7	11	9	12	6	6	6	4	9	6	8	6	28	23	20	20	9	8	24	27	21	23	10	6	13
13	15	6	12	9	9	11	7	6	14	10	9	5	7	7	8	7	4	7	21	13	18	15	17	8	10
14	10	12	8	18	4	8	8	21	15	17	9	13	13	8	10	6	16	25	31	16	17	21	11	11	14
15	9	7	8	7	5	7	6	7	4	5	5	6	3	5	8	4	16	9	13	9	28	26	10	12	9
16	14	10	11	8	3	5	9	6	7	9	5	6	12	8	11	5	10	5	11	14	9	8	11	7	9
17	4	3	2	4	6	3	3	5	2	2	3	3	2	2	1	5	2	3	6	5	4	4	6	5	4
18	1	2	3	4	3	2	2	2	2	4	4	9	7	4	2	6	4	3	8	7	6	6	7	3	4
19	8	7	2	2	2	3	3	4	4	2	2	4	4	3	4	4	5	5	7	5	4	7	10	5	4
20	3	3	2	2	2	2	3	2	3	4	3	6	15	13	12	4	3	4	7	4	4	4	9	9	5
21	2	2	2	8	3	4	7	4	2	4	4	2	2	2	4	3	6	2	4	5	4	6	4	2	4
22	2	2	2	2	2	3	3	2	2	2	2	2	2	1	3	4	4	5	5	5	6	7	4	4	3
23	2	4	2	2	5	2	1	1	2	1	1	2	3	2	3	3	3	6	3	11	13	13	14	5	4
24	8	12	12	8	12	6	12	4	13	6	13	16	6	6	6	11	8	14	15	21	22	17	8	10	11
25	17	14	9	11	4	2	4	5	3	3	2	2	6	4	4	4	6	10	7	12	8	5	7	8	7
26	14	5	9	5	2	4	2	2	2	2	5	5	2	5	6	5	6	4	11	9	12	10	5	8	6
27	3	4	4	3	3	3	1	1	1	2	2	1	2	2	3	4	4	2	4	5	6	4	3	2	3
28	3	2	3	2	1	2	1	2	2	1	6	8	5	1	2	12	10	28	17	29	7	7	7	6	7
29	4	7	7	4	3	3	2	3	3	2	4	3	3	17	21	8	53	50	25	15	14	19	26	13	13
30	20	13	21	25	70	83	72	57	28	12	7	5	3	3	6	5	4	4	5	10	7	6	7	5	20
31	3	4	3	3	3	3	3	2	3	4	2	2	2	2	2	3	5	4	5	6	10	12	7	5	4
Mean	7	6	6	6	6	6	6	5	5	5	5	5	5	5	6	6	7	8	10	10	11	10	8	6	7

MOULD BAY MAGNETIC OBSERVATORY, 1962-63

RESOLUTE BAY MAGNETIC OBSERVATORY

1963

The Magnetic Equipment

No changes were made in the station equipment in 1963. A summary of the equipment in operation during this period is provided below:

The Photographic Variometers

A set of three-component photographic Ruska variometers is aligned to record the geographic components X, Y and Z of the earth's magnetic field. The time scale of the Ruska magnetograms is 20 mm/hr. Scale values adopted for the Ruska variometers for 1963 were:

X	Jan. 1—Mar. 18	5.44 gammas/mm
	Mar. 19	3.80
	Mar. 20—Aug. 8 at 06 hrs Aug. 8 at 06 hrs—Dec. 31	7.11 increasing linearly to 7.24 6.51 decreasing linearly to 6.37
Y	Jan. 1—Mar. 18	4.50 gammas/mm
	Mar. 19	2.80
	Mar. 20—Aug. 8 at 06 hrs Aug. 8 at 06 hrs—Dec. 31	7.02 decreasing linearly to 6.89 6.57 “ “ 6.51
Z	Jan. 1—Mar. 18	4.44 gammas/mm
	Mar. 19—Aug. 31	4.63
	September	4.68
	Oct. 1—Dec. 31	4.70

Sensitivity changes were made on the X and Y variometers on March 19, March 20, and August 8.

Temperature coefficients were $+2.5$ gammas/ $^{\circ}\text{C}$ for X and $+0.7$ gammas/ $^{\circ}\text{C}$ for Y until March 19, 00 hrs. U.T., when the X and Y temperature control magnets were removed with a view to reducing as much as possible the interactions between the various magnets. Following their removal the temperature coefficients were -1.6 gammas/ $^{\circ}\text{C}$ in X and -0.9 gammas/ $^{\circ}\text{C}$ in Y. The Z temperature coefficient was less than 1 gamma/ $^{\circ}\text{C}$.

Thermostatically controlled electric heaters maintain the temperature in the variometer room constant to within approximately 2 degrees, except for brief periods

of high wind velocity or power failure. Temperature effects were generally small and were disregarded in base-line calculations and mean hourly value measurements.

The Stand-by Variometer and Storm Recorder

A three-component electrical magnetometer with an inked output records X, Y and Z. Chart speed is 20 mm/hr. Full-scale sensitivity is 2000 gammas normally, with automatic switching to 4000 gammas at times of heavy disturbance.

Absolute Instruments

A proton precession magnetometer is the primary standard of total intensity (F). A portable three-component electrical magnetometer of the saturable core type is used for the determination of declination (D) and inclination (I).

Base-line Values

The r.m.s. value of the observed minus adopted base-line values was 3 gammas for 22 observations in X; 5 gammas for 22 observations in Y; and 3 gammas for 23 observations in Z.

The Magnetic Reductions

A summary for 1963 by month, season and year of the mean hourly values of X, Y and Z for all days and for the international quiet and disturbed days is given in Tables 90–98. The daily mean values of the three elements are given in Tables 99–101.

R_y indices of magnetic disturbance are given for each hour of 1963 in Tables 102–113. The R_y indices are the hourly ranges in Y, the principal horizontal magnetic field component recorded at Resolute Bay, expressed in 10-gamma units.

MEAN VALUES OF MAGNETIC ELEMENTS
NORTH COMPONENT OF HORIZONTAL INTENSITY (@mmas) (All days)

Table 90 Resolute Bay

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	93	100	111	105	97	103	98	84	74	98	108	114	99	96	97	104
1-2	95	106	114	114	112	99	110	104	99	107	110	120	108	106	109	108
2-3	103	109	121	125	123	120	133	125	110	119	115	122	119	125	119	112
3-4	111	115	127	135	140	135	149	140	130	132	118	126	130	141	131	118
4-5	117	121	132	147	162	156	170	153	153	141	130	132	143	160	143	125
5-6	128	124	135	154	174	182	180	165	176	147	140	131	153	175	153	131
6-7	132	131	142	156	190	196	197	169	173	154	139	143	160	188	156	136
7-8	131	135	146	164	184	203	202	171	175	157	148	150	164	190	161	141
8-9	135	137	148	167	182	209	199	173	181	158	149	151	166	191	164	143
9-10	135	135	142	165	192	206	191	176	172	155	146	145	163	191	158	140
10-11	127	125	138	160	183	207	194	174	169	148	140	138	159	190	154	133
11-12	115	120	133	153	182	200	198	168	160	134	129	131	152	187	145	124
12-13	112	108	126	148	168	199	192	168	151	120	119	120	144	182	136	115
13-14	99	101	118	140	150	191	194	150	125	113	110	109	133	171	124	105
14-15	80	94	109	125	134	178	159	131	111	104	102	103	119	150	112	95
15-16	79	87	100	113	116	158	132	107	97	94	85	93	105	128	101	86
16-17	71	72	89	100	84	108	103	87	73	76	68	87	85	96	84	75
17-18	59	73	79	78	75	106	78	58	51	59	66	79	72	79	67	69
18-19	62	72	80	76	63	83	69	46	36	59	68	79	66	65	63	70
19-20	61	71	79	76	64	71	55	49	36	59	75	79	65	60	63	72
20-21	68	80	88	75	84	57	57	38	43	65	75	85	68	59	68	77
21-22	76	86	88	91	87	74	62	44	38	70	89	91	75	67	72	86
22-23	81	91	91	103	90	99	73	62	61	73	98	98	85	81	82	92
23-24	87	95	97	96	97	95	87	73	60	92	104	105	91	88	86	98
Mean	98	104	114	124	131	143	137	117	111	110	110	114	118	132	115	106

