

Kodaikanal Observatory

Bulletin No. CXLV

PART I

Summary of prominence and Calcium flocculus observations for the first half of 1955

This bulletin embodies the results of observations of prominences made at Kodaikanal Observatory during the first half of 1955 supplemented by data computed from photographs supplied by Mount Wilson and Meudon Observatories for those days on which Kodaikanal had imperfect or no photographs.

Calcium Prominences on the Limb.—During the half-year under review, photographs of calcium prominences on the limb were obtained at Kodaikanal on 141 days. Spectroheliograms for 30 days were obtained from Mount Wilson Observatory and for 27 days from the Meudon Observatory. In all records were available for 171 days and these were counted as 170½ effective days after giving due weightage for the quality of the photographs.

The mean daily areas (in square minutes of arc) and the mean daily numbers of all prominences derived from all the above records are tabulated below .—

	Combined data	
	Mean daily areas (square minutes)	Mean daily numbers
North	2.08	4.12
South	1.12	3.19
TOTAL	3.20	7.31

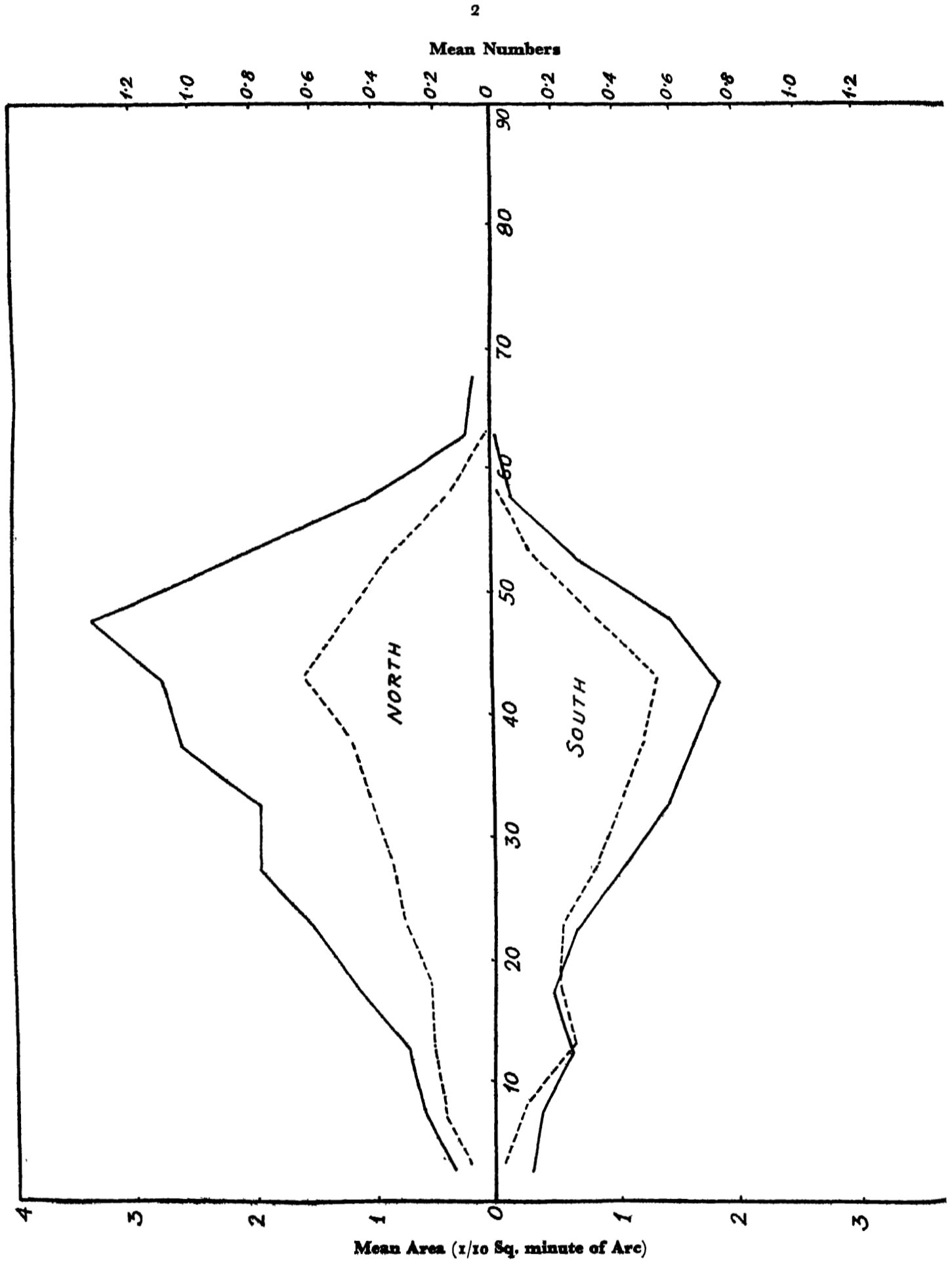
The above figures show that compared to the previous half-year there has been a considerable increase in activity in both areas and numbers, the increase being 76.8% in area and 24.9% in numbers.

For comparison with the data published in bulletins prior to 1923, *i.e.* before the co-operation of other observatories came into force, the following table gives the values based on Kodaikanal observations alone.

	Mean daily areas (square minutes)	Mean daily numbers
North	2.21	4.24
South	1.14	3.28
TOTAL	3.35	7.52

The distribution of areas and numbers in 5° ranges of latitude as obtained from the combined data is represented in diagram I. The curves for area show pronounced peaks of activity in the latitude zone 45°—50° in the northern hemisphere and 35°—40° in the southern hemisphere.

DIAGRAM I
 Mean Areas and Mean Numbers of
 Calcium Prominences.
 January—June 1955.
 Mean Areas.....Full Line.
 Mean Numbers.....Broken line.



The monthly, quarterly and half-yearly areas, numbers, heights and extents of prominences as derived from all the available photographs are as follows :—

Months 1955	Number of days (effective)	Area (square minutes)	Numbers	Daily means		Mean height	Mean extent
				Areas (square minutes)	Numbers		
January	29½	74.75	189	2.51	6.35	43.81	4.24
February	26	92.55	168	3.55	6.46	49.97	5.11
March	31	124.25	368	4.00	11.89	30.39	2.68
April	27	90.95	233	3.37	8.63	34.89	2.83
May	27	93.10	138	3.45	5.10	49.31	4.71
June	30	70.15	149	2.34	4.96	40.77	4.23
1st quarter	86½	291.55	725	3.36	8.31	38.37	3.65
2nd quarter	84	254.20	520	3.02	6.20	40.41	3.73
1st half-year	170½	545.75	1,245	3.11	7.29	39.22	3.68

The following table gives the distribution of prominences about the sun's axis of rotation :—

1955 January—June	East	West	Percentage East
Total areas (square minutes)	263.9	281.9	48.3
Total numbers	609	636	48.9

Observations with the prominence Spectroscope.—No metallic or eruptive prominence was observed during the half-year. Two bright reversals of H-alpha line and dark reversal of D₃ line on the disc near sunspots were observed.

The mean heights in H-alpha, D₃ and H-beta of 10 prominences observed with the spectroscope and the mean height in the K-line of the same prominences as measured from the calcium spectroheliograms are as follows :—

	Mean height
K	65.5
H-alpha	58.5
D ₃	47.8
H-beta	41.4

Observations with the Hale Spectrohelioscope.—Details of Doppler displacements in H-alpha line observed in prominences and dark markings are tabulated below :—

	North	South	East	West	Total	Displacements		
						To red	To violet	Both ways
Displacements in prominences	14	9	11	12	23	..	..	23
Displacements in dark markings	4	1	3	2	5	.	..	5

Solar Flares

Details of solar flares observed during the period are given below :—

Date	Time (I S T)			Mean latitude	Mean longitude from central meridian	Intensity	Maximum width of H-alpha observed	Remarks
	Beginning h. m.	Maximum h. m.	End h. m.					
1955								
January 13 . . .	07 45	..	08 30	33°N	3°E	1	1.00	Observed with spectrohelioscope
February 4 . . .	07 50	..	08 15	19°N	55°W	1	1.04	Do.
May 22 . . .	07 40	..	08 15	25°N	15°W	1	0.32	Do

Sudden disappearance of Prominences and H-alpha Dark Markings.—No sudden disappearance of prominences or H-alpha absorption markings was observed during the period.

Prominences projected on the disc as absorption markings.— During the period under review, photographs of the sun's disc in H-alpha line were secured on 146 days at Kodaikanal. Spectroheliograms were also received for 29 days from Mt. Wilson Observatory and for 26 days from Meudon Observatory. On the whole records were available for 180 effective days.

The mean daily areas in millionths of the sun's visible hemisphere (uncorrected for foreshortening) and the mean daily numbers of H-alpha dark markings as derived from the combined photographs are :—

	Combined data	
	Mean daily areas (Millionths of the sun's visible hemisphere)	Mean daily numbers
North	10,22.9	6.96
South	434.3	3.18
TOTAL	14,57.2	10.14

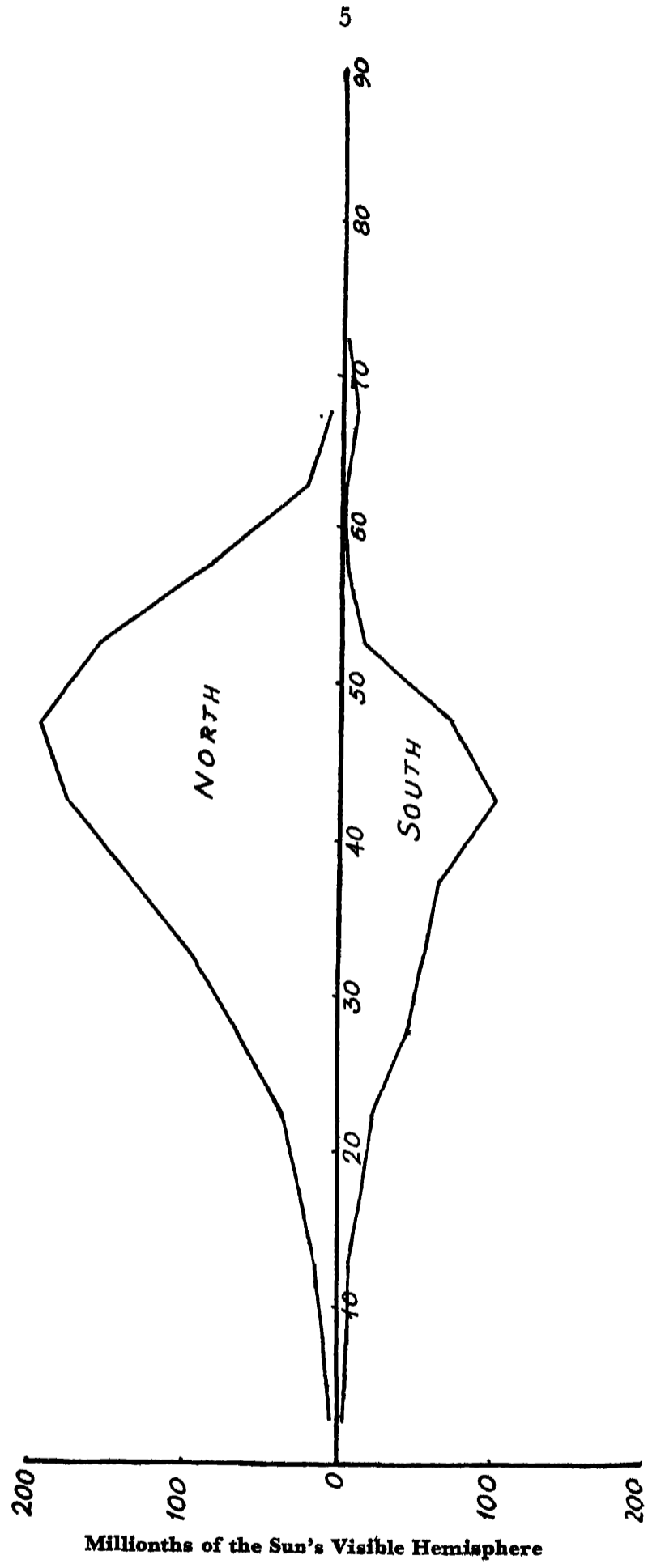
Compared to the previous half-year's values, these figures show a marked increase in activity as in the case of the limb prominences. The areas show an increase of 117.7% and the numbers 73.3%.

The figures based on only Kodaikanal photographs are also given below for comparison with similar data :—

	Kodaikanal data only	
	Mean daily areas (millionths of the sun's visible hemisphere)	Mean daily numbers
North	902.4	6.20
South	376.5	2.62
TOTAL	1,278.9	8.82

The distribution of the areas of the markings in 5° ranges of latitude as obtained from the combined data is shown in diagram II. There is a well-marked zone of maximum activity in the northern hemisphere in the latitude belt 45°—50°. The zone of maximum activity in the southern hemisphere is in the belt 40°—45°.

DIAGRAM II
Mean Areas of H-Alpha Absorption Markings
January-June 1955



The distribution of total areas and numbers of the dark markings east and west of the sun's axis is as follows :—

	Combined data		
	East	West	Percentage East
Total area (millionths of the sun's visible hemisphere uncorrected for foreshortening)	14,1274	12,1530	53.6
Total numbers	983	843	53.8

The Western excess of both areas and numbers seen in the last half-year has now changed into an eastern excess.

Calcium Flocculus

Commencing with 1955 this bulletin will incorporate the results of calcium flocculus observations at Kodaikanal supplemented by observations made at the co-operating observatories for days on which Kodaikanal had no observations.

During the half-year under review calcium flocculus spectroheliograms were taken on 143 days at Kodaikanal. Calcium spectroheliograms for 24 days were received from Meudon Observatory. In all observations were available for 167 effective days.

The mean daily areas (in millionths of the sun's visible hemisphere—uncorrected for foreshortening) computed from the combined data are given in the following table :—

	Combined data
	Mean daily area (millionths of the sun's visible hemisphere)
North	2,009
South	1,230
TOTAL	3,239

The distribution of flocculi East and West of the sun's axis is as follows:—

	East	West	Percentage East
Total area in millionths of the sun's visible hemisphere	26,0114	28,0358	48.1

Our thanks are due to the co-operating observatories for the photographs supplied by them.

PART II

Brief descriptions of the absolute instruments, the variometers and the system of observations are available in Bulletins No. CXXXII and CXXXVI of this observatory. The data given in this bulletin are derived mainly from the records of the La Cour instruments, but in case of failure of La Cour records the Watson magnetograms have been used.

The adopted values of the scale-coefficients of the horizontal force, vertical force and declination magnetographs for the first half of 1955 are 80.0 $\gamma/cm.$, 115.0 $\gamma/cm.$ and 16.0'/cm. respectively.

Trends in Magnetic Variations

The mean value of and the range in horizontal force for the first half of 1955 were 39.469 γ and 99 γ respectively showing a decrease in the mean value and an increase in the range over the corresponding values viz. 39.479 γ and 87 γ for the second half of 1954. In the case of vertical force the mean value as well as the range showed an increase over the corresponding values for the previous half-year, the mean value rising from 2,387 γ to 2,394 γ and the range from 34 γ to 36 γ . The mean westerly declination decreased from 2°34'4 to 2°33'9 and the mean range from 3.5' to 3.4'.

A. K. DAS,
Deputy Director-General of Observatories.

KODAIKANAL OBSERVATORY
December, 1956.

