N.Z. DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

APIA OBSERVATORY,

APIA, WESTERN SAMOA

ANNUAL REPORT

FOR

1941

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Minister of Scientific and Industrial Research

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APIA OBSERVATORY

Annual Report for the Year 1941

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Resident Staff, 1941

Acting Director	H.B. Sapsford B.Sc.
Professional Assistants	A.B.F. Ayers B.Sc.(until 14th February); J.D. Coulter M.Sc. J.W. Hutchings M.Sc. (until 2nd October); F. Finkelstein M.Sc. (from 14th February)
Locally recruited staff	Miss V. Hannemann (until 25th February); Miss H.M. Sasse (from 27th February); Siaosi Sumeo; Pele Feagai; Pene Wells; Popo Tanielu; Fa'asi'u; Ma'auga; (until 2nd October); Sini (from 6th October); Malaefou (from 27th March)

Co-ordinates of Transit Pier

Latitude	13° 48' 26"	South
Longitude	171° 46' 30"	West or 11h 27m 6s west of Greenwich
Altitude	Two metres above mean sea level	

Standards of Time

Greenwich Mean Time is used in terrestrial magnetism and seismology (12h = Greenwich midday). Zone Time (165° west of Greenwich) is used in meteorology and atmospheric electricity.

Apia Observatory, Samoa

Report of the Director for the year 1941

The general arrangement of this report is the same as in previous years. The geophysical subjects in which observations have been made are terrestrial magnetism, seismology, meteorology, atmospheric electricity and tides. Details of instruments and other relevant information will be found in the preliminary remarks which introduce the respective sections of the report.

Staff

During the year the Observatory was under the control of H.B. Sapsford who was Acting Director. Mr. A.B. F. Ayers left Samoa on February 14th and Mr. J. Finkelstein took up professional duties at the Observatory on the same day. Owing to the pressure of work in the meteorological service in New Zealand Mr. J.W. Hutchings was recalled and left Samoa on October 2nd. He was not replaced.

In February Miss H.M. Sasse replaced Miss V. Hannemann as stenographer. There were also a few changes among the Samoan staff.

Buildings

General maintenance work was carried out by the Public Works Department including much painting. No new buildings were erected and no old ones demolished.

Time Service

The Strasser and Rohde clock, No. 381, still functioned as the standard for maintaining an accurate time service. Time marks for the magnetographs and seismographs were provided by the Synchronome clock, No.C603. The Davison chronometer was used for magnetic observations. The clocks and chronometers were controlled by daily wireless time signals.

Tides

The automatic recording of the tides by means of the portable tide gauge No. 11664 was continued. Hourly scalings of heights of the tides together with times and heights of high and low water were forwarded monthly to the United States Coast and Geodetic Survey in Washington.

Terrestrial Magnetism 1941

This branch of the work consists of the continuous photographic recording of horizontal intensity (H), declination (D) and vertical intensity (Z), together with the usual observational programme for the control and reduction of the continuous records. The results are presented in this report in the form of tables.

Eschenhagen variometers record horizontal intensity and declination while vertical intensity is recorded by a Godhavn balance. These instruments are still in the concrete building, the Gauss Haus, in which they have been for many years. The H and D variometers are in the eastern room and the Z instrument is in the western room. The lenses of the H and D variometers are at distances of 128 and 174 centimetres respectively from the recording drum and the lens of the Godhavn balance is distant 162 centimetres from its drum.

The photographic papers are changed once a day at approximately 1900 hours G.M.T. and the temperature inside the variometer house is read at the same time. It has been found that the diurnal variation of temperature in the Gauss Haus is negligible and the variation throughout the year is also small. The highest temperature during 1941 was 28.8°C in February and the lowest 25.0°C in July.

In 1937 the temperature coefficient of the H variometer was reduced to 0.25γ/°C. At the same time the Godhavn balance was adjusted to give the maximum compensation for temperature, the final temperature coefficient being 1.8γ/°C. With these coefficients the variation of temperature in the Gauss Haus is not considered to be large enough to warrant the application of temperature corrections to the ordinates measured from the magnetograms.

The sensitivity of the instruments was such that the H variometer had a scale value of about 2½ gammas per millimetre, the Godhavn balance 1¼ gammas per millimetre and the D variometer 1 minute of arc per millimetre. Accurate determinations of the scale values of the H and Z variometers were made about once a week and the values adopted are given at the end of this description. The scale values for the H variometer and for the Godhavn balance were obtained by the electrical method using Helmholtz Gaugain coils. That for the D variometer was calculated from the geometrical constants and the torsion of the suspension.

Regular absolute observations were made of horizontal

intensity, declination and inclination (I), the number of observations being 37 of H, 35 of D and 42 of I. The observations of H and D were made with C.I.W. magnetometer No. 9 which is on loan from the Department of Terrestrial Magnetism, Carnegie Institute, Washington. Inclination measurements were made with Schulze earth inductor No. 2.

The method of observation with C.I.W. magnetometer No. 9 is the same as that described by D.L. Hazard in "Directions for Magnetic Measurements" (United States Department of Commerce, Serial Number 166). The measurements have been reduced to International Magnetic Standard by applying a correction of -28γ(-0.00079H) to horizontal force and -0.2 of a minute of arc to declination. These corrections which are based on comparisons with the standard C.I.W. magnetometer No. 3 at Washington, D.C., Nov. 6-10, 1934, have been applied since January 1937. The instrument was re-standardized in June 1937 by Mr. Parkinson of the Carnegie Institute and Mr. Dyer of the Observatory staff. When the results of this intercomparison are available some amendments may be necessary to the values of H, D and Z in this report. The measurements of inclination have been reduced by applying a correction of -0.2 of a minute (reckoning southerly inclination negative). This correction was determined by the Department of Terrestrial Magnetism after comparison of Schulze earth inductor No. 2 with C.I.W. inductor No. 48 at Cheltenham in August 1939.

The base-line values of the records, which are computed from the absolute observations, are plotted on a graph. The adopted base-line values are read from a smooth curve drawn through the computed values. These are given at the end of this introduction.

In October an earthquake caused the suspension of the H variometer to untwist and the necessary adjustment caused a shift in base line value.

During August the Godhavn balance was dismantled because of a rapid decrease in sensitivity. The magnet and agates were cleaned and the balance reassembled. The scale-value remained steady after this adjustment but there was a small change in base-line value.

The practice of measuring the ordinates on the magnetograms of H and D from the centre of the trace to the nearer edge of the base line, and of Z from the centre of the trace to the further edge of the base line, has been continued.

The hourly values of horizontal intensity and verti-

cal intensity have been obtained by converting the ordinates, which are scaled in millimetres, into gammas. The results have been presented in the form of departures of the hourly means from the mean value of the day. The daily mean is given under the column headed "Mean". The departures are based on mean values of the elements over periods of one hour between exact hours of Greenwich Mean Time. The column heading specifies the commencement of the hourly period: Thus column 0 refers to the period 0 to 1 hour G.M.T. and so on.

In both horizontal and vertical intensity the tabular values are in gammas while in declination the values are in tenths of a minute of arc. The values of vertical intensity shown in the tables are numerical values of the field strength, the sense of the vertical force being given by the fact that in Samoa the south pole of the magnet dips.

International Quiet Days are indicated by a plus sign, thus:- +

The values of the diurnal variations of the magnetic elements have not been corrected for non-cyclic change. Values of the correction (N) have been computed and are given at the foot of the appropriate tables. The non-cyclic change N is the difference between the first and second midnights ($\bar{a}_{24} - \bar{a}_{o}$) of the mean day. Since hourly means are used and not instantaneous values, the midnight values have been estimated by taking the means of the two hourly periods centered at the midnights.

Tabulations of the three-hour-range index "K" have been made and are given in this report. The method of determining "K" is the same as that described in the "Journal of Terrestrial Magnetism and Atmospheric Electricity", Volume 44 (1939), page 411. Only records of H have been considered in estimating "K", as it has been found that at times of magnetic disturbance the range at this station is always greatest in H.

Adopted Scale Values

Horizontal Intensity.

The values of the terms A and B occurring in the scale value equation $dY/dn = A + Bn$ (where n = ordinate in millimetres) which were adopted during 1941 are as follows:

Date		A	B
January	1st-31st	2.21	0.0032

Date		A	B
February	1st-April 30th	2.20	0.0032
May	1st-June 30th	2.19	0.0034
July	1st-31st	2.20	0.0034
August	1st-Sept. 30th	2.21	0.0032
October	1st-Dec. 31st	2.22	0.0032

Vertical Intensity

The scale value was assumed to be linear, the following values being adopted.

January 1st - February 28th	1.26
March	1.27
April	1.30
May	1.31
June	1.33
July	1.38
August 1st - 19th.	1.42
August 20th - September 20th.	1.31
September 21st-22nd.	1.33
23rd-24th.	1.35
25th-October 3rd.	1.37
October 4th-December 31st.	1.35

Declination

The scale value remained constant and equal to one minute of arc per millimetre on the recording paper.

Adopted Base Line Values

The base line values of the magnetograms may be read from the following list in which the dates are given on which the base line assumes a new value.

Horizontal Intensity

January	1st 34642, 2nd 643, 3rd 644, 4th 645, 6th 646, 8th 647, 10th 648, 12th 649, 14th 650, 16th 651, 18th 652, 20th 653, 24th 654, 31st 655.
February	1st 34655, 7th 656, 14th 657, 21st 658, 28th 659.
March	1st 34659, 7th 660, 15th 661, 21st 662, 28th 663.
April	1st 34663, 4th 664, 11th 665, 19th 666, 25th 667.
May	1st 34667, 2nd 668, 9th 669, 16th 670, 23rd 671, 30th 672.
June	1st 34672, 6th 673, 13th 674, 20th 675, 27th 676.

July 1st 34676, 6th 677, 11th 678, 18th 679, 25th 680.
August 1st 34681. September 1st 34681.
October 1st 34681, 6th 691, 24th 690, 30th 689.
November 1st 34689, 4th 688, 6th 687, 7th 686, 8th 685, 9th 684, 10th 683, 11th 682, 13th 681, 14th 680, 15th 679, 16th 678, 17th 677, 18th 676, 24th 675.
December 1st 34675.

Vertical Intensity

January 1st 20589, 6th 590, 17th 591, 28th 592.
February 1st 20592, 8th 593, 19th 594.
March 1st 20595, 16th 596, 24th 597.
April 1st 20597, 4th 598, 15th 599, 26th 600.
May 1st 20600, 7th 601, 18th 602, 29th 603.
June 1st 20603, 20th 602. July 1st 20602.
August 1st 20602, 9th 601, 21st 597.
September 1st 20597. October 1st 20596.
November 1st 20596, 4th 595, 7th 594, 10th 593, 15th 592, 16th 591, 19th 590, 22nd 589, 25th 588, 28th 587.
December 1st 20587.

Declination

10°+...E.

January 1st 28.5'; February 1st 28.5'; March 1st 28.5'; April 1st 28.5'; 6th 28.6'; 16th 28.7'; 26th 28.8';
May 1st 28.8'.
June 1st 28.8'; 6th 28.7'; 16th 28.6'; 26th 28.5'.
July 1st 28.5'. August 28.5'. September 28.5'.
October 28.5'. November 1st. 28.5'; 4th 28.6'; 9th 28.7'; 16th 28.8'; 21st 28.9'.
December 1st 28.9'.

Mean Values of Magnetic Elements, 1941

All Days

		D	H	X	Y	Z
		East	gamma	gamma	gamma	gamma
January	10°	57.1'	34875	34240	6626	20649
February		57.2'	34873	34239	6626	20649
March		57.4'	34838	34203	6622	20659
April		58.0'	34849	34213	6630	20659
May		58.5'	34861	34223	6637	20660
June		58.8'	34867	34228	6641	20661
July		59.0'	34846	34207	6639	20667
August		59.2'	34857	34219	6643	20664
September		59.5'	34840	34201	6643	20668
October		59.7'	34868	34228	6650	20670
November		59.7'	34855	34215	6648	20667
December		60.3'	34863	34222	6655	20661
Year		58.7'	34858	34220	6638	20661

International Quiet Days

		D	H	X	Y	Z
		East	gamma	gamma	gamma	gamma
January	10°	56.9'	34888	34253	6626	20650
February		57.1'	34879	34244	6626	20649
March		57.6'	34860	34225	6628	20659
April		58.1'	34856	34220	6632	20658
May		58.5'	34860	34223	6637	20662
June		58.8'	34876	34238	6643	20661
July		59.2'	34862	34224	6644	20667
August		59.0'	34875	34236	6645	20661
September		59.6'	34867	34228	6649	20664
October		59.7'	34878	34238	6652	20669
November		59.9'	34872	34232	6653	20666
December		60.3'	34877	34236	6658	20660
Year		58.7'	34871	34233	6641	20661

Diurnal Variation of Horizontal Intensity

International Quiet Days, 1941
Not corrected for non-cyclic change. Unit = One gamma

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+26	+25	+22	+14	+ 2	+ 8	+20	+21	+20	+29	+24	+32	+20
1- 2	+13	+15	+14	+ 9	0	+ 7	+13	+15	+12	+19	+16	+25	+13
2- 3	0	+ 5	+ 3	- 4	- 3	+ 2	+ 4	+ 3	+ 2	+ 4	+ 3	+14	+ 3
3- 4	-12	- 6	- 8	- 5	- 8	- 5	- 4	- 6	- 4	- 6	- 6	+ 1	- 5
4- 5	-14	-10	-14	-11	-16	- 7	- 8	-11	- 9	-14	-14	- 6	-11
5- 6	-16	-12	-18	-14	-15	- 7	-11	-11	-13	-16	-17	-12	-13
6- 7	-16	-15	-16	-15	-14	- 9	-12	-12	-13	-17	-15	-13	-14
7- 8	-14	-13	-17	-13	-13	-10	-13	-13	-13	-19	-13	-13	-14
8- 9	-14	-13	-17	-11	-11	- 9	-13	-13	-13	-19	-13	-13	-13
9-10	-14	-10	-14	-10	- 8	-10	-13	-12	-13	-18	-13	-13	-12
10-11	-15	-10	-13	- 7	- 7	-11	-12	-10	-14	-16	-15	-14	-12
11-12	-16	-10	-13	- 6	- 5	-10	-12	-11	-12	-15	-14	-13	-11
12-13	-16	- 7	-11	- 6	- 4	-10	-11	-10	-11	-14	-13	-14	-11
13-14	-14	- 9	- 9	- 6	- 3	- 8	- 9	- 8	-11	-13	-12	-15	-10
14-15	-13	- 9	- 9	- 6	- 2	- 6	- 7	- 8	-10	-12	-11	-14	- 9
15-16	-13	- 9	- 7	- 6	+ 1	- 4	- 6	- 8	- 9	-10	- 9	-12	- 8
16-17	-11	- 8	- 6	- 4	+ 3	- 1	- 4	- 5	- 8	- 7	- 8	-13	- 6
17-18	-10	-10	- 4	- 2	+ 6	+ 4	- 2	- 3	- 4	- 5	- 7	-12	- 4
18-19	- 4	- 7	- 3	+ 2	+10	+ 8	+ 3	+ 3	+ 2	0	- 1	- 9	0
19-20	+ 9	0	+ 5	+ 7	+13	+11	+ 9	+11	+ 8	+ 9	+ 9	0	+ 7
20-21	+25	+12	+16	+13	+15	+13	+16	+18	+13	+20	+25	+10	+16
21-22	+40	+26	+30	+24	+18	+17	+21	+23	+24	+33	+33	+27	+26
22-23	+49	+37	+42	+29	+22	+19	+23	+28	+34	+44	+40	+39	+34
23-24	+47	+38	+48	+29	+18	+19	+24	+26	+40	+42	+37	+44	+34
N	+13	+ 9	+23	+ 9	+12	+ 8	+ 1	0	+17	+ 5	+ 4	+11	
R	65	53	66	44	38	29	37	41	54	63	57	59	48
No. of days	5	5	5	4	5	5	5	5	5	4	4	4	

Diurnal Variation of Declination
International Quiet Days, 1941
Not corrected for non-cyclic change.
Unit: One tenth of a minute of arc

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+13	+20	+10	- 1	- 7	- 6	-10	-19	-12	+11	+21	+18	+ 3
1- 2	+13	+21	+15	+ 2	0	+ 4	+ 4	- 7	+ 3	+17	+23	+27	+10
2- 3	+12	+18	+14	+ 7	+ 9	+ 9	+15	+ 9	+12	+18	+20	+27	+14
3- 4	+ 8	+14	+10	+ 9	+13	+ 9	+13	+12	+14	+13	+15	+23	+13
4- 5	+ 7	+10	+ 6	+ 7	+ 9	+ 4	+ 7	+ 8	+ 9	+ 9	+ 9	+15	+ 8
5- 6	+ 8	+ 7	+ 6	+ 6	+ 5	+ 1	0	+ 5	+ 5	+ 8	+ 7	+11	+ 6
6- 7	+ 9	+ 8	+ 7	+ 5	+ 3	0	0	+ 4	+ 5	+ 8	+ 7	+12	+ 6
7- 8	+ 9	+ 8	+ 6	+ 2	+ 1	0	+ 1	+ 4	+ 3	+ 6	+ 6	+ 9	+ 5
8- 9	+ 8	+ 6	+ 3	- 1	- 1	- 1	0	+ 2	0	+ 2	+ 3	+ 5	+ 2
9-10	+ 6	+ 3	+ 1	- 1	- 3	- 1	- 1	+ 1	0	0	- 1	+ 3	+ 1
10-11	+ 5	+ 1	0	- 2	- 2	- 1	- 1	+ 1	0	- 1	- 1	+ 1	0
11-12	+ 3	+ 2	0	- 2	- 1	- 1	0	+ 1	0	- 1	- 1	- 3	0
12-13	0	0	0	- 2	0	0	+ 1	+ 2	0	- 2	-1	- 3	0
13-14	- 1	0	0	- 1	+ 1	0	+ 2	+ 3	0	- 2	-1	- 3	0
14-15	- 1	0	0	+ 1	+ 2	+ 1	+ 3	+ 5	+ 2	- 1	- 1	- 2	+ 1
15-16	- 3	0	+ 1	+ 2	+ 2	+ 3	+ 5	+ 6	+ 4	+ 1	- 1	+ 2	+ 2
16-17	- 5	0	+ 2	+ 3	+ 3	+ 4	+ 7	+ 7	+ 5	+ 3	- 3	+ 2	+ 2
17-18	-14	- 9	+ 1	+ 4	+ 4	+ 5	+ 7	+ 7	+ 6	- 1	-14	- 7	- 1
18-19	-27	-25	- 6	+ 9	+ 5	+ 9	+ 9	+ 9	+ 5	-10	-26	-20	- 6
19-20	-31	-36	-17	- 7	- 1	+ 5	+ 3	+ 1	- 4	-20	-31	-35	-14
20-21	-27	-33	-21	-13	-10	- 3	- 7	- 9	-10	-26	-26	-38	-19
21-22	-13	-18	-20	-12	-14	-12	-17	-18	-12	-22	-15	-32	-17
22-23	+ 2	- 4	-13	- 6	-12	-15	-18	-19	-15	-15	- 1	-15	-11
23-24	+13	+11	- 4	- 1	- 9	-14	-18	-19	-16	- 2	+13	+ 5	- 3
M	+ 2	- 2	- 5	+ 3	0	- 1	- 3	+ 2	+ 3	+ 1	+ 2	+ 2	
A - a			15	11	16	10	16	11	14	20		30	14
B - a			2	11	8	10	10	8	6	5		5	2
A - b	44	57	36	22	27	24	33	31	30	44	54	65	33
B - b			23	22	19	24	27	28	22	29		40	21
No. of Days	5	5	5	4	5	5	5	5	5	5	4	4	

Diurnal Variation of X, 1941

International Quiet Days. Unit: One Gamma

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+22	+20	+20	+14	+ 3	+ 9	+22	+25	+22	+26	+20	+27	+19
1- 2	+10	+11	+11	+ 9	0	+ 6	+12	+16	+11	+16	+11	+19	+11
2- 3	- 2	+ 1	0	- 5	- 5	0	+ 1	+ 1	0	0	- 1	+ 9	0
3- 4	-14	- 9	-10	- 7	-11	- 7	- 7	- 8	- 7	- 9	- 9	- 4	- 9
4- 5	-15	-12	-15	-12	-18	- 8	- 9	-13	-11	-16	-16	- 9	-13
5- 6	-18	-13	-19	-15	-16	- 7	-11	-12	-14	-18	-18	-14	-15
6- 7	-18	-17	-17	-16	-15	- 9	-12	-13	-14	-19	-16	-15	-15
7- 8	-16	-15	-18	-13	-13	-10	-13	-14	-14	-20	-14	-15	-15
8- 9	-16	-14	-18	-11	-11	- 9	-13	-13	-13	-19	-14	-14	-14
9-10	-15	-11	-14	-10	- 7	-10	-13	-12	-13	-18	-13	-14	-13
10-11	-16	-10	-13	- 7	- 7	-11	-12	-10	-14	-16	-15	-14	-12
11-12	-17	-10	-13	- 6	- 5	-10	-12	-11	-12	-15	-14	-12	-11
12-13	-16	- 7	-11	- 6	- 4	-10	-11	-10	-11	-14	-13	-13	-11
13-14	-14	- 9	- 9	- 6	- 3	- 8	- 9	- 9	-11	-13	-12	-14	-10
14-15	-13	- 9	- 9	- 6	- 2	- 6	- 8	- 9	-10	-12	-11	-14	- 9
15-16	-14	- 9	- 7	- 6	+ 1	- 5	- 7	- 9	-10	-10	- 9	-12	- 8
16-17	-10	- 8	- 6	- 5	+ 2	- 2	- 5	- 6	- 9	- 8	- 7	-13	- 6
17-18	- 7	- 8	- 4	- 3	+ 5	+ 3	- 3	- 4	- 5	- 5	- 4	-11	- 4
18-19	+ 1	- 2	- 2	0	+ 9	+ 6	+ 1	+ 1	+ 1	+ 2	+ 4	- 5	+ 1
19-20	+15	+ 7	+ 8	+ 7	+13	+10	+ 8	+11	+ 9	+13	+15	+ 7	+10
20-21	+29	+19	+20	+16	+17	+14	+17	+20	+15	+25	+29	+18	+20
21-22	+42	+29	+33	+26	+21	+19	+24	+27	+26	+36	+35	+32	+29
22-23	+49	+37	+44	+29	+24	+22	+27	+31	+36	+46	+39	+41	+35
23-24	+43	+39	+48	+28	+20	+22	+28	+29	+42	+41	+39	+42	+35
R	67	56	67	45	42	33	41	45	56	66	57	57	50

Diurnal Variation of Y, 1941.
International Quiet Days
Not corrected for non-cyclic change. Unit: One gamma

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+18	+25	+14	+ 2	- 7	- 4	- 6	-15	- 8	+17	+26	+24	+ 7
1- 2	+16	+24	+18	+ 4	0	+ 5	+ 7	- 4	+ 5	+21	+26	+32	+13
2- 3	+12	+19	+15	+ 6	+ 8	+ 9	+16	+10	+12	+19	+21	+30	+15
3- 4	+ 6	+13	+ 8	+ 8	+11	+ 8	+12	+11	+13	+12	+14	+23	+12
4- 5	+ 4	+ 8	+ 3	+ 5	+ 6	+ 3	+ 5	+ 6	+ 7	+ 6	+ 6	+14	+ 6
5- 6	+ 5	+ 5	+ 2	+ 3	+ 2	0	- 2	+ 3	+ 2	+ 5	+ 4	+ 9	+ 3
6- 7	+ 6	+ 5	+ 4	+ 2	0	- 2	- 2	+ 2	+ 2	+ 5	+ 4	+ 9	+ 3
7- 8	+ 6	+ 5	+ 3	- 1	- 2	- 2	- 2	+ 1	0	+ 2	+ 3	+ 6	+ 2
8- 9	+ 5	+ 3	0	- 3	- 3	- 3	- 3	- 1	- 3	- 2	0	+ 2	- 1
9-10	+ 3	+ 1	- 2	- 3	- 5	- 3	- 4	- 1	- 3	- 4	- 4	0	- 2
10-11	+ 2	- 1	- 3	- 3	- 3	- 3	- 3	- 1	- 3	- 4	- 4	- 2	- 2
11-12	0	0	- 3	- 3	- 2	- 3	- 2	- 1	- 2	- 4	- 4	- 6	- 3
12-13	- 3	- 1	- 2	- 3	- 1	- 2	- 1	0	- 2	- 5	- 4	- 6	- 3
13-14	- 4	- 2	- 2	- 2	0	- 2	0	+ 1	- 2	- 5	- 3	- 6	- 2
14-15	- 4	- 2	- 2	0	+ 2	0	+ 2	+ 3	0	- 3	- 3	- 5	- 1
15-16	- 6	- 2	0	+ 1	+ 2	+ 2	+ 4	+ 4	+ 2	- 1	- 3	0	0
16-17	- 7	- 2	+ 1	+ 2	+ 4	+ 4	+ 6	+ 6	+ 3	+ 2	- 5	- 1	+ 1
17-18	-16	-11	0	+ 4	+ 5	+ 6	+ 7	+ 6	+ 5	- 2	-15	- 5	- 1
18-19	-28	-26	- 7	+ 9	+ 7	+11	+10	+10	+ 5	-10	-26	-22	- 5
19-20	-29	-36	-16	- 6	+ 2	+ 7	+ 5	+ 3	- 2	-18	-29	-35	-13
20-21	-22	-31	-18	-10	- 7	0	- 4	- 5	- 7	-22	-21	-36	-15
21-22	- 5	-13	-14	- 7	-10	- 9	-13	-13	- 7	-15	- 8	-27	-12
22-23	+11	+ 3	-23	0	- 8	-12	-13	-13	- 8	- 7	+ 7	- 7	- 6
23-24	+21	+19	+ 5	+ 5	- 5	-10	-13	-14	- 8	+ 5	+20	+13	+ 3
A - a			21	11	16	12	20	12	16	26	30	38	18
B - a			4	12	12	14	14	11	21	7	1	6	4
A - b	50	61	41	18	21	21	29	26	8	43	45	68	30
B - b			24	19	17	23	23	25	13	24	26	36	16

Diurnal Variation of Vertical Intensity
International Quiet Days, 1941
Not corrected for non-cyclic change. Unit = One gamma.

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+ 3	+ 2	- 3	- 2	- 5	- 6	- 1	- 4	- 4	- 1	+ 1	0	- 2
1- 2	+ 1	0	- 5	- 3	- 6	- 4	- 3	- 5	- 4	- 1	0	+ 2	- 2
2- 3	- 1	- 1	- 5	- 4	- 7	- 4	- 4	- 4	- 3	- 2	- 2	+ 1	- 3
3- 4	- 3	- 3	- 7	- 4	- 7	- 4	- 4	- 3	- 2	- 2	- 3	- 1	- 4
4- 5	- 3	- 5	- 5	- 4	- 6	- 4	- 4	- 3	- 2	- 3	- 4	- 1	- 4
5- 6	- 2	- 5	- 4	- 3	- 5	- 4	- 3	- 2	- 2	- 3	- 4	- 1	- 3
6- 7	- 1	- 3	- 3	- 2	- 3	- 3	- 2	- 1	- 1	- 3	- 3	- 1	- 2
7- 8	0	- 1	- 1	- 2	- 1	- 2	- 1	- 1	- 1	- 3	- 1	+ 1	- 1
8- 9	0	0	- 1	- 1	0	- 1	- 1	- 1	- 1	- 2	- 1	+ 1	- 1
9-10	0	0	0	- 1	+ 2	0	- 1	0	- 1	- 2	0	+ 1	0
10-11	0	+ 1	+ 1	0	+ 3	+ 2	- 1	0	- 1	- 1	0	0	0
11-12	0	+ 2	+ 1	+ 1	+ 3	+ 2	- 1	+ 1	0	0	+ 1	0	+ 1
12-13	0	+ 3	+ 1	+ 1	+ 3	+ 3	0	+ 2	+ 1	+ 1	+ 2	0	+ 1
13-14	+ 1	+ 3	+ 3	+ 2	+ 3	+ 2	0	+ 2	+ 3	+ 3	+ 3	+ 1	+ 2
14-15	+ 1	+ 4	+ 4	+ 3	+ 3	+ 2	+ 2	+ 3	+ 4	+ 4	+ 3	+ 1	+ 3
15-16	+ 2	+ 4	+ 5	+ 3	+ 2	+ 2	+ 2	+ 3	+ 5	+ 5	+ 3	+ 2	+ 3
16-17	+ 2	+ 5	+ 5	+ 4	+ 3	+ 2	+ 3	+ 4	+ 5	+ 6	+ 2	+ 3	+ 4
17-18	+ 1	+ 4	+ 6	+ 4	+ 2	+ 2	+ 4	+ 4	+ 5	+ 4	+ 1	+ 3	+ 3
18-19	0	+ 1	+ 4	+ 4	+ 3	+ 3	+ 5	+ 5	+ 5	+ 4	0	+ 2	+ 3
19-20	- 1	- 2	+ 2	+ 4	+ 3	+ 3	+ 6	+ 4	+ 2	+ 2	- 2	+ 1	+ 2
20-21	0	- 4	+ 1	+ 3	+ 3	+ 3	+ 5	+ 3	0	0	- 2	- 3	+ 1
21-22	+ 2	- 5	0	+ 2	+ 2	+ 2	+ 2	+ 1	- 2	- 1	- 1	- 3	0
22-23	+ 2	- 2	- 1	- 1	+ 1	+ 1	- 2	- 2	- 3	- 1	+ 1	- 2	- 1
23-24	+ 3	+ 1	- 1	- 2	- 1	+ 1	- 4	- 5	- 4	- 2	+ 2	+ 1	- 1
R	6	10	13	8	10	9	10	10	9	9	7	6	8
N	- 1	0	0	- 1	+ 1	+ 3	- 5	- 3	+ 1	- 1	+ 2	+ 3	
No. of days	5	3	4	5	5	5	5	5	5	5	5	4	

Diurnal Variation of H - All Days 1941

Not corrected for non-cyclic change. Unit* One gamma.

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+30	+31	+31	+18	+10	+10	+11	+15	+21	+25	+22	+29	+21
1- 2	+16	+22	+21	+ 9	+ 4	+ 5	+ 5	+ 9	+10	+16	+13	+19	+12
2- 3	+ 4	+ 9	+11	- 1	+ 1	- 1	- 1	+ 1	0	+ 6	+ 2	+ 6	+ 3
3- 4	- 5	- 3	+ 1	- 7	- 5	- 6	- 7	- 4	- 5	- 4	- 7	- 6	- 5
4- 5	-11	-11	- 3	-10	-11	- 8	- 8	- 9	-10	-10	-13	-12	-10
5- 6	-13	-14	- 4	-12	-13	- 9	- 9	-11	-11	-13	-16	-14	-12
6- 7	-13	-14	- 4	-14	-15	-12	-13	-13	-13	-15	-16	-11	-13
7- 8	-13	-12	- 9	-14	-16	-14	-14	-14	-15	-16	-17	-10	-14
8- 9	-12	-14	-10	-12	-15	-13	-15	-15	-19	-16	-15	-10	-14
9-10	-12	-14	-13	-12	-11	-11	-15	-14	-16	-15	-14	-11	-13
10-11	-11	-11	- 9	-12	- 8	-11	-14	-12	-14	-14	-12	-10	-11
11-12	-11	-10	- 6	-10	- 7	- 9	-12	-11	-10	-13	-10	-11	-10
12-13	-12	- 9	- 4	- 7	- 5	- 8	- 8	-10	-11	-11	- 9	- 9	- 9
13-14	-10	- 8	- 4	- 6	- 4	- 4	- 5	- 8	- 8	- 9	- 7	- 8	- 7
14-15	- 8	- 8	- 9	- 5	- 3	- 3	- 3	- 5	- 5	- 7	- 5	- 8	- 6
15-16	- 9	- 7	-10	- 3	- 1	- 2	- 2	- 3	- 5	- 5	- 2	- 8	- 5
16-17	- 9	- 7	-11	- 1	+ 1	+ 2	0	- 2	- 2	- 3	- 1	-10	- 4
17-18	- 9	- 7	- 6	+ 2	+ 4	+ 4	+ 3	+ 1	+ 1	- 4	- 2	- 9	- 2
18-19	- 7	- 5	- 8	+ 5	+10	+11	+ 9	+ 7	+ 6	- 1	- 2	- 6	+ 2
19-20	0	0	- 4	+10	+13	+14	+14	+14	+12	+ 6	+ 4	+ 1	+ 7
20-21	+12	+ 9	+ 3	+15	+16	+15	+16	+19	+16	+16	+15	+10	+13
21-22	+27	+21	+ 9	+21	+20	+17	+22	+22	+22	+25	+24	+23	+21
22-23	+38	+30	+17	+23	+20	+18	+24	+23	+27	+31	+32	+32	+26
23-24	+38	+34	+21	+24	+16	+15	+22	+21	+27	+29	+34	+34	+26
R	51	48	44	38	36	32	39	38	46	47	51	48	40
N	+ 1	0	-10	+ 1	0	+ 1	+ 7	0	0	- 3	+ 4	+ 2	

Diurnal Variation of Declination - All Days 1941
Not corrected for non-cyclic change. Unit: One tenth of a minute of arc

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+18	+19	+13	+ 1	- 7	- 7	- 5	-11	- 2	+13	+17	+20	+ 6
1- 2	+17	+22	+17	+ 2	+ 2	+ 2	+ 5	- 1	+ 9	+18	+20	+22	+11
2- 3	+17	+19	+16	+ 5	+10	+ 8	+11	+11	+15	+17	+19	+22	+14
3- 4	+14	+15	+11	+ 6	+11	+ 8	+ 8	+14	+16	+12	+16	+19	+13
4- 5	+ 9	+10	+ 7	+ 6	+ 7	+ 4	+ 4	+11	+ 9	+ 9	+12	+14	+ 9
5- 6	+ 7	+ 7	+ 7	+ 4	+ 4	0	0	+ 6	+ 5	+ 7	+11	+11	+ 6
6- 7	+ 8	+ 9	+ 8	+ 4	+ 2	- 2	0	+ 5	+ 3	+ 7	+10	+11	+ 5
7- 8	+ 8	+ 7	+ 6	0	0	- 3	- 1	+ 3	+ 1	+ 4	+ 7	+ 9	+ 3
8- 9	+ 6	+ 5	+ 2	- 1	- 2	- 4	- 2	+ 1	- 2	+ 1	+ 3	+ 6	+ 1
9-10	+ 3	+ 1	- 1	- 3	- 3	- 3	- 3	- 1	- 4	- 1	- 1	+ 2	- 1
10-11	+ 1	- 2	- 3	- 3	- 4	- 4	- 3	- 2	- 5	- 2	- 3	- 1	- 3
11-12	0	- 2	- 3	- 2	- 4	- 3	- 3	- 3	- 5	- 2	- 4	- 3	- 3
12-13	- 2	- 2	- 3	- 1	- 3	- 2	- 2	- 2	- 3	- 2	- 4	- 4	- 3
13-14	- 3	- 1	- 3	- 1	0	0	0	0	- 2	- 2	- 4	- 3	- 2
14-15	- 3	0	- 4	+ 1	+ 2	+ 2	+ 2	+ 2	0	- 1	- 2	- 3	0
15-16	- 5	0	- 2	+ 2	+ 4	+ 4	+ 4	+ 4	+ 3	0	- 1	- 2	+ 1
16-17	- 6	- 1	+ 1	+ 3	+ 6	+ 7	+ 6	+ 6	+ 5	+ 2	- 2	- 3	+ 2
17-18	-17	-10	+ 1	+ 5	+ 7	+ 7	+ 7	+7	+ 6	- 2	-12	-13	- 1
18-19	-28	-25	- 7	+ 2	+ 9	+11	+10	+ 9	+ 3	-11	-24	-27	- 6
19-20	-30	-33	-17	- 6	+ 3	+ 7	+ 4	+ 1	- 4	-19	-29	-34	-13
20-21	-23	-30	-20	-10	- 5	0	- 4	- 8	- 9	-22	-25	-31	-16
21-22	-10	-18	-17	- 9	-11	- 8	-11	-15	-12	-19	-13	-20	-14
22-23	+ 5	- 2	- 9	- 4	-14	-12	-14	-18	-13	-11	- 1	- 3	- 8
23-24	+15	+11	+ 1	0	-13	-12	-12	-17	-10	+ 3	+11	+13	- 1
A - a		24	21	9	15	12	14	17	21	20	24	26	17
B - a		2	5	8	13	15	13	12	11	4	3	2	5
A - b	48	55	37	16	25	20	25	32	29	40	49	56	30
B - b		33	21	15	23	23	24	27	19	24	28	32	18
N	0	- 1	- 1	+ 1	0	0	- 1	0	+ 1	0	+ 1	0	

Diurnal Variation of Vertical Intensity - All Days 1941
Not corrected for non-cyclic change. Unit= One Gamma

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	0	+ 1	- 2	- 2	- 6	- 5	- 3	- 4	- 4	- 1	- 1	0	- 2
1- 2	- 2	- 1	- 5	- 4	- 7	- 5	- 4	- 5	- 5	- 2	- 2	0	- 3
2- 3	- 4	- 3	- 5	- 6	- 6	- 5	- 4	- 5	- 4	- 3	- 3	- 2	- 4
3- 4	- 4	- 4	- 5	- 6	- 5	- 4	- 4	- 4	- 3	- 4	- 3	- 2	- 4
4- 5	- 4	- 5	- 5	- 5	- 4	- 3	- 4	- 4	- 3	- 4	- 3	- 2	- 4
5- 6	- 3	- 5	- 3	- 4	- 4	- 3	- 3	- 3	- 3	- 3	- 3	- 2	- 3
6- 7	- 2	- 3	- 2	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 2	- 1	- 3
7- 8	0	- 1	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 1	0	- 1
8- 9	0	0	- 1	- 1	- 1	- 2	- 2	- 2	- 2	- 1	- 1	0	- 1
9-10	+ 1	0	- 1	0	0	0	- 1	- 1	0	- 1	0	0	0
10-11	+ 2	+ 1	+ 1	0	+ 1	0	- 1	0	0	0	+ 1	+ 1	+ 1
11-12	+ 2	+ 2	+ 2	+ 2	+ 2	+ 1	0	+ 1	+ 2	+ 2	+ 2	+ 1	+ 2
12-13	+ 3	+ 4	+ 3	+ 3	+ 3	+ 2	+ 1	+ 2	+ 3	+ 2	+ 3	+ 2	+ 3
13-14	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	+ 2	+ 3	+ 4	+ 3	+ 3	+ 3	+ 3
14-15	+ 4	+ 5	+ 4	+ 4	+ 4	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	+ 4
15-16	+ 4	+ 5	+ 5	+ 4	+ 4	+ 4	+ 3	+ 4	+ 5	+ 4	+ 5	+ 4	+ 4
16-17	+ 4	+ 5	+ 5	+ 4	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 3	+ 4
17-18	+ 3	+ 3	+ 6	+ 4	+ 4	+ 4	+ 4	+ 4	+ 5	+ 4	+ 3	+ 3	+ 4
18-19	0	+ 1	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 4	+ 2	+ 1	+ 1	+ 3
19-20	- 2	- 2	+ 2	+ 3	+ 5	+ 5	+ 4	+ 5	+ 3	+ 1	- 1	- 1	+ 2
20-21	- 3	- 4	0	+ 2	+ 4	+ 4	+ 3	+ 4	0	0	- 3	- 3	0
21-22	- 2	- 4	- 2	+ 1	+ 2	+ 2	+ 2	+ 1	- 1	- 1	- 3	- 3	- 1
22-23	- 1	- 2	- 1	- 1	0	0	0	- 1	- 2	- 1	- 1	- 2	- 1
23-24	+ 1	0	- 1	- 2	- 3	- 3	- 2	- 3	- 3	- 1	0	- 1	- 1
R	8	10	11	11	12	10	9	10	10	9	8	7	8
N	0	0	0	0	0	0	- 1	0	+ 1	0	0	0	

VALUES OF "K" AT APIA FOR JANUARY 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	1	2	2	1	2	3	3	3
2nd.	1	2	2	1	1	1	3	2
3rd.	0	2	1	2	2	1	2	3
4th.	4	3	2	1	1	2	2	2
5th.	3	1	0	2	1	3	2	2
6th.	4	5	4	3	2	1	3	2
7th.	2	2	2	1	1	2	4	4
8th.	2	3	2	1	1	1	1	3
9th.	3	3	3	3	3	2	2	2
10th.	2	2	1	1	2	2	2	2
11th.	1	2	1	2	3	0	3	3
12th.	2	2	1	1	2	1	2	3
13th.	2	2	0	2	1	1	2	2
14th.	2	1	1	1	1	0	3	4
15th.	2	0	3	2	2	1	3	1
16th.	3	2	2	2	3	2	3	5
17th.	5	2	4	4	4	3	3	3
18th.	2	3	3	3	1	2	3	3
19th.	3	2	3	3	3	1	2	1
20th.	2	2	2	2	1	2	3	3
21st.	3	4	2	2	0	1	0	2
22nd.	1	3	2	1	2	1	4	2
23rd.	2	2	2	3	2	3	2	2
24th.	2	3	3	2	3	3	3	2
25th.	3	3	3	3	2	2	2	3
26th.	3	2	2	3	1	2	3	3
27th.	2	4	2	3	2	2	2	2
28th.	2	2	0	2	2	0	2	1
29th.	2	2	1	2	1	1	0	3
30th.	2	4	2	2	3	2	3	2
31st.	2	3	2	2	2	0	2	1

VALUES OF "K" AT APIA FOR FEBRUARY 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	2	1	0	0	2	0	2	3
2nd.	2	3	2	2	2	2	4	3
3rd.	3	5	3	4	2	3	2	4
4th.	3	0	1	1	1	1	2	3
5th.	2	3	2	2	3	2	3	3
6th.	3	3	3	3	3	2	2	2
7th.	2	5	3	4	3	2	3	3
8th.	3	2	2	3	3	1	2	1
9th.	2	3	2	2	2	1	3	1
10th.	1	2	2	2	2	0	2	3
11th.	2	1	2	1	2	1	1	2
12th.	2	1	2	2	1	1	1	0
13th.	2	3	5	3	5	2	3	3
14th.	3	2	3	4	2	2	0	2
15th.	3	3	2	3	3	2	1	2
16th.	3	2	0	1	2	1	2	3
17th.	1	3	2	4	1	2	3	2
18th.	2	2	2	3	2	1	1	1
19th.	1	1	1	1	1	2	2	1
20th.	2	1	2	2	2	2	3	3
21st.	3	3	2	2	3	3	3	3
22nd.	3	3	3	3	3	3	4	3
23rd.	2	1	3	3	1	2	4	3
24th.	2	3	3	3	3	3	3	2
25th.	1	2	1	3	2	2	2	2
26th.	3	2	3	4	2	1	2	1
27th.	1	2	1	2	0	1	2	3
28th.	2	3	1	4	1	0	2	3

VALUES OF "K" AT APIA FOR MARCH 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	3	6	9	7	8	8	6	6
2nd.	6	5	5	4	3	-	-	-
3rd.	2	2	1	3	2	3	2	3
4th.	4	3	4	3	3	3	1	3
5th.	4	3	3	2	3	2	4	2
6th.	3	2	3	3	2	2	3	2
7th.	3	2	2	2	2	2	3	4
8th.	3	3	2	-	-	-	-	3
9th.	2	2	3	2	2	1	2	3
10th.	2	2	2	1	1	2	3	2
11th.	3	2	2	1	2	2	3	5
12th.	3	2	1	-	-	-	-	2
13th.	2	2	2	1	0	2	2	3
14th.	5	-	-	-	-	-	-	4
15th.	3	2	3	3	3	1	2	2
16th.	2	2	0	2	1	0	2	2
17th.	2	2	2	2	2	0	1	3
18th.	1	3	1	1	1	0	2	3
19th.	3	2	4	3	4	2	3	3
20th.	2	3	3	4	2	3	3	3
21st.	3	3	3	3	2	0	3	3
22nd.	4	3	3	3	3	2	2	2
23rd.	3	2	3	3	1	1	2	3
24th.	3	2	0	3	1	1	2	3
25th.	1	2	2	3	0	1	2	2
26th.	3	2	2	1	0	0	1	3
27th.	3	2	0	1	1	0	3	4
28th.	5	3	4	5	4	2	4	3
29th.	3	4	3	3	3	2	3	3
30th.	4	4	3	3	2	4	6	5
31st.	5	5	5	5	4	3	3	3

VALUES OF "K" AT APIA FOR APRIL 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	2	2	0	2	1	1	2	3
2nd.	3	1	2	2	2	1	2	2
3rd.	3	3	1	3	2	3	2	3
4th.	2	2	2	2	1	0	2	2
5th.	2	2	2	0	1	1	2	1
6th.	2	2	2	1	3	1	2	2
7th.	1	2	2	4	3	3	-	-
8th.	-	-	-	-	-	-	-	3
9th.	2	3	2	2	3	2	2	2
10th.	3	3	3	3	2	2	2	4
11th.	2	3	3	4	1	1	2	2
12th.	3	4	3	3	3	2	1	2
13th.	-	-	-	-	2	0	2	2
14th.	1	1	1	2	1	0	0	2
15th.	1	0	0	1	2	2	2	4
16th.	4	3	2	4	3	0	1	1
17th.	1	2	2	2	2	2	2	2
18th.	3	2	2	-	-	-	-	4
19th.	1	4	5	2	4	1	1	2
20th.	1	2	2	2	2	2	1	3
21st.	-	-	-	-	-	-	-	2
22nd.	1	2	2	0	1	2	2	2
23rd.	-	-	-	-	-	-	-	-
24th.	-	2	5	5	5	3	4	4
25th.	3	5	5	3	2	2	3	2
26th.	2	3	2	4	1	0	0	3
27th.	3	0	1	2	0	1	1	2
28th.	3	4	2	2	3	2	3	4
29th.	4	5	2	3	0	1	1	3
30th.	2	2	2	2	0	0	2	1

VALUES OF "K" AT APIA FOR MAY 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	1	1	0	1	1	2	3	2
2nd.	2	2	2	2	2	1	2	2
3rd.	2	3	2	2	1	1	2	2
4th.	1	4	4	3	2	2	2	2
5th.	3	1	3	1	2	1	1	2
6th.	2	1	3	2	2	0	2	2
7th.	2	4	3	1	0	0	2	2
8th.	3	2	1	4	2	1	3	2
9th.	2	3	3	2	3	2	2	3
10th.	3	2	2	2	2	2	3	2
11th.	2	2	1	3	2	0	2	2
12th.	0	2	2	2	1	2	2	3
13th.	3	2	2	2	2	1	2	2
14th.	1	2	0	0	1	1	1	3
15th.	3	2	2	1	1	1	1	2
16th.	3	2	3	2	2	2	1	2
17th.	2	5	5	5	3	1	1	2
18th.	1	3	2	2	1	2	2	2
19th.	2	2	1	0	0	0	1	2
20th.	2	0	0	1	1	2	1	3
21st.	3	3	3	3	3	3	4	4
22nd.	4	3	3	4	2	1	3	2
23rd.	3	2	3	3	3	1	2	4
24th.	3	3	4	3	1	1	2	2
25th.	2	3	2	2	2	2	2	2
26th.	2	3	2	3	2	0	1	3
27th.	3	1	2	2	1	0	2	1
28th.	1	2	3	4	2	0	2	4
29th.	3	4	2	3	1	0	2	1
30th.	3	3	1	1	2	2	1	3
31st.	4	3	2	2	1	1	2	3

VALUES OF "K" AT APIA FOR JUNE 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	3	4	2	2	2	0	2	3
2nd.	3	2	1	0	0	1	1	0
3rd.	2	0	2	2	0	2	1	2
4th.	2	2	0	1	1	0	0	2
5th.	2	2	2	1	1	0	2	1
6th.	2	2	1	3	2	2	2	2
7th.	3	2	2	0	2	0	0	1
8th.	2	2	2	2	1	0	1	1
9th.	2	3	2	4	2	0	2	3
10th.	2	3	4	3	4	3	2	3
11th.	5	2	3	3	2	2	4	3
12th.	2	2	3	2	2	1	1	0
13th.	2	4	6	5	4	3	4	2
14th.	3	3	3	2	2	1	1	2
15th.	4	2	4	2	4	2	3	3
16th.	2	0	2	0	0	0	2	3
17th.	2	2	2	3	2	3	5	5
18th.	2	4	4	2	3	2	2	1
19th.	3	0	0	2	2	3	2	2
20th.	2	4	3	4	2	1	2	3
21st.	2	3	2	3	1	0	1	2
22nd.	3	2	4	3	1	0	2	2
23rd.	2	2	0	2	0	0	1	2
24th.	2	1	1	2	2	1	1	2
25th.	1	1	2	1	1	0	2	2
26th.	2	2	2	2	1	0	2	3
27th.	2	4	3	2	3	0	2	1
28th.	2	2	1	1	2	0	2	2
29th.	3	2	3	2	1	1	2	1
30th.	2	2	1	2	0	1	1	3

VALUES OF "K" AT APIA FOR JULY 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	3	2	3	3	2	1	1	2
2nd.	2	2	2	0	0	0	2	2
3rd.	3	2	1	1	3	2	2	3
4th.	2	5	4	2	2	2	-	-
5th.	-	-	-	-	-	-	-	5
6th.	4	3	4	4	4	3	3	2
7th.	5	5	5	3	2	2	3	3
8th.	1	2	3	2	2	1	2	2
9th.	2	1	1	2	2	2	4	4
10th.	3	3	2	1	2	2	4	3
11th.	3	3	4	3	2	1	2	0
12th.	0	0	4	3	4	1	2	2
13th.	1	0	2	2	1	0	1	2
14th.	2	2	1	0	1	0	0	1
15th.	2	1	2	1	2	2	2	3
16th.	2	3	2	1	2	2	3	3
17th.	2	3	2	2	1	1	1	2
18th.	2	2	2	1	0	0	2	2
19th.	2	3	1	1	1	0	0	2
20th.	1	1	3	2	1	0	2	3
21st.	3	5	3	4	4	3	2	2
22nd.	3	3	3	2	2	1	2	2
23rd.	4	2	3	3	2	1	2	2
24th.	3	2	2	2	2	0	2	2
25th.	2	4	3	2	2	0	2	2
26th.	3	1	2	1	1	0	2	2
27th.	3	2	1	1	0	0	2	1
28th.	0	2	1	2	0	0	0	2
29th.	2	2	0	1	1	0	1	2
30th.	2	2	2	1	1	0	2	2
31st.	3	2	2	0	1	1	2	3

VALUES OF "K" AT APIA FOR AUGUST 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	2	3	3	3	0	0	3	3
2nd.	3	3	4	5	4	3	2	2
3rd.	3	2	2	3	2	1	2	2
4th.	4	6	4	4	5	3	4	4
5th.	4	5	3	2	1	2	2	3
6th.	2	2	2	2	2	2	1	4
7th.	3	2	3	3	2	1	3	2
8th.	2	1	1	2	0	0	2	2
9th.	1	1	0	1	0	1	1	3
10th.	2	2	0	0	0	0	1	3
11th.	2	2	2	2	1	1	1	2
12th.	2	3	1	2	2	0	1	2
13th.	2	2	2	3	2	0	1	1
14th.	1	3	1	1	1	0	0	2
15th.	3	1	1	1	1	0	2	1
16th.	2	1	0	0	0	0	3	2
17th.	2	3	0	0	0	0	2	2
18th.	1	2	0	1	0	0	2	4
19th.	5	3	2	2	3	2	3	2
20th.	3	2	2	0	0	2	3	2
21st.	3	3	1	2	2	2	1	2
22nd.	1	1	1	0	0	2	3	1
23rd.	3	1	1	0	0	0	2	2
24th.	1	3	3	1	1	0	2	2
25th.	2	2	0	1	1	2	2	2
26th.	2	3	3	2	3	2	2	3
27th.	4	4	4	5	4	2	2	3
28th.	3	3	3	4	4	1	3	1
29th.	2	3	3	4	4	3	3	3
30th.	4	4	2	2	3	2	2	2
31st.	2	2	2	2	2	2	2	2

VALUES OF "K" AT APIA FOR SEPTEMBER 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	3	2	3	2	2	3	1	3
2nd.	3	2	3	2	2	2	2	2
3rd.	3	2	1	0	1	2	2	3
4th.	2	2	1	0	0	0	2	2
5th.	1	2	0	1	0	0	2	2
6th.	2	2	0	0	0	2	1	2
7th.	2	4	4	3	4	2	3	2
8th.	4	3	3	3	0	2	1	3
9th.	2	2	1	2	0	2	2	3
10th.	2	1	0	1	0	1	2	2
11th.	2	2	1	3	3	0	2	2
12th.	1	1	2	2	1	2	1	2
13th.	0	0	2	3	4	3	3	4
14th.	3	3	4	4	3	3	2	3
15th.	3	2	3	3	4	2	4	3
16th.	4	3	2	2	2	1	3	3
17th.	3	2	2	1	2	2	3	2
18th.	3	6	8	6	7	5	6	7
19th.	7	7	7	7	5	5	5	4
20th.	4	4	3	4	3	2	3	2
21st.	3	5	4	3	3	3	3	1
22nd.	2	3	2	1	0	2	1	4
23rd.	2	3	2	2	2	2	2	3
24th.	3	4	3	2	3	3	3	4
25th.	3	0	3	2	3	2	2	2
26th.	1	2	1	1	1	2	2	1
27th.	2	2	4	2	2	2	2	1
28th.	3	2	2	2	2	2	3	4
29th.	2	4	2	3	2	2	3	3
30th.	3	2	2	3	2	2	2	2

VALUES OF "K" AT APIA FOR OCTOBER 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	2	2	2	2	2	0	2	2
2nd.	2	2	0	0	0	1	3	3
3rd.	2	2	0	2	0	2	3	2
4th.	2	2	2	2	1	2	3	3
5th.	3	2	2	-	-	-	-	-
6th.	-	-	-	3	1	0	0	3
7th.	2	3	1	1	0	1	1	3
8th.	4	3	1	2	0	1	2	2
9th.	0	2	0	2	3	0	2	2
10th.	1	2	1	1	2	2	3	3
11th.	3	2	3	4	4	3	3	5
12th.	4	3	3	3	1	1	2	2
13th.	3	2	3	2	1	2	3	2
14th.	2	0	1	3	2	3	0	3
15th.	2	2	2	3	0	2	2	3
16th.	2	3	3	0	2	1	3	2
17th.	2	2	3	2	0	1	1	2
18th.	2	2	2	2	0	1	1	2
19th.	2	1	2	1	2	2	2	1
20th.	0	2	2	2	0	2	2	2
21st.	3	3	2	1	0	1	2	2
22nd.	2	3	2	2	4	5	5	3
23rd.	2	2	1	2	2	2	3	2
24th.	0	3	2	1	1	2	3	2
25th.	2	2	2	0	0	0	-	-
26th.	-	-	-	-	-	-	-	3
27th.	3	1	2	2	2	0	1	2
28th.	2	2	0	2	2	0	1	2
29th.	3	2	1	1	2	1	2	1
30th.	2	2	1	1	2	0	2	3
31st.	2	6	5	2	3	3	5	6

VALUES OF "K" AT APIA FOR NOVEMBER 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	5	5	3	5	3	4	2	1
2nd.	3	2	2	2	2	2	1	3
3rd.	2	2	2	2	2	2	2	2
4th.	3	2	2	1	0	0	2	3
5th.	2	2	0	1	1	3	3	3
6th.	3	3	4	4	3	4	3	3
7th.	3	2	3	2	2	1	3	2
8th.	3	2	3	2	3	2	2	2
9th.	2	1	2	3	3	2	2	2
10th.	2	2	2	3	3	2	4	4
11th.	2	4	2	3	2	2	1	2
12th.	2	0	2	1	2	1	2	2
13th.	2	2	2	3	1	2	2	2
14th.	2	2	1	2	1	1	2	2
15th.	1	0	1	0	2	2	0	2
16th.	3	2	1	1	0	3	3	3
17th.	3	3	4	4	2	4	4	2
18th.	3	2	3	3	2	3	3	4
19th.	4	3	3	3	2	1	1	3
20th.	2	3	2	2	1	2	2	2
21st.	2	1	1	2	2	1	2	2
22nd.	3	2	2	1	1	3	3	3
23rd.	4	3	3	2	1	2	2	2
24th.	1	2	1	2	2	2	1	1
25th.	1	2	2	2	3	1	2	2
26th.	2	3	1	0	2	-	-	1
27th.	2	4	3	2	2	3	3	2
28th.	4	6	4	5	3	3	5	3
29th.	1	2	2	2	2	2	2	2
30th.	3	2	2	0	1	2	2	2

VALUES OF "K" AT APIA FOR DECEMBER 1941

HOUR	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
DATE								
1st.	3	4	4	6	4	4	3	3
2nd.	3	3	4	3	3	2	1	2
3rd.	3	1	2	1	2	2	2	4
4th.	3	2	3	3	3	2	3	3
5th.	3	2	2	2	2	2	4	2
6th.	3	3	2	3	2	1	1	2
7th.	1	3	2	2	2	1	1	2
8th.	3	2	1	2	2	1	1	3
9th.	2	3	2	3	3	1	2	2
10th.	2	1	2	1	2	1	1	2
11th.	1	2	0	1	2	0	2	3
12th.	2	3	1	2	2	1	2	1
13th.	2	2	2	2	3	3	2	2
14th.	2	4	3	3	3	3	4	3
15th.	2	2	1	1	3	2	1	3
16th.	5	3	3	1	1	1	2	2
17th.	3	1	3	3	1	1	3	2
18th.	2	3	4	4	3	2	2	3
19th.	3	3	3	1	1	1	2	2
20th.	2	1	0	1	2	1	1	3
21st.	2	3	0	2	0	1	2	3
22nd.	3	3	0	2	1	1	2	0
23rd.	2	2	1	2	2	3	3	4
24th.	2	2	2	3	3	2	3	2
25th.	3	2	3	3	0	2	-	-
26th.	-	-	-	-	-	-	-	4
27th.	2	3	2	2	2	3	-	-
28th.	1	1	2	1	1	2	2	2
29th.	2	2	2	-	-	-	-	3
30th.	3	1	-	-	-	-	-	2
31st.	2	2	0	1	0	2	1	3

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) January 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+32	+23	+12	0	- 8	-15	-13	-11	- 9	-10	-11	- 9	- 8	- 4	- 3	+ 3	- 1	-15	-13	- 3	- 5	+ 7	+24	+30	864	00 03 +34	18 07 -18	52
2	+22	+12	+ 2	- 3	- 6	- 8	- 8	-12	-11	-13	-16	-16	-17	-19	-18	-17	-17	-13	- 9	0	+21	+41	+55	+55	868	23 03 +59	13 53 -23	82
3	+28	+17	+ 7	- 5	-14	-20	-23	-23	-23	-23	-23	-23	-17	-16	-13	- 8	- 8	-11	- 8	+ 2	+20	+43	+67	+67	889	22 57 +72	07 27 -26	98
4	+67	+39	+16	- 1	-13	-23	-23	-22	-19	-21	-21	-22	-23	-23	-22	-21	-18	-16	-10	- 2	+19	+40	+53	+58	880	00 08 +71	05 24 -27	98
+ 5	+37	+18	- 1	-16	-22	-24	-22	-23	-23	-18	-18	-21	-25	-23	-22	-16	- 5	- 3	+ 9	+19	+33	+43	+59	+61	895	23 35 +64	12 34 -25	89
6	+73	+51	+27	- 6	-37	-45	-32	-30	-13	-11	-10	-11	-19	-15	-13	-10	- 5	- 4	0	+ 7	+10	+25	+37	+40	868	00 00 +84	05 04 -55	139
7	+31	+17	+ 4	- 2	- 3	- 5	- 5	- 7	-12	-10	- 8	- 7	- 7	- 7	- 2	- 5	-10	- 2	-12	-17	-10	+16	+35	+19	870	22 32 +38	19 20 -18	56
8	+ 3	- 8	-10	-13	-13	-10	-10	-15	-18	-14	-15	-13	-10	- 9	- 8	- 4	- 3	- 1	+ 3	+12	+23	+40	+51	+42	869	22 12 +58	07 55 -20	78
9	+29	+ 7	- 8	- 3	0	+ 1	- 2	- 7	-10	-17	-12	- 5	- 9	-15	+ 1	- 9	-12	-10	-10	- 3	+10	+26	+30	+28	868	00 00 +39	09 15 -17	56
10	+10	- 2	-10	- 8	- 8	-10	-10	-11	-10	- 8	- 8	-10	-14	- 9	- 8	-10	-10	- 6	0	+10	+23	+33	+42	+41	875	22 25 +44	13 03 -18	62
11	+35	+23	+12	+10	+ 4	- 5	- 5	- 4	- 5	-10	- 8	-10	-11	- 1	- 5	- 9	-10	- 9	-15	-20	-14	+ 6	+24	+27	870	00 00 +40	19 10 -21	61
12	+15	+ 1	-11	-14	-14	-16	-13	-12	-13	- 9	-14	-16	-18	-11	- 6	- 8	- 9	- 8	- 3	+ 8	+25	+43	+50	+44	874	22 32 +52	12 30 -18	70
13	+26	+12	+ 8	- 1	- 9	-14	-12	-12	-11	-12	-12	- 9	- 6	- 5	- 3	- 3	- 3	- 6	- 9	- 3	+ 6	+19	+32	+27	877	00 00 +33	09 54 -15	48
+14	+13	+ 6	- 2	- 8	-11	-12	-13	-11	-11	- 7	- 7	- 7	- 9	-12	-12	-13	-13	-13	- 9	+ 6	+26	+44	+43	+30	884	22 00 +49	06 05 -15	64
+15	+12	- 6	-15	-23	-31	-32	-24	-15	- 9	- 6	- 8	-13	-12	- 6	- 3	- 6	- 8	- 8	- 2	+17	+34	+48	+56	+56	890	22 54 +59	05 07 -33	92
16	+51	+33	+24	+15	+ 2	- 2	- 3	- 8	-10	-10	-10	- 6	-10	-18	-22	-26	-27	-23	-23	-21	-12	+12	+43	+60	886	23 50 +68	15 54 -28	96
17	+79	+35	+12	+ 7	- 3	- 3	- 3	-12	-27	-30	-14	- 6	- 4	+ 5	- 1	- 7	-11	- 9	- 9	-12	- 7	+ 7	+ 5	+ 5	871	00 10 +96	09 01 -40	136
18	+18	+ 7	- 8	-20	-15	-15	-22	- 8	-15	-14	- 1	- 3	- 3	- 1	- 1	+ 1	+ 2	- 3	0	- 6	+10	+24	+35	+34	859	23 00 +44	06 30 -25	69
19	+26	+25	+11	-12	-20	-23	-19	-19	- 9	-17	-12	- 4	- 9	- 8	+ 1	+ 1	- 2	0	+ 1	+ 1	+12	+21	+26	+27	868	23 05 +31	05 21 -24	55
20	+13	+ 8	- 1	- 7	-12	-18	-17	-12	-12	-13	-17	-16	-11	-12	-13	-10	- 7	- 5	+ 2	+21	+25	+31	+44	+44	877	23 08 +49	05 36 -20	69
+21	+21	+13	+ 1	-14	+ 1	+ 6	+ 1	- 2	- 7	-11	-16	-18	-18	-17	-17	-17	-17	-14	- 8	+ 1	+11	+32	+44	+44	892	23 06 +47	03 37 -22	69
22	+38	+25	+16	+ 9	+ 1	- 8	-12	- 9	- 7	- 8	- 7	- 9	- 9	- 9	- 7	- 4	- 3	- 3	- 8	-14	- 9	+ 5	+17	+22	893	00 00 +40	06 06 -15	55
23	+31	+14	+ 7	+ 2	+ 2	+ 3	+ 3	+ 2	+ 2	+ 2	- 8	- 8	-13	-11	-11	- 8	-14	-18	-19	-11	+ 5	+14	+20	+17	873	00 00 +37	17 56 -28	65
24	+33	+28	+14	+ 8	+ 4	- 5	-16	-22	-10	- 6	-10	-14	-13	-17	-13	-14	- 2	- 6	-12	-13	0	+22	+30	+33	858	23 15 +37	07 20 -29	66
25	+21	+ 5	-13	-25	-35	-30	-15	-10	- 3	- 8	+ 6	- 6	-10	- 3	0	- 3	-10	- 8	+ 5	+16	+27	+36	+40	+30	861	22 34 +44	04 15 -37	81
26	+ 6	+ 1	+ 1	- 4	- 9	-14	-16	-14	-14	-11	- 1	+ 1	- 1	0	- 1	0	- 2	+ 1	+ 6	+14	+14	+11	+19	+24	862	23 21 +28	06 49 -17	45
27	+ 9	- 8	-20	-19	-13	- 8	-10	- 9	- 4	- 9	+ 2	0	- 8	- 4	0	- 5	-13	-15	-11	+ 1	+17	+33	+45	+47	871	22 23 +51	02 42 -23	74
28	+32	+16	+ 4	-10	-15	-12	-11	-10	-10	- 7	-10	-13	- 7	- 6	-10	-12	-11	-11	- 7	- 2	+17	+30	+36	+37	878	23 41 +38	04 54 -16	54
29	+31	+22	+ 7	- 3	- 9	-13	-16	-14	-13	-11	-14	-12	- 9	-12	-11	-11	-11	-16	-16	- 7	+ 7	+30	+45	+49	879	23 18 +53	10 49 -17	70
30	+44	+36	+27	+ 3	-20	-16	-12	-16	-16	-15	-13	-17	-21	- 8	- 7	-12	-16	-21	-25	-15	+ 8	+31	+42	+51	878	23 20 +53	18 15 -25	78
+31	+45	+35	+19	+ 3	- 9	-19	-20	-18	-19	-27	-25	-22	-18	-14	-13	-12	-12	-10	- 8	+ 3	+21	+35	+43	+42	881	00 22 +48	09 48 -27	75
MEAN.	+30	+16	+ 4	- 5	-11	-13	-13	-13	-12	-12	-11	-11	-12	-10	- 8	- 9	- 9	- 9	- 7	0	+12	+27	+38	+38	875			

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Horizontal Intensity

G. M. T. (H = 34000γ + Mean +.....) February 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
+ 1	+36	+22	+10	- 3	- 8	-11	-12	-12	-13	-11	-12	-11	- 3	-11	-13	-12	-14	-16	-13	-11	+ 6	+25	+46	+49	884	23 28 +50	16 48 -16	66
2	+52	+43	+28	+ 8	- 6	-10	-11	- 8	-15	-18	-22	-19	-17	-15	-12	-10	- 7	- 3	- 2	- 2	- 1	+ 5	+21	+32	878	00 00 +54	11 12 -26	80
3	+63	+59	+36	+ 4	-28	-31	-21	-25	-33	-40	-28	-22	-19	-16	-16	-14	- 8	- 3	- 1	- 1	+ 9	+26	+42	+56	850	00 09 +64	09 30 -48	112
4	+40	+23	+ 6	- 5	-12	-12	-15	-14	-13	-17	-18	-14	-15	-19	-18	-14	-12	-12	- 8	+ 3	+18	+32	+47	+55	859	23 39 +57	13 33 -20	77
5	+39	+29	+15	+ 8	- 4	-11	-14	-11	-14	-16	-21	-19	-19	-20	-16	+ 1	0	+ 2	+ 6	+12	+12	+11	+15	+15	870	00 00 +44	11 12 -24	68
6	+12	+10	- 6	- 9	- 7	-17	-30	-26	-17	-15	- 7	- 7	-15	- 2	0	- 2	- 7	- 9	- 7	- 1	+17	+40	+46	+49	861	23 30 +53	06 39 -33	86
7	+37	+24	+14	+ 4	-10	-33	-28	-23	-34	-30	-13	-10	-13	- 5	- 4	- 4	- 5	- 8	+ 2	+16	+22	+35	+42	+36	865	22 22 +45	05 45 -42	87
8	+22	+24	+15	+ 4	- 7	- 6	- 5	- 8	- 3	0	-11	- 1	- 1	-10	-12	-12	-10	-12	-19	-12	0	+10	+21	+23	874	01 12 +27	18 30 -19	46
9	+21	+18	+11	- 3	- 4	-13	-24	-19	-15	-11	- 9	- 7	- 5	- 4	- 3	- 2	- 2	- 2	+ 3	+ 6	+ 8	+16	+24	+26	871	23 59 +29	06 13 -26	55
10	+16	+ 6	- 4	- 9	-16	-20	-13	-13	- 9	-14	-13	-10	- 5	- 5	- 7	- 9	- 9	-10	- 4	+10	+21	+34	+39	+34	876	22 54 +41	05 20 -21	62
+11	+23	+11	- 1	-10	-11	-12	-17	-10	-10	- 8	- 8	- 9	-10	- 8	- 3	- 4	- 5	- 8	- 5	+ 5	+14	+26	+33	+26	872	22 12 +34	06 39 -17	51
+12	+ 7	- 3	- 9	-14	-15	-17	-17	-15	-13	- 7	- 4	- 5	- 5	- 5	- 7	- 9	- 8	- 7	- 4	+ 6	+20	+34	+41	+44	881	23 27 +44	05 25 -19	63
13	+35	+24	+21	+12	+ 8	+20	+29	+14	-12	-26	-14	-26	-25	+ 3	- 5	-19	-23	-15	-12	-17	- 2	+ 8	+12	+22	881	00 00 +44	10 37 -42	86
14	+32	+13	- 5	-12	-22	-22	-17	-14	-21	-14	+ 4	- 5	- 7	- 3	- 8	- 8	- 2	- 5	-10	- 1	+10	+28	+41	+46	875	23 34 +48	05 08 -27	75
15	+40	+24	+ 5	- 3	-16	-19	-17	-16	-14	- 5	-10	-14	- 8	- 1	- 3	- 4	- 1	- 4	- 8	- 9	+ 2	+14	+26	+31	873	00 07 +49	04 27 -27	76
16	+22	+17	- 3	-17	-17	-17	-17	-16	-13	-16	-18	-17	- 9	- 3	- 3	- 1	- 1	- 3	+ 3	+11	+22	+34	+25	+36	881	23 54 +37	10 30 -20	57
17	+38	+29	+18	0	-13	-16	-16	-12	-19	-19	- 7	-13	-10	-12	-12	- 6	- 5	- 5	- 2	+ 2	+ 5	+18	+27	+27	880	00 22 +41	09 56 -27	68
+18	+25	+19	+11	0	- 3	- 7	-12	-14	-15	-14	-18	-14	- 8	-13	-12	- 8	- 5	- 5	- 4	+ 3	+14	+21	+27	+26	882	22 30 +29	11 25 -21	50
19	+24	+22	+13	+ 4	- 2	- 6	- 9	- 9	- 9	-11	-14	-11	- 9	- 9	- 9	- 9	- 7	- 4	-10	-10	+ 4	+18	+27	+27	884	23 48 +31	11 00 -17	48
20	+30	+22	+16	+ 6	+ 1	- 2	- 4	-10	- 8	- 8	-14	-15	-19	-15	-17	-12	- 9	- 4	+ 1	+ 8	+12	+16	+12	+16	882	00 00 +31	12 34 -24	55
21	+24	+12	- 9	-17	-16	- 9	- 3	- 1	- 1	- 6	-12	- 7	- 2	+ 3	+ 5	- 2	- 7	- 7	-14	+ 4	+ 5	+ 7	+20	+24	866	23 57 +29	04 00 -19	48
22	+32	+20	+ 5	-19	-18	-17	-14	- 7	- 4	-11	+ 1	-14	+ 4	+ 1	+ 1	- 3	- 9	- 1	+ 4	- 3	+ 5	+13	+17	+27	861	00 09 +36	03 34 -27	63
23	+24	+17	+ 2	- 4	-12	-12	-18	0	- 7	- 5	+ 1	- 2	- 5	- 8	- 5	- 8	- 7	0	+ 6	+ 2	+ 2	+ 9	+14	+21	862	00 27 +28	06 17 -21	49
24	+26	+22	+ 6	-13	-24	-24	-13	-13	-14	-16	-11	0	- 6	- 9	- 4	+ 1	- 8	- 4	- 9	- 9	+12	+28	+40	+40	863	23 12 +42	05 08 -49	91
25	+29	+23	+14	+ 3	-11	-11	-12	-13	-13	-13	- 4	- 7	- 8	- 7	- 2	- 6	- 4	-11	-18	-10	- 2	+16	+28	+34	870	23 16 +34	18 30 -22	56
26	+40	+30	+ 1	-17	-26	-26	-24	-15	-17	-19	- 5	- 1	-13	-13	-10	- 8	- 9	- 9	- 9	+ 2	+18	+32	+42	+47	867	23 27 +49	05 48 -29	78
+27	+32	+26	+12	- 2	-12	-15	-18	-14	-14	-12	- 9	-10	-10	- 9	- 9	-12	-10	-14	-10	- 3	+ 7	+22	+36	+43	878	23 56 +52	06 40 -19	71
28	+42	+33	+19	+ 8	- 1	- 9	-15	-13	-15	-14	-18	- 1	- 5	- 9	-10	-10	-10	-10	-11	-13	- 3	+11	+23	+35	890	00 27 +45	11 00 -23	66
29																												
30																												
31																												
MEAN.	+31	+22	+ 9	- 3	-11	-14	-14	-12	-14	-14	-11	-10	- 9	- 8	- 8	- 7	- 7	- 7	- 5	0	+ 9	+21	+30	+34	873			