RESOLUTE BAY MAGNETIC OBSERVATORY, 1963

MEAN VALUES OF MAGNETIC ELEMENTS
NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 91 Resolute Bay

1963

U T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	108	109	111	123	120	120	124	98	95	108	115	125	113	116	109	114
1-2	108	112	112	123	126	114	127	118	108	111	114	123	116	121	113	114
2-3	108	113	116	123	129	116	130	123	119	114	114	124	119	124	118	115
3-4	107	111	119	126	131	126	137	126	123	123	116	124	122	130	123	114
4-5	107	113	119	128	138	138	140	132	126	121	116	123	125	137	123	115
5-6	108	114	121	129	145	148	145	137	130	125	119	124	129	144	126	116
6-7	109	114	121	129	147	161	150	142	130	126	124	124	131	150	126	118
7-8	113	115	122	134	152	184	164	144	130	127	123	129	136	161	128	120
8-9	112	117	127	141	155	173	169	140	128	132	124	136	138	159	132	122
9-10	112	117	128	145	168	168	159	139	132	130	124	139	138	158	134	123
10-11	109	114	128	147	165	167	161	140	127	124	121	133	136	158	131	119
11-12	106	111	126	143	147	161	172	139	120	120	119	129	133	155	127	116
12-13	106	109	124	135	140	156	171	124	117	112	116	124	128	148	122	114
13-14	103	108	125	125	133	148	161	114	104	114	113	121	122	139	117	111
14-15	99	104	122	114	118	132	137	137	104	107	105	119	117	131	112	107
15-16	97	102	120	105	108	132	140	120	97	90	103	117	111	125	103	105
16-17	94	100	113	107	98	118	111	104	76	91	103	115	103	108	97	103
17-18	91	95	94	103	99	103	100	77	77	94	103	113	96	95	92	101
18-19	95	95	92	95	98	111	105	61	79	97	102	110	95	94	91	100
19-20	97	99	91	105	108	106	106	45	90	100	108	110	97	91	97	103
20-21	101	104	100	116	121	107	127	58	78	101	108	115	103	103	99	107
21-22	101	109	109	124	135	102	108	86	68	105	105	120	106	108	101	109
22-23	102	107	113	120	124	107	99	99	74	107	110	119	107	107	104	110
23-24	101	108	113	110	119	88	107	97	75	108	111	120	105	103	102	110
Mean	104	108	115	123	130	133	135	113	104	112	113	122	118	128	114	112

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (γ) (Disturbed Days)

Table 92 Resolute Bay

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	70	64	98	107	117	76	103	87	-6	60	94	91	80	96	65	80
1-2	71	94	100	113	117	76	145	122	72	89	101	115	101	115	93	95
2-3	102	110	116	123	127	149	141	157	93	132	116	121	124	144	116	112
3-4	128	136	133	144	150	174	172	166	131	159	116	125	144	165	142	126
4-5	148	154	149	160	201	219	194	191	220	179	148	150	176	201	177	150
5-6	172	163	152	163	205	214	208	195	268	181	174	128	185	205	191	159
6-7	187	188	178	155	213	257	253	206	246	192	151	165	199	232	193	173
7-8	171	190	189	167	203	274	245	217	255	207	182	180	207	235	205	181
8-9	189	172	184	172	206	283	236	222	263	211	164	176	207	237	208	175
9-10	202	173	150	178	230	238	218	223	202	206	166	159	195	227	184	175
10-11	180	146	147	162	210	207	230	208	180	191	164	145	181	214	170	159
11-12	128	133	139	147	194	200	251	208	168	142	148	138	166	213	149	137
12-13	129	98	128	165	179	228	246	243	156	121	119	111	160	224	142	114
13-14	99	95	100	158	155	229	272	187	123	110	103	95	144	211	123	98
14-15	40	80	87	128	148	207	168	150	99	88	92	76	114	168	101	72
15-16	50	55	66	98	124	138	137	131	82	67	51	69	89	133	78	56
16-17	28	26	36	89	104	54	153	94	46	7	-16	52	56	101	44	23
17-18	7	42	16	36	51	113	46	73	48	-23	-15	29	35	71	19	16
18-19	9	41	41	36	72	97	46	16	9	11	-5	30	34	58	24	19
19-20	3	15	39	58	74	69	12	44	-2	0	2	17	28	50	24	9
20-21	35	40	51	9	115	-27	-24	35	8	16	5	21	24	25	21	25
21-22	59	62	59	88	108	0	25	-3	-26	49	39	36	41	32	42	49
22-23	80	86	73	110	46	33	46	32	61	53	57	66	62	39	74	72
23-24	65	81	83	73	94	70	67	50	67	99	73	97	77	70	81	79
Mean	98	102	105	118	143	149	150	136	115	106	93	100	118	144	111	98

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (gammas) (All Days)

Table 93 Resolute Bay

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	854	850	854	871	877	877	879	877	888	865	848	836	865	878	870	847
1-2	856	849	854	869	881	894	885	881	894	868	850	832	868	885	871	847
2-3	854	849	854	866	890	890	882	881	907	867	853	832	869	886	874	847
3-4	854	850	852	859	887	884	878	876	881	865	851	833	864	881	864	847
4-5	866	851	850	858	872	882	883	870	887	856	853	834	864	877	863	851
5-6	862	849	844	854	860	876	867	859	883	849	853	838	858	866	858	850
6-7	852	846	842	843	843	856	851	845	858	847	845	832	847	849	848	844
7-8	847	837	833	830	830	837	836	830	837	826	827	825	833	833	832	834
8-9	831	829	824	822	816	819	815	814	810	814	816	816	819	816	818	823
9-10	822	825	814	808	803	809	798	800	783	795	807	803	806	803	800	814
10-11	811	813	803	801	789	793	786	790	772	788	795	797	795	790	791	804
11-12	803	809	798	794	782	777	774	774	753	782	791	792	786	777	782	799
12-13	802	797	794	785	764	756	752	757	748	779	781	781	775	757	777	790
13-14	797	795	790	776	754	743	735	755	742	774	781	773	768	747	771	786
14-15	792	790	782	770	747	722	731	745	747	769	781	770	762	736	767	783
15-16	791	793	775	769	748	712	727	743	740	773	781	778	761	733	764	786
16-17	799	799	787	772	760	725	738	754	745	775	789	789	769	744	770	794
17-18	812	812	800	783	761	725	744	780	771	793	799	798	781	752	787	805
18-19	824	820	817	793	770	731	777	788	790	811	815	811	796	767	803	818
19-20	830	835	826	807	800	764	800	812	803	824	829	820	812	794	815	828
20-21	840	842	837	828	827	781	807	826	825	833	838	830	826	810	831	837
21-22	845	846	842	841	842	826	832	836	855	846	841	835	841	834	846	842
22-23	850	847	849	849	853	844	847	847	872	860	840	837	850	848	858	844
23-24	854	848	850	860	862	863	867	863	878	858	844	836	857	864	862	846
Mean	831	828	824	821	817	808	812	817	820	822	821	814	820	814	822	824