TABLE I
Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

January

2° plus tabular quantities

DIAGRAM I

Date	Hours G M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	33.3	33.3	33.5	32.7	33.0	33.8	33.8	33.0	32.2	31.2	30.9	31.4	32.5	32.5	32.4
2	33.0	33.3	33.8	33.3	33.5	34.6	34.6	34.4	33.8	32.7	31.4	31.4	32.2	32.8	32.5
3	33.5	33.6	33.8	33.3	33.2	33.6	34.0	33.6	33.0	32.5	31.7	31.4	32.2	32.8	32.4
4	33.2	33.0	33.0	33.0	33.3	33.8	34.1	34.3	34.1	33.8	32.8	32.2	32.4	32.4	32.2
5	32.7	32.7	32.7	32.8	33.8	34.6	34.8	34.4	34.0	33.3	32.7	31.7	31.7	32.0	32.0
6	32.7	32.0	31.2	30.9	32.2	33.8	33.8	33.8	33.8	33.6	32.8	32.4	32.2	31.7	31.4
7	32.8	32.5	32.0	31.6	31.6	32.5	33.2	33.5	33.3	33.5	33.0	32.2	32.4	32.2	32.2
8	32.8	32.8	32.5	32.4	31.2	32.0	32.7	33.3	33.6	33.6	33.2	32.8	32.8	32.7	32.5
9†	33.0	33.5	33.6	34.1	34.0	34.1	34.8	34.0	33.8	33.0	32.4	32.2	32.2	32.2	32.4
10†	34.4	34.4	34.0	33.0	32.8	33.6	33.5	34.3	33.3	33.0	32.7	32.5	32.7	32.7	32.5
11	33.0	33.2	33.0	32.8	33.0	33.6	33.6	32.2	31.2	30.9	31.1	31.4	31.9	31.4	31.4
12	32.7	32.5	32.4	32.0	33.3	34.3	34.1	33.3	32.8	32.2	32.0	32.4	33.0	33.0	32.8
13	33.2	33.0	33.0	32.7	33.0	33.8	34.1	33.6	32.8	31.4	31.1	31.1	31.7	32.2	32.0
14	33.0	33.0	33.0	33.0	33.6	34.6	34.9	34.3	33.0	31.7	31.1	31.2	31.4	31.4	31.4
15†	33.0	33.0	32.5	32.4	32.7	33.0	33.3	33.2	32.5	31.4	31.1	31.2	32.0	32.2	32.5
16	32.8	32.7	32.4	32.4	32.7	33.6	34.6	34.6	34.1	32.8	31.9	31.4	31.7	31.9	31.4
17††	33.0	33.5	33.8	33.5	33.5	34.0	34.0	33.5	33.0	32.5	31.9	31.4	31.2	32.2	31.2
18††	33.8	34.4	33.6	32.2	30.8	31.9	32.7	33.3	33.0	32.8	32.2	31.4	31.2	31.2	31.2
19††	32.7	32.8	33.0	32.0	31.4	30.9	29.8	29.5	29.3	29.6	29.0	29.5	29.6	30.3	29.8
20††	32.0	32.0	32.5	32.0	32.4	32.7	32.5	32.7	33.0	32.8	32.4	31.4	31.2	31.2	31.1
21	32.4	32.4	32.5	32.7	32.7	32.7	32.8	32.8	32.5	31.6	31.4	31.4	31.4	31.4	31.7
22	32.8	33.0	33.5	33.5	33.0	33.0	32.7	32.2	32.2	32.0	32.2	32.2	32.4	32.0	32.2
23	33.3	34.1	34.6	34.0	33.3	33.3	33.0	32.2	31.6	31.2	30.9	31.1	31.6	31.4	31.4
24†	33.2	33.6	34.3	33.6	33.2	33.3	33.3	33.0	32.4	32.0	31.6	31.6	32.2	32.2	32.4
25†	33.3	34.0	34.8	34.8	34.3	34.1	34.4	33.8	33.0	32.4	32.0	32.0	32.4	32.5	32.5
26†	33.0	33.0	33.0	33.3	34.1	34.1	34.3	34.0	33.3	32.7	32.2	32.0	32.4	33.0	32.8
27	33.3	33.6	34.1	33.6	33.0	33.2	33.5	33.0	32.4	31.6	31.4	31.4	32.0	32.5	32.7
28	33.5	34.0	34.6	34.8	34.8	34.8	34.6	34.1	33.8	32.8	32.5	32.4	32.7	32.8	33.0
29	34.6	34.9	34.6	34.6	34.8	35.4	35.2	34.6	34.1	33.3	33.0	33.0	33.0	33.0	32.8
30	33.2	33.5	33.5	33.8	34.4	34.6	34.4	33.8	33.0	32.4	31.7	31.7	32.5	32.7	32.8
31	33.0	32.8	32.7	32.8	33.3	33.6	33.8	33.5	33.0	32.8	32.5	32.2	32.5	32.8	32.8
Mean	33.1	33.2	33.3	33.0	33.1	33.6	33.7	33.4	32.9	32.4	31.9	31.7	32.0	32.2	32.1
Mean†	33.4	33.6	33.7	33.4	33.4	33.6	33.8	33.7	32.9	32.3	31.9	31.9	32.3	32.5	32.5
Mean††	32.9	33.2	33.3	32.8	32.4	32.7	32.8	32.6	32.4	32.1	31.6	31.2	31.1	31.4	31.1

† Five International quiet days.

†† Five International disturbed days.

* Loss of record, (day omitted for means).

TABLE I

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

January

2° plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
									H. M.		H. M.				
32.2	32.4	32.5	32.7	32.8	32.8	32.8	32.8	32.8	32.6	05 30	33.8	10 06	30.3	3.5	1
32.5	32.7	32.7	32.8	33.0	33.0	33.0	33.0	33.0	33.0	05 50	34.9	10 30	31.1	3.8	2
32.5	32.7	32.7	32.7	32.8	32.8	33.0	33.0	33.2	32.9	06 50	34.0	11 50	31.2	2.8	3
32.4	32.7	32.7	32.7	32.8	32.8	32.7	32.7	32.7	33.0	07 06	34.3	11 10	31.7	2.6	4
31.7	31.7	31.9	32.8	32.8	32.7	32.7	32.8	32.8	32.8	06 02	34.9	11 30	31.4	3.5	5
31.4	31.6	32.0	32.2	32.2	32.4	32.7	32.7	32.8	32.4	08 10	33.8	09 00	30.6	3.2	6
32.0	32.2	32.2	32.2	32.2	32.4	32.7	32.8	32.8	32.5	09 06	33.6	09 15	31.1	2.5	7
32.4	32.4	32.5	32.7	32.8	32.8	32.8	33.0	33.0	32.7	08 58	33.8	09 30	30.8	3.0	8
32.7	32.7	32.4	32.5	33.0	33.0	33.0	33.0	33.6	33.1	06 10	34.8	11 30	31.4	3.4	9†
32.5	32.5	32.7	32.7	32.8	33.0	33.0	33.0	33.0	33.1	01 40	31.4	10 50	31.9	2.5	10†
31.7	32.0	32.0	32.0	32.2	32.4	32.0	32.4	32.7	32.2	05 30	33.8	08 30	30.8	3.0	11
32.8	32.8	32.8	32.8	32.8	33.0	33.0	33.0	33.0	32.9	05 30	34.3	10 46	31.7	2.6	12
32.2	32.2	32.5	32.5	32.7	32.7	32.8	33.0	33.0	32.6	04 50	34.4	10 50	30.4	4.0	13
31.4	31.9	31.9	32.5	32.7	32.8	32.8	33.0	33.0	32.6	05 10	34.9	10 10	30.6	4.3	14
32.7	32.7	32.7	32.8	32.8	32.8	32.8	32.8	32.8	32.5	06 50	33.3	10 30	30.8	2.5	15†
31.4	32.0	32.0	32.0	32.2	32.5	32.7	32.8	32.8	32.6	06 30	31.6	11 10	30.9	3.7	16
30.6	31.4	31.7	31.9	32.4	33.0	32.7	32.5	33.8	32.6	23 00	34.3	14 10	29.8	4.5	17††
31.2	31.1	31.1	31.4	31.4	32.2	32.8	32.5	32.7	32.2	01 36	34.4	04 18	30.3	4.1	18††
30.3	30.9	31.2	31.4	31.2	31.4	31.4	31.7	32.0	30.9	02 20	33.0	09 50	28.2	4.8	19††
31.1	31.1	31.2	31.2	31.2	31.4	31.4	31.4	32.0	31.8	08 10	33.0	15 10	30.9	2.1	20††
31.7	31.9	32.0	32.0	32.0	32.0	32.2	32.5	32.7	32.1	23 00	33.0	11 10	31.4	1.6	21
32.2	32.4	32.7	32.5	32.4	32.7	33.0	33.0	33.0	32.6	02 56	33.6	09 30	31.7	1.9	22
31.9	32.0	32.5	32.7	32.7	32.8	33.0	33.0	33.0	32.5	02 36	34.6	10 10	30.8	3.8	23
32.5	32.7	32.7	32.7	32.7	32.8	32.8	33.0	33.2	32.8	02 52	34.4	10 50	31.4	3.0	24†
32.5	32.7	32.8	32.8	32.8	32.7	32.7	32.8	32.8	33.1	03 00	34.9	10 10	31.4	3.5	25†
32.8	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.1	06 26	31.4	11 30	31.6	2.8	26†
32.8	32.8	32.8	32.7	32.5	32.8	33.0	33.0	33.0	32.8	03 00	34.6	10 50	31.2	3.4	27
33.0	33.2	33.8	33.5	33.6	33.8	34.0	34.1	34.8	33.7	04 10	35.4	10 50	31.9	3.5	28
32.8	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.6	06 14	35.4	11 10	32.8	2.6	29
33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.1	05 10	34.8	10 30	31.4	3.4	30
32.7	32.8	33.0	33.0	33.0	33.0	33.0	33.0	33.0	32.9	06 30	31.1	10 30	32.0	2.1	31
32.1	32.3	32.4	32.5	32.6	32.7	32.8	32.8	33.0	32.7					3.2	Mean
32.6	32.7	32.8	32.8	32.8	32.9	32.9	32.9	33.0							Mean†
31.2	31.4	31.5	31.7	31.8	32.2	32.3	32.2	32.8							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record, (day omitted for means).

DIAGRAM 1

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TABLE 2

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

February

2° plus tabular quantities

Date	Hours G M T														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1†	34.0	34.0	34.0	33.8	34.2	34.6	35.6	35.6	35.1	34.6	33.8	33.7	33.8	34.0	34.0
2†	35.3	35.0	35.3	35.0	35.3	35.6	35.6	35.4	34.5	33.5	32.9	32.7	33.2	33.2	33.2
3	34.6	35.0	35.4	35.6	35.6	35.6	35.6	35.6	34.8	34.0	34.0	34.0	34.0	34.0	34.0
4††	34.0	34.2	34.5	34.3	34.6	35.3	35.3	34.8	34.0	33.7	33.2	33.0	33.2	33.2	33.4
5††	34.0	34.0	34.0	33.5	33.8	34.0	34.0	33.8	33.4	33.0	32.9	33.2	33.2	33.4	33.2
6	34.3	35.1	35.3	35.3	35.0	35.1	34.6	34.0	33.8	33.2	32.4	32.4	33.2	33.7	33.7
7	34.0	34.8	35.1	34.6	35.1	36.2	36.0	36.4	35.4	34.5	33.8	33.2	33.5	33.5	33.2
8	34.6	34.2	34.2	34.5	34.6	35.6	35.6	35.6	34.8	33.5	32.9	32.9	33.4	33.7	33.8
9	34.0	34.2	34.0	33.4	34.5	35.4	36.4	35.6	35.0	34.0	33.2	33.4	33.8	34.0	33.8
10†	34.0	34.0	33.8	33.8	34.6	35.8	36.6	36.6	35.8	35.0	34.0	33.7	33.8	33.8	33.8
11	34.0	34.0	34.0	34.5	35.9	37.2	37.2	36.7	35.6	34.6	33.8	33.7	33.7	33.8	33.8
12	33.0	32.9	32.7	33.8	34.5	35.6	35.6	35.6	35.0	34.0	32.9	33.0	33.4	33.4	33.4
13	33.7	33.2	33.0	33.2	33.7	34.6	35.0	35.0	34.3	33.2	32.4	32.4	32.4	33.0	33.2
14	34.0	33.8	33.7	33.5	33.8	34.3	35.1	35.9	35.3	33.8	33.2	33.0	33.0	33.0	32.4
15	34.0	34.0	34.0	33.8	34.6	35.4	35.6	35.6	35.1	34.5	34.0	33.8	34.0	34.0	34.0
16	33.8	33.7	33.5	33.7	34.3	35.0	35.4	35.3	35.0	33.8	32.7	32.6	33.2	33.4	33.0
17	34.1	34.3	34.6	34.8	35.1	35.4	35.6	35.6	35.1	34.3	33.8	33.7	33.8	34.0	34.0
18	34.6	34.6	35.0	34.6	34.8	35.3	35.3	35.0	34.3	33.7	33.5	34.0	34.0	34.0	34.0
19†	33.8	33.8	34.0	34.0	34.3	34.8	34.8	34.8	34.2	33.7	33.8	33.8	33.8	33.8	33.8
20	35.3	34.8	34.8	35.1	35.3	35.4	35.6	35.4	35.0	34.3	33.8	33.7	33.8	34.0	33.7
21	34.0	33.7	33.7	33.4	33.5	34.3	35.0	34.8	33.8	32.7	32.4	32.4	32.4	32.4	32.4
22††	34.0	33.7	33.2	33.5	34.3	35.0	35.3	35.0	34.8	34.6	34.2	33.5	33.4	33.7	33.8
23††	34.0	34.0	34.0	34.0	34.5	35.3	36.1	36.6	35.9	35.0	34.0	33.2	33.2	33.7	33.5
24	34.0	34.2	34.5	35.0	35.6	35.9	36.4	35.9	35.1	34.0	33.8	33.7	33.7	34.0	34.0
25	34.0	34.0	34.0	34.2	34.5	34.3	34.6	35.8	35.6	34.8	33.4	33.8	33.7	33.8	33.8
26	35.3	35.1	35.1	34.3	33.7	34.2	34.3	35.0	34.8	34.3	33.8	33.8	33.7	33.7	33.5
27†	35.0	34.8	35.0	35.0	35.0	35.3	35.8	36.1	35.8	35.6	35.4	35.3	34.2	34.0	34.2
28††	35.3	35.6	35.4	34.5	33.7	33.8	34.3	34.8	34.8	34.6	34.0	33.7	33.5	33.0	32.4
Mean	34.2	34.2	34.3	34.2	34.5	35.1	35.5	35.4	34.9	34.1	33.5	33.4	33.5	33.6	33.5
Mean†	34.4	34.3	34.4	34.3	34.7	35.2	35.7	35.7	35.1	34.5	34.0	33.8	33.8	33.8	33.8
Mean††	34.3	34.3	34.2	34.0	34.2	34.7	35.0	35.0	34.6	34.2	33.7	33.3	33.3	33.4	33.3

† Five International quiet days

†† Five International disturbed days

* Loss of record, (day omitted for means).

TABLE 2

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

February

2° plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
										H. M.		H. M.			
34.0	34.3	34.5	34.8	34.8	35.0	35.0	35.1	35.1	31.5	06 50	35.6	11 30	33.4	2.2	1†
32.9	33.0	33.7	33.8	34.0	34.0	34.2	34.2	34.2	31.2	05 30	35.6	15 14	32.4	3.2	2†
33.8	34.0	33.8	33.8	33.8	33.8	34.0	34.0	34.0	34.4	06 10	35.6	17 30	33.4	2.2	3
33.7	33.7	33.7	33.7	33.8	33.8	34.0	33.8	33.8	33.9	06 10	35.4	11 10	32.9	2.5	4††
33.2	33.2	33.4	33.7	33.7	33.7	33.7	33.8	34.0	33.6	02 40	34.2	10 10	32.4	1.8	5††
33.7	33.8	34.0	34.0	34.5	34.0	34.3	34.6	34.5	34.1	02 40	35.4	10 10	32.2	3.2	6
33.5	33.8	34.0	34.0	34.0	34.0	34.0	34.2	34.3	34.4	06 50	36.9	10 50	33.0	3.9	7
33.8	33.8	33.8	34.0	34.0	34.0	34.0	34.0	34.0	34.1	06 50	35.6	11 10	32.4	3.2	8
33.8	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.2	06 10	36.4	10 10	33.0	3.4	9
33.8	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.4	06 10	36.9	11 30	33.5	3.4	10†
33.8	34.0	34.0	34.0	33.5	33.5	33.4	33.2	33.2	34.4	05 50	37.2	23 30	33.2	4.0	11
33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.7	33.7	06 50	35.6	01 56	32.6	3.0	12
33.2	33.2	33.2	33.5	33.7	33.8	34.0	34.0	34.0	33.5	06 50	35.3	11 30	32.2	3.1	13
33.0	33.2	33.5	34.0	34.0	34.0	34.0	34.0	34.0	33.8	06 50	36.2	14 10	32.4	3.8	14
34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.3	06 10	35.6	08 30	33.0	2.6	15
33.4	33.5	33.8	34.0	34.0	34.2	34.1	34.0	34.0	33.9	06 30	35.4	11 10	32.4	3.0	16
34.0	34.0	34.0	34.0	34.0	34.0	34.2	34.2	34.3	34.4	06 26	35.6	11 10	33.2	2.4	17
34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	33.8	34.3	06 30	35.4	10 10	33.2	2.4	18
33.8	34.0	34.0	34.0	34.0	34.0	34.0	34.2	35.0	34.1	18 10	35.1	09 30	33.2	1.9	19†
33.4	33.4	33.7	33.7	33.7	33.8	34.0	34.0	34.0	34.3	05 50	35.6	15 30	33.0	2.6	20
32.4	32.6	33.0	33.2	33.4	33.8	34.0	34.0	34.0	33.4	06 50	35.1	13 10	32.1	3.0	21
34.0	34.0	34.0	34.0	34.0	34.2	34.0	34.0	34.0	34.1	06 18	35.4	02 40	32.9	2.5	22††
33.7	33.8	33.8	33.8	34.0	34.0	34.0	34.0	34.0	34.2	06 50	36.7	11 30	32.6	4.1	23††
34.0	34.0	34.0	34.0	34.0	34.2	34.3	34.3	34.2	34.4	06 50	36.4	11 30	33.2	3.2	24
34.2	34.3	34.0	34.0	34.2	34.6	34.8	35.0	35.3	34.4	07 50	35.8	12 10	33.2	2.6	25
33.7	33.7	33.8	34.0	34.0	34.7	34.8	34.9	35.0	34.3	02 20	35.6	14 10	33.2	2.4	26
34.5	34.5	34.6	34.6	34.8	34.8	35.1	35.3	35.6	35.0	06 50	36.1	12 30	33.8	2.3	27†
32.6	33.2	33.7	33.8	34.0	34.0	34.0	34.2	34.3	34.0	01 20	35.6	13 30	32.4	3.2	28††
33.6	33.7	33.8	33.9	34.0	34.8	34.1	34.2	34.2	34.2					2.9	Mean
33.8	34.0	34.2	34.2	34.3	34.4	34.5	34.6	34.8							Mean†
33.4	33.6	33.7	33.8	33.9	33.9	33.9	34.0	34.0							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 3
Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