[300/1/39—17185

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) March 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+245	+231	+221	+204	+206	+221	+218	+81	+10	-75	-12	+29	+58	+30	-117	-166	-241	-194	-208	-187	-158	-155	-133	-106	680	06 08 +263	16 50 -291	554
2																												
3	+ 2	-12	-15	-20	-18	-19	-19	-20	-18	- 7	+ 4	+ 3	+ 4	- 2	- 1	+ 2	+ 8	+ 3	+ 4	+ 3	+15	+22	+35	+42	800	23 55 +46	04 01 -21	67
4	+24	+ 1	- 2	- 1	-17	-28	-31	-10	- 7	- 6	+ 1	-10	- 5	+ 1	+ 7	+13	+ 5	0	- 1	+ 4	+16	+ 5	+16	+16	810	00 07 +38	06 15 -35	73
5	+ 3	+13	+12	-10	-12	-14	-15	- 8	- 8	- 3	+ 2	+ 7	+ 2	0	+10	+ 9	+14	+12	+ 2	+ 1	- 4	- 8	0	+ 6	814	14 33 +17	06 07 -22	39
6	- 3	- 7	- 4	- 3	-13	-14	-17	-10	- 7	-10	+ 3	- 2	- 2	+ 1	+ 1	+ 3	+ 6	+ 8	- 1	- 2	+ 3	+17	+24	+31	825	23 45 +38	06 51 -21	59
7	+11	+ 5	+ 6	+10	+ 5	- 1	- 8	-12	-15	-22	-21	-17	-15	-11	- 8	- 6	- 1	+ 2	+10	+ 6	+20	+23	+27	+16	844	22 42 +37	09 50 -29	66
8																												
9	+29	+17	+ 5	- 3	- 9	-15	-20	-13	- 8	-15	-13	-11	-11	- 9	- 6	- 3	0	+ 3	+ 6	+ 7	+10	+21	+24	+10	849	00 00 +36	07 04 -21	57
+10	+ 2	- 1	-12	-22	-25	-26	-22	-19	-17	-12	- 9	-11	-11	- 8	- 9	- 8	- 3	- 1	+ 7	+22	+35	+49	+56	+54	858	23 00 +58	05 12 -26	84
11	+42	+22	+ 8	- 2	-13	-19	-20	-18	-15	-13	-13	-17	-13	-11	-12	- 8	+ 1	+ 3	+ 9	+19	+30	+30	+ 7	+12	858	00 00 +49	07 04 -20	69
12																												
13	+35	+27	+12	- 5	-15	-17	-18	-16	-12	- 9	- 7	- 7	- 7	- 7	- 7	- 9	- 6	- 2	0	+ 5	+11	+17	+19	+26	861	00 03 +39	06 15 -20	59
14																												
15	+12	+18	+ 9	-11	-17	-21	-15	-12	- 6	- 6	-12	0	+ 4	- 7	- 9	- 5	- 4	- 2	- 5	+ 5	+12	+17	+25	+27	835	23 54 +32	05 33 -22	54
+16	+14	+ 9	+ 6	- 2	-10	-14	-14	-16	-18	-14	-15	-13	- 9	- 7	- 5	- 5	- 4	- 1	- 2	+ 3	+16	+27	+35	+40	849	23 39 +40	08 27 -18	58
+17	+30	+28	+18	+ 4	- 4	-12	-14	-19	-24	-22	-17	-15	-13	- 9	- 8	- 7	- 7	- 6	- 6	- 2	+ 7	+22	+33	+41	859	24 00 +42	08 30 -25	67
18	+33	+24	+18	+ 9	0	- 9	-17	-17	-18	-19	-18	-17	-13	-12	- 8	- 7	- 7	- 5	- 5	0	+11	+24	+23	+29	865	23 20 +37	09 45 -20	57
19	+38	+40	+32	+24	+22	+21	+11	- 8	-14	-15	-16	-21	-18	-34	-21	-21	-23	-18	-14	- 3	+ 2	+ 2	+14	+23	860	00 36 +41	13 54 -42	83
20	+26	+18	+10	- 8	-13	- 6	-11	-14	-22	-18	- 2	-14	-10	- 1	- 2	- 5	0	+ 5	0	0	+ 6	+10	+26	+32	847	23 37 +36	09 00 -28	64
21	+27	+22	+ 3	- 7	- 2	- 9	- 5	-10	-18	-20	-10	- 8	- 2	- 7	- 8	- 7	- 5	- 5	- 9	-13	+ 1	+20	+30	+39	850	23 47 +42	09 20 -25	67
22	+45	+38	+ 1	-13	-24	-23	-18	-16	-10	-12	- 7	- 4	+ 6	+ 1	- 5	- 1	- 2	- 2	- 5	- 4	+ 6	+14	+21	+19	847	00 16 +46	05 12 -36	82
23	+19	+21	+11	- 3	- 8	- 6	- 4	- 8	-19	-16	-13	- 2	- 8	- 9	- 6	- 3	- 2	0	- 5	+ 1	+10	+17	+13	+19	851	24 00 +26	08 31 -21	47
24	+19	+10	-10	-15	-16	-13	-13	-13	-10	-13	- 3	- 5	- 8	- 7	- 5	- 5	- 5	- 2	+ 2	+10	+16	+17	+34	+42	856	23 57 +45	04 16 -18	63
25	+31	+21	+10	- 1	- 7	-13	-12	-15	-18	- 2	- 6	-10	-11	-11	- 8	- 8	- 8	- 8	-11	- 6	- 9	+19	+30	+37	864	23 44 +39	08 43 -21	60
+26	+34	+17	+ 4	- 9	-18	-22	-17	-16	-11	- 7	-10	-10	-10	- 7	- 7	- 6	- 5	- 4	- 4	+ 1	+ 7	+20	+38	+45	863	23 24 +46	05 30 -23	69
+27	+32	+15	- 2	-11	-15	-14	-15	-15	-14	-14	-14	-14	-14	-16	-14	-11	-11	-10	- 8	+ 3	+16	+30	+49	+60	872	24 00 +65	14 07 -18	83
28	+82	+41	+16	+11	+20	+20	+20	+ 8	+ 6	-14	-43	-40	-27	+ 2	-12	-12	-19	-12	-11	- 5	-14	-20	- 1	+ 3	847	00 00 +91	11 04 -49	140
29	+11	- 3	-11	-21	-13	-14	-20	- 7	- 9	- 7	- 1	+ 3	+ 4	+13	+ 8	+ 5	+ 4	+11	+ 2	0	+ 3	+ 6	+ 9	+24	833	23 35 +29	05 57 -27	56
30	+43	+30	- 1	-10	-11	-10	- 4	- 6	+ 4	-11	- 6	+ 7	+12	+18	+13	+12	+22	+43	+17	+ 1	-17	-38	-56	-60	814	17 40 +48	23 18 -69	117
31	-51	-68	-60	-56	-63	-22	-13	-16	+23	+23	+18	+29	+ 2	+ 1	+ 2	+ 2	+ 5	+14	+21	+31	+25	+38	+51	+54	801	11 42 +63	01 38 -71	134
MEAN.	+31	+21	+11	+ 1	- 3	- 4	- 4	- 9	-10	-13	- 9	- 6	- 4	- 4	- 9	-10	-11	- 6	- 8	- 4	+ 3	+ 9	+17	+21	838			

200/1/41—14357]

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) April 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H.	M.	γ	Minimum. H.	M.	γ	Range.
1	+19	+13	0	- 8	- 9	-11	-12	-13	-12	-12	-12	- 8	- 6	- 8	- 8	- 6	- 3	- 1	- 2	+ 3	+14	+22	+30	+41	833	24	00	+45	07	18	-13	58
2	+36	+22	+ 7	- 5	-12	-15	-20	-15	-15	-19	-16	-15	-12	- 8	- 1	- 1	- 3	- 2	- 2	+ 9	+17	+15	+24	+27	840	00	18	+39	09	39	-21	60
3	+22	+20	0	-16	-15	-17	-15	-12	-15	-17	-17	-11	+ 1	0	- 6	+ 1	+ 6	+ 4	+ 5	+ 7	+12	+18	+17	+17	842	00	05	+23	05	21	-20	43
4	+14	+ 6	- 8	- 4	- 4	- 9	-14	-20	-18	- 8	- 4	- 2	- 2	- 3	- 2	+ 1	+ 1	+ 3	+ 4	+ 7	+11	+14	+21	+21	847	23	04	+24	07	19	-21	45
5	+10	+ 5	0	- 3	- 3	-10	-15	-13	-13	-10	-10	-11	- 8	- 5	- 5	- 3	0	+ 3	+ 7	+11	+13	+17	+19	+19	853	23	28	+22	06	00	-17	39
6	+20	+ 8	- 8	-17	-14	-16	-24	-21	-17	-16	-14	-14	-13	-12	- 5	+ 5	+ 8	+10	+13	+18	+22	+25	+30	+40	850	23	31	+41	06	24	-24	65
7																																
8																																
9	+12	+ 5	0	-15	-21	-20	-21	-20	-18	-11	-13	-10	0	- 4	- 4	- 8	- 7	+ 2	+10	+19	+23	+27	+34	+36	858	22	46	+39	06	50	-27	66
10	+28	+13	- 1	- 9	- 6	- 6	-12	-14	-25	-14	- 8	- 6	- 4	- 7	- 7	- 4	- 6	+ 1	+ 3	+ 8	+20	+28	+13	+14	857	21	35	+35	08	13	-26	61
11	+13	+ 2	- 4	- 9	-18	-25	-13	-13	-20	- 1	- 3	- 4	- 4	- 3	- 4	- 7	- 7	- 3	+ 2	+10	+17	+26	+36	+43	852	23	32	+45	08	56	-30	75
12	+31	+16	- 1	-16	-23	-33	-19	-23	-15	-12	- 4	- 8	+ 4	- 6	-10	-10	- 6	- 1	+ 4	+ 9	+17	+31	+40	+38	860	22	35	+44	05	24	-45	89
13																																
+14	+23	+12	+ 6	- 2	- 9	-12	-14	-15	-14	-17	-15	-12	- 7	- 6	- 7	- 7	- 7	- 4	- 2	+ 3	+10	+23	+33	+32	863	22	52	+33	09	46	-18	51
15	+13	+ 5	- 1	- 5	- 8	-11	-12	-11	-11	- 7	- 8	-10	- 6	- 6	-11	- 8	- 6	- 4	+ 1	+ 9	+18	+33	+29	+23	877	22	13	+44	05	48	-13	57
16	+28	+ 2	+ 1	+ 2	+ 1	- 3	- 3	- 3	+ 1	- 3	-23	- 8	-25	-19	- 9	-10	-10	- 8	- 3	+ 5	+12	+17	+23	+27	864	00	07	+38	12	25	-29	67
17	+25	+15	+ 6	0	- 6	- 3	- 3	- 5	- 9	-14	-16	-19	-13	- 9	- 6	- 1	+ 1	+ 5	- 3	- 1	+ 2	+10	+16	+21	865	00	02	+28	11	15	-22	50
18																																
19	+36	+27	+16	+11	0	- 9	-47	-61	-26	-35	-32	-25	-18	-11	- 3	+ 6	+ 8	+ 9	+11	+17	+25	+27	+34	+41	836	23	49	+42	07	55	-71	113
20	+19	+10	+ 1	- 6	- 5	- 5	-10	-15	-11	-16	-13	-13	- 6	- 5	-10	- 8	- 3	+ 2	+ 7	+11	+15	+24	+28	+19	855	22	12	+32	08	49	-20	52
21																																
+22	+18	+13	+ 5	- 3	-10	-15	-18	-15	-10	- 8	- 8	- 7	-10	-12	-10	-13	- 8	- 5	+ 3	+12	+19	+29	+32	+31	865	22	45	+33	06	52	-19	52
+23																																
24	+54	+47	+41	+32	+31	+34	+32	+40	+25	-24	-57	-49	-25	-27	- 7	- 9	-17	-12	0	- 2	-17	-20	-30	-35	842	00	00	+57	10	39	-74	131
25	-25	-35	-41	-39	-33	-24	-37	- 8	-12	+ 3	+11	+ 3	+ 6	+ 5	+11	+11	+12	+20	+20	+22	+21	+32	+34	+36	820	23	00	+37	06	46	-50	87
26	+13	+ 5	- 6	-14	-23	-17	-22	-17	-16	- 3	- 3	0	+ 1	- 1	- 3	- 1	+ 1	+ 3	+ 6	+12	+19	+24	+18	+13	840	21	40	+26	04	26	-30	56
+27	+ 5	+ 5	+ 3	- 5	- 9	-12	-12	-13	-12	- 8	- 2	- 5	- 6	- 6	- 7	- 7	- 6	- 2	+ 3	+10	+15	+25	+26	+26	848	22	33	+27	07	06	-16	43
28	+29	+31	+27	+ 2	-18	-18	-11	-11	- 4	- 5	- 9	-14	-11	- 4	- 1	- 1	+ 7	+ 8	+ 5	+11	+ 6	- 5	- 9	- 9	840	02	02	+33	05	08	-26	59
29	-14	-45	-44	-38	-17	-11	-10	-16	-14	-13	- 6	- 1	+ 1	+ 4	+ 5	+ 6	+ 9	+11	+18	+26	+33	+37	+36	+34	830	21	21	+38	02	31	-50	88
+30	+ 9	+ 3	- 5	-11	-18	-19	-16	-12	- 9	- 8	- 5	- 2	- 2	0	0	+ 2	+ 3	+ 3	+ 3	+ 3	+ 8	+18	+24	+24	848	22	39	+25	05	00	-22	47
31																																
MEAN.	+18	+ 9	0	- 7	-10	-12	-14	-14	-12	-12	-12	-10	- 7	- 6	- 5	- 3	- 1	+ 2	+ 5	+10	+15	+21	+23	+24	849							

200/1/41—14357)

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) May 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+15	+14	+13	+ 5	+ 1	- 2	- 4	- 6	- 4	- 4	- 3	+ 1	+ 3	+ 3	+ 1	- 2	+ 1	+ 1	+ 1	- 9	-13	- 7	- 4	- 4	855	00 24 +15	20 19 -14	29
+ 2	+ 4	0	- 1	- 8	-20	-23	-20	-18	-15	-11	- 6	- 4	- 3	+ 2	+ 5	+ 9	+ 9	+14	+14	+14	+12	+16	+21	+19	845	22 45 +23	05 06 -24	47
+ 3	+ 9	+ 8	+ 3	- 3	-25	-18	-14	-12	- 9	- 4	- 2	- 2	- 2	- 2	+ 1	+ 5	+ 5	+ 5	+ 5	+ 5	+ 8	+14	+17	+18	856	23 26 +19	05 06 -20	39
4	+26	+22	+18	+23	+21	+ 2	-30	-51	-33	-14	-11	- 9	- 6	- 5	- 1	+ 1	+ 4	+ 1	+ 4	+ 4	+ 6	+ 6	+13	+13	848	00 27 +27	07 30 -54	81
+ 5	- 7	-10	- 6	-11	-13	-13	-11	-11	- 7	- 1	- 5	- 4	- 4	- 1	- 4	- 1	- 1	+ 1	+ 9	+11	+14	+20	+24	+21	865	22 08 +26	05 38 -15	41
6	+14	+ 9	+ 9	+ 9	+ 6	+ 4	+ 4	+ 2	- 8	-10	-13	-15	-14	-17	-13	-12	-10	- 8	- 4	- 1	+ 7	+17	+24	+22	867	22 34 +24	11 10 -20	44
7	+21	+11	+ 3	- 9	-26	-35	-30	-26	-14	- 9	- 6	- 6	- 6	- 5	- 4	- 2	+ 1	+ 3	+10	+17	+26	+33	+36	+28	863	22 16 +37	05 06 -36	73
8	+12	+11	+11	+ 6	- 2	- 4	- 4	- 3	- 2	0	- 3	-16	-21	-13	- 8	- 3	+ 1	+ 3	+10	+ 6	+ 6	+ 8	+ 1	+ 2	873	00 00 +16	12 04 -24	40
9	+16	+11	- 2	-17	-29	-27	-33	-33	-26	-22	-17	-15	-10	- 1	- 2	- 4	+ 1	+10	+22	+29	+34	+42	+48	+37	860	22 24 +49	06 42 -37	86
10	+11	- 5	- 9	- 9	- 5	- 4	- 9	-10	-11	- 9	-11	- 9	-11	-13	-14	- 9	- 5	0	+ 6	+16	+23	+33	+35	+28	869	21 42 +37	10 30 -14	51
11	+17	+ 6	+ 7	+ 2	- 3	- 8	- 6	- 6	- 8	-13	-15	- 8	- 3	- 8	- 8	- 8	- 8	- 7	- 1	+ 7	+18	+22	+23	+19	873	22 33 +24	10 30 -17	41
12	+ 4	- 2	- 7	-12	-12	-12	-12	-10	- 7	- 3	0	0	0	0	- 1	0	+ 3	0	+ 3	+10	+15	+18	+20	+10	882	22 09 +23	03 49 -15	38
13	+18	+ 3	- 3	- 7	- 7	- 7	-13	-13	-13	- 9	- 7	- 9	- 7	- 6	- 5	0	+ 2	+ 3	+ 2	+ 5	+13	+19	+23	+29	867	23 43 +30	06 42 -17	47
14	+18	+15	+ 9	0	- 5	- 7	-11	-11	-14	-11	-10	-12	-11	- 9	- 9	- 6	- 6	0	+ 5	+26	+11	+16	+19	+13	876	22 24 +21	08 19 -14	35
15	- 7	- 5	- 2	- 2	0	- 5	- 7	-12	-12	-13	-12	-12	-10	- 6	- 3	- 2	0	+ 3	+10	+12	+15	+22	+25	+20	877	22 43 +28	09 22 -15	43
16	+12	+ 9	+15	+ 7	- 3	- 3	- 8	-19	-14	-12	-16	-12	-15	-15	-10	- 3	- 5	- 3	+ 7	+15	+17	+22	+21	+15	871	21 43 +24	11 06 -20	44
17	+33	+27	+28	+28	+ 3	-29	-35	-27	-45	-33	- 7	-26	-26	-19	- 7	- 7	- 2	+ 4	+12	+20	+25	+30	+24	+23	843	00 00 +37	08 13 -53	90
18	+ 3	- 4	- 9	-17	-15	- 9	-12	-10	- 9	- 5	- 2	- 2	- 5	- 5	- 2	- 2	+ 3	+ 7	+16	+16	+16	+21	+15	+14	856	21 46 +22	03 56 -27	49
+19	+ 5	- 1	-10	-12	-10	-10	-10	-10	- 9	- 9	- 9	- 7	- 7	- 6	- 5	- 2	0	+ 2	+11	+15	+17	+20	+25	+20	861	22 24 +25	03 00 -15	40
+20	- 1	+ 2	- 3	- 8	-11	-13	-13	-13	-13	-13	-11	- 8	- 6	- 6	- 8	- 4	+ 1	+ 7	+13	+19	+23	+22	+22	+12	874	22 25 +24	05 00 -13	37
21	+ 3	+ 7	+ 4	+ 2	+ 4	- 3	-17	-25	-29	-30	-23	-15	-13	-10	- 6	+ 3	+14	+24	+36	+34	+32	+17	+ 4	- 6	869	20 05 +47	09 42 -33	80
22	+11	- 7	-20	-47	-48	-40	-23	-13	-20	-16	+ 9	+ 3	+15	+ 9	+ 6	+ 9	+ 9	+12	+23	+26	+19	+23	+28	+30	840	23 03 +31	03 25 -52	83
23	+24	+15	0	-12	-19	-17	-17	-12	- 7	0	-10	- 5	+ 8	+ 8	+ 6	+ 5	+ 4	+ 6	+ 8	+13	+11	+ 8	+ 1	-10	847	00 24 +25	04 41 -20	45
24	+10	- 2	-11	-14	-23	-35	-43	-40	-33	- 8	+ 3	+ 1	+ 4	+ 5	+ 5	+ 8	+13	+15	+18	+20	+24	+25	+25	+25	832	20 26 +28	06 29 -45	73
25	+ 1	- 1	+ 1	- 6	-18	- 9	- 4	- 1	- 6	- 4	- 1	0	+ 4	+ 4	+ 2	+ 5	+ 1	+ 4	0	0	+ 6	+ 5	+ 1	+ 6	846	20.42 + 9	04 40 -23	32
26	- 7	-14	-14	-13	- 9	- 7	- 9	-14	-17	- 6	- 3	+ 1	+ 4	+ 1	- 1	+ 1	+ 2	+ 6	+13	+15	+18	+25	+15	+10	854	21 33 +25	02 56 -19	44
27	- 3	0	- 2	- 9	- 9	-13	-12	-11	-12	-11	- 3	- 4	- 2	0	- 2	- 4	- 2	0	+ 8	+10	+17	+22	+23	+20	864	20 54 +23	06 18 -14	37
28	+14	+10	+ 4	- 1	- 6	-13	-13	-23	-30	-32	-21	-13	- 1	- 6	- 6	- 3	- 1	+ 1	+ 9	+19	+26	+33	+29	+14	863	22 03 +36	09 00 -33	69
29	+ 9	+ 4	+ 6	+ 2	-18	-25	-24	-29	-24	-21	-11	- 1	+ 4	+ 6	+ 4	+ 4	+ 4	+ 6	+11	+14	+16	+16	+16	+19	858	23 57 +19	07 33 -33	52
30	+ 1	+ 4	+10	- 3	-13	-15	-15	-15	-13	-13	-13	-10	-10	- 8	- 5	- 3	+ 5	+ 5	+10	+12	+16	+21	+33	+25	878	22 33 +34	05 30 -17	51
31	+27	+ 2	-22	-20	-15	-15	-17	-17	-14	- 7	- 5	- 3	- 1	- 4	- 5	0	+ 5	+ 6	+ 7	+16	+22	+25	+24	+14	868	00 00 +32	03 00 -26	58
MEAN.	+10	+ 4	+ 1	- 5	-11	-13	-15	-16	-15	-11	- 8	- 7	- 5	- 4	- 3	- 1	+ 1	+ 4	+10	+13	+16	+20	+20	+16	861			

200/1/41—14357]

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) June 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H.	M.	γ	Minimum. H.	M.	γ	Range.
1	+ 7	+10	+10	- 3	-22	-23	-22	-17	-11	- 9	- 6	- 4	- 4	0	0	+ 3	+ 3	+ 7	+15	+22	+18	+14	+ 5	0	865	20	04	+20	04	45	-27	47
+ 2	-2	- 1	- 4	-11	-12	-10	- 9	- 9	- 6	- 6	- 6	- 7	- 9	- 7	- 6	- 4	- 1	+ 4	+11	+16	+21	+21	+21	+21	874	20	59	+21	03	39	-13	34
+ 3	+12	+16	+12	+ 5	+ 2	+ 1	+ 2	0	- 5	- 8	-13	-11	-11	-10	-10	- 9	+ 3	+ 2	+ 2	+ 5	+ 6	+ 9	+ 9	+ 2	883	00	57	+17	10	51	-13	30
+ 4	- 5	- 7	-10	-12	-11	- 7	-10	-11	-12	-12	-11	-10	-10	- 7	- 2	- 2	0	+ 4	+ 9	+13	+18	+24	+28	+33	885	23	37	+36	08	34	-12	48
+ 5	+33	+24	+14	+ 4	- 3	- 8	-16	-18	-17	-16	-16	-13	-11	- 8	- 7	- 4	- 3	+ 3	+ 9	+12	+ 9	+12	+13	+ 9	881	00	19	+36	07	40	-19	55
6	+ 4	- 3	-1	- 1	- 6	- 3	+ 1	+ 2	+ 2	- 4	-16	-17	-13	-18	-16	-13	- 8	- 3	+ 4	+ 9	+14	+22	+27	+30	882	23	39	+31	10	51	-20	51
7	+34	+25	+ 9	- 2	- 9	- 9	- 9	- 7	- 4	- 1	- 1	- 4	- 4	- 5	- 9	-11	- 9	- 6	- 4	0	+ 5	+ 9	+ 9	+ 4	880	00	14	+35	05	24	-11	46
8	+ 3	- 2	- 7	-10	-10	-10	- 7	-10	-11	-12	-10	- 5	- 5	- 7	- 7	- 7	- 5	- 1	+ 8	+14	+19	+25	+28	+27	881	22	27	+31	08	36	-15	46
9	+10	0	- 9	-11	- 6	- 4	+ 4	+ 6	+ 4	+13	- 6	- 7	-16	-14	-19	-14	-14	- 9	+ 4	+15	+22	+24	+19	+14	890	21	09	+28	14	27	-21	49
10	+28	+18	+ 8	+10	+11	+ 2	-24	-42	-45	-31	-19	-16	-21	+ 2	- 4	-11	- 2	+ 3	+10	+15	+23	+28	+33	+35	868	23	22	+38	08	00	-50	88
11	+41	+29	+18	- 1	- 8	- 8	-11	-13	-16	-16	-11	- 8	- 1	+ 1	+ 4	+ 1	+ 6	+14	+15	+ 4	- 6	-13	-11	- 3	865	00	41	+59	06	30	-18	77
12	+ 3	+ 3	- 5	-16	-21	-18	-14	-21	-11	- 9	- 6	- 4	- 3	+ 1	+ 1	0	+ 2	+ 7	+11	+16	+18	+21	+22	+18	868	22	15	+23	07	34	-24	47
13	+52	+47	+34	+36	+52	+39	+12	-16	-46	-60	-48	-26	-17	+ 5	- 5	0	+ 6	- 5	+ 2	- 5	-11	-14	-12	-19	838	04	36	+57	10	22	-66	123
14	-26	-31	-45	-37	-33	-31	-29	-13	-14	- 9	- 5	0	+10	+15	+14	+15	+14	+15	+22	+27	+30	+37	+34	+30	833	22	01	+43	02	22	-50	93
15	+26	+16	- 4	-23	-25	-30	-42	-48	-35	-24	-25	-19	-11	- 1	+ 7	+13	+18	+17	+19	+33	+38	+45	+35	+31	832	21	41	+48	08	13	-51	99
16	+ 3	+ 1	- 2	- 9	-12	-12	-14	-12	- 7	- 8	- 9	- 9	- 7	- 6	- 4	- 1	+ 3	+ 6	+ 9	+ 8	+12	+18	+25	+28	857	23	42	+28	07	00	-14	42
17	+11	+ 6	+ 6	+ 3	+ 2	+ 3	0	+ 3	+ 8	- 3	- 9	- 4	- 2	- 3	- 4	- 2	+ 6	+11	+23	+ 8	+ 1	- 6	-20	-36	869	18	46	+36	24	00	-48	84
18	+32	-40	-44	-46	-37	-28	-20	-13	- 4	- 1	- 2	- 1	+ 4	+10	+17	+24	+24	+21	+24	+30	+31	+31	+31	+31	846	21	09	+33	03	09	-51	84
19	+ 9	+ 9	+ 8	+ 4	0	- 1	- 4	- 4	- 4	- 6	-11	-12	-16	-16	-16	-11	- 4	+ 1	+13	+16	+15	+ 9	+ 6	+ 4	871	19	54	+20	13	00	-21	41
20	+23	+16	+ 6	-10	- 1	-11	-23	-37	-37	-22	-16	- 6	- 8	- 6	- 1	+ 5	+ 9	+11	+16	+20	+16	+23	+26	+16	845	00	00	+28	07	51	-42	70
21	+ 1	- 1	- 8	- 6	- 8	-15	-17	-22	-17	-12	- 5	- 1	- 5	- 4	- 4	0	+ 1	+ 5	+11	+12	+17	+22	+25	+21	856	22	27	+27	07	09	-23	50
22	- 5	-11	- 7	- 5	- 5	- 2	- 2	- 7	-21	- 7	-12	-10	- 7	- 5	- 2	- 1	+ 1	+ 5	+12	+20	+20	+22	+17	+17	861	21	42	+22	08	42	-27	49
23	+ 2	+ 3	- 3	- 8	-14	-10	- 9	-10	-10	-10	- 7	- 5	- 5	- 5	- 5	- 2	- 1	+ 1	+ 9	+12	+14	+17	+22	+24	869	23	48	+27	08	31	-13	40
24	+17	+ 7	+ 1	- 3	- 6	- 7	- 8	- 6	- 6	-10	- 7	-15	-13	-10	- 2	- 6	- 3	- 1	+ 4	+ 9	+ 9	+17	+24	+16	874	22	27	+27	09	54	-13	40
25	+13	+ 9	0	- 6	-12	-14	-12	-11	- 8	- 9	- 6	- 5	- 5	- 5	- 3	- 2	0	+ 3	+ 9	+12	+13	+14	+13	+ 5	873	00	19	+18	05	22	-14	32
26	0	- 7	-12	-20	-20	-17	-18	-21	-15	-10	- 7	- 5	- 2	0	0	+ 2	+ 5	+ 7	+17	+26	+22	+27	+31	+22	866	22	16	+35	07	13	-23	58
27	+19	+10	+ 9	+ 6	-11	-23	-31	-23	-18	- 8	-16	-17	-16	-13	- 1	- 4	0	+ 1	+11	+24	+25	+26	+30	+29	873	22	34	+31	06	25	-33	64
28	+17	+10	+ 5	+ 2	- 6	-12	-14	-12	-14	- 9	-11	-12	-10	- 8	- 3	- 3	- 3	0	+ 7	+15	+17	+16	+15	+ 7	877	00	00	+30	08	24	-15	35
29	- 2	- 6	- 1	- 2	- 2	- 2	- 2	- 6	- 5	- 2	- 5	- 5	- 1	0	+ 3	0	+ 3	+ 3	+ 5	+ 7	+ 5	+ 4	0	0	879	19	56	+ 8	07	28	-12	20
30	0	- 3	- 5	- 6	- 5	- 5	- 5	- 8	-12	-12	-15	-12	-10	-10	- 8	- 4	0	+ 5	+10	+15	+17	+17	+21	+27	877	23	43	+32	10	09	-20	52
31																																
MEAN.	+10	+ 5	- 1	- 6	- 8	- 9	-12	-14	-13	-11	-11	- 9	- 8	- 4	- 3	- 2	+ 2	+ 4	+11	+14	+15	+17	+18	+15	867							

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) July 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+27	+22	+ 9	- 5	-12	-12	-15	-22	-26	-26	-20	-15	- 7	- 2	- 2	+ 2	+ 4	+ 5	+ 8	+12	+14	+23	+19	+20	875	00 00 +32	08 51 -29	61
2	+19	+ 9	+ 5	+ 5	0	- 6	-12	-14	-16	-17	-16	-16	-15	-12	-10	- 6	- 4	- 1	+ 9	+16	+21	+21	+24	+21	874	23 01 +25	07 09 -19	44
3	- 3	- 8	- 7	- 2	- 1	- 3	- 3	- 3	- 8	- 8	- 6	- 6	+ 7	+ 7	+ 2	+ 6	- 1	+ 4	+ 4	+ 4	+ 7	+ 7	+ 4	- 3	886	12 46 +13	09 18 - 9	22
4																												
5																												
6	-72	-66	-57	-50	-46	-42	-31	-22	-12	- 6	+ 4	+11	+22	+27	+41	+36	+31	+40	+36	+30	+31	+34	+33	+36	734	14 44 +48	00 03 -76	124
7	-17	-49	-62	-51	-62	-42	-30	+ 9	- 3	-12	-13	- 3	+ 9	+ 8	+13	+16	+19	+22	+37	+44	+44	+40	+38	+46	775	24 00 +57	02 48 -71	128
8	+19	+12	+ 7	+ 5	0	- 7	-13	-21	-24	-24	-21	-19	-14	-10	-12	-10	-10	- 5	+ 5	+10	+20	+31	+39	+39	808	23 33 +39	08 00 -33	72
9	+ 7	- 4	-12	-19	-21	-21	-19	-19	-19	-16	-15	-12	-12	-16	- 7	-12	- 6	+ 3	+ 8	+20	+27	+65	+65	+45	834	22 13 +74	04 07 -22	96
10	+34	+32	+12	+ 2	- 1	0	-12	-10	- 5	- 8	- 7	- 6	- 5	0	+ 1	+ 2	+ 1	+ 2	- 2	- 2	-10	-12	- 2	- 2	832	00 00 +39	21 25 -17	56
11	+ 9	+16	+10	0	- 2	0	- 7	-21	-29	-24	-17	-13	-12	- 9	- 5	- 3	- 2	0	+ 5	+12	+20	+25	+26	+25	828	22 14 +27	08 40 -29	56
12	+16	+10	+ 5	0	- 2	- 5	-10	-24	-34	-32	-26	-24	- 8	+ 2	- 2	0	+ 1	+ 2	+ 7	+12	+18	+28	+34	+34	833	23 03 +37	08 16 -36	73
+13	+17	+10	+ 6	+ 3	+ 1	- 1	- 3	- 7	- 8	-16	-19	-18	-14	-12	- 9	- 8	- 7	- 3	+ 2	+ 6	+13	+19	+23	+23	847	23 19 +24	10 19 -21	45
+14	+13	+ 8	+ 6	+ 1	- 4	-11	- 9	-11	-11	-11	-11	-11	- 9	- 7	- 5	- 4	- 1	+ 1	+ 4	+ 8	+13	+15	+16	+16	849	22 22 +17	06 09 -11	28
15	+ 3	- 4	- 4	- 6	-11	-14	-17	-20	-22	-19	-20	-18	-12	- 8	- 4	- 2	+ 4	+10	+18	+19	+22	+28	+35	+38	857	23 04 +39	08 07 -23	62
16	+32	+27	+17	+ 1	+ 1	- 1	- 9	- 8	-15	-15	-15	-13	-10	- 3	+ 1	- 1	- 1	+ 1	+ 7	+ 8	+ 2	+ 2	+ 2	- 8	863	00 16 +34	09 31 -18	52
17	- 5	- 8	-10	-10	-16	- 7	-10	-12	- 7	-10	- 7	- 6	- 5	- 2	0	0	+ 3	+ 7	+12	+20	+22	+22	+20	+16	850	20 33 +24	04 26 -18	42
18	+ 6	- 4	- 5	- 2	- 3	0	0	- 2	- 5	- 8	- 5	- 4	- 5	- 5	- 5	- 3	0	+ 2	+ 9	+13	+ 9	+ 8	+ 4	0	854	19 12 +13	09 18 - 9	22
19	- 4	- 4	-14	-17	-14	-11	- 9	- 6	- 6	- 6	- 4	- 4	- 4	- 1	- 1	- 1	+ 1	+ 6	+12	+17	+20	+23	+18	+15	855	21 28 +25	03 17 -20	45
20	+ 6	+ 1	- 3	- 6	- 6	- 8	- 5	- 6	-18	-13	- 6	- 8	-11	-11	- 8	- 3	- 2	+ 1	+10	+13	+11	+19	+24	+25	857	23 59 +29	08 33 -21	50
21	+56	+45	+38	+38	+42	+11	-25	-27	-25	-53	-65	-51	-32	-18	-16	-11	- 4	+ 4	+11	+16	+13	+20	+18	+16	816	00 00 +67	10 21 -67	134
22	- 2	-12	-12	-22	-24	-16	-24	-14	- 9	- 8	-12	- 7	- 4	- 2	- 1	- 1	+ 3	+ 3	+10	+19	+25	+31	+34	+39	836	23 04 +41	04 36 -31	72
23	+27	+ 4	- 9	-12	-10	-12	-10	-10	-12	+ 1	-10	- 7	- 5	- 5	- 7	- 5	- 3	- 3	+ 2	+ 5	+15	+24	+19	+17	839	00 06 +33	08 27 -17	50
24	- 8	- 7	- 8	-13	-15	-10	- 8	- 8	- 8	- 2	0	0	- 3	- 7	- 8	- 7	- 5	- 3	+ 9	+17	+17	+22	+32	+29	854	22 58 +32	04 42 -18	50
25	+21	+16	+14	+ 6	+15	+18	-13	-28	-28	-25	-18	-18	-17	-13	-11	-11	- 8	- 7	0	+ 9	+14	+23	+29	+31	858	23 28 +31	07 39 -30	61
+26	+24	+16	- 3	-17	-19	-18	-18	-17	-13	-10	- 9	- 8	-10	- 8	- 6	- 8	- 6	- 6	+ 2	+12	+19	+28	+29	+34	865	23 33 +34	04 13 -20	54
+27	+29	+18	+ 6	- 6	-13	-16	-18	-16	-16	-15	-13	-11	- 9	- 9	- 6	- 4	- 4	- 1	+ 4	+11	+19	+21	+21	+23	868	00 00 +31	06 22 -18	49
28	+20	+15	+ 6	- 1	- 7	-12	-16	-18	-20	-20	-16	-13	- 7	- 6	- 4	- 1	+ 1	+ 5	+ 6	+11	+14	+19	+26	+26	868	22 47 +28	09 09 -21	49
+29	+15	+12	+ 7	0	- 5	-10	-11	-13	-15	-13	-10	-10	-13	-10	- 8	- 5	- 3	- 1	+ 5	+10	+17	+20	+25	+26	882	23 18 +27	08 09 -15	42
30	+30	+20	+ 9	+ 5	- 3	- 8	-13	-17	-10	-13	-14	-13	-10	-10	- 6	- 3	0	+ 2	+ 7	+ 9	+ 7	+11	+15	+11	872	00 00 +32	07 36 -17	49
31	+ 5	+ 8	+10	+ 4	- 1	- 5	- 7	-10	-11	-10	-11	-11	-10	-11	-12	-10	- 3	- 1	+ 7	+15	+15	+17	+18	+12	879	22 05 +25	08 03 -13	36
MEAN.	+11	+ 5	- 1	- 7	- 8	- 9	-13	-14	-15	-15	-14	-12	- 8	- 5	- 3	- 2	0	+ 3	+ 9	+14	+16	+22	+24	+22	846			

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) August 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+ 9	+ 2	- 4	- 7	- 2	+ 1	- 2	- 3	-17	-26	-17	-12	- 9	- 9	- 7	- 4	- 2	+ 1	+ 8	+20	+23	+20	+18	+10	870	20 06 +28	09 18 -26	54
2	+34	+20	+ 9	+ 4	0	- 1	- 8	-18	-31	-46	-34	-19	-18	-12	+11	+19	+16	+14	+16	+16	+16	+14	+ 7	+ 2	837	00 00 +38	09 42 -53	91
3	- 8	-13	-13	- 8	- 5	- 8	- 8	-13	-14	-15	- 1	+ 3	- 3	- 7	- 6	- 5	- 3	- 1	+ 9	+16	+21	+20	+26	+29	842	23 03 +31	08 55 -18	49
4	+69	+64	+67	+68	+27	-10	-18	-10	+ 1	- 7	-30	-16	- 6	-25	-27	-23	-23	-11	- 9	+ 3	+ 1	-16	-30	-43	804	03 00 +84	23 39 -46	130
5	-52	-60	-67	-46	-25	-18	-12	- 4	+ 1	+ 3	+ 6	+10	+12	+10	+10	+19	+22	+25	+27	+32	+32	+34	+27	+24	797	21 30 +34	02 12 -76	110
6	+ 1	0	- 4	-10	-16	-16	-26	-18	-18	-16	-14	- 9	- 6	- 4	+ 1	+10	+10	+10	+18	+32	+29	+15	+15	+ 6	821	20 12 +32	06 33 -28	60
7	-19	-19	-17	-21	-19	-22	-19	-15	- 7	- 7	- 7	+ 7	+ 2	+ 2	+ 5	+ 3	+ 2	+ 7	+12	+19	+27	+34	+29	+24	834	21 04 +34	01 00 -24	58
8	+ 9	+ 3	- 3	- 8	-12	-14	-14	-16	-14	-13	- 7	- 7	- 7	- 5	- 5	- 5	- 5	- 2	+ 5	+14	+25	+29	+32	+29	853	22 34 +35	07 16 -17	52
+ 9	+11	+ 8	- 1	- 8	-13	-11	-12	-13	-13	-11	- 8	- 8	- 6	- 3	- 3	- 3	- 1	- 1	+ 4	+ 9	+14	+21	+29	+31	864	23 13 +31	07 55 -13	44
+10	+16	+11	- 1	-11	-13	-11	-11	-11	-11	-11	-10	- 8	- 8	- 6	- 5	- 6	- 3	- 1	+ 4	+11	+14	+19	+32	+29	874	22 43 +36	04 07 -13	49
11	+21	+21	+13	+ 1	- 4	- 5	-11	-19	-16	-14	-11	-10	- 9	- 6	- 6	- 6	- 4	0	+ 1	+ 3	+11	+16	+18	+25	877	23 33 +26	07 31 -21	47
12	+26	+21	+11	+ 1	- 6	-11	-14	-14	-16	-19	-17	-11	-11	- 6	- 4	- 4	- 1	+ 1	+ 6	+11	+16	+18	+16	+16	872	00 00 +28	09 27 -19	47
13	+12	+12	+ 7	- 1	- 7	- 9	- 9	-17	-19	-17	- 9	-17	-12	- 8	- 7	- 4	- 4	- 1	+ 8	+14	+18	+24	+24	+18	875	22 55 +25	09 03 -22	47
14	+19	+13	+ 8	- 3	-21	-16	-17	-16	-16	-13	-13	-12	- 8	- 6	- 6	- 3	- 1	+ 4	+ 9	+14	+16	+20	+26	+30	869	23 39 +31	04 46 -23	54
15	+27	+ 9	- 1	- 4	- 8	-11	-13	-14	-12	-13	-13	-12	- 9	- 7	- 7	- 7	- 4	- 2	+ 5	+13	+20	+25	+25	+23	870	00 13 +30	07 37 -14	44
+16	+15	+13	+ 3	- 7	-12	- 9	- 9	-12	-12	-12	-11	-13	-12	-12	-12	-12	-11	- 7	0	+13	+23	+31	+37	+38	875	23 39 +39	11 31 -13	52
+17	+32	+29	+15	+ 2	- 9	-11	-11	-12	-12	-12	-11	-12	-11	-10	-10	- 9	- 7	- 4	0	+ 9	+15	+20	+17	+12	878	00 00 +34	07 38 -14	48
18	- 1	- 6	-10	-13	-13	- 9	- 6	- 6	- 9	- 9	- 7	-11	-10	- 9	- 9	- 7	- 6	- 1	+ 6	+16	+19	+24	+33	+44	884	23 43 +52	03 10 -13	65
19	+67	+60	+15	- 5	- 6	-12	-11	-17	-12	-13	-11	-12	-19	-28	-17	-21	-19	-19	- 5	+ 8	+12	+21	+27	+20	863	01 19 +73	13 30 -29	102
20	+ 2	-10	-18	-21	-22	-18	-15	-14	- 9	-10	-10	-13	-15	-14	-13	-11	- 5	+ 2	+14	+27	+37	+47	+51	+47	866	22 28 +52	04 16 -25	77
21	+32	+22	+ 7	0	- 5	-18	-24	-26	-24	-23	-18	-15	- 8	- 3	0	- 2	- 5	0	+ 7	+ 9	+14	+21	+27	+24	871	00 00 +39	08 00 -27	66
22	+10	+ 6	- 1	-11	-17	-15	-15	-15	-12	-12	-14	-12	-12	-12	-11	-10	- 8	0	+10	+20	+30	+32	+36	+36	883	22 58 +38	04 30 -17	55
+23	+32	+15	0	- 8	-10	-14	-17	-19	-15	-12	-12	-12	-12	-10	- 9	- 8	- 5	0	+ 7	+15	+23	+26	+23	+20	883	00 00 +36	07 19 -20	56
24	+23	+18	+10	+ 5	0	- 9	-14	-22	-28	-12	-13	-11	- 9	- 7	- 7	- 7	- 4	- 2	0	+ 5	+13	+23	+28	+23	875	22 45 +31	08 08 -31	62
25	+17	+20	+12	0	- 5	- 9	-10	-12	-12	-10	-10	- 7	- 5	- 5	- 3	0	0	0	+ 2	+ 1	+10	+10	+12	+15	878	01 26 +21	08 46 -12	33
26	+37	+32	+25	+15	+ 5	- 2	- 7	- 9	-14	-22	-26	-26	-24	-16	- 7	- 5	- 5	- 7	+ 3	+ 8	+ 5	+13	+13	+ 5	853	00 00 +42	10 10 -29	71
27	+27	+ 3	+ 3	+ 3	0	-18	-16	-28	-39	-22	- 4	-25	-29	-19	+ 3	+ 1	+ 1	+ 6	+13	+20	+28	+32	+22	+28	809	00 00 +39	09 00 -52	91
28	- 9	- 8	-10	-16	-10	-10	- 4	-10	-17	-27	- 5	-16	-20	- 1	- 1	- 1	- 1	+ 4	+ 9	+19	+26	+34	+34	+34	832	23 00 +35	09 49 -37	72
29	+23	+12	+ 6	+ 4	-10	-12	- 8	- 5	- 7	- 1	0	- 6	- 4	+12	+12	+ 3	- 1	- 5	0	- 1	- 2	- 5	+ 3	0	851	00 28 +27	24 00 -19	46
30	-32	-22	-20	-13	-13	- 6	-11	- 3	- 6	0	-10	- 6	- 1	- 5	+ 8	+ 9	+ 6	+ 6	+ 9	+12	+19	+24	+27	+28	847	23 57 +31	00 15 -35	66
31	+16	+16	+ 4	-11	-14	-16	-18	-23	-16	-16	-18	-18	-13	- 8	- 6	- 3	- 2	+ 4	+11	+19	+24	+34	+34	+29	864	21 29 +38	07 18 -28	66
MEAN.	+15	+ 9	+ 1	- 4	- 9	-11	-13	-14	-15	-14	-12	-11	-10	- 8	- 5	- 3	- 2	+ 1	+ 7	+14	+19	+22	+23	+21	857			

200/1/41—14357]

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) September 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+19	+ 4	- 4	- 7	- 8	-16	- 5	- 9	-14	- 2	- 8	- 7	- 7	- 7	- 9	- 7	- 2	+ 1	- 3	+ 6	+13	+23	+28	+15	860	00 00 +30	08 29 -19	49
2	+ 4	- 1	+ 5	+ 4	0	- 5	-13	-13	-18	-13	-12	- 6	-10	- 6	- 6	- 6	- 4	+ 1	+ 6	+11	+15	+18	+21	+21	857	23 12 +27	08 06 -24	51
3	0	- 5	- 5	- 7	- 7	- 7	- 9	-10	-10	-10	- 9	-10	-10	-10	-10	- 7	- 5	0	+ 9	+17	+25	+31	+32	+25	868	22 30 +34	08 00 -11	45
+ 4	+12	+ 4	- 2	- 3	- 5	- 5	- 5	- 7	- 8	- 8	- 8	- 8	- 5	- 7	- 7	- 5	- 5	- 3	+ 1	+ 4	+ 8	+17	+19	+27	871	23 52 +32	08 26 -10	42
+ 5	+25	+18	+ 5	- 3	- 8	-14	-14	-13	-12	-12	-12	- 9	- 8	- 7	- 7	- 7	- 9	- 6	+ 2	+ 8	+10	+18	+22	+29	875	24 00 +31	06 00 -14	45
+ 6	+22	+11	- 2	-12	-16	-15	-13	-12	-13	-13	-13	-13	-11	-11	-12	-11	- 7	- 2	+ 4	+10	+16	+24	+37	+43	884	23 24 +44	04 19 -16	60
7	+45	+32	+19	+ 9	+10	+15	- 3	-17	-30	-27	-27	-15	-14	- 6	- 3	-10	-12	-11	- 5	+ 7	+ 6	+ 7	+15	+20	878	00 00 +49	08 15 -33	82
8	+28	+12	-14	-17	-12	-13	-17	-25	-29	-25	-14	- 9	- 7	- 7	- 6	- 3	+ 1	+ 9	+15	+23	+29	+33	+33	+25	865	22 03 +35	09 03 -31	66
9	+ 4	- 6	-12	-13	-18	-16	-16	-16	-18	-12	-10	- 8	- 8	- 6	- 6	- 3	- 1	+ 1	+ 6	+16	+26	+35	+43	+39	874	23 10 +49	08 49 -21	70
10	+16	+ 5	- 4	- 8	-11	-13	-13	-13	-12	-13	-13	-11	-11	-11	- 6	- 6	- 4	- 1	+ 8	+16	+24	+25	+28	+29	879	23 27 +31	10 29 -16	47
11	+28	+15	+ 2	- 1	0	- 5	- 7	- 7	- 7	-10	-15	-20	-15	-11	- 5	- 5	- 3	- 3	+ 1	+ 5	+10	+12	+17	+24	878	00 00 +30	12 18 -26	56
+12	+17	+12	+ 4	- 3	- 6	-10	-10	-13	-18	-18	-20	-14	-15	-12	-10	- 9	- 6	- 3	+ 2	+ 9	+19	+31	+42	+40	881	22 56 +45	10 27 -20	65
13	+34	+25	+14	+ 7	+ 1	- 1	- 2	- 3	+ 4	+ 4	+ 8	+14	- 8	-15	-15	-22	-23	-18	-12	- 3	+ 9	+ 4	+ 6	+ 1	881	00 00 +37	15 17 -28	65
14	+19	+ 5	-12	-20	-24	-34	-32	-14	-31	-17	-17	- 9	+ 5	- 1	- 5	- 5	+ 3	+ 8	+16	+22	+34	+37	+32	+37	853	21 26 +42	06 00 -41	83
15	+19	+ 5	- 3	- 3	- 5	- 9	-10	-20	-22	-14	- 4	-13	-10	- 5	+ 5	+ 5	+ 8	+ 9	+ 8	+19	- 2	- 2	+13	+19	866	00 02 +24	08 00 -26	50
16	+14	-18	- 1	- 8	-25	-25	-18	-14	-13	-13	-13	-13	-11	- 9	- 3	- 1	+ 2	+ 4	+11	+14	+29	+44	+42	+34	864	22 12 +49	05 04 -30	79
17	+25	+10	- 1	- 5	-10	-17	-22	-22	-20	-20	-17	-20	-22	-22	-17	-15	-12	- 6	+12	+25	+30	+39	+50	+50	868	23 45 +51	07 31 -24	75
18	+201	+189	+176	+166	+185	+209	+181	+114	+10	-10	-42	-12	-104	-89	-65	-90	-90	-91	-93	-103	-129	-154	-148	-212	709	05 20 +250	23 49 -223	473
19	-111	-134	-187	-152	-211	-192	-185	-130	-111	-46	+ 8	+29	+57	+72	+90	+110	+124	+133	+140	+126	+121	+130	+148	+163	600	23 23 +167	04 25 -264	431
20	-22	-26	-24	-19	-15	-10	+ 4	-16	-17	-25	-28	- 8	- 3	+ 2	- 3	+ 2	- 2	+ 4	+16	+30	+36	+42	+44	+47	768	23 39 +47	10 00 -33	80
21	+17	+10	- 2	-35	-32	-18	-34	-37	-25	-18	-11	-15	- 7	-11	-14	- 4	- 4	- 2	+10	+28	+42	+49	+53	+56	795	23 50 +56	03 45 -53	109
+22	+25	+16	+ 6	- 1	-10	-23	-23	-18	-16	-13	-16	-16	-16	-16	-13	-12	-11	- 4	+ 1	+ 8	+13	+30	+48	+60	823	23 37 +61	06 12 -26	87
23	+40	+34	+23	+ 9	- 5	-14	-16	-19	-23	-19	-16	-14	- 4	- 8	- 1	- 9	- 5	- 9	- 8	- 2	+ 8	+15	+23	+28	838	00 19 +42	08 26 -26	68
24	+28	+11	+ 6	- 6	-18	-27	-27	-23	-14	-14	-11	-11	+ 4	+ 9	+11	+16	+18	+18	+ 1	+ 7	+11	+ 6	+ 4	+ 4	830	00 00 +41	05 45 -32	73
25	+ 3	+ 3	0	- 9	-12	-14	-13	-19	-14	-14	-19	-21	-19	- 8	- 4	- 7	0	+ 3	+10	+12	+15	+32	+43	+42	819	23 08 +44	08 11 -26	70
26	+13	+ 4	- 6	- 9	-10	-11	-13	-13	-16	-16	-13	-11	- 9	- 6	- 5	- 4	- 1	+ 1	+11	+16	+22	+26	+28	+31	840	23 16 +32	08 09 -16	48
27	+32	+19	+12	+ 2	+ 1	0	- 3	-19	-27	-30	-29	-24	-19	-15	-10	- 6	+ 5	+ 7	+ 8	+12	+17	+22	+27	+27	834	00 00 +37	10 11 -31	68
28	+ 3	- 4	- 6	- 8	- 8	-11	-13	-13	-16	-18	-16	-13	-11	- 6	- 4	- 4	+ 5	+ 9	+ 9	+ 4	+16	+23	+31	+48	852	24 00 +54	09 46 -19	73
29	+51	+41	+31	+11	- 8	-13	-13	-11	-18	-22	-18	-19	-21	-13	-11	- 6	- 6	- 7	+ 1	+ 4	+ 4	+ 6	+15	+26	852	00 17 +55	10 00 -30	85
30	+27	+ 6	- 5	- 5	- 7	- 9	-12	-16	-12	-12	-15	- 4	-12	-15	-12	- 6	0	0	+ 2	+ 7	+12	+26	+28	+27	851	22 06 +29	10 33 -18	47
31																												
MEAN.	+21	+10	0	- 5	-10	-11	-13	-15	-19	-16	-14	-10	-11	- 8	- 5	- 5	- 2	+ 1	+ 6	+12	+16	+22	+27	+27	840			

200/1/41—14357

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) October 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+22	+ 9	0	- 5	-10	-15	-15	-16	-18	-13	- 9	-10	-13	-13	- 9	- 8	- 5	- 3	+ 2	+12	+21	+28	+32	+32	852	23 10 +34	07 49 -20	54
2	+20	+15	+ 7	+ 2	- 2	-10	-15	-15	-15	-14	-14	-14	-12	-12	-12	-12	-11	- 7	+ 5	+19	+22	+27	+27	+20	859	22 03 +32	08 20 -15	47
3	+ 9	- 2	- 8	-11	-13	-16	-17	-16	-18	-16	-13	-11	-11	-11	-11	-11	- 8	- 3	+ 6	+19	+29	+39	+46	+51	855	23 11 +53	08 50 -18	71
4	+28	+20	+ 6	- 6	-15	-18	-18	-18	-16	-17	-18	-18	-16	-16	-16	-15	-10	- 4	+ 1	+14	+26	+40	+49	+39	875	22 44 +50	06 12 -21	71
5																												
6																												
7	+23	+15	+ 3	- 7	-14	-14	-16	-16	-14	-14	-12	- 9	- 9	- 9	- 9	- 8	- 7	- 8	- 4	+ 3	+13	+28	+46	+50	883	23 39 +51	07 03 -18	69
8	+54	+34	+12	-10	-26	-21	-20	-23	-20	-15	-13	-10	-10	- 8	- 7	- 5	- 5	- 8	- 3	+ 2	+14	+24	+32	+31	872	00 00 +60	04 21 -28	88
9	+14	+ 4	- 2	-16	-23	-23	-23	-22	-21	-20	-18	-16	-13	-10	- 1	- 4	- 1	+ 1	+ 8	+20	+26	+40	+46	+45	880	23 04 +48	04 36 -25	73
10	+20	+11	- 2	- 9	-12	-14	-14	-17	-17	-14	-14	-14	-14	-14	-12	- 2	+ 1	+ 2	+ 6	+17	+22	+31	+31	+31	898	22 18 +37	13 13 -18	55
11	+65	+52	+36	+26	+20	+17	0	0	- 7	-34	-26	-41	-31	-31	-22	-22	-14	-13	- 5	- 7	+ 4	+25	+27	- 8	854	00 00 +69	09 57 -50	119
12	+ 7	+13	- 6	-30	-26	-16	-14	-18	-26	-21	-16	- 6	- 2	- 3	- 2	- 2	+ 1	+ 5	+ 7	+13	+25	+37	+40	+37	846	22 24 +40	03 29 -33	73
13	+10	+12	+ 5	- 5	- 9	-11	- 4	-15	-10	-14	-11	- 9	-14	-11	- 7	- 7	- 5	-10	-10	+ 2	+12	+27	+37	+37	869	23 25 +40	07 42 -17	57
14	+32	+20	+ 7	- 2	-10	-10	-12	-15	-12	-12	-10	- 5	-10	- 5	- 5	0	0	- 5	- 5	0	+ 7	+15	+22	+19	869	00 00 +35	10 00 -15	50
15	+21	+14	+12	+ 7	- 3	-10	-20	-18	-22	-22	-25	-18	- 8	- 6	- 6	- 3	+ 1	+ 3	+ 8	+ 7	+15	+21	+17	+24	840	00 00 +30	11 12 -30	60
16	+17	+12	+ 2	-27	-31	-21	-22	-19	-10	- 8	- 6	- 5	- 6	+ 2	0	- 3	- 3	0	- 4	+ 6	+27	+27	+37	+39	857	23 58 +41	03 51 -32	73
17	+28	+15	+ 3	- 2	- 4	- 3	- 9	-17	-24	-22	-19	-17	-17	-14	-12	- 8	- 4	- 3	0	+ 7	+17	+28	+35	+32	866	22 50 +35	08 12 -24	59
18	+22	+ 9	+ 2	- 1	- 2	- 2	- 5	- 8	- 3	-10	-13	-13	-10	-10	- 8	- 8	- 5	- 8	- 8	- 5	+ 7	+19	+32	+34	867	23 01 +34	11 46 -15	49
19	+26	+13	+ 2	- 4	- 9	- 9	-14	-16	-16	-16	-16	-15	-12	- 6	- 1	- 9	- 1	- 4	- 6	+ 2	+16	+26	+31	+36	868	23 30 +36	07 58 -19	55
20	+26	+16	+ 7	- 2	- 9	-14	-19	-25	-26	-26	-25	-21	-16	-15	-12	- 9	- 6	- 2	+ 6	+15	+23	+36	+47	+53	873	23 48 +55	08 54 -29	84
21	+38	+26	+ 4	- 8	-23	-28	-25	-23	-20	-18	-16	-14	-13	-13	-12	-10	- 8	- 6	+ 2	+12	+24	+36	+46	+48	887	23 23 +51	05 21 -30	81
22	+46	+36	+26	+16	+ 3	- 4	-11	-14	-11	- 4	- 4	- 7	- 9	+ 3	+13	+16	+ 1	-31	-38	-21	- 5	+ 1	+ 3	+ 1	878	00 00 +51	18 45 -42	93
23	+17	+12	0	-19	-22	-25	-20	-20	-21	-18	-15	-13	-10	-10	- 2	- 7	- 5	+ 2	+ 2	+13	+24	+37	+47	+49	862	23 03 +53	04 31 -31	84
24	+32	+23	+14	- 2	-14	-15	-17	-18	-20	-17	-18	-15	-10	- 8	- 7	+ 1	+ 1	0	0	- 5	+ 4	+22	+35	+34	866	23 56 +39	08 36 -23	62
25																												
26																												
27	+ 5	+ 4	+ 1	- 5	- 6	- 8	- 8	- 6	-12	-13	-11	- 8	-11	- 8	- 4	- 1	- 1	+ 1	+ 3	+ 9	+15	+16	+20	+20	869	22 56 +23	09 57 -16	39
28	+10	+ 5	+ 1	+ 2	- 1	- 7	- 7	- 7	- 7	- 7	- 7	- 4	- 3	- 5	- 9	- 5	- 5	- 4	- 1	+ 2	+10	+15	+22	+15	873	22 28 +22	07 57 - 9	31
29	- 2	- 8	- 8	-11	-11	- 8	- 8	- 8	-10	-13	-14	-14	-16	-12	- 8	- 2	+ 1	+ 2	+ 4	+12	+22	+30	+36	+37	886	23 08 +38	10 03 -17	55
30	+31	+17	+ 7	- 3	- 3	- 5	- 9	- 5	-10	-10	-10	-13	-16	-19	-14	-10	- 8	- 8	- 6	+ 2	+15	+25	+27	+22	882	00 00 +35	14 09 -20	55
31	+49	+46	+32	+28	+ 7	-34	-55	-29	-17	- 8	- 5	- 3	+ 2	+12	+19	+19	+20	+15	+15	- 5	0	-12	-29	-55	850	00 07 +52	24 00 -85	137
MEAN.	+25	+16	+ 6	- 4	-10	-13	-15	-16	-16	-15	-14	-13	-11	- 9	- 7	- 5	- 3	- 4	- 1	+ 6	+16	+25	+31	+29	868			

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) November 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	- 6	-35	-55	-66	-83	-73	-32	-41	-38	-35	- 7	+ 9	+ 7	+14	+16	+45	+52	+33	+26	+38	+47	+57	+64	+62	764	22 18 +64	05 00 -91	155
2	-10	-15	-18	-20	-22	-20	-17	-13	-13	-11	-10	- 8	- 7	- 7	- 6	- 3	- 1	+ 3	+11	+22	+33	+43	+44	+41	836	22 23 +46	04 45 -23	69
3	+10	+ 3	- 6	-15	-18	-18	-13	- 9	- 6	- 3	- 2	- 1	- 1	- 7	-11	-11	-11	- 8	- 2	+ 9	+24	+34	+36	+36	853	23 03 +41	05 20 -21	62
+4	+19	+11	- 2	- 7	-14	-20	-19	-14	-12	- 8	- 7	- 6	- 4	- 4	- 5	- 5	- 5	- 7	- 7	+ 4	+23	+30	+33	+30	853	00 00 +34	05 36 -21	55
5	+19	+14	+ 2	- 1	- 6	- 6	- 1	- 1	- 1	+ 2	- 1	+ 2	+ 2	- 1	0	+ 2	- 5	-18	-13	- 8	+ 4	+ 9	+ 5	+ 8	862	00 00 +22	17 39 -21	43
6	+30	+29	+20	+ 8	+ 6	- 4	- 9	- 8	-28	-19	- 9	+ 1	- 6	- 1	+ 3	+ 5	- 2	- 4	-15	-14	- 2	- 4	+10	+14	835	01 25 +37	08 24 -34	71
7	- 7	- 6	- 7	- 9	-12	-14	-19	- 4	-13	-14	- 7	-11	- 8	- 4	- 4	- 4	- 6	- 6	+ 1	+15	+30	+35	+38	+38	851	23 51 +40	06 36 -21	61
8	+35	+28	+ 5	-14	-21	-21	-30	-28	-23	- 6	-12	-12	- 9	- 2	+ 6	+ 4	0	- 1	- 7	+ 3	+13	+26	+36	+42	852	23 09 +43	06 48 -33	76
9	+25	+18	+10	+ 1	- 6	- 9	- 9	- 9	- 4	-12	- 4	-12	-16	-11	- 8	- 2	- 4	- 7	- 7	- 1	+ 8	+18	+23	+27	864	24 00 +28	12 59 -19	47
10	+33	+21	+ 4	- 6	- 9	- 9	+ 7	- 9	+12	0	- 4	- 1	- 1	+12	+11	- 4	- 8	- 6	-16	-23	-14	- 1	+12	+ 6	855	00 06 +37	19 02 -26	63
11	- 7	-14	-22	-29	-18	-11	- 7	- 4	- 7	- 5	- 3	- 5	- 6	- 3	- 2	+ 3	+ 6	+ 2	- 2	+ 8	+17	+30	+36	+35	845	22 40 +40	03 40 -31	71
12	+19	+17	+ 4	- 8	-12	-15	- 8	-13	-10	-10	-10	- 9	- 5	- 8	- 3	- 4	- 3	- 4	- 3	+ 3	+12	+14	+24	+27	858	23 30 +29	05 21 -15	44
13	+16	+ 7	+ 1	- 7	-10	-10	- 7	- 9	-15	-20	-20	- 5	- 7	-10	-10	- 7	- 6	- 5	- 1	+ 1	+12	+27	+45	+35	864	22 42 +42	10 34 -22	64
14	+24	+17	+ 9	+ 2	- 6	-10	-13	-15	-15	-13	-13	- 9	-12	-10	- 9	- 7	- 6	- 3	- 3	+ 4	+ 9	+16	+24	+29	866	23 56 +32	08 13 -17	49
+ 15	+18	+13	+ 1	- 9	-14	-14	-12	- 9	-10	-13	-17	-16	-15	-14	-12	- 7	- 5	- 4	- 2	+ 6	+21	+33	+44	+46	876	23 08 +49	10 42 -17	66
+ 16	+28	+13	- 1	-10	-19	-17	-15	-11	-12	-11	-12	-15	-15	-16	-17	-16	-14	-10	+ 5	+18	+38	+38	+44	+31	883	22 28 +52	04 33 -22	74
17	+51	+43	+31	+21	+11	+ 3	-13	-25	+19	- 6	-13	-17	- 8	- 6	- 6	- 1	+ 4	-11	-21	-17	-16	-16	- 8	- 6	851	00 46 +64	07 24 -30	94
18	+ 8	+ 3	- 4	- 9	-12	-14	-13	- 4	- 4	-19	-14	- 8	- 2	- 9	-12	- 4	+ 1	- 4	-12	-10	+ 6	+23	+45	+63	841	23 20 +60	09 39 -24	84
19	+18	- 9	+ 1	- 9	- 9	- 9	-11	-14	-11	- 9	+ 1	0	- 9	-10	- 9	- 7	- 7	- 7	- 2	+ 6	+20	+23	+21	+31	863	23 29 +36	08 54 -19	55
20	+24	+19	+ 9	- 1	-13	-21	-26	-21	-18	-13	-11	- 9	- 9	- 6	- 5	- 4	0	+ 1	+ 3	+ 4	+12	+26	+36	+33	865	22 52 +39	06 34 -27	66
21	+18	+ 8	+ 6	- 7	-11	-12	-11	-11	- 9	-11	- 6	- 8	- 8	- 4	- 4	- 2	- 2	- 4	- 2	+ 6	+11	+18	+23	+25	863	22 55 +31	05 17 -15	46
22	+17	+18	+ 8	+ 3	- 2	- 7	-10	-10	-11	-10	-12	-11	- 7	-10	-10	- 5	+ 3	- 1	-10	- 2	+ 5	+ 8	+28	+32	871	22 50 +35	08 12 -15	50
23	+41	+26	+ 5	-24	-26	-30	-26	-26	-21	-14	-11	-14	-11	-11	-10	- 7	- 4	- 3	+ 1	+ 8	+24	+41	+49	+52	863	23 03 +55	05 12 - 9	64
+24	+31	+26	+14	+ 3	-10	-16	-16	-17	-17	-22	-22	-20	-17	-15	-12	-10	- 8	- 5	- 2	+ 7	+18	+30	+38	+39	875	23 03 +42	09 33 -23	65
25	+21	+14	+ 6	- 1	0	- 6	- 9	-10	-11	-16	-21	-22	-24	-17	- 7	- 4	- 1	- 2	- 1	+ 1	+10	+24	+33	+39	884	23 19 +39	12 10 -25	64
+26																												
27	+14	+ 5	+ 1	0	+10	-11	-34	-32	-21	-14	-16	-11	- 7	- 4	- 1	- 3	- 5	+ 4	+ 9	+12	+16	+25	+29	+30	889	23 12 +34	06 33 -36	70
28	+102	+80	+55	+30	- 6	-37	-63	-79	-81	-63	-38	-25	-18	- 8	0	+ 8	+18	+27	+12	+11	+ 6	+13	+28	+31	808	00 26 +108	08 39 -81	189
29	+ 4	- 4	-13	-20	-25	-22	-20	-22	-30	-27	-25	-21	-15	-10	- 8	- 3	+ 1	+ 2	+ 9	+20	+35	+59	+70	+72	834	23 18 +74	08 16 -30	104
30	+43	+32	+10	+10	-21	-22	-17	-15	-12	-10	-12	-12	-15	-15	-12	-12	- 5	- 5	0	+ 9	+17	+27	+32	+34	858	00 00 +47	05 07 -25	72
31																												
MEAN.	+22	+13	+ 2	- 7	-13	-16	-16	-17	-15	-14	-12	-10	- 9	- 7	- 5	- 2	- 1	- 2	- 2	+ 4	+15	+24	+32	+34	855			

200/1/41—14357]

Horizontal Intensity

G.M.T. (H = 34000γ + Mean + ...) December 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+66	+51	+34	+24	+22	+24	+44	+38	+32	+29	+24	-16	-17	-17	-27	-42	-55	-46	-46	-35	-26	-24	-19	-22	819	00 00 +74	16 22 -62	136
2	-12	-18	-36	-50	-59	-58	-33	-24	-14	- 9	+ 3	- 2	+ 6	+12	+15	+ 9	+ 6	+ 3	+12	+19	+34	+53	+66	+69	809	23 27 +70	05 03 -71	141
3	+22	+ 8	- 9	-26	-31	-28	-23	-21	-17	-16	-16	-15	-14	-12	- 9,	0	+ 1	0	+ 2	+16	+27	+57	+63	+48	847	21 50 +71	04 21 -31	102
4	+21	+ 6	+ 5	- 9	-14	-11	-11	-14	-14	- 9	-16	- 9	- 9	- 4	- 4	- 6	- 6	- 1	+ 1	+ 2	+ 5	+21	+36	+38	852	23 12 +41	10 09 -21	62
5	+30	+11	- 4	- 9	-11	-14	-15	-16	-14	-11	- 9	- 6	- 5	- 1	- 1	0	+ 4	+ 1	- 4	- 4	- 4	+18	+31	+36	847	00 00 +38	08 00 -19	57
6	+27	+19	+ 7	-13	-13	-18	-18	-20	-17	-15	-14	- 4	+ 2	+ 2	+ 2	- 1	- 4	- 3	- 4	- 1	+ 9	+21	+27	+27	856	00 22 +37	03 55 -25	62
7	+15	+ 6	- 5	-12	-14	- 9	- 7	- 7	-11	-14	-15	-16	-15	- 6	- 7	- 5	- 4	- 4	- 4	+ 3	+11	+30	+43	+45	862	23 14 +47	10 16 -18	65
8	+36	+21	+ 3	-12	-19	-21	-21	-19	-19	-15	-13	-12	- 7	- 5	- 7	- 4	- 7	- 7	- 4	+ 3	+16	+30	+43	+51	867	23 28 +52	05 31 -21	73
9	+45	+36	+19	+ 4	- 8	-12	- 9	-15	-12	-11	-15	-16	- 2	-11	-15	-14	-15	-14	-11	- 1	+ 3	+16	+28	+29	869	00 00 +47	11 31 -21	68
10	+27	+17	+ 1	- 9	-15	-16	-16	-14	-11	-13	-15	-13	- 6	- 5	- 5	- 8	-10	-11	- 8	+ 5	+16	+29	+40	+40	868	22 30 +42	05 29 -17	59
+11	+32	+26	+15	+ 2	- 5	-10	-13	-14	-15	-13	-17	-18	-15	-13	-13	-13	-11	-10	- 8	+ 2	+ 6	+25	+43	+48	873	23 52 +50	12 00 -19	69
+12	+44	+35	+21	+ 8	- 7	- 9	- 7	- 8	- 9	- 8	-12	-15	-22	-24	-22	-19	-21	-19	-12	+ 1	+13	+28	+36	+36	877	00 00 +46	12 57 -26	72
13	+35	+33	+26	+16	+ 9	+ 4	0	- 4	- 1	+ 1	+ 8	+ 4	- 5	-10	- 4	-12	-23	-25	-28	-16	- 9	- 1	+ 1	+ 4	874	00 00 +38	18 30 -29	67
14	+19	+ 6	- 3	-16	- 8	- 3	- 3	- 1	- 1	- 8	+ 3	- 8	- 1	+ 4	+ 4	+ 4	- 1	- 6	- 1	- 3	- 3	- 1	+11	+19	849	00 00 +26	03 16 -22	48
15	+13	+ 7	- 5	-13	-17	-20	-15	-17	-15	-12	-12	-12	-12	- 7	- 3	- 4	- 7	- 3	+ 2	+11	+21	+35	+47	+50	858	22 57 +52	05 13 -25	77
16	+50	+27	- 3	-29	-30	-28	- 8	- 8	-15	-10	-13	-13	-10	-10	-10	- 8	- 8	- 7	- 3	+ 7	+17	+27	+37	+42	861	00 22 +57	03 48 -40	97
17	+43	+34	+ 9	- 6	- 9	-11	-16	-14	-23	-18	-13	- 9	- 6	- 4	- 6	- 6	- 9	-11	- 6	+ 5	+ 9	+19	+24	+29	864	00 33 +46	08 43 -27	73
18	+25	+15	0	-10	-17	-29	-24	- 5	- 5	-12	0	- 5	-10	- 9	- 2	0	- 2	0	- 5	+ 3	+13	+30	+24	+30	870	21 51 +33	05 45 -34	67
19	+35	+30	+23	+10	0	-10	- 4	+ 2	- 7	-15	-13	-13	-11	-10	-12	- 8	-12	-10	-12	-10	- 1	+12	+20	+24	870	00 11 +35	09 59 -15	50
+20	+22	+15	+ 7	- 3	- 5	-13	-10	-10	-10	-10	-10	- 8	-10	-13	-10	- 5	- 8	- 8	- 8	- 3	+10	+22	+34	+43	873	23 53 +45	13 00 -13	58
+21	+31	+25	+13	- 1	- 8	-17	-20	-20	-18	-20	-17	-12	-10	-10	-10	-12	-12	-11	- 6	- 1	+10	+31	+41	+48	885	24 00 +49	07 00 -20	69
22	+50	+42	+23	+ 4	- 8	-13	-14	-16	-16	-16	-15	-13	-13	-11	-13	-11	-13	-13	- 8	- 4	+ 4	+17	+26	+26	886	00 16 +50	07 52 -17	67
23	+24	+21	+ 9	- 3	- 6	-11	-16	-16	-13	-13	-13	- 8	- 1	- 1	- 6	- 6	- 3	+ 4	+ 4	+ 7	+17	+14	+14	+ 6	886	00 00 +24	06 52 -16	40
24	+21	+13	+ 8	+ 1	- 4	- 7	- 5	- 4	- 7	-12	-19	-13	- 9	-14	-13	-13	- 9	- 4	+ 6	+11	+13	+19	+23	+23	867	23 18 +26	10 54 -21	47
+25																												
26																												
27																												
28	+19	+ 9	- 3	-13	-18	-21	-18	-13	-11	-13	-13	-16	-16	-13	-13	-11	-11	- 8	- 1	+12	+25	+42	+52	+47	876	22 49 +56	05 33 -23	79
29																												
30																												
31	+19	+11	- 1	- 9	- 9	-11	-10	- 9	- 9	- 9	- 9	-11	-14	-14	-11	-11	- 9	- 9	- 9	+ 2	+14	+26	+42	+52	874	23 39 +53	05 34 -14	67
MEAN.	+29	+19	+ 6	- 6	-12	-14	-11	-10	-10	-11	-10	-11	- 9	- 8	- 8	- 8	-10	- 9	- 6	+ 1	+10	+23	+32	+34	863			

