

N.Z. DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH



APIA OBSERVATORY,
APIA, WESTERN SAMOA

ANNUAL REPORT

FOR

1943

*Issued under the authority of the Hon. K. J. HOLYOAKE,
Minister of Scientific and Industrial Research*

WELLINGTON:
R. E. OWEN, Government Printer

1950

Sir,

I have the honour to present herewith the Annual
Report of the Apia Observatory for the year 1943.

E. MARSDEN,

Secretary.

Department of Scientific and Industrial Research

The Hon. D. G. Sullivan,

Minister of Scientific and Industrial Research.

APIA OBSERVATORY

Annual Report for the Year 1943

<u>Contents</u>	<u>Page</u>
Resident Staff	1
Co-ordinates of Transit Pier	1
Altitude of Station	1
Time Standards	1
General Introduction	2
<u>Terrestrial Magnetism 1943</u>	
Introduction	2
Scale Values	5
Base Line Values	6
Monthly Mean Values of Magnetic Elements	8
Diurnal Variation - International Quiet Day	9
Diurnal Variation - All Days	14
Values of K-Indices	17
Hourly Values	
Horizontal Intensity	29
Declination	41
Vertical Intensity	53
<u>Seismology 1943</u>	64
<u>Meteorological Report 1943</u>	
Notes on Instruments and Observations	78
Meteorological Instruments in Use	84
Synoptic Meteorology in South West Pacific Region	84
Notes on Weather	85
Meteorological Observations at Fixed Hours	92
Extreme Values and Normals of Meteorological Elements	128
Pressure: Mean Hourly Values	129
Pressure: Diurnal Changes	130
Temperature: Mean Hourly Values	131
Temperature: Diurnal Changes	132
Fourier Coefficients - Pressure and Temperature	133
Relative Humidity - Mean Values	134
Vapour Pressure	135
Rainfall at Apia Observatory	136
Rainfall at Local Stations	137
Sunshine: Duration of	138
Sunshine: Analysis of	139

	Page
Wind: Mean Values of Speed	140
Wind: Percentage Frequencies from Different Directions	141
Wind: Analysis and Summary	142
Thunder and Lightning	143
Upper Winds	144

Climatological Summary 1943

Atafu	165
-------	-----

Resident Staff, 1943

Acting Director H.B. Sapsford B.Sc.

Professional Assistants J.D. Coulter M.Sc. (until 15/3/43);
J. Finkelstein M.Sc.
A.B.F. Ayers B.Sc. (from 8/3/43 until 21/9/43);
A. Nicol M.A. (from 11/8/43)

R.N.Z.A.F. Personnel at Observatory in connection with war work
Cpl. L.H.E. Mollring
G. Barber L.A.C.
F.T. Gillman L.A.C.
R.R. McPherson L.A.C. (from 11/6/43)

Locally recruited staff Miss H.M. Sasse; Siaosi Sumeo; Fa'asi'u (until 2/8/43); Siaki Fati (until 11/11/43); Tanielu Ah Sui (until 15/1/43); Tali (until 10/11/43); Fa'asalafa (until 17/12/43); Pasese (until 31/1/43); Lafo (from 23/2/43); Tauemua (from 5/8/43 until 11/8/43); Enele (from 1/9/43 until 31/10/43); Alaiva'a (from 5/11/43); Laulauga (from 5/11/43); Iosua (from 18/11/43); Paulo (from 14/12/43); Sio (from 14/12/43)

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.

Apia Observatory, Samoa

Report of the Director for the year 1943

The geophysical programme comprised observations in terrestrial magnetism, seismology, meteorology 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

Mr. H.B. Sapsford, who was Acting Director, controlled the Observatory throughout the year except for a few weeks in September when he paid a short visit to New Zealand. Changes in the professional assistants and locally recruited staff are given on the first page of this report.

Time Service

The standard clock, Strasser and Rohde No. 381, which was controlled by daily wireless time signals was used to maintain an accurate time service. The time marks for the magnetographs and seismographs were provided by the Synchronome clock No. C 603. The control of this clock was such that it generally had an error of less than half a second. The Davison chronometer was used for magnetic work.

Tides

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

Terrestrial Magnetism 1943

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 recorded during 1943 was 28.0° in April and 25.2° C in June, was the lowest.

In 1937 the temperature coefficient of the H variometer was reduced to $0.25\gamma/^{\circ}\text{C}$. At the same time the Godhavn balance was adjusted to give the maximum compensation for temperature, the final temperature coefficient being $1.8\gamma/^{\circ}\text{C}$. 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 $2\frac{1}{2}$ gammas per millimetre, the Godhavn balance a little less than $1\frac{1}{2}$ 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 of the instruments were obtained by the electrical method using Helmholtz Gaugain coils.

Regular absolute observations were made of horizontal intensity, declination and inclination (I), the number of observations being 74 of H, 75 of D and 50 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 de-

clination. 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.

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 vertical intensity have been obtained by scaling the ordinates in millimetres and converting to gammas. The values of declination have been scaled in millimetres and converted to minutes of arc. 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 ($\bar{a}_{24} - \bar{a}_0$) 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.

In the diurnal variation tables of declination and of the component Y it will be noticed that significant maxima usually occur within an hour or two of 03 hours and 17 hours G.M.T. The corresponding minima occur within an hour or two of 12 hours and 22 hours G.M.T. At the foot of these tables ranges A-a, B-a, A-b and B-b have been given where A and B refer to the first and second maxima respectively and a and b refer to the first and second minima respectively. There is occasionally a small fluctuation about 06 hours G.M.T. which introduces a third minimum and a corresponding maximum but ranges based on these are not given.

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 $dI/dn = A + Bn$ (where n = ordinate in millimetres) which were adopted during 1943 are as follows:

Date	A	B
January 1st - March 31st	2.27	0.0034
April 1st - May 31st	2.28	0.0032
June 1st - June 30th.	2.27	0.0032
July 1st - August 31st.	2.27	0.0036
September 1st - October 31st	2.26	0.0034
November 1st - November 30th	2.28	0.0034
December 1st - December 31st	2.21	0.0038

Vertical Intensity

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

January	1.43
February	1.43
March 1st - 20th.	1.43
March 21st - April 30th	1.36
May	1.38
June	1.39
July	1.38
August 1st - October 31st	1.37
November	1.39
December - no records.	

Declination

The scale value remained constant and equal to one minute of arc per millimetre.

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	34704			
February	1st	34704			
March	1st	34704			
April	1st	34705			
May	1st	34705			
June	1st	34705,	11th	34715.	
July	1st	34715,	20th	34712.	
August		34712			
September		34712			
October		34712			
November	1st	34712,	12th	34713,	30th 34714.
December	1st	34714,	18th	34715.	

Vertical Intensity

January	1st	20582,	12th	20581,	25th	20580.
February		20580				
March		20580				
April		20580				
May		20580				
June	1st	20580,	12th	20586.		
July		20587				
August	1st	20588,	11th	20589,	21st	20590
September		20590				
October - December 31st				20590.		

Declination

10°+E

January - February	27.7'			
March 1st	27.7'	7th	27.6', 22nd	27.5'
April 1st	27.5'	9th	27.4'	
May 1st	27.4'	8th	27.3', 23rd	27.2'
June	27.2'			
July	27.2'			
August	27.1'			
September 1st	27.2'	11th	27.3', 21st	27.4'
October - December 31st.			27.4'	

MEAN VALUES OF MAGNETIC ELEMENTS, 1943All Days

	D	H	X	Y	Z
	East	gamma	gamma	gamma	gamma
January	11° 03.5'	34866	34220	6688	20660
February	03.7'	34866	34220	6690	20654
March	03.9'	34854	34207	6689	20654
April	04.3'	34844	34196	6691	20655
May	04.6'	34844	34196	6692	20657
June	04.9'	34855	34207	6700	20659
July	05.3'	34851	34201	6703	20655
August	05.2'	34835	34185	6699	20655
September	05.7'	34835	34184	6704	20654
October	06.0'	34841	34189	6708	20655
November	06.1'	34846	34195	6710	20653
December	05.9'	34850	34199	6709	-
Year	11° 04.9'	34849	34200	6699	20656

International Quiet Days

	D	H	X	Y	Z
	East	gamma	gamma	gamma	gamma
January	11° 03.5'	34876	34230	6690	20660
February	03.7'	34871	34224	6690	20654
March	03.8'	34864	34217	6690	20652
April	04.7'	34858	34209	6698	20656
May	04.6'	34856	34208	6697	20656
June	05.1'	34866	34216	6704	20662
July	05.3'	34863	34214	6705	20653
August	05.3'	34843	34193	6701	20655
September	05.7'	34853	34204	6707	20652
October	06.2'	34855	34204	6713	20653
November	06.3'	34863	34217	6715	20652
December	06.3'	34861	34212	6715	-
Year	11° 05.0'	34861	34217	6702	20655

DIURNAL VARIATION OF HORIZONTAL INTENSITY

International Quiet Days, 1943
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	+16	+24	+22	+10	+ 9	+ 9	+14	0	+13	+19	+16	+27	+15
1- 2	+12	+18	+15	+ 1	+ 4	+ 5	+ 8	- 7	+ 7	+14	+12	+18	+ 9
2- 3	+ 4	+ 9	+ 7	- 4	- 2	0	+ 1	-14	0	+ 6	+ 5	+ 7	+ 2
3- 4	- 7	+ 1	0	- 8	- 7	- 4	- 7	-17	- 7	- 1	- 2	- 3	- 5
4- 5	-12	- 7	- 5	- 9	- 8	- 9	- 9	-14	-11	- 7	-10	- 9	- 9
5- 6	-14	- 9	- 7	-11	- 9	-10	- 8	-11	-12	-11	-12	-11	-10
6- 7	-14	- 9	- 9	-11	-10	-10	- 8	- 9	-13	-12	-11	-10	-11
7- 8	-14	- 9	-10	-12	-11	-10	- 9	- 9	-16	-13	-11	- 9	-11
8- 9	-12	-10	-10	-11	-10	- 8	-11	-10	-16	-12	-11	- 8	-11
9-10	-11	- 9	- 9	-11	-10	- 7	-10	- 9	-15	-12	-12	- 7	-10
10-11	-10	- 8	- 9	-10	- 7	- 7	-11	- 8	-11	-11	-11	- 8	- 9
11-12	-11	- 7	- 9	- 9	- 6	- 7	- 9	- 8	-11	- 9	-11	- 7	- 9
12-13	-10	- 9	- 8	- 9	- 4	- 7	- 8	- 7	-10	- 8	-10	- 6	- 8
13-14	- 9	-10	- 6	- 7	- 4	- 7	- 8	- 6	- 9	- 8	-10	- 8	- 8
14-15	- 8	- 9	- 6	- 5	- 4	- 7	- 6	- 4	- 8	- 7	- 9	- 8	- 7
15-16	- 7	- 7	- 4	- 4	- 4	- 7	- 4	- 2	- 7	- 7	- 9	- 7	- 6
16-17	- 6	- 5	- 3	- 2	- 3	- 5	- 1	+ 1	- 3	- 7	- 8	- 8	- 4
17-18	- 4	- 5	- 3	+ 1	- 1	- 1	+ 4	+ 5	+ 1	- 5	- 7	- 9	- 2
18-19	- 2	- 4	- 3	+ 5	+ 4	+ 4	+ 8	+11	+ 5	- 3	- 3	- 9	+ 1
19-20	+ 7	0	+ 1	+10	+10	+ 9	+10	+19	+15	+ 4	+ 9	- 5	+ 7
20-21	+16	+ 7	+ 5	+16	+15	+15	+11	+22	+23	+13	+18	+ 5	+14
21-22	+26	+16	+11	+24	+19	+19	+17	+24	+27	+21	+25	+20	+21
22-23	+32	+23	+17	+29	+21	+23	+22	+26	+27	+27	+33	+29	+26
23-24	+36	+23	+21	+29	+19	+23	+18	+23	+26	+30	+30	+31	+26
N	+19	- 4	- 1	+13	+ 7	+ 6	+ 2	+18	+ 9	+ 9	+11	0	
R	50	34	32	41	32	33	33	43	43	43	45	42	37
No. of days	5	4	5	3	5	4	3	5	4	5	5	4	

DIURNAL VARIATION OF DECLINATION
International Quiet Days 1943
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	+16	+18	+11	- 4	- 2	-12	+ 4	- 3	- 2	+ 7	+17	+20	+ 6
1- 2	+12	+21	+12	+ 1	+ 4	- 4	+10	+ 8	+ 5	+13	+20	+21	+10
2- 3	+ 6	+16	+ 7	+11	+11	+ 5	+14	+15	+ 8	+10	+16	+19	+11
3- 4	+ 6	+11	+ 4	+13	+15	+ 7	+12	+12	+ 8	+ 8	+ 9	+13	+10
4- 5	+ 8	+ 7	+ 3	+11	+ 9	+ 5	+ 4	+ 6	+ 6	+ 5	+ 6	+10	+ 7
5- 6	+10	+ 6	+ 5	+ 7	+ 4	+ 1	+ 2	+ 1	+ 3	+ 6	+ 7	+ 9	+ 5
6- 7	+10	+ 8	+ 8	+ 7	+ 3	0	+ 1	0	+ 5	+ 5	+ 9	+10	+ 5
7- 8	+ 7	+ 8	+ 7	+ 5	0	0	- 2	- 1	+ 3	+ 4	+ 9	+ 9	+ 4
8- 9	+ 4	+ 7	+ 5	0	- 2	- 1	- 2	- 1	0	+ 1	+ 6	+ 5	+ 2
9-10	+ 3	+ 3	+ 3	- 3	- 2	- 2	- 2	- 2	- 2	0	+ 3	+ 1	0
10-11	+ 2	- 1	+ 2	- 3	- 3	- 2	- 4	- 3	- 3	- 1	+ 2	- 1	- 1
11-12	+ 2	- 1	+ 1	- 5	- 3	- 3	- 3	- 3	- 3	- 1	+ 1	- 3	- 2
12-13	0	- 1	- 1	- 4	- 3	- 2	- 2	- 2	- 3	- 2	0	- 4	- 2
13-14	- 1	- 2	- 2	- 1	- 1	0	- 1	0	- 1	- 3	- 1	- 6	- 2
14-15	- 2	- 1	- 1	+ 1	0	+ 1	0	+ 2	+ 2	- 2	- 1	- 6	- 1
15-16	- 2	- 2	0	+ 2	+ 3	+ 3	+ 1	+ 3	+ 5	- 2	0	- 5	+ 1
16-17	- 3	- 1	0	+ 3	+ 4	+ 4	+ 5	+ 5	+ 7	- 2	- 2	- 5	+ 1
17-18	-12	- 7	- 3	+ 4	+ 4	+ 6	+ 7	+ 6	+ 8	- 4	- 9	-11	- 1
18-19	-19	-20	- 9	- 2	+ 5	+ 9	+ 7	+ 7	+ 7	- 6	-19	-21	- 5
19-20	-20	-27	-19	-10	- 2	+ 7	0	- 1	- 2	-10	-30	-29	-12
20-21	-18	-27	-20	-14	- 9	+ 3	- 4	-10	- 9	-12	-31	-26	-15
21-22	-14	-17	-13	-11	-11	- 5	-15	-14	-13	-11	-19	-15	-13
22-23	- 1	- 3	- 5	- 8	-11	-10	-16	-15	-16	- 6	- 2	+ 3	- 7
23-24	+10	+ 9	+ 3	- 1	- 8	-12	- 6	-12	-12	+ 3	+11	+17	0
N	0	0	- 3	+ 3	+ 1	+ 2	0	- 2	0	+ 5	+ 1	+ 7	
A-a				18	18	10	10	18	11				13
B-a				9	8	12	11	10	11				3
A-b	36	48	32	27	26	19	30	30	24	25	51	50	26
B-b				18	16	21	23	22	24				14
No. of days	5	4	5	3	5	4	3	5	4	5	5	4	

DIURNAL VARIATION OF X, 1943

International Quiet Days. Unit: One gamma

Not corrected for non-cyclic change.



G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+13	+24	+20	+11	+ 9	+11	+13	+ 1	+13	+18	+13	+23	+14
1- 2	+10	+14	+13	+ 1	+ 3	+ 6	+ 6	- 9	+ 6	+11	+ 8	+14	+ 7
2- 3	+ 3	+ 6	+ 6	- 6	- 4	- 1	- 2	-17	- 2	+ 4	+ 2	+ 3	- 1
3- 4	- 8	- 1	- 1	-11	-10	- 5	- 9	-19	- 9	- 3	- 4	- 6	- 7
4- 5	-14	- 8	- 6	-11	-10	-10	-10	-15	-12	- 8	-11	-11	-11
5- 6	-16	-10	- 8	-12	-10	-10	- 8	-11	-13	-12	-13	-13	-11
6- 7	-16	-11	-11	-12	-11	-10	- 8	- 9	-14	-13	-13	-12	-12
7- 8	-15	-11	-11	-13	-11	-10	- 9	- 9	-17	-14	-13	-11	-12
8- 9	-13	-11	-11	-11	-10	- 8	-11	-10	-16	-12	-12	- 9	-11
9-10	-12	-10	-11	-10	-10	- 7	-10	- 9	-15	-12	-13	- 7	-11
10-11	-10	- 8	- 9	- 9	- 6	- 7	-10	- 7	-10	-11	-11	- 8	- 9
11-12	-11	- 7	- 9	- 8	- 5	- 6	- 8	- 7	-10	- 9	-11	- 6	- 8
12-13	-10	- 9	- 8	- 8	- 3	- 7	- 8	- 7	- 9	- 8	-10	- 5	- 8
13-14	- 9	-10	- 6	- 7	- 4	- 7	- 8	- 6	- 9	- 7	-10	- 7	- 7
14-15	- 8	- 9	- 6	- 5	- 4	- 7	- 6	- 4	- 8	- 7	- 9	- 7	- 7
15-16	- 7	- 7	- 4	- 4	- 5	- 8	- 4	- 3	- 8	- 7	- 9	- 6	- 6
16-17	- 5	- 5	- 3	- 3	- 4	- 6	- 2	0	- 4	- 7	- 8	- 7	- 5
17-18	- 2	- 4	- 2	0	- 2	- 2	+ 3	+ 4	- 1	- 4	- 5	- 7	- 2
18-19	+ 2	0	- 1	+ 5	+ 3	+ 2	+ 7	+10	+ 4	- 2	+ 1	- 5	+ 2
19-20	+11	+ 5	+ 5	+12	+10	+ 8	+10	+19	+15	+ 6	+15	+ 1	+10
20-21	+20	+12	+ 9	+19	+17	+14	+12	+24	+25	+15	+12	+10	+16
21-22	+28	+19	+14	+26	+21	+20	+20	+27	+29	+23	+20	+23	+23
22-23	+31	+24	+18	+30	+23	+25	+25	+28	+29	+27	+32	+27	+27
23-24	+33	+21	+20	+29	+21	+25	+19	+25	+27	+28	+27	+27	+25
R	49	35	31	43	34	35	36	47	46	42	45	40	39

DIURNAL VARIATION OF Y, 1943
 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	+19	+23	+15	- 2	0	-10	+ 7	- 3	+ 1	+11	+20	+25	+ 9
1- 2	+14	+25	+15	+ 1	+ 5	- 3	+12	+ 7	+ 6	+16	+22	+25	+12
2- 3	+ 7	+18	+ 8	+10	+11	+ 5	+14	+12	+ 8	+11	+17	+20	+12
3- 4	+ 5	+11	+ 4	+11	+14	+ 6	+11	+ 9	+ 7	+ 8	+ 9	+12	+ 9
4- 5	+ 6	+ 6	+ 2	+ 9	+ 7	+ 3	+ 2	+ 3	+ 4	+ 4	+ 4	+ 8	+ 5
5- 6	+ 7	+ 4	+ 4	+ 5	+ 2	- 1	0	- 1	+ 1	+ 4	+ 5	+ 7	+ 3
6- 7	+ 7	+ 6	+ 6	+ 5	+ 1	- 2	- 1	- 2	+ 2	+ 3	+ 7	+ 8	+ 3
7- 8	+ 4	+ 6	+ 5	+ 3	- 2	- 2	- 4	- 3	0	+ 1	+ 7	+ 7	+ 2
8- 9	+ 2	+ 5	+ 3	- 2	- 4	- 3	- 4	- 3	- 3	- 1	+ 4	+ 3	0
9-10	+ 1	+ 1	+ 1	- 5	- 4	- 3	- 4	- 4	- 5	- 2	+ 1	0	- 2
10-11	0	- 3	0	- 5	- 4	- 3	- 6	- 5	- 5	- 3	0	- 3	- 3
11-12	0	- 2	- 1	- 7	- 4	- 4	- 5	- 5	- 5	- 3	- 1	- 4	- 3
12-13	- 2	- 3	- 3	- 6	- 4	- 3	- 4	- 3	- 5	- 4	- 2	- 5	- 4
13-14	- 3	- 4	- 3	- 2	- 2	- 1	- 3	- 1	- 3	- 5	- 3	- 8	- 3
14-15	- 4	- 3	- 2	0	- 1	0	- 1	+ 1	0	- 3	- 3	- 8	- 2
15-16	- 3	- 3	- 1	+ 1	+ 2	+ 2	0	+ 3	+ 4	- 3	- 2	- 6	- 1
16-17	- 4	- 2	- 1	+ 3	+ 3	+ 3	+ 5	+ 5	+ 6	- 3	- 4	- 7	0
17-18	-13	- 8	- 4	+ 4	+ 4	+ 6	+ 8	+ 7	+ 8	- 5	-10	-13	- 1
18-19	-19	-21	-10	- 1	+ 6	+10	+ 9	+ 9	+ 8	- 7	-20	-23	- 5
19-20	-19	-27	-19	- 8	0	+ 9	+ 2	+ 3	+ 1	- 9	-28	-30	-10
20-21	-15	-26	-19	-11	- 6	+ 6	- 2	- 7	- 4	- 9	-27	-25	-12
21-22	- 9	-14	-11	- 6	- 7	- 1	-12	- 9	- 8	- 7	-14	-11	- 9
22-23	+ 5	+ 2	- 2	- 2	- 7	- 5	-12	-10	-11	- 1	+ 5	+ 9	- 2
23-24	+17	+14	+ 7	+ 5	- 4	- 7	- 2	- 7	- 7	+ 9	+17	+23	+ 5
A-a			18	18	18	10	20	17	13	21			16
B-a			2	11	10	14	15	14	13	2			4
A-b	38	52	34	22	21	16	26	22	19	25	50	55	24
B-b			18	15	13	20	21	19	19	6			12

DIURNAL VARIATION OF VERTICAL INTENSITY
International Quiet Days, 1943

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	+4	0	-4	0	-3	-2	-1	-3	-5	-3	0		-2
1-2	+1	+1	-5	-3	-5	-1	-2	-4	-6	-2	-1		-2
2-3	-2	-1	-6	-5	-5	0	-4	-5	-5	-3	-2		-3
3-4	-4	-2	-6	-5	-3	0	-4	-5	-3	-2	-2		-3
4-5	-5	-3	-5	-5	-2	-1	-4	-4	-1	-2	-2		-3
5-6	-5	-2	-3	-5	-1	-1	-3	-3	0	-1	-1		-2
6-7	-3	-2	-1	-4	0	-1	-3	-2	0	-1	0		-2
7-8	-2	-1	+1	-3	0	-2	-3	-1	0	0	+1		-1
8-9	-1	0	+2	-1	0	-2	-2	-1	0	0	+1		0
9-10	+1	+1	+3	0	0	-2	-1	0	+1	0	0		0
10-11	+1	+1	+3	+1	+1	-1	0	+2	+2	0	+1		+1
11-12	+1	+2	+3	+1	0	-1	+1	+3	+2	0	+1		+1
12-13	+2	+2	+3	+1	+1	0	+3	+3	+2	+1	+1		+2
13-14	+1	+2	+3	+2	+1	+1	+4	+3	+2	+1	+2		+2
14-15	+1	+2	+3	+3	+1	+3	+4	+3	+3	+1	+2		+2
15-16	+1	+3	+3	+3	+2	+3	+4	+3	+3	+2	+3		+3
16-17	+1	+3	+4	+3	+3	+3	+3	+3	+4	+3	+4		+3
17-18	0	+3	+4	+3	+3	+3	+3	+3	+5	+3	+4		+3
18-19	0	+1	+3	+3	+4	+3	+3	+3	+5	+3	+3		+3
19-20	-1	0	0	+2	+4	+3	+2	+4	+4	+2	+1		+2
20-21	0	-2	-1	+1	+3	+1	+1	+3	+2	+1	-2		+1
21-22	+2	-2	-1	+1	+2	-1	+1	+1	-1	0	-5		0
22-23	+3	-2	0	+1	0	-1	0	0	-4	-1	-4		-1
23-24	+5	-2	-1	+2	-3	-3	0	-1	-6	-1	-3		-1
R	10	6	10	8	9	6	8	9	11	6	9		6
N	0	-1	+1	0	-3	-3	0	+1	-3	+1	-2		
No. of days	5	5	5	3	5	4	3	5	5	5	5		

DIURNAL VARIATION OF HORIZONTAL INTENSITY
All Days, 1943
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	+29	+24	+19	+17	+10	+10	+15	+ 8	+11	+15	+17	+21	+16
1- 2	+20	+16	+12	+ 6	+ 3	+ 4	+ 8	- 1	+ 1	+ 5	+11	+13	+ 8
2- 3	+ 9	+ 6	+ 5	- 4	- 5	+ 1	+ 2	- 6	- 8	- 2	+ 4	+ 4	+ 1
3- 4	- 2	- 3	- 1	- 9	- 8	- 3	- 4	-13	-12	- 6	- 4	- 4	- 6
4- 5	- 7	-10	- 5	-13	-11	- 7	- 5	-15	-13	- 7	-13	- 9	-10
5- 6	-10	-14	- 7	-15	-13	- 8	- 9	-19	-14	-12	-15	-10	-12
6- 7	-10	-14	- 8	-17	-14	- 9	-13	-17	-14	-12	-12	- 9	-12
7- 8	-11	-13	- 8	-17	-13	-12	-14	-14	-14	-12	-10	- 9	-12
8- 9	-12	-14	-10	-16	-11	-11	-13	-12	-12	-12	- 7	- 9	-12
9-10	-11	-12	-10	-13	-10	-12	-13	- 9	- 9	- 8	- 6	- 8	-10
10-11	-11	- 9	-10	-11	- 7	- 9	-10	- 5	- 7	- 7	- 7	-10	- 9
11-12	- 9	- 7	-10	- 7	- 6	-10	- 8	- 3	- 4	- 6	- 7	- 9	- 7
12-13	- 9	- 8	- 7	- 7	- 6	- 9	- 8	- 2	- 5	- 3	- 6	- 7	- 6
13-14	- 9	- 7	- 5	- 6	- 5	- 8	- 6	- 1	- 4	- 1	- 4	- 7	- 5
14-15	- 8	- 6	- 4	- 3	- 3	- 6	- 3	+ 1	- 2	- 1	- 3	- 7	- 4
15-16	- 8	- 5	- 3	- 1	- 2	- 4	- 2	+ 3	- 2	- 2	- 3	- 6	- 3
16-17	- 7	- 5	- 2	0	0	- 2	0	+ 4	0	- 3	- 5	- 6	- 2
17-18	- 7	- 4	- 1	+ 3	+ 4	+ 1	+ 4	+ 5	+ 2	- 3	- 6	- 6	- 1
18-19	- 5	- 1	0	+ 7	+ 9	+ 7	+ 8	+ 9	+ 6	- 1	- 3	- 5	+ 3
19-20	+ 1	+ 2	+ 4	+11	+14	+14	+11	+15	+13	+ 4	+ 5	0	+ 8
20-21	+ 8	+10	+ 6	+17	+18	+17	+12	+18	+20	+11	+11	+ 9	+13
21-22	+17	+20	+10	+23	+20	+19	+16	+19	+23	+17	+17	+21	+19
22-23	+25	+26	+16	+28	+21	+20	+17	+19	+23	+22	+24	+28	+22
23-24	+28	+27	+19	+27	+15	+17	+17	+14	+22	+22	+23	+26	+21
R	41	41	29	45	35	32	31	38	37	34	39	38	34
N	- 1	- 1	- 2	+ 2	0	0	- 2	- 3	+ 4	+ 3	+ 3	0	