March

2° plus tabular quantities

DIAGRAM I

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1†	34.5	34.5	34.5	35.1	35.8	35.9	36.3	36.6	36.3	35.8	35.1	34.7	34.7	35.0	35.1
2†	35.3	34.7	34.5	34.0	34.7	35.3	35.3	35.9	35.9	35.3	34.5	34.3	34.2	34.5	34.5
3†	34.5	34.5	34.5	34.3	34.7	35.8	36.1	36.1	35.9	35.6	34.8	34.5	34.5	34.5	34.5
4†	34.5	34.3	34.3	33.9	34.3	34.8	35.3	35.3	34.8	34.5	34.3	34.2	34.0	34.3	34.5
5	34.5	34.3	34.3	33.9	34.2	34.5	35.0	35.6	35.8	35.0	34.5	34.2	33.9	33.7	33.9
6	34.3	33.9	34.0	34.0	34.3	35.3	35.6	35.8	35.1	34.7	33.5	33.2	33.5	33.9	34.0
7††	33.7	33.1	32.9	33.1	33.9	34.5	34.5	34.7	34.5	34.3	33.9	33.7	33.7	33.7	33.9
8	33.4	32.7	32.7	32.7	33.7	34.3	34.7	35.1	34.8	34.2	33.9	33.7	33.9	34.3	34.2
9††	34.5	34.5	34.5	34.0	34.5	34.5	34.5	34.7	34.5	34.5	34.0	33.5	33.5	33.5	33.7
10	34.5	34.5	34.7	33.9	34.3	34.2	34.1	34.3	34.0	34.2	33.7	33.2	32.7	33.2	33.7
11	33.7	33.7	34.0	34.0	34.8	35.8	35.9	36.4	36.3	35.0	34.5	34.2	33.4	33.7	34.2
12	34.5	34.5	34.3	33.9	34.0	34.8	35.6	35.8	35.3	34.8	34.3	33.5	33.2	33.4	33.9
13	33.9	33.9	34.0	34.5	35.5	35.8	35.9	36.1	35.9	35.3	34.2	33.7	34.0	34.3	34.3
14	33.9	33.7	34.0	34.0	35.3	36.1	36.1	35.9	35.9	35.9	35.1	34.5	34.5	34.5	34.5
15	34.5	34.7	35.1	34.0	33.7	33.7	34.3	34.8	35.3	34.2	34.0	33.7	34.0	34.2	34.2
16	34.3	34.5	34.5	34.0	34.3	34.8	35.0	34.8	35.1	35.3	34.5	34.5	34.7	34.7	34.8
17	35.9	36.3	36.7	35.8	35.1	35.3	35.8	35.5	34.5	34.3	33.7	32.9	32.9	33.7	34.2
18	35.3	35.3	35.3	34.8	35.1	35.9	36.1	36.1	36.1	35.6	34.8	34.0	33.7	34.0	34.3
19	34.3	33.9	33.9	33.9	34.7	35.0	35.6	36.1	36.1	35.8	34.8	34.3	34.5	34.5	34.5
20	35.8	35.6	35.3	34.7	34.7	35.3	35.3	35.5	35.8	35.8	34.8	34.3	34.3	34.3	34.3
21	34.5	34.5	34.5	34.2	34.3	34.8	35.5	35.9	35.9	35.1	34.0	33.5	34.0	34.5	34.5
22††	34.5	34.5	34.8	35.0	35.8	36.4	36.9	37.2	37.7	37.4	35.9	34.3	32.9	31.6	31.1
23	34.5	34.5	34.8	34.7	34.8	35.5	35.8	36.1	36.1	35.6	34.7	34.5	34.5	34.5	34.5
24	34.2	33.7	33.4	33.9	34.7	35.1	35.3	35.3	35.9	35.6	34.8	34.3	34.5	34.3	34.3
25	34.5	34.5	34.5	34.0	33.7	33.7	34.0	34.5	34.5	34.2	32.9	33.1	33.5	34.0	34.3
26	34.5	34.5	34.3	34.3	34.5	34.5	35.0	35.8	35.8	35.0	33.9	33.5	33.4	33.2	33.4
27	34.5	34.5	34.5	34.0	34.2	34.3	34.7	35.1	35.3	35.3	34.5	33.9	33.7	34.2	34.2
28	34.3	34.3	34.2	34.2	34.5	34.8	35.5	36.1	36.1	35.6	34.8	34.2	34.2	34.2	34.3
29†	34.5	34.5	34.0	33.5	33.7	34.2	34.8	35.3	35.8	35.8	34.8	34.3	34.3	34.2	34.3
30††	34.5	34.5	34.2	33.2	32.9	33.4	34.5	35.6	35.6	34.8	34.5	34.3	34.3	34.3	34.3
31††	33.9	33.7	32.6	32.4	32.9	33.5	34.7	35.3	34.5	34.0	33.5	32.9	33.2	33.9	34.2
Mean	34.4	34.3	34.3	34.1	34.4	34.9	35.3	35.6	35.5	35.1	34.4	33.9	33.9	34.0	34.1
Mean†	34.7	34.5	34.4	34.2	34.6	35.2	35.6	35.8	35.7	35.4	34.7	34.4	34.3	34.5	34.6
Mean††	34.2	34.1	33.8	33.5	34.0	34.5	35.0	35.5	35.4	35.0	34.4	33.7	33.5	33.4	33.4

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means)

TABLE 3

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

March

2° plus tabular quantities

Hours G. M. T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
35.1	35.3	35.3	35.3*	35.3	35.3	35.3	35.3	35.3	35.3	06 42	36.7	11 50	34.5	2.2	1†
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	07 30	35.9	05 10	34.0	1.9	2†
34.5	34.5	34.5	34.5	34.3	34.5	34.5	34.5	34.5	34.8	06 30	36.1	13 30	34.2	1.9	3†
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	06 10	35.3	11 50	33.7	1.6	4†
34.0	34.2	34.2	34.2	34.3	34.3	34.3	34.3	34.5	34.4	07 30	35.8	13 10	33.7	2.1	5
33.7	33.7	33.7	33.7	33.7	33.5	33.5	33.7	33.9	34.1	06 30	35.9	10 30	32.9	3.0	6
33.9	33.7	33.5	33.2	33.4	33.4	33.7	33.7	33.7	33.8	07 30	34.7	02 00	32.9	1.8	7††
34.0	34.2	34.2	34.3	34.3	34.3	34.3	34.5	34.5	34.0	07 50	35.1	03 00	32.7	2.4	8
33.7	33.7	33.4	33.4	33.2	32.7	32.7	33.5	34.0	33.9	07 30	35.1	20 10	32.6	2.5	9††
33.2	33.5	33.7	33.7	33.7	33.7	34.0	33.7	33.9	33.8	02 52	35.0	12 12	32.7	2.3	10
34.5	34.5	34.5	34.5	34.5	34.3	34.5	34.5	34.5	34.6	07 10	36.7	12 10	33.2	3.5	11
34.2	34.3	34.0	33.7	33.7	33.7	33.7	34.0	34.3	34.2	06 42	35.9	12 30	32.9	3.0	12
34.2	34.2	34.2	34.2	34.2	34.2	34.3	34.3	34.2	34.6	06 50	36.1	11 30	33.4	2.7	13
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.8	06 30	36.1	03 00	33.5	2.6	14
34.3	34.3	34.3	34.3	34.3	34.2	34.0	34.0	34.2	34.3	02 20	35.1	03 00	32.9	2.2	15
35.0	35.0	35.0	34.5	34.7	35.2	35.3	35.3	35.8	34.8	10 02	35.3	03 06	33.4	2.1	16
34.2	34.3	34.5	34.5	34.5	34.5	34.7	34.8	35.1	34.7	03 04	36.7	12 06	32.6	4.1	17
34.5	34.5	34.5	34.0	33.7	33.7	34.0	34.2	34.3	34.7	06 30	36.3	11 50	33.7	2.6	18
34.5	34.5	34.5	34.5	34.7	35.1	35.5	35.3	35.8	34.8	06 30	36.1	01 40	33.7	2.4	19
34.2	34.2	34.2	34.2	34.2	34.2	34.3	34.3	34.3	34.7	08 30	35.8	18 30	34.0	1.8	20
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.7	34.6	07 12	35.9	11 30	33.2	2.7	21
31.6	32.1	32.4	32.7	33.2	33.5	34.2	34.3	34.5	34.4	08 10	37.7	14 54	30.5	7.2	22††
34.5	34.2	33.7	33.1	32.9	32.9	33.1	33.7	33.7	34.4	06 30	36.1	21 38	32.7	3.4	23
34.3	34.2	34.0	34.0	34.0	34.2	34.3	34.3	34.5	34.5	08 10	35.9	02 00	32.9	3.0	24
34.3	34.2	33.7	33.7	33.7	34.0	34.2	34.3	34.3	34.0	01 00	34.5	10 18	32.9	1.6	25
33.7	34.3	34.5	34.5	34.5	34.3	34.3	34.5	34.5	34.4	07 50	35.9	13 10	32.9	3.0	26
34.2	34.2	33.7	33.7	33.9	33.7	33.9	34.2	34.2	34.3	08 02	35.3	11 30	33.4	1.9	27
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.6	08 08	36.1	12 30	33.9	2.2	28
34.3	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.8	34.5	08 10	35.9	03 02	33.4	2.5	29†
34.3	34.5	34.5	34.5	34.3	34.2	34.3	34.5	34.2	34.3	07 50	35.6	03 10	32.9	2.7	30††
34.2	34.3	34.0	33.7	33.7	34.2	33.9	34.2	34.2	33.8	06 50	35.3	02 36	31.9	3.4	31††
34.2	34.2	34.2	34.1	34.1	34.2	34.2	34.4	34.5	34.4					2.7	Mean
34.6	34.7	34.7	34.7	34.6	34.7	34.7	34.7	34.7							Mean†
33.5	33.7	33.6	33.5	33.6	33.6*	33.8	34.0	34.1							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 4

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

April

2° plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	33.5	33.1	32.7	32.6	33.9	33.9	34.2	34.7	34.8	34.5	34.1	33.9	32.9	32.7	33.4
2	33.5	33.2	33.5	33.2	33.2	33.7	35.0	35.6	35.9	35.5	34.5	34.2	34.3	34.3	34.3
3	34.5	34.5	34.2	33.5	32.9	33.5	34.0	34.3	34.8	35.0	34.3	34.2	34.3	34.3	34.2
4	34.7	34.8	34.5	33.7	33.7	34.0	34.5	34.8	34.8	34.8	34.2	33.7	33.9	34.2	34.3
5††	33.7	33.2	33.2	33.1	33.7	34.5	34.5	34.8	35.3	34.7	33.7	32.9	33.2	33.7	33.5
6	34.2	33.4	33.7	33.1	34.0	34.5	34.7	35.1	35.3	35.1	34.5	34.2	34.0	34.2	34.2
7††	34.2	33.7	32.9	32.6	32.9	33.2	34.2	34.7	34.5	34.5	33.5	33.4	34.0	34.3	34.3
8	34.0	33.7	33.9	33.5	34.3	34.5	34.5	35.0	35.0	34.5	34.2	33.9	34.2	33.9	33.5
9	33.7	33.5	33.5	33.1	32.9	33.7	34.0	34.5	34.3	34.3	33.9	33.4	33.2	33.4	33.7
10	34.3	34.5	34.3	33.9	34.7	35.1	35.8	35.8	35.8	34.8	34.5	33.9	33.4	33.5	34.2
11	34.5	34.5	34.5	34.8	34.5	34.5	35.0	35.0	35.0	34.3	33.9	33.1	33.4	34.0	34.3
12	34.5	33.7	33.1	32.9	33.2	34.2	34.8	34.8	34.3	34.0	33.5	33.5	33.7	33.7	34.0
13	33.7	33.5	33.5	33.9	34.7	35.5	36.4	36.4	36.4	36.4	35.5	34.7	34.5	34.5	34.5
14	33.7	33.7	33.5	33.5	34.2	34.5	34.5	34.7	34.5	34.5	34.3	33.9	33.4	33.2	34.2
15	34.2	34.2	34.0	33.7	34.5	34.5	34.8	35.6	35.5	34.5	34.2	33.7	33.7	34.0	34.2
16†	34.3	34.0	33.7	34.2	34.8	35.3	34.7	35.1	34.8	34.7	34.0	33.4	33.7	34.3	34.5
17††	34.3	33.4	32.9	34.2	34.8	35.1	35.6	36.1	35.9	35.3	34.5	34.0	33.9	34.3	34.5
18†	33.5	32.7	32.4	33.5	34.7	35.1	35.8	35.8	35.8	35.1	34.3	34.2	34.0	34.0	34.0
19†	33.9	33.2	32.9	32.9	34.0	34.8	35.5	36.1	35.6	35.1	34.5	34.3	34.3	34.5	34.5
20	34.5	34.3	34.3	34.5	35.3	36.1	36.4	36.1	35.1	33.9	34.2	32.9	33.2	33.4	33.7
21	33.7	32.9	32.7	33.1	33.7	34.7	36.1	37.4	36.3	34.7	33.7	32.9	32.9	33.2	33.9
22	33.7	33.1	32.9	32.9	33.1	33.5	34.0	34.7	34.5	34.2	34.0	32.9	32.7	33.2	33.7
23†	35.1	34.7	34.5	34.3	34.3	35.5	37.1	37.4	36.7	35.8	34.8	34.2	34.2	34.3	34.5
24	34.3	34.0	33.9	34.2	35.3	36.6	36.7	36.7	36.1	35.8	35.0	34.5	34.5	34.5	34.5
25	33.2	32.6	32.4	32.7	33.9	35.3	36.7	37.4	36.6	35.9	34.8	34.3	34.2	34.3	34.3
26	33.2	32.6	32.1	32.4	33.7	35.3	36.1	36.4	35.8	34.8	34.3	33.4	32.9	33.5	34.2
27††	33.2	32.6	32.4	32.4	33.2	34.5	35.5	36.1	35.8	35.1	34.2	33.5	33.5	33.5	33.5
28††	32.1	31.5	31.3	31.3	31.9	33.5	34.5	34.5	34.2	33.7	33.2	32.9	33.1	33.5	33.9
29††	32.9	32.6	32.6	32.1	33.5	34.8	35.3	35.5	34.7	33.7	32.9	32.7	32.9	33.7	34.2
30	33.4	32.9	32.9	32.9	33.5	34.5	34.5	34.5	34.2	33.5	32.7	32.7	32.7	33.7	33.7
Mean	33.9	33.5	33.3	33.3	33.9	34.6	35.2	35.5	35.3	34.8	34.1	33.6	33.6	33.9	34.1
Mean†	34.2	33.6	33.3	33.8	34.5	35.2	35.7	36.1	35.8	35.2	34.4	34.0	34.0	34.3	34.4
Mean††	33.2	32.7	32.5	32.3	33.0	34.1	34.8	35.1	34.9	34.3	33.5	33.1	33.3	33.7	33.9

† Five International quiet days.

†† Five International disturbed days.

* Loss of record, (day omitted for means).

TABLE 4

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

April 2° plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag		
									H M		H. M.				
33.4	33.4	33.5	33.5	32.7	32.9	33.7	34.0	33.7	33.6	07 40	34.8	13 10	32.3	2.5	1
34.0	33.5	33.4	33.7	34.0	34.5	33.2	33.9	34.5	34.1	07 40	35.9	17 44	32.7	3.2	2
33.9	33.9	33.7	33.9	33.9	34.2	34.2	34.3	34.5	34.1	08 26	35.0	03 16	32.3	2.7	3
34.3	34.3	33.9	33.4	33.4	33.7	33.7	33.7	33.7	34.1	08 32	34.8	18 30	32.7	2.1	4
33.2	33.5	33.4	33.1	33.2	33.4	33.4	33.5	33.7	33.7	08 10	35.3	11 30	32.3	3.0	5††
34.3	34.2	34.2	34.2	34.2	34.3	34.3	34.3	34.5	34.3	08 16	35.3	11 47	32.9	2.4	6
34.5	34.5	34.5	34.5	34.7	35.0	35.0	35.0	35.0	34.2	07 00	35.0	02 46	32.1	2.9	7††
33.5	33.5	32.9	32.9	32.9	32.9	32.9	33.5	33.7	33.8	07 44	35.0	18 10	32.6	2.4	8
34.2	34.2	34.2	34.2	34.2	34.2	34.3	34.3	34.3	33.9	06 30	34.5	09 00	32.7	1.8	9
34.2	34.2	34.3	34.5	34.5	34.5	34.5	34.3	34.3	34.5	07 16	35.8	13 58	32.9	2.9	10
34.5	34.3	34.3	34.2	34.0	34.0	34.2	34.3	34.5	34.3	05 58	35.0	11 08	32.6	2.4	11
34.0	34.0	33.9	33.9	33.7	33.5	33.5	33.5	33.5	33.8	06 36	34.8	02 16	32.3	2.5	12
34.5	34.5	34.5	34.3	34.3	34.2	33.7	33.5	33.5	34.6	06 34	36.4	01 12	33.2	3.2	13
34.2	34.2	34.2	34.0	33.7	33.7	34.0	34.0	34.2	34.0	07 14	34.7	12 22	32.4	2.3	14
34.3	34.3	34.2	34.2	34.0	34.0	34.2	34.2	34.3	34.3	07 30	35.6	11 10	32.7	2.9	15
34.8	35.3	35.3	34.5	34.5	34.3	34.3	34.3	34.3	34.5	06 36	35.3	11 22	32.7	2.6	16†
34.8	34.7	34.5	34.5	34.5	34.3	34.3	34.3	34.2	34.5	07 30	36.1	01 50	32.3	3.8	17†
34.2	34.2	34.2	34.2	34.2	34.2	34.3	34.3	34.3	34.3	07 06	36.1	01 42	32.1	4.0	18†
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.4	07 06	36.1	01 46	32.7	3.4	19†
33.7	33.7	33.7	33.7	33.5	33.5	33.7	33.7	33.7	34.2	05 32	36.6	11 02	32.7	3.9	20
34.3	34.3	34.2	34.2	34.0	34.0	34.2	34.2	34.2	34.1	07 00	37.4	02 02	32.4	5.0	21
34.0	34.2	34.3	34.3	34.3	34.5	34.5	34.5	34.7	33.8	07 10	34.7	11 30	32.1	2.6	22
34.5	34.5	34.3	34.2	34.2	34.3	34.3	34.3	34.3	34.8	07 10	37.4	11 02	33.7	3.7	23†
34.5	34.5	34.5	34.5	33.9	32.9	33.2	33.1	33.2	34.6	06 26	36.7	21 42	32.7	4.0	24
34.3	34.3	34.3	34.3	34.0	33.7	33.7	33.5	33.7	34.4	07 02	37.4	01 50	32.1	5.3	25
34.3	34.5	34.3	34.3	34.0	33.7	33.7	33.5	33.4	34.0	06 58	36.4	02 06	31.3	5.1	26
34.0	34.2	34.5	34.7	33.9	32.9	32.1	31.3	31.8	33.7	06 52	36.1	21 14	30.5	5.6	27††
34.2	34.2	34.0	33.2	32.9	32.9	32.9	33.1	33.1	33.2	06 30	34.5	01 46	30.5	4.0	28††
34.3	34.2	34.0	34.0	34.0	33.7	33.9	33.7	33.5	33.7	06 30	35.5	02 54	31.3	4.2	29††
33.7	33.7	33.7	33.7	33.7	33.7	33.5	32.9	32.9	33.5	07 10	34.5	11 18	32.6	1.9	30
34.2	34.2	34.1	34.0	33.9	33.9	33.9	33.8	33.9	34.1					3.3	Mean
34.6	34.6	34.6	34.4	34.4	34.3	34.3	34.3	34.3							Mean†
34.0	34.1	34.1	33.9	33.7	33.6	33.5	33.3	33.4							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 5

