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Information

OTTAWA

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**RECORD OF OBSERVATIONS AT
VICTORIA MAGNETIC OBSERVATORY
FOR 1959**

B. Caner and A. Perry-Whittingham

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VICTORIA MAGNETIC OBSERVATORY, 1959

Geographic Latitude $48^{\circ} 31' \text{ North}$

Geographic Longitude $123^{\circ} 25' \text{ West}$

Geomagnetic Latitude $54.3^{\circ} \text{ North}$

Geomagnetic Longitude $292.7^{\circ} \text{ East}$

Introduction

The Victoria Magnetic Observatory was established in 1957, on the grounds of the Dominion Astrophysical Observatory, Royal Oak, about 10 miles north of Victoria, British Columbia. Information on the site and equipment can be found in the publication containing the record of observations for the period 1957–1958 (Caner and Loomer, 1960). Construction of a permanent variometer building was completed in September 1959; the original prefabricated aluminum building was then used to house the absolute instruments and the control equipment for the electronic recording magnetometer only.

The photographic three-component variometer used was a portable Askania-Werke earth magnetic variograph (Caner and Loomer, 1960). Scale values were checked monthly using the incorporated deflection coils, and were found to be constant. For an original paper width of 120 mm the values adopted were:

D: 0.50 minutes per mm., or

2.72 gammas per mm.

H: 2.48 gammas per mm.

and Z: 3.28 gammas per mm.

Although processing procedures were standardized as far as possible, large variations in paper expansion or shrinkage were encountered and corrected scale values were used for scaling H and Z. The D-component which is the lowest ordinate on the record was not significantly affected.

A three-component set of Ruska variometers was installed in September 1959 and operated concurrently with the Askania variograph for the last three months of the year. Ruska records were not used for compilation of the data in this publication, but starting in January 1960 the Ruska variometers will constitute the primary equipment of the observatory, with the Askania instrument as a stand-by variometer. Sufficient overlap scaling will be carried out to ensure continuity of hourly mean values.

The remaining observatory equipment was unchanged from that described in the preceding publication.

Absolute Observations and Base-line Values

The procedures used up to June 30 were essentially those described by Caner and Loomer, 1960. From July 1 onwards the QHM alone was used for determination of horizontal intensity. The vertical component was computed from these values of horizontal intensity and from the inclination determined with the three-component saturable core magnetometer.

Declination

The adopted declination base line was obtained by least-squares fitting of straight lines to the observed values, using the reciprocals of the standard errors of the observations as weighting factors. Discontinuities occurred on April 3 and 6, May 19, June 8, October 8, and November 20 and 26. These were due to suspension adjustments or introduction of new equipment into the building. The fitted linear segments indicated zero or negligible base-line drift between discontinuities. The r.m.s. value of the observed minus adopted base-line values is ± 0.6 minutes.

Horizontal Intensity

Discontinuities in the horizontal force base lines occurred on January 22, April 3, May 19, and October 8. These were due to suspension adjustments or the introduction of new equipment into the building. Between discontinuities straight lines were fitted by least-squares to the observed values, using the reciprocals of the standard errors of the observations as weighting factors. Base-line drift was found to be low, about 3 gammas per month during the summer and less than 1 gamma per month during the rest of the year. The r.m.s. value of the observed minus adopted base-line values is ± 7 gammas for the whole year, or ± 9 gammas up to June 30 and ± 2 gammas for the rest of the year.

Vertical Intensity

Up to April 20 the vertical component suspension was not compensated for temperature and hourly mean values were corrected at the rate of $+ 10$ gammas/ $^{\circ}\text{C}$ whenever the heating capacity of the observatory proved insufficient to maintain constant temperature. The suspension was compensated during the period April 20–26,

and no temperature corrections were necessary after this date.

Base-line drift up to April 20 was of the order of 10 to 20 gammas per month. Fairly extensive changes in torsion were necessary to compensate the suspension for temperature, and in the months following this adjustment base-line drift was considerable, about 200 gammas in May, 150 gammas in June, 120 gammas in July, 80 gammas in August, and tapering off to about 20 gammas in December. Least-squares fitting of base lines was carried out for the period January 1 to April 20. During the rest of the year base-line drift was both rapid and irregular and the suspension had to be repeatedly re-adjusted to bring the trace back on scale; since only a few base-line determinations were available for each period between discontinuities, no reliable base-line values could be determined. The adopted base-line values were estimated using the available base-line determinations, data on discontinuities, and in particular the trend of quiet-day means. Consequently non-cyclic or long-period changes during these months have probably been removed and the data is valid only for the study of variations with periods of about 24 hours or less.

Discontinuities in the vertical force base lines occurred on April 3 and during the interval April 20 to 27, May 1, 5, and 19, June 1, 8, and 18, July 23, September 11, October 7 and 8, November 10, 20, and 26. These discontinuities were due to suspension adjustments. The r.m.s. value of the observed minus adopted base-line values is ± 19 gammas for the whole year, or ± 16 gammas for the period January to April and ± 21 gammas for the rest of the year.

Magnetic Reductions, Magnetic Activity and Disturbance Indices

The procedures used in the reduction and tabulation of the data were unchanged from those described by Caner and Loomer (1960). Values marked with an asterisk* were obtained by interpolation from low-sensitivity records, with an accuracy of about 5 gammas.

Summary of Annual Mean Values

The mean values derived in 1957, 1958, and 1959 are given below, together with a determination of the field made on July 31, 1956 on the site of the absolute pier prior to installation of the observatory.

Year	D	H	Z	
			$^{\circ}$	γ
1956.6	23	07.5	18740	53460
1957.75	23	04.4	18756	53441
1958.5	23	02.5	18764	53429
1959.5	23	00.1	18787	53410

Declination east continues to decrease at a rate of about 2.5 minutes per year. The mean decrease of vertical field intensity appears to be about 17 gammas per year. The mean rate of increase of the horizontal field intensity over the last four years is about 16 gammas per year.

A permanent building for the absolute instruments was completed in September 1961 and at the same time a nuclear precession magnetometer was installed as the primary force standard of the observatory. In order to reduce all prior data to the new location, the following corrections should be applied to the data in this publication and to those in the preceding publication:

D: -7.3 mins. H: -51 gammas Z: -33 gammas

The next observatory publication, that for 1960, will show absolute values referred to the new location and the mean annual value table therein will show values for the years 1956.6—1959.5 corrected by the amounts given above.

Acknowledgements

The help of Dr. R. M. Petrie, Dominion Astrophysicist, and the staff of the Dominion Astrophysical Observatory is greatly appreciated.

Reference

- CANER, B., and LOOMER, E. I., 1960. Record of Observations at Victoria Magnetic Observatory, 1957-1958. *Dom. Obs. Pub.*, Ottawa, V. 24, No. 9.

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

Table 1 Victoria

 $H = 18,500 \gamma +$

January 1959

Hour U.T. Day	0 to 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
1 Q	298 300 301 302 302 300 300 300 300 300 301 301 302 303 305 304 297 280 264 256 258 268 279 292 292	
2 Q	300 302 302 302 303 304 303 302 303 303 305 312 312 316 316 314 313 300 281 262 261 270 289 302 299	
3	304 300 294 292 292 285 286 295 298 300 300 302 308 308 310 313 314 302 278 259 258 271 281 291 293	
4	302 306 306 306 306 305 302 305 302 303 307 308 304 306 310 314 295 283 266 254 252 258 268 282 294	
5	290 295 298 298 296 300 298 293 290 292 290 300 296 288 293 290 288 248 244 217 207 199 203 241 273	
6 D	264 264 260 266 266 268 274 270 266 268 262 269 277 275 282 255 281 271 243 227 238 234 210 234 238 258	
7 D	251 248 266 267 254 254 260 263 264 270 270 274 276 278 282 286 283 265 246 235 220 225 249 249 260	
8	247 260 258 264 275 276 274 276 274 275 285 289 288 284 285 280 286 277 267 242 231 226 232 235 266	
9 D	238 268 276 276 278 280 280 280 278 279 282 280 275 283 265 271 225 217 247 250 231 209 199 206 257	
10 D	221 242 248 248 236 235 229 235 226 181 235 174 256 265 239 265 225 210 219 193 204 210 210 208 226	
11	221 244 255 260 258 254 255 252 255 261 265 269 272 268 268 274 280 265 246 237 220 234 236 241 254	
12	251 274 274 276 281 284 284 282 282 284 283 286 290 292 293 295 294 274 246 237 240 245 257 267 274	
13	275 280 281 282 284 282 280 281 280 280 272 284 288 290 295 299 300 279 256 233 238 245 263 279 276	
14	288 289 288 291 293 294 296 296 295 288 292 295 297 299 309 306 296 280 267 254 245 248 249 263 284	
15	282 284 279 270 267 271 270 275 277 278 277 282 285 292 296 299 293 275 257 244 244 255 268 282 275	
16	291 288 291 290 291 290 290 287 297 298 283 272 289 293 295 276 284 272 263 252 243 241 248 259 278	
17	271 275 272 271 274 272 274 273 272 276 284 282 273 268 286 306 305 279 264 250 244 249 263 273 273	
18	281 279 262 264 262 273 280 283 280 284 286 293 289 278 292 307 290 273 275 264 241 233 246 268 274	
19	276 282 279 273 282 284 286 284 281 285 286 291 290 291 294 294 294 280 257 234 246 255 261 271 277	
20 Q	280 283 286 288 290 290 293 296 294 294 295 296 297 298 296 292 279 267 259 259 258 268 277 285	
21 Q	287 292 293 296 297 296 296 299 294 294 296 300 302 303 305 302 278 272 268 264 267 270 276 290	
22	290 296 298 304 299 296 298 299 306 308 301 305 308 310 311 309 305 295 280 263 264 272 279 286 295	
23	290 292 299 300 300 299 303 301 304 306 308 311 308 310 312 310 301 286 274 271 278 287 290 298	
24 Q	296 293 296 296 295 294 298 296 297 298 302 303 307 310 309 307 298 285 280 273 272 277 290 295	
25	296 297 301 304 306 305 305 306 308 312 316 331 330 319 331 306 283 284 286 269 252 253 253 265 297	
26 D	278 284 286 290 274 275 275 278 278 282 292 276 223 291 285 290 284 291 267 260 259 258 259 268 275	
27	273 274 274 276 285 290 285 281 285 284 280 286 302 309 312 305 290 272 251 249 248 250 254 271 279	
28	273 272 278 279 280 280 284 286 286 284 288 295 294 292 289 294 294 277 263 256 249 252 268 279 279	
29	292 292 291 294 297 299 294 293 281 273 274 288 303 303 319 318 298 273 251 247 243 258 267 286	
30	281 289 296 288 288 282 278 286 286 287 297 288 293 295 295 295 288 282 272 263 262 266 272 285 284	
31	297 296 282 285 280 285 271 270 278 270 285 283 284 283 288 289 285 269 261 253 249 255 266 274 277	
Mean	277 282 283 284 284 284 284 284 284 284 284 288 291 294 294 294 297 290 275 262 250 246 248 256 267 278	

DECLINATION
Mean values for periods of sixty minutes, Universal Time

Table 2 Victoria

D = 22° 45.0' E +

January 1959

Hour U.T. Day \	0 to 1 1	1 to 2 2	2 to 3 3	3 to 4 4	4 to 5 5	5 to 6 6	6 to 7 7	7 to 8 8	8 to 9 9	9 to 10 10	10 to 11 11	11 to 12 12	12 to 13 13	13 to 14 14	14 to 15 15	15 to 16 16	16 to 17 17	17 to 18 18	18 to 19 19	19 to 20 20	20 to 21 21	21 to 22 22	22 to 23 23	23 to 24 24	Mean
1 Q	15.3	16.2	16.7	17.2	17.4	17.2	16.9	16.6	16.3	16.4	16.7	16.9	17.1	17.3	17.7	18.7	21.4	23.7	23.7	20.8	17.7	15.4	13.7	13.7	17.5
2 Q	14.4	15.5	16.2	16.7	16.8	16.9	16.8	16.7	16.4	16.4	16.7	16.7	16.7	15.7	17.3	19.4	22.5	24.4	24.4	22.0	18.5	15.7	14.2	14.4	17.6
3	15.4	16.1	16.6	16.9	16.8	18.4	18.7	17.1	16.9	16.7	16.4	16.2	16.6	16.8	16.9	17.9	21.7	24.4	24.7	22.7	19.9	16.7	14.7	13.7	17.9
4	14.2	14.2	14.9	15.7	16.2	16.7	17.0	16.4	16.9	18.5	19.4	19.7	19.6	18.2	18.7	19.7	22.3	21.2	22.1	21.7	19.2	15.9	14.3	13.6	17.8
5	14.7	16.2	17.3	17.7	17.2	17.2	17.7	18.2	18.2	19.3	21.7	27.0	28.3	26.4	13.6	20.2	21.2	18.0	13.2	21.2	19.1	17.2	11.4	10.7	18.5
6 D	12.6	14.7	16.6	17.2	18.2	19.2	17.9	18.7	18.3	20.4	17.6	20.9	19.2	17.8	12.5	18.9	21.2	15.0	13.8	20.1	19.7	17.7	14.3	13.9	17.3
7 D	14.5	15.9	17.2	18.2	20.2	18.7	20.2	19.7	19.6	18.9	19.0	18.1	17.7	18.2	18.3	18.7	21.3	22.2	21.2	20.7	19.2	16.9	16.1	13.7	18.5
8	12.7	13.5	12.9	16.6	17.4	17.7	17.7	17.7	18.7	18.2	16.2	19.2	17.5	18.7	18.7	18.2	18.8	19.3	21.2	18.2	16.8	16.5	13.7	15.7	17.2
9 D	13.7	12.2	15.2	16.3	17.2	17.6	17.7	17.6	16.3	16.8	19.2	20.2	16.2	15.3	18.8	10.5	16.6	11.2	10.4	19.7	17.8	15.6	13.9	10.2	15.7
10 D	07.7	07.6	13.3	17.1	18.2	20.0	19.7	22.6	26.1	21.4	27.7	28.7	24.4	13.7	13.2	06.8	13.2	07.7	19.4	16.7	16.1	15.6	15.8	15.1	17.0
11	14.4	13.1	16.7	17.4	17.9	19.0	19.4	20.0	19.1	18.5	17.4	17.7	17.7	18.9	18.2	21.0	23.6	24.5	23.9	22.2	19.3	15.8	12.9	13.7	18.4
12	11.7	12.1	13.2	16.2	17.7	16.4	16.8	17.0	17.5	17.7	17.9	17.7	17.4	18.0	18.1	18.7	21.8	24.6	25.8	19.2	16.2	14.5	15.0	15.2	17.3
13	15.9	16.2	16.7	17.1	17.7	17.9	18.7	18.7	19.6	22.3	20.6	19.6	18.3	18.9	19.2	19.3	20.9	23.4	25.7	22.4	19.9	17.2	14.8	14.2	19.0
14	15.2	16.0	16.8	16.7	16.9	16.9	16.9	16.4	17.2	16.9	16.3	17.2	16.7	17.2	18.7	19.8	21.9	23.5	22.2	20.6	18.5	15.6	14.4	12.9	17.5
15	12.7	12.7	13.4	15.1	15.7	18.1	18.4	18.1	16.4	20.0	19.7	19.2	18.5	18.4	19.7	20.0	22.2	23.7	23.3	21.2	17.7	14.9	14.1	14.6	17.8
16	15.2	16.1	16.2	16.7	16.8	16.7	17.1	16.7	16.4	18.4	22.4	20.3	16.2	21.4	15.1	12.7	19.8	20.6	21.2	20.7	19.1	16.5	16.0	15.6	17.7
17	15.7	15.4	15.9	20.2	19.2	18.0	20.4	21.2	20.9	19.2	17.2	17.5	20.2	17.5	13.0	17.8	22.4	25.2	22.7	21.7	19.2	17.2	16.2	16.4	18.8
18	15.7	14.2	17.2	17.5	17.2	18.8	18.5	18.2	17.0	18.1	18.2	16.6	17.7	14.4	15.6	20.2	19.2	16.2	17.7	20.8	19.4	15.4	15.6	15.1	17.3
19	15.7	15.7	16.2	18.7	16.4	16.6	16.6	17.4	17.4	20.0	18.7	17.2	14.6	14.2	15.6	18.0	21.2	22.4	21.6	19.0	17.8	15.8	15.5	15.7	17.4
20 Q	15.4	15.7	15.9	16.2	16.2	16.2	16.6	16.2	16.1	16.2	16.5	16.5	16.7	17.5	18.4	21.7	23.6	22.2	20.9	18.9	16.2	15.1	14.7	17.3	
21 Q	15.1	14.8	14.9	15.6	16.2	16.3	16.2	17.1	16.5	16.7	16.8	16.7	17.0	17.0	17.2	19.7	22.8	25.2	22.7	21.2	19.2	17.4	16.4	15.2	17.7
22	14.7	15.4	16.0	16.4	16.7	17.9	17.0	16.7	20.7	18.7	19.1	19.4	19.1	18.7	19.0	19.5	21.3	22.2	22.2	21.7	19.1	16.6	15.6	14.7	18.3
23	13.8	14.7	14.5	15.3	15.4	15.5	15.5	15.7	15.2	15.7	16.7	16.2	16.5	16.0	16.6	17.2	19.4	20.9	20.2	19.3	17.8	14.9	13.5	12.7	16.2
24 Q	14.4	15.2	15.5	15.7	15.7	15.7	15.9	16.6	16.3	16.3	16.2	16.2	15.4	16.2	16.6	17.6	19.2	21.1	20.7	19.7	18.5	15.7	13.7	13.2	16.6
25	14.4	14.9	15.5	15.9	15.8	16.0	16.1	16.0	16.1	16.7	16.7	17.9	21.1	15.7	15.4	20.9	20.7	15.0	13.4	15.2	16.9	15.2	16.1	16.5	16.4
26 D	15.6	15.4	15.7	15.8	16.6	16.2	16.2	15.8	16.2	17.2	15.7	13.2	22.2	20.3	21.4	21.6	20.1	23.1	23.2	22.2	19.2	17.2	16.7	18.0	
27	16.4	16.2	16.1	16.1	16.0	16.0	15.6	16.5	18.6	17.7	18.1	15.5	15.6	16.1	17.4	18.7	22.7	26.4	22.8	19.2	16.7	15.1	13.3	12.9	17.3
28	12.4	13.3	13.1	15.2	16.5	16.9	16.9	16.7	16.4	16.9	16.5	18.5	18.4	17.9	16.7	18.2	22.5	23.3	23.8	22.7	16.6	12.7	11.7	13.2	17.0
29	14.7	15.2	15.8	16.2	16.1	16.3	16.7	17.4	17.2	21.2	21.6	19.1	17.6	16.7	14.5	16.6	21.1	24.2	26.8	21.5	18.7	13.7	12.0	12.0	17.6
30	12.4	13.6	14.6	15.4	15.0	15.2	16.6	17.4	16.9	16.7	17.9	18.2	19.0	17.8	18.2	19.7	21.8	23.2	22.9	20.7	17.3	14.3	13.1	13.2	17.1
31	13.2	13.8	13.5	16.2	15.6	23.2	18.7	19.3	17.3	21.0	19.2	19.7	18.8	18.9	18.7	20.7	24.2	25.4	22.8	20.4	17.1	15.3	13.7	13.2	18.3
Mean	14.2	14.6	15.5	16.6	16.9	17.4	17.5	17.6	17.5	18.2	18.4	18.6	18.0	17.6	17.0	18.2	21.0	21.3	21.3	20.6	18.4	15.9	14.5	14.1	17.5

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

Table 3 Victoria

z = 53,000 γ +

January 1959

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 Q	440	439	435	437	437	435	433	435	436	438	437	439	438	435	431	435	442	444	439	438	436	437	439	439	437
2 Q	437	437	435	433	433	427	426	426	424	423	423	423	420	418	414	414	420	418	415	412	415	416	420	423	423
3	418	415	416	420	421	420	422	420	419	417	416	415	415	416	419	421	425	419	410	410	413	411	414	419	417
4	426	428	427	427	428	428	426	427	426	427	425	423	420	423	427	427	432	429	424	423	415	410	417	421	424
5	424	426	423	421	421	423	421	421	419	419	401	389	382	396	414	426	422	428	430	429	428	436	460	420	
6 D	458	451	454	453	454	454	451	449	443	437	411	417	421	412	396	412	417	408	411	418	421	424	433	438	431
7 D	445	448	456	453	455	458	458	452	447	438	437	433	436	435	436	439	442	438	433	433	428	428	439	441	442
8	443	449	451	453	450	445	442	439	437	434	407	403	418	428	433	431	421	425	427	427	425	430	439	433	
9 D	436	446	447	444	443	441	438	436	433	431	432	424	403	377	369	375	348	356	381	408	410	424	433	452	416
10 D	482	477	470	464	462	473	451	448	440	395	381	311	309	304	327	335	368	369	405	427	438	451	456	462	413
11	470	471	464	457	453	454	454	455	456	452	445	440	437	434	429	424	430	435	439	442	439	436	440	440	446
12	446	450	449	445	443	442	439	437	437	437	438	435	433	431	433	434	437	433	428	433	432	432	434	434	437
13	433	433	435	435	437	437	436	434	428	415	418	425	425	426	429	436	441	438	433	433	431	429	430	431	
14	433	431	431	431	431	429	428	428	425	423	426	428	429	427	428	427	428	426	423	420	417	419	425	427	
15	431	433	436	439	443	449	449	446	438	426	429	430	427	426	429	431	434	437	435	433	429	426	427	430	434
16	431	429	430	430	430	429	428	429	423	414	413	371	357	374	397	391	406	410	412	416	413	422	431	412	
17	433	434	439	443	448	444	443	435	430	424	410	400	391	395	378	377	390	403	416	396	425	428	427	418	
18	426	425	428	435	438	444	436	430	421	419	421	413	409	415	416	421	418	416	420	416	413	419	427	423	
19	427	428	429	431	434	431	430	427	426	421	425	426	423	419	428	426	434	430	428	431	428	419	418	426	
20 Q	424	428	429	431	429	429	428	426	425	425	424	425	425	424	422	427	431	428	428	426	420	413	415	425	
21 Q	417	418	420	423	423	423	423	422	420	420	422	423	423	422	422	426	430	424	422	419	417	415	413	415	421
22	421	421	424	425	426	424	422	423	421	419	420	422	420	420	420	422	425	425	422	421	417	411	412	417	421
23	424	425	428	428	426	423	424	424	426	423	418	414	416	419	420	424	426	422	418	419	418	414	408	410	421
24 Q	410	413	414	417	418	418	420	419	419	418	417	416	416	417	420	423	425	422	416	413	404	401	403	409	415
25	414	417	418	418	420	419	418	420	421	420	411	410	403	399	381	376	390	392	400	412	418	421	423	423	410
26 D	426	427	426	428	432	435	434	434	432	432	430	412	289	386	417	424	421	423	425	431	429	421	423	427	419
27	427	426	424	426	426	426	426	426	424	422	422	423	424	429	426	426	428	429	426	422	421	422	428	432	425
28	430	433	437	440	442	443	441	436	431	429	427	423	426	426	423	423	424	424	422	420	417	410	426	430	429
29	430	426	424	424	426	426	428	431	418	416	431	431	426	417	411	402	404	404	410	410	412	419	420	419	
30	425	429	432	430	432	434	440	440	436	432	428	427	427	428	427	431	434	430	425	421	417	415	421	428	429
31	430	427	426	430	431	432	431	435	432	408	424	427	423	423	426	431	434	430	425	419	417	416	420	430	426
Mean	433	434	434	435	435	435	434	433	430	424	422	416	410	412	414	416	420	419	421	422	420	425	429	425	

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

Table 4 Victoria

 $H = 18,500 \gamma +$

February 1959

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	283	284	290	284	277	282	288	285	292	294	286	291	295	296	290	299	301	283	260	249	250	252	264	278	281
2	288	290	291	295	283	284	256	264	271	264	269	275	285	283	291	276	292	264	251	242	243	253	263	258	272
3	250	282	284	282	280	278	279	294	285	284	282	282	293	292	278	290	303	298	274	252	254	260	249	231	276
4 D	248	262	269	267	274	268	264	276	282	277	286	284	283	305	296	292	276	266	290	257	210	230	238*	246*	269
5	253	274	276	275	283	257	266	274	276	276	272	278	279	290	267	274	269	276	252	236	230	241	246*	247	265
6	232	256	269	274	280	280	280	284	284	295	280	290	284	278	280	274	290	284	252	192	218	240	256	265	267
7	269	279	281	276	279	281	283	284	283	284	285	288	273	287	290	293	290	279	258	247	242	242	251	262	274
8	278	288	289	286	284	289	290	291	292	291	293	291	302	316	306	304	301	299	284	267	245	227	246	258	284
9	270	265	255	265	262	265	258	238	234	262	274	278	280	269	289	288	284	278	258	238	232	234	244	256	262
10 Q	270	282	284	285	286	286	284	284	284	284	287	289	290	294	295	294	290	278	256	242	240	244	266	280	278
11	286	292	295	290	286	298	302	303	298	253	235	265	271	288	296	277	264	266	256	241	236	230	244	251	272
12	267	283	280	267	262	277	278	278	281	278	284	293	289	285	293	277	281	272	246	242	233	232	239	226	268
13	264	286	289	289	286	288	286	288	291	293	287	292	293	285	278	280	280	271	238	198	243	244	245	262	273
14	268	275	280	273	283	277	269	270	273	285	286	284	235	246	308	255	247	278	262	238	232	234	242	257	265
15	262	263	270	270	266	247	250	293	274	241	251	256	240	285	293	282	254	233	232	264	250	242	240	252	259
16 D	275	264	271	286	259	257	260	271	264	270	278	281	284	258	242	276	234	239	223	194	208	204	198	206	250
17	219	227	243	250	245	243	240	238	255	256	252	258	262	267	264	258	261	252	241	240	237	238	239	244	247
18 Q	255	266	273	278	279	282	281	282	284	282	287	286	288	287	282	286	285	278	272	265	254	250	252	260	275
19	268	269	280	284	278	262	260	254	269	271	272	277	282	280	278	286	296	289	277	270	267	259	268	279	274
20 Q	287	290	291	289	286	285	286	286	292	290	296	297	294	294	294	294	288	278	264	253	252	258	270	284	
21 Q	282	292	296	296	295	295	291	288	291	293	297	302	303	301	298	296	298	288	278	252	245	246	252	265	285
22	284	302	304	296	278	263	286	293	292	292	285	296	303	307	305	302	302	293	282	277	277	268	272	268	289
23	276	288	286	290	286	275	279	275	270	253	264	267	292	295	293	290	283	273	264	260	258	254	258	263	275
24 Q	280	290	294	293	293	293	292	293	294	296	298	300	300	297	300	298	296	288	278	258	247	248	260	274	286
25 D	290	304	315	315	306	278	255	236	260	254	242	260	282	272	199	181	203	176	199	231	217	212	227	234	248
26 D	214	250	263	266	240	246	261	248	235	248	248	265	252	240	247	241	228	250	242	226	199	187	199	229	238
27	244	260	272	266	266	280	273	272	274	271	281	274	279	282	270	288	272	221	268	255	246	235	238	242	264
28 D	247	260	261	266	267	270	270	274	270	272	280	262	254	288	239	253	237	226	218	230	209	238	230	248	253
29																									
30																									
31																									
Mean	265	276	280	280	277	274	274	275	277	275	276	281	281	285	281	279	275	267	257	244	238	239	246	254	269

DECLINATION

Mean values for periods of sixty minutes, Universal Time

000 470 478 471 481 488 490

Table 5 Victoria

D = 22° 45.0'E +

February 1959

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	13.7	14.3	14.9	15.1	15.9	16.6	16.8	16.3	17.0	17.5	20.2	17.8	18.3	17.5	15.8	14.9	21.5	22.7	23.0	21.3	16.6	13.4	12.7	12.8	16.9
2	13.7	13.7	14.5	14.7	13.9	22.0	22.4	19.5	17.0	17.7	22.7	19.7	20.5	26.2	26.7	20.1	23.5	24.5	21.1	20.5	15.5	14.8	13.0	12.9	18.8
3	12.0	12.0	14.0	16.2	15.7	16.3	16.3	16.5	16.2	17.2	13.9	24.0	23.2	17.5	16.5	10.0	16.5	23.5	22.1	21.7	19.0	15.5	15.5	10.7	16.7
4 D	07.6	09.0	08.1	14.3	14.8	15.4	17.4	17.1	18.0	19.2	16.0	22.0	23.0	15.3	23.2	21.5	22.0	12.5	17.4	18.7	17.5	18.6	13.5	13.0	16.2
5	13.0	15.2	15.7	15.0	18.0	17.7	17.0	16.5	17.3	17.5	16.2	23.0	22.0	21.5	19.8	17.1	15.7	18.9	22.0	22.4	20.0	17.5	15.4	12.5	17.8
6	12.9	12.6	13.4	14.5	16.5	16.2	16.5	17.0	17.5	12.9	16.2	19.3	18.7	16.9	16.5	17.0	20.6	22.0	21.9	17.5	13.6	12.3	13.0	12.4	16.2
7	13.2	13.1	13.9	14.6	15.5	14.6	15.0	15.4	16.5	16.5	16.1	16.5	13.5	10.4	15.5	16.8	18.6	22.7	21.0	20.3	16.2	14.4	14.0	13.2	15.7
8	13.8	14.3	14.6	14.3	14.9	15.0	15.6	16.5	19.7	16.1	16.5	13.5	14.0	15.0	17.0	18.1	21.2	21.0	20.5	20.5	19.6	16.5	11.8	09.8	16.2
9	09.5	10.0	11.2	16.4	16.5	16.8	17.2	20.7	24.5	21.0	19.4	18.5	20.7	16.4	15.7	21.0	22.2	23.5	23.4	22.1	19.0	16.5	14.1	13.0	17.9
10 Q	12.0	13.8	13.8	14.6	15.2	15.4	15.4	15.5	15.5	15.4	15.3	15.6	16.1	16.0	16.2	18.0	19.2	21.0	20.4	18.5	15.0	12.9	10.0	10.6	15.5
11	12.0	13.5	14.3	14.1	14.0	14.1	14.2	14.3	15.5	31.8	27.0	26.5	18.5	21.5	18.8	19.0	23.2	22.2	20.5	18.0	15.8	14.3	12.0	12.5	17.8
12	13.0	13.7	15.4	14.4	19.5	16.5	15.2	15.0	14.5	14.8	15.2	14.0	17.7	17.4	16.8	12.9	18.6	22.7	19.4	17.3	16.0	15.1	12.2	12.2	15.8
13	13.5	13.9	14.7	15.8	16.5	16.5	15.8	15.7	15.5	14.8	10.5	12.5	18.4	19.3	10.7	14.7	20.4	21.5	18.5	10.7	12.2	13.1	14.0	12.3	15.1
14	12.3	13.5	13.0	17.0	16.0	16.5	18.2	18.0	15.8	15.5	13.9	13.5	03.5	03.0	19.5	17.0	05.8	08.8	13.8	16.9	14.9	14.5	14.5	14.3	13.7
15	14.3	14.3	14.9	15.6	22.1	18.9	24.7	21.3	25.7	24.5	29.0	23.7	16.7	16.6	21.8	23.2	19.7	16.0	09.0	12.6	17.7	17.8	16.0	14.5	18.8
16 D	13.1	13.8	19.5	15.5	15.2	20.5	22.9	21.7	17.7	15.5	14.0	16.5	17.2	08.8	16.4	23.3	19.5	06.0	18.5	12.5	11.0	15.2	11.2	14.2	15.8
17	15.1	14.7	19.5	17.7	16.8	16.7	16.7	18.5	18.4	17.3	19.4	19.5	19.4	17.1	16.4	19.1	20.0	22.6	22.2	19.5	19.3	18.4	17.0	16.5	18.2
18 Q	16.8	16.4	15.3	14.5	14.4	14.0	14.2	13.5	12.6	14.1	14.5	15.6	16.5	15.7	16.0	19.0	20.7	21.2	23.5	21.6	19.7	18.4	17.1	15.5	16.7
19	16.0	16.5	16.0	16.6	14.9	16.0	17.3	18.7	16.0	14.3	17.6	16.5	18.8	11.8	15.9	18.0	19.1	18.1	19.1	18.4	16.5	15.6	15.0	16.6	
20 Q	14.4	14.4	15.0	15.5	15.5	15.3	15.0	15.3	15.3	15.5	15.5	15.7	15.7	16.0	16.4	17.0	18.9	19.3	19.5	17.8	16.0	14.6	13.5	16.0	
21 Q	13.0	13.5	14.5	14.8	15.0	15.0	14.8	18.4	16.0	17.2	15.5	15.5	15.6	16.8	17.4	17.5	18.9	20.1	21.2	19.7	15.6	15.4	14.6	13.9	16.2
22	13.0	12.9	13.7	14.0	13.8	16.7	14.7	15.5	17.4	23.0	21.3	19.6	17.5	17.5	17.1	17.3	18.4	20.0	19.7	17.7	15.4	14.0	13.2	13.5	16.5
23	11.9	11.8	11.6	11.5	11.0	14.5	13.2	16.6	20.0	22.3	20.9	16.5	19.7	17.1	17.6	18.5	20.0	20.4	19.5	17.9	15.7	15.0	14.4	14.0	16.3
24 Q	13.0	13.7	14.6	15.0	15.0	15.0	14.9	15.0	15.2	15.3	15.5	15.5	16.3	16.0	17.0	18.9	20.5	21.5	20.6	19.5	18.0	15.4	13.4	12.6	16.1
25 D	12.6	12.6	13.2	14.0	14.7	14.6	18.7	27.2	19.0	20.0	20.1	19.2	17.8	13.4	04.5	03.0	22.7	04.5	09.9	14.5	16.0	14.0	14.5	13.7	14.8
26 D	13.1	11.5	09.7	10.0	09.5	17.5	17.4	41.0	22.7	17.0	18.5	17.0	18.8	16.8	15.4	19.3	19.0	21.5	20.0	21.6	20.0	16.0	10.5	12.0	17.3
27	12.1	14.5	15.0	14.7	18.2	16.7	17.0	18.2	18.2	18.9	23.3	24.5	20.3	18.3	17.7	21.5	17.8	21.5	14.0	16.9	17.4	16.0	15.5	13.1	17.5
28 D	11.5	12.5	11.8	20.2	14.5	15.7	16.2	17.1	17.0	16.5	19.0	19.1	10.0	18.2	12.6	11.9	11.7	18.7	14.0	12.0	15.0	15.0	13.5	08.8	14.7
29																									
30																									
31																									
Mean	12.9	13.4	14.1	15.0	15.5	16.3	16.8	18.3	17.6	17.8	18.0	18.2	17.4	16.5	16.6	17.2	19.0	19.3	19.1	18.2	16.7	15.3	13.8	13.0	16.5