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Declination

(D = 10° + Mean + ... East)

G.M.T. Unit = 0.1 minute of arc January 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+22	+31	+37	+32	+21	+12	+10	+ 9	+ 4	+ 2	- 1	- 5	- 7	- 7	-10	-15	- 9	- 9	-19	-29	-24	-20	-18	- 8	574			
2	+ 4	+13	+20	+17	+10	+ 4	+ 7	+11	+ 7	+ 5	+ 3	+ 2	- 5	- 5	- 4	- 6	- 6	-17	-27	-33	-28	-14	-10	-25	572			
3	+28	+26	+20	+13	+ 8	+ 7	+ 8	+ 8	+ 5	+ 1	- 1	- 4	- 6	- 7	- 7	- 7	- 9	-20	-30	-30	-23	-12	+10	+25	575			
4	+36	+41	+35	+25	+14	+10	+11	+10	+ 4	- 3	- 6	- 6	- 6	- 6	- 7	- 7	- 7	-15	-26	-37	-36	-27	- 6	+20	572			
+5	+32	+33	+25	+16	+ 6	+ 4	+ 6	+ 6	+ 6	+ 5	+ 4	+ 2	- 2	- 3	- 3	- 4	- 6	-19	-34	-34	-28	-19	- 5	+12	570			
6	+24	+28	+33	+28	+16	+ 6	+10	+ 5	+ 5	+ 3	+ 3	- 1	- 3	- 4	- 4	- 6	- 8	-25	-36	-25	-19	-15	- 5	+ 2	572			
7	+ 5	+ 6	+14	+15	+13	+ 4	+ 3	+ 3	+ 2	+ 2	+ 1	+ 1	+ 1	- 1	- 4	- 4	- 6	-22	-26	-16	- 9	+ 3	+10	+17	572			
8	+ 9	+ 9	+24	+24	+14	+ 7	+5	+ 3	+ 4	+ 4	+ 3	+ 3	+ 3	0	- 2	- 3	- 7	-22	-28	-34	-30	- 8	+ 7	+17	570			
9	+18	0	-13	- 2	+ 8	+ 5	+ 5	+ 3	0	+ 4	+ 6	+ 5	+ 1	- 4	- 4	- 2	- 4	-24	-32	-21	- 8	+15	+26	+20	567			
10	+11	+10	+14	+14	+10	+ 9	+ 8	+ 8	+ 8	+ 8	+ 4	+ 3	+ 1	0	0	- 2	- 6	-21	-27	-20	-19	-12	+ 1	+ 6	565			
11	+ 9	+ 4	+ 1	+ 4	+ 2	0	+ 8	+ 9	+ 8	+ 6	+ 3	+ 1	- 1	0	- 2	- 2	- 4	-24	-31	-21	-15	0	+16	+24	567			
12	+20	+15	+14	+15	+16	+13	+ 6	+ 5	+ 4	+ 2	- 1	- 3	- 3	- 2	- 4	- 4	- 5	-15	-25	-30	-24	- 5	+ 5	+ 8	570			
13	+ 7	- 2	- 2	- 1	0	+ 3	+ 8	+ 9	+ 8	+ 7	+ 4	+ 4	+ 3	+ 2	+ 2	0	- 2	-20	-24	-15	- 2	+ 2	+ 6	+ 8	567			
+ 14	+ 5	+15	+16	+16	+13	+10	+ 8	+ 8	+ 5	+ 5	+ 4	+ 2	+ 2	+ 2	+ 1	- 2	- 4	-16	-33	-37	-35	- 6	+18	+ 8	570			
+ 15	+ 1	- 8	- 9	- 9	- 5	+ 6	+14	+16	+15	+14	+13	+10	+ 5	+ 4	+ 2	0	- 3	-16	-25	-26	-16	- 6	+ 5	+17	561			
16	+ 8	+12	+13	+12	+ 7	+ 6	+ 9	+ 8	+ 5	+ 3	- 1	- 5	- 9	-12	-11	- 7	- 2	- 4	-15	-24	-23	-11	+15	+29	570			
17	+34	+31	+20	+16	+12	+17	+21	+14	+ 8	+ 4	0	0	- 6	- 5	- 6	-14	- 9	-10	-26	-45	-40	-22	- 1	+15	571			
18	+21	+33	+34	+31	+22	+15	+14	+11	+ 6	+ 4	0	- 3	- 7	- 7	- 6	- 7	- 7	-16	-31	-42	-44	-29	- 8	+12	572			
19	+22	+22	+19	+15	+12	+13	+13	+13	+ 7	+ 3	0	- 1	- 4	0	0	0	+ 2	- 2	-17	-28	-34	-28	-18	- 8	573			
20	+11	+28	+32	+26	+17	+10	+ 5	+ 5	+ 4	+ 2	+ 1	0	- 3	- 5	- 2	+ 1	- 1	- 8	-19	-36	-36	-22	-10	+ 1	573			
+21	+ 1	+ 2	+12	+11	+16	+15	+11	+10	+ 8	+ 3	+ 1	- 1	- 3	- 4	- 5	- 6	- 7	- 9	-17	-22	-20	-14	- 4	+10	574			
22	+17	+15	+14	+13	+11	+ 4	+ 5	+ 7	+ 5	+ 3	+ 2	+ 1	- 1	- 4	- 5	- 7	- 8	-17	-25	-23	-14	+ 2	+ 4	+ 3	573			
23	+ 1	+ 2	+ 7	+ 6	+ 4	+ 6	+12	+12	+10	+ 2	0	- 6	- 8	- 7	- 7	- 8	- 8	-17	-26	-18	- 8	+13	+19	+20	573			
24	+21	+22	+15	+12	+13	+ 4	+ 4	+ 2	+ 4	- 2	- 2	- 4	- 6	- 5	- 6	- 8	-11	-26	-26	-21	- 7	- 5	+ 7	+15	571			
25	+19	+ 6	+ 3	+ 7	+ 8	+ 8	+11	+ 9	+ 7	+ 6	+ 3	+ 2	+ 2	+ 2	+ 2	- 2	- 3	-24	-41	-38	-23	- 3	+13	+26	569			
26	+30	+31	+28	+20	+ 8	+ 1	+ 1	+ 1	+ 1	- 1	- 1	- 4	- 3	- 1	- 2	- 6	- 8	-30	-40	-40	-27	- 8	+15	+33	575			
27	+36	+19	+ 3	- 3	- 5	+ 3	+ 6	+ 3	+ 3	+ 2	- 4	- 4	0	+ 2	0	- 4	- 7	-23	-35	-37	-23	+ 3	+21	+34	572			
28	+39	+42	+38	+23	+ 6	+ 2	+ 4	+ 4	+ 4	0	- 1	+ 1	+ 1	- 2	- 6	- 7	-11	-30	-47	-46	-28	- 7	+11	+13	573			
29	+15	+11	+ 8	+ 5	0	+ 2	+ 7	+ 8	+ 6	+ 5	+ 3	+ 3	+ 2	0	0	- 1	- 3	-10	-22	-27	-28	-15	+ 8	+25	570			
30	+20	+20	+22	+17	+ 2	- 7	+ 4	+ 7	+ 6	+ 3	+ 1	- 2	- 6	- 4	- 5	- 4	- 8	-18	-29	-29	-18	- 5	- 5	-17	573			
+31	+25	+23	+17	+ 9	+ 5	+ 4	+ 8	+ 7	+ 5	+ 5	+ 4	+ 3	- 1	- 2	- 1	- 1	- 3	-10	-25	-35	-34	-21	- 5	+17	570			
MEAN.	+18	+17	+17	+14	+ 9	+ 7	+ 8	+ 8	+ 6	+ 3	+ 1	0	- 2	- 3	- 3	- 5	- 6	-17	-28	-30	-23	-10	+ 5	+15	571			

(200/1/39—17185

Declination

(D = 10° + Mean ...East)

G. M. T. Unit = 0.1 minute of arc February 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
+ 1	+27	+33	+30	+20	+ 8	0	+ 3	+ 5	0	0	- 2	- 1	0	- 3	- 3	- 3	- 3	- 9	-27	-40	-40	-21	+ 2	+19	575			
2	+24	+23	+13	+ 3	+ 3	+ 5	+ 8	+ 5	+ 6	- 1	- 3	0	+ 1	+ 2	+ 2	+ 2	+ 2	- 7	-24	-29	-25	-16	- 6	+10	572			
3	+25	+32	+35	+33	+15	+ 5	+ 7	+ 5	- 2	-13	- 7	- 4	- 3	- 2	+ 1	+ 4	+ 2	-12	-30	-43	-35	-23	- 3	+ 6	570			
4	+14	+20	+18	+10	+ 2	- 6	+ 2	+ 3	+ 2	0	- 4	+ 1	+ 2	+ 2	+ 3	+ 4	+ 3	- 5	-19	-29	-27	-13	+ 2	+13	573			
5	+18	+23	+21	+14	+ 5	+ 2	+ 4	+ 4	+ 4	0	- 2	- 1	- 1	+ 1	+ 4	+ 4	+ 1	-15	-27	-36	-25	-14	+ 4	+18	571			
6	+19	+15	+ 7	- 4	- 6	- 4	+ 2	+ 5	+ 3	- 3	- 5	- 1	+ 5	+ 5	+ 5	+ 4	+ 4	-13	-31	-33	-24	- 5	+22	+35	570			
7	+32	+31	+30	+22	+11	+ 1	+ 1	- 2	- 6	- 7	- 1	- 1	0	+ 1	0	- 5	-10	-19	-29	-30	-21	-11	0	+10	574			
8	+15	+16	+11	+ 5	- 2	- 5	+ 4	+ 3	+ 5	+ 3	- 3	- 5	- 2	- 1	- 1	+ 5	- 3	-17	-35	-35	-23	+ 5	+25	+35	570			
9	+34	+39	+42	+28	+12	+ 3	+ 3	+ 5	+ 3	+ 2	+ 2	+ 1	- 1	- 1	+ 1	+ 1	- 5	-18	-32	-40	-37	-24	-11	- 7	573			
10	+ 8	+13	+15	+13	+13	+ 9	+ 9	+ 9	+ 5	+ 5	+ 6	+ 4	+ 2	+ 2	+ 1	+ 4	0	-11	-28	-35	-29	-17	- 5	- 1	567			
+11	- 1	- 1	+ 4	+ 8	+ 8	+ 7	+ 8	+ 8	+ 7	+ 6	+ 6	+ 6	+ 6	+ 6	+ 6	+ 2	+ 1	-14	-30	-35	-28	-10	+10	+26	567			
+12	+28	+25	+22	+15	+ 6	+ 5	+ 9	+12	+10	+ 4	+ 3	+ 4	+ 2	0	- 1	- 2	- 4	-16	-35	-44	-30	- 8	- 2	+ 5	570			
13	+ 8	+ 4	+ 1	+16	+19	+21	+28	+24	+17	+ 7	+ 5	0	- 3	- 1	- 5	- 7	-10	-14	-32	-34	-33	-21	0	+18	568			
14	+29	+33	+32	+30	+22	+16	+12	+12	+10	+ 4	- 4	- 8	- 5	- 5	- 5	- 6	- 5	-15	-29	-39	-39	-27	- 8	+ 6	573			
15	+14	+23	+23	+22	+21	+14	+18	+13	+ 7	+ 1	- 9	- 8	- 8	- 8	- 7	- 3	- 2	- 8	-19	-21	-25	-21	-13	- 1	574			
16	+23	+32	+33	+23	+16	+11	+11	+ 9	+ 5	+ 2	- 1	- 2	- 4	- 3	- 1	- 1	- 1	- 8	-27	-48	-48	-30	- 9	+ 9	573			
17	+18	+22	+21	+19	+10	+ 9	+ 5	+ 2	0	- 1	- 6	- 7	- 4	- 4	- 2	- 1	- 2	- 8	-13	-20	-21	-18	- 4	+ 9	575			
+18	+19	+20	+15	+15	+21	+15	+11	+ 8	+ 5	+ 2	+ 2	- 1	- 6	- 4	- 5	- 1	+ 2	- 7	-23	-38	-36	-21	- 7	+ 9	573			
19	+11	+14	+13	+11	+ 5	+ 3	+ 8	+ 4	+ 4	+ 1	0	- 2	- 1	0	0	- 1	+ 1	- 1	-15	-29	-31	-19	+ 1	+17	574			
20	+23	+26	+21	+14	+11	+11	+11	+10	+ 6	+ 4	+ 1	0	- 1	- 1	- 1	- 1	- 1	- 8	-29	-45	-39	-22	- 1	+18	574			
21	+22	+28	+28	+22	+17	+15	+10	+ 7	+ 5	- 1	- 5	- 4	- 3	- 3	- 3	- 3	- 7	-10	-23	-41	-38	-21	- 1	+ 6	578			
22	+13	+ 6	+ 2	+ 2	+ 9	+10	+11	+10	+ 5	+ 3	- 1	- 2	- 3	- 2	0	+ 1	0	- 6	-20	-21	-15	- 8	+ 4	+13	572			
23	+22	+28	+23	+14	+10	+10	+ 8	+ 4	+ 1	0	- 4	- 2	- 1	+ 1	+ 1	+ 1	+ 1	- 8	-20	-27	-28	-26	-14	+ 1	574			
24	+18	+19	+12	+11	+12	+10	+10	+ 7	+ 3	+ 1	0	- 3	- 4	- 2	- 1	0	0	- 8	-25	-24	-24	-18	- 7	+ 3	575			
25	+17	+17	+16	+12	+ 3	+10	+ 7	+ 7	+ 4	0	- 7	- 8	-10	- 8	- 2	+ 2	+ 2	- 6	-20	-26	-27	-12	+11	+23	573			
26	+29	+29	+29	+19	+ 9	+ 9	+12	+11	+ 6	- 3	-12	-10	- 9	- 3	- 1	0	- 1	- 8	-23	-37	-26	-15	- 2	+ 9	576			
+27	+26	+26	+20	+13	+ 7	+ 6	+ 8	+ 8	+ 6	+ 4	- 3	+ 1	- 1	0	+ 3	+ 6	+ 5	- 1	-11	-24	-32	-32	-23	- 6	569			
28	+10	+12	+ 9	+ 9	+ 6	+ 5	+13	+13	+12	+ 5	+ 2	- 1	- 1	+ 2	+ 3	+ 4	+ 5	+ 2	-11	-28	-31	-27	-12	+ 2	573			
29																												
30																												
31																												
MEAN.	+19	+22	+19	+15	+10	+ 7	+ 9	+ 7	+ 5	+ 1	- 2	- 2	- 2	- 1	0	0	- 1	-10	-25	-33	-30	-18	- 2	+11	572			

Declination

(D = 10° + Mean+....East)

G.M.T. Unit = 0.1 minute of arc MARCH 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+27	+26	+26	+22	+34	+48	+48	+40	+18	- 2	-12	-17	-13	-53	-103	-64	-17	+ 2	+ 3	-17	- 7	- 1	+ 2	+19	557			
2																												
3	+17	+14	+14	+ 7	+ 2	+ 1	+ 7	+ 9	+ 7	+ 6	+ 3	- 3	- 2	- 1	- 1	+ 4	+ 4	- 2	-16	-24	-23	-19	-13	- 2	568			
4	+ 8	+ 8	+11	+ 5	0	- 1	+ 1	- 1	+ 3	+ 1	- 4	- 3	- 3	- 2	+ 1	- 1	+ 3	+ 4	- 3	- 6	- 8	- 8	- 5	+ 5	571			
5	+16	+18	+13	+ 5	- 4	+ 1	+ 1	+ 8	+ 7	+ 7	+ 5	- 4	- 9	- 5	- 3	- 5	- 4	- 6	-18	-13	-14	-11	- 3	+13	569			
6	+13	+17	+17	+10	+ 7	+ 7	- 2	- 6	- 3	- 3	- 9	- 8	- 4	- 3	- 2	+ 1	+ 6	+ 7	0	-13	-23	-13	- 3	+ 7	578			
7	+17	+17	+19	+13	+ 8	+ 4	+ 8	+ 5	+ 1	- 1	- 3	- 1	- 1	0	0	0	+ 1	- 1	- 8	-17	-22	-22	-18	- 5	576			
8																												
9	+28	+25	+19	+12	+ 8	+ 3	+ 2	+ 1	+ 1	- 1	- 1	- 1	- 1	- 1	+ 1	+ 1	+ 1	- 2	-12	-26	-29	-21	- 9	+ 6	576			
+10	+10	+16	+17	+13	+10	+ 7	+ 7	+ 7	+ 4	+ 2	+ 1	0	+ 1	+ 1	+ 2	+ 2	+ 3	+ 2	- 6	-23	-30	-29	-17	- 5	575			
11	+12	+16	+15	+13	+11	+ 6	+ 5	+ 5	+ 4	+ 1	0	- 1	- 1	- 1	+ 2	+ 3	+ 5	+ 3	-11	-27	-28	-27	-17	+ 1	572			
12																												
13	+25	+27	+21	+16	+ 5	+ 8	+10	+ 8	+ 3	0	0	- 2	- 2	- 1	0	- 1	+ 4	0	- 8	-18	-28	-30	-20	- 6	577			
14																												
15	+13	+16	+14	+14	+11	+10	+11	+11	+ 2	+ 1	+ 1	+ 1	- 4	- 2	0	0	0	- 4	-11	-22	-26	-20	-11	+ 2	574			
+16	+12	+17	+16	+10	+ 3	+ 6	+ 9	+ 8	+ 4	0	- 1	- 1	0	0	0	+ 1	+ 1	- 1	-11	-21	-22	-20	-11	+ 2	576			
+17	+13	+22	+22	+15	+ 3	0	+ 6	+ 4	+ 1	0	0	0	- 1	- 1	- 1	0	+ 1	+ 1	- 2	-12	-18	-18	-17	- 7	575			
18	+10	+21	+26	+19	+ 9	+ 6	+ 7	+ 5	+ 3	- 1	- 2	- 2	- 3	- 2	- 2	- 2	0	0	- 7	-17	-22	-22	-14	- 7	577			
19	+ 9	+16	+21	+17	+12	+12	+14	+11	+ 7	+ 4	+ 2	0	- 7	-11	- 8	- 2	- 4	- 8	-14	-25	-27	-20	- 9	+ 1	573			
20	+13	+20	+18	+18	+10	+10	+ 8	+ 5	0	- 3	- 6	- 9	- 6	- 2	- 2	- 4	- 4	- 3	- 7	-13	-13	-13	- 8	- 2	577			
21	+13	+23	+30	+23	+17	+11	+ 4	+ 1	+ 1	0	- 6	- 6	- 3	- 2	- 1	- 1	+ 1	+ 1	-16	-22	-21	-20	-16	- 1	574			
22	+14	+21	+17	+11	+ 9	+ 4	+ 3	+ 2	+ 2	- 2	- 6	- 2	0	- 1	- 1	+ 1	+ 2	0	-14	-20	-23	-17	- 9	- 2	574			
23	+10	+18	+12	+11	+ 8	+ 8	+ 9	+ 7	+ 4	+ 1	0	- 2	- 2	- 2	- 2	- 2	- 3	- 5	-10	-19	-21	-15	- 4	+ 6	577			
24	+12	+17	+13	+ 6	+ 1	+ 7	+ 8	+ 6	+ 1	0	0	- 1	- 1	0	+ 1	+ 1	+ 3	+ 3	- 7	-19	-21	-19	-11	- 1	576			
25	+12	+16	+11	+ 4	0	+ 3	+ 6	+ 4	+ 1	- 1	0	+ 1	+ 1	+ 1	+ 2	+ 3	+ 2	- 1	-11	-19	-17	-10	- 4	+ 8	574			
+26	+12	+15	+11	+ 9	+ 9	+ 9	+ 6	+ 5	+ 3	+ 1	0	- 1	0	- 1	- 1	- 1	- 1	- 1	- 5	-17	-20	-14	- 6	- 2	576			
+27	+ 2	+ 4	+ 4	+ 3	+ 5	+ 8	+ 9	+ 7	+ 5	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	+ 3	+ 5	+ 2	- 4	-10	-14	-18	-13	- 8	576			
28	+ 1	+ 8	+ 8	+ 5	+ 6	+ 8	+10	+ 5	+ 5	-15	-13	-11	- 3	- 3	- 2	+ 8	+ 7	+11	- 2	- 8	-12	- 8	- 1	+ 6	577			
29	+ 7	+13	+12	+ 5	+ 3	+ 4	+ 3	+ 1	- 1	- 5	- 4	- 4	- 3	0	+ 2	+ 2	+ 8	+ 5	- 1	-17	-21	-16	- 4	+ 6	580			
30	+14	+21	+17	+ 6	+ 1	- 3	- 1	- 8	-16	-13	-12	- 4	- 5	- 4	+ 4	+ 3	+ 7	+16	- 1	+ 5	-10	-11	- 6	- 8	579			
31	+ 4	+ 7	+ 6	- 4	+ 1	- 2	+ 1	0	- 5	-12	- 6	- 7	- 1	+ 4	+ 4	+ 6	+ 8	+ 8	+ 4	- 8	-14	-10	+ 3	+ 9	570			
MEAN.	+13	+17	+16	+11	+ 7	+ 7	+ 8	+ 6	+ 2	- 1	- 3	- 3	- 3	- 3	- 4	- 2	+ 1	+ 1	- 7	-17	-20	-17	- 9	+ 1	574			

Declination

(D = 10° + Mean + .. East)

G.M.T. Unit = 0.1 minute of arc April 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+ 8	+12	+16	+ 9	+ 2	+ 1	+ 3	+ 1	+ 1	+ 1	+ 1	+ 1	- 1	- 1	0	+ 1	+ 2	+ 1	- 7	-12	-16	-13	-10	- 4	576			
2	0	0	- 2	- 7	- 5	- 1	+ 1	- 3	- 3	- 2	0	+ 1	+ 2	+ 1	+ 3	+ 1	+ 2	+ 2	- 7	- 6	- 1	+ 7	+ 9	+ 7	575			
3	+ 3	+ 6	+ 7	+ 3	+ 1	- 3	- 1	- 2	- 2	- 3	- 3	0	+ 1	- 1	- 1	+ 3	+ 4	+ 5	- 2	- 4	- 3	- 1	+ 1	0	578			
4	+ 3	+ 7	+ 4	+ 2	+ 4	+ 5	+ 6	+ 1	+ 2	- 2	- 2	- 2	- 2	- 2	- 1	0	+ 2	0	- 4	-10	- 9	- 5	0	+ 2	579			
5	0	+ 3	+ 4	+ 4	+ 4	+ 3	+ 1	+ 1	- 1	- 2	- 1	- 1	- 2	- 3	0	+ 2	+ 3	+ 3	+ 1	- 6	-11	- 6	+ 2	+ 5	581			
6	+ 8	+ 1	- 5	- 7	- 3	- 2	- 2	- 2	0	+ 1	+ 2	+ 2	+ 5	+ 5	+ 8	+ 8	+ 8	+ 6	0	- 7	-12	-12	- 8	- 5	578			
7																												
8																												
9	-18	-14	- 2	+ 7	+12	+10	+ 5	+ 2	- 1	- 4	- 4	- 2	- 1	- 1	+ 1	+ 1	0	0	- 1	- 8	- 7	+ 2	+10	+14	584			
10	+15	+14	+13	+12	+10	+ 7	+ 5	- 5	- 5	- 4	- 3	- 2	- 1	0	+ 2	- 1	+ 2	+ 2	+ 1	- 8	-16	-18	-14	- 6	584			
11	+ 5	+14	+13	+ 8	+ 7	+ 7	+ 4	- 6	- 3	- 6	- 4	- 3	- 3	- 3	+ 1	+ 2	+ 4	+ 4	- 1	-12	-14	-13	- 4	+ 3	582			
12	- 3	+ 2	+ 7	+ 2	+ 2	0	+ 2	+ 4	+ 2	+ 1	0	- 3	- 3	0	0	0	+ 1	0	- 1	- 9	- 9	- 3	+ 7	+10	584			
13																												
+14	+ 8	+11	+ 9	+ 6	+ 4	+ 5	+ 6	+ 4	+ 1	- 1	- 1	- 1	- 2	- 3	- 2	+ 1	+ 1	+ 3	- 4	-14	-16	-10	- 4	+ 3	580			
15	+ 8	+ 6	+ 6	+ 5	+ 2	+ 6	+ 6	+ 5	+ 2	0	0	0	+ 1	+ 4	+ 1	+ 1	0	+ 4	+ 1	- 8	-13	-14	-11	- 4	578			
16	+ 6	+ 1	+ 2	+ 7	+ 7	+10	+ 7	+ 6	+ 5	+ 5	+ 1	- 4	- 4	- 2	- 1	+ 1	+ 1	+ 6	+ 5	- 8	-13	-15	-12	- 5	579			
17	-10	-13	- 5	+ 4	+ 6	+ 5	+ 5	+ 3	+ 3	+ 2	- 1	- 1	- 4	- 2	- 2	+ 3	+ 3	+ 6	+ 7	+ 2	- 6	-11	- 3	+11	581			
18																												
19	+12	+11	+12	+14	+15	+ 4	+ 3	- 5	-16	-11	-10	-11	- 6	- 7	- 4	+ 1	+ 1	- 1	+ 2	- 6	- 8	- 6	+ 2	+11	583			
20	+13	+10	+12	+13	+11	+ 3	+ 3	- 4	- 6	- 4	- 5	- 4	- 4	- 4	- 3	- 1	+ 1	+ 3	+ 2	- 8	-10	-11	- 7	- 7	584			
21																												
+22	- 3	+ 3	+ 7	+10	+ 8	+ 6	+ 6	+ 4	0	- 2	- 2	- 2	- 3	0	+ 3	+ 3	+ 4	+ 6	+ 6	- 6	-13	-15	-12	- 5	581			
+23																												
24	- 3	- 3	+ 4	+ 6	+ 8	+ 7	+ 7	+ 4	+ 2	-13	-13	- 4	0	0	+ 5	+ 3	+12	+22	+17	- 1	- 9	-19	-17	-13	580			
25	- 3	- 5	+ 1	+ 2	+ 1	- 8	- 7	0	- 3	- 8	- 8	- 2	+ 1	+ 3	+10	+11	+11	+14	+11	- 3	- 8	- 8	- 3	+ 4	576			
26	+ 2	+ 1	+ 7	+10	+ 4	+ 4	+ 3	0	- 4	-10	- 3	0	+ 1	+ 2	+ 7	+ 8	+ 9	+10	+ 3	- 7	-14	-14	-10	- 4	578			
+27	- 8	- 4	+ 7	+13	+ 9	+ 6	+ 4	0	- 2	- 3	- 3	- 3	- 2	- 1	+ 1	+ 4	+ 4	+ 6	+ 7	- 3	-10	-12	- 4	- 1	581			
28	+ 6	+ 7	+10	+13	+13	+10	+ 9	+ 5	+ 2	0	- 6	- 8	- 5	- 3	0	0	0	+ 6	+ 7	- 1	-10	-16	-14	-17	578			
29	-20	-23	-10	0	+10	+10	+ 7	0	0	0	0	0	+ 1	0	0	+ 1	+ 2	+ 3	+ 7	+ 3	- 3	- 1	+ 3	+ 3	578			
+30	- 2	- 3	+ 5	+ 8	+ 9	+ 7	+ 3	0	- 1	0	- 2	- 2	- 1	- 1	0	+ 1	+ 3	+ 2	0	- 4	-11	-11	- 4	- 2	581			
31																												
MEAN.	+ 1	+ 2	+ 5	+ 6	+ 6	+ 4	+ 4	0	- 1	- 3	- 3	- 2	- 1	- 1	+ 1	+ 2	+ 3	+ 5	+ 2	- 6	-10	- 9	- 4	0	580			

Declination

(D = 10° + Mean + ...East)

G.M.T. Unit = 0.1 minute of arc May 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+ 3	+12	+13	+14	+12	+ 5	+ 3	+ 2	0	0	+ 2	+ 1	+ 1	+ 2	+ 2	+ 2	+ 3	+ 3	+ 3	- 8	-17	-17	-17	-17	585			
+ 2	-10	- 6	+ 4	+12	+ 6	+ 5	+ 4	- 3	- 4	- 4	+ 1	+ 2	+ 2	+ 5	+ 6	+ 5	+ 5	+ 5	+ 4	- 6	-15	-14	- 9	- 7	583			
+ 3	- 9	+ 1	+10	+12	+11	+ 2	+ 1	0	- 2	- 4	- 3	0	0	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	0	- 9	- 9	- 8	0	587			
4	+ 1	+ 3	+10	+12	+11	+ 9	0	- 9	- 9	- 7	-11	- 9	- 1	+ 1	+ 3	+ 3	+ 1	+ 1	+ 1	- 9	- 9	0	+ 2	+11	587			
+ 5	+ 9	+17	+19	+19	+13	+ 8	- 1	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 1	- 2	- 1	- 1	- 2	-10	-19	-21	-12	- 3	590			
6	+ 7	+ 6	+ 7	+ 8	+ 8	+ 7	+ 6	+ 5	+ 5	+ 2	- 1	- 2	- 3	- 2	+ 4	+ 5	+ 5	+ 5	+ 5	- 5	-15	-19	-16	-15	583			
7	- 7	- 3	+ 6	+16	+15	+ 6	+ 6	+ 5	+ 1	- 2	- 3	- 3	- 3	- 2	+ 1	+ 5	+ 6	+ 6	+ 7	+ 1	-11	-14	-14	-13	582			
8	-11	- 7	+ 2	+ 9	+11	+ 7	+ 4	+ 2	+ 2	0	- 7	- 8	- 8	+ 1	+ 2	+ 2	+ 2	+ 2	+ 6	+ 2	- 1	- 7	- 8	- 8	586			
9	- 6	+ 4	+14	+19	+14	+ 4	- 1	- 2	- 5	- 6	- 6	- 6	- 6	0	+ 1	+ 4	+ 4	+ 6	+ 7	+ 4	- 6	-16	-16	-16	584			
10	-15	- 5	+ 6	+10	+ 6	+ 5	+ 5	+ 4	- 4	- 5	- 4	- 4	- 4	- 2	+ 1	+ 5	+ 5	+ 5	+ 6	+ 5	+ 2	- 5	-10	-15	583			
11	-14	- 5	+ 5	+10	+ 5	+ 5	+ 4	+ 2	0	- 2	- 4	- 4	- 5	- 1	+ 2	+ 5	+ 5	+ 5	+12	+ 8	0	- 6	-10	- 5	583			
12	- 6	+ 3	+13	+13	+ 4	+ 3	+ 3	+ 2	- 2	- 2	- 4	- 4	- 2	- 2	0	+ 3	+ 3	+ 3	+10	+ 4	+ 2	- 7	-12	-16	585			
13	- 5	+ 3	+10	+ 5	+ 5	+ 5	+ 4	- 1	+ 2	+ 2	- 4	- 4	- 5	- 4	+ 2	+ 5	+ 5	+ 4	+ 8	+ 5	- 3	- 6	-13	-13	583			
14	- 5	+ 6	+15	+12	+ 6	+ 6	+ 5	+ 3	0	- 1	- 1	- 3	- 1	- 1	- 1	0	+ 4	+ 6	+ 6	- 4	-14	-18	-21	- 8	582			
15	+ 3	+ 9	+ 9	+ 6	+ 3	+ 3	+ 2	- 2	- 4	- 6	- 6	- 7	0	+ 2	+ 3	+ 3	+ 3	+ 3	+ 8	+ 7	- 4	-10	-17	-17	585			
16	- 8	+ 4	+17	+18	+12	+ 6	+ 3	+ 2	- 3	- 5	- 6	- 8	- 8	- 2	+ 2	+ 3	+ 4	+ 5	+12	+10	- 6	-17	-19	-18	586			
17	- 7	+ 4	+13	+16	+13	+ 3	+ 4	+ 3	- 4	- 7	- 7	- 7	- 7	- 7	+ 3	+ 3	+ 4	+12	+ 3	+ 2	- 7	- 8	-16		585			
18	- 9	+ 3	+12	+12	+ 3	+ 3	+ 2	+ 1	- 1	- 1	- 2	- 5	- 7	- 5	- 3	+ 2	+ 2	+ 5	+11	+ 3	- 1	- 7	- 9	-17	586			
+ 19	-12	- 5	+ 6	+14	+12	+ 5	+ 5	+ 5	+ 2	- 3	- 4	- 4	- 2	- 2	0	+ 4	+ 5	+ 5	+ 9	+ 5	- 5	-15	-16	-16	583			
+ 20	-15	- 6	+ 4	+ 7	+ 4	+ 4	+ 4	+ 3	+ 1	0	- 2	- 2	0	+ 3	+ 4	+ 4	+ 6	+11	+14	+ 4	- 3	-12	-16	-18	584			
21	-16	0	+11	+13	+ 8	+ 2	+ 1	- 3	- 8	- 9	- 8	- 7	- 5	0	+ 1	+10	+11	+18	+22	+14	+1	-12	-19	-19	587			
22	-10	- 5	+14	+14	+ 5	+ 4	+ 4	+ 2	- 5	- 8	-10	- 5	- 6	- 4	+ 5	+ 5	+ 8	+ 9	+14	+ 5	- 4	- 6	-15	-15	583			
23	- 9	- 3	+ 6	+11	+ 6	+ 5	- 4	- 4	- 4	- 4	- 4	- 4	+ 6	+ 6	+ 6	+ 9	+10	+16	+16	+ 6	- 3	-14	-23	-24	582			
24	-15	0	+ 6	+15	+ 5	- 4	- 5	- 5	- 5	- 5	- 5	- 5	- 4	+ 2	+ 5	+10	+14	+15	+ 7	+ 4	- 5	- 6	- 5		583			
25	- 5	- 2	+ 4	+ 3	+ 2	- 6	+ 2	- 2	- 7	- 7	- 3	0	0	- 2	+ 3	+ 7	+13	+13	+13	+10	+ 3	- 7	-16	-17	585			
26	- 6	+ 3	+14	+14	+ 5	+ 4	+ 3	- 1	- 1	- 1	- 3	- 4	- 5	+ 3	+ 4	+ 4	+ 5	+ 6	+ 5	+ 3	- 6	-14	-16	-16	584			
27	+ 1	+20	+21	+11	+ 1	+ 1	0	- 3	- 2	- 3	- 2	0	0	+ 1	+ 1	+ 2	+ 2	+ 6	+10	+ 2	- 6	-16	-23	-28	587			
28	-14	- 4	+ 5	+ 4	- 4	- 1	0	+ 3	- 1	- 3	- 3	- 3	- 2	+ 5	+ 6	+ 8	+15	+16	+16	+15	- 1	-13	-17	-18	582			
29	-12	+ 3	+ 6	+ 5	- 5	+ 1	+ 4	- 3	- 5	- 5	- 4	- 4	+ 3	+ 3	+ 4	+ 5	+14	+15	+15	+ 8	- 5	-13	-17	-18	583			
30	-12	- 3	+ 8	+10	+10	+ 9	+ 1	0	0	- 1	- 9	- 7	- 7	0	0	0	+ 5	+10	+10	+ 8	- 1	-10	-10	-10	588			
31	0	+ 2	+11	+ 9	+ 2	+ 2	+ 1	0	- 1	- 2	- 1	- 1	+ 1	+ 2	+ 3	+ 5	+11	+11	+12	+ 2	- 9	-20	-28	-18	586			
MEAN.	- 7	+ 2	+10	+11	+ 7	+ 4	+ 2	0	- 2	- 3	- 4	- 4	- 3	0	+ 2	+ 4	+ 6	+ 7	+ 9	+ 3	- 5	-11	-14	-13	585			

200/1/41—14357]

Declination

(D = 10° + Mean + ...East)

Unit = 0.1 minute of arc

G M T

June 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	- 9	+ 2	+11	+11	+ 3	+ 1	+ 1	- 2	- 5	- 2	- 2	0	0	+ 1	+ 2	+ 3	+ 5	+ 7	+11	+ 5	- 7	-17	-20	-10	587			
+ 2	+ 1	+10	+10	+10	+ 9	+ 1	0	- 1	- 1	- 1	- 1	- 1	- 1	- 1	0	0	0	+ 3	+ 9	+ 5	- 1	-10	-13	-18	588			
+ 3	-19	- 5	+ 7	+10	+ 2	+ 1	+ 1	+ 1	0	0	0	- 4	- 1	0	0	+ 1	+ 2	+ 3	+11	+11	+ 2	- 4	- 9	-10	587			
+ 4	- 9	0	+10	+10	+ 3	0	0	0	0	- 1	0	0	+ 1	+ 1	+ 3	+ 7	+ 9	+10	+10	+ 3	-10	-20	-20	-10	588			
+ 5	+ 1	+ 9	+11	+10	+ 1	+ 1	+ 1	+ 1	0	0	0	0	+ 1	+ 1	+ 2	+ 4	+ 6	+ 6	+11	+ 5	0	-14	-22	-30	587			
6	-13	+10	+18	+16	+ 7	- 1	- 2	- 2	- 3	- 2	- 2	- 3	- 3	- 2	- 1	+ 4	+ 6	+ 3	+ 8	+ 3	- 2	-12	-13	-12	589			
7	- 3	- 2	+ 8	+ 8	+ 7	- 1	- 2	- 2	- 2	- 2	- 3	- 3	- 3	- 2	- 2	- 1	- 1	+ 5	+ 8	+ 8	- 1	- 4	- 3	- 3	589			
8	- 3	+ 6	+16	+16	+ 8	+ 5	- 1	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 2	- 2	+ 5	+ 6	+ 7	+ 2	- 5	-13	-14	-13	590			
9	- 6	+ 2	+10	+ 8	+ 7	- 1	- 3	- 3	- 3	- 4	-11	-13	- 5	- 4	- 3	+ 4	+ 5	+ 7	+11	+ 9	+ 7	- 3	- 3	- 8	590			
10	- 8	- 4	+ 3	+ 7	+ 6	+ 6	+ 5	+ 3	- 3	- 7	- 4	- 5	- 5	- 3	-13	- 2	+ 7	+16	+17	+12	0	- 8	-13	-14	590			
11	-10	- 3	+ 6	+ 6	+ 3	- 2	- 3	- 3	- 3	- 3	- 3	- 3	- 2	- 1	+ 4	+ 6	+ 6	+ 7	+ 8	+ 6	- 3	- 4	- 5	- 4	590			
12	- 3	+ 7	+17	+17	+10	+ 6	+ 4	0	- 3	- 2	- 3	- 3	- 3	- 3	- 2	0	+ 6	+ 6	+ 8	+ 6	- 3	-12	-19	-22	590			
13	-11	0	+10	+13	+ 9	0	0	-10	-10	- 1	- 8	0	- 1	- 1	0	+ 1	+ 9	+10	+17	+10	0	- 8	-16	-17	587			
14	- 7	+ 1	+ 3	+ 5	+ 1	- 5	- 8	- 7	- 8	- 3	0	+ 1	+ 2	+ 2	+ 2	+ 2	+ 4	+ 4	+12	+12	+ 3	- 4	- 8	- 7	585			
15	- 1	+ 5	+ 8	+ 5	+ 7	- 6	- 7	- 7	- 8	-16	-12	- 9	- 6	+ 2	+ 5	+13	+15	+15	+13	+ 8	+ 3	- 4	- 7	- 5	584			
+16	- 4	+ 6	+ 6	+ 7	+ 6	+ 4	- 2	- 2	- 3	- 3	- 4	- 2	- 2	- 1	+ 1	+ 3	+ 5	+ 5	+ 6	- 1	- 4	-11	-11	- 1	590			
17	+ 7	+ 8	+10	+ 6	- 2	- 4	- 4	- 5	- 5	- 5	- 6	- 5	- 5	- 2	+ 4	+ 6	+ 8	+12	+15	+ 8	+ 4	- 5	-14	-14	591			
18	- 2	- 1	- 1	- 3	- 1	- 4	-12	-13	-10	-5	- 3	- 2	- 1	0	+ 5	+ 7	+ 8	+ 8	+10	+10	+ 8	0	- 2	- 2	588			
19	0	+ 8	+ 8	+ 8	+ 5	- 1	- 1	- 2	- 3	- 3	- 4	- 9	- 5	- 4	- 2	+ 6	+ 8	+ 8	+18	+14	+ 1	-12	-22	-22	588			
20	-10	+ 1	+ 9	+ 7	0	0	-11	- 2	- 4	- 5	- 3	- 2	- 1	- 1	+ 7	+ 9	+10	+ 9	+10	+ 8	- 2	-11	-12	-10	587			
21	- 4	0	+ 9	+ 8	+ 2	+ 1	- 2	0	0	- 2	- 1	- 1	- 1	+ 1	+ 5	+ 9	+10	+ 8	+10	+ 2	- 9	-20	-20	-13	586			
22	- 8	+ 4	+11	+10	0	0	0	0	- 7	- 9	- 8	- 6	0	0	+ 1	+ 3	+ 7	+10	+10	+ 1	- 1	- 9	-11	- 9	586			
23	- 9	- 2	+ 3	+ 5+	3	+ 1	0	- 1	- 2	- 2	- 2	- 2	- 2	- 1	0	+ 5	+ 8	+ 8	+ 9	+ 9	+ 4	- 4	-12	-13	588			
24	-18	-10	- 1	+ 7	+ 7	+ 3	+ 1	0	0	- 2	- 5	- 3	- 2	+ 3	+ 7	+ 7	+ 7	+ 8	+15	+ 8	+ 7	- 3	-12	-19	589			
25	-20	- 3	+ 7	+ 6	+ 5	+ 5	+ 2	- 2	0	- 1	- 2	- 2	- 1	+ 2	+ 6	+ 7	+ 7	+ 7	+ 7	+ 7	+ 2	- 3	-12	-22	589			
26	-21	- 7	+ 1	+ 4	+ 3	- 4	- 4	- 5	- 4	- 4	- 4	0	+ 2	+ 4	+ 5	+ 6	+10	+11	+16	+15	+ 5	- 7	-14	-15	590			
27	- 5	+ 5	+14	+ 5	+ 4	+ 4	+ 1	- 5	- 5	- 5	- 5	- 4	- 4	+ 2	+ 5	+ 5	+ 5	+ 4	+ 7	+ 5	- 4	- 8	- 9	- 9	590			
28	+ 8	+17	+14	+ 5	- 2	- 3	- 4	- 4	- 5	- 5	- 5	- 5	- 4	- 3	+ 2	+ 4	+ 5	+ 5	+ 6	+ 3	- 6	- 8	- 6	- 6	590			
29	- 3	- 3	- 4	- 3	- 2	- 2	- 2	- 3	- 3	- 3	- 3	- 2	0	+ 2	+ 6	+ 7	+ 7	+ 7	+ 7	+ 7	+ 4	- 3	- 7	-13	588			
30	- 7	+ 5	+14	+15	+ 6	0	+ 1	- 3	- 3	- 4	- 4	- 4	- 4	- 3	+ 1	+ 6	+ 6	+ 6	+ 8	+ 6	- 4	-11	-11	- 5	589			
31																												
MEAN.	- 7	+ 2	+ 8	+ 8	+ 4	0	- 2	- 3	- 4	- 3	- 4	- 3	- 2	0	+ 2	+ 4	+ 7	+ 7	+11	+ 7	0	- 8	-12	-12	588			

200/1/41—14357]

Declination

(D = 10° + Mean + .. East)

G.M.T. Unit = 0.1 minute of arc July 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	0	+9	+10	+9	+7	+3	0	-1	-1	-1	-1	-1	-1	0	+1	+1	+4	+6	+9	0	-5	-11	-16	-19	586			
2	-11	+9	+19	+9	0	+2	+1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	+8	+6	-1	-9	-11	-11	586			
3	+4	+14	+8	-1	-2	-1	-2	-2	-2	-2	-2	-2	-1	+1	+5	+8	+8	+7	+7	-1	-3	-10	-12	-12	587			
4																												
5																												
6	-1	+7	+16	+7	-3	-9	-9	-8	-3	-3	-4	-14	-14	-10	-6	-2	+7	+8	+7	+7	+7	+6	+7	+7	588			
7	+15	+26	+18	+5	-7	-3	-4	-14	-9	-11	-6	-4	-4	-4	-1	+5	+6	+6	+6	-1	-4	-4	-4	-4	589			
8	-1	+6	+13	+5	+1	-4	-5	-5	-4	-6	-6	-6	-6	-4	+3	+5	+5	+5	+12	+8	-4	-6	-6	-8	591			
9	-7	+1	0	+1	+3	+2	+3	0	-2	-2	-3	-4	-6	-4	+3	+3	+4	+9	+13	+13	+4	-6	-7	-8	592			
10	-10	-6	-6	-5	-4	-4	-3	-6	-6	-5	-5	-4	+3	+3	+4	+6	+14	+14	+21	+14	+5	-2	-6	-10	591			
11	-4	+3	+15	+7	+5	-2	+5	+5	+5	-2	-4	-4	-5	-4	-4	-3	+3	+6	+9	+6	+1	-8	-13	-10	589			
12	-7	+1	+6	+4	+3	+2	+3	+3	+1	-4	-6	-6	-6	-7	-2	+3	+3	+3	+4	+4	+3	+2	-6	-7	592			
+13	-5	+6	+16	+15	+6	-2	-2	-2	-3	-2	-3	-4	-3	+2	+5	+6	+6	+6	+6	+5	-5	-14	-14	-14	589			
+14	-12	-2	+10	+8	+3	-2	-2	+4	0	-2	-1	+1	+4	+6	+6	+6	+7	+7	+7	-2	-11	-18	-13	-6	588			
15	-5	-2	+4	+2	-3	-4	-4	0	-2	-3	-4	-2	-3	+2	+4	+5	+9	+10	+15	+9	+3	-5	-8	-15	590			
16	-15	+4	+16	+15	+5	+1	+1	-3	-5	-5	-5	-2	+4	+5	+5	+8	+11	+13	+15	+6	-4	-15	-23	-24	590			
17	-13	-4	+6	+7	+6	+3	+1	-2	-3	-2	-2	-2	-2	+3	+6	+7	+7	+7	+14	+4	-7	-13	-12	-5	588			
18	-3	+5	+12	+6	+5	+4	+1	-1	-2	-3	-1	0	+4	+4	+5	+5	+6	+7	+5	-2	-13	-15	-19	-11	590			
19	-5	+4	+5	+4	+4	+3	+3	+3	+2	+1	+1	-1	+2	+4	+4	+5	+7	+9	+12	+4	-6	-17	-26	-21	591			
20	-12	+5	+9	+6	+1	+2	+4	+2	-5	-5	-4	0	+3	+4	+5	+5	+8	+6	+6	+5	-5	-14	-15	-6	590			
21	-4	0	+8	+13	+9	+11	+7	+7	-4	-13	-14	-14	-11	-5	-3	+5	+6	+5	+6	+6	+2	-6	-9	+7	589			
22	+17	+18	+15	+7	-2	-2	0	-3	-3	-3	-3	-3	-4	-2	-2	+6	+7	+6	+7	-3	-13	-18	-14	-3	588			
23	+7	+17	+17	+17	+6	-1	0	+1	-2	-3	-4	-6	-4	-3	-2	+6	+6	+6	+7	-3	-13	-23	-23	-13	588			
24	+4	+7	+15	+15	+6	-3	-3	-3	-4	-5	-4	-4	-4	-4	-2	0	+4	+6	+15	+6	-4	-13	-13	-14	589			
25	-14	-4	+6	+7	+5	+3	-1	-3	-4	-4	-4	-4	-4	+1	+3	+7	+14	+13	+16	+8	-4	-8	-13	-11	589			
+26	-14	-4	+7	+12	+7	+2	+1	+1	+1	0	0	0	0	+1	+2	+6	+8	+10	+13	+8	-4	-17	-23	-26	594			
+27	-18	+9	+20	+12	+7	+2	+2	+1	+1	0	0	0	+1	+1	+1	+3	+7	+8	+11	+1	-8	-16	-18	-16	594			
28	-8	+9	+16	+12	+10	+2	+1	0	-1	-4	-2	-3	-2	0	+1	+2	+3	+3	+9	+2	-6	-12	-18	-10	594			
+29	0	+11	+20	+16	+10	+2	+1	+1	0	0	0	+1	+1	+1	+2	+4	+6	+5	+9	+1	-9	-20	-23	-27	594			
30	-19	-5	+8	+11	+5	+1	0	-1	-6	+1	+1	+1	+2	+2	+3	+4	+5	+4	+10	+9	-4	-8	-12	-12	593			
31	+1	+11	+20	+18	+11	+2	+2	+1	+1	0	0	-1	-1	+1	+2	+2	+2	+7	+11	0	-13	-29	-30	-29	594			
MEAN.	=5	+5	+11	+8	+4	0	0	-1	-2	-3	-3	-3	-2	0	+2	+4	+6	+7	+10	+4	-4	-11	-14	-12	590			

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Declination

(D = 10° + Mean + ...East)

G.M.T. Unit = 0.1 minute of arc August 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	-16	+ 4	+14	+14	+ 6	+ 4	+ 5	+ 4	+ 4	- 2	- 4	- 4	- 3	+ 1	+ 4	+ 5	+ 6	+10	+16	+ 8	- 5	-15	-23	-32	590			
2	-20	- 1	+10	+12	+ 8	+ 5	+ 8	+ 9	0	-10	-10	-10	- 4	- 2	- 1	+ 1	- 1	+ 9	+17	+16	0	-11	-16	-20	596			
3	-13	- 3	+ 7	+14	+ 6	+ 5	+ 4	+ 5	+ 4	+ 3	0	- 1	- 5	- 3	+ 1	+ 4	+ 4	+ 4	+11	+ 6	- 3	-13	-17	-16	591			
4	0	+14	+13	+17	+ 7	- 3	+ 1	- 3	- 4	- 4	-13	-13	-23	-13	- 8	+ 1	+ 6	+ 7	+14	+ 7	+ 6	+ 6	- 1	- 3	588			
5	+ 3	+ 8	+ 2	- 2	- 6	- 6	- 4	+ 2	+ 3	+ 2	+ 3	+ 3	+ 3	+ 3	+ 4	+ 9	+ 6	+ 4	+ 5	- 6	-14	-16	- 7	+ 2	592			
6	+10	+11	+11	+11	+ 2	0	- 9	0	- 7	- 9	- 9	-10	-10	- 8	+ 2	+11	+11	+11	+15	+ 8	- 6	- 9	-12	- 8	594			
7	+ 6	+11	+17	+12	+ 2	+ 1	+ 1	+ 1	- 2	- 2	- 1	+ 1	+ 1	+ 1	+ 2	+ 5	+10	+11	+11	0	-11	-20	-26	-29	594			
8	-14	- 3	+13	+17	+13	+ 7	+ 6	+ 6	+ 4	0	- 2	- 2	- 2	+ 5	+ 7	+ 7	+ 8	+ 9	+16	+ 7	- 4	-22	-33	-33	588			
+ 9	-22	- 2	+10	+14	+ 9	+ 7	+ 7	+ 3	+ 1	0	- 1	0	+ 2	+ 4	+ 8	+ 8	+ 9	+ 9	+10	- 2	-15	-22	-23	-23	587			
+10	-31	-21	- 6	+ 4	+ 8	+ 8	+ 5	+ 7	+ 2	+ 1	+ 1	+ 1	+ 2	+ 5	+ 7	+ 8	+ 8	+ 8	+10	+ 6	- 3	-12	-12	-12	587			
11	- 2	+ 8	+19	+18	+14	+ 7	+ 8	+ 3	- 1	- 1	0	+ 1	+ 7	+ 8	+ 8	+ 8	+ 9	+ 9	+10	- 2	-19	-31	-39	-32	587			
12	-22	-12	- 2	+ 4	+ 7	+ 2	+ 4	+ 1	0	- 1	- 1	- 1	+ 6	+ 7	+ 8	+ 8	+ 8	+ 8	+11	+ 8	0	-11	-13	-11	587			
13	- 4	- 2	+ 5	+ 6	+ 6	+ 3	+ 1	+ 1	- 2	- 4	- 4	- 4	- 2	0	+ 3	+ 6	+ 6	+ 8	+11	+ 6	- 3	- 9	-14	-16	589			
14	-13	- 3	+15	+16	+ 6	+ 5	+ 5	0	- 1	- 2	- 2	- 3	- 1	0	+ 6	+ 7	+ 7	+ 7	+10	+ 7	- 4	-13	-22	-21	588			
15	-16	- 6	+ 5	+ 6	+ 5	+ 5	+ 5	+ 5	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 5	+ 5	+10	+ 4	- 6	-16	-22	-24	590			
+16	-23	- 8	+11	+12	+ 7	+ 2	+ 2	+ 1	0	+ 1	+ 1	0	- 2	0	+ 2	+ 3	+ 3	+ 3	+10	+ 2	- 8	-13	- 7	- 7	593			
+17	- 5	+ 1	+15	+16	+14	+ 6	+ 5	+ 5	+ 5	+ 4	+ 3	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 6	0	-13	-25	-35	-35	590			
18	-35	-16	+12	+14	+14	+13	+12	+ 5	+ 4	+ 3	+ 3	+ 3	+ 3	+ 3	+ 5	+ 8	+11	+13	+16	+ 6	- 7	-19	-32	-31	592			
19	-22	- 6	+14	+16	+20	+15	+12	+ 6	+ 5	+ 4	- 3	-13	-11	- 5	+ 3	+ 4	+ 6	+12	+ 6	- 2	-12	-23	-20	-10	590			
20	-10	+11	+28	+20	+18	+10	+ 2	0	- 1	- 1	- 4	- 5	- 5	- 4	- 1	0	+ 1	+ 3	+10	+ 2	-10	-20	-21	-19	595			
21	- 8	+ 2	+11	+12	+10	+ 3	+ 3	+ 2	- 3	- 7	- 7	0	+ 2	+ 2	+ 7	+ 9	+11	+12	+11	+ 1	-10	-18	-18	-17	593			
22	-18	- 2	+19	+28	+19	+ 6	0	- 1	- 2	- 2	- 2	- 2	- 3	- 2	- 1	0	+ 4	+ 8	+10	+ 1	-10	-20	-21	-20	596			
+23	-15	- 6	+13	+13	+ 4	+ 3	+ 3	+ 3	+ 2	+ 1	+ 2	+ 2	+ 2	+ 3	+ 4	+ 5	+ 9	+10	+ 7	- 3	- 8	-17	-17	-17	592			
24	-16	0	+11	+20	+19	+ 9	+ 2	0	- 1	- 3	- 4	- 4	- 1	0	0	+ 3	+ 6	+ 5	+ 8	0	-10	-13	-17	-11	595			
25	- 5	- 1	+10	+20	+18	+ 6	+ 3	0	- 2	- 2	- 2	- 2	- 2	- 2	- 1	- 1	- 1	0	+ 7	- 2	- 3	-12	-18	-15	597			
26	-17	-10	+ 7	+14	+12	+ 9	+ 8	+ 7	+ 2	+ 2	+ 1	0	- 9	- 4	- 1	- 2	+ 1	+ 1	+ 8	+ 1	- 4	- 9	- 8	- 1	594			
27	+ 2	+ 4	+ 2	+12	+20	+12	+12	+ 9	+ 3	+ 1	- 9	-18	-18	- 8	- 9	- 7	+ 2	0	- 7	- 8	- 6	+ 2	+ 2	+12	593			
28	+ 1	+ 7	+18	+27	+19	+ 9	+ 8	- 2	- 2	- 3	-10	-12	-10	-11	- 4	- 2	- 1	+ 2	+ 6	- 2	- 8	-12	-14	-15	597			
29	-10	-10	+ 1	+10	+11	+10	+10	+ 6	+ 5	+ 2	- 3	0	0	0	0	+ 1	0	+ 3	+ 1	- 7	-10	-11	-10	- 9	595			
30	0	+ 2	+11	+17	+12	+11	+ 9	+ 6	+ 2	+ 1	+ 1	- 1	- 2	0	+ 2	+ 2	+ 2	+ 6	+ 2	- 9	-19	-19	-19	-17	594			
31	- 6	+ 4	+15	+24	+18	+ 3	+ 3	+ 2	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 5	+11	+11	+ 4	- 7	-18	-27	-27	-27	592			
MEAN.	-11	- 1	+11	+14	+11	+ 6	+ 5	+ 3	+ 1	- 1	- 2	- 3	- 2	0	+ 2	+ 4	+ 6	+ 7	+ 9	+ 1	- 8	-15	-18	-17	592			

200/1/41—14357

Declination

(D = 10° + Mean + .. East)

G.M.T. Unit = 0.1 minute of arc September 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	-19	- 5	+ 6	+15	+15	+ 5	+ 2	+ 3	- 2	+ 2	+ 3	+ 4	+ 5	+ 5	+ 5	+ 8	+13	+ 7	+ 5	- 4	-15	-24	-16	-14	590			
2	+ 1	+ 8	+12	+16	+12	+ 4	- 4	- 7	+ 1	0	0	+ 1	+ 1	+ 3	+ 7	+10	+ 3	+ 3	+ 4	+ 1	- 9	-19	-28	-19	594			
3	- 2	+ 9	+ 9	+11	+11	+ 9	+ 9	+ 8	+ 6	0	0	- 1	0	0	0	+ 2	+ 6	+ 7	+ 6	- 1	-11	-21	-30	-23	596			
+ 4	-18	- 9	+ 5	+14	+12	+ 8	+ 8	+ 5	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 6	+11	+11	+11	+11	+ 2	- 9	-18	-23	-28	594			
+ 5	-24	- 8	+ 8	+10	+ 9	+ 8	+ 8	+ 7	+ 2	+ 2	+ 1	+ 2	+ 1	+ 2	+ 3	+ 4	+ 4	+ 5	+ 9	+ 1	- 6	- 9	-18	-24	594			
+ 6	-21	- 1	+10	+12	+10	+ 8	+ 8	+ 6	0	- 1	- 1	- 1	- 1	- 1	0	+ 2	+ 7	+ 9	+10	+ 1	- 7	-10	-12	-16	596			
7	- 2	+12	+21	+19	+12	+ 3	+ 6	+ 2	- 1	- 7	- 9	- 7	- 1	+ 3	+10	+11	+12	+18	+13	- 5	-18	-28	-37	-38	593			
8	-31	-15	+ 6	+16	+15	+ 9	+ 6	+ 4	- 3	- 4	- 4	+ 3	+ 4	+ 5	+ 6	+13	+14	+16	- 2	- 4	-11	-15	-16	-10	590			
9	-10	+ 2	+13	+18	+10	+ 5	0	0	- 1	- 6	- 3	- 1	- 1	- 1	0	+ 2	+ 6	+ 9	+ 9	- 2	-11	-12	-12	- 9	596			
10	+ 1	+ 8	+11	+12	+10	+ 2	+ 2	+ 2	+ 1	+ 1	0	0	0	+ 1	+ 1	+ 2	+ 3	+ 5	+ 2	- 8	-17	-19	-18	-11	594			
11	- 9	0	+10	+11	+ 7	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	0	0	0	+ 1	+ 1	+ 2	+ 3	0	- 8	-10	- 9	- 2	+ 1	594			
+12	+ 8	+22	+23	+22	+12	- 1	- 4	- 5	- 7	- 7	- 7	- 7	- 7	- 7	- 6	- 4	0	+ 2	0	- 7	-10	- 8	- 6	- 6	602			
13	+ 3	+13	+23	+15	+ 5	+ 2	- 1	0	+ 2	+ 1	- 3	- 5	- 6	- 7	-16	- 6	- 6	- 5	+ 3	- 1	- 6	- 3	- 4	- 6	601			
14	- 2	+ 2	+ 5	+ 5	+ 6	+ 8	+ 3	0	- 2	- 3	- 3	- 2	- 1	- 2	- 1	+ 2	0	+ 1	+ 3	0	- 5	-10	- 2	- 2	598			
15	+ 1	+ 7	+11	+16	+10	+ 6	0	0	- 1	- 1	- 3	- 7	- 4	- 3	- 1	+ 1	+ 3	+ 5	+ 1	- 1	- 7	- 9	-10	-10	596			
16	- 3	+ 1	+ 9	+13	+12	+ 9	+ 8	+ 8	+ 2	+ 1	0	- 1	- 1	- 1	0	+ 2	+ 2	+ 8	+ 4	- 1	-10	-12	-20	-21	596			
17	- 9	+ 5	+10	+ 6	+ 1	+ 1	+ 2	+ 1	+ 1	+ 1	0	- 1	0	0	+ 1	+ 1	+ 4	+10	+10	0	- 6	-10	-11	- 7	595			
18	+13	+32	+35	+32	+32	+39	+32	+22	- 4	-14	-42	-69	-56	-38	-43	-36	-13	+ 3	+ 9	+20	+32	+ 3	+ 4	+ 7	592			
19	+32	+31	+40	+30	-15	-26	-28	-21	-39	-40	-18	+ 1	+11	+ 1	+10	+13	+11	+ 2	- 1	- 9	- 9	0	+ 1	+11	584			
20	+19	+39	+49	+40	+22	+12	+ 9	+ 8	- 2	-14	-21	-19	-19	-12	- 2	+ 1	+ 5	0	- 7	-17	-19	-21	-22	-21	596			
21	-11	0	+11	+19	+10	+ 9	0	- 5	- 8	-10	- 5	- 9	- 1	0	+ 8	+14	+10	+10	+ 3	- 7	- 7	- 7	-10	-14	595			
+22	- 5	+11	+14	+12	+ 3	+ 3	+ 5	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	+ 4	+ 5	+ 5	+ 5	+ 3	- 6	-15	-17	-17	-17	- 7	592			
23	- 1	+ 9	+13	+14	+ 9	+ 5	+ 3	+ 1	- 1	- 1	- 1	- 1	- 1	- 1	+ 7	+ 6	+ 9	+14	+ 4	-11	-11	-12	-20	-21	596			
24	-14	+ 3	+10	+ 9	- 3	- 4	- 3	- 3	- 3	- 3	- 4	- 4	- 4	- 4	+ 1	+ 3	+ 6	+ 6	- 3	- 6	- 9	- 4	+ 6	+16	599			
25	+18	+28	+29	+25	+15	+ 6	+ 5	0	- 4	- 9	-11	-14	-10	-14	- 6	- 5	- 4	- 4	- 4	- 6	- 5	- 9	-13	-13	600			
26	+ 1	+ 7	+ 7	+ 7	+ 6	+ 3	+ 4	+ 5	+ 1	- 1	- 3	- 3	- 3	- 3	- 1	0	+ 1	+ 1	- 3	- 5	-10	-10	- 4	- 3	599			
27	+ 9	+19	+19	+16	+ 9	0	- 1	- 9	- 9	-10	- 4	- 1	- 1	0	+ 1	+ 1	+ 9	+ 9	+ 5	- 8	-11	-11	-11	-11	596			
28	+ 1	+11	+10	+ 9	+ 2	+ 2	- 1	- 1	- 1	- 1	- 1	0	0	0	0	- 1	+ 3	+ 4	+ 7	- 1	-10	-11	-11	- 8	596			
29	0	+17	+19	+18	+ 8	- 2	- 2	- 2	- 2	- 4	-11	- 2	- 1	- 1	+ 1	+ 8	+ 8	+ 6	- 2	-12	-14	-18	-11	- 1	597			
30	+16	+21	+16	+15	+ 5	+ 5	+ 1	- 4	- 5	- 5	- 5	- 5	- 5	- 4	- 2	+ 5	+ 5	+ 3	- 5	-15	-16	-15	-14	- 4	600			
31																												
MEAN.	- 2	+ 9	+15	+16	+ 9	+ 5	+ 3	+ 1	- 2	- 4	- 5	- 5	- 3	- 2	0	+ 3	+ 5	+ 6	+ 3	- 4	- 9	-12	-13	-10	595			

200/1/41—14357]

Declination

(D = 10° + Mean + .. East)

G.M.T. Unit = 0.1 minute of arc October 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+ 8	+17	+17	+ 9	+ 8	+ 4	0	- 2	- 2	- 2	- 2	- 2	- 2	- 1	+ 1	+ 1	+ 2	+ 1	- 2	- 6	- 9	-11	-12	-12	597			
2	- 4	+ 9	+11	+ 8	+ 8	+ 6	+ 3	0	- 1	- 1	- 2	- 2	- 1	- 1	0	+ 1	+ 2	- 1	- 3	- 9	- 8	- 4	- 3	- 1	597			
3	+ 6	+ 9	+11	+13	+11	+ 9	+ 8	+ 3	- 1	- 3	- 3	- 2	- 1	0	0	+ 1	+ 2	+ 3	0	- 9	-11	-11	-14	-18	596			
+4	- 3	+10	+19	+19	+14	+10	+ 9	+ 8	+ 5	+ 1	0	0	- 1	- 1	0	0	+ 5	+ 2	- 4	-16	-22	-23	-22	-17	597			
5	- 5	+ 4	+ 8	+ 6	+ 7	+ 8	+ 8	+ 1	- 2	- 1	- 1	+ 1	0	+ 2	+ 3	+ 4	+ 5	+ 5	0	- 5	-10	-15	-12	- 5	596			
+6	+ 5	+14	+16	+14	+14	+13	+11	+ 8	0	- 1	+ 1	- 1	- 2	- 2	- 1	0	0	- 2	- 9	-13	-21	-23	-22	- 6	597			
+7	+ 9	+17	+17	+ 7	+ 4	+ 3	+ 6	+ 6	+ 5	+ 3	- 1	- 1	- 2	- 2	- 1	0	+ 4	0	- 4	-14	-22	-23	-16	- 3	598			
8	+16	+22	+14	+ 7	- 1	0	+ 3	+ 1	- 2	- 4	- 5	- 5	- 5	- 5	- 4	- 4	- 2	- 3	- 8	-14	-10	- 5	- 3	+ 6	600			
9	+25	+25	+16	+ 6	- 2	- 1	+ 2	+ 2	- 2	- 3	- 4	- 3	- 3	- 2	0	+ 1	+ 4	+ 6	+ 1	-14	-14	-15	-14	- 4	599			
10	+ 7	+ 9	+ 6	+ 4	+ 5	+ 6	+ 6	+ 6	+ 5	+ 4	+ 1	- 3	- 3	- 2	- 2	- 1	+ 5	+ 6	0	- 5	-13	-15	-15	- 5	599			
11	+ 8	+18	+18	+17	+17	+13	+ 8	+ 5	- 1	-12	-14	-16	-15	-13	-12	- 3	- 3	- 2	- 5	- 7	- 5	- 4	- 2	+ 8	597			
12	+17	+17	+20	+ 9	+ 8	+ 9	+ 8	+ 3	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 3	-13	-22	-23	-17	- 2	597			
13	+10	+16	+16	+11	+ 7	+ 5	+ 5	+ 5	- 1	- 3	- 4	- 4	- 4	- 3	+ 2	+ 2	+ 5	- 4	-14	-24	-25	-15	- 3	+15	599			
14	+26	+27	+18	+ 8	+ 6	+ 7	+ 8	+ 7	+ 7	+ 4	- 2	- 3	- 3	- 3	- 3	- 2	+ 4	- 2	-12	-22	-28	-24	-14	+ 5	598			
15	+19	+24	+18	+10	+10	+10	+ 9	+ 6	- 1	- 2	- 4	- 1	- 1	- 1	- 1	- 1	- 1	-10	-15	-21	-21	-19	-10	+ 4	596			
16	+11	+17	+18	+10	+ 8	+ 8	+ 8	+ 8	+ 7	+ 3	+ 3	+ 3	0	+ 2	+ 2	- 1	- 1	- 8	-20	-31	-31	-22	- 3	+ 9	597			
+ 17	+17	+18	+18	+17	+ 8	+ 7	+ 7	+ 6	+ 1	- 3	- 3	- 3	- 3	- 2	- 2	+ 5	+ 3	- 4	-22	-32	-33	-20	0	+10	598			
18	+28	+26	+17	+10	+ 7	+ 7	+ 6	+ 4	- 3	- 3	- 3	- 5	- 3	- 3	- 3	- 2	- 2	-12	-20	-23	-25	-16	- 2	+18	598			
19	+27	+27	+27	+18	+14	+ 9	+ 7	+ 6	+ 2	- 2	- 3	- 3	- 3	- 3	- 3	- 3	+ 2	- 3	-18	-32	-36	-33	-18	+18	598			
20	+11	+11	+11	+ 9	+ 5	+ 3	+ 6	0	+ 1	0	0	+ 1	+ 1	+ 1	+ 1	+ 2	+ 2	0	-10	-21	-28	-19	0	+21	594			
+ 21	+28	+27	+18	+ 9	+ 3	+ 7	+ 7	+ 3	- 1	- 2	- 2	- 2	- 2	- 2	- 1	+ 1	+ 5	- 2	-12	-23	-31	-23	-13	+ 6	597			
22	+20	+22	+22	420	+10	+ 9	+ 9	+ 6	+ 1	+ 1	0	- 1	- 2	- 2	0	0	+ 7	+ 8	- 1	-20	-30	-30	-30	-11	595			
23	+ 4	+22	+29	+22	+13	+ 7	+ 6	+ 4	+ 3	+ 2	- 2	- 1	+ 2	+ 3	+ 3	+ 4	+11	+ 3	- 7	-23	-37	-40	-27	+ 2	592			
24	+20	+21	+20	+17	+10	+ 9	+ 9	+ 5	+ 1	0	- 1	0	0	0	0	+ 1	+ 1	- 7	-19	-21	-29	-21	-10	+ 5	595			
25																												
26																												
27	+13	+19	+18	+16	+ 9	+ 5	+ 7	+ 5	0	0	- 1	- 1	- 1	0	+ 1	+ 1	0	- 6	-20	-22	-21	-18	- 2	+ 8	596			
28	+13	+18	+23	+18	+13	+ 7	+ 7	+ 4	0	- 1	- 2	- 2	- 2	- 1	0	0	- 2	- 4	-18	-23	-22	-19	-12	+ 4	598			
29	+17	+17	+14	+11	+10	+ 7	+ 5	+ 5	+ 1	0	0	0	0	0	0	0	- 1	-14	-28	-30	-20	- 9	+ 9	+12	595			
30	+18	+19	+19	+14	+ 9	+ 6	+ 9	+ 7	+ 1	- 1	- 1	- 4	- 3	- 2	- 1	0	- 1	-14	-30	-31	-27	-15	- 1	+18	596			
31	+18	+19	+18	+17	+19	+10	+ 4	+ 8	- 1	- 2	- 2	- 2	- 2	+ 1	+ 5	0	+ 7	- 2	-11	-22	-29	-31	-21	+ 1	597			
MEAN.	+13	+18	+17	+12	+ 9	+ 7	+ 7	+ 4	+ 1	- 1	- 2	- 2	- 2	- 2	- 1	0	+ 2	- 2	-11	-19	-22	-19	-11	+ 3	597			

200/1/41—14357]

Declination

(D = 10° + Mean + .. East)

G.M.T. Unit = 0.1 minute of arc November 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+17	+21	+16	+17	+17	+ 7	+ 6	+ 3	- 3	- 4	- 4	- 9	-10	-13	- 8	- 5	- 5	-12	-18	-21	-15	- 5	+ 7	+19	589			
2	+23	+23	+23	+20	+13	+13	+12	+ 9	+ 3	+ 3	+ 1	- 1	- 4	- 2	+ 2	+ 3	+ 3	- 8	-27	-36	-31	-26	- 8	+ 4	592			
3	+10	+ 3	- 3	- 3	0	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 7	+ 7	+ 4	- 6	-17	-18	-14	- 7	+ 4	+13	592			
+ 4	+18	+18	+11	+ 3	- 3	- 3	+ 2	+ 3	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 5	+ 3	- 9	-18	-25	-18	- 7	+ 2	+12	594			
5	+17	+22	+14	+ 9	+ 2	+ 3	+ 4	+ 3	+ 3	+ 3	+ 3	+ 2	+ 3	+ 3	+ 3	+ 5	+ 3	-10	-26	-36	-33	-17	+ 3	+16	593			
6	+28	+33	+32	+27	+17	+15	+14	+ 7	+ 1	- 7	-15	-14	-20	-11	- 4	- 2	- 4	-24	-34	-34	-23	- 5	+ 7	+19	590			
7	+19	+21	+19	+14	+12	+11	+11	+ 4	+ 2	0	- 6	- 5	- 3	- 3	0	0	+ 1	-11	-27	-31	-29	-16	- 1	+11	595			
8	+11	+12	+18	+18	+18	+19	+12	+ 9	+ 6	0	- 1	- 3	- 2	- 3	- 6	- 4	- 1	-10	-20	-21	-20	-13	-10	+1	597			
9	+10	+ 9	+ 5	+ 5	+ 8	+10	+ 9	+ 8	+ 6	+ 4	0	- 4	-10	- 6	- 7	- 3	+ 3	+ 2	- 6	-16	-14	- 8	- 5	+ 8	594			
10	+14	+14	+10	+ 8	+ 8	+ 9	+ 8	+ 4	0	- 5	- 5	- 3	- 3	- 8	- 4	- 2	- 7	-11	-14	-21	-21	- 2	+ 9	+18	599			
11	+20	+23	+22	+15	+ 7	+ 9	+ 8	+ 6	+ 2	- 3	- 5	- 5	- 7	- 5	- 2	- 2	- 2	-13	-22	-22	-19	-11	- 2	+ 8	599			
12	+12	+11	+11	+11	+11	+11	+ 9	+ 5	+ 2	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	- 1	- 1	-10	-20	-29	-23	-12	+ 1	+11	596			
13	+15	+14	+12	+10	+ 9	+ 9	+ 8	+ 6	0	- 1	- 3	-10	-10	- 8	- 5	- 2	- 2	-11	-21	-22	-12	0	+10	+20	598			
14	+24	+22	+21	+21	+16	+11	+11	+10	+ 2	0	- 3	- 3	- 4	- 1	0	0	- 6	-20	-30	-33	-28	-11	+ 1	+11	597			
+15	+11	+11	+10	+10	+ 9	+ 9	+ 9	+ 6	+ 1	- 1	- 2	- 3	- 2	- 1	- 1	- 1	- 2	-11	-20	-22	-20	-10	+ 2	+20	598			
+ 16	+33	+33	+27	+23	+14	+13	+ 5	+ 4	+ 1	- 5	- 5	- 5	- 6	- 6	- 6	- 6	- 6	-17	-35	-36	-27	-15	+ 3	+15	604			
17	+30	+34	+24	+24	+23	+15	+ 9	+ 5	+ 4	- 5	- 5	- 5	- 5	+ 1	+ 4	+ 2	- 6	-17	-36	-39	-37	-26	- 6	+14	594			
18	+27	+30	+29	+21	+16	+13	+11	+ 9	0	- 9	-10	- 6	- 4	- 7	- 1	+ 1	0	-17	-30	-30	-29	-19	- 9	+ 9	598			
19	+17	+23	+28	+27	+21	+18	+17	+12	+ 8	+ 5	- 1	- 2	- 3	- 3	- 3	- 3	- 3	-13	-33	-45	-42	-29	-12	+ 7	601			
20	+17	+19	+26	+18	+15	+16	+14	+ 8	+ 4	0	- 2	- 2	- 3	- 2	- 1	- 1	- 3	-14	-33	-41	-32	-13	+ 5	+17	601			
21	+27	+27	+27	+23	+16	+ 9	+ 7	+ 6	+ 6	0	- 4	- 4	- 4	- 4	- 3	- 3	- 2	-11	-24	-34	-33	-15	- 2	+ 6	603			
22	+18	+26	+27	+26	+17	+16	+11	+ 7	0	- 2	- 3	- 3	- 3	- 3	- 3	+ 2	+ 4	- 3	-14	-32	-32	-30	-22	-12	602			
23	0	+19	+28	+29	+21	+20	+19	+11	+ 8	0	0	- 1	- 4	-10	- 4	- 1	- 1	-20	-30	-35	-31	-21	-10	+ 6	600			
+ 24	+20	+30	+30	+23	+15	+11	+11	+10	+ 9	+ 1	0	0	0	0	0	0	- 5	-20	-30	-39	-38	-29	-10	+ 6	599			
25	+16	+19	+22	+21	+20	+15	+11	+10	0	0	- 1	- 1	- 6	- 7	- 6	- 6	- 9	-20	-30	-30	-23	-11	+ 3	+20	599			
+26																												
27	+ 3	+ 8	+15	+15	+21	+15	+16	+15	+10	+ 5	0	- 5	- 5	- 6	- 5	- 5	- 5	-15	-24	-25	-20	- 6	+ 4	+ 6	604			
28	+18	+23	+23	+20	+ 8	+ 4	+ 9	+ 5	- 6	- 9	-15	-13	-10	- 6	- 5	- 2	- 6	-15	- 7	- 6	- 6	- 5	- 5	+ 4	595			
29	+ 8	+12	+13	+13	+12	+10	+ 8	+ 2	- 3	- 7	- 8	- 5	+ 2	+ 2	+ 2	+ 2	+ 2	- 7	-19	-28	-26	- 8	+12	+14	597			
30	+16	+17	+ 8	+ 6	0	+ 2	+ 5	+ 5	+ 5	+ 2	- 2	- 2	- 2	- 2	- 2	+ 4	+ 7	- 3	-23	-33	-23	-10	+ 8	+24	602			
31																												
MEAN.	+17	+20	+19	+16	+12	+11	+10	+ 7	+ 3	- 1	- 3	- 4	- 4	- 4	- 2	- 1	- 2	-12	-24	-29	-25	-13	- 1	+11	597			

200/1/41—14357

Declination

(D = 10° + Mean + ...East)

G.M.T. Unit ≡ 0.1 minute of arc December 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+33	+26	+22	+17	+12	+14	+20	+19	+ 5	+ 1	-23	-27	-15	- 9	-16	-25	-21	-27	-26	-18	-10	+ 3	+21	+34	595			
2	+27	+25	+22	+17	+17	+ 9	+ 6	+ 4	+ 2	- 2	- 3	- 2	- 1	- 3	+ 1	+ 4	- 3	-22	-36	-35	-24	-14	+ 1	+16	603			
3	+25	+28	+21	+18	+14	+ 9	+ 8	+ 8	+ 7	+ 2	- 1	- 2	- 2	- 2	- 2	- 2	- 4	-16	-32	-47	-41	-17	+ 7	+18	601			
4	+17	+14	+17	+16	+16	+17	+15	+ 7	+ 5	- 2	- 3	- 3	- 9	+ 2	- 3	- 3	- 4	-22	-42	-46	-34	- 4	+19	+31	602			
5	+27	+19	+ 8	+ 7	+ 8	+ 8	+ 8	+ 7	+ 4	+ 2	+ 1	- 3	- 2	- 2	- 2	- 2	- 3	-19	-32	-35	-21	- 9	+ 7	+20	602			
6	+29	+27	+23	+18	+17	+15	+ 7	+ 7	+ 5	+ 4	0	- 3	- 3	- 3	- 3	- 3	- 7	-23	-40	-43	-32	-16	- 4	+17	602			
7	+25	+25	+25	+17	+ 7	+ 6	+10	+ 6	+ 3	- 4	- 5	- 8	- 5	- 5	- 5	-15	- 5	-15	-28	-35	-26	-15	+ 5	+25	604			
8	+31	+27	+24	+14	+ 5	+ 4	+ 6	+ 5	+ 4	0	- 5	- 6	- 6	- 6	- 6	- 1	- 5	-16	-28	-43	-36	-16	+12	+38	605			
9	+44	+40	+34	+24	+12	+ 5	+ 6	+ 4	+ 3	- 5	- 6	- 6	- 7	- 7	- 6	- 3	- 5	-17	-36	-45	-36	-17	+ 1	+14	605			
10	+27	+27	+26	+20	+15	+ 9	+ 7	+ 6	+ 5	+ 2	- 3	- 3	- 3	0	0	+ 4	+ 4	- 5	-24	-34	-41	-30	-14	-13	603			
11	+25	+28	+29	+27	+16	+ 8	+ 8	+ 8	+ 7	+ 1	- 2	- 2	- 2	- 1	- 2	0	- 1	-11	-23	-42	-42	-23	- 8	+ 7	601			
12	+15	+23	+26	+24	+15	+13	+13	+ 9	+ 4	+ 3	0	- 6	- 6	- 6	- 6	0	0	- 6	-17	-28	-27	-26	-15	+ 4	605			
13	+17	+ 8	+ 8	+12	+13	+18	+18	+18	+17	+ 9	+ 8	- 1	- 2	- 2	- 2	- 2	- 7	-19	-31	-23	-29	-22	-13	- 2	601			
14	+ 5	+ 8	+19	+18	+11	+10	+15	+15	+ 8	+ 6	- 2	- 1	+ 1	0	+ 6	+ 4	- 2	-12	-23	-22	-20	-16	-16	- 9	601			
15	0	+15	+16	+16	+15	+14	+11	+ 6	+ 6	+ 5	+ 5	+ 3	+ 1	- 1	- 4	- 4	- 5	- 5	-25	-33	-25	-15	- 5	+ 5	604			
16	+ 9	+14	+23	+22	+19	+16	+17	+13	+12	+ 3	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	- 3	-18	-38	-51	-38	-20	+ 1	+11	607			
17	+21	+29	+26	+25	+15	+11	+ 9	+ 5	+ 1	0	- 4	- 4	- 4	- 2	+ 1	+ 3	+ 4	-15	-25	-43	-37	-25	- 5	+ 7	604			
18	+19	+26	+20	+18	+18	+18	+18	+19	+ 8	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	-19	-32	-37	-34	-26	-12	+ 8	601			
19	+13	+23	+33	+32	+23	+14	+13	+13	+ 3	+ 2	- 7	- 7	- 7	- 6	- 3	0	0	- 9	-27	-38	-39	-31	-17	+13	606			
20	+27	+33	+26	+16	+ 9	+ 6	+11	+11	+ 6	+ 6	+ 2	- 4	- 4	- 3	+ 1	+ 5	+ 6	- 4	-17	-34	-38	-35	-20	- 4	603			
21	+ 6	+22	+28	+25	+20	+15	+15	+10	+ 5	+ 5	+ 5	0	- 2	- 3	0	+ 4	+ 4	- 5	-24	-38	-46	-45	-15	+15	604			
22	+23	+31	+34	+31	+21	+19	+10	+ 8	+ 1	0	0	- 3	- 9	-10	-10	-10	-10	-10	-20	-30	-31	-28	-10	0	609			
23	+13	+15	+14	+13	+11	+10	+13	+12	+ 4	+ 3	+ 3	- 1	- 7	- 7	- 7	- 8	-11	-10	-18	-26	-26	- 8	+ 8	+13	606			
24	+14	+15	+22	+20	+14	+13	+14	+12	+ 7	+ 4	- 3	- 6	- 6	- 6	- 6	- 6	- 6	-15	-26	-26	-17	- 5	+ 6		605			
25																												
26																												
27																												
28	+ 9	+13	+16	+ 7	+ 6	+ 7	+ 7	+ 9	+ 8	+ 7	+ 6	+ 3	- 1	0	0	- 1	- 3	-10	-21	-28	-24	-22	- 3	+17	602			
29																												
30																												
31	+ 7	+14	+ 9	+12	+ 9	+ 4	+ 4	+ 4	+ 4	+ 2	0	+ 1	0	0	+ 1	+ 2	+ 3	- 5	-16	-26	-25	-16	- 4	+11	605			
MEAN.	+20	+22	+22	+19	+14	+11	+11	+ 9	+ 6	+ 2	- 1	- 3	- 4	- 3	- 3	- 2	- 3	-13	-27	-34	-31	-20	- 3	+13	603			

200/1/41—14357]

Vertical Intensity

(Z = 20000γ + Mean + ...)