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

May

2° plus tabular quantities

Date	Hours G M T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	32.4	31.9	31.3	31.9	33.4	33.9	34.3	34.5	33.9	33.7	32.9	32.7	32.1	32.4	32.9
2	32.9	32.6	32.1	32.4	33.7	34.5	35.0	35.5	34.5	33.9	33.4	32.7	32.7	33.4	33.4
3	32.9	32.1	31.5	31.9	33.4	34.3	34.8	35.8	35.6	35.0	34.5	34.5	34.2	34.2	34.0
4	33.2	32.7	32.6	32.7	33.5	34.5	34.5	34.8	34.8	34.8	34.5	34.0	33.5	32.9	32.9
5	32.7	32.3	31.8	31.6	33.2	34.7	35.6	35.6	35.1	34.7	34.2	33.5	32.9	32.9	33.4
6††	32.9	32.3	32.3	32.3	33.2	34.5	35.1	36.1	35.9	35.3	34.2	34.0	33.9	32.6	32.3
7††	33.7	32.7	32.6	31.9	32.4	33.5	34.8	35.3	34.8	33.9	32.7	32.6	32.4	32.7	33.1
8††	32.9	32.7	32.1	31.6	32.1	33.7	35.1	35.6	35.5	35.0	34.0	33.1	32.9	32.7	33.5
9	33.2	33.2	33.1	33.2	33.7	35.1	35.9	35.9	35.6	34.7	34.0	32.9	32.9	32.9	33.1
10	33.2	32.7	32.6	32.4	33.7	35.3	36.1	36.4	36.4	35.6	34.5	33.9	32.9	33.2	33.9
11	33.7	33.4	33.2	32.9	33.4	35.0	36.1	36.4	36.1	35.1	34.5	34.0	33.4	33.5	33.5
12	32.7	32.1	31.3	31.3	32.1	33.7	34.5	34.8	34.5	34.5	33.5	32.7	32.6	32.9	32.9
13	32.6	31.6	31.6	32.3	33.5	35.0	35.8	35.3	35.1	34.5	34.3	34.5	34.5	34.5	34.5
14	34.3	33.9	33.9	33.5	33.7	34.5	35.1	35.9	36.1	35.6	34.5	33.5	32.9	32.7	32.9
15	33.1	32.7	32.1	31.5	32.3	33.7	34.5	34.5	34.5	34.5	33.9	33.7	33.7	33.7	34.0
16	34.3	34.2	33.4	32.7	32.7	33.5	34.2	34.7	34.7	34.3	33.7	33.7	33.9	34.2	34.2
17†	34.0	33.5	33.2	32.9	34.5	35.1	36.1	36.1	35.9	34.8	34.3	34.0	34.2	34.5	34.5
18	34.3	34.2	34.0	33.5	34.0	34.8	35.3	35.3	34.8	34.3	34.0	33.7	33.7	34.0	34.5
19†	34.3	33.7	33.7	33.7	33.9	35.1	35.9	36.1	36.1	35.6	34.7	34.3	34.3	34.5	34.5
20	34.3	33.4	32.9	32.9	33.5	34.5	35.1	36.1	36.1	35.5	34.5	34.5	34.5	34.5	34.5
21†	33.7	33.2	32.9	32.9	33.5	34.8	35.5	35.8	35.3	34.7	34.3	34.2	34.3	34.5	34.5
22	34.3	33.7	33.5	34.0	34.8	35.6	36.3	36.4	36.1	35.6	34.5	34.0	33.7	33.9	34.2
23†	33.7	33.2	33.4	34.3	34.8	35.6	36.4	36.7	36.3	35.3	34.0	32.9	32.9	33.5	33.9
24†	34.2	33.4	32.9	32.9	33.7	35.3	36.6	37.4	36.9	35.6	34.8	34.2	33.7	33.9	34.3
25††	34.2	33.4	32.9	32.9	33.7	35.0	35.8	36.1	35.8	35.1	34.5	34.5	34.3	34.3	34.5
26††	32.7	31.9	30.8	30.8	30.8	32.9	34.0	34.8	35.3	34.5	33.4	32.9	32.9	32.9	33.1
27	32.7	32.4	31.9	31.3	32.4	33.5	34.5	34.8	35.3	35.3	34.8	34.2	33.7	32.9	33.4
28	32.9	31.9	31.3	31.3	32.1	33.5	34.3	34.3	34.3	34.2	33.5	32.9	32.9	32.9	32.9
29	32.9	32.7	32.4	32.1	32.6	33.7	35.0	35.8	35.8	34.7	34.3	33.7	33.5	33.4	33.5
30	33.1	32.9	32.9	32.7	33.2	34.0	34.7	34.3	34.2	33.9	33.4	33.2	33.7	33.7	33.7
31	32.6	32.6	32.7	32.7	32.9	34.0	33.5	33.4	34.3	34.0	34.0	33.7	34.0	34.3	34.3
Mean	33.4	32.9	32.5	32.5	33.2	34.4	35.2	35.5	35.3	34.8	34.1	33.6	33.5	33.5	33.7
Mean†	34.0	33.4	33.2	33.3	34.1	35.2	36.1	36.4	34.1	35.2	34.4	33.9	33.9	34.2	34.3
Mean††	33.3	32.6	32.1	31.9	32.4	33.9	35.0	35.6	35.5	34.8	33.8	33.4	33.3	33.0	33.3

† Five International quiet days

†† Five International disturbed days.

* Loss of record, (day omitted for means).

TABLE 5

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

May

2° plus tabular quantities

Hours G. M. T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag		
										H M	'	H M.	'		
32.9	32.9	32.9	32.9	32.9	32.7	32.6	32.7	32.9	32.9	07 10	34.5	02 00	31.3	3.2	1
33.4	33.2	33.2	33.1	32.9	33.1	32.9	32.7	32.9	33.3	06 50	35.5	02 40	32.1	3.4	2
33.7	33.5	33.2	32.9	32.9	32.9	32.9	33.1	33.5	33.6	07 10	35.8	02 16	31.5	4.3	3
32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.7	33.4	08 30	34.8	02 20	32.4	2.4	4
32.9	33.2	33.4	33.5	33.7	33.9	34.0	34.2	33.9	33.6	06 30	35.6	02 40	31.3	4.3	5
32.9	33.5	34.0	34.2	33.5	33.2	32.9	33.4	33.9	33.7	07 58	36.1	01 40	31.8	4.3	6††
33.4	33.5	33.5	33.5	33.4	33.2	32.9	32.9	32.7	33.2	06 58	35.6	02 40	31.9	3.7	7††
33.9	33.5	33.5	33.5	33.5	32.9	32.9	32.9	32.9	33.4	07 10	35.8	02 40	31.3	4.5	8††
33.5	33.5	33.4	33.2	33.5	33.7	34.0	33.7	33.7	33.8	07 10	35.9	12 50	32.7	3.2	9
33.7	33.7	33.7	33.7	33.7	33.5	32.9	33.2	33.7	33.9	07 10	36.0	02 40	31.9	4.7	10
33.5	33.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	33.8	06 50	36.4	02 54	32.6	3.8	11
32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	33.0	06 30	35.0	03 00	31.9	3.7	12
34.3	34.3	33.9	33.5	33.5	33.5	33.7	34.0	34.2	33.9	06 10	35.8	02 16	31.3	4.5	13
33.4	34.2	33.9	33.5	33.7	33.7	33.5	33.2	33.2	34.0	06 50	36.1	12 22	32.6	3.5	14
33.7	33.7	33.7	33.7	33.7	33.7	33.9	34.2	34.3	33.6	07 50	34.7	03 02	31.8	2.9	15
34.3	34.3	34.3	34.3	34.5	34.5	34.5	34.5	34.7	34.0	07 10	34.7	02 50	32.7	2.0	16
34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	06 30	36.1	03 20	32.9	3.2	17†
34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	07 10	35.9	03 30	33.4	1.9	18
34.7	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.6	07 50	36.3	02 20	33.7	2.6	19†
34.3	34.2	34.5	34.2	33.9	33.7	33.7	33.7	34.9	34.3	06 30	36.1	03 14	32.9	3.2	20
34.5	34.5	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	06 30	35.8	03 10	32.6	3.2	21†
34.3	34.3	34.2	34.2	34.0	34.0	34.0	33.7	33.7	34.5	06 30	36.4	02 00	33.5	2.9	22
34.2	34.5	34.5	34.2	34.2	34.2	34.2	34.2	34.2	34.2	06 50	36.7	11 10	32.9	3.8	23†
34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	06 50	37.4	03 12	32.6	4.8	24†
35.1	35.6	35.6	35.0	34.0	33.5	32.6	32.3	32.7	34.3	06 46	36.4	21 10	32.1	4.3	25††
33.1	33.1	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	08 30	35.6	02 40	30.3	5.3	26††
33.2	32.9	32.9	32.7	32.4	32.7	32.7	32.9	32.9	33.3	08 10	35.5	03 14	31.3	4.2	27
32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	33.1	33.5	08 10	34.5	02 40	31.3	3.2	28
33.2	32.9	32.9	32.9	32.9	32.9	32.9	32.9	33.1	33.4	06 30	35.9	03 06	31.9	4.0	29
33.7	33.5	33.5	33.4	32.7	32.7	32.9	32.9	32.7	33.4	06 10	35.0	03 06	32.6	2.4	30
34.3	34.3	34.0	33.7	33.4	33.2	33.4	33.4	33.4	33.6	07 50	34.5	01 00	32.4	2.1	31
33.7	33.8	33.7	33.6	33.5	33.5	33.4	33.5	33.6	33.8					3.5	Mean
34.4	34.5	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4						Mean†
33.7	33.8	33.9	33.8	33.5	33.1	32.8	32.9	33.0							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 6

Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

June

2° plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	32.9	32.3	31.9	31.6	32.1	33.4	34.8	35.6	35.5	35.1	34.8	34.2	33.5	33.9	34.5
2	32.9	32.7	32.6	33.4	34.3	35.1	35.9	36.6	36.3	36.1	35.9	35.1	34.3	34.2	34.3
3	33.9	32.6	31.9	31.9	32.9	35.0	35.9	36.4	36.9	36.3	35.6	35.0	34.3	34.3	34.5
4	34.0	33.5	33.2	32.4	32.7	34.3	35.5	35.9	35.6	35.1	34.5	34.3	33.7	33.1	33.5
5†	32.4	31.9	31.1	31.1	32.1	33.9	35.5	36.3	36.4	36.1	35.0	34.5	34.2	34.3	34.3
6	32.7	32.1	31.1	31.0	31.6	33.4	34.8	35.9	35.9	35.5	34.3	33.9	33.7	34.0	34.2
7	32.4	31.0	30.0	30.5	33.2	35.6	37.2	37.7	37.7	36.9	35.9	34.8	34.5	35.0	35.0
8††	34.3	33.5	32.3	31.8	32.6	35.0	36.6	36.6	36.3	35.8	35.5	34.5	34.2	33.7	33.4
9	32.4	31.5	31.0	31.1	32.3	34.0	35.1	35.6	35.5	34.0	33.2	32.7	32.6	32.9	33.5
10†	32.9	32.3	31.8	32.3	33.2	34.8	36.1	36.3	36.3	35.3	34.2	33.2	33.2	33.7	34.5
11	34.5	34.5	34.3	33.4	33.4	34.7	36.1	37.2	37.7	36.4	35.8	35.0	34.3	34.3	34.3
12	34.2	33.5	32.9	32.4	33.1	34.3	34.8	35.6	35.5	34.5	33.5	33.4	33.5	33.9	34.2
13	33.5	32.9	32.9	33.2	34.5	35.6	36.4	36.4	36.4	35.3	34.3	33.9	33.5	33.1	32.9
14	34.2	33.2	32.7	33.2	34.3	35.8	36.9	36.9	36.9	35.3	34.2	32.9	32.9	33.4	33.9
15††	33.2	32.7	32.4	32.6	33.5	35.0	36.3	37.1	37.1	35.5	34.3	34.5	34.5	34.5	34.5
16††	32.9	32.6	32.6	32.7	33.5	34.5	35.5	36.1	36.1	35.8	34.8	34.3	34.3	34.5	34.8
17	34.2	33.9	33.4	33.5	34.7	35.5	36.4	36.9	36.1	35.5	34.5	34.0	33.9	34.2	34.3
18	33.5	32.9	32.6	32.7	33.2	34.0	35.1	35.9	35.8	35.0	34.2	33.9	33.7	33.5	33.5
19	33.5	32.9	32.9	33.5	34.5	35.6	35.1	36.3	36.3	36.3	34.8	34.3	34.3	34.3	34.3
20	32.9	32.4	31.8	32.3	33.5	35.0	36.1	36.9	37.1	36.6	35.0	34.3	34.0	34.3	34.5
21†	33.2	32.9	33.2	34.0	35.1	36.1	36.7	37.1	37.1	35.9	34.5	33.9	33.4	33.7	34.2
22	33.5	33.1	32.7	32.9	34.0	35.3	36.4	36.7	36.9	36.3	35.0	35.6	35.0	34.5	34.3
23††	34.0	33.2	32.7	32.4	32.9	33.2	34.5	36.1	36.4	35.9	35.8	35.3	34.5	34.5	35.1
24††	33.5	32.9	32.7	32.7	33.5	35.1	36.9	37.5	37.5	36.7	35.3	35.0	35.3	35.3	34.7
25	34.3	33.9	33.7	34.0	35.1	36.1	37.2	37.5	37.1	35.6	34.5	34.0	33.4	33.4	34.2
26†	32.9	32.6	32.1	32.4	33.5	35.0	34.8	37.2	37.4	36.6	35.0	34.0	33.4	33.5	34.0
27	33.1	32.6	32.4	32.7	33.7	35.1	35.9	36.7	36.9	36.3	35.3	34.8	34.5	34.5	34.5
28	32.9	32.9	32.9	33.1	34.0	34.8	35.6	35.9	35.8	35.9	35.3	35.3	35.3	35.3	35.6
29	35.3	35.3	35.1	34.5	34.0	34.8	35.9	37.1	37.1	35.8	34.5	34.3	34.3	34.5	34.5
30†	33.9	32.9	32.9	32.9	33.5	34.5	35.5	36.4	37.2	36.4	35.6	34.8	34.5	34.5	34.5
Mean	33.5	32.9	32.5	32.6	33.5	34.8	35.8	36.5	36.6	35.8	34.8	34.3	34.0	34.1	34.3
Mean†	33.1	32.5	32.2	32.5	33.5	34.9	35.7	36.7	36.9	36.1	34.9	34.1	33.7	33.9	34.3
Mean††	33.6	33.0	32.5	32.4	33.2	34.6	36.0	36.7	36.7	35.9	35.1	34.7	34.6	34.5	34.5

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 6
Hourly Values of Declination, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

June

2° plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag		
									H M		H M.				
34.5	34.0	33.9	33.7	32.9	32.9	32.9	32.9	32.9	33.6	07 26	35.6	03 30	31.3	4.3	1
34.5	34.5	34.3	34.2	34.3	34.3	34.5	34.5	34.5	34.6	07 10	36.7	02 40	32.1	4.6	2
34.8	35.3	35.3	35.5	34.3	34.2	34.2	34.3	34.3	34.6	08 10	36.9	02 40	31.8	5.1	3
33.7	33.5	33.2	32.9	32.6	32.6	32.7	32.7	32.9	33.7	07 10	35.9	03 14	32.1	3.8	4
34.3	34.0	33.7	33.4	32.9	32.7	32.9	32.9	32.9	33.7	07 50	36.6	02 48	31.0	5.6	5†
33.9	33.4	33.2	32.9	32.7	32.1	31.9	32.1	32.1	33.3	08 10	36.1	02 52	31.0	5.1	6
35.0	34.8	34.5	34.5	34.5	34.5	34.5	34.5	34.3	34.5	07 50	37.7	02 50	29.7	8.0	7
32.7	32.9	32.7	33.1	32.9	33.2	32.9	32.9	32.9	33.8	07 42	36.6	03 02	30.8	5.8	8††
33.7	33.7	33.7	33.7	33.4	32.9	32.7	32.9	32.7	33.2	06 30	35.9	02 54	31.0	4.9	9
34.5	34.3	34.3	34.3	34.5	34.5	34.5	34.7	34.8	34.2	06 30	36.3	02 40	31.1	5.2	10†
34.2	34.2	34.2	34.0	33.7	34.0	33.7	33.9	34.2	34.7	07 50	37.7	03 14	32.6	5.1	11
34.0	33.9	34.0	34.0	34.0	34.0	34.0	33.7	33.7	33.9	07 10	35.9	03 14	32.4	3.5	12
33.4	34.0	34.3	34.3	34.2	34.2	34.2	33.7	33.7	34.2	06 30	36.4	02 36	32.1	4.3	13
34.0	34.2	34.2	34.0	34.2	33.9	33.5	33.7	33.7	34.3	05 30	36.9	02 20	32.1	4.8	14
34.5	34.5	34.5	34.5	34.3	34.2	34.2	34.2	34.2	34.4	07 10	37.1	02 40	32.1	5.0	15††
35.1	35.0	34.8	34.5	34.5	34.5	34.3	34.3	34.3	34.4	06 50	36.1	01 40	31.9	4.2	16††
34.3	34.3	34.3	33.7	33.7	33.5	33.4	33.4	33.5	34.4	06 30	36.9	02 20	32.9	4.0	17
33.7	33.5	33.4	33.4	33.2	33.2	33.4	33.5	33.7	33.8	07 16	36.6	02 30	32.6	4.0	18
34.3	34.2	34.0	33.7	33.5	33.4	33.2	33.2	33.2	34.2	06 30	36.3	02 10	32.4	3.9	19
34.5	34.5	34.0	33.7	33.5	33.4	33.5	33.5	33.7	34.2	08 38	37.1	02 30	31.3	5.8	20
34.3	34.3	34.3	34.3	34.3	34.2	34.2	33.9	33.7	34.5	07 30	37.1	01 18	32.6	4.5	21†
34.3	34.5	34.2	34.0	33.7	33.5	33.5	33.2	33.4	34.4	08 22	36.9	02 50	32.7	4.2	22
35.6	35.3	34.5	34.3	34.2	33.5	33.2	33.5	33.5	34.3	07 30	36.9	03 50	32.4	4.5	23††
34.5	34.5	34.5	34.3	34.3	34.3	34.2	34.2	34.2	34.3	07 30	37.5	02 30	31.9	5.6	24††
34.2	34.0	33.7	33.5	33.4	33.2	32.9	32.9	32.9	34.4	07 30	37.5	01 30	32.9	4.6	25
34.2	33.9	33.5	33.4	32.9	32.9	32.9	32.9	32.9	33.9	07 30	37.4	02 20	31.8	5.6	26†
34.5	34.3	34.2	34.0	33.7	33.5	33.5	33.4	33.2	34.3	07 30	37.4	02 00	31.9	5.5	27
35.5	35.3	35.1	35.0	35.1	35.1	35.1	35.1	35.1	34.9	07 30	36.1	02 50	32.6	3.5	28
34.5	34.5	34.5	34.3	34.0	33.7	34.2	34.2	34.2	34.8	07 18	37.5	03 50	33.5	4.0	29
34.5	34.5	34.5	34.5	34.5	34.3	34.3	34.3	34.3	34.6	07 50	37.2	02 54	32.6	4.6	30†
34.3	34.3	34.1	34.0	33.8	33.7	33.6	33.6	33.6	34.2					4.8	Mean
34.4	34.2	34.1	34.0	33.8	33.7	33.8	33.7	33.7							Mean†
34.5	34.4	34.2	34.1	34.0	33.9	33.8	33.8	33.8							Mean††