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

Table 6 Victoria

Z = 53,000 γ +

February 1959

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	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	432	429	429	429	432	435	432	430	427	407	404	419	420	415	414	418	422	418	421	425	424	421	425	428	423	
2	431	429	428	428	429	433	438	446	442	414	424	432	408	379	392	404	408	405	405	409	412	411	417	419	418	
3	425	436	435	435	436	436	433	432	430	429	409	391	398	416	409	394	399	412	414	416	419	417	418	417	419	
4 D	429	442	454	455	457	459	457	451	440	432	404	400	392	360	382	419	420	408	404	398	397	407	416*	425*	421	
5	437	436	435	438	448	454	461	452	439	432	406	407	401	371	361	379	392	391	399	410	416	422	424	428	418	
6	427	433	435	439	438	435	434	430	430	413	397	403	416	417	415	411	424	424	414	410	425	423	424	426	423	
7	427	429	432	434	434	434	434	432	429	427	424	422	415	405	412	416	417	419	419	421	414	418	422	423		
8	426	428	427	429	431	432	433	429	429	427	420	414	412	405	411	420	421	419	420	415	418	421	424	423		
9	439	436	447	455	456	454	456	453	447	417	424	424	418	417	418	427	430	425	422	420	422	423	425	432		
10 Q	416	419	420	420	419	419	419	417	417	416	416	413	409	409	408	411	413	408	403	405	407	413	416	414		
11	424	425	424	424	424	426	426	427	425	390	335	366	356	336	359	381	413	418	419	420	425	427	431	437	406	
12	440	439	434	437	447	441	436	434	427	421	387	391	413	419	418	412	417	415	410	417	419	426	429	431	423	
13	433	431	427	425	424	424	423	424	423	421	407	403	402	395	365	374	405	412	406	405	420	422	424	431	414	
14	435	435	439	447	447	451	457	455	437	433	428	428	370	272	348	369	352	356	381	397	409	418	428	433	409	
15	434	437	443	450	468	481	500	499	422	383	366	408	386	357	378	391	383	372	377	383	395	403	412	413		
16 D	416	421	433	429	434	452	459	448	442	439	425	425	423	386	305	355	362	360	368	389	415	432	458	490	415	
17	489	488	493	474	466	463	462	455	416	428	424	411	398	406	418	428	430	431	432	432	434	434	434	441		
18 Q	434	435	435	433	431	430	430	430	429	429	431	430	429	429	429	430	431	432	431	429	426	426	423	422	430	
19	425	426	428	427	427	435	439	438	434	424	418	416	399	393	393	395	415	423	426	430	431	430	427	426	422	
20 Q	424	425	426	426	425	424	423	422	421	422	422	421	422	421	424	428	428	418	417	417	419	421	418	422		
21 Q	424	428	429	429	428	429	428	428	422	424	426	426	425	426	425	427	428	430	427	419	420	423	421	424	426	
22	428	429	428	427	422	442	442	435	438	409	406	409	418	425	425	425	425	430	411	409	407	405	409	411	421	
23	414	421	425	429	439	442	444	450	422	408	405	370	402	424	427	429	427	424	420	416	419	421	421	421	422	
24 Q	419	422	423	422	422	423	424	423	421	422	418	416	414	414	416	421	423	422	419	416	411	412	413	419		
25 D	417	417	417	415	415	418	436	446	440	416	356	347	329	298	222	151	281	337	356	380	410	422	436	443	375	
26 D	416	446	452	474	499	495	498	474	443	452	397	413	410	401	427	417	422	428	425	424	430	444	446	452	441	
27	450	449	449	448	456	430	442	445	442	439	431	417	419	420	407	420	402	391	420	421	425	425	431	437	430	
28 D	438	441	445	459	451	443	441	440	437	433	417	398	323	317	327	326	351	381	399	410	413	437	439	452	409	
29																										
30																										
31																										
Mean	430	433	436	437	440	441	443	441	431	422	409	408	401	391	390	395	405	408	410	412	417	421	425	429	420	

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

Table 7 Victoria

 $H = 18,500 \gamma +$

March 1959

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 D	239	251	253	247	243	249	248	237	252	256	249	269	282	289	264	212	264	258	259	243	224	226	221	231	249	
2	248	272	274	268	267	277	271	269	273	267	252	265	253	276	261	282	292	273	246	222	205	217	227	254	259	
3	268	261	269	272	263	282	279	279	303	284	283	291	282	289	297	295	271	243	259	247	229	228	239	246	269	
4	271	274	281	279	282	285	299	296	287	283	279	278	285	293	291	289	277	261	228	219	215	239	253	263	271	
5	278	276	281	279	272	275	279	284	293	287	290	287	287	291	288	293	290	257	245	249	241	239	254	267	274	
6		283	280	273	283	289	287	288	287	292	293	294	295	297	298	295	290	281	272	257	251	249	253	265	280	280
7		288	291	293	291	295	297	297	295	299	299	303	305	299	296	299	301	293	283	281	277	267	253	254	265	288
8		271	274	269	277	285	277	277	283	283	289	293	296	298	297	299	297	291	292	281	263	255	248	251	260	279
9 Q		273	282	288	289	289	291	295	295	297	297	300	303	303	305	303	296	293	287	277	270	263	259	265	274	287
10 Q		286	291	293	296	297	298	300	301	302	306	310	313	314	314	315	313	309	297	285	275	269	266	273	284	296
11 Q		294	302	307	307	307	307	305	302	302	311	315	319	320	321	321	321	317	307	285	265	263	269	271	281	301
12		303	287	296	297	295	288	282	294	303	307	301	302	315	315	315	308	302	294	269	258	255	256	259	268	290
13		291	301	294	288	292	297	295	293	297	301	303	307	305	302	303	309	305	291	274	259	250	227	238	257	287
14		285	298	301	299	292	296	287	292	292	295	298	302	309	306	307	308	301	283	265	248	245	245	251	264	286
15		281	295	295	294	300	307	308	309	307	307	308	316	305	308	311	311	307	296	275	253	245	245	249	261	291
16 Q		277	292	301	301	301	301	304	305	308	311	311	311	311	310	313	313	307	287	267	253	250	257	259	272	293
17		288	299	306	299	300	299	299	301	308	308	308	311	307	309	311	312	309	297	287	275	269	263	271	278	296
18		291	299	300	303	307	314	312	311	307	306	309	309	309	310	313	309	310	297	277	263	252	253	279	277	297
19		296	309	309	309	310	309	313	315	317	319	323	320	319	319	321	315	303	291	279	271	265	269	281	304	
20		293	301	304	301	303	303	309	310	309	311	313	317	316	313	313	310	305	300	292	278	267	265	271	283	299
21		295	300	304	307	309	311	311	312	312	311	309	315	315	315	313	311	295	289	275	267	261	265	264	279	298
22 Q		291	299	303	303	303	305	307	309	312	317	315	315	315	317	315	306	297	286	273	260	259	269	289	299	
23		303	307	301	296	300	293	298	309	307	307	313	316	318	314	310	301	286	277	263	249	245	256	271	293	293
24		304	305	299	291	300	299	303	305	306	311	319	323	317	314	309	301	289	261	249	259	264	267	283	292	295
25		303	311	315	304	277	277	294	270	279	293	297	299	306	312	296	263	285	257	247	236	227	261	273	273	281
26 D		279	281	279	282	283	285	286	289	297	308	296	252	205	171	203	267	242	203	186	204	195	217	212	257	249
27 D		302	249	287	282	342	207*	182	081	127*	122	213	162	203	117	-028	-153	-018	019	085	091	162	237	258	240	157
28 D		245	240	232	245	243	232	243	250	250	247	245	219	222	238	173	194	243	173	117*	162*	182*	152*	190	300	218
29 D		258	251	269	230	229	242	241	232	240	270	260	230	205	206	219	192	185	221	224	207	199	214	235	246	229
30		259	264	259	259	262	265	268	267	266	274	270	261	276	274	265	263	265	258	245	236	245	242	252	261	
31		264	278	281	275	281	280	277	274	272	282	288	289	277	276	282	273	261	241	227	231	236	231	243	266	266
Mean		281	285	288	286	288	285	286	282	287	290	292	290	290	287	280	275	277	264	252	244	240	244	254	269	276

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 8 Victoria

D = 22° 45.0' E +

March 1959

Hour U.T. Day \	0 to 1 1	1 to 2 2	2 to 3 3	3 to 4 4	4 to 5 5	5 to 6 6	6 to 7 7	7 to 8 8	8 to 9 9	9 to 10 10	10 to 11 11	11 to 12 12	12 to 13 13	13 to 14 14	14 to 15 15	15 to 16 16	16 to 17 17	17 to 18 18	18 to 19 19	19 to 20 20	20 to 21 21	21 to 22 22	22 to 23 23	23 to 24 24	Mean	
1 D	10.2	07.1	11.8	12.8	20.3	15.0	21.7	26.8	23.2	18.5	16.5	19.9	20.2	17.8	18.8	10.3	11.8	17.8	18.2	18.8	18.0	16.4	13.6	09.5	16.5	
2	11.3	11.8	12.7	12.7	18.6	17.3	19.3	19.8	18.8	12.8	15.7	24.4	22.1	14.3	12.8	14.9	19.3	21.8	20.7	18.5	19.3	14.8	13.5	12.7	16.7	
3	12.0	13.5	15.4	14.3	24.0	16.3	15.8	17.8	18.7	16.6	17.8	16.3	13.8	17.3	17.8	20.3	20.9	18.8	17.8	20.1	16.8	14.4	11.9	10.6	16.6	
4	09.9	11.8	13.0	13.8	14.8	15.8	19.6	18.0	16.4	16.8	17.9	17.3	12.4	16.3	18.3	20.0	20.8	20.8	21.3	16.3	14.8	13.8	15.3	14.6	16.2	
5	11.8	11.8	12.5	10.4	10.3	13.7	15.2	17.8	17.0	18.0	17.5	16.4	16.8	17.0	17.8	19.3	20.5	22.4	17.0	17.3	16.6	13.5	10.4	10.9	15.5	
6	10.3	11.2	11.5	13.0	14.3	15.4	15.9	17.0	16.2	15.8	16.3	15.8	14.8	15.3	17.6	20.0	22.3	23.2	21.6	19.6	16.9	14.8	13.6	12.8	16.0	
7	12.8	13.3	13.4	13.8	13.9	14.3	15.5	15.0	15.2	15.4	16.0	18.0	21.1	20.5	20.7	22.3	22.2	21.4	17.8	14.8	12.7	11.1	09.8	09.3	15.8	
8	09.3	08.5	10.8	12.8	15.3	15.0	16.3	16.4	16.8	17.4	16.4	16.6	16.6	17.0	17.3	19.6	20.1	20.2	21.4	20.7	18.0	15.8	13.3	11.3	15.9	
9 Q	10.5	10.8	11.3	12.2	12.7	14.0	14.8	14.8	15.8	17.0	16.0	16.4	16.7	18.1	17.4	18.8	20.8	20.7	18.5	16.8	15.3	14.0	13.2	15.5		
10 Q	12.6	13.2	13.5	13.8	13.9	13.9	14.1	14.6	14.8	14.8	14.9	15.3	16.4	16.8	17.8	19.1	21.0	22.2	22.5	20.5	18.0	15.5	13.1	11.6	16.0	
11 Q	11.3	12.0	12.7	13.1	13.4	13.6	13.6	14.3	15.3	16.8	15.6	15.3	15.4	16.3	17.8	19.6	21.3	23.1	24.3	19.9	15.3	12.8	10.6	09.6	15.5	
12	08.8	11.3	12.7	14.3	14.4	13.7	14.3	14.4	14.6	16.9	19.1	15.2	17.1	18.2	18.8	17.0	20.8	20.2	20.5	15.5	15.1	14.5	12.5	12.8	15.5	
13	12.0	12.6	13.8	14.4	14.5	14.3	14.8	15.0	15.8	15.8	14.9	14.3	13.8	12.8	15.3	20.3	23.0	22.8	24.1	22.3	18.8	14.8	10.9	10.5	15.9	
14	10.0	11.5	13.3	14.2	13.8	14.5	19.5	17.0	16.6	16.2	15.0	11.9	13.7	15.0	15.3	19.6	22.4	23.7	24.2	21.3	18.3	14.8	12.3	10.8	16.0	
15	10.5	10.8	14.0	15.2	13.5	13.8	14.0	14.4	14.8	15.7	15.8	13.3	15.3	15.9	17.2	19.6	22.3	24.2	24.8	22.3	18.5	15.1	12.8	10.0	16.0	
16 Q	10.7	11.3	12.7	13.8	14.1	14.3	14.8	15.0	14.8	14.8	15.3	15.3	15.6	16.3	17.6	19.8	22.8	24.5	23.2	20.6	16.4	12.7	10.6	09.4	15.7	
17	09.6	10.3	12.3	13.7	14.6	14.8	16.3	15.3	15.1	15.2	15.3	15.2	15.3	15.7	16.5	19.3	22.1	24.6	22.9	21.8	18.7	15.8	13.3	12.3	16.1	
18	11.8	13.0	13.8	14.3	14.8	14.0	13.7	13.5	12.3	12.5	13.5	13.9	13.3	14.3	17.2	19.3	22.2	24.9	24.7	20.8	17.1	15.4	12.5	13.5	15.7	
19	11.8	11.9	13.2	13.8	14.3	14.5	14.8	15.3	16.0	15.8	17.6	16.8	16.1	15.9	16.6	17.8	21.0	21.6	21.7	18.7	17.3	14.8	12.8	11.6	15.9	
20	11.4	11.7	13.0	13.8	14.0	14.3	14.7	16.4	15.8	16.7	16.4	15.8	15.7	16.8	17.3	18.8	21.3	21.3	19.3	17.6	15.3	13.8	11.9	11.4	15.6	
21	11.0	11.8	12.3	13.2	13.3	13.8	14.2	14.5	15.7	18.3	16.0	15.1	15.7	15.8	17.6	19.8	21.0	20.3	20.8	17.1	13.8	12.3	11.4	10.9	15.2	
22 Q	11.8	12.3	12.6	13.0	13.7	13.7	13.8	14.0	14.8	15.0	16.7	15.8	16.1	16.8	17.8	19.4	22.5	21.5	19.6	17.5	15.3	13.0	10.7	09.8	15.3	
23	10.3	10.6	11.7	12.3	13.3	14.0	15.0	13.3	15.8	18.0	15.3	14.8	14.8	16.0	19.0	21.6	22.9	21.8	22.7	18.3	14.4	12.0	11.2	10.4	15.4	
24	11.3	11.5	10.6	12.7	13.4	14.3	14.8	14.6	15.0	15.3	14.5	15.0	17.1	18.5	20.6	22.1	23.3	23.8	18.7	13.1	11.5	10.8	11.3	11.8	15.2	
25	12.8	12.0	12.8	11.5	10.0	10.7	11.3	14.7	15.7	15.3	15.3	16.0	17.4	18.3	22.1	23.6	15.6	20.1	21.6	16.5	07.9	10.5	12.4	13.6	14.9	
26 D	14.3	14.2	13.5	13.8	14.5	14.6	14.5	14.6	14.6	15.2	23.1	35.3	32.8	28.8	29.8	27.8	30.8	31.3	22.8	12.4	09.8	03.9	04.3	02.3	18.3	
27 D	05.8	05.2	13.8	06.8	00.8	14.8*	34.8	32.8	14.8*	21.6	25.1	34.3	19.3	30.2	21.8	04.8	21.8	06.8	13.4	08.0	09.0	12.2	12.6	12.8	16.0	
28 D	13.5	15.6	16.6	15.2	25.3	17.8	17.1	15.6	19.8	27.3	23.3	09.8	20.5	23.9	15.5	11.3*	20.3	28.5	11.8*	14.8*	11.3*	10.9	07.3	16.9		
29 D	04.8	04.9	07.3	05.8	12.7	16.5	33.0	18.6	20.0	19.3	16.8	23.5	18.4	09.3	16.3	17.6	17.8	14.9	20.8	20.8	18.3	15.8	14.5	13.0	15.9	
30	11.9	12.4	14.8	19.8	16.4	17.3	16.8	18.3	16.5	15.4	18.8	15.8	14.8	17.7	18.8	20.3	20.8	20.7	22.2	22.0	18.0	14.6	12.9	10.8	17.0	
31	10.3	11.5	14.2	12.3	13.5	14.6	15.8	16.3	17.5	19.6	18.2	17.7	15.7	15.3	16.8	20.5	21.1	20.4	19.3	14.0	10.3	08.6	07.4	15.3		
Mean	10.8	11.3	12.8	13.1	14.4	14.7	16.8	16.6	16.2	16.7	17.0	17.3	16.9	17.3	18.1	18.7	21.1	21.6	20.7	18.1	15.7	13.4	11.9	10.9	15.9	

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

Table 9 Victoria

	z = 53,000 γ +																				March 1959				
Hour U.T. Day	0 to 1 1	1 to 2 2	2 to 3 3	3 to 4 4	4 to 5 5	5 to 6 6	6 to 7 7	7 to 8 8	8 to 9 9	9 to 10 10	10 to 11 11	11 to 12 12	12 to 13 13	13 to 14 14	14 to 15 15	15 to 16 16	16 to 17 17	17 to 18 18	18 to 19 19	19 to 20 20	20 to 21 21	21 to 22 22	22 to 23 23	23 to 24 24	Mean
1 D	464	466	458	473	483	489	485	449	443	442	390	401	412	424	398	351	378	398	411	414	416	428	437	444	431
2	451	456	459	456	468	456	458	461	452	410	380	378	393	408	400	408	417	412	411	414	416	436	438	444	428
3	448	447	450	447	454	447	450	445	431	417	425	417	405	414	426	429	424	429	432	423	421	432	437	437	433
4	443	438	437	436	436	439	437	417	417	418	418	409	394	407	421	421	417	417	414	417	415	420	423	429	423
5	433	437	442	446	452	459	451	442	433	425	425	425	423	419	424	422	415	410	409	410	413	417	421	425	428
6	430	435	439	438	436	435	436	433	429	427	425	424	422	420	422	428	430	425	422	419	418	415	415	427	
7	420	423	427	427	428	429	429	429	429	427	422	414	409	411	416	422	420	411	408	406	404	409	414	420	419
8	432	438	447	445	445	445	445	445	441	437	432	429	426	424	423	424	425	421	419	419	412	409	410	411	428
9 Q	420	421	426	428	428	429	426	427	426	425	424	421	420	421	422	424	422	412	405	400	399	406	412	410	419
10 Q	412	414	418	418	418	421	419	419	418	418	420	417	417	417	419	414	411	410	411	408	405	403	405	415	
11 Q	409	414	417	416	415	417	418	420	418	413	412	412	411	409	411	416	416	415	406	403	410	409	405	405	412
12	414	415	417	417	419	424	431	429	426	422	411	405	377	391	404	404	403	401	400	401	404	413	415	417	411
13	420	422	421	422	424	425	422	422	419	413	405	397	390	395	412	416	419	415	409	401	406	412	418	414	
14	420	420	420	420	420	420	421	422	416	416	414	408	404	409	411	415	413	410	403	399	394	395	398	405	411
15	413	418	419	420	418	417	418	418	417	416	404	406	411	414	418	415	410	406	403	406	411	412	414		
16 Q	416	419	417	415	413	414	415	414	411	408	407	407	408	409	412	417	417	411	406	403	397	399	399	403	410
17	411	417	421	415	417	418	417	419	419	417	417	414	414	417	417	421	422	419	414	408	406	406	408	406	415
18	408	416	417	415	414	414	411	412	413	413	416	417	417	418	421	424	426	421	412	401	395	398	401	405	413
19	411	414	416	414	413	412	414	415	416	416	412	414	415	417	419	421	417	416	406	397	391	389	391	399	410
20	404	408	414	413	411	412	412	411	412	412	411	411	410	408	412	413	410	402	400	397	393	390	393	402	407
21	407	413	416	416	412	410	410	410	408	411	407	408	410	412	414	413	406	393	390	396	394	393	396	406	
22 Q	401	404	408	408	409	412	412	413	413	409	407	408	409	410	414	415	411	406	401	404	404	402	399	403	408
23	408	415	415	415	415	418	422	418	414	409	410	409	408	405	411	415	411	399	389	385	390	396	397	402	407
24	406	408	412	414	418	418	419	418	416	414	411	401	405	410	412	413	412	405	396	388	387	397	403	405	408
25	406	408	412	416	428	432	435	442	439	431	425	419	417	416	411	401	372	367	375	384	398	418	424	421	412
26 D	416	414	412	413	415	415	417	418	419	417	391	331	288	224	265	377	423	423	401	402	413	430	481	511	396
27 D	544	498	524	550	592	295	290	308	310*	245	388	358	328	230	060	120	312	328	403	427	492	533	550	505	383
28 D	468	454	446	456	470	478	480	482	485	455	436	343	313	372	271	256	332	382	390*	415*	440*	470*	518	565	424
29 D	550	516	514	510	493	525	478	440	448	384	363	333	322	335	339	361	399	413	423	426	430	436	440	438	430
30	439	444	450	454	451	448	418	432	425	382	408	399	402	423	426	425	424	428	430	430	432	428	428	427	
31	431	442	450	445	442	440	443	442	437	414	420	419	413	407	421	420	426	424	420	421	422	425	434	445	429
Mean	431	431	434	435	437	429	427	425	423	412	411	402	397	396	391	398	408	408	408	407	410	417	423	427	416

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

Table 10 Victoria

H = 18,500 γ +

April 1959

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	270	278	280	274	275	278	244	261	278	281	283	285	283	282	280	278	270	254	240	232	228	231	244	258	265	
2	271	275	282	284	284	286	288	290	287	290	284	291	286	285	288	286	281	268	260	256	255	246	252	259	276	
3	270	282	284	274	276	287	285	292	283	283	289	288	294	290	290	284	267	258	249	240	241	252	264	264	274	
4	266	281	285	280	290	290	295	298	297	290	300	298	294	294	291	281	276	264	258	260	258	264	264	266	282	
5 Q	278	285	287	296	290	292	295	299	302	306	306	304	306	308	303	295	279	264	258	260	262	265	270	288		
6	292	288	290	295	301	303	304	304	310	311	312	311	316	318	307	286	266	259	253	251	254	264	276	291		
7	291	294	298	296	300	304	301	297	301	302	302	295	290	300	302	299	280	264	257	253	246	261	268	264	286	
8	282	290	286	266	280	285	290	290	280	284	292	301	318	302	305	284	264	231	250	253	246	245	230	257	275	
9 D	294	292	293	260	271	278	258	266	258	273	292	291	297	302	300	297	283	272	258*	268	272	252	254	273	277	
10 D	287	284	288*	258	282	295	292	282	283*	293*	286	288	198*	178*	198*	218*	213*	229	237	235	212	219	230	244	251	
11	244	242	258	268	259	254	264	258	260	271	274	283	298	298	297	293	286	270	262	256	238	232	234	250	265	
12	264	294	291	289	290	288	293	292	300	311	304	306	295	301	307	306	296	274	255	248	250	258	248	269	285	
13	277	284	294	298	302	304	304	315	308	310	311	311	314	311	308	304	297	286	283	277	274	260	266	270	294	
14	285	301	298	295	302	300	296	299	305	311	311	314	313	318	322	324	322	311	292	282	276	271	272	289	300	
15	292	286	290	294	296	298	298	305	306	308	311	312	311	306	306	300	292	288	268	274	273	270	274	278	293	
16	293	287	294	296	298	297	302	310	306	310	318	313	310	309	308	306	304	294	288	282	281	284	281	283	298	
17	295	304	311	310	309	312	310	316	321	314	312	298	306	302	299	306	306	294	277	260	258	260	262	287	297	
18 Q	296	292	298	304	305	308	310	312	314	314	317	322	316	318	320	315	314	302	298	290	286	279	278	285	304	
19 Q	294	306	314	313	314	314	313	316	320	320	318	316	320	322	324	318	310	297	289	286	279	274	274	276	305	
20 Q	289	300	308	309	314	317	313	316	318	323	322	320	320	321	324	325	308	288	280	281	280	282	288	293	306	
21	298	305	301	300	294	300	304	312	311	296	307	307	308	310	307	303	302	298	288	284	280	276	284	296	299	
22 Q	302	309	310	309	309	310	312	312	314	316	318	316	318	320	322	317	302	284	271	274	276	282	290	303		
23 D	304	310	317	316	314	316	316	318	319	325	341	346	355	347	350	304	280	239	220	223	198	192	233	258	293	
24 D	262*	264*	268	276	284	290	287	280	288	296	297	284	270	284	290	276	246	240	232	221	221	215	232	254	265	
25	274	282	293	294	294	280	284	284	297	306	300	298	294	297	300	294	267	244	259	258	257	269	275	271	282	
26	281	316	294	289	293	297	301	301	302	306	308	306	297	294	300	299	290	268	275	278	258	242	239	269	288	
27	297	290	295	292	282	291	290	292	291	295	296	298	286	295	292	282	266	251	256	263	269	258	270	287	283	
28	288	296	295	286	292	293	303	302	286	304	303	298	288	278	276	277	269	264	269	270	269	265	267	285		
29 D	294	293	285	304	296	304	302	300	301	292	300	295	300	288	298	282	226	223	215	251	256	256	271	272	279	
30	285	288	288	289	285	287	305	304	300	299	296	292	296	291	261	265	246	229	223	242	252	256	258	262	275	
31																										
Mean	284	290	292	290	293	295	295	297	299	301	304	303	300	299	300	294	282	268	261	260	257	255	261	271	286	