G.M.T.

January 1941.

DAY.		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum.			Minimum.			Range.
																											H.	M.	γ	H.	M.	γ	
1		- 6	- 7	- 7	- 5	- 5	- 2	- 1	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 3	+ 4	+ 7	+ 6	+ 3	0	- 2	0	- 1	- 3	649							
2		- 9	- 9	- 8	- 4	- 1	0	+ 1	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	+ 3	+ 4	+ 4	+ 5	+ 5	+ 4	+ 3	0	- 1	- 1	-10	652							
3		-12	-12	-10	- 7	- 5	- 2	0	+ 3	+ 4	+ 4	+ 4	+ 3	+ 4	+ 4	+ 4	+ 6	+ 6	+ 4	+ 2	- 1	- 3	0	0	- 2	649							
4		- 4	-10	-16	-15	-11	- 9	- 5	- 2	0	+ 1	+ 1	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 4	+ 7	+ 8	+14	648							
+ 5		+12	+ 9	+ 6	+ 1	- 2	- 3	- 2	- 2	0	+ 1	+ 1	0	- 2	- 2	0	+ 1	+ 1	0	+ 1	+ 1	+ 1	- 2	- 9	-13	651							
6		- 6	- 6	- 5	- 8	-13	-15	- 8	- 3	+ 4	+ 5	+ 7	+ 7	+ 7	+ 5	+ 7	+ 7	+ 7	+ 7	+ 5	+ 3	0	0	+ 3	+ 4	0	645							
7		- 2	- 6	- 9	-11	- 9	- 7	- 4	- 3	- 2	+ 3	+ 3	+ 4	+ 6	+ 6	+ 6	+ 6	+ 4	+ 3	- 2	- 3	- 1	+ 4	+ 4	- 1	646							
8		- 6	0	-15	-13	-11	- 8	- 5	- 5	- 1	+ 2	+ 5	+ 6	+ 9	+ 9	+ 9	+ 9	+ 8	+ 5	+ 2	0	- 3	- 3	0	+ 5	648							
9		+ 7	+ 1	- 2	- 4	- 4	- 1	0	- 1	- 1	0	+ 3	+ 4	+ 4	+ 3	+ 7	+ 5	+ 4	0	- 4	- 6	- 5	- 4	- 5	- 2	649							
10		0	- 1	- 3	- 4	- 4	- 3	- 4	- 3	- 1	+ 1	+ 2	+ 2	+ 2	+ 5	+ 6	+ 5	+ 4	+ 2	+ 1	- 1	- 1	- 3	- 3	- 8	648							
11		- 6	- 5	- 7	- 7	- 5	- 2	0	+ 2	+ 2	+ 2	+ 3	+ 3	+ 4	+ 8	+ 8	+ 7	+ 5	+ 4	- 1	- 6	- 8	- 7	- 2	+ 4	645							
12		+ 1	0	+ 1	- 2	0	0	- 2	- 2	- 2	- 2	- 2	0	+ 1	+ 5	+ 6	+ 6	+ 6	+ 5	+ 2	- 2	- 4	- 5	- 4	- 4	647							
13		- 3	- 5	- 7	- 3	- 3	- 2	- 2	0	0	0	0	+ 2	+ 3	+ 5	+ 6	+ 6	+ 6	+ 3	0	- 4	- 4	0	+ 3	+ 2	647							
+14		- 4	-10	- 8	- 4	- 3	0	0	0	- 2	0	0	+ 1	+ 1	+ 2	+ 3	+ 3	+ 5	+ 3	+ 1	- 2	+ 1	+ 3	+ 7	+ 9	647							
+15		+ 2	- 2	- 5	- 5	- 5	- 2	+ 2	+ 3	+ 3	+ 3	0	- 1	- 1	+ 2	+ 2	+ 2	+ 2	0	- 2	- 2	- 1	+ 6	+ 3	+ 3	650							
16		+ 4	0	+ 4	+ 4	+ 4	+ 2	+ 2	+ 1	0	- 2	- 3	- 3	- 5	- 7	- 5	- 4	0	+ 1	+ 1	- 2	- 5	- 4	0	+12	652							
17		+17	+ 1	- 5	- 6	- 7	- 4	0	0	- 2	- 1	+ 3	+ 4	+ 3	+ 5	+ 4	+ 1	+ 3	+ 5	+ 3	- 4	- 6	- 5	- 4	- 1	650							
18		- 6	0	+ 4	0	+ 1	0	- 1	+ 3	+ 1	+ 1	+ 3	+ 1	0	0	0	0	+ 1	+ 1	+ 1	- 1	- 1	- 3	- 1	- 1	654							
19		+ 1	+ 1	- 3	- 8	- 8	- 4	- 2	0	+ 2	+ 2	+ 4	+ 4	+ 2	+ 2	+ 4	+ 4	+ 4	+ 4	+ 2	0	- 3	- 5	- 7	- 4	653							
20		- 1	+ 1	- 1	- 4	- 6	- 7	- 4	- 2	+ 1	+ 1	+ 1	+ 2	+ 3	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 5	- 1	- 2	- 1	+ 2	652							
+21		+ 4	- 1	- 6	-10	- 5	- 3	- 3	- 1	0	+ 1	+ 1	+ 2	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	0	0	0	+ 2	+ 6	+ 9	649							
22		+ 7	+ 3	- 2	- 5	- 6	- 6	- 6	- 3	- 2	- 1	+ 2	+ 2	+ 2	+ 2	+ 2	0	- 1	- 2	- 5	- 5	- 2	+ 2	+ 8	+11	651							
23		+ 8	+ 2	+ 2	+ 2	- 1	- 1	- 2	- 2	- 2	- 2	- 1	+ 1	- 1	+ 2	+ 2	+ 3	+ 1	- 2	- 4	- 6	- 6	- 3	- 1	+ 3	652							
24		+10	+10	+ 4	+ 1	- 4	- 7	- 7	- 7	- 2	0	+ 1	+ 3	+ 4	+ 5	+ 7	+ 5	+ 7	+ 1	- 2	- 9	- 9	- 7	- 1	+ 1	650							
25		+ 3	- 3	- 6	- 6	- 7	- 6	- 1	+ 1	+ 2	+ 1	+ 4	+ 4	+ 6	+ 8	+10	+10	+ 7	+ 3	- 2	- 8	- 9	- 6	- 3	+ 1	647							
26		- 2	- 4	- 2	- 2	- 1	- 1	- 1	0	0	+ 1	+ 4	+ 5	+ 6	+ 9	+ 9	+ 8	+ 9	+ 5	- 1	- 5	- 9	-10	- 6	- 2	645							
27		- 1	- 3	- 6	- 7	- 6	- 3	- 1	- 1	0	0	+ 2	+ 2	+ 3	+ 5	+ 7	+ 7	+ 4	+ 3	0	- 1	- 1	- 2	- 3	+ 2	646							
28		+ 4	+ 1	+ 1	0	- 1	0	+ 1	+ 3	+ 3	+ 1	+ 1	+ 1	+ 5	+ 5	+ 5	+ 5	+ 6	+ 4	- 2	- 9	- 9	- 9	-10	-11	646							
29		- 9	-10	-12	- 8	- 4	- 2	+ 1	+ 2	+ 3	+ 3	+ 2	+ 5	+ 6	+ 6	+ 7	+10	+10	+ 8	+ 7	+ 3	- 4	-12	- 7	0	644							
30		- 3	+ 2	+ 3	+ 3	- 1	- 1	+ 2	+ 3	+ 3	+ 2	+ 2	+ 1	+ 1	+ 3	+ 4	+ 4	+ 3	+ 2	- 1	- 6	- 8	- 3	- 3	- 2	648							
+31		+ 2	+ 8	+ 8	+ 5	- 1	- 3	- 3	- 2	- 2	- 3	- 3	- 2	- 2	- 1	- 1	+ 1	+ 1	+ 1	- 1	- 2	- 2	+ 1	+ 6	+ 6	653							
MEAN.		0	- 2	- 4	- 4	- 4	- 3	- 2	0	0	+ 1	+ 2	+ 2	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	0	- 2	- 3	- 2	- 1	+ 1	649							

1200/1/39—17185

Vertical Intensity

G.M.T. (Z = 20 000γ + Mean + ..) February 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
+ 1	+ 8	+ 6	+ 4	0	- 3	- 4	- 3	0	+ 1	+ 2	+ 2	+ 2	+ 4	+ 1	+ 1	+ 1	+ 2	+ 4	+ 2	0	- 5	-10	-10	- 6	650			
2	+ 2	+ 2	- 2	- 5	- 5	- 5	- 2	0	0	0	0	+ 2	+ 3	+ 3	+ 4	+ 5	+ 5	+ 5	+ 4	- 1	- 3	- 3	0	+ 2	647			
3	+ 1	+ 1	- 4	- 8	-16	-13	- 7	- 4	- 3	- 4	+ 1	+ 4	+ 6	+ 6	+ 6	+ 7	+ 7	+ 7	+ 4	- 1	- 1	+ 2	+ 6	+10	648			
4	+ 4	- 4	- 8	-11	-11	- 9	- 6	- 3	0	0	+ 1	+ 4	+ 4	+ 2	+ 4	+ 4	+ 4	+ 2	+ 1	0	0	+ 2	+ 8	+10	650			
5	+ 8	+ 2	- 4	- 5	- 6	- 6	- 4	- 3	- 1	- 1	0	+ 1	+ 2	+ 2	+ 4	+ 6	+ 5	+ 2	+ 1	+ 1	+ 1	0	+ 2	+ 2	650			
6	- 2	- 2	- 2	- 1	- 1	- 2	- 4	0	+ 3	+ 3	+ 4	+ 5	+ 5	+ 8	+ 8	+ 7	+ 4	+ 1	- 5	-10	-10	- 9	- 5	- 2	651			
7	- 2	- 4	- 4	- 4	- 6	-11	- 9	- 6	- 6	- 2	+ 4	+ 5	+ 5	+ 8	+ 7	+ 5	+ 3	0	0	+ 1	+ 1	+ 3	+ 5	+ 1	651			
8	+ 3	+ 5	+ 3	+ 1	- 2	- 2	0	+ 1	+ 4	+ 6	+ 4	+ 8	+ 9	+ 8	+ 8	+ 9	+ 6	+ 4	- 5	-11	-15	-15	-12	-10	647			
9	- 9	- 8	- 9	-13	-11	- 9	- 6	- 3	0	+ 2	+ 5	+ 6	+ 7	+ 9	+10	+10	+ 7	+ 5	+ 2	- 1	- 3	- 3	0	+ 5	646			
10	+ 1	0	- 2	- 2	- 2	- 3	- 2	- 2	- 2	0	+ 1	+ 2	+ 5	+ 5	+ 5	+ 5	+ 3	+ 1	- 2	- 3	- 4	- 4	- 3	- 4	650			
+11	- 4	- 6	- 6	- 7	- 6	- 5	- 4	- 1	- 1	0	+ 1	+ 3	+ 4	+ 6	+ 8	+ 8	+ 8	+ 5	+ 1	- 2	- 1	+ 1	+ 3	+ 1	647			
+12	+ 1	+ 1	- 2	- 3	- 6	- 6	- 3	- 1	- 1	- 1	- 1	+ 1	+ 1	+ 2	+ 3	+ 3	+ 4	+ 3	- 1	- 3	- 6	- 6	+ 2	+ 8	649			
13	+ 6	+ 6	+ 5	+ 5	+ 3	+ 5	+ 6	+ 1	- 4	- 7	- 8	- 4	- 2	+ 6	+ 3	+ 1	+ 2	+ 5	+ 1	- 5	- 8	- 8	- 9	- 4	650			
14	+ 2	- 1	- 2	- 2	- 2	- 1	+ 1	+ 2	+ 1	+ 2	+ 3	+ 2	+ 2	+ 3	+ 3	+ 4	+ 7	+ 4	+ 1	- 2	- 4	- 8	-12	-11	649			
15	- 7	- 6	- 6	- 3	- 2	- 2	- 1	0	+ 2	+ 2	- 1	- 1	+ 2	+ 3	+ 3	+ 5	+ 7	+ 4	+ 3	0	0	- 1	- 3	- 6	648			
16	- 3	- 3	- 5	- 6	- 4	- 1	+ 1	+ 2	+ 4	+ 4	+ 2	+ 2	+ 2	+ 4	+ 4	+ 5	+ 5	+ 5	+ 4	0	- 3	- 4	- 4	+ 1	646			
17	0	- 2	0	- 4	- 7	- 5	- 4	- 2	- 2	- 2	+ 2	0	+ 1	0	+ 1	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	+ 2	+ 5	+ 5	650			
+18																												
19																												
20																												
21																												
22																												
23																												
24																												
25																												
26																												
+27																												
28																												
29																												
30																												
31																												
MEAN.	+ 1	- 1	- 3	- 4	- 5	- 5	- 3	- 1	0	0	+ 1	+ 2	+ 4	+ 4	+ 5	+ 5	+ 5	+ 3	+ 1	- 2	- 4	- 4	- 2	0	649			

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Vertical Intensity

G.M.T. (Z = 20 000γ + Mean + ...) March 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
+10																												
11																												
12																												
13																												
14																												
15																												
+16	- 5	- 8	- 8	- 9	- 8	- 6	- 4	- 1	- 1	0	0	0	+ 1	+ 1	+ 3	+ 4	+ 5	+ 6	+ 5	+ 4	+ 4	+ 4	+ 3	- 1	662			
+17	- 2	0	0	- 3	- 3	- 3	- 2	- 2	- 2	0	+ 1	0	0	+ 1	+ 1	+ 2	+ 2	+ 4	+ 2	+ 1	+ 1	0	0	- 2	661			
18	- 1	- 3	- 6	- 5	- 6	- 6	- 3	- 1	0	0	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 2	- 3	- 7	659			
19	- 5	- 6	- 6	- 7	- 6	- 3	- 2	- 2	- 1	+ 2	+ 3	+ 3	+ 4	0	+ 4	+ 5	+ 4	+ 5	+ 5	+ 4	- 1	- 2	- 1	+ 2	654			
20	- 3	- 6	- 8	- 9	- 8	- 5	- 5	- 3	- 1	+ 1	+ 5	+ 4	+ 5	+ 8	+ 6	+ 4	+ 5	+ 5	+ 4	+ 1	+ 1	0	+ 2	+ 1	657			
21																												
22																												
23	+ 4	+ 3	- 1	- 2	- 6	- 6	- 6	- 6	- 6	- 3	- 2	+ 2	+ 3	+ 3	+ 4	+ 4	+ 4	+ 3	+ 2	- 1	- 2	- 2	0	+ 4	659			
24	+ 5	+ 2	- 1	- 2	- 4	- 3	- 3	- 3	- 3	- 2	+ 1	+ 1	+ 1	+ 2	+ 3	+ 3	+ 2	+ 2	+ 1	- 1	- 2	- 3	- 1	+ 1	661			
25	+ 2	+ 1	- 1	- 3	- 4	- 5	- 4	- 4	- 4	- 1	0	+ 1	+ 2	+ 4	+ 5	+ 5	+ 5	+ 2	- 1	- 3	- 4	- 3	- 1	- 1	658			
+26	- 1	- 6	- 6	- 6	- 4	- 3	- 2	- 1	- 1	+ 1	+ 1	+ 2	+ 3	+ 6	+ 6	+ 7	+ 7	+ 6	+ 4	+ 1	- 2	- 3	- 3	- 1	656			
+27	- 2	- 7	- 8	- 8	- 7	- 4	- 2	- 2	- 2	0	+ 1	+ 2	+ 2	+ 3	+ 6	+ 7	+ 7	+ 7	+ 6	+ 3	+ 2	0	- 2	- 2	657			
28	- 4	-11	-11	- 7	- 2	- 1	+ 1	- 2	- 2	- 8	- 9	- 4	+ 2	+ 8	+ 7	+10	+ 8	+12	+10	+ 6	- 1	- 2	+ 2	+ 4	656			
29	- 3	- 5	- 3	- 3	0	0	0	+ 3	+ 1	0	+ 3	+ 3	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 6	+ 3	- 3	- 5	- 6	- 5	- 4	663			
30	- 6	- 9	- 3	- 3	-12	- 7	- 3	- 2	- 1	- 2	+ 1	+ 5	+ 5	+ 6	+ 7	+ 7	+10	+16	+ 7	+ 3	- 1	- 7	- 8	- 8	661			
31	-12	-13	- 9	- 7	- 3	+ 5	+ 5	+ 3	+ 7	+ 3	+ 3	+ 3	+ 1	+ 1	+ 1	+ 2	+ 2	+ 5	+ 5	+ 3	0	- 2	+ 1	+ 1	666			
MEAN.	- 2	- 5	- 5	- 5	- 5	- 3	- 2	- 2	- 1	- 1	+ 1	+ 2	+ 3	+ 4	+ 4	+ 5	+ 5	+ 6	+ 4	+ 2	0	- 2	- 1	- 1	659			

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Vertical Intensity

G.M.T. (Z = 20 000γ + Mean + ...) April 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+ 3	- 1	- 3	- 5	- 3	- 3	- 2	- 2	- 1	- 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 3	+ 3	+ 2	- 1	- 1	+ 1	+ 1	+ 1	664			
2	+ 2	0	- 1	- 4	- 5	- 4	- 2	- 2	- 1	- 1	+ 2	+ 2	+ 3	+ 3	+ 4	+ 3	+ 3	+ 3	+ 3	0	0	+ 2	0	- 1	663			
3	- 2	- 5	-11	-13	-11	- 8	- 4	- 2	- 2	0	+ 1	+ 4	+ 5	+ 5	+ 4	+ 5	+ 5	+ 5	+ 5	+ 4	+ 4	+ 4	+ 1	- 2	661			
4	- 4	- 5	- 9	- 9	- 7	- 5	- 4	- 2	- 1	+ 2	+ 4	+ 4	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 2	+ 2	+ 2	+ 3	+ 2	664			
5	0	- 4	- 6	- 6	- 6	- 8	- 6	- 4	- 1	+ 1	+ 3	+ 3	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	+ 4	+ 5	+ 4	+ 4	+ 1	- 1	663			
6	- 4	- 7	- 9	- 9	- 8	- 7	- 7	- 4	- 2	+ 1	+ 2	+ 4	+ 5	+ 5	+ 6	+ 6	+ 6	+ 5	+ 5	+ 2	+ 1	+ 1	+ 1	0	662			
7																												
8																												
9	- 3	- 4	- 6	- 7	- 7	- 6	- 6	- 4	- 3	- 1	+ 1	+ 3	+ 6	+ 6	+ 7	+ 5	+ 3	+ 3	+ 3	+ 1	+ 1	+ 1	+ 2	+ 3	661			
10	0	- 3	- 4	- 5	- 5	- 3	- 4	- 5	- 5	- 2	+ 1	+ 4	+ 4	+ 5	+ 6	+ 6	+ 6	+ 5	+ 5	+ 4	+ 4	+ 1	- 5	- 7	662			
11	- 6	- 6	- 7	- 6	- 4	- 2	- 3	- 4	- 4	+ 1	- 1	+ 1	+ 3	+ 5	+ 6	+ 6	+ 6	+ 5	+ 3	+ 2	- 1	- 1	- 2	- 2	661			
12	- 4	- 4	- 4	- 4	- 3	- 4	- 2	- 2	- 1	- 1	- 1	- 1	+ 2	+ 2	+ 2	+ 3	+ 5	+ 5	+ 5	+ 3	- 1	- 1	- 2	- 3	661			
13	- 1	- 5	- 3	- 2	+ 1	+ 1	+ 1	- 1	+ 1	- 1	+ 1	+ 1	+ 2	+ 2	+ 3	+ 4	+ 4	+ 6	+ 6	+ 3	- 1	- 3	- 5	- 5	656			
14	- 6	- 8	- 8	- 6	- 6	- 4	- 2	- 1	0	- 1	- 1	0	0	+ 2	+ 2	+ 3	+ 4	+ 5	+ 7	+ 7	+ 5	+ 3	- 2	- 4	655			
15	- 4	- 7	- 8	- 7	- 4	- 1	0	+ 1	+ 3	+ 3	+ 3	+ 1	+ 1	+ 1	0	+ 1	+ 3	+ 4	+ 6	+ 8	+ 6	+ 4	- 1	- 5	655			
16	- 8	-13	-12	- 8	- 7	- 4	- 2	+ 1	+ 2	+ 2	0	+ 1	- 2	+ 1	+ 2	+ 4	+ 4	+ 5	+ 7	+10	+10	+ 7	+ 4	+ 2	654			
17	- 4	- 5	- 7	- 8	- 8	- 5	- 3	- 1	0	+ 1	+ 1	+ 1	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 3	+ 3	+ 1	655			
18	- 1	- 7	- 7	- 7	- 5	- 4	- 1	0	+ 1	+ 3	+ 3	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 1	- 3	+ 1	655			
19	+ 1	- 2	- 6	- 6	- 6	- 7	-12	-11	- 2	0	+ 2	+ 3	+ 7	+ 7	+ 9	+ 9	+ 7	+ 5	+ 5	+ 2	+ 1	0	+ 2	+ 3	658			
20	+ 1	- 5	- 9	- 9	- 7	- 6	- 5	- 3	- 1	+ 2	+ 3	+ 6	+ 7	+ 7	+ 6	+ 4	+ 6	+ 6	+ 4	+ 1	- 1	- 1	- 1	- 2	657			
21	- 4	- 2	- 3	- 4	- 4	- 4	- 4	- 3	- 2	0	+ 2	+ 3	+ 3	+ 5	+ 5	+ 3	+ 3	+ 3	+ 2	+ 2	0	0	0	+ 1	658			
22	+ 3	+ 2	- 2	- 3	- 4	- 4	- 4	- 3	- 3	- 2	0	+ 1	+ 1	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	0	0	0	0	0	658			
23	+ 1	+ 1	- 2	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 2	+ 1	+ 1	+ 2	+ 2	+ 3	+ 3	+ 3	+ 4	+ 3	+ 3	+ 3	+ 3	+ 3	657			
24	+ 3	+ 6	+ 4	+ 1	- 1	- 1	- 2	- 1	- 3	-14	-16	- 9	- 1	+ 1	+ 7	+ 6	+ 6	+ 8	+ 8	+ 6	+ 2	+ 1	- 2	- 2	657			
25	- 6	- 6	- 4	- 2	- 1	- 1	- 4	+ 3	+ 1	+ 2	+ 3	+ 2	+ 3	+ 5	+ 7	+ 7	+ 6	+ 6	+ 5	+ 1	- 2	- 4	- 6	- 8	662			
26	- 8	- 6	- 4	- 4	- 5	- 2	- 2	- 2	- 2	0	+ 1	+ 3	+ 4	+ 4	+ 5	+ 5	+ 7	+ 5	+ 4	+ 3	+ 1	- 1	- 4	- 4	661			
27	- 4	- 2	- 4	- 4	- 4	- 4	- 2	- 2	- 2	- 1	- 1	- 1	0	+ 1	+ 3	+ 3	+ 4	+ 4	+ 5	+ 5	+ 4	+ 3	0	- 2	661			
28	0	- 2	- 4	-10	-10	- 4	- 2	0	+ 1	0	- 2	- 2	+ 1	+ 3	+ 5	+ 5	+ 7	+ 7	+ 7	+ 5	+ 1	- 4	- 6	- 4	659			
29	-10	-14	-10	- 4	+ 3	+ 5	+ 3	- 1	- 1	- 1	+ 1	+ 1	+ 2	+ 2	+ 2	+ 3	+ 5	+ 5	+ 6	+ 7	+ 5	+ 1	- 2	- 3	663			
30	- 4	- 6	- 6	- 6	- 5	- 2	- 1	+ 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 4	+ 5	+ 5	+ 5	+ 5	+ 1	- 1	- 5	- 8	661			
31																												
MEAN.	- 2	- 4	- 6	- 6	- 5	- 4	- 3	- 2	- 1	0	0	+ 2	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 5	+ 3	+ 2	+ 1	- 1	- 2	659			

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Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) May 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	- 6	- 6	- 6	- 6	- 4	- 2	- 1	0	+ 2	+ 2	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 4	+ 7	+ 5	+ 4	0	- 4	- 5	660			
+ 2	- 9	-11	-13	-11	-10	- 6	- 2	+ 1	+ 2	+ 3	+ 4	+ 4	+ 3	+ 4	+ 6	+ 4	+ 6	+ 6	+ 6	+ 6	+ 6	+ 2	- 3	- 5	661			
+ 3	- 6	- 7	-11	-10	- 8	- 6	- 3	0	+ 2	+ 3	+ 5	+ 3	+ 3	+ 2	+ 2	+ 3	+ 3	+ 3	+ 5	+ 5	+ 5	+ 5	+ 3	+ 1	662			
4	- 2	- 1	- 1	- 1	- 3	- 7	-13	-14	- 6	0	0	+ 3	+ 4	+ 4	+ 4	+ 3	+ 3	+ 2	+ 2	+ 2	+ 3	+ 4	+ 6	+ 3	665			
+ 5	- 2	- 2	- 1	- 4	- 5	- 5	- 4	- 1	0	+ 3	+ 3	+ 4	+ 4	+ 3	+ 1	+ 1	0	0	0	- 1	- 1	- 1	- 1	- 2	664			
6	- 2	- 6	- 5	- 4	- 5	- 4	- 4	- 2	- 2	- 1	0	+ 2	+ 3	+ 3	+ 3	+ 3	+ 2	+ 2	+ 2	+ 3	+ 3	+ 4	+ 3	+ 2	660			
7	- 4	- 9	-11	- 8	- 8	- 8	- 7	- 4	0	+ 1	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	+ 1	+ 3	+ 4	+ 4	+ 5	+ 5	+ 5	660			
8	+ 4	+ 3	0	- 1	- 4	- 4	- 4	- 4	- 3	- 3	- 1	- 3	- 1	+ 3	+ 4	+ 4	+ 3	+ 1	+ 1	0	0	0	- 1	0	660			
9	+ 1	+ 1	- 2	- 4	- 6	- 7	- 8	- 7	- 4	- 3	0	+ 1	+ 4	+ 7	+ 6	+ 5	+ 5	+ 5	+ 5	+ 4	+ 1	0	- 2	- 4	659			
10	- 8	-10	- 9	- 5	- 2	- 1	- 2	- 2	- 4	- 2	- 2	0	+ 2	+ 3	+ 4	+ 6	+ 6	+ 6	+ 6	+ 6	+ 6	+ 3	0	- 1	657			
11	- 3	- 4	- 3	0	- 2	- 3	- 2	- 2	- 3	- 4	- 4	- 2	0	+ 1	+ 2	+ 4	+ 5	+ 4	+ 4	+ 4	+ 4	+ 2	+ 1	- 3	659			
12	- 6	- 6	- 4	- 2	0	0	0	+ 1	+ 1	0	0	0	0	+ 1	+ 2	+ 4	+ 4	+ 4	+ 4	+ 4	+ 2	0	- 4	- 7	659			
13	- 2	- 4	- 4	- 2	0	+ 2	0	0	0	0	0	- 1	- 1	0	+ 2	+ 3	+ 4	+ 4	+ 6	+ 6	+ 4	+ 2	- 2	- 6	657			
14	- 8	- 9	- 8	- 6	- 2	+ 1	+ 1	+ 1	+ 2	+ 2	+ 2	+ 1	+ 2	+ 2	+ 2	+ 4	+ 5	+ 6	+ 8	+ 6	+ 5	- 2	- 9	-16	655			
15	-18	-15	-13	- 7	- 2	- 1	0	0	+ 2	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 6	+ 6	+ 6	+10	+11	+ 7	+ 3	- 2	-13	653			
16	-23	-22	-15	-13	-11	- 8	- 4	- 4	- 1	+ 2	+ 2	+ 3	+ 2	+ 3	+ 6	+ 6	+ 6	+ 6	+ 8	+12	+13	+12	+ 9	+ 3	657			
17	- 8	-12	- 9	- 6	- 9	-14	-10	- 6	- 8	- 4	+ 4	0	0	+ 2	+ 3	+ 3	+ 4	+ 4	+ 5	+ 9	+11	+12	+11	+ 9	661			
18	+ 6	+ 2	- 2	- 3	- 3	- 2	- 2	0	+ 1	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 2	+ 1	0	- 3	- 6	663			
+ 19	- 5	- 8	- 7	- 4	- 3	- 3	- 1	0	0	+ 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 1	+ 3	+ 3	+ 3	+ 1	+ 1	0	661			
+ 20	- 3	- 4	- 4	- 4	- 4	- 4	- 4	- 3	- 3	- 1	0	+ 1	+ 3	+ 3	+ 3	+ 1	+ 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 3	0	661			
21	- 2	- 4	- 4	- 4	- 4	- 6	- 8	-10	- 8	- 7	- 3	+ 1	+ 2	+ 4	+ 5	+ 6	+ 7	+ 7	+ 9	+ 6	+ 4	+ 1	0	- 2	660			
22	- 1	- 6	- 9	-12	-10	- 7	- 3	- 1	- 1	- 1	+ 5	+ 5	+ 6	+ 6	+ 7	+ 6	+ 5	+ 5	+ 6	+ 5	+ 3	- 1	- 2	+ 1	659			
23	- 2	- 2	- 4	- 6	- 6	- 4	- 4	- 3	- 2	0	0	+ 1	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 4	+ 4	+ 4	0	- 3	- 8	660			
24	-10	-11	-10	- 9	- 9	- 7	- 6	- 5	- 2	+ 3	+ 5	+ 5	+ 6	+ 7	+ 8	+ 8	+10	+10	+ 7	+ 6	+ 5	+ 2	- 1	- 2	659			
25	- 8	-11	- 8	- 5	- 7	- 1	+ 1	+ 1	- 1	- 1	+ 1	+ 3	+ 3	+ 4	+ 5	+ 6	+ 6	+ 5	+ 4	+ 4	+ 4	+ 1	- 1	- 3	661			
26	- 4	- 7	- 5	0	+ 3	+ 3	+ 1	0	0	+ 1	+ 1	+ 3	+ 4	+ 4	+ 4	+ 5	+ 5	+ 5	+ 6	+ 4	0	- 3	- 8	-13	661			
27	-15	-15	-11	- 8	- 4	- 3	- 3	- 2	0	0	+ 1	+ 1	+ 2	+ 4	+ 4	+ 5	+ 5	+ 6	+ 7	+ 7	+ 7	+ 9	+ 7	+ 6	660			
28	+ 1	- 3	- 2	+ 2	+ 1	- 1	- 1	- 2	- 3	- 3	- 2	- 1	+ 2	+ 1	+ 2	+ 3	+ 4	+ 4	+ 6	+ 6	+ 4	+ 3	- 3	-13	663			
29	-14	-12	- 7	- 4	- 5	- 4	- 3	- 1	- 1	0	+ 1	+ 3	+ 4	+ 3	+ 3	+ 4	+ 5	+ 5	+ 6	+ 8	+ 6	+ 4	+ 5	- 3	662			
30	- 8	- 9	- 2	+ 2	+ 2	0	+ 2	+ 2	+ 2	0	0	- 1	- 1	- 1	0	0	+ 2	+ 2	+ 3	+ 3	+ 2	0	- 1	- 4	663			
31	- 7	-11	-12	- 8	- 4	- 3	- 1	0	+ 3	+ 3	+ 3	+ 3	+ 3	+ 1	+ 3	+ 3	+ 4	+ 4	+ 5	+ 8	+ 6	+ 5	0	- 5	662			
MEAN.	- 6	- 7	- 6	- 5	- 4	- 4	- 3	- 2	- 1	0	+ 1	+ 2	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 2	0	- 3	660			

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Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) June 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	- 3	- 3	- 5	- 5	- 6	- 6	- 2	- 1	- 1	+ 2	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 5	+ 5	+ 6	+ 6	+ 5	+ 2	- 5	-11	661			
+ 2	-14	- 9	- 7	- 7	- 5	- 3	- 2	- 1	+ 1	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	+ 2	+ 2	+ 5	+ 6	+ 6	+ 5	+ 6	+ 6	661			
+ 3	+ 2	+ 4	+ 2	0	- 3	- 3	- 3	- 2	- 2	- 2	0	0	+ 1	0	0	0	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 2	0	662			
+ 4	- 5	- 5	- 4	- 4	- 2	- 2	- 2	- 2	- 1	0	+ 2	+ 3	+ 3	+ 3	+ 3	+ 3	+ 2	+ 2	+ 3	+ 3	+ 2	0	- 1	- 1	660			
+ 5	- 4	- 4	- 2	- 4	- 5	- 6	- 6	- 5	- 4	- 1	+ 2	+ 3	+ 4	+ 6	+ 4	+ 4	+ 3	+ 3	+ 3	+ 3	+ 2	- 1	- 2	- 2	660			
6	- 6	- 8	- 8	- 8	- 7	- 6	- 3	- 2	- 2	0	0	+ 1	+ 4	+ 5	+ 6	+ 6	+ 5	+ 5	+ 5	+ 5	+ 4	+ 1	+ 1	0	658			
7	0	- 3	- 7	- 8	- 7	- 5	- 5	- 4	- 3	- 1	+ 1	+ 1	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 5	+ 3	0	+ 1	659			
8	0	- 3	- 2	+ 1	+ 1	0	- 2	- 3	- 3	- 3	- 2	0	+ 2	+ 2	+ 4	+ 4	+ 4	+ 4	+ 4	+ 2	+ 1	- 3	- 6	- 8	662			
9	- 7	- 5	- 1	+ 3	+ 3	+ 3	+ 3	+ 1	0	0	- 5	- 5	- 4	- 3	- 1	+ 1	+ 3	+ 3	+ 4	+ 5	+ 7	+ 3	0	- 3	660			
10	- 7	- 7	- 6	- 3	- 2	- 3	- 6	- 7	- 7	- 3	+ 1	+ 1	+ 1	+ 6	+ 2	+ 5	+ 7	+ 9	+10	+ 9	+ 7	+ 1	- 2	- 3	662			
11	+ 1	- 3	- 4	- 6	- 4	- 2	- 2	- 2	- 3	- 3	- 2	0	+ 1	+ 2	+ 4	+ 4	+ 5	+ 8	+ 8	+ 4	0	- 4	- 6	- 7	663			
12	- 5	- 6	-10	-10	- 6	- 2	+ 1	+ 1	+ 2	+ 2	+ 2	+ 2	+ 1	+ 2	+ 2	+ 2	+ 3	+ 3	+ 5	+ 6	+ 6	+ 5	+ 2	- 2	662			
13	- 3	- 5	- 7	- 4	- 1	- 3	- 7	-11	-12	- 8	- 5	+ 1	+ 3	+ 7	+ 4	+ 5	+ 7	+ 7	+ 9	+11	+ 9	+ 7	+ 1	- 4	660			
14	-10	-14	-12	- 8	- 6	- 3	0	+ 4	+ 4	+ 5	+ 5	+ 5	+ 6	+ 5	+ 5	+ 4	+ 4	+ 5	+ 6	+ 6	+ 5	+ 2	- 3	- 6	663			
15	- 6	- 7	-10	-12	-11	-10	- 8	- 6	- 2	+ 1	+ 2	+ 4	+ 6	+ 8	+ 8	+ 9	+ 9	+ 8	+ 6	+ 8	+ 8	+ 4	- 3	- 8	663			
+16	-10	- 7	- 7	- 7	- 6	- 4	- 2	0	+ 1	+ 2	+ 2	+ 4	+ 4	+ 2	+ 2	+ 2	+ 2	+ 4	+ 4	+ 4	+ 2	+ 2	+ 1	+ 1	663			
17	+ 3	0	- 2	- 4	- 4	- 2	- 2	- 1	0	- 1	- 1	0	+ 2	+ 2	+ 2	+ 2	+ 3	+ 3	+ 4	+ 2	0	- 1	- 4	- 5	661			
18	- 7	-11	-13	-11	- 6	- 3	- 3	- 2	+ 2	+ 3	+ 3	+ 3	+ 5	+ 5	+ 5	+ 5	+ 3	+ 2	+ 2	+ 5	+ 5	+ 3	+ 2	+ 2	662			
19	+ 2	0	- 1	- 1	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 1	- 1	0	0	+ 2	+ 2	+ 2	+ 4	+ 4	+ 3	- 1	- 4	- 5	661			
20	- 9	-13	-12	- 8	- 4	- 5	- 9	- 8	- 5	- 1	+ 1	+ 4	+ 4	+ 5	+ 7	+ 7	+ 7	+ 5	+ 5	+ 5	+ 5	+ 7	+ 7	+ 1	660			
21	- 5	- 6	- 6	- 2	- 1	- 2	- 3	- 2	- 2	- 1	+ 2	+ 3	+ 2	+ 3	+ 3	+ 3	+ 3	+ 2	+ 3	+ 2	+ 2	+ 2	- 1	- 5	662			
22	- 8	- 4	0	+ 3	+ 3	+ 1	0	- 1	- 5	- 1	- 1	0	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	3	0	- 3	- 3	- 1	660			
23	- 5	- 4	- 3	- 4	- 4	- 3	- 3	- 3	- 3	- 1	- 1	0	+ 1	+ 1	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	+ 1	- 1	660			
24	- 4	- 4	- 1	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 3	- 1	+ 1	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 1	- 3	660			
25	- 4	- 5	- 5	- 4	- 4	- 3	- 1	- 1	0	- 1	0	0	+ 1	+ 1	+ 3	+ 4	+ 4	+ 4	+ 5	+ 5	+ 3	- 1	- 5	- 7	660			
26	- 9	- 9	- 6	- 5	- 2	- 2	- 2	- 2	- 1	0	0	0	+ 2	+ 3	+ 4	+ 6	+ 6	+ 6	+ 7	+10	+ 7	+ 4	0	- 5	661			
27	- 2	- 5	- 3	- 1	- 2	- 3	- 5	- 2	- 1	+ 1	- 1	- 1	+ 1	+ 2	+ 3	+ 3	+ 5	+ 3	+ 6	+ 7	+ 5	+ 2	- 1	- 3	658			
28	- 4	- 5	- 4	- 4	- 4	- 4	- 2	- 1	- 1	0	0	- 1	- 1	0	+ 2	+ 3	+ 3	+ 4	+ 7	+ 8	+ 7	+ 3	0	- 2	657			
29	- 6	- 9	- 7	- 6	- 3	- 2	- 1	- 1	+ 1	+ 1	- 1	- 1	- 1	+ 1	+ 1	+ 1	+ 2	+ 2	+ 3	+ 6	+ 6	+ 5	+ 2	- 1	658			
30	- 2	- 5	- 5	- 3	- 2	- 1	- 1	- 1	- 1	- 2	- 1	- 1	- 1	- 1	+ 1	+ 2	+ 3	+ 5	+ 7	+ 7	+ 3	+ 3	+ 3		657			
31																												
MEAN.	- 5	- 5	- 5	- 4	- 3	- 3	- 3	- 2	- 2	0	0	+ 1	+ 2	+ 3	+ 3	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 2	0	- 3	661			

Vertical Intensity

G.M.T. (Z = 20000Y + Mean + ...) July 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	0	- 3	- 7	- 9	- 7	- 5	- 4	- 3	- 3	- 1	+ 2	+ 2	+ 3	+ 3	+ 2	+ 2	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 2	+ 2	658			
2	- 2	- 6	- 5	- 6	- 6	- 6	- 5	- 2	- 2	- 1	- 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 3	+ 5	+ 6	+ 6	+ 5	+ 3	659			
3	- 1	0	- 1	- 1	- 3	- 3	- 3	- 1	- 1	0	+ 2	+ 2	+ 4	+ 3	+ 2	+ 2	0	- 1	0	0	0	- 1	- 1	- 3	658			
4																												
5																												
6	+ 4	+ 4	+ 8	+ 6	+ 2	+ 1	- 1	- 1	- 1	+ 1	+ 1	- 1	+ 1	+ 4	+ 5	+ 4	+ 2	+ 2	- 2	- 5	- 7	- 9	- 5	- 3	685			
7	- 1	- 3	- 6	- 5	- 8	- 1	- 1	+ 3	- 1	- 2	- 1	+ 2	+ 5	+ 5	+ 5	+ 6	+ 5	+ 3	+ 3	+ 1	- 1	- 3	- 8	- 6	681			
8	- 5	- 6	- 5	- 5	- 5	- 6	- 6	- 6	- 5	- 5	- 3	0	+ 1	+ 5	+ 6	+ 6	+ 8	+ 6	+ 6	+ 5	+ 5	+ 6	+ 5	+ 4	678			
9	+ 1	0	+ 1	0	+ 1	+ 1	+ 1	0	- 1	- 1	- 1	0	0	0	+ 3	+ 3	+ 3	+ 4	+ 4	+ 3	0	+ 1	- 4	-11	679			
10	- 6	- 2	- 3	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 1	+ 1	+ 2	+ 4	+ 5	+ 6	+ 5	+ 5	+ 2	- 1	- 1	- 3	674			
11	- 2	- 2	- 2	- 2	- 2	- 1	- 1	- 2	- 2	- 2	- 2	- 2	- 2	- 1	+ 1	+ 2	+ 4	+ 4	+ 5	+ 5	+ 5	+ 4	- 1	- 2	674			
12	- 4	- 5	- 5	- 7	- 5	- 4	- 2	- 4	- 5	- 4	- 4	- 2	- 1	0	0	+ 2	+ 2	+ 2	+ 3	+ 5	+ 7	+ 9	+ 6	+ 5	673			
+ 13	+ 3	- 2	- 2	- 1	- 2	- 2	- 1	- 1	- 1	- 2	- 4	- 2	- 2	- 1	- 1	+ 1	+ 1	+ 2	+ 3	+ 5	+ 3	+ 3	+ 2	+ 1	670			
+ 14	+ 2	0	- 2	- 4	- 4	- 4	- 1	0	0	0	0	0	0	+ 2	+ 2	+ 2	+ 3	+ 3	+ 5	+ 6	+ 7	0	- 2	- 5	666			
15	- 7	- 7	- 5	- 5	- 6	- 5	- 5	- 3	- 2	- 1	- 1	+ 1	+ 1	+ 2	+ 2	+ 2	+ 4	+ 4	+ 5	+ 4	+ 5	+ 4	+ 4	+ 1	667			
16	- 2	- 4	- 6	- 9	- 9	- 6	- 4	- 3	- 2	0	+ 1	+ 2	+ 2	+ 4	+ 4	+ 4	+ 2	+ 2	+ 5	+ 5	+ 4	+ 5	+ 5	0	664			
17	- 4	- 7	- 5	- 5	- 5	- 1	- 1	- 1	+ 1	+ 1	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	+ 3	+ 4	+ 4	+ 3	0	- 1	0	665			
18	- 6	- 7	- 7	- 4	- 4	- 3	- 3	- 3	- 3	- 2	0	+ 1	+ 3	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	- 3	668			
19	- 5	- 7	- 7	- 5	- 5	- 4	- 3	- 1	0	+ 2	+ 2	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	+ 4	+ 6	+ 6	+ 3	- 1	669			
20	0	0	- 2	- 2	- 3	- 4	- 2	- 2	- 4	- 2	+ 1	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	+ 3	+ 3	0	+ 1	0	0	667			
21	+ 4	- 1	- 2	- 2	- 1	- 5	- 9	- 7	- 7	- 9	- 8	- 2	+ 4	+ 7	+ 9	+ 9	+ 9	+ 7	+ 7	+ 4	+ 3	- 1	- 4	- 2	661			
22	- 2	- 2	0	- 3	- 2	0	- 2	+ 1	+ 1	+ 1	+ 1	+ 2	+ 2	+ 4	+ 4	+ 5	+ 5	+ 2	+ 4	+ 2	+ 1	- 6	- 9	- 7	663			
23	- 6	- 7	- 6	- 4	- 3	- 3	- 2	- 2	- 2	+ 1	0	0	+ 2	+ 4	+ 4	+ 5	+ 5	+ 4	+ 4	+ 2	+ 2	0	- 4	- 6	663			
24	- 9	- 4	0	+ 1	+ 1	- 2	- 2	- 2	- 2	- 2	- 2	0	0	0	+ 1	+ 2	+ 4	+ 4	+ 7	+ 5	+ 4	+ 2	0	- 2	663			
25	- 4	- 4	- 5	- 5	- 3	- 1	- 5	- 7	- 5	- 3	- 1	- 1	0	+ 3	+ 4	+ 7	+ 8	+ 8	+10	+ 8	+ 4	0	- 4	- 3	664			
+ 26	- 5	- 5	- 8	- 9	- 5	- 2	- 2	- 1	- 1	- 1	- 1	+ 1	+ 1	+ 1	+ 1	+ 3	+ 3	+ 5	+ 5	+ 6	+ 8	+ 6	+ 3	- 4	-10	669		
+ 27	- 6	- 6	- 5	- 4	- 4	- 4	- 2	- 1	- 1	- 1	- 1	- 1	0	0	+ 2	+ 3	+ 5	+ 6	+ 7	+ 7	+ 6	+ 2	- 2	- 4	665			
28	- 3	- 5	- 7	- 5	- 4	- 4	- 4	- 3	- 3	- 3	- 1	- 1	0	+ 1	+ 1	+ 3	+ 4	+ 6	+ 7	+ 7	+ 6	+ 4	+ 3	+ 1	664			
+ 29	0	- 2	- 2	- 1	- 4	- 5	- 4	- 4	- 2	- 1	- 1	- 1	- 1	0	+ 2	+ 2	+ 3	+ 3	+ 5	+ 6	+ 5	+ 2	- 2	- 4	665			
30	- 3	-13	-16	-13	-10	- 7	- 5	- 2	+ 1	+ 2	+ 2	+ 2	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 6	+ 6	+ 5	+ 5	+ 5	0	659			
31	- 6	- 2	- 1	- 2	- 3	- 5	- 3	- 2	- 1	- 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	- 1	+ 1	+ 2	+ 3	+ 5	+ 3	+ 2	- 1	- 1	662		
MEAN.	- 3	- 4	- 4	- 4	- 4	- 3	- 3	- 2	- 2	- 1	- 1	0	+ 1	+ 2	+ 3	+ 3	+ 4	+ 4	+ 5	+ 4	+ 3	+ 2	0	- 2	667			

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Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) August 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	- 5	- 5	- 2	- 1	- 1	- 2	- 2	- 2	- 4	- 2	- 1	+ 2	+ 2	+ 2	+ 2	0	0	0	+ 3	+ 3	+ 2	+ 2	+ 2	0	664			
2	- 1	- 3	- 1	0	- 1	- 4	- 5	- 4	- 5	- 7	- 1	+ 2	+ 3	+ 5	+ 9	+ 7	+ 5	+ 3	+ 3	+ 3	0	- 1	- 3	- 4	667			
3	- 5	- 4	- 5	- 4	- 2	- 4	- 4	- 4	- 4	- 2	+ 2	+ 4	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	+ 2	+ 4	+ 5	+ 5	+ 5	+ 5	668			
4	+ 7	+ 7	+ 8	+ 8	- 6	-13	-11	- 9	- 6	- 6	- 7	- 6	0	+ 1	+ 1	+ 6	+ 4	+ 6	+ 7	+ 4	+ 4	0	- 2	- 3	666			
5	- 9	- 7	- 6	- 1	+ 1	+ 1	0	+ 1	+ 1	+ 1	+ 1	+ 3	+ 3	+ 4	+ 4	+ 6	+ 6	+ 4	+ 3	+ 1	- 1	- 4	- 6	- 6	673			
6	- 2	0	- 2	- 5	- 5	- 3	- 6	- 2	- 3	- 3	- 2	0	+ 1	+ 4	+ 7	+10	+ 8	+ 7	+ 7	+ 7	+ 1	- 6	- 8	-13	672			
7	- 9	- 5	- 2	- 1	- 1	+ 1	+ 1	+ 2	+ 2	+ 2	+ 1	+ 4	+ 2	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 2	+ 2	- 2	- 8	-12	668			
8	- 9	- 7	- 6	- 2	- 2	- 3	- 3	- 3	- 2	- 2	- 2	0	0	+ 1	+ 3	+ 4	+ 4	+ 6	+ 6	+ 7	+ 7	+ 1	- 3	- 6	666			
+9	- 7	- 7	- 6	- 3	0	+ 1	+ 2	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 4	+ 5	+ 7	+ 7	+ 7	+ 5	+ 1	- 2	- 6	-12	661			
+10	-13	-13	- 9	- 7	- 4	- 2	+ 1	+ 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 4	+ 4	+ 4	+ 5	+ 7	+ 8	+ 8	+ 7	+ 4	- 4	-12	658			
11	- 9	- 7	- 7	- 7	- 4	- 3	- 3	- 3	- 2	0	+ 1	+ 1	+ 1	+ 1	+ 3	+ 3	+ 4	+ 5	+ 7	+ 8	+10	+ 7	+ 1	- 2	658			
12	- 5	- 8	- 8	- 7	- 5	- 5	- 3	- 1	0	0	0	+ 2	+ 2	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 6	+ 7	+ 7	+ 4	+ 3	659			
13	+ 1	- 2	- 5	- 5	- 5	- 4	- 2	- 1	- 1	+ 1	+ 2	+ 1	+ 2	+ 2	+ 3	+ 3	+ 3	+ 3	+ 5	+ 5	+ 5	+ 2	+ 1	- 4	660			
14	- 8	- 8	- 6	- 5	- 8	- 6	- 5	- 3	- 1	+ 1	+ 1	+ 2	+ 2	+ 2	+ 4	+ 4	+ 4	+ 5	+ 5	+ 5	+ 5	+ 5	+ 4	- 1	664			
15	- 3	- 9	- 9	- 9	- 7	- 4	- 3	0	+ 1	+ 3	+ 3	+ 3	+ 3	+ 4	+ 3	+ 3	+ 3	+ 3	+ 4	+ 4	+ 3	+ 1	0	- 2	665			
+16	- 1	- 2	- 4	- 4	- 5	- 4	- 4	- 2	- 1	- 1	0	0	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 5	+ 5	+ 3	+ 3	0	663			
+17	+ 1	- 1	- 3	- 4	- 7	- 6	- 4	- 3	- 1	0	+ 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 1	0	662			
18	- 4	- 5	- 7	- 8	- 7	- 4	- 4	- 3	- 3	- 1	- 1	0	0	+ 2	+ 2	+ 2	+ 2	+ 2	+ 3	+ 5	+ 6	+ 5	+ 5	+ 5	666			
19																												
20																												
21	0	- 3	- 3	- 2	- 2	- 3	- 4	- 4	- 3	- 2	0	+ 2	+ 5	+ 6	+ 7	+ 6	+ 5	+ 5	+ 3	+ 1	- 2	- 6	- 7	- 8	659			
22	- 5	- 5	- 3	- 3	- 2	- 2	- 3	- 3	- 3	- 3	- 2	- 1	+ 1	+ 2	+ 3	+ 4	+ 6	+ 6	+ 6	+ 5	+ 3	+ 1	+ 2	+ 4	658			
+23	+ 1	0	0	+ 3	+ 1	- 1	- 2	- 4	- 5	- 4	- 4	- 2	- 1	0	+ 1	+ 3	+ 4	+ 4	+ 4	+ 1	0	- 2	- 4	- 2	661			
24	- 2	- 1	+ 1	+ 1	+ 1	- 2	- 2	- 3	- 5	- 1	- 1	- 1	+ 1	+ 2	+ 3	+ 4	+ 6	+ 6	+ 6	+ 6	+ 3	- 1	- 5	- 9	658			
25	-10	-10	-10	-12	- 5	- 2	- 1	0	0	0	0	0	+ 2	+ 3	+ 4	+ 5	+ 7	+ 7	+ 7	+ 5	+ 4	+ 2	0	+ 2	657			
26	- 2	- 3	- 4	- 4	- 3	- 2	- 1	- 1	- 1	- 1	- 2	- 3	- 2	+ 1	+ 2	+ 3	+ 5	+ 5	+ 5	+ 7	+ 5	+ 3	+ 1	- 4	663			
27	-14	-18	-14	- 7	- 6	- 6	- 3	- 2	- 2	+ 2	+ 3	- 3	- 2	+ 2	+ 6	+ 7	+ 9	+ 9	+ 7	+ 9	+ 7	+ 7	+ 2	+ 3	667			
28	- 8	-10	-11	-13	- 8	- 4	- 1	- 1	- 1	- 2	+ 3	- 1	0	+ 3	+ 2	+ 2	+ 3	+ 3	+ 6	+ 6	+ 7	+ 7	+ 4	+ 2	670			
29	- 1	- 7	- 5	- 3	- 3	- 3	- 2	- 1	+ 1	+ 3	+ 3	+ 2	+ 2	+ 5	+ 3	+ 2	+ 1	+ 2	+ 2	+ 3	+ 2	- 1	- 1	- 3	667			
30	- 7	- 6	- 6	- 2	- 2	- 1	- 1	+ 2	+ 2	+ 3	+ 3	+ 3	+ 4	+ 3	+ 6	+ 3	+ 2	+ 2	+ 2	0	- 2	- 2	- 2	- 2	666			
31	+ 1	- 1	- 5	- 9	- 7	- 7	- 7	- 4	- 5	+ 1	+ 2	+ 4	+ 5	+ 6	+ 5	+ 5	+ 4	+ 5	+ 5	+ 4	+ 2	0	- 1	- 1	660			
MEAN.	- 4	- 5	- 5	- 4	- 4	- 3	- 3	- 2	- 2	- 1	0	+ 1	+ 2	+ 3	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 1	- 1	- 3	664			

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Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) September 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	- 6	-11	-11	- 6	- 3	- 6	- 3	- 3	- 2	+ 2	+ 3	+ 5	+ 6	+ 6	+ 5	+ 6	+ 6	+ 5	+ 2	+ 2	0	+ 1	+ 1	0	659			
2	- 4	- 4	- 3	- 4	- 4	- 6	- 8	- 7	- 4	- 2	+ 1	+ 3	+ 5	+ 7	+ 7	+ 7	+ 6	+ 6	+ 5	+ 5	+ 3	+ 3	- 1	- 7	663			
3	-14	-11	- 7	- 2	- 1	- 2	- 2	- 2	- 1	+ 1	+ 2	+ 2	+ 3	+ 5	+ 6	+ 6	+ 6	+ 6	+ 6	+ 5	+ 3	+ 1	- 4	- 6	663			
+ 4	- 5	- 3	- 3	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 1	+ 1	+ 2	+ 3	+ 5	+ 6	+ 6	+ 5	+ 5	+ 1	- 3	- 3	- 6	- 4	663			
+ 5	- 5	- 3	- 2	- 2	- 2	- 2	- 2	- 2	- 3	- 2	- 2	- 1	+ 1	+ 3	+ 3	+ 5	+ 5	+ 3	+ 5	+ 3	+ 1	- 1	+ 1	- 1	663			
+ 6	- 1	- 1	0	0	0	0	0	- 1	- 1	- 1	- 1	- 1	0	+ 1	+ 3	+ 4	+ 5	+ 5	+ 5	+ 3	0	- 4	- 5	- 6	661			
7	- 3	0	+ 1	- 1	- 1	- 1	- 3	- 5	- 8	- 5	- 5	- 1	+ 1	+ 4	+ 6	+ 5	+ 5	+ 6	+ 6	+ 5	+ 1	- 3	- 4	- 5	660			
8	- 5	-11	-13	- 7	- 1	0	0	- 1	- 1	0	+ 2	+ 4	+ 4	+ 5	+ 6	+ 8	+ 8	+ 9	+ 8	+ 5	+ 1	- 1	- 5	- 9	660			
9	-12	- 9	- 6	- 4	- 4	- 2	- 1	0	0	+ 1	+ 1	+ 1	+ 1	+ 1	+ 3	+ 3	+ 4	+ 5	+ 5	+ 4	+ 3	+ 1	0	- 1	661			
10	- 6	- 4	- 2	- 1	- 1	- 2	- 2	- 1	- 1	- 2	- 2	- 2	- 2	- 1	- 1	+ 1	+ 1	+ 2	+ 3	+ 3	+ 2	+ 2	+ 3	+ 5	663			
11	+ 3	- 4	- 5	- 2	- 1	- 1	- 1	0	+ 1	+ 3	+ 1	+ 1	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 3	0	- 2	- 5	- 5	- 5	661			
+12	- 7	- 7	- 7	- 7	- 8	- 7	- 4	- 2	- 1	+ 1	+ 2	+ 3	+ 3	+ 5	+ 5	+ 5	+ 6	+ 6	+ 7	+ 6	+ 5	+ 2	+ 1	- 1	663			
13	- 2	- 1	- 1	- 1	- 1	- 1	- 1	0	+ 3	+ 3	+ 4	+ 6	0	- 1	- 2	0	0	0	+ 3	+ 4	+ 4	- 1	- 2	- 4	666			
14	- 8	- 4	- 5	- 3	- 3	- 4	- 2	+ 2	0	+ 4	+ 4	+ 5	+ 6	+ 4	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 1	0	- 3	- 3	668			
15	0	- 1	- 1	- 1	- 2	- 4	- 4	- 4	- 2	0	+ 3	0	+ 3	+ 3	+ 4	+ 3	+ 2	+ 2	0	+ 3	- 2	- 1	+ 4	+ 4	666			
16	+ 1	- 6	- 8	- 6	- 8	- 5	- 3	- 1	0	+ 1	+ 1	+ 3	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 3	- 1	0	+ 3	+ 3	+ 4	665			
17	+ 4	+ 2	- 2	- 3	- 4	- 4	- 4	- 3	- 2	0	+ 1	+ 1	+ 2	+ 2	+ 4	+ 4	+ 4	+ 4	+ 6	+ 4	0	- 2	- 2	0	668			
18	+ 3	+ 3	+ 5	+ 5	+ 9	+16	+ 5	- 9	-26	-20	-22	-14	-18	- 4	+ 4	+ 4	+ 9	+11	+13	+11	+ 7	0	+ 3	- 5	665			
19	-26	-27	-26	-14	-24	-16	-12	+ 5	+ 2	+12	+23	+26	+27	+23	+23	+22	+16	+11	+ 6	- 6	-14	-14	-12	-10	692			
20	- 1	- 4	0	+ 3	+ 3	+ 2	+ 2	- 1	- 2	- 5	- 5	+ 3	+ 4	+ 5	+ 7	+ 8	+ 7	+ 5	+ 4	0	- 4	- 8	-10	-13	678			
21	-14	-14	-10	-11	- 6	- 1	- 3	- 3	+ 1	+ 2	+ 3	+ 3	+ 6	+ 7	+ 9	+13	+10	+ 9	+ 7	+ 6	+ 5	- 2	- 6	- 7	672			
+22	- 7	- 5	- 1	+ 1	+ 2	+ 1	+ 1	+ 1	+ 1	+ 1	- 1	- 1	+ 1	+ 2	+ 3	+ 5	+ 5	+ 5	+ 2	- 2	- 5	- 5	- 5	- 6	672			
23	- 5	- 5	- 8	- 8	- 6	- 5	- 3	- 2	- 3	- 1	- 1	+ 1	+ 3	+ 3	+ 6	+ 6	+ 7	+ 9	+ 9	+ 6	+ 3	+ 1	- 3	- 6	672			
24	- 9	-11	- 7	- 5	- 4	- 4	- 1	+ 2	+ 3	+ 3	+ 3	+ 3	+ 4	+ 6	+ 7	+ 8	+ 8	+ 7	+ 4	+ 3	0	- 4	- 7	- 7	671			
25	-12	- 9	- 8	- 8	- 6	- 4	- 1	- 1	0	0	0	- 1	0	+ 2	+ 3	+ 3	+ 6	+ 6	+ 7	+ 7	+ 7	+ 7	+ 7	+ 5	676			
26	+ 1	- 1	- 1	- 1	- 1	- 1	- 1	+ 1	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	+ 1	+ 1	+ 2	+ 1	- 2	- 3	- 6	- 6	677			
27	- 6	- 6	- 6	- 6	- 6	- 6	- 6	- 8	- 5	- 4	- 1	0	+ 2	+ 2	+ 2	+ 3	+ 5	+ 5	+ 5	+ 5	+ 5	+ 5	+ 6	+ 7	676			
28	+ 9	+ 7	+ 6	+ 2	- 2	- 2	- 4	- 2	- 2	- 2	- 1	0	0	0	- 1	- 2	- 1	- 2	- 2	- 4	- 5	- 4	- 2	+ 2	676			
29	+ 7	+ 9	+ 7	+ 2	- 5	- 6	- 5	- 4	- 4	- 2	- 1	+ 2	+ 2	+ 3	+ 3	+ 3	+ 2	0	0	- 2	- 4	- 4	- 2	- 1	672			
30	+ 1	- 5	- 8	- 8	- 6	- 5	- 5	- 5	- 3	- 1	+ 1	+ 3	+ 3	+ 3	+ 3	+ 5	+ 5	+ 3	+ 2	- 1	+ 1	+ 2	+ 3	+ 5	669			
31																												
MEAN.	- 4	- 5	- 4	- 3	- 3	- 3	- 3	- 2	- 2	0	0	+ 2	+ 3	+ 4	+ 4	+ 5	+ 5	+ 5	+ 4	+ 3	0	- 1	- 2	- 3	668			

Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) October 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+4	+1	0	0	-2	-3	-4	-3	-2	+1	+2	+4	+4	+5	+5	+5	+4	+2	0	-2	-4	-6	-4	-3	669			
2	-3	-2	-3	-3	-5	-5	-5	-3	-2	-1	+1	+2	+3	+5	+6	+6	+5	+5	+3	+1	-3	-3	-2	-1	668			
3	-5	-6	-5	-3	-3	-3	-3	-3	-3	-3	-1	+1	+2	+3	+5	+5	+3	+3	+3	+2	+2	+2	+1	+2	672			
+ 4	+5	+3	+2	+1	-1	-2	-2	-2	-2	-3	-2	-2	-1	+2	+2	+3	+5	+5	+2	+1	-1	-2	-2	-3	671			
5	-5	-8	-9	-7	-4	-2	-2	-2	-5	-4	-1	+2	+2	+2	+3	+4	+4	+4	+4	+6	+4	+2	0	+2	670			
+ 6	0	0	+1	+2	+1	0	-2	-3	-4	-4	-3	-2	0	0	+1	+2	+2	+2	+2	+2	+1	+1	+1	0	672			
+ 7	+2	+2	-1	-3	-5	-3	-3	-2	-2	-2	-1	-1	-1	+1	+1	+2	+3	+3	+3	+2	-1	-2	+1	-1	671			
8	+3	-1	-5	-8	-9	-5	-3	0	+2	+2	+2	+2	+3	+3	+4	+4	+6	+6	+4	0	-1	-3	-5	-8	666			
9	-11	-14	-13	-10	-7	-3	-2	-2	0	+1	+1	+2	+2	+5	+6	+6	+8	+9	+10	+9	+5	+2	0	0	668			
10	-7	-5	-5	-5	-4	-3	-1	-1	0	0	0	0	0	+1	+1	+4	+4	+5	+4	+5	+4	+3	+1	+1	673			
11	-4	-5	-6	-6	-6	-5	-5	-2	-4	-9	-4	-5	-1	+2	+3	+4	+6	+7	+7	+4	+7	+10	+7	-4	678			
12	-4	-3	-4	-10	-7	-2	0	0	-2	+1	+2	+4	+4	+2	+2	+1	+1	+2	+2	+2	+2	+1	-2	-3	680			
13	+1	+3	+2	-1	-1	-2	-1	-1	+1	+1	+1	+2	+2	+2	+3	+2	+2	-1	-2	-3	-5	-3	-3	-3	675			
14	-1	-2	-5	-6	-6	-5	-3	-2	-1	+1	+2	+3	+3	+3	+3	+5	+5	+2	+1	-1	-1	-1	-1	+2	671			
15	+2	0	-1	-2	-4	-5	-6	-4	-4	-2	-1	+3	+4	+4	+4	+3	+3	+2	+2	-1	0	0	0	+3	674			
16	+7	+5	+4	-3	-4	-1	0	+1	+4	+4	+5	+5	+5	+8	+5	+4	+3	+1	-3	-7	-8	-11	-10	-8	673			
+17	-1	-3	-4	-4	-6	-6	-6	-6	-4	-3	0	+3	+5	+7	+7	+8	+9	+4	+3	0	-1	-1	-1	-1	669			
18	0	-2	-2	-2	-2	0	0	-2	0	0	+1	+3	+4	+5	+7	+5	+4	+3	0	-2	-3	-4	-3	0	665			
19	+2	+4	+2	+1	-1	-2	-3	-3	-3	-2	-1	+1	+2	+4	+5	+4	+5	+4	-1	-2	-3	-6	-9	-6	664			
20	-3	-3	-2	-1	-2	-2	-1	-3	-2	-2	-1	+2	+5	+6	+8	+10	+10	+9	+6	+2	-2	-7	-10	-10	660			
+21	-11	-9	-9	-8	-5	-4	-1	0	0	+1	+1	+3	+4	+6	+7	+8	+10	+8	+8	+4	0	-1	-3	-4	662			
22	-7	-7	-6	-5	-5	-3	-3	-2	-1	-1	-1	-2	-1	+4	+6	+8	+8	+5	+5	+9	+10	+6	-2	-5	664			
23	-12	-9	-6	-6	-5	-3	-1	-1	-1	-1	-1	-1	+1	+1	+3	+3	+5	+7	+7	+6	+5	+2	-1	+2	671			
24	-2	-5	-5	-5	-5	-4	-2	-1	-1	0	0	+2	+2	+2	+3	+6	+6	+4	+2	-1	-2	-1	0	-1	674			
25	+1	0	-4	-4	-3	0	-2	0	+1	+2	+2	+1	+1	+2	+1	+2	+2	+2	+1	-2	-3	-6	-3	0	672			
26	-1	-1	-4	-7	-5	-4	-3	0	+1	0	0	0	0	0	0	+1	+3	+3	+3	+4	+3	+3	+4	+4	673			
27	+4	+6	+3	0	-2	-2	-2	-1	-1	-1	0	+2	+2	+2	+2	+2	0	0	-2	-2	-2	-2	-1	-1	674			
28	+1	-2	-3	-2	-2	-3	-3	-2	-1	+2	+2	+5	+5	+3	+3	+2	+2	+1	+1	-1	-1	+1	+3	+1	671			
29	+2	0	+2	0	-1	-1	-1	-1	0	0	+2	+2	+2	+3	+3	+3	+2	0	-2	-4	-4	-1	+2	+2	670			
30	+3	0	-3	-6	-6	-4	-3	-2	0	0	+1	+3	+3	+4	+5	+5	+4	+1	-2	-3	-2	-2	0	+3	665			
31	+1	-2	-6	-7	-9	-14	-14	-6	-2	+1	+2	+4	+6	+9	+9	+8	+9	+5	+5	+1	+2	0	+1	+4	668			
MEAN.	-1	-2	-3	-4	-4	-3	-3	-2	-1	-1	0	+2	+2	+3	+4	+4	+5	+4	+2	+1	0	-1	-1	-1	670			

Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) November 1941.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	-10	-14	-14	-12	-10	- 7	+ 1	- 1	- 1	+ 2	+ 9	+10	+10	+11	+13	+16	+14	+ 9	+ 2	- 1	- 2	- 3	- 7	- 6	675			
2	- 2	- 2	- 1	- 2	- 3	- 2	- 1	- 1	- 1	- 1	+ 1	+ 1	+ 2	+ 3	+ 5	+ 5	+ 5	+ 3	+ 1	- 2	- 2	+ 1	+ 2	+ 3	675			
3	+ 4	+ 4	+ 4	+ 4	+ 4	+ 1	+ 1	+ 3	+ 1	0	0	0	+ 1	+ 1	+ 3	+ 3	+ 1	0	- 4	- 8	- 7	- 5	- 4	- 5	677			
+ 4	- 3	- 2	- 2	0	0	- 2	- 2	0	- 2	0	0	0	+ 1	+ 1	+ 2	+ 2	+ 2	+ 1	0	- 2	- 2	0	+ 1	+ 1	675			
5	+ 5	+ 7	+ 5	+ 5	+ 3	+ 1	+ 1	+ 1	+ 1	+ 1	0	+ 1	+ 3	+ 3	+ 4	+ 5	+ 4	+ 1	0	- 5	- 7	- 8	-12	-16	672			
6	-10	-10	- 9	- 6	- 3	- 2	+ 1	+ 1	- 2	0	+ 1	+ 5	+ 4	+ 9	+12	+13	+12	+ 8	+ 2	- 2	- 3	- 5	- 3	- 3	667			
7	- 8	- 2	- 1	- 1	0	0	0	+ 3	+ 2	0	+ 2	+ 2	+ 2	+ 2	+ 3	+ 4	+ 4	+ 4	+ 3	0	0	- 2	- 4	- 5	672			
8	- 4	- 7	- 8	- 6	- 3	+ 1	0	+ 3	+ 4	+ 7	+ 5	+ 4	+ 5	+ 7	+ 8	+ 7	+ 5	+ 5	+ 3	0	- 3	- 8	- 8	-10	667			
9	- 7	- 8	-10	-10	- 8	- 7	- 6	- 2	0	0	0	- 2	- 2	+ 1	+ 3	+ 4	+ 5	+ 4	+ 4	+ 5	+ 5	+ 7	+ 8	+11	663			
10	+ 7	+ 3	- 1	- 2	- 4	- 2	- 2	- 1	- 1	0	- 1	0	0	+ 2	+ 2	- 1	- 1	- 1	- 2	- 2	- 2	- 1	0	0	667			
11	- 7	- 7	- 8	- 8	- 5	- 2	- 1	0	0	0	+ 2	+ 2	0	+ 2	+ 2	+ 3	+ 3	+ 3	+ 2	+ 2	+ 2	+ 2	+ 4	+ 6	667			
12	+ 3	+ 3	+ 5	+ 4	+ 3	+ 1	+ 1	0	+ 1	+ 1	+ 3	+ 3	+ 1	+ 1	+ 1	0	0	- 1	- 3	- 4	- 5	- 5	- 4	- 1	670			
13	- 1	- 5	- 6	- 6	- 6	- 5	- 2	- 1	- 1	- 1	+ 1	+ 3	+ 3	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	- 1	+ 1	+ 5	+ 7	+ 7	667			
14	+ 6	+ 3	- 1	- 2	- 2	- 2	- 1	- 1	0	+ 2	+ 3	+ 4	+ 4	+ 4	+ 6	+ 4	+ 3	+ 3	+ 3	- 4	- 8	- 7	- 4	- 2	666			
+15	- 1	- 4	- 5	- 7	- 8	- 7	- 4	- 2	0	0	+ 2	+ 3	+ 4	+ 6	+ 6	+ 6	+ 4	+ 2	0	- 1	- 1	0	+ 3	+ 7	666			
+16	+ 6	+ 3	+ 2	- 2	- 3	- 5	- 5	- 3	- 3	- 3	- 2	- 1	+ 1	+ 2	+ 2	+ 2	+ 2	- 1	- 2	- 3	- 2	- 1	+ 2	+ 5	666			
17	+10	+10	+ 3	- 1	- 1	- 4	- 8	- 8	+ 1	- 1	+ 1	+ 3	+ 6	+ 9	+10	+10	+ 9	+ 3	- 1	- 2	- 9	-12	-10	- 6	662			
18	- 4	0	0	- 2	- 3	- 3	- 3	- 2	- 3	- 6	- 3	+ 2	+ 5	+ 4	+ 5	+ 8	+ 9	+ 5	0	- 4	- 6	- 4	- 2	+ 1	667			
19	- 2	- 6	- 3	- 6	- 3	- 3	- 4	- 3	- 3	- 2	0	0	0	+ 1	+ 2	+ 4	+ 4	+ 4	+ 5	+ 4	+ 2	0	+ 1	+ 6	666			
20	+ 6	+ 9	+ 9	+ 6	+ 4	+ 2	+ 1	0	- 2	- 3	- 3	- 3	- 2	0	0	+ 1	+ 2	+ 1	0	- 2	- 4	- 4	- 6	-10	670			
21	- 7	- 6	- 3	- 3	- 1	+ 1	+ 3	+ 3	+ 3	+ 1	+ 1	+ 1	+ 1	+ 3	+ 4	+ 5	+ 7	+ 7	+ 5	0	- 6	- 8	-10	-10	663			
22	- 5	- 5	- 7	- 6	- 5	- 2	+ 1	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	+ 2	+ 5	+ 8	+ 8	+ 4	+ 2	+ 1	- 3	- 3	- 6	661			
23	- 5	- 3	- 2	- 3	- 2	+ 1	+ 4	+ 2	+ 4	+ 5	+ 4	+ 2	+ 2	+ 1	+ 2	+ 4	+ 5	+ 5	+ 2	0	- 5	- 6	- 7	- 7	661			
+24	- 5	- 2	- 3	- 2	- 2	0	0	+ 1	+ 2	+ 1	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	+ 1	0	- 2	- 3	- 2	+ 2	+ 2	661			
25	0	- 3	- 3	- 4	- 6	- 6	- 3	- 2	- 2	0	+ 1	+ 1	+ 1	+ 1	+ 3	+ 4	+ 3	+ 3	+ 1	- 3	- 3	- 2	+ 3	+ 7	657			
+26	+ 8	+ 5	0	- 3	- 5	- 6	- 3	- 2	0	0	0	+ 1	+ 2	+ 2	+ 1	+ 1	+ 1	+ 1	+ 1	0	- 3	- 2	- 3	- 5	660			
27	- 5	- 6	- 6	- 3	+ 1	- 2	- 3	0	+ 2	+ 5	+ 5	+ 5	+ 6	+ 6	+ 6	+ 5	+ 4	+ 4	+ 2	- 3	- 6	- 6	- 5	- 2	660			
28	- 4	- 9	-13	-14	-18	-18	-15	-13	-10	- 3	+ 4	+ 8	+10	+10	+12	+12	+12	+ 9	+ 8	+ 5	+ 4	+ 6	+12	+12	663			
29	+ 4	- 2	- 3	- 4	- 7	- 7	- 7	- 7	- 6	- 4	- 2	+ 1	+ 4	+ 4	+ 4	+ 5	+ 4	+ 2	+ 1	- 2	- 3	0	+ 8	+13	667			
30	+13	+11	+ 7	+ 3	- 1	- 2	- 2	- 2	- 2	- 2	- 2	- 2	- 1	- 1	- 1	0	0	-1	- 4	- 6	- 8	- 5	- 2	0	669			
31																												
MEAN.	- 1	- 2	- 3	- 3	- 3	- 3	- 2	- 1	- 1	0	+ 1	+ 2	+ 3	+ 3	+ 4	+ 5	+ 4	+ 3	+ 1	- 1	- 3	- 3	- 1	0	667			

Vertical Intensity

G.M.T. (Z = 20000γ + Mean + ...) December 1941

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M. γ	Minimum. H. M. γ	Range.
1	+ 4	+ 2	- 1	0	0	- 1	+ 3	+ 2	- 2	0	- 2	- 5	+ 2	+ 4	+ 2	- 2	- 2	- 1	- 4	- 5	- 5	- 4	+ 2	+ 7	665			
2	+ 7	+ 7	+ 3	+ 2	- 1	- 2	0	+ 2	+ 2	+ 2	+ 3	+ 3	+ 4	+ 6	+.7	+ 6	+ 4	0	- 5	-10	-12	-13	-12	- 9	669			
3	- 4	- 2	- 2	- 2	- 2	- 1	0	0	+ 2	+ 2	0	+ 2	+ 3	+ 4	+ 6	+ 7	+ 7	+ 6	+ 2	- 4	- 8	- 6	- 5	- 5	665			
4	- 5	- 5	- 1	- 1	- 1	0	+ 1	0	0	0	- 1	+ 3	+ 1	+ 5	+ 4	+ 4	+ 5	+ 4	0	- 4	- 5	- 3	0	+ 3	664			
5	- 1	- 5	-12	-10	- 8	- 5	- 2	- 1	- 1	+ 1	+ 2	+ 3	+ 5	+ 6	+ 5	+ 6	+ 7	+ 6	+ 1	- 3	- 6	- 2	+ 3	+ 6	662			
6	+ 7	+ 7	+ 5	+ 3	+ 1	0	0	0	0	0	0	+ 1	+ 3	+ 3	+ 3	+ 3	+ 3	+ 1	- 3	- 7	- 7	- 7	-12	- 8	664			
7	- 1	- 1	- 1	- 1	- 1	+ 1	+ 2	+ 2	+ 2	+ 1	- 1	- 1	+ 1	+ 2	+ 3	+ 5	+ 5	+ 3	+ 2	- 2	- 8	- 8	- 6	- 3	662			
8	- 1	- 1	- 2	- 4	- 2	- 2	0	0	+ 2	+ 3	+ 3	+ 3	+ 4	+ 3	+ 4	+ 6	+ 6	+ 4	+ 3	- 4	- 7	- 8	- 9	- 8	661			
9	- 7	- 7	- 6	- 6	- 6	- 3	0	+ 1	+ 4	+ 4	+ 4	+ 4	+ 5	+ 5	+ 4	+ 5	+ 5	+ 5	+ 4	0	- 6	- 6	- 3	0	659			
10	- 2	- 3	- 5	- 5	- 5	- 5	- 2	- 1	+ 1	+ 2	+ 2	+ 2	+ 3	+ 3	+ 3	+ 3	+ 2	+ 2	+ 2	+ 2	+ 1	+ 1	+ 1	- 2	662			
+11	- 1	0	- 1	- 3	- 1	- 1,	0	+ 1	+ 3	+ 3	+ 3	+ 3	+ 3	+ 4	+ 3	+ 3	+ 3	+ 3	+ 1	- 1	- 6	- 6	- 3	0	660			
+12	+ 2	0	0	- 1	- 5	- 5	- 4	- 2	- 1	0	- 1	- 1	- 1	- 1	- 1	0	0	0	+ 2	+ 2	+ 3	+ 6	+ 8	+12	662			
13	+ 7	+ 4	+ 4	+ 2	0	- 1	- 2	- 1	0	+ 2	+ 3	+ 2	- 1	- 1	0	- 2	- 5	- 5	- 6	- 1	0	+ 3	+ 3	+ 3	665			
14	+ 2	- 5	- 9	-11	- 7	- 5	- 2	0	+ 2	+ 2	+ 4	+ 4	+ 7	+ 8	+ 8	+ 7	+ 3	0	- 2	- 2	- 2	- 2	+ 2	+ 8	661			
15	+ 4	+ 4	+ 3	+ 2	0	- 1	- 1	- 1	0	0	+ 2	+ 3	+ 3	+ 3	+ 4	+ 3	0	0	- 1	- 4	- 6	- 8	- 9	- 8	665			
16	+ 3	+ 7	+ 3	0	+ 1	0	+ 1	0	- 1	- 1	- 1	0	+ 1	+ 3	+ 4	+ 4	+ 3	+ 1	- 1	- 4	- 7	- 7	- 5	- 3	664			
17	+ 3	+ 7	+ 3	+ 2	- 1	- 2	- 5	- 5	- 8	- 5	- 2	- 1	+ 2	+ 3	+ 5	+ 6	+ 6	+ 3	+ 2	- 2	- 3	- 2	- 1	+ 1	662			
18	+ 2	+ 1	- 1	- 3	- 2	- 3	- 1	+ 3	- 1	- 2	+ 1	+ 2	+ 2	+ 3	+ 6	+ 7	+ 7	+ 6	+ 2	- 2	- 6	- 8	-12	-10	662			
19	- 5	- 4	- 1	- 1	- 1	- 1	+ 1	+ 2	- 2	- 4	- 4	- 4	+ 1	+ 2	+ 3	+ 6	+ 7	+ 7	+ 5	+ 1	- 2	- 4	- 2	+ 1	658			
+20	+ 3	+ 5	+ 3	+ 1	+ 1	0	+ 1	+ 3	+ 3	0	- 1	- 1	- 1	0	+ 1	+ 4	+ 5	+ 4	+ 1	- 1	- 6	-10	-11	- 8	660			
+21	- 3	+ 2	+ 2	+ 1	+ 1	0	0	0	0	0	0	0	0	0	0	+ 1	+ 4	+ 5	+ 5	+ 2	- 2	- 3	- 2	- 2	659			
22	0	- 2	- 3	- 3	- 2	0	0	0	- 2	- 2	- 2	- 2	- 2	- 2	0	0	+ 1	+ 2	+ 5	+ 5	+ 4	+ 1	+ 1	+ 1	659			
23	+ 1	- 2	- 2	- 5	- 5	- 2	0	+ 1	+ 2	+ 2	+ 2	+ 2	+ 2	+ 2	0	+ 1	+ 1	+ 5	+ 2	+ 1	+ 1	- 3	- 5	- 6	659			
24	- 9	- 9	- 5	- 5	- 3	- 2	+ 1	+ 2	+ 2	+ 2	+ 3	+ 2	+ 3	+ 1	+ 1	+ 1	+ 2	+ 4	+ 6	+ 6	+ 5	+ 4	+ 1	+ 1	659			
+25																												
26																												
27																												
28	- 2	- 2	- 5	- 5	- 6	- 5	- 4	- 1	+ 1	+ 1	+ 2	+ 2	+ 3	+ 3	+ 3	+ 3	+ 2	+ 2	+ 1	+ 1	+ 2	+ 1	+ 1	- 2	658			
29	- 4	- 7	- 7	- 7	- 7	- 6	- 3	- 3	- 2	0	+ 3	+ 4	+ 5	+ 5	+ 7	+ 5	+ 4	+ 3	+ 1	0	- 2	0	+ 5	+ 8	656			
30																												
31	- 6	- 2	- 5	- 5	- 4	- 5	- 4	- 2	- 2	- 2	- 1	- 1	+ 1	+ 1	+ 1	+ 3	+ 3	+ 5	+ 5	+ 2	+ 2	+ 2	+ 3	+ 6	+ 9	658		
MEAN.	0	0	- 2	- 2	- 2	- 2	- 1	0	0	0	+ 1	+ 1	+ 2	+ 3	+ 3	+ 4	+ 3	+ 3	+ 1	- 1	- 3	- 3	- 2	- 1	661			

200/1/41—14357}

SEISMOLOGY 1941

The following summary of earthquakes recorded at Apia is based on the quarterly bulletins which have already appeared in print. The preliminary identification of phases given in the quarterly bulletins has sometimes been revised after comparison with reports received from other observatories. As a general rule, the positions of epicentres given by the United States Coast and Geodetic Survey have been used; but in some cases, more especially for near earthquakes, the position of the epicentre has been calculated at the Observatory.

The lithological foundation is coral sand on volcanic rock. The instruments in use are a Wiechert 1000 kilogram horizontal seismograph for the east and north components and a Wiechert 80 kilogram seismograph for the vertical component. Time breaks on the records at the commencement of minute intervals are put on by electrical contact from a Synchronome clock. The clock is rated daily and its correction known to 0.1 second. On the horizontal seismograph rollers there is a device which assists in smooth running between the minute breaks. It is considered that cumulative errors may result in final times being in error by an amount not exceeding one second.

Due to the construction of the seismograph room, the temperature conditions inside are remarkably uniform (See Annual Report 1939).

In deducing epicentral distances the following tables and charts have been in use:-

H. Jeffreys and K.E. Bullen, Revised Travel-Time Tables (1935)
H. Jeffreys, Tables of P. & S. (1932)
B. Gutenberg and C.F. Richter, Materials for the Study of Deep-focus Earthquakes (1936)
G.J. Brunner and J.B. Macelwane, The Brunner focal depth-time-distance chart.
H. Jeffreys, Table for the Near Earthquake Pulses.

Abbreviations used in the report are as follows:-

U.S.C.G.S.	= United States Coast & Geodetic Survey
J.S.A.	= Jesuit Seismological Association
H	= hypocentral time
RF	= Rossi-Forel scale of intensity.
h	= depth

Other symbols have their usually accepted meanings: see page 500 of Volume 25, Part II, Handbuch der Experimentalphysik (Wien-Harms), "Seismik" by O. Meisser and Krumbach - Leipzig 1931.

The seismograph constants were as follows:-

January 23rd, 1941

E-W Free period 10.9 seconds; static magnification 169; coefficient of friction 0.0015 (cms/sec^2) damping ratio 9.1; total friction 2.1 dynes.

N-S Free period 11.3 seconds; static magnification 187; coefficient of friction 0.0013; damping ratio 8.3; total friction 1.3 dynes.

Z Free period 4.6 seconds; static magnification 48; coefficient of friction 0.0015; damping ratio 2.0; total friction 4.1 dynes.

March 22nd, 1941

E-W Free period 10.9 seconds; static magnification 165; coefficient of friction 0.0012; damping ratio 6.6; total friction 1.7 dynes.

N-S Free period 11.1 seconds; static magnification 186; coefficient of friction 0.0012; damping ratio 8.0; total friction 1.4 dynes.

Z Free period 4.5 seconds; static magnification 43; coefficient of friction 0.0014; damping ratio 2.1; total friction 5.6 dynes.

April 30th, 1941

E-W Free period 10.9 seconds; static magnification 166; coefficient of friction 0.0012; damping ratio 7.8; total friction 1.7 dynes.

N-S Free period 10.9 seconds; static magnification 177; coefficient of friction 0.0012; damping ratio 7.6; total friction 1.5 dynes.

Z Free period 4.5 seconds; static magnification 43; coefficient of friction 0.0014; damping ratio 2.0; total friction 5.6 dynes.

July 1st, 1941

E-W Free period 10.9 seconds; static magnification 156; coefficient of friction 0.0014; damping ratio 7.9; total friction 2.1 dynes.

N-S Free period 10.9 seconds; static magnification 202; coefficient of friction 0.0015; damping ratio 9.8; total friction 1.4 dynes.

July 1st. 1941 (contd.)

Z Free period 4.4 seconds; static magnification 44; coefficient of friction 0.0014; damping ratio 2.0; total friction 4.5 dynes.

September 25th. 1941

E-W Free period 10.9 seconds; static magnification 161; coefficient of friction 0.0018; damping ratio 6.0; total friction 2.8 dynes.

N-S Free period 11.0 seconds; static magnification 180; coefficient of friction 0.0023; damping ratio 8.1; total friction 2.8 dynes.

Z Free period 4.4 seconds; static magnification 47; coefficient of friction 0.0036; damping ratio 2.3; total friction 5.2 dynes.

Earthquakes, 1941

January

3rd (1) P 11h 45m 02s (in time gap) iS 11h 45m 17s Distance 1.2°
(2) iP 12h 25m 13s iS 12h 25m 30s Distance 1.4°

4th P 16h 21m 02s (in time gap) iS 16h 21m 23s Distance 1.8°

8th Slight activity 00h 30m not recorded elsewhere

9th (1) eL 01h 31m Indefinite trace not recorded elsewhere
(2) e? 02h 46m (ca) Very weak. Epicentre 38.2°S 177.1°E (N.Z.)
(3) iP 15h 52m 23s iS 15h 52m 46s Distance 1.9°

13th eP 16h 34m 55s ipP 16h 35m 20s iP_cP 16h 37m 13s eS 16h 40m 35s isS 16h 41m 20s iSS 16h 43m 43s L 16h 46.0m M 16h 51.0m F 18h 10m U.S.C.G.S. gives Epicentre 4.6°S 151.2°E, H = 16h 27m 50s h = 100 Km. which gives distance 37.6° for Apia. Felt in Rabaul R-F VII.

20th eP 01h 39m 55s iS 01h 40m 13s Distance 1.6°

25th iP 23h 36m 31s iS 23h 37m 26s Distance 4.8° assuming normal depth. Azimuth 237° giving Epicentre 15°S 175°W. Possibly deep focus.

28th iP 03h 20m 31s iS 03h 21m 33s Distance 5°
Dilatation from SW Epicentre near 18°S 175°W (Christchurch, Manila, Pasadena).

Tremors: 3d 12h 29m 4d 22h 59m 5d 15h 5m 5d 19h 48m 6d 3h 28m 6d 3h 35m 11d 21h 26m 11d 21h 28m

February

1st iP 17h 19m 44s iS 17h 20m 12s Distance 2.3°

2nd Weak trace e 2h 17m ca not recorded elsewhere

9th (1) eP 09h 55m 23s eS 10h 04m 41s eL 10h 12.0m M 10h 17m J.S.A. gives Epicentre 41.1°N 125.5°W H = 09h 44m 05s depth normal.
(2) eS 19h 32m 05s eL 19h 34m 40s U.S.C.G.S. gives Epicentre near 3°S 153.5°E.

10th iP 15h 49m 36s iS 15h 50m 33s Distance 5.0°

14th Weak trace of long waves from 19h 15m to 19h 25m Remainder masked by microseisms. U.S.C.G.S. gives Epicentre 56° ± S, 133° ± W.

22nd iP 19h 16m 50s iS 19h 18m 22s Epicentre 19.5°S 178°W h = 500 Km. H = 19h 14.9m

24th (1) iP 11h 10m 20s iS 11h 10m 40s Distance 1.7° Felt in Apia R-F 2-3
(2) iP 12h 44m 39s iS 12h 45m 02s (±1s) Epicentre 15.2°S 173.1°W with depth probably normal (Apia, Tucson, Pasadena) Felt in Apia R-F 4. (2) may be a foreshock of (1)

27th eP 11h 09m 58s iS 11h 10m 14s Distance 1.6°

Tremors: 22d 7h 50m 24d 16h 8m 24d 18h 54m

March

9th eP 13h 12m 30s eS 13h 12m 47s Distance 1.5°

18th eP 11h 08m 32s iS 11h 08m 54s Distance 1.9°

28th eP 22h 34m 08s iS 22h 37m 09s Distance 17.2°
U.S.C.G.S. gives Epicentre 30°S 178°W H = 22h 30.2m h = 100 Km (ca).

31st Weak trace of deep disturbance (not recorded elsewhere) eP 6h 9m 28s i? 6h 10m 4s i? 10h 12m 41s

Tremors: 09d 22h 18m 10d 00h 27m 19d 23h 48m
25d 03h 17m 26d 02h 21m 26d 05h 21m
30d 00h 01m 31d 04h 18m

April

3rd eP 15h 34m 45s eSKS 15h 45m 30s very weak trace. U.S.C.G.S. gives Epicentre 22.4°S 67.0°W H = 15h 21m 44s h = 300 Km (South America).

7th (1) iP 02h 42m 45s iS 02h 44m 12s i? 02h 44m 14s Epicentre 20°S 177°W H = 02h 40m 57s h = 500 Km.
(2) iP 23h 00m 22s iS 23h 01m 10s Distance 4.2° Recorded in Pasadena

8th (1) eL 00h 17m 15s Epicentre 17.6°N 78.3°W (U.S.C.G.S.)
(2) iP 22h 12m 47s iS 22h 13m 38s Distance 4.4°

13th iP 09h 38m 24s iS 09h 38m 48s Distance 2.1°

14th iP 12h 24m 17s iS 12h 24m 38s Distance 1.5° Felt in Apia R-F 3

15th (1) eP 03h 46m 19s iS 03h 47m 16s Distance 5.0° Recorded in California
(2) eP 06h 57m 46s eS 06h 58m 37s Distance 4.4° Recorded in California. (1) and (2) both exhibit rather unusual traces.
(3) eS 19h 31m 11s iPS 19h 32m 19s iSS 19h 36m 22s eSSS 19h 39m 30s eL 19h 40m 28s U.S.C.G.S. gives Epicentre 18.7°N 102.9°W H = 19h 09m 53s Destructive in Mexico.

17th iP 05h 33m 50s iS 05h 34m 09s Distance 1.5°

18th iP 15h 16m 09s iS 15h 16m 21s Distance 0.9°

21st iP 22h 32m 04s eS 22h 35m 30s eL 22h 37.0m U.S.C.G.S. gives Epicentre 21°S 169°E H = 22h 27.7m

26th iP 10h 40m 05s iS 10h 40m 26s Distance 1.7°

29th iP 15h 44m 13s eS 15h 45m 16s Distance 6° (ca) Long train of waves following

Tremors: 02d 05h 37m 07d 06h 14m 11d 00h 18m
13d 20h 24m 18d 05h 00m 22d 04h 0.5m
22d 10h 12.5m 25d 14h 47.6m 25d 15h 14.2m
28d 17h 29.1m 28d 17h 30.6m

May

1st 1P 07h 25m 17s 1S 07h 25m 29s Distance 0.9°
Felt in Apia R.F.2-3

3rd eP 06h 35m 36s 1S 06h 36m 13s Distance 3° ca
Probably deep. Weak trace.

7th (1) Weak activity 01h 03m to 01h 06m
(2) 1P 12h 24m 00s epP 12h 24m 24s eS? 12h 27m 20s esS 12h 28m 00s Epicentre 19°S 170°E (Wellington, Riverview, Apia, Manila). H = 12h 19m 55s h = 150 Km.

8th 1P 10h 23m 39s 1S 10h 25m 12s Epicentre 18°S 178°W H = 10h 21.8m h = 600 Km (Tongan deep)

12th (1) 1P 07h 02m 17s 1S 07h 02m 34s Distance 1.3°
(2) 1P 20h 54m 49s 1S 20h 55m 09s Distance 1.7°

15th Feeble trace of deep shock not recorded elsewhere e? 06h 16.5m i? 06h 17m 15s Distance 5° - 10° (ca)

17th 1P 02h 29m 45s 1PP 02h 30m 05s 1S 02h 33m 29s Epicentre 12.0°S 166.7°E (Vanikoro) H = 02h 24m 48s (J.S.A. and U.S.C.G.S.) Depth normal.

23rd 1P 17h 37m 54s 1S 17h 38m 21s Distance 2.4°

25th eP 01h 10.0m eS 01h 10.9m Distance 4° (ca)
Recorded at Pasadena

28th 1P 19h 01m 20s 1S 19h 01m 50s Distance 2.5°

30th eP 17h 31m 52s eS 17h 33m 32s J.S.A. give 15°S 179°W H = 17h 29.7m Depth normal

31st eP 04h 58m 22s S 05h (in time gap) Distance 8° ca. Weak trace with probably a second shock superimposed.

Tremors: 04d 04h 40.1m 04d 04h 41.4m 09d 05h 12.2m
09d 05h 12.8m 09d 21h 24.5m 09d 21h 26.0m
15d 04h 20m 18d 07h 27m 20d 05h 40m
20d 17h 42m 21d 03h 33m 21d 04h 57m
21d 07h 02m 22d 05h 06m 22d 05h 09m
22d 05h 10m 22d 07h 51m 23d 02h 06m
23d 04h 59m 24d 05h 23m 24d 15h 10m
24d 15h 59m 26d 08h 23m

June

1st Slight seismic activity 01h 42m

3rd P 03h 59.0m (in gap) iS 03h 59m 22s Distance 1.8°

4th iP 17h 35m 15s iS 17h 35m 37s Distance 1.8°

6th iP 00h 44m 09s iS 00h 44m 49s Distance 3.5°

16th iP 05h 09m 20s iS 05h 10m 04s Dilatation from SW Distance 4.0°. Recorded at Pasadena. Epicentre near 17°S 175°W H = 05h 8.3m

17th P 02h 25m 06s iS 02h 26m 23s Recorded at Pasadena. h = 150 Km (ca) Epicentre near 19°S 178°W (Tonga).

21st (1) eP 17h 43m 51s iS 17h 45m 25s U.S.C.G.S. gives epicentre 20°S 178.5°W (Tonga), h = 500 Km. (ca).
(2) eP 18h 25m 37s iS 18h 27m 08s Probably an aftershock of previous quake.

23rd Weak activity e 23h 29.0m

26th iP 12h 05m 41s iPP 12h 09m 50s iPPP 12h 12m 09s iSKS 12h 16m 15s eS 12h 17m 07s ePS? 12h 18m 50s iSS 12h 24m 16s iSSS 12h 28m 12s eL 12h 32.3m U.S.C.G.S. give Epicentre 12.8°N 92.7°E H = 11h 52m 03s which agrees with our interpretation but J.S.A. give 12.8°N 89.7°E as revised epicentre. (Note: Times may require a correction of -1s owing to partial failure of clocks).

29th (1) Weak trace of distant quake e? 05h 46m 05s
(2) eP 22h 11m 15s ipP 22h 11m 41s eS 22h 14m 54s sS? 22h 15m 31s Distance 20.6° h = 100 Km Epicentre 21°S 169°W H = 22h 06.7m
(3) Feeble trace of deep quake commencing 22h 31m (ca). Possibly an aftershock of (2)

Tremors: 03d 17h 51m 04d 23h 23m 04d 23h 24m
05d 23h 20m 06d 02h 41m 07d 21h 15m
07d 21h 17m 08d 04h 55m 08d 21h 50m
09d 15h 46m

July

16th iP 08h 21m 08s iS 08h 21m 28s Distance 1.6°
Dilatation from 246°. Felt in Apia R-F 3.
Epicentre 14.4°S 174.3°W

20th (1) eP 06h 05m 20s eS 06h 9.0m esS? 06h 09m 34s Distance 20° ca. Wellington gives h = 130 Km. U.S.C.G.S. Epicentre near 22°S 171°E H = 06h 1.0m
(2) eP 19h 58m 01s iS 19h 58m 24s Distance 1.9°

25th (1) Feeble trace of distant disturbance 08h 55m No phases identifiable and not recorded elsewhere.
(2) eP 09h 53m 09s ipP 09h 53m 22s eS 09h 56m 51s iSS 09h 57m 33s Distance 20° h = 70 Km (ca) Epicentre near 19°S 169°E H = 09h 48.7m

30th (1) Slight disturbance 01h 03m to 01h 07m
(2) eP 02h 03m 28s eS 02h 13m 15s eL 02h 27.2m Very weak trace except for long waves well recorded on N-S instrument. Distance 77° (ca) U.S.C.G.S. gives Epicentre 60.9°N 151.4°W H = 02h 51m 30s

Tremors: 03d 03h 41m 03d 05h 20m 03d 05h 28m
03d 14h 24m 07d 01h 46m 07d 04h 08m 08d 21h 46m
09d 05h 15m 09d 05h 34m 11d 04h 57m 11d 04h 59m
11d 09h 24m 17d 05h 24m 28d 04h 33m 28d 04h 34m
28d 04h 49m 28d 04h 57m 30d 11h 23m.

August

2nd eP 11h 45m 19s ipP 11h 45m 32s eS 11h 48m 23s esS 11h 48m 45s Distance 17.1° h = 100 Km. U.S.C.G.S. gives epicentre 30°S 178°W H = 11h 41m 27s

3rd (1) eP 03h 12m 46s eS 03h 13m 06s Distance 2° (ca)
(2) eP 22h 12m 04s iS 22h 12m 22s Distance 1.5° (ca)

10th eP 18h 17m 10s iS 18h 17m 40s Distance 2.7° Clock correction uncertain.

19th (1) e 09h 58m 45s Weak trace of deep disturbance not recorded elsewhere.
(2) iP 17h 45m 13s eS 17h 49m 30s Distance 24.8° U.S.C.G.S. gives epicentre near 13½°S 166°E H = 17h 40.4m

24th eP 21h 02m 21s iS 21h 02m 57s Distance 3° (ca)

25th eP 02h 45m 13s iS 02h 45m 27s Distance 1.1° Timing unreliable

28th eP 20h 28m 25s eS 20h 29m 26s Distance 5½° ca
Epicentre 19½°S 176°W H = 20h 27.2 m.

31st eP 04h 15m 22s eS 04h 16m 58s Distance 8.2° ca. Epicentre near 21°S 176°W (Apia, Mt. Palomar). H = 04h 13.4m

Tremors: 06d 16h 31m 11d 13h 22m 15d 15h 10m
16d 10h 26m 16d 18h 04m 17d 15h 52m (3.2°)
20d 19h 29m 26d 15h 08m

September

1st (1) eP 10h 16m 44s iS 10h 18m 03s Distance 7.0° not recorded elsewhere. Probably deep from Tongan region.
(2) Slight disturbance 10h 22m to 10h 30m.

9th eP 07h 26m 32s ePP 07h 27m 42s ePPP 07h 28m 02s eS 07h 31m 50s eL 07h 36m 04s Distance 34.4° U.S.C.G.S. gives 7.0°S 154.9°E H = 07h 19m 41s

12th eP 07h 11m 48s eS 07h 19m 47s eL 07h 25.8m Distance 58° ca. Pasadena gives Epicentre ½°S 132°E H = 07h 02m 00s.

1_th Weak record of distant quake commencing 18h 24m ca.

14th iP 07h 39m 19s iS 07h 39m 52s Distance 2.7° Weak shock.

15th eP 06h 43m 27s iS 06h 44m 01s Distance 2.8° Weak shock. Epicentre SW of Apia.

16th (1) eP 06h 24m 17s eS 06h 24m 51s Distance 2.8° Weak shock.
(2) eP 21h 42m 51s iS 21h 45m 45s iSS 21h 46m 14s eL 21h 46m 40s Distance 15.9° U.S.C.G.S. gives epicentre 28.5°S 178°W H = 21h 39.1m

17th eP 19h 45m 53s iS 19h 46m 35s Distance 3.6°

18th (1) eP 11h 33m 14s iS 11h 33m 51s Distance 3.2°
(2) eP 18h 18m 57s iS 18h 19m 20s Distance 1.9° H = 18h 18m 26s Epicentre near 15°S 173°W

22nd eP 11h 39m 01s iS 11h 39m 23s Distance 1.8°

24th (1) eP 10h 27m 39s eS 10h 27m 51s Distance 1° ca.
(2) eP 18h 42m 17s eS 18h 43m 03s Distance 3° ca.

25th eP 17h 55m 40s eL 18h 5.3m Very weak trace. U.S.C.G.S. gives epicentre 19.4°N 155.5°W H = 17h 48m 39s

28th eP 12h 35m 11s eS 12h 35m 40s Distance 2½° ca

29th iP 17h 11m 51s eS 17h 14m 37s i? 17h 15m 05s eL 17h 16.1m Distance 15° Normal depth. Epicentre near 22°S 175°W H = 17h 08.2m

30th eL 08h 31.0m U.S.C.G.S. gives epicentre 9½°S 160°E H = 08h 19.3m

Tremors: 05d 16h 25m (Distance 2.1°); 10d 00h 57m (Distance 2.9°); 12d 07h 23m; 27d 22h 05m; 27d 21h 56m.

October

3rd eS 16h 33m 29s eL 16h 41.9m U.S.C.G.S. gives epicentre 40.7°N 125°W H = 16h 13m 11s

5th (1) iP 10h 11m 43s iS 10h 12m 06s Distance 2.0° Dilatation from SW. Felt in Apia. R-F IV - V, in Falealupo R.F. VI - VII. Pens thrown off and synchronome clock stopped. Epicentre 13.5°S 173.2°W H = 10h 11m 15s Depth normal.
(2) iP 17h 12m 17s iS 17h 12m 38s Distance 1.7°

6th (1) iP 05h 59m 45s eS 06h 05m ± (in gap) Distance 1.5° ca.
(2) Weak record commences 12h 04m 45s

9th eP 18h 03.1m (weak) iS 18h 03m 38s Distance 2° ca. Timing uncertain.

10th Weak record of distant quake commences 07h 18.8m

11th iP 07h 59m 16s iS 07h 59m 35s Distance 1.4°

15th (1) Very weak trace commences 01h 39m
(2) Weak trace at 21h 19m

16th (1) iP 04h 42m 13s iS 04h 42m 34s Distance 1.7°
(2) iP 10h 08m 56s iS 10h 09m 18s Distance 1.8° Timing uncertain.
(3) eP 15h 15m 20s (very weak) Timing uncertain. U.S.C.G.S. gives epicentre near 17°S 167°E H = 15h 10.6m

26th iP 15h 38m 39s iS 15h 38m 58s Distance 1.4°

27th eP 17h 12m 16s iS 17h 12m 33s Distance 1.2° Felt in Apia R.F. II. Times may be in error by 2 seconds.

30th eP 20h 28m 31s 1S 20h 28m 48s Distance 1.4°

31st e? 16h 55.0m Weak trace medium distance.

Tremors: 05d 10h 54m 11d 13h 49m 15d 04h 29m

November

4th 1P 02h 28m 43s 1S? 02h 30m 24s Distance 8° ca U.S.C.G.S. gives epicentre 18°S 178½°W H = 02h 26.8m h = 600 Km. Horizontal instrument out of action.

5th (1) eP 11h 09m 23s 1S 11h 13m 14s Distance 20° ca Epicentre near 23°S 171°E but Australasian data not insistent. H = 11h 05.3m
(2) 1P 13h 09m 23s ePP 13h 10m 14s eS 13h 12m 51s 1SSS 13h 14m 11s Distance 18° U.S.C.G.S. gives epicentre 23°S 172½°E H = 13h 05.4m h = 100 Km.
(3) eL 18m 08.1m U.S.C.G.S. gives epicentre near 11°N 121°E H = 17h 38.8m

6th eL 12h 59.0m U.S.C.G.S. gives epicentre near 54°N 164½°W H = 12h 29.6m

8th 1P 23h 48m 13s 1PP 23h 50m 44s eS 23h 57m 04s eSS? 24h 01m 10s eL 24h 05.1m Distance 67.5° Pasadena gives 0.5°N 122°E H = 23h 37m 22s Depth normal.

10th (1) 1P 01h 57m 52s 1S 01h 58m 20s Distance 2.3° Compression from NE.
(2) 1P 04h 17m 49s 1S 04h 18m 13s Distance 2.0°

11th 1P 09h 34m 06s 1S 09h 34m 17s Distance 0.8° Compression from NW. Timing uncertain.

17th 1P 19h 38m 05s 1S 19h 38m 24s Distance 1.5°

19th eP 08h 15m 00s 1S 08h 15m 38s Distance 3.3°

20th (1) Very weak trace commences about 02h 11m on E-W record.
(2) eP 21h 20m 08s 1? 21h 21m 11s Epicentre possibly in vicinity of New Hebrides.

22nd. 1P 04h 43m 10s 1S 04h 44m 02s Distance 5° ca Tongan region probably deep. Pasadena gives h 350 Km.

24th 1P 21h 49m 57s 1S 21h 52m 34s Distance 14° ca U.S.C.G.S. gives epicentre 28.1°S 177.4°W H = 21h 46m 17s

25th iPKP 18h 23m 40s iPPNZ 18h 27m 48s eSKSNE 18h 30m 53s ePSKSN(?) 18h 37m 35s iSSNE 18h 46m 45s iSSSNZ 18h 51m 29s eL 18h 12.0m. Strong trace with maximum ground amplitude 1400 microns. Initial impulse was a dilatation. Clock unreliable with an applied correction of +1m 19s which may be too high. U.S.C.G.S. gives epicentre 37.6°N 18.7°W H = 18h 03m 56s

30th iP 01h 59m 39s iS 01h 02m 00s Distance 1.7°

Tremors: 08d 03h 58m 23d 08h 30m (1.4°) 29d 16h 27m
29d 22h 38m 29d 23h 30m

<u>December</u>

1st iP 19h 21m 18s iS 19h 21m 35s Distance 1.4°

5th eP 21h 00m 05s ± (in gap) ePPP 21h 06m 15s eSKS 21h 10m 53s eS 21h 11m 15s eSS? 21h 17m 17s eSSS 21h 20m 55s iL 21h 28m 42s Distance 92.5° U.S.C.G.S. gives epicentre 8.4°N 83.0°W H = 20h 46m 58s

6th iSKS 21h 48m 29s eL 22h 9.0m Aftershock of quake of 5th December 20h.

8th iP 00h 18m 27s iS 00h 18m 48s Distance 1.7° Compression from SW.

9th eP 14h 18m 08s iS 14h 18m 55s Distance 4° ca.

10th Very weak trace commences 01h 35m.

12th iP 04h 12m 33s iS 04h 12m 55s Distance 1.8° Compression from NW

14th eP 14h 02m 58s iPg 14h 03m 20s iS 14h 04m 01s Distance 5° ca. Epicentre in Tongan region.

15th iP 08h 25m 56s iPg 08h 25m 13s iS 08h 26m 58s Distance 5° ca. Epicentre in Tongan region.

16th (1) iP 18h 57m 09s iS 18h 57m 28s Distance 1.5° Compression from NW.
(2) e 19h 32m 32s eS? 19h 42.0m Weak trace. J.S.A. gives 22.5°N 121°E H = 19h 19m 50s

18th (1) eP 04h 34m 26s eS 04h 35m 00s
(2) eP 21h 06m 22s i 21h 06m 38s iS 21h 06m 46s Distance 2.0°

20th eP 20h 14m 43s iS 20h 15m 02s Distance 1.5°

26th eP 06h 14m 48s 1 06h 14m 55s 18 06h 15m 15s
Distance 2.4°

31st Weak record commences 19h 01m

Tremors: 07d 01h 41m 08d 14h 49m 11d 05h 42m
11d 14h 06m 18d 19h 38m 18d 19h 42m
19d 19h 54m 26d 19h 03m 30d 08h 15m
31d 17h 25m

Meteorological Report, 1941

Notes on Observations and Instruments

The observations comprise eye observations of the meteorological elements and usual instruments; continuous autographic records of air temperature, pressure, humidity, rainfall, and the direction and velocity of the wind; registration of the duration of bright sunshine and general record of occasional phenomena.

The surface observations were made regularly at 0.30 a.m., 8.0 a.m., 9.0 a.m., noon, 2.0 p.m., 3.0 p.m., and 7.0 p.m. Only the 9.0 a.m. and 3.0 p.m. observations, which continue the series for climatological purposes, are published in this report. The noon readings were used mainly to provide an additional check on the self recording instruments while the observations at the four remaining times were for synoptic purposes.

Cloud

The observations of cloud form were made in accordance with international classification, the abridged edition (1932) of the International Atlas being used as a guide. Some additions have been made to the usual abbreviations for cloud forms. Fractostratus and Fractocumulus have been entered as Fs and Fc respectively. Further the medium cloud sheet which sometimes has the appearances of Ac with parts like As, or As with parts like Ac, has been entered in the tables as Ac-As.

The cloud form given in the tables is the predominating cloud at each level: thus an observation of Cumulus 4, Stratocumulus 2, is shown under low cloud as "Cu 6."

The cloud amount was found by estimating the proportion of the sky covered by cloud, the result being expressed in terms of the numerical scale ranging from 0, cloudless, to 10, completely covered. The symbol 9+ has been used to indicate that the sky was not completely covered but that the amount of cloud was more than 9/10. When computing monthly means of cloud 9+ has been counted as 9.

Weather and State of Sky

The weather and the state of sky have been described by the use of the usual Beaufort letters. In addition a few other symbols have been used with the

following meanings.

A capital letter indicates "intense"
The suffix $_{o}$ indicates "slight"
A letter repeated indicates "continuous"
The letter "i" indicates "intermittent"
The letter "j" indicates "within sight but not at station"
A line slightly inclined means "within the hour preceding the observation:" thus c/r = cloudy sky after rain which has fallen in the last hour.

When there are only small quantities of cloud or blue sky present, c is not used unless the sky is more than a quarter covered, and b unless there is more than a quarter of the sky free from cloud.

Visibility

The method of determining visibility is, as nearly as possible, in accordance with that described in the "Meteorological Observer's Handbook, 1939" (London), page 58. The observation of visibility consists of determining the most distant object of a selected series which is visible on any given occasion. Letters have been assigned to the objects and the appropriate letter is recorded at each observation. The reference objects are as follows:-

Indicn. Letter of Object	Description of Object	Actual Distance	Standard Distance	Code Figure
D	Platform in lagoon	340 yds.	220 yds.	2
E	Lagoon House	540 yds.	550 yds.	3
F	Watson's Island	1040 yds.	1100 yds.	4
G	Pilot Station	1½ miles	1¼ miles	5
H	Tree on sky-line to west or Island huts to N.W.	2¾ miles 2 miles	2½ miles	6
J	House at Tapatapao	5¾ miles	6¼ miles	7
K	Saluafata Promonotory or Mount Tofua	12½ miles 13 miles	12½ miles	8
M	Promontory of Savaii and Puga Hill	35 miles	31 miles	9

Suitable objects corresponding to I (4⅓ miles) and L (18⅔ miles) have not been chosen. When the observer estimates that one of these objects would be visible if it existed the corresponding letter is recorded. Conditions in Samoa are such that the necessity for objects closer than 220 yards does not arise.

Wind

The wind speed and direction have been measured as in former years by means of a Dines pressure tube anemometer. The vane is at an elevation of 80 feet above the ground in order to avoid the sheltering influence of the trees. As a check on the instrumental recordings it has been customary for the observer to estimate the wind force and direction before reading the anemometer.

Pressure

A new standard barometer was brought into use on January 1st. to replace the Kew pattern marine barometer M.O. 2233 which had been used as standard for many years. The new instrument G 3939, is a Kew pattern station model barometer which was brought from the Meteorological Office, Wellington, by Mr. Sapsford early in September 1940. The standard temperature of the instrument is 284.9°a at 1000 mb. The height of the cistern above mean sea level is 6½ feet. For the range of pressure recorded at Samoa the instrument has no index error. The corrections for temperature, gravity and reduction to mean sea level are made by means of a correction card which was computed at the Observatory. Temperature readings from the attached thermometer 51104 and pressure readings rounded off to the nearest ten millibars are used to enter the correction card.

A comparison in Wellington showed that pressure readings from the standard barometer there do not differ from those obtained with barometer G 3939. The comparison in Apia between barometers G 3939 and M.O. 2233 showed that pressure readings from the latter are 0.1 millibar low. Published pressure readings for Apia, at least for some time just prior to January 1st 1941, may be considered to require correction by this amount, +0.1 mb.

A continuous record of pressure was obtained with Grand Model barograph No 102030, which was made by Jules Richard of Paris. The barograms were scaled at exact hours of zone time, the readings being instantaneous values at these hours, and suitable corrections were applied. The corrections were known at the times of the control readings, (seven per day) and it was assumed that the change in the correction was linear during the intervals between control readings.

Temperature

The standard thermometer, Fuess No. 652, the maximum and minimum as well as the wet and dry bulb thermometers are exposed in a Stevenson screen which differs from the standard pattern. The screen, which has been in use for many years, has additional protection in the form of a thatched shelter and two louvered walls.

A duplicate set of thermometers were exposed in a Stevenson's screen of standard pattern until April 24th. This screen was then dismantled and later sent, together with the thermometers, to Atafu in the Tokelau Islands. The readings from the instruments in the standard sereen are not given in this report: they did not differ greatly from the readings obtained in the thatched screen.

The minimum temperature on the grass was recorded by a spirit thermometer, set on two small wooden pegs, with its bulb at a height of one two inches above the ground. This thermometer is read at 9.0 a.m. and set in the early evening. The maximum and minimum thermometers are read and set at 9.0 a.m. each day. The entries in the tables of this report are made in such a way that readings at 9.0 a.m. of maximum temperature are credited to the preceding day while minimum readings are entered to the day on which they are read.

The thermograph was exposed in a Stevenson screen of approved pattern. The thermograms were scaled at exact hours of zone time and corrections were applied in the same manner as for pressure. The charts are changed once a week.

Humidity

The humidity of the air has been computed from the readings of the wet and dry bulb thermometers using Jelineks "psychrometer-Tafeln," Leipzig 1903. Vapour pressure is expressed in millimetres in these tables but the values were converted to millibars before being tabulated for publication. A continuous record of humidity has also been obtained by means of a hair hydrograph which is exposed in a Stevenson screen of approved pattern together with the thermograph. The chart is changed once a week and instantaneous values are read from the chart at exact even hours of Zone Time. Corrections to the hygrograph readings were applied only when they were different from those given by the wet and dry bulb thermometers by more than five per cent.

Rain

A self recording rain gauge, Dines tilting syphon pattern (M.O. 28/37), was in operation throughout the year. The diameter of the collecting rim is 11.31 inches and the height of the rim above the ground is 28 inches. The records of this gauge are controlled by means of the standard gauge.

The standard gauge, which was constructed by Fuess, has a rim 15.95 centimetres in diameter. Its height above the ground is 65 centimetres (25½ inches). The rain collected in the inner vessel is measured each morning at 9.0 a.m. by means of a glass measuring cylinder, the readings being in millimetres. The rainfall measured at 9.0 a.m. is credited to the previous day in the tables.

Another gauge, of the pattern used by the Meteorological Office, London, is in use as a check on the older German gauges. The rim of this gauge, which is 5 inches in diameter, is at a height of one foot above the ground. Like the standard gauge, its capacity is not adequate for the torrential downpours of rain which sometimes occur in Samoa. In order to avoid loss of records on such occasions measurements are also obtained by a tropical Fuess rain-gauge which has a very large internal capacity. The standard and tropical gauges are of the Snowdon type in that they have not splayed bases like the pattern used by the Meteorological Office, London.

The rain-gauges are placed in an open grass plot and are free from shielding.

Sunshine

The sunshine recorder, M.O. 265, was mounted on a wooden platform near the sea. The exposure is good, there being no loss of record due to shielding apart from that which occurs when the sun is setting behind the low lying hills to the west. Since the sunshine is seldom, if ever, sufficiently intense to burn when the sun is so low in altitude, the loss may be considered negligible.

In one column of the table which occurs later the recorded sunshine has been expressed as a percentage of the possible duration of sunshine. In this computation the possible duration of sunshine is based on the intervals between sunrise and sunset during a year which is half way between two leap years.

Evaporation

The instrument in use to measure evaporation is a Piche evaporimeter which is exposed in a small Stevenson screen. It consists of a graduated tube which is filled with water and hangs mouth downwards. Evaporation takes place from a small disc of absorbent paper which is clamped over the mouth of the tube and the fall of level of the water inside the tube is measured. The area effective for evaporation is approximately $12\frac{1}{2}$ square centimetres.

The volume of water evaporated has been divided by the exposed area of the paper disc (1250 square millimetres) to give the equivalent depth of water evaporated and the depth has been entered in millimetres and tenths in the tables.

The amount of evaporation in 24 hours, ending at 9.0 a.m., has been credited to the preceding day.

Miscellaneous Notes

Non-cyclic change.

In the tables of diurnal changes of temperature and pressure the departures from the mean of the day have been adjusted for non-cyclic change. A short method of computing the correction has been employed. The value at midnight at the beginning of the month has been subtracted from the value at midnight at the end of the month and the difference has been divided by the number of days in the month. Necessary modifications were made when there were missing days. The number so obtained has been divided proportionately assuming that the non-cyclic change comes in at a uniform rate.

Time

The time standard, upon which all the meteorological tables that follow are based, is that of the meridian 165° west of Greenwich. (i.e. zone time, which is 11 hours slow on Greenwich time).

Seasons

In tables where seasonal means are given for the Wet and Dry Seasons the means have been derived from the following grouping of months:-

Wet Season - November 1940 to February 1941 (inclusive)
Dry Season - May 1941 to August 1941 (inclusive)

Normals

The Normal values of temperature, pressure and rainfall are based on the period 1890 to 1935. Sunshine normals are based on twenty years as follows:- 1905, 1906, 1917, 1919, 1924 and 1925 to 1933 inclusive, and 1935 to 1940.

Meteorological Instruments in use during 1941

Anemometer: Dines pressure tube No. 233 supplied by R.W. Munro of London, 1933. The vane is 80 feet above the ground.

Barograph : Grand Model No. 102030 made by Jules Richard of Paris.

Barometers: (i) Kew pattern, station model, mercury barometer number G 3939. This instrument was adopted as the Observatory standard on January 1st. 1941.
(ii) Kew pattern, marine model, M.O. 2233 made by S.& A. Calderara.
(iii) Kew pattern, station model, by Fuess, No. 1469.

Evaporimeter: Piché

Hygrograph : Casella No. 1141 (M.O. 195/32)

Raingauges : (i) Casella No. 1593/32 M.O.
(ii) Fuess Standard gauge
(iii) Dines Tilting Syphon Rain-gauge M.O. 28/37
(iv) Tropical size gauge for exceptional precipitation.

Sunshine Recorder: Campbell Stokes pattern by J.Hicks, London M.O. 265/30; sphere M.O. 355/30

Thermograph: Short and Mason.

Thermometers: Grass minimum Casella 36182.

(In tropical screen)
Standard Fuess No. 652
Dry Bulb Calderara No. 34490
Wet Bulb Calderara No. 34491
Maximum Casella No. 17250
Minimum Calderara No. 34686

Thermometers: (In Stevenson screen of standard pattern until 24th. April).
(contd.)

Dry Bulb Negretti No. W. 31863
Wet Bulb Negretti No. W. 31864
Maximum Calderara No. W. 34492
Minimum Negretti No. W. 20818

Synoptic Meteorology in the South West Pacific Region

The Observatory carried out a programme of synoptic meteorology under the direction of the Director of Meteorological Services, Air Department, Wellington, New Zealand. The scope of this work was much the same as in 1940 except for slight modifications necessary in view of war-time conditions.

Notes on the Weather of 1941 at Apia Observatory

January

Conditions were predominantly cloudy during January but as much of the cloud was thin Cirro-stratus or thin Altostratus only four days had less than three hours sunshine. The average cloudiness was more than seven tenths at 9 a.m. and more than eight tenths at 3 p.m. while the other hours of the day were generally less cloudy.

Light showers were fairly frequent throughout the month, while the only period of general rain occurred on the 13th. and 14th.

As a consequence of the fairly stable conditions the rainfall for January was very much less than normal and winds were mainly light; the highest gust recorded being only 29 m.p.h. Temperatures varied between 89.4°F and 70.9°F.

The synoptic charts showed several interesting features the most important being a tropical cyclone the centre of which passed near Suwarrow Island at about 0600 G.M.T. Jan. 1st. The storm appeared to result from the regeneration of a quasi-stationary depression centred just east of Penrhyn Island. The depression deepened rapidly and moved in a southwesterly direction passing between Palmerston and Niue Islands before moving off in an easterly direction and gradually losing

intensity. The lowest pressure at the centre was probably about 993 mb. at 0100 G.M.T. Jan. 1st. when Suwarrow reported winds of force 11 and heavy rain. On the same front there were other waves which travelled along but did not develop into deep depressions, merely bringing rainy conditions with moderate winds.

February

During February there were two periods of dull wet weather; the first from the 6th. to the 9th., and the second from the 16th. to the 18th. Otherwise the weather was mainly cloudy, with showers at times.

The rainfall was 5.05 inches greater than the normal, but over half of the total rain measured fell on the 16th. and the 17th; and the number of rain days was only 16. The bright sunshine was only 4 hours less than the normal value.

The average wind speed was rather high, and the windiest days, the 9th. and 17th., were associated with northerly to northwesterly winds, the maximum gust recorded being 45 miles per hour on the 17th. The prevailing winds during daylight hours were easterly.

Temperatures varied from a minimum of 73.6 on the 17th. to a maximum of 89.2 on the 26th., and the mean temperature was nearly two degrees in excess of the normal value.

The eastern front showed evidence of considerable instability. At the beginning of the month a wave formed near Solomon Islands. It moved across the Santa Cruz Islands, and reached the New Hebrides on the 3rd., causing winds of gale force and considerable rain.

On the 6th. a heat low developed south of Ellice Islands, and induced the formation of a wave west of Samoa, which deepened as it moved southwards over the Tongan group, causing considerable rain. A later wave which had its origin north of the Fiji group intensified as it passed over Samoa, causing strong westerly winds followed by heavy rain. The lowest pressure recorded at Samoa was 996 mb. on the 16th., After passing Samoa it recurved eastwards and developed into a tropical cyclone, the full force of which struck the Fiji group on the 19th. The lowest pressure recorded at Suva was 965 mb., and the maximum wind velocity was 110 m.p.h. Heavy rain also occurred.

Towards the end of the month a wave developed over the Tokelau Islands and moved southwards towards Samoa.

March

The month opened with stormy, wet weather, lasting till the 4th. Otherwise there were many days of fair to fine weather. There were periods of two to three days of showery weather about the 7th., 14th., and 20th., 24th., and 30th., but a considerable amount of the rain was at night.

The rainfall was 1.51 inches less than the normal, and the number of rain days was 17. Nearly half the total rainfall fell on the 1st. and 2nd. The number of hours of bright sunshine was more than 60 greater than the normal value, and there were 24 days with more than 7 hours sunshine. Thus during daylight hours the rain was not often associated with dull weather.

The stormy weather on the 1st. and 2nd. was associated with a northwesterly gale, which reached its maximum of 63 miles per hour in the early hours of the 2nd. Some damage was done to dwellings and banana trees. For the remainder of the month easterly winds prevailed. They were fresh to strong at times in the afternoons but varied considerably in force from day to day.

Temperatures varied from a minimum of 71.6 on the 27th. to a maximum of 88.3 on the 11th. and 12th. The mean temperature was 1.2 degrees in excess of the normal value, but as the relative humidity was rather less than the normal value, conditions were not often oppressive.

The wave which formed over the Tokelau Islands towards the end of February deepened rapidly as it moved southwards, causing southerly winds at first in Samoa, and later the northwesterly gale and heavy rain of the 1st. and 2nd. The lowest pressure recorded at Apia was 991 millibars on the 1st., but at Niue Island on the 2nd. the pressure fell to 962 millibars, indicating that the disturbance had deepened considerably. From Niue, it travelled eastwards towards the Cook Islands, causing northerly to westerly winds of gale force there, but only moderate rain. During the remainder of March the eastern front showed less tendency to wave formation. A shallow wave over the Tonga group on the 9th. and one over the Cook Islands towards the end of the month caused moderate rain and increased cloud. A wave which formed over Noumea on the 15th. moved southwards past Norfolk Island and deepened, later causing strong winds and unsettled weather in New Zealand. The pleasant weather conditions which prevailed at times in the region from Samoa to Tahiti were associated with the westward extension of the South Pacific semi-permanent high.

April

The weather was generally rather cloudy and at times dull, but with intervals of clear weather. Towards the end of the month conditions were showery and occasionally squally. Lightning was seen rather frequently.

The rainfall was 5.62 inches less than the normal. There were no days on which as much as an inch of rain fell; and the fact that there were 14 rain days indicates that the rain was well distributed. The sunshine was considerably higher than the normal value.

Easterly winds prevailed, and were generally moderate to fresh in the afternoons of the 1st. to 20th., but towards the end of the month they tended to be light, and there were several days with little wind. The highest wind velocity was reached in the squally weather of the 30th.

Temperatures varied from a minimum of 73.2 on the 10th. to a maximum of 89.1 on the 10th., 16th., and 18th. The mean temperature was 2.78 degrees higher than the normal, and was the highest on record for April.

There was still some tendency for waves to form on the eastern front. Such a wave travelled over the Santa Cruz Islands and the New Hebrides early in the month, causing considerable rain and strong winds. Later a wave of considerable intensity formed over Rikitea, but moved rapidly eastward. About the middle of the month frontogenesis occurred in the equatorial trough. The warm front stretched nearly directly east and west, and as it travelled slowly southwards it brought moderate rain to Samoa. The invasion of equatorial air caused warm and oppressive conditions in Apia towards the end of the month, with rather frequent showers.

May

The month opened with fine weather, but from the 6th. to the 14th., the weather was rather cloudy and at times dull, with showers and occasional squalls. From the 15th. to the 22nd. fair to fine weather predominated. For the rest of the month the days were dull, with little wind, except on the last 2 days of the month.

The rain recorded was only about one quarter of the normal value, and nearly all of it fell in the first half of the month.

Easterly winds, generally moderate to fresh, prevailed from the first to the 20th. From the 21st. to

the 29th., winds were very light and variable in direction.

Temperature varied from a minimum of 71.6 on the 18th. to a maximum of 88.0 on the 3rd. and 9th. As in April, the mean temperature was considerably higher than the normal, in this case by 2.17 degrees.

Early in the month frontogenesis occurred again in the region between the northern Cook Islands and the Tokelaus, and the warm front brought dull weather and rain as far south as northern Tonga. This front also induced wave-formation near Rarotonga in a quasi-stationary front lying across Fiji and the southern Cook Islands. A later shallow wave which formed over the Fiji group persisted for some days with very little motion. At times the southern part of the Tongan group and the Cook Islands came under the influence of an anticyclone situated to the south; but towards the end of the month a col formed in this area. Wave-formation followed in the Rarotonga group, and considerable rain resulted.

June

The dull weather of the end of May continued for a few days with some rain, but from the 3rd. to the 19th. fine clear dry weather prevailed, interspersed with fair to cloudy days. Moderate rain occurred on the 20th. The weather continued mainly fair to fine, but with an increase in the cloud amount and the tendency to showers towards the end of the month. The 30th. was dull with intermittent rain, followed by heavy rain in the early morning of July 1st.

As in May, the rainfall was considerably below normal. Over half of the total rainfall fell on the 30th., leaving the rest of the month with a rainfall of less than one inch.,

The sunshine was considerably above the normal value.

Easterly winds prevailed, but there were several days in the middle of the month with little wind.

Temperatures ranged from a minimum of 70.7 on the 6th. to a maximum of 88.9 on the 8th. As in May, the mean temperature was more than 2 degrees above the normal value.

During the greater part of the month a belt of high pressure extended over the area from Nukualofa

to Papeete and further eastward, highest pressure being about 1016 millibars in latitude 25. Frontal activity was generally restricted. About the middle of the month, however, a wave formed near Suva in a quasi-stationary front, and brought unsettled conditions to Fiji and Tonga. About the 20th., frontogenesis again occurred in the equatorial trough. The end of the month brought the building-up of an anticyclone extending from Queensland to New Zealand. This development caused the advance of colder air into Fiji and Tonga and renewed northward motion in two fronts lying north of Samoa and north of Fiji respectively.

July

The weather was unsettled at the beginning of the month, with considerable rain on the 5th. This was followed by a spell of fine weather, cool at first. Rain occurred again on the 16th., and from the 20th. to the 24th. the weather was cloudy to dull and showery, with gusty winds, and squalls at times. The remaining days of the month were mainly fair to fine, but the 26th. and 27th. were unusually windy, and there was some rain on the 29th. and 30th.

The rainfall of 6.07 inches was considerably above normal, and 2.64 inches of it fell on the morning of the 5th. There were 12 rain days. The sunshine was below normal.

Easterly winds reached and maintained a velocity of 25 to 30 miles per hour for many hours on the 26th. and 27th. Easterly winds were also recorded frequently throughout the night from the 20th. to the end of the month.

Temperatures ranged from a minimum of 68.2 on the 11th. to a maximum of 85.6 on the 12th. The mean temperature was higher than the normal value, but by less than in any previous month of this year. Relative humidities of less than 60 per cent were recorded on the 7th. and 8th.

The synoptic charts showed considerable signs of frontal activity in this region. The cold front which had already passed Fiji at the beginning of the month moved slowly over northern Tonga and Samoa, bringing considerable rain. Behind the front the air was considerably cooler and drier, as it was derived from an anticyclone stretching from Catham Islands to Sunday Island. As the front became stationary, wave-formation occurred, at first in the Paumotu group, later northwest of Fiji. A smaller wave which

formed west of Samoa brought considerable rain. Later in the month, the development of an anticyclone south-east of Rarotonga accelerated the northward movement of a front which had been lying south of Fiji. Behind this front strong easterly to southeasterly winds were experienced in Samoa, the northern Cook Islands and northern Tonga. The formation of a small wave near Samoa occurred once again.

August

The weather was dull and unsettled on the 7th., 8th. and 9th. Otherwise it was mainly fair to cloudy, but at times showery. The most showery periods were from the 19th. to the 22nd., and the 30th. and 31st.

As in July, the rainfall of 6.95 inches was nearly double the normal value. The 3.65 inches falling in 6 hours on the morning of the 7th. was unusually heavy rain for this month.

The easterly winds were strong at times, but not for such long periods as those recorded in July; generally the month was less windy than July.

Temperatures varied from a minimum of 70.9 on the 28th. to a maximum of 87.4 on the 17th., and the mean was again greater than the normal value.

At the beginning of the month a quasi-stationary front lay between Fiji and northern Tonga. The southward movement of this front caused unsettled conditions in Fiji and southern Tonga. Later its northward movement brought Samoa the heavy rain of the 7th., and also affected the Cook Islands. This front remained near Samoa for some days while frontolysis occurred. A second front behaved in the same manner over Fiji, but frontolysis occurred before it crossed Samoa. The third front in this region showed the formation of a wave near Niue, possibly induced by a low pressure centre situated near Sunday Island. The wave travelled eastwards towards the Paumotu group, and was accompanied by wind changes and showery conditions. The front itself brought drier air to Samoa, but its passing was accompanied by little weather change. Frontolysis occurred again north of Samoa. The most pronounced anticyclonic development in the sub-tropical region occurred off Queensland about the middle of the month, highest pressure being in about latitude 28°S. The anticyclone travelled eastwards south of Tonga and the Cook Islands.

September

In the first half of the month the weather was mainly cloudy, with rather unsettled conditions on the 7th., 8th. and 9th. From the 17th. to the 21st. and from the 25th. to the 27th., the weather was windy and squally, with a tendency to showers. The remaining days of the latter half of the month were fair to fine.

The rainfall of 2.35 inches was less than half the normal value, and the number of rain days, seven, was the least so far recorded for any month of this year. The sunshine was above normal.

In the latter half of the month strong winds were experienced similar to those recorded in July, but with a greater tendency to gusty and squally conditions. The mean wind velocity was even higher than in July.

Temperatures varied from a minimum of 71.1 on the 16th. to a maximum of 87.8 on the 24th. The mean temperature was slightly lower than that recorded for August.

The snyoptic charts showed pronounced antcyclonic development, highest pressures being usually in latitude 25° to 35°S. As in July and August, there were signs of frontal activity in this region and of the formation of small waves on the quasi-stationary fronts lying near Samoa. These waves often originated near Rotuma. Two larger waves associated with considerable precipitation and changes in pressure and wind direction appeared in the Rarotonga and Fiji areas respectively. The squally conditions experienced in Samoa in the latter half of the month were associated in each case with frontal activity while an anticyclone was centred near Sunday Island.

October

From the 1st. to the 11th. the weather was mainly fair to fine. From the 12th. to the 15th. the weather was mainly cloudy, with rain on the 13th. The 16th., 17th., and 19th. were dull, wet and windy, but the 18th. was windless, oppressive and showery. The 20th., 21st. and 22nd. were cloudy. For the rest of the month, the weather was mainly fine and clear, but the 29th. was cloudy, showery and squally.

As in September, the rainfall was considerably below normal, and the number of rain days, eight, was unusually low. The sunshine was considerably above the normal value.

The mean wind velocity was considerably less than in September. Easterly winds reached their maximum velocity on the 16th. and 17th., with a gale in the early morning of the 17th. Fresh northerly winds were experienced on the 19th., followed by strong gusty westerly winds. A northerly squall reached gale force on the morning of the 29th.

Temperatures varied from a minimum of 67.6 on the 11th. to a maximum of 87.4 on the 1st. The mean minimum was the lowest for any month of this year, temperatures of less than 70 being recorded on five occasions. The mean humidity at 9 a.m., 71 per cent, was also unusually low.

The synoptic charts in the early part of the month showed the north-eastward advance of cold fronts, but the effects were more marked in the Fiji-Tonga-Rarotonga area than near Samoa. As in previous months, there was evidence of the formation of small waves on quasi-stationary fronts. The most important development, however, was initiated near the Ellice Islands. A trough which had existed in this area for some days intensified from the 16th., causing an advance of equatorial air, with extensive rain over Fiji. The cyclonic centre moved southeastwards and intensified; and the pressure was probably 998 millibars as the centre passed north of Keppel in the Tongan group. At this stage the cyclone showed evidence of both a warm and a cold front, and appeared on the map as a wave on the equatorial front. The lowest pressure recorded at Apia was 1003.3 millibars on the 19th. The wave continued in an east-south-east direction past the Tubuai Group. In the cool air behind the cyclone an anticyclone developed, centred in latitude 20° near Tonga, and moved over Tahiti. At the end of the month another invasion of equatorial air occurred and extended as far south as northern Tonga.

November

The weather was dull and unsettled on the 8th. and 19th. while wet and stormy conditions were experienced on the 23rd., 24th., and 25th. Otherwise the weather was mainly fair to cloudy, with a showery tendency at times. Squally conditions were sometimes associated with the showers.

The rainfall was again below the normal value; but the number of rain days, fourteen, was considerably greater than in September or October. The sunshine was greatly in excess of the normal value.

The mean wind velocity was nearly as high as in September. The highest average velocity of easterly winds over 24 hours was reached on the 18th. The stormy weather of the 24th. and 25th. included easterly and northeasterly winds averaging gale force at times, and strong and gusty westerly to southerly winds.

Temperatures varied from a minimum of 72.0 on the 7th. to a maximum of 90.3 on the 2nd. The mean temperature was considerably higher than the normal value.

The synoptic charts showed the sub-tropical anticyclones still well developed. Weather changes associated with fronts moving from the southwest were noticed again; in some cases frontolysis occurred south of Samoa. A gradual advance of equatorial air associated with showery conditions was evident during the month. A centre of low pressure developed between the Phoenix Islands and the Ellice Islands about the 19th. It moved east-south-eastward with only slight intensification at first, and on the 23rd. was situated between the Ellice and Tokelau groups, with centre 1002 millibars. From here it moved southeastwards and deepened rapidly to cyclone intensity. The Apia anemogram and barogram for the 24th. and 25th. showed the presence of two centres as the cyclone passed, the lowest pressure being 991.1 millibars. Further deepening occurred as it moved eastwards towards Pago Pago, but filling occurred as it moved over the southern Cook Islands. No sustained wind velocities beyond gale force were experienced in Apia, and the rainfall was not large.

December

From the 3rd. to the 6th., and from the 25th. to the 27th. the days were rather dull, with some rain. Otherwise the weather was mainly cloudy, frequently with showers. Thunder and lightning occurred rather freqeuntly, lightning being seen every day from the 6th. to the 15th. A thunderstorm of considerable intensity in the early morning of the 9th, brought the heaviest rain of the month.