† Five International quiet days

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 7

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

January

39,000 γ plus tabular quantities

Date	Hours G M T														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	459	459	476	498	524	530	530	502	466	446	443	446	462	473	170
2	451	455	470	490	518	538	534	514	484	454	444	462	478	483	483
3	458	462	474	498	522	542	537	506	474	443	430	438	457	468	460
4	466	462	484	499	527	550	554	540	511	481	457	457	467	459	462
5	458	456	472	492	538	570	580	570	538	494	466	459	462	467	466
6	462	459	451	472	513	536	545	534	506	475	466	470	470	474	466
7	470	462	464	481	490	508	519	532	516	498	480	478	472	468	466
8	454	452	457	473	512	534	528	524	514	490	470	460	465	466	462
9††	462	471	462	462	470	484	502	494	498	476	470	462	454	444	449
10†	469	467	470	473	490	498	492	481	470	462	452	460	471	474	468
11	467	468	474	488	508	514	500	473	456	448	444	454	458	444	430
12	459	452	465	482	506	514	507	492	476	446	442	451	465	465	466
13	465	463	481	482	503	524	513	484	450	450	452	443	445	445	450
14	460	460	469	488	511	534	542	526	497	466	462	468	471	466	458
15†	460	460	462	481	498	508	497	476	460	454	460	464	468	465	462
16	466	463	455	480	502	519	537	540	528	503	486	492	492	482	470
17††	465	462	461	464	494	513	525	521	516	506	510	500	456	416	388
18††	443	419	406	394	390	402	400	444	425	422	404	406	409	410	409
19††	435	436	435	436	412	426	398	378	371	388	364	382	375	390	369
20††	425	418	423	420	435	444	441	454	457	449	444	444	444	441	433
21	438	444	454	474	489	498	497	488	478	468	460	458	449	449	444
22	439	444	454	467	487	498	510	502	489	474	459	452	457	457	452
23	457	458	462	474	492	516	517	505	490	473	459	452	452	441	441
24†	454	453	456	482	505	523	522	497	476	460	460	460	458	449	446
25†	454	466	466	484	497	513	518	505	486	476	472	468	468	462	460
26†	457	454	462	476	494	518	519	507	482	462	449	456	468	462	460
27	466	465	473	490	514	538	544	531	513	500	492	486	492	492	494
28	444	446	446	467	500	514	516	505	478	457	438	441	446	450	450
29	460	462	459	476	498	510	512	508	494	482	470	462	462	459	453
30	454	454	460	489	513	532	529	521	494	471	460	466	464	462	464
31	454	454	457	474	490	507	510	500	482	470	466	466	468	468	465
Mean	456	455	460	474	495	511	513	502	483	466	456	457	459	458	452
Mean†	459	460	463	479	497	512	510	493	475	463	459	462	467	462	459
Mean††	446	441	437	435	440	454	453	458	453	448	438	439	428	426	410

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 7

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

January

39,000 γ plus tabular quantities

Hours G. M. T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M	γ	H. M.	γ	γ	
465	460	460	462	460	462	465	456	449	472	05 50	534	09 34	433	101	1
474	465	458	465	466	468	466	459	453	477	04 58	542	09 44	436	106	2
470	470	468	466	468	470	471	471	474	475	05 02	543	10 10	420	117	3
460	451	416	458	459	456	454	459	460	478	06 22	556	16 42	441	115	4
468	465	462	466	469	470	470	474	470	488	06 06	582	00 52	455	127	5
462	460	458	454	457	468	470	471	470	478	06 10	548	02 04	447	101	6
460	458	458	451	450	444	452	458	458	475	06 40	535	19 14	441	94	7
460	456	459	459	466	464	462	462	471	477	06 10	538	01 16	450	88	8
444	444	420	433	444	440	446	449	458	460	06 06	505	16 50	409	96	9†
462	460	460	458	459	460	465	465	465	469	04 56	500	10 06	444	56	10†
444	457	460	460	465	462	455	452	470	465	04 38	518	14 04	420	98	11
467	465	468	466	468	474	470	468	464	471	04 54	521	09 40	438	83	12
454	453	452	452	452	455	460	460	460	465	04 40	556	12 46	439	117	13
448	441	442	458	462	460	460	460	460	474	05 50	516	16 10	436	110	14
464	460	460	460	462	465	465	466	468	469	04 54	510	09 02	450	60	15†
457	454	456	456	454	454	462	461	466	481	06 20	542	18 46	440	99	16
360	375	394	408	434	442	438	447	446	457	05 50	527	15 20	334	193	17††
401	402	403	422	412	442	441	442	432	416	07 18	496	05 36	372	124	18††
374	398	418	432	436	427	427	428	433	407	03 32	457	09 58	356	101	19††
430	436	440	438	435	444	435	436	438	438	07 46	458	03 20	416	42	20††
442	440	440	433	428	433	439	438	440	455	05 26	508	19 20	426	82	21
452	446	446	446	448	450	451	460	458	463	06 06	520	00 36	438	82	22
444	441	452	446	438	439	468	460	456	464	05 20	526	19 44	432	94	23
444	450	448	446	448	449	448	448	441	464	05 40	532	15 10	441	91	24†
457	456	454	452	450	449	451	452	457	470	05 36	524	19 40	446	78	25†
460	460	460	460	462	463	465	403	465	470	05 50	524	10 14	446	78	26†
489	484	458	441	435	434	460	442	442	482	05 30	546	18 46	426	120	27
450	458	460	460	458	457	458	454	450	463	05 06	522	10 14	434	88	28
452	458	459	454	458	454	458	465	460	470	06 10	510	14 06	440	70	29
462	458	458	449	454	452	453	460	457	472	04 58	538	18 20	448	90	30
462	460	460	466	468	468	465	472	476	472	05 50	514	01 26	453	61	31
450	450	450	451	452	454	457	457	458	466					95	Mean
457	457	456	455	456	457	459	459	461							Mean†
402	411	415	427	432	439	438	440	441							Mean††

† Five International quiet days.

†† Five International disturbed days

* Loss of record; (day omitted for means)

TABLE 8

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

February

39,000 γ plus tabular quantities

Date	Hours G. M. T														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1†	471	470	473	477	509	529	529	522	513	497	491	481	473	471	475
2†	457	455	465	494	521	545	549	541	500	473	458	463	459	455	447
3	455	469	473	484	489	495	495	495	487	471	471	469	468	463	458
4††	463	469	473	489	505	521	532	521	503	492	463	436	435	441	447
5††	453	445	447	468	477	485	481	477	465	453	447	452	439	436	435
6	454	454	455	485	500	509	503	503	492	457	452	455	445	441	441
7	444	452	449	469	489	509	513	519	505	477	454	451	455	451	441
8	449	453	457	475	505	529	536	521	491	457	433	441	449	458	455
9	457	459	473	485	517	520	516	505	484	474	463	452	459	464	457
10†	445	445	452	484	509	525	525	509	497	479	457	455	454	452	455
11	462	462	461	484	521	547	545	519	501	469	449	445	454	460	457
12	430	438	453	477	501	523	522	507	485	463	459	451	452	451	449
13	450	441	445	473	485	509	516	511	492	466	454	453	454	454	451
14	457	455	457	483	500	517	533	535	513	471	453	453	459	452	449
15	447	447	449	465	489	511	511	505	476	450	447	453	461	463	463
16	455	453	451	469	493	514	519	513	497	475	451	449	465	465	454
17	473	475	476	477	488	508	513	507	489	473	462	460	452	453	458
18	468	471	473	491	513	533	525	501	473	449	453	460	468	467	465
19†	449	455	465	489	515	537	537	525	493	473	463	465	471	471	465
20	471	471	482	511	525	535	542	540	517	493	481	479	481	473	455
21	455	460	463	482	517	535	535	532	489	475	475	477	468	453	447
22††	464	455	458	477	492	513	519	517	508	495	467	452	450	451	453
23††	465	460	454	467	487	508	524	535	525	497	445	415	413	421	431
24	453	458	469	485	495	514	523	527	497	476	455	455	465	470	461
25	471	468	466	479	484	508	524	521	517	487	476	457	445	451	441
26	460	457	461	473	484	505	511	508	495	481	465	464	463	461	457
27†	467	466	476	485	501	529	540	533	521	509	492	477	471	473	467
28††	477	489	487	481	465	454	439	465	466	459	453	441	435	418	415
Mean	458	459	463	481	499	517	520	515	496	475	460	456	456	455	452
Mean†	458	458	466	486	511	533	536	526	505	486	472	468	466	464	462
Mean††	464	464	464	476	485	496	499	503	493	479	455	439	434	433	436

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 8

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

39,000 γ plus tabular quantities

February

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
473	470	465	465	463	462	463	459	457	482	05 52	535	22 42	455	80	1†
444	442	442	449	455	453	454	454	455	472	06 40	557	16 28	437	120	2†
449	443	446	447	449	451	455	458	463	467	06 32	499	16 06	439	60	3
445	444	433	449	441	449	457	450	449	467	05 58	537	16 48	425	112	4††
431	431	434	439	452	441	444	453	454	452	03 02	493	15 10	429	64	5††
431	425	436	447	451	445	447	457	445	460	05 18	517	16 18	420	97	6
444	440	443	442	453	455	451	451	451	463	06 50	521	16 02	436	85	7
451	457	460	442	444	449	458	461	460	466	06 38	541	10 31	431	110	8
455	459	455	447	441	441	443	447	445	467	04 42	524	19 32	439	85	9
457	455	455	455	455	462	459	463	461	469	05 58	535	01 34	439	96	10†
447	438	458	434	421	422	422	416	425	463	05 40	553	19 22	412	141	11
447	447	441	432	437	434	447	451	453	460	05 24	529	00 22	425	104	12
452	453	441	446	444	453	455	455	456	463	06 50	519	17 02	437	82	13
449	449	442	457	455	455	451	453	451	469	07 22	537	16 54	439	98	14
459	457	457	459	455	455	455	455	455	464	05 38	519	10 02	446	73	15
451	454	455	457	473	471	471	471	473	471	05 46	521	10 40	447	74	16
459	463	461	461	461	460	459	465	465	472	06 20	515	12 32	447	68	17
465	465	463	463	455	453	441	447	445	471	05 14	535	21 06	439	96	18
465	463	463	462	461	464	464	465	468	477	05 34	547	00 23	445	102	19†
447	445	443	452	461	465	463	461	458	481	06 50	545	15 40	441	104	20
453	457	457	455	459	465	469	471	468	476	06 32	543	14 40	443	100	21
457	455	455	455	460	464	467	471	468	472	05 31	523	11 10	447	76	22††
423	423	420	425	436	441	444	449	453	457	06 34	551	13 40	412	139	23††
452	442	441	443	453	469	476	471	469	472	06 50	535	16 18	440	95	24
437	445	443	439	441	455	447	461	461	468	07 20	529	14 54	434	95	25
455	454	455	455	455	467	470	471	468	471	06 20	517	16 24	452	65	26
465	466	467	465	469	473	479	481	487	486	06 31	546	15 40	459	87	27††
420	425	433	441	441	443	442	448	449	449	00 58	503	05 50	399	104	28†
449	449	449	449	451	454	455	458	458	468					93	Mean
461	459	458	459	461	463	464	464	466							Mean†
435	436	435	442	446	448	451	454	455							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 9

Hourly Values of Horizontal Force, 1955

[Averages for sixty' minutes centred at the full hours of Greenwich Mean Time]

March

39,000 γ plus tabular quantities

Date	Hours G M T														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1†	450	447	461	477	507	517	527	515	499	479	460	457	456	450	451
2†	447	445	447	463	487	507	516	511	502	495	480	475	474	471	465
3†	466	467	474	491	518	531	543	531	519	503	495	484	484	481	475
4†	469	468	479	503	528	543	544	530	507	483	466	467	474	477	477
5	468	459	466	484	507	523	519	511	498	482	469	469	469	461	453
6	447	444	443	467	503	531	530	518	487	463	439	447	459	460	455
7††	448	443	458	481	495	527	516	498	471	439	439	449	455	458	458
8	437	436	451	483	517	527	511	491	463	443	445	451	453	453	445
9††	455	455	471	490	512	530	522	511	485	456	443	441	435	423	410
10	435	442	455	483	493	503	507	490	455	447	455	443	431	439	449
11	435	437	447	466	487	507	483	487	450	433	439	444	424	436	439
12	461	458	461	475	501	524	530	514	491	483	469	452	447	445	445
13	452	449	455	481	504	525	523	509	491	463	455	457	461	466	462
14	447	450	463	490	514	526	533	511	490	477	469	458	451	455	455
15	450	455	463	483	496	509	512	495	476	463	451	450	452	449	450
16	447	451	450	471	488	503	498	485	479	476	473	469	466	461	457
17	453	455	459	493	512	535	533	515	503	480	453	448	442	442	447
18	472	477	472	479	505	533	543	531	507	491	485	471	463	451	447
19	451	447	459	481	491	507	519	518	499	485	482	471	465	462	459
20	463	459	475	499	517	535	541	539	522	503	489	476	474	476	469
21	475	463	462	487	515	541	546	543	515	493	473	477	477	474	471
22††	475	473	491	517	535	559	567	562	536	522	501	467	402	330	323
23	439	444	458	471	495	504	515	503	490	479	475	471	474	481	475
24	431	436	452	483	507	519	520	516	493	472	455	450	444	444	439
25	458	455	467	490	522	543	546	531	504	471	458	455	455	458	459
26	451	455	467	491	527	543	554	521	485	451	431	427	429	423	423
27	463	462	472	501	521	543	545	541	514	506	490	469	467	471	467
28	466	468	475	489	506	527	537	535	517	491	479	470	465	466	467
29†	469	465	465	487	511	543	551	551	535	509	479	465	466	469	469
30††	469	467	473	503	533	561	573	570	539	521	506	505	495	484	476
31††	455	453	459	477	495	517	523	498	442	410	403	407	423	423	418
Mean	455	454	463	485	508	527	530	519	496	476	465	459	456	453	450
Mean†	460	458	465	484	510	528	536	528	512	494	476	470	471	470	467
Mean††	460	458	470	494	514	539	540	528	495	470	458	454	442	425	417

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 9

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

March

39,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
452	453	449	447	450	452	449	447	445	467	06 02	533	17 50	442	91	1†
461	459	458	459	461	461	463	465	467	472	05 14	517	01 20	444	73	2†
474	471	472	471	468	467	466	469	469	487	05 58	545	19 18	461	84	3†
475	475	479	480	474	468	463	459	459	485	05 22	547	21 34	457	90	4†
449	443	448	451	452	453	455	456	452	471	05 02	525	16 20	434	91	5
440	443	449	453	451	447	447	447	445	463	05 10	543	10 10	431	112	6
455	447	431	456	439	451	455	447	441	461	05 14	537	17 10	421	116	7††
442	443	443	471	464	452	449	452	452	461	04 50	528	00 40	434	94	8
411	427	419	441	424	395	401	418	427	450	05 20	533	19 50	391	142	9††
445	443	443	439	439	439	439	433	439	454	06 22	517	12 14	423	94	10
444	447	459	449	451	451	455	459	458	454	04 54	515	12 06	416	99	11
445	442	447	442	443	443	444	452	451	466	05 58	549	16 02	435	114	12
447	447	443	451	447	458	463	455	452	467	05 02	535	16 50	435	100	13
455	456	445	466	455	447	456	455	447	470	05 46	535	17 22	440	95	14
455	453	456	455	455	443	435	439	445	462	05 50	515	20 50	431	84	15
455	455	456	451	453	451	471	463	459	466	06 10	509	01 42	445	64	16
455	453	455	463	466	469	467	466	472	472	05 50	539	11 44	439	100	17
451	458	475	447	439	451	458	453	452	475	05 54	549	19 22	429	120	18
459	463	463	461	457	459	463	461	461	473	06 42	522	01 10	446	76	19
466	465	465	463	466	471	471	471	466	485	06 20	543	00 46	457	86	20
473	471	473	477	475	471	477	482	479	487	06 02	549	01 50	460	89	21
333	362	376	389	400	415	423	433	436	452	05 54	575	14 44	315	260	22††
456	451	432	416	410	417	451	440	434	462	06 32	531	19 20	405	126	23
444	442	445	447	448	455	455	456	453	463	04 58	527	00 24	430	97	24
459	455	455	451	445	447	452	449	451	472	05 48	547	18 54	439	108	25
439	447	459	459	463	464	466	471	471	467	06 02	565	13 42	413	152	26
469	463	459	459	460	460	460	462	465	483	04 46	561	16 26	455	106	27
469	469	467	469	471	471	471	469	465	482	06 06	541	12 34	462	79	28
469	466	465	468	469	469	469	468	468	485	06 34	555	11 34	461	94	29†
469	463	465	463	463	465	463	478	463	494	06 14	586	18 16	459	127	30††
427	437	434	430	440	447	439	455	445	448	05 44	541	09 34	389	152	31††
450	451	451	453	452	452	455	456	454	470					107	Mean
466	465	465	465	464	463	462	462	462							Mean†
419	427	425	436	433	435	436	446	442							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 10