DECLINATION
Mean values for periods of sixty minutes, Universal Time

Table 11 Victoria

D = 22° 45.0' E +

April 1959

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	06.6	07.5	10.5	08.9	12.3	11.7	15.8	20.9	18.4	16.3	15.8	16.3	16.0	16.8	18.2	19.8	21.0	20.8	19.2	16.3	13.3	11.2	10.4	10.5	14.8	
2	11.2	12.3	13.1	14.1	14.7	14.8	14.5	14.7	15.3	16.1	16.6	16.7	18.6	19.3	20.0	20.4	22.2	21.8	19.1	17.5	15.5	13.0	10.8	09.3	15.9	
3	09.6	09.3	10.2	10.8	12.8	13.5	14.0	16.0	17.3	18.1	14.3	10.9	16.3	18.8	20.5	21.9	20.8	18.6	16.8	14.8	12.8	11.3	09.6	09.1	14.5	
4	09.0	09.5	10.6	13.8	13.7	14.0	14.4	14.5	15.1	16.4	17.0	16.9	16.9	17.8	19.1	20.5	21.1	18.6	18.5	14.5	12.5	10.7	09.5	10.2	14.8	
5 Q	11.0	11.0	12.7	13.2	12.9	13.6	13.7	14.3	15.1	15.7	16.0	16.0	15.7	17.5	19.0	21.7	22.8	22.6	20.0	15.4	13.0	11.6	10.7	08.8	15.2	
6	09.5	12.0	13.1	13.5	13.1	13.4	14.0	14.5	15.2	15.4	15.7	15.4	15.5	16.7	18.5	22.8	24.5	23.5	20.8	18.1	15.1	11.7	10.2	10.0	15.5	
7	09.5	10.7	12.0	13.2	13.5	13.4	12.9	13.1	14.0	14.4	15.9	19.0	17.0	18.2	20.5	23.2	26.5	24.5	21.2	18.9	13.7	10.7	08.8	07.2	15.5	
8	05.7	06.9	05.6	09.6	13.6	14.1	14.6	17.5	20.6	21.1	20.6	19.1	11.8	18.0	20.1	24.7	25.3	22.1	16.5	17.3	13.1	10.8	07.9	05.6	15.1	
9 D	03.6	07.6	-01.7	04.0	13.8	20.0	24.1	20.6	24.1	27.0	18.4	17.1	16.1	18.8	20.3	22.2	24.0	23.6	22.2	17.0	14.1	11.0	07.5	07.0	15.9	
10 D	09.1	11.2	11.6	11.1	13.2	13.5	18.0	20.6	27.1	29.1	09.1	16.1	15.6	14.1	30.6	33.6	19.1	19.6	15.1	18.4	13.7	10.9	10.6	12.6	16.8	
11	14.0	16.2	17.6	19.1	18.3	18.4	15.6	17.9	24.6	20.3	16.2	13.1	18.1	21.1	24.5	27.6	27.6	26.8	25.6	20.8	17.3	12.9	10.7	07.1	18.8	
12	10.9	11.1	12.6	13.6	13.6	13.6	15.1	14.3	14.5	15.1	16.0	14.6	15.1	16.8	19.5	22.3	24.2	24.4	21.5	17.6	14.3	12.5	10.8	08.6	15.5	
13	09.8	10.9	12.1	13.6	13.7	14.1	14.1	19.6	17.4	14.7	14.6	14.1	14.6	17.9	21.3	22.8	24.1	24.4	20.6	18.6	14.8	12.3	09.6	08.6	15.8	
14	09.6	11.6	14.5	14.1	14.0	15.1	16.1	19.0	17.7	15.6	15.6	16.1	17.1	17.5	19.2	20.7	23.5	23.9	22.2	18.9	16.4	13.1	11.1	07.3	16.2	
15	05.6	09.6	11.6	13.5	13.9	14.2	14.5	14.6	15.0	15.1	14.8	14.5	15.1	17.3	18.1	20.6	21.2	19.8	19.8	13.6	13.6	12.6	11.5	11.6	14.6	
16	11.6	13.9	14.3	14.3	15.5	15.6	15.1	17.1	16.6	15.8	15.0	16.4	16.9	17.8	19.1	20.5	22.6	22.1	19.5	17.5	14.6	12.1	11.3	10.8	16.1	
17	10.1	10.6	12.1	13.9	14.1	14.3	15.2	14.6	15.6	16.6	18.3	18.7	16.7	14.6	16.7	19.6	21.1	21.6	21.6	17.8	14.1	12.6	10.4	08.5	15.4	
18 Q	09.1	10.6	12.6	13.1	13.7	14.1	14.5	14.8	15.3	15.4	15.3	15.3	16.2	16.8	18.0	20.1	21.8	23.1	21.6	18.4	16.1	14.4	12.1	10.1	15.5	
19 Q	10.1	11.0	12.6	13.8	14.2	14.2	14.6	14.5	15.1	16.5	15.7	15.5	15.1	16.9	18.4	21.1	23.5	23.1	18.8	16.8	15.6	14.1	12.6	11.8	15.6	
20 Q	11.2	11.8	12.8	14.0	13.8	14.0	14.3	15.1	15.2	15.3	16.6	16.3	15.7	15.9	20.8	25.3	26.8	25.3	20.3	17.1	15.1	13.8	12.4	11.4	16.3	
21	11.4	11.1	13.7	14.1	15.9	15.9	14.8	14.7	16.1	16.3	19.3	17.6	17.1	18.8	20.6	20.7	22.1	21.3	18.1	14.7	13.7	12.3	11.6	11.3	16.0	
22 Q	12.1	11.6	13.1	13.6	13.5	13.6	13.6	14.1	14.3	14.4	14.6	15.8	17.1	18.4	20.1	22.3	24.1	21.8	18.5	14.6	12.6	11.5	10.1	09.8	15.2	
23 D	10.0	10.5	11.2	12.1	12.6	12.7	12.9	13.3	13.9	14.6	14.8	15.9	15.6	19.8	22.5	27.1	28.8	25.3	22.9	16.4	14.9	04.5	06.1	07.2	15.2	
24 D	07.7	10.2	10.9	11.6	13.4	12.7	10.8	12.7	15.1	17.6	17.8	18.6	18.1	26.3	29.1	25.5	21.1	17.3	15.5	13.2	11.6	09.1	09.1	09.6	15.2	
25	10.1	12.2	14.5	13.6	14.5	15.6	16.6	14.9	13.6	15.1	16.1	13.6	13.6	17.1	18.5	20.1	20.1	13.5	12.6	16.6	12.6	11.0	10.1	11.1	14.5	
26	10.1	09.0	09.8	13.8	15.6	16.4	15.6	16.8	15.4	17.1	16.6	16.3	17.4	17.6	17.3	18.4	20.6	18.5	15.9	15.6	17.5	15.1	12.6	09.1	15.3	
27	08.6	09.1	09.1	09.9	12.1	15.6	18.4	17.1	16.3	16.6	15.1	17.1	20.1	20.1	21.3	20.5	18.8	17.3	13.1	12.6	13.1	13.1	10.6	08.6	14.7	
28	07.0	06.1	07.5	11.1	12.6	14.9	17.1	15.6	20.6	18.5	19.6	17.1	17.2	18.2	16.4	15.9	15.7	15.5	14.3	13.2	12.5	11.1	08.5	07.2	13.9	
29 D	05.3	07.1	11.6	11.1	09.8	12.8	11.3	17.1	17.6	17.3	17.3	21.8	19.7	23.6	22.5	21.8	20.8	20.1	12.5	08.4	08.0	08.1	08.3	08.8	14.3	
30	09.1	09.8	11.4	11.6	12.0	13.6	16.6	12.4	14.6	14.6	14.3	15.6	17.0	18.1	14.6	19.6	19.8	18.6	16.8	11.0	09.8	09.1	08.1	09.8	13.7	
31																										
Mean	09.3	10.4	11.4	12.6	13.7	14.4	15.1	15.9	16.9	17.1	16.1	16.2	16.4	18.2	20.2	22.1	22.5	21.3	18.7	16.0	13.8	11.6	10.1	09.3	15.4	

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

Table 12 Victoria

z = 53,000 γ +

April 1959

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	442	447	457	451	457	459	469	461	448	441	439	437	436	435	434	434	436	434	431	426	427	432	433	435	442	
2	437	438	439	438	434	434	432	432	434	435	431	424	423	426	427	425	420	421	418	415	413	417	425	434	428	
3	435	443	452	447	447	444	443	442	440	436	429	402	394	411	418	422	416	407	406	408	410	415	421	423	425	
4	425	431	435	436	437	433	429	426	427	429	424	422	425	427	429	429	425	418	414	414	419	426	424	423	426	
5 Q	425	427	430	433	429	427	429	427	426	425	422	421	420	419	421	421	419	411	409	408	407	404	402	420	420	
6	414	419	422	423	423	420	420	422	419	415	415	416	418	421	422	420	416	408	402	400	401	407	412	413	415	
7	412	414	420	420	422	424	425	425	422	422	418	416	409	413	419	420	416	410	405	403	404	405	410	416		
8	421	431	442	455	455	455	450	446	430	421	402	408	355	387	418	421	417	411	413	409	403	406	410	434	421	
9 D	483	487	490	493	497	509	464	463	425	397	419	423	427	431	432	432	433	436	436	434	421	416	419	417	445	
10 D	415	417	435	435	429	432	429	377	290	395	383	388	290	210	175	260	335	375	400	415	422	435	436	435	375	
11	434	440	442	443	441	444	415	402	413	416	407	370	412	426	430	426	419	413	410	410	409	416	425	431	421	
12	421	431	428	428	429	433	435	434	430	421	421	421	415	417	419	417	415	410	409	407	411	415	416	417	421	
13	418	424	428	428	427	425	427	420	420	425	424	422	406	416	421	424	420	413	409	407	411	412	413	414	419	
14	416	426	434	428	424	424	422	425	425	424	424	421	423	423	421	414	408	410	408	409	415	415	424	420		
15	434	444	438	431	429	428	430	429	428	425	425	425	424	425	422	422	422	421	416	419	416	417	420	421	425	
16	426	430	432	432	432	429	429	425	423	423	425	423	417	422	424	425	425	427	425*	415	407	404	408	413	422	
17	417	423	426	424	424	425	425	428	420	416	410	406	405	401	402	411	413	405	398	399	406	412	417	425	414	
18 Q	435	436	435	431	427	426	425	428	428	427	427	428	427	427	428	427	425	421	419	422	419	417	415	410	411	425
19 Q	418	423	429	431	429	427	427	428	428	427	422	422	426	428	431	430	426	418	415	415	410	415	418	419	423	
20 Q	420	422	422	421	419	417	417	413	411	405	403	402	397	397	401	404	420*	410*	409	402	400	400	405	405	410*	
21	415	418	421	423	430	427	423	420	420	405	385	400	410	418	421	422	422	415								
22 Q		418	425	426	429	430	428	427	426	425	424	424	426	427	427	424	417									
23 D							428	429	430	429	432	427	423	410	420	410	399									
24 D	410*	415*	420*	425*	435	435	436	434	435	430	433	429	394	378	393	401	414									
25	408	418	427	424	426	423	426	423	416	404	406	410	404	407	408	409	405	400	409	411	426	429	443	434	416*	
26	430	447	453	463	452	439	434	430	421	426	434	433	426	425	425	419	418	420	428	439	437	438	437	434*		
27	435*	437*	439*	439*	437*	435	416	411	411	412	405	384	380	383	383	375	367	368	389	401	410	414	429	436	408*	
28	435	444	449	449	447	449	443	438	425	424	419	415	425	421	415	410	410	409	410	411*	411	421	439	455	428*	
29 D	453	461	449	446	444	445	441	426	426	427	417	396	406	395	380	377	381	384	387	398	407	417	433	445	418*	
30	444	443	443	445	447	448	444	415	423	431	431	428	430	419	370	373	389	397	405	421	430	434	435	440	424*	
31																										
Mean	428	433	436	437	436	436	432	427	421	422	419	415	410	408	408	410	412	411	411	412	413	417	421	425	421	

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

Table 13 Victoria

 $H = 18,500 \gamma +$

May 1959

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	278	288	297	297	306	297	297	292	296	294	288	288	286	202	307	306	287	273	258	257	262	268	270	280	282	
2	287	298	297	292	286	302	318	308	310	312	312	316	316	312	305	302	298	298	302	302	302	302	290	296	303	
3	296	306	308	307	310	313	316	314	320	326	325	326	324	316	309	296	300	309	308	312	309	296	298	292	310	
4	302	309	320	312	318	318	322	326	339	328	324	329	331	337	324	324	327	326	320	326	322	330	312	350*	324	
5	367*	376*	295	278	268	285	294	297	318	308	308	306	303	298	303	300	294	278	271	273	272	272	280	287	297	
6 Q	293	300	301	302	306	308	311	312	316	322	322	320	324	328	330	320	306	284	276	280	284	286	282	288	304	
7	290	300	304	306	309	312	314	318	321	331	336	336	333	335	334	334	327	312	312	304	298	294	292	316	315	
8 D	323	304	316	334	317	271	282	287	256	280	273	273	311	310	322	323	315	301	289	282	279	274	298	312	297	
9	294	304	304	303	309	304	307	312	318	322	322	319	324	326	320	330	319	300	308	308	295	290	295	281	309	
10	298	305	306	310	310	316	306	312	310	308	323	316	318	320	330	328	313	291	293	290	287	282	280	276	305	
11	304	308	309	316	311	317	330	322	312	314	325	306	294	309	312	307	285	264	255	274	296	300	312	343*	305	
12 D	362*	358*	328*	363*	383*	372	325	362	327	254	290	284	286	301	269	250	258	293*	276	292	288	278	270	287	306	
13	285	288	285	284	282	293	294	300	298	280	289	282	292	288	297	297	302	295	293	291	284	278	294	287	290	
14 Q	293	294	294	290	292	295	298	298	300	300	303	307	296	294	309	306	298	281	284	286	279	277	289	298	294	
15 D	308	320	320	308	303	300	301	317	326	330	392	382	306	302	308	307	296	262	273	274	260	274	283	267	305	
16 D	320	314	334	325	287	275	288	277	269	289	291	284	282	281	286	281	272	264	263	268	269	267	286	279	285	
17	304	307	304	296	296	299	309	298	314	318	308	306	292	312	308	294	280	274	282	290	288	290	296	310	299	
18	312	311	308	322	326	307	301	284	285	304	292	304	305	310	308	303	291	284	275	286	284	298	303	308	300	
19	316	328	310	295	292	303	308	313	312	311	302	292	290	298	289	272	262	258*	250	260	282	290	291	282	292	
20	308	295	300	294	297	295	298	304	308	312	304	301	306	308	302	290	267	264	261	275	278	286	296	291	293	
21	305	301	298	292	204	299	302	299	308	320	310	306	301	302	296	269	258	246	233	250	256	253	276	270	281	
22	295	326	310	286	293	299	311	304	286	302	306	304	306	309	306	302	310	286	280	279	292	284	291	304	299	
23	290	283	290	290	296	301	304	312	308	308	304	308	308	304	295	286	285	272	280	286	279	268	266	292	292	
24 D	322	322	290	290	308	316	305	299	301	312	298	270	293	277	304	286	290	304	292	294	309	269	287	260	296	
25	314	298	280	265	282	278	278	271	264	289	301	298	294	292	286	290	292	289	292	288	278	268	269	274	285	
26	295	308	295	292	292	294	297	299	301	308	305	300	300	302	308	308	297	283	275	273	272	279	294	299	295	
27 Q	304	302	308	308	304	304	307	308	307	311	308	310	316	310	298	288	282	275	279	283	292	290	296	300		
28 Q	304	307	307	308	312	312	315	318	318	319	319	319	320	323	324	319	312	306	300	298	292	292	299	306	310	
29 Q	313	315	312	312	313	315	319	322	325	326	324	322	323	323	323	321	317	317	317	319	320	320	322	313	319	
30	326	329	331	328	326	324	326	326	329	332*	332*	330*	332*	334*	328*	320*	316*	316*	310*	316*	322*	322*	325*	330*	325*	
31	335*	330	334	326	313	293	313	322	331	316	312	311	307	312	306	295	288	282	267	273	277	276	304	306	305	
Mean	308	311	306	304	302	304	306	307	308	309	311	308	307	306	308	302	295	287	287	283	287	287	286	292	296	301

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 14 Victoria

D = 22° 45.0' E +

May 1959

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	11.2	12.8	14.5	16.7	24.7	19.0	17.1	19.8	18.5	19.4	19.8	20.5	21.6	21.5	21.6	22.8	24.8	23.1	20.1	17.3	14.1	10.6	08.7	09.5	17.9			
2	10.7	11.2	12.7	11.5	12.2	14.0	12.1	14.6	14.6	15.0	15.1	15.6	16.7	18.0	20.1	21.3	22.1	21.6	20.7	17.6	14.8	12.3	11.2	10.5	15.3			
3	10.9	10.6	12.0	13.3	13.6	14.1	14.5	16.5	16.0	14.6	14.1	14.6	15.8	18.1	18.8	20.1	19.7	19.1	17.7	15.3	14.6	12.6	10.6	10.2	14.9			
4	09.6	11.0	12.1	13.4	13.8	12.7	13.5	14.5	14.2	20.5	17.6	16.1	17.0	17.6	15.6	17.7	19.5	19.3	17.6	14.5	13.1	11.1	13.0	03.4	14.5			
5	03.5	00.9	06.7	09.6	12.1	13.8	12.1	13.9	12.7	13.8	13.6	14.1	12.5	17.8	18.9	21.2	22.4	21.5	18.8	15.6	13.5	11.3	10.1	10.6	13.4			
6 Q	10.8	12.2	13.7	13.5	12.9	12.8	13.4	14.0	14.6	14.7	15.1	16.8	17.6	19.8	22.1	23.9	24.1	22.3	19.5	16.0	14.0	12.3	11.1	10.6	15.7			
7	11.8	12.8	13.4	13.3	13.1	13.1	13.6	14.0	14.0	14.7	15.0	15.6	17.6	18.1	19.6	20.5	21.6	21.9	19.2	17.1	14.3	12.4	10.4	07.2	15.2			
8 D	07.8	10.2	11.2	12.0	19.1	24.2	18.1	22.1	20.3	22.5	15.1	15.7	19.0	21.7	23.6	26.8	27.8	26.0	22.2	17.2	12.1	10.1	07.9	07.9	17.5			
9	08.7	11.3	14.5	14.0	12.8	13.7	14.7	13.8	15.0	14.6	12.6	11.6	14.8	18.0	19.7	23.0	23.7	26.1	20.7	16.1	14.1	10.7	10.1	11.3	15.2			
10	10.2	11.6	12.5	13.6	13.6	15.3	19.2	18.8	15.6	17.1	17.1	14.6	15.8	17.6	19.8	22.3	24.5	23.4	16.7	13.6	12.3	06.6	05.1	06.6	15.1			
11	08.7	13.7	13.7	14.0	14.1	13.6	18.8	15.1	15.3	16.3	14.1	14.6	14.0	20.9	23.7	25.4	27.9	24.3	19.8	13.6	12.6	12.4	11.0	06.6*	16.0			
12 D	00.6*	01.4*	00.6*	01.4*	06.6*	07.6*	12.7	02.9	13.1	13.1	15.5	11.5	14.1	20.9	26.9	30.1	36.4	13.6	19.7	15.7	14.6	14.3	14.5	15.1	13.2			
13	14.9	15.2	15.1	15.1	16.4	15.3	13.6	13.6	16.1	13.6	12.6	14.0	15.9	22.4	24.4	25.0	25.6	23.1	19.6	15.1	13.8	13.1	12.1	11.6	16.5			
14 Q	10.6	12.5	12.9	13.6	13.2	13.3	13.8	13.6	13.6	13.9	14.1	12.9	13.0	15.6	19.2	22.9	24.2	22.1	19.1	15.1	12.1	11.0	09.6	09.2	14.6			
15 D	10.0	12.0	15.3	15.8	13.9	12.7	13.1	12.3	14.0	15.4	18.7	24.6	19.5	18.2	20.9	23.6	27.0	27.3	16.6	14.6	14.4	14.3	13.1	09.0	16.5			
16 D	09.6*	15.6	13.0*	20.6	21.6	13.6*	22.6*	22.6	17.6	14.3	15.6	15.7	15.8	17.7	22.6	25.4	25.6	22.6	17.6	13.6	11.6*	10.6*	10.6*	11.1*	17.0			
17	10.6*	12.1*	13.1*	13.6*	14.1*	15.1*	16.1	16.6	18.6	15.9	15.1	15.6	18.1	22.3	23.9	23.1	20.1	19.1	18.1	15.5	13.6*	12.6	11.6*	11.6*	16.1			
18	13.6*	13.6*	15.6	14.1	18.6*	12.6*	18.1	14.4	18.4	18.1	17.0	16.8	19.1	21.7	24.8	24.1	25.0	20.8	16.8	14.1*	12.1*	11.1*	11.0*	12.1*	16.8			
19	13.1	13.0	13.3	13.6	10.6*	12.6	12.4	12.8	12.6	13.6	18.1	16.9	21.6	22.5	23.3	23.8	19.0	15.6*	11.6*	08.2	07.9	08.2	08.6	10.8	14.3			
20	10.4	12.1	13.0	13.1	13.5	13.5	13.0	12.5	11.6	13.0	13.5	15.0	17.5	20.7	23.0	24.0	23.5	19.8	16.0	10.0	07.5	06.1	06.8	08.9	14.1			
21	09.1	10.0	11.1	10.6	12.1	13.7	14.3	14.0	12.5	13.0	15.8	16.0	18.0	19.0	19.7	21.1	22.9	20.8	15.5	12.5	10.2	08.5	06.5	07.5	13.9			
22	07.5	08.0	10.5	11.1	12.2	12.4	12.5	14.0	10.5	15.9	15.5	16.5	18.2	18.5	17.7	17.0	20.5	21.4	18.6	14.9	12.0	09.9	07.5	07.0	14.7			
23	08.4	08.4	10.4	13.5	11.5	12.0	14.2	14.6	15.0	15.2	15.1	16.3	17.4	19.5	20.7	22.0	20.2	17.5	13.1	12.0	10.5	08.9	07.0	05.9	14.7			
24 D	06.2	07.1	11.2	11.6	11.0	09.6	14.5	14.5	18.7	17.2	21.0	27.9	23.4	21.1	24.0	26.5	20.3	19.1	18.4	16.5	15.2	15.7	07.4	06.1	16.0			
25	00.5	06.5	06.9	10.0	10.7	13.5	18.6	19.0	17.0	15.2	15.0	14.0	15.5	18.7	21.3	22.3	21.7	21.0	18.3	15.7	14.0	12.2	10.8	09.5	14.5			
26	09.6	10.9	11.7	12.5	13.0	13.1	13.1	13.1	13.0	12.7	13.5	15.0	16.1	18.3	20.6	22.3	23.6	23.5	18.7	14.2	11.3	08.9	08.0	07.6	14.3			
27 Q	08.3	10.0	13.9	14.2	12.6	13.0	13.1	13.1	13.4	13.0	13.5	14.0	15.3	17.4	19.5	20.7	20.4	19.0	17.5	15.6	14.5	12.1	10.2	10.6	14.4			
28 Q	11.0	12.2	13.0	13.1	13.0	14.2	14.0	14.1	14.4	15.0	15.4	15.5	15.8	17.4	19.0	19.2	18.6	18.0	16.7	16.0	13.2	09.6	07.9	07.2	14.3			
29 Q	08.7	10.7	12.5	12.9	13.4	13.9	14.2	14.7	14.8	15.5	15.0	16.1	17.7	19.1	21.1	23.0	23.3	21.4	19.2	16.2	14.0	12.5	11.0	10.6	15.5			
30	10.5	11.5	12.5	13.2	13.5	13.5	14.0	14.6	15.1	15.1	15.1	15.1	15.1	16.1*	16.1*	20.1*	19.1*	22.6*	22.1*	23.1*	22.1*	18.6*	16.1*	14.1*	13.1*	12.6*	11.6*	15.8*
31	10.0	11.7	12.7	14.3	16.0	16.2	14.1	12.9	15.5	15.0	14.4	14.9	15.7	18.0	25.6	24.0	23.1	22.7	19.2	10.9	08.5	06.9	06.6	07.4	14.8			
Mean	09.3	10.6	12.1	12.9	13.9	13.8	14.8	14.7	15.0	15.4	15.4	15.9	17.1	19.3	21.4	22.8	23.3	21.3	18.1	14.7	12.7	11.0	09.8	09.2	15.2			

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

Table 15 Victoria

Hour U.T. Day	Z = 53,000 γ +																								May 1959
	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	435	436	436	439	434	430	432	428	430	427	422	414	410	425	432	435	434	431	429	423	420	421	425	429	428
2	424	434	439	438	441	438	420	425	425	424	423	423	423	420	421	423	423	416	410	413	418	415	416	420	424
3	414	417	421	422	418	418	419	419	420	420	418	415	417	418	416	409	407	403	396	393	396	402	404	408	412
4	407	412	418	417	420	417	418	419	418	402	405	410	414	421	411	409	404	402	405	409	406	405	409	431	412
5	481	547	543	529	486	477	447	439	436	429	426	425	417	421	420	423	424	419	416	417	417	416	422	426	446
6 Q	419	420	421	420	419	419	419	420	420	420	417	418	420	420	418	414	410	404	403	405	408	410	407	408	415
7	403	406	408	409	410	411	413	413	415	413	412	413	413	411	407	406	402	401	400	402	406	408	417	409	
8 D	419	417	416	422	430	448	443	406	384	395	339	296	379	393	425	436	434	433	425	421	418	415	427	439	411
9	420	424	428	421	418	419	422	421	414	415	415	403	403	411	405	406	406	401	399	399	403	411	414	412	
10	411	415	414	412	411	413	417	411	412	381	399	409	415	420	420	421	418	402	397	391	395	397	404	411	408
11	418	429	424	419	413	414	411	402	404	391	393	390	383	400	405	403	398	388	388	391	392	402	412	428	404
12 D	425	436	438	471	460	487	472	466	432	344	412	386	319	368	392	386	352	360	390	407	415	414	419	433	412
13	424	424	419	417	419	420	418	417	399	388	397	377	394	398	409	414	410	406	405	402	411	417	411	408	
14 Q	403	403	401	398	399	402	405	407	407	410	410	411	396	383	386	396	403	400	398	402	404	406	410	412	402
15 D	412	423	429	422	412	409	407	410	412	399	390	377	409	413	408	412	408	399	394	399	404	422	442	462	411
16 D	477	481	480	468	464	427	393	397	410	393	413	419	422	418	421	421	420	409	402	403	408	412	424	427	425
17	420	418	414	410	409	411	416	417	412	395	392	386	373	408	415	407	402	397	394	392	391	397	404	408	404
18	417	422	426	427	422	391	419	411	395	397	396	405	417	417	411	399	391	387	386	389	389	398	414	419	406
19	409	418	421	413	406	403	401	399	396	386	365	362	365	382	386	389	384	387*	390*	396	409	416	421	436	398
20	438	435	437	431	431	430	430	428	417	413	418	421	427	429	427	422	424	404	389	391	402	410	424	429	421
21	431	439	442	434	440	440	437	434	427	409	403	407	412	414	413	410	409	409	401	402	409	415	422	424	420
22	427	442	448	444	437	432	434	410	408	421	425	439	438	419	398	402	404	398	399	407	405	409	426	421	
23	434	440	447	444	434	428	430	428	427	422	418	418	420	421	420	416	411	400	402	404	405	408	410	418	421
24 D	425	438	454	445	436	443	437	388	413	412	389	368	411	392	383	398	399	396	392	401	416	422	458	495	417
25	510	492	454	432	434	435	455	443	426	408	425	425	431	434	431	429	428	420	421	421	429	438	441	437	
26	448	448	436	427	424	426	427	428	432	433	428	431	429	426	424	415	405	399	400	403	405	410	422	430	423
27 Q	434	435	440	433	426	426	427	428	430	428	424	426	431	435	431	425	418	408	403	402	403	411	416	417	423
28 Q	414	418	420	421	422	422	424	425	425	426	426	425	423	422	424	424	419	413	405	400	403	401	408	416	418
29 Q	419	424	422	420	420	419	421	421	422	422	421	423	424	423	419	416	416	401	388	391	400	405	406	410	415
30	416	417	416	416	416	414	415	416	417	415*	412*	415*	415*	421	421	423	409	386	374	379	389	385	394	405	412
31	416	415	410	426	430	430	426	422	420	416	417	421	423	409	386	374	379	389	385	394	405	412	424	437	411
Mean	427	433	433	430	427	426	424	420	416	408	408	405	409	413	413	411	408	403	400	402	406	410	418	427	416

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

Table 16 Victoria

H = 18,500 γ +

June 1959

Hour U.T. Day \	0 to 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	0 to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
1	321 304 295 288 294 292 302 303 304 308 312 312 315 309 311 307 298 290 279 284 292 296 304 298 301	
2	286 306 303 312 320 318 320 318 309 304 310 314 317 316 304 292 291 266 259 282 282 293 315 323 302	
3	316 308 314 282 305 302 303 310 308 310 307 298 306 308 297 300 281 271 270 272 282 275 288 312 297	
4 D	332 322 288 302 308 298 307 292 307 312 310 302 318 324 332 333 328 318 299 282 279 260 299 302 306	
5	261 296 305 306 284 284 293 300 305 310 318 318 312 318 317 304 294 290 279 266 261 276 295 297 295	
6		
7		
8		
9	321 322 315 315 313 317 307 317 327 282 292 286 296 334 334 331 338 339 306 288 288 288 282 286 309	
10	318 307 316 325 316 287 294 302 311 311 310 314 323 330 338 329 324 310 290 284 277 282 289 300 308	
11	308 310 312 315 314 314 321 315 318 360 323 323 332 348 334 338 334 346 315 297 296 291 287 290 318	
12 Q	301 310 312 308 306 304 304 304 305 305 307 310 317 322 326 322 316 296 298 292 280 294 298 311 306	
13 Q	311 318 315 313 309 310 312 315 315 316* 313* 318* 320* 320* 316 312 304 296 298 292 280 294 298 311 306	
14	310 321 320 318 317 314 317 319 322 322 324 320 314 316 325 326 316 317 308 300 298 302 298 313 315	
15	310 326 326 325 325 322 317 311 296 309 313 313 322 328 326 319 310 299 294 296 296 296 296 301 311	
16 Q	311 312 322 322 310 301 306 305 308 305 306 308 311 319 324 326 326 328 316 306 303 293 288 298 311	
17 Q	312 316 316 314 314 314 313 315 318 320 322 323 330 339 346 342 328 306 291 298 300 322 308 303 317	
18	308 314 318 326 309 314 326 327 315 313 313 309 304 310 312 304 285 286 278 271 268 276 295 308 304	
19	322 329 328 326 326 325 320 320 322 327 324 328 327 336 331 324 317 302 292 294* 284 284 295 309 316	
20	324 328 331 318 318 318 321 322 322 324 326 328 332 337 335 333 318 306 294 287 295 306 306 319	
21	302 314 309 313 314 322 321 314 318 318 320 318 320 324 320 317 308 281 271 261 267 268 283 293 304	
22	315 316 327 326 318 315 326 328 324 335 332 325 321 326 320 312 316 319 300 293 291 298 288 302 316	
23	310 321 319 316 318 330 320 320 322 328 324 323 324 328 334 324 315 294 293 300 296 310 308 301 316	
24	325 335 346 317 281 270 284 290 291 295 296 296 300 308 307 294* 281 255 247* 259 273* 286 288 286 292	
25 Q	307 304 309 308 309 305 302 305 308 310 316 313 312 315 316 315 302 292 291 291 290 295 287 304	
26	301 298 318 308 317 305 306 305 289 272 278 286 299 302 308 309 310 304 280 268 268 269 276 280 294	
27 D	290 299 301 308 308 310 311 320 326 323 326 336 337 344 312 310 266 278 306 288 275 275 297 290 306	
28 D	336 304 304 328 287 293 293 279 280 266 275 271 285 273 244 271 286 287 290 276 266 269 293 310 286	
29 D	318 312 308 312 296 292 288 304 292 286 240 257 309 288 282 263 238 226 247 268 302 292* 329 314 286	
30 D	313 291 298 288 287 298 296 291 291 263 226 225 292 264 255 280 272 259 256 226 238 262 278 292 272	
31		
Mean	311 313 314 313 308 306 309 309 309 306 315 318 315 313 304 295 287 282 282 286 295 300 305	

HORIZONTAL INTENSITY
DECLINATION
Mean values for periods of sixty minutes, Universal Time