Appreciable amounts of rain were recorded on nineteen days, but the total for the month was less than half the normal value. A large proportion of the rain fell between 6 p.m. and 8 a.m.

In spite of the general cloudiness of the month, the sunshine recorded was greatly in excess of the normal value.

The mean wind velocity was considerably less than in November. Northerly to northwesterly winds prevailed from the 25th. to the 30th.

Temperatures varied from a minimum of 70.9 on the 9th. to a maximum of 88.3 on the 31st. As in November the mean temperature was considerably higher than the normal value, and very few of the nights were cool.

The synoptic charts showed the general advance of equatorial air southwards, and an associated tendency to showery conditions. During the early part of the month a trough of low pressure associated with frontal activity extended from Rarotonga to the Tokelau Group. The northward-moving front became quasi-stationary near Samoa, and brought moderate rain. A wave which formed in the front brought unsettled weather in the Rarotongan area. Later, pressure was high in the latter area, with an anticyclone centred to the south-east. Frontogenesis then occurred in the northern Cook Islands. On the 23rd. a depression developed over the Solomon Islands and moved southeastwards over the New Hebrides and Fiji, with considerable deepening. The pressure at the centre fell to 988 millibars in south-eastern Fiji on the 26th., but the disturbance was extensive rather than intense, and few winds of gale force were reported. At the same time a deep depression was situated east of New Zealand, and pressure was low over a wide area.

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METEOROLOGICAL OBSERVATIONS.

9 a.m. January 1941

Day of Month.	Cloud. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (° C).	Wet Bulb (° C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu	Ac	Ci	7	9+	3000		cbcc	cpr_o	M	SSW	4	1004.4	25.9	22.3	73	23.7			
2	Cu	-	Ci	Tr	9+	3000		c	c	M	CALM	0	1006.7	26.9	22.4	66	23.2			
3	Cu	-	Ci	1	8	4000		cbcbbcc	c	M	E	1	1010.3	28.1	23.0	63	23.6			
4	Fc Sc	Ns	-	3	10	2500		cbcbcrr	crr	K	ESE	1	1011.5	24.9	23.9	92	28.5			
5	Fs Fb	Ns	-	7	9+	500		bbcpr_oc	cr_o	K	ExS	1	1012.0	26.2	24.8	89	29.9			
6	Cu	-	Ci Cs	3	7	4000		orr_ocbc	bc	M	E	2	1010.3	28.8	26.1	80	31.3			
7	Cu	Ac	Ci	5	9	3000		cpr_ojpc	c	K	ExS	3	1010.0	28.1	24.6	73	27.7			
8	Cu Sc	Ac	-	6	10	3500		cpr_oc	c	K	S	1	1010.1	27.8	24.6	76	28.0			
9	Cu	Ac	Ci	6	9+	4000		cjpprc	c	K	E	3	1009.6	28.0	25.4	80	30.0			
10	Cu Sc	Ac	Ci Cs	4	9	3000		cpr_oc	c	K	W	1	1010.9	28.6	25.9	80	30.9			
11	Cu	Ac	Ci	4	9+	2500		cbcc	c	M	E	1	1009.3	29.0	25.5	74	29.5			
12	Cu Cb	Ac	Ci	1	7	3000		cbcb	bc	M	ESE	2	1008.5	29.8	25.6	70	29.1			
13	Cu	Ac	Ci Cs	5	8	3000		cprbcjp	c	K	E	1	1009.5	29.5	26.2	76	30.9			
14	Fs	Ns	-	9	9+	2500		cprcrr	cpr	K	ESE	1	1008.9	26.8	25.3	88	30.7			
15	Cu	Ac	Cs	3	7	2500		cjpprc	bc	M	E	1	1008.6	28.7	25.4	75	29.5			
16	Cu Cb	-	Ci Cs	2	4	4000		cjprbc	bc	M	CALM	0	1009.5	29.1	24.5	66	26.7			
17	Cu	-	Ci	2	2	3000		cpr_obcb	b	M	CALM	0	1009.8	28.0	24.5	73	27.1			
18	Cu	Ac	Ci Cs	2	9+	3000		bc c	c	K	ESE	3	1010.3	28.9	25.0	71	28.1			
19	Cu	-	Ci	2	3	3000		cbc	bc	M	ExS	2	1010.3	28.1	23.4	66	24.7			
20	Cu	-	-	1	1	4000		bbcb	b	M	ESE	1	1010.7	28.6	23.7	65	25.1			
21	Cu	-	Ci	3	3	3000		cbc	bcjpr	M	ESE	3	1009.1	29.2	25.4	72	29.1			
22	Cu	-	Ci	1	1	3000		bcb	b	M	E	4	1007.7	29.6	25.9	73	30.0			
23	Cb	-	-	8	8	2500		bccpbcc	cjpr	K	ExN	4	1008.0	28.4	26.4	85	32.4			
24	Cb	-	Ci	5	8	3000		bccpRc	c/pr_o	M	ESE	1	1009.3	27.7	26.0	87	31.9			
25	Fs Fc	Ac As	-	5	10	500		cptlr	cjpr	K	SW	1	1010.5	26.1	25.2	93	31.1			
26	Cu	Ac	Ci	2	3	3000		ctbcpr	bc	M	ESE	2	1008.7	29.3	26.4	78	31.7			
27	Cb	Ns	Cs	8	9+	2000		cprcrr	c/pr	M	SE	2	1007.7	25.5	24.9	95	30.7			
28	Cu	Ac	Ci Cs	4	9+	3000		bc c	c	M	WSW	1	1007.5	29.0	26.1	78	31.1			
29	Cu	Ac	Ci	3	9+	2000		bcclc	c	M	NNW	2	1007.9	28.9	25.8	77	29.5			
30	Cu	Ac	Cs	5	7	2500		cblbcp	bc	K	SE	1	1010.4	28.9	26.2	80	31.5			
31	Cu	Ac	Ci Cs	5	7	3500		cpr_obc	bc	K	ESE	2	1010.7	30.0	26.8	76	32.3			
Means	-	-	-	3.9	7.2	2900		-	-	-	-	1.7	1009.3	28.1	25.1	77	29.0			

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METEOROLOGICAL OBSERVATIONS. 3.0 p.m. January 1941

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	At Time.	Visibility.	Wind. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Sc	-	Ci	9	9+	3000		c	cjp	K	S	4	1003.7	27.0	22.4	66	23.1			
2	Cu	Ac As	Ci Cs	1	9	3500		c	c	K	ExN	3	1005.3	29.3	24.1	63	25.5			
3	Cu	-	Ci	1	9	3500		c	c	M	ENE	2	1007.9	30.0	25.3	66	28.1			
4	Cu	Ac	Cs	1	7	4000		crrcbc	bc	M	NE	1	1009.0	28.8	25.6	76	29.9			
5	St Sc	Ns	-	Tr	10	6000		or_or_o	or_or_o	H	SE	2	1007.9	25.8	25.0	93	30.7			
6	Cu	As	Ci Cs	4	9+	3000		bccjprc	c	M	SE	1	1008.4	27.7	24.7	77	28.4			
7	Sc Cb	Ns	-	7	10	2500		cpr_ocpr	cpr_o	K	E	4	1008.3	27.3	24.8	80	28.9			
8	Cu Sc	As	-	6	10	3000		cpr_oc	c	M	CALM	0	1008.0	27.1	24.4	79	28.1			
9	Cu	Ac	Ci	5	9+	2500		cpr_oc	c	K	E	4	1007.7	29.9	26.5	75	31.5			
10	Cu	Ac	Ci	3	9	2500		c	c	M	ExN	1	1007.7	29.6	25.8	72	29.7			
11	Cb	Ac	Ci Cs	3	9+	2500		cbcjprc	c	M	NE	1	1007.2	30.0	26.3	73	30.8			
12	Cb	Ac	Ci Cs	1	9+	2500		bc c	c	M	ENE	2	1007.3	30.3	26.3	71	30.7			
13	Cu	Ac	Ci Cs	3	8	3000		cprcjpc	c	M	NE	2	1006.8	29.9	26.0	72	30.1			
14	Sc	Ac	Ci	7	9+	1000		cprRRjp	cjpr	K	ESE	2	1007.5	28.2	26.3	85	32.4			
15	Sc	Ac	Cs	8	9	1500		$bccpojp$	cjpr	K	ExS	4	1006.3	30.2	26.8	76	32.1			
16	Sc	Ac	-	8	9+	2000		$bccpojp$	cjpr	K	E	4	1007.3	29.6	25.6	71	29.2			
17	Cu	Ac	Cs	3	4	4000		bc	bc	M	E	5	1006.4	30.5	26.2	70	30.1			
18	Cb	Ac	Ci	3	9+	2500		c	cjpr	K	E	5	1007.4	29.4	25.0	68	27.7			
19	Cu Sc	Ac	-	2	2	3000		bccbcb	b	M	ExN	4	1007.5	29.7	25.2	67	28.0			
20	Sc Cb	Ac	-	7	9	1000		$bbccpr_o$	cpr_o	M	ESE	1	1007.7	28.3	25.7	80	30.8			
21	Cu	Ac	Ci	5	6	2500		bcjprbc	bc	M	ExN	4	1006.5	29.4	25.6	72	29.5			
22	Cu	Ac	Ci	4	6	3000		bc	bc	M	ExN	4	1005.6	30.0	26.1	72	30.3			
23	Cu	Ac	Cs	5	6	2000		cjpbcp	bc	M	ENE	3	1006.3	30.0	27.6	83	35.1			
24	Cb Sc	-	Ci	9	10	1500		cproc	cpr	K	ESE	2	1008.3	29.3	26.7	80	32.5			
25	Cb	Ac	Ci Cs	5	9+	3000		circ	ct	M	ENE	1	1008.2	28.6	25.8	79	30.7			
26	Cb	Ac	Cs	7	9+	3000		bc	c	M	E	2	1006.6	30.0	26.9	78	32.7			
27	Cu	Ac	Cs	5	6	2500		cprjpbc	bc	M	NNW	2	1005.4	29.6	25.8	72	29.7			
28	Cu	Ac	Cs	3	7	2500		cbc	bc	M	NW	2	1005.0	30.2	26.2	71	30.4			
29	Cu	Ac	-	4	9+	2000		c	cjpr	M	NNW	1	1006.9	29.6	26.2	75	30.9			
30	Cu	Ac	Ci	5	8	2500		bcjprc	c	M	ExN	2	1008.2	30.2	27.5	81	33.9			
31	Cu	Ac	Ci Cs	4	9	3000		bc c	c	M	E	3	1008.9	31.4	27.0	70	31.7			
Means	-	-	-	4.5	8.2	2700		-	-	-	-	2.5	1007.1	29.3	26.0	75	30.1			

METEOROLOGICAL OBSERVATIONS.

January 1941

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter. (mm.)
	Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)				
1	31.0	24.0	21.1		-	7.4		4.2
2	30.9	21.6	19.0		-	10.8		3.2
3	30.3	22.3	20.3		1.7	9.8		2.8
4	30.0	23.9	22.4		2.5	5.5		-
5	29.0	24.0	22.8		11.7	0.8		0.8
6	29.4	23.2	21.7		10.5	4.4		1.6
7	29.7	24.0	23.3		0.4	2.5		2.5
8	29.3	23.8	22.5		2.3	1.0		2.2
9	30.5	24.8	23.3		Trace	4.3		2.2
10	30.2	24.7	23.4		-	5.2		2.2
11	30.8	24.7	22.8		-	7.8		2.2
12	30.7	23.8	22.3		Trace	11.1		2.2
13	30.3	24.9	23.7		24.7	10.9		1.8
14	30.4	25.4	24.2		42.0	3.6		0.6
15	31.2	23.5	22.2		Trace	8.6		2.4
16	30.2	23.6	22.2		0.7	8.6		2.2
17	30.6	23.5	22.0		Trace	11.5		3.0
18	30.6	23.2	22.5		-	4.9		2.8
19	30.0	22.6	21.0		-	10.6		3.4
20	30.2	22.3	20.3		0.3	7.2		2.6
21	30.4	22.9	21.1		-	9.5		2.8
22	30.3	23.0	21.5		3.3	12.0		2.8
23	31.2	25.8	24.4		18.7	8.2		1.9
24	30.8	24.7	24.5		10.7	6.3		1.7
25	29.5	24.6	23.9		8.4	2.1		1.2
26	31.0	25.6	23.5		29.2	9.7		1.9
27	30.1	24.9	24.3		2.9	8.3		2.2
28	30.5	25.5	24.4		-	9.9		3.5
29	30.2	26.6	24.8		Trace	4.3		2.2
30	31.2	25.4	24.4		Trace	10.9		2.7
31	31.9	26.2	24.0		1.6	10.5		2.6
Sum	-	-	-		171.6	228.2		70.4
Mean	30.4	24.2	22.7		-	7.4		2.3

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METEOROLOGICAL OBSERVATIONS. 9.0.a.m. February 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	At Time.	Visibility.	Wind. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu Sc	Ac	Cs	5	6	3000		cbcprlt	bc	K	ESE	3	10.6	29.1	26.6	81	32.4			
2	Cu	-	Ci	2	8	3000		bc cprc	c	M	ESE	4	09.9	29.3	26.2	77	31.2			
3	Cu	As-Ac	-	2	10	3000		bcjprc	c	M	S	1	10.2	26.9	25.0	85	29.9			
4	Cu	Ac	Ci-Cs	3	9	3000		cpr$_o$ltc	c	K	ExN	2	10.1	29.2	26.1	76	30.8			
5	Cu	Ac	Cs	4	8	3000		cpr$_o$jpr	cjpr	M	CALM	0	10.8	27.8	25.0	78	29.1			
6	-	Ns	-	1	10	3000		c	crr	L	SSW	1	11.0	24.0	23.4	95	28.0			
7	Sc	As	-	6	10	3000		cr$_o$qRrr	cjpr	M	CALM	0	08.2	26.4	24.8	87	29.7			
8	Sc	As	-	6	10	500		crr crir	cjpr	K	SW	2	08.0	26.7	25.1	87	30.3			
9	Fs	Ac	-	6	9+	1000		cpr	cp$_o$/rt	K	NNW	6	06.2	27.1	25.9	90	32.1			
10	Sc	Ac	Ci	4	9	2500		c bc c	c	K	NW	3	05.1	28.3	26.4	85	32.5			
11																				
12	Cu Sc	Ac-As	Ci	2	10	3000		cpr$_o$c	c	K	ESE	1	06.1	27.7	25.8	85	31.3			
13	Cu Sc	Ac	Ci	2	8	3000		c bc c	c	K	CALM	0	05.8	28.0	25.8	83	31.1			
14	Cu	-	Ci-Cs	1	10	3500		c	c	M	CALM	0	02.8	28.1	25.0	77	28.8			
15	Sc	Ac	Ci	7	10	2000		cpr$_o$cpr	c	H	SSW	1	02.5	28.1	26.0	84	31.6			
16	Sc	Ac-As	-	7	10	2000		cprltrr	cjpr	M	CALM	0	02.0	27.3	25.9	89	32.0			
17	Sc	Ac	Ci	6	9	3000		orrcir	c	K	CALM	0	99.3	28.1	25.9	83	31.3			
18	Sc	As	-	6	10	500		ORRltrr	c/opr	K	NW	6	98.1	27.3	25.2	83	30.0			
19	Cu Fs	Ac	Ci	5	9+	500		cpr$_o$jpr	cjpr	K	NNW	3	03.8	27.4	25.3	84	30.3			
20	Cu	-	Ci-Cs	4	9	2500		cprc	c	K	CALM	0	05.4	28.3	26.0	82	31.5			
	Cu	-	Cs	4	6	2500		cbcpr$_o$c	bc	M	CALM	0	08.3	28.6	25.8	79	30.7			
21																				
22	Cu	Ac	Ci	1	7	3000		bccpr$_o$b	bc	M	ENE	1	09.2	28.1	24.5	73	27.5			
23	Cu	Ac	Ci	2	8	4000		bccbcb	c	M	ExS	3	09.5	29.9	26.5	75	31.5			
24	Cu Cb	-	Ci	2	7	3000		lbcbbc	bcjpr	M	NE	1	08.4	29.8	25.7	70	29.3			
25	Cb Cu	Ac	Ci	4	8	2500		cbclbbc	cjpr	L	E	4	08.9	29.2	26.6	81	32.4			
26	Cu	Ac	Ci	5	9	3000		cjpbcbbc	c	M	ESE	3	09.4	29.6	26.8	79	32.7			
27	Cu	-	Ci-Cs	1	10	4000		cpr$_o$bbc	c	M	ESE	3	06.8	29.6	26.1	75	30.7			
28	Sc	Ac	Ci	5	10	3500		cpbccjp	cjpr	K	ESE	4	04.6	28.5	26.2	82	31.9			
29	Cu	-	Ci-Cs	3	9+	3000		cpr$_o$bcb	c	M	CALM	0	03.0	28.6	26.1	81	31.5			
30																				
31																				
Means	-	-	-	3.7	8.9	2700		-	-	-	-	1.9	1006.8	28.1	25.7	82	30.8			

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METEOROLOGICAL OBSERVATIONS. 3.0.p.m. February 1941.

Day of Month.	CLOUD. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed; Height Ratio.
1	Cb	Ac	Ci-Cs	3	4	2500		cbcbcjp	bcjpr	L	ExS	4	1008.0	31.3	27.3	72	32.7			
2	Cb	Ac	Ci-Cs	1	3	3000		bccjpr	bccjp	L	E	5	1007.0	30.5	26.7	73	31.6			
3	Cu Sc	As	--	4	10	2500		c	c	M	E	5	1007.2	29.6	26.5	77	31.7			
4	Sc	As	--	7	10	3000		cjptRrp	cpr	K	CALM	0	1009.3	24.9	24.2	94	29.3			
5	Sc	Ac	--	3	9	3000		cjprRc	c	M	ENE	1	1008.1	28.6	24.0	66	25.7			
6	Sc	As	--	Tr	10	3000		crrc	c	M	NNW	1	1007.4	26.8	24.2	80	27.7			
7	Fs-Fc	Ns	--	5	10	1000		cjpqir	crr	K	NW	1	1006.1	25.9	24.7	90	29.9			
8	Sc	Ac	--	9	10	2000		cprc	cjpr	K	NW	4	1005.8	27.8	25.3	80	29.9			
9	Cb	Ac	Ci-Cs	3	9+	2500		cprc	c	K	NW	6	1003.7	29.0	26.0	78	30.8			
10	Cu	Ac	Cs	4	9+	2000		c	c	K	NNW	3	1003.1	29.2	26.8	82	32.9			
11	Cu	Ac-As	Ci	4	10	2000		c	c	K	NW	3	1003.8	28.8	26.1	80	31.3			
12	Cu Cb	Ac	Cs	5	9+	2500		c	c	M	NNW	2	1003.4	29.2	26.1	77	30.9			
13	Sc	Ac	Ci	3	10	3000		c	c	K	NW	4	1000.8	29.8	26.6	77	31.9			
14	Cu	Ac	Ci-Cs	4	10	1000		c	c	K	NNW	2	999.7	29.5	26.7	79	32.4			
15	Fc-Fs	As	--	9	10	400		oir$_o$q	oir$_o$	H	NW	3	1000.5	26.7	25.8	93	32.1			
16	Fs-Fc	--	--	10	10	500		orrcoRR	oRR	H	W	3	996.9	26.6	25.8	93	32.3			
17	Sc	As	--	4	10	2500		c	c	M	NW	6	997.6	27.5	24.2	75	27.2			
18	Cu	Ac	Ci	3	10	2000		cjppr$_o$c	c	K	ESE	1	1002.2	27.9	25.2	79	29.6			
19	Cu	--	Ci-Cs	4	10	2500		cpr$_o$c	c	M	NNE	1	1003.8	29.0	25.5	74	29.5			
20	Cu	Ac	Ci	2	7	3000		bccpr$_o$	bc	M	NxW	1	1005.8	29.1	25.7	75	29.9			
21	Cu	--	Cs	2	4	3000		bc c bc	bc	M	ENE	2	1007.1	30.6	27.2	76	33.5			
22	Cb	Ac	Ci	2	5	3500		bc t bc	bc	M	E	5	1006.7	30.7	27.5	77	33.7			
23	Cb	Ac	Ci-Cs	3	9+	3000		bc-c	cjpr	M	E	5	1005.9	29.7	26.7	78	32.1			
24	Fs	As	Cs	6	10	1000		cjprtc	c	K	E	4	1006.6	28.7	26.7	85	33.1			
25	Sc	Ac	Ci-Cs	6	9+	1500		c bc c	c	M	ExS	4	1006.5	30.6	27.3	75	33.5			
26	Cu Sc	Ac	Ci	5	9+	1500		cpr$_o$cjp	cjpr	M	E	3	1004.3	29.3	27.0	79	34.3			
27	Cu Sc	Ac	Ci	3	9+	3000		cjpprjr	cjpr	M	ESE	5	1001.5	29.8	27.1	81	33.7			
28	Fs Fc	Ac	Ci Cs	5	9+	2500		cjprcjp	cjpr	K	E	5	1000.1	30.4	27.5	79	34.4			
29																				
30																				
31																				
Means	-	-	-	4.2	8.7	2200		-	-	-	-	3.2	1004.3	28.8	26.1	79	31.3			

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METEOROLOGICAL OBSERVATIONS.

February 1941

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter. (mm.)
1	31.6	25.9	23.9					
2	30.6	24.6	23.2		5.3	8.7		2.6
3	31.1	25.1	23.9		-	10.1		2.2
4	29.6	25.4	24.0		Trace	1.7		2.1
5	29.0	23.3	22.2		18.0	1.7		1.0
					49.2	8.5		1.8
6	27.7	24.0	23.5					
7	28.4	23.5	23.1		36.6	0.0		0.2
8	28.8	24.0	22.8		6.8	1.2		1.1
9	29.1	25.9	24.7		2.7	0.8		1.8
10	29.7	27.2	26.8		0.3	2.2		2.9
					Trace	7.6		2.0
11	29.8	25.2	23.5					
12	30.0	24.5	23.2		-	3.4		1.6
13	31.1	24.3	22.7		-	8.1		1.8
14	29.8	25.4	23.6		8.5	7.5		2.7
15	29.9	25.2	24.2		27.6	5.6		0.6
					20.8	0.1		0.7
16	29.2	24.9	24.1					
17	28.2	23.1	22.7		308.0	2.5		0.1
18	28.5	25.8	24.2		Trace	0.7		4.4
19	29.8	24.8	23.4		2.5	1.7		1.2
20	30.2	24.7	23.2		Trace	9.5		2.1
					Trace	11.1		2.0
21	31.2	24.4	22.9					
22	31.4	25.3	23.8		-	11.4		2.3
23	31.0	25.2	23.8		-	10.4		2.3
24	31.3	25.1	23.2		1.5	5.6		2.2
25	31.1	25.0	23.4		-	5.6		1.9
					Trace	9.1		1.8
26	31.8	25.9	24.1					
27	30.8	25.9	24.5		11.1	6.5		1.2
28	30.8	24.9	23.6		2.9	5.1		1.8
29					11.3	7.9		2.3
30								
31								
Sum	-	-	-		513.1	154.3		50.7
Mean	30.1	24.9	23.7		-	5.5		1.8

1,000/7/52—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

9 a.m. March 1941

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Fs	Ns	-	3	10	2000		Cpr$_o$orr	crr	G	SW	2	994.7	26.8	25.0	86	29.9			
2	Fc	As	-	8	10	2000		orqlorq	cq	H	WNW	7	1004.2	26.9	25.2	86	30.4			
3	Fs	Ac-As	-	8	10	500		oircbcc	cr$_o$r$_o$	K	WNW	5	1008.3	27.3	25.4	85	30.5			
4	Fs-Fc	Ns	-	4	10	1000		cpr$_o$bcb	cr$_o$	H	CALM	0	1010.0	25.1	24.5	95	30.0			
5	Cu	Ac	Ci-Cs	3	9+	2000		cr$_o$ir$_o$c	c	M	CALM	0	1011.3	27.0	25.1	85	30.0			
6	Cu	-	Cs	1	3	4000		cbcbbc	bc	M	CALM	0	1011.4	27.3	24.7	80	28.7			
7	Cu	Ac	Ci	2	4	3500		bccpbcb	bc/b	M	ESE	1	1010.7	28.1	25.1	77	29.1			
8	Cu	Ac	Ci	3	8	3000		cpr$_o$bcc	c	M	CALM	0	1009.5	27.4	25.0	81	29.5			
9	Cu	Ac	Ci	3	6	3000		crbcpr	bc	M	CALM	0	1009.6	28.1	25.2	78	29.3			
10	Cu	-	-	2	2	2000		bccpr$_o$c	b	M	CALM	0	1010.5	28.2	25.4	79	29.9			
11	Cu	Ac	Ci	3	9	3000		bbcbbcc	cjpr	M	ESE	3	1012.0	29.5	26.8	80	32.7			
12	Cu	-	Ci-Cs	1	9	3000		cprc	c	M	CALM	0	1011.9	28.2	25.5	79	30.1			
13	Cu	-	Ci	1	5	3500		bc b	bc	K	ESE	2	1010.6	29.8	26.5	76	31.6			
14	CbScCu	Ac	Ci	3	9	3000		cpr$_o$c	c/pr$_o$	K	ESE	2	1009.6	27.8	25.5	82	30.4			
15	Cu	Ac	Cs	3	9	3000		cjplpRt	cjpr	K	ESE	2	1009.3	28.9	26.4	81	32.0			
16	Cu	Ac	Ci	3	7	3000		cprlcbc	bc	M	ESE	2	1010.8	29.0	26.3	80	31.7			
17	Cu	-	-	2	2	3000		c bc b	b	M	E	2	1011.6	29.2	25.8	75	30.1			
18	Cu	-	-	1	1	4000		bjprbcb	b	M	SE	1	1011.2	28.4	24.5	71	27.2			
19	Sc	Ac	-	8	9	2500		bbcpRc	cpr$_o$	K	ESE	1	1011.5	27.4	25.0	81	29.5			
20	CbCu	-	-	2	2	4000		bcpr$_o$b	b	M	CALM	0	1011.2	28.2	24.9	75	28.5			
21	Cu	-	-	1	1	4500		cjrbcb	b	M	ExS	2	1010.0	29.4	26.2	76	31.1			
22	Cu	-	-	1	1	4000		cjrbcb	b	M	ExS	3	1010.4	28.7	25.2	74	28.9			
23	Cu tr	-	-	Tr	Tr	4500		bcpr$_o$b	b	M	CALM	0	1011.0	28.3	24.4	71	27.1			
24	Cb Cu	Ac	-	2	2	3000		b	b	M	CALM	0	1009.6	29.0	26.0	78	30.8			
25	Cu	-	Cs	1	1	3500		cjppr$_o$b	b	M	SE	1	1009.7	28.6	25.0	73	28.4			
26	Cu	-	Ci-Cs	1	4	3500		cbccpr$_o$	bc	M	SW	1	1010.0	28.1	24.7	74	28.0			
27	Cu	-	-	1	1	4500		c bc b	b	M	CALM	0	1009.0	27.4	22.9	66	24.0			
28	CuSc	-	-	1	1	4000		bc b	b	M	CALM	0	1009.9	27.7	23.0	66	24.0			
29	Cu	Ac	Ci	1	3	3500		cbcbbc	bc	M	ESE	2	1011.0	28.6	24.6	70	27.3			
30	Cu	Ac	Ci	7	9	2000		bcbbccp	cjr	K	ExN	3	1012.3	28.8	26.2	80	31.6			
31	Cb	Ac	Ci	5	6	3500		bccRRlt	cjpr	M	ESE	2	1011.7	29.4	25.5	71	29.1			
Means				3.5	5.3	3100						1.4	1009.8	28.1	25.2	78	29.3			

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1,000/7/32—3911] G.M.T.

METEOROLOGICAL OBSERVATIONS.

3.0 p.m. March 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Fs	As	-	10	10	500		orrq	orrq	H	W	6	991.9	26.8	25.4	89	30.9			
2	Fc	As-Ac	-	9	10	800		orq-oq	oq/orq	K	NW	7	1002.6	27.3	25.8	88	31.7			
3	Cu	Ac	Cs	8	9+	3000		cjpr	cpr$_o$	K	WxN	3	1006.1	28.9	25.6	76	29.9			
4	Fs-Fc	As	-	7	10	1000		cr$_o$rrc	cr$_o$	H	SxE	1	1007.3	26.4	25.8	95	32.4			
5	Cu	Ac	Ci-Cs	4	7	3500		c $_o$bc	bc	M	NNW	1	1009.0	28.7	25.0	72	28.4			
6	Cu	Ac	Cs	2	7	3000		bc	bc	M	NNE	1	1009.2	28.6	25.5	77	29.7			
7	Fs-Fc	As	-	7	10	1000		bccprjp	cjpr	M	CALM	0	1008.8	25.8	24.7	91	30.0			
8	Cb	Ac	Ci	4	9	2500		c	c	M	NNE	2	1006.6	28.8	25.7	77	30.1			
9	CuCb	-	Ci	2	3	2000		bc	bc	M	NW	3	1007.0	28.8	26.1	80	31.3			
10	Cu Cb	Ac	-	2	2	3000		b	b	M	NE	1	1008.5	29.0	25.8	76	30.3			
11	Cu	Ac	Ci	1	9	3000		bc c	c	M	ESE	4	1010.3	30.8	27.3	75	32.7			
12	Cb	Ac	Ci	3	3	3000		bc	bcjpr	M	E	5	1009.1	30.4	27.2	77	29.7			
13	Cb	Ac	Ci	3	9	3500		bc c	c	M	E	5	1008.4	30.8	27.0	73	31.9			
14	Cu	Ac	Cs	1	9	3000		c	c	K	E	5	1006.4	30.0	26.8	76	32.3			
15	Cb	-	Ci tr	1	2	3500		b	b	M	E	3	1007.4	31.0	27.4	75	33.2			
16	Cb	Ac tr	Ci	5	6	2500		bc c pr	bc/pr	K	ENE	1	1009.6	29.4	27.1	83	33.7			
17	Cu	-	-	2	2	3000		b	bjpr	M	ExN	5	1007.8	30.1	26.9	77	32.5			
18	Cu	Ac	-	1	2	3500		b	b	M	E	6	1006.8	29.9	26.5	75	31.5			
19	Cb Cu	Ac	Ci	4	5	2500		ctbcpr$_o$	bc	M	E	4	1008.0	29.8	26.9	79	32.8			
20	Cb	Ac	-	8	9+	3000		bbccjpr	cjpr	K	ExN	6	1008.0	29.1	26.4	80	31.9			
21	Cu-Sc	Ac	Ci	6	8	2000		bbctcjr	cjpr	M	E	3	1007.7	29.3	26.8	81	32.8			
22	Cb	Ac	-	2	3	3000		bcbcjpr	bcpr$_o$	L	E	4	1007.2	30.2	26.2	71	30.4			
23	Cu	Ac	Ci	1	2	3000		bbjprb	b	M	N	2	1007.2	29.1	25.2	71	28.5			
24	Fs	Ns	-	4	9+	2000		bccpr$_o$p	cpr	K	CALM	0	1006.4	26.3	25.2	91	30.8			
25	Sc	Ac	-	6	8	3000		bbccjpr	cjpr	M	ExN	3	1007.2	30.4	25.8	67	29.1			
26	Cu	-	Ci-Cs	3	8	3500		bccjprc	c	M	ExN	5	1006.4	30.0	25.6	68	28.9			
27	Cu	Ac	-	3	4	3000		b bc	bc	M	ExN	3	1006.3	30.1	24.8	63	26.7			
28	Sc	Ac	-	7	9	3000		b bc c	c	M	ENE	1	1007.4	29.6	24.7	65	26.8			
29	Cu	Ac	Ci	3	4	3000		bc	bc	M	NE	2	1009.9	29.9	24.5	62	26.0			
30	Cu	Ac	Ci	3	5	3500		c bc	bc	M	NExE	2	1010.0	30.6	27.0	74	32.4			
31	Cb	Ac	Ci	4	8	2500		CRRpr$_o$c	c	M	NNE	1	1010.0	28.4	25.4	77	29.7			
Means	-	-	-	4.1	6.5	2700		-	-	-	-	3.1	1007.2	29.2	26.0	77	30.7			

METEOROLOGICAL OBSERVATIONS.

March 1941.

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
1	27.5	25.8	24.5		150.0	0.0		0.0
2	28.1	23.7	23.8		9.2	0.0		1.7
3	29.2	24.4	25.0		14.4	1.3		0.0
4	27.9	24.5	23.3		8.4	0.6		0.6
5	29.2	22.6	21.0		-	9.1		1.9
6	29.1	22.8	21.3		Trace	10.2		2.1
7	30.0	23.6	22.1		3.1	5.6		1.2
8	29.5	23.9	22.7		19.3	8.4		1.1
9	29.2	23.9	23.2		1.4	9.6		1.8
10	29.7	24.6	23.3		-	11.4		2.1
11	31.3	24.8	23.1		2.7	9.5		2.2
12	31.3	24.5	22.8		-	10.5		2.6
13	30.4	25.3	23.7		0.2	9.7		2.2
14	31.1	25.3	24.0		12.7	9.5		2.4
15	31.2	23.7	21.9		24.6	10.1		2.0
16	31.2	25.3	23.7		3.9	9.1		2.1
17	30.5	24.1	-		-	9.3		2.5
18	30.1	23.2	21.1		5.1	11.0		2.5
19	30.1	24.8	22.5		Trace	8.2		1.8
20	31.1	23.9	22.4		-	9.3		2.2
21	30.9	23.9	22.5		-	7.1		2.2
22	30.8	24.0	22.4		Trace	9.9		2.4
23	29.7	23.0	21.1		-	10.4		2.7
24	30.0	24.9	23.1		30.6	5.3		1.3
25	30.9	23.5	21.6		Trace	8.5		2.2
26	30.8	24.2	22.8		-	10.4		2.8
27	30.4	22.0	19.2		-	10.2		3.1
28	30.1	22.8	20.8		-	8.4		2.9
29	30.7	23.0	21.1		0.3	10.9		2.6
30	30.9	24.5	22.8		15.3	9.0		2.1
31	30.0	25.9	24.8		17.7	3.8		1.3
Means	30.1	24.1	22.6			7.9		1.9
Total					318.9	246.3		

1,000/7/32—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

9 a.m. April 1941.

Day of Month.	Cloud. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu	Ac	Ci	3	10	3000		cpr$_0$lbc	c	M	ESE	2	1013.8	29.1	26.4	80	31.9			
2	Cu	Ac	Ci	1	3	4000		cbcbbc	bc	M	E	4	1014.0	29.7	26.1	74	30.5			
3	Sc	As	Cs	4	9	3000		bcbbcc	c/pr$_0$	M	ESE	4	1013.8	29.3	25.9	75	30.3			
4	Cu	-	Cs	1	2	4000		bcjrbcb	b	M	E	3	1011.0	29.8	26.2	74	30.7			
5	Cu	Ac	-	3	4	3000		cpr$_0$bcb	bcjpr	K	ESE	4	1012.6	29.7	26.8	79	32.4			
6	Cu	Ac	Ci	4	6	2500		bcpr$_0$	bc/pr$_0$	M	ESE	3	1013.3	28.0	25.3	79	29.7			
7	Cu	-	Cs	1	2	3000		bc b	b	M	E	2	1012.9	29.7	25.7	71	29.5			
8	Cb	As	-	4	10	4000		bcpr$_0$lc	c/pr$_0$	L	ESE	2	1012.3	28.2	25.4	79	29.9			
9	Cu Sc	-	Cs	2	4	3500		c	bc/c	M	E	3	1012.3	29.4	24.6	65	26.7			
10	Sc	-	Ci	4	9+	3000		cbcc	c	M	CALM	0	1011.4	27.4	23.3	69	24.9			
11	Cu Sc	Ac	Cs	2	9	3000		cbcc	c	M	SxW	1	1010.5	28.4	25.2	76	29.2			
12	Fs	As	-	7	10	2500		c	crr	H	ENE	4	1010.3	25.8	25.1	94	30.9			
13	Sc	Ac	-	6	9	3000		crbcpr$_0$	c	K	ESE	1	1008.7	28.4	26.8	88	33.6			
14	Cu	-	Ci	2	4	3500		cprbc	bc	M	E	4	1009.0	29.4	26.7	80	32.5			
15	Cu	-	Ci	2	8	3500		bclcpr$_0$	c	K	E	2	1009.3	29.7	26.8	79	32.4			
16	Cb	Ac	Ci	1	3	4000		bc	bc	M	E	1	1009.1	29.0	26.0	78	30.8			
17	Cu	Ac	Ci	1	2	4500		bccprbc	b	K	E	4	1009.6	30.1	27.0	78	33.1			
18	Sc	As	Ci	4	9+	3500		bccprc	cjpr	K	ESE	4	1009.8	28.5	26.3	83	32.1			
19	Sc	Ac	Ci	3	9	3500		cbcbbcc	cjpr	M	E	4	1010.0	29.2	25.5	73	29.3			
20	Cu	-	Ci	1	9	4000		bbcpr$_0$b	c	K	ESE	4	1009.6	29.7	25.8	72	29.7			
21	Cu	Ns	-	2	10	2500		bclcprr	c/r	K	ESE	5	1008.5	27.4	26.0	89	32.1			
22	Cu	-	Ci	5	8	2500		cprlbcc	cpr/c	K	ESE	2	1009.7	28.8	27.1	87	34.6			
23	Cu	Ac	-	7	8	2500		bccprc	c	M	E	3	1009.9	29.3	26.7	80	32.5			
24	Cu	Ac	Ci	3	10	3000		bccpr$_0$l	c	M	ESE	1	1009.9	28.9	26.2	80	31.5			
25	Cu	-	Ci	1	9	3000		cbcprc	c	M	E	3	1010.6	29.2	26.3	78	31.5			
26	Cu	Ac	Cs	7	9+	2000		cpr$_0$bcb	cjpr	M	ESE	1	1011.2	27.7	26.0	87	31.9			
27	Cu	Ac	Ci	1	8	3000		crlbcc	c	M	ENE	2	1011.4	29.0	26.3	80	31.7			
28	Cb	-	Cs	1	5	4500		bcpr$_0$lb	bc	M	NW	1	1010.7	28.7	25.4	75	29.5			
29	Cu	-	Ci	1	9	5500		cbcbbcc	c	M	CALM	0	1012.3	28.0	24.6	74	27.9			
30	Fr. st	Ns	-	2	10	500		ctlqrr	oRq	H	NE	5	1014.4	25.4	25.1	97	31.3			
31																				
Means				2.9	7.2	3200						2.6	1011.1	28.7	25.9	79	30.8			

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1,000/7/32—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

3.p.m. April 1941.

Day of Month.	CLOUD. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu	-	Cs	3	9+	3000		cjpr	cjpr	M	ENE	2	1011.5	30.7	27.1	73	32.1			
2	Cu	Ac	Cs	2	4	2500		bc	bc	M	E	5	1011.5	30.4	26.8	74	32.0			
3	Cu	Ac	Ci	1	4	3000		cbc-jpr	bc-jp	K	E	6	1010.2	30.1	26.8	76	32.1			
4	Cu	Ac	Ci	7	8	3000		bccpr$_o$	cpr$_o$	M	ESE	2	1008.5	29.2	25.8	75	30.1			
5	Cb	As	Ci	1	1	3000		bcb	b	K	E	6	1009.7	30.3	26.9	75	32.3			
6	Cu	-	Ci	2	3	3500		bc	bc	M	E	4	1010.4	30.5	27.2	75	32.7			
7	Cu	Ac	Ci	2	6	4500		cbc	bc	M	E	4	1008.7	30.5	26.6	72	31.3			
8	Sc	As	-	3	10	3500		cpr$_o$c	c	K	ESE	4	1009.0	29.0	25.7	76	30.0			
9	Cu	-	Ci	2	8	3000		bcc	c	M	E	5	1009.3	29.9	24.7	63	26.5			
10	Cu	Ac	Cs	3	8	3000		c	c	M	E	4	1008.4	30.4	26.1	70	30.0			
11	Sc	Ac	Ci	3	9+	3000		c	c	M	E	4	1008.1	29.8	26.5	76	31.6			
12	Sc Fc	As	-	5	10	2500		crrcir$_o$	cir$_o$	K	ESE	5	1007.3	27.7	26.0	87	31.9			
13	Sc	Ac	Ci	7	9	3000		cprc	c/pr	M	NE	2	1006.5	29.0	26.3	80	31.7			
14	Cu	Ac	Ci	3	5	3000		bc	bc	M	E	3	1006.6	30.3	27.6	79	34.4			
15	Cu	Ac	Ci	4	5	3000		cbc	bc	M	E	4	1005.8	30.7	27.4	77	33.9			
16	Cu	-	Ci	4	4	4000		bbc	bc	K	E	3	1007.0	31.1	28.0	79	35.5			
17	Cb	-	Ci	2	3	3500		bc	bc	K	E	5	1007.1	30.5	27.1	76	33.3			
18	Cu	As	Ci	2	9+	3500		cjprc	c	K	ESE	5	1006.2	29.9	26.0	72	30.1			
19	Cu	Ac	Ci	3	7	3000		cjprbc	bc	M	E	4	1007.7	31.2	27.3	73	32.8			
20	Cu	Ac	Cs	1	7	4500		cbc	bc	K	E	6	1007.5	30.6	26.7	72	31.5			
21	Sc	Ac	Ci	6	9+	2500		cpr$_o$cjp	cjpr	K	E	4	1006.3	29.8	27.6	84	34.9			
22	Cu	-	Cs	2	7	3000		bc	bc	K	E	4	1006.9	31.0	28.0	79	35.5			
23	Cu	Ac	Cs	5	6	3000		cbc-jpr	bcjpr	M	E	3	1006.9	31.1	27.4	74	33.1			
24	Cu	Ac	Cs	2	9+	2500		c	c	M	ENE	2	1007.2	30.1	26.8	76	32.1			
25	Sc	Ac	Ci	7	9	3000		cpr$_o$cjr	cjpr	M	NE	4	1007.8	29.5	26.5	78	31.9			
26	Fs	Ac	-	8	9+	2000		cir$_o$	crr	M	SSE	2	1009.7	25.3	24.7	95	30.4			
27	Cu	-	Ci	2	6	2500		cbc	bc	M	NE	2	1009.0	30.6	26.0	68	29.5			
28	Cu	Ac	Ci	4	9+	3000		cpr$_o$c	c	M	ENE	1	1008.9	30.4	26.0	69	29.7			
29	Cu	Ac	Cs	3	9+	2000		c	c	M	ENE	3	1010.1	30.6	26.6	72	31.2			
30	Cb	-	-	9+	9+	1000		cpr$_o$	cpr$_o$	M	NE	2	1011.2	28.1	25.9	83	31.3			
31																				
Means				3.6	7.0	3000						3.7	1008.4	29.9	26.6	76	31.9			

METEOROLOGICAL OBSERVATIONS.

April 1941

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
1	31.4	24.6	22.9		-	10.3		2.5
2	30.9	25.8	23.8		Trace	11.2		2.6
3	31.0	24.8	23.1		-	8.3		2.6
4	31.1	23.9	22.0		Trace	9.3		2.9
5	31.1	25.5	23.7		Trace	10.6		3.4
6	31.1	27.8	26.0		-	9.0		2.6
7	31.0	23.8	22.0		Trace	9.0		2.2
8	29.8	26.2	24.4		Trace	0.1		2.1
9	30.5	23.5	21.6		-	10.5		3.4
10	31.7	22.9	19.9		-	7.1		2.7
11	31.1	24.2	22.3		2.2	6.6		2.7
12	28.6	24.6	22.8		9.0	0.0		1.0
13	30.5	25.3	24.9		3.9	6.9		1.6
14	31.1	25.0	23.8		Trace	9.9		2.2
15	31.1	24.9	23.3		-	10.9		2.2
16	31.7	24.5	23.1		0.3	10.4		2.2
17	31.2	24.8	23.4		0.5	11.0		2.4
18	31.7	25.4	24.4		-	5.2		2.2
19	31.5	23.7	21.7		Trace	9.1		2.5
20	31.4	24.2	21.8		24.3	10.5		2.1
21	31.1	25.2	24.5		1.1	5.0		1.9
22	31.5	27.0	25.3		9.4	9.7		1.8
23	31.5	26.0	24.7		5.7	9.1		1.8
24	31.0	25.1	23.9		1.0	10.5		1.9
25	30.7	24.8	23.5		1.8	7.9		1.9
26	29.3	25.9	24.8		16.5	0.6		0.8
27	30.6	24.9	24.0		Trace	9.6		2.2
28	30.7	24.8	23.4		Trace	10.3		2.2
29	31.1	23.7	21.6		24.7	9.4		1.7
30	30.7	23.5	22.7		12.2	3.3		1.6
31								
Sum	-	-	-		112.6	241.3		65.9
Mean	30.9	24.9	23.3		-	8.0		2.2

1,000/7/32—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

9 a.m. May 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu	Ac	-	1	2	3000		c bc b	b	M	E	3	1013.9	29.4	25.8	74%	30.0			
2	Cu	-	Ci	1	2	3500		c bc b	b	K	ESE	4	1012.9	28.4	23.4	64	24.4			
3	Sc	Ac	Cs	5	9+	3000		cbcbbcc	c/jpr	M	ESE	2	1012.3	29.4	25.2	72	29.1			
4	Sc	Ac	Ci	5	7	4000		bcbbccp	bc/cp	M	ESE	4	1011.0	28.2	24.3	72	26.9			
5	Sc	As	-	3	10	3000		bccirc	c	K	ESE	2	1011.2	27.9	24.7	76	28.3			
6	Fs	Ac	Ci	4	9+	2500		cqpr$_o$c	cjpr	L	SE	3	1009.6	29.2	25.7	74	29.9			
7	Cu	Ac	Ci	1	9	3000		ctlrrc	c	M	ESE	4	1009.9	28.2	25.0	76	28.8			
8	Cu	Ac	Ci	2	8	3000		cpr$_o$lc	c	M	SExE	1	1009.7	28.1	25.6	81	30.5			
9	Cu	Ac	Cs	1	9+	3500		cpr$_o$c	c	M	E	3	1009.3	29.3	26.4	78	31.7			
10	Cu	Ac	Ci	2	5	1000		cprcbc	bc	M	ESE	5	1010.1	28.0	25.9	84	31.3			
11	Cu	Ac	Ci	1	5	3000		cprbc	bc	M	ESE	3	1010.6	28.5	25.6	78	30.1			
12	Cu	Ac	Ci	1	8	3000		bcprc	c	M	ESE	4	1009.4	28.6	25.6	78	30.1			
13	Cb	Ac	Ci	5	9	2500		cpr	cjpr	M	S	1	1010.0	27.0	25.0	84	29.7			
14	Cb	Ac	Ci	6	9+	3000		cprc	cjpr	K	E	5	1010.6	28.6	26.7	85	33.2			
15	Sc	-	Ci	4	8	3000		cprc	c/pr$_o$	K	ESE	5	1012.4	28.8	26.3	81	31.9			
16	Cu	-	-	2	2	3000		bcpr$_o$b	b	K	ESE	4	1011.5	28.4	24.5	71	27.2			
17	Fs	Ac	-	6	8	3000		bcpr$_o$c	c/pr$_o$	K	E	4	1010.6	28.0	25.7	82	30.8			
18	Sc	-	Ci	1	4	3000		cbcbbc	bc	M	CALM	0	1010.5	27.0	24.2	78	27.6			
19	Sc	Ac	-	7	9	3000		bbcc	cjpr	M	E	5	1010.0	28.0	25.0	77	28.9			
20	Cu	Ac	Cc	1	5	4500		cpr$_o$bcb	bc	M	ESE	1	1010.1	28.3	24.9	75	28.4			
21	Sc	Ac	-	6	8	3500		b bc c	cjpr	M	CALM	0	1010.7	27.8	25.0	78	29.1			
22	Cu	Ac	-	1	1	3000		bcpr$_o$b	b	M	CALM	0	1010.2	28.5	25.8	80	30.7			
23	Sc	As	Ci	3	9+	3500		bbcprc	cjpr	M	SSE	1	1009.8	26.7	25.6	91	31.6			
24	Sc	Ac	-	3	9	3000		bcprc	c	M	ESE	1	1009.7	27.2	25.5	87	30.9			
25	Sc	Ac	Ci	6	9+	3000		bccpr$_o$	c	M	CALM	0	1009.5	27.1	25.2	85	30.3			
26	Sc	-	-	9+	9+	2500		bcjrbbc	cjr	M	NNW	2	1009.2	27.0	24.8	83	29.2			
27	Sc	Ac	Ci	2	8	3000		bcpr$_o$c	c	M	CALM	0	1008.2	28.0	24.8	76	28.4			
28	Fs	Ac	Ci	4	9+	3000		cpr$_o$c	c	M	CALM	0	1008.6	27.7	24.0	72	26.5			
29	Sc	Ac	Ci	3	9	3000		c	c	M	CALM	0	1012.1	27.5	24.1	74	26.9			
30	Cu	Ac	Ci	1	9	2500		c	c	M	CALM	0	1013.2	27.1	24.8	82	29.1			
31	Sc	Ac	-	4	9+	3000		c	c	M	S	1	1013.1	27.1	24.8	82	28.9			
Means	-	-	-	3.3	7.3	3000		-	-	-	-	2.2	1010.6	28.0	25.2	78	29.4			

1,000/7/32—3911] ARIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

3 p.m. May 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu	Ac	Cs	2	9	3500		bbcc	c	K	E	6	1011.1	29.4	26.3	77%	31.3			
2	Cu	Ac	Cs	1	8	3500		bbcc	c	M	E	6	1010.2	29.5	24.9	67	27.5			
3	Cu	Ac	Ci	3	4	3000		cjprpro	bc	M	E	5	1009.1	30.2	26.6	74	31.5			
4	Cu	-	Cs	2	4	4500		bc	bc	K	E	6	1008.2	30.0	25.3	66	28.1			
5	Cb	As	Ci	3	9	3000		c	c	M	E	3	1008.1	30.4	25.2	64	27.6			
6	Sc	Ns	-	3	10	3000		ctqr$_o$r$_o$	ctrr	H	CALM	0	1008.0	25.6	24.6	92	29.9			
7	Cb	Ac	Ci	5	9+	3000		cjprpro	cpr$_o$	M	SE	4	1007.3	30.1	26.8	76	32.1			
8	Sc	Ac	Ci	6	9+	2500		c	c	M	E	2	1007.7	29.4	26.9	81	33.1			
9	Sc	Ac	-	5	9+	3000		cbccjpr	cjpr	M	E	3	1006.7	29.7	27.4	84	34.3			
10	Frst	Ac	-	6	9+	3000		bcc	cjpr	M	E	5	1008.6	28.2	25.2	77	29.3			
11	Sc	Ac	-	6	6	3000		bc	bcjpr	M	E	4	1008.1	30.2	26.5	74	31.2			
12	Sc	Ac	Ci	5	9	3000		cpr$_o$c	cjpr	K	ESE	4	1007.3	28.1	25.3	79	29.7			
13	Sc	As	Cs	5	9+	2500		cprc	c	K	ENE	1	1008.2	29.8	26.3	75	31.1			
14	Cu	Ac	Ci	2	9	3000		cqprc	c	K	E	5	1008.6	29.9	26.9	78	32.7			
15	Cu	-	Ci	1	3	3000		cbc	bc	K	E	6	1008.8	29.8	26.7	77	32.1			
16	Cu	-	Ci	3	7	3500		bbc	bc	K	E	4	1008.8	28.9	25.2	73	28.7			
17	Frst	Ns	-	6	9+	2000		cpr	cpr$_o$	K	E	4	1007.8	27.1	25.2	85	30.3			
18	Cu	-	-	2	2	3000		bcb	b	M	E	5	1006.7	29.0	25.8	76	30.3			
19	Cu	Ac	Ci	2	8	3000		cprc	c	M	ENE	3	1007.3	29.9	26.8	77	32.3			
20	Cu	Ac	-	2	2	2500		b	b	M	ENE	2	1007.4	30.2	26.2	71	30.4			
21	Cb	Ac	Ci	4	5	3000		cbc	bcjpr	M	ENE	1	1007.2	30.3	26.0	69	29.7			
22	Cu	Ac	Cc	2	3	3000		bc	bc	M	CALM	0	1006.1	30.1	26.6	75	31.6			
23	Cu	Ac	Ci	2	6	3000		cjprbc	bc	M	ENE	1	1007.0	29.7	26.4	76	31.3			
24	Cu	Ac	Ci	2	6	3000		cbc	bc	M	ExN	2	1006.6	29.8	26.5	76	31.6			
25	Cb	Ac	-	2	4	2800		bcjpr	bcjpr	M	N	2	1006.5	29.2	26.0	76	30.7			
26	Cb	Ac	-	4	5	2000		cjr	bcjr	K	NW	3	1006.7	29.1	25.0	70	28.0			
27	Sc	Ac	Ci	9	9	3000		cpr$_o$c	c	K	CALM	0	1005.6	28.0	24.7	75	28.1			
28	Fs	As	-	9	10	2500		c	cjpr	K	SW	1	1007.0	27.2	24.2	77	27.5			
29	Sc	Ac	Ci	4	9	3000		c	c	M	E	2	1009.7	29.1	24.9	69	27.7			
30	Fc	Ac	Cs	9	9+	2500		cbcc	c	M	E	4	1010.3	28.7	25.6	77	30.0			
31	Sc	Ac	Ci	3	9+	3000		cpr$_o$	c	K	E	5	1010.0	29.0	25.9	77	30.5			
Means	-	-	-	2.9	7.1	2900		-	-	-	-	3.2	1008.0	29.2	25.9	75	30.3			

METEOROLOGICAL OBSERVATIONS.

May 1941.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Grass Minimum (°)	Black Bulb in vacuo (°)				
1	30.6	23.8	22.3		-	10.5		2.6
2	30.1	22.7	20.8		-	10.4		2.8
3	31.1	23.5	21.9		Trace	9.2		3.8
4	30.2	25.7	22.7		Trace	8.9		3.4
5	31.0	24.0	21.9		Trace	8.3		2.6
6	29.3	24.9	-		13.3	1.4		1.0
7	30.4	23.7	22.3		0.4	8.0		1.8
8	29.0	24.6	23.9		0.5	7.9		1.9
9	31.1	25.4	24.1		3.6	5.6		1.9
10	30.0	25.5	24.2		2.0	6.1		1.9
11	30.8	24.9	-		1.6	6.5		2.5
12	30.0	26.4	25.0		5.7	7.4		2.1
13	30.9	25.8	24.4		0.7	5.4		1.9
14	30.3	25.2	23.5		8.4	7.4		2.4
15	30.1	26.4	24.3		0.2	10.3		3.0
16	30.8	25.4	22.7		Trace	9.8		2.6
17	29.1	24.9	23.1		3.4	3.7		1.8
18	30.0	22.0	20.0		-	10.7		3.5
19	30.4	24.8	-		0.2	5.6		1.8
20	30.4	23.6	21.8		-	9.7		2.3
21	30.5	23.4	-		Trace	5.9		2.0
22	30.2	24.7	23.6		Trace	9.4		1.9
23	30.2	25.8	23.6		1.1	7.5		1.8
24	30.0	25.2	-		Trace	6.4		1.0
25	29.6	25.5	-		-	5.9		2.6
26	29.6	24.5	23.5		Trace	6.5		2.6
27	29.4	24.5	22.9		Trace	5.9		1.9
28	29.1	24.4	22.9		-	1.7		2.7
29	29.3	24.8	23.5		-	4.5		2.0
30	30.6	23.7	22.0		-	6.7		2.7
31	30.1	24.8	23.5		Trace	4.9		2.2
Sums					41.1	218.1		71.0
Means	30.1	24.7	23.0			7.0		2.7

1,000/7/32—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

9 a.m. June 1941.

Day of Month.	Cloud. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed; Height Ratio.
1	Sc	Ac	-	3	9	3000		cpr$_o$c	c/pr$_o$	M	SSW	1	1012.7	27.5	25.1	81	29.6			
2	Sc	-	Ci	6	6	3000		bcprbc	bc	K	SE	2	1013.5	28.5	26.1	82	31.6			
3	Sc	Ac	Ci	7	9+	2500		bbccpr$_o$	c/pr$_o$	K	SSE	1	1014.3	27.0	25.1	85	30.0			
4	Cu	-	-	1	1	4500		bcb	b	M	CALM	0	1013.8	27.1	23.9	75	26.8			
5	Cu	Ac	Ci	Tr.	2	5000		b	b	M	CALM	0	1012.8	26.1	23.2	77	25.7			
6	Cu	-	Ci	Tr.	2	4500		bcbv	b	M	CALM	0	1012.2	27.4	23.9	73	26.5			
7	Cu	-	Ci	Tr.	2	4500		bcb	b	M	SSE	1	1012.8	27.7	24.0	72	26.5			
8	Cu	-	Ci	1	3	3000		bcbbc	bc	M	ESE	1	1014.7	27.2	23.1	68	24.4			
9	Sc	Ac	-	6	6	3000		bc	bc	M	ESE	3	1015.1	28.8	24.9	71	28.0			
10	Cu	-	Ci	1	4	3000		bc	bc	M	E	4	1013.3	27.8	23.7	70	25.7			
11	Sc	Ac	Ci	5	9	4000		bcc	cjpr	M	SE	2	1012.4	26.0	23.2	78	25.9			
12	Cu	Ac	Ci	1	9	3000		bccpr$_o$c	c	M	E	2	1012.5	27.8	24.6	76	28.0			
13	Cu	Ac	Ci	1	4	3000		bccbc	bc	K	ESE	4	1014.3	28.5	25.0	74	28.5			
14	Cu	Ac	Ci	1	9	4000		cjpr	c	M	ESE	4	1013.5	27.9	24.1	71	26.7			
15	Cu	-	Ci	2	6	3500		cbc	bc	M	E	6	1011.8	28.2	25.0	76	28.8			
16	Cu	Ac	Ci	1	8	3500		bbcc	c	M	SE	1	1010.9	27.0	24.4	80	28.1			
17	Cu	Ac	Ci	Tr.	9+	2500		c	c	K	VAR.	1	1010.8	26.7	24.2	80	27.9			
18	Sc	-	Ci	Tr.	9	2500		c	c	M	S	1	1011.3	27.6	24.4	76	27.6			
19	Cu	Ac	Ci	1	8	3500		cbcc	c	M	E	1	1011.7	28.3	24.6	72	27.6			
20	Cu	-	Ci	1	3	3000		cbc	bc	M	E	1	1011.0	28.2	24.8	74	28.3			
21	Cu	Ac	Ci	2	6	3500		bcpRbc	bc/pr	M	CALM	0	1011.4	27.2	25.6	87	31.2			
22	Cu	-	-	2	2	4000		bcb	b	M	E	2	1012.8	27.9	25.1	79	29.3			
23	Cu	Ac	Ci	3	5	3000		bbc	bc	K	E	4	1012.0	29.0	25.7	76	30.0			
24	Cu	Ac	Cs	2	3	3000		bcpr$_o$bc	bc	M	ESE	3	1013.2	28.1	24.7	74	28.0			
25	Cu	-	Ci	2	3	3500		bbcprbc	bc	M	E	6	1011.3	28.4	24.2	69	26.5			
26	Cb	Ac	Cs	2	8	2500		bcprc	c/pr$_o$	M	SSW	1	1012.0	25.3	24.5	93	29.9			
27	Cu	Ac	Ci	2	7	3000		cprc	c	K	ESE	2	1012.6	28.2	25.3	78	29.6			
28	Cu	-	Ci	2	8	3000		cpr$_o$c	c	K	ESE	2	1013.3	27.9	24.9	77	28.8			
29	Fs	As	-	6	10	2500		bcpr$_o$c	c/pr	K	E	4	1012.6	27.2	25.1	83	29.9			
30	Fs	As	-	3	10	2500		cprbcc	c/pr$_o$	K	CALM	0	1011.2	26.9	25.1	86	30.1			
31																				
Means	-	-	-	2.1	6.0	3300		-	-	-	-	2.0	1012.6	27.5	24.6	77.1	28.2			

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APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

3 p.m. June 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu	Ac	Cc	3	4	3000		cbc	bc	M	ExS	4	1009.7	29.9	26.6	76	31.7			
2	Cu	-	-	4	4	4000		bcpro	bc	M	E	3	1010.5	30.5	27.0	75	32.5			
3	Cu	Ac	Ci	6	8	2000		cjpro	cjpro	K	E	5	1011.6	30.4	26.9	75	32.3			
4	Cu	Ac	-	3	4	3500		bbc	bc	M	E	4	1010.5	29.5	25.2	68	28.3			
5	Cu	Ac	Ci	3	7	4000		bc	bc	M	NW	2	1010.0	28.0	23.9	69	26.0			
6	Cu	Ac	Ci	4	6	3500		bc	bc	M	E	2	1009.2	29.5	25.1	68	28.0			
7	Cu	Ac	Ci	1	4	3500		bc	bc	M	ENE	2	1010.2	29.4	24.6	65	26.7			
8	Sc	-	Cs	6	8	3000		bcc	cjpr	M	E	5	1011.5	30.4	25.9	68	29.3			
9	Sc	Ac	-	4	4	3000		bc	bcjpr	K	ESE	4	1012.3	30.4	26.4	72	30.8			
10	Cu	-	Ci	1	4	3500		bc	bc	M	E	5	1010.0	29.0	24.1	64	25.5			
11	Cu	Ac	Ci	3	5	3500		bc	bcjpr	M	E	5	1009.4	29.0	25.0	71	28.1			
12	Cu	Ac	Ci	2	6	3000		cpro cbc	bc	M	ESE	4	1010.6	29.9	25.5	68	28.7			
13	Sc	Ac	-	9	9	3000		c	cjpr	M	ESE	5	1011.6	28.5	25.0	74	28.5			
14	Sc	Ac	Ci	9	9+	3000		c	c	M	E	4	1011.5	28.7	25.0	72	28.4			
15	Cu	-	Ci	Tr.	1	3500		bc bz	bz	K	E	5	1009.4	29.0	24.0	64	25.5			
16	Fs	-	-	9	9+	2000		c	cro	K	CALM	0	1009.6	25.9	24.0	85	28.0			
17	Cu	Ac	Ci	2	8	3000		c	c	M	CALM	0	1007.7	28.6	24.5	69	27.1			
18	Cu	-	Ci	1	7	4500		cbc	bc	M	ENE	3	1008.2	29.9	24.8	65	26.9			
19	Cu	Ac	Ci	1	6	3000		cbc	bc	M	ENE	2	1008.7	29.9	25.6	69	28.9			
20	Cu	-	Ci	2	5	3500		bc	bc	M	ENE	2	1009.0	29.5	25.3	69	28.5			
21	Cu	Ac	Ci	4	5	3000		bbcjpr	bcjpr	M	E	3	1009.2	30.2	26.1	70	30.1			
22	Cu	-	-	2	2	3500		b	b	M	E	4	1009.2	30.4	26.2	70	30.3			
23	Cu	Ac	Ci	3	6	2500		cpro bc	bc	M	ENE	5	1010.3	30.2	25.8	68	29.3			
24	Cu	Ac	-	1	1	3500		b	b	M	E	5	1010.0	29.5	25.1	68	28.0			
25	Cu	-	Ci	1	3	3000		bc	bc	M	E	6	1008.5	29.2	24.6	67	26.9			
26	Sc	As	-	3	9+	3000		bc c	cu	M	E	3	1009.8	26.7	24.2	80	27.9			
27	Cb	Ac	-	6	9	3000		c	c	K	ENE	3	1010.4	29.6	26.2	75	30.9			
28	Sc	Ac	Ci	2	6	3000		c bc	bc	K	E	4	1010.9	30.4	25.8	67	29.1			
29	Sc	As	Cs	3	9+	2500		c	c	K	E	3	1010.4	28.8	25.3	74	29.1			
30	Fs.	Ns	-	5	10	2000		cpr	cpro	K	E	2	1009.9	25.2	24.1	91	28.8			
31																				
Means	-	-	-	3.4	5.9	3100		-	-	-	-	3.5	1010.0	29.2	25.3	71.	28.7			

METEOROLOGICAL OBSERVATIONS.

June 1941.

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
1	30.6	24.3	23.1		2.2	8.3		2.0
2	30.9	25.5	24.0		0.1	10.3		1.9
3	30.9	24.1	22.8		-	7.3		1.4
4	30.2	22.8	20.5		-	10.0		2.4
5	28.5	22.1	19.4		-	10.6		2.7
6	29.7	21.5	19.0		-	10.4		2.7
7	29.9	22.5	20.9		-	9.3		2.5
8	31.6	22.5	20.2		-	8.1		2.6
9	31.4	24.2	22.9		-	9.1		2.9
10	29.6	22.7	21.2		-	10.6		3.1
11	29.3	22.3	20.8		Trace	7.4		2.8
12	30.3	23.7	22.0		-	7.4		2.7
13	29.9	23.4	21.7		-	2.9		2.5
14	29.9	24.5	22.7		-	8.1		3.4
15	29.8	23.8	22.1		-	9.3		3.4
16	30.2	22.9	21.2		0.2	4.6		2.2
17	29.5	23.8	22.1		-	6.0		2.4
18	30.9	24.2	22.6		-	10.2		2.7
19	30.3	23.4	21.7		-	10.2		2.6
20	30.4	24.0	22.2		7.7	11.0		2.3
21	30.9	25.1	23.4		-	8.9		2.2
22	31.2	23.6	22.0		-	9.4		2.8
23	30.6	26.2	24.0		Trace	8.9		2.8
24	30.3	24.5	22.8		1.2	10.7		3.5
25	29.8	25.2	22.3		4.9	10.6		3.7
26	29.9	24.3	22.3		0.5	4.9		1.8
27	30.2	24.8	24.0		0.7	4.1		2.6
28	30.6	24.7	22.8		1.1	10.0		3.0
29	29.8	26.3	24.7		4.6	0.7		2.5
30	29.8	25.5	24.3		34.9	0.7		0.2
31								
Sums	-	-	-		58.1	240.0		76.3
Means	30.2	23.9	22.2		-	8.0		2.5

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APIA OBSERVATORY — METEOROLOGICAL OBSERVATIONS.

9 a.m. July 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu	Ac	Ci	2	9+	2500		corrc	c	K	SE	1	1012.8	25.1	23.2	84%	26.7			
2	Cu	-	Ci	1	3	3000		cbcbbc	bc	M	CALM	0	1012.2	26.9	24.7	83	29.1			
3	Cb	Ac	Cc	2	5	3000		bc	bc	M	CALM	0	1012.8	26.9	24.3	80	28.0			
4	Fs	Ac	-	9	9+	3000		cpr	cpr_o	M	ESE	5	1014.2	24.1	23.6	96	28.4			
5	Fs	Ns	-	3	10	1500		orr	cpr_o	F	SW	1	1014.8	23.2	22.7	96	26.9			
6	Fs	-	-	9	9+	1000		cjpr	cpr_o	K	E	4	1015.7	24.9	22.1	77	24.0			
7	Cu	-	-	4	4	3500		bc	bc	M	SE	3	1015.6	25.5	20.7	63	20.3			
8	Sc	-	Ci	7	7	4500		cjprbcc	cy	M	ESE	2	1015.3	24.8	19.2	56	17.5			
9	Cu	-	-	2	2	3500		bybcb	b	M	ESE	2	1014.5	25.8	21.4	66	21.6			
10	Cu	-	-	2	2	3500		cbcb	b	M	ESE	2	1013.7	26.2	22.8	73	24.7			
11	Cu	-	Ci	2	2	3500		bcb	b	M	ESE	2	1014.5	25.8	22.7	76	24.8			
12	Cu	-	Ci	3	5	2500		bc	bc	M	ENE	3	1012.4	28.0	24.1	71	26.5			
13	Cu	-	Ci	1	1	3000		bccprb	b	M	CALM	0	1013.3	26.2	23.8	81	27.2			
14	Cu	-	Ci	1	7	2500		bbcc	c	M	CALM	0	1014.6	26.8	23.9	78	27.1			
15	Sc	Ac	-	9	9+	3000		bcc	cjpr	K	CALM	0	1014.3	25.1	23.1	83	26.1			
16	Sc	Ns	-	4	9+	3000		$cjprcr_o$	cjpr	K	S	1	1013.9	23.9	22.9	91	26.8			
17	Cu	-	-	6	6	2500		cbc	bc	M	E	4	1014.5	26.8	23.2	72	25.2			
18	Cu	-	Ci	4	4	3000		cjprbcb	bc	K	E	4	1013.9	26.3	22.1	68	22.9			
19	Cu	As	Ci	2	9+	3500		c	c	M	E	4	1014.4	26.2	22.3	70	23.5			
20	Cu	Ac	Ci	2	7	3500		bccbc	bc	K	E	5	1012.9	27.2	24.0	75	26.9			
21	Sc	Ns	-	8	10	2500		bccqlr	cr_o	F	N	2	1012.2	25.7	23.9	85	27.9			
22	Sc	Ns	-	5	10	1500		cr_or_o	c	M	E	2	1012.7	25.9	23.0	77	25.5			
23	Fs	Ns	-	8	10	1500		$cjrcpr_o$	cpr_o	F	ESE	2	1013.0	25.7	24.8	93	30.3			
24	Cu	Ac	Cs	4	4	3000		$cqpr_obc$	bcjr	K	E	2	1012.3	27.7	24.7	77	28.4			
25	Cu	-	-	3	3	4500		cjprcbc	bc	K	E	3	1013.6	26.3	21.2	61	20.7			
26	Cu	-	Cs	4	4	4000		bc	bc	K	E	7	1012.2	27.0	22.9	69	24.3			
27	Cu	Ac	Ci	2	3	4000		$bcpr_obbc$	bc	K	E	6	1012.8	27.1	22.4	65	23.1			
28	Cu	-	-	3	3	4000		$bcpr_o$	bc	K	ENE	4	1011.1	27.4	22.7	65	23.5			
29	Sc	-	Cs	8	8	3500		cprbbc	cjpr	M	ESE	1	1011.4	26.3	22.1	68	22.9			
30	Sc	Ac	-	8	9	2500		cprc	cpr_o	K	ENE	1	1011.7	24.2	23.0	90	26.9			
31	Sc	-	-	7	7	3500		$bccpr_oc$	c	M	ESE	2	1009.4	25.9	22.9	76	25.2			
Means	-	-	-	4.3	6.1	3000		-	-	-	-	2.4	1013.3	26.0	23.0	76	25.3			

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APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 3 p.m. July 1941.

Day of Month.	Cloud. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	At Time.	Visibility.	Wind. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu	Ac	Ci	5	8	4000		cjpr	c	K	NE	3	1009.8	27.8	25.2	80%	29.6			
2	Cb	Ac	Ci	4	7	3000		bcjpr	bcjr	M	NNE	1	1009.1	28.2	25.0	76	28.8			
3	Sc	Ac	Ci	6	9+	2500		bc c	c/pr	K	E	3	1010.1	28.4	25.4	77	29.7			
4	Sc	Ac	-	6	9+	2500		cpr$_o$ c	c	K	E	4	1010.8	27.9	25.0	78	29.1			
5	Sc	Ac	-	7	9+	2500		cjpr	c	M	S	2	1011.5	27.3	23.1	69	24.5			
6	Sc	-	Ci	2	4	3000		c bc	bc	K	ESE	4	1012.3	27.1	22.0	62	22.0			
7	Sc	-	-	9+	9+	3000		bc c	cjpr	M	ESE	5	1013.5	27.6	21.6	57	20.7			
8	Cu	-	Ci	1	2	4000		cy bc b	by	M	E	4	1011.9	27.5	20.8	52	18.8			
9	Sc	-	-	9+	9+	4000		bbccpr$_o$	c	M	E	4	1012.1	27.8	23.0	65	23.9			
10	Cu	Ac	-	6	6	3000		b bc	bc	M	ENE	5	1011.8	28.1	23.9	69	26.0			
11	Cu	Ac	Cs	2	5	4500		bc	bc	M	E	4	1011.2	28.7	24.0	66	25.7			
12	Cu	-	Ci	4	4	3000		bc cpr$_o$	bc	M	ENE	3	1009.5	29.5	25.0	67	27.7			
13	Cu	Ac	Ci	1	2	3000		b	b	M	NE	2	1011.4	28.5	24.5	70	27.2			
14	Cu	-	Ci	2	3	3000		c bc	bc	M	ENE	2	1011.7	29.2	25.2	71	28.5			
15	Sc	Ac	-	5	8	3000		cr$_o$ c	cjpr	M	ENE	3	1011.3	28.8	24.2	66	26.1			
16	Sc	Ac	-	5	9+	2500		cjpr c	c	M	ESE	3	1011.1	27.2	23.9	74	26.7			
17	Sc	Ac	-	7	8	3000		bcjpr c	cjpr	M	ESE	4	1011.8	28.0	23.7	68	25.5			
18	Sc	Ac	Ci	6	9	3000		bc c	c	M	SE	4	1012.0	26.9	22.0	64	22.1			
19	Sc	Ac	Ci	2	9+	2800		c	cjpr	K	ESE	4	1012.0	27.7	23.0	66	24.0			
20	Cu	Ac	Ci	2	5	3000		c - bc	bc	K	E	5	1009.7	28.7	25.1	74	28.7			
21	Cu	Ac	-	6	9+	500		cir	cjpr	M	ESE	1	1009.8	27.3	25.1	83	29.7			
22	Fs	As	-	6	10	2000		cr$_o$ rr	cjpr	M	NNE	1	1010.5	26.6	24.5	83	28.8			
23	Sc	As	-	4	10	3000		oqrcpr	cpr$_o$	K	E	4	1010.6	27.4	25.0	81	29.5			
24	Sc	Ac	-	5	9+	3000		bc-jprc	cjpr	K	E	5	1010.9	28.2	24.7	73	28.0			
25	Sc	-	-	6	6	3000		b bc	bc	K	E	6	1010.7	27.6	22.5	63	22.8			
26	Cu	-	-	3	3	2000		bc	bcjr	K	E	6	1010.6	27.9	23.9	70	26.1			
27	Cu	-	Ci	1	6	3500		bc	bc	K	E	5	1010.6	28.4	23.6	65	24.9			
28	Sc	Ac	-	9	9	2500		bcb bcc	cpr$_o$	M	ENE	5	1009.2	26.8	23.7	76	26.5			
29	Cu	Ac	-	3	5	2500		cpr$_o$cbc	bcjr	K	E	4	1009.3	28.0	23.8	69	25.7			
30	Cu	-	Cs	1	7	3000		c bc	bc	M	E	5	1007.0	27.8	23.9	71	26.1			
31	Cu	-	Ci	4	4	3000		c bc	bc	M	ENE	3	1006.6	28.6	24.0	66	25.7			
Means	-	-	-	4.5	6.8	2900		-	-	-	-	3.7	1010.7	28.0	23.9	70	26.1			

METEOROLOGICAL OBSERVATIONS.