MEAN VALUES OF MAGNETIC ELEMENTS
WEST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 9# Resolute Bay

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	834	845	840	834	842	846	838	857	853	833	827	813	839	846	840	830
1-2	833	840	836	835	862	846	842	857	844	833	828	815	839	852	837	829
2-3	834	838	833	835	851	852	840	855	840	833	832	814	838	849	835	830
3-4	835	836	831	831	847	852	837	854	834	841	830	814	837	848	834	829
4-5	836	836	828	829	848	850	836	848	832	837	830	814	835	845	831	829
5-6	837	836	827	826	842	850	829	849	830	832	830	814	834	843	829	829
6-7	835	835	825	822	835	851	827	839	828	827	829	814	831	838	826	828
7-8	834	834	824	818	830	840	820	836	819	821	826	814	826	831	820	827
8-9	833	833	822	817	826	818	808	822	811	816	821	812	820	818	817	825
9-10	829	828	818	818	819	808	809	821	804	810	818	804	815	814	812	820
10-11	827	825	814	811	808	793	797	817	801	810	816	790	809	804	809	814
11-12	824	820	810	804	799	795	788	815	796	809	816	797	806	799	805	814
12-13	820	821	808	794	788	789	776	805	800	805	814	794	801	789	802	812
13-14	820	820	801	789	775	785	762	800	795	799	811	793	796	781	796	811
14-15	820	817	794	783	772	774	761	790	792	792	810	797	792	774	790	811
15-16	819	813	783	787	775	763	753	786	796	801	812	799	791	769	792	811
16-17	821	818	787	792	789	759	759	791	813	807	813	803	796	774	800	814
17-18	828	826	805	795	786	762	779	808	825	816	817	804	804	784	810	819
18-19	832	825	806	801	791	770	792	822	823	829	820	808	810	794	815	821
19-20	832	844	825	804	802	793	797	832	825	831	829	812	819	806	821	829
20-21	835	845	831	823	833	821	826	842	814	833	829	815	829	831	825	831
21-22	838	842	835	830	839	830	818	851	825	829	828	817	832	835	829	831
22-23	834	838	839	839	836	826	829	847	842	831	828	815	834	835	838	829
23-24	834	838	837	843	837	840	856	853	863	831	828	815	840	847	844	829
Mean	830	831	819	815	818	813	807	829	821	821	823	808	820	817	819	823

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 95 Resolute Bay

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	895	894	886	891	889	923	921	913	985	942	899	873	909	911	926	890
1-2	901	889	893	889	922	977	898	910	973	950	893	854	912	927	926	884
2-3	893	885	892	873	945	944	885	912	1072	947	901	859	917	922	946	884
3-4	909	894	888	857	926	952	896	918	931	920	881	860	903	923	899	886
4-5	962	902	897	863	896	948	905	889	956	891	867	864	903	909	902	899
5-6	926	893	876	862	888	891	869	867	989	864	871	880	890	879	898	893
6-7	882	878	874	848	866	870	852	845	907	914	873	860	872	858	886	873
7-8	878	838	852	838	828	833	831	815	850	837	830	853	840	827	844	850
8-9	821	821	832	815	809	819	813	796	788	809	825	838	815	809	811	826
9-10	804	831	802	797	805	801	774	797	735	762	795	801	792	794	774	808
10-11	773	796	788	775	754	771	763	762	737	751	761	789	768	762	763	780
11-12	737	781	763	759	743	765	754	740	707	750	739	771	751	750	745	757
12-13	755	745	751	755	731	730	693	692	688	741	713	756	729	711	734	742
13-14	737	749	754	742	731	709	648	711	671	712	694	731	716	700	720	728
14-15	726	742	748	722	708	656	694	684	699	702	722	729	711	685	718	730
15-16	722	757	742	726	712	676	700	685	702	723	720	761	719	693	723	740
16-17	757	770	776	734	710	753	675	709	695	731	728	771	734	712	732	757
17-18	789	807	790	786	750	722	679	727	736	740	765	797	757	719	763	789
18-19	820	800	825	827	759	693	707	763	815	795	810	814	786	731	816	811
19-20	837	834	825	783	830	698	742	758	808	827	837	835	801	757	811	836
20-21	848	852	854	838	830	771	775	800	866	853	868	858	834	794	853	856
21-22	855	859	866	876	865	832	831	848	909	878	876	875	864	844	882	866
22-23	863	858	866	880	876	832	869	843	923	892	878	871	871	855	890	868
23-24	883	868	870	895	888	877	914	880	894	864	895	866	883	890	881	878
Mean	832	831	830	818	819	810	795	803	835	825	818	824	820	807	827	826

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (All Days)

Table 96 Resolute Bay

58,000 γ +

1963

U. T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	114	120	113	100	97	60	90	119	146	145	157	140	117	91	126	133
1-2	117	119	115	101	101	76	95	119	150	149	156	140	120	98	129	133
2-3	119	121	118	106	103	83	96	117	152	153	159	141	122	100	132	135
3-4	119	123	119	108	111	91	98	120	157	156	161	143	125	105	135	136
4-5	128	126	124	111	117	98	105	125	165	160	165	147	131	111	140	142
5-6	132	130	126	114	121	108	113	130	182	168	173	156	138	118	148	148
6-7	133	135	128	116	128	112	123	137	186	182	181	158	143	125	153	152
7-8	136	134	128	118	131	115	129	141	183	178	175	163	144	129	152	152
8-9	143	151	132	120	130	118	127	143	183	179	178	168	148	130	154	160
9-10	149	145	130	122	130	115	128	146	181	176	179	161	147	130	152	159
10-11	147	138	130	120	133	110	125	145	183	175	180	160	145	128	152	156
11-12	141	134	131	119	133	114	120	145	179	175	178	160	144	128	151	153
12-13	137	135	129	119	129	110	122	148	177	170	181	162	143	127	149	154
13-14	134	133	128	118	128	101	115	151	177	169	184	164	142	124	148	154
14-15	136	130	126	116	118	89	120	152	173	161	179	167	139	120	144	153
15-16	137	126	122	126	110	62	111	144	170	151	176	161	133	107	142	150
16-17	129	117	114	128	110	69	119	140	162	142	171	156	130	110	137	143
17-18	124	108	107	120	99	50	104	157	156	143	171	155	125	103	132	140
18-19	120	106	110	101	105	43	71	152	161	145	172	150	120	93	129	137
19-20	119	111	104	100	102	34	82	137	151	140	167	146	116	89	123	136
20-21	120	113	102	90	87	46	78	133	145	146	162	143	114	86	121	135
21-22	117	114	108	95	86	45	87	139	135	144	159	140	114	89	121	132
22-23	117	114	110	101	86	22	76	146	130	143	157	139	112	83	121	132
23-24	115	117	114	103	93	48	88	129	147	146	155	139	116	90	127	131
Mean	128	125	119	111	112	80	105	138	164	158	170	152	130	109	138	144