DIURNAL VARIATION OF DECLINATION

All Days, 1943

Not corrected for non-cyclic change. Unit: One tenth of a minute of arc

International
Seismological
Centre

G.M.T.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0- 1	+18	+16	+12	+ 2	- 5	- 7	+ 2	- 1	- 2	+12	+18	+15	+ 7
1- 2	+17	+18	+14	+ 7	+ 3	- 1	+ 9	+ 9	+ 8	+15	+18	+18	+11
2- 3	+13	+16	+12	+11	+10	+ 4	+11	+14	+13	+11	+14	+18	+12
3- 4	+11	+14	+ 8	+11	+11	+ 6	+ 8	+12	+11	+ 7	+11	+15	+10
4- 5	+ 9	+ 9	+ 6	+10	+ 7	+ 2	+ 3	+ 6	+ 6	+ 5	+ 9	+13	+ 7
5- 6	+ 9	+ 7	+ 7	+ 8	+ 3	0	+ 1	0	+ 3	+ 6	+10	+11	+ 5
6- 7	+ 9	+ 8	+ 7	+ 7	+ 1	- 1	- 1	- 2	+ 3	+ 5	+10	+11	+ 5
7- 8	+ 7	+ 6	+ 6	+ 3	- 1	- 2	- 2	- 2	+ 1	+ 3	+ 9	+10	+ 3
8- 9	+ 4	+ 4	+ 3	- 2	- 3	- 4	- 3	- 4	- 1	+ 1	+ 5	+ 7	+ 1
9-10	+ 1	+ 1	0	- 4	- 4	- 4	- 4	- 6	- 3	- 1	+ 2	+ 2	- 2
10-11	+ 1	- 1	- 2	- 5	- 5	- 5	- 6	- 6	- 5	- 3	0	- 1	- 3
11-12	- 2	- 2	- 2	- 3	- 5	- 5	- 5	- 5	- 5	- 2	- 2	- 4	- 3
12-13	- 3	- 2	- 2	- 4	- 4	- 4	- 4	- 6	- 4	- 3	- 3	- 5	- 4
13-14	- 4	- 2	- 1	- 1	- 1	- 1	- 2	- 2	- 2	- 3	- 3	- 6	- 2
14-15	- 5	- 2	0	+ 1	+ 1	+ 2	+ 1	+ 1	+ 2	- 2	- 3	- 6	- 1
15-16	- 5	- 2	+ 1	+ 3	+ 4	+ 4	+ 4	+ 5	+ 4	- 2	- 3	- 5	+ 1
16-17	- 6	- 2	+ 1	+ 4	+ 5	+ 6	+ 6	+ 7	+ 6	- 3	- 4	- 5	+ 1
17-18	-14	- 8	- 4	+ 4	+ 6	+ 7	+ 8	+ 9	+ 7	- 5	-11	-11	- 1
18-19	-20	-20	-12	- 1	+ 8	+11	+10	+ 9	+ 5	- 9	-21	-19	- 5
19-20	-21	-27	-21	-10	+ 3	+ 8	+ 3	+ 2	- 2	-14	-29	-25	-11
20-21	-17	-25	-20	-15	- 4	+ 4	- 5	- 7	- 8	-13	-26	-22	-13
21-22	-10	-15	-13	-14	- 9	- 3	-12	-12	-12	-10	-14	-15	-12
22-23	- 1	- 2	- 4	- 8	-12	- 8	-13	-14	-13	- 3	0	- 3	- 7
23-24	+11	+12	+ 5	- 3	-10	- 9	- 8	- 9	-11	+ 6	+13	+ 7	0
N	- 1	+ 3	- 1	- 1	0	+ 1	- 2	0	0	+ 1	+ 1	- 1	
A-a			16	16	16	11	17	20	18	18			16
B-a			3	9	13	16	16	15	12	1			5
A-b	39	45	35	26	23	15	24	28	26	29	47	43	25
B-b			22	19	20	20	23	23	20	12			14

DIURNAL VARIATION OF VERTICAL INTENSITY
All Days, 1943
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	- 1	- 3	- 3	- 4	- 3	- 4	- 6	- 7	- 3	- 3		- 3
1- 2	+ 2	- 2	- 4	- 4	- 5	- 5	- 4	- 6	- 8	- 3	- 3		- 4
2- 3	- 1	- 4	- 4	- 5	- 5	- 4	- 4	- 5	- 7	- 2	- 3		- 4
3- 4	- 3	- 4	- 4	- 5	- 4	- 3	- 4	- 4	- 5	- 2	- 3		- 4
4- 5	- 3	- 4	- 4	- 5	- 3	- 3	- 3	- 4	- 3	- 1	- 3		- 3
5- 6	- 3	- 4	- 3	- 4	- 3	- 2	- 3	- 4	- 2	- 2	- 2		- 3
6- 7	- 2	- 2	- 2	- 4	- 2	- 2	- 2	- 2	- 2	- 1	0		- 2
7- 8	- 2	- 1	- 1	- 3	- 2	- 2	- 2	- 1	0	0	+ 1		- 1
8- 9	- 1	0	0	- 2	- 1	- 1	- 1	0	+ 1	0	+ 1		0
9-10	0	0	0	- 1	0	- 1	0	+ 1	+ 1	0	+ 2		0
10-11	0	+ 2	+ 1	0	0	0	0	+ 2	+ 2	+ 1	+ 2		+ 1
11-12	+ 1	+ 3	+ 2	+ 2	+ 1	0	+ 1	+ 2	+ 3	+ 2	+ 3		+ 2
12-13	+ 1	+ 3	+ 3	+ 3	+ 2	+ 1	+ 1	+ 2	+ 3	+ 3	+ 3		+ 2
13-14	+ 1	+ 3	+ 4	+ 4	+ 2	+ 1	+ 2	+ 3	+ 4	+ 3	+ 3		+ 3
14-15	+ 2	+ 4	+ 5	+ 5	+ 2	+ 2	+ 3	+ 4	+ 5	+ 3	+ 4		+ 4
15-16	+ 2	+ 4	+ 5	+ 5	+ 3	+ 2	+ 4	+ 5	+ 5	+ 3	+ 4		+ 4
16-17	+ 2	+ 4	+ 5	+ 5	+ 3	+ 2	+ 4	+ 5	+ 5	+ 3	+ 3		+ 4
17-18	+ 1	+ 4	+ 5	+ 5	+ 3	+ 2	+ 4	+ 5	+ 5	+ 2	+ 3		+ 4
18-19	0	+ 2	+ 3	+ 5	+ 4	+ 3	+ 5	+ 4	+ 5	+ 1	+ 2		+ 3
19-20	- 2	0	+ 1	+ 3	+ 4	+ 4	+ 4	+ 4	+ 4	0	0		+ 2
20-21	- 1	- 1	- 1	+ 1	+ 3	+ 4	+ 2	+ 2	+ 2	- 1	- 2		+ 1
21-22	0	- 2	- 3	0	+ 2	+ 3	+ 1	- 1	- 1	- 2	- 3		- 1
22-23	+ 2	- 2	- 2	0	0	+ 1	- 1	- 3	- 3	- 2	- 3		- 1
23-24	+ 3	- 1	- 2	- 2	- 2	- 1	- 2	- 4	- 5	- 2	- 3		- 2
R	6	8	9	10	9	9	9	11	13	6	7		8
H	0	0	0	0	0	0	0	0	- 1	0	0		

VALUES OF "K" AT APIA FOR JANUARY 1943



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

VALUES OF "K" AT APIA FOR FEBRUARY 1943



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

VALUES OF "K" AT APIA FOR MARCH 1943

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

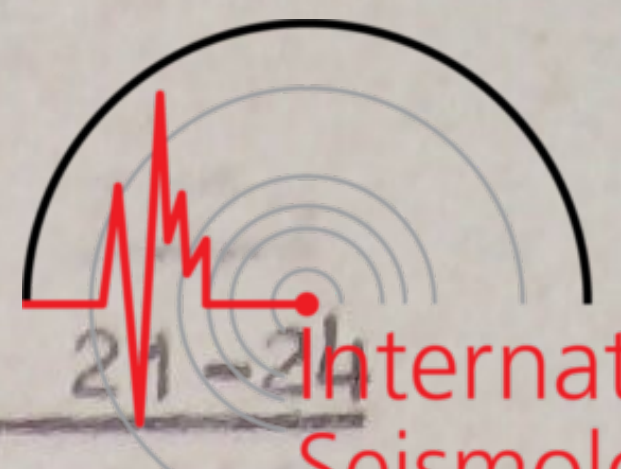
VALUES OF "K" AT APIA FOR APRIL 1943



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

VALUES OF "K" AT APIA FOR MAY 1943

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



VALUES OF "K" AT APIA FOR JUNE 1943

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



International
Seismological
Centre

VALUES OF "K" AT APIA FOR JULY 1943

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



VALUES OF "K" AT APIA FOR AUGUST 1943



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

VALUES OF "K" AT APIA FOR OCTOBER 1943

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



VALUES OF "K" AT APIA FOR NOVEMBER 1943

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

VALUES OF "K" AT APIA FOR DECEMBER 1943



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

HORIZONTAL INTENSITY

(E = 34000γ + Mean +)

G.M.T.

January 1943

DAY.	January 1943																								Range.	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1	+15	+18	+2	-7	-11	-10	-11	-11	-11	-11	-7	-6	-3	+1	+1	+6	+6	+6	+6	-1	+7	+19	+31	+15	+7	28
2	+23	+21	+9	-4	-8	-11	-10	-11	-12	-14	-18	-16	-16	-16	-12	-12	-3	-1	-1	-1	+7	+19	+35	+35	+21	58
3	+61	+40	+20	-13	-8	-10	-8	-10	-8	-3	+9	+15	+5	-10	-5	-13	-18	-4	-10	-14	-14	+15	+13	+7	84	
4	+19	+7	-8	-13	-13	-16	-3	-6	-10	-2	+2	-1	-1	-3	-4	-2	-2	-6	-3	+4	+15	+19	+13	+2	40	
5	+9	+9	+5	-3	-7	-7	-5	-10	-10	-9	-5	-6	-2	-2	-2	-2	-2	-4	+2	+9	+19	+4	+9	+4	49	
6	+12	+7	-3	-11	-16	-18	-17	-16	-16	-13	-11	-8	-6	-6	-8	-8	-8	-8	-6	+7	+24	+37	+46	+51	72	
7	+40	+34	+18	0	-13	-19	-18	-17	-15	-10	-7	-7	-7	-5	-10	-14	-13	-13	-7	+6	+12	+18	+22	+18	65	
8	+60	+35	+20	+3	-7	-14	-23	-32	-31	-32	-21	-12	-7	-3	-2	-3	-7	-7	-2	+3	+12	+21	+28	+30	71	
9	+22	+17	+6	-5	-13	-18	-15	-14	-13	-6	-4	-5	-2	-3	-3	-3	-4	-4	0	+5	+10	+14	+15	+17	43	
10	+8	+9	+8	0	-9	-15	-14	-12	-12	-12	-6	-7	-6	-4	-4	-1	-1	+1	+1	+4	+7	+13	+22	+32	56	
11	+59	+27	+18	+7	0	-1	-15	-12	-12	-12	-11	-10	-10	-10	-6	-6	-6	-6	+6	+6	+18	+31	+39	+38	65	
12	+26	+20	+9	-5	-10	-10	-12	-12	-12	-10	-10	-10	-7	-6	-3	-3	-3	-5	-7	-2	+5	+15	+23	+27	43	
13	+18	+13	+8	-6	-12	-15	-17	-17	-12	-12	-15	-12	-10	-10	-6	-5	-5	-4	-2	+3	+10	+18	+23	+28	61	
14	+18	+9	-2	-11	-14	-11	-11	-11	-6	-6	-6	-7	-6	-4	-1	-1	-1	-1	+1	+4	+21	+30	+31	+29	74	
15	+37	+32	+17	+4	-3	-4	-3	-1	-6	-6	-1	-7	-6	-4	-1	-1	-1	-1	-1	+1	+7	+13	+22	+32	66	
16	+21	+11	+8	+16	+17	+16	+11	+1	-1	-3	-6	-7	-8	-10	-11	-13	-16	-16	-16	-6	+18	+31	+39	+38	82	
17	+44	+28	+13	-6	-12	-14	-12	-8	-14	-13	-9	-4	-7	-12	-12	-10	-10	-10	-7	+1	+6	+12	+21	+31	125	
18	+26	+19	-1	-14	-21	-16	-15	-9	-9	-11	-14	-11	-9	-9	-11	-11	-11	-9	-4	+1	+14	+31	+54	+56	87	
19	+56	+45	+36	+20	+10	+3	+3	-7	-7	-7	-1	+7	+8	+7	+9	+3	-3	-5	-4	+1	+14	+31	+54	+56	40	
20	+15	+2	-16	-23	-17	-15	-6	-11	-25	-17	-9	-14	-15	-9	-5	-2	-6	-5	+5	+21	+27	+40	+53	+40	65	
21	+18	+13	+10	+4	+1	-3	-5	-8	-13	-10	-11	-8	+7	-9	-2	-4	-4	-10	-10	-8	-1	+4	+12	+22	87	
22	+43	+9	+2	-4	-9	-18	-14	-13	-13	-13	-10	-10	-9	-9	-7	-9	-9	-9	-7	+3	+12	+25	+39	+41	40	
23	+32	+25	+6	-8	-13	-14	-13	-14	-14	-12	-6	-5	-10	-10	-6	-8	-8	-5	-4	+2	+5	+20	+31	+32	66	
24	+16	+11	+3	-4	-9	-14	-15	-14	-13	-13	-12	-13	-9	-9	-8	-7	-7	-8	-4	+6	+20	+36	+44	+35	50	
25	+37	+27	+9	+4	-1	-12	-12	-7	-8	-5	-23	-19	-15	-7	-6	-8	-7	-8	-1	+6	+20	+36	+44	+35	65	
26	+12	+13	+17	+8	+1	-7	-8	-9	-9	-11	-9	-8	-10	-10	-10	-10	-10	-10	-8	-1	+6	+17	+17	+17	65	
27	+41	+37	+31	+22	+7	-5	-5	-8	-8	-12	-27	-29	-30	-22	-19	-14	-10	-9	-6	+4	+4	+16	+26	+36	62	
28	+49	+17	+8	-3	-11	-14	-12	-13	-13	-14	-15	-17	-14	-12	-9	-12	-13	-11	-6	+7	+9	+22	+35	+43	78	
29	+42	+28	+9	-3	-8	-11	-11	-12	-12	-13	-16	-17	-15	-12	-13	-10	-10	-6	-3	+10	+17	+22	+35	+43	66	
30	+25	+16	+1	-10	-10	-9	-11	-11	-9	-9	-7	-9	-7	-6	-8	-9	-9	-3	0	+6	+15	+22	+24	+25	63	
31	+29	+20	+9	-2	-7	-10	-10	-11	-12	-11	-11	-9	-9	-8	-6	-8	-7	-3	0	+6	+15	+19	+19	+16	50	
MEAN.																									866	



International Seismological Centre

HORIZONTAL INTENSITY

(H = 34000γ + Mean + e.e.s.s.)

February 1943

G.M.T.

DAY.	February 1943																								Range.							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23								
1	+12	0	-7	-11	-12	-11	-11	-11	-8	-6	-7	-8	-8	-7	-6	-6	-3	-1	+4	+14	+19	+24	+27	+32	867	23	42	+35	04	35	-12	47
2	+21	+11	-1	-6	-8	-13	-13	-13	-11	-13	-11	-8	-10	-11	-6	-5	-6	-5	-1	+7	+7	+21	+27	+25	877	22	47	+30	08	50	-18	48
3	+25	+6	-2	-6	-8	-17	-13	-9	-12	-9	-8	-13	-14	-6	-7	-4	-2	+1	+2	+7	+15	+26	+33	+32	863	22	51	+39	06	17	-22	61
4	+30	+19	-2	-17	-29	-24	-17	-5	-4	-10	-8	+5	-4	-4	-1	-5	-4	-2	+1	+6	+20	+32	+24	856	00	66	+34	04	29	-32	66	
5	+9	+5	+5	-6	-12	-18	-17	-17	-10	-10	-5	+1	+13	+1	-7	-6	-7	-6	-2	0	+8	+22	+30	+25	861	22	39	+30	05	58	-22	52
6	+12	+3	0	-6	-10	-11	-16	-19	-26	-22	-18	-8	0	-1	-3	-2	-6	-8	-5	-1	+18	+35	+45	+49	867	23	20	+50	08	42	-28	78
7	+40	+21	0	-16	-22	-21	-16	-13	-11	-8	-7	-6	-6	-3	-1	-2	-2	-1	+2	+7	+7	+12	+24	+24	867	00	06	+45	04	18	-24	69
8	+15	+16	+8	-2	-7	-12	-12	-12	-14	-17	-22	-23	-18	-14	-9	-7	-7	-6	-8	-7	+11	+34	+54	+62	878	23	54	+63	11	08	-24	87
9	+56	+38	+20	+7	-13	-23	-18	-18	-23	-18	-20	-18	-15	-13	-10	-8	-5	-7	-5	+1	+12	+24	+35	+38	879	00	05	+60	05	32	-25	85
+10	+31	+26	+20	+11	0	-7	-8	-7	-9	-9	-7	-7	-11	-12	-13	-12	-13	-12	-8	-3	+3	+11	+19	+20	883	00	05	+31	13	24	-13	44
11	+31	+17	+19	+20	+10	-5	-26	-33	-33	-23	-20	-20	-15	-10	-12	-12	-10	-9	-2	+7	+20	+29	+35	+35	869	23	13	+39	07	12	-42	81
+12	+26	+14	+1	-11	-18	-16	-14	-13	-11	-13	-18	-16	-15	-11	-5	0	+2	+4	+5	+10	+18	+26	+32	+30	870	22	54	+32	04	29	-19	51
13	+21	+31	+38	+24	+12	+2	-4	-4	-17	-14	-14	-11	-13	-12	-12	-12	-12	-9	-8	-4	-2	+6	+8	+13	878	02	16	+45	08	36	-26	71
14	+17	+11	+5	-4	-7	-9	-5	-5	-8	-3	-4	-8	-8	-5	-3	-2	-3	-3	-2	+2	+10	+15	+17	+15	874	00	13	+22	06	05	-13	35
+15	+21	+21	+13	+6	+3	+1	-3	-4	-9	-12	-3	-3	-8	-9	-9	-8	-7	-9	-11	-8	+1	+8	+16	+16	868	00	55	+22	09	00	-13	35
15	+6	+3	-6	-15	-20	-19	-16	-13	-11	-11	-11	-11	-11	-13	-13	-13	-13	-13	-1	+4	+23	+54	+55	+55	875	22	00	+65	04	03	-17	82
17	+87	+75	+51	+30	+6	-19	-30	-12	-27	-29	-17	+21	-12	-15	-10	-13	-13	-19	-21	-17	-22	-16	-1	+13	851	01	18	+90	06	39	-37	127
18																																
19																																
20																																
+21																																
22																																
23																																
24																																
25																																
26																																
27																																
+28																																
29																																
30																																
31																																
MEAN.																																



HORIZONTAL INTENSITY

(H = 54000γ + Mean +)

G.M.T.

March 1943

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.	Minimum. H. M.	Range.		
1	+14	+9	+6	-2	-7	-5	+6	+4	+4	+3	+2	-1	-3	-6	-11	-15	-16	-17	-13	-7	+2	+14	+22	+24	872	23 20	+26	15 54	-18	44
2	+57	+51	+37	+50	+30	+32	+24	-3	-35	-66	-66	-59	-49	-23	-13	-14	-10	-5	-1	+7	+9	+17	+24	+28	837	00 11	+60	09 36	-75	135
3	+7	-1	-3	-3	-1	+5	+12	+19	+17	-1	-2	-15	-22	-20	-15	-11	-3	+1	+2	+4	+5	+4	+12	+17	847	23 40	+17	12 54	-25	42
4	+21	+18	+11	+5	-2	-2	-4	-6	-15	-9	-6	-11	-8	+3	+3	+2	+7	+6	+1	+1	+2	-6	-4	-3	838	00 06	+26	08 38	-20	46
5	-4	-9	-14	-26	-24	-22	-18	-17	-14	-4	+3	+4	+5	+7	+8	+8	+7	+3	+5	+10	+18	+25	+29	+25	856	22 10	+30	03 18	-31	61
6	+8	+2	-5	-7	-8	-10	-10	-7	-5	-2	-2	0	-1	-1	+1	+3	+2	-1	0	+5	+4	+11	+15	+16	851	23 27	+18	06 18	-12	30
7	+9	+7	-3	-13	-14	-15	-14	-10	-5	-2	-2	0	+2	+4	+0	0	+0	-3	-8	-3	+5	+17	+25	+22	859	23 04	+27	04 51	-16	43
8	+23	+14	+4	-7	-6	-9	-9	-9	-14	-14	-14	-6	+5	+4	+1	+3	+4	-0	-1	-1	+2	+10	+7	+10	850	00 11	+26	10 12	-17	43
9	+3	0	-4	-5	-3	0	-8	-18	-16	-7	-10	-12	-3	+2	+2	0	+3	+1	+1	+10	+10	+14	+17	+21	859	23 36	+22	07 28	-20	42
+10	+16	+11	+4	-3	-6	-5	-6	-9	-8	-5	-4	-4	-4	-3	-1	+2	+4	0	-1	-1	+1	+2	+5	+9	865	23 59	+10	08 05	-10	20
11	+25	+20	+8	+1	-5	-7	-10	-11	-12	-13	-12	-11	-10	-8	-10	-6	-5	-5	-2	+3	+9	+18	+23	+25	866	23 15	+27	08 47	-15	42
12	+23	+15	+3	-15	-17	-14	-14	-12	-14	-8	-12	-12	-10	-10	-9	-5	-5	-4	0	+8	+18	+27	+31	+31	868	22 47	+31	04 14	-19	50
+13	+19	+12	+4	-1	-3	-6	-6	-6	-4	-4	-8	-10	-11	-11	-11	-8	-8	-4	-6	-3	+2	+13	+22	+28	872	23 59	+30	14 17	-13	45
16	+51	+40	+35	+33	+28	+13	0	-8	-15	-19	-32	-41	-30	-20	-17	-16	-13	-11	-5	0	-5	+5	+13	+8	851	00 03	+51	10 48	-49	100
17	-6	+2	+4	+2	-1	-6	-7	-6	-6	-3	+4	-8	-14	-13	-11	-8	-7	-5	-3	+4	+13	+19	+24	+29	852	23 55	+32	12 51	-19	51
18	+22	+19	+12	+4	-6	-11	-8	-10	-14	-19	-16	-13	-12	-13	-11	-8	-8	-6	-5	+3	+14	+27	+35	+34	862	23 00	+37	09 19	-22	59
19	+21	+14	+4	-4	-6	-9	-9	-16	-14	-11	-11	-11	-9	-9	-9	-6	-5	-1	+3	+6	+25	-1	+16	+32	870	23 57	+35	07 48	-21	56
20	+44	+39	+24	+10	-4	-9	-9	-9	-23	-16	-24	-17	-14	-9	-11	-14	-9	-6	-14	+1	+4	+11	+26	+34	860	00 33	+47	08 30	-33	80
21	+26	+13	-2	-12	-12	-14	-14	-17	-22	-22	-22	+1	-11	-13	-12	-10	-7	0	+6	+8	+19	+32	+39	+41	863	23 24	+44	10 00	-29	73
22	+41	+36	+20	+10	+5	+3	0	0	0	0	-10	-11	-12	-8	-7	-3	-7	-9	-8	-5	-2	-15	-10	-5	866	00 39	+43	21 52	-20	63
23	+12	-1	-6	-3	-28	-25	-30	-12	-8	-15	-11	+2	+7	+11	+7	+4	+4	+4	-2	+6	+7	+17	+28	+35	837	23 39	+38	06 58	-37	75
24	+21	+19	+13	+3	-1	-9	-17	-19	-14	-13	-12	-9	+5	+1	-4	-4	-9	-8	-8	-8	+3	+16	+27	+31	853	23 27	+31	07 46	-21	52
+25	+25	+16	+9	-1	-11	-16	-18	-16	-16	-16	-14	-11	-7	-4	-4	-4	-5	-5	-3	+4	+12	+20	+29	+35	855	23 49	+36	08 14	-19	55
26	+26	+17	+7	+2	-2	-10	-13	-16	-19	-18	-15	-14	-10	-8	-8	-5	-4	-4	-7	0	+7	+19	+32	+38	864	23 27	+39	08 45	-20	59
27	+33	+19	+14	+11	+5	+1	-1	-5	-6	-9	-8	-9	-9	-7	-9	-9	-10	-10	-10	-9	-5	+4	+16	+24	865	00 02	+37	18 56	-11	48
+28	+24	+16	+8	+3	-1	-3	-5	-7	-9	-8	-8	-7	-6	-5	-5	-2	0	-2	-3	+3	+2	+1	+6	+10	864	00 04	+25	08 15	-10	55
29	+24	+16	+13	+10	+9	+8	+5	+3	+7	+10	+6	+3	+10	+14	+11	+20	+23	+21	+29	+28	-37	-72	-70	-85	846	19 00	+53	23 00	-88	141
30	-42	-47	-47	-43	-47	-41	-28	-13	-3	-4	+8	+8	+7	+8	+15	+22	+27	+29	+33	+37	+30	+33	+28	+25	799	19 28	+41	02 02	-51	92
31	-3	-8	-13	-16	-13	-10	-9	-8	-3	-3	-3	-3	0	0	+5	+5	+2	+7	+17	+12	+13	+17	+8	+11	827	18 51	+18	03 19	-19	37
MEAN.	+19	+12	+5	-1	-5	-7	-8	-8	-10	-10	-10	-10	-7	-5	-4	-3	-2	-1	0	+4	+6	+10	+16	+19	854					



International
Seismological
Centre

HORIZONTAL INTENSITY

(H = 34000Y + Mean +)

G.M.T.

April 1943

DAY.																									Mean.	Maximum.		Minimum.		Range.				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H.	M.	H.	M.		γ			
1	+25	+18	-4	-19	-29	-26	-21	-19	-19	-14	-20	-14	-17	-9	-4	0	+2	+5	+11	+20	+25	+27	+40	+46	825	23	57	+50	04	26	-31	81		
2	+28	+5	+4	+5	-23	-28	-17	-22	-21	-14	-11	-10	-11	-11	-4	+1	+1	+2	+5	+11	+21	+24	+27	+38	839	23	18	+42	05	58	-31	73		
3	+32	-11	-13	-20	-37	-27	-38	-24	-13	-12	+4	+2	+2	+9	+2	+9	+9	+9	+17	+19	+24	+31	+34	+12	826	00	00	+49	06	43	-46	95		
4	0	-1	-11	-24	-23	-23	-18	-6	-6	-5	-1	+9	+2	+9	+9	+12	+9	0	-8	-3	+12	+24	+26	+27	836	23	07	+33	03	15	-25	58		
5	+5	-10	-20	-19	-16	-12	-11	-16	-21	-28	-20	-4	+2	+2	+6	+11	-2	+22	+18	+19	+29	+33	+20	+18	832	21	08	+36	09	22	-31	67		
6	+7	-4	-12	-7	-2	0	-4	-4	-7	-4	-12	-12	+3	-9	-11	-9	-12	-10	-7	+2	+14	+25	+35	+33	842	22	41	+38	11	09	-24	62		
7	+30	+20	-9	-18	-12	-14	-12	-11	-9	-4	-4	+1	0	-9	-6	-4	-2	-1	-1	-3	+1	+11	+24	+26	839	00	06	+35	02	47	-22	57		
8																																		
9																																		
10	+43	+38	+32	+24	+12	-5	-28	-16	-11	-23	-27	-32	-22	-21	-14	-5	0	+7	+12	+10	+7	+6	+9	+1	816	00	03	+44	11	24	-42	86		
11	+16	+6	-21	-27	-32	-51	-36	-55	-54	-44	-30	+3	+7	+11	+19	+21	+23	+32	+36	+40	+37	+35	+35	+33	785	19	33	+40	07	40	-62	102		
12	-9	+2	-5	-10	-11	-10	-7	-7	-9	-14	-14	-10	-9	-4	-2	0	+1	+5	+7	+10	+13	+20	+28	+29	832	23	14	+29	09	38	-16	45		
13	+10	+2	-5	-10	-11	-10	-10	-11	-9	-7	-7	-7	-7	-6	-5	-5	-4	0	+4	+11	+16	+24	+27	+25	850	22	25	+27	04	39	-12	39		
14	+7	+2	+2	-1	-6	-11	-13	-14	-13	-14	-15	-15	-15	-13	-11	-8	-6	-2	+3	+12	+20	+29	+36	+35	863	23	20	+37	07	37	-16	53		
15	+16	+4	-1	-2	-1	-5	-9	-7	-9	-15	-15	-17	-11	-10	-10	-8	-8	-4	+6	+15	+13	+25	+29	+22	870	22	53	+53	11	15	-22	55		
16	+36	+29	+17	+13	+6	-5	-17	-35	-28	-16	-4	-10	-15	-18	-13	-5	-3	-1	+2	+4	+9	+18	+24	+22	853	00	21	+37	07	36	-40	77		
17	+12	+4	-5	-6	-5	-5	-15	-19	-18	-16	-9	-3	-4	-5	-5	-4	-4	-0	+7	+15	+15	+26	+32	+31	855	22	37	+35	07	58	-23	58		
18	+19	+9	-1	-13	-31	-23	-21	-16	-11	-7	-6	-7	-8	-9	-9	-7	-5	+1	+6	+15	+22	+29	+31	+31	861	22	41	+34	04	18	-36	70		
19	+24	+13	-3	-12	-13	-9	-11	-10	-10	-7	-7	-8	-8	-11	-6	-5	-5	-3	0	0	+8	+19	+28	+28	862	00	03	+30	04	07	-16	46		
20	+19	+12	+4	-1	-3	-8	-11	-9	-5	-5	-6	-9	-12	-12	-10	-8	-9	-5	0	+5	+10	+15	+24	+31	865	23	12	+33	13	03	-15	48		
21	+39	+16	-3	-14	-14	-31	-32	-23	-38	-7	-7	+14	+3	+8	(+9)	-3	+3	+1	+3	0	+9	+23	+31	+29	843	00	03	+51	05	45	-38	89		
22	+13	+3	-2	-4	-8	-12	-14	-12	-14	-14	-16	-12	-9	-5	-4	-4	-3	0	+8	+11	+18	+23	+28	+30	852	23	57	+32	10	21	-18	50		
23	+13	-2	-10	-12	-10	-11	-11	-12	-12	-11	-7	-6	-5	-2	0	+2	+3	+5	+7	+7	+12	+19	+25	+28	862	23	21	+29	08	54	-14	43		
24																																		
25																																		
26																																		
27																																		
28																																		
29																																		
30																																		
31																																		
MEAN.	+17	+6	-4	-9	-13	-15	-17	-17	-16	-13	-11	-7	-7	-6	-3	-1	0	+5	+7	+11	+17	+23	+28	+27	844									



International Seismological Centre

HORIZONTAL INTENSITY

(H = 34000Y + Mean +)

G.M.T.