Table 17 Victoria

Hour U. T. Day	D = 22° 45.0' E +																				June 1959				
	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	09.1	09.9	13.0	13.1	12.2	13.0	12.7	12.5	13.8	12.5	12.4	13.9	15.0	15.9	19.2	21.1	23.3	21.7	18.4	14.0	11.3	09.2	07.5	07.1	13.8
2	09.0	10.2	12.5	12.6	13.7	13.3	17.3	14.9	15.5	16.7	15.9	17.4	18.0	21.6	23.3	21.7	23.5	23.5	17.0	13.5	09.5	08.0	06.7	06.6	15.1
3	08.7	09.5	08.5	11.2	18.1	14.4	13.4	14.5	14.3	14.5	16.5	17.0	16.1	17.8	20.0	21.6	23.0	20.1	17.0	12.9	09.8	07.1	07.2	06.7	14.2
4 D	06.0	06.8	11.6	11.5	12.1	19.2	20.9	15.0	12.0	13.5	14.1	17.6	15.5	17.4	20.1	23.1	23.0	19.4	15.9	13.1	12.2	08.8	07.3	05.1	14.2
5	09.0	09.1	11.3	13.7	15.6	15.5	12.1	11.7	11.6	12.4	13.2	12.0	16.2	17.0	22.2	23.4	22.2	21.7	19.2	14.5	11.2	08.0	08.2	07.9	14.1
6	09.2	11.5	12.4	12.5	12.5	12.9	13.0	12.5	18.5	14.4	15.8	13.5	13.4	14.6	19.0	21.0	22.2	23.1	15.1	12.8	12.2	12.0	11.5	10.4	14.4
7	10.1	10.5	11.5	13.9	17.3	14.8	12.1	12.5	13.0	13.5	14.0	14.1	14.5	17.1	20.0	22.9	23.2	22.6	20.0	15.4	13.7	11.8	11.0	10.5	15.0
8	10.5	11.1	12.0	12.6	12.5	12.6	13.0	17.2	18.3	15.9	14.5	14.0	14.7	16.4	18.0	19.6	20.5	19.2	18.1	13.3	11.7	09.5	07.0	08.0	14.2
9	08.0	10.5	12.8	14.9	17.3	20.0	15.2	14.0	12.2	20.6	20.0	11.9	22.1	21.4	23.3	25.1	26.2	25.5	21.7	14.0	09.9	09.3	08.5	08.2	16.4
10	09.1	11.9	12.7	21.5	17.6	14.2	13.1	13.3	12.0	10.9	12.0	13.1	13.4	14.5	16.5	18.8	21.0	21.5	18.7	17.0	13.0	09.4	08.3	08.0	14.2
11	10.1	12.4	14.7	15.0	13.6	13.2	13.8	13.0	12.6	10.6	17.0	13.3	20.2	19.7	19.8	20.0	20.0	18.7	19.6	17.5	13.0	11.3	09.9	09.8	14.9
12 Q	10.9	12.2	13.6	14.7	14.6	14.0	14.0	13.5	14.0	14.5	15.2	15.8	16.5	17.7	19.7	21.6	23.0	24.6	20.2	15.6	13.5	11.1	10.0	07.8	15.3
13 Q	09.0	10.5	13.5	15.1	14.0	14.0	13.5	13.5	13.5	14.0	14.5	15.0													
14	06.8	07.9	10.5	11.9	13.0	13.2	12.5	13.0	13.5	14.0	14.1	13.3	14.3	16.0	18.5	20.5	22.0	21.9	17.5	14.0	12.0	10.5	08.5	07.5	13.6
15	07.6	08.9	11.2	13.0	13.7	13.8	15.2	14.7	16.2	15.9	14.2	15.3	18.3	19.5	21.0	22.6	23.1	21.1	18.0	15.0	13.0	10.5	08.5	08.0	14.9
16 Q	09.0	10.5	13.0	15.9	14.5	13.5	12.5	11.7	11.5	12.9	13.2	14.7	15.1	16.5	17.3	18.6	20.4	21.0	20.1	18.2	17.0	13.0	11.2	10.0	14.6
17 Q	09.7	11.0	12.0	12.5	12.7	12.8	12.9	13.3	13.5	13.7	13.5	14.0	14.6	16.5	19.1	22.6	24.6	26.5	24.6	16.5	12.7	10.0	05.5	09.0	14.7
18	06.9	09.0	10.4	11.9	12.6	11.5	11.5	11.3	14.0	13.2	13.2	14.0	16.6	17.9	20.7	21.5	20.9	22.0	17.5	11.0	06.2	05.4	06.0	06.7	13.0
19	07.0*	09.0*	11.5*	12.5*	12.0*	16.5	13.2	13.0	13.8	14.7	16.0	15.7	17.5	19.5	20.8	22.3	24.5	23.0	18.0	14.0	11.2	08.9	07.6	07.0	14.5
20	06.5	09.4	11.5	12.0	11.5	11.3	11.3	11.9	12.0	13.1	14.2	15.5	15.7	18.2	20.5	23.8	23.4	23.5	21.4	14.2	10.1	07.0	06.8*	07.0	13.8
21	06.5	07.4	10.2	11.6	11.7	11.5	12.2	11.2	11.5	12.3	12.7	15.0	15.1	15.5	19.4	24.0	23.7	27.2	21.3	15.7	08.7	05.7	03.9	04.5	13.3
22	05.5	07.9	10.0	11.7	12.0	11.6	11.7	12.6	16.0	12.3	13.2	16.2	20.6	23.7	24.0	21.9	24.4	24.0	22.5	15.2	10.5	06.7	05.5	06.0	14.4
23	07.4	09.8	11.1	12.0	13.5	14.1	13.5	13.9	13.7	13.7	14.2	15.5	16.9	19.7	21.9	25.5	26.9	25.2	18.5	11.4	09.0	06.1	05.8	07.0	14.4
24	02.9	03.5	02.0	16.5	13.5	14.8	12.5	12.7	12.9	12.4	12.2	12.6	15.0	18.0	21.3	24.7	25.2	25.7	21.7	17.7	12.5	08.7	05.2	04.3	13.7
25 Q	06.7	09.7	12.5	14.0	15.5	13.2	13.0	12.7	13.2	13.2	13.5	13.0	16.0	19.5	23.3	25.0	25.1	24.7	20.5	15.5	11.4	08.0	05.0	04.0	14.5
26	05.0	06.4	07.7	11.5	15.5	13.9	14.5	16.0	18.5	17.4	19.6	17.5	19.2	19.5	21.2	22.5	23.3	25.0	24.0	19.9	14.1	10.7	09.5	09.7	15.7
27 D	10.7	11.8	12.5	12.5	12.9	13.0	12.7	13.0	11.5	13.0	17.0	17.5	20.5	23.5	23.4	18.0	20.0	15.9	13.0	16.5	16.1	11.2	06.9	05.0	14.5
28 D	00.5	05.0	04.9	10.8	14.6	12.2	11.2	06.5	17.3	13.3	12.9	17.6	15.5	20.2	17.7	18.7	18.7	16.0	17.7	19.3	13.0	08.5	09.0	08.8	12.9
29 D	09.5	10.6	12.7	14.7	17.1	16.0	13.9	11.9	03.5	13.1	25.8	20.4	21.0	18.7	20.0	18.5	18.4	15.2	14.4	11.5	09.5	07.8	09.5	05.5	14.1
30 D	05.4	10.1	10.4	09.7	11.2	12.7	14.6	13.0	13.7	17.0	19.8	22.0	21.4	20.0	23.0	20.4	22.5	24.3	23.5	16.5	11.9	09.9	09.0	08.9	15.5
31																									
Mean	07.7	09.5	11.1	13.2	14.0	13.9	13.4	13.0	13.4	14.0	15.1	15.3	16.9	18.4	20.5	21.8	22.7	22.2	19.1	15.0	11.7	09.1	07.8	07.4	14.4

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

Table 18 Victoria

Z = 53,000 γ +

June 1959

Hour U.T. Day \	0 to 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	0 to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
1	462 467 463 449 444 443 440 437 434 428 419 424 429 430 432 430 431 428 410 396 393 400 416 421 430	1
2	417 424 422 421 425 429 409 417 420 420 420 416 404 406 408 406 409 404 399 403 407 416 430 448 416	2
3	476 471 475 462 452 433 437 438 431 418 409 410 423 429 432 432 426 422 416 413 406 407 415 427 432	3
4 D	436 448 439 431 431 440 433 419 435 429 421 415 424 427 430 423 412 425 406 406 408 411 427 438 426	4
5	442 452 453 457 450 453 444 435 433 431 432 426 428 431 428 424 423 415 409 407 407 411 418 428 431	5
6	433 436 433 427 426 427 427 428 425 423 415 423 419 410 407 416 424 412 407 404 406 415 426 428 421	6
7	435 439 438 439 436 432 427 425 423 423 419 422 424 422 420 416 407 398 403 403 409 415 419 421	7
8	426 427 425 422 422 422 423 421 405 411 419 423 425 423 418 415 411 410 401 397 393 402 407 415 415	8
9	432 440 433 433 435 432 424 426 409 377 360 347 378 423 434 434 430 425 414 413 414 417 423 425 416	9
10	444 454 461 472 461 447 438 432 426 405 414 425 431 431 430 419 418 418 411 403 401 412 421 428 429	10
11	430 432 432 428 424 419 418 417 418 421 392 363 387 409 409 402 398 393 384 382 390 399 409 419 407	11
12 Q	427 435 432 424 420 418 417 417 419 419 420 422 425 424 420 418 409 393 394 399 401 404 406 412 416	12
13 Q	414 421 422 421 417 417 416 417 418 418 418* 418* 418* 418* 418* 418 409 393 394 399 401 404 406 412 416	13
14	412 417 416 412 412 412 411 410 412 413 415 414 407 396 397 396 395 396 395 393 396 404 413 425 407	14
15	425 429 425 419 416 415 413 412 397 411 414 418 423 425 426 422 422 409 397 395 397 398 403 408 413	15
16 Q	418 424 431 435 431 425 421 418 417 416 416 419 421 424 424 420 416 409 403 392 385 390 399 407 415	16
17 Q	414 420 418 414 411 410 409 409 410 410 410 412 414 418 420 420 409 396 383 375 376 380 376 392 404	17
18	405 415 420 423 415 410 411 411 410 410 410 408 405 399 396 393 392 388 385 380 381 384 391 401	18
19	403 412 412 413 409 409 406 407 407 402 401 406 404 407 408 409 408 404 391 382 375 377 384 395 401	19
20	402 411 413 402 398 399 400 401 401 403 404 406 408 408 402 415 411 401 385 377 371 368 374 382 398	20
21	392 404 404 404 401 403 405 406 407 407 408 406 407 409 406 402 405 397 384 377 379 382 391 402 400	21
22	411 413 420 418 412 406 408 408 407 407 401 390 388 382 396 400 402 388 367 369 367 374 375 388 396	22
23	397 410 412 408 407 410 406 408 409 410 408 410 409 404 402 402 404 392 380 376 373 387 403 428 402	23
24	436 461 492 514 453 443 430 407 406 413 416 419 423 429 428 409* 405* 397* 386* 381 386 397 405 407 423	24
25 Q	416 418 418 412 406 405 405 406 408 408 408 408 410 410 408 407 400 388 378 374 375 378 387 401 401	25
26	420 425 433 429 440 424 423 420 377 387 398 410 411 406 400 403 408 408 404 404 402 408 414 411	26
27 D	422 425 423 418 411 408 407 403 391 380 384 388 381 384 379 350 342 350 366 373 383 400 424 434 393	27
28 D	444 442 467 480 463 459 472 463 413 404 421 409 407 362 347 348 363 375 388 389 398 410 426 414	28
29 D	441 443 439 437 439 434 432 431 368 259 277 316 356 394 391 392 372 359 375 386 403 423 463 447 395	29
30 D	445 444 442 429 426 421 417 385 353 318 243 367 353 328 323 342 370 380 393 406 423 436 431 387	30
31		31
Mean	426 432 434 432 426 424 421 419 411 404 402 401 408 409 408 405 404 399 393 391 392 399 409 417 411	Mean

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

Table 19 Victoria

 $H = 18,500 \gamma +$

July 1959

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 Q	298	298	292	297	293	286	287	295	294	291	292	288	286	290	294	288	284	278	268	268	276	282	285	304	288
2	297	312	317	286	301	288	282	291	288	292	288	290	287	284	282	276	286	281	277	276	274	276	278	286	287
3 Q	302	308	312	300	302	301	300	303	304	308	308	310	314	320	331	332	319	306	298	284	277	274	269	284	303
4	301	315	322	317	314	314	318	320	326	328	320	307	320	338	349	338	348	338	317	290	321	289	285	301	318
5	289	314	314	323	306	291	297	302	313	311	312	304	320	323	330	336	323	315	294	273	270	283	286	294	305
6	303	311	318	307	306	308	308	310	318	321	309	310	320	323	338	357	338	308	279	264	255	273	281	288	306
7	299	316	314	306	310	315	312	321	325	318	296	306	311	312	316	321*	318	315	312	308	290	284	294	301	305
8	306	312	316	316	304	302	304	314	301	284	289	313	314	314	314	322	329	304	294	288	290	284	294	301	305
9	300	314	316	321	304	298	294	292	298	294	298	306	310	322	334	330	299	310	305	288	258	246	274	305	301
10	324	304	325	336	323	310	306	293	299	304	311	316	313	325	334	334	336	332	326	314	298	288	296	297	314
11	320	333	329	324	306	309	301	301	309	308	311	312	320	310	330	339	328	355*	330	361	363	333	325	365*	326
12	370*	283	309	309	296	302	303	300	307	303	303	305	293	278	282	292	285	284	267	267	258	257	279	281	292
13 Q	292	315	321	318	320	315	310	309	321	306	306	311	309	301	293	293	297	286	273	247	245	258	285	280	296
14	320	313	328	335	350	317	305	318	296	293	291	289	281	304	305	326	312	281	273	269	271	270	275	284	300
15 D	339	354	370	346	288	291	292	296	410*	305*	200*	255*	-200*	-230*	030*	-155*	-385*	-565*	-505*	085*	165*	215*	310*	365*	120*
16 D	235*	230*	257	260	217	220	235	243	230	224	222	222	218	211	194	195	206	211	217	223	240	235	269	315	230
17 D	275	265	269	304	317	284	265	268	270	251	257	257	267	263	267	263	225*	125*	190*	125*	185*	240*	305*	270*	250
18 D	350*	325*	350*	400*	350	278	270*	220	045*	246	252	223	242	247	259	282	297	276	232	227	239	269	302	277	269
19	324	307	295	262	275	265	277	269	288	277	276	271	271	252	256	259	258	265	257	269	257	257	274	291	273
20	288	302	309	288	294	290	297	289	282	291	288	285	298	305	308	308	298	276	260	262	264	270	273	264	287
21	251	283	295	306	302	292	293	300	305	304	302	307	310	303	292	292	291	269	262	256	258	266	279	290	288
22	292	299	295	302	294	302	307	317	304	308	308	304	305	299	287	287	300	285	277	258	259	274	260	285	292
23	321	305	280	282	297	290	284	283	292	298	301	299	295	302	306	308	305	292	268	252	244	236	270	290	288
24	295	294	297	298	302	307	305	296	302	310	319	302	308	304	301	300	305	280	266	284	275	280	293	287	296
25 D	291	313	311	281	301	305	295	293	302	278	286	286	289	278	292	272	232	264	290	291	290	268	287		
26	291	278	311	303	288	284	306	305	278	296	305	299	294	288	293	297	292	274	274	268	254	247	268	314	288
27	289	288	310	282	283	284	286	286	294	283	289	304	300	293	297	298	296	265	266	274	267	269	263	277	285
28	281	301	293	287	288	296	302	303	296	297	307	302	294	302	297	300	296	277	261	262	263	266	272	280	288
29 Q	292	296	308	289	285	302	298	296	300	299	304	294	303	310	308	299	292	277	256	255	264	270	268	276	289
30 Q	286	293	296	298	301	301	302	302	304	305	305	302	307	310	314	308	294	268	248	259	280	289	297	298	294
31	304	303	311	314	309	303	296	290	296	316	296	307	310	307	319	322	306	277	267	271	298	303	275	290	300
Mean	301	303	309	306	301	295	295	294	293	295	292	293	281	292	288	275	253	244	259	265	270	283	294	286	

DECLINATION
Mean values for periods of sixty minutes, Universal Time

Table 20 Victoria

D = 22° 45.0' E +

July 1959

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	
1Q	09.7	10.5	12.4	15.7	13.8	12.8	14.0	15.8	13.7	12.5	12.5	13.3	15.0	17.4	18.5	19.5	21.0	20.5	19.0	16.1	12.9	10.5	08.5	07.5	14.3	
2	09.5	10.2	10.0	12.0	14.9	12.1	19.0	17.5	15.2	15.9	15.1	16.0	18.5	21.0	20.4	22.0	23.5	26.0	23.6	18.7	14.3	12.0	09.5	08.4	16.1	
3Q	09.3	10.0	11.1	12.0	12.5	12.9	13.1	13.2	13.9	14.5	15.0	16.0	16.9	17.6	19.0	20.2	21.0	20.3	20.0	20.5	16.5	15.4	12.1	09.3	15.1	
4	07.8	09.0	11.0	12.3	12.5	12.4	12.3	12.8	12.9	12.7	14.7	14.5	19.4	21.2	22.1	23.5	21.8	25.9	23.0	16.1	13.5	10.4	09.7	07.3	14.9	
5	08.5	09.3	11.1	13.0	20.6	18.4	21.0	23.0	15.0	13.2	17.5	15.0	16.1	16.8	19.7	23.0	23.2	20.6	18.0	14.3	11.5	11.0	10.1	09.9	15.8	
6	10.0	11.4	13.5	14.7	14.0	13.7	13.5	14.5	15.0	17.5	15.1	14.4	14.4	16.7	21.6	23.5	24.2	24.6	23.0	17.8	14.0	11.4	08.5	07.0	15.6	
7	08.2	10.5	13.3	16.2	13.5	13.4	13.5	13.5	19.6	12.5	15.0	17.9	16.5	16.5	19.5	21.0*										
8	09.5	12.0	14.4	15.5	16.9	16.0	14.3	13.5	20.5	15.7	16.2	13.5	12.3	14.7	18.5	22.5	27.3	29.6	23.9	19.4	15.0	10.5	08.0	08.0	16.2	
9	09.5	10.9	13.1	15.7	19.0	18.9	21.0	18.4	16.5	17.5	15.0	11.7	10.4	16.7	22.5	25.6	28.0	22.5	21.4	16.0	13.0	08.3	07.4	08.4	16.1	
10	09.9	11.6	19.7	21.5	23.4	16.2	15.6	16.5	14.6	12.9	11.0	11.7	13.7	16.2	18.5	22.7	25.5	25.0	22.8	17.8	15.5	13.9	11.3*	08.2*	16.5	
11	09.0	12.2	15.0	15.5	17.5	17.0	18.5	14.0	13.0	13.5	14.1	13.7	13.8	14.5	19.2	24.0	26.7	30.5	23.5	18.7	12.5	11.0	10.5	13.9	16.3	
12	13.7	07.1	08.0	08.7	10.5	11.5	12.0	12.0	13.1	13.0	13.7	14.0	16.2	21.0	25.0	26.5	28.9	28.0	24.0	18.1	13.6	12.1	10.0	08.7	15.4	
13Q	09.3	11.3	13.5	15.0	15.0	13.3	13.9	14.0	14.9	14.0	14.0	14.0	13.7	16.0	21.5	23.5	24.9	24.0	21.9	17.5	12.1	08.2	07.4	07.9	15.0	
14	07.5	10.6	14.0	17.7	17.6	19.5	11.6	14.0	15.1	14.4	10.5	16.0	17.0	17.7	18.2	23.2	25.5	26.0	19.0	15.5	13.5	12.0	10.8	10.5	15.7	
15D	10.2	11.5	10.0	10.1	15.5	13.4	11.5	14.0	14.8	09.5	11.5*	17.5*	36.5*	36.5*	47.5*	50.0*	37.5*	70.5*	46.5*	25.5*	26.5*	11.5*	15.5*	13.5*	23.6*	
16D	11.5*	11.0	13.4	21.5	19.0	15.2	18.5	13.0	09.4	10.1	09.4	12.5	15.4	19.0	21.7	22.8	23.4	21.6	20.7	19.0	13.7	08.7	06.5	10.0	15.3	
17D	11.0	10.0	10.5	12.3	18.5	15.5	15.0	15.0	12.4	14.0	12.4	17.1	16.7	15.4	20.7	22.1	15.0*	18.0*	53.5*	41.5*	26.5*	10.5*	03.0*	00.8*	17.0	
18D	02.5*	04.0*	05.5*	10.5*	18.0*	21.5*	22.5*	18.0*	08.5*	16.0	14.1	08.4	15.3	17.6	23.5	28.0*	25.0	23.4	24.5	18.8	15.0	11.0	10.8	09.2	15.5	
19	08.9	10.5	09.9	13.0	11.5	11.0	14.0	11.3	10.9	11.5	10.8	13.2	14.0	14.1	16.7	19.0	21.8	22.5	20.4	16.5	15.5	13.6	10.7	07.6	13.7	
20	07.7	11.2	11.5	15.0	13.5	14.5	15.1	14.0	09.1	13.1	11.5	10.5	13.1	17.0	20.2	23.7	26.9	23.5	18.7	13.0	08.5	06.6	06.5	07.6	13.8	
21	10.0	09.7	11.5	16.5	15.9	13.0	14.6	17.0	14.5	12.9	12.9	12.5	14.1	18.4	20.6	22.5	25.1	27.8	23.0	17.6	12.5	09.5	06.5	06.0	15.2	
22	07.4	11.0	11.5	12.0	12.2	12.0	18.3	13.4	12.1	12.2	13.4	12.0	15.7	17.0	17.8	19.1	18.5	19.5	16.3	11.9	06.1	05.7	06.7	05.7	12.8	
23	06.1	10.5	11.2	11.5	15.6	19.5	18.5	13.4	12.9	12.0	11.9	13.5	13.4	19.1	21.5	25.0	26.5	25.1	22.6	20.2	15.0	10.5	07.5	05.6	15.4	
24	06.4	08.7	10.5	11.1	11.4	12.1	12.3	12.8	11.4	09.5	13.0	12.8	16.0	15.9	19.0	20.5	23.4	25.0	17.9	15.9	09.1	09.4	08.0	06.7	13.3	
25D	06.0	06.3	11.1	11.0	15.0	16.8	13.8	13.0	13.0	12.2	13.3	14.6	14.5	14.9	17.5	19.5	21.5	26.0	22.5	13.1	10.8	09.4	09.9	10.5	14.0	
26	08.1	09.3	10.5	18.8	15.5	12.5	14.5	12.4	12.1	11.6	12.0	12.0	16.0	17.4	22.2	25.2	25.3	22.5	19.9	16.6	16.5	12.5	09.5	10.6	15.1	
27	10.2	11.3	19.5	14.6	14.0	17.9	15.6	11.1	17.5	11.5	12.2	12.0	14.5	17.5	21.0	24.0	25.4	27.4	23.0	20.2	18.0	15.3	11.0	09.4	16.4	
28	08.7	14.0	13.5	13.5	11.7	11.9	17.3	15.6	13.4	12.5	10.6	08.8	13.5	17.0	20.6	23.0	24.0	25.8	20.6	15.9	12.5	09.5	08.0	08.0	14.6	
29Q	09.0	11.9	12.1	17.1	15.5	16.0	17.4	13.4	13.0	13.0	13.5	10.8	15.2	18.0	20.8	22.4	23.2	20.8	16.5	12.1	08.5	07.0	07.9	08.3	14.3	
30Q	08.2	10.0	12.9	12.6	12.2	12.4	12.9	12.5	12.8	13.0	13.8	14.3	15.8	18.9	21.5	23.3	23.4	21.1	15.0	11.0	09.5	08.6	07.5	08.2	13.8	
31	10.4	12.0	12.9	13.0	22.0	17.0	14.5	15.7	15.0	11.8	12.2	15.4	15.0	17.3	18.6	21.0	21.9	21.0	15.0	10.2	07.3	07.7	07.0	06.5	14.2	
Mean	08.8	10.3	12.2	14.2	15.4	14.8	15.5	14.5	13.7	13.1	13.2	13.5	15.8	17.9	21.1	23.6	24.3	25.5	22.7	17.5	13.6	10.5	08.9	08.3	15.4	

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

Table 21 Victoria

Z = 53,000 γ +

July 1959

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	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1 Q	427	425	425	423	416	410	411	409	407	405	406	409	411	413	415	407	410	404	396	394	400	406	414	428	411
2	427	442	455	459	456	447	436	415	398	399	407	410	411	410	407	399	403	402	395	394	395	402	404	403	416
3 Q	407	416	422	415	411	409	408	406	406	407	406	408	411	409	407	405	394	381	377	380	381	383	390	390	402
4	398	408	413	408	404	401	400	402	403	401	396	384	394	401	407	409	404	386	372	362	369	367	387	401	395
5	412	422	418	421	431	435	422	410	401	397	402	407	394	399	401	392	389	382	381	378	380	386	394	402	
6	396	406	416	410	405	405	403	405	403	389	385	392	395	387	390	398	398	395	391	382	373	377	385	394	395
7	405	418	422	419	409	403	401	401	395	356	365	366	385	390	396	404									
8	399	404	408	411	409	406	405	402	390	374	376	379	388	379	382	389	389	381	382	380	376	379	385	390	390
9	395	403	399	404	406	405	378	377	397	393	390	394	379	368	392	396	398	395	383	379	372	376	379	397	390
10	420	424	454	447	432	411	407	409	406	404	399	402	405	410	415	419	408	400	390	382	362	356	356	363	403
11	396	408	419	422	419	404	403	395	394	393	391	392	390	381	391	400	403	404	373	372	370	363	373	407	394
12	447	425	421	414	403	400	397	396	400	400	400	400	392	384	380	393	395	394	380	367	353	358	369	378	394
13 Q	388	400	402	397	393	390	390	391	381	386	393	398	396	385	380	373	375	376	374	370	369	379	390	391	386
14	402	403	418	431	428	405	396	398	383	380	374	376	380	370	368	389	397	393	389	376	372	373	376	383	390
15 D	407	436	462	475	461	421	404	405	378	211	206	456*	235*	220*	215*	211	-015*	-010*	229*	564	589	499	554	604	359
16 D	536	513	496	478	447	435	426	405	389	398	396	406	413	412	407	412	420	421	417	417	414	391	391	424	428
17 D	417	414	412	426	436	419	404	405	405	393	377	383	382	373	394	404	396	316	348	395	419	451	428	399	400
18 D	447	444	510	599	542	407	353	289	170	337	384	364	411	431	434	432	417	398	385	398	414	428	447	430	411
19	459	459	453	445	431	405	403	393	390	385	383	393	401	395	399	402	409	424	417	411	408	403	408	411	412
20	416	428	430	423	420	416	409	407	381	379	389	384	401	419	425	430	426	418	405	396	385	376	387	406	406
21	413	419	424	427	418	416	415	411	405	407	406	404	398	405	408	413	411	401	390	375	368	372	383	389	403
22	398	413	409	407	399	404	401	384	384	395	399	398	400	405	402	405	410	408	396	385	383	377	377	391	397
23	417	432	410	403	409	409	405	406	404	398	394	397	405	410	412	410	403	396	387	384	386	391	404	403	
24	419	426	427	419	415	417	420	426	426	417	403	408	413	414	407	408	409	406	401	399	405	419	432	414	
25 D	439	444	461	436	436	415	414	421	408	373	385	413	422	422	417	430	425	411	398	413	420	421	423	425	420
26	426	431	453	466	441	431	418	394	365	400	396	402	416	422	419	425	422	419	406	404	411	426	435	461	420
27	443	438	464	443	434	434	429	390	397	388	380	391	410	419	428	436	436	422	410	395	395	408	407	417	417
28	424	443	438	430	419	419	417	412	412	415	409	387	390	399	402	412	410	406	404	395	397	404	410	411	
29 Q	416	427	427	426	426	421	404	408	410	409	409	401	403	414	421	423	412	400	400	370	377	373	386	398	407
30 Q	405	414	419	415	410	406	405	404	405	405	405	407	409	411	412	410	404	391	382	375	377	378	379	384	400
31	393	398	402	400	401	392	400	405	407	390	359	383	396	395	402	409	407	401	394	389	391	379	376	391	394
Mean	419	425	432	432	425	413	406	399	390	387	386	396	395	395	398	402	393	385	386	393	393	392	399	410	402

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

Table 22 Victoria

 $H = 18,500 \gamma +$

August 1959

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	305	295	289	293	294	290	296	302	291	305	309	313	297	316	335	331	328	299	287	271	269	263	276	298	298	
2	307	269	306	291	275	291	271	277	295	303	299	300	307	309	306	300	292	268	279	280	283	280	277	290	290	
3	295	301	295	293	283	295	312	327	305	309	311	301	285	296	309	319	309	284	263	259	253	279	287	289	294	
4	289	289	295	289	293	297	302	309	306	317	285	294	291	300	291	313	302	274	274	269	269	279	267	267	290	
5	285	300	297	288	290	295	296	297	299	303	305	303	309	313	301	302	291	267	272	276	285	281	287	297	293	
6	301	299	289	298	308	293	306	307	319	311	315	313	303	320	331	327	303	253	263	268	284	281	298	302	300	
7	292	283	289	293	289	289	293	292	301	307	309	309	305	309	311	299	283	273	259	252	267	287	294	295	291	
8	291	295	297	299	303	305	303	301	299	292	299	305	313	315	314	299	308	284	269	260	257	267	283	284	293	
9	287	288	287	298	299	302	306	309	301	311	304	293	285	291	289	280	292	257	246	263	254	270	280	292	287	
10	301	299	315	270	289	290	295	299	299	303	303	305	303	311	313	305	298	295	274	267	265	265	270	293	293	
11	286	294	301	292	292	301	300	304	308	312	314	318	317	310	306	300	296	294	278	272	270	266	271	287	295	
12 Q	302	312	309	308	302	302	306	312	314	308	310	310	308	316	321	310	289	285	283	282	277	284	286	300	302	
13 Q	292	308	314	316	318	308	308	314	318	318	322	320	320	324	322	310	296	278	268	272	276	294	300	304	305	
14 Q	310	315	316	318	305	312	318	322	324	320	314	316	320	322	318	318	311	295	272	272	268	275	286	302	306	
15	302	322	318	310	321	320	325	326	333	317	319	325	324	322	316	311	316	295	286	282	294	308	279	311	312	
16 D	324	284	299	304	327	329	320	282	259	265	262	174*	087*	070*	192*	204	106*	187*	210	193	206	262	306	334	241	
17 D	459*	451*	444*	325*	238	244	247*	204*	210	152*	102*	196	188	183	195	212	183	236	272	254	224	247	260	289	251	
18	278	286	290	299	276	267	274	266	268	280	282	281	282	271	270	286	288	256	256	277	256	262	283	301	276	
19	307	320	288	301	296	260	278	258	273	282	286	287	286	290	298	292	296	260	240	254	261	266	268	282	280	
20 D	289	301	312	308	326	320	314	334	324	320	314	299	302	309	316	315	296	279	278	278	279	280	310	304		
21 D	280	297	303	303	284	303	301	299	313	300	307	300	303	299	295	287	269	257	240	255	269	264	280	297	288	
22	324	288	291	293	298	305	289	278	290	298	297	299	299	304	305	297	261	249	248	247	225	229	242	267	280	
23 D	304	295	304	299	300	289	286	292	298	306	300	301	302	300	295	293	287	262	259	244	248	261	253	294	286	
24	297	305	286	289	302	281	291	300	290	291	281	293	295	296	297	289	295	301	290	283	275	268	284	279	290	
25	301	295	299	304	290	301	299	310	306	317	307	305	299	301	299	290	283	275	257	245	256	267	270	275	290	
26	287	301	299	299	305	308	303	321	314	313	307	307	307	303	287	276	274	275	274	272	273	280	296			
27 Q	291	285	295	304	305	307	305	307	305	307	307	309	309	303	292	275	255	255	259	272	282	291	293			
28 Q	298	301	301	307	306	309	311	317	309	302	303	311	316	311	293	307	287	265	253	260	269	285	301	313	299	
29	322	321	308	306	311	317	309	302	303	311	316	311	293	307	299	289	307	275	259	245	253	275	287	301	297	
30	322	313	307	307	317	320	319	319	319	311	299	284	282	294	311	309	297	269	266	259	253	259	280	296	296	
31	305	301	308	298	305	307	309	311	305	287	286	284	291	299	307	300	286	259	234	227	238	263	273	281	286	
Mean	304	304	305	300	298	299	300	300	300	300	296	296	291	294	300	297	286	274	271	263	261	262	271	279	294	290