July 1941.

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
1	28.9	22.8	21.7		-	6.8		2.0
2	29.2	23.2	21.6		-	8.3		1.3
3	29.5	23.8	21.8		4.1	7.9		2.7
4	28.1	23.6	22.7		67.0	2.9		1.2
5	27.7	21.7	20.9		0.3	1.9		3.1
6	27.7	22.8	21.5		-	8.8		4.4
7	27.8	22.6	19.6		-	8.5		4.6
8	28.1	23.6	20.6		-	7.6		3.8
9	28.6	21.0	18.8		Trace	6.7		3.0
10	28.8	21.8	19.8		Trace	9.0		2.7
11	29.3	20.1	17.8		Trace	10.4		3.4
12	29.8	25.2	23.4		1.5	10.2		2.6
13	29.2	22.4	21.0		-	10.4		2.3
14	29.7	22.4	20.6		-	10.9		2.3
15	29.2	23.1	21.4		2.5	4.5		1.9
16	27.4	23.7	22.3		15.9	0.0		1.2
17	29.3	22.7	20.7		-	8.2		3.8
18	28.1	24.7	22.0		-	9.3		3.8
19	28.6	23.4	20.9		-	2.9		3.9
20	29.2	25.7	22.7		27.4	7.6		1.4
21	27.5	24.3	22.4		19.4	0.6		0.7
22	27.9	23.4	22.4		3.3	0.0		1.5
23	28.3	24.4	22.9		5.2	0.7		1.9
24	29.4	24.9	23.2		4.0	6.8		3.4
25	28.2	24.3	22.4		-	10.2		5.3
26	28.6	24.9	22.6		Trace	9.5		4.3
27	28.8	25.9	24.4		Trace	7.7		4.7
28	29.0	26.0	24.4		Trace	8.6		3.8
29	28.4	23.8	21.7		3.6	7.1		2.0
30	28.2	22.7	21.3		Trace	7.6		2.7
31	29.0	22.8	21.3		-	9.7		2.6
Sum	-	-	-		154.2	211.3		88.3
Mean	28.6	23.5	21.6		-	6.8		2.9

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METEOROLOGICAL OBSERVATIONS.

9 a.m. August, 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Sc	-	Cs	7	8	3000		bc c	c	M	ENE	4	1009.7	27.3	22.7	66%	23.6			
2	Sc	-	Ci	8	9	2500		c	cpr_o	M	E	3	1010.4	25.8	22.5	74	24.3			
3	Cu	-	Ci	1	7	3000		bc c bc	bc	M	CALM	0	1010.3	27.2	23.6	72	25.9			
4	Cu	-	Cs	1	1	3500		c bc b	b	M	CALM	0	1009.6	25.9	22.8	76	24.9			
5	Cu	Ac	Cs	3	3	3000		b bc	bc	M	E	3	1010.2	27.9	23.4	67	24.8			
6	Sc	Ac	-	8	8	2500		bccjprc	cjpr	M	E	4	1010.4	26.7	23.6	76	26.3			
7	Sc	Ns	-	7	9+	1500		bcjcORR	c/r_o	K	SE	2	1010.7	23.9	23.4	96	28.1			
8	Sc	Ns	-	9	10	1000		cjprcr$_o$	cpr_o	G	ESE	4	1011.7	24.9	23.8	91	28.3			
9	Sc	As	-	9	9	2000		orrcpr$_o$	cjpr	K	ESE	3	1011.7	26.8	24.9	85	29.6			
10	Sc	-	-	9+	9+	2000		cprcbcc	cpr_o	K	ESE	2	1012.3	26.9	25.2	86	30.4			
11	Cu	Ac	Ci	4	5	3000		cpr$_o$cbc	bc	M	CALM	0	1013.2	26.4	24.5	85	28.9			
12	Sc	Ac	-	7	7	3500		bcclprc	cjpr	M	ESE	4	1013.6	27.8	25.8	84	31.3			
13	Sc	-	-	7	7	2500		bc prbc	bcpr	G	ESE	5	1013.2	26.4	24.9	88	30.0			
14	Cu	-	-	1	1	3000		bc cbcb	b	K	ESE	4	1011.4	27.3	23.7	72	26.1			
15	Sc	-	-	9	9+	3500		bccpr$_o$c	cjpr	K	E	6	1013.5	27.3	25.0	82	29.5			
16	Sc	Ac	-	8	8	2500		bcpr$_o$c	cpr_o	K	E	4	1015.4	26.2	25.1	91	30.7			
17	Sc	-	Ci	7	8	3000		cprcbcc	c	M	NNE	1	1014.2	27.1	24.3	78	27.9			
18	Cu	-	Ci	1	8	3000		b bc c	c	M	ESE	3	1011.6	26.7	22.0	65	22.4			
19	Cu	Ac	Ci	2	4	3000		c bc	bc	M	ESE	3	1011.3	27.5	23.7	71	25.9			
20	Cu	Ac	Cs	3	4	3000		cpr$_o$cbc	bc/pr	K	ESE	5	1012.2	27.4	24.7	79	28.7			
21	Cu	Ac	Ci	2	3	3000		bcpRlt	bc/pr	K	SE	1	1012.1	27.7	25.9	86	31.6			
22	Cu	-	Cs	2	4	2500		bccbc b	bc	M	E	1	1011.1	27.3	24.8	80	28.9			
23	Cu	Ac	Cs	2	9	3000		crrcprc	c	M	N	1	1011.4	26.4	24.2	82	28.1			
24	Sc	-	Ci	3	4	3000		c bc	bc	M	SE	1	1013.2	27.1	23.9	75	26.8			
25	Sc	Ac	Ci	1	3	3000		c bc	bc	M	ESE	2	1014.2	27.1	23.6	73	26.0			
26	Cu	-	Ci	1	9	3000		cpr$_o$bcc	c	M	SE	1	1013.3	26.1	22.4	72	23.9			
27	Cu	Ac	Ci	7	9	3000		cpr_o	c	M	ESE	2	1012.9	24.8	22.4	80	24.9			
28	Cu	-	-	6	6	3000		bcbbcpr	bc/pr	M	E	4	1014.4	26.2	23.0	75	25.2			
29	Cu	-	Ci	5	6	3000		bc	bc	K	E	4	1014.6	28.0	24.4	72	27.3			
30	Cu	Ac	Ci	5	8	3000		bcbbccp	cpr_o	K	ESE	4	1013.2	27.7	25.6	84	30.8			
31	Cu	-	Ci	4	6	4000		clpr bc	bc/pr	K	ESE	4	1013.6	27.9	25.3	80	29.9			
Means	-	-	-	4.8	6.5	2800		-	-	-	-	2.7	1012.3	26.8	24.0	79	27.5			

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METEOROLOGICAL OBSERVATIONS.

3 p.m. August, 1941.

Day of Month.	CLOUD. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER. Since previous Observation.	At Time.	Visibility.	WIND. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	UPPER CLOUD. Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu	Ac	Ci	1	9+	3000		cpr$_o$ c	c	M	E	4	1006.8	28.3	23.6	66%	25.1			
2	Cu	-	Ci	1	6	3000		cpr$_o$ bc	bc	M	ENE	4	1007.1	28.4	23.9	67	25.7			
3	Cu	-	Cs	1	9	3000		bc c	c	M	NNW	1	1007.6	28.0	22.9	63	23.5			
4	Cu	-	Ci	3	4	3000		bbc cbc	bc	M	ENE	4	1006.7	29.0	25.0	71	28.1			
5	Cu	Ac	Cc	1	5	3000		bc	bc	K	ENE	5	1006.8	28.6	24.5	69	27.1			
6	Cu	Ac	-	4	7	2500		cjprcbc	bcjpr	M	ESE	5	1007.5	28.4	24.6	72	27.5			
7	Sc	As	-	5	9+	2500		c	cjpr	K	ENE	3	1008.5	28.3	24.8	74	28.3			
8	-	Ns	-	0	10	6000		crror	orr	G	ESE	3	1010.2	24.3	23.5	93	28.0			
9	Fc-Fs	Ac	-	8	9+	1000		cjpr pr	cpr	K	E	5	1008.7	27.0	25.3	86	30.5			
10	Sc	Ac	-	8	9+	2500		cpr$_o$	c	K	ENE	2	1010.7	27.6	25.0	80	29.2			
11	Cu	Ac	Ci	2	9	2500		bc c	c	M	ENE	4	1010.5	28.3	26.0	82	31.5			
12	Sc	-	-	3	3	3000		bc b bc	bc	K	E	5	1010.8	29.3	26.4	78	31.7			
13	Cu	-	-	3	3	3500		cbc bbc	bc	K	E	6	1010.0	28.3	24.2	70	26.5			
14	Cu	Ac	Ci	1	3	3500		b bc	bc	K	E	6	1010.0	28.0	23.9	69	26.0			
15	Cu	-	Ci	3	4	3000		bc	bc	K	E	5	1011.3	28.5	25.1	75	28.8			
16	Cu	Ac	-	8	8	2700		czjpr	czjpr	K	E	5	1012.0	28.9	25.9	78	30.7			
17	Cu	-	-	2	2	3000		c bc b	b	M	S	3	1010.0	30.0	24.1	59	24.9			
18	Cu	-	Ci	1	9+	4000		c	c	M	E	5	1007.6	28.1	24.0	70	26.1			
19	Sc	Ac	Ci	2	9	3000		c	c	K	ESE	4	1009.3	29.1	25.5	73	29.3			
20	Cu	Ac	Ci	1	6	3000		bc c bc	bc/pr	K	ESE	4	1010.0	28.8	25.5	75	29.6			
21	Cu	-	Ci	2	7	3000		bccprbc	bc	M	NNE	1	1009.7	28.7	25.5	76	29.7			
22	Sc	-	-	9	9	3000		bcpr$_o$ c	cjpr$_o$	M	CALM	0	1008.6	27.8	25.4	81	30.1			
23	Cu	Ac	Ci	5	8	3000		bc c	cjpr$_o$	K	E	5	1009.8	28.7	25.3	75	29.2			
24	Sc	Ac	-	7	9+	2500		bc cjpr	cjpr	K	E	4	1011.0	28.3	24.8	74	28.1			
25	Sc	-	-	9	9+	2000		bccjrpr	cpr$_o$	K	WSW	1	1011.6	27.6	24.0	75	26.7			
26	Cu	Ac	Ci	8	9	4000		c	c	M	CALM	0	1010.8	27.5	22.5	63	22.9			
27	Sc	Ac	Ci	6	8	3000		c	c	M	ENE	3	1010.7	27.0	22.0	63	22.1			
28	Cu	-	-	2	2	3000		bc b	b	K	E	4	1011.7	28.4	24.6	72	27.5			
29	Cu	-	-	3	3	3000		bc	bc	K	E	5	1011.9	28.0	24.6	74	27.9			
30	Cu	Ac	Ci	3	4	3500		cjpr bc	bc	K	E	3	1011.0	29.0	25.9	77	30.5			
31	Cb	-	Ci	3	4	3000		c bc	bcpr	K	E	4	1010.0	27.9	24.9	77	28.8			
Means	-	-	-	3.7	6.6	3000		-	-	-	-	3.7	1009.6	28.2	24.6	73	27.8			

METEOROLOGICAL OBSERVATIONS.

August, 1941.

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
1	28.8	23.3	-		Trace	7.3		3.1
2	29.0	23.7	21.7		Trace	8.9		3.3
3	28.4	23.0	21.2		-	9.8		2.6
4	29.6	22.4	20.8		-	11.0		2.8
5	30.1	22.8	20.2		-	10.2		3.4
6	29.7	24.2	22.9		92.6	8.7		2.2
7	29.2	23.4	22.9		2.6	0.9		1.7
8	27.0	23.4	23.1		37.3	0.1		0.8
9	28.6	23.8	23.5		3.3	5.2		1.6
10	29.0	25.7	23.9		0.5	3.0		1.7
11	29.4	23.6	21.9		0.4	5.4		1.8
12	29.5	23.6	22.4		0.2	10.4		1.9
13	29.1	24.1	22.7		Trace	10.5		3.4
14	28.7	24.7	22.2		Trace	10.9		3.7
15	29.1	25.2	22.5		Trace	7.9		2.2
16	29.7	24.3	22.8		1.4	8.8		1.9
17	30.8	23.7	22.4		-	10.1		2.9
18	28.4	22.3	19.8		-	10.7		3.0
19	29.8	22.3	20.5		1.2	8.8		2.8
20	29.2	25.4	24.0		18.3	7.8		1.9
21	29.3	25.1	23.9		0.4	10.1		1.6
22	29.2	23.9	22.2		11.5	7.4		1.3
23	29.2	23.8	22.4		-	8.0		2.0
24	29.1	24.4	22.9		-	6.6		2.5
25	28.8	23.6	21.9		Trace	4.7		3.2
26	28.9	23.0	20.2		Trace	8.0		3.0
27	28.6	22.2	20.4		Trace	8.4		3.0
28	28.6	21.6	-		-	10.2		3.2
29	29.3	23.7	21.3		0.3	9.2		2.9
30	30.0	23.4	21.6		3.9	9.8		1.7
31	29.3	23.5	22.1		2.6	9.1		2.1
Sums	-	-	-		176.5	247.9		75.2
Means	29.1	23.7	20.7			8.0		2.4

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METEOROLOGICAL OBSERVATIONS. 9 a.m. SEPTEMBER 1941.

Day of Month.	Cloud. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed; Height Ratio.
1	Cb	Ac	Cs	6	8	3000		bc cpr	cjpr	M	E	4	1012.6	26.5	24.4	83	28.5			
2	Sc	-	Cs	5	9+	3000		bcpr	cjr	K	ESE	4	1013.3	26.7	23.1	72	25.1			
3	Cu	Ac	Ci	1	8	3500		c	c	M	ESE	3	1012.4	27.0	23.0	69	24.5			
4	Sc	-	Ci	3	3	3000		cr bc	bc	K	ESE	4	1012.5	27.7	24.4	75	27.6			
5	Sc	-	-	8	8	3000		cpr_o c	cpr	K	ESE	4	1012.7	26.6	25.2	89	30.7			
6	Cu	Ac	Ci	4	8	3000		cpr lc	c	M	CALM	0	1013.0	26.9	24.5	81	28.5			
7	Cu	Ac	Ci	1	8	3000		c bcbbc	c	M	CALM	0	1012.1	27.0	23.2	71	25.1			
8	Fs	Ac	-	3	4	2500		cbcpr$_o$b	bc	M	E	1	1010.5	27.0	24.3	79	27.9			
9	Fs	Ac	-	8	9	2000		crr pr	cr_o	M	SSE	1	1009.7	25.4	24.2	90	28.9			
10	Sc	As	-	7	9+	1500		c or c	cjr	K	SW	1	1010.9	25.8	23.9	85	27.9			
11	Sc	Ac	-	9	9	4000		c d bcc	cjpr	M	ESE	2	1012.5	26.3	22.9	73	24.9			
12	Cu	Ac	-	1	1	3000		c bc b	b	M	E	4	1013.5	26.8	22.9	70	24.5			
13	Sc	Ac	-	7	9+	2000		cbcjprc	$cjpr_o$	K	ESE	4	1014.0	25.7	22.7	76	24.9			
14	Cu	Ac	Ci	1	4	3000		c bcbbc	bc	M	ESE	3	1014.1	27.7	24.0	72	26.5			
15	Cu	Ac	-	3	7	3000		c bc c	bc	M	ENE	1	1014.4	27.6	24.2	74	27.2			
16	Cu	-	Ci	3	3	3000		bc b	bc	M	CALM	0	1014.4	26.4	21.7	65	21.9			
17	Sc	-	-	7	7	3000		cpr_o bc	bcjpr	M	ESE	3	1013.9	25.5	22.3	75	24.0			
18	Sc	-	-	9	9	3000		$bccqpr_o$	cpr_o	K	ESE	4	1014.8	24.1	22.3	85	25.2			
19	Cu	-	Ci	2	7	3000		bccprbc	bc	K	ESE	4	1014.3	27.1	23.4	72	25.5			
20	Cb	-	Ci	8	9	3000		bc cpr	cpr_o	H	ESE	6	1011.7	26.0	24.3	86	28.7			
21	Sc	As	Cs	4	9+	5000		corqtlc	c	M	ESE	2	1012.3	26.2	24.2	84	28.3			
22	Cu	-	-	7	7	3000		c bc	bc z	K	E	4	1012.8	28.2	25.7	81	30.7			
23	Cu	-	-	4	4	3000		bc	bc	K	ESE	5	1013.2	28.0	24.0	70	26.3			
24	Cu	-	-	3	3	3000		b bc	bc	M	CALM	0	1013.3	27.5	23.6	71	25.7			
25	Cu	-	-	4	4	3000		b bc	bc	M	E	5	1011.2	27.8	23.8	70	26.0			
26	Sc	-	Ci	8	9	3000		cprqc	c	K	ESE	5	1012.0	26.6	23.3	77	26.4			
27	Sc	Ns	-	6	10	3000		cbccqpr	cqr_o	K	E	6	1012.3	25.4	23.8	87	27.9			
28	Cb	Ac	Ci	4	9	3500		cpr_o c	cpr_o	M	E	5	1010.4	28.0	25.7	82	30.8			
29	Sc	-	-	6	6	3000		bc	bc	M	E	3	1011.8	28.3	25.9	81	31.1			
30	Cu	-	Ci	3	4	3000		cpr_o bc	bc	K	ESE	4	1013.3	29.0	25.8	76	30.3			
31																				
Means	-	-	-	4.8	6.9	3000		-	-	-	-	3.1	1012.7	26.8	23.9	77	27.1			

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METEOROLOGICAL OBSERVATIONS.

3 p.m. SEPTEMBER 1941.

Day of Month.	CLOUD. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed ; Height Ratio.
1	Cb	Ac	Ci	3	6	3000		c bc	bcjpr	K	E	5	1009.9	27.3	24.6	79	28.4			
2	Sc	Ac	Ci	6	9	2000		c	c	K	ESE	5	1010.8	28.3	24.6	72	27.6			
3	Sc	Ac	Ci	5	7	4000		c	c	K	E	5	1009.1	27.9	24.2	72	26.9			
4	Cu	Ac	Ci	3	6	3000		bc	bc	K	E	4	1009.9	28.6	25.1	74	28.7			
5	Cu	Ac	-	4	8	2500		c	cjpr	K	E	5	1010.2	28.7	25.8	78	30.5			
6	Cb	Ac	Ci	3	9	3000		c z	cjpr	M	E	4	1010.6	29.2	25.9	76	30.4			
7	Cb	Ac	Ci	4	9+	3000		cbcjprc	cjpr	M	ESE	3	1009.7	28.6	24.9	72	28.1			
8	Sc	Ac	Ci	5	8	2500		c	cjpr	K	E	2	1007.8	28.1	25.0	77	28.8			
9	Fs	As	-	6	9+	2000		cjr	cpr$_o$	K	NW	1	1007.3	26.5	24.6	85	29.1			
10	Sc	As	-	4	10	1500		c	c	K	ESE	3	1008.5	27.8	24.3	73	27.2			
11	Sc	Ac	-	7	7	5000		c	c	K	SE	2	1010.3	28.4	23.0	61	23.5			
12	Sc	Ac	-	8	8	4500		c	c	K	E	6	1010.1	27.2	23.1	69	24.7			
13	Sc	Ac	Cs	4	9	4000		cpr$_o$ c	c	M	E	4	1011.3	27.8	23.4	67	24.9			
14	Sc	-	Ci	8	9	3000		bc $_o$	c	M	E	4	1011.5	28.0	25.1	78	29.2			
15	Cu	Ac	Ci	2	5	5000		bc	bc	M	ENE	5	1010.9	28.5	24.8	72	28.0			
16	Sc	Ac	-	7	9	3500		cjpr c	cjpr	M	SE	2	1011.0	27.2	22.0	61	22.0			
17	Sc	Ac	-	4	7	3500		bc qpr$_o$	bc	K	ESE	4	1010.8	26.7	22.9	71	24.5			
18	Sc	Ac	-	4	8	3500		cpqr$_o$	c	K	ESE	4	1012.2	26.9	23.0	70	24.7			
19	Cu	-	Ci	2	7	3000		c bc	bc	K	E	5	1010.8	28.6	24.7	71	27.6			
20	Sc	Ac	Ci	4	8	2500		c bc	c	K	E	7	1009.7	28.6	24.6	70	27.3			
21	Sc	Ac	Ci	7	9+	2000		c og	og	L	ENE	2	1009.7	27.8	25.3	80	29.9			
22	Cu	Ac	Ci	4	4	3000		bc z	bc z	K	E	4	1010.7	29.3	26.0	76	30.5			
23	Cu	-	Cs	1	6	3500		c bc	bc	K	E	5	1010.6	28.7	24.8	71	27.9			
24	Cu	-	Ci	2	2	3000		bc by	by	M	ESE	4	1009.9	30.5	23.7	54	23.5			
25	Cu	-	Cs	1	8	3500		bc c	c	M	E	6	1008.2	28.0	24.1	71	26.5			
26	Cu	-	Cs	1	9	3000		c	c	K	ESE	6	1009.0	28.1	24.5	73	27.5			
27	Cu	As	Ci	Tr.	9+	3000		cqpr$_o$	c	K	E	5	1008.5	27.5	24.6	78	28.3			
28	Cu	-	-	3	3	3000		c bc	bc	K	E	3	1008.2	29.5	26.4	77	31.6			
29	Cu	-	Ci	4	6	3000		bc	bc	M	ENE	2	1009.7	29.7	26.1	74	30.5			
30	Cu	Ac	Ci	3	6	3000		bc	bc	K	E	4	1010.1	29.7	26.1	74	30.5			
31																				
Means	-	-	-	4.0	7.3	3100		-	-	-	-	4.0	1009.9	28.3	24.6	73	27.6			

METEOROLOGICAL OBSERVATIONS.

September 1941.

Day of Month.	Thermometers. Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°)	Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
1	28.1	24.4	22.7		Trace	6.0		2.5
2	29.2	24.8	22.7		-	7.2		2.9
3	29.0	21.8	20.6		3.1	9.9		3.2
4	29.3	24.6	22.3		Trace	9.4		2.6
5	29.9	23.8	22.8		Trace	7.7		2.0
6	29.8	23.2	-		-	9.1		2.2
7	30.0	23.4	21.6		Trace	8.0		2.2
8	27.6	23.1	21.6		23.3	6.8		1.6
9	28.5	24.0	22.5		8.4	5.1		1.4
10	29.0	23.3	22.8		Trace	1.3		2.3
11	28.8	23.9	22.3		-	5.5		3.4
12	28.2	23.0	21.2		-	6.3		3.2
13	28.4	23.1	20.5		-	6.1		2.8
14	29.0	22.5	20.4		-	7.4		2.4
15	29.3	23.5	21.6		-	8.6		2.6
16	28.8	21.7	19.8		Trace	6.5		3.0
17	29.2	22.9	21.3		Trace	9.2		3.1
18	28.3	23.1	20.8		-	5.6		3.1
19	29.2	22.9	21.2		6.7	10.2		2.8
20	28.8	24.2	22.8		14.3	8.7		1.7
21	28.6	22.3	21.9		-	3.2		1.5
22	29.7	25.4	23.8		-	10.6		3.0
23	29.6	24.1	22.0		-	10.7		2.8
24	31.0	22.0	20.0		-	11.3		3.8
25	29.0	22.0	20.1		2.2	11.1		3.5
26	28.8	23.5	22.7		Trace	10.2		3.5
27	28.7	24.4	22.9		Trace	2.0		2.5
28	30.3	25.1	24.6		-	9.9		2.1
29	30.3	24.3	22.7		Trace	10.6		2.7
30	30.6	26.5	25.1		1.8	10.5		2.5
31								
Sums	-	-	-		-	234.8		
Means	29.2	23.6	21.2		59.8	-		2.6

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METEOROLOGICAL OBSERVATIONS.

9 a.m. OCTOBER 1941.

Day of Month.	Cloud. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	At Time.	Visibility.	Wind. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu	Ac	Ci	2	5	3000		bc cpr.	bc	K	ESE	4	1012.7	28.5	26.1	82%	31.6			
2	Cu	-	Ci	5	7	3000		bcpr.	bc	K	E	4	1012.4	29.1	25.7	75	29.9			
3	Cu	-	-	3	3	3000		b bc	bc	K	ESE	4	1011.8	28.6	25.0	73	28.4			
4	Cu	-	Ci	3	4	3000		bc bbcw	bc	M	E	4	1011.7	28.6	24.7	71	27.6			
5	Fs	As	-	6	9+	2000		bcprbbc	cir.	K	ENE	1	1010.6	24.8	23.4	88	27.3			
6	Cu	Ac	Ci	1	2	4000		bcjpr b	b	M	E	3	1008.8	28.0	23.2	65	24.3			
7	Cu	As	-	2	9+	2500		cbcqpr.	c	M	ESE	2	1008.6	27.5	24.1	74	26.9			
8	Sc	As	-	6	9	3000		bclpr c	c	M	SW	1	1009.3	26.5	24.1	81	27.7			
9	Cu	-	-	2	2	3000		c bc b.	by	M	E	2	1011.9	27.3	21.3	56	20.1			
10	Cu	-	Ci	1	9+	3500		b bc c	c	M	ESE	4	1012.2	26.9	21.0	57	19.9			
11	Cu	-	Cs	2	9+	3500		c bc c	c	M	ESE	1	1012.2	26.8	20.3	53	18.3			
12	Sc	Ac	Ci	2	5	3000		c bc	bc	M	NE	1	1013.2	26.1	21.1	62	20.7			
13	Sc	Ns	-	1	10	2000		c cir.	or/qr	H	SE	2	1013.0	24.8	24.0	93	28.9			
14	Sc	Ac	Ci	2	8	3000		c bc .c	c	K	ESE	4	1011.6	28.7	23.8	65	25.2			
15	Sc	As	Ci	4	5	3000		bc c bc	bc	M	ESE	4	1010.2	28.7	23.8	65	25.2			
16	Sc	Ac	-	7	9	3000		c	c	M	ESE	3	1009.4	28.0	23.6	67	25.2			
17	Sc	Ac	-	5	10	2000		c pr.	c/pr.	K	ESE	6	1008.3	26.7	23.8	78	26.8			
18	Sc	Ac	Ci	2	9	3000		cRR .c	c	M	CALM	0	1007.1	28.2	25.9	82	31.2			
19	Sc	Ac	-	4	10	3000		cqr cRR	cjpr	K	N	4	1006.3	27.9	26.0	85	31.7			
20	Sc	Ac	Ci	4	9	2500		cir c	c/pr.	K	S	2	1007.3	28.2	24.2	70	26.7			
21	Sc	Ac	Ci	1	9	3000		bc c	c	M	N	1	1010.0	26.4	22.8	72	24.5			
22	Sc	Ac	-	5	7	3000		c bc	bc	M	E	2	1012.1	26.6	22.1	66	22.7			
23	Cu	Ac	Cs	1	3	4000		bc b bc	bcy	M	S	2	1013.8	27.1	21.0	56	19.6			
24	Sc	Ac	-	4	4	3500		bc	bcy	M	ESE	3	1013.2	26.7	20.2	53	18.1			
25	Sc	Ac	Ci	3	5	3500		bc b bc	bc	M	ESE	2	1012.9	27.5	22.8	65	23.6			
26	Cu	-	Ci	Tr.	6	3500		b bc	bc	M	E	1	1012.8	27.8	22.1	59	21.7			
27	Cu	-	Ci	1	8	4000		c bc c	c	M	ESE	2	1014.5	28.0	23.3	66	24.5			
28	Cu	-	Ci	7	7	3000		bc	bc	M	E	4	1014.4	28.7	25.1	74	28.7			
29	Fs	-	-	10	10	1000		bc pr.c	cqPR	E	N	8	1014.3	22.0	21.5	96	24.9			
30	Sc	Ac	-	4	9	3500		bcltcpq	c	M	CALM	0	1015.3	27.8	25.2	80	29.6			
31	Cu	Ac	Ci	2	2	2500		bccprcb	b	M	ENE	2	1016.4	28.8	26.1	80	31.3			
Means	-	-	-	3.3	6.9	3000		-	-	-	-	2.7	1011.6	27.3	23.5	71	25.4			

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APIA OBSERVATORY — METEOROLOGICAL OBSERVATIONS. — 3 p.m. OCTOBER 1941.

Day of Month.	Cloud. Form. Low.	Cloud. Form. Medium.	Cloud. Form. High.	Cloud. Amount of Low.	Cloud. Total Amount.	Cloud. Height of Base.	Cloud. How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Temperature and Humidity. Wet Bulb (°C).	Temperature and Humidity. Relative Humidity (%).	Temperature and Humidity. Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Upper Cloud. Direction whence coming.	Upper Cloud. Speed : Height Ratio.
1	Cu	Ac	Ci	3	6	3000		c bc	bc	K	E	4	1010.1	29.6	26.4	77%	31.5			
2	Cu	-	Ci	2	2	3000		bc b	b	K	E	3	1009.9	29.4	25.2	69	28.3			
3	Cu	-	Ci	3	3	3000		bc	bc	K	E	4	1009.8	29.5	25.4	70	28.8			
4	Sc	-	Cs	4	7	4000		bc	bc	M	ENE	4	1008.6	29.2	24.9	69	27.6			
5	Sc	As	-	4	4	3000		c bc	bcjpr	M	E	4	1007.1	28.7	24.1	66	26.0			
6	Sc	Ac	Ci	3	8	3000		b bc c	c	M	E	4	1006.1	29.2	24.7	68	27.2			
7	Sc	Ac	Ci	3	6	3000		c bc	bc	M	ENE	3	1005.9	29.9	25.3	67	28.1			
8	Sc	Ac	-	6	9	2500		cpr$_o$ c	cjpr	K	S	1	1007.5	28.7	23.2	61	23.7			
9	Cu	Ac	-	1	2	4000		bc b	by	M	E	4	1009.0	28.8	21.9	52	20.4			
10	Sc	Ac	Cs	1	9+	4000		c	cy	M	E	6	1008.0	27.4	21.4	56	20.4			
11	Sc	-	Ci	2	9+	4000		c	c	M	E	5	1009.9	27.5	21.7	58	20.9			
12	Sc	Ac	Ci	2	8	3000		bc c	c	M	E	5	1009.6	28.0	23.6	67	25.2			
13	Sc	As	-	6	9	2500		circprq	c	K	ESE	4	1009.8	27.8	24.5	78	27.7			
14	Cu	-	Ci	2	5	3000		c bc	bc	M	E	4	1007.8	30.4	24.9	62	26.7			
15	Cu	Ac	Ci	3	9	3000		c	c	K	E	4	1007.7	28.0	23.3	66	24.5			
16	Sc	Ac	-	7	9+	3000		c	cjr	K	E	6	1005.9	28.5	24.5	70	27.2			
17	Sc	Ac	-	4	10	3000		cjpr$_o$	cpr$_o$	H	E	6	1005.2	27.0	24.1	77	27.3			
18	Cu	Ac	Ci	3	9+	3000		c	c	K	N	1	1005.3	29.0	26.4	80	32.0			
19	Fc	As	-	7	10	2000		c RR c	cir$_o$	G	WNW	5	1003.6	26.2	25.3	93	31.2			
20	Cu	Ac	Ci	2	5	3000		cpr$_o$ bc	bc	M	ESE	3	1005.7	30.1	25.1	65	27.5			
21	Sc	Ac	-	8	9+	3000		c	c	M	N	2	1007.8	27.8	22.7	63	23.2			
22	Sc	Ac	-	6	7	3000		bc	bc	M	NE	2	1009.6	26.9	22.0	64	22.1			
23	Sc	Ac	-	2	3	3000		bcy	bcy	M	S	4	1010.4	28.7	20.7	46	17.6			
24	Sc	Ac	-	3	4	3000		bcy	bcy	M	E	3	1009.9	27.9	21.2	53	19.5			
25	Sc	Ac	Ci	2	8	3000		bcy	cy	M	NNE	1	1010.2	27.8	21.7	56	20.8			
26	Sc	As	Ci	8	9+	2000		bc cpr$_o$	c	M	ENE	1	1010.3	28.3	23.2	63	24.0			
27	Cu	Ac	Ci	3	4	3000		bc	bc	M	E	3	1011.6	29.0	24.2	65	26.0			
28	Sc	Ac	Cc	6	7	3000		bc	bc	M	NE	2	1011.7	28.1	25.0	77	28.8			
29	Sc	-	-	7	7	3000		c bc	bc	K	NNE	3	1011.0	28.0	26.0	85	31.6			
30	Cu	Ac	Ci	2	7	3500		bc	bc	M	NE	1	1012.4	29.0	25.7	76	30.0			
31	Sc	-	-	6	6	3000		bc	bc	M	ENE	2	1013.9	29.9	26.7	77	32.0			
Means	-	-	-	3.9	6.8	3000		-	-	-	-	3.4	1008.4	28.5	24.0	68	25.3			

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METEOROLOGICAL OBSERVATIONS.

OCTOBER 1941.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°C)				
1	30.8	24.8	23.8		Trace	9.8		2.5
2	30.0	25.8	24.8		-	10.4		3.0
3	30.3	23.7	22.4		-	11.3		2.7
4	29.9	22.3	20.3		Trace	10.6		2.9
5	28.3	23.0	21.5		-	5.0		3.1
6	29.6	21.5	19.5		Trace	9.1		3.4
7	30.4	24.6	23.6		Trace	6.3		2.5
8	28.5	24.0	22.6		Trace	1.7		4.3
9	30.1	24.0	22.1		-	11.5		4.2
10	28.2	19.9	-		-	8.9		4.2
11	28.9	19.8	17.6		-	8.9		4.3
12	29.4	20.5	18.9		3.0	4.1		2.8
13	28.8	24.5	23.7		5.7	0.0		2.4
14	30.4	24.4	22.7		-	10.4		4.0
15	30.1	23.8	22.6		-	5.4		3.4
16	29.8	23.6	22.5		1.6	4.6		3.1
17	29.1	24.5	23.5		39.2	2.1		2.2
18	29.4	24.3	23.2		28.6	9.4		0.6
19	28.4	25.5	24.6		12.5	0.0		1.3
20	30.6	25.6	24.2		Trace	10.1		3.5
21	29.8	24.1	21.2		-	7.1		3.0
22	28.7	22.8	21.1		-	7.2		3.6
23	29.6	21.4	19.1		-	12.1		4.6
24	28.8	20.5	16.5		-	9.6		3.9
25	29.3	20.9	18.8		-	10.7		4.3
26	28.8	21.6	19.8		-	9.0		3.4
27	29.6	21.6	19.9		-	11.9		3.4
28	29.9	25.2	23.0		12.9	10.9		3.3
29	28.4	23.0	-		4.6	8.1		1.4
30	29.2	22.6	22.4		Trace	10.5		2.6
31	30.6	26.7	25.3		-	12.0		2.6
Sum	-	-	-		108.1	248.7		96.5
Mean	29.5	23.2	21.8		-			3.2

1,000/7/32—3911] **APIA OBSERVATORY**

METEOROLOGICAL OBSERVATIONS.

9 a.m. NOVEMBER 1941.

Day of Month.	CLOUD. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars)	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu	Ac	-	4	4	3500		bc	bc	M	E	3	1015.6	29.6	25.8	72%	29.7			
2	Cu	-	Ci	2	9	3500		bc bbcc	c	K	ENE	2	1014.3	29.0	25.0	71	28.1			
3	Sc	-	-	2	2	4000		bc b	b	M	E	4	1013.5	29.2	24.3	65	26.1			
4	Cu	-	Ci	4	6	3500		bc	bc	K	E	3	1013.2	29.3	25.0	68	27.9			
5	Cu	Ac	Ci	3	8	3000		cpr$_o$ bcc	c	K	E	3	1013.0	30.1	25.2	65	27.7			
6	Sc	Ac	Ci	3	7	3000		cjpr bc	bc	M	ESE	4	1011.2	28.5	23.8	66	25.2			
7	Sc	Ac	Ci	5	7	3000		bccprbc	bc	M	ESE	3	1010.6	29.0	25.0	71	28.1			
8	Sc	As	-	8	9+	500		ctlqpr	cpr	K	ESE	4	1010.6	26.8	25.6	90	31.6			
9	Cu	Ac	Ci	1	6	3000		orrc bc	bc	M	E	3	1011.3	28.5	25.4	77	29.6			
10	Sc	-	Ci	3	4	3000		cpr$_o$ bc	bc	K	E	5	1011.7	29.3	26.7	80	32.5			
11	Sc	Ac	Ci	2	4	3000		bcprlbc	bc	K	ESE	6	1011.2	28.9	25.3	73	29.1			
12	Sc	Ac	Ci	3	8	3000		bc c	c	K	ESE	6	1011.5	29.1	26.1	78	31.1			
13	Sc	Ac	Ci	3	4	3000		bc b bc	bc/pr	K	ESE	3	1012.4	28.9	25.8	77	30.4			
14	Sc	As	Ci	5	9	2500		bc c	c	K	E	4	1013.0	29.0	25.7	76	30.0			
15	Sc	-	Ci	3	3	3000		bc b bc	bc	K	ESE	3	1012.2	29.8	25.0	66	27.5			
16	Cu	-	-	9	9	3000		bbcprlb	cqpr	K	SE	3	1010.6	27.8	26.2	87	32.4			
17	Cb	Ac	-	4	4	3000		bcqprbc	bcjpr	K	ESE	4	1010.2	29.4	26.1	76	30.8			
18	Cu	-	-	4	4	3000		bclcpbc	bc	K	E	6	1008.6	29.5	26.0	74	30.4			
19	Sc	Ac	Ci	4	7	2000		bclcRRq	bcjpr	K	ESE	4	1007.3	27.7	25.0	79	29.2			
20	Sc	As	-	7	9+	3000		cr$_o$r$_o$ c	c	K	E	4	1006.7	27.9	24.5	78	27.7			
21	Sc	Ac	-	4	9+	3000		bc c	c	M	CALM	0	1006.2	27.0	23.9	76	26.8			
22	Cu	Ac	-	1	6	3000		cpr$_o$cbc	bc	M	E	3	1004.5	29.0	24.9	70	27.9			
23	Fs	Ac-As	-	4	9	3000		cbcpr$_o$c	cjpr	K	ESE	5	1005.4	28.1	25.8	82	31.1			
24	Sc	Ac-As	-	5	10	2000		cq PR c	cpr	K	ESE	6	1003.2	26.8	25.6	90	31.6			
25	Sc	As	-	7	10	1500		o RR q	cir$_o$	K	WNW	5	996.5	26.2	24.1	83	28.0			
26	Sc	Ac	Ci	2	9	3000		cr$_o$ r$_o$c	c	K	SSW	1	1006.3	28.8	23.9	65	25.2			
27	Sc	Ac	Ci	2	6	3000		c bc	bc	M	N	1	1009.3	27.7	24.1	73	26.8			
28	Cu	-	-	1	1	3000		bc b	b	M	ENE	1	1010.1	28.2	25.0	76	28.8			
29	Cu	Ac	Ci	2	8	3000		bcjpbbc	c	M	ENE	1	1011.1	27.8	24.4	74	27.5			
30	Cu	Ac	Ci	2	8	3000		bccprbc	c	M	E	1	1010.7	27.6	24.7	78	28.4			
31																				
Means	-	-	-	3.6	6.6	2900		-	-	-	-	3.4	1009.7	28.5	25.1	75	28.9			

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METEOROLOGICAL OBSERVATIONS.

3 p.m. NOVEMBER 1941.

Day of Month.	CLOUD. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cb	-	Ci	2	3	3000		bc b	bc	M	E	5	1012.8	29.1	26.0	77%	30.8			
2	Cu	-	Ci	2	5	3500		bc	bc	M	ESE	3	1011.3	31.1	25.5	62	27.7			
3	Cu	-	Ci	3	3	3500		b bcy	bc	M	E	6	1011.3	29.5	25.0	67	27.7			
4	Cu	Ac	Ci	2	8	3000		bc c	c	M	E	6	1010.8	29.6	25.8	72	29.7			
5	Cb	Ac	Ci	5	8	3000		cpr$_o$bcc	cjpr	M	E	6	1010.3	30.0	26.2	73	30.5			
6	Cu	Ac	Ci	3	3	3000		bc	bc	K	E	6	1008.7	29.1	25.4	73	29.1			
7	Sc	Ac	Ci	4	6	3000		bc pr$_o$	bc	L	E	6	1007.8	29.5	26.0	74	30.4			
8	Fs	Ns	-	2	10	2000		cproRqr	cr/qr	H	E	3	1008.5	25.1	24.0	91	28.7			
9	Cu	-	Ci	1	9	3000		bc c	c	M	E	4	1008.2	28.9	26.2	80	31.5			
10	Cu	Ac	Ci	3	7	3000		bc	bc	K	E	5	1009.1	29.7	26.6	77	31.9			
11	Cu	Ac	Ci	3	4	3000		bc	bc	K	ESE	4	1010.2	30.2	26.5	74	31.2			
12	Cu	-	Ci	3	4	3000		bc	bc	K	E	6	1009.4	29.4	25.8	74	30.0			
13	Cu	-	Ci	2	5	3000		bc	bc	K	E	5	1010.1	29.4	25.7	73	29.7			
14	Cu	-	Ci	3	4	3000		cqr bc	bc	K	E	6	1010.6	29.7	26.2	75	30.8			
15	Cu	-	-	1	1	3000		bc	b	K	E	6	1008.6	29.3	25.0	68	27.9			
16	Cb	Ac	-	8	9+	2000		bcjpr	cpr$_o$	K	E	6	1007.9	29.2	27.0	83	33.5			
17	Cu	Ac	-	3	4	3000		bc	bc$_o$	K	E	6	1006.8	30.0	26.2	73	30.5			
18	Cu	Ac	-	3	3	3000		b bc	bc	K	E	6	1005.6	30.0	25.6	68	28.9			
19	Sc	As	-	5	10	3000		bccpr$_o$c	cpr$_o$	K	ESE	6	1005.7	28.0	24.5	73	27.6			
20	Cu	Ac	Ci	3	5	3000		c cpr$_o$	bc$_o$	K	E	5	1004.5	29.2	25.3	71	28.8			
21	Cu	Ac	Ci	1	9+	3000		c pr$_o$ c	c	M	E	4	1003.6	28.9	25.0	71	28.1			
22	Sc	Ac	Ci	6	8	3000		c bc c	cjpr	M	E	5	1003.1	28.6	25.6	78	30.1			
23	Sc	Ac	-	5	10	3000		cPRqprc	c	K	ESE	3	1002.9	27.2	25.6	87	31.2			
24	Fc	As	-	5	10	2000		c rr	cr$_o$r$_o$	H	SE	5	998.7	25.9	24.3	87	28.8			
25	Sc	Ns	-	5	10	1000		oqr crr	cr$_o$r$_o$	H	SSW	4	1000.0	25.8	23.6	82	27.1			
26	Cu	Ac	Ci	1	9	3000		c	c	M	SSW	2	1004.9	30.5	23.3	52	22.4			
27	Cu	Ac	-	3	3	3000		bc	bc	M	ENE	2	1006.9	30.0	24.9	64	27.1			
28	Cb	Ac	-	3	4	2500		b bc	bc	M	NE	1	1008.2	28.7	25.2	74	28.9			
29	Cu	Ac	Ci	2	6	3000		c bc	bc	M	NE	1	1009.0	28.7	24.9	72	28.1			
30	Sc	-	Ci	4	8	3000		c bc c	c	M	NW	4	1008.5	29.1	25.4	73	29.1			
31																				
Means	-	-	-	3.2	6.3	2900		-	-	-	-	4.6	1007.5	29.0	25.4	74	29.3			

METEOROLOGICAL OBSERVATIONS.

NOVEMBER 1941.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Grass Minimum (°)	Black Bulb in vacuo (°)				
1	30.0	23.7	22.4		-	11.6		3.0
2	32.4	23.5	21.9		-	11.9		3.1
3	31.7	23.2	21.5		-	11.3		3.7
4	30.2	22.9	20.5		Trace	8.1		3.3
5	30.4	24.6	22.0		Trace	9.6		3.6
6	30.7	23.8	22.2		0.6	8.8		3.0
7	30.8	22.2	20.3		24.9	9.0		1.4
8	29.2	24.8	24.4		24.8	1.5		1.2
9	29.7	23.8	22.9		0.3	9.6		2.4
10	30.8	25.3	23.9		0.2	11.1		3.0
11	30.4	26.2	24.4		-	11.1		3.3
12	30.3	25.7	24.2		Trace	11.4		2.9
13	29.8	24.4	22.2		-	11.2		3.0
14	30.3	24.8	22.2		Trace	9.2		3.4
15	30.5	24.8	22.8		0.8	10.5		3.0
16	31.0	24.0	22.3		1.1	9.8		2.6
17	30.5	25.8	23.8		Trace	11.2		3.2
18	31.0	26.9	25.8		22.1	11.1		2.6
19	29.3	24.3	23.6		3.3	2.8		2.2
20	29.9	23.1	22.5		Trace	4.3		2.6
21	29.5	23.0	21.5		Trace	1.3		2.7
22	30.0	23.8	22.6		0.6	7.5		2.7
23	28.7	24.6	23.5		32.3	0.2		1.3
24	27.9	24.8	24.2		60.2	0.0		1.2
25	29.1	24.7	24.7		2.9	0.0		2.3
26	30.9	23.7	21.5		-	10.7		3.8
27	30.6	24.3	20.8		-	10.4		2.7
28	29.3	22.9	21.0		-	10.3		2.3
29	30.1	24.3	21.8		1.9	11.4		2.5
30	31.2	23.8	22.1		-	11.1		3.0
31								
Sum	-	-	-		176.0	248.0		81.0
Mean	30.2	24.3	22.7		-	8.3		2.7

1,000/7/32—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

9 a.m. DECEMBER 1941.

Day of Month.	Cloud. Form. Low.	Form. Medium.	Form. High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	Weather. At Time.	Visibility.	Wind. Direction.	Wind. Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed; Height Ratio.
1	Sc	-	Ci	3	7	3000		c bc	bc	M	NE	1	1010.2	27.7	25.0	79%	29.2			
2	Sc	Ac	Ci	2	9	3500		bc jprc	c	M	NE	1	1010.5	27.0	23.9	76	26.8			
3	Sc	Ac	Cs	2	9+	3000		c	c	M	CALM	0	1011.5	27.6	24.3	75	27.3			
4	Sc	Ac	Ci	7	9	3500		c crr	cjpr	H	CALM	0	1012.0	26.7	25.3	89	30.8			
5	Fs	As	-	2	10	500		cir	cr_or_o	G	SW	1	1009.5	24.7	24.0	94	28.9			
6	Sc	As	-	5	9+	3000		c lt	c/pr_o	M	CALM	0	1008.5	26.1	23.9	82	27.6			
7	Sc	Ac	Ci	6	6	3000		cjr ltc	bcjpr	M	E	5	1008.9	27.3	24.8	80	28.9			
8	Cu	Ac	Ci	5	7	3000		cltprbc	bc	K	ESE	5	1009.3	29.1	25.8	76	30.3			
9	Sc	Ac	Cs	3	9+	3000		cltprRR	c	K	SSE	2	1010.8	23.0	21.8	90	24.9			
10	Cu	Ac	Ci	3	6	3500		c l bc	bc	M	E	2	1009.6	27.9	24.1	71	26.7			
11	Sc	As	Ci	6	9+	3000		bcprlbc	c	K	ESE	3	1009.4	27.9	25.2	79	29.6			
12	Sc	-	-	3	3	3000		bc l pr	bc	K	ESE	4	1010.7	28.9	26.2	80	31.5			
13	Cu	-	Ci	4	4	3000		$bclpr_o$	bc	M	ESE	4	1013.1	29.3	26.2	77	31.2			
14	Cu	-	Ci	2	4	3000		$bc\ pr_ol$	bc	K	E	5	1012.2	29.5	26.4	77	31.6			
15	Cu	Ac	Ci	1	8	3000		bctlprc	c	M	E	2	1010.2	29.0	25.7	76	30.1			
16	Cu	Ac	Ci	2	8	3000		bcpr c	c	K	E	5	1009.0	29.2	26.1	77	30.9			
17	Cu	Ac	Ci	3	9	3500		cirq°c	c	M	E	4	1009.8	29.2	25.8	75	30.1			
18	Sc	Ac	-	9	9+	2000		bcbbccp	cpr_o	K	ESE	4	1010.6	26.9	25.2	86	30.4			
19	Sc	Ac	Ci	2	3	3000		bc b bc	bc	M	E	3	1009.2	29.7	25.9	72	30.0			
20	Cu	Ac	Ci	2	4	3500		bclbbc	bc	M	CALM	0	1008.4	28.5	24.9	73	28.3			
21	Cu	-	Ci	1	8	3500		c bcbbc	c	M	CALM	0	1008.4	28.4	24.1	69	26.3			
22	Cu	Ac	Ci	2	8	3500		cbcbbcc	c	M	WSW	1	1006.6	27.5	25.0	80	29.3			
23	Sc	Ac	-	8	9	2000		cbcprbc	c/pr_o	H	ESE	3	1006.4	27.2	25.1	83	29.9			
24	Cu	Ac	Ci	2	2	3500		cprbcb	b_o	M	E	2	1005.2	28.9	26.1	79	31.2			
25	Sc	Ac	Ci	7	9	3000		cpr bcc	c	M	NNW	2	1003.8	28.8	26.2	80	31.6			
26	Sc	As	-	4	10	3000		cpr°c	c/pr_o	K	NW	3	1004.7	29.0	26.8	83	33.1			
27	Sc	Ac-As	Ci	5	9+	3000		corrlqc	$cjpr_o$	K	NNE	1	1008.0	28.3	26.5	86	32.8			
28	Cu	-	Cs	7	7	3000		cpr oc	bc	K	CALM	0	1010.9	29.7	26.9	79	32.8			
29	Cu	Ac	Ci	1	9	3500		bc c	c	K	NE	1	1010.5	28.7	25.8	78	30.5			
30	Sc	Ac-As	-	Tr.	9+	500		cprorrc	c	M	CALM	0	1010.1	27.3	25.4	85	30.5			
31	Cu	Ac	Cs	1	3	3000		cpr_obc	bc	M	ESE	3	1010.3	29.5	26.2	76	31.5			
Means	-	-	-	3.5	7.3	2900		-	-	-	-	2.2	1009.3	28.0	25.3	79	29.8			

1,000/7/32—3911] APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

3 p.m. DECEMBER 1941

Day of Month.	Cloud. Form. Low.	Medium.	High.	Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	Weather. Since previous Observation.	At Time.	Visibility.	Wind. Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Temperature and Humidity. Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Upper Cloud. Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cb	Ac	Ci	5	7	3000		bc	bcjpr	M	NE	2	1007.7	28.9	25.0	71%	28.1			
2	Sc	-	Cc	2	9+	3000		c	c	M	ENE	3	1008.4	29.1	25.0	70	28.0			
3	Cu	Ac	-	3	9+	3000		c	c	M	ENE	4	1009.0	28.9	26.0	78	30.9			
4	Sc	Ac	-	7	9+	2000		cpr bc	cjpr	M	E	3	1009.5	28.2	25.7	81	30.7			
5	Sc	Ac	-	7	9+	2000		cr_or_o c	c	M	ESE	2	1007.4	28.1	25.3	79	29.7			
6	Cb	Ac	Ci	3	9	3000		ct pr_o	cjr	M	E	3	1006.2	29.6	25.3	69	28.4			
7	Cb	Ac	Ci	4	7	2500		bc c	bcjpr	M	E	4	1006.4	29.2	25.3	71	28.8			
8	Sc	Ac	Cs	3	9+	2000		c	c	M	ESE	5	1008.3	27.8	25.2	80	29.6			
9	Cu	Ac	Cs	1	9+	3000		c	c	M	NE	3	1007.1	27.7	23.2	67	24.5			
10	Cu	Ac	Ci	4	5	3000		cpr_o bc	bc	M	ENE	3	1007.3	29.2	25.8	75	30.1			
11	Cu	Ac	Ci	2	3	3000		c bc	bc	M	E	5	1006.2	29.0	25.6	75	29.7			
12	Cu	Ac	Ci	2	4	3000		bc pr_o	bc	K	ESE	5	1009.3	29.8	26.8	78	32.4			
13	Cu	-	Ci	2	4	4000		bc $_o$	bc	K	E	5	1010.6	30.0	26.7	76	32.0			
14	Sc	Ac	Cs	8	9+	3000		bccjprc	c	K	E	6	1009.5	29.7	27.4	83	34.3			
15	Cu	-	Ci	3	7	3000		c	bc	K	E	6	1008.2	29.7	26.3	75	31.1			
16	Cu	-	Ci	2	9	3500		cjpr	c	L	E	4	1008.0	29.8	26.9	79	32.8			
17	Cb	Ac	Ci	5	9	3000		c	cjpr	M	E	4	1007.5	29.8	26.8	78	32.4			
18	Cb	-	Ci	5	7	3000		cpr_ocbc	bc	M	E	3	1008.0	29.2	26.5	80	32.1			
19	Cu	-	Ci	3	3	3000		bc	bc	M	E	6	1006.2	29.8	26.5	76	31.6			
20	Sc	-	-	9+	9+	3000		bc c	cjr	M	VAR.	2	1006.1	29.3	25.8	74	30.0			
21	Cu	Ac	Ci	4	9+	2000		bc cpr_o	cjpr	M	E	4	1006.2	30.1	26.2	72	30.5			
22	Cu	-	Ci	5	7	3000		c bc	bc	K	E	6	1004.2	29.4	25.9	74	30.3			
23	Cu	-	Ci	2	6	3000		cpr bc	bc	M	E	2	1004.0	29.7	26.0	73	30.3			
24	Cu	-	Ci	8	8	2500		bcpr_ojp	cjpr	M	ENE	3	1002.7	28.5	26.2	82	31.9			
25	Cu	-	Cs	3	10	3500		c	c	M	NNW	2	1001.6	29.6	26.6	78	32.0			
26	Sc	Ac	Ci	8	10	3000		c	c	K	NNW	5	1002.7	29.1	26.5	80	32.1			
27	Fs	As-Ac	-	6	9+	1500		cir	c	K	N	4	1006.9	28.3	26.7	88	33.3			
28	Cu	Ac	Ci	4	8	3500		bccpr$_o$c	c	K	ESE	1	1008.9	29.6	26.0	74	30.4			
29	Cb	Ac	Ci	4	9	2500		cptr	c	K	NW	1	1009.5	27.3	25.6	87	31.2			
30	Sc	Ac	-	9	9+	2500		c cpr_o	cpr_o	K	SSW	2	1008.7	27.6	26.6	92	33.7			
31	Sc	-	-	7	7	3000		bc	bc	M	E	5	1007.2	29.8	26.7	77	32.1			
Means	-	-	-	4.5	7.7	2800		-	-	-	-	3.7	1007.1	29.1	26.0	77	30.8			

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METEOROLOGICAL OBSERVATIONS.

DECEMBER 1941.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°C)	Minimum (°C)	Grass Minimum (°C)	Black Bulb in vacuo (°C)				
1	29.5	23.2	21.2		Trace	7.9		2.4
2	29.8	23.8	21.0		-	9.1		2.6
3	30.1	25.0	23.4		6.0	3.2		2.4
4	29.8	24.5	23.8		8.1	5.4		1.6
5	28.8	24.3	23.6		5.1	0.7		1.2
6	29.8	24.0	22.5		0.1	5.2		2.2
7	29.8	23.9	22.7		0.1	9.7		2.7
8	29.9	24.4	22.7		55.4	5.3		1.8
9	29.4	21.6	20.7		-	3.6		2.6
10	29.6	22.6	21.1		4.7	8.5		2.2
11	28.9	23.3	21.9		4.6	9.9		2.2
12	30.3	25.6	23.9		0.1	11.6		2.5
13	30.5	25.8	23.0		Trace	11.8		3.4
14	30.6	26.3	24.5		5.7	9.7		2.7
15	30.4	25.2	24.5		0.2	9.9		3.0
16	30.7	25.2	23.6		12.7	10.5		2.0
17	30.3	24.6	23.6		6.0	7.7		2.6
18	30.8	25.4	24.1		3.5	8.4		2.0
19	30.3	24.3	22.8		-	10.5		2.9
20	30.3	23.5	21.9		-	10.0		2.6
21	30.4	22.8	21.0		-	8.2		2.2
22	30.6	22.8	20.7		0.1	9.6		2.9
23	30.2	25.4	23.5		2.5	9.2		2.2
24	30.1	24.4	23.4		0.3	8.7		3.2
25	29.9	26.7	26.4		4.6	7.2		2.7
26	29.6	26.3	24.8		10.5	2.4		2.2
27	29.7	25.3	24.4		13.0	0.0		1.8
28	30.6	26.5	27.1		1.4	7.0		1.6
29	30.9	25.4	24.2		9.2	6.4		1.4
30	29.7	24.8	24.2		0.4	5.1		1.8
31	31.3	24.8	23.6		-	9.8		2.4
Sum	-	-	-		154.3	232.2		72.0
Mean	30.1	24.6	23.2		-	7.5		2.3

METEOROLOGICAL ELEMENTS: EXTREME VALUES, NORMALS AND VARIATIONS, 1941

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Pressure													
Normal (mb)	1007.6	1008.3	1009.1	1009.8	1010.9	1011.5	1011.7	1012.1	1012.0	1011.2	1009.3	1008.1	1010.1
Variation 1941	+0.7	-2.9	-0.4	+0.1	-1.5	-0.1	+0.4	-1.0	-0.6	-1.0	-0.6	+0.3	-0.5
Absolute Maximum ..	1012.0	1011.5	1013.2	1014.8	1014.3	1015.5	1016.1	1015.4	1014.9	1016.4	1015.7	1013.2	1016.4
Absolute Minimum ..	1003.5	995.5	991.0	1005.5	1005.6	1007.4	1006.6	1006.4	1007.3	1003.3	991.1	1001.5	991.0
Temperature													
Normal (°C)	26.27	26.26	26.31	26.18	25.97	25.59	25.29	25.59	25.79	26.07	26.08	26.32	25.98
Variation 1941	+0.86	+0.99	+0.65	+1.54	+1.21	+1.32	+0.48	+0.55	+0.31	+0.08	+0.83	+0.76	+0.80
Absolute Maximum ..	31.9	31.8	31.3	31.7	31.1	31.6	29.8	30.8	31.0	30.8	32.4	31.3	32.4
Absolute Minimum ..	21.6	23.1	22.0	22.9	22.0	21.5	20.1	21.6	21.7	19.8	22.2	21.6	19.8
Greatest Daily Range	9.3	6.8	8.4	8.8	8.0	9.1	9.2	7.5	9.0	9.1	8.9	7.8	9.3
Mean Maximum	30.4	30.1	30.1	30.9	30.1	30.2	28.6	29.1	29.2	29.5	30.2	30.1	29.9
Mean Minimum	24.2	24.9	24.1	24.9	24.7	23.9	23.5	23.7	23.6	23.2	24.3	24.6	24.1
Rainfall													
Normal (mm)	455	385	358	255	161	130	82	89	133	169	267	370	2854
Variation 1941	-283	+128	- 39	-142	-120	- 72	+ 72	+ 88	- 73	- 61	- 91	-216	-810
Sunshine													
Normal (hours)	160	158	185	195	215	210	232	238	224	222	187	174	2400
Variation 1941	+ 68	- 4	+ 61	+ 46	+ 3	+ 30	- 21	+ 10	+ 11	+ 27	+ 61	+ 58	+351

PRESSURE: MEANS OF HOURLY VALUES, 1941

From readings in millibars at exact hours (1000 mb.. + tabular values)

Hour	1	2	3	4	5	6	7	8	9	10	11	noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
Month																									
January	8.63	8.07	7.85	7.77	7.91	8.40	8.85	9.23	9.31	9.29	8.97	8.47	7.99	7.61	7.13	6.77	6.95	7.38	7.93	8.45	8.95	9.19	9.27	9.12	8.31
February	5.91	5.35	4.85	4.77	4.85	5.15	5.62	6.27	6.57	6.63	6.26	5.81	5.19	4.67	4.23	3.96	4.02	4.42	4.83	5.43	5.83	6.14	6.25	6.03	5.38
March	9.09	8.73	8.38	8.18	8.29	8.44	8.95	9.42	9.82	10.04	9.70	9.00	8.26	7.67	7.24	7.08	7.23	7.58	8.13	8.84	9.46	9.82	9.89	9.73	8.71
April	10.37	10.01	9.70	9.58	9.50	9.65	10.20	10.75	11.06	11.32	11.14	10.32	9.57	8.91	8.37	8.14	8.32	8.66	9.13	9.88	10.46	10.70	10.72	10.64	9.88
May	9.78	9.41	9.13	8.94	8.93	9.09	9.63	10.15	10.64	10.84	10.56	9.82	9.07	8.41	7.96	7.86	8.07	8.48	9.09	9.66	10.06	10.25	10.20	10.00	9.42
June	11.72	11.38	11.08	10.87	10.88	11.01	11.46	12.18	12.59	12.71	12.51	11.86	11.19	10.47	9.99	9.88	10.04	10.42	10.99	11.55	12.00	12.20	12.13	11.98	11.38
July	12.57	12.21	11.80	11.54	11.53	11.72	12.11	12.80	13.31	13.53	13.29	12.63	11.90	11.20	10.66	10.52	10.68	11.03	11.64	12.27	12.67	12.88	12.80	12.62	12.08
August	11.47	11.07	10.71	10.52	10.52	10.74	11.31	11.88	12.28	12.45	12.25	11.54	10.82	10.25	9.64	9.52	9.63	9.96	10.67	11.30	11.74	12.01	12.05	11.91	11.09
September	11.86	11.36	11.00	10.87	10.83	11.02	11.60	12.23	12.66	12.73	12.50	11.84	11.21	10.43	9.90	9.73	9.89	10.30	11.14	11.70	12.14	12.39	12.40	12.25	11.42
October	10.53	10.07	9.56	9.45	9.53	9.86	10.40	11.27	11.56	11.48	11.12	10.61	9.85	9.15	8.75	8.61	8.73	9.21	9.97	10.54	10.97	11.36	11.39	11.11	10.21
November	9.17	8.69	8.21	8.04	8.15	8.45	9.04	9.63	9.73	9.64	9.42	9.00	8.46	7.81	7.47	7.22	7.25	7.63	8.43	8.89	9.40	9.73	9.88	9.64	8.71
December	8.78	8.29	7.92	7.81	7.88	8.21	8.77	9.22	9.30	9.24	9.00	8.56	8.05	7.64	7.08	6.83	6.91	7.24	8.02	8.46	8.92	9.31	9.62	9.35	8.35
Year	9.99	9.55	9.18	9.03	9.07	9.31	9.83	10.42	10.74	10.83	10.56	9.95	9.30	8.69	8.20	8.01	8.14	8.53	9.16	9.75	10.22	10.50	10.55	10.37	9.58
Wet Season 1940-41	7.70	7.17	6.81	6.75	6.88	7.31	7.75	8.15	8.31	8.35	8.06	7.62	7.05	6.63	6.16	5.88	6.02	6.42	6.92	7.53	7.95	8.23	8.31	8.09	7.34
Dry Season 1941	11.39	11.02	10.68	10.47	10.47	10.64	11.13	11.75	12.21	12.38	12.15	11.46	10.75	10.08	9.56	9.45	9.61	9.97	10.60	11.19	11.62	11.83	11.80	11.63	10.99

PRESSURE: DIURNAL CHANGES, 1941

The departures in millibars from the mean of the day are adjusted for non-cyclic change

Hour / Month	Mean 1000 +	1	2	3	4	5	6	7	8	9	10	11	noon	13	14	15	16	17	18	19	20	21	22	23	24
January	8.31	+0.39	-0.18	-0.40	-0.49	-0.36	+0.13	+0.57	+0.95	+1.02	+0.99	+0.67	+0.16	-0.33	-0.71	-1.20	-1.57	-1.39	-1.03	-0.42	+0.09	+0.58	+0.82	+0.89	+0.74
February	5.38	+0.36	-0.18	-0.66	-0.73	-0.64	-0.32	+0.17	+0.83	+1.14	+1.22	+0.87	+0.43	-0.18	-0.68	-1.10	-1.36	-1.29	-0.87	-0.44	+0.17	+0.58	+0.91	+1.04	+0.83
March	8.71	+0.55	+0.18	-0.19	-0.40	-0.31	-0.18	+0.32	+0.77	+1.16	+1.36	+1.01	+0.29	-0.47	-1.07	-1.52	-1.69	-1.56	-1.22	-0.69	+0.00	+0.61	+0.95	+1.01	+0.83
April	9.88	+0.50	+0.14	-0.17	-0.29	-0.37	-0.22	+0.33	+0.88	+1.18	+1.44	+1.36	+0.44	-0.31	-0.97	-1.51	-1.75	-1.57	-1.23	-0.76	-0.01	+0.57	+0.81	+0.83	+0.75
May	9.42	+0.34	-0.03	-0.31	-0.50	-0.50	-0.34	+0.20	+0.72	+1.22	+1.42	+1.14	+0.40	-0.35	-1.01	-1.45	-1.55	-1.34	-0.93	-0.32	+0.26	+0.66	+0.85	+0.80	+0.60
June	11.38	+0.37	+0.03	-0.28	-0.49	-0.48	-0.36	+0.09	+0.81	+1.22	+1.34	+1.13	+0.48	-0.19	-0.92	-1.39	-1.51	-1.35	-0.97	-0.41	+0.15	+0.60	+0.79	+0.72	+0.57
July	12.08	+0.41	+0.06	-0.35	-0.60	-0.60	-0.40	-0.01	+0.69	+1.21	+1.44	+1.20	+0.55	-0.17	-0.87	-1.40	-1.53	-1.36	-1.01	-0.39	+0.25	+0.66	+0.87	+0.80	+0.63
August	11.09	+0.45	+0.04	-0.32	-0.52	-0.53	-0.31	+0.25	+0.82	+1.21	+1.37	+1.17	+0.45	-0.28	-0.85	-1.47	-1.60	-1.49	-1.17	-0.46	+0.16	+0.59	+0.86	+0.89	+0.75
September	11.42	+0.45	-0.06	-0.42	-0.55	-0.59	-0.40	+0.18	+0.81	+1.24	+1.31	+1.08	+0.42	-0.21	-0.99	-1.52	-1.69	-1.53	-1.12	-0.28	+0.28	+0.72	+0.97	+0.97	+0.82
October	10.21	+0.36	+0.11	-0.62	-0.73	-0.66	-0.33	+0.21	+1.05	+1.36	+1.28	+0.91	+0.40	-0.36	-1.07	-1.47	-1.61	-1.50	-1.02	-0.26	+0.30	+0.73	+1.12	+1.14	+0.86
November	8.71	+0.38	-0.09	-0.57	-0.73	-0.61	-0.31	+0.29	+0.89	+1.00	+0.92	+0.70	+0.29	-0.24	-0.89	-1.22	-1.46	-1.42	-1.03	-0.23	+0.24	+0.76	+1.09	+1.35	+1.02
December	8.35	+0.44	-0.05	-0.42	-0.53	-0.46	-0.13	+0.43	+0.88	+0.95	+0.89	+0.65	+0.21	-0.30	-0.71	-1.27	-1.53	-1.45	-1.12	-0.34	+0.10	+0.56	+0.95	+1.26	+0.99
Year	9.58	+0.41	-0.03	-0.39	-0.55	-0.51	-0.27	+0.25	+0.85	+1.17	+1.25	+0.99	+0.37	-0.29	-0.89	-1.37	-1.57	-1.45	-1.06	-0.41	+0.17	+0.63	+0.91	+0.97	+0.79
Wet Season 1940-41	7.34	+0.33	-0.20	-0.55	-0.61	-0.48	-0.05	+0.40	+0.80	+0.97	+1.01	+0.73	+0.28	-0.29	-0.70	-1.17	-1.45	-1.31	-0.91	-0.39	+0.22	+0.63	+0.93	+1.01	+0.79
Dry Season 1941	10.99	+0.39	+0.02	-0.31	-0.53	-0.53	-0.35	+0.13	+0.76	+1.21	+1.39	+1.16	+0.47	-0.25	-0.91	-1.43	-1.53	-1.39	-1.02	-0.39	+0.21	+0.63	+0.84	+0.80	+0.64

TEMPERATURE: MEANS OF HOURLY VALUES, 1941

From readings in degrees centigrade at exact hours.