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

April

39,000 γ plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	440	439	444	471	492	500	504	481	468	461	450	436	428	438	444
2	433	442	448	464	492	512	520	500	471	450	438	440	455	436	438
3	450	452	452	466	493	518	519	503	492	480	461	459	456	442	424
4	448	452	466	488	518	544	533	524	506	490	456	440	444	446	448
5††	452	450	455	480	524	548	533	527	514	482	460	458	450	448	429
6	452	458	461	492	508	511	519	511	505	492	479	455	452	448	446
7††	459	452	464	484	516	535	534	512	487	470	448	450	458	461	450
8	460	458	463	486	519	536	521	498	477	460	456	464	468	464	458
9	458	455	466	503	524	540	544	524	496	474	461	460	465	468	469
10	463	462	476	504	544	573	577	557	522	500	478	456	423	412	418
11	449	448	458	488	511	529	522	508	482	472	464	460	466	466	460
12	466	468	476	492	515	536	520	505	492	472	468	455	448	452	460
13	455	456	456	484	496	508	516	512	507	503	487	468	466	460	461
14	464	461	471	488	519	532	520	498	480	460	460	465	464	461	458
15	462	462	472	500	524	548	554	552	538	512	488	478	479	476	472
16†	468	466	476	503	526	556	572	556	519	490	468	460	466	468	466
17†	466	468	487	522	556	570	556	532	512	490	467	464	463	460	468
18†	471	472	488	512	533	538	532	514	482	458	466	479	486	472	465
19†	474	482	494	517	532	538	530	521	504	492	490	490	492	484	478
20	492	494	514	538	564	575	548	511	487	460	453	462	470	468	460
21	459	462	476	504	534	546	564	549	519	472	455	456	460	463	457
22	466	466	484	514	524	524	501	477	452	440	439	446	456	460	463
23†	466	465	476	506	533	565	570	550	522	496	472	464	468	472	468
24	470	468	479	510	540	572	573	556	530	500	470	472	484	467	439
25	447	444	455	479	511	524	532	528	496	472	452	446	442	440	439
26	442	446	455	479	518	520	525	511	479	439	432	430	431	436	436
27††	450	444	452	479	508	492	532	532	512	492	469	455	450	444	448
28††	392	388	392	412	432	444	448	428	410	396	390	396	424	422	424
29††	416	416	433	456	484	492	484	464	426	410	380	367	386	404	416
30	428	428	436	463	482	490	480	476	458	439	425	424	427	431	434
Mean	454	454	464	489	516	531	529	514	492	471	456	452	454	452	450
Mean†	469	471	484	512	536	553	552	535	508	485	473	471	475	471	469
Mean††	434	430	439	462	493	502	506	493	470	450	429	425	434	436	435

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (data omitted for means).

TABLE 10

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

April

39,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date		
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag				
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H	M	γ	H	M	γ		
448	446	448	444	456	455	460	464	456	457	05	16	514	11	32	426	88	1
423	407	402	408	416	426	429	456	452	448	06	02	529	17	06	401	128	2
412	418	428	428	432	434	440	444	448	456	05	14	535	15	42	408	127	3
450	452	452	440	455	445	447	452	452	469	05	34	546	18	20	434	112	4
444	445	441	440	448	455	447	447	448	468	04	48	556	13	44	416	140	5††
444	447	450	452	456	460	463	470	468	471	05	40	524	14	34	436	88	6
450	445	450	452	468	466	462	456	452	470	04	50	544	10	20	435	109	7††
456	452	450	444	450	450	456	460	460	469	04	52	542	17	48	440	102	8
472	472	474	468	470	472	471	462	468	481	05	18	546	00	58	453	93	9
424	428	436	452	448	448	449	444	444	472	05	34	579	13	48	409	170	10
464	460	462	462	462	464	462	458	458	472	04	46	532	01	08	444	88	11
460	466	461	464	460	457	452	456	452	473	05	06	538	12	02	440	98	12
464	464	460	466	472	468	460	456	459	475	06	20	526	01	48	451	75	13
458	460	458	458	358	462	462	462	464	473	04	54	537	08	58	457	80	14
468	468	462	465	468	470	468	471	472	469	07	10	557	16	16	454	103	15
466	474	476	476	481	472	468	470	472	488	05	40	576	11	04	458	118	16†
469	468	467	468	475	476	473	472	472	488	04	58	571	12	08	455	116	17†
468	468	472	471	472	474	472	472	470	484	05	04	540	09	06	453	87	18†
481	482	484	482	479	480	481	487	490	494	05	08	543	00	20	470	73	19†
456	456	457	452	454	456	460	459	458	484	05	08	582	18	04	445	137	20
464	464	464	460	460	458	466	464	465	481	05	58	566	10	48	448	118	21
466	472	470	466	470	475	472	474	468	473	05	08	528	09	52	425	103	22
468	466	466	466	466	466	466	468	470	487	05	08	572	01	08	461	111	23†
451	452	440	432	408	410	414	420	439	475	06	02	580	18	38	400	180	24
438	432	436	442	441	452	448	448	446	462	05	44	533	16	08	426	107	25
440	444	446	448	442	444	452	444	443	458	05	24	529	11	02	422	107	26
450	451	472	464	428	428	396	384	400	460	06	48	539	21	46	370	169	27††
420	422	420	414	414	418	410	423	420	415	05	18	458	01	42	372	86	28††
420	417	410	434	431	424	439	439	428	428	04	24	501	11	02	362	139	29††
436	433	434	434	440	444	441	436	434	444	04	42	512	11	32	416	96	30
451	451	452	452	453	454	453	454	454	469							112	Mean
470	472	473	473	475	474	472	474	475									Mean†
437	436	439	441	438	438	431	430	430									Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 11

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

May

39,000 γ plus tabular quantities

Date	Hours G.M.T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	434	435	447	479	492	509	508	492	476	458	444	428	433	439	441
2	441	439	448	471	498	516	524	516	496	480	470	454	450	450	450
3	448	449	450	471	492	499	508	504	491	478	474	470	466	462	459
4	460	468	484	504	522	531	516	504	495	482	474	466	464	455	441
5	448	448	460	494	535	548	540	528	492	474	460	454	460	464	460
6††	471	466	474	488	520	532	540	524	518	484	444	423	399	370	372
7††	446	437	439	456	492	490	495	492	469	430	414	424	431	436	436
8††	452	450	460	486	512	520	513	500	474	450	441	431	420	421	433
9	433	437	447	464	479	482	484	476	472	460	452	444	440	440	444
10	442	444	454	479	496	507	500	498	483	468	450	430	438	449	450
11	444	448	458	476	512	536	530	522	500	472	455	450	450	450	450
12	455	454	456	472	504	519	524	517	501	484	461	452	444	450	450
13	444	444	449	472	500	520	520	506	504	496	488	488	488	480	475
14	465	466	475	490	516	497	504	516	507	506	485	452	448	443	444
15	451	452	460	474	500	508	516	512	508	493	476	468	458	460	460
16	474	482	477	476	448	460	479	496	498	482	460	447	436	440	440
17†	452	459	475	492	511	519	516	498	468	444	444	455	456	455	454
18	476	477	481	489	488	493	492	492	490	482	478	474	474	471	466
19†	468	468	482	496	511	518	519	511	504	488	468	458	462	466	464
20	458	468	471	488	508	527	528	532	530	512	493	476	478	476	468
21†	462	467	480	474	520	532	533	532	521	506	500	488	482	474	474
22	468	472	479	495	506	516	522	518	512	500	490	476	468	468	467
23†	466	468	478	498	519	532	540	535	524	504	482	472	471	472	470
24†	474	472	479	496	533	557	568	553	536	517	495	476	472	468	468
25††	468	467	470	482	528	549	551	547	531	510	493	480	478	478	477
26††	391	384	386	389	422	450	469	462	454	430	410	410	408	410	408
27	423	425	427	438	475	498	514	522	514	498	476	458	448	429	434
28	432	430	442	456	473	485	480	478	470	454	442	434	425	424	426
29	441	446	448	462	485	506	507	501	494	470	461	449	442	446	440
30	440	448	458	471	492	501	510	510	494	480	467	458	452	444	444
31	453	454	468	480	492	506	503	486	470	458	450	453	465	465	461
Mean	451	452	460	476	499	512	515	509	497	479	464	455	452	450	449
Mean†	464	467	479	491	519	532	535	526	511	492	478	470	469	467	466
Mean††	446	441	446	460	495	508	514	505	489	461	440	434	427	423	425

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 11

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

May

39,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
441	441	441	440	444	439	439	442	441	453	04 58	516	11 08	426	90	1
447	445	447	448	449	449	448	444	450	464	05 44	528	01 10	434	94	2
459	450	444	442	448	451	456	460	462	466	06 12	511	17 56	436	75	3
434	438	448	450	450	452	446	446	442	470	04 46	595	15 04	432	103	4
449	457	461	468	471	472	462	491	491	479	05 12	552	14 56	442	110	5
398	415	426	437	436	434	431	438	442	453	04 20	568	13 28	357	211	6††
448	446	448	450	452	455	450	444	440	451	03 58	508	09 26	408	100	7††
436	420	426	429	436	436	433	431	428	452	05 24	542	12 06	408	134	8††
444	444	444	450	448	448	448	447	447	453	04 18	487	00 48	432	55	9
450	450	453	450	452	448	441	444	443	459	05 26	520	11 20	420	100	10
452	452	454	452	455	455	456	452	452	468	05 06	540	00 12	442	98	11
448	444	444	444	441	444	447	452	449	465	06 38	530	19 48	440	90	12
471	473	463	455	455	464	458	464	465	477	05 50	527	00 10	441	86	13
442	449	441	448	450	450	449	448	451	468	04 40	530	16 42	439	91	14
458	458	458	453	456	461	468	472	476	473	06 06	524	01 08	448	76	15
440	440	444	443	446	450	450	451	450	459	07 02	502	11 48	434	68	16
458	458	458	459	460	461	462	468	476	469	05 48	522	10 54	441	81	17†
460	458	458	458	462	460	468	467	470	478	05 22	496	15 42	456	40	18
460	459	458	458	458	462	460	459	458	476	06 30	525	19 22	456	69	19†
468	463	466	468	468	466	467	468	464	484	06 26	545	00 28	457	88	20
468	466	462	462	464	466	465	468	466	485	05 54	536	17 18	460	76	21†
468	466	470	468	468	466	466	468	470	482	04 46	528	18 40	460	68	22
471	478	480	479	480	482	480	477	474	489	06 06	543	00 24	464	79	23†
468	469	468	471	468	466	468	464	464	490	05 34	571	21 36	463	108	24†
510	514	517	522	475	464	438	414	394	490	06 28	554	22 46	373	181	25††
408	411	416	418	421	421	422	423	423	419	06 12	475	03 26	335	140	26††
433	434	427	434	439	445	446	438	429	454	07 08	524	00 30	421	103	27
438	434	431	432	434	438	439	439	438	445	04 54	494	12 14	418	76	28
438	434	438	436	437	439	440	442	444	456	05 38	512	15 50	430	82	29
440	439	452	453	450	450	448	452	454	463	06 02	514	15 36	438	76	30
461	456	458	461	462	462	458	460	460	467	05 12	509	10 12	448	61	31
451	450	452	453	453	453	453	453	452	466					94	Mean
465	466	465	466	466	467	467	467	468							Mean†
440	441	447	451	444	442	435	430	425							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (day omitted for means).

TABLE 12

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

June

39,000 γ plus tabular quantities

Date	Hours G M T														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	458	464	475	491	514	534	542	521	504	498	480	468	457	454	457
2	460	463	474	482	485	496	494	491	480	467	462	450	441	438	445
3	451	454	457	473	496	522	517	510	493	476	462	454	450	450	449
4	462	464	473	494	512	526	535	512	486	463	451	453	454	458	453
5†	450	454	465	490	521	540	538	521	502	509	455	452	459	466	463
6	458	463	470	494	526	540	561	533	510	481	454	441	444	452	452
7	450	448	454	478	521	541	538	522	494	462	442	437	447	453	452
8††	462	466	478	499	514	516	514	495	478	465	466	462	458	454	434
9	449	455	468	488	518	531	525	499	475	443	431	422	430	439	443
10†	460	462	472	492	524	538	546	534	508	476	446	437	442	450	450
11	450	452	457	482	502	516	534	535	532	519	510	476	463	462	460
12	465	465	466	476	505	514	520	510	490	467	433	430	434	450	450
13	456	453	454	471	502	519	537	524	497	486	473	468	462	454	437
14	476	479	482	499	525	550	545	534	500	458	442	434	425	438	444
15††	460	468	474	486	500	522	523	505	486	456	450	443	442	443	450
16††	462	462	469	490	510	518	521	507	505	490	449	446	438	436	438
17	451	452	457	473	486	506	514	526	522	510	490	455	449	446	452
18	466	466	463	478	496	514	514	526	520	500	470	462	459	459	460
19	462	470	478	482	518	536	537	538	526	510	479	472	468	462	460
20	460	462	470	470	487	510	526	530	518	498	470	458	462	476	479
21†	464	466	470	486	506	521	526	527	518	508	484	463	460	460	460
22	470	476	483	498	514	532	542	550	538	524	500	519	505	487	486
23††	478	476	473	482	502	519	538	558	555	536	510	497	490	483	485
24††	452	447	449	455	479	508	518	527	510	490	462	462	454	449	442
25	460	460	468	474	487	510	527	534	500	484	458	431	446	452	457
26†	470	470	474	479	491	505	512	510	508	502	489	473	462	462	468
27	462	462	466	478	497	510	518	517	510	500	483	465	462	466	467
28	467	463	466	478	502	510	504	498	497	490	490	485	475	473	475
29	470	470	470	481	501	516	521	518	502	486	471	466	473	476	476
30†	477	483	486	490	491	494	502	510	512	507	497	481	471	472	472
Mean	461	463	469	483	504	520	527	521	506	489	469	459	456	457	457
Mean†	464	467	473	487	507	520	527	520	510	500	474	461	459	462	463
Mean††	463	464	469	482	501	517	523	518	507	487	467	462	456	453	450

† Five International quiet days.

†† Five International disturbed days

* Loss of record ; (day omitted for means).