DECLINATION
Mean values for periods of sixty minutes, Universal Time

 $D = 22^\circ 45.0' E +$

August 1959

Table 23 Victoria

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
Hour U.T. Day	0 1	1 2	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24	
1	08.5	11.5	13.0	16.0	18.9	15.0	15.0	24.6	13.4	11.2	11.4	10.6	11.7	17.1	20.5	22.4	22.1	20.5	17.5	16.2	13.5	11.3	09.5	08.6	15.0
2	09.0	10.1	10.9	12.5	16.3	21.0	17.0	17.7	14.4	11.5	12.0	13.0	15.3	17.0	19.5	21.1	21.0	18.5	11.9	09.6	09.3	08.0	07.4	08.5	13.9
3	10.3	12.4	15.5	13.4	13.0	11.3	16.3	18.4	15.8	13.3	13.0	12.5	18.5	22.0	23.5	28.2	29.1	23.4	15.4	11.3	08.1	08.4	09.3	09.5	15.5
4	12.0	14.0	14.6	13.5	13.5	13.5	15.0	13.5	12.5	11.1	11.0	13.8	13.8	18.6	16.5	24.5	28.0	23.0	17.0	14.0	11.0	09.6	10.7	10.5	14.8
5	11.0	11.9	14.5	14.5	13.5	14.0	16.1	12.5	12.1	12.0	12.7	12.2	14.0	16.0	18.5	21.5	23.5	19.8	12.1	11.0	07.7	07.5	09.0	10.3	13.7
6	12.3	13.6	14.5	19.3	15.8	15.5	15.9	13.6	15.9	16.0	11.6	11.1	16.9	18.7	21.4	23.0	25.0	23.4	11.6	08.4	09.6	06.9	07.8	10.0	14.9
7	13.2	12.6	14.5	18.2	14.4	14.1	17.6	17.5	11.5	10.9	10.0	08.4	13.1	16.1	19.5	22.1	24.0	22.2	14.0	07.5	04.5	03.1	05.0	07.9	13.4
8	11.3	13.5	13.8	13.1	13.5	13.8	19.8	18.1	16.9	14.5	13.5	12.5	11.5	17.3	20.5	21.9	22.2	20.9	18.5	15.5	11.4	07.8	07.0	07.9	14.9
9	08.0	10.0	12.5	12.0	12.5	13.0	13.4	18.5	17.0	14.9	13.8	17.1	19.8	18.4	21.0	21.0	26.5	27.6	20.9	10.9	06.6	06.0	07.4	09.5	14.9
10	12.5	13.5	13.0	15.7	14.1	13.8	12.8	13.0	13.5	14.9	13.5	13.1	15.6	16.4	20.4	24.0	26.4	24.3	21.0	14.5	11.5	11.4	09.5	07.4	15.2
11	09.3	10.0	11.0	12.5	11.6	15.4	15.5	13.8	13.0	12.5	13.4	13.3	15.2	18.3	19.6	21.7	22.1	23.0	18.4	14.5	11.7	09.5	09.4	08.5	14.3
12 Q	10.5	11.4	12.4	13.2	13.5	12.4	12.0	11.6	13.2	14.8	13.9	14.5	14.5	18.9	22.1	25.5	26.5	23.6	19.0	12.8	09.5	08.5	08.2	07.5	14.6
13 Q	09.5	10.5	11.0	11.0	12.4	12.0	11.9	11.9	13.2	13.5	13.2	13.0	14.5	16.6	18.6	20.9	21.4	20.4	13.9	07.1	05.5	04.5	05.4	06.8	12.4
14 Q	09.5	10.5	11.5	11.6	11.0	11.5	12.2	12.5	13.0	14.5	15.0	14.9	16.0	17.5	20.9	22.5	20.1	18.8	14.5	09.5	08.4	06.0	05.6	06.5	13.1
15	10.3	11.0	13.4	11.7	11.0	11.0	11.0	11.7	11.8	14.8	15.4	15.0	16.1	18.0	19.0	20.0	23.0	22.7	14.9	11.4	07.0	03.2	03.0	02.9	12.9
16 D	03.1	10.6	12.0	10.6	07.9	07.0	19.6	20.0	17.5	22.0*	20.5	12.3	31.5*	03.0*	27.4	28.8	28.0	19.5	20.0	12.9	09.5	08.4	09.7	11.6	15.3
17 D	13.5	08.5	11.5*	25.0	25.5	16.6	38.4	18.0	24.1	15.6	25.3	17.6	14.0	14.0	24.0	20.5	22.6	26.0	25.0	19.0	15.5	13.0	14.3	11.0	19.1
18	12.5	13.5	17.8	27.0	21.0	16.3	18.0	19.0	16.1	12.5	13.0	13.4	16.1	18.1	19.4	20.8	24.3	27.2	18.4	13.4	11.6	08.0	06.5	08.6	16.4
19	11.5	11.2	11.9	18.5	15.8	15.9	15.1	12.9	12.5	11.2	12.0	14.0	15.5	18.3	22.0	23.5	24.5	25.5	21.7	12.6	09.5	08.0	08.5	08.8	15.0
20 D	10.5	11.5	10.5	12.1	17.5	08.5	08.0	09.1	12.2	13.0	14.4	17.8	19.5	20.8	25.5	26.5	28.4	24.5	19.9	17.1	12.8	08.9	08.0	06.4	15.1
21 D	07.6	08.5	10.7	10.5	08.9	12.7	19.0	16.0	12.9	07.5	13.1	15.6	16.3	17.0	18.5	19.6	22.2	19.2	20.2	16.3	12.0	09.5	07.0	06.9	13.7
22	08.8	10.6	12.0	14.5	13.9	17.9	20.0	17.5	14.6	12.5	11.5	12.0	13.5	14.6	18.0	22.4	28.0	25.1	21.4	17.3	13.0	08.0	05.7	04.0	14.9
23 D	03.7	10.3	10.0	10.5	13.5	14.5	13.5	13.0	12.6	11.5	08.1	10.0	15.0	14.3	16.1	18.5	25.4	24.0	19.0	17.0	12.2	08.9	06.5	06.1	13.1
24	09.0	09.0	12.5	11.5	14.6	16.0	14.0	14.3	11.1	16.8	12.5	11.1	13.4	15.5	16.5	18.0	21.5	20.5	17.8	13.9	11.5	10.0	07.4	07.5	13.6
25	08.0	10.5	11.0	12.5	17.1	17.1	13.4	10.3	11.6	14.0	08.9	12.5	15.0	16.8	19.4	20.1	17.5	20.6	20.9	16.5	13.4	11.0	09.6	07.9	14.0
26	09.6	09.5	11.0	11.0	12.5	14.1	15.5	12.5	12.0	12.1	14.0	15.0	16.0	17.4	19.9	22.1	23.9	22.5	18.0	15.5	13.5	12.0	11.0	09.6	14.6
27 Q	10.0	12.9	12.0	11.5	11.6	12.1	14.9	12.7	13.0	13.0	13.5	14.0	14.4	16.1	19.0	21.7	22.7	21.0	17.4	12.3	10.4	09.3	08.5	08.7	13.9
28 Q	10.4	12.0	12.4	12.3	12.5	12.8	14.0	13.5	13.1	13.8	14.3	14.5	15.0	16.5	18.4	20.0	22.0	21.0	17.5	12.1	08.6	06.5	06.1	07.1	13.6
29	09.1	11.0	11.5	12.8	13.5	13.0	12.5	13.6	14.3	14.0	12.9	07.5	10.3	12.5	09.5	20.1	23.0	19.0	14.1	10.5	11.4	09.9	11.8	14.0	13.0
30	13.0	14.1	13.0	13.0	14.4	13.0	11.4	09.5	08.5	05.0	05.1	06.1	08.5	15.3	20.5	20.5	23.6	21.4	22.1	14.9	12.6	11.6	10.6	11.9	13.3
31	13.8	14.4	14.4	12.5	12.0	11.5	12.0	12.5	14.0	15.5	13.5	18.0	14.5	19.4	22.6	23.0	21.5	21.0	18.0	13.6	11.0	09.6	09.0	10.4	14.9
Mean	10.0	11.4	12.6	14.0	14.1	13.8	15.5	14.6	13.8	13.2	13.1	13.1	15.3	16.5	19.9	22.1	23.9	22.3	17.8	13.2	10.4	08.5	08.2	08.5	14.4

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

Table 24 Victoria

z = 53,000 $\gamma +$

August 1959

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	411	419	419	427	420	408	410	386	379	395	399	400	397	404	416	424	421	406	400	392	386	389	395	409	405
2	426	418	447	457	461	434	399	416	408	426	423	423	426	426	426	427	426	411	404	397	397	395	399	410	420
3	419	427	439	448	437	427	422	362	377	407	410	407	384	391	386	397	406	401	389	381	390	406	413	414	406
4	418	423	426	423	420	419	419	408	411	400	370	394	370	395	384	393	406	393	392	401	413	417	419	425	406
5	429	432	427	419	417	418	417	417	418	418	418	418	422	424	420	416	412	402	396	388	383	385	397	403	412
6	416	423	419	423	423	421	417	409	411	396	411	406	391	410	417	414	412	398	393	390	393	402	411	418	409
7	432	425	430	432	423	420	417	417	418	417	414	395	403	419	424	422	417	408	397	386	389	404	411	422	414
8	424	424	424	419	418	418	417	415	404	398	387	397	392	417	425	426	426	424	412	406	407	409	418	431	414
9	436	439	434	422	416	416	417	419	397	408	403	377	389	382	379	366	395	398	394	391	400	414	420	421	406
10	420	418	441	440	437	430	425	420	421	423	424	425	426	428	426	420	412	406	402	396	402	399	404	419	419
11	427	437	444	438	428	423	410	414	415	416	416	418	419	422	421	418	414	411	405	387	388	392	401	410	416
12 Q	414	422	421	419	416	414	415	412	405	410	412	415	415	415	424	422	416	401	388	382	381	387	395	408	409
13 Q	409	413	415	411	411	411	409	407	407	409	408	410	412	412	407	401	387	376	374	375	384	392	401	402	
14 Q	409	414	415	415	408	408	409	407	406	405	408	408	411	412	411	408	404	399	384	378	380	382	390	400	403
15	406	418	425	415	410	409	405	404	406	409	413	411	410	410	411	402	388	373	368	368	372	382	392	417	401
16 D	425	418	414	406	410	416	427	354	386	322	357	305	164	168	266	294	306	347	398	401	425	469	567	590	376
17 D	596	613	616	493*	468	513	404	318	350	334	333	290	328	360	354	340	311	353	432	414	426	446	456	451	417
18	427	429	440	446	437	472	473	402	418	431	433	434	434	422	401	389	401	403	408	415	413	420	420	429	425
19	428	435	434	448	445	468	466	455	436	417	412	426	431	435	436	432	431	422	407	406	408	411	412	414	430
20 D	418	422	430	444	455	448	442	439	425	422	410	415	420	417	419	417	413	397	392	386	386	385	404	418	
21 D	409	425	429	425	425	427	417	417	410	367	374	391	408	414	414	407	396	396	402	413	422	428	443	411	
22	466	445	434	428	422	413	405	389	416	419	415	414	413	416	424	427	421	412	407	398	394	401	402	416	
23 D	415	421	420	419	426	429	442	419	410	399	385	389	383	399	401	408	415	412	409	398	399	405	413	437	411
24	445	442	440	436	433	431	421	374	392	402	409	410	419	422	413	418	416	408	399	395	397	403	408	415	
25	414	416	412	414	414	413	410	401	394	398	378	385	392	405	408	407	404	398	387	386	388	396	405	408	401
26	416	419	413	409	410	411	408	401	377	385	394	402	406	408	409	406	402	385	376	373	379	388	396	404	399
27 Q	414	423	418	414	410	409	409	408	404	406	407	409	408	411	410	408	403	391	377	373	376	383	392	402	403
28 Q	409	408	405	405	403	403	402	404	404	404	405	406	408	408	405	402	394	385	384	388	396	401	407	402	
29	410	404	398	401	404	404	402	403	405	406	407	407	408	413	410	418	423	405	393	400	406	412	414	421	407
30	421	412	402	403	405	404	403	403	401	403	402	409	422	429	431	413	392	391	392	395	401	410	414	407	
31	411	405	407	405	406	404	405	404	401	393	390	384	397	384	403	405	400	396	389	385	391	402	415	423	400
Mean	426	429	430	426	423	424	418	405	403	401	401	399	396	402	406	406	404	398	395	391	395	403	412	421	409

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

Table 25 Victoria

 $H = 18,500 \gamma +$

September 1959

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	289	298	285	283	293	292	285	277	290	289	283	293	300	301	301	281	271	267	252	241	227	247	259	282	279	
2	306	298	277	263	263	263	289	284	261	251	271	298	297	302	303	289	269	257	233	220	236	249	253	271	271	
3	279	280	291	287	284	288	287	293	304	296	292	305	313	310	312	301	285	239	221	273	270	271	252	304	285	
4 D	219	301	266	369*	264	279	248	232*	166*	176*	259	220	271	284	209	168	192	226	222	174	197	241	233	258	236	
5	269	261	263	264	272	265	282	307	290	287	291	287	282	273	291	279	256	233	214	215	232	251	240	258	265	
6	289	261	284	273	279	279	297	298	292	296	303	308	305	296	295	297	283	271	256	247	251	257	263	273	281	
7 Q	285	287	293	293	295	297	299	302	309	306	304	305	303	312	309	303	281	275	265	260	261	271	285	289	291	
8 Q	295	301	307	304	301	304	309	305	304	300	310	307	313	308	309	303	285	281	273	258	261	262	279	295	295	
9 Q	302	306	311	308	301	306	307	309	309	310	308	309	308	306	303	288	281	279	265	263	271	287	297	300	297	
10 Q	308	304	309	307	311	311	312	316	320	323	327	327	322	319	317	307	288	282	287	290	303	311	297	309		
11	305	307	308	309	293	303	307	316	314	317	315	311	305	310	317	297	281	270	271	276	285	295	309	317	302	
12	273	283	292	297	301	305	303	306	309	313	309	312	310	309	303	281	277	286	275	272	281	288	293	299	295	
13	299	297	305	307	307	307	309	312	319	316	317	317	317	316	313	306	295	283	283	288	295	312	283	275	303	
14	283	307	285	293	293	282	295	296	285	299	301*	307*	301*	299*	283*	291*	281*	273*	267*	271*	281*	269*	281*	299*	288*	
15	297	310	312	309	309	310	310	309	308	313	310	315	315	310	293	261	263	271	283	271	276	301	304	299		
16	311	307	288	283	289	297	302	301	305	307	311	314	316	310	295	285	287	281	275	277	277	289	301	311	297	
17	310	317	315	313	313	311	312	306	312	318	317	315	313	321	307	294	277	271	264	275	249	252	295	297	299	
18	303	292	303	296	299	303	306	303	309	326	305	316	312	306	295	291	283	277	249	269	285	293	287	286	296	
19	231	273	285	301	286	282	291	295	295	297	303	321	307	309	303	294	285	275	271	273	283	294	299	297	290	
20 D	295	299	289	300	277	271	256	277	277	285	281	281	241	231	328	307	295	259	249	233	217	241	247	264	271	
21 D	255	277	271	251	281	277	230	237	251	280	298	256	261	252	252	249	235	224	211	214	213	217	243	267	250	
22 D	282	283	245	263	271	271	301	343*	316	231	224	261	275	255	229	252	275	255	229	238	248	263	274	275	265	
23	280	287	289	290	297	300	283	293	281	285	283	283	295	295	291	259	260	259	221	201	211	251	264	261	272	
24	261	278	284	281	273	287	279	286	272	295	299	301	293	280	287	281	265	257	252	243	253	264	277	287	276	
25 D	289	284	277	273	263	275	274	269	257	272	289	282	297	279	284	273	243	253	248	253	245	267	267	279	270	
26	287	283	263	263	277	285	291	279	289	282	295	284	269	303	305	294	276	262	262	253	255	265	267*	277		
27	273*	279	283	291	297	285	301	287	283	295	292	287	294	303	293	291	269	281	260	253	262	281	277	285	283	
28	297	289	275	287	293	289	283	281	279	300	295	297	300	299	299	289	277	261	241	255	270	269	277	277	282	
29 Q	279	282	294	299	299	298	299	298	303	314	303	307	306	307	305	297	291	283	282	285	289	293	289	295	296	
30	304	296	301	301	303	303	302	300	303	317	305	298	298	305	303	300	293	280	257	247	261	276	282	286	293	
31																										
Mean	285	291	288	292	289	291	292	294	290	293	297	297	298	298	295	285	274	266	254	253	258	269	276	285	284	

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 26 Victoria

D = 22° 45.0' E +

September 1959

Hour U.T. Day	0 to 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	0 to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
1	12.5 14.3 11.1 13.9 13.1 13.9 15.1 16.0 16.0 15.9 14.5 11.4 13.7 17.4 21.1 18.8 18.1 14.9 13.0 10.5 06.6 05.5 07.0 10.6 13.5	
2	12.5 13.5 12.5 12.0 19.1 16.0 15.0 14.8 21.5 19.5 19.4 17.6 17.9 19.3 21.5 23.0 23.5 20.2 17.5 14.0 09.5 11.3 10.5 10.5 16.3	
3	12.5 14.0 13.4 12.9 14.9 13.3 15.0 13.8 13.4 19.4 18.5 14.5 14.9 16.9 17.5 18.6 19.5 17.5 08.1 04.3 07.0 08.6 12.0 08.4 13.7	
4 D	12.0 04.0 10.5 05.5* 21.5 20.7 29.1 23.8 17.5* 28.5 21.5 12.0 14.3 20.5 21.5 11.6 11.8 15.3 22.3 15.4 07.5 09.5 09.6 09.0 15.6	
5	11.6 12.2 18.2 11.9 12.9 15.5 18.4 13.4 09.9 13.7 15.5 15.5 14.0 11.5 20.0 23.4 24.5 23.5 19.4 14.1 11.5 10.0 10.5 09.4 15.0	
6	07.3 10.5 11.0 13.2 13.0 16.9 15.0 12.4 11.5 13.8 12.5 14.0 13.5 13.2 17.0 20.6 22.5 22.0 18.8 15.2 12.0 09.6 08.8 09.0 13.9	
7 Q	10.4 12.1 12.6 13.1 14.0 14.5 13.5 13.5 13.5 14.0 14.5 14.5 15.9 16.7 18.8 21.5 22.5 19.9 20.0 16.4 12.5 09.8 08.0 08.9 14.6	
8 Q	09.9 11.1 12.5 13.2 13.0 13.5 15.4 16.5 14.0 12.8 10.9 13.3 14.5 17.5 20.3 21.5 23.6 22.8 16.5 12.0 11.5 10.8 09.6 10.0 14.4	
9 Q	10.0 11.0 12.0 12.1 12.5 12.7 13.1 13.4 13.5 14.1 15.8 15.3 16.0 17.5 19.3 21.0 20.6 20.0 16.5 13.0 10.5 09.5 09.6 11.1 14.2	
10 Q	10.1 11.0 11.0 11.5 11.8 12.3 13.1 13.5 13.5 14.3 15.1 16.0 16.0 17.1 19.3 20.3 21.5 21.9 17.4 13.9 11.1 08.4 07.0 09.5 14.0	
11	10.6 11.0 09.7 08.8 11.9 11.0 12.3 13.5 14.0 15.2 15.9 14.0 16.5 18.8 21.8 20.4 19.1 17.9 15.7 12.9 10.0 09.0 09.7 09.0 13.7	
12	08.6 08.9 11.6 13.0 12.0 11.6 12.6 13.2 15.0 14.3 16.5 13.8 15.0 16.5 17.9 17.1 14.5 14.4 13.6 12.9 13.0 12.5 12.0 10.9 13.4	
13	10.7 11.3 11.0 11.4 12.0 13.0 14.5 14.5 14.6 14.4 15.4 15.5 15.9 16.9 19.0 20.3 21.0 20.6 17.0 12.5 09.8 08.5 08.7 08.0 14.0	
14	10.1 09.0 09.8 10.5 09.5 12.0 12.5 23.8 17.5 13.5 13.3 11.3* 12.7* 14.6* 18.9* 16.5* 19.6* 15.3* 11.7* 08.2* 08.0* 07.8* 09.5* 09.0* 12.5*	
15	11.0 10.8 11.1 11.7 12.1 12.0 12.0 14.5 16.3 14.0 14.8 16.7 15.2 19.2 20.4 21.5 21.0 14.5 11.1 09.3 09.1 07.8 10.2 11.0 13.6	
16	10.6 09.6 09.5 05.6 14.1 14.5 11.8 11.5 12.4 13.5 14.5 15.0 15.0 16.5 17.8 16.7 18.4 18.2 15.7 13.2 11.6 10.5 10.0 10.2 13.2	
17	13.0 12.1 12.0 12.0 11.6 13.4 14.0 13.0 13.9 14.6 16.9 20.9 19.0 19.4 21.1 20.9 21.1 21.7 18.2 12.0 12.0 03.4 05.5 09.5 14.6	
18	08.9 10.1 11.0 11.1 12.0 12.6 13.0 13.1 14.5 15.5 12.6 17.5 19.5 15.1 16.0 18.4 20.1 18.2 12.8 06.5 09.0 08.5 05.9 07.4 12.9	
19	07.0 06.0 11.9 14.5 21.7 13.9 11.5 12.0 12.7 14.0 14.5 16.6 19.0 18.0 19.1 18.0 19.5 17.9 14.7 11.5 09.9 09.0 08.7 10.6 13.8	
20 D	12.9 14.0 15.1 15.0 16.5 23.0 20.0 14.2 16.0 17.4 18.5 19.5 19.5 13.5 16.1 15.7 19.7 13.4 09.1 08.5 09.0 08.3 11.0 11.0 14.9	
21 D	15.0 16.8 22.0 14.5 15.0 14.5 20.9 21.0 13.5 18.0 18.5 10.1 12.5 12.9 17.0 15.5 22.0 23.0 20.0 15.9 12.5 10.6 10.1 11.0 15.9	
22 D	08.8 08.0 14.0 11.0 17.0 23.5 31.0* 36.5* 09.0* 15.0* 15.1 14.9 16.7 21.0 14.1 21.0 21.4 21.5 19.0 15.5 13.3 12.6 13.0 13.7 16.9	
23	14.4 14.1 13.5 13.5 20.8 15.5 14.5 15.9 18.4 18.5 17.6 12.5 17.6 19.1 19.5 18.3 13.1 16.0 14.0 08.5 06.0 06.5 07.1 10.5 14.4	
24	12.6 13.0 14.1 11.5 18.6 19.5 15.0 15.7 10.4 16.4 15.0 14.9 12.5 09.0 21.6 20.6 19.9 21.4 16.8 14.8 12.5 11.5 12.0 11.5 15.0	
25 D	11.0 16.5 13.3 11.5 14.7 12.5 15.6 19.5 22.0 19.5 21.5 19.6 15.1 12.5 14.4 12.1 13.2 09.0 10.7 11.6 11.1 11.6 13.1 12.4 14.3	
26	12.0 10.6 14.0 12.8 15.5 14.0 15.0 13.0 22.0 22.5 18.6 17.9 11.5 18.5 19.6 20.1 18.5 16.7 16.5 14.9 13.5 11.9 11.0 11.0* 15.5	
27	09.5* 10.0 10.6 12.1 12.5 13.5 20.5 14.7 18.1 12.5 11.9 17.5 21.4 16.6 14.0 16.9 13.5 18.1 17.0 15.5 12.9 11.3 11.5 12.4 14.4	
28	11.0 11.6 13.0 12.4 13.0 13.9 15.3 15.8 12.6 20.1 18.3 15.6 13.6 15.5 16.6 18.5 21.0 18.6 12.5 11.7 12.0 10.5 09.9 10.9 14.3	
29 Q	10.3 12.0 14.6 13.1 12.8 12.3 12.9 13.6 14.4 19.0 18.2 16.5 13.0 11.4 13.8 18.3 18.1 16.9 15.7 15.1 14.6 13.5 12.8 12.3 14.4	
30	11.1 12.0 11.6 12.1 12.5 12.5 12.8 13.6 14.5 15.1 23.5 20.0 13.0 11.8 11.2 14.0 15.9 15.7 17.0 12.9 08.5 08.5 09.4 10.5 13.3	
31		
Mean	10.9 11.4 12.6 11.9 14.4 14.6 15.7 15.8 14.9 16.3 16.3 15.5 15.5 16.1 18.0 18.7 19.3 18.2 15.6 12.4 10.6 09.6 09.8 10.3 14.3	

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

Table 27 Victoria

	$Z = 53,000 \gamma +$																								September 1959	
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	425	428	430	431	424	421	415	410	418	412	406	381	398	400	403	402	375	374	382	393	403	409	412	412	407	
2	424	436	447	456	473	453	388	393	364	338	389	416	423	425	425	421	410	407	407	408	420	421	421	428	416	
3	428	430	426	419	418	418	420	421	402	372	385	396	402	407	416	408	401	393	383	400	395	406	413	451	409	
4 D	460	496	514	603	510	490	482	418	170	238	392	371	392	424	381	303	314	363	406	411	426	451	470	487	416	
5	481	477	488	452	442	444	433	395	389	377	401	414	409	388	392	410	408	406	404	409	413	415	430	453	422	
6	464	448	446	438	435	434	421	406	396	408	410	412	416	414	415	419	420	416	411	401	399	403	407	413	419	
7 Q	414	416	415	413	413	413	412	413	416	413	408	408	408	411	410	410	406	398	388	385	394	400	403	405	407	
8 Q	406	408	410	411	411	411	412	408	412	408	395	401	400	400	403	409	407	410	403	399	399	403	406	413	406	
9 Q	411	410	411	411	408	408	407	408	409	410	410	411	409	409	410	403	397	391	391	388	387	391	395	403	404	
10 Q	395	403	404	404	404	406	407	407	408	409	408	407	407	406	409	411	406	400	399	396	394	396	394	390	403	
11	393	394	400	407	416	408	411	408	401	394	388	373	362	376	383	391	395	391	391	391	393	395	395	399	394	
12	397	403	421	416	407	403	404	404	402	399	393	398	395	398	400	394	392	393	389	388	387	394	395	397	399	
13	398	400	402	399	398	398	398	397	394	394	395	396	396	396	396	396	393	386	376	373	370	373	381	390	391	
14	392	401	398	401	409	423	418	408	403	410	406	396*	388*	395*	386*	383*	379*	376*	381*	386*	393*	393*	402*	404*	397	
15	400	402	402	399	399	399	405	407	398	403	401	398	398	395	397	391	379	376	374	379	379	397	402	400	395	
16	402	412	416	434	439	423	418	412	409	406	404	403	403	403	402	395	391	393	387	387	389	393	394	401	405	
17	402	403	400	401	403	407	408	412	412	408	391	394	401	405	403	402	407	399	384	382	372	383	395	395	399	
18	398	395	401	397	398	398	401	404	403	377	350	369	378	378	371	377	378	372	364	374	380	384	391	407	385	
19	404	425	426	421	417	427	416	402	399	399	396	391	384	394	393	396	395	394	388	386	390	395	392	394	401	
20 D	395	398	394	395	396	388	393	373	353	373	360	310	245	205	284	316	356	363	355	366	385	415	429	445	362	
21 D	447	447	452	459	452	388	371	399	296	363	374	319	330	313	352	352	354	395	403	407	406	412	418	426	389	
22 D	424	429	476	473	513	505	476	302	294	274	290	341	368	380	355	366	380	382	383	399	410	414	411	411	394	
23	404	404	404	402	404	396	400	397	377	383	391	374	380	392	385	371	368	377	383	389	399	416	426	430	394	
24	423	418	426	422	427	411	409	409	382	386	401	401	378	299	315	373	388	391	393	395	403	412	410	415	395	
25 D	421	446	430	436	433	410	396	409	400	382	361	357	375	352	331	329	334	348	374	389	401	411	427	429	391	
26	418	419	422	423	421	415	404	384	381	386	392	368	319	364	393	401	401	399	396	397	399	407	413	418*	398	
27	417*	420	415	409	413	408	383	395	394	352	356	364	363	337	360	363	384	392	397	405	407	406	408	389		
28	409	410	413	413	411	412	411	405	382	383	395	399	397	397	394	399	401	401	397	393	390	394	400	406	400	
29 Q	406	409	411	407	405	401	400	402	403	387	389	395	391	388	381	385	390	391	395	397	400	403	399	396	397	
30	397	398	398	398	398	399	400	401	402	395	373	376	386	374	369	369	375	378	382	379	379	386	393	400	388	
31																										
Mean	415	420	423	425	423	417	411	400	382	381	387	385	383	381	384	385	386	388	389	391	395	403	408	414	399	