May 1943

DAY.																									Mean.	Maximum.		Minimum.		Range.		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H. M.	γ	H. M.	γ		H. M.	γ
1	+49	+35	+11	-8	-25	-29	-44	-18	-20	-27	+4	+3	-8	+6	+23	+13	+14	+12	-2	+2	+4	+5	-12	809	22	59	+29	00	00	-39	68	
2	-23	-21	-28	-30	-29	-21	-10	-9	-4	+11	-6	+3	+8	+6	+3	+1	+8	+15	+16	+19	+25	+29	+26	822	22	07	+26	04	03	-9	35	
3	0	-1	-5	-8	-9	-6	-6	-6	-4	+1	-2	-5	-4	-4	-4	-1	1	6	+11	+14	+19	+22	+15	834	22	07	+26	04	03	-9	35	
4	+12	+11	+4	-4	-11	-26	-21	-12	-13	-13	-14	-13	-11	-9	-4	-1	5	+12	+18	+21	+21	+26	+23	844	23	02	+27	05	28	-30	57	
5	+13	+7	+4	-4	-8	-7	-12	-13	-14	-10	-7	-9	-13	-10	-9	-3	0	+3	+13	+21	+25	+25	+22	848	22	13	+27	12	06	-16	43	
6	+9	-1	-5	-5	-6	-7	-7	-7	-7	-5	-4	-4	-3	-2	-2	0	+1	+5	+6	+11	+14	+15	+15	850	22	04	+16	05	46	-9	25	
7	+7	0	-8	-17	-14	-10	-10	-10	-8	-9	-7	-6	-3	-3	-4	-4	2	+2	+11	+22	+28	+29	+20	855	22	08	+31	03	38	-19	50	
8	+8	+5	-8	-8	-8	-7	-7	-7	-7	-7	-5	-5	-5	-6	-6	-2	0	+4	+10	+15	+16	+18	+15	862	22	06	+18	03	45	-10	28	
9	+20	+13	+7	0	-1	-2	-5	-7	-9	-12	-9	-7	-7	-4	-4	-2	+1	+5	+7	+9	+9	+7	+8	857	21	06	+10	09	00	-12	22	
10	-3	-5	-1	-3	-8	-1	-3	-4	-8	-4	-8	-10	-10	-8	-5	-1	+5	+12	+11	+12	+14	+12	+10	870	19	10	+15	12	13	-13	28	
11	+6	+6	+1	-2	-4	-1	-5	-12	-14	-17	-15	-14	-12	-8	-3	+3	+5	+11	+16	+18	+18	+20	+11	874	21	43	+24	09	06	-17	41	
12	+20	+17	+6	-16	-25	-11	-11	-19	-13	-14	-14	-15	-11	-10	-7	0	+1	+3	+6	+16	+27	+36	+30	859	22	41	+36	04	01	-34	70	
13	+22	+26	+27	+24	+23	+19	+5	-19	-36	-17	-11	-20	-19	-17	-14	-16	-9	-2	+5	+10	+12	+14	+14	852	02	05	+30	08	17	-42	72	
14	+18	+12	-3	-15	-13	-9	-7	-4	-1	-13	-17	-13	-9	-9	-7	-2	+5	+11	+18	+20	+24	+15	0	847	21	15	+25	10	10	-19	44	
15	+6	-24	-33	-30	-41	-31	-9	-18	-17	-8	-1	+12	+1	0	-1	+2	+10	+19	+27	+32	+40	+38	+31	819	21	57	+45	04	37	-44	89	
16	+4	+5	+5	+4	+6	+6	+4	+5	+6	0	-4	-18	-29	-21	-19	-9	-9	+3	+10	+13	+18	+20	+11	842	21	46	+22	12	19	-31	53	
17	+6	-1	-6	-7	-4	-1	-20	-24	-18	-11	-5	-10	-9	-8	-6	-1	-9	-17	+27	+22	+23	+26	+12	844	19	17	+28	07	09	-34	62	
18	+10	+3	-20	-21	-35	-50	-45	-14	+3	-9	-2	+8	-4	-6	-4	+8	+13	+20	+26	+35	+40	+26	+25	825	21	22	+45	06	06	-56	101	
19	+15	+1	-12	-8	-36	-37	-27	-17	-11	-6	-4	-4	0	+10	+1	+4	+14	+25	+21	+23	+23	+31	+28	829	22	51	+32	04	49	-47	79	
20	+11	0	-6	-7	-8	-8	-7	-6	-6	-8	-8	-7	-2	-1	-6	-3	+4	+4	+11	+14	+16	+19	+12	841	22	19	+20	09	43	-11	51	
+21	-2	-9	-14	-12	-11	-14	-14	-14	-9	-9	-4	-4	-1	0	0	-3	+6	+13	+17	+23	+26	+26	+26	849	22	53	+26	02	09	-16	42	
+22	+13	+9	+6	+2	-7	-10	-15	-17	-16	-13	-8	-6	-6	-7	-6	-1	+3	+9	+12	+18	+24	+28	+28	858	23	11	+28	07	37	-19	47	
23	+26	+22	+19	+15	+7	-7	-22	-23	-27	-28	-18	-11	-14	-12	-11	-8	-4	+4	+13	+19	+22	+20	+18	856	21	57	+24	09	11	-29	53	
24	+33	+4	-35	-28	-6	-7	-8	-11	-13	-8	+2	+2	+4	+4	+14	+8	+8	-1	+1	+1	+1	+4	-3	836	14	58	+45	02	51	-44	89	
25	+10	+4	-6	-1	-9	-17	-19	-23	-27	-27	-17	-1	+5	+4	+5	+9	+14	+26	+21	+16	+16	+14	+9	824	19	55	+26	08	47	-56	62	
26	-11	-15	-19	-10	-4	-6	-9	-11	-10	-12	-9	-5	-2	0	+2	+7	+19	+24	+24	+22	+18	+19	+13	838	18	59	+24	02	25	-21	45	
27	+5	+5	+3	-3	-11	-23	-38	-32	-19	-12	-7	-5	-5	-4	-3	+9	+16	+22	+25	+21	+15	+19	+13	840	21	00	+27	06	52	-42	69	
28	+7	-2	-17	-21	-17	-14	-22	-16	-11	+6	+10	-4	0	0	+5	+6	+12	+15	+13	+14	+10	+1	+1	855	19	16	+17	02	48	-27	44	
29	-9	-2	-7	-16	-14	-14	-13	-17	-11	+2	-4	-9	-2	-2	-2	+5	+11	+10	+18	+24	+29	+28	+28	844	21	55	+31	04	13	-25	54	
30	+18	+6	-6	-6	-11	-17	-21	-9	-11	-10	-9	-7	-6	-7	-9	-6	+8	+18	+25	+27	+27	+26	+21	849	22	00	+28	06	32	-26	54	
31	+2	-4	-10	-11	-12	-12	-12	-10	-9	-9	-9	-9	-9	-10	-10	-6	+9	+21	+30	+27	+36	+36	+8	860	22	25	+39	06	54	-15	54	
MEAN.	+10	+3	-5	-8	-11	-13	-14	-13	-11	-10	-7	-6	-6	-5	-3	0	+4	+9	+14	+18	+20	+21	+15	844								



HORIZONTAL INTENSITY

(E = 34000γ + Mean +)

G.M.T.

June 1943

DAY.	June 1943																															Range.				
	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.	H. M.	Maximum.	H. M.	Minimum.	H. M.						
1	-5	+1	+14	+4	-6	-6	-6	-9	-11	-7	-11	-11	-11	-9	-6	-3	-2	-1	+6	+13	+10	+10	+16	+18	860	01	21	+26	09	24	-15	41				
2	+22	+24	+20	+12	-7	-7	-7	-6	-7	-3	-12	-22	-22	-18	-13	-11	-9	-9	-7	-1	+7	+10	+9	+9	+9	855	01	37	+25	12	49	-23	48			
3	+1	-2	-6	-10	-9	-11	-16	-16	-13	-11	-9	-10	-7	-7	-6	-6	-6	-6	+8	+19	+27	+35	+40	+36	858	22	36	+41	07	07	-18	59				
4	+21	+12	+6	-2	-10	-10	-10	-6	-8	-6	-8	-7	-6	-6	-5	-4	-3	+5	+4	+5	+10	+13	+15	+15	862	00	00	+27	07	06	-10	37				
5	+2	-5	-10	-13	-11	-8	-8	-10	-13	-14	-13	-8	-8	-23	-6	0	+3	+3	+14	+21	+26	+31	+32	+25	870	22	06	+33	11	00	-14	47				
6	+21	+8	-7	-15	-5	-5	-12	-21	-12	-6	-2	-5	-5	-3	-2	-2	-1	+8	+10	+10	+15	+18	+18	+18	859	00	00	+26	08	17	-27	53				
7	+15	+5	0	-3	-1	+2	+1	-1	-3	-6	-8	-14	-15	-14	-14	-14	-14	+2	+4	+4	+9	+27	+17	+17	860	22	38	+32	12	45	-16	48				
8	+26	+26	+21	+31	+1	-23	-25	-26	-36	-5	-13	-20	-14	-7	-7	-2	-1	-8	+7	+15	+16	+13	+13	+18	836	03	33	+38	09	05	-57	95				
9	+15	+10	+12	+3	-4	-12	-14	-15	-5	-18	-22	-13	-9	-9	-2	0	+3	+3	+7	+12	+15	+15	+10	+13	837	00	08	+20	10	58	-27	47				
10	+16	+16	+11	+2	-17	-13	-11	-11	-24	-6	-7	-6	-5	-5	-3	-1	+4	+6	+9	+14	+15	+17	+6	+7	858	01	04	+19	09	15	-28	47				
11	0	+3	+5	+7	+4	+3	+1	0	-5	-9	-15	-18	-17	-13	-8	-8	-3	-1	+3	+10	+15	+22	+20	+13	859	21	48	+23	11	52	-22	45				
12	+12	+10	+9	+6	+2	-8	-20	-9	-15	-23	-23	-18	-17	-17	-15	-10	-5	-5	+8	+13	+27	+34	+32	+24	855	22	00	+37	10	39	-27	64				
13	+18	-19	-26	-24	-17	-14	-10	-8	-7	-4	-5	-3	0	-3	-7	-3	0	+4	+13	+24	+25	+23	+19	+20	854	19	58	+29	01	52	-43	72				
14	+11	-19	-23	-8	-7	-1	-17	-11	-11	0	-4	-7	-3	-3	-3	-2	+1	+4	+11	+19	+20	+23	+23	+20	848	21	39	+24	01	56	-50	54				
15	+6	-1	-7	-10	-9	-8	-9	-6	-6	-8	-8	-8	-8	-7	-6	-7	-5	-1	+8	+17	+24	+27	+23	+13	860	21	16	+28	07	00	-10	38				
16	+2	+2	0	-4	-11	-10	-9	-9	-10	-10	-10	-10	-8	-8	-8	-8	-5	0	+6	+13	+20	+30	+31	+25	862	22	07	+32	04	32	-12	44				
17	+10	+5	0	-1	-5	-8	-8	-6	-5	-5	-5	-7	-8	-8	-8	-7	-5	-3	+2	+7	+12	+15	+17	+16	867	22	54	+17	06	35	-10	27				
18	+5	0	-5	-10	-12	-13	-13	-11	-10	-8	-7	-7	-6	-6	-7	-6	-6	-2	+5	+13	+20	+23	+30	+35	874	23	20	+38	04	38	-12	50				
19	+23	+16	+13	+7	-1	-4	-8	-12	-13	-10	-9	-12	-8	-8	-7	-7	-8	-5	0	+13	+16	+15	+11	+4	881	20	28	+18	12	47	-13	51				
20	+6	-20	-29	-27	-14	-11	-15	-13	-16	-12	-8	-6	-4	-4	+4	+7	+11	+19	+24	+24	+27	+26	+30	+12	843	21	33	+29	05	18	-36	65				
21	+8	+8	+4	-2	-4	-8	-22	-21	-19	-5	-30	-14	-8	-8	-5	-	0	+8	+20	+22	+25	+24	+21	+21	844	22	47	+27	07	51	-26	53				
22	+19	+9	+6	-3	-12	-25	-25	-18	-19	-14	-10	-3	-4	-4	-3	+2	+4	+6	+11	+16	+16	+17	+14	+19	843	23	58	+23	07	22	-41	64				
23	+13	+15	+8	+4	-6	-8	-7	-14	-8	-11	-14	-7	+1	-7	-7	-2	+9	+11	+14	+18	+11	+4	+1	-6	853	19	27	+18	08	15	-18	36				
24	-3	-5	-4	-10	-24	-11	-16	-7	-14	-1	0	-4	-3	-3	0	-2	-0	+3	+16	+22	+22	+27	+26	+22	847	22	24	+30	04	27	-29	59				
25	+5	-7	-8	-6	+2	0	-3	0	-3	+4	+2	-5	-8	-8	-8	-5	-2	-1	+7	+12	+11	+9	+12	+9	850	20	07	+14	01	51	-11	25				
26	-1	-3	-4	-8	-10	-5	-7	-4	-4	-3	-4	-7	-3	-3	-2	-1	-1	+3	+7	+9	+13	+14	+14	+18	855	22	05	+17	04	02	-15	30				
27	-5	-3	-7	-9	-13	-9	-18	-18	-14	-13	-9	-8	-9	-9	-7	-4	-2	+8	+24	+24	+24	+19	+24	+24	865	23	58	+29	08	15	-21	50				
28	+36	+31	+30	+26	+14	+16	+17	-14	-17	-21	-17	-16	-21	-12	-7	-6	-6	-1	0	-7	0	0	+4	-5	857	00	05	+38	13	07	-26	64				
29	-7	-8	-9	-11	-18	-20	-17	-16	-13	-9	-7	-6	-5	-5	-3	-1	+1	+4	+11	+18	+26	+29	+31	+34	855	23	05	+35	04	39	-31	56				
+30																																				
31																																				
MEAN.																																				
	+10	+4	+1	-3	-7	-8	-9	-12	-11	-12	-9	-10	-9	-8	-6	-4	-2	+1	+7	+14	+17	+19	+20	+17												



International Seismological Centre

HORIZONTAL INTENSITY

(H = 34000γ + Mean +)

G.M.T.

July 1943

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	+48	+46	+41	+17	-13	-29	-54	-57	-37	-28	-19	-16	-13	-13	-7	-5	-4	+ 1	+ 8	+16	+23	+31	+36	+33	847	22 51	+38	07 03	-65	103	
2	+10	- 6	- 7	- 6	- 7	-12	- 8	-12	-21	-13	- 5	+ 4	-12	- 6	- 1	- 5	+ 9	+18	+18	+ 9	+ 9	+16	+14	+12	854	16 52	+27	08 09	-23	50	
3	+20	- 1	-12	- 2	+ 2	-20	-10	-18	-13	-21	-17	- 8	- 3	+ 2	+13	+ 9	+ 4	+ 9	+ 7	+ 7	+13	+16	+ 7	+ 7	841	00 07	+24	05 32	-37	61	
4	+21	+15	-12	-19	- 6	0	-17	-20	-11	-17	- 3	-11	+ 4	+ 1	- 3	- 1	+ 2	+ 6	+10	+14	+14	+20	+15	+ 8	834	00 39	+25	03 16	-25	50	
5	0	- 5	0	+ 5	- 2	-17	-14	-10	- 7	- 2	0	- 7	- 2	- 0	+ 4	+ 9	+ 9	+ 8	+13	+16	+18	-14	-14	+13	845	20 01	+19	05 12	-19	38	
6	- 4	- 6	- 3	- 8	- 5	+ 4	-10	- 5	- 3	-10	-14	+ 1	- 4	- 9	- 2	+ 1	0	0	+ 3	+ 2	+ 6	+18	+20	+17	848	21 38	+21	10 35	-16	37	
7	+24	+17	+ 8	- 1	+ 1	+ 3	- 2	-26	-32	-34	-17	0	- 6	- 7	- 7	+ 5	+ 3	+ 5	+ 2	+13	+11	+12	+23	+26	840	00 16	+28	09 21	-46	74	
8	+22	+14	+ 4	-24	-15	-13	- 9	-14	-19	- 8	+ 2	- 3	-12	-10	- 2	- 3	- 1	- 3	- 1	+ 4	+ 9	+17	+24	+32	846	23 53	+34	03 42	-32	66	
9	+50	+20	+13	+ 4	- 8	- 7	-22	-19	-25	-27	-24	-21	-15	+ 2	+ 2	+ 3	+ 3	+ 3	+ 9	+20	+19	+23	+19	+ 4	845	00 06	+35	06 08	-36	71	
10	- 1	+ 3	0	-10	- 7	- 7	- 6	-23	- 6	- 2	-10	- 7	- 3	0	+ 1	+ 3	+ 3	+ 9	+14	+ 9	+ 6	+ 7	+14	+12	846	22 48	+14	03 45	-13	27	
11	+ 2	-21	-21	-16	- 8	-10	- 1	+ 2	0	- 6	+ 1	- 1	- 4	- 2	- 1	- 4	+ 1	+ 1	+ 6	+15	+13	+16	+19	+22	849	23 45	+25	01 54	-30	55	
12	+ 9	+ 7	+ 4	0	- 4	- 5	- 6	- 7	-10	-10	- 9	- 9	- 9	- 9	- 7	- 5	- 2	+ 2	+ 6	+ 8	+ 9	+17	+20	+ 8	860	22 32	+23	09 24	-11	34	
13	+15	+12	0	-13	-10	- 8	- 7	- 2	- 8	- 9	- 9	-12	- 9	- 3	- 2	- 2	- 1	+ 1	+ 4	+ 5	+ 8	+ 8	+13	+20	837	23 59	+23	09 26	-14	37	
14	+11	+ 4	- 4	-11	-12	- 9	- 8	- 9	-10	-10	-11	- 7	- 5	- 5	- 1	+ 1	+ 3	+ 8	+11	+ 9	+ 9	+12	+19	+16	861	22 27	+21	04 21	-14	35	
15	+ 8	+12	+14	+11	+ 7	+ 3	+ 1	- 2	- 3	- 7	- 5	- 8	-10	-10	- 9	- 8	- 2	+ 1	+ 2	+ 3	+ 9	+12	+ 1	- 8	870	02 56	+15	25 59	-15	28	
16	+ 2	- 3	- 8	-12	-13	-16	-16	- 5	- 4	+ 1	- 4	-11	-11	- 8	- 7	- 2	- 2	+ 8	+16	+13	+15	+ 20	+25	+28	852	25 59	+50	06 00	-21	51	
17	+15	+ 5	- 3	- 6	- 8	-14	-16	-14	-11	-13	-13	-18	-13	- 6	- 7	- 5	- 3	+ 2	+10	+18	+18	+20	+25	+27	865	25 39	+27	11 20	-17	44	
18	+21	+13	+ 2	-10	-10	-11	-10	-11	-12	-11	-12	-12	-11	-11	-10	- 9	- 4	+ 2	+ 8	+14	+15	+22	+28	+30	868	25 30	+32	10 06	-14	46	
19	+38	+40	+31	+29	+20	- 8	-25	-15	-13	-18	-32	-22	-18	-24	-17	- 5	-13	- 8	0	+ 1	+ 9	+21	+ 8	+11	860	00 55	+45	10 20	-10	53	
20	+ 3	- 7	-14	-15	-11	- 9	-19	-19	- 9	-10	- 6	+ 7	+ 1	+ 1	0	- 3	- 1	+ 1	+ 8	+16	+24	+28	+22	+25	850	21 04	+36	06 45	-27	63	
MEAN.	+15	+ 8	+ 2	- 4	- 5	- 9	-13	-14	-13	-13	-10	- 8	- 8	- 6	- 3	- 2	0	+ 4	+ 8	+11	+12	+16	+17	+17	851						

200, 1. 45-143571



International
Seismological
Centre

HORIZONTAL INTENSITY

(H = 34000Y + Mean + e.....)

G.M.T.

August 1943

DAY.																									Mean.	Maximum.		Minimum.		Range.					
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H.	M.	H.	M.		H.	M.			
1	-2	-9	-2	-2	+6	+3	-13	-24	-26	-25	-22	-18	+2	-10	-8	-6	-1	+8	+14	+21	+28	+27	+28	+25	854	20	10	+31	09	00	-29	60			
2	+18	+6	+11	-11	-26	-36	-41	-11	-11	-12	-12	-1	-4	-6	-1	+9	+5	+5	+10	+17	+17	+24	+25	+24	853	20	00	+24	06	25	-49	73			
3	+11	-1	-6	-12	-21	-19	-15	-11	-11	-1	-4	-2	-2	+2	+3	+1	+3	+4	+9	+9	+9	+15	+24	+25	841	22	12	+30	05	05	-26	56			
4	+7	+7	+4	-14	-14	-9	-8	-9	-9	-5	-5	-5	-4	+2	+4	+5	+3	-1	+7	+5	+7	+8	+8	+12	840	20	20	+14	03	50	-22	36			
5	+7	-12	-2	-20	-16	-21	-15	-6	-9	+3	0	+3	+5	+12	+15	+10	+10	+7	+6	+6	+6	+7	+8	+10	840	14	40	+20	02	21	-34	54			
6																																			
7																																			
8	+39	+39	+29	+20	-4	-2	+8	+11	+2	+1	-3	-15	+3	-7	+5	+10	+25	+8	-12	-17	-27	-37	-33	-43	827	15	47	+52	23	59	-59	111			
9	-39	-52	-46	-40	-44	-45	-35	-27	-18	-9	+1	+11	+16	+19	+23	+21	+24	+25	+28	+33	+38	+40	+41	+28	795	22	31	+41	02	00	-59	100			
10	-13	-17	-22	-26	-24	-14	-2	-4	-7	-2	-2	-1	-2	-3	-2	+5	+5	+10	+17	+21	+24	+24	+24	+21	827	20	36	+25	03	22	-29	54			
11	-2	-6	-11	-11	-11	-8	-9	-6	-13	-14	-14	-14	-13	-11	-9	-6	-1	+5	+14	+22	+26	+29	+32	+32	843	23	00	+33	10	48	-16	49			
12	+11	+1	-7	-7	-6	-10	-21	-34	-28	-24	-20	-18	-14	-11	-8	-6	+2	+15	+24	+35	+43	+37	+34	+21	854	20	39	+46	07	29	-36	82			
13	+36	+34	+29	+21	+3	-42	-30	-30	-29	-17	-24	-6	-10	+8	-1	-3	0	+4	+15	+16	+22	-1	+6	+9	831	01	03	+29	05	52	-55	84			
14	-8	-12	-9	-9	-12	-14	-3	-2	-5	-6	-6	-6	+6	0	-1	0	0	+5	+20	+23	+18	+21	+8	-3	837	19	39	+25	04	48	-18	43			
15	-2	-3	-12	-19	-17	-21	-16	-11	-3	-2	-2	0	-2	-2	-5	-1	+3	+7	+12	+10	+21	+18	+20	+25	842	23	59	+29	05	21	-24	53			
16	+29	+17	-14	-25	-27	-30	-23	-9	-16	-11	+4	+15	-6	-4	-4	-6	-4	-7	+3	+17	+21	+26	+30	+25	841	22	28	+31	05	15	-36	67			
17	+20	-4	-11	-12	-17	-22	-23	-28	-22	-4	-4	0	-4	-2	-2	+1	-4	+5	+15	+28	+24	+24	+25	+20	836	19	44	+30	06	11	-42	72			
18	+20	+4	-1	-7	-13	-12	-6	+9	+8	+29	-2	-2	-12	-13	-17	-20	-23	-15	-13	+1	+14	+17	+19	+19	827	10	12	+58	16	06	-25	83			
19	+9	-2	-10	-9	-7	-13	-13	-11	-24	-20	-20	-17	-11	-8	+4	+6	+9	+9	+10	+19	+24	+36	+31	+18	831	21	28	+38	08	59	-35	73			
20	-11	-19	-7	-8	-3	-10	-25	-23	-19	-14	+15	+13	-9	-7	+2	+4	+3	+4	+4	+12	+19	+26	+26	+20	826	10	46	+46	07	02	-35	81			
21	-14	-32	-26	-14	-21	-15	-23	-12	-9	-3	0	-1	-3	+6	+6	+6	+7	+9	+11	+17	+21	+27	+31	+31	829	22	20	+33	01	28	-35	68			
22	+10	+2	-7	-8	-5	-9	-9	-12	-12	-13	-13	-12	-8	-5	-2	0	+1	+3	+5	+11	+14	+17	+19	+18	844	22	30	+21	09	32	-15	56			
23	+8	-1	-12	-18	-15	-15	-14	-12	-10	-7	-7	-5	-5	-7	-5	-3	-0	+3	+8	+18	+25	+23	+28	+20	852	22	54	+30	05	32	-20	50			
24	+31	+22	+6	+2	-3	-33	-53	-37	-34	-16	-10	-9	-7	-2	+1	+2	+6	+12	+13	+16	+21	+23	+22	+26	859	00	12	+56	06	29	-61	97			
25	+24	+13	-12	-33	-24	-17	-10	-14	-10	-2	-3	-4	-2	-5	0	+10	+4	0	+9	+15	+17	+18	+15	+7	842	21	48	+20	03	15	-40	60			
26	+3	-1	-5	-16	-8	-16	-10	-16	-23	-13	-11	-5	-3	-3	+1	+6	+6	+11	+13	+21	+21	+23	+24	+17	836	20	28	+27	08	05	-36	63			
27	-5	-11	-17	-20	-16	-12	-11	-9	-8	-7	-6	-6	-6	-7	-3	-3	+0	+4	+9	+21	+23	+29	+24	+17	848	21	20	+30	03	15	-23	53			
28	+24	+15	+10	0	-6	-7	-1	+7	+14	+9	+7	+25	-5	-9	-4	-20	-22	-15	-9	+3	+13	-10	-31	-24	845	11	33	+44	23	58	-36	80			
29	-10	-14	-19	-19	-15	-7	-3	-4	+8	-4	0	+13	0	0	-4	0	+2	+2	+3	+3	+11	+23	+18	+18	832	22	32	+25	02	55	-21	46			
30	+17	+11	0	-22	-5	0	+2	-8	-5	-13	-10	-20	0	+8	+16	+24	+17	+4	+6	+9	+2	-7	-5	-25	828	16	05	+27	23	58	-40	67			
31	+25	+6	-18	-52	-57	-108	-52	-62	-11	-20	+9	+8	+31	+23	+30	+60	+32	+26	+21	+24	+10	+21	+25	+25	764	15	22	+71	05	37	-23	194			
MEAN.	+8	-1	-6	-13	-15	-19	-17	-14	-12	-9	-5	-3	-2	-1	+1	+3	+4	+5	+9	+15	+16	+19	+19	+14	835										

International Seismological Centre

HORIZONTAL INTENSITY

(H = 34000γ + Mean +)

G.M.T.