Hour	1	2	3	4	5	6	7	8	9	10	11	noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
Month																									
January	25.33	25.21	25.15	25.03	24.98	24.89	25.43	26.59	28.08	28.74	28.98	29.15	29.25	29.22	29.20	28.93	28.66	28.36	27.90	27.33	26.85	26.32	25.94	25.61	27.13
February	26.06	25.97	25.93	25.79	25.72	25.82	25.97	26.67	28.02	28.67	28.78	29.04	28.75	28.60	28.68	28.36	28.05	27.89	27.67	27.36	26.92	26.63	26.48	26.26	27.25
March	25.13	25.09	25.05	25.09	25.06	25.00	25.13	26.11	28.09	28.97	29.10	29.21	29.18	29.19	29.12	28.82	28.51	28.11	27.60	26.94	26.39	25.86	25.59	25.22	26.98
April	25.89	25.85	25.80	25.85	25.75	25.76	25.85	26.76	28.62	29.47	29.84	30.09	30.14	30.18	29.89	29.69	29.36	28.73	28.15	27.50	27.05	26.65	26.31	26.09	27.72
May	25.82	25.73	25.62	25.57	25.49	25.45	25.59	26.11	28.01	28.75	29.13	29.29	29.38	29.38	29.18	28.82	28.44	27.74	27.30	26.78	26.51	26.29	26.09	25.97	27.18
June	25.16	25.03	24.98	24.93	25.00	25.03	25.17	25.75	27.56	28.87	29.38	29.45	29.64	29.45	29.18	28.82	28.39	27.66	27.12	26.42	26.06	25.78	25.61	25.33	26.91
July	24.67	24.51	24.33	24.16	24.07	23.95	23.93	24.64	25.94	27.05	27.47	27.61	27.84	28.03	27.89	27.66	27.16	26.49	25.89	25.35	25.12	24.97	24.88	24.83	25.77
August	24.74	24.62	24.46	24.33	24.16	24.05	24.26	25.35	26.74	27.85	28.27	28.38	28.38	28.36	28.14	27.88	27.50	26.91	26.35	25.90	25.55	25.28	25.08	24.91	26.14
September	24.72	24.50	24.32	24.08	23.99	23.85	24.31	25.70	26.79	27.79	28.18	28.42	28.38	28.32	28.19	27.85	27.36	26.75	26.31	25.78	25.49	25.26	25.13	24.94	26.10
October	24.51	24.17	24.04	23.90	23.83	23.68	24.42	26.44	27.32	28.19	28.33	28.59	28.61	28.56	28.49	28.09	27.45	26.81	26.40	25.73	25.38	25.08	24.91	24.67	26.15
November	25.25	25.16	24.98	24.79	24.56	24.55	25.31	27.35	28.45	28.88	29.04	28.96	28.97	29.05	28.94	28.54	28.07	27.65	27.25	26.74	26.32	25.96	25.67	25.42	26.91
December	25.55	25.29	25.09	24.97	24.88	24.87	25.60	27.22	27.99	28 65	28.96	28.94	29.00	29.04	29.00	28.76	28.46	27.97	27.54	27.07	26.69	26.36	26.08	25.87	27.08
Year	25.24	25.09	24.98	24.87	24.79	24.74	25.08	26.22	27.64	28.49	28.79	28.93	28.96	28.95	28.83	28.52	28.12	27.59	27.12	26.58	26.19	25.87	25.65	25.43	26.78
Wet Season 1940-41	25.34	25.22	25.16	25.07	25.03	25.07	25.62	26.72	27.98	28.56	28.68	28.80	28.76	28.69	28.64	28.32	27.97	27.66	27.32	26.86	26.43	26.06	25.81	25.57	26.89
Dry Season 1941	25.10	24.97	24.85	24.75	24.68	24.62	24.74	25.46	27.06	28.13	28.56	28.68	28.81	28.81	28.60	28.30	27.87	27.20	26.67	26.11	25.81	25.58	25.41	25.26	26.50

TEMPERATURE: DIURNAL CHANGES, 1941

The departures in degrees from the mean of the day are adjusted for non-cyclic change

Hour	Mean	1	2	3	4	5	6	7	8	9	10	11	noon	13	14	15	16	17	18	19	20	21	22	23	24
Month																									
January	27.13	-1.77	-1.89	-1.95	-2.08	-2.13	-2.22	-1.69	-0.53	+0.96	+1.62	+1.85	+2.02	+2.12	+2.08	+2.06	+1.79	+1.52	+1.22	+0.75	+0.18	-0.31	-0.84	-1.22	-1.56
February	27.25	-1.21	-1.30	-1.34	-1.48	-1.54	-1.44	-1.29	-0.59	+0.76	+1.42	+1.53	+1.79	+1.50	+1.35	+1.44	+1.12	+0.81	+0.65	+0.43	+0.13	-0.31	-0.60	-0.75	-0.96
March	26.98	-1.87	-1.91	-1.94	-1.90	-1.93	-1.99	-1.86	-0.88	+1.10	+1.99	+2.12	+2.23	+2.20	+2.21	+2.15	+1.85	+1.54	+1.14	+0.63	-0.03	-0.58	-1.10	-1.37	-1.74
April	27.72	-1.85	-1.89	-1.93	-1.88	-1.98	-1.97	-1.88	-0.97	+0.91	+1.75	+2.12	+2.37	+2.42	+2.46	+2.18	+1.98	+1.65	+1.02	+0.44	-0.21	-0.66	-1.05	-1.39	-1.61
May	27.18	-1.36	-1.45	-1.56	-1.61	-1.69	-1.73	-1.59	-1.07	+0.83	+1.57	+1.95	+2.11	+2.20	+2.20	+2.00	+1.64	+1.26	+0.56	+0.12	-0.40	-0.65	-0.89	-1.09	-1.21
June	26.91	-1.75	-1.88	-1.93	-1.98	-1.91	-1.88	-1.74	-1.16	+0.65	+1.96	+2.47	+2.54	+2.73	+2.54	+2.27	+1.91	+1.48	+0.75	+0.21	-0.49	-0.85	-1.13	-1.30	-1.58
July	25.77	-1.11	-1.27	-1.44	-1.61	-1.70	-1.82	-1.84	-1.13	+0.17	+1.28	+1.70	+1.84	+2.07	+2.26	+2.12	+1.89	+1.39	+0.72	+0.12	-0.42	-0.65	-0.80	-0.89	-0.93
August	26.14	-1.39	-1.51	-1.68	-1.81	-1.98	-2.09	-1.88	-0.79	+0.60	+1.71	+2.13	+2.24	+2.24	+2.22	+2.00	+1.74	+1.36	+0.77	+0.21	-0.24	-0.59	-0.86	-1.06	-1.24
September	26.10	-1.35	-1.57	-1.76	-2.00	-2.09	-2.24	-1.78	-0.39	+0.70	+1.70	+2.08	+2.32	+2.28	+2.21	+2.08	+1.74	+1.25	+0.64	+0.19	-0.34	-0.63	-0.87	-1.00	-1.19
October	26.15	-1.65	-1.99	-2.12	-2.26	-2.33	-2.48	-1.74	+0.28	+1.17	+2.04	+2.18	+2.44	+2.46	+2.41	+2.34	+1.95	+1.31	+0.67	+0.26	-0.41	-0.76	-1.06	-1.23	-1.47
November	26.91	-1.69	-1.78	-1.95	-2.14	-2.37	-2.37	-1.61	+0.43	+1.53	+1.96	+2.13	+2.05	+2.06	+2.15	+2.04	+1.64	+1.17	+0.75	+0.36	-0.15	-0.57	-0.92	-1.21	-1.46
December	27.08	-1.52	-1.78	-1.98	-2.10	-2.19	-2.20	-1.47	+0.15	+0.91	+1.57	+1.88	+1.86	+1.92	+1.96	+1.92	+1.67	+1.37	+0.88	+0.45	-0.02	-0.40	-0.73	-1.01	-1.22
Year	26.78	-1.54	-1.69	-1.79	-1.90	-1.99	-2.03	-1.69	-0.55	+0.85	+1.71	+2.01	+2.15	+2.19	+2.17	+2.05	+1.75	+1.35	+0.81	+0.35	-0.20	-0.58	-0.91	-1.13	-1.35
Wet Season 1940-41	26.89	-1.55	-1.67	-1.73	-1.82	-1.86	-1.82	-1.27	-0.17	+1.09	+1.67	+1.79	+1.91	+1.87	+1.80	+1.75	+1.43	+1.09	+0.77	+0.43	-0.02	-0.45	-0.83	-1.07	-1.32
Dry Season 1941	26.50	-1.40	-1.53	-1.65	-1.75	-1.82	-1.88	-1.76	-1.04	+0.56	+1.63	+2.06	+2.18	+2.31	+2.31	+2.10	+1.80	+1.37	+0.70	+0.17	-0.39	-0.69	-0.92	-1.09	-1.24

FOURIER COEFFICIENTS: BAROMETRIC PRESSURE AND TEMPERATURE, 1941

Values of P_n and A_n in the series $\Sigma P_n \sin(15nt+A_n)$, t being Zone Time (11h 00m slow on Greenwich) expressed in hours from midnight.

Period	P_1	A_1	P_2	A_2	P_3	A_3	P_4	A_4
	Barometric Pressure							
	mb	°	mb	°	mb	°	mb	°
Wet Season 1940-41	0.43	23	1.00	149	0.06	138	0.04	27
Dry Season 1941	0.48	15	1.01	145	0.14	341	0.07	259
Y e a r 1941	0.51	20	1.09	146	0.07	11	0.04	283
	Temperature							
	°C	°	°C	°	°C	°	°C	°
Wet Season 1940-41	1.94	239	0.43	108	0.27	356	0.13	238
Dry Season 1941	2.08	237	0.63	69	0.23	338	0.21	194
Y e a r 1941	2.13	237	0.52	85	0.27	354	0.17	217

RELATIVE HUMIDITY, 1941

Percentages at exact even hours

Hour	2	4	6	8	10	noon	14	16	18	20	22	24	Mean
Month													
January	86	87	87	83	77	77	77	78	78	83	86	86	82
February	88	88	88	87	82	82	83	83	85	86	87	88	86
March	87	87	87	84	78	77	77	78	80	85	86	87	83
April	88	88	88	84	77	76	76	77	81	85	86	87	83
May	86	87	88	85	78	76	76	79	81	84	85	86	83
June	86	86	87	84	73	72	74	76	80	83	85	85	81
July	80	80	80	80	73	71	71	71	76	79	80	80	77
August	85	86	87	84	75	74	75	77	79	83	84	85	81
September	87	87	87	83	76	75	76	77	80	83	85	86	82
October	85	85	85	76	70	70	70	71	74	79	82	83	78
November	85	86	85	77	75	75	77	77	80	81	85	85	81
December	86	87	86	81	78	78	79	79	82	83	85	86	82
Year	86	86	86	82	76	75	76	77	80	81	85	85	81
Wet Season 1940-41	87	87	87	83	78	78	79	79	81	84	86	86	83
Dry Season 1941	84	85	85	83	75	73	74	76	79	82	83	84	81

VAPOUR PRESSURE, 1941

Mean values in millibars at exact even hours

Hour	2	4	6	8	10	noon	14	16	18	20	22	24	Mean
Month													
January	27.3	27.3	27.1	28.5	30.1	30.8	30.9	30.8	29.9	29.9	29.2	28.0	29.2
February	29.2	28.9	28.9	30.1	31.9	32.5	32.1	31.7	31.6	31.1	30.1	29.7	30.9
March	27.3	27.3	27.2	28.1	30.9	30.9	30.9	30.5	30.1	29.9	28.4	27.6	29.2
April	28.9	28.9	28.8	29.2	31.3	32.1	32.3	31.7	31.6	30.8	29.6	29.1	30.5
May	28.2	28.2	28.3	28.5	30.4	30.7	30.8	30.9	29.7	29.3	28.8	28.5	29.6
June	27.0	26.8	27.2	27.6	28.8	29.3	30.1	29.7	29.3	28.4	28.0	27.2	28.4
July	24.4	23.9	23.6	24.6	25.8	26.0	26.6	26.1	26.1	25.6	25.1	24.9	25.3
August	26.1	26.0	25.9	26.8	27.6	28.2	28.8	28.5	27.8	27.4	26.9	25.8	27.1
September	26.4	25.8	25.5	27.1	28.1	28.8	29.0	28.6	27.7	27.3	27.1	26.9	27.4
October	25.3	24.9	24.6	25.9	26.4	27.1	27.0	26.7	25.8	25.9	25.9	25.5	26.2
November	26.9	26.6	25.9	27.7	29.6	29.6	30.6	29.8	29.3	28.2	28.2	27.5	28.5
December	27.4	27.2	26.8	28.9	30.2	30.8	31.4	30.9	30.6	29.4	28.9	28.4	29.2
Year	27.0	26.8	26.7	27.7	29.3	29.7	30.0	29.7	29.1	28.6	28.0	27.4	28.3

RAINFALL AT APIA OBSERVATORY - 1941

Month	Number of Days on which stated Amounts of Precipitation were recorded (Amount of rain in millimetres)					Total Rain Days	Total Rain-fall	Greatest Amount in 24 hours		Greatest Amount in one hour		
	0.2 - 0.9	1.0 - 9.9	10.0 - 24.9	25.0 - 99.9	100 and over		mm.	mm.	Date	mm.	Date	Time
January	3	7	5	2	0	17	171.6	42.0	14th.	22.2	14th.	1-2
February	1	7	4	3	1	16	513.1	308.0	16th.	47.0	17th.	7-8
March	2	7	6	1	1	17	318.9	150.0	1st.	26.9	1st.	5-6
April	2	8	4	0	0	14	112.6	24.7	29th.	9.4	30th.	8-9
May	5	7	1	0	0	13	41.1	13.3	6th.	3.3	13th.	7-8
June	3	6	0	1	0	10	58.1	34.9	30th.	7.2	20th.	11-12
July	1	7	2	2	0	12	154.2	67.0	4th.	16.0	5th.	4-5
August	5	6	2	2	0	15	176.5	92.6	6th.	29.0	7th.	3-4
September	0	5	2	0	0	7	59.8	23.3	8th.	11.9	8th.	7-8
October	0	4	2	2	0	8	108.1	39.2	17th.	21.3	18th.	4-5
November	5	4	3	2	0	14	176.0	60.2	24th.	16.5	24th.	4-5
December	3	12	3	1	0	19	154.3	55.4	8th.	24.6	9th.	2-3
Y e a r	30	80	34	16	2	162	2044.3	308.0	16th. Feb.	47.0	17th.Feb.	7-8

NOTE:-

Rainfall is measured at 9.0 a.m. and entered to the previous day. Greatest amounts for 1 hour are entered to the date on which the fall actually occurred.

RAINFALL IN SAMOA, 1941

(Expressed in inches)

Station	Elevation (feet)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	Authority
UPOLU															
Alafua	185	4.10	22.06	12.60	4.07	4.15	2.55	10.35	8.85	2.87	6.09	11.49	9.76	98.94	Mr. M.R. Mecham
Aleisa	910	4.47	27.41	9.16	4.45	2.31	3.98	5.70	6.38	5.52	8.21	12.75	19.80	110.14	N.Z. Reparation Estates
Casala	700	3.22	3.17	12.39	2.62	2.94	3.48	12.18	3.73	4.35	5.97	10.26	9.51	73.82	Mr. P.L.M. Morgan
Lotofaga	40	8.28	17.40	21.59	9.40	16.88	3.62	20.20	7.99		6.50	14.08	25.93		Rev. Father Beauchemin
Magia	215	4.94	18.21	15.38	2.12	4.42	1.67	13.06	3.33	4.36	7.70	9.25	8.74	93.18	Mr. G. Miedecke
Mulifanua	14	6.13	14.85	7.60	2.07	3.17	2.01	12.53	3.71	4.30	8.33	8.58	10.92	84.20	N.Z. Reparation Estates
Mulinu'u	5	6.76	20.20	12.56	4.43	1.62	2.29	6.07	6.95	2.35	4.25	6.93	6.07	80.48	The Observatory
Mulivai	6	3.77	20.09	8.91											Rev. Father Gaucher
Piula	65	5.78	21.27	4.63	9.14	4.70	7.38	18.22	7.05	4.87	5.16	10.15	13.12	111.47	Rev. N.G. Pardey
Samatau		6.75	26.93	13.37	2.77	6.80	6.40	19.16	4.66	7.58		9.47	13.51		The Observatory
Tafa'igata	550	6.32	14.22	14.65	3.83	3.26	2.72	10.46	6.81	3.10	4.69	10.03	17.27	97.36	N.Z. Reparation Estates
Tuana'imato	105	5.50	15.72	15.18	4.93	2.05	2.39	8.73	8.22	2.58	6.81	8.55	6.95	87.61	N.Z. Reparation Estates
Vailele	25	7.25	17.38	11.22	6.89	3.17	1.43	6.39	5.28	1.77	3.13	6.88	7.37	78.16	N.Z. Reparation Estates
Vailima		4.95	19.53	13.72	6.97	4.93	0.73	16.78	8.19	3.39	5.41	10.87	9.98	105.45	Government House, Vailima
Vaipapa	720	7.40	28.88	25.69	4.38	7.77	4.37	15.85	3.49	7.94	13.12	18.44	8.96	146.29	N.Z. Reparation Estates
Vaipoto	400	7.78	18.50	13.30	5.13	3.38	0.53	14.05	8.68	4.64	6.25	14.03	12.67	108.94	Mr. A.R. Cobcroft
Vaitele	20	6.47	17.36	11.39	4.71	2.22	2.69	5.73	6.26	2.61	4.02	8.88	8.17	80.51	N.Z. Reparation Estates
SAVAI'I															
Fagamalo	8	10.81	21.02	16.97	4.75	5.61	4.26	6.58	6.50	7.84	7.49	8.43	6.51	106.77	The Wireless Operator
Falealupo	8	12.70	5.63	5.02	1.65	2.22	7.32	8.39	2.38	3.35	8.46				Rev. Father Merten
Tuasivi	25	4.92	15.63	10.67	4.21	8.79	1.71	11.59	5.65	3.24	7.36	5.46	13.65	92.88	The Resident Commissioner
Vaipouli	210	10.55	23.18	17.72	4.13	7.73	4.79	9.18	7.60	7.51	4.95	8.47	6.98	112.79	Superintendent of Schools
TUTUILA															
Pago Pago		14.87	11.41	13.27	6.18	9.69	4.54	10.72	10.59	11.10	6.51	13.67			U.S. Naval Station

NOTES:

(1) The rim of the gauge is generally at a height of one or two feet above the ground.

(2) Most of the gauges in use are of the Meteorological Office (London) pattern with a deep funnel five inches in diameter. A tapered glass measure reading in inches is used.

(3) Some of the sites are not strictly conventional owing to the profuse growth of vegetation i.e. surrounding objects may be nearer the gauge than twice their own height.

(4) The readings of the rain gauge at many of the stations given in this table are made in the morning and entered ("thrown back") to the previous day while at other stations the readings are entered to the same day.

DURATION OF BRIGHT SUNSHINE, 1941

Aggregate duration of bright sunshine occurring between the exact hours of apparent solar time and the percentage of possible duration of sunshine for the month.

Hour of day	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	Totals	%
M o n t h																
January	1.2	17.6	20.4	23.3	22.4	21.9	20.7	22.9	20.0	16.3	16.1	13.9	10.7	0.8	228.2	57
February	0.0	7.9	14.9	18.7	19.6	16.3	15.5	13.6	12.6	13.0	11.1	7.9	3.2	0.0	154.3	44
March	0.0	13.5	24.1	26.1	25.8	25.7	24.4	23.9	22.4	21.0	18.3	13.8	7.3	0.0	246.3	65
April	0.0	8.8	20.4	21.5	22.6	23.9	24.9	25.1	23.0	21.8	24.4	19.5	5.4	0.0	241.3	68
May	0.0	5.2	18.4	20.3	20.1	24.8	24.8	25.1	22.1	20.7	18.6	14.3	3.7	0.0	218.1	61
June	0.0	6.4	20.8	25.7	26.8	27.1	24.4	23.1	23.6	23.1	18.9	16.4	3.7	0.0	240.0	71
July	0.0	4.7	17.9	18.9	21.6	22.4	22.1	22.2	21.8	19.7	20.1	15.9	4.0	0.0	211.3	62
August	0.0	7.9	21.7	23.8	26.8	26.0	25.7	22.4	21.7	22.5	21.0	20.2	8.2	0.0	247.9	69
September	0.0	6.6	20.8	22.7	26.1	25.6	23.2	23.8	21.0	20.4	19.5	17.6	7.5	0.0	234.8	65
October	0.0	15.1	22.7	23.3	24.0	24.6	23.2	22.4	22.1	21.5	20.3	18.0	10.6	0.9	248.7	65
November	0.5	15.2	22.8	23.1	23.3	23.0	22.0	22.5	23.1	21.7	20.8	17.7	11.6	0.7	248.0	65
December	0.4	13.4	18.4	20.8	22.9	25.3	21.7	20.5	22.4	19.4	17.3	16.1	12.3	1.3	232.2	58
T o t a l s	2.1	122.3	243.3	268.2	282.0	286.6	272.6	267.5	255.8	241.1	226.4	191.3	88.2	3.7	2751.1	62

ANALYSIS OF SUNSHINE, 1941

Clear Days - more than 7 hours bright sunshine

Cloudy Days - less than 3 hours bright sunshine

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Clear	19	12	24	22	15	23	20	24	19	22	24	20	244
Partly Cloudy	8	6	3	5	14	4	4	5	9	5	5	8	76
Cloudy	4	10	4	3	2	3	7	2	2	4	1	3	45

WIND, 1941

Means of Hourly Values of Wind Speed in Miles per hour.

Hour / Month	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
January	2.5	2.4	2.3	2.1	2.8	3.4	2.8	1.8	3.5	6.7	8.3	8.4	8.6	8.7	8.5	8.0	8.3	7.8	6.1	3.7	2.5	2.2	2.3	2.5	4.9
February	5.1	5.3	5.5	4.8	4.9	4.9	3.9	4.9	5.7	8.6	10.7	11.3	12.7	11.8	11.6	11.1	10.6	8.3	7.3	6.0	4.3	4.5	3.9	4.3	7.2
March	4.7	4.5	4.3	4.1	4.6	4.5	4.5	4.1	5.2	7.4	9.0	10.1	10.7	10.6	11.2	11.0	10.2	9.8	8.3	6.0	4.4	4.1	3.5	4.1	6.7
April	3.9	4.1	4.3	4.3	5.4	4.3	4.6	4.1	7.0	10.0	11.0	12.0	13.0	13.5	13.2	12.7	12.5	11.8	9.0	6.7	5.5	4.6	4.6	4.6	7.8
May	5.5	4.6	4.1	4.0	4.3	3.7	4.1	5.1	5.7	7.8	9.3	10.9	11.0	11.9	11.7	11.4	10.2	9.3	8.6	6.8	5.4	5.3	6.1	5.6	7.2
June	3.8	3.5	3.9	4.3	3.8	4.3	4.5	4.4	5.0	7.7	9.0	9.9	10.9	11.2	11.7	11.1	11.3	10.1	8.5	5.7	5.1	5.2	5.0	4.3	6.8
July	7.7	8.1	7.5	7.8	8.7	9.0	7.7	7.6	7.9	10.1	12.1	13.0	13.9	13.6	13.3	12.6	12.6	12.0	10.1	7.2	7.7	7.1	7.7	7.7	9.7
August	5.5	5.0	5.1	5.2	4.3	5.2	4.3	5.9	8.1	10.1	11.5	12.9	14.0	14.0	13.7	13.0	12.2	11.3	10.6	7.9	7.2	6.8	6.2	6.3	8.6
September	7.5	6.8	6.6	6.4	6.5	6.8	6.4	8.3	10.0	12.2	14.8	15.2	15.9	16.1	15.9	15.8	14.9	14.3	12.4	9.7	7.8	8.1	8.1	7.8	10.6
October	4.8	4.7	4.5	4.5	5.1	5.1	4.9	5.5	8.4	9.2	11.0	12.2	12.5	12.5	11.9	11.3	11.3	10.5	9.2	6.8	5.5	5.3	4.6	5.9	7.8
November	6.0	6.3	5.1	5.4	4.8	6.6	6.4	8.2	11.0	13.2	15.3	16.4	16.8	16.9	17.2	16.5	15.2	14.1	12.3	9.7	7.2	5.7	7.1	6.6	10.4
December	3.4	3.2	2.7	3.0	3.0	3.3	3.3	4.6	6.0	8.2	9.9	12.0	12.6	12.2	12.5	12.2	11.2	10.7	8.9	6.7	5.6	5.6	5.3	5.4	7.1
Year	5.0	4.9	4.7	4.7	4.9	5.1	4.8	5.4	6.9	9.3	11.0	12.0	12.7	12.7	12.7	12.2	11.7	10.8	9.3	6.9	5.7	5.4	5.4	5.4	7.9
Wet Season 1940-41	4.1	4.3	4.1	3.5	3.9	4.4	3.9	4.1	5.9	8.6	10.4	11.1	11.3	11.1	10.6	10.1	9.9	8.5	7.5	5.5	4.7	3.9	3.6	3.6	6.6
Dry Season 1941	5.6	5.3	5.1	5.3	5.3	5.5	5.1	5.7	6.7	8.9	10.5	11.7	12.5	12.7	12.6	12.0	11.6	10.7	9.5	6.9	6.3	6.1	6.3	6.0	8.1

PERCENTAGE FREQUENCIES OF WINDS, 1941

(This table is based on observations every three hours commencing at midnight)

Month	Calm	N	NE	E	SE	S	SW	W	NW	Variable	Number of observations
January	1	4	3	33	18	27	9	2	2	1	248
February	3	10	2	18	13	21	13	6	13	1	224
March	6	4	5	24	12	25	14	4	6	0+	248
April	0+	1	3	42	23	25	6	0	0+	0	240
May	3	3	3	32	24	23	9	0+	2	1	248
June	3	1	3	41	25	24	3	0	0+	0+	240
July	1	1	6	43	30	16	2	1	0	0+	248
August	2	2	5	43	25	18	4	1	0+	0	248
September	1	0+	1	54	26	11	6	1	0+	0+	240
October	3	1	9	35	19	22	7	2	1	1	248
November	3	1	3	40	23	17	10	2	1	0	240
December	4	7	6	35	17	16	9	2	4	0	248
Y e a r	2	3	4	37	21	20	8	2	2	1	2920

MONTHLY WIND SPEED AND DIRECTION, 1941

Speed in miles per hour

M o n t h	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Mean speed for month	4.9	7.2	6.7	7.8	7.2	6.8	9.7	8.6	10.6	7.8	10.4	7.1	7.9
Greatest speed in Gust	29	45	63	40	38	35	39	35	40	44	57	38	63
Direction of Gust	E	NNW	NW	ENE	E	ESE	E	ESE	E	N	SSW	E	NW
Greatest speed for one hourly period	22	32	44	24	25	27	30	26	30	34	35	26	44
Prevailing direction of wind 9 a.m.	E	ESE	ESE	ESE	ESE	E	E	ESE	ESE	ESE	E & ESE	E	ESE
3 p.m.	E	E	E	E	E	E	E	E	E	E	E	E	E
Most frequent direction of Wind (Eight points only).	E	S	S	E	E	E	E	E	E	E	E	E	E

THUNDER AND LIGHTNING, 1941

Month	Number of Days with		Total
	Lightning only	Lightning and Thunder	
January	3	5	8
February	4	5	9
March	4	5	9
April	9	3	12
May	3	2	5
June	2	1	3
July	1	0	1
August	2	1	3
September	2	1	3
October	1	3	4
November	4	2	6
December	9	6	15
Y e a r	44	34	78

Pilot Balloon Ascents 1941

The usual method of observing the balloon with a single theodolite was used during 1941, assuming a constant rate of ascent calculated from the formula.

$$V = qL^{\frac{1}{2}}/(L+W)^{\frac{1}{3}}$$

where
V = rate of ascent in feet per minute
q = 275
L = free lift in grams
W = weight of balloon in grams.

The rate of ascent (V) used normally was 500 feet per minute but occasionally 400 feet per minute was adopted. Flights in which the balloons had the latter upward velocity (400 ft/min) have been marked thus,(+). On a few occasions rates of ascent different from either 500 or 400 feet per minute were used: these flights have been marked thus, (‡).

The surface winds are taken from the anemometer, the vane of which is at a height of 80 feet above the ground.

The measurements are expressed in the form recommended in Resolutions LIV and LVII of the Commission for Synoptic Weather Information at Salzburg, September 1937. (O.M.I. Publication No. 37, pages 53 and 57). Values have also been given at the additional heights recommended in Resolution XXXIX of the Meteorological Conference for the Southwest Pacific, 1937 (O.M.I. Publication No. 42, page 37).

Details of the form are as follows:

$$YYGG \quad HHddv_5 \quad HHddv_5 \quad ----- \quad ----- \quad C_L C_M HHM$$

where
YY = Greenwich day of month; GG hour of Greenwich time

HH = The height in hectametres of the centre of a layer about 300 metres thick. When the height of the balloon was above 9900 metres the hundreds digit of the code figure for HH was dropped. (e.g. when the height was 10000 metres HH was given as 00). It should be noted that this is a departure from the way in which high flights were coded in the 1940 report.

In the original computations the heights are expressed in feet and hence a certain approximation is made when converting to metres. The order of this approximation may be seen from the table of "Selected Heights" below, which gives the actual heights and the published heights. The table is the same as that given in 1940 except for one amendment: the actual height selected for publication as 10 hectametres, when the rate of ascent is 500 feet per minute, is now 1067 metres instead of 914 metres. In cases where the published heights do not occur in the table of selected heights, it may be assumed that the order of approximation is the same as that shown in the table.

dd = direction of wind using 36 points; thus 270° is expressed as 27.

v_5 = average wind velocity in the layer expressed in code (see below)

$C_L C_M$ = usual information about clouds

M = reason for the ending of the observation (see below)

Table of Selected Heights.

Published Height		Actual Height	
Hectametres	Metres	Rate of ascent 400 ft./min. metres.	Rate of ascent 500 ft./min. metres.
02	200	244	152
05	500	488	457
10	1000	975	1067
20	2000	1951	1981
30	3000	3048	3048
40	4000	4023	3962
50	5000	4999	5029
60	6000	5974	5944
70	7000	6949	7010
80	8000	8047	7925
90	9000	9022	9144
100	10000	9997	10058
110	11000	10973	10973
120	12000	11948	11887
130	13000	13045	13106
140	14000	14021	14021
150	15000	14996	14935
160	16000	15971	15850
170	17000	16947	17069
180	18000	18044	17983

Code for V_5 in miles per hour.

dd = 01 -36	
v_5	m.p.h.
0	0- 1
1	2- 4
2	5- 7
3	8-10
4	11-14
5	15-17
6	18-20
7	21-23
8	24-26
9	27-29

dd = 51 - 86	
v_5	m.p.h.
0	30-32
1	33-35
2	36-38
3	39-41
4	42-45
5	46-48
6	49-51
7	52-54
8	55-57
9	58-60

i.e. if the wind is equal to or greater than 30 miles per hour then 50 is added to dd and the code on the right above is used for v_5.

Code for M in last group

0 = observation abandoned
1 = obscured by passing clouds
2 = balloon burst
3 = lost in haze
4 = lost near the sun
5 = entered cloud layer
6 = lost accidentally
7 = obscured by rain
8 = confused with star
9 = for use when none of the above apply.

January

0109 00191 02231 05201 10182 41125
0121 00195 02175 05184 10193 20225 29236 40302
0209 00161 02161 05202 10234 17263 4x185
0223 00050 02081 05162 10253 20302 23313 30285 10320
0309 00171 02122 05053 10081 14282 20062 23334 30334 40330
0323 00083 02084 05092 10052 14363 20368 30364 40017 44055 50025 60022 70064 76104 80113 90066 00077 10058 20531 10299
0409 00150 02122 05093 10052 20036 30014 40015 40409
0423 00181 02162 05114 10065 20173 30014 22345
0510 00180 02291 05291 10052 20053 34335 40345 50018 40581
0609 00191 02182 05090 10101 17283 20263 30274 40371
0623 00102 02084 05051 10000 20283 24204
0709 00131 02113 05116 09115 62115
0723 00116 02117 05116 10134 14114 82155
0809 00113 02125 05118 10125 20064 30269
0823 00085 02095 05105 08094 72105

January (Contd.)

0909	00075	02108	05097	06075	62087		
0923	00123	02115	05105	10104	20094	23032	30051
	41093	26479					
1009	00111	02103	05094	10072	14052	20081	30082
	23349						
1023	00091	02102	05000	10192	20221	26131	35295
1109	00000	02311	05341	10212	20182	30000	38000
	43409						
1123	00083	02xxx	05xxx	10xxx	12222	20243	30281
	46350						
1209	00181	02271	05050	10230	20162	21154	30173
	37202	23389					
1222	00093	02093	05073	10063	20043	30064	36305
1310	00141	02102	05074	10074	20053	20262	
1323	00091	02093	05063	10062	20033	30023	35034
	36361						
1409	00121	02xxx	05103	10093	34125		
1501	00101	02093	05092	08361	10361	36145	
1509	00171	02xxx	05062	10072	36128		
1523	00072	02073	05092	10133	20126		
1609	00170	02114	05106	10083	20115	34215	
1623	00095	02105	05102	10183	36125		
1709	00111	02xxx	05121	10135	40129		
1723	00093	02103	05142	06192	10173	20152	
1809	00152	02093	05105	10103	20123	30182	00339
1823	00104	02105	05095	10124	20094	30103	38062
	35415						
1909	00000	02111	05143	10134	20180	44209	
1922	00085	02109	05096	10152	10125		
2009	00191	02142	05000	10212	20202	30181	00340
2023	00083	02114	05074	10132	20213	30282	20499
2109	00181	02134	05116	10094	20122	30152	40245
	50245	10539					
2123	00095	02096	05096	10114	20193	30122	44332
	53192	30559					
2209	00161	02114	05105	10093	15022	20012	30202
	35272	10379					
2223	00085	02095	05095	10152	20063	32251	38271
	44332	10479					
2309	00151	02123	05104	10085	20073	40245	
2323	00083	02085	05085	09074	80111		
2409	00200	02113	05104	10104	20112	40249	
2423	00081	02072	05042	10042	20082	30033	53083
	20553						
2509	00171	02133	05104	10093	20092	30112	35133
	41559						
2523	00171	02202	05132	10084	82122		
2609	00151	02122	05094	10084	20075	30114	40093
	40449						
2622	00092	02084	05083	10083	20073	30083	20340
2709	00190	02111	05063	10053	30171		
2723	00291	02292	05324	10333	20334	30303	86619

January (Contd.)

2809	00000	02xxx	05xxx	09303	20323	24315	30269
2823	00321	02332	05323	10325	20316	83272	
2909	00041	02xxx	05022	10013	20333	30316	30409
2923	00311	02323	05312	10335	20356	30344	87365
3009	00071	02043	05012	10352	20333	30334	20430
3023	00072	02074	05064	10054	20044	86211	
3109	00161	02113	05084	10056	00189		
3123	00103	02094	05084	10093	14064	20055	30054
	20342						

February

0109	00121	02114	05106	10095	15095	90171	
0123	00106	02116	05107	10095	20107	30105	36329
0210	00151	02114	05115	10153	20172	10249	
0222	00096	02097	05104	10115	20104	20232	
0309	00190	02102	05123	10113	20103	30114	10329
0323	00103	02094	05114	10102	20152	30097	24355
0409	00071	02093	05084	10063	20182	62241	
0423	00111	02113	05105	10085	32145		
0509	00191	05042	10083	31125			
0523	00063	02054	05044	10037	37125		
0609	00180	02142	05072	10081	73125		
0701	00000	02281	05012	10032	52093		
0722	00322	02323	05312	10284	20202	62215	
0809	00181	02242	05282	10299	51125		
0823	00305	02296	05299	10333	20332	30252	62345
0909	00363	02354	05345	10339	61125		
0923	00337	02830	91055				
1009	00314	02325	05327	10309	15810	26175	
1023	00334	02325	05326	08317	76095		
1109	00312	02302	05292	08231	10271	20230	30131
	34101	33389					
1123	00361	02343	05322	80085			
1209	00191	02121	05071	10311	20162	27202	23299
1223	00021	02021	05361	10322	20314	41291	47251
	52311	25565					
1309	00190	02241	05263	10283	20274	26299	23359
1323	00283	02273	05252	10253	15263	20171	
1409	00362	02051	05091	10363	20284	30266	4x341
1423	00303	02304	05306	10295	20297	30299	24433
1509	00181	02191	05252	10277	20305	42279	
1522	00312	02313	05326	10308	37145		
1612	00190	02121	05342	10324	14314	62151	
1623	00820	02823	05829				
1809	00345	02297	05297	71085			
1823	00354	02345	05355	10355	81115		
1909	00200	05324	91085				
1923	00042	02022	05022	08363	21105		
2009	00021	02012	05012	00013	40145		
2023	00041	02051	05031	09042	15043	20231	

February (Contd.)

2109	00201	02101	05081	10063	20054	30066	40369
2123	00083	02074	05093	10093	20075	53025	
2209	00201	02152	05124	10094	20084	40216	
2223	00086	02096	05106	10124	20146		
2310	00181	02xxx	05114	10095	20114	30125	40134
	50124	20509					
2322	00105	02095	05115	10116	20104	36239	
2409	00201	02122	05124	10096	20095	40239	
2423	00085	02085	05096	10105	20124	30115	37117
	30385						
2509	00191	02123	05094	10082	20031	41215	
2523	00095	02095	05105	10115	20104	30104	37093
	41113	33432					
2610	00141	02113	05103	10062	20032	30011	40328
2623	00104	02106	05107	10104	14094	80155	
2709	00160	02124	05117	10119	40189		
2723	00112	02125	05108	10109	20650	23651	83249
2809	00131	02124	05106	10095	18105	20209	
2823	00095	02095	05124	10154	20125	26117	83275

March

0109	00092	02115	05126	10125	4x145		
0310	00292	02285	05277	10279	14298	20782	23793
	40249						
0323	00305	02295	05305	87095			
0409	00000	02282	05283	10273	40109		
0509	00000	02102	05301	62065			
0519	00000	02092	05053	10172	36112		
0523	00000	02061	05132	10171	20131	10214	
0609	00000	02151	05000	10263	20265	40219	
0623	00021	02xxx	05321	08231	10094		
0709	00000	02150	05011	10360	26119		
0723	00092	02084	05094	10000	20332	86271	
0809	00000	02081	05022	10342	18273	26189	
0823	00330	02352	05321	10251	20274	30235	23365
0910	00000	02161	05333	10344	20333	30302	51379
0922	00332	02313	05293	10306	20317	30232	
1009	00000	02090	05321	10293	20314	30335	40359
1023	00361	02361	05012	10343	20364	10262	
1109	00180	02133	05114	10083	20073	30053	10379
1123	00105	02097	05107	10085	20087	30088	76415
1209	00132	02115	05107	10087	20581	26572	10309
1223	00105	02107	05125	10127	20109	30109	10409
1309	00121	02114	05117	10109	20580	3005x	10329
1323	00104	02107	05097	10108	20088	10279	
1409	00132	02114	05118	10109	14339		
1423	00104	02094	05107	10107	20097	13275	
1509	00151	02124	05108	32085			
1523	00101	02092	05093	10083	20065	30077	10349
1610	00190	02123	05107	10095	18095	36205	

March (Contd.)

	1623	00093	02094	05095	10075	20086	26103	30094
		40082	50073	60123	78147	24802		
	1709	00190	02111	05114	10124	18123	10202	
	1723	00095	02098	05107	10117	20107	30124	10349
	1809	00000	02123	05125	10105	20106	30117	20389
	1823	00096	02095	05114	10133	20095	30591	10439
	1909	00161	02113	05125	10104	70135		
	1923	00094	02085	05096	10095	20074	29094	94309
	2009	00200	02103	05094	10083	20104	10269	
(+)	2023	00084	02084	05082	10112	15115	10162	
	2109	00191	02124	05107	10105	20123	20219	
(+)	2123	00084	02085	05096	10072			
	2209	00191	02123	05115	10115	20133	28164	20289
(+)	2223	00084	02087	05086	10103	10172		
	2310	00161	02xxx	05151	10164	20143	29134	00309
	2322	00341	02352	05131	09192	10099		
(‡)	2423	00361	02012	05311	08221	20092		
	2509	00141	02114	05105	10115	20123	30173	40339
(‡)	2523	00073	02074	05094	10133	15115	10172	
	2609	00170	05104	10104	20115	41245		
(‡)	2623	00094	02085	05061	10111	20185	30222	
(‡)	2723	00093	02092	05102	10182	20174	10222	
	2823	00071	02052	05103	10152	20111		
	2909	00161	02123	05103	10131	40175		
	2923	00072	02082	05082	10064	20092	30092	10352
	3010	00190	02102	05074	10055	20046	30029	40329
	3023	00084	02076	05084	10074	20064	30024	24340
	3111	00000	02112	05085	30065			

April

	0102	00091	02052	05xxx	10025	20037	26046	36279
	0109	00201	02122	05043	10024	15035	40179	
	0123	00113	02094	05073	10072	20043	30342	10375
	0210	00161	02114	05094	10084	20072	30053	20329
	0223	00102	02087	05096	10125	20095	30085	10383
	0309	00000	02113	05134	10137	20079		
	0323	00108	02097	05115	10135	20106	20499	
	0409	00181	02133	05114	10116	20127	10239	
	0423	00096	02096	05117	10117	20086	30064	76379
	0510	00132	02115	05118	10107	20094	29096	33309
(+)	0523	00097	02600	05109	10098	20026	10349	
	0610	00097	02097	05590	10098	20086	10219	
(+)	0623	00103	02107	05096	10085	23162		
	0710	00160	02114	05117	10118	17117	10189	
(+)	0723	00094	02106	05124	10117	20106	20269	
	0809	00112	02114	05095	10078	20560	20325	
(+)	0823	00106	02107	05107	10095	20064	82279	
	0909	00131	02134	05095	10123	20154	23295	
	0923	00096	02095	05104	10144	20134	30124	10332
	1009	00230	02121	05134	10145	20127	20209	

April (Contd.)

(+)1023 00351 02092 05124 10096 16074 80205
1109 00181 02114 05105 10065 20014 10269
(+)1123 00103 02114 05115 10113 86125
1210 00181 02104 05096 10117 20134 30143 40172
15439
1222 00113 02115 05097 10079 20078 92231
1311 00082 02073 05054 10035 18035 23205
1322 00072 02053 83045
1411 00180 02132 05071 10025 20024 33209
1423 00083 02104 05084 10074 20062 24022 30083
40062 23469
1509 00131 02104 05075 10065 20083 23114 30103
16349
(+)1523 00092 02084 05093 10114 20083 30042 10439
1609 00131 02114 05107 10144 20094 30087 40339
(+)1623 00104 02095 05097 10076 20057 30104 10339
1709 00000 02133 05115 10094 20083 30086 40309
(+)1723 00105 02097 05107 10115 20143 30153 40222
10489
(+)1809 00000 02104 05105 10094 20093 30073 40329
(+)1823 00105 02097 05097 07098 24095
1909 00132 02104 05107 10114 20094 40269
(+)1923 00115 02106 05096
2009 00131 02104 05107 10095 20084 26077 80279
2022 00098 02099 05105 10131 20044 30056 40055
50045 20589
(+)2109 00171 02093 05125 10097 60129
(+)2123 00106 02106 05106 83065
(+)2210 00125 02107 20065
(+)2223 00104 02095 05095 10085 80162
(+)2310 00171 02094 40052
(+)2323 00094 02094 05095 10084 80152
(+)2409 00181 02112 05083 10023 20052 23073 30054
10328
(+)2423 00081 02072 05072 10092
(+)2509 00181 02093 05082 10063 20063 30065 10348
(+)2523 00081 02053 05053 10044 18025 36192
(+)2610 00141 02104 05094 10074 20076 30553 20309
(+)2709 00181 02113 05085 10092 15262 82155
(+)2723 00082 02073 05082 10071 20111 80229
(+)2809 00181 02092 05092 10111 20331 40279
(+)2823 00341 02352 05302 10211 15231 20272
(+)2909 00181 02252 05252 08253 20092
(+)2923 00071 02072 xxxxx
(+)2923 00071 02072 05102 11182 10132
(+)3010 00181 02114 05104 30069
(+)3023 00114 02094 05098 10088 86155

May

(+)0109 00132 02115 05105 10096 13108 70145
(+)0123 00097 02127 05125 10137 20162 30242 20329

May (Contd.)

(+)	0209	00141	02126	05117	10126	20137	20208	
(+)	0223	00116	02612	05098	10074	20053	30022	10409
(+)	0309	00151	02115	05117	10097	16088	20169	
(+)	0322	00105	02114	05133	10162	20212	26221	
(+)	0409	00163	02125	05116	10117	10129		
(+)	0422	00107	02108	05116	10118	84149		
(+)	0509	00131	02117	05118	10119	20000	00209	
(+)	0522	00093	02114	05124	10116	16097	10172	
(+)	0609	00141	02124	05127	10116	20108	41245	
(+)	0622	00000	02153	05144	62065			
(+)	0709	00121	02114	87025				
(+)	0723	00095	02108	05108	10098	19064	41192	
(+)	0809	00121	02104	05095	10054	20024	30015	87309
(+)	0822	00093	02093	05093	10051	17354	86182	
	0910	00171	02112	05113	10072	15052	34155	
(+)	0922	00093	02081	05075	10074	18064	86202	
1	1010	00122	02104	05085	10064	20053	24072	94245
(+)	1022	00106	02087	46041				
(+)	1109	00152	02106	05097	50085			
(+)	1122	00096	02106	05115	10106	17092	36182	
(+)	1222	00098	02108	05601	10610	86175		
(+)	1310	00095	02097	05098	43099			
(+)	1322	00101	02094	05074	10084	80125		
(+)	1410	00114	02115	05106	10095	15097	43195	
(+)	1422	00096	02098	05097	30065			
(+)	1522	00107	02109	05109	10109	20129		
(+)	1609	00133	02117	05108	10108	40128		
(+)	1622	00106	02107	05108	10119	20159		
(+)	1709	00161	02093	05094	40061			
(+)	1722	00111	02115	34025				
(+)	1809	00191	02124	05116	10105	20092	30084	40281
		50163	40519					
(+)	1822	00094	02084	05123	10114	20083	30062	40183
		20472						
(+)	1909	00200	02174	05124	10104	20082	43241	
(+)	1922	00131	02113	05074	10064	20134	86212	
(+)	2009	00141	02103	05073	10062	20062	28062	20299
(+)	2022	00102	02093	05094	10093	15053	86162	
(+)	2109	00171	02092	05103	10062	20013	25022	20269
(+)	2122	00052	02062	05081	10141	12252	16292	86172
(+)	2209	00161	02221	05231	10031	20052	22013	70231
(+)	2222	00000	02281	05272	10293	15314	25162	
(+)	2309	00181	02092	05073	09073	6x101		
(+)	2322	00131	02092	05082	10051	16363	25172	
(+)	2409	00171	02111	05091	10031	20335	5x221	
(+)	2422	00000	02031	05051	10261	20335	85262	
(+)	2509	00161	02091	05091	10261	14203	62141	
(+)	2522	00291	02281	05311	10323	20352	30335	37305
(+)	2609	00181	02071	05021	10071	14342	20324	30297
		10309						
(+)	2622	00311	02302	05322	10342	86135		

May (Contd.)

(+)	2709	00272	02232	05360	10331	27102		
(+)	2722	00321	02321	05270	10282	40125		
(+)	2809	00161	02341	05350	10362	40102		
(+)	2822	00352	02332	05272	10241	13011	87155	
(+)	2909	00202	02162	05082	10065	57155		
(+)	2922	00311	02282	05242	10111	18315	87205	
(+)	3009	00200	02xxx	05xxx	10122	20303	41205	
(+)	3022	00000	02000	05191	84074			
(+)	3109	00095	02126	05163	10128	20074	71205	
(+)	3122	00116	02116	05115	10115	84125		

June

(+)	0109	00131	05115	10082	17362	44172		
(+)	0122	00111 23403	02104	05094	10084	20084	30072	38121
(+)	0210	00132 30279	02105	05105	10095	12084	20063	26052
(+)	0222	00094	02094	05085	10094	20084	36265	
(+)	0309	00141	02115	05105	10095	15084	80183	
(+)	0322	00103	02105	05106	10094	86155		
(+)	0409	00161	02114	05125	10114	20163	25163	80283
(+)	0422	00091	02092	05092	10162	20144	30124	
(+)	0509	00162	02000	05000	10121	20124	10243	
(+)	0522	00351	02342	05301	10101	13182	80149	
(+)	0609	00161	02252	05252	10205	20311	47273	
(+)	0622	00081	02051	05081	10181	18293	10206	
(+)	0709	00161	02104	05094	10093	20284	28305	10299
(+)	0722	00092	02104	05093	10102	10122		
(+)	0809	00181	02092	05061	10081	20362	10219	
	0822	00000	02182	05162	20082			
	0911	00192	02122	05125	10105	20093	30271	23359
(+)	0922	00115	02116	05125	10134	80115		
	1009	00114	02127	05127	10104	17082	10209	
(+)	1022	00106	02107	05124	10183	80132		
	1109	00181	02123	05114	10181	20314	40239	
(+)	1122	00105	02107	05117	10094	83119		
	1209	00142	02104	05085	10132	20342	29274	13309
(+)	1222	00104	02094	05094	10092	50155		
	1309	00116	02094	05095	43089			
(+)	1322	00105	02105	05105	10092	50135		
	1410	00122 40359	02116	05117	10115	20143	30154	34182
	1422	00096 20499	02096	05116	10134	20115	30144	40174
	1509	00161	02124	05117	10107	40159		
	1522	00108	02109	05108	10115	20114	20243	
	1609	00095	02907	05087	10077	14075	20073	10211
	1622	00092	02083	05084	10162	20231	20216	
	1709	00151	02114	05084	10093	51129		
	1722	00051	02012	05301	10202	20334	27272	

June (Contd.)

1822	00000	02081	05132	10351	20285	29317	10306
1922	00072	02073	05092	10052	20322	30263	40262
	20412						
2022	00092	02082	05072	10032	10156		
2122	00083	02083	05093	10091	20032	30044	40053
	50023	60053	20610				
2222	00105	02106	05107	10097	20075	30104	40064
	50022	60000	70341	80362	90141	00152	16070
2322	00095	02085	05086	10078	20067	90241	
2422	00096	02097	05107	10125	20104	30084	40048
	50025	60054	20610				
2522	00086	02086	05065	24061			
2611	00074	02084	05085	10065	14046	10159	
2621	00121	02112	05064	10014	20346	30014	40003
	83479						
2722	00094	02095	05085	10095	85185		
2822	00094	02096	05096	10085	20045	30075	20379
3023	00091	02112	05082	10053	20033	27345	27315

July

0122	00113	02104	05095	10064	20352	30351	40085
	50099	23525					
0222	00061	02052	05051	10102	20052	80215	
0322	00094	02105	05114	10112	20172	30191	40262
	50282	60283	70306	80307	87307	24889	
0422	00086	02097	05106	10097	20074	30053	40032
	50362	60363	86610				
0603	00182	02144	05134	08146	43092		
0622	00126	02117	05630	10148	53151		
0809	00114	02125	05127	24092			
0822	00113	02114	05115	10108	5x125		
0921	00084	02093	05103	10113	20213	30375	40268
	50245	60253	70234	80226	90711	40919	
1022	00074	02095	05075	10133	20262	30256	40237
	20435						
1122	00095	02112	05125	10135	20124	30153	40156
	50064	60044	70034	80067	90083	00204	20049
1222	00063	02074	05074	10044	20342	30093	40067
	20430						
1322	00050	02061	05231	10232	18301	24204	
1922	00105	02116	05117	10098	20151	30062	86325
2009	00098	02109	05600	10098	20082	30323	40279
	50276	57529					
2022	00096	02106	05108	10086	18076	34209	
2209	00151	02134	05095	6x087			
2223	00094	02105	05086	10077	87175		
2309	00131	02114	05106	10094	15054	20054	30057
	47359						
2409	00112	02115	05108	10098	30151		
2422	00107	02105	05125	10116	18136	83205	

July (Contd.)

2509	00114	02107	05600	10590	17097	80208	
2523	00114	02114	05114	09610	80111		
2609	00113	02127	05118	10600	20085	40239	
2622	00109	02109	05109	09593	20115		
2709	00098	02601	05590	10089	20065	40219	
2723	00118	02099	05600	10115	14152		
2809	00097	02108	05099	10087	20098	40211	
2822	00094	02094	05094	10077	10126		
2909	00095	02097	05096	10106	20104	21201	
2922	00106	02105	05095	10075	80175		
3022	00095	02109	05107	10113	80175		
3109	00161	02123	05104	10104	80105		
3122	00094	02105	05096	10115	20122	24012	80261

August

0109	00161	02112	05094	10095	70155		
0122	00094	02096	05085	10065	20035	30022	38364
	80401						
0209	00131	02114	05096	10084	20062	26269	
0222	00094	02096	05085	10086	80186		
0309	00073	02073	05074	26075			
0322	00000	02052	05362	10241	20292	70210	
0408	00191	02141	05091	10102	20083	26114	30114
	43009						
0422	00092	02092	05141	10152	20052	30282	40335
	50335	60354	10611				
0509	00191	02xxx	05251	10132	20193	30292	10303
0522	00094	02114	05135	10134	21353	30273	40284
	50284	60314	66305	24699			
0609	00095	02117	05126	10134	17073	4x205	
0622	00095	02109	05124	10135	20083	30231	40323
	50274	60294	13670				
0709	00112	02114	05117	10107	18084	23203	
0722	00094	02105	05095	10053	52155		
0809	00096	02105	05108	10095	15063	8x175	
0909	00108	02109	05109	08088	73095		
0922	00103	02105	05077	87065			
1009	00114	02085	05066	10034	14355	80155	
1022	00092	02073	8x055				
1109	00161	02113	05094	10151	15103	20093	29054
	40354	43419					
1122	00093	02084	05104	10094	20034	44211	
1209	00181	02142	05114	10114	20083	30042	40104
	43164	50042	10569				
1222	00116	02107	05097	10105	20075	30072	20372
1309	00181	02114	05125	10118	20115	30124	35054
	40025	44066	20499				
1322	00086	02107	05117	10125	15108	20099	40249
1409	00125	02116	05108	10119	4x145		
1422	00098	02107	05118	10155	15094	20106	30079
	40056	50046	60069	24649			

August (Contd.)

1509	00115	02118	05118	10089	15024	20094	30087
	40086	10439					
1522	00096	02106	05099	10088	20065	26085	30076
	35078	10373					
1609	00132	02124	05096	08085	30095		
1622	00105	02096	05097	10095	40125		
1709	00104	02105	05095	10105	50125		
1723	00102	02112	05194	10174	20152		
1809	00111	02134	05144	10157	20167	30135	40125
	10469						
1822	00084	02084	05093	10144	14139	10176	
1909	00161	02113	05105	10106	20106	30094	20309
1922	00113	02104	05094	10063	20366	30065	40056
	50049	25521					
2010	00131	02134	05107	10076	20043	90209	
2022	00105	02105	05096	09077	80115		
2109	00095	02104	3x055				
2122	00000	02051	05012	10014	90145		
2209	00170	02121	05172	10252	30302	20239	
2222	00041	02052	05062	08182	80095		
2322	00094	02095	05351	10143	20072	30333	40294
	50284	80521					
2409	00100	02072	05122	10112	87145		
2423	00126	02107	05117	08163	53115		
2509	00101	02112	05113	10134	15121	40175	
2522	00095	02084	05111	10182	17221	84181	
2609	00163	02144	06144	10163	20264	30274	40194
	50154	60094	13643				
2622	00074	02084	05142	10193	14214	80151	
2709	00141	02124	05117	10112	20246	30247	40264
	41419						
2722	00094	02106	05105	10083	20232	80266	
2809	00141	02124	05107	10094	20112	30222	40212
	50354	60353	20679				
2822	00105	02108	05097	10096	20314	30162	40352
	50352	60364	67364	10699			
2909	00161	02114	05096	10193	20334	30132	40073
	50035	40553					
2922	00095	02095	05096	10124	17362	20093	30022
	40054	40441					
3009	00181	02113	05125	10127	20064	30055	43373
3022	00104	02096	05086	10075	20066	30094	40054
	23479						
3109	00141	02114	05086	10055	15057	30171	
3122	00094	02085	05095	10114	20172	30083	38141
	20432						

September

0109	00141	02114	05095	10106	90145	
0122	00106	02108	05109	10116	14610	83151

September (Contd.)

0209	00113	02115	05128	10610	15109	40185	
0222	00104	02105	05117	10107	20152	83215	
0309	00123	02116	05118	10114	20194	30251	38132
	20409						
0322	00095	02107	05114	10105	20171	30111	40333
	50364	60345	66335	13699			
0422	00096	02109	05106	10094	20364	30352	40314
	50346	60276	70277	80319	20842		
0509	00112	02114	05107	10094	15084	7x175	
0522	00112	02115	05095	10064	20096	30085	40052
	45032	83471					
0610	00103	02105	05106	10084	20072	30043	37012
	30409						
0622	00105	02098	05116	10115	20082	86212	
0709	00131	02114	05105	10084	15064	20112	26053
	23285						
0722	00094	02095	05093	10182	20072	30362	84309
0809	00161	02114	05104	10052	20011	23352	30322
	36369						
0822	00094	02095	05093	10022	15021	40185	
0909	00171	02121	05023	10363	20344	30324	86300
0922	00051	02052	05341	10323	19313	34205	
1009	00190	02211	05111	9x055			
1022	00094	02123	05152	09135	80115		
1122	00095	02094	05162	10142	20343	86241	
1209	00095	02114	05133	10144	80175		
1222	00096	02106	05113	09142	50115		
1309	00103	02114	05124	10143	40175		
1322	00124	02115	05107	09094	76115		
1409	00191	02133	05123	10084	20161	30362	40074
	80429						
1422	00096	02095	05095	10112	20033	30364	40073
	50034	60352	24643				
1508	00113	02114	05116	10113	20103	14271	
1522	00095	02094	05071	10192	84172		
1609	00191	02122	05123	10135	20115	29225	80309
1622	00111	02122	05162	10152	40125		
1709	00123	02134	05134	10138	15138	80171	
1722	00115	02105	05129	10115	20132	25232	20272
(‡)1809	00124	02125	05118	10098	90131		
1822	00116	02610	05119	10107	24145		
1909	00151	02124	05117	10109	20088	80231	
1922	00115	02105	05116	10094	20032	28024	20292
2022	00118	02107	05600	09098	25116		
2109	00104	02115	05098	10570	80125		
2122	00103	02095	05074	47065			
2209	00141	02114	05085	10066	20045	26056	40271
2222	00096	02095	05096	80065			
2309	00114	02104	05107	10109	14089	40155	
2322	00095	02105	05107	10117	15108	20183	
2409	00191	02123	05115	10132	20091	29142	10309
2422	00094	02104	05134	10155	20135	80231	

September (Contd.)

2509	00162	02114	05127	10128	20128	30610	10379
2522	00096	02107	05109	10610	20126	20219	
2609	00114	02114	05118	10104	20061	30292	38322
	20408						
2622	00099	02611	05610	10119	20342	24114	30351
	20329						
2709	00134	02126	05119	10099	4x155		
2722	00105	02116	05095	54085			
2809	00105	02097	05087	10077	18057	43215	
2822	00094	02094	05075	10067	20047	80249	
2909	00141	02113	05114	10095	20087	10419	
2922	00082	02083	20051				
3009	00103	02104	05096	09086	3x115		
3022	00096	02107	05095	10096	27056	20299	

October

0109	00105	02104	10045				
0122	00105	02105	05096	10096	86155		
0209	00094	02096	05096	13081			
0222	00094	02094	05095	10113	17093		
0309	00131	02114	05095	10096	20124	10239	
0322	00094	02105	05095	10085	20095	30071	35050
	40073	46222	50014	80566			
0409	00180	02112	05090	10150	15102	20102	27172
	30162	10389					
0422	00086	02085	05113	10143	20143	30184	20359
0509	00150	02113	05113	10134	40121		
0522	00095	02097	05104	10143	14181	46155	
0609	00190	02180	05121	10154	20164	30212	40313
	10469						
0622	00084	02085	05104	10125	20121	29324	20309
0709	00122	02114	05106	43085			
0722	00093	02094	05095	10051	20335	30820	40801
	46791	25499					
0809	00171	02162	05123	10121	14132	5x155	
0822	00051	02072	05101	10121	80155		
0909	00174	02175	05154	10152	20051	24264	73261
0922	00093	02093	05141	10192	40175		
1009	00121	02122	05134	10126	17092	10186	
1021	00104	02107	05105	10154	20092	23142	30092
	10379						
1109	00191	02124	05125	10124	20361	27073	74291
1122	00095	02095	05105	10155	10122		
1209	00141	02133	05115	10116	70155		
1222	00095	02105	05133	10163	14123	57155	
1409	00122	02114	05115	10096	82125		
1422	00096	02097	05124	10172	15132	21342	30053
	40313	43412					
1509	00162	02105	05134	10134	15104	20021	26211
	43295						
1522	00097	02108	05126	10124	44175		

October (Contd.)

1609	00113	02114	05122	10085	15054	83185	
1623	00098	02600	05117	10119	18093	85203	
1721	00118	02600	05108	42095			
1722	00108	02098	05099	44098			
1821	00000	02361	05314	10316	20811	30810	38317
	20389						
1909	00131	02075	05035	10357	20339	92212	
1922	00364	02368	05852	62065			
2022	00101	02122	05203	10185	84115		
2109	00161	02152	05141	10172	14252	20275	23287
	10249						
2122	00093	02061	05281	84089			
2210	00000	02102	05090	10270	51125		
2222	00084	02092	05231	84066			
2309	00170	02132	05132	10201	15235	20277	40239
2321	00183	02183	05203	10222	20239	30248	40259
	49163	52224	60236	70238	80763	10912	
2409	00162	02133	05123	10191	17229	20710	30217
	40389						
2422	00095	02096	05105	10152	20194	30174	40083
	47241	74501					
2509	00171	02134	05095	10085	20114	27254	30222
	40322	40495					
2522	00092	02073	05074	10041	20222	23255	10244
2609	00191	02151	05021	10012	15353	20245	43216
2621	00031	02052	05031	10262	20252	30295	40278
	50268	60780	70780	80790	70883		
2709	00161	02102	05072	10082	15130	50185	
2722	00093	02084	05083	10062	20302	29297	10302
2809	00161	02104	05085	10054	17324	10189	
2822	00063	02074	05063	09053	20115		
2909	00074	02064	05055	10026	14017	37155	
2922	00131	02052	05054	90095			
3009	00000	02061	05012	10324	33125		
3022	00032	02033	05042	10331	20344	30345	40325
	50316	60309	70780	80307	90830	24949	
3109	00131	02103	05074	77085			
3122	00072	02074	05063	10043	20014	30023	20405

November

0109	00131	02114	05104	10084	20044	30354	40353
	50302	20529					
0122	00106	02108	05105	10124	20084	30033	40012
	50352	60234	70325	80294	90298	00317	10307
	20810	30213	40174	46042	20492		
0209	00180	02113	05115	10104	20103	30072	40031
	23443						
0222	00085	02096	05134	10164	20136	30125	80323
0308	00170	02113	05133	10116	20126	10269	
0322	00095	02105	05114	10144	20135	29114	70301
0409	00000	02122	05113	10117	14620	10159	

November (Contd.)

0421	00096	02106	05116	10097	20097	25105	86272
0509	00102	02115	05116	09106	36111		
0522	00097	02590	05109	10112	15143	80173	
0609	00107	02107	05109	10601	15097	26179	
0622	00095	02095	05144	10147	20094	30114	40094
	50072	60072	80699				
0709	00102	02114	05117	10109	20125	84269	
0722	00114	02116	05107	10107	15115	84172	
0809	00122	02124	05116	10084	15032	20062	27064
	86299						
0822	00094	02085	05077	08076	30095		
0909	00142	02113	05093	10025	20045	30043	87359
0921	00094	02095	05122	10124	20103	23084	30064
	37034	40025	50036	20520			
1009	00131	02114	05106	10095	20074	30073	40074
	20449						
1022	00106	02107	05108	10099	20125		
1109	00106	02115	05109	10108	20580	23590	30269
1122	00107	02600	05109	08089	80095		
1209	00124	02117	05610	10075	20062	30219	
1222	00106	02099	05108	10600	15098	20173	
1309	00131	02115	05107	10086	20119	10261	
1322	00097	02099	05107	10124	20104	30116	20329
1409	00141	02114	05135	10134	20095	30125	40134
	10498						
1422	00108	02591	05107	10128	20119	30106	40135
	50111	60262	83629				
1509	00124	02117	05119	10118	20125	30124	38135
	20399						
1522	00108	02107	05114	10134	80151		
1609	00180	02113	05116	10108	20105	30095	34124
	40183	40469					
1622	00115	02106	05097	10095	20094	30113	35162
	86365						
1709	00095	02086	05087	09069	10115		
1722	00106	02118	05600	10109	15116	25172	
1809	00113	02116	05119	10601	20097	40216	
1822	00097	02601	05612	10601	20591	23590	20243
1922	00108	02612	05612	09600	87115		
2022	00105	02106	05107	08098	97095		
2109	00200	02xxx	05133	10202	15184	20122	
2122	00082	02094	05104	10152	20182	27183	87295
2209	00200	02113	05115	10135	20112	53211	
2222	00086	02089	05096	10143	85125		
2309	00200	02114	05116	10097	20093	30033	40032
	44443						
2322	00121	02124	05086	97085			
2609	00201	02213	05186	40095			
2622	00032	02081	05122	10135	20225	40245	
2709	00191	02193	05202	10182	15264	20284	43239
2723	00042	02043	05032	08181	24124		
2809	00180	02111	05270	10131	20262	10239	

November (Contd.)

2822	00051	02062	05061	10122	15102	20102	30312
	20322						
2909	00161	02101	05081	10101	20111	60241	
2922	00051	02052	05042	10000	20032	20232	
3009	00161	02212	05300	10241	20200	40215	
3022	00313	02323	05313	10292	20224	30235	

December

0109	00000	02222	05253	10273	20287	10309	
0122	00031	02032	05012	10352	20354	26337	20272
0209	00000	02090	05192	10172	15321	52175	
0222	00061	02052	05031	10261	14334	20314	30306
	40307	10432					
0309	00000	02111	05161	12344	43155		
0322	00094	02095	05102	10072	14053	57155	
0411	00200	02132	05132	08131	57095		
0422	00101	02093	05113	10083	20023	30012	85372
0509	00104	02095	05106	10127	66155		
0522	00102	02114	05115	10136	15124	20125	30107
	57325						
0609	00180	02112	05115	10104	20172	24012	30323
	40287	17439					
0622	00041	02073	05094	10082	20081	30294	40334
	50326	56326	87585				
0709	00161	02131	05081	10162	20122	36219	
0722	00105	02096	05106	10144	20113	30072	40362
	43323	86462					
0809	00112	02115	05106	50099			
0822	00107	02109	05590	10098	20024	30035	38082
	76431						
0909	00094	02097	05590	10078	18055	32201	
0922	00093	02096	05116	10107	20065	30124	40175
	85442						
1009	00131	02125	05127	10118	18062	70209	
1022	00095	02087	05085	10161	15111	85175	
1109	00190	02131	05114	10112	17161	21362	24013
	10269						
1122	00095	02108	05101	10105	15095	83185	
1209	00116	02106	05109	90065			
1222	00095	02096	05096	10095	20066	30066	37057
	23382						
1309	00161	02124	05085	10067	20074	30074	35085
	80379						
1322	00105	02590	05099	10115	20094	30068	10342
1409	00105	02105	05119	10099	20590	23089	70249
1422	00098	02600	05613	09600	80112		
1509	00113	02116	05118	10117	20109	40249	
1522	00105	02622	05613	10099	20104	20219	
1609	00103	02116	05116	10115	20093	29115	80309
1622	00096	02097	05096	10085	20054	24066	20262

December (Contd.)

1709	00093	02105	05095	10075	15077	20086	80215
1722	00094	02095	05116	10123	20092	30074	40074
	47064	20492					
1809	00103	02105	05096	10086	20091	30102	80379
1822	00062	02094	05106	10086	20086	30085	40086
	24439						
1909	00101	02115	05106	10105	20085	30105	40065
	47104	80509					
1922	00097	02590	05116	10118	20104	30124	40132
	50101	56022	20582				
2009	00000	02124	05124	10116	20114	30123	40152
	50012	53322	80569				
2022	00084	02096	05082	10172	20112	30134	40163
	50161	60352	23622				
2109	00000	02112	05151	10111	20102	30141	40203
	46262	10479					
2122	00093	02084	05112	10123	20115	30115	20343
2209	00000	02141	05111	10252	20112	13212	
2222	00095	02097	05105	10143	20145	30142	40227
	70462						
2309	00161	02115	05105	10096	10121		
2322	00111	02103	05085	10065	20043	85232	
2409	00121	02114	05094	10081	20050	26272	27292
2422	00083	02095	05084	10082	14242	20162	30202
	35264	86381					
2509	00042	02034	05043	10013	20344	30292	55335
2522	00333	02335	36055				
2609	00313	02316	05317	31089			
2622	00335	02335	05327	09317	8x105		
2709	00343	02344	05335	10325	15325	67185	
2723	00025	02015	62035				
2809	00363	02354	05354	10344	87149		
2821	00141	02081	05361	09354	36112		
2907	00131	02112	05062	10033	20043	30062	26359
2921	00092	02104	05101	10172	20144	30143	40104
	50104	80502					
3009	00000	02201	05213	09204	6x115		
3022	00303	02294	05312	10172	20135	30136	38124
	87402						
3109	00110	02181	05xxx	10xxx	15126	20134	30164
	13352						
3122	00094	02073	05291	14182	20112	26123	80272

CLIMATOLOGICAL SUMMARY, 1941

Mean Values and Frequencies of Meteorological Elements

Station - Atafu. Lat. 8° 32'S. Long. 172° 31'W. Altitude: 6 feet above sea level (barometer cistern). Hour of observation 8.0 a.m. Local Time (Time standard: +11h 1.e. slow on Greenwich).

Month	Barometer (millibars)	Temperature (°F). Dry Bulb	Wet Bulb	Mean Maximum	Absolute Maximum	Date	Mean Minimum	Absolute Minimum	Date	Rainfall (inches).	Wind - Number of observations of: Forces 8 or more	Forces 4 - 7	Forces 1 - 3	Calm	N	NE	E	SE	S	SW	W	NW	Variable	Cloud - Number of observations of: Clear Sky 0-2	Partly clouded 3 - 7	Overcast 8-10	Number of daily reports available.
January	1008.7	82.8	78.0	89.3	92.8	31st	78.5	76.5	7th,11th	4.21	0	0	28	3	3	4	5	4	2	2½	6½	1	0	0	18	13	31
February	1007.2	81.9	78.4	86.7	92.5	1st	77.5	75.8	6th,28th	33.18	0	10	17	1	2½	2	3	2	1	½	10	6	0	0	2	26	28
March	1009.3	82.2	78.2	89.1	92.8	21st	77.7	73.2	1st	10.71	0	5	26	0	3½	1½	12	3	1½	2½	3½	3½	0	0	18	13	31
April	1009.2	83.9	79.4	90.3	93.6	15th	79.3	76.3	1st	6.58	0	0	30	0	0	3	17	4	2	1½	2½	0	0	2	21	7	30
May	1008.6	83.5	79.6	90.1	93.2	8th	79.7	77.4	7th,22nd	4.30	0	2	28	1	1	1½	23	3	1	0	0	0½	0	1	11	19	31
June	1010.8	81.9	80.1	89.0	92.8	3rd	79.3	74.5	13th	11.10	0	3	25	2	2	1	19	3½	½	½	0	1½	0	0	19	11	30
July	1010.9	80.8	78.8	87.1	91.4	5th	78.0	73.8	26th,27	17.83	0	15	16	0	1	½	16½	10	2	0	1	0	0	0	12	19	31
August	1010.3	81.1	77.8	87.8	91.4	21st	77.8	73.8	25th	10.80	0	7	24	0	0	½	23	6½	0½	0½	0	0	0	0	16	15	31
September	1010.3	82.5	78.1	89.0	92.1	15th,21	79.6	74.1	10th	5.92	0	12	18	0	0	1	22	6	0	1	0	0	0	0	17	13	30
October	1009.5	81.8	77.9	89.4	94.8	29th	78.1	75.0	16th	15.14	0	3	28	0	4½	3	12½	8½	0	½	½	1½	0	4	13	14	31
November	1008.7	82.1	78.8	88.0	93.0	19th	77.7	73.8	12th	19.20	0	8	20	2	6	1½	14½	3½	0	1	1	0½	0	0	9	21	30
December	1008.3	82.2	79.0	90.6	95.0	23rd	78.3	73.9	17th	9.44	0	1	29	1	4	1	15	5½	1½	1	1	1	0	1	15	15	31
Year	1009.3	82.2	78.7	88.9	95.0	23rd Dec.	78.5	73.2	1st March	148.41	0	66	289	10	27½	20½	182½	59½	12	11½	26	15½	0	8	171	186	365

Source of data

Monthly meteorological reports supplied by the native radio operator, Simi. Readings of pressure were obtained from a Kew pattern mercury barometer (M.O. 874 until May and C 117539 from June to December), and temperatures are read from mercury thermometers. The readings of the barometer are corrected for index error, temperature, gravity, and elevation above mean sea level.

Note

The frequencies of wind have been condensed to eight principal points by crediting one half of the frequencies of intermediate points to each of the neighbouring principal points; e.g. a frequency of 5 observations of wind from NNE is expressed as N 2½ and NE 2½.

Atmospheric Electricity 1941

The observations of potential gradient at the Land Station with the Benndorf electrometer were continued under the guidance of the Carnegie Institute of Washington who provide a grant-in-aid for this purpose. The scale value of the instrument was determined four times a week and lay in the region of 70 volts per centimetre. Leak tests of the insulation were carried out and in general the standard of insulation was such that the logarithmic rate of leak was 0.025 or less.

During the year an absolute determination of the reduction factor of the Land Station was carried out on the sandflats to the south of the Observatory, using the stretched wire and incorporating the leak-free, potentiometric method due to Gish and Sherman. The mean value of the reduction factor obtained was 0.94.

The electrical classification of days is as follows:

Character 0:- Days during which no negative potential gradient is recorded.
Character 1:- Days during which negative potential gradient is recorded for one or more short periods amounting to less than three hours in the aggregate.
Character 2:- Days during which the period of negative potential gradient recorded amounts in the aggregate to three hours or more.

The day is unclassified (Character X) if, after interpolating where interpolation is justified, there is still no record over a period or periods amounting in the aggregate to three hours or more, provided that the day is not of character 2 as above.

During 1941 the number of days of character 0 recorded was 146.

Potential Gradient 1941, at Apia Observatory, Samoa.

(Based on days free from negative gradient)

Tabular values are the average values expressed in volts per metre using reduction factor 1.00 for successive periods of one hour. Time standard, Meridian 165° West of Greenwich. The seasonal means are derived from the following grouping of months: - Wet - November 1940 to February 1941 inclusive; Dry - May to August inclusive.

Month	No. of Days	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
January	+10	91	93	93	94	89	103	163	244	230	140	120	111	98	98	99	85	89	87	106	149	176	127	100	84	120
February	4	96	89	82	87	84	111	163	258	305	247	146	115	103	101	103	103	103	92	109	167	243	137	111	113	136
March	6	100	95	91	92	109	112	141	216	249	193	140	118	102	89	87	89	88	91	110	188	189	151	120	102	128
April	11	79	85	88	97	94	89	120	239	261	166	120	110	104	98	93	87	91	94	105	158	144	122	95	88	118
May	15	78	81	82	89	84	87	121	184	243	193	137	116	104	100	96	97	94	100	126	154	131	112	94	92	116
June	‡18	91	93	88	89	84	97	126	201	256	191	140	130	121	112	112	112	109	110	170	214	163	136	112	98	131
July	13	96	97	102	107	111	112	140	202	211	174	143	133	130	121	113	111	106	108	131	161	140	133	113	100	129
August	18	90	91	93	97	93	96	121	207	219	142	128	125	118	111	101	110	107	106	119	157	155	128	109	98	122
September	11	98	95	95	103	105	111	138	206	180	140	133	138	127	111	109	110	115	105	108	152	154	123	108	95	123
October	18	87	89	100	103	111	125	177	233	170	133	121	106	96	92	95	95	91	87	100	161	154	121	97	90	118
November	16	128	128	121	125	124	140	235	260	223	151	138	125	117	113	116	113	116	121	132	169	174	158	144	129	146
December	6	108	102	93	91	110	129	165	223	205	163	135	110	103	94	101	105	107	115	121	176	223	187	140	114	134
Year	146	95	95	94	98	100	109	151	223	229	169	133	120	110	103	102	101	101	101	120	167	171	136	112	100	127
Wet Season 1940-41	32	102	98	94	95	98	109	168	261	241	176	132	116	107	105	105	97	99	100	120	170	203	152	114	107	132
Dry Season	64	89	91	91	95	93	98	127	199	232	175	137	126	118	111	105	107	104	106	137	171	147	127	107	97	125

\+ Ten (10) days of Character 0 occurred in January, but only nine (9) days were used in computing means.

‡ Two (2) days were not used in computing means.

Atmospheric Electricity
Monthly Values 1941

Month	Electric Character of Day 0	1	2	Number of Days not classified	Mean Potential Gradient for Days of Character 0	Number of hours of negative potential recorded
January	+10	13	3	5	120	83
February ..	4	9	5	10	136	97
March	6	11	2	12	128	83
April	11	13	2	4	118	60
May	15	6	1	9	116	39
June	‡18	9	0	3	131	21
July	13	10	1	7	129	42
August	18	3	0	10	122	25
September ..	11	6	0	13	123	23
October	18	7	1	5	118	33
November ..	16	10	1	3	146	36
December ..	6	18	3	4	134	71
Y e a r	146	115	19	85	127	613

\+ One (1) day was not used in computing means.

‡ Two (2) days were not used in computing means.