TABLE 12

Hourly Values of Horizontal Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

June

39,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
459	454	461	462	461	460	462	462	462	478	05 34	547	13 06	451	96	1
449	453	454	454	450	451	452	452	454	462	05 14	500	12 42	436	64	2
454	456	458	454	454	454	453	454	458	466	05 26	526	13 42	446	80	3
449	450	440	448	450	453	455	452	450	469	05 46	538	15 02	443	95	4
458	453	451	450	453	455	457	459	458	474	05 20	542	10 44	446	96	5†
452	452	451	460	454	446	443	442	454	472	05 54	562	11 32	437	125	6
450	458	457	458	459	460	460	460	452	460	05 02	550	10 46	433	117	7
413	422	434	439	446	452	446	446	452	463	03 38	526	14 54	406	120	8††
448	452	454	460	462	454	454	462	461	463	05 34	540	10 50	418	122	9
452	451	452	450	450	450	450	450	450	471	05 56	561	11 06	434	127	10†
457	458	460	456	451	451	454	460	469	478	07 08	540	18 26	450	90	11
452	454	457	458	458	460	460	458	457	466	06 06	524	10 10	426	98	12
440	456	459	458	467	468	470	469	476	473	05 44	542	14 10	428	114	13
447	451	446	446	450	458	454	454	457	471	05 32	564	11 42	418	146	14
454	450	447	451	457	454	454	457	458	466	05 38	537	11 50	434	103	15††
436	446	444	445	450	452	451	451	452	465	06 44	530	12 54	426	104	16††
447	449	454	454	458	456	457	456	466	470	08 10	527	12 58	442	85	17
458	455	458	460	460	458	460	462	463	474	07 34	540	16 06	454	86	18
460	460	458	457	456	456	457	458	459	480	06 54	546	18 02	454	92	19
478	477	462	463	462	466	468	466	466	479	07 32	535	11 06	457	78	20
462	463	462	464	466	468	468	470	472	480	05 50	534	12 54	458	76	21†
478	478	482	478	473	472	475	475	476	496	06 46	551	18 36	467	84	22
492	494	497	489	491	468	470	470	458	496	07 20	560	22 50	455	114	23††
438	441	442	454	459	462	469	460	454	466	07 16	540	14 18	433	107	24††
452	450	450	452	460	465	466	468	468	470	06 50	546	11 18	426	120	25
466	463	460	460	460	462	460	460	460	476	05 49	516	19 12	458	58	26†
468	467	462	463	470	468	470	470	470	478	07 20	522	17 06	458	64	27
470	470	470	468	468	470	471	470	470	463	04 34	526	16 54	462	64	28
475	477	478	477	475	474	476	478	477	483	06 42	524	10 46	461	63	29
472	472	470	474	474	476	476	476	477	484	07 20	514	12 10	466	48	30†
456	458	458	459	460	460	461	461	462	474					95	Mean
462	460	459	460	461	462	462	463	463							Mean†
447	451	453	456	461	458	458	457	455							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 13

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

January

2,000 γ plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	401	400	399	394	382	374	376	386	402	411	417	412	407	406	403
2	400	400	402	400	391	380	378	381	391	410	419	414	404	406	406
3	403	404	402	396	387	377	373	378	388	406	417	415	406	404	403
4	400	406	407	401	387	382	377	376	378	389	400	402	402	394	397
5	400	401	403	402	386	371	361	362	364	374	391	399	401	400	400
6	397	401	404	403	376	360	353	352	355	366	382	391	397	399	397
7	399	400	401	402	395	384	377	372	364	366	385	392	396	396	397
8	399	400	403	406	401	392	384	366	363	369	382	389	393	394	394
9†	397	402	397	397	407	403	396	394	391	391	393	391	392	393	399
10†	400	397	395	396	392	389	389	394	393	400	409	409	402	399	399
11	399	397	395	396	393	384	392	410	418	414	414	407	397	392	391
12	394	395	403	395	378	377	380	384	389	393	404	406	399	399	400
13	395	396	394	397	401	403	409	412	410	408	402	387	385	389	394
14	395	396	397	397	399	397	396	392	393	404	408	407	400	396	392
15†	399	400	399	406	410	411	409	410	412	418	416	407	401	399	399
16	400	402	402	395	389	387	390	397	399	399	401	403	401	397	394
17††	401	402	404	404	406	403	400	396	390	387	402	395	379	386	383
18††	392	387	396	400	393	406	410	408	389	388	396	403	404	400	396
19††	394	397	389	386	379	377	373	380	379	380	377	388	391	399	395
20††	392	394	400	393	391	394	400	401	399	400	400	401	400	400	399
21	394	396	394	394	389	388	395	394	394	395	395	391	389	395	396
22	395	394	389	388	388	389	388	385	378	378	379	389	393	395	396
23	392	395	397	394	397	389	382	377	380	386	388	389	388	387	388
24†	388	387	383	389	386	387	384	388	384	386	391	393	391	388	388
25†	392	392	387	386	388	380	377	381	387	391	393	392	388	388	389
26†	392	392	388	380	373	368	364	373	381	389	394	396	391	389	392
27	392	391	387	384	382	378	376	379	386	391	395	393	395	394	396
28	391	392	389	388	382	382	380	380	385	391	397	397	395	394	393
29	389	388	384	379	369	361	363	373	377	378	378	379	382	386	386
30.	386	388	388	388	377	371	374	382	386	389	397	400	392	388	391
31	389	392	389	384	374	373	380	386	388	389	389	389	389	392	392
Mean	395	396	396	394	389	384	383	385	387	391	397	398	389	389	394
Mean†	394	394	390	390	390	387	382	389	391	397	401	399	395	394	393
Mean††	395	396	397	396	395	397	396	396	390	389	394	396	393	396	390

† Five International quiet days

†† Five International disturbed days,

* Loss of record, (day omitted for means).

TABLE 13

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

January

2,000 γ plus tabular quantities

Hours G. M. T									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
401	400	401	401	401	403	403	400	399	399	10 05	425	05 42	374	51	1
403	400	399	403	403	403	404	400	401	400	10 00	424	05 25	378	46	2
406	406	403	404	403	402	401	401	403	400	09 55	422	06 03	373	49	3
397	394	395	401	399	399	399	400	400	395	02 20	412	07 08	376	36	4
401	400	400	400	400	400	401	401	400	392	21 18	410	06 08	361	49	5
397	397	397	399	400	402	400	401	400	389	01 25	410	06 20	352	58	6
395	396	399	397	396	396	399	400	400	392	03 08	408	08 24	364	44	7
395	396	399	399	403	400	397	400	399	393	03 05	412	07 32	363	49	8
395	396	392	401	399	399	400	400	400	397	04 08	416	16 53	389	27	9††
397	395	395	397	399	399	399	399	399	398	10 28	420	05 30	389	31	10†
400	406	404	403	406	401	400	400	403	401	07 45	428	05 14	381	47	11
399	399	400	400	400	401	397	397	399	395	10 30	414	04 15	376	38	12
397	396	396	397	397	399	400	399	396	398	06 40	418	11 16	376	42	13
390	390	393	400	401	399	397	397	399	397	18 20	417	07 18	385	32	14
399	397	397	400	399	400	400	400	400	404	09 25	427	15 25	397	30	15†
392	395	399	399	397	399	401	401	400	397	10 30	414	05 08	387	27	16
371	388	399	401	406	401	394	397	393	395	18 55	433	14 10	348	85	17††
394	394	395	403	395	404	399	394	388	397	05 25	422	03 30	379	43	18††
400	403	409	408	402	399	397	396	397	391	17 38	417	10 06	371	46	19††
397	400	400	400	400	401	395	395	394	398	19 55	406	04 20	385	21	20††
397	397	396	395	394	397	400	399	399	395	21 08	404	11 30	385	19	21
395	394	394	394	395	394	395	396	394	391	20 46	399	09 25	374	25	22
392	388	399	392	389	393	401	393	389	390	20 35	407	07 20	376	31	23
388	393	393	394	394	393	392	391	392	389	10 20	399	08 30	382	17	24†
389	391	392	394	393	394	394	394	394	389	20 35	397	05 53	372	25	25†
392	393	392	394	393	394	394	393	393	388	10 28	401	05 45	363	38	26†
392	391	384	379	382	387	395	386	384	387	21 15	401	05 56	371	30	27
392	394	393	393	392	391	389	388	391	390	05 05	406	06 53	374	32	28
388	391	392	392	392	388	396	393	389	383	20 58	403	05 16	360	43	29
391	389	391	388	392	389	393	394	389	388	10 42	407	05 23	371	36	30
392	393	393	395	394	394	393	395	395	389	22 10	403	05 16	371	32	31
395	396	397	398	397	397	398	397	396	393					38	Mean
393	394	394	396	396	396	396	395	396							Mean†
391	396	399	403	400	401	397	396	394							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record, (day omitted for means).

TABLE 14

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

February

2,000 γ plus tabular quantities

Date	Hours GMT														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1†	394	395	397	392	373	364	364	371	378	382	388	389	387	389	394
2†	389	389	386	385	371	368	366	372	376	392	400	396	389	387	387
3	392	397	391	387	386	384	384	386	388	389	386	384	385	388	389
4††	394	394	392	388	382	379	385	392	397	399	389	379	380	388	396
5††	388	388	387	385	387	386	390	399	400	399	394	387	379	387	388
6	387	386	386	388	393	394	394	395	395	396	403	401	391	388	385
7	387	384	379	374	373	376	379	381	385	391	395	395	392	388	391
8	388	389	386	382	376	371	369	371	378	386	392	399	394	391	389
9	395	394	387	380	371	369	370	377	387	394	395	387	387	392	391
10†	392	393	389	382	366	353	350	355	363	376	387	391	389	382	395
11	396	399	395	391	372	366	364	374	386	394	397	394	389	389	389
12	395	397	392	386	376	371	371	372	377	382	389	392	392	394	395
13	400	400	400	394	380	378	376	378	384	389	388	389	389	391	392
14	394	394	393	389	377	365	364	371	374	377	387	392	392	388	389
15	388	392	387	382	389	389	392	395	395	397	401	400	395	396	396
16	395	396	397	395	399	394	388	386	386	389	397	400	396	388	387
17	*	*	*	386	380	376	370	366	371	378	386	388	386	389	395
18	397	395	391	381	377	372	364	365	374	392	396	394	392	395	397
19†	389	391	388	382	387	378	377	387	388	393	395	392	388	391	392
20	394	394	392	388	380	378	377	377	379	376	379	392	391	388	387
21	394	392	395	394	392	389	385	386	390	399	402	399	393	388	386
22††	395	393	394	394	386	382	379	378	379	381	378	382	387	388	391
23††	394	394	392	389	387	381	376	377	373	373	369	371	377	381	386
24	397	395	392	394	391	387	385	386	386	392	397	396	392	392	391
25	395	394	391	397	391	394	392	388	387	386	387	382	379	386	385
26	387	386	388	387	391	391	384	385	387	392	389	391	391	391	391
27†	*	*	*	387	381	373	372	374	378	382	385	386	388	388	388
28††	389	399	392	380	372	376	374	373	380	373	373	379	386	385	389
Mean	393	393	391	387	381	377	376	379	383	388	390	390	388	389	390
Mean†	391	392	390	385	374	366	364	371	376	391	393	392	388	390	392
Mean††	392	394	391	387	383	381	381	384	386	385	381	380	382	386	390

† Five International quiet days

†† Five International disturbed days.

* Loss of record; (day omitted for means),

TABLE 14

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

February

2,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
392	392	391	391	391	391	391	389	388	386	20 33	402	05 18	364	38	1†
389	388	389	393	395	394	394	392	393	387	10 20	407	06 23	363	44	2†
388	388	392	394	396	395	396	397	392	390	22 12	407	06 47	384	23	3
394	393	389	396	393	397	394	391	389	390	09 48	411	01 05	373	38	4††
388	389	392	395	397	388	391	393	389	390	19 35	409	11 52	379	30	5††
386	382	392	393	393	391	391	392	386	391	05 57	412	14 32	382	30	6
392	391	392	392	395	395	392	392	391	388	19 48	402	04 00	371	31	7
389	395	392	387	388	394	399	399	399	388	11 05	407	06 47	369	38	8
391	394	392	389	389	389	394	395	392	388	09 08	401	05 20	363	38	9
395	395	396	396	397	400	397	397	397	385	19 53	407	06 09	349	58	10†
387	386	394	386	382	391	391	388	395	387	16 50	407	05 55	362	45	11
395	396	395	393	400	397	403	402	401	390	20 52	406	05 42	371	35	12
392	391	387	389	389	392	394	395	395	390	20 18	401	06 25	371	30	13
394	394	394	399	397	394	393	392	388	387	17 33	403	05 35	361	42	14
399	395	396	797	397	397	397	396	395	394	10 35	408	04 37	372	36	15
387	391	394	392	399	395	*	*	*	*	*	*	*	*	*	16
395	394	394	393	394	393	392	392	391	*	*	*	*	*	*	17
399	400	400	397	394	393	387	388	388	389	10 34	401	07 38	362	39	18
394	395	394	394	394	395	394	395	394	390	19 55	399	05 58	372	27	19†
386	387	391	396	395	400	401	397	394	388	19 17	407	08 10	373	34	20
389	394	395	395	395	395	395	397	396	393	09 07	411	05 47	382	29	21
397	396	397	395	396	401	396	396	396	390	20 15	402	09 45	378	24	22††
386	389	387	392	395	394	394	395	395	385	19 08	406	10 28	369	37	23††
388	389	392	397	401	404	401	396	394	393	20 00	412	13 30	382	30	24
385	389	388	387	389	392	388	391	388	389	05 20	402	11 40	379	23	25
392	392	393	394	394	*	*	*	*	*	*	*	*	*	*	26
387	387	388	386	386	388	388	391	391	*	*	*	*	*	*	27†
389	393	395	395	395	395	396	394	394	386	22 55	399	04 32	369	30	28††
391	392	393	393	394	395	394	394	393	389					35	Mean
393	393	393	394	394	395	394	393	393							Mean†
391	392	392	395	395	395	394	394	393							Mean††

† Five International quiet days.

†† Five International disturbed days

* Loss of record, (day omitted for means).

TABLE 15

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

March

2,000 γ plus tabular quantities

Date	Hours G M T														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1†	396	395	394	391	387	373	368	372	375	379	382	388	386	384	388
2†	388	390	387	387	384	374	368	370	375	379	381	381	383	384	386
3†	391	394	394	390	378	368	370	371	379	380	387	382	384	388	388
4†	391	390	390	389	388	383	381	381	382	387	391	396	391	390	393
5	388	384	382	383	388	386	380	380	382	383	386	389	394	390	389
6	390	390	388	385	368	359	357	365	372	381	382	390	391	391	389
7††	394	396	401	396	387	379	373	378	382	384	393	393	393	393	394
8	394	396	398	395	375	365	357	364	374	386	388	388	387	387	387
9††	393	393	394	394	384	376	370	372	374	386	384	386	386	384	384
10	390	389	382	380	388	387	382	375	380	384	391	385	382	388	391
11	384	387	387	389	388	388	381	380	376	391	395	394	380	388	390
12	390	389	384	380	376	371	367	357	368	374	378	380	381	384	387
13	394	393	390	390	387	382	382	384	383	394	399	398	394	390	389
14	389	390	389	386	383	382	384	388	396	396	390	387	387	390	390
15	386	388	387	382	381	376	378	373	368	370	374	384	389	390	391
16	386	383	382	381	380	382	382	383	384	379	380	380	382	384	386
17	381	380	383	389	394	395	386	376	378	388	380	379	380	384	387
18	391	390	395	397	398	396	388	375	373	378	382	383	383	380	383
19	391	391	390	388	382	379	373	368	368	371	374	376	379	382	384
20	389	389	386	382	375	371	368	358	354	355	368	374	381	386	387
21	393	384	384	384	388	384	375	365	364	371	380	383	383	384	388
22††	391	390	390	386	378	374	373	366	363	370	373	371	356	350	363
23	396	394	393	390	390	390	390	378	380	384	384	388	394	397	394
24	385	386	380	379	374	366	363	359	357	365	373	379	384	389	391
25	394	393	391	384	384	378	371	368	372	373	380	386	390	390	390
26	393	394	393	393	388	382	371	357	359	371	384	387	390	381	384
27	386	388	390	388	388	386	382	378	372	376	381	380	387	389	389
28	390	393	390	390	385	382	379	368	362	371	380	389	390	390	390
29†	394	394	396	396	391	386	370	359	356	358	370	376	384	388	387
30††	387	389	390	388	397	387	371	360	363	371	379	387	384	386	384
31††	388	393	396	394	382	371	366	350	348	372	390	394	395	393	391
Mean	390	390	390	388	384	379	374	370	372	378	382	385	385	386	388
Mean†	392	393	392	391	386	377	371	371	373	377	382	385	386	387	388
Mean††	391	392	394	392	386	377	371	365	366	377	384	386	383	381	383

† Five International quiet days.

†† Five International disturbed days

* Loss of record, (day omitted for means).

TABLE 15

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

March

2,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date		
15	16	17	18	19	20	21	22	23		Time	Mag	Time	Mag				
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H	M	γ	H.	M	γ	γ	
389	388	388	389	390	390	388	388	387	386	03	40	397	06	20	367	30	1†
387	386	387	388	390	390	389	387	388	384	03	20	398	06	18	368	30	2†
389	388	390	390	391	391	390	393	391	386	20	55	395	06	22	366	29	3†
393	394	395	395	393	388	387	384	386	389	10	50	405	06	38	380	25	4†
383	389	391	393	391	391	394	396	393	388	17	20	404	06	23	376	28	5
386	390	393	394	394	393	393	394	394	385	20	34	399	05	37	356	43	6
395	394	388	399	391	397	405	394	393	391	20	32	410	06	00	373	46	7††
388	390	391	399	394	388	389	390	391	386	17	52	402	05	53	357	45	8
388	394	391	401	393	379	384	390	390	386	18	05	419	06	33	305	54	9††
387	387	389	385	387	388	386	385	388	386	14	03	395	07	30	375	20	10
390	391	394	389	388	390	390	391	390	388	16	45	403	07	36	373	30	11
388	389	391	390	391	394	396	394	394	383	21	48	402	07	10	357	45	12
382	384	386	390	389	391	391	388	389	389	10	22	409	05	37	374	35	13
390	391	387	396	388	386	394	389	387	389	18	10	409	11	21	376	33	14
394	393	393	391	390	386	383	387	388	384	16	28	397	07	45	362	35	15
387	389	391	388	389	387	393	387	383	385	21	47	401	09	32	376	25	16
390	394	393	394	396	395	394	389	389	387	04	42	398	07	20	373	25	17
386	387	399	383	385	394	397	394	391	388	03	33	409	08	24	373	36	18
387	390	390	388	388	388	389	388	388	383	20	28	398	07	25	365	33	19
388	390	390	390	391	393	390	390	391	381	20	04	396	08	16	354	42	20
390	391	393	394	395	394	395	395	394	385	21	08	397	07	42	364	33	21
376	388	393	396	398	399	399	401	397	381	19	30	408	12	35	348	60	22††
388	388	382	381	383	390	403	388	385	389	21	05	411	07	14	376	35	23
391	393	395	396	397	398	396	395	393	383	20	52	399	07	55	356	43	24
393	391	393	391	391	394	394	394	393	386	20	30	401	07	04	367	34	25
393	395	397	394	395	393	391	391	390	386	17	15	403	07	12	357	46	26
390	389	391	390	391	391	390	390	389	386	21	48	398	08	07	371	27	27
391	394	394	394	395	395	394	394	393	387	19	38	398	08	18	359	39	28
388	388	388	390	390	389	388	388	387	383	03	40	397	08	25	355	42	29†
386	388	390	394	396	394	395	399	394	386	18	48	404	07	20	360	44	30††
396	399	395	394	401	397	391	399	393	387	15	45	409	07	34	348	61	31††
389	390	391	392	392	391	392	391	390	386							37	Mean
389	389	390	390	391	390	388	388	388									Mean†
388	393	391	397	396	393	395	397	393									Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 16