September 1943

DAY.																									Mean.	Maximum.		Minimum.		Range.				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H.	M.	H.	M.		γ			
1	-32	+33	-32	-18	-13	-11	-8	-14	-7	-1	-8	-6	+8	+13	+5	+4	+7	+1	+11	+23	+31	+42	+40	804	22	58	+47	02	19	-44	91			
2	+20	+10	-16	-21	-14	-8	-14	-12	-2	-14	-19	-3	-2	+2	+16	+2	-	-	+2	+23	+23	+23	+9	812	20	47	+29	10	17	-25	54			
3	+4	-6	-6	-15	-13	-26	-38	-19	+3	+3	-8	+18	+1	-1	+1	-3	-	-	+7	+18	+28	+13	+34	811	23	56	+43	06	40	-48	91			
4	+28	+22	+12	+2	-14	-34	-19	-34	-10	-22	-5	-10	-16	-11	-2	+1	0	0	+7	+17	+26	+28	+26	822	00	02	+29	05	56	-41	70			
5	+20	+6	-18	-33	-30	-15	-10	-16	-9	0	-9	+3	+1	-2	+2	+1	0	0	+12	+23	+30	+28	+25	826	21	29	+31	03	12	-35	66			
6	+15	+4	-3	-12	-19	-21	-28	-21	-17	-13	-13	0	-6	-9	-6	-4	-4	+1	+19	+26	+33	+39	+41	833	23	01	+41	07	04	-35	76			
7	+21	+11	+3	-5	-11	-11	-16	-20	-22	-21	-14	-15	-16	-15	-14	-5	-	-	+6	+19	+27	+37	+33	848	22	09	+38	08	38	-24	62			
8	+32	+18	+9	+6	+2	-1	-3	-13	-20	-18	-15	-15	-13	-5	+2	+9	+2	-	+3	+8	-	+4	-	842	00	08	+34	08	23	-22	56			
9	+5	0	+15	+9	+20	-24	-14	-9	-25	-18	-1	-8	-7	-1	+6	+9	+9	+11	+15	+20	+9	+11	+9	823	20	57	+25	08	55	-30	55			
10	-5	-12	-24	-22	-15	-10	-11	-5	-7	+12	+14	-3	-11	-10	-4	-4	+1	+10	+17	+21	+22	+16	+22	827	21	12	+27	02	55	-31	58			
11	+18	-1	-13	-25	-19	-7	-7	-9	-4	-9	-7	-4	-4	0	+4	-	-	+8	+13	+18	+13	+13	+19	833	20	52	+23	03	24	-31	54			
12	+3	-15	-18	-12	-6	-5	-6	-9	-9	-1	+7	-1	+1	-	-	-	+1	+5	+3	+13	+23	+23	+38	838	22	33	+24	02	14	-23	47			
13	+9	-8	-30	-32	-15	-18	-10	-8	-4	-2	-3	+4	-1	-7	-8	-	+4	+9	+11	+26	+31	+31	+27	830	21	51	+34	03	15	-42	76			
14	-4	-6	-9	-16	-21	-12	-11	-6	+3	-1	+3	-4	-1	+5	-4	-	+2	+8	+6	+13	+21	+28	+17	838	22	42	+28	03	59	-26	54			
15	+4	-3	-6	-11	-14	-20	-14	-12	-10	-7	-3	-5	-	-	-2	+1	+3	(+3)	+6	+16	+25	+24	+20	840	22	03	+26	05	51	-25	51			
16	+8	+4	-3	-13	-17	-18	-19	-23	-22	-20	-13	-9	-9	-7	-6	-	+2	+7	+19	+29	+37	+33	+38	852	21	47	+39	07	48	-23	62			
17	+35	+17	+1	-15	-17	-20	-25	-15	-10	-10	-8	-8	-8	-8	-8	-5	-	+2	+10	+17	+22	+20	+25	849	00	09	+42	06	23	-26	68			
18	+21	+17	+8	-3	-10	-10	-10	-13	-14	-15	-11	-10	-6	-6	-5	-4	0	0	+16	+20	+20	+6	-	854	00	42	+22	09	50	-16	38			
19																																		
20																																		
21	+22	+4	-9	-7	-1	-6	-17	-22	-20	-18	-13	+10	-2	-11	-7	-6	-4	+1	+20	+22	+25	+21	+19	850	21	21	+25	07	24	-23	48			
22	+13	-5	-16	-15	-10	-15	-12	-12	-11	-1	-8	-9	-6	-8	-5	-1	+5	+10	+12	+7	+11	+27	+26	849	23	05	+32	05	48	-20	52			
23																																		
24	+2	-5	-7	-5	-5	-9	-7	-7	-5	-5	-8	-8	-10	-10	-8	-7	-3	0	+8	+15	+20	+30	+36	859	23	59	+40	13	27	-11	51			
25																																		
26																																		
27																																		
28																																		
29																																		
30																																		
31																																		
MEAN.	+11	+1	-8	-12	-13	-14	-14	-14	-12	-9	-7	-4	-5	-4	-2	-2	0	+2	+6	+15	+20	+23	+22	855										



International
Seismological
Centre

HORIZONTAL INTENSITY

(H = 34000γ + Mean +)

October 1943

G.M.T.

DAY.	October 1943																								Range.									
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23										
1	+25	-23	-17	-22	-13	-5	-5	-5	-5	-10	-5	+4	+9	+21	+15	+9	+3	+3	+3	+9	+4	+21	+35	+19	825	22	48	+36	00	45	-37	73		
2	-8	-28	-26	-14	-9	-19	-15	-12	-5	+11	+9	+3	+17	+16	+6	-3	+5	-8	+5	+12	+14	+17	+27	+21	829	22	21	+28	01	42	-48	76		
3	+18	-9	-11	-8	-2	-3	-12	-7	-7	+7	-14	-7	-2	+5	+6	+1	+1	+5	+6	+6	+13	+5	+3	+5	817	00	00	+27	08	57	-24	51		
4	-7	-15	-21	-12	-7	-5	-8	-8	+8	0	-5	-6	0	-3	-7	-7	-7	0	0	+11	+19	+25	+27	+26	829	22	27	+30	02	33	-24	54		
5	+11	+1	-1	-5	-10	-15	-9	-10	-11	-15	-12	-8	-4	-4	-1	0	+1	+3	+3	+1	+8	+21	+31	+39	838	23	59	+42	09	47	-17	59		
+6	+31	+26	+13	+3	-5	-11	-15	-13	-16	-20	-18	-15	-13	-11	-10	-8	-4	+2	+9	+9	+16	+22	+28	+33	848	23	59	+36	10	15	-21	57		
7	+29	+10	-1	0	+3	+1	-2	-3	-1	-5	-10	-6	-10	-12	-10	-7	-3	-1	+3	+3	+9	+10	+9	-5	851	00	05	+33	14	09	-14	47		
8	-5	-12	-11	-9	-10	-12	-16	-7	-6	-7	-10	+4	+9	+2	+4	+5	+10	+12	+17	+17	+22	+17	+6	+2	839	11	52	+31	06	50	-18	49		
9	+15	+9	+2	-2	-9	-12	-22	-4	-7	-9	-1	-7	-9	-12	-7	-9	-2	-	0	+7	+15	+27	+33	+35	839	22	27	+36	07	52	-24	60		
10	+20	+13	+6	+1	-5	-8	-22	-22	-9	-7	-8	-6	-6	-8	-8	-3	-3	0	0	-1	+9	+21	+33	+33	846	23	02	+36	06	35	-28	64		
11	+35	+21	+15	+8	-6	-22	-13	-17	-13	-8	-7	-6	-6	-7	-5	-4	-3	0	0	+4	+5	+6	+11	+18	838	00	12	+38	05	24	-23	61		
12	+15	+12	0	-10	-10	-13	-13	-10	-8	-7	-7	+7	+1	-2	-4	-7	-4	-1	+7	+11	+19	+25	+25	847	22	44	+27	07	17	-15	42			
+14	+15	+10	+6	-3	-12	-14	-14	-12	-8	-5	-2	-2	-4	-5	-5	-6	-6	-4	+3	+3	+10	+20	+28	+31	851	23	44	+31	07	07	-17	48		
+15	+20	+12	+3	-5	-10	-13	-11	-10	-9	-7	-3	-3	-3	-5	-5	-5	-5	-4	0	0	+8	+17	+22	+22	859	23	13	+23	05	36	-13	36		
+16	+16	+12	+5	+2	-2	-5	-8	-9	-13	-13	-15	-12	-12	-10	-10	-12	-12	-8	+1	+13	+25	+35	+44	864	23	24	+45	09	01	-15	60			
+17	+53	+44	+36	+25	+9	-3	-30	-35	-15	-18	-19	-11	-15	-14	-12	-8	-8	-8	-6	+2	+7	+7	+12	+17	852	00	03	+54	08	17	-41	95		
+18	+13	+9	+2	0	-5	-8	-11	-15	-14	-11	-9	-9	-6	-6	-4	-4	0	0	+7	+16	+21	+24	+21	855	22	51	+26	07	46	-16	42			
19	+15	+15	+11	0	-5	-6	-12	-20	-22	-27	-25	-15	-7	0	+3	+3	+3	+3	+4	+18	+21	+28	+34	861	23	41	+38	11	03	-29	67			
20	+29	+24	+19	+10	+2	-3	-7	-9	-12	-11	-13	-10	-8	-11	-7	-7	-16	-5	+5	+5	+9	+12	+7	+9	867	00	44	+30	18	01	-26	56		
21	+8	-7	-7	-2	-5	-8	-4	-5	-9	-11	-11	-10	-9	-7	-4	-3	+1	+4	+8	+16	+22	+24	+31	848	23	48	+32	10	15	-11	43			
22																																		
23																																		
24																																		
25																																		
26	+22	+3	-2	-8	-4	-28	-42	-33	-19	-21	-12	+6	+20	+11	+8	+6	+4	+2	0	+8	+20	+25	+29	612	00	01	+36	07	03	-48	84			
27	+7	0	+1	-8	-9	-14	-10	+7	-13	-18	0	+3	+1	+3	+2	-3	+3	+1	+10	+14	+7	+14	+9	850	20	30	+19	09	42	-22	41			
28	+10	-13	-25	-37	-31	-32	-13	-20	-11	+4	+9	+20	+11	+11	+4	-1	-2	-3	+7	+15	+20	+28	+34	823	23	17	+37	03	53	-46	85			
29	+18	-3	-16	-16	-11	-16	-16	-7	-7	+2	+6	+15	-1	+6	+6	-4	-1	-6	-6	+11	+16	+17	+23	855	00	03	+28	06	12	-25	51			
30	+28	+18	-11	-19	-14	-21	-19	-9	-11	-1	-1	+10	+23	+12	+1	-4	-9	-14	-9	-9	+7	+14	+13	+8	831	13	54	+30	05	42	-27	57		
31	+1	-5	-9	-12	-9	-12	+3	+5	-7	+11	+3	+5	+11	+3	0	-5	-9	-7	-11	-2	+10	+17	+16	829	23	59	+25	03	40	-12	57			
MEAN.	+15	+5	-2	-6	-7	-12	-12	-12	-8	-7	-6	-3	-1	-1	-2	-3	-3	-1	+4	+11	+17	+22	+22	841										



HORIZONTAL INTENSITY

(H = 34000Y + Mean +)

G.M.T.

November 1943

DAY.	November 1943																								Mean.	Maximum.			Minimum.			Range.			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H.	M.	Y.	H.	M.	Y.				
1	+34	+34	+28	+3	-34	-51	-50	-14	-16	-4	-7	-4	+3	+13	-7	-7	-2	+1	+13	+18	+22	+23	+23	+23	827	01	17	+38	05	47	-57	95			
2	+5	+3	0	-5	-7	-12	-16	-16	-15	-9	-10	-9	-7	-5	-2	-2	-4	-2	-4	+6	+26	+26	+32	+36	840	23	19	+37	08	17	-18	55			
3	+26	+20	+7	+1	-6	-13	-15	-15	-16	-16	-15	-15	-14	-9	-6	-6	-6	-2	+3	+22	+22	+52	+31	849	23	33	+33	08	36	-16	49				
4	+25	+29	+24	+11	-4	-12	-13	-11	-21	-21	-16	-16	-11	-13	-6	-1	-4	-1	+6	+18	+18	+16	+18	856	01	58	+30	09	45	-23	53				
5	+23	+18	+13	+4	0	-2	-2	-7	-1	+2	0	+3	0	0	0	-1	-9	-23	-11	+7	+7	0	-2	847	00	27	+25	17	33	-31	56				
6	+1	-7	-12	-14	-14	-13	-15	-17	+1	-2	-8	-9	-7	-4	-1	+1	+2	+5	+10	+20	+20	+30	+33	842	23	09	+34	07	05	-24	58				
7	+12	+5	0	-5	-11	-20	-6	-9	-12	0	-6	-9	-10	-7	-9	-5	-5	+4	+9	+20	+20	+25	+26	850	23	47	+27	05	52	-23	50				
8	+23	+13	-5	-7	-7	-14	-18	-11	-16	-13	-14	-14	-12	-13	-9	-11	-7	+3	+13	+38	+38	+35	+23	852	21	36	+43	06	28	-24	67				
9	+19	+9	-4	-13	-13	-10	-4	-3	-3	-3	-3	-5	-8	-8	-8	-4	-3	-1	+4	+12	+12	+14	+19	848	00	09	+24	03	48	-15	39				
10	+13	+6	-2	-4	-9	-11	-10	-11	-11	-11	-11	-11	-11	-13	-13	-14	-13	-11	-4	+11	+33	+39	+35	854	22	03	+39	15	43	-14	53				
11	+21	+13	+6	+1	-2	-4	0	+1	+3	+3	-2	-7	-10	-14	-13	-14	-16	-12	-3	+6	+11	+18	+23	860	23	31	+26	15	42	-16	42				
12	+17	+12	+5	-3	-10	-13	-11	-10	-10	-9	-8	-9	-10	-10	-10	-9	-8	-5	+11	+26	+26	+31	+30	861	22	44	+35	05	29	-14	49				
13	+26	+24	+19	+9	-10	-16	-18	-16	-14	-14	-14	-11	-10	-9	-9	-10	-11	-7	0	+21	+21	+30	+32	862	23	13	+33	06	59	-18	51				
14	+15	+8	-2	-11	-15	-14	-11	-11	-14	-15	-16	-15	-14	-12	-9	-6	-4	0	+13	+24	+32	+45	+34	877	22	48	+51	10	09	-19	70				
15	+34	+21	+7	+7	+7	+11	+11	+7	+1	0	-3	-8	-10	-6	0	-5	-10	-11	(-10)	-	-	-3	-3	866	00	04	+40	12	42	-15	55				
16	+7	+9	+7	-3	-6	-6	-6	-6	-8	-11	-11	-8	-6	-6	-6	-4	-3	-3	+1	+14	+14	+19	+19	859	22	24	+22	09	53	-14	36				
17	+9	+6	+3	-1	-6	-9	-5	-4	-6	-11	-14	-6	-11	-9	+4	+3	-2	-9	+1	+14	+14	+24	+33	867	23	07	+34	10	06	-17	51				
18	-2	-11	-19	-27	-28	-14	-4	-6	+1	+3	-6	-3	-2	+3	+16	+13	+6	+1	+4	+18	+18	+28	+23	823	22	21	+32	04	09	-34	66				
19	+28	+18	+6	+3	-5	-9	-14	-2	+16	+2	+11	-4	-4	-6	-9	-4	-6	-15	-14	-10	-10	+6	+11	823	23	59	+16	19	03	-19	55				
20	+18	+13	+3	-11	-19	-20	-19	-15	-3	-4	-4	-2	+8	+3	+9	+11	-9	-10	+8	+6	+6	+18	+9	823	22	48	+21	04	12	-26	47				
21	-4	-4	-5	-21	-60	-46	-17	-27	-15	0	-3	+2	+24	+17	+8	+5	+3	+7	+14	+23	+23	+39	+29	812	22	36	+41	04	22	-64	105				
22	+6	+1	-1	-13	-24	-26	-23	-4	+6	-6	+2	-4	-6	-4	-4	-4	-1	0	+9	+18	+18	+26	+31	830	23	39	+31	04	50	-50	61				
23	+23	+20	+9	-3	-13	-18	-13	-18	-8	-6	-12	0	-2	+14	+5	-1	-2	-8	-8	+7	+7	+14	+16	832	00	27	+24	05	42	-25	49				
24	+17	+11	+4	-4	-13	-15	-12	-10	-7	-6	-7	-7	-6	-4	-3	-3	-5	-6	-3	+5	+11	+17	+24	846											
25																																			
26																																			
27																																			
28																																			
29																																			
30																																			
31																																			
MEAN.																																			



HORIZONTAL INTENSITY

(H = 34000γ + Mean + ...)

G.M.T.

December 1943

DAY.																									Mean.	Maximum.		Minimum.		Range.			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H.	M.	H.	M.		H.	M.	
1	+9	+9	+3	-4	-13	-19	-20	-20	-17	-14	-10	-5	0	+2	+4	-3	-6	+2	0	+12	+19	+25	+29	+28	849	22	08	+34	06	08	-20	54	
2	+29	+24	+12	-2	-8	-6	-10	-6	-9	-9	-10	-6	3	-2	-6	+9	+2	+1	-3	-3	+19	+2	+6	-3	849	00	35	+30	11	01	-13	43	
3	+18	+16	+9	+5	-6	-18	-13	-6	-7	-6	-7	-9	-6	+1	-6	-13	-8	-3	-8	-8	+4	+15	+26	+22	835	23	03	+30	05	45	-24	54	
4	+10	+8	+5	-4	-8	-9	-13	-15	-13	-12	-7	-7	+5	+5	-2	-2	-2	-4	+8	+17	+22	+20	+21	836	20	59	+25	07	22	-19	44		
5	+12	+8	+2	-6	-9	-1	-5	-7	-7	-12	-9	-5	-7	-1	-3	-7	-5	+2	+8	+10	+12	+15	+12	841	22	19	+15	04	01	-15	30		
+6																																	
7																																	
8																																	
9																																	
10	+15	+7	-3	-7	-6	-4	-7	-13	-17	-10	-9	-5	-10	-15	-17	-3	-5	-3	+7	+21	+32	+36	+31	856	21	59	+37	08	02	-23	60		
	+27	+19	+8	-5	-13	-17	-18	-16	-13	-11	-9	+4	-3	-13	-16	-18	-18	-13	+11	+19	+31	+35	+31	852	21	53	+38	17	33	-19	57		
+11	+22	+12	0	-7	-10	-10	-7	-6	-5	-5	-3	-3	-5	-5	-6	-9	-10	-12	-5	+6	+20	+29	+37	856	23	09	+38	18	32	-12	50		
+12	+27	+22	+13	-3	-8	-12	-12	-12	-14	-17	-17	-14	-13	-11	-6	-5	-5	-2	-2	+8	+22	+29	+30	863	23	07	+32	11	03	-17	49		
+13	+26	+15	+2	-7	-12	-11	-11	-12	-8	-7	-5	-3	-5	-7	-8	-10	-10	-10	-3	+8	+24	+34	+32	863	22	45	+35	08	21	-12	47		
14	+28	+23	+15	+6	-1	-6	-4	-1	-5	-6	-9	-14	-18	-18	-23	-22	-22	-17	-14	+6	+21	+36	+37	867	22	51	+41	17	27	-26	67		
15	+33	+18	+3	-7	-13	-14	-14	-16	-15	-16	-16	-14	-11	-11	-9	-5	-7	-5	+3	+16	+33	+48	+51	860	23	27	+52	08	14	-21	73		
16	+59	+47	+35	+17	+10	+5	+7	+14	+7	-5	-38	-16	-10	-23	-10	-11	-19	-28	-23	-14	+7	+17	+7	846	00	09	+66	10	23	-43	109		
17	+5	-2	-9	-13	-18	-14	-18	-9	-4	+10	+13	+2	-7	-9	-5	-9	-5	+3	+1	+15	+29	+38	+26	831	22	21	+41	06	38	-23	64		
18	+7	+4	-7	-3	-10	-14	-10	-14	-17	-11	-13	-10	+3	-2	-2	-2	-2	-2	-2	+15	+30	+38	+35	847	22	39	+41	08	28	-24	65		
19	+31	+9	-4	-1	+3	+4	+1	-22	-25	-13	-1	+6	-2	-2	-2	-2	-2	-2	+1	+3	+3	+5	+6	841	00	06	+41	08	19	-30	71		
20																																	
21	+3	-5	-2	-3	-5	-3	-4	-4	-3	-4	-5	+7	+1	-1	+4	+7	+9	+3	+4	+12	+12	+7	-5	838	12	28	+13	01	12	-10	23		
22	-4	-6	-8	-14	-11	-4	-4	-5	-6	-2	-6	-4	-6	-6	-5	-3	-2	-2	-3	+14	+25	+33	+23	839	22	54	+33	03	43	-16	49		
23	+11	+7	-4	-13	-13	-6	-4	-3	+4	-8	-9	-10	-8	-6	-6	-6	-3	-1	+5	+16	+24	+24	+21	843	21	45	+26	04	04	-16	42		
24	+11	+1	-4	-10	-13	-18	-13	-9	-2	-9	-9	-9	-4	-4	-2	-4	-4	-1	+1	+4	+21	+36	+38	846	23	02	+42	05	25	-21	63		
25	+17	+5	-1	-4	-12	-13	-10	-7	-11	-12	-8	-15	-12	-10	-10	-8	-7	-5	+4	+15	+31	+38	+37	852	22	57	+41	10	31	-17	58		
26	+24	+16	-6	-8	-11	-6	-3	-1	0	+8	+9	+4	-3	-11	-12	-11	-6	-9	-9	-3	+4	+11	+16	848	00	06	+34	03	57	-12	46		
27	+9	-2	-14	-25	-25	-20	-15	-13	-11	-10	-8	-5	-6	-5	-2	-3	-3	0	+12	+20	+39	+51	+53	850	22	35	+54	05	42	-29	83		
+28	+34	+24	+12	-1	-10	-15	-11	-8	-3	-3	-3	-8	-10	-10	-10	-10	-10	-10	-8	0	+15	+22	+24	862	00	09	+59	05	33	-17	56		
29	+27	+21	+7	-4	-12	-20	-22	-24	-15	-16	-13	-10	-7	-9	-10	-7	-7	+5	+20	+37	+46	+49	+49	857	23	56	+51	08	55	-24	75		
30	+39	+32	+17	+3	-5	-9	-10	-15	-14	-13	-10	-10	-5	-2	-2	-3	-3	-5	-8	-4	+12	+17	+18	867	00	12	+42	08	25	-17	59		
31	+27	+24	+19	+9	-2	-1	-3	-7	-15	-27	-27	-25	-21	-13	-11	-7	-7	-5	+3	+12	+24	+31	+27	855	22	16	+38	10	25	-31	69		
MEAN.	+21	+13	+4	-4	-9	-10	-9	-9	-8	-10	-9	-7	-7	-7	-6	-6	-6	-5	0	+9	+21	+28	+26	850									



DECLINATION

(D = 11° + Mean + ... East)

G.M.T.

Unit = 0.1 minute of arc

January 1943

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.	Minimum. H. M.	Range.	
1	+16	+16	+14	+6	+3	+7	+6	+8	+7	+6	+4	+4	0	-3	-4	-5	-5	-15	-25	-24	-25	-14	+3	+15	031				
2	+16	+18	+15	+12	+6	+5	+6	+6	+4	+2	-4	-4	-4	-5	-5	-6	-6	-9	-16	-19	-24	-7	+4	+16	032				
3	+22	+19	+15	+11	+9	+9	+9	+10	+4	+2	-4	-8	-8	+2	-6	-20	-7	-13	-18	-19	-18	-10	+1	+10	035				
4	+16	+18	+16	+13	+11	+9	+6	+4	+4	-3	-4	-3	+1	+3	0	-4	-16	-16	-26	-19	-19	-15	-4	+14	033				
5	+17	+17	+11	+7	+8	+7	+8	+7	+7	+5	-3	-3	+2	+3	+1	+3	-3	-13	-24	-24	-24	-13	+4	+27	030				
6	+17	+13	+7	+6	+5	+6	+6	+3	+4	+3	+2	+2	+2	+2	+2	+2	0	-17	-31	-20	-20	-10	+3	+23	034				
7	+37	+41	+36	+21	+8	+5	+6	+5	0	+2	-2	-6	-10	-9	-5	-4	-8	-12	-24	-23	-23	-17	-12	+3	039				
8	+18	+26	+28	+17	+12	+8	+8	+4	-2	-3	-3	-3	-4	-4	-9	-4	-10	-13	-20	-22	-20	-12	-5	+8	039				
9	+19	+12	+6	+10	+8	+11	+12	+7	+4	+2	+2	+2	+1	-2	-4	-6	-6	-8	-18	-21	-19	-17	-8	+11	035				
10	+18	+12	+3	+8	+8	+12	+12	+11	+5	+4	+3	+2	+1	+1	0	+1	+1	-7	-9	-18	-23	-18	-9	-7	034				
11	+2	+2	+4	+10	+12	+18	+13	+12	+6	+2	+0	+2	+8	+8	-6	-8	-8	-16	-10	-8	-20	-3	-2	+11	035				
12	+11	+10	+5	+1	+3	+11	+8	+8	+3	+1	+1	+1	-1	-5	-7	-9	-9	-19	-10	-10	-6	+1	+20	036					
13	+21	+20	+12	+13	+13	+11	+8	+2	+2	+1	+1	+1	-1	0	-5	-4	-4	-11	-19	-24	-19	-17	-5	+9	036				
14	+14	+6	+3	+7	+14	+14	+13	+11	+4	+4	+4	+2	+1	-5	-6	-6	-2	-8	-17	-20	-21	-16	-7	+4	033				
15	+19	+20	+14	+9	+7	+6	+9	+7	+4	+3	+0	-2	-2	-2	-1	-8	-1	-5	-12	-20	-20	-18	-11	-2	037				
16	+10	+11	+13	+13	+13	+16	+15	+13	+6	+4	-1	-9	-14	-8	-8	-7	-9	-13	-20	-18	-18	-8	+2	+13	034				
17	+21	+14	+12	+4	+3	+8	+7	+3	+2	+3	+2	+2	+1	+1	-5	-7	-7	-17	-18	-16	-16	-9	+1	+13	034				
18	+20	+20	+18	+15	+11	+11	+11	+8	+1	+0	+0	-1	-1	-3	-3	-5	-9	-19	-20	-19	-19	-10	-9	0	036				
19	+6	+5	+6	+6	+9	+14	+14	+6	+6	+6	+6	+5	+4	-4	-4	-5	-14	-25	-27	-25	-21	-6	+6	+24	031				
20	+28	+29	+22	+11	+9	+10	+10	+9	+1	+1	-5	-9	-4	-9	-10	-11	-12	-19	-21	-20	-20	-11	0	+16	036				
21	+19	+15	+9	+9	+9	+9	+9	+8	+6	+1	-2	-2	-2	-3	-9	-11	-12	-21	-20	-15	-13	-3	+8	+19	038				
22	+23	+20	+10	+9	+1	+2	+2	0	0	0	-1	-1	-1	-3	-5	-10	-10	-20	-11	-20	-11	0	+11	+19	037				
23	+20	+10	+11	+20	+11	+10	+10	+9	+5	+1	0	-1	-3	-9	-9	-4	-4	-15	-21	-20	-20	-15	+1	+22	036				
24	+27	+26	+18	+15	+6	+1	+5	0	-2	-3	-4	-4	-4	-4	-4	-5	-10	-21	-31	-18	-18	-3	+10	+27	039				
25	+27	+26	+20	+16	+11	+14	+16	+13	+4	-4	-13	-5	-11	-11	-11	-11	-9	-15	-23	-13	-13	-10	+4	+6	040				
26	+11	+10	+9	+1	0	+2	+10	+10	+9	+3	+1	-1	-9	-9	-8	-7	-5	-10	-17	-10	-10	-10	0	+20	036				
27	+25	+27	+29	+28	+18	+8	+9	+8	+7	+2	-11	-12	-12	-12	-12	-12	-11	-13	-21	-17	-17	-10	-1	+8	038				
28	+13	+11	+10	+11	+18	+15	+11	+10	+6	+1	+1	0	0	0	-1	-1	0	-6	-10	-21	-20	-21	-20	-10	036				
29	+6	+17	+17	+8	+7	+2	+6	+3	+1	-2	-3	-4	-4	-4	-4	-5	-12	-14	-22	-14	-6	+4	+7	+8	039				
30	+13	+12	+6	+6	+8	+13	+13	+13	+8	+4	+4	+3	+3	+1	-4	-3	+1	-6	-15	-17	-17	-17	-12	-7	033				
31	+18	+17	+13	+11	+9	+9	+9	+7	+4	+1	-1	-2	-3	-4	-5	-5	-6	-14	-20	-21	-17	-10	-1	+11	035				
MEAN.																													



International
Seismological
Centre



DECLINATION.

(D = 11° + Mean + ... East)

G.M.T.