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

Table 28 Victoria

 $H = 18,500 \gamma +$

October 1959

Hour U.T. Day	0 to 1 1	1 to 2 2	2 to 3 3	3 to 4 4	4 to 5 5	5 to 6 6	6 to 7 7	7 to 8 8	8 to 9 9	9 to 10 10	10 to 11 11	11 to 12 12	12 to 13 13	13 to 14 14	14 to 15 15	15 to 16 16	16 to 17 17	17 to 18 18	18 to 19 19	19 to 20 20	20 to 21 21	21 to 22 22	22 to 23 23	23 to 24 24	Mean
1 D	287	279	281	277	270	283	263	317	271	277	253	264	261	283	273	261	283	276	248	232	245	252	267	287	270
2	291	282	281	290	267	254	275	279	309	303	303	307	313	311	309	309	310	307	301	298	299	303	301	304	296
3 D	305	305	301	301	303	287	279	259	284	289	291	292	300	299	279	261	246	231	239	238	233	233	238	254	273
4 D	265	269	261	255	250	249	264	267	303	265	265	255	255	231	295	295	283	275	261	232	219	243	269	263	262
5	270	279	261	262	263	269	285	283	284	289	299	285	287	308	303	301	302	268	283	268	248	251	270	279	279
6 D	251	273	280	296	291	265	241	243	237*	232*	227	266	251	275	291	272	263	285	287	264	236	252	277	281*	264
7	288	287	289	274	279	292	299	294	295	291	290	291	304	299	303	297	291	281	272	261	256	257	279	285	
8	285	299	294	300	292	299	302	306	305	305	311	310	309	308	302	289	288	283	273	264	263	269	277	289	293
9	298	297	302	304	307	311	304	294	302	305	311	315	315	313	306	300	294	285	270	273	286	294	298	300	
10 Q	299	302	303	308	306	307	307	305	311	315	318	319	320	318	316	310	306	296	293	301	304	300	296	296	306
11 Q	302	313	315	316	316	314	314	315	315	317	318	321	323	322	319	308	300	297	295	296	295	294	294	299	309
12	308	314	317	319	318	318	318	320	322	324	327	328	326	326	321	312	304	305	292	282	280	292	294	298	311
13 Q	301	311	317	318	318	318	315	318	320	324	327	332	331	326	321	314	306	300	297	299	308	310	309	310	315
14	307	310	316	316	318	319	319	320	321	321	322	332	329	329	324	314	303	290	275	278	296	305	310	305	312
15	298	300	306	311	301	307	305	310	306	315	323	317	313	311	314	305	292	278	267	264	271	267	281	294	298
16 Q	301	300	307	309	310	311	313	312	314	316	316	317	319	318	320	309	303	297	286	282	286	299	303	310	307
17	316	322	327	328	328	325	322	318	324	328	328	324	324	328	324	316	302	297	293	282	292	298	302	310	315
18	301	295	274	293	291	301	304	308	318	308	287	303	297	302	300	297	275	276	270	254	247	250	270	276	287
19	291	301	298	298	313	298	298	300	302	300	308	305	306	306	307	302	296	283	264	268	273	278	291	288	295
20	288	310	313	313	311	308	297	304	293	304	308	308	311	310	305	294	283	274	273	281	287	293	297	299	
21	302	309	313	312	311	311	311	313	315	317	320	320	320	320	323	322	314	305	295	292	291	298	289	294	309
22	300	305	304	305	306	295	295	288	294	294	300	299	304	294	282	288	267	290	279	264	266	270	282	270	289
23	278	272	269	274	283	294	298	294	291	288	291	304	311	311	306	296	287	279	276	272	272	279	286	288	
24	294	302	306	306	308	308	311	311	308	315	317	320	317	322	330	325	317	308	298	288	286	283	292	286	307
25	290	291	288	285	280	290	285	288	296	282	279	322	300	313	321	309	297	300	298	291	284	288	281	262	292
26	276	283	294	299	288	282	281	282	295	314	298	311	315	298	282	298	298	302	292	285	290	282	279	287	292
27	293	295	294	292	289	302	298	288	282	278	296	300	307	306	299	302	299	291	288	285	285	288	296	300	294
28 Q	304*	307	308	310	309	310	304	317	321	315	317	320	322	321	320	317	310	303	290	281	282	290	299	308	308
29	312	314	315	312	311	310	310	309	315	315	315	322	324	322	319	316	308	297	293	293	299	308	321	312	
30	331	303	276	293	321	319	310	308	314	327	330	329	331	326	322	321	321	313	308	288	281	270	266	260	307
31 D	300	294	293	290	284	286	286	295	281	281	286	244	267	312	297	288	279	269	250	251	222	222	248	262	274
Mean	295	298	297	299	298	298	297	299	301	302	302	306	307	309	308	303	296	290	282	274	273	277	284	289	295

DECLINATION
Mean values for periods of sixty minutes, Universal Time

Table 29 Victoria

		D = 22° 45.0' E +																									
		October 1959																									
Hour U.T. Day	0 to 1 2	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
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1 D	11.0	13.0	12.9	12.3	08.8	16.6	20.5	22.1	19.5	20.0	24.9	34.7	25.8	20.5	12.1	10.6	16.4	17.5	13.9	12.5	10.6	11.5	11.6	13.1	16.3		
2	12.5	13.0	12.4	12.7	19.0	21.0	18.5	17.5	15.9	17.9	16.7	17.0	14.1	17.0	19.1	20.4	21.0	19.0	19.0	16.2	13.5	11.3	11.5	11.2	16.1		
3 D	11.3	11.5	12.2	12.5	12.0	14.4	17.4	11.1	17.4	18.3	16.1	15.6	23.5	24.0	21.5	09.0	13.4	03.5	06.0	09.9	12.7	11.5	10.5	12.5	13.7		
4 D	13.4	07.5	08.2	11.5	29.0	14.9	14.7	17.2	23.1	23.0	13.9	11.4	08.9	09.5	16.1	17.0	16.5	17.4	17.6	16.1	11.2	09.8	10.1	11.0	14.5		
5	09.5	11.5	13.1	12.2	14.5	14.8	14.0	14.3	14.9	16.0	16.0	17.5	17.4	19.1	17.5	13.0	13.5	15.0	10.4	12.0	10.9	11.6	11.5	12.2	13.8		
6 D	11.7	12.0	13.5	16.8	14.9	14.9	20.0	22.0	19.5	22.6	33.4	22.9	12.0	13.5	14.1	15.3	16.6	16.2	16.6	17.5	15.5	14.0	13.5	13.5	16.8		
7	13.4	13.9	13.5	16.0	14.9	19.0	15.1	15.6	15.6	14.0	14.6	11.5	15.4	14.9	18.0	20.5	22.0	21.9	19.2	16.3	14.0	12.0	12.0	09.9	15.5		
8	10.3	11.6	15.4	13.3	14.9	14.3	13.1	13.3	13.4	13.5	10.1	14.3	14.0	14.9	15.7	14.9	16.8	17.5	17.5	16.4	14.6	12.5	11.2	10.3	13.9		
9	10.8	11.7	12.3	13.1	13.0	13.1	14.0	14.3	16.2	14.9	14.5	14.9	14.8	15.3	15.8	16.8	16.8	18.2	16.8	15.4	12.1	10.3	10.0	10.0	14.0		
10 Q	10.1	10.1	11.4	12.2	12.5	13.1	13.0	13.0	14.0	14.0	14.0	14.5	14.2	14.5	15.4	16.5	19.2	20.0	16.5	13.5	12.5	12.0	11.1	10.9	13.7		
11 Q	10.8	10.8	11.5	11.6	12.0	12.4	12.3	13.1	13.4	13.6	14.0	14.0	14.0	15.0	16.0	17.5	18.0	16.4	14.0	11.8	10.5	09.6	09.9	09.8	13.0		
12	09.6	10.5	11.1	12.0	12.5	12.9	13.0	13.2	13.5	13.8	14.1	14.4	14.8	15.4	16.5	18.4	20.6	17.8	17.9	16.4	11.5	09.6	11.0	10.8	13.8		
13 Q	10.7	11.0	11.5	11.7	12.0	12.5	12.5	12.0	13.0	13.5	14.2	14.5	14.5	15.0	15.6	16.4	17.5	17.7	16.2	12.8	10.7	11.0	11.8	11.9	13.3		
14	12.2	11.3	11.7	12.6	13.0	13.0	13.0	14.5	13.5	15.0	17.8	19.0	18.1	18.5	16.5	18.0	18.2	19.0	15.6	11.5	09.4	09.0	09.2	08.9	14.1		
15	08.0	08.1	10.8	12.7	12.9	13.2	14.4	15.1	15.5	14.0	14.7	13.2	14.0	10.3	15.8	16.0	17.9	19.3	17.3	14.5	12.3	11.8	10.0	11.5	13.5		
16 Q	10.8	11.5	12.5	12.7	13.0	12.9	12.8	13.0	13.3	13.9	14.5	14.5	14.5	15.1	16.1	17.8	18.5	19.0	18.3	15.0	12.4	11.5	11.7	11.3	14.0		
17	11.5	11.5	11.8	12.0	12.5	12.5	12.2	12.9	14.0	16.7	17.8	18.2	17.5	17.2	18.1	17.5	19.4	20.2	16.2	12.5	09.0	08.0	07.5	09.6	14.0		
18	08.6	06.5	09.5	13.0	13.5	13.1	14.0	14.1	18.9	08.4	06.3	20.9	15.5	12.6	15.1	18.5	19.0	15.5	13.5	11.2	08.6	08.3	08.0	09.4	12.6		
19	11.9	12.3	12.4	12.8	17.5	13.6	13.3	13.2	13.5	15.3	10.1	13.4	14.1	13.9	15.4	17.6	19.3	20.5	18.7	16.5	13.6	11.7	10.5	10.3	14.2		
20	12.2*	12.0	12.6	12.9	13.1	12.5	14.8	10.1	18.5	16.4	15.3	13.5	13.9	14.8	15.8	16.7	18.0	19.5	18.5	15.0	12.2	11.7	12.0	12.2	14.3		
21	11.5	12.1	12.7	13.2	13.3	13.4	13.0	13.1	13.2	13.4	13.0	13.7	14.0	15.0	16.9	17.3	17.8	17.0	14.7	11.5	09.4	11.1	11.3	13.5			
22	11.3*	11.5	13.2	12.7	12.7	12.5	14.9	18.8	17.9	20.7	21.4	19.9	13.4	09.2	05.0	07.1	09.9	12.3	14.1	14.0	10.4	10.4	09.5	08.5	13.0		
23	11.3	11.6	12.3	14.5	13.5	14.2	13.8	15.7	20.5	21.0	16.3	17.3	15.2	14.2	15.0	15.6	16.3	17.0	16.3	15.2	14.0	13.1	12.3	11.5	14.9		
24	11.7	12.3	12.9	12.8	13.3	13.3	13.5	13.1	12.3	15.9	15.3	14.0	12.8	10.3	14.5	17.2	17.2	18.2	16.5	14.8	13.5	12.3	11.1	11.7	13.8		
25	11.2	10.6	11.0	13.8	13.4	13.4	15.5	16.5	18.0	15.3	12.5	22.5	19.0	10.6	13.7	14.3	10.4	14.2	15.3	14.0	13.4	12.5	11.8	12.0	14.0		
26	10.2	11.6	12.7	13.1	14.4	14.7	16.3	19.2	19.9	23.3	21.2	14.4	16.5	14.2	05.1	04.2	04.5	11.6	17.0	15.4	15.0	14.4	14.0	13.7	14.0		
27	12.6	12.6	12.6	13.4	16.6	18.4	16.3	17.1	23.2	20.7	15.4	13.8	14.0	15.4	14.9	16.3	18.7	19.2	18.4	11.8	15.0	13.5	12.8	13.4	15.7		
28 Q	13.1	12.7	13.0	13.1	13.2	13.2	14.4	14.5	14.4	16.3	15.8	15.4	15.4	15.3	16.0	17.5	18.1	19.5	20.0	17.5	15.2	13.0	12.4	11.9	15.0		
29	12.4	12.2	12.6	12.9	13.0	14.6	14.6	14.5	14.7	14.8	14.7	13.5	13.8	15.1	15.4	15.2	17.3	18.2	17.1	15.1	13.2	12.4	12.3	11.7	14.2		
30	10.9	10.6	10.5	13.8	12.9	12.6	13.1	13.0	12.8	13.7	14.2	15.3	15.6	16.0	15.3	16.5	17.2	17.5	13.0	13.1	12.0	08.8	06.9	08.0	13.1		
31 D	10.3	12.3	14.2	14.3	13.9	13.3	13.7	17.0	18.7	17.8	21.5	14.0	18.5	21.0	11.0	08.0	09.2	14.9	11.2	10.8	11.9	11.5	11.4	11.3	13.8		
Mean	11.2	11.3	12.2	13.0	14.1	14.1	14.6	15.0	16.2	16.4	16.0	16.2	15.4	15.0	15.1	15.4	16.6	17.1	16.0	14.2	12.4	11.3	11.0	11.1	14.2		

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

Table 30 Victoria

z = 53,000 γ +

October 1959

Hour U.T. Day	0 to 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	0 to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
1 D	402 407 409 420 446 435 437 340 379 390 348 297 325 360 365 353 380 396 399 398 410 412 415 412 389	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
2	411 407 403 406 426 443 435 431 398 381 405 403 398 400 404 408 407 402 395 391 384 386 389 390 404	
3 D	389 391 394 396 400 412 429 410 368 411 412 397 381 381 370 359 358 356 361 380 408 439 457 480 397	
4 D	468 458 473 517 476 453 438 429 378 351 360 342 293 257 338 377 387 397 404 397 402 413 420 419 402	
5	418 422 432 455 466 458 439 427 422 410 387 390 368 355 376 384 391 386 396 398 401 423 426 433 411	
6 D	426 428 440 440 455 471 410 406 339 273 347 388 348 359 373 383 392 412 417 417 421 431 432 436* 402	
7	420 416 416 418 423 421 413 414 416 413 403 393 405 408 410 413 412 406 397 394 398 399 409 396 409	
8	415 419 415 425 420 421 419 419 418 415 403 406 411 411 409 413 409 406 406 406 406 406 409 413 413	
9	416 418 419 417 415 414 413 411 409 411 412 412 411 411 414 415 412 407 404 403 404 409 410 412	
10 Q	411 414 413 413 414 415 415 415 415 412 411 411 412 414 414 415 409 402 398 403 405 406 406 411	
11 Q	408 413 415 413 412 410 412 413 412 412 411 411 411 409 409 410 407 404 397 393 393 393 399 402 403 407	
12	405 407 410 410 408 407 408 408 407 407 407 405 405 407 408 409 409 406 399 390 388 391 395 399 404	
13 Q	403 406 410 410 409 410 411 413 410 410 409 409 409 407 406 407 410 411 409 405 400 398 399 401 402 407	
14	402 405 409 409 410 409 409 408 410 410 404 397 392 392 397 400 403 401 394 392 398 402 404 404 402	
15	407 410 418 421 424 425 421 418 418 415 403 399 400 403 403 411 414 409 407 404 407 412 407 408 411	
16 Q	408 409 413 413 412 412 412 412 411 410 409 409 409 409 411 414 413 408 402 397 399 402 402 408	
17	402 406 407 407 406 406 407 409 404 395 374 390 398 396 402 406 405 402 397 385 386 396 398 406 400	
18	405 413 437 435 428 421 417 413 401 352 334 390 398 393 391 403 405 410 408 399 400 411 420 420 404	
19	418 421 420 426 419 421 420 420 415 413 400 399 408 409 413 415 415 410 401 399 400 404 408 411	
20	409 411 409 407 405 407 408 395 400 407 405 404 404 405 404 407 410 408 400 395 393 391 395 400 403	
21	403 405 405 403 403 403 404 404 404 403 403 402 401 401 403 407 409 404 395 393 395 394 399 402	
22	405 407 406 406 405 405 407 397 401 391 381 355 349 361 353 361 377 383 392 396 403 410 419 419 391	
23	426 427 434 437 435 428 419 415 409 396 388 386 399 405 406 408 409 409 406 402 400 403 406 407 411	
24	408 411 410 408 407 407 407 405 395 400 403 395 383 383 394 401 400 397 393 390 392 399 399 399	
25	403 407 411 423 429 423 422 416 420 407 352 357 355 373 385 394 398 399 397 399 399 403 407 411 399	
26	418 419 419 415 419 423 434 425 412 389 380 397 391 384 363 332 345 374 388 395 400 407 412 415 398	
27	412 411 415 415 415 405 407 408 399 395 396 397 399 397 400 407 406 405 405 401 399 400 404 407 404	
28 Q	405 406 407 407 407 407 409 405 397 400 402 402 402 402 404 405 406 403 397 391 394 398 393 395 402	
29	398 399 401 402 402 404 402 404 402 400 399 398 396 395 400 404 405 401 394 390 390 392 393 397 399	
30	397 397 407 427 416 408 404 401 401 400 399 397 396 394 395 398 401 400 393 387 391 393 400 412 401	
31 D	413 414 409 407 406 407 408 407 403 384 382 319 268 329 340 332 355 370 375 380 387 400 423 425 381	
Mean	411 412 416 420 420 419 416 416 410 402 396 391 389 385 387 392 395 399 400 398 396 398 404 411 403	

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

Table 31 Victoria

 $H = 18,500 \gamma +$

November 1959

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 D	279	280	270	281	264	246	262	292	240	268	264	280	241	248	290	282	268	266	274	267	255	275	270	269	268	
2 D	272	262	249	244	244	259	252	284	256	277	266	264	224	290	284	287	274	238	239	254	254	243	266	261	260	
3 D	272	272	277	292	280	277	306	272	267	276	282	300	296	270	268	248	256	237	218	235	231	242	246	265	266	
4	284	289	293	294	293	287	288	291	278	284	288	284	305	284	278	272	287	286	268	198	200	233	262	262	274	
5	277	273	264	283	298	288	283	270	262	280	262	270	292	286	284	290	278	273	265	260	260	271	284	292	277	
6	294	273	266	287	291	292	310	284	295	298	305	308	316	306	304	292	276	264	254	246	246	234	267	286	283	
7	297	302	303	300	288	299	305	306	306	309	306	306	304	309	312	304	305	288	262	251	236	262	280	305	294	
8	306	310	309	283	288	288	302	302	302	306	300	314	314	302	294	318	314	294	273	280	274	278	286	294	297	
9	299	304	306	315	316	313	310	315	318	318	318	318	319	322	326	322	320	308	304	290	278	273	285	293	308	
10	294	300	310	312	312	311	309	309	315	314	313	315	316	317	316	316	314	313	304	289	279	273	274	294	305	
11 Q	301	302	305	306	308	309	310	310	310	310	316	316	316	315	313	310	303	295	288	280	278	285	295	304		
12 Q																										
13	304	313	314	314	313	310	301	300	308	314	320	327	332	330	328	328	329	320	314	306	300	302	302	306	314	
14	316	312	300	287	301	302	299	311	324	316	310	285	292	310	303	286	283	282	290	278	269	272	282	290	296	
15 Q	292	298	300	302	304	304	303	304	305	306	306	308	310	310	306	298	286	276	270	272	280	288	298	297		
16	306	310	312	312	311	311	312	315	315	317	316	316	317	319	314	315	306	278	279	269	265	270	280	290	302	
17	296	297	291	287	272	282	296	303	305	304	303	310	304	312	305	300	290	284	282	281	278	285	292	290	294	
18	293	295	292	287	283	288	291	284	281	294	295	306	311	314	306	307	300	278	248	265	279	276	286	294	290	
19	301	304	306	306	300	294	300	285	282	288	295	300	303	314	305	306	306	292	278	269	272	277	283	292	294	
20 Q	298	290	292	302	300	298	296	301	304	306	310	311	312	313	312	310	305	299	294	285	278	284	294	304	300	
21	307	309	310	300	294	300	298	304	297	313	305	303	308	320	314	300	289	282	265	249	256	266	280	284	294	
22	277	280	280	268	288	290	291	288	294	294	297	292	307	318	317	319	314	298	282	273	276	278	288	291	292	
23	294	277	270	279	268	248	268	251	272	261	279	282	289	271	254	296	292	280	269	249	246	273	284	290	273	
24 Q	292	292	287	292	295	292	297	300	302	302	304	306	307	303	304	308	302	294	283	275	270	272	284	290	294	
25	292	296	301	302	300	300	297	297	296	292	294	301	305	312	312	314	308	302	290	275	267	270	276	296		
26	287	294	290	288	284	283	282	304	287	290	292	288	296	303	304	305	300	300	296	291	287	284	278	284	292	
27	291	296	296	299	302	300	289	284	292	295	296	295	300	296	298	296	297	291	284	270	273	278	280	297	291	
28 D	304	327	328	333	388	432	212	234	226	244	052	214	236	254	266	268	272	269	256	238	232	235	244	246	263	
29	249	250	250	258	263	267	269	268	268	269	270	254	256	262	270	290	287	283	251	244	245	254	263	271	263	
30 D	282	280	274	273	276	284	285	278	281	264	276	260	259	267	261	269	256	230	239	238	246	247	260	265	265	
31																										
Mean	292	293	291	293	294	295	290	291	289	293	288	294	296	299	298	299	295	284	274	265	262	268	278	282	288	

DECLINATION

Mean values for periods of sixty minutes, Universal Time

Table 32 Victoria

D = 22° 45.0' E +

November 1959

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 D	11.3	12.2	15.2	14.6	15.2	22.5	16.5	21.9	22.0	22.0	25.2	24.0	11.9	17.0	09.0	08.1	10.0	08.6	12.5	13.0	12.5	15.5	17.0	17.0	15.6	
2 D	17.8	16.5	16.5	20.5	19.1	20.3	23.5	28.5	33.9	19.5	14.0	13.4	04.6	07.5	14.2	07.5	03.5	08.0	11.5	13.6	14.0	13.3	12.8	12.9	15.3	
3 D	14.9	11.5	19.2	20.5	14.1	22.5	12.2	17.4	16.0	16.6	09.0	16.0	17.8	13.0	11.0	10.2	08.6	15.5	14.0	12.3	13.5	12.2	12.3	14.0	14.3	
4	13.0	14.1	14.8	14.9	14.9	17.7	16.9	18.0	08.0	09.5	10.3	03.0	13.3	15.8	16.5	10.3	03.0	08.5	16.5	17.5	12.8	10.3	10.9	11.0	12.6	
5	13.0	13.9	16.1	17.4	21.4	10.9	18.5	14.1	16.0	17.1	10.5	13.0	15.0	14.3	13.7	14.1	17.9	19.9	19.0	17.0	15.5	13.8	13.0	12.7	15.3	
6	13.2	13.8	15.7	14.0	15.4	19.5	19.1	16.9	15.0	14.5	05.9	11.9	17.9	15.6	13.6	13.7	12.5	14.3	15.7	15.6	13.5	12.1	10.8	11.6	14.2	
7	12.1	13.0	13.4	13.4	17.4	15.3	15.5	14.3	11.7	13.5	14.1	12.8	12.6	12.7	13.7	15.2	15.1	18.5	18.5	16.9	12.7	09.9	10.1	10.9	13.9	
8	11.8	12.7	12.8	15.8	13.6	14.5	14.4	13.4	15.5	14.5	09.9	15.4	16.5	14.5	07.5	10.0	14.8	17.0	14.9	12.9	12.3	11.9	11.7	12.0	13.3	
9	12.7	12.9	13.5	13.6	14.0	14.0	13.7	13.6	13.6	13.6	13.7	14.0	14.1	14.2	14.4	13.6	16.9	17.3	18.3	17.4	13.3	11.7	10.2	08.8	13.9	
10	08.9	10.3	11.7	12.7	12.3	12.7	13.4	14.8	14.0	14.5	15.3	15.2	15.3	17.3	17.3	17.3	19.0	18.2	18.3	17.0	15.1	12.6	10.0	09.1	14.3	
11 Q	08.3	10.8	11.9	13.4	13.6	13.8	14.1	14.3	14.5	14.6	15.1	14.5	13.6	14.1	14.6	15.3	16.9	18.4	18.3	16.5	14.5	12.7	11.0	11.8	14.0	
12 Q																								11.8	10.9	10.3
13	10.3	11.8	11.8	12.7	12.7	12.7	12.9	13.8	14.8	14.6	13.3	15.5	14.3	15.1	15.5	16.5	17.2	19.1	17.3	15.5	11.7	09.9	09.7	10.3	13.7	
14	06.3	06.5	07.7	11.8	11.7	14.5	15.4	15.5	18.7	15.1	17.3	11.7	10.4	09.5	13.5	16.4	11.9	12.7	13.9	14.9	13.5	11.0	11.7	13.4	12.7	
15 Q	12.8	12.5	13.6	14.5	13.7	13.8	13.6	13.5	13.4	13.7	13.5	13.6	14.7	15.4	16.3	17.2	17.5	18.2	17.3	15.2	13.4	12.2	12.1	12.5	14.3	
16	12.3	12.7	12.9	13.0	13.3	13.1	12.9	13.2	13.6	14.5	13.4	13.4	13.7	14.5	13.5	12.0	15.5	14.6	09.0	09.9	08.2	08.1	09.9	12.5	12.5	
17	13.1	13.9	13.9	19.0	22.0	15.5	14.9	12.7	12.5	13.1	14.0	18.1	09.8	15.7	15.0	15.6	16.2	16.5	15.4	14.0	13.0	12.6	13.5	14.0	14.7	
18	12.9	13.0	14.5	14.5	13.6	14.1	14.6	16.0	17.4	19.7	16.6	15.5	13.5	14.0	09.1	14.4	17.0	19.5	12.3	09.4	10.4	10.6	10.9	12.0	14.0	
19	12.3	12.5	13.0	13.0	12.7	13.0	16.2	16.5	14.0	16.1	12.0	10.6	09.0	14.2	13.6	11.5	15.0	17.4	18.5	14.5	12.0	10.6	10.0	10.9	13.2	
20 Q	11.8	12.5	12.1	13.4	13.5	13.5	13.8	13.2	11.5	11.4	12.0	13.5	13.6	13.8	14.1	15.1	16.4	16.9	16.1	14.9	13.5	12.0	12.0	11.5	13.4	
21	11.6	12.6	12.8	13.4	13.6	13.6	14.1	13.6	14.6	14.1	13.2	15.6	19.5	16.1	11.3	13.9	11.5	14.5	14.6	10.6	09.1	09.9	10.1	11.1	13.1	
22	11.9	14.0	14.7	17.1	15.6	18.5	18.6	14.8	19.4	15.7	14.6	10.1	09.8	16.1	17.1	16.1	16.4	16.7	15.1	14.6	12.9	12.4	11.5	11.5	14.8	
23	09.4	06.2	01.7	02.7	15.4	14.5	13.5	21.6	20.1	16.6	14.9	21.6	19.6	18.0	03.6	09.9	13.6	14.6	14.3	14.0	12.2	12.1	12.6	13.2		
24 Q	12.6	12.8	13.2	14.0	13.5	13.8	14.6	13.4	13.2	12.7	13.1	13.4	14.6	12.6	11.7	13.4	16.6	18.0	17.6	15.5	12.6	10.7	11.5	11.5	13.6	
25	11.6	12.5	12.6	13.1	13.6	14.1	13.6	15.1	17.2	18.7	18.1	14.6	20.7	20.1	17.1	16.5	16.0	16.1	14.1	13.6	13.0	11.6	10.6	11.6	14.8	
26	12.0	12.0	12.0	13.1	13.5	14.3	14.8	21.0	17.0	14.5	19.5	24.2	15.6	14.6	15.1	15.5	16.0	16.1	15.0	14.9	13.5	13.0	11.9	10.5	15.0	
27	09.5	10.7	12.5	13.0	12.6	13.0	12.3	13.7	14.2	14.8	15.2	16.4	17.0	16.7	16.4	16.6	16.5	18.0	16.5	13.3	11.0	10.6	10.2	11.0	13.8	
28 D	06.8	07.0	05.8	05.6	08.0	14.7	32.5	16.5	17.0	14.8	07.5	18.0	16.5	15.9	14.3	12.8	15.5	16.3	16.0	15.6	13.9	14.4	13.0	14.4	13.9	
29	14.5	15.1	16.5	15.5	14.6	14.5	13.0	13.0	12.9	12.0	15.0	21.5	16.5	10.5	10.1	11.0	14.6	15.9	14.0	14.5	13.6	13.0	13.6	13.5	14.1	
30 D	13.5	14.2	14.5	14.5	14.3	14.1	14.5	20.0	11.4	08.1	23.4	17.2	08.0	19.1	09.6	06.5	09.9	15.4	15.9	13.9	12.2	12.0	11.9	13.6		
31																										
Mean	11.8	12.2	13.0	14.0	14.4	15.1	15.6	16.0	15.6	14.8	14.1	15.1	14.1	14.8	13.2	13.3	14.2	15.9	15.5	14.4	12.8	11.8	11.6	12.0	14.0	

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

Table 33 Victoria

Z = 53,000 γ +

November 1959

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 D	428	426	428	424	431	444	446	401	328	282	343	315	270	232	327	353	388	394	410	417	412	421	425	424	382	
2 D	425	427	443	468	472	475	455	387	328	362	347	337	270	275	312	365	365	370	393	407	425	435	444	441	393	
3 D	456	438	455	444	434	431	400	397	399	343	355	395	393	386	372	370	393	396	404	407	414	426	429	427	407	
4	424	421	417	416	417	422	420	415	391	370	352	318	295	325	349	364	357	372	388	389	415	427	438	437	389	
5	448	440	440	439	431	404	403	361	362	395	354	364	406	403	410	417	415	421	418	414	415	419	420	420	409	
6	419	420	428	430	426	420	407	406	413	409	387	382	387	402	409	407	408	401	395	389	393	399	414	416	407	
7	420	420	417	415	416	420	416	414	408	406	407	408	407	407	409	413	417	420	413	407	404	408	411	414	412	
8	415	416	415	416	420	425	419	396	407	403	381	387	394	394	385	390	399	403	406	403	402	400	403	407	404	
9	411	412	412	412	412	410	408	408	407	407	407	407	407	407	407	410	408	403	394	390	395	402	407	406		
10	409	412	416	416	416	417	417	420	413	411	407	407	395	397	403	407	407	408	408	404	399	397	399	407	408	
11 Q	411	412	415	415	413	413	412	411	409	407	403	403	405	407	407	410	409	408	403	398	394	393	399	403	407	
12 Q																										
13	407	410	412	413	414	416	416	416	416	413	407	399	403	403	404	405	403	402	398	392	387	392	394	399	405	
14	402	406	414	422	426	429	428	424	388	384	395	382	344	360	358	375	390	393	391	393	395	403	409	410	397	
15 Q	410	412	413	413	413	412	411	411	410	408	406	403	403	404	407	411	413	413	409	403	403	405	408	408	409	
16	409	409	408	407	408	408	408	408	408	408	407	406	406	407	404	399	400	398	394	390	395	401	406	408	404	
17	410	412	410	414	420	425	425	420	414	412	407	380	368	378	393	405	409	411	409	404	403	407	409	409	406	
18	409	410	410	413	417	420	417	416	411	404	402	404	411	410	403	400	409	409	413	407	407	413	415	410		
19	413	413	410	409	410	410	407	398	380	383	397	397	396	395	397	393	397	403	405	405	407	411	415	414	403	
20 Q	411	412	412	412	411	409	410	410	406	405	404	407	407	407	408	410	410	409	408	408	409	411	410	409		
21	404	404	404	403	405	407	411	412	409	399	398	378	349	313	303	331	375	393	401	399	401	408	414	414	389	
22	417	419	418	415	417	412	410	408	406	404	404	398	386	392	400	402	402	402	401	399	404	406	408	411	406	
23	413	431	461	485	484	455	437	386	404	379	332	340	347	338	329	358	387	396	403	405	408	417	419	415	401	
24 Q	412	412	412	413	414	414	412	409	407	408	409	409	407	404	396	394	397	401	401	399	399	402	407	409	406	
25	408	412	412	410	411	412	412	411	406	396	396	388	366	374	387	400	403	403	399	398	401	404	409	401		
26	412	414	415	417	418	418	417	399	402	396	358	355	391	405	410	414	414	414	413	405	398	399	404	407	404	
27	414	414	417	420	420	418	418	421	418	415	413	410	407	405	407	411	412	410	406	403	407	406	408	411	412	
28 D	407	416	424	559	639	605	440	448	426	417	175	317	410	430	432	427	427	427	426	428	428	435	431	427	433	
29	428	427	430	433	428	422	419	414	414	407	376	357	364	361	370	381	396	403	406	412	418	420	422	421	405	
30 D	420	420	418	419	421	423	422	413	383	330	377	343	290	329	352	351	374	404	412	427	433	432	429	388		
31																										
Mean	416	417	420	427	430	428	418	409	399	392	380	379	375	376	384	392	398	403	405	404	406	410	414	415	404	