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Quiet Days)

Table 97 Resolute Bay

58,000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	119	112	118	120	100	83	100	127	134	148	155	139	121	102	130	131
1-2	121	115	118	116	104	94	95	122	134	148	154	140	122	104	129	133
2-3	120	117	122	115	106	105	97	120	134	148	155	139	123	107	130	133
3-4	118	123	122	116	110	108	106	121	133	148	156	142	125	111	130	135
4-5	117	122	122	114	116	108	106	120	136	149	155	142	126	113	130	134
5-6	120	120	121	114	119	106	110	118	138	152	155	143	126	113	131	134
6-7	122	121	121	116	122	106	109	117	140	153	157	143	127	113	132	136
7-8	120	121	122	114	119	115	108	120	141	151	158	143	128	116	132	136
8-9	122	121	122	113	119	112	108	125	143	152	159	147	129	116	133	137
9-10	122	124	123	109	120	103	111	128	145	153	158	151	129	116	132	139
10-11	121	123	122	110	119	99	113	129	146	151	156	156	129	115	132	139
11-12	120	123	122	108	120	102	105	129	147	150	155	151	128	114	132	137
12-13	121	123	122	108	123	107	104	137	146	148	154	151	129	118	131	137
13-14	118	121	119	112	126	102	96	137	142	144	155	148	127	115	129	136
14-15	117	120	114	107	114	108	100	133	135	141	156	147	124	114	124	135
15-16	116	109	104	108	103	116	76	134	132	132	156	147	119	107	119	132
16-17	115	104	88	85	100	106	57	152	126	122	157	145	110	104	95	130
17-18	114	96	80	67	109	80	35	173	132	113	159	145	108	99	98	128
18-19	114	93	85	60	115	61	36	196	136	116	166	145	110	102	99	129
19-20	114	104	89	64	92	58	43	191	138	123	163	142	110	96	103	131
20-21	111	105	85	59	105	83	64	174	120	138	157	140	112	107	101	128
21-22	115	113	89	70	119	80	71	169	123	140	154	140	115	110	105	130
22-23	115	113	104	90	133	56	85	156	127	135	154	139	117	107	114	130
23-24	114	113	111	104	127	75	82	136	133	137	153	137	118	105	121	129
Mean	118	115	110	100	114	95	88	140	136	141	157	144	121	109	121	133

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (Disturbed Days)

Table 98 Resolute Bay

58,000 γ +

1963

U.T.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Summer	Equinox	Winter
0-1	107	124	121	99	96	71	39	99	179	152	165	143	116	76	138	135
1-2	114	122	129	95	93	73	56	108	196	164	166	142	121	82	146	136
2-3	117	125	136	105	91	63	83	117	194	177	181	144	128	89	153	142
3-4	118	130	134	109	116	70	88	121	210	179	188	152	135	99	158	147
4-5	171	150	156	118	118	92	97	140	206	188	185	168	149	112	167	168
5-6	168	169	165	125	134	110	108	137	264	212	200	194	166	122	192	183
6-7	161	191	163	117	145	123	122	146	263	271	255	195	179	134	203	200
7-8	175	176	161	116	150	123	135	161	241	241	228	201	176	142	190	195
8-9	170	253	176	129	148	150	130	159	266	239	223	223	189	147	203	217
9-10	231	216	160	127	153	136	129	165	242	228	207	184	182	146	189	210
10-11	226	173	156	119	155	118	123	162	244	223	228	179	176	140	186	202
11-12	200	162	159	117	145	106	108	169	216	212	231	179	167	132	176	193
12-13	185	161	158	114	138	109	112	171	210	204	239	185	166	133	172	193
13-14	173	157	150	112	129	90	111	140	199	213	256	193	160	118	168	195
14-15	185	143	145	106	91	44	99	112	172	209	234	195	145	87	158	189
15-16	194	142	139	107	70	-5	121	86	154	190	206	181	132	68	147	181
16-17	159	118	138	126	53	49	108	56	132	187	194	168	124	66	146	160
17-18	148	100	130	135	8	-16	114	24	132	186	180	158	108	32	146	146
18-19	137	91	127	96	36	24	76	75	176	192	175	151	113	53	148	138
19-20	133	100	109	61	50	-17	84	56	176	180	167	147	104	43	132	137
20-21	137	107	116	58	2	41	32	58	198	185	169	141	104	33	139	139
21-22	126	113	131	89	18	12	70	77	184	190	174	143	111	44	149	139
22-23	120	112	135	85	70	-26	23	135	143	175	169	146	107	50	134	137
23-24	114	114	134	81	70	75	42	127	163	177	160	144	117	79	139	133
Mean	157	144	143	106	95	67	92	117	198	199	199	169	141	93	162	167

MEAN VALUES OF MAGNETIC ELEMENTS

NORTH COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 99 Resolute Bay

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	101	82	111	123	134	183	144	100	114	110	105	112
2	105	106	123	112	147	190	137	105	103	109	101	109
3	105	95	115	125	115	160	139	92	105	119	118	101
4	94	97	115	112	137	140	100	116	98	118	106	90
5	111	100	107	124	145	127	85	110	103	111	113	100
6	102	103	103	129	133	92	127	136	109	111	105	100
7	99	101	96	130	124	121	118	126	106	105	88	115
8	103	107	108	124	118	112	113	120	128	117	101	115
9	101	95	107	134	135	---	115	117	112	109	85	128
10	103	106	91	125	100	---	125	131	109	105	100	118
11	93	102	107	113	112	146	116	119	108	114	110	118
12	99	100	115	116	114	124	109	125	121	97	115	119
13	95	97	114	116	117	151	130	104	107	103	113	113
14	80	104	111	108	117	163	116	126	138	116	118	104
15	102	106	113	147	118	161	142	96	99	108	115	116
16	78	101	115	110	113	159	183	89	117	120	117	108
17	98	109	101	123	148	159	181	108	152	120	105	112
18	89	107	117	110	135	---	148	175	114	116	112	115
19	84	109	116	158	127	148	109	79	126	123	114	105
20	103	99	129	126	160	125	139	174	114	101	114	107
21	96	100	124	133	117	133	201	141	108	129	109	106
22	96	112	115	120	140	122	179	114	86	111	104	98
23	97	110	118	145	129	115	142	159	143	94	117	113
24	86	111	111	110	134	132	168	124	67	121	90	113
25	95	112	118	110	84	149	162	103	108	102	129	131
26	101	111	114	102	102	159	148	105	106	108	119	127
27	107	109	122	137	120	167	145	95	86	110	117	133
28	107	111	116	134	176	149	137	109	101	92	118	120
29	93		124	130	182	134	144	109	115	58	113	118
30	101		128	119	167	139	132	105	115	139	116	121
31	103		121		151		105	118		106		129
Mean	98	104	114	124	131	143	137	117	111	110	110	114