Unit = 0.1 minute of arc

FEBRUARY 1943

DAY.	FEBRUARY 1943																							Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	-9	-1	+5	+11	+8	+7	+3	0	0	+1	0	+1	0	0	-1	-9	-12	-9	-9	-9	0	+2	+9	036
2	+8	-2	+3	+1	+2	+10	+5	+2	+2	+1	+2	+1	+1	+1	+1	-3	-9	-19	-21	-10	+1	+7	+13	035
3	+20	+12	+10	+7	+2	+6	+3	+1	+1	-3	-1	-3	-1	-1	-4	-22	-24	-22	-11	-11	+1	+7	+11	035
4	+3	-6	0	+3	+10	+12	+6	+3	+2	+1	+2	+1	+2	+3	+3	-16	-16	-16	-12	-12	-6	+3	+4	033
5	+11	+10	+10	+5	0	0	+1	+1	0	0	0	0	0	0	-1	-19	-20	-19	-11	-11	0	+11	+21	036
6	+21	+19	+10	+8	+1	+1	+1	0	-1	-1	-1	-1	-1	0	+1	-30	-20	-30	-31	-31	-15	+9	+26	036
7	+35	+44	+34	+23	+6	+4	+2	-5	-6	-7	-6	-8	-8	-8	-6	-26	-17	-26	-26	-26	-15	+5	+12	042
8	+23	+23	+20	+13	+11	+3	+6	+7	+2	+1	+1	+2	+2	+2	+2	-28	-19	-28	-29	-29	-27	-16	+3	034
9	+21	+30	+31	+32	+13	+12	+10	+9	0	-1	-1	-1	-1	-1	-4	-31	-20	-31	-39	-39	-29	-19	-1	036
10	+11	+21	+20	+15	+10	+10	+10	+7	+2	+3	+3	+1	+1	+1	+1	-22	-18	-22	-29	-29	-26	-18	-9	036
11	-1	+9	+18	+18	+16	+10	+9	-1	-1	-1	-1	-1	-1	-1	-2	-22	-21	-22	-21	-21	-13	-1	+9	038
12	+10	+9	+6	0	-1	0	+7	+8	+6	-4	0	-1	-2	-1	-1	-20	-19	-20	-13	-13	-9	+6	+16	037
13	+16	+15	+16	+21	+12	+9	+14	+6	+4	-5	-5	-6	-6	-10	-9	-18	-22	-18	-14	-14	-4	+6	+16	041
14	+26	+25	+17	+8	+4	+2	+4	+6	+4	-2	-2	-3	-3	-3	-4	-31	-24	-31	-24	-24	-13	+4	+17	039
15	+27	+27	+19	+13	+8	+4	+7	+6	+4	-2	-2	-3	-3	-2	-2	-32	-22	-32	-31	-31	-12	-1	+9	038
16	+19	+20	+19	+17	+9	+8	+9	+8	+1	-1	-1	-1	-1	0	-1	-40	-28	-40	-35	-35	-20	0	+18	037
17	+23	+26	+28	+28	+20	+16	+17	+8	-2	-9	-10	-7	-9	-3	-5	-40	-30	-40	-32	-32	-20	+2	+20	037
18																								
19																								
20																								
21																								
22																								
23	+26	+28	+27	+15	+7	+7	+7	+4	-3	-4	-4	-5	-4	-4	-13	-25	-34	-34	-33	-14	-3	+16	040	
24																								
25	+9	+12	+11	+11	+11	+11	+9	+6	+2	+2	+1	+2	+1	+1	+1	-15	-27	-31	-31	-30	-18	+9	036	
26	+17	+19	+19	+19	+18	+9	+11	+10	+8	+3	-2	-1	-1	-1	-3	-31	-13	-31	-41	-31	-10	+9	037	
27	+18	+26	+28	+19	+17	+8	+10	+9	+2	+4	-2	-2	-2	-2	-2	-32	-22	-32	-32	-24	-11	+8	038	
28	+23	+27	+18	+16	+12	+10	+8	+6	-2	-2	-3	-3	-3	-3	-3	-33	-22	-33	-33	-22	-1	+21	039	
29																								
30																								
31																								
MEMO.	+16	+18	+16	+14	+9	+7	+8	+6	+4	+1	-1	-2	-2	-2	-2	-8	-20	-27	-25	-15	-2	+12	037	

DECLINATION

(D = 11° + Mean + East)

March 1943

Unit = 0.1 minute of arc

G.M.T.

DAY.	March 1943																							Mean.	Maximum.		Minimum.		Range.	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23	H. M.	γ	H. M.		γ
1	+27	+28	+25	+15	+8	+7	+8	+6	+2	-1	-1	-1	-1	-1	-2	-2	-2	-5	-22	-40	-41	-25	-7	+7	038					
2	+20	+21	+14	+16	+19	+20	+10	-3	-17	-11	-8	-7	+2	+2	+2	+2	+2	-6	-18	-27	-27	-17	-9	+3	034					
3	+11	+14	+21	+18	+12	+12	+12	+11	+3	-1	-11	-9	-8	0	+0	+1	+1	-8	-19	-28	-20	-15	-9	+1	036					
4	+11	+12	+13	+11	+6	+3	-3	-7	-7	-3	-7	+2	+3	+3	+3	+3	-7	-26	-27	-20	-20	-8	+7	+23	034					
5	+30	+30	+22	+10	-1	+1	0	+2	+1	+1	+1	+2	+1	+1	+1	-1	-1	-23	-33	-34	-34	-21	-5	+11	036					
6	+17	+20	+15	+6	+6	+2	+1	0	-2	-3	+1	-3	-3	+2	+2	+1	+2	-24	-34	-34	-34	-14	+6	+26	041					
7	+34	+36	+27	+17	+7	+7	+7	+4	+1	+1	-1	-2	-2	-2	-2	-4	-4	-23	-38	-34	-34	-28	-14	+1	039					
8	+12	+18	+21	+11	+9	+9	+9	+0	+0	0	0	0	0	+1	+1	+1	-4	-21	-33	-32	-32	-21	-1	+18	037					
9	+27	+25	+18	+13	+8	+8	+8	+3	+4	-2	-2	-1	-1	-1	-1	-2	-14	-27	-31	-27	-31	-23	-12	+5	038					
+10	7	+8	+8	+6	+6	+8	+8	+6	+3	+5	+1	+3	+1	+1	+5	+4	-2	-5	-22	-24	-24	-23	-13	-2	038					
11																														
12																														
+13	+18	+17	+7	+5	-2	+7	+8	+7	+6	+6	+1	0	-2	-1	-2	-4	-3	-13	-23	-23	-23	-13	-3	+5	038					
14	+8	+8	-2	-3	-2	+7	+8	+2	0	-1	+2	+2	+6	-2	-2	-3	-3	-10	-12	-12	-12	-2	+1	+11	038					
+15	+18	+16	+6	-1	-2	+6	+5	+4	0	-1	+1	-2	-1	-4	-5	-5	-14	-22	-22	-22	-22	-10	+6	+16	039					
16	+19	+18	+7	-1	+3	+8	+8	+8	+4	-17	-1	-2	-2	+4	+3	+3	-21	-22	-22	-21	-22	-3	+7	+9	037					
17	+2	-6	+6	-5	-2	+5	+4	+4	+3	-2	-7	-1	-6	-2	-2	-3	-6	-6	-6	-5	-6	+5	+14	+21	041					
18	+15	+8	+2	+4	+3	+4	+3	+2	+1	+1	0	-1	-6	-2	+2	+2	-17	-17	-10	-10	-10	0	+2	+9	043					
19	+8	+6	+5	+4	+5	+8	+6	+5	0	+1	0	0	+3	+5	+3	+5	-15	-15	-16	-16	-15	-15	-9	+2	040					
20	+6	+6	+6	+5	+6	+7	+6	+3	-6	-5	-3	-3	+3	-4	-2	-1	-3	+1	-3	-3	-3	-3	-3	-2	039					
21	+7	+7	+8	+9	+8	+8	+7	+7	-2	-1	-3	-2	-7	0	+0	+5	-13	-9	-13	-14	-13	-13	-12	-3	038					
22	+1	+20	+18	+18	+12	+11	+10	+1	+1	0	-2	-4	-7	-8	-7	-3	-16	-9	-16	-19	-19	-19	-9	0	044					
23	+13	+21	+20	+17	+10	+1	-2	-8	-9	-9	-9	-10	-9	-8	-3	0	-11	-6	-11	-9	-9	-4	+2	+11	044					
24	+25	+25	+24	+15	+8	+5	-3	-2	-2	-4	-5	-5	-4	-3	-1	0	-28	-15	-22	-22	-22	-9	+1	+4	041					
+25	+10	+12	+4	+1	+3	+4	+4	+3	+3	0	-3	-4	-4	-2	0	+1	-8	-8	-13	-7	-7	-1	0	+3	041					
26	+8	+7	+4	+5	+8	+11	+9	+7	+4	+2	+3	+1	+1	0	0	0	-13	-9	-13	-15	-14	-14	-12	-5	037					
27	+3	+15	+24	+18	+12	+9	+8	+5	+3	0	-2	-1	-1	-1	-1	-1	-25	-8	-20	-25	-24	-16	-7	040						
+28	+4	+7	+12	+10	+9	+13	+9	+2	+2	+1	+3	-2	-2	-1	+2	+6	(-3)	(-3)	(-16)	(-16)	(-16)	(-16)	(-16)	(-16)	038					
29	+2	+14	+17	+12	+4	+4	+4	+3	+3	+1	+2	-2	-2	+3	+8	+5	-1	-1	-16	-16	-16	-23	-17	-16	041					
30	-4	+5	0	+6	+8	+4	+7	+4	+4	-3	-4	0	+1	+1	+1	+1	-4	-4	-13	-11	-11	-7	-5	-4	038					
31	-5	0	+1	+3	+7	+8	+0	+1	+1	0	0	-1	-1	+0	+1	0	-2	-2	-10	-12	-12	-9	-1	-1	044					
MEAN.	+12	+14	+12	+8	+6	+7	+6	+3	0	-2	-2	-1	0	+1	+1	+1	-4	-12	-21	-20	-20	-13	-4	+5	039					



DECLINATION

(D = 11° + Mean + ... East)

Unit = 0.1 minute of arc

G.M.T.

April 1943

DAY.	G.M.T.																								Mean.	Maximum. H. M. / γ	Minimum. H. M. / γ	Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
1	+6	+13	+9	+5	+4	+7	0	-4	-7	-5	-4	-4	-1	+4	+5	+5	-2	-14	-15	-14	-14	-1	+6	039				
2	+10	+10	+11	+10	+8	0	-1	-5	-8	-7	-4	-4	+1	+0	+0	+1	-2	-12	-10	-12	-12	-9	+0	044				
3	+12	+12	+10	+3	+5	+2	+2	0	0	-7	-7	-4	-1	+2	+2	+2	+6	-7	-11	-15	-7	+5	+12	042				
4	+13	+14	+11	+2	+3	+11	+3	0	0	-5	-6	-0	+3	+3	+3	+2	-8	-17	-18	-26	-17	+7	+3	042				
5	+12	+15	+12	+12	+13	+12	+3	-3	-3	+1	-3	+1	+3	+4	+3	+10	-3	-25	-18	-27	-25	-17	-8	042				
6	+4	+11	+11	+6	+11	+13	+5	-2	-7	-6	-7	-4	-5	+4	+5	+4	-5	-16	-15	-16	-13	+3	+4	040				
7	+10	+19	+20	+13	+10	+8	+1	0	-1	-2	-3	-9	-1	0	0	-3	-11	-19	-20	-19	-10	-1	+3	044				
8	+16	+15	+10	+5	+6	+3	+1	0	-12	-6	-4	-4	+5	+12	+13	+12	-4	-14	-6	-12	-12	-4	+5	038				
9	+2	+3	+12	+16	+15	+13	+2	+1	-13	-7	0	+3	+2	+3	+3	+7	+6	+4	-7	-10	-12	-8	+4	041				
10	+2	+2	+7	+10	+9	+1	+8	+4	-2	-2	-2	-2	-1	+1	+2	+2	+3	+3	-4	-11	-10	-11	-9	045				
11	-4	-2	+4	+13	+14	+9	+4	-3	-6	-6	-7	-5	-2	-5	-2	+1	-4	-9	-12	-11	-4	+2	+6	046				
12	+6	+6	+7	+6	+7	+5	+1	-4	-4	-5	-3	-3	+3	+3	+5	+3	+4	-4	-13	-14	-13	-4	+5	049				
13	+1	+9	+19	+17	+16	+16	+8	-1	-4	-4	-5	-6	-2	+1	+6	+6	-1	-22	-3	-22	-24	-16	-12	047				
14	-2	+1	+3	+8	+9	+10	+9	+2	-1	-1	-1	0	0	0	+1	+1	0	0	-9	-11	-12	-10	-4	046				
15	-2	+3	+12	+15	+10	+10	+1	0	0	-2	-3	-1	+2	+3	+5	+8	+5	-11	-11	-17	-19	-14	-9	044				
16	-7	-5	+5	+13	+13	+7	0	0	0	-3	-6	-4	-6	+3	+3	+5	+2	-3	-3	-13	-9	-5	+3	040				
17	-6	+1	+10	+14	+15	+12	+9	+2	0	-2	0	+1	0	+2	+2	+3	+2	0	-5	-17	-20	-16	-9	043				
18	-5	0	+12	+17	+12	+8	+5	+1	-1	-1	0	0	+4	+5	+6	+7	0	-10	-10	-22	-23	-21	-12	045				
19	+4	+12	+14	+17	+10	+4	+3	-1	-1	-1	0	+2	+2	+4	+4	+3	+8	0	-11	-12	-16	-18	-17	044				
20	-17	+1	+14	+22	+11	+11	+4	-7	-8	-9	-8	0	+6	+8	+11	+12	+12	+12	-5	-10	-18	-17	-9	042				
21	+2	+7	+11	+11	+10	+8	+7	+3	-2	-4	-3	-4	+1	+3	+4	+4	+4	-1	-10	-15	-14	-8	-3	043				





DECLINATION

(D = 11° + Mean + ... East)

G.M.T.

Unit = 0.1 minute of arc

May 1943

DAY.	May 1943																								Mean.	Maximum.		Minimum.		Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H. M.	γ	H. M.	γ	
1	-9	0	+9	+10	+9	-4	-6	-5	-12	-20	-21	-13	+10	+17	+24	+29	+25	+9	+1	-9	-18	-22	043							
2	-17	-3	+9	+14	+10	-2	-0	-9	-9	-8	-9	-7	+8	+10	+7	+11	+10	+3	-1	-5	-9	-6	043							
3	-5	+3	+13	+14	+7	+5	+4	-5	-2	-5	-5	+1	+5	+6	+7	+7	+5	-3	-13	-16	-17	-17	047							
4	-13	-8	+6	+12	+10	+8	+1	-2	-1	-2	-4	+2	+3	+4	+6	+8	+8	+2	-3	-12	-12	-12	046							
5	-12	+1	+8	+12	+12	+7	+3	-3	-3	-4	-3	-4	-1	+1	+4	+4	+6	+6	-3	-8	-10	-6	046							
6	-5	+1	+13	+14	+8	+3	-2	-3	-3	-3	-4	-4	-2	+2	+5	+3	+4	+4	-2	-5	-9	-4	047							
7	+1	+6	+12	+15	+8	+6	+0	-2	-2	-2	-5	-4	-2	+3	+5	+8	+8	-2	-12	-12	-10	-4	046							
8	-5	+6	+15	+20	+12	+4	+1	-4	-3	-4	-5	-4	-2	+2	+0	+1	+8	-2	-7	-8	-10	-5	048							
9	+9	+14	+19	+18	+12	+4	+1	-2	-0	-2	-3	-1	+0	+2	+4	+6	+2	-14	-23	-21	-13	-4	044							
10	+2	+13	+15	+12	+8	+0	-3	-4	-4	-4	-5	-4	-2	+4	+3	+3	+5	-4	-12	-15	-14	-4	046							
11	+5	+7	+10	+10	+6	+3	+2	-2	-2	-2	-3	-2	-1	+3	+4	+3	+6	-4	-13	-19	-15	-3	046							
12	+4	+5	+12	+14	+11	+1	+4	-4	-4	-4	-4	-2	-4	+3	+3	+4	+4	-4	-6	-8	-7	-4	046							
13	+4	+10	+14	+11	+7	+5	+1	-1	-4	-8	-11	-4	-4	+4	+3	+3	+6	-4	-3	-5	-9	-8	046							
14	+8	-2	+9	+14	+9	+4	+1	-1	-3	-4	-3	-1	+1	+2	+7	+8	+8	+3	-1	-5	-9	-8	046							
15	-8	+11	+27	+18	+4	+2	-5	-7	-5	-7	-9	-4	-4	+2	+3	+5	+10	+8	-1	-10	-19	-18	044							
16	0	+5	+7	+7	+6	+7	+2	-1	-1	-3	-6	-5	-4	+4	+6	+4	+5	-2	-7	-14	-11	-9	048							
17	+13	+19	+15	+11	+7	+5	+0	-2	-2	-3	-5	-1	+4	+5	+4	+9	+5	-2	-15	-22	-11	-2	045							
18	-7	+14	+15	+11	+8	+2	-4	-5	-5	-9	-17	-5	+3	+5	+5	+6	+7	-7	-15	-24	-8	-18	047							
19	+1	+7	+15	+14	+11	-1	-5	-8	-6	-8	-11	-7	+1	+1	+4	+3	+6	+3	-3	-1	-8	-5	047							
20	-2	+1	+12	+17	+8	+6	+1	-1	-1	-2	-3	-3	-2	+0	+3	+4	+8	+7	-2	-5	-8	-8	048							
21	-15	-10	0	+8	+5	+1	-1	-1	-1	-1	-3	-1	+1	+5	+5	+7	+8	+6	-2	-13	-15	-17	044							
22	-1	+3	+10	+15	+7	+0	-1	-3	-2	-3	-2	-1	+1	+5	+4	+7	+8	+4	-4	-10	-3	-1	044							
23	-10	-4	+6	+7	+3	-1	-1	-3	-3	-3	-7	-4	+4	+6	+6	+7	+9	+4	-3	-3	-5	-11	046							
24	-4	-4	-3	+2	+5	+1	0	-2	-3	-2	-2	+2	+6	+5	+8	+12	+13	+9	-2	-11	-13	-13	045							
25	-12	-2	+3	+5	-1	-1	-12	-9	-9	-3	-3	-2	+3	+7	+9	+13	+13	+5	0	-4	-10	-10	042							
26	-3	+4	+7	+4	+1	-1	-2	-2	-2	-2	0	+3	+5	+9	+7	+14	+14	+6	-3	-13	-21	-17	045							
27	-11	-2	+1	+8	+0	-1	-2	-1	-2	-1	-1	+3	+7	+8	+10	+15	+15	+8	-1	-10	-13	-15	043							
28	-11	-5	+6	+5	-3	-5	-4	-3	-3	-5	-6	+2	+4	+7	+7	+12	+11	+11	+6	+3	-5	-9	046							
29	-12	-6	+5	+12	+2	-3	-2	-5	-2	-3	-2	+4	+7	+7	+8	+11	+11	+7	-4	-13	-15	-14	044							
30	-15	-7	+9	+12	+3	-5	-7	-4	-5	-4	-5	-1	+3	+7	+4	+6	+6	+7	+4	+2	+3	+3	047							
31	+4	+4	+7	+11	+4	+3	+0	-2	-2	-4	-5	+0	+1	+4	+4	+6	+12	+5	+1	-7	-15	-21	048							
MEAN.	-5	+3	+10	+11	+7	+3	+1	-1	-3	-4	-5	-4	+1	+4	+5	+6	+8	+3	-4	-9	-12	-10	046							

DECLINATION

(D = 11° + Mean + ... East)

July 1943

Unit = 0.1 minute of arc

G.M.T.

DAY.	Mean.																							Maximum.		Minimum.		Range.		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	H. M.	γ	H. M.		γ	
+ 1	+ 6	+ 7	+ 1	- 3	+ 1	- 5	- 1	- 3	- 3	- 3	0	+ 1	+ 1	0	+ 4	+ 8	+ 8	+ 11	+ 9	- 1	- 9	- 10	- 11	051						
2	- 3	+ 7	+ 8	+ 3	- 1	- 2	- 6	- 1	- 2	- 8	- 7	- 9	- 6	+ 3	- 1	+ 7	+ 9	+ 10	+ 9	+ 1	- 3	- 7	- 3	052						
3	+ 4	+ 9	+ 13	+ 7	0	- 2	- 2	- 1	- 3	- 6	- 20	- 4	- 7	- 11	- 1	+ 2	+ 3	+ 7	+ 10	+ 6	0	- 2	- 6	- 3	052					
4	+ 2	+ 5	+ 12	+ 12	+ 2	+ 1	- 2	- 1	- 1	- 1	- 1	- 6	- 4	- 4	+ 3	+ 2	+ 3	+ 10	+ 2	- 7	- 9	- 7	- 0	050						
5	+ 2	+ 8	+ 9	+ 10	+ 5	+ 2	+ 1	+ 1	- 1	- 3	- 2	- 10	- 9	- 9	0	+ 1	+ 7	+ 9	+ 1	- 8	- 9	- 8	- 2	051						
6	+ 1	+ 6	+ 9	+ 9	+ 5	+ 2	+ 1	- 7	- 0	- 1	- 8	- 8	- 7	- 6	+ 1	+ 5	+ 7	+ 17	+ 11	+ 1	- 8	- 8	- 4	050						
7	+ 4	+ 10	+ 12	+ 5	+ 2	+ 4	+ 1	- 2	- 4	- 4	- 7	- 13	- 8	- 5	- 1	+ 4	+ 10	+ 13	+ 4	- 5	- 9	- 9	- 9	048						
8	- 2	+ 6	+ 8	+ 8	+ 2	- 3	- 1	- 2	- 9	- 8	- 6	- 3	+ 2	- 1	+ 6	+ 8	+ 9	+ 13	+ 8	- 1	- 10	- 11	- 7	052						
9	- 2	+ 7	+ 8	+ 2	- 2	- 5	- 0	- 3	- 10	- 8	- 4	- 3	- 3	- 4	+ 5	+ 8	+ 8	+ 7	- 2	- 2	- 3	- 5	- 2	054						
10	+ 9	+ 16	+ 19	+ 17	+ 5	+ 4	- 1	- 1	- 1	- 3	- 4	- 4	- 1	- 1	+ 2	+ 2	+ 8	+ 9	+ 3	- 12	- 12	- 28	- 21	053						
+ 14	- 9	- 1	+ 10	+ 11	+ 5	+ 4	+ 3	0	0	- 1	- 3	0	0	0	+ 2	+ 4	+ 8	+ 8	0	- 7	- 12	- 10	0	051						
15																														
16																														
17																														
18	- 4	+ 2	+ 5	+ 3	+ 1	+ 3	+ 3	+ 1	- 2	- 5	- 4	- 6	- 1	+ 6	+ 13	+ 12	+ 14	+ 8	- 2	- 14	- 23	- 24	056							
19	- 12	+ 2	+ 5	- 3	+ 2	- 6	- 5	- 2	- 3	- 3	- 5	- 4	- 1	+ 3	+ 6	+ 9	+ 12	+ 6	- 1	- 6	- 9	- 4	057							
20	+ 6	+ 15	+ 14	+ 4	+ 3	- 4	- 3	- 1	- 5	- 5	- 5	- 4	- 2	- 1	+ 2	+ 5	+ 7	+ 12	+ 6	- 1	- 10	- 15	- 19	056						
21																														
22	- 1	+ 9	+ 14	+ 10	+ 7	+ 3	0	0	- 2	- 1	- 3	- 3	0	+ 3	+ 9	+ 11	+ 12	+ 11	(0)	- 9	- 20	- 25	- 19	051						
23																														
+ 24																														
+ 25	+ 22	+ 26	+ 24	+ 15	+ 6	+ 3	- 1	- 5	- 4	- 6	- 7	- 4	- 4	- 3	- 3	+ 2	+ 5	+ 3	- 1	- 7	- 18	- 22	- 6	056						
26	+ 2	+ 2	+ 7	+ 13	+ 5	+ 3	+ 1	- 3	- 5	- 4	- 5	- 4	- 2	- 1	+ 3	+ 5	+ 7	+ 15	+ 4	- 4	- 14	- 14	+ 1	055						
27	+ 20	+ 23	+ 18	+ 16	+ 9	+ 7	+ 2	- 1	- 3	- 4	- 2	- 10	- 3	- 1	+ 1	0	3	6	- 2	- 8	- 20	- 22	- 13	052						
28	- 4	+ 6	+ 10	+ 8	+ 3	+ 3	+ 1	- 1	- 2	- 4	- 2	- 1	+ 3	+ 7	+ 8	+ 9	+ 10	- 7	- 11	- 18	- 12	- 8	052							
+ 29	0	+ 6	+ 9	+ 9	+ 1	0	0	- 1	- 2	- 1	0	0	0	0	+ 2	+ 8	+ 9	+ 10	0	+ 1	- 15	- 15	- 12	052						
30	+ 1	+ 17	+ 20	+ 13	+ 5	+ 4	- 3	- 11	- 14	- 6	- 4	+ 3	+ 0	+ 6	+ 2	+ 8	+ 9	+ 9	- 3	- 17	- 22	- 16	- 6	053						
31	+ 4	+ 8	+ 9	+ 8	- 2	- 3	- 2	- 1	- 7	- 9	- 1	- 1	0	0	+ 3	+ 6	+ 8	+ 3	- 5	- 10	- 8	- 1	+ 2	052						
MEAN.	+ 2	+ 9	+ 11	+ 8	+ 3	+ 1	- 1	- 2	- 3	- 4	- 6	- 5	- 4	- 2	+ 1	+ 4	+ 6	+ 8	+ 10	+ 3	- 5	- 12	- 13	- 8	053					





DECLINATION

(D = 11° + Mean + ... East)

Unit = 0.1 minute of arc

G.M.T.

August 1943

DAY.	August 1943																							Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	+6	+13	+11	+8	+6	+5	-2	+1	-2	-4	-5	-8	-3	-2	+3	+5	+8	+4	-1	-6	-12	-10	-2	053
2	+14	+15	+17	+7	+2	+2	+1	+1	0	-2	-2	-3	-3	+1	+2	+6	+11	+10	+11	-10	-23	-26	-19	050
3	+5	+11	+13	+11	+5	+5	+4	+1	0	-2	-7	-10	-11	-10	-2	-1	+8	+9	+9	-3	-6	-13	-9	051
4	-2	0	+6	+8	+6	+6	0	+1	-2	-1	0	-3	-1	+1	+5	+7	+11	+11	+1	-9	-15	-14	-9	050
5																								
6																								
7																								
8	-3	+8	+13	+13	+10	+3	-7	-8	-7	-12	-14	-17	-10	-9	-5	+1	+13	+25	+19	+11	-1	-7	+2	058
9	+17	+21	+21	+19	+11	-1	-6	-6	-6	-6	-7	-7	-7	-6	0	+3	+5	+1	-5	-13	-16	-13	0	050
10	+8	+14	+15	+9	+7	-1	-3	-2	-1	-3	-3	-5	-2	0	+2	+7	+8	+2	-11	-14	-12	-12	-12	052
11	-8	+7	+16	+15	+8	+4	+1	-2	-1	-3	-2	3	0	+2	+4	+6	+7	+7	-1	-12	-13	-17	-21	053
12	-8	+8	+14	+18	+7	-2	-1	-3	-2	-3	-3	-2	+2	+2	+8	+11	+16	+8	-8	-8	-18	-22	-15	052
13	-2	+12	+19	+18	+1	-11	-9	-3	-17	-11	-3	-8	-2	0	+8	+16	+12	+8	-2	-2	-4	-10	-11	052
14	-9	+7	+17	+10	+1	0	+10	+3	-2	-8	-3	-1	+3	+3	+9	+10	+13	+15	+3	-7	-13	-21	-24	051
15	-16	-3	+8	+10	+4	-2	-2	-2	0	-1	-1	0	+1	+6	+8	+10	+14	+11	+4	-4	-17	-15	-10	050
16	-5	-1	-2	-2	0	0	-2	-4	-1	-12	-8	-8	+1	+5	+11	+11	+18	+2	0	-10	-11	-11	-2	052
17	+7	+11	+7	+10	0	-6	-6	-3	-6	-6	-5	-4	+1	+4	+9	+13	+15	+4	-8	-16	-21	-15	-2	053
18	+1	+10	+14	+14	+10	+1	+4	-2	-7	-10	-9	+1	+1	+9	+7	+14	+10	+3	-14	-21	-22	-12	-12	050
19	-1	+9	+17	+18	+9	+5	+4	-1	-5	-8	-7	+2	+3	+2	+8	+10	+12	-2	-11	-14	-19	-9	-9	052
20	+4	+18	+24	+17	+8	+2	-9	-7	-9	-11	-9	-2	-2	+1	+6	+5	+8	+8	0	-2	-9	-12	-14	052
21	0	+10	+11	+7	0	-9	-3	+1	-2	0	0	1	0	+6	+5	+5	+2	-2	8	-9	-9	-5	050	
22	0	+8	+17	+13	+5	-2	-2	-1	-3	-4	-3	-2	-2	0	+4	+4	+7	+1	-6	-13	-14	-12	-5	053
23	-1	+6	+14	+9	+5	+1	+1	+7	0	-1	-2	+3	+4	+4	+5	+6	+6	+7	+1	-11	-13	-13	-2	054
24	-7	+1	+5	+6	-1	-14	-10	-7	-5	-4	-4	+1	+4	+4	+5	+13	+13	+8	0	-6	-4	-2	055	
25	-3	+8	+19	+16	+11	+3	-2	-3	-4	-4	-5	-1	-1	+4	+11	+10	+8	-5	-14	-17	-20	-21	055	
26	-12	-2	+9	+9	+6	+3	-4	-5	-2	-4	-3	0	+6	+8	+13	+16	+16	+4	-4	-12	-15	-18	053	
27	-14	+6	+15	+13	+6	+1	-1	-6	-2	-3	-3	0	+3	+3	+5	+8	+13	+5	-11	-15	-11	-4	055	
28	-1	+1	+13	+16	+9	+6	+8	+1	-2	-6	-9	-11	-11	+3	+6	+8	+1	-10	-7	-10	-11	-1	053	
29	+6	+15	+16	+16	+11	+5	+1	-5	-6	-6	-5	-3	+4	+10	+6	+5	+4	-9	-16	-22	-21	-12	055	
30	0	+13	+13	+21	+13	+3	+2	-12	-13	-13	-7	-10	-10	+2	+2	+3	+8	+2	-3	-7	-8	+2	058	
31	+19	+30	+34	+29	+12	-5	-21	-21	-24	-18	-18	-13	-5	-5	+4	+2	+1	0	-4	-2	+7	+12	+2	049
MEAN.	-1	+9	+14	+12	+6	0	-2	-2	-4	-6	-5	-6	-2	+1	+5	+7	+9	+9	+2	-7	-12	-14	-9	052



DECLINATION

(D = 11° + Mean + ... East)

Unit = 0.1 minute of arc

G.M.T.