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

Table 34 Victoria

 $H = 18,500 \gamma +$

December 1959

Hour U.T. Day	0 to 1 1	1 to 2 2	2 to 3 3	3 to 4 4	4 to 5 5	5 to 6 6	6 to 7 7	7 to 8 8	8 to 9 9	9 to 10 10	10 to 11 11	11 to 12 12	12 to 13 13	13 to 14 14	14 to 15 15	15 to 16 16	16 to 17 17	17 to 18 18	18 to 19 19	19 to 20 20	20 to 21 21	21 to 22 22	22 to 23 23	23 to 24 24	Mean							
1	275	285	274	268	259	262	258	260	263	252	252	252	252	262	284	291	276	272	266	254	242	248	262	271	275	265						
2	265	275	284	286	274	284	278	287	284	266	275	302	312	284	276	296	286	250	212	245	260	276	266	275								
3 D	255	260	271	272	263	250	243	262	237	244	254	273	249	322	312	280	290	287	268	262	242	234	252	278	265							
4	277	280	284	277	282	290	288	282	292	299	290	294	299	305	306	306	301	296	287	279	273	266	276	283	288							
5 D	286	292	293	296	296	294	293	291	281	307	294	290	315	232	222	186	156	132	068	149	166	200	254	260	244							
6	266	272	275	272	273	275	264	266	283	279	276	280	280	273	278	280	278	272	256	246	254	264	269	268	271							
7 Q	272	270	276	286	280	284	286	284	285	286	286	289	293	296	300	304	292	279	266	259	258	261	268	279	281							
8	286	295	292	292	290	293	299	297	297	290	286	291	297	296	296	292	286	276	275	272	258	262	274	286	287							
9	296	302	305	307	310	307	300	293	304	307	304	306	306	301	302	300	292	278	274	271	274	278	288	297	296							
10 Q	306	310	310	313	314	313	312	309	309	304	306	304	306	308	306	302	296	292	277	264	270	274	289	298	300							
11 Q	304	308	310	310	308	300	294	302	307	306	306	308	308	308	308	307	304	301	295	286	286	289	292	297	302							
12	308	314	308	280	305	304	299	302	299	297	298	304	306	310	306	304	304	296	307	283	267	258	262	281	296							
13	291	279	279	275	294	292	291	294	292	296	299	298	301	302	300	298	294	282	284	280	264	252	261	278	286							
14 D	286	271	254	269	271	274	273	275	261	230	272	282	280	272	297	286	268	248	248	260	264	265	266	277	269							
15	285	290	286	283	271	267	273	271	260	270	266	274	282	291	294	284	278	268	258	270	268	270	262	267	274							
16	282	286	285	292	293	297	290	289	280	273	286	289	298	291	297	308	281	296	282	273	266	272	270	268	285							
17	273	287	289	290	294	293	292	295	288	287	292	294	296	300	302	302	299	294	279	268	268	278	286	290	289							
18	292	298	301	300	300	296	289	301	293	288	288	294	306	290	297	299	305	300	288	282	281	290	293	297	294							
19	302	302	295	282	280	276	278	293	284	272	266	265	276	310	316	310	305	301	290	281	275	278	285	290	288							
20	294	294	298	297	290	296	299	299	302	301	305	306	309	310	314	316	298	291	286	277	275	278	287	297								
21 Q	299	302	302	303	298	298	302	302	301	302	303	308	311	313	316	319	318	310	296	288	279	278	281	290	301							
22 Q	302	307	308	310	312	312	312	312	310	312	315	317	318	320	320	319	311	300	296	289	290	287	291	304	307							
23	318	316	318	318	321	304	290	298	300	300	302	302	306	310	312	274	294	290	266	265	264	273	260	296								
24	282	289	292	292	292	296	290	299	266	275	308	298	300	304	306	302	292	284	282	286	291	302	310	293								
25	306	295	290	282	281	292	306	300	293	299	284	296	302	304	307	303	306	302	287	282	282	284	288	295	294							
26	297	303	305	299	291	292	287	293	294	290	290	291	302	304	287	296	306	302	280	295	282	272	270	282	292							
27 D	287	289	280	278	284	286	286	287	270	281	257	279	298	280	284	292	266	284	266	256	262	270	278	264	278							
28 D	268	274	277	287	284	288	282	284	295	284	270	286	278	286	267	290	274	268	231	262	266	260	262	268	275							
29	276	280	286	272	264	279	280	294	292	272	283	276	293	302	294	296	292	294	287	278	277	279	281	280	284							
30	289	296	296	291	281	284	282	293	286	288	286	296	311	294	287	310	308	294	280	272	272	280	283	288	289							
31	292	294	290	290	292	294	291	299	288	290	295	294	294	291	297	300	299	293	282	280	274	285	290	291	291							
Mean	288	291	291	289	289	289	288	290	288	286	285	291	296	297	297	295	289	283	270	267	266	269	276	282	286							

DECLINATION
Mean values for periods of sixty minutes, Universal Time

December 1959

Table 35 Victoria

Hour U.T. Day	D = 22° 45.0' E +																								
	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean
1	12.8	14.5	14.6	16.8	14.6	22.1	19.8	18.3	16.4	16.0	09.5	08.5	17.0	12.5	17.0	17.2	14.2	16.5	16.9	14.7	13.0	11.6	12.3	11.8	14.9
2	12.5	13.5	15.3	15.1	21.5	16.5	16.0	15.3	16.1	11.9	14.0	11.9	18.3	09.0	09.0	07.5	14.0	16.0	14.5	09.0	05.9	09.6	13.0	12.6	13.2
3 D	13.9	15.2	16.5	16.6	18.9	21.0	23.0	21.6	25.7	14.1	23.1	29.6	20.1	15.4	12.1	13.8	15.0	15.9	17.0	12.9	13.5	10.6	11.1	13.5	17.1
4	14.0	13.9	12.0	12.5	14.5	16.0	14.5	14.5	14.7	14.5	13.7	12.8	11.9	14.0	16.5	17.1	16.6	15.5	13.9	13.0	13.5	13.4	13.1	14.1	
5 D	12.3	12.8	13.2	13.4	13.9	13.6	13.5	14.3	14.5	11.2	15.5	18.1	14.0	00.0	04.3	03.0	01.5	14.8	04.5	06.5	09.9	04.0	07.1	11.3	10.0
6	13.4	13.6	13.3	13.4	16.6	13.5	14.3	15.0	14.8	10.9	13.6	14.5	15.5	13.8	13.0	14.6	17.3	17.1	17.1	15.8	14.3	13.0	12.6	12.0	14.3
7 Q	11.8	11.0	11.4	13.3	14.3	14.5	13.7	13.4	13.5	13.5	13.0	12.9	12.5	12.5	12.0	12.9	16.0	17.0	17.1	15.7	14.0	12.0	11.7	10.5	13.3
8	11.6	11.5	12.1	12.9	13.5	13.5	13.5	13.0	13.4	14.0	15.1	15.0	14.5	13.9	14.2	15.5	19.0	17.8	16.6	15.0	14.4	10.9	09.9	10.1	13.8
9	11.3	12.0	12.5	13.0	13.5	13.4	13.2	13.9	12.4	11.6	14.0	13.5	14.5	14.7	14.4	15.7	17.8	18.0	16.7	15.4	13.0	11.4	11.0	10.2	13.6
10 Q	10.8	11.2	12.0	12.6	11.9	12.3	13.2	13.0	13.2	13.1	13.5	13.2	13.5	13.8	14.0	15.0	16.6	16.0	16.5	15.5	13.3	12.5	11.5	11.0	13.3
11 Q	11.3	12.0	12.5	12.5	12.2	12.6	12.9	13.0	13.5	13.0	13.0	14.0	13.8	13.5	14.0	15.2	15.0	16.1	15.5	14.0	12.8	11.5	11.6	11.5	13.2
12	11.4	10.7	09.7	15.0	12.3	12.0	13.1	12.8	12.7	15.1	14.3	15.0	14.9	11.8	15.5	16.0	16.9	18.0	15.0	14.0	13.5	11.6	07.5	06.2	13.1
13	07.5	10.1	13.0	14.0	14.2	13.7	13.6	13.4	13.2	13.2	13.6	14.0	13.9	13.5	14.3	15.1	17.9	17.0	15.8	14.7	13.9	11.7	03.0	05.9	12.9
14 D	08.5	10.1	14.5	20.0	17.5	18.4	17.7	21.3	12.0	08.0	27.6	24.6	12.5	03.9	13.5	08.9	13.0	14.5	13.3	11.5	11.5	11.0	10.5	14.0	
15	13.4	14.5	15.9	15.0	15.5	11.0	21.0	20.0	16.9	15.4	16.5	13.7	09.5	12.5	14.0	14.0	12.8	12.6	08.6	12.1	12.5	12.0	11.6	11.8	13.9
16	11.3	12.7	14.4	14.5	16.0	16.5	16.6	14.5	15.3	09.0	09.0	11.5	16.5	14.6	11.0	08.5	10.1	09.4	10.0	10.8	11.5	11.0	11.1	11.0	12.4
17	11.7	12.6	13.9	14.5	14.9	14.4	14.5	17.0	14.4	13.9	09.7	11.0	11.0	14.0	15.1	15.9	16.6	16.5	15.7	13.4	11.5	11.5	11.5	11.9	13.6
18	12.2	12.7	14.0	14.0	14.4	14.2	16.0	23.5	14.0	14.6	16.9	12.5	12.6	10.7	14.0	13.1	16.5	16.4	15.2	14.0	12.5	11.4	11.0	11.4	14.1
19	11.0	12.5	12.0	13.3	15.2	16.5	15.5	22.7	18.2	20.9	19.1	13.9	08.0	09.0	15.1	16.2	16.6	15.0	13.8	14.2	14.0	12.5	11.5	11.5	14.5
20	12.5	12.8	13.9	14.0	14.7	14.0	13.5	13.1	12.6	13.0	12.4	12.0	12.7	12.1	14.0	15.4	17.0	15.5	13.4	13.4	12.5	11.9	11.2	11.4	13.3
21 Q	12.0	12.5	13.0	13.4	13.7	14.5	13.8	12.9	12.5	11.9	12.3	12.2	12.2	12.3	13.3	14.6	17.0	18.4	18.5	16.8	14.2	12.5	11.7	11.0	13.6
22 Q	11.0	11.3	12.0	14.0	13.5	13.6	13.1	12.8	12.5	12.5	12.7	12.8	12.9	13.0	13.9	14.5	17.9	17.5	15.9	15.4	13.2	11.4	10.5	10.0	13.2
23	10.0	11.6	12.5	13.9	13.5	13.8	17.1	14.0	13.4	12.1	12.9	14.7	13.1	13.9	15.5	19.2	18.6	10.9	12.5	16.0	15.5	12.0	09.5	08.9	13.5
24	05.9	09.1	13.1	15.0	15.0	14.5	15.0	15.5	09.6	06.6	14.5	20.5	22.9	17.0	16.0	14.6	17.1	17.6	17.5	16.0	14.1	12.1	11.0	10.8	14.2
25	13.3	13.9	13.9	15.0	15.7	15.5	14.4	13.5	13.4	15.6	15.0	12.1	14.0	14.0	14.3	14.4	16.9	17.0	16.1	14.4	14.5	13.5	13.1	12.9	14.4
Mean	12.0	12.5	13.4	14.5	15.4	15.4	15.3	14.2	13.3	15.0	14.5	14.6	12.7	13.0	13.3	14.9	15.6	14.4	13.6	12.9	11.7	11.2	11.2	13.8	

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

Table 36 Victoria

z = 53,000 γ +

December 1959

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	431	426	427	437	440	435	422	392	382	358	314	332	333	352	384	404	404	405	409	415	422	427	426	423	400	
2	422	423	424	423	419	406	418	411	394	377	363	329	370	350	347	361	377	394	397	405	417	424	425	424	396	
3 D	421	428	431	434	433	435	426	387	336	271	326	333	269	311	330	341	381	394	396	399	403	411	420	427	381	
4	425	425	426	428	427	429	423	419	415	402	409	412	407	406	408	412	410	406	403	402	405	406	411	411	414	
5 D	407	408	406	407	407	407	406	403	384	377	373	369	336	259	248	253	229	282	293	357	387	414	424	424	361	
6	424	423	423	425	425	423	422	424	422	410	415	414	410	407	408	409	408	406	404	403	407	410	409	412	414	415
7 Q	414	414	419	421	418	413	410	408	409	412	412	412	413	411	410	407	409	411	410	412	412	413	414	414	412	
8	416	418	416	417	415	414	414	412	411	411	414	416	415	414	413	415	414	412	405	404	407	409	411	412	412	
9	414	414	414	414	415	415	416	421	418	413	409	411	409	405	408	411	411	408	406	404	404	403	406	404	411	
10 Q	407	405	405	407	408	408	407	405	403	403	403	404	403	402	404	405	407	408	402	403	403	404	404	403	405	
11 Q	402	404	405	406	407	406	408	408	405	403	403	401	402	401	402	404	404	403	398	400	398	399	398	398	403	
12	400	402	403	406	413	411	409	409	403	398	403	403	401	393	394	404	405	403	401	398	394	396	400	407	402	
13	413	419	431	428	425	419	416	414	410	407	408	407	406	406	406	406	409	408	406	403	397	392	399	412	410	
14 D	416	421	425	432	429	435	428	414	371	281	336	354	373	334	336	362	371	390	407	410	409	413	413	414	391	
15	418	415	415	416	414	405	399	401	397	392	393	389	387	394	404	405	402	407	402	410	412	414	412	415	405	
16	418	416	416	415	415	411	407	408	403	390	377	387	403	390	380	392	389	391	395	406	410	412	411	411	402	
17	411	413	412	413	413	411	409	405	398	397	395	399	397	402	405	407	408	408	409	410	410	409	408	408	407	
18	409	409	407	407	406	405	404	402	394	389	390	389	372	362	383	396	396	397	399	402	399	403	401	401	397	
19	402	403	402	407	411	409	399	387	384	374	362	334	324	341	360	377	387	391	394	398	399	403	405	406	386	
20	404	403	403	402	402	402	402	400	399	399	397	395	390	396	396	400	401	399	400	402	393	395	399	400	399	
21 Q	405	405	404	404	402	403	403	401	401	401	402	403	402	401	402	405	407	404	400	396	394	396	400	400	402	
22 Q	402	403	404	404	403	401	400	399	399	400	399	399	398	398	401	405	407	408	404	399	394	394	400	401	401	
23	404	403	404	403	403	403	409	408	403	403	404	402	402	399	399	398	388	388	386	393	394	394	400	404	400	
24	415	420	420	416	413	411	410	407	383	346	349	366	371	386	396	408	412	408	404	401	400	401	402	398		
25	399	401	401	403	404	405	399	396	395	388	386	392	397	404	405	405	407	402	400	401	399	395	398	399		
26	398	402	403	404	406	409	414	416	407	401	396	368	361	376	363	355	360	368	383	393	391	396	398	404	390	
27 D	413	416	417	418	417	419	409	399	392	379	306	305	355	351	368	382	391	399	399	404	405	404	405	406	390	
28 D	420	424	424	427	417	412	395	402	385	395	382	353	367	379	343	325	340	366	377	389	397	405	409	411	389	
29	412	418	416	414	418	419	417	395	390	383	391	364	359	381	389	400	400	400	402	404	402	400	401	399		
30	405	406	406	406	404	404	402	399	396	394	400	387	354	356	351	370	376	382	388	393	398	402	404	404	391	
31	403	402	402	403	403	403	402	395	389	395	392	393	396	398	396	402	403	401	407	403	408	406	407	400		
Mean	411	413	413	414	414	413	410	405	396	385	384	381	380	380	382	388	391	395	396	401	402	405	407	409	399	

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

Hour Month Season	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	U.T. to 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
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HORIZONTAL INTENSITY (gammas) (All Days)

Table 37 Victoria		1959
January	-1	+4
February	-4	+7
March	+5	+9
April	-2	+4
May	+7	+10
June	+6	+8
July	+15	+17
August	+14	+14
September	+1	+7
October	0	+3
November	+4	+5
December	+2	+5
Year	+4	+8
Winter	0	+5
Equinox	+1	+6
Summer	+10	+12

DECLINATION (minutes) (All Days)

Table 38 Victoria		1959
January	-3.3	-2.9
February	-3.6	-3.1
March	-5.1	-4.6
April	-6.1	-5.0
May	-5.9	-4.6
June	-6.7	-4.9
July	-6.6	-5.1
August	-4.4	-3.0
September	-3.4	-2.9
October	-3.0	-2.9
November	-2.2	-1.8
December	-1.8	-1.3
Year	-4.3	-3.5
Winter	-2.7	-2.3
Equinox	-4.4	-3.8
Summer	-5.9	-4.4

VERTICAL INTENSITY (gammas) (All Days)

Table 39 Victoria		1959
January	+8	+9
February	+10	+13
March	+15	+15
April	+7	+12
May	+11	+17
June	+15	+21
July	+17	+23
August	+17	+20
September	+18	+21
October	+8	+13
November	+12	+13
December	+12	+14
Year	+12	+16
Winter	+10	+12
Equinox	+12	+14
Summer	+15	+20

PUBLICATIONS OF THE DOMINION OBSERVATORY

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

Hour U.T. Month Season	0 to 1 1	1 to 2 2	2 to 3 3	3 to 4 4	4 to 5 5	5 to 6 6	6 to 7 7	7 to 8 8	8 to 9 9	9 to 10 10	10 to 11 11	11 to 12 12	12 to 13 13	13 to 14 14	14 to 15 15	15 to 16 16	16 to 17 17	17 to 18 18	18 to 19 19	19 to 20 20	20 to 21 21	21 to 22 22	22 to 23 23	23 to 24
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HORIZONTAL INTENSITY (gammas) (Quiet Days)

Table 40 Victoria		1959																									
January	0	+3	+4	+5	+5	+5	+6	+6	+6	+6	+6	+6	+6	+6	+10	+12	+14	+14	+14	+10	-5	-18	-27	-29	-25	-16	-5
February	-7	+2	+6	+6	+6	+6	+5	+5	+7	+7	+11	+13	+14	+13	+12	+10	+2	-10	-26	-34	-34	-24	-12				
March	-11	-2	+3	+4	+4	+6	+7	+7	+9	+13	+15	+17	+17	+18	+19	+17	+11	0	-15	-28	-34	-33	-28	-15			
April	-9	-3	+3	+5	+5	+7	+8	+10	+13	+15	+15	+15	+17	+19	+15	+5	-11	-20	-24	-25	-27	-23	-18				
May	-3	-1	-1	+1	+1	+2	+5	+5	+8	+10	+11	+10	+9	+12	+14	+8	-11	-15	-13	-13	-12	-9	-5				
June	-1	+1	+6	+4	+1	-3	-3	-2	+1	+1	+4	+5	+9	+15	+19	+17	+9	-3	-10	-12	-15	-9	-12	-8			
July	0	+8	+12	+7	+6	+7	+5	+7	+10	+8	+10	+7	+10	+12	+14	-1	+3	-11	-25	-31	-26	-19	-13	-6			
August	-3	+3	+6	+10	+6	+7	+9	+12	+14	+12	+12	+13	+16	+9	-6	-21	-35	-33	-31	-19	-10	+1					
September	-4	-2	+5	+4	+8	+6	+7	+7	+10	+12	+13	+13	+13	+11	+3	-9	-17	-25	-27	-24	-15	-6	-3				
October	-6	-2	+1	+8	+3	+3	+2	+4	+7	+9	+10	+13	+14	+10	+3	-4	-10	-17	-17	-14	-10	-9	-4				
November	-3	-3	-3	+2	+3	+2	+2	+5	+6	+7	+10	+11	+12	+11	+10	+5	-4	-12	-19	-24	-20	-11	-2				
December	-2	+2	+8	+6	+4	+4	+3	+4	+4	+5	+7	+9	+11	+12	+6	-2	-12	-21	-21	-20	-14	-4					
Year	-6	0	+4	+5	+4	+4	+5	+6	+8	+9	+10	+11	+12	+14	+14	+10	+3	-8	-18	-23	-24	-20	-15	-7			
Winter	-3	+1	+2	+5	+4	+4	+4	+5	+6	+6	+8	+10	+12	+12	+12	+8	-2	-13	-23	-27	-25	-16	-6				
Equinox	-8	-2	+3	+4	+4	+5	+6	+7	+10	+12	+13	+14	+15	+15	+10	+1	-10	-19	-24	-24	-21	-16	-10				
Summer	-2	+3	+6	+5	+4	+3	+4	+6	+8	+8	+9	+8	+10	+14	+16	+8	+1	-12	-21	-21	-15	-11	-5				

DECLINATION (minutes) (Quiet Days)

Table 41 Victoria		1959																								
January	-2.4	-1.8	-1.5	-1.0	-0.8	-0.8	-0.8	-0.7	-1.0	-0.9	-0.7	-0.7	-0.7	-0.8	0.0	+1.5	+4.2	+6.3	+5.4	+3.6	+1.3	-1.2	-2.7	-3.1		
February	-2.3	-1.7	-1.5	-1.2	-1.1	-1.2	-1.2	-0.6	-1.2	-0.6	-0.8	-0.5	-0.1	0.0	+0.4	+1.8	+3.2	+4.4	+4.9	+3.7	+1.1	-0.5	-2.2	-2.9		
March	-4.2	-3.7	-3.0	-2.4	-2.0	-1.7	-1.4	-1.1	-0.7	-0.2	+0.3	-0.1	+0.4	+1.0	+2.2	+3.5	+5.7	+6.8	+6.5	+3.8	+0.8	-1.7	-3.8	-4.9		
April	-4.9	-4.4	-3.8	-2.1	-2.0	-1.7	-1.5	-1.0	-0.6	-0.1	0.0	+0.2	+0.4	+1.5	+3.7	+6.5	+8.2	+7.6	+4.2	+0.9	-1.1	-2.5	-4.0	-5.2		
May	-5.0	-3.4	-1.7	-1.4	-1.9	-1.5	-1.2	-1.0	-0.7	-0.5	-0.3	+0.2	+1.0	+3.0	+5.3	+7.0	+7.3	+5.7	+3.5	+0.9	-1.3	-3.4	-4.9	-5.3		
June	-5.7	-4.0	-2.0	-0.5	-0.8	-1.4	-1.7	-2.0	-1.8	-1.2	-1.0	-0.4	+0.7	+2.7	+5.0	+7.1	+8.5	+9.4	+6.5	+1.6	-1.2	-4.3	-6.9	-7.1		
July	-5.4	-3.8	-2.1	0.0	-0.7	-1.0	-0.2	-0.7	-0.8	-1.1	-0.7	-0.8	+0.8	+3.1	+5.8	+7.3	+8.2	+6.8	+4.0	+0.9	-2.6	-4.6	-5.8	-6.3		
August	-3.3	-2.0	-1.6	-1.6	-1.3	-1.3	-0.5	-1.1	-0.4	+0.4	+0.5	+0.7	+1.4	+3.6	+6.3	+8.6	+9.0	+7.5	+8.0	-2.7	-5.0	-6.5	-6.7	-6.2		
September	-4.2	-2.9	-1.8	-1.7	-1.5	-1.2	-0.7	-0.2	-0.5	+0.5	+0.6	+0.6	+0.8	+1.7	+4.0	+6.2	+7.0	+6.0	+2.9	-0.2	-2.3	-3.9	-4.9	-3.9		
October	-2.7	-2.6	-1.8	-1.5	-1.3	-1.0	-0.8	-0.7	-0.2	+0.5	+0.7	+0.8	+0.7	+1.2	+2.0	+3.3	+4.5	+4.7	+8.2	+0.3	-1.5	-2.4	-2.6			
November	-2.4	-1.7	-1.1	0.0	-0.2	-0.1	+0.2	-0.2	-0.7	-0.7	-0.4	-0.1	+0.3	+0.2	+0.4	+1.4	+3.0	+4.1	+3.5	+1.7	-0.3	-1.9	-2.3	-2.3		
December	-1.9	-1.7	-1.1	-0.1	-0.1	+0.1	0.0	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	+0.1	+1.1	+3.2	+3.7	+3.4	+2.2	+0.2	-1.3	-1.9	-2.5		
Year	-3.7	-2.8	-1.8	-1.1	-1.1	-1.1	-0.8	-0.8	-0.7	-0.4	-0.2	0.0	+0.5	+1.4	+2.9	+4.6	+6.0	+6.1	+4.2	+1.4	-1.0	-2.9	-4.0	-4.4		
Winter	-2.2	-1.7	-1.3	-0.6	-0.6	-0.5	-0.4	-0.4	-0.8	-0.6	-0.6	-0.4	-0.2	-0.2	+0.2	+1.5	+3.4	+4.6	+4.3	+2.8	+0.6	-1.2	-2.3	-2.7		
Equinox	-4.0	-3.4	-2.4	-1.9	-1.7	-1.4	-1.1	-0.8	-0.5	+0.2	+0.4	+0.4	+0.6	+1.4	+3.0	+4.9	+6.4	+6.3	+4.2	+1.2	-1.0	-2.6	-3.8	-4.2		
Summer	-4.8	-3.3	-1.8	-0.9	-1.1	-1.3	-0.9	-1.2	-0.9	-0.6	-0.4	-0.1	+1.0	+3.1	+5.6	+7.5	+8.2	+7.4	+4.2	+0.2	-2.5	-4.7	-6.1	-6.2		

VERTICAL INTENSITY (gammas) (Quiet Days)

Table 42 Victoria		1959																									
January	+2	+3	+3	+4	+4	+2	+2	+1	+1	+1	+1	0	-1	-2	+1	+6	+3	0	-2	-8	-6	-6	-4				
February	+1	+4	+5	+4	+3	+3	+2	0	+1	+1	0	-1	-2	-2	-1	+2	+3	-1	-5	-5	-5	-4	-3				
March	-1	+1	+4	+4	+4	+6	+5	+6	+4	+2	+1	0	0	0	+3	+5	-2	-7	-9	-9	-9	-8					
April	+5	+6	+10	+10	+7	+5	+6	+5	+5	+4	+4	0	-1	0	-1	0	-1	0	-6	-10	-11	-8	-6	-2			
May	+3	+5	+6	+3	+2	+3	+4	+5	+6	+6	+6	+4	+2	+2	+1	0	-2	-10	-15	-11	-8	-6	-2				
June	+10	+15	+16	+11	+8	+6	+4	+4	+5	+4	+6	+8	+10	+9	+7	-1	-13	-19	-24	-23	-17	-6					
July	+8	+15	+18	+14	+10	+6	+8	+3	+1	+1	+3	+3	+4	+6	+6	+3	0	-8	-14	-20	-18	-11	-3				
August	+7	+12	+11	+9	+6	+5	+5	+4	+4	+2	+4	+5	+6	+8	+9	+6	+1	-10	-22	-26	-24	-18	-10	0			
September	+3	+6	+7	+6	+5	+5	+5	+5	+7	+2	-1	+1	0	0	+1	+2	+4	+3	0	-6	-11	-7	-6	-5			
October	0	+3	+5	+4	+4	+4	+5	+4	+2	+2	+1	+1	+1	+1	+2	+2	+4	+3	0	-6	-11	-10	-7	-6	-5		
November	+3	+4	+5	+5	+4	+2	+2	0	-1	0	0	0	-1	-1	0	+2	+3	0	-1	-3	-6	-7	-6	-5	0		
December	+2	+2	+3	+4	+4	+2	+2	0	-1	0	0	0	-1	-1	0	+2	+3	0	-1	-3	-3	-3	-2	-1	-1		
Year	+4	+6	+8	+6	+5	+4	+4	+3	+2	+2	+1	+2	+2	+2	+2	+2	+1	-3	-8	-12	-12	-10	-7	-4			
Winter	+2	+3	+4	+4	+4	+3	+2	+2	0	0	0	0	-1	-2	-2	0	+2	+2	-1	-4	-5	-6	-4	-2			
Equinox	+2	+4	+6	+6	+5	+5	+4	+4	+2	0	0	0	0	0	+1	+2	+1	-2	-6	-9	-8	-8	-8	-6			
Summer	+7	+12	+13	+9	+6	+5	+4	+4	+3	+3	+4	+5	+6	+6	+4	+4	0	-10	-18	-22	-20	-17	-11	-3			

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

Hour U.T. Month Season	0 to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	0 to 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

HORIZONTAL INTENSITY (gammas) (Disturbed Days)

Table 43 Victoria		1959																						
January	-5	+6	+12	+14	+7	+9	+8	+9	0	+15	+1	+6	+25	+10	+24	+3	-10	-14	-20	-25	-33	-25	-21	
February	+8	+16	+24	+28	+17	+12	+10	+9	+10	+12	+15	+18	+19	+20	-7	-3	-16	-20	-18	-24	-43	-38	-34	-19
March	+45	+34	+44	+37	+48	+23	+20	-2	+13	+21	+82	+6	+3	-16	-55	-76	-37	-44	-46	-39	-28	-11	+8	+35
April	+15	+15	+17	+10	+16	+24	+18	+16	+17	+23	+30	+28	+11	+7	+14	+2	-23	-32	-41	-33	-41	-46	-29	-13
May	+31	+28	+21	+28	+24	+11	+4	+12	0	-3	-18	0	-2	+2	-6	-11	-9	-17	-14	-15	-24	-11	-15	
June	+27	+15	+9	+17	+6	+7	+8	+6	+8	-1	-16	-13	+17	+6	-6	0	-13	-17	-11	-23	-19	-19	+8	+11
July	+67	+66	+80	+87	+64	+45	+40	+33	+20	+30	+13	+18	-68	-75	-25	-55	-104	-187	-158	-46	-7	+19	+64	+68
August	+67	+52	+58	+34	+21	+23	+20	+8	+7	-5	-17	-20	-38	-43	-17	-12	-42	-26	-22	-29	-11	+2	+31	
September	+9	+30	+11	+32	+12	+16	+3	+13	-6	-16	+11	+1	+10	+1	+1	-9	-11	-15	-27	-37	-35	-14	-6	+10
October	+13	+15	+14	+15	+11	+5	-3	+7	+6	0	-5	-5	-2	+11	+18	+6	+2	-2	-12	-26	-38	-29	-9	0
November	+18	+20	+16	+21	+26	+36	-1	+8	-10	+2	-36	0	-13	+2	+10	+7	+1	-16	-19	-18	-20	-16	-7	-3
December	+10	+11	+9	+14	+14	+12	+9	+14	+3	+3	+16	+18	+12	+10	+1	-15	-22	-50	-28	-26	-20	-4	-4	+4
Year	+24	+26	+26	+28	+22	+19	+11	+11	+6	+6	+3	+3	-3	-4	-4	-10	-22	-32	-36	-28	-27	-20	-4	+7
Winter	+6	+13	+15	+19	+16	+17	+6	+10	+3	+4	-1	+9	+8	+15	+6	+7	-7	-17	-25	-22	-28	-27	-18	-10
Equinox	+20	+24	+22	+24	+22	+17	+10	+8	+8	+17	+8	+6	+1	-6	-20	-17	-23	-32	-34	-36	-25	-10	+8	
Summer	+46	+40	+42	+42	+29	+22	+18	+15	+9	+5	-7	-8	-22	-28	-12	-18	-42	-55	-52	-28	-18	-9	+16	+24