MEAN VALUES OF MAGNETIC ELEMENTS

WEST COMPONENT OF HORIZONTAL INTENSITY (gammas)

Table 100 Resolute Bay

1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	829	816	838	857	797	809	822	825	813	820	826	825
2	830	830	834	817	819	784	805	830	819	821	820	820
3	827	827	824	824	820	807	814	837	819	820	836	827
4	818	833	826	817	826	820	810	797	823	823	826	828
5	820	820	826	837	820	809	855	828	829	811	826	831
6	828	829	824	809	821	801	836	818	817	821	813	823
7	825	828	836	828	807	842	838	834	819	823	811	810
8	831	830	816	824	823	823	822	807	826	822	838	832
9	824	829	830	821	827	---	835	840	823	826	814	797
10	833	825	825	821	822	---	816	803	826	814	823	808
11	830	829	840	829	828	805	832	814	806	805	826	811
12	835	843	816	820	817	802	820	828	833	803	813	804
13	833	819	808	803	827	822	822	839	827	839	817	831
14	819	838	825	819	840	771	827	839	793	804	829	809
15	847	819	834	829	812	812	807	797	797	827	819	819
16	843	820	824	833	833	788	769	825	808	810	823	819
17	834	832	820	827	805	793	817	827	820	821	802	823
18	844	827	821	815	801	---	792	808	797	814	825	823
19	827	830	824	816	779	804	823	789	787	812	823	825
20	833	826	829	806	819	836	811	803	802	819	825	810
21	832	820	825	800	802	831	746	815	798	826	817	822
22	832	830	818	807	814	829	791	807	891	826	816	804
23	840	826	807	843	821	820	783	816	822	827	826	809
24	832	834	813	822	821	812	802	808	819	846	810	806
25	833	834	820	827	826	793	798	826	840	836	825	797
26	838	829	814	830	842	814	806	825	826	821	822	804
27	835	833	814	822	835	791	824	805	830	819	825	804
28	834	836	825	804	806	788	829	797	827	811	830	804
29	831		830	822	828	796	784	820	817	815	822	788
30	832		831	807	821	804	814	808	834	856	816	802
31	830		831		785		831	816		831		805
Mean	831	828	824	821	817	808	812	817	820	822	821	814

RESOLUTE BAY MAGNETIC OBSERVATORY, 1963

MEAN VALUES OF MAGNETIC ELEMENTS

VERTICAL INTENSITY (gammas)

Table 101 Resolute Bay 58,000 γ + 1963

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	141	155	129	126	85	60	86	178	163	142	200	149
2	132	127	119	98	89	48	98	145	132	132	175	146
3	129	129	125	108	138	73	77	162	161	127	188	181
4	130	132	134	72	126	102	137	166	156	151	178	163
5	138	129	132	95	99	100	122	165	139	142	162	166
6	121	134	113	103	97	92	168	117	136	128	172	176
7	123	128	117	95	111	149	164	137	125	136	194	168
8	121	123	140	101	124	153	139	131	150	149	228	166
9	109	119	133	103	127	---	143	158	161	130	209	162
10	108	159	156	106	158	---	136	98	147	120	196	146
11	106	147	155	111	174	62	140	107	132	148	188	147
12	110	132	135	131	133	109	135	141	168	168	187	140
13	118	144	127	154	115	63	108	148	131	157	170	141
14	140	137	113	166	146	53	111	138	167	191	165	157
15	161	140	128	128	127	60	98	123	134	163	155	150
16	151	117	117	125	133	48	-14	167	142	187	155	148
17	141	117	131	123	108	71	133	126	201	153	182	137
18	132	109	144	132	96	---	86	70	170	138	159	140
19	156	107	120	38	74	42	140	111	165	145	155	142
20	129	109	107	125	61	127	50	115	172	148	152	160
21	107	118	114	89	120	93	57	125	133	136	152	146
22	109	112	106	87	106	111	78	115	241	152	146	158
23	107	113	94	134	128	112	36	122	198	160	146	152
24	118	110	94	118	108	89	62	115	198	206	169	152
25	120	112	111	130	161	31	71	130	198	180	176	150
26	117	115	115	133	126	38	111	159	169	181	154	150
27	113	108	97	143	129	52	104	160	170	153	146	144
28	113	117	101	76	58	47	119	163	188	146	143	139
29	114		106	95	59	67	57	183	187	187	136	155
30	164		95	93	82	109	141	148	179	242	157	149
31	203		102		71		164	160		201		145
Mean	128	125	119	111	112	80	105	138	164	158	170	152

Table 103 Resolute Bay

R_y (Hourly Ranges in 10 γ units)

February 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	1	1	1	1	1	1	1	1	5	7	3	7	5	7	4	3	5	4	3	6	2	3	2	3
2	1	2	2	2	1	2	1	1	1	0	1	1	1	1	1	1	2	2	3	1	2	1	1	0	1
3	1	1	2	2	1	2	1	1	1	1	1	1	1	2	1	3	2	2	3	1	2	1	1	2	1
4	1	1	0	0	1	0	0	1	0	0	0	0	0	1	2	3	3	3	3	3	4	1	2	1	1
5	1	1	1	1	0	0	1	1	1	1	2	5	4	2	2	4	3	4	4	3	3	2	1	1	2
6	1	1	3	2	2	2	1	1	1	1	1	1	1	2	2	5	7	5	4	2	2	1	1	1	2
7	1	1	1	0	1	1	1	0	1	3	2	2	1	1	1	3	3	3	3	1	2	3	2	3	2
8	1	1	0	1	1	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	2	1
9	1	0	0	0	1	1	1	1	0	1	1	1	1	1	2	2	1	5	7	3	3	4	7	6	2
10	4	6	3	4	8	7	5	9	6	8	8	7	6	10	9	12	13	8	11	8	7	7	4	5	7
11	10	7	4	5	7	9	12	9	4	6	4	7	6	4	10	9	10	14	18	8	9	9	3	5	8
12	10	12	11	9	6	7	6	7	21	11	6	4	3	6	5	12	8	12	14	15	6	9	8	9	9
13	5	9	6	4	6	5	7	10	6	4	5	5	6	9	10	6	11	7	11	11	9	6	7	5	7
14	8	4	5	5	8	5	3	3	34	7	3	4	7	6	8	5	8	4	11	10	6	2	3	8	7
15	3	5	3	2	3	3	2	2	2	5	5	5	3	7	10	5	5	11	10	7	3	1	1	1	4
16	5	1	2	1	2	2	1	1	1	1	4	3	4	3	4	3	4	5	6	4	3	2	2	1	3
17	1	1	1	1	1	2	1	1	2	2	4	2	2	1	1	3	3	7	4	4	1	2	1	1	2
18	1	1	2	1	1	1	1	1	1	1	2	2	1	2	3	2	4	2	4	3	2	1	1	2	2
19	2	1	1	1	1	0	1	1	1	1	1	1	2	2	1	3	1	2	2	1	3	1	0	1	1
20	1	1	2	2	1	2	2	2	2	2	4	3	4	4	3	5	4	4	3	4	4	2	4	4	3
21	4	2	3	1	1	1	1	1	2	1	2	1	3	3	5	4	3	3	5	4	2	3	2	2	2
22	2	3	1	2	3	2	1	2	3	2	2	2	2	3	2	4	5	8	8	5	2	2	3	3	3
23	1	1	1	1	1	1	3	4	1	1	1	5	5	3	2	5	7	5	2	6	4	5	1	2	3
24	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	3	2	8	3	3	3	3	3	2
25	3	4	4	3	2	2	1	0	1	2	3	2	2	2	3	4	2	5	2	5	4	3	1	2	3
26	2	1	1	1	1	2	2	2	2	2	1	2	4	2	3	3	5	1	3	6	2	1	1	1	2
27	1	4	1	1	1	0	0	1	1	1	1	1	1	1	2	1	3	2	4	2	1	1	1	1	1
28	2	2	1	3	1	1	2	1	4	5	2	1	2	4	7	2	2	3	2	2	2	3	2	2	2
29																									
30																									
31																									
Mean	3	3	2	2	2	2	2	2	4	3	3	3	3	3	4	4	5	5	6	5	4	3	2	3	3