September 1943

DAY.	September 1943																							Mean.	Minimum.		Range.		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23	H. M.		γ	H. M.
1	+8	+17	+16	+13	+10	+7	+6	+6	+3	+4	-7	-4	-4	-2	-1	+3	+6	+4	-4	-14	-20	-20	-20	054					
2	+8	+12	+22	+15	+9	+10	+10	+6	+5	-1	-5	-11	-8	-5	-4	-3	+4	+3	-3	-11	-15	-18	-18	055					
3	+9	+5	+8	+12	+8	+4	+4	+4	+1	+4	-6	-14	-10	-10	+1	+5	+5	+6	+6	+4	-1	-6	-6	056					
4	+1	+2	+11	+12	+7	+4	+3	+3	+5	-2	-3	-5	-3	-3	+0	+7	+7	+7	+9	+4	-5	-8	-11	055					
5	-9	+4	+12	+7	+2	-4	-1	-2	-6	-5	-7	-8	-8	-3	-3	+0	+5	+7	+10	+6	+2	+2	0	060					
6	+5	+15	+23	+10	-3	-5	-3	-3	-3	-5	-5	-5	-5	-3	+1	+2	+2	+2	+3	0	-5	-5	5	057					
7	+1	+9	+14	+14	+6	-2	-2	-2	-4	-4	-6	-4	-6	-1	+1	+3	+4	+4	+3	-3	-8	-8	-5	058					
8	+2	+14	+16	+10	+3	+1	+3	+3	-8	-8	-6	-4	-0	+5	+6	+11	+7	+16	+4	-1	-5	-16	-15	056					
9	+3	+6	+15	+17	+7	+2	+2	+2	-14	-14	-5	-3	+2	+7	+7	+7	+7	+7	+4	-6	-11	-6	+4	055					
10	+7	+14	+15	+14	+7	+4	+0	+3	-12	-12	-10	-3	+1	+2	+6	+9	+9	+7	+7	-7	-13	-14	-9	055					
11	+5	+10	+19	+20	+16	+7	+6	+4	-4	-4	-2	+0	+3	+7	+6	+8	+7	+7	-3	-17	-23	-19	-12	055					
12	+5	+7	+9	+8	+5	+2	+2	+1	-5	-5	-1	+1	+2	+5	+5	+7	+12	+12	+5	+5	-8	-19	-21	056					
13	-4	+5	+7	+7	+7	+5	+5	+2	-2	-2	-3	+3	+2	+7	+6	+15	+9	+9	+5	-9	-14	-20	-15	056					
14	-4	+11	+16	+7	+2	+4	+1	+1	-3	-3	-4	+1	+2	+6	+7	+7	+7	+7	+6	-4	-7	-11	-13	056					
15	-10	+3	+5	+3	+3	+3	+3	+3	-0	-5	-4	-4	+0	+0	+3	+4	+10	+10	+2	-7	-9	-7	+3	060					
+16	+9	+12	+11	+5	+4	+2	+1	-4	-4	-1	-6	-2	+2	+3	+12	+12	+12	+10	-2	-8	-13	-15	060						
17	-4	+7	+15	+15	+14	+6	+5	+1	-1	-3	-3	-2	+3	+5	+9	+5	+6	+6	0	-9	-12	-20	-21	056					
+18	-11	-7	+1	+6	+6	+8	+4	+4	+1	+1	+1	+2	+2	+5	+9	+9	+11	+11	+2	+2	-9	-16	-18	053					
21	-9	-1	+15	+18	+13	+5	-4	-4	-4	-4	-1	-3	+4	+6	+7	+7	+7	+7	+4	-2	-8	-14	-13	058					
22	-3	+9	+12	+6	+3	-3	-4	-4	-5	-5	-5	-3	+0	+1	+4	+8	+8	+4	-4	-4	-5	-5	-4	059					
23	-4	+6	+7	+6	+7	+6	+5	+3	-1	-1	-1	-1	0	+2	+5	+6	+6	+3	-6	-6	-13	-17	-10	057					
+24																													
25																													
26																													
27																													
28																													
29																													
30																													
31																													
MEAN.																													

DECLINATION

(D = 10° + Mean + ... East)

October 1943

Unit = 0.1 minute of arc

G.M.T.

DAY.	October 1943																							Range.						
	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.	Minimum. H. M.	γ	
1	-4	+4	+6	+9	+6	+2	+8	-3	-2	-4	-10	-6	-3	-4	-3	-4	-3	+6	+7	+3	-1	-4	-4	-3	060					
2	+8	+7	-4	-5	+2	+8	+8	+3	+8	+1	+1	+1	+2	+1	+1	+1	+1	+7	+3	+3	-11	-17	-17	-6	055					
3	+3	+12	+7	+4	+1	+2	-5	-7	-7	-9	-6	-7	-5	-5	-4	-4	-4	+0	+2	+2	+1	+2	+4	+10	062					
4	+21	+24	+23	+13	+8	+5	+5	-5	-7	-5	-4	-7	-1	-5	-1	-1	-0	-3	-5	-9	-15	-15	-7	+2	061					
5	+7	+7	+7	+7	+7	+5	+5	+5	+5	+4	-0	-1	+2	+0	+0	+0	+0	-3	-5	-5	-11	-14	-13	-3	059					
6	+8	+19	+16	+11	+3	+3	+1	-4	-7	-7	-7	-6	-5	-5	-2	-1	+1	+1	+1	+1	-4	-7	-7	+3	063					
7	+15	+19	+10	+3	+3	+8	+6	+2	+1	-4	-1	-4	-2	-1	+0	+3	+3	-1	-1	-1	-9	-16	-15	+7	063					
8	+4	+5	+5	+4	+4	+5	+4	+4	+4	+4	-1	-4	-3	-3	0	+4	+6	+4	-4	-4	-11	-12	-8	-6	060					
9	+5	+17	+18	+13	+5	+4	-3	-3	-3	-3	-3	-3	+3	+3	+2	0	0	-1	-4	-4	-12	-15	-14	-3	059					
10	+11	+16	+8	-2	+3	-2	-2	-2	-2	-2	-2	+4	+4	+4	+4	+4	+1	-2	-8	-7	-14	-12	-2	+8	058					
11	+13	+14	+11	+3	+3	+1	+2	+1	+1	+1	-1	-1	-1	-1	-1	-1	-1	-4	-4	-7	-8	-7	+1	063						
12	+11	+11	+3	-5	+5	+2	+5	+2	+2	0	-1	-2	+1	+1	+1	+1	+1	+1	+4	+4	-8	-8	-8	+3	062					
13	+12	+15	+13	+9	+6	+5	+5	+3	+3	+2	0	-2	-2	-2	-3	-3	-3	-4	-5	-5	-7	-12	-7	+2	061					
14	+6	+15	+15	+13	+10	+8	+6	+4	+4	+2	+2	-1	-2	-2	-3	-1	0	-5	-9	-9	-16	-20	-17	-7	061					
15	+3	+10	+3	+2	+2	+4	+4	+3	+2	+2	+2	0	-4	-4	-1	-3	-5	-6	-10	-10	-14	-14	+2	062						
16	+18	+18	+16	+10	+6	+8	+6	+4	+1	-4	-3	-4	-3	-3	-2	-3	-5	-7	-14	-14	-16	-16	-3	+5	059					
17	+4	+7	+5	+3	+4	+7	+3	+1	+1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-7	-7	-9	-7	+1	063						
18	+17	+21	+15	+13	+12	+8	+2	0	0	-4	-6	-3	0	0	0	-4	-5	-6	-14	-14	-13	-13	+5	-1	061					
19	+4	+9	+8	+6	+8	+10	+6	+4	+4	+2	+2	-1	-5	-5	-4	-2	-5	-7	+1	+1	-6	-7	-7	-4	062					
20	+4	+8	+8	+7	+6	+7	+7	+6	+5	+2	+2	0	-1	-1	-2	-3	-3	-5	-13	-15	-14	-14	-4	+6	058					
21	+15	+21	+16	+15	+14	+9	+6	-1	-1	-5	-7	-11	-14	-14	-7	-5	-7	-13	-16	-18	-14	-6	+4	+14	060					
22	+17	+13	+7	+7	+2	+9	+2	0	0	-2	-1	-2	-2	-2	-3	-3	-4	-20	-20	-23	-20	-8	+7	+25	057					
23	+28	+28	+26	+14	+7	+6	+5	+4	-1	-1	-3	-5	-6	-6	-10	-11	-18	-24	-24	-25	-24	-12	+8	+26	058					
24	+27	+25	+11	+3	+2	+7	+7	+3	+2	+2	-2	-6	-3	-3	-5	-6	-15	-27	-27	-36	-25	-5	+15	+25	059					
25	+22	+24	+22	+12	+4	+7	+4	+2	+2	-7	-6	-8	-8	-8	-10	-8	-18	-28	-28	-28	-20	-3	+14	+25	062					
26	+27	+25	+17	+15	+15	+12	+6	+1	-2	-5	-5	-7	-7	-7	-7	-7	-25	-27	-27	-34	-25	-5	+13	+27	059					
27	+12	+15	+11	+7	+5	+6	+3	+1	-1	-3	-3	-2	-3	-3	-2	-2	-3	-5	-9	-14	-13	-10	-3	+6	060					
28																														
29																														
30																														
31																														
MEAN.																														



DECLINATION

(D = 10° + Mean + ... East)

G.M.T.

Unit = 0.1 minute of arc

November 1943

DAY.	November 1943															Mean.	Maximum.		Minimum.		Range.											
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14		15	16	17	18		19	20	21	22	23	H. M.	γ	H. M.	γ		
1	+25	+17	+16	+13	+10	+5	+8	+9	+7	+3	-4	-9	-7	-5	-7	-24	-29	-19	-9	-19	-29	-24	-8	+3	+13	061						
2	+20	+17	+14	+9	+6	+8	+6	+5	+4	+3	+2	0	+3	+2	-2	-36	-31	-21	-11	-21	-31	-24	0	0	+14	060						
3	+19	+19	+12	+8	+3	+9	+6	+3	+1	+1	+1	0	+0	+1	+0	-29	-29	-19	-7	-18	-29	-29	+2	+20	063							
4	+15	+22	+14	+10	+6	+7	+8	+1	-3	-6	-4	-1	0	+3	0	-26	-28	-8	-8	-20	-28	-26	0	+13	062							
5	+23	+20	+14	+11	+5	+12	+10	+5	+4	+2	-4	-3	+2	+2	-1	-35	-35	-18	-7	-18	-35	-35	-6	+5	061							
6	+12	+12	+12	+6	+2	+6	+4	+1	+1	+3	+2	0	+0	-2	-4	-24	-27	-7	-10	-25	-27	-24	+6	+22	060							
7	+20	+12	+6	+4	+2	+5	+4	+2	+3	+1	0	-2	+1	-6	-7	-19	-28	-5	-12	(-22)	-28	-19	+13	+24	061							
8	+32	+27	+23	+13	+5	+4	+3	+3	+4	+3	+2	+0	+1	-2	-5	-33	-37	-17	-14	-25	-37	-33	0	+13	061							
9	+15	+13	+5	+2	0	+3	+5	+4	+3	+3	+2	+0	+1	+2	-6	-17	-30	-4	-17	-28	-30	-17	+13	+23	061							
10	+25	+30	+24	+12	+6	+6	+6	+3	+2	+2	+1	+1	+1	0	-1	-36	-40	-16	-16	-31	-40	-36	+1	+15	062							
11	+29	+32	+22	+13	+10	+11	+11	+6	+3	+2	-2	-4	-3	-1	-6	-29	-29	-13	-13	-25	-29	-30	+8	+4	062							
12	+12	+18	+14	+10	+10	+10	+10	+7	+3	+2	+1	-1	-1	0	0	-29	-30	-7	-7	-17	-30	-29	-3	+11	063							
13	+18	+17	+10	+3	-1	+2	+7	+4	+2	0	+1	-2	-2	-2	-3	-20	-21	-10	-10	-14	-21	-20	+7	+12	065							
14	+20	+19	+15	+10	+8	+9	+10	+9	+2	+1	0	-1	-3	-4	-2	-34	-31	-9	-9	-19	-31	-34	-1	+12	064							
15	+12	+12	+10	+10	+10	+12	+10	+7	+1	0	-1	-2	-1	-1	-1	-22	-20	-8	-8	(-11)	-20	-22	-10	+1	065							
16	+12	+15	+15	+9	+9	+9	+9	+8	+6	+3	+3	+2	+3	+3	+3	-34	-27	-2	-2	-14	-27	-34	-12	+3	061							
17	+10	+11	+6	+12	+10	+12	+12	+10	+4	+2	+1	-5	-5	-6	-8	-20	-28	-18	-18	-18	-28	-20	+4	+14	062							
18	+13	+13	+14	+15	+16	+15	+14	+5	-2	-6	-6	-6	-6	-4	-4	-15	-25	-13	-13	-24	-25	-15	-6	-3	060							
19	+14	+18	+24	+22	+16	+17	+14	+6	-3	-10	-14	-15	-6	-6	-6	-15	-26	-16	-16	-26	-26	-7	-4	+4	060							
20	+8	+8	+9	+10	+13	+18	+10	+8	+4	+1	-2	-4	-9	-12	-4	-24	-22	-4	-4	-16	-22	-24	-2	+17	056							
21	+17	+15	+15	+16	+17	+15	+14	+5	-2	-5	-6	-5	-5	-6	-5	-24	-34	-15	-15	-25	-34	-24	+6	+20	059							
22	+22	+24	+15	+14	+22	+16	+12	+8	-2	-8	-6	-6	-6	-8	-9	-28	-31	-20	-20	-28	-31	-17	+1	+11	062							
23	+21	+23	+23	+13	+10	+13	+13	+3	+1	-2	-8	-17	-9	-9	-12	-17	-24	-17	-17	-21	-24	-17	+4	+13	061							
24	+18	+18	+14	+11	+9	+10	+9	+5	+2	0	-2	-3	-3	-3	-4	-26	-29	-11	-11	-21	-29	-26	0	+13	061							
25	+18	+18	+14	+11	+9	+10	+9	+5	+2	0	-2	-3	-3	-3	-4	-26	-29	-11	-11	-21	-29	-26	0	+13	061							
26	+8	+8	+9	+10	+13	+18	+10	+8	+4	+1	-2	-4	-9	-12	-4	-24	-22	-4	-4	-16	-22	-24	-2	+17	056							
27	+17	+15	+15	+16	+17	+15	+14	+5	-2	-5	-6	-5	-5	-6	-5	-24	-34	-15	-15	-25	-34	-24	+6	+20	059							
28	+22	+24	+15	+14	+22	+16	+12	+8	-2	-8	-6	-6	-6	-8	-9	-28	-31	-20	-20	-28	-31	-17	+1	+11	062							
29	+21	+23	+23	+13	+10	+13	+13	+3	+1	-2	-8	-17	-9	-9	-12	-17	-24	-17	-17	-21	-24	-17	+4	+13	061							
30	+18	+18	+14	+11	+9	+10	+9	+5	+2	0	-2	-3	-3	-3	-4	-26	-29	-11	-11	-21	-29	-26	0	+13	061							
31	+18	+18	+14	+11	+9	+10	+9	+5	+2	0	-2	-3	-3	-3	-4	-26	-29	-11	-11	-21	-29	-26	0	+13	061							
MEAN.																																





DECLINATION

(D = 11° + Mean + ... East)

Unit = 0.1 minute of arc

G.M.T.

December 1943

DAY.	December 1943																							Mean.	Maximum.		Minimum.		Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23	H. M.	γ	H. M.	
1	+7	+15	+17	+17	+15	+14	+14	+8	+6	+5	+4	0	-2	-3	-4	-4	0	-1	-12	-32	-33	-26	-14	+1	058				
2	+7	+11	+11	+11	+11	+9	+8	+7	+3	+1	-1	-4	-6	-6	-6	+1	+4	+1	-9	-13	-11	-14	-12	-6	063				
3	+1	+9	+21	+26	+24	+11	+6	+6	+6	+5	-2	-4	-4	-4	-4	+3	0	-2	-5	-17	-19	-15	-14	-11	058				
4	+4	0	+9	+10	+9	+10	+9	+9	+7	+4	0	-1	-1	-1	-2	-1	-1	-2	-12	-20	-20	-12	-2	+5	056				
5	+8	+15	+16	+16	+15	+14	+13	+13	+6	+5	+3	-3	-4	-4	-3	-1	-5	-15	-21	-24	-16	-15	-10	059					
6	+25	+34	+36	+33	+24	+23	+21	+14	+9	+3	-2	-8	-12	-15	-16	-12	-12	-17	-29	-37	-30	-18	-13	-4	027				
7	+7	+12	+4	0	+1	+3	+4	+6	+5	+2	-3	-7	-9	-9	-9	-8	-8	-17	-28	-15	-1	+6	+23	+40	028				
8	+21	+27	+21	+13	+10	+6	+10	+10	+4	+2	+1	0	-1	-5	-7	-7	-7	-15	-25	-29	-21	-10	+1	+13	063				
9	+22	+22	+20	+13	+12	+11	+11	+6	+4	0	-1	-7	-8	-8	-6	-6	-6	-10	-18	-27	-26	-16	+2	+14	062				
10	+23	+22	+20	+11	+10	+11	+10	+10	+5	+1	0	-4	-6	-6	-5	-4	-4	-9	-19	-30	-30	-19	+1	+13	063				
11	+29	+33	+30	+20	+16	+10	+9	+6	+2	0	-2	-10	-12	-12	-12	-7	-7	-10	-20	-30	-30	-17	+1	+15	064				
12	+24	+24	+16	+14	+14	+13	+10	+10	+4	+4	+2	-1	-4	-4	-4	-3	-1	-5	-10	-22	-28	-26	-21	-7	060				
13	+15	+27	+36	+29	+26	+21	+19	+17	+7	-5	-16	-13	-22	-16	-16	-13	-10	-15	-23	-30	-23	-12	+2	+13	057				
14	+14	+14	+14	+19	+19	+24	+22	+22	+14	+4	+2	-7	-7	-7	-7	-6	-6	-18	-24	-24	-21	-15	-8	-5	060				
15	+3	+11	+12	+8	+8	+13	+13	+13	+10	+3	+2	-6	-6	-6	-6	-5	-5	-7	-15	-15	-12	-6	-2	+2	061				
16	+6	+14	+15	+17	+15	+14	+14	+13	+12	+4	+3	-5	-7	-7	-7	-8	-7	-14	-15	-11	-15	-16	-15	-11	060				
17	+13	+10	+12	+7	+7	+11	+12	+12	+11	+4	+2	-1	-3	-3	-3	-8	-8	-16	-19	-18	-18	-10	-2	+6	062				
18	+12	+12	+13	+15	+14	+14	+13	+13	+10	+4	+3	-4	-6	-6	-6	-6	-6	-15	-17	-19	-16	-10	-6	+2	060				
19	+4	+6	+7	+8	+11	+15	+15	+15	+11	+7	+6	-2	-3	-3	-3	-4	-4	-14	-20	-22	-16	-14	-4	+6	058				
20	+10	+9	+5	+1	0	+2	+8	+8	+5	0	-8	-4	-2	-2	-2	-5	-9	-14	-18	-19	-10	+1	+15	+26	064				
21	+29	+21	+20	+20	+12	+8	+9	+9	+7	0	-8	-3	-6	-6	-6	-5	-9	-19	-30	-32	-24	-7	+10	+20	064				
22	+22	+20	+19	+20	+19	+11	+9	+8	+5	+1	-2	-9	-8	-8	-8	-4	-10	-22	-36	-31	-18	+9	+23	064					
23	+27	+23	+21	+16	+17	+12	+11	+11	+9	+3	+2	-1	-1	-1	-1	-8	-8	-17	-28	-40	-38	-27	+7	+11	062				
24	+14	+13	+17	+16	+8	+9	+8	+8	+7	+1	-4	-4	-6	-6	-6	-3	-3	-11	-23	-30	-27	+6	+27	066					
25	+34	+30	+21	+11	+9	+5	+4	+3	+1	-4	-4	0	-1	-1	-1	0	-9	-20	-30	-30	-29	-4	+9	064					
26	+18	+30	+37	+27	+14	+8	+8	+7	+7	+1	-8	-7	-6	-6	-6	-3	-2	-10	-24	-33	-34	-28	-10	+17	066				
27	+26	+30	+29	+22	+12	+11	+10	+10	+2	-8	-9	-9	-9	-9	-8	-3	-3	-9	-18	-19	-18	-17	-9	-6	062				
28	+15	+18	+18	+15	+13	+11	+11	+10	+7	+2	-1	-4	-5	-6	-6	-5	-5	-11	-19	-25	-22	-15	-3	+7	059				



VERTICAL INTENSITY

January 1943

(Z = 20000Y + Mean +)

G.M.T.

DAY.	January 1943																								Mean.	Maximum.		Minimum.		Range.		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H. M.	Y	H. M.	Y		H. M.	Y
1	+2	0	-1	-4	-7	-5	-3	-1	0	+2	+3	+5	+2	+3	+3	+3	0	+2	0	-2	-1	-2	-4	-3	-2	3	656					
2	-3	0	0	-2	-2	-3	-3	-2	-2	+1	+1	+2	+2	+3	+3	+1	+1	+2	+1	+1	-2	-2	+1	-4	-3	-2	2	658				
3	+3	+3	+7	+4	-4	-5	-4	-5	-4	-2	-3	+3	+1	+1	+1	0	0	0	1	-1	-6	-4	-6	-7	+15	661						
4	+13	+11	+4	+1	-4	-1	-4	-4	-4	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-7	665					
5	-1	0	-1	-4	-3	-4	-3	-1	-1	-1	-1	0	+3	+5	+6	+6	+5	+2	+0	+2	-1	-3	-2	-1	+3	3	660					
6	0	-3	-4	-6	-5	-4	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	661					
7	+5	+4	+1	-3	-4	-4	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	4	662					
8	+5	+1	-2	-4	-5	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	1	665					
9	+1	+1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	665					
10	+1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	4	665					
11	+5	+8	+2	-1	-6	-4	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	661					
12	+8	+1	-1	-7	-7	-4	-4	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	8	659					
13	+2	+1	-1	-2	-5	-7	-4	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	659					
14	+5	+3	0	-5	-6	-6	-6	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	660					
15	+9	+6	0	-1	-3	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	658					
16	-2	+4	+3	+7	+4	-5	-3	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	657					
17	+4	+12	+11	+9	+2	-1	-3	-3	-3	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	661					
18	+6	+6	+8	+8	+4	+0	+5	+5	+1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	663					
19	+6	+6	+8	+8	+4	+0	+5	+5	+1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	661				
20	+6	+6	+8	+8	+4	+0	+5	+5	+1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	662				
21	+3	+3	-1	-2	-4	-1	-1	-4	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	4	665					
22	+3	+3	0	0	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	1	663					
23	+3	+3	0	0	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	1	663					
24	+4	+3	-2	-9	-3	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	4	659					
25	+3	+3	-2	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	4	659					
26	+5	+6	-8	-9	-8	-5	-2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	662					
27	+2	+7	-7	-9	-9	-7	-5	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	659					
28	+2	+3	-3	-8	-9	-6	-5	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	656					
29	+18	+13	+3	+8	+2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	17	657					
30	+1	+1	-2	-5	-9	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	659					
31	+1	+1	-2	-10	-9	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	653					
MEAN.	+3	+2	-1	-3	-3	-3	-2	-2	-1	0	0	+1	+1	+1	+2	+2	+2	+1	0	0	-2	-1	0	+2	+3	660						



VERTICAL INTENSITY

(Z = 20000T + Mean +)

G.M.T.

February 1943

DAY.	February 1943																															Mean.	Maximum. H. M.	Minimum. H. M.	Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23											
1	-1	-4	-5	-6	-6	-4	-3	-3	0	+	2	+	3	+	3	+	2	0	+	1	+	2	+	5	+	6	657								
2	+1	+7	+5	-5	-5	-4	-5	-3	-2	+	1	+	4	+	3	+	3	+	1	+	4	+	5	+	1	+	656								
3	+2	-3	-5	-6	-6	-4	-3	-2	-1	+	2	+	6	+	7	+	6	+	4	+	3	+	1	+	1	+	656								
4	0	-1	-7	-8	-7	-3	-1	-1	-1	+	3	+	2	+	6	+	5	+	3	+	1	+	3	+	3	+	657								
5	+1	+4	+1	+1	-1	-2	-2	-1	-1	+	1	+	4	+	8	+	1	-	2	-	7	-	4	-	2	-	658								
6	0	0	+2	+2	0	-1	-1	-3	-3	+	3	+	2	+	4	+	5	+	3	+	1	+	4	+	6	+	657								
7	-5	-8	-9	-8	-3	-0	+1	+1	+2	+	2	+	4	+	5	+	7	+	6	+	7	+	2	+	6	+	652								
8	-4	-7	-6	-8	-4	-0	+3	+3	+1	+	1	+	3	+	4	+	6	+	6	+	0	+	3	+	2	+	651								
9	-1	-4	-7	-7	-7	-4	+1	+1	+3	+	3	+	4	+	1	+	0	+	3	+	3	+	0	+	1	+	650								
+10	-1	+1	-0	-1	-3	-4	-3	-1	0	+	0	+	-1	+	1	+	0	+	6	+	3	+	5	+	6	+	654								
11	+4	+1	+1	-2	-4	-8	-4	-4	-1	+	1	+	3	+	2	+	1	+	1	+	2	+	4	+	5	+	655								
+12	+4	+1	-1	-4	-5	-2	-1	-1	-1	+	1	+	1	+	2	+	1	+	1	+	2	+	4	+	1	+	658								
13	+2	0	-3	-4	-8	-7	-4	-6	-1	+	2	+	2	+	2	+	0	+	0	+	1	+	5	+	7	+	657								
14	+8	+1	-2	-5	-5	-3	-1	-1	-1	+	3	+	3	+	3	+	1	+	0	+	3	+	6	+	3	+	656								
+15	+3	+5	+5	+2	-1	-1	-1	0	+	+	5	+	5	+	6	+	6	+	4	+	5	+	11	+	11	+	651								
16	-8	-2	-6	-7	-3	-2	-1	-2	-1	+	4	+	7	+	7	+	7	+	7	+	2	+	8	+	6	+	652								
17	+1	+2	-2	-4	-8	-7	-1	-1	+	+	5	+	11	+	11	+	10	+	6	+	5	+	8	+	5	+	651								
18	+1	+2	+1	-1	-1	-1	-1	-1	-1	+	4	+	8	+	5	+	6	+	5	+	4	+	10	+	11	+	655								
19										+	5	+	5	+	5	+	5	+	5	+	4	+	10	+	11	+									
20										+	4	+	8	+	5	+	7	+	7	+	5	+	8	+	6	+									
+21	-1	-1	-1	-2	-1	-1	-1	-1	-1	+	1	+	1	+	2	+	5	+	5	+	3	+	1	+	1	+	652								
22	-2	+1	-1	-3	-3	-1	-1	-1	-1	+	1	+	2	+	3	+	4	+	4	+	1	+	1	+	2	+	652								
23	+1	0	-1	-3	-3	-1	-1	-1	-1	+	1	+	1	+	3	+	6	+	4	+	4	+	4	+	6	+	650								
24	-10	-12	-10	-8	-4	-2	-1	-1	-1	+	2	+	4	+	4	+	5	+	7	+	8	+	2	+	0	+	649								
25	-6	-6	-6	-6	-4	-0	-1	-3	-4	+	4	+	4	+	4	+	6	+	6	+	3	+	5	+	9	+	650								
26	-12	-12	-12	-11	-8	-1	-1	-5	-4	+	8	+	7	+	5	+	7	+	8	+	6	+	2	+	3	+	652								
27	-7	-9	-8	-6	-4	-0	-1	-4	-4	+	4	+	5	+	6	+	6	+	4	+	1	+	0	+	3	+	653								
+28	-3	-4	-7	-7	-4	-2	-2	-1	-3	+	4	+	4	+	3	+	3	+	3	+	0	+	4	+	4	+	653								
29										+	4	+	4	+	3	+	3	+	3	+	0	+	4	+	4	+									
30										+	4	+	4	+	3	+	3	+	3	+	0	+	4	+	4	+									
31										+	4	+	4	+	3	+	3	+	3	+	0	+	4	+	4	+									
MEAN.	-1	-2	-4	-4	-4	-2	-1	0	0	+	2	+	3	+	4	+	4	+	4	+	2	+	2	+	2	+	654								



VERTICAL INTENSITY

(Z = 20000T + Mean +)

G.M.T.