DECLINATION (minutes) (Disturbed Days)

Table 44 Victoria		1959																						
January	-4.5	-4.1	-1.7	-0.4	+0.8	+1.0	+1.0	+1.7	+1.9	+1.4	+2.8	+3.4	+0.8	+0.1	-0.7	-2.0	+1.5	-2.1	+0.3	+2.8	+1.7	-0.3	-1.8	-3.4
February	-4.2	-3.9	-3.3	-1.0	-2.1	+0.9	+2.7	+9.0	+3.1	+1.8	+1.7	+3.0	+1.6	-1.3	-1.4	0.0	+3.2	-3.2	+0.2	+0.1	-1.0	-3.2	-3.5	
March	-7.0	-7.3	-4.1	-5.8	-2.0	-1.0	+7.5	+5.0	+1.8	+3.7	+4.3	+7.9	+6.5	+5.3	+3.7	-2.3	+3.8	+3.2	+0.7	-2.3	-4.8	-5.5	-7.7	
April	-8.4	-6.2	-6.8	-5.5	-2.9	-1.2	-0.1	+1.4	+4.1	+5.6	0.0	+2.4	+1.5	+5.0	+9.5	+10.5	+7.3	+5.7	+2.1	-0.8	-3.0	-6.8	-7.2	-6.5
May	-9.2	-7.3	-5.6	-4.3	-1.6	-2.5	+0.2	-1.1	+0.7	+0.5	+1.2	+3.1	+2.4	+3.9	+7.6	+10.5	+11.4	+5.7	+2.9	-0.5	-2.4	-3.0	-5.3	-6.0
June	-7.8	-5.3	-3.5	-2.4	-0.6	+0.4	+0.5	-2.3	-2.6	-0.2	+3.7	+4.8	+4.6	+5.6	+6.6	+5.5	+6.3	+4.0	+2.7	+1.2	-1.7	-5.0	-5.9	-7.5
July	-8.9	-8.5	-7.0	-4.0	+0.1	-0.6	-0.8	-2.5	-5.5	-4.7	-5.0	-3.1	+2.6	+3.6	+9.1	+11.4	+7.4	+14.8	+18.4	+4.5	+1.4	-6.9	-8.0	-8.3
August	-7.6	-5.4	-4.4	-1.6	-0.6	-3.4	+4.4	-0.1	+0.6	-1.4	+1.0	-0.6	+4.0	-2.7	+7.0	+7.5	+10.0	+8.1	+5.5	+1.2	-2.9	-5.6	-6.2	-6.0
September	-3.6	-3.6	-0.5	-4.0	+1.4	+3.3	+7.8	+7.5	+0.1	+4.2	+2.8	-0.3	+0.1	+0.6	+1.1	-0.3	+2.1	+0.9	+0.7	-2.1	-4.8	-5.0	-4.1	-4.1
October	-3.5	-3.7	-2.8	-1.5	+0.7	-0.2	+2.3	+2.9	+4.5	+5.3	+7.0	+4.7	+4.7	+4.7	0.0	-8.0	-0.6	-1.1	-1.9	-1.6	-2.6	-3.3	-3.6	-2.7
November	-1.6	-2.2	-0.3	-0.6	-0.4	+4.3	+5.3	+5.4	+5.6	+1.7	+1.8	+3.2	-2.7	0.0	-2.9	-5.5	-5.0	-1.7	-0.5	-0.8	-1.3	-1.0	-1.1	-0.6
December	-0.9	-1.5	+0.8	+2.9	+3.4	+5.5	+4.1	+3.7	+2.4	-1.1	+7.6	+6.5	+2.8	-4.0	-4.1	-6.5	-4.7	+0.1	-3.3	-4.3	-2.1	-3.5	-3.0	-1.8
Year	-5.6	-4.9	-3.3	-2.3	-0.3	+0.5	+2.9	+2.6	+1.4	+1.4	+2.4	+2.9	+2.2	+1.6	+3.0	+2.1	+3.6	+3.0	+2.1	-0.1	-1.7	-3.9	-4.6	-4.9
Winter	-2.8	-2.9	-1.1	+0.5	+0.4	+2.9	+3.3	+5.2	+3.2	+1.0	+3.4	+4.0	+0.6	-1.3	-2.3	-3.5	-1.2	-1.7	-0.3	-0.6	-0.4	-1.4	-2.3	-2.3
Equinox	-5.6	-5.2	-3.6	-4.2	-0.7	+0.2	+4.4	+4.2	+2.6	+4.7	+3.7	+2.4	+3.6	+3.6	+1.2	+3.2	+2.2	+0.4	-1.7	-3.3	-5.0	-5.1	-5.2	
Summer	-8.4	-6.6	-5.2	-3.1	-0.7	-1.5	+1.1	-1.5	-1.7	-1.4	+0.2	+1.0	+3.4	+2.6	+7.6	+8.7	+8.8	+8.4	+6.9	+2.1	-1.4	-5.1	-6.4	-7.2

VERTICAL INTENSITY (gammas) (Disturbed Days)

Table 45 Victoria		1959																						
January	+25	+26	+27	+24	+25	+28	+22	+20	+15	+3	-6	-25	-52	-41	-35	-27	-25	-25	-13	-1	+1	+6	+13	+20
February	+11	+21	+28	+34	+39	+41	+46	+40	+28	+22	-12	-15	-37	-60	-78	-45	-29	-22	-12	+1	+16	+27	+40	
March	+75	+57	+58	+67	+78	+27	+17	+6	+6	-24	-19	-60	-80	-96	-146	-120	-44	-24	-7	+4	+25	+46	+72	+80
April	+37	+42	+45	+44	+49	+32	+9	-33	-7	-7	-11	-39	-68	-64	-57	-30	-15	-5	+3	+4	+10	+16	+19	
May	+17	+24	+26	+31	+25	+28	+15	-2	-5	-26	-26	-46	-27	-18	-9	-4	-12	-16	-14	-9	-3	+2	+19	+36
June	+35	+37	+39	+36	+31	+29	+30	+24	-5	-38	-39	-49	-16	-19	-28	-36	-37	-27	-20	-16	-5	+8	+29	+32
July	+45	+46	+64	+79	+60	+15	-4	-19	-54	-62	-54	0	-31	-32	-31	-26	-75	-97	-49	+33	+47	+34	+45	+52
August	+46	+53	+58	+30	+40	+19	-18	-11	-38	-35	-49	-66	-56	-36	-32	-23	-23	-1	-6	+3	+19	+43	+58	
September	+39	+53	+63	+63	+71	+46	+34	-10	-87	-64	-35	-50	-48	-55	-49	-57	-42	-20	-6	+4	+16	+31	+41	+50
October	+26	+26	+31	+42	+43	+42	+30	-4	-21	-32	-24	-45	-71	-57	-37	-33	-20	-8	-3	0	+12	+25	+35	+40
November	+26	+24	+33	+62	+78	+75	+32	+8	-28	-54	-82	-60	-74	-77	-47	-28	-16	-9	+6	+13	+20	+29	+31	+29
December	+33	+37	+39	+42	+39	+40	+31	+19	-8	-41	-37	-39	-42	-55	-57	-49	-40	-16	-8	+10	+18	+27	+32	+34
Year	+35	+37	+42	+48	+47	+38	+25	+7	-17	-30	-31	-37	-48	-53	-53	-46	-35	-26	-12	+2	+12	+21	+34	+41
Winter	+24	+27	+32	+40	+45	+46	+33	+22	+2	-18	-34	-35	-51	-58	-54	-46	-32	-20	-9	+2	+10	+20	+26	+31
Equinox	+44	+44	+49	+58	+59	+41	+28	+2	-33	-32	-21	-42	-60	-69	-79	-67	-34	-17	-5	+3	+14	+28	+41	+47
Summer	+36	+40	+46	+44	+38	+28	+15	-4	-19	-41	-38	-36	-85	-81	-26	-24	-40	-41	-21	0	+10	+16	+34	+44

PUBLICATIONS OF THE DOMINION OBSERVATORY

THREE-HOUR RANGE INDICES, VICTORIA, 1959

Table 46

January								February										
	D	H	Z	K	D	H	Z	K	D	H	Z	K	D	H	Z	K		
1	0000 0101	0000 0000	0110 1100	0110 1101	1223 4312	2222 2211	1123 2111	2223 4312	0001 2211	0001 1111	0100 0111	0101 2211	2554 4433	1433 3323	1333 4221	2554 4433		
2	0001 2211	0001 1111	0100 0111	0101 2211	2554 4433	1433 3323	1333 4221	2554 4433	1331 1121	2321 1110	1101 0011	2331 1121	2225 5534	3123 3324	2114 3312	3225 5534		
3	1331 1121	2321 1110	1101 0011	2331 1121	2225 5534	3123 3324	2114 3312	3225 5534	1021 3311	1121 2211	0111 1221	1121 3321	2324 5543	3223 4453	3124 4322	3324 5553		
4	1021 3311	1121 2211	0111 1221	1121 3321	2324 5543	3223 4453	3124 4322	3324 5553	1114 5553	2122 2443	1103 3312	2124 5553	3434 4423	2422 4323	1323 4332	3434 4433		
5	1114 5553	2122 2443	1103 3312	2124 5553	3434 4423	2422 4323	1323 4332	3434 4433	6	3323 6542	3232 4333	2123 3321	3333 5543	2224 4322	3124 2332	2113 2221	3224 4332	
7	3433 2222	3313 0122	2112 1111	3433 2222	2222 4221	2211 3111	1001 2120	2222 4221	8	3323 2323	2212 2212	2103 3222	3323 3323	1133 2323	1111 3223	1112 2211	1133 3323	
9	2123 5555	4111 4444	2012 4444	4123 5555	4555 4212	4344 3001	3233 2101	4555 4212	10	4565 5543	4455 5542	3346 5442	4566 5543	2010 1212	2000 1112	1000 0101	2010 1212	
11	3232 2223	3221 1133	2211 2121	3232 2233	1246 5444	1345 4433	0125 4422	1346 5444	12	3201 3332	3101 2222	2101 2211	3201 3332	2523 3433	3423 2323	1314 2221	3524 3433	
13	1133 1221	1123 1111	0022 1211	1133 1221	1114 5443	2112 3333	1003 4321	2114 5443	14	0023 2112	1031 2112	1011 1101	1033 2112	3434 7651	2333 6531	1233 6441	3434 7651	
15	1232 2111	2321 1010	1231 0010	2332 2111	1566 5342	2455 5342	1455 4321	2566 5342	16	1025 5433	1024 3323	1025 4322	1025 5433	4543 5754	4542 4533	2333 6444	4543 6754	
17	2334 4333	2322 3322	1123 3321	2334 4333	4353 3221	4342 2121	2343 3111	4353 3221	18	3433 4433	3322 3422	1222 2221	3433 4433	1111 2211	1001 1101	0000 0111	1111 2211	
19	2323 3222	1221 1121	1111 1121	2323 3222	2333 5121	2332 3212	1222 3321	2333 5322	20	0021 2212	0010 1011	0010 1121	0021 2222	0111 1211	0112 1010	0001 0111	0112 1211	
21	1011 1211	0021 1201	0011 0101	1021 1211	1143 2220	1131 1120	1031 0121	1143 2221	22	1232 2222	1232 1111	0121 1211	1232 2222	2333 3313	3423 2223	1333 2111	3433 3323	
23	1113 3212	1112 2111	1112 2111	1113 3212	2344 3110	2333 3000	1244 4110	2344 3110	24	2011 1210	1110 1110	1000 0110	2111 1210	0012 2122	0001 1101	1011 0101	1012 2122	
25	0002 5543	0003 4432	0002 3331	0003 5543	2355 7753	3454 6543	1255 6752	3455 7753	26	1216 6411	1315 6311	1205 7211	1316 7411	4574 4334	4454 3333	3465 3322	4575 4334	
27	1133 2221	0223 2111	0111 2110	1233 2221	2524 4443	2413 3443	2413 3322	2524 4443	28	2113 3223	2112 2223	1101 1122	2113 3223	4523 5443	4323 5344	3314 5532	4524 5544	
29	1133 3333	1133 2223	1133 3211	1133 3333	30	2233 2121	2223 1111	1122 1101	2233 2121	31	2455 2321	3333 1110	2333 1111	3455 2321	1112 2221	1112 2221	1112 2221	1112 2221
31	1112 2221	1112 2221	1112 2221	1112 2221	March	D	H	Z	K	D	H	Z	K	D	H	Z	K	
1	3555 4532	4333 5522	2345 4422	4555 5532	3532 2110	3241 1110	2232 1100	3352 2110	2	3536 5333	3434 4322	2324 4222	3535 5333	1012 2221	1112 1222	0111 1111	1112 2222	
3	3544 3333	3433 3333	1232 3222	3544 3333	2224 3201	2222 1102	2214 3101	2224 3202	4	2234 3332	2132 2112	2133 3211	2234 3332	2311 1211	2212 1111	2211 0101	2312 1211	
5	3332 2222	2231 1222	2231 1211	3332 2222	1101 2122	2201 1112	2100 1102	2201 2122	6	1121 2111	2121 1001	1010 1101	2121 2111	1112 2221	2111 1121	1111 0111	2112 2221	
7	1122 2221	0112 1121	1112 1111	1122 2221	2123 3222	2222 2222	1111 2111	2223 3222	8	3322 1210	3221 1200	2121 0110	3221 1210	3333 4332	3233 4223	3333 4334	3333 4334	
9	1111 1211	1000 0100	1100 0111	1111 1211	5655 2333	5434 2244	4554 1132	5655 2344	10	0011 0111	0001 0001	0001 0101	0011 0111	2377 7653	3364 6442	4275 7631	4377 7653	
11	1012 1122	1012 1012	1001 1112	1012 1122	2365 3333	3353 2223	2244 3222	3365 3333	12	2224 4442	3233 3331	1223 4221	3234 4442	3123 3112	4223 2113	3212 1111	4223 3113	
13	1212 3312	2222 2222	1212 2221	2222 3322	1142 3211	1231 2221	1121 3210	1242 3221	14	1233 3221	1222 2221	1112 2221	1233 3221	2232 2223	3321 1214	3211 1212	3332 2224	
15	3213 1211	3212 1001	1102 1101	3213 1211	3120 2331	3210 1232	2110 1121	3120 2332	16	1121 1111	1110 1001	1010 0000	1121 1111	3222 2221	3122 1212	1111 1111	3222 2222	
17	1120 1221	1221 1101	1110 0111	1221 1221	1123 3221	1123 2212	1122 2111	1123 3222	18	0221 2214	1201 1114	1101 1112	1221 2214	1102 2221	2101 1111	1101 1121	2102 2221	
19	1113 2231	1112 1111	1102 1221	1113 2231	1112 2211	1113 2231	1112 0112	1112 2221	20	1112 2121	1111 1011	1100 1111	1122 2121	1112 3111	1112 1121	0011 1111	1112 3121	
21	1023 2321	1012 1212	1111 1111	1123 2322	2224 2220	3223 1211	2114 1110	3224 2220	22	1112 2312	1111 1112	1111 1222	1112 2312	2001 1111	1001 1011	1100 0110	2001 1111	
23	2233 2332	3232 3221	2121 2111	3233 3332	0003 4344	1004 4444	0003 3443	1004 4444	24	2113 1321	2213 1211	1102 1211	2213 1321	4333 5422	3333 3322	3222 4311	4333 5422	
24	2113 1321	2213 1211	1102 1211	2213 1321	3433 3442	3433 3322	3222 4311	3433 3442	25	1342 3532	2441 3443	2322 2432	2442 3543	3433 3442	2432 2333	2332 2222	3433 3443	
26	2126 6444	2146 7445	2126 7535	2146 7545	2432 3232	4322 2333	3322 1122	4432 3333	27	6886 7742	6876 8764	6897 9865	6897 9865	2433 3222	2332 2213	1233 2212	2433 3223	
28	3556 6643	3445 6646	4336 6655	4556 6656	2343 2222	2233 1112	2133 1111	2343 2222	29	4665 5532	5545 4432	5555 4521	5665 5532	3353 4441	3333 3432	3133 3211	3353 4442	
30	3354 3222	3344 3212	2244 3212	3354 3222	2252 4431	2242 3322	1141 4321	2252 4432	31	3334 3221	3234 2232	3222 3222	3334 3232	2252 4431	2242 3322	1141 4321	2252 4432	

THREE-HOUR RANGE INDICES, VICTORIA, 1959

July											August										
	D	H	Z	K		D	H	Z	K			D	H	Z	K						
1	2331	1111	2321	2012	1210	1101	2331	2112		2453	4331	4343	4333	3342	3223	4453	4333				
2	3552	2210	4441	2211	3342	1101	4552	2211		2552	2332	5442	2332	3441	0222	5552	2332				
3	1001	1110	3121	1121	3110	1111	3121	1121		3353	4321	2343	3332	3352	2231	3353	4332				
4	1003	2332	3123	3344	2113	3323	3123	3344		2234	4332	2324	3423	2224	4331	2334	4433				
5	2545	3222	4432	3222	2332	3121	4545	3222		2242	3321	3221	3432	2100	1222	3242	3432				
6	1134	3221	3233	3333	3222	2121	3234	3333		1434	4343	3333	3444	2123	4222	3434	4444				
7	2345	3211	3234	2322	3233	2211	3345	3322		3353	3333	3322	1323	2203	3122	3353	3333				
8	2344	3331	2333	2323	2122	2221	2344	3333		2344	3212	2123	2313	1023	3111	2344	3313				
9	1454	5331	2442	3334	2142	3222	2454	5334		2044	5431	3143	4432	2234	3421	3244	5432				
10	4433	1111	4432	2122	4411	1211	4433	2222		2322	3332	3311	2213	3210	1121	3322	3333				
11	3342	3534	3331	3545	3321	2334	3342	3545		1432	2211	3311	2212	3310	1110	3432	2212				
12	4123	4211	5322	3323	4311	3211	5323	4323		2232	3221	2221	2212	2122	2232	3222					
13	2242	3311	4231	2333	3223	2222	4243	3333		1221	1232	3322	1222	1000	1211	3322	1232				
14	3544	3221	4433	4312	3433	3211	4544	4322		2112	2231	3322	1222	2201	0111	3322	2232				
15	3546	7996	5569	9897	5468	8977	5569	9997		3313	3344	4223	3445	3201	1223	4323	3445				
16	5552	2234	6542	3334	5443	2224	6553	3335		4357	8653	5368	7645	3267	7546	5368	8656				
17	1445	3897	4434	2887	3323	3766	4445	3887		6776	5433	7767	4534	8976	4533	8976	5534				
18	6786	4633	7695	4534	6785	4533	7796	4634		4562	3332	3442	3343	3451	3322	4562	3343				
19	4543	3332	5532	3333	4433	2322	5543	3333		2443	3332	4542	2333	3343	2122	4543	3333				
20	3353	3322	4343	3324	3242	3223	4353	3324		2544	3332	3454	3244	2333	2222	3554	3344				
21	2432	3322	4332	3333	2222	2221	4432	3333		3344	3443	4334	3444	3244	3233	4344	3444				
22	3242	2322	3232	2324	3232	1212	3242	2324		3443	3433	4332	2344	4331	2222	4443	3444				
23	4442	2121	5322	2113	3212	2111	5442	2123		4453	3433	3342	3434	3243	3323	4453	3434				
24	2134	3443	3224	3444	3223	2232	3234	3444		3454	2322	4443	1324	2253	2212	4454	2324				
25	4434	3443	4433	3454	4344	2332	4444	3454		3544	3322	3333	2222	2233	3111	3544	3322				
26	3455	3443	5443	3444	4452	2223	5455	3444		2242	1221	3232	1212	2033	0111	3243	1222				
27	5455	2333	4344	3333	4244	3222	5455	3333		2031	1110	2120	0011	2110	0000	2131	1111				
28	3243	3221	3223	3222	3223	2121	3243	3222		1020	0111	0111	0111	1000	0000	1121	0111				
29	3443	2221	3432	2212	2222	2111	3443	2222		2214	3532	3223	3432	2100	1321	3224	3532				
30	2101	0110	2101	0222	2100	0111	2101	0222		2232	4312	3234	4222	3000	3212	2334	4322				
31	1534	3233	2323	3235	2224	2123	2534	3235		2334	3231	2222	3222	1013	3111	2334	3322				

PUBLICATIONS OF THE DOMINION OBSERVATORY

THREE-HOUR RANGE INDICES, VICTORIA, 1959

September								October								
	D	H	Z	K	D	H	Z	K	D	H	Z	K	D	H	Z	K
1	3355 3331	3332 1332	1123 2321	3355 3332	2676 5432	2465 4433	2466 5421	2676 5433	2676 5433	2465 4433	2466 5421	2676 5433	2676 5433	2465 4433	2466 5421	2676 5433
2	3555 2332	4345 2334	4455 1222	4555 2334	2553 2321	3452 2222	2454 1111	3554 2322	2444 3322	2333 1123	2223 2233	2444 3333	2444 3333	2322 2222	2222 2222	2444 3333
3	2234 3355	3233 2555	2143 2223	3244 3555	1364 4534	2352 3333	1354 3343	2364 4544	2322 2222	2222 1123	2222 2222	2322 2222	2322 2222	2222 2222	2222 2222	2322 2222
4	5786 4553	6786 6544	5897 5544	6897 6554	5755 4332	3544 5233	3654 6321	5755 6333	3324 4443	3313 3443	3333 3232	3334 4443	3334 4443	3333 3232	3334 4443	3334 4443
5	5354 5333	4243 3434	3344 4223	5354 5434	3324 4443	3313 3443	3333 3232	3334 4443	3324 4443	3313 3443	3333 3232	3334 4443	3334 4443	3333 3232	3334 4443	3334 4443
6	4442 2310	5232 3211	4232 1210	5442 3311	5456 3333	4456 4444	4567 4322	5567 4444	5567 4444	4456 4444	4567 4322	5567 4444	5567 4444	4456 4444	4567 4322	5567 4444
7	2202 2322	2121 2322	0001 0001	2222 2322	2444 3322	2333 1123	2223 2233	2444 3333	2444 3333	2333 1123	2223 2233	2444 3333	2444 3333	2322 2222	2222 2222	2444 3333
8	2143 3332	3222 1311	1113 1110	3243 3332	3324 2211	3212 2211	1102 0100	3324 2211	3324 2211	3212 2211	1102 0100	3324 2211	3324 2211	3222 2222	3222 2222	3324 2211
9	2002 1212	2211 1212	1000 0000	2212 1212	1032 1101	2131 0121	1020 0101	2132 1121	2132 1121	2131 0121	1020 0101	2132 1121	2132 1121	2132 1121	2132 1121	2132 1121
10	2101 1322	2112 2213	1000 1101	2112 2323	1021 0211	1120 1111	0001 0100	1121 1211	1121 1211	1120 1111	0001 0100	1121 1211	1121 1211	1121 1211	1121 1211	1121 1211
11	2323 3322	1323 3213	1223 2111	2323 3323	0020 0111	1110 0011	0000 0000	1120 0111	1120 0111	1110 0011	0000 0000	1120 0111	1120 0111	1120 0111	1120 0111	1120 0111
12	4333 2322	4321 2321	3201 1100	4333 2322	0000 1322	1000 1222	1000 0111	1000 1322	1000 1322	1000 1222	1000 0111	1000 1322	1000 1322	1000 1322	1000 1322	1000 1322
13	1211 1112	3021 0024	1010 0002	3221 1124	0011 1311	1011 1111	1000 0001	1011 1311	1011 1311	1011 1111	1000 0001	1011 1311	1011 1311	1011 1311	1011 1311	1011 1311
14	2353 3322	3332 3333	2333 2232	2353 3333	2123 3333	1123 3133	1003 2111	2123 3333	2123 3333	1123 3133	1003 2111	2123 3333	2123 3333	2123 3333	2123 3333	2123 3333
15	2143 3342	3122 2333	1021 1222	3143 3343	2323 4322	1322 2222	2112 2111	2323 4322	2323 4322	1322 2222	2112 2111	2323 4322	2323 4322	2323 4322	2323 4322	2323 4322
16	3531 3321	4321 2211	3320 1200	4531 3321	1100 1111	1000 0121	1000 0110	1100 1121	1100 1121	1100 1111	1000 0121	1000 0110	1100 1121	1100 1121	1100 1121	1100 1121
17	2334 3333	2222 3344	1113 1222	2334 3344	1133 3434	2222 3233	0023 2122	1233 3434	1233 3434	1133 3434	2222 3233	0023 2122	1233 3434	1233 3434	1233 3434	1233 3434
18	3234 4453	3223 3344	2014 2223	3234 4454	4246 4433	4235 3333	4335 2222	4346 4433	4346 4433	4246 4433	4235 3333	4335 2222	4346 4433	4346 4433	4346 4433	4346 4433
19	5524 4321	5423 2123	4333 3111	5534 4323	1523 2212	3412 1133	2213 1111	3523 2233	3523 2233	1523 2212	3412 1133	2213 1111	3523 2233	3523 2233	3523 2233	3523 2233
20	2555 6533	2445 6443	1255 6432	2555 6543	1153 1210	3241 1010	0041 0111	3253 1210	3253 1210	1153 1210	3241 1010	0041 0111	3253 1210	3253 1210	3253 1210	3253 1210
21	4655 4543	4555 3344	3565 4433	4665 4544	0121 2313	2011 1223	0000 0111	2121 2323	2121 2323	0121 2313	2011 1223	0000 0111	2121 2323	2121 2323	2121 2323	2121 2323
22	4676 5431	5466 5432	4575 4321	5676 5432	2243 5523	2332 4433	1124 3311	2344 5533	2344 5533	2243 5523	2332 4433	1124 3311	2344 5533	2344 5533	2344 5533	2344 5533
23	2434 2432	3334 3333	1233 3312	3434 3433	2244 2110	3323 1010	2224 2000	3344 2110	3344 2110	2244 2110	3323 1010	2224 2000	3344 2110	3344 2110	3344 2110	3344 2110
24	3543 5332	3333 3323	2343 5311	3543 5333	0033 4322	1121 3122	0021 2211	1133 4322	1133 4322	0033 4322	1121 3122	0021 2211	1133 4322	1133 4322	1133 4322	1133 4322
25	4344 3332	3343 3422	3343 4223	4444 4433	2335 5432	2434 3324	1225 4211	2435 5434	2435 5434	2335 5432	2434 3324	1225 4211	2435 5434	2435 5434	2435 5434	2435 5434
26	3355 5321	3344 4323	1234 5111	3355 5323	2255 6532	3334 4422	1234 4421	3355 6532	3355 6532	2255 6532	3334 4422	1234 4421	3355 6532	3355 6532	3355 6532	3355 6532
27	2545 3422	3443 3322	2333 3211	3545 3422	2545 3321	2433 2211	1321 1100	2545 3321	2545 3321	2545 3321	2433 2211	1321 1100	2545 3321	2545 3321	2545 3321	2545 3321
28	2154 3322	3243 2122	1143 1110	3254 3322	1032 1111	1031 1011	0021 0000	1032 1111	1032 1111	1032 1111	1031 1011	0021 0000	1032 1111	1032 1111	1032 1111	1032 1111
29	3113 3211	3023 1212	1103 2101	3123 3212	0312 1212	1121 1008	0000 1002	1322 1213	1322 1213	0312 1212	1121 1008	0000 1002	1322 1213	1322 1213	1322 1213	1322 1213
30	2025 4321	3123 2222	1003 3110	3125 4322	2211 3333	5332 3233	3311 1112	5332 3333	5332 3333	2211 3333	5332 3233	3311 1112	5332 3333	5332 3333	5332 3333	5332 3333
31					3236 6433	4236 6343	1026 6433	4236 6343	1026 6433	3236 6433	4236 6343	1026 6433	4236 6433	4236 6433	4236 6433	4236 6433
November								December								
	D	H	Z	K	D	H	Z	K	D	H	Z	K	D	H	Z	K
1	3565 6432	3465 6323	1365 7421	3565 7433	2546 5432	3334 4222	2345 5221	3546 5432	2546 5432	3334 4222	2345 5221	3546 5432	2546 5432	3334 4222	2345 5221	3546 5432
2	2566 5543	3464 5444	3364 5232	3566 5544	2553 5433	3334 4443	1335 4430	3555 5443	2553 5433	3334 4443	1335 4430	3555 5443	2553 5443	3334 4443	1335 4430	3555 5443
3	5555 4543	4465 4543	3345 3432	5565 4543	3466 5434	3454 5434	2155 5522	3466 5534	3466 5434	3454 5434	2155 5522	3466 5534	3466 5534	3454 5434	2155 5522	3466 5534
4	1365 5543	1244 4454	0255 4332	1365 5554	3333 2222	3332 2212	1132 1201	3333 2222	3333 2222	3332 2212	1132 1201	3333 2222	3333 2222	3333 2222	3333 2222	3333 2222
5	3665 3331	3454 3221	2454 3210	3665 3331	0035 7774	1045 6575	0033 6563	1045 7775	0035 7774	1045 6575	0033 6563	1045 7775	0033 6563	1045 7775	0033 6563	1045 7775
6	3445 3332	3343 3213	2234 3112	3445 3333	2443 3322	2333 2222	0122 1210	2443 3322	2443 3322	2333 2222	0122 1210	2443 3322	2443 3322	2333 2222	0122 1210	2443 3322
7	1442 2331	2311 2232	0120 1110	2442 2332	3100 2212	2200 2111	1100 0100	3200 2212	3100 2212	2200 2111	1100 0100	3200 2212	3100 2212	2200 2111	1100 0100	3200 2212
8	1345 5421	2333 3321	0233 2211	2345 5421	1122 1322	2122 0122	0000 0110	2122 1322	1122 1322	2122 0122	0000 0110	2122 1322	1122 1322	2122 1322	2122 1322	2122 1322
9	1100 1333	1211 1232	0100 0121	1211 1333	1133 2312	1132 2111	0011 1101	1133 2312	1133 2312	1132 2111	0011 1101	1133 2312	1133 2312	1133 2312	1133 2312	1133 2312
10	2122 3233	2121 2123	1011 2012	2122 3233	1211 0221	1121 0121	0000 0110	2122 0221	1211 0221	1121 0121	0000 0110	2122 0221	1211 0221	1211 0221	1211 0221	1211 0221
11	3111 1222	1112 0121	1001 0011	3112 1222	0112 1212	1321 1111	0000 0110	1322 1212	0112 1212	1321 1111	0000 0110	1322 1212	1322 1212	1322 1212	1322 1212	1322 1212
12	1211 1232	2111 1122	1112 1122	2212 1232	2422 3223	3422 2222	0221 2111	3422 3223	2422 3223	3422 2222	0221 2111	3422 3223	3422 3223	3422 3223	3422 3223	3422 3223
13	2123 3333	2122 2233	1002 1122	2123 3333	4221 1324	3311 1233	3220 0122	4321 1334	4221 1324	3311 1233	3220 0122	4321 1334	4321 1334	4321 1334	4321 1334	4321 1334
14	2345 4432	3344 4332	2244 3411	3345 4432	4577 5532	4456 4433	2365 5321	4577 5532	4577 5532	4456 4433	2365 5321	4577 5532	4577 5532	4577 5532	4577 5532	4577 5532
15	1111 1111	2110 1000	1001 0010	2111 1111	2654 34											