Table 105 Resolute Bay Ry (Hourly Ranges in 10 γ units) April 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	4	3	3	5	6	7	4	3	2	1	1	3	3	2	5	8	5	4	6	3	3	2	2	4
2	2	4	3	1	1	1	1	1	1	1	1	1	1	2	2	2	6	5	2	4	4	2	2	6	2
3	4	2	1	2	2	2	1	1	5	3	1	1	1	1	1	4	1	5	3	4	1	1	1	2	2
4	1	1	1	1	1	1	1	2	3	2	4	5	2	6	6	15	19	11	13	18	10	11	14	16	7
5	22	14	5	7	14	11	10	5	8	4	6	4	6	6	6	8	6	15	20	10	8	4	5	9	9
6	6	5	6	4	4	6	2	4	8	6	5	6	8	4	6	9	7	15	11	10	11	8	4	6	7
7	6	3	3	5	1	4	5	6	4	9	3	6	4	4	7	9	6	10	11	14	14	7	4	6	6
8	2	4	2	4	3	2	2	1	2	4	2	6	6	1	2	2	7	8	5	16	5	4	5	4	4
9	2	1	2	4	5	4	2	5	4	4	3	4	3	4	6	2	5	9	8	14	5	2	1	4	4
10	2	1	1	1	1	1	0	1	1	2	1	2	2	1	2	1	2	4	6	9	5	2	2	1	2
11	1	1	1	1	1	1	1	1	2	2	4	2	1	1	1	2	2	6	2	11	4	2	2	2	2
12	5	5	1	3	1	1	1	2	1	4	5	2	2	7	3	3	10	12	6	4	4	4	2	2	4
13	2	1	3	3	3	1	1	1	4	5	4	4	2	4	6	4	8	11	7	6	7	8	6	4	4
14	10	5	4	3	2	4	2	2	2	10	5	5	8	5	4	12	21	6	25	14	5	6	5	9	7
15	4	4	7	5	3	2	10	6	2	3	2	6	4	4	5	6	4	4	8	4	6	2	3	6	4
16	2	2	2	5	2	4	5	1	3	5	2	4	4	2	2	8	6	8	11	5	3	3	4	5	4
17	1	4	5	1	4	2	2	2	2	4	4	3	2	2	1	2	5	2	5	9	3	3	4	1	3
18	1	2	1	1	2	1	1	1	4	5	4	1	3	4	4	13	11	7	11	20	12	3	5	8	5
19	7	4	5	3	4	5	3	5	6	4	3	2	1	4	3	8	12	7	17	12	7	10	10	4	6
20	11	4	3	4	2	2	2	3	2	5	3	3	4	5	5	9	9	6	7	3	4	4	1	1	4
21	1	1	1	1	1	1	1	1	1	1	2	2	6	2	2	1	5	5	3	6	5	2	4	5	2
22	4	12	11	5	2	1	1	2	2	2	3	3	4	1	3	3	5	3	6	10	10	7	4	4	4
23	4	6	3	3	2	3	4	2	3	4	5	4	2	4	4	3	8	8	14	4	10	4	2	1	4
24	1	1	1	1	1	1	1	1	1	2	2	1	2	1	2	2	5	6	6	2	2	2	1	1	2
25	1	2	2	2	3	4	1	2	2	1	1	1	1	1	1	1	6	12	3	2	4	2	3	4	3
26	2	1	2	8	6	3	2	1	1	2	1	3	1	1	1	4	4	6	8	5	5	4	5	5	3
27	4	2	5	1	2	3	2	4	2	2	2	3	5	4	2	15	11	10	9	16	3	3	2	4	5
28	3	1	1	1	1	2	1	1	1	1	1	2	1	4	2	2	3	5	4	4	10	5	1	2	3
29	2	1	1	4	2	2	2	1	1	1	1	2	2	2	2	4	1	3	3	8	5	3	2	2	2
30	1	1	3	1	1	1	1	1	2	4	2	3	3	4	3	8	15	11	42	24	26	15	16	17	9
31																									
Mean	4	3	3	3	3	3	3	2	3	3	3	3	3	3	3	6	7	7	9	9	7	5	4	5	4

Table 109 Resolute Bay

 R_y (Hourly Ranges in 10 γ units)