March 1943

DAY.	March 1943																								Mean.	Maximum. H. M.	Minimum. H. M.	Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
1	0	0	-2	-5	-6	-4	0	+1	+2	+4	+4	+5	+5	+4	+2	+2	+1	0	0	-3	-5	-4	0	-4	649			
2	-1	-4	-8	-10	-8	-7	-7	-11	-14	-15	-2	-2	-3	-3	-2	-1	+1	+9	+8	+5	+3	+4	+4	+5	651			
3	-2	-4	-3	-3	-4	-3	+2	+3	+1	-2	0	0	+7	+10	+9	+7	+6	+7	+6	-	-	-	-	-	653			
4	-3	-2	-3	-3	-3	-2	-2	-3	+1	-3	+3	+4	+7	+10	+9	+8	+6	+7	+7	-	-	-	-	-	654			
5	-6	-2	-3	-3	-3	-1	-2	+1	+1	+1	+3	+4	+4	+5	+6	+6	+4	+4	+4	-	-	-	-	-	656			
6	-2	-1	0	-2	-2	-1	-1	0	+1	+1	+2	+3	+5	+6	+8	+9	+8	+8	+5	-	-	-	-	-	651			
7	-10	-9	-8	-7	-3	+2	+1	+2	+2	+2	+1	+3	+5	+6	+7	+8	+8	+7	+5	-	-	-	-	-	649			
8	-8	-6	-5	-4	-2	+1	+1	+1	+1	+1	+2	+3	+5	+5	+4	+4	+4	+4	+4	-	-	-	-	-	652			
9	-8	-9	-8	-4	-1	+1	+1	+1	+1	+2	+1	+1	+3	+4	+4	+6	+5	+5	+2	-	-	-	-	-	652			
+10	-5	-6	-6	-5	-3	-1	-1	+1	+1	+2	+1	+1	+1	+1	+2	+3	+3	+2	+2	-	-	-	-	-	652			
11	-2	-8	-7	-5	-4	-2	0	+2	+3	+3	+3	+3	+3	+3	+4	+4	+4	+10	+11	-	-	-	-	-	651			
12	-8	-4	-11	-10	-8	-2	-1	+1	+3	+3	+4	+4	+4	+4	+4	+5	+5	+3	+3	-	-	-	-	-	651			
+13	-4	+1	-1	-11	-2	-0	+3	+3	+3	+4	+4	+4	+4	+4	+4	+6	+4	+1	+3	-	-	-	-	-	653			
14	-7	-7	-10	-11	-9	-3	0	+1	+3	+4	+4	+4	+4	+4	+4	+4	+4	+3	+3	-	-	-	-	-	650			
+15	-3	-5	-5	-5	-5	-2	0	+2	+2	+2	+2	+4	+4	+4	+4	+4	+4	+4	+4	-	-	-	-	-	649			
16	0	-4	-2	-8	-6	-5	-5	-2	-2	-2	-5	-4	-4	-4	-4	-4	-4	-4	-4	-	-	-	-	-	649			
17	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-	-	-	-	-	653			
18	-4	+5	-4	-1	-2	-4	-4	-4	-3	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-	-	-	-	-	655			
19	0	-4	-3	-2	-2	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-	-	-	-	-	656			
+20	+1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-	-	-	-	-	664			
21	+2	+4	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-	-	-	-	-	660			
22	+4	+1	-3	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-	-	-	-	-	658			
23	-5	-5	-5	-7	-11	-8	-2	-1	-2	-1	-1	-3	-3	-4	-4	-4	-4	-4	-4	-	-	-	-	-	660			
24	+1	+2	+3	+2	+1	-2	-1	+1	+1	+1	+4	+5	+5	+4	+4	+4	+4	+4	+4	-	-	-	-	-	657			
+25	-16	-16	-14	-11	-9	-4	-1	+2	+2	+4	+4	+4	+5	+4	+4	+6	+8	+5	+7	-	-	-	-	-	654			
26	-3	-4	-4	-7	-5	-1	0	0	0	0	0	1	2	2	3	4	5	3	3	-	-	-	-	-	656			
27	0	-4	-4	-4	-6	-2	0	0	0	2	2	2	2	2	2	2	2	3	4	-	-	-	-	-	653			
+28	0	-1	-5	-6	-4	-0	+1	+2	+2	+2	+3	+4	+4	+4	+4	+4	+4	+4	+4	-	-	-	-	-	653			
29	-3	-5	-4	-6	-4	-2	+0	+2	+2	+4	+4	+6	+6	+5	+8	+7	+7	+5	+3	-	-	-	-	-	651			
30	-12	-10	-9	-4	-9	-1	+3	+5	+5	+6	+6	+6	+6	+7	+8	+7	+4	+2	+2	-	-	-	-	-	658			
31	-3	-3	-5	-8	-6	-3	+2	+3	+5	+4	+4	+5	+5	+4	+5	+4	+3	+2	+3	-	-	-	-	-	659			
MEAN.	-3	-4	-4	-5	-4	-3	-2	-1	0	0	+1	+2	+3	+4	+5	+5	+5	+5	+5	-	-	-	-	-	654			



VERTICAL INTENSITY

(Z = 20000' + Mean +)

G.M.T.

April 1943

DAY.	Mean.																								Maximum. H. M.	Minimum. H. M.	Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
1	0	1	7	-11	-12	-10	-7	-4	-1	0	3	4	5	8	8	7	5	3	1	1	1	0	1	0	659		
2	0	6	6	-7	-8	-8	-6	-4	-2	0	1	4	7	7	4	4	3	2	2	0	1	1	3	7	659		
3	0	10	9	-8	-9	-5	-7	0	0	3	4	5	6	7	7	6	4	2	2	0	0	1	0	6	660		
4	5	1	1	-1	-1	-1	-1	-3	-4	3	1	0	3	4	4	0	0	4	4	1	1	3	1	12	663		
5	8	7	3	0	1	3	2	1	4	8	-9	-7	-2	1	4	4	6	6	8	1	3	-11	-12	52	652		
6	-10	-11	-10	-8	-2	2	2	0	-1	1	0	3	3	6	4	6	7	3	3	0	0	1	1	2	653		
7	4	6	-11	-10	-7	2	1	2	4	-1	2	1	4	4	4	5	6	5	1	1	2	4	1	1	654		
8	5	5	-5	-6	-3	1	2	0	4	2	3	4	4	4	4	4	4	4	4	1	3	4	8	3	654		
9	6	10	-12	-11	-9	-	2	0	0	0	0	1	3	3	3	4	4	4	4	4	7	1	1	2	655		
10	2	1	-4	-6	-7	8	8	-1	-4	-4	-1	3	6	8	3	9	9	6	4	3	3	1	1	2	657		
11	9	4	-12	-9	-5	9	7	6	1	6	12	11	9	2	2	10	10	8	3	2	1	1	4	5	660		
12	4	5	-5	-1	-6	5	2	2	0	1	0	2	2	1	1	2	2	3	3	3	4	6	4	5	660		
13	8	3	1	-2	-2	3	3	1	1	1	1	3	4	4	4	4	4	3	1	1	4	1	1	2	659		
14	3	2	-3	-2	-2	2	2	1	0	1	2	3	5	5	5	4	3	2	2	2	2	1	1	3	654		
15	2	2	-2	-2	-2	2	2	1	0	0	2	3	5	5	5	3	3	2	2	2	1	1	1	3	653		
16	3	2	-2	-3	-4	6	8	6	2	2	2	3	6	5	6	5	5	5	5	4	2	2	2	0	653		
17	3	4	-4	-2	-2	4	4	4	3	1	1	3	3	3	3	2	1	1	1	1	2	3	3	0	655		
18	2	4	2	-1	-1	2	2	2	1	1	0	2	3	3	3	3	3	3	3	1	1	3	3	2	654		
19	1	1	3	-2	-3	0	1	1	0	1	1	2	3	5	5	7	5	4	4	1	1	5	6	7	650		
20	7	8	-8	-3	-1	1	0	0	0	1	1	1	4	7	7	7	5	4	4	1	4	1	1	0	648		
21	4	4	-6	-4	-2	6	3	0	0	0	4	2	4	4	4	4	4	1	1	1	3	3	3	3	651		
22	4	5	-5	-4	-1	1	1	0	-1	-3	-1	0	3	3	3	3	4	5	6	4	1	1	1	5	652		
23	-16	-18	-18	-16	-13	-8	-4	-2	-1	2	7	10	9	10	10	10	9	9	9	9	9	6	21	653			
24	-2	-5	-8	-7	-5	3	3	1	2	3	4	6	5	5	4	4	4	4	4	0	0	1	1	5	656		
25	6	6	-6	-4	-3	7	7	6	3	0	4	7	7	7	7	7	7	7	4	3	4	1	1	0	655		
26	4	0	1	-1	-1	6	7	4	-3	-3	2	5	6	5	5	5	4	4	4	1	1	3	5	659			
27	-3	-4	-5	-5	-4	-4	-3	-2	-1	0	2	3	4	5	5	5	5	5	3	1	0	0	0	2	655		
MEAN.																											



VERTICAL INTENSITY

(Z = 20000' + Mean +)

G.M.T.

DAY.	May 1943																								Mean.	Maximum.		Minimum.		Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		H. M.	γ	H. M.	γ	
1	-10	-7	-4	-7	-3	0	0	0	1	1	3	4	6	6	7	4	4	3	4	0	2	3	-	4	3	660				
2	-5	-4	-1	-4	0	1	1	1	1	1	1	1	4	4	4	4	6	4	4	1	2	-	4	7	6	660				
3	-2	1	0	4	0	3	0	1	1	2	0	2	3	3	4	4	4	4	4	4	4	3	-	4	7	659				
4	-9	8	-6	-4	-1	-2	-1	-3	-2	-1	-1	1	2	2	3	5	4	5	5	5	5	2	-	1	2	658				
5	-6	-2	-4	-2	-1	-2	-2	-2	-2	-2	-2	-2	0	0	1	2	2	2	4	4	4	4	3	3	1	659				
6	-2	5	-4	-2	-3	0	1	0	1	1	1	1	1	1	1	1	2	2	4	4	4	4	4	1	2	659				
7	-3	4	-8	-2	-1	-1	0	2	2	2	2	2	2	2	3	3	3	4	4	4	4	3	3	7	2	656				
8	-8	-4	-8	-4	-1	0	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	3	2	3	653				
9	-1	-4	-1	-6	-4	-2	-4	-2	-2	-2	0	1	2	3	3	2	2	2	3	3	5	5	4	1	4	654				
10	-1	-1	-5	-10	-10	-4	-4	-4	0	1	2	3	3	4	2	2	2	2	4	4	2	2	4	2	7	653				
11	-7	-11	-10	-10	-10	-4	-4	-4	-2	0	2	4	2	2	2	2	2	2	4	4	5	5	4	8	2	655				
12	-1	-1	-4	-5	-4	-2	-4	-2	-2	0	1	3	3	3	4	2	2	2	3	3	2	2	4	4	7	659				
13	-7	-5	-10	-10	-10	-4	-4	-4	-2	0	2	3	3	4	2	2	2	2	4	4	5	5	4	8	2	655				
14	-2	-7	-10	-10	-10	-4	-4	-4	-2	0	2	3	3	4	2	2	2	2	4	4	5	5	4	8	2	655				
15	-7	-11	-10	-10	-10	-4	-4	-4	-2	0	2	3	3	4	2	2	2	2	4	4	5	5	4	8	2	655				
16	5	4	2	1	1	0	2	0	0	2	2	4	2	2	2	2	2	2	4	4	5	5	4	8	2	659				
17	8	6	5	2	2	5	3	1	3	3	4	2	2	2	2	2	2	2	4	4	5	5	4	8	2	659				
18	-15	-14	-15	-11	-8	-5	-1	0	3	2	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	659				
19	-6	-7	-7	-3	-4	-1	0	0	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	655				
20	-2	-2	-1	-1	-1	0	-1	-2	0	2	1	5	5	5	0	2	2	2	4	4	5	5	4	6	11	654				
21	-4	-8	-10	-6	-3	0	1	0	1	0	2	6	6	6	5	5	5	5	6	6	5	5	4	6	11	656				
22	-7	-7	-5	-3	-1	1	1	1	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	655				
23	-3	-4	-1	-1	-1	0	1	0	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	654				
24	-5	-13	-18	-11	-3	0	1	0	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	656				
25	0	-3	-6	-4	-6	-4	1	1	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	656				
26	3	4	5	3	1	2	1	0	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	659				
27	6	8	7	6	6	9	5	0	3	1	3	6	7	6	5	5	5	5	6	6	5	5	4	6	11	660				
28	1	2	5	4	2	4	1	2	4	2	4	3	3	3	1	2	2	2	4	4	3	3	2	3	4	658				
29	1	1	2	5	2	4	0	2	4	2	4	3	3	3	1	2	2	2	4	4	3	3	2	3	4	659				
30	0	0	1	5	4	4	2	3	4	2	4	3	3	3	1	2	2	2	4	4	3	3	2	3	4	657				
31	4	5	6	4	1	2	3	3	4	2	4	3	3	3	1	2	2	2	4	4	3	3	2	3	4	658				
MEAN.	-4	-5	-5	-4	-3	-2	-2	-1	0	0	1	2	2	3	3	3	3	3	4	4	4	3	2	0	-2	657				

VERTICAL INTENSITY

(Z = 20000T + Mean +)

G.M.T.

June 1943

DAY.	June 1943																															Mean.	Maximum.		Minimum.		Range.
	0.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	H. M.	γ	H. M.	γ	H. M.	γ							
1	8	-	7	-	4	-	3	-	5	-	3	0	+	6	+	6	+	6	+	7	+	4	+	3	+	2	652										
2	4	-	6	-	3	-	3	-	3	-	3	+	+	3	+	4	+	5	+	6	+	3	+	3	+	2	655										
3	4	-	4	-	4	-	2	-	3	-	2	+	+	3	+	3	+	4	+	4	+	3	+	1	+	2	658										
4	1	-	0	-	1	-	1	-	1	-	2	-	-	1	-	3	-	3	-	4	-	0	-	0	-	6	658										
5	7	-	5	-	2	-	1	-	1	-	1	-	-	1	-	2	-	4	-	4	-	1	-	3	-	6	657										
6	8	-	13	-	1	-	2	-	2	-	1	-	+	2	-	3	-	5	-	6	-	6	-	3	-	1	653										
7	2	-	5	-	3	-	1	-	1	-	1	-	+	1	-	1	-	2	-	6	-	8	-	6	-	1	655										
8	5	-	3	-	8	-	2	-	8	-	0	-	+	2	-	2	-	1	-	7	-	6	-	0	-	2	657										
9	3	-	1	-	4	-	3	-	2	-	1	-	+	2	-	2	-	4	-	4	-	4	-	3	-	2	653										
10	1	-	4	-	5	-	3	-	0	-	3	-	+	2	-	2	-	5	-	4	-	3	-	1	-	2	654										
11	6	-	1	-	2	-	5	-	0	-	3	-	+	1	-	1	-	2	-	4	-	8	-	7	-	5	663										
12	1	-	8	-	5	-	0	-	3	-	3	-	+	1	-	0	-	1	-	4	-	7	-	4	-	1	663										
13	8	-	2	-	3	-	1	-	1	-	2	-	+	1	-	1	-	2	-	4	-	4	-	3	-	2	661										
14	1	-	11	-	3	-	3	-	1	-	3	-	+	3	-	3	-	1	-	2	-	4	-	3	-	2	662										
15	4	-	1	-	5	-	3	-	2	-	2	-	+	2	-	2	-	1	-	4	-	3	-	3	-	3	664										
16	5	-	1	-	1	-	3	-	3	-	2	-	+	4	-	3	-	3	-	2	-	2	-	1	-	2	663										
17	1	-	3	-	1	-	1	-	3	-	1	-	+	3	-	3	-	4	-	4	-	3	-	3	-	4	665										
18	3	-	3	-	1	-	3	-	1	-	1	-	+	4	-	4	-	8	-	4	-	1	-	3	-	1	661										
19	8	-	10	-	3	-	3	-	3	-	2	-	+	3	-	5	-	7	-	8	-	3	-	1	-	3	657										
20	10	-	13	-	3	-	3	-	3	-	0	-	+	5	-	7	-	9	-	7	-	1	-	3	-	7	660										
21	6	-	7	-	4	-	2	-	2	-	2	-	+	1	-	3	-	6	-	7	-	6	-	2	-	3	659										
22	7	-	5	-	3	-	0	-	2	-	2	-	+	2	-	4	-	4	-	7	-	4	-	1	-	3	658										
23	4	-	3	-	5	-	3	-	3	-	3	-	+	4	-	3	-	7	-	7	-	6	-	3	-	0	658										
24	7	-	10	-	7	-	2	-	1	-	4	-	+	5	-	6	-	8	-	7	-	4	-	4	-	3	660										
25	6	-	9	-	5	-	1	-	1	-	1	-	+	1	-	1	-	5	-	8	-	8	-	5	-	3	659										
26	0	-	1	-	2	-	5	-	0	-	3	-	+	0	-	0	-	0	-	1	-	1	-	0	-	1	661										
27	2	-	1	-	5	-	4	-	4	-	2	-	+	3	-	3	-	5	-	6	-	4	-	0	-	7	666										
28	2	-	1	-	4	-	2	-	2	-	3	-	+	3	-	2	-	3	-	7	-	6	-	7	-	4	661										
29	1	-	3	-	3	-	3	-	2	-	2	-	+	6	-	2	-	4	-	7	-	5	-	2	-	2	661										
30	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	658										
31	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	658										
MEAN.	-3	-5	-4	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	2	2	3	4	4	4	3	3	1	-1	659											





VERTICAL INTENSITY

(Z = 20000r + Mean +)

G.M.T.

July 1943

DAY.	July 1943																								Mean.	Maximum. H. M. 7	Minimum. H. M. 7	Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
+ 1	-7	-6	-3	-5	-7	-9	-10	-8	-3	0	+1	+2	+3	+4	+5	+6	+7	+7	+8	+8	+7	+5	+4	-2	655			
2	-10	-9	-4	-1	0	0	-1	-3	-3	-1	-1	-1	-3	+0	+2	+3	+8	+7	+6	+4	+2	+3	+1	-1	656			
3	-9	-6	-6	-2	-2	-1	+2	+2	+2	+3	+0	+3	+0	+0	+2	+3	+5	+3	+5	+3	+7	+6	+8	-10	657			
4	-5	-5	-11	-6	-4	-4	-2	-2	-4	+2	+3	+5	+2	+1	+1	+1	+1	+1	+1	+7	+3	+3	-1	-6	659			
5	+5	+1	0	-6	-4	-3	-2	-2	-2	+2	+3	+1	+0	+0	+1	+1	+1	+1	+1	+3	+3	+3	-1	-6	659			
6	-9	-10	-6	-2	-1	-1	-1	-2	-4	-3	0	+1	+3	+7	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	658			
7	-5	-6	-6	-4	-2	-1	+2	+2	+2	+2	+2	+2	+1	+4	+5	+4	+3	+3	+3	+3	+7	+6	+8	-10	656			
8	-5	-9	-11	-6	-4	-4	-2	-2	-4	-3	+2	+3	+2	+2	+2	+2	+2	+2	+2	+3	+3	+3	-1	-6	657			
9	+5	+1	0	-6	-4	-3	-2	-2	-4	+2	+3	+5	+2	+1	+1	+1	+1	+1	+1	+3	+3	+3	-1	-6	659			
10	-7	-3	-4	-1	0	0	-1	-3	-3	-1	-1	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	658			
11	+3	+2	-4	-1	-1	-1	-1	-2	-4	-3	0	+1	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	659			
12	+4	-4	-2	-4	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	661			
13	+5	-4	-2	-4	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	658			
+14	-5	-8	-3	-4	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	654			
15	-7	-3	-4	-1	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	656			
16	-5	-7	-2	-4	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	658			
17	-5	-8	-3	-4	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	657			
18	-5	-3	-2	-4	-1	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	655			
19	-11	-10	-5	-8	-2	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	654			
20	-7	-9	-7	-4	-2	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	654			
21	-10	-14	-12	-10	-4	-3	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	+5	652			
22	-2	-4	-7	-9	-4	-2	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	+5	652			
23	-9	-7	-9	-9	-7	-2	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	+5	651			
+24	-7	-9	-7	-4	-2	-1	-1	-2	-4	-3	-2	+2	+3	+4	+5	+4	+3	+3	+4	+5	+5	+4	+5	+5	654			
+25	+1	-4	-8	-8	-8	-4	-4	-3	-2	0	+1	+1	+4	+4	+3	+2	+2	+3	+4	+8	+6	+4	+1	0	652			
26	+1	0	0	0	-2	-4	-4	-2	-2	-1	0	+1	+2	+3	+4	+3	+2	+2	+3	+4	+3	+2	0	0	650			
27	0	0	+1	0	-1	-3	-3	-2	-2	0	0	+1	+2	+3	+4	+3	+2	+2	+3	+4	+3	+2	0	0	652			
28	-1	-3	-3	-5	-2	-2	-2	-1	-1	-1	-1	+1	+4	+5	+4	+3	+2	+2	+3	+4	+3	+2	-2	-2	651			
+29	+1	+4	+2	+2	+1	+2	+2	+3	+3	+6	+2	+1	+1	+2	+3	+4	+3	+2	+3	+4	+3	+2	+1	+1	653			
30	+4	+4	+6	+2	+2	+2	+2	+3	+3	+6	+2	+1	+1	+2	+3	+4	+3	+2	+3	+4	+3	+2	+1	+1	651			
31	-8	-6	-6	-5	-2	-2	-2	-1	-1	-1	-2	-6	-2	-2	-5	-6	-5	-7	-6	-4	-1	-4	-7	-9	650			
MEAN.	-4	-4	-4	-4	-3	-3	-2	-2	-1	0	0	+1	+1	+2	+3	+4	+4	+4	+5	+4	+2	+1	-1	-2	655			



VERTICAL INTENSITY

(Z = 20000T + Mean +)

G.M.T.

August 1943

DAY.																																Mean.	Maximum.		Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	H. M.	H. M.									
1	-12	-10	-5	-	1	-3	-4	3	-1	-2	1	2	2	4	5	6	8	5	4	6	4	2	0	-	2	27	653								
2	-4	-6	-6	1	6	3	1	-1	1	2	2	3	2	4	5	5	5	6	6	9	8	2	4	4	-	27	653								
3	-12	-12	-7	3	2	0	1	3	0	1	1	3	2	4	5	8	6	8	9	6	4	4	-	-	-13	653									
4	-14	-12	-9	5	3	1	1	2	4	2	2	2	2	4	4	6	6	8	9	6	3	4	-	-	1	653									
5	-3	-4	-4	3	2	1	2	4	4	4	2	2	2	4	3	5	4	6	6	6	3	2	0	-	3	655									
6	-	3	-4	7	2	0	0	2	0	3	1	2	1	2	2	2	5	2	7	7	4	4	0	3	3	655									
7	3	3	6	4	1	1	1	1	2	1	1	4	5	4	4	4	8	8	7	7	3	3	4	6	6	653									
8	-	4	5	7	2	4	1	0	5	1	1	5	4	3	3	3	2	2	2	1	1	4	6	6	6	651									
9	-	4	5	7	2	4	1	0	5	1	1	5	4	3	3	3	2	2	1	1	4	6	6	6	6	657									
10	-	9	-	8	-	-	4	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	656									
11	-	3	0	4	4	4	1	0	1	1	3	3	4	6	4	6	3	6	4	4	3	2	2	1	2	656									
12	-	7	3	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	655									
13	-	3	4	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	655									
14	-	3	4	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	658									
15	-	4	4	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	657									
16	-	3	0	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	655									
17	-	8	-10	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	656									
18	-	4	-8	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	656									
19	-	14	-15	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	652									
20	-	13	-9	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	652									
21	-	13	-14	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	655									
22	-	1	-5	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	654									
23	+	2	-1	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	655									
24	-	7	-11	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	654									
25	-	5	-5	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	654									
26	-	5	-7	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	656									
27	-	2	-2	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	655									
28	+	1	-2	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	653									
29	-	7	-2	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	657									
30	-	8	-2	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	657									
31	-	8	-4	4	4	4	1	4	6	1	3	4	6	8	4	7	5	5	4	4	1	3	2	1	8	661									
MEAN.	-6	-6	-5	-4	-4	-2	-1	0	1	2	2	3	4	5	5	5	4	4	4	4	2	1	3	4	4	655									

VERTICAL INTENSITY

(Z = 20000ft + Mean +)

September 1943

G.M.T.

DAY.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean.	Maximum. H. M.	Minimum. H. M.	Range.	
1	-12	-9	-9	-3	1	0	1	1	2	1	-1	1	2	3	3	4	3	4	3	3	3	2	1	5	662				
2	-8	-12	-11	-7	2	2	3	4	6	2	1	2	2	4	5	5	4	5	5	7	4	0	-5	-10	657				
3	-12	-13	-12	-8	-6	-5	4	0	2	4	2	0	0	3	4	4	4	6	8	3	4	4	2	2	657				
4	-1	-4	-4	-2	-4	-1	3	4	2	1	2	2	1	0	3	3	2	4	4	3	4	3	1	3	659				
5	-5	-9	-13	-11	-5	-1	1	3	5	5	2	3	1	1	2	3	2	5	4	4	3	2	3	6	656				
6	-6	-8	-6	-6	-6	-6	3	0	2	4	3	5	3	2	2	3	3	3	4	5	3	2	0	2	655				
7	-5	-10	-11	-5	-2	-1	1	1	1	1	3	3	2	2	2	3	3	4	5	5	2	1	0	0	654				
8	-4	-5	-5	-5	-5	-5	4	3	3	3	2	6	5	4	4	5	5	5	4	4	1	1	5	9	654				
9	-11	-11	-7	-7	-9	-3	2	1	1	1	7	11	9	9	5	7	7	5	5	1	1	7	8	11	652				
10	-13	-12	-11	-7	-4	-3	2	1	1	5	7	7	5	5	4	5	5	5	4	2	1	0	2	1	652				
11	0	-1	0	-2	-2	-1	2	-3	-2	-1	1	3	4	7	7	5	4	3	2	0	1	5	5	5	654				
12	-5	-7	-4	-2	-1	-1	1	-2	0	0	2	3	5	5	6	6	6	5	6	0	1	3	4	5	653				
13	-6	-6	-7	-6	-2	-2	0	-2	0	0	2	2	4	4	6	9	9	7	6	1	1	3	3	4	8	655			
14	-10	-8	-5	-4	-3	0	0	2	3	1	1	7	7	7	10	9	9	8	8	4	5	5	2	8	653				
15	-13	-12	-6	-4	-2	0	1	0	1	-1	1	0	2	5	6	9	9	9	6	5	2	2	7	8	655				
16	-5	-2	-1	0	0	1	1	1	0	0	-1	1	1	0	2	3	6	5	6	5	2	1	5	5	654				
17	-6	-7	-4	-3	-2	0	1	1	1	3	1	0	0	1	1	4	4	5	7	6	5	1	3	6	652				
18	-5	-7	-5	-3	-1	1	3	3	3	3	3	4	4	5	7	5	5	7	8	7	2	5	12	16	650				
19	-3	-7	-5	-4	-2	-1	-1	0	0	2	3	3	3	3	3	3	3	6	6	5	3	1	3	7	650				
20	-12	-17	-15	-9	-4	-4	4	3	1	2	5	10	6	6	6	6	6	6	5	3	5	3	1	3	650				
21	-9	-14	-15	-12	-10	-6	-5	-3	-1	2	3	5	5	6	7	6	6	5	5	3	2	5	6	2	651				
22	-4	-5	-4	-5	-4	-5	-4	-4	1	2	3	4	4	5	4	4	4	6	5	3	5	6	1	6	651				
23	-5	-5	-5	-2	-1	-2	-2	-1	1	2	0	3	2	4	4	3	3	6	5	3	3	3	1	1	2	653			
24	-5	-5	-5	-2	-1	-2	-2	-1	1	1	0	2	2	4	3	3	3	6	3	2	1	1	1	1	1	654			
25	-5	-5	-5	-4	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
26	-5	-5	-5	-5	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
27	-5	-5	-5	-5	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
28	-5	-5	-5	-5	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
29	-5	-5	-5	-5	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
30	-5	-5	-5	-5	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
31	-5	-5	-5	-5	-4	-5	-8	-5	-4	0	4	3	3	5	12	8	5	5	5	0	4	5	2	1	654				
MEAN.	-7	-8	-7	-5	-3	-2	-2	0	1	1	2	3	3	4	5	5	5	5	5	4	4	2	1	3	5	654			



International Seismological Centre

200/1/43-143571



VERTICAL INTENSITY

(Z = 20000ft + Mean + ...)