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

April

2,000 γ_2 plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	396	396	397	396	390	384	384	384	390	396	390	391	399	405	408
2	394	396	396	398	393	386	381	376	380	388	394	396	393	395	397
3	398	405	402	402	396	387	382	378	379	379	384	394	396	396	393
4	402	406	410	404	398	395	391	380	382	388	384	388	393	398	401
5††	401	401	397	397	394	390	379	382	382	378	387	394	395	394	390
6	399	401	393	396	387	387	387	384	382	386	390	388	393	396	397
7††	401	399	408	403	402	398	394	387	391	395	390	396	396	396	395
8	403	404	399	398	397	396	389	389	394	403	408	402	397	399	402
9	398	408	408	404	402	402	386	384	390	390	405	406	404	402	402
10	396	399	395	402	396	391	384	378	384	395	394	391	381	384	394
11	396	398	394	394	390	390	390	396	399	412	410	409	405	401	399
12	403	409	409	402	393	390	384	388	395	393	390	389	385	396	402
13	405	406	402	405	396	391	387	385	386	388	395	396	398	396	399
14	408	399	403	402	399	398	394	390	389	392	401	402	402	402	402
15	403	408	405	402	396	387	380	373	373	380	388	396	396	398	398
16†	402	406	408	402	396	388	379	373	375	386	396	401	401	399	399
17†	396	405	396	389	379	373	366	367	375	382	396	402	401	403	402
18†	405	408	399	393	390	390	390	383	395	406	409	408	403	396	396
19†	406	408	408	401	397	396	395	396	399	404	406	402	398	397	396
20	405	406	404	398	394	384	371	379	390	401	404	406	406	399	398
21	408	408	404	397	394	387	378	373	374	380	393	401	402	396	397
22	406	408	408	408	394	390	390	394	399	413	416	406	408	404	403
23†	405	408	408	404	398	383	374	374	380	387	397	404	402	396	397
24	408	409	411	408	402	395	384	380	380	387	397	410	411	394	390
25	408	408	408	405	402	396	387	384	386	390	391	396	397	398	402
26	404	410	409	399	390	380	375	373	373	379	402	408	408	405	402
27††	408	404	408	401	389	376	374	370	367	373	387	396	405	401	402
28††	404	396	396	393	383	373	372	379	389	396	404	411	414	408	408
29††	406	408	404	398	396	390	390	397	402	405	396	401	401	408	409
30	405	405	402	397	394	394	399	406	409	410	410	408	406	405	406
Mean	403	404	403	400	394	389	384	383	386	391	397	400	400	399	400
Mean†	403	407	404	398	392	386	381	379	385	393	401	403	401	398	398
Mean††	404	402	403	398	393	385	382	383	386	389	393	400	402	401	401

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means)

TABLE 16

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

April

2,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
402	401	399	398	404	402	399	406	403	397	21 34	409	06 10	383	26	1
396	396	396	401	404	404	403	411	402	395	21 42	414	07 18	374	40	2
391	399	402	403	402	404	406	406	404	395	21 54	412	07 10	373	39	3
401	402	404	401	408	403	402	402	404	398	19 00	412	07 26	379	33	4
391	401	401	405	408	409	396	397	398	394	20 30	411	08 42	373	38	5††
398	402	402	406	408	408	408	409	405	396	21 38	411	07 50	380	31	6
398	398	401	404	406	403	399	399	402	398	18 50	410	07 10	384	26	7††
402	402	402	404	408	408	409	408	404	401	21 18	411	07 22	384	27	8
402	405	405	404	406	406	402	402	399	401	10 30	408	06 10	383	25	9
396	398	401	404	398	399	402	396	396	394	16 36	408	07 16	375	33	10
401	402	403	402	403	404	404	403	402	400	09 18	413	04 16	387	26	11
402	405	403	405	405	404	405	403	404	399	01 12	410	05 36	382	28	12
403	403	403	409	408	408	404	405	404	399	18 12	411	06 42	379	32	13
405	406	406	408	408	408	406	405	406	402	19 50	409	07 50	386	23	14
399	402	402	406	406	408	408	408	404	397	01 12	409	06 58	370	39	15
401	403	406	405	403	402	398	401	399	397	01 25	409	07 30	368	41	16†
402	401	405	405	406	405	404	403	403	394	18 50	408	06 40	362	46	17†
401	408	404	404	405	406	406	404	405	401	09 58	410	07 00	379	31	18†
399	403	405	403	403	405	403	405	405	402	00 44	410	06 18	391	19	19†
398	402	404	404	406	408	408	406	408	400	01 50	410	06 10	362	48	20
404	405	405	406	408	408	408	405	404	398	21 04	409	06 26	367	42	21
408	408	408	408	409	411	406	408	403	404	10 42	417	05 34	384	33	22
398	401	403	404	403	402	403	405	406	398	01 30	409	07 06	372	37	23†
402	403	403	398	393	398	403	405	409	399	11 20	414	07 05	376	38	24
398	397	405	410	408	410	405	402	402	400	20 58	414	07 22	383	31	25
403	408	408	408	405	408	409	405	404	399	01 30	411	06 54	371	40	26
404	403	413	410	399	406	399	394	402	395	01 24	419	07 50	364	55	27††
408	408	406	406	408	410	408	413	408	400	22 10	414	06 14	366	48	28††
410	408	406	414	411	408	414	413	416	404	22 06	419	04 38	386	33	29††
408	409	408	409	410	412	409	406	406	406	19 18	414	05 08	388	26	30
401	403	404	405	405	406	405	405	404	399					34	Mean
400	403	405	404	404	404	403	404	404							Mean†
402	405	405	408	406	407	403	403	405							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 17

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

May

2,000 γ plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	405	409	411	403	394	385	385	393	397	397	400	401	401	397	397
2	403	403	403	403	400	391	385	390	397	397	396	397	397	394	398
3	403	403	400	397	393	391	389	382	385	385	386	392	398	398	398
4	403	404	401	391	379	374	382	391	391	390	391	393	398	396	393
5	403	405	405	398	386	371	368	368	379	383	391	403	404	401	399
6††	403	404	403	405	403	384	375	375	382	383	386	382	382	376	385
7††	407	404	405	397	384	368	375	366	391	394	409	415	407	399	399
8††	405	403	404	397	382	368	359	366	375	384	385	388	392	392	400
9	397	401	396	393	392	385	383	379	382	389	392	399	403	401	403
10	404	406	407	403	391	386	375	369	371	381	388	393	400	403	404
11	404	406	406	405	401	388	378	378	379	389	397	403	405	403	403
12	404	406	405	407	400	388	379	373	373	378	388	399	403	400	400
13	406	408	409	400	394	386	377	368	381	382	386	393	400	397	400
14	405	407	405	403	394	383	385	383	379	388	383	386	399	401	400
15	404	407	414	408	400	389	379	379	383	389	391	396	400	398	398
16	405	408	410	399	390	397	397	397	389	393	390	386	389	393	394
17†	393	397	391	392	391	381	375	374	382	391	393	397	393	391	391
18	403	401	401	403	404	406	401	397	398	403	403	400	396	394	397
19†	405	404	405	399	389	384	385	391	391	397	400	400	401	399	398
20	401	400	397	392	386	376	370	369	373	378	377	378	384	391	391
21†	397	396	393	393	390	379	379	383	385	385	389	389	391	393	394
22	399	403	403	396	391	393	393	393	396	400	399	398	403	398	396
23†	396	404	403	400	403	397	390	384	382	382	388	391	394	394	397
24†	398	404	408	411	399	379	367	362	369	378	385	397	403	399	397
25††	403	406	408	408	401	391	390	385	384	391	397	401	403	399	400
26††	398	412	413	409	400	388	379	377	377	379	393	403	404	403	401
27	405	411	416	414	403	397	391	383	382	382	384	391	393	389	393
28	399	403	399	401	397	388	388	383	390	385	393	401	399	404	404
29	408	408	413	401	388	374	365	363	370	379	389	390	391	394	393
30	401	403	401	401	408	403	393	394	396	397	401	406	405	408	408
31	414	415	412	403	391	382	390	394	417	413	416	415	407	404	403
Mean	403	405	405	401	394	386	382	381	385	388	393	396	398	397	398
Mean†	398	401	400	399	394	384	379	379	382	387	391	395	395	395	395
Mean††	403	406	407	403	394	380	376	378	382	386	394	398	398	394	397

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 17

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

May

2,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	γ	
400	401	403	403	403	403	403	403	401	400	01 20	412	05 32	382	30	1
400	400	400	401	403	403	400	398	403	398	22 56	405	06 18	383	22	2
400	398	399	401	404	405	405	405	404	397	18 30	406	07 32	381	25	3
394	400	405	403	404	405	403	401	400	396	20 10	407	04 58	371	36	4
398	401	405	407	406	405	408	411	406	396	22 14	414	06 30	367	47	5
401	405	411	411	411	405	403	407	406	395	18 14	415	07 52	370	45	6††
403	403	403	404	406	407	403	398	401	399	10 32	420	05 02	367	53	7††
401	396	400	403	403	403	401	399	396	392	00 01	407	05 50	357	50	8††
403	403	403	405	403	404	403	403	404	397	18 02	408	06 58	378	30	9
403	403	403	403	403	400	400	403	403	396	01 30	409	07 28	368	41	10
404	404	405	404	403	403	403	403	403	399	01 50	408	07 20	375	33	11
401	403	404	404	405	406	405	407	405	398	21 50	408	07 02	369	39	12
400	403	399	400	403	406	404	404	403	396	01 50	411	06 32	367	44	13
399	403	402	403	405	405	403	403	403	397	01 06	411	07 32	375	36	14
398	401	401	401	401	403	403	403	405	398	01 55	416	07 02	377	39	15
397	399	400	400	401	400	397	397	391	397	01 35	413	07 44	384	29	16
391	397	397	398	397	400	400	403	403	392	23 59	404	06 10	373	31	17†
399	399	401	403	403	403	404	404	405	401	04 50	407	06 58	393	14	18
398	398	399	400	399	399	397	397	397	397	02 10	408	05 46	383	25	19†
392	394	401	399	398	397	397	399	399	389	23 16	403	06 54	368	35	20
393	394	394	397	397	397	397	397	397	392	23 46	399	06 45	375	24	21†
397	398	398	397	397	397	397	396	398	397	01 24	405	03 50	389	16	22
400	403	403	403	403	403	401	400	399	397	01 10	406	08 28	380	26	23*
397	400	403	403	403	401	400	401	401	394	03 02	412	06 40	359	53	24†
413	414	415	416	399	396	394	391	396	400	17 22	417	07 08	381	36	25†
400	404	405	405	405	406	405	404	404	399	02 06	416	06 10	370	46	26††
394	397	398	400	400	403	399	397	394	397	02 38	417	07 02	375	42	27
409	406	406	408	406	408	408	408	408	400	14 46	410	06 14	374	36	28
394	396	399	398	398	400	400	401	401	392	01 38	414	06 28	359	55	29
408	411	415	415	414	412	412	412	414	406	16 44	416	06 00	392	24	30
403	403	408	411	408	407	406	405	407	406	10 04	421	04 51	379	42	31
400	401	403	403	403	403	402	402	402	397					36	Mean
396	398	399	400	400	400	399	400	399							Mean†
404	404	407	408	405	403	401	400	401							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record ; (day omitted for means).

TABLE 18

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

June

2,000 γ plus tabular quantities

Date	Hours G. M. T.														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	405	408	405	405	405	394	386	383	390	396	398	400	397	398	400
2	403	406	406	406	402	397	394	388	388	396	400	400	400	400	401
3	401	406	411	405	396	385	376	378	380	380	386	389	390	388	391
4	399	400	405	405	402	397	391	385	390	394	397	400	401	403	402
5†	403	405	406	403	390	382	374	372	376	382	390	394	400	400	400
6	404	411	418	418	408	397	382	379	382	393	400	402	400	397	400
7	403	411	412	413	393	372	366	370	374	382	388	394	397	393	394
8††	402	404	409	394	380	371	374	380	388	391	396	395	388	390	386
9	400	405	410	411	400	390	382	386	394	397	400	406	406	401	401
10†	405	412	417	414	402	386	378	370	376	391	397	400	399	398	398
11	404	405	405	400	386	380	373	371	368	371	382	388	390	398	390
12	402	405	408	401	396	379	378	374	376	385	394	400	395	395	391
13	398	401	403	402	401	390	385	388	398	401	400	395	391	389	386
14	400	402	402	401	393	387	382	385	386	394	400	398	388	394	391
15††	401	406	409	404	401	395	386	383	381	389	402	401	400	397	397
16††	408	410	406	408	400	390	385	379	376	372	374	385	389	390	389
17	398	400	402	401	397	391	389	386	382	387	388	385	391	400	400
18	405	406	406	405	401	405	401	394	391	389	391	402	405	405	403
19	406	410	410	410	411	396	386	380	386	382	389	387	390	391	394
20	402	405	404	400	390	383	378	379	389	397	403	410	408	402	400
21†	403	402	401	401	405	403	389	376	379	391	394	398	403	400	395
22	402	405	402	398	396	389	388	382	382	382	386	398	394	389	393
23††	403	405	406	409	397	388	379	366	372	367	367	379	389	389	390
24††	397	402	406	401	391	385	376	379	371	382	390	396	394	389	389
25	401	402	404	398	389	381	376	367	368	378	382	395	405	408	401
26†	408	411	411	405	400	393	390	390	394	393	394	397	401	401	401
27	404	408	409	404	408	397	409	398	396	389	394	396	393	397	398
28	405	405	402	402	406	400	405	414	413	412	405	397	397	396	400
29	401	402	409	413	408	398	389	389	394	403	406	401	397	391	393
30†	400	401	400	397	398	401	397	394	391	389	389	390	394	394	394
Mean	402	405	407	404	398	390	385	382	384	389	393	396	396	396	395
Mean†	404	406	407	404	399	393	386	380	383	389	393	396	399	399	398
Mean††	402	405	407	403	394	386	380	377	378	380	386	391	392	391	390

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (days omitted for means).

TABLE 18

Hourly Values of Vertical Force, 1955

[Averages for sixty minutes centred at the full hours of Greenwich Mean Time]

June

2,000 γ plus tabular quantities

Hours G. M. T.									Mean	Maximum		Minimum		Range	Date
15	16	17	18	19	20	21	22	23		Time	Mag.	Time	Mag.		
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ		
402	402	409	405	405	406	404	403	402	400	17 16	412	06 50	381	31	1
403	405	403	402	400	400	400	400	400	400	02 54	409	08 00	385	24	2
394	396	397	397	400	399	397	398	400	393	01 36	412	05 54	373	39	3
401	403	404	403	403	404	404	400	400	400	02 20	409	07 02	381	28	4
400	400	401	403	403	402	402	401	401	395	01 49	410	07 22	370	40	5†
401	401	402	409	406	404	402	402	405	401	02 39	420	07 02	376	44	6
394	398	400	398	398	397	397	395	397	393	07 42	418	05 13	365	53	7
383	394	402	400	400	400	400	399	400	393	02 02	411	04 57	368	43	8††
403	404	406	409	406	403	403	405	403	401	03 00	413	06 33	379	34	9
400	401	401	401	402	402	402	402	402	398	02 40	419	07 19	365	54	10†
389	395	397	397	397	396	400	402	401	391	01 42	408	07 58	364	44	11
394	397	398	396	396	398	397	395	396	394	02 02	411	07 27	370	41	12
391	400	397	397	400	398	396	398	401	396	02 26	404	05 58	382	22	13
394	396	394	396	397	398	396	397	398	395	01 50	404	07 39	376	28	14
400	400	398	398	400	400	400	400	403	398	02 30	411	07 28	376	35	15††
390	394	394	394	394	395	394	394	395	392	01 20	413	09 45	367	46	16††
398	401	402	403	404	404	404	404	405	397	22 44	408	07 50	380	28	17
403	402	403	405	405	405	405	405	404	402	12 06	408	08 24	388	20	18
396	398	396	400	400	400	400	400	401	397	04 10	413	07 10	375	38	19
401	401	398	400	401	402	401	401	401	398	11 26	412	01 02	371	41	20
400	401	400	401	401	400	400	401	401	398	04 18	409	07 50	375	34	21†
394	396	401	401	401	400	401	402	401	395	10 54	409	07 38	380	29	22
397	400	402	402	404	396	401	398	396	392	19 16	413	08 28	360	53	23††
393	395	400	405	405	403	401	400	397	394	02 10	411	07 57	365	46	24††
401	401	403	405	406	405	405	405	405	395	12 10	412	07 50	363	49	25
401	400	401	403	402	404	402	401	403	400	01 02	412	06 10	388	24	26†
400	401	400	402	403	404	403	403	403	401	05 28	413	10 21	378	35	27
398	400	400	401	400	400	401	398	398	402	08 20	418	12 37	393	25	28
394	398	400	400	400	400	400	400	400	400	03 20	416	23 28	386	30	29
394	394	395	398	398	395	396	396	396	395	05 20	402	08 28	387	15	30†
397	399	400	401	401	401	400	400	401	397					36	Mean
399	399	400	401	401	401	400	400	401							Mean†
398	397	399	400	401	399	399	398	398							Mean††

† Five International quiet days.

†† Five International disturbed days.

* Loss of record; (days omitted or means).

TABLE 19
PRINCIPAL MAGNETIC STORMS

January—June 1955

Greenwich date 1955	Storm time		Sudden commencement			Degree of activity	Maximum activity Greenwich Day	Ranges			Remarks	
	G.M.T. of beginning	G.M.T. of ending (1)	Type (2)	Amplitudes (3)				D	H	Z		
				D	H							Z
H. M.	D. H.		γ	γ	γ	γ	γ	γ				
January 17 . . .	03 18	20 3	.	.	.	m	17	6	193	82		
March 22 . . .	03 24	23 2	.	.	..	ms	22	7	260	53	
March 25 . . .	14 30	26 10	S C	+1	+29	+15	m	25	6	191	49	

The following symbols and conventions have been used according to recognised practice —

(1) Approximate time of ending of storm construed as the time of cessation of reasonably marked disturbance movements in the traces.

(2) S.C.=sudden commencement; ()=gradual commencement

(3) Signs of amplitudes of 'D' and 'Z' taken algebraically; (D—reckoned negative being westerly);

(4) Storm described by three degrees of activity: (Z—reckoned positive being vertically downwards);

(m)—for moderate (when range is less than 250 γ);

(ms)—for moderately severe (when range is between 251 γ and 400 γ);

(s)—for severe (when range is above 400 γ)