August 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	6	10	11	6	7	7	4	3	2	5	7	6	5	15	12	17	21	20	27	21	14	9	11	11	
2	10	9	6	6	7	12	9	4	10	6	5	5	6	4	9	8	13	24	18	11	13	12	10	4	9	
3	7	7	5	5	7	3	6	4	6	5	4	3	2	2	6	8	10	14	14	8	10	14	5	8	7	
4	6	4	6	5	2	2	3	6	2	8	2	8	7	8	5	4	28	9	12	9	9	9	11	13	7	
5	4	7	3	2	5	4	3	5	6	3	5	9	4	5	6	5	15	6	6	18	4	7	3	5	6	
6	2	3	4	3	4	2	7	2	5	3	6	4	2	4	7	5	7	5	8	16	19	11	3	5	6	
7	8	4	6	4	4	6	4	5	3	3	5	2	7	8	3	5	9	3	19	10	5	3	4	4	6	
8	7	4	3	6	3	3	5	4	3	4	3	4	3	2	3	3	5	7	4	3	3	3	2	2	4	
9	2	3	2	3	3	3	5	3	5	7	5	2	4	2	3	5	5	12	11	14	9	9	2	2	5	
10	2	3	2	3	2	2	3	2	2	2	4	7	4	5	6	8	12	4	8	8	6	3	3	2	4	
11	2	2	3	2	2	5	3	1	1	1	1	2	2	3	6	3	3	3	4	5	7	4	3	6	3	
12	2	2	2	1	2	3	2	2	2	3	3	3	3	2	3	3	4	6	11	6	5	6	3	1	3	
13	2	2	3	2	1	1	2	3	1	1	2	1	3	1	3	5	6	6	6	6	3	3	3	4	3	
14	3	3	3	2	1	1	1	1	1	1	2	2	2	4	3	2	2	5	5	2	3	4	2	2	2	
15	1	1	1	1	1	2	1	1	1	1	2	2	3	4	9	8	8	18	24	11	7	8	5	7	10	6
16	7	3	2	1	2	2	1	1	1	1	2	4	5	4	4	5	13	11	20	9	6	9	6	7	5	
17	5	8	5	1	3	2	3	2	1	2	7	3	2	2	4	3	4	12	12	15	11	10	8	5	5	
18	5	4	4	4	5	5	5	4	12	14	13	8	9	13	9	13	17	36	46	35	27	12	11	8	13	
19	6	9	3	3	2	3	2	2	3	3	2	4	3	2	6	7	15	5	14	14	7	12	5	9	6	
20	7	8	11	18	7	13	7	9	6	12	12	11	23	10	11	5	9	13	22	10	16	13	6	12	11	
21	15	4	9	5	9	5	8	8	6	7	5	9	6	4	14	12	24	8	21	13	17	7	6	7	10	
22	3	4	3	3	1	4	3	7	9	2	3	4	3	4	2	6	5	5	5	10	13	10	13	5	5	
23	5	5	4	7	6	4	3	4	7	4	5	8	7	4	3	7	4	14	11	10	12	2	2	5	6	
24	8	11	8	5	2	2	2	3	6	10	3	4	6	2	3	6	5	11	6	9	7	6	1	4	5	
25	4	2	3	3	2	3	3	3	4	5	4	3	3	6	6	3	16	10	20	11	7	8	4	6	6	
26	5	9	3	5	8	8	4	2	4	5	4	3	6	6	6	5	11	13	15	8	7	7	3	3	6	
27	7	2	6	4	2	2	3	2	2	3	3	5	6	6	3	7	27	26	11	9	6	11	5	10	7	
28	6	3	3	6	4	5	4	2	4	5	10	6	6	8	5	11	15	14	11	13	14	5	7	8	7	
29	5	3	5	6	4	3	2	3	8	4	7	3	4	5	7	6	12	21	18	12	4	8	6	4	7	
30	5	7	4	2	4	2	2	3	3	3	6	4	4	6	5	8	14	9	21	14		2	5	6	6	
31	5	6	4	3	3	3	5	4	3	5	3	4	5	3	6	7	4	17	7	11	8	7	5	7	6	
Mean	5	5	4	4	4	4	4	3	4	4	5	5	5	5	6	6	11	12	13	11	9	8	5	6	6	

Table 111 Resolute Bay R_y (Hourly Range in 10γ units) October 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	2	3	2	2	1	1	2	3	1	1	1	1	2	4	4	7	4	4	5	2	1	2	2	3
2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	6	3	3	2	1	1	1	2
3	1	1	1	2	2	3	1	1	2	2	2	1	2	3	3	2	3	3	4	7	2	1	1	2	2
4	1	2	4	4	4	2	3	1	4	3	4	1	3	2	4	4	6	3	4	2	3	1	1	2	3
5	2	2	1	1	3	2	1	1	2	9	6	2	2	4	3	3	3	4	3	2	3	1	2	2	3
6	3	2	3	2	3	6	1	1	1	1	1	1	1	2	2	3	3	3	4	6	4	2	1	1	2
7	1	1	1	2	1	1	1	1	2	2	3	2	2	1	3	7	11	6	3	4	6	8	7	6	3
8	6	6	8	10	4	6	6	3	2	3	4	2	3	4	7	4	4	8	9	4	4	2	2	2	5
9	2	2	2	2	1	2	2	1	2	2	3	2	3	2	2	3	7	7	6	8	2	2	4	3	3
10	6	1	2	1	1	1	1	1	3	4	4	3	6	3	6	2	3	3	8	6	7	1	3	2	3
11	2	3	2	3	2	1	3	4	5	8	7	6	13	3	6	11	6	8	9	7	8	3	9	5	6
12	3	15	11	10	3	4	6	3	8	4	4	3	18	12	18	11	7	16	22	17	9	6	8	4	9
13	8	4	7	5	8	11	5	2	10	5	3	4	4	8	4	6	8	10	21	14	9	6	13	10	8
14	8	12	7	9	2	7	6	13	11	8	6	9	7	8	10	5	6	10	17	13	9	4	5	7	8
15	5	5	6	3	4	6	5	5	1	2	4	5	6	6	3	4	17	11	9	11	6	4	11	12	6
16	10	6	7	8	3	3	4	3	4	6	4	5	7	6	5	4	6	6	5	10	4	3	3	4	5
17	3	2	1	2	3	2	4	3	1	1	1	2	2	1	2	3	4	4	5	5	2	2	2	2	2
18	1	2	2	3	3	1	2	1	1	2	3	7	6	6	1	4	2	3	2	4	2	2	3	2	3
19	5	3	1	2	1	1	3	2	2	2	2	3	2	3	3	1	4	3	6	3	4	3	3	3	3
20	2	2	2	3	1	1	2	2	2	3	3	7	6	5	11	4	4	3	4	4	3	4	9	9	4
21	2	2	2	5	2	2	6	2	1	5	5	1	3	4	3	4	4	5	2	5	1	1	2	2	3
22	2	1	1	1	1	1	1	1	1	1	2	1	2	1	3	6	5	3	2	3	4	2	2	2	2
23	2	2	1	1	1	1	1	1	1	0	1	1	2	1	2	2	3	7	7	7	6	4	3	3	3
24	13	8	7	4	5	5	11	8	12	5	8	9	8	7	7	12	12	13	10	10	5	6	8	7	8
25	20	18	5	4	2	4	3	5	2	2	1	2	3	3	4	4	13	15	9	9	4	4	4	5	6
26	7	4	7	3	2	2	3	1	1	2	3	3	2	3	5	7	7	7	9	5	4	2	3	3	4
27	2	2	2	2	1	1	2	1	1	2	1	1	3	1	3	2	4	2	3	5	2	3	1	1	2
28	1	1	1	1	1	1	1	1	1	1	4	4	2	2	3	10	12	10	8	8	6	5	4	5	4
29	3	3	6	2	3	3	2	4	4	2	3	3	6	14	9	8	24	28	13	7	10	13	13	7	8
30	11	7	16	19	7	55	59	15	30	3	3	5	5	4	3	4	5	5	6	6	4	2	1	1	11
31	2	2	1	2	1	1	2	2	2	2	1	2	2	3	2	5	9	8	4	5	4	3	3	1	3
Mean	4	4	4	4	3	4	5	3	4	3	3	3	4	4	5	5	7	7	7	6	4	3	4	4	4

Table 112 Resolute Bay

R_y (Hourly Ranges in 10 γ units)