October 1943

G.M.T.

DAY.	October 1943																								Range.
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	-15	-13	-7	-5	-2	-1	0	1	0	-1	-2	+1	+5	+5	+7	+5	+5	+3	+5	+3	+1	+2	+1	+6	+5
2	+1	-1	-1	+1	-1	0	+1	+1	+3	+1	+3	+0	+1	+1	+2	+1	+1	+1	+1	+1	+2	+1	-	-	6
3	-5	-9	-8	-6	-3	-1	+4	+0	+0	+3	+4	-	+6	+4	+6	+1	+6	+6	+4	+2	+2	-	-	-	4
4	-6	-5	-4	-1	0	0	+1	+1	+4	+1	+1	-	+1	+0	+2	+2	+2	+2	+2	+2	+1	-	-	-	1
5	0	+1	+1	+2	+2	0	0	0	0	-1	+1	+1	+1	+1	0	0	0	0	0	0	-4	-3	-4	-	4
6	-2	-2	-6	-6	-8	-7	-2	-1	-1	0	0	+1	+2	+2	+2	+2	+2	+2	+3	+4	+6	+6	+8	+9	655
7	+7	+5	+3	+3	+1	-1	-2	-2	-2	-1	-1	-2	-1	-2	-2	-1	-1	-1	-1	-1	+3	+3	0	-	658
8	-2	-2	-1	0	-3	-3	0	+1	+1	+2	+2	+5	+2	+2	+3	+2	+2	+1	0	+1	+1	-1	-3	-	656
9	-4	-4	-4	-4	-4	-5	-4	0	0	+1	+3	+5	+5	+6	+5	+4	+3	+3	0	0	-1	-1	0	0	653
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-2	+1	+3	+2	+2	+3	+6	+4	+4	+2	+4	+4	+4	+4	+4	+4	+2	+2	0	0	-3	-1	0	0	655
12	-	+3	+5	+3	+2	+1	+3	+5	+3	+2	+3	+1	+3	+4	+3	+1	+4	+3	+2	+1	+1	+1	+2	+0	656
13	+3	+4	+4	+3	+3	+1	+1	+2	+5	+2	+1	+3	+1	+2	+3	+3	+1	+1	+1	+1	+1	+3	+1	+2	658
14	+3	+4	+4	+3	+3	+1	+1	+2	+2	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	656
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	652
16	-4	-5	-2	0	+1	+2	+2	+1	+2	+2	+1	+1	+1	+1	+2	+3	+6	+4	+3	+1	+1	-6	-7	-6	651
17	-5	-6	-1	-5	-2	-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	650
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	653
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	653
20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	653
21	-7	+10	-2	-3	-3	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	653
22	+7	+2	-1	-3	-3	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	652
23	-9	-7	-4	-4	-3	-2	+1	+4	+3	+2	+4	+2	+5	+7	+5	+4	+1	+3	+3	+2	+1	+1	+1	+1	652
24	-7	-6	-2	-1	-1	+1	+2	+1	+2	+1	+3	+2	+2	+5	+5	+4	+1	+3	+1	+0	+2	+4	+5	+5	652
25	-2	-2	-2	-2	-1	+1	+1	+2	+2	+1	+10	+2	+8	+6	+6	+4	+4	+1	+2	-5	-6	-8	-5	-2	655
26	-4	-6	-5	-4	-3	-6	-4	-1	0	0	7	4	9	4	8	5	3	3	0	3	3	3	0	1	656
27	+2	+3	+4	+2	+1	+3	+2	+1	0	0	3	4	4	4	4	3	3	1	3	7	7	8	5	4	657
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	656
30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	655
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	654
MEAN.	-3	-3	-2	-2	-1	-2	-1	0	0	0	+1	+2	+3	+3	+3	+3	+3	+2	+1	0	0	-1	-2	-2	655



VERTICAL INTENSITY

(Z = 20000r + Mean +)

G.M.T.

November 1943

DAY.	November 1943																								Mean.	Maximum. H. M.	Minimum. H. M.	Range.		
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23						
1	-6	-3	-3	-5	-9	-7	-4	+4	+5	+6	+4	+3	+4	+7	+3	+3	+3	+3	+2	0	-1	-2	-3	-2	655					
2	-2	-4	-5	-6	-4	-1	+1	+3	+3	+4	+3	+2	+2	+2	+3	+4	+4	+3	+3	+1	-1	-2	-2	-2	654					
3																														
4	+4	+3	0	-3	-5	-3	-1	0	+2	+3	+4	+3	+4	+3	+5	+3	+2	0	0	-2	-4	-5	-4	-4	655					
5	-2	-5	-6	-7	-5	-1	+1	+4	+6	+7	+7	+7	+7	+6	+5	+3	+1	+1	-1	-2	-3	-5	-4	-4	651					
6																														
7	+1	0	-6	-3	-1	+1	0	+1	+1	+3	+4	+5	+6	+8	+6	+6	+4	+2	-1	-3	-5	-9	-11	-12	651					
8	-9	-6	-5	-5	-3	-1	+1	+1	+1	+1	+1	+2	+4	+5	+4	+6	+4	+1	-1	-4	-4	-3	-1	+4	651					
9	+3	+1	0	+1	0	+1	0	-1	+1	+1	0	+1	+2	+4	+5	+5	+4	+2	0	+1	0	-3	-8	-12	653					
10	-1	3	-7	-4	-1	+1	+1	+3	+2	+1	+1	+3	+4	+5	+6	+7	+6	+4	+2	+4	+1	-5	-9	-11	651					
+11	+3	+8	-9	-4	-1	+1	0	+1	+1	+3	+1	+3	+4	+5	+6	+7	+5	+2	2	4	2	-3	-8	-14	653					
+12	-1	3	-7	-4	-1	+1	+1	+3	+2	+1	+1	+3	+4	+5	+6	+7	+5	+2	4	5	3	-4	-8	-12	651					
+13	-1	3	-7	-4	-1	+1	0	+1	+1	+3	+1	+3	+4	+5	+6	+7	+5	+2	4	5	3	-4	-8	-12	651					
+14	-1	3	-7	-4	-1	+1	0	+1	+1	+3	+1	+3	+4	+5	+6	+7	+5	+2	4	5	3	-4	-8	-12	653					
+15	+4	+3	0	-3	-1	+1	0	+1	+1	+3	+4	+3	+4	+7	+5	+6	+4	+2	2	4	2	-3	-8	-12	653					
16	-1	0	-4	-7	-4	+1	+2	+0	+1	+1	0	+1	+1	+3	+4	+5	+3	+1	1	4	3	+3	+3	+2	651					
+17	-1	0	-4	-7	-4	+1	+2	+0	+1	+1	0	+1	+1	+3	+4	+5	+3	+1	1	4	3	+3	+3	+2	652					
18	-1	0	-4	-7	-4	+1	+2	+0	+1	+1	0	+1	+1	+3	+4	+5	+3	+1	1	4	3	+3	+3	+2	651					
19	-1	0	-4	-7	-4	+1	+2	+0	+1	+1	0	+1	+1	+3	+4	+5	+3	+1	1	4	3	+3	+3	+2	651					
20	-1	0	-4	-7	-4	+1	+2	+0	+1	+1	0	+1	+1	+3	+4	+5	+3	+1	1	4	3	+3	+3	+2	656					
21	-6	-6	-5	-4	-3	0	+3	+0	+3	+5	+3	+4	+5	+6	+4	+3	+1	-2	4	3	0	-4	-2	-2	654					
22	-4	-5	-3	-3	-3	-2	+1	+3	+0	+1	+4	+4	+5	+6	+4	+3	+1	-2	4	3	0	-4	-2	-2	655					
23																														
24																														
25																														
26																														
27																														
28																														
29																														
30	-4	-7	-6	-6	-5	-2	+1	+1	0	-1	-1	0	+1	+2	+3	+4	+5	+4	2	0	-1	+1	-1	-1	654					
31																														
MEAN.	-3	-3	-3	-3	-3	-2	0	+1	+1	+2	+3	+3	+3	+4	+4	+3	+3	+2	0	-2	-3	-3	-3	-3	653					

SEISMOLOGY, 1943

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 error 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, Seismological Tables, 1940.
- G.J. Brunner and J.B. Macelwane, The Brunner focal depth - time distance chart.
- H. Jeffreys, Table for the Near Earthquake Pulses.
- H. Jeffreys, Times of Transmission for Small Distances, M.N.R.A.S., Vol. 4, 8, 1939.

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.
- M.M. = Modified Mercalli scale of intensity.

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

The seismograph constants were as follows:-

February 4th, 1943.

- E-W** Free period 10.0 seconds; static magnification 174; coefficient of friction .0018; damping ratio 6.1; total friction 2.3 dynes.
- N-S** Free period 10.8 seconds; static magnification 180; coefficient of friction .0022; damping ratio 5.3; Total friction 2.7 dynes.
- Z** Free period 4.9 seconds; static magnification 55; coefficient of friction .0013; damping ratio 2.6; total friction 3.0 dynes.

March 18th, 1943.

- E-W** Free period 10.0 seconds; static magnification 174; coefficient of friction .0019; damping ratio 4.5; total friction 2.5 dynes.
- N-S** Free period 11.4 seconds; static magnification 182; coefficient of friction .0025; damping ratio 5.1; total friction 3.0 dynes.
- Z** Free period 4.4 seconds; static magnification 56; coefficient of friction .0013 cms/sec²; damping ratio 1.8; total friction 3.2 dynes.

May 7th, 1943

- E-W** Free period 10.0 seconds; static magnification 171; coefficient of friction .0013; damping ratio 6.3; total friction 1.7 dynes.
- N-S** Free period 11.4 seconds; static magnification 182; coefficient of friction .0009; damping ratio 9.5 (*); total friction 1.1 dynes.
- Z** Free period 4.4 seconds; static magnification 56; coefficient of friction .0036 (+) cms/sec²; damping ratio 2.4; total friction 8.5 (+) dynes.
- (*) Adjusted to 5.5 on the 8th.
(+) Adjusted to .0009 cms/sec² and 2.1 dynes on the 8th.

July 9th, 1943

- E-W Free Period 10.2 seconds; static magnification 172; coefficient of friction .0009; damping ratio 7.0⁺; total friction 1.1 dynes.
- N-S Free period 11.3 seconds; static magnification 195; coefficient of friction .0016; damping ratio 4.7; total friction 1.6 dynes.
- Z Free period 4.4 seconds; static magnification 57; coefficient of friction .0008; damping ratio 2.1; total friction 1.7 dynes.
- F decreased to about 6 on 10th July.

September 3rd, 1943

- E-W Free period 10.3 seconds; static magnification 168; coefficient of friction .0013; damping ratio 5.8; total friction 1.7 dynes.
- N-S Free period 12.1 +seconds; static magnification 162; coefficient of friction .0014; damping ratio 4.3; total friction 2.1 dynes.
- Z Free period 4.4 seconds; static magnification 53; coefficient of friction .0013 cms/sec²; damping ratio 2.0; total friction 3.3 dynes.
- + Later adjusted to 10.1 secs.

November 17th, 1943

- E-W Free period 10.5 seconds; static magnification 176; coefficient of friction .0016; damping ratio 4.6; total friction 2.0 dynes.
- N-S Free period 9.8 seconds; static magnification 197; coefficient of friction .0019; damping ratio 2.7⁺; total friction 1.9 dynes.
- Z Free period 4.3 seconds; static magnification 60; coefficient of friction .0013; damping ratio 1.9; total friction 2.5 dynes.
- + Later adjusted to 5 $\frac{1}{2}$ (ca)

December 22nd. 1943

- E-W Free period 10.7 seconds; static magnification 165; coefficient of friction .0014; damping ratio 4.3; total friction 2.0 dynes.
- N-S Free period 9.7 seconds; static magnification 200; coefficient of friction .0016; damping ratio 5.7; total friction 1.6 dynes.
- Z Free period 4.4 seconds; static magnification 57; coefficient of friction .0010 cms/sec²; damping ratio 1.8; total friction 2.3 dynes.

Earthquakes, 1943
January

- 2nd. eP 16h 12m 22s iS 16h 12m 44s Distance = 1.8°
Trace of middle distance earthquake; commencement lost in changing on horizontal and indistinct on Z. iNE 19h 30.7m iNZ 19h 34m 19s.
- 13th. Middle distance disturbance recorded on horizontal; times not available due to overlapping.
- 19th. e? 11h 41m 17s e? 11h 42m 28s e? 11h 44m 10s.
Weak trace.
- 27th. (1) eS 3h 4m 35s eL 3h 14.0m US.C.G.S. gives epicentre 51°N 179½°W (Aleutian Is.) H = 2h 45.2m
(2) Slight seismic activity 6 h 50m.
- 28th. Weak trace on N-S instrument commencing 7h 1.0m.
- 29th. eP 8h 9m 23s iS 8h 9m 43s Distance = 1.6° Felt in Apia M.M.II H = 8h 8m 55s
- Slight Tremors: 8d 11h 12m; 9d 19h 28m; 10d 19h 46m;
18d 08h 06m; 18d 08h 23m; 21d 00h 33m;
21d 03h 16m; 26d 19h 37m.

February

- 1st. Weak medium distance disturbance commences 1h 20.1m on E-W. N-S trace overlapping.
- 6th. eP 14h 15m 50s iS 14h 16m 51s Distance = 5° ca.
H = 14h 14.5m

- 7th. (1) eP 4h 27m 24s 1S 4h 30m 5s 1P 4h 30m 13s.
Epicentre near $28^{\circ}\text{S } 173^{\circ}\text{W}$ $H = 4\text{h } 23.8\text{m}$.
(2) eP 5h 29m 5s 1S 5h 31m 43s Superimposed on
(1). Probably same epicentre with $H = 5\text{h } 25.5\text{m}$.
- 10th. Slight seismic activity 14h 15.1m to 14h 19m
- 15th. Slight seismic activity 6h 24m to 6h 27m
- 16th. (1) eP 4h 2m 8s 1S 4h 2m 28s Distance = 1.6°
 $H = 4\text{h } 1\text{m } 42\text{s}$. (2) iP 14h 43m 52s eL 14h 51.0m
Epicentre $9^{\circ}\text{S } 162^{\circ}\text{E}$ (Solomons) $H = 14\text{h } 38.2\text{m}$
- 17th. (1) eP 2h 22m 8s eP 2h 31.0m Epicentre probab-
ly in Banda Sea. (Using N.Z. and Australian
data) (2) Weak trace commences 19h 9m 50s.
- 22nd. eP 9h 32.6m eS 9h 42m 19s eL 9h 55.3m (Period
23secs) Distance = 77° U.S.C.G.S. gives epi-
centre $17^{\circ} 55'\text{N } 101^{\circ} 5'\text{W}$ $H = 9\text{h } 20\text{m } 46\text{s}$.
- 28th. eL 1h 50m 54s Previous phases weak.
- Slight tremors: 6d 06h 39m; 7d 11h 55m; 8d 07h 19m;
8d 07h 20m; 8d 11h 13m; 9d 02h 06m;
12d 19h 12m; 15d 17h 31m; 20d 15h 33m
(1.8°); 20d 16h 31m (2.3°).

March.

- 1st. Weak Trace on N-S commences 11h 52.8m iP 21h
26m 43s 1S 21h 27m 14s Distance = 2.6°
- 9th. (1) eLq 10h 38.8m eLp 10h 48.5m U.S.C.G.S.
gives epicentre $60^{\circ}\text{S } 29^{\circ}\text{W}$ (Sandwich Is.) $H = 9\text{h } 49.0\text{m}$. (2) eP 20h 20m 40s 1S 20h 22m 7s Dis-
tance = 7° ca. $H = 20\text{h } 18.8\text{m}$ Very deep focus
in Tongan region.
- 11th. iP 9h 38m 29s eS 9h 42.0m U.S.C.G.S. gives
epicentre $21\frac{1}{2}^{\circ}\text{S } 170\frac{1}{2}^{\circ}\text{E}$ (Loyalty Is.) $H = 9\text{h } 34.1\text{m}$
- 14th. iP 17h 15m 27s eS 17h 18m 56s U.S.C.G.S. gives
epicentre $22^{\circ}\text{S } 170\frac{1}{2}^{\circ}\text{E}$ (Loyalty Is.) $H = 17\text{h } 11.0\text{m}$
- 15th. (1) iP 2h 28m 59s eS 2h 32m 48s eL 2h 34.7m
U.S.C.G.S. gives epicentre $22^{\circ}\text{S } 169^{\circ}\text{E}$ (Loyalty
Is.) $H = 2\text{h } 24.5\text{m}$. (2) eL 5h 15.2m U.S.C.G.S.
gives epicentre $19\frac{1}{2}^{\circ}\text{N } 141\frac{1}{2}^{\circ}\text{E}$ (Caroline Is.) $H =$
 $4\text{h } 47.9\text{m}$. (3) iP 23h 0m 30s 1S (large) 23h 1m
15s. Felt at Wallis Is. U.S.C.G.S. gives epi-
centre $14\frac{1}{2}^{\circ}\text{S } 176\frac{1}{2}^{\circ}\text{W}$ $H = 22\text{h } 59\text{m } 15\text{s}$ $h = 300\text{ km}$.

- 20th. eP 4h 53m 42s IS 4h 56m 07s U.S.C.G.S. gives epicentre $16\frac{1}{2}^{\circ}\text{S } 175\frac{1}{2}^{\circ}\text{E}$ (Fiji) $H = 4\text{h } 50.6\text{m}$.
- 21st. eP 20h 42m 57s eS 20h 48m 40s eL 20h 51m 42s Pasadena gives epicentre $5.7^{\circ}\text{S } 152.2^{\circ}\text{E}$ $H = 20\text{h } 35\text{m } 43\text{s}$.
- 23rd. Slight seismic activity 9h 0m to 9h 12m on N-S instrument.
- 24th. (1) eP 8h 52m 6s eS 8h 52m 39s Distance = 3° ca
(2) iP 11h 14m 5s eS 11h 16m 6s Pasadena gives epicentre $23^{\circ}\text{S } 179^{\circ}\text{W}$ (Tonga) $H = 11\text{h } 11\text{m } 27\text{s}$ $h = 430\text{ km}$. (3) eP 15h 51m 54s IS 15h 52m 15s Distance = 1.7°
- 26th. eP 17h 40m 32s IS 17h 42m 6s iP 17h 42m 23s Felt in Nukualofa. U.S.C.G.S. gives epicentre $22.9^{\circ}\text{S } 176.0^{\circ}\text{W}$ (Tonga) $H = 17\text{h } 38\text{m } 12\text{s}$ $h = 75\text{ km}$.
- 27th. iP 15h 34m 19s IS 17h 34m 35s Distance = 1.3°
- 28th. Weak trace commences 21h 3.0m
- Slight tremors: 1d 10h 12m (2.6°); 2d 23h 55m (2.4°); 3d 16h 47m (1.4°); 4d 06h 36m; 7d 08h 59m; 19d 06h 29m; 19d 17h 18m; 19d 17h 21m; 30d 19h 40m (1.5°); 31d 10h 34m.

April

- 1st. (1) iP 18h 38m 50s IS 18h 39m 15s Epicentre near $16^{\circ}\text{S } 172^{\circ}\text{W}$ $H = 18\text{h } 38.3\text{m}$ (Using Pasadena)
(2) eP 18h 43m 35s IS 18h 44m 4s.
- 3rd. Weak trace commences 15h 16.5m
- 4th. eP 22h 20m 36s IS 22h 21m 27s Distance = 5° ca.
- 6th. (1) iP 16h 20m 21s ePP 16h 24m 29s eS 16h 31m 32s eP 16h 32m 46s ePS 16h 33m 12s eSS 16h 37.6m eSKKS 16h 44.6m eL₁ 16h 49.3m (Period 19 sec) eL₂ 17h 01.0m (Period 13 sec.) Vertical instrument only. U.S.C.G.S. gives epicentre $31.5^{\circ}\text{S } 71^{\circ}\text{W}$ $H = 16\text{h } 07\text{m } 20\text{s}$ Destructive in Chile. (2) Weak trace commences 18h 20m. Initial phases lost in changing charts.

- 8th. Seismic activity 9h 46.9m to 9h 50m On N-S.
- 9th. eP 8h 58m 8s 1pP 8h 58m 35s 1S 9h 5m 21s eSS
9h 6m 19s U.S.C.G.S. gives epicentre 18.8°N
 145.9°E (Mariana Is.) H = 8h 48m 49s h = 100km.
- 15th. (1) 1P 4h 40m 4s 1S 4h 40m 19s Felt in Apia.
M.M. II Distance = 1.2° (2) eL 12h 20.9m
(Period 15 sec.)
- 25th. 1P 5h 3m 33s 1S 5h 4m 45s Epicentre near 20°S
 174°W (Tonga) H = 5h 2.0m h = 400km.
- 28th. (1) Slight seismic activity 17h 18m to 17h 22m
(2) 1P 23h 46m 7s 1S 23h 48m 20s 1 23h 48m 30s
Pasadena gives epicentre $24.5^{\circ}\text{S } 180^{\circ}\text{W}$ (S of Tonga)
H = 23h 43m 18s h = 530 km.
- 30th. (1) eP 7h 59m 14s e? 7h 59m 33s e? 8h 2m 38s
Weak trace. (2) Slight seismic activity 17h 18m
to 17h 24m (3) 1P 19h 43m 29s 1S 19h 43m 49s
Distance = 1.6° (4) 1P 21h 17m 12s 1S 21h 17m
28s Distance = 1.3°
- Slight tremors: 5d 10h 10m (2.2°); 7d 20h 23m; 16d 12h
47m (1.5°); 16d 17h 19m; 16d 17h 24m;
17d 9h 48m; 21d 17h 34m; 22d 15h 47m;
23d 5h 11m.

May

- 1st. eP 20h 58m 24s 1S 20h 59m 5s Distance 3°Ca .
Probably deep.
- 2nd. e? 17h 42.5m eL 18h 5.0m U.S.C.G.S. gives epi-
centre $6.8^{\circ}\text{N } 80.8^{\circ}\text{W}$ (Panama) H = 17h 18m 7s
- 3rd. eP 2h 10m 12s e? 2h 19.5m eL 2h 27.4m Pasadena
gives epicentre $12.5^{\circ}\text{N } 125.5^{\circ}\text{E}$ (Philippines) H =
1h 59m 12s
- 4th. 1P 21h 32m 47s 1S 21h 33m 9s Distance = 1.8°
- 6th. 1P 17h 34m 42s 1S 17h 35m 3s Distance = 1.7°
Dilatation from SW Felt in Apia M.M. III
- 12th. (1) eP 8h 24m 54s 1S 8h 26m 5s Pasadena gives
epicentre $20^{\circ}\text{S } 175^{\circ}\text{W}$ (Tonga) H = 8h 23m 15s h =
270 km. (2) 1P 14h 39m 6s 1S 14h 39m 25s Dis-
tance = 1.5° Dilatation from 217° Epicentre near
 $15^{\circ}\text{S } 172^{\circ}\text{W}$ H = 14h 38m 38s (3) eP 17h 24m 24s 1S
17h 24m 41s Distance = 1.3°

- 14th. 1P 16h 22m 47s 1S 17h 23m 10s Distance = 1.9°
Compression
- 24th. e? 18h 40m 24s Weak near earthquake.
- 25th. 1P 23h 18m 12s 1PP 23h 20m 40s eS 23h 26m 42s
ePS 23h 27m 23s eSS 23h 31m 16s eL 23h 35.0m
U.S.C.G.S. gives epicentre $6.8^\circ\text{N } 127.2^\circ\text{E}$ (Mindanao) H = 23h 7m 35s.
- 28th. eP 20h 3m 50s 1S 20h 5m 40s Pasadena gives
epicentre near $21^\circ\text{S } 179.5^\circ\text{W}$ H = 20h 1m 30s h =
610 km.
- Slight Tremors: 4d 2h 46m; 9d 9h 9m; 9d 23h 27m; 13d
12h 6m; 15d 8h 4m; 20d 9h 21m; 20d 15h
20m; 23d 18h 14m; 24d 2h 31m; 25d 16h
19m; 27d 5h 28m; 28d 9h 18m; 29d 8h 5m;
31d 4h 15m.

June

- 3rd. (1) P 12h 16m 2s +2 (in gap) eS 12h 17m 56s
1E 12h 18m 14s Epicentre near $22^\circ\text{S } 176^\circ\text{W}$ (Tonga)
H = 12h 13.6m h = 600 km. (2) 1P 19h 54m 22s eS
19h 54m 50s Compression. Felt in Apia M.M.II
Epicentre near $16^\circ\text{S } 174^\circ\text{W}$ H = 19h 53m 40s (3)
1P 20h 48m 47s 1S 20h 49m 12s Compression.
Felt in Apia M.M.III Aftershock of (2) H = 20h
48m 8s. (4) eP 21h 36m 18s 1S 21h 36m 44s Epi-
centre $16.8^\circ\text{S } 172.5^\circ\text{W}$ H = 21h 35m 43s
- 5th. 1P 20h 29m 38s 1S 20h 30m 42s Deep focus in
Tongan region
- 8th. eS 21h 5m 48s followed by weak long waves F
24.9h U.S.C.G.S. gives epicentre $3^\circ\text{S } 103^\circ\text{E}$
(Sumatra) H = 20h 42.7m
- 9th. (1) eP 3h 19.0m eS? 3h 29.8m eL 3h 52m ca After
shock of preceding quake. (2) 1P 4h 6m 9s 1S 4h
7m 50s Epicentre near $21^\circ\text{S } 176^\circ\text{W}$ (Tonga) H = 4h
4m 4s h = 600 km.
- 11th. e? 8h 18m 19s eN 8h 19m 23s eNE 8h 28m 44s
- 13th. (1) eP 5h 23.0m eS 5h 31m 58s eL 5h 42.7m
(Period 21 sec.) U.S.C.G.S. gives epicentre 42.3°
 $\text{N } 142.5^\circ\text{E}$ (Japan) H = 5 h 11m 41s (2) Seismic
activity 9h 9.5m to 9h 20m ca. Aftershock of (1)

- 18th. 1P 19h 24m 18s 1S 19h 24m 57s Dilatation.
Epicentre near $15^{\circ}\text{S } 175^{\circ}\text{W}$ $H = 19\text{h } 23.5\text{m}$ (Using Pasadena)
- 19th. (1) 1P 9h 7m 41s 1S 9h 8m 21s Dilatation.
Aftershock of preceding quake (2) 1P 19h 19m 29s 1S 19h 19m 51s Distance = 1.5° Felt in Apia M.M. II (3) Seismic activity 1h 4m to 1h 16m
- 24th. eP 1h 0,0m (1n gap) 1S 1h 0m 28s 1? 1h 0m 49s
- 25th. 1P 19h 15m 20s eS 19h 16m 47s Pasadena gives epicentre $18^{\circ}\text{S } 178^{\circ}\text{W}$ $H = 19\text{h } 13\text{m } 28\text{s}$ $h = 550\text{km}$.
- 28th. (1) Weak trace of distant shock 2h 50m to 3h 10m ca. (2) 1P 12h 57m 2s 1S 12h 57m 29s Epicentre near $16^{\circ}\text{S } 172^{\circ}\text{W}$ $H = 12\text{h } 56.4\text{m}$ Felt in Apia M.M. II (Times may be up to 4s too early)
- 30th. eP 4h 30m 8s e? 4h 31m 2s Deep focus (Times may be up to 3s too early)
- Slight tremors: 2d 7h 42m; 4d 8h 25m; 5d 1h 20m; 8d 5h 8m; 11d 22h 58m($1\frac{1}{2}^{\circ}$); 12d 15h 21m; 13d 4h 0m; 13d 8h 5m; 14d 22h 57m; 21d 0h 54m; 26d 23h 11m; 27d 16h 47m.

July.

- 5th. Weak trace of