November 1963

Hour U. T. Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	to 1	to 2	to 3	to 4	to 5	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18	to 19	to 20	to 21	to 22	to 23	to 24	
1	3	2	3	2	3	7	7	2	3	2	2	3	2	4	4	8	8	9	9	5	4	2	2	5	4
2	5	2	3	3	4	4	3	1	3	2	5	5	5	7	7	16	7	3	11	6	3	5	7	7	5
3	2	3	5	5	6	8	3	7	7	3	4	2	4	4	4	3	3	8	9	7	3	7	7	1	5
4	3	3	2	3	3	3	5	2	2	3	3	1	2	3	3	3	5	5	5	4	2	2	1	1	3
5	1	1	1	1	1	1	2	2	1	1	1	1	1	1	2	3	5	4	2	2	1	1	1	1	2
6	2	2	3	1	1	1	1	2	6	3	2	3	5	3	4	8	9	11	7	5	4	5	6	2	4
7	5	5	4	4	5	6	5	4	3	6	9	6	7	4	10	14	7	7	14	6	12	7	7	19	7
8	18	12	13	7	5	16	30	11	5	3	7	9	11	7	11	7	9	10	10	7	7	6	5	7	10
9	12	7	4	8	6	3	3	13	12	8	6	7	10	9	9	6	10	17	8	7	7	10	7	7	8
10	7	7	15	7	8	6	7	11	6	5	7	7	6	4	11	6	4	7	9	7	7	5	5	6	7
11	6	7	7	5	4	5	3	9	3	6	6	6	4	2	8	9	11	11	10	4	7	3	5	3	6
12	5	3	3	6	2	4	4	12	7	4	5	5	3	4	7	4	7	11	4	5	2	2	3	3	5
13	1	2	2	3	3	2	2	1	1	2	3	3	2	3	2	3	3	4	6	3	2	2	2	1	2
14	2	3	1	2	4	5	5	2	1	1	1	1	2	3	3	2	3	2	2	3	1	2	2	1	2
15	2	3	2	2	2	1	1	2	3	2	1	2	2	2	1	1	2	2	2	2	2	1	1	1	2
16	1	1	1	2	1	1	1	1	1	1	1	0	1	1	1	2	2	2	2	1	1	1	1	1	1
17	2	1	1	1	0	1	1	1	1	5	2	2	3	5	12	12	4	12	12	2	3	4	2	4	4
18	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	3	2	3	8	1	1	1	1	1	2
19	1	1	1	0	0	1	1	1	1	1	1	1	1	2	2	2	2	3	1	1	1	1	2	2	1
20	1	2	7	7	2	1	1	1	1	1	1	1	1	3	1	2	4	1	2	3	1	1	1	1	2
21	1	1	1	1	1	1	1	1	1	1	1	1	2	1	4	3	2	3	2	1	1	1	1	1	1
22	1	1	1	1	1	0	1	1	2	3	1	3	2	2	2	7	7	2	3	7	2	2	2	4	2
23	3	4	4	4	1	1	1	3	2	3	2	2	1	2	3	5	4	2	3	3	1	2	2	1	2
24	2	2	2	5	2	3	2	2	4	4	2	3	7	3	4	3	2	6	6	2	4	5	6	5	4
25	7	5	1	3	3	8	9	2	4	3	3	3	3	4	5	4	7	3	3	1	1	1	2	1	4
26	1	0	1	1	1	1	0	1	5	2	1	1	1	2	2	2	3	2	1	1	1	1	1	1	1
27	1	0	1	1	1	2	2	1	2	2	2	2	1	1	3	2	3	4	3	4	2	2	2	2	2
28	2	2	3	2	6	6	1	1	1	1	1	1	2	1	2	2	3	2	1	0	0	0	0	1	2
29	1	1	2	3	2	2	2	1	1	1	4	3	2	3	5	7	3	2	1	3	1	4	4	6	3
30	4	3	2	1	1	1	2	1	1	2	4	3	19	18	6	9	4	6	5	2	2	4	3	2	4
31																									
Mean	3	3	3	3	3	3	4	3	3	3	3	3	4	4	5	5	5	5	5	4	3	3	3	3	4

Table 113 Resolute Bay R_y (Hourly Ranges in 10 γ units) December 1963

Hour U. T. Day	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 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	1	1	1	1	1	1	1	2	1	1	1	1	2	2	4	2	2	2	1	1	2	2	2	2
2	4	4	2	3	2	2	2	2	2	1	2	2	3	2	7	6	5	2	5	2	1	5	7	5	3
3	2	4	5	3	4	9	10	34	35	4	7	4	4	7	10	12	11	9	4	5	9	11	10	5	9
4	7	6	3	6	3	3	10	2	2	5	2	5	4	7	8	10	12	9	6	7	2	6	5	12	6
5	12	9	4	3	5	6	5	3	4	6	2	4	4	7	8	8	6	6	6	5	3	3	7	7	6
6	8	2	2	4	10	27	10	4	5	5	5	4	8	8	12	5	10	6	4	6	3	6	5	6	7
7	3	5	4	2	4	3	3	3	8	4	3	6	4	7	8	7	7	4	3	2	2	2	2	2	4
8	2	2	2	4	4	14	6	7	5	4	2	4	5	3	7	5	8	3	2	4	3	2	3	4	4
9	4	1	2	1	2	2	3	4	3	7	4	4	4	2	6	2	6	2	1	2	1	1	0	1	3
10	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0	0	0	1
11	0	0	0	1	1	1	0	1	1	1	1	2	1	2	2	2	1	1	2	1	1	1	1	1	1
12	1	2	1	1	1	1	1	2	1	2	1	1	1	1	1	2	2	2	2	1	1	2	1	4	1
13	4	2	1	3	2	5	1	1	1	1	1	1	2	1	4	1	4	1	2	3	1	1	2	2	2
14	1	1	2	2	2	1	1	1	2	1	1	2	6	8	4	8	4	4	5	3	4	4	3	2	3
15	2	4	2	2	2	1	2	1	1	2	2	4	2	4	4	7	2	4	2	4	3	2	1	3	3
16	1	2	2	1	1	1	0	1	1	1	2	1	2	3	4	4	7	7	2	1	1	1	2	3	2
17	5	3	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	2	1	2	1	2	2	2	2
18	2	3	1	1	1	0	0	1	1	1	2	2	0	2	1	2	2	2	2	1	0	1	1	1	1
19	1	1	1	1	0	1	0	0	0	1	0	1	0	0	1	4	3	2	2	1	1	2	5	4	1
20	4	6	1	2	1	2	4	6	4	2	2	2	6	6	3	4	2	3	3	4	4	2	4	5	3
21	1	2	1	1	1	1	1	1	3	1	1	1	5	5	6	9	5	5	2	2	1	2	5	6	3
22	2	1	1	1	1	3	9	5	2	4	2	2	2	7	6	4	6	4	3	2	2	2	3	2	3
23	2	3	1	2	1	1	2	2	7	4	2	2	2	1	1	8	2	4	5	2	2	2	3	6	3
24	4	4	2	2	1	1	1	1	2	0	1	1	2	5	7	6	4	2	4	2	3	2	4	2	3
25	1	1	2	1	1	1	1	1	1	4	7	2	2	2	3	4	1	2	4	2	1	1	1	1	2
26	1	1	2	3	3	2	2	1	2	2	2	2	2	2	2	1	2	1	0	2	2	2	1	1	2
27	1	1	2	1	1	2	3	2	1	1	2	2	2	2	5	2	1	4	1	2	1	1	1	1	2
28	1	1	1	1	2	1	1	1	2	2	2	1	1	2	3	2	3	3	2	2	6	4	3	3	2
29	3	4	4	4	2	1	2	2	2	2	2	9	3	2	5	4	2	5	2	3	3	3	2	3	3
30	5	4	2	2	1	1	1	1	0	1	2	1	1	2	2	2	2	4	2	2	1	1	2	2	2
31	1	2	1	2	1	1	0	1	1	1	2	1	2	1	1	1	2	2	1	1	1	1	1	1	1
Mean	3	3	2	2	2	3	3	3	3	2	2	2	3	4	3	5	4	4	3	2	2	2	3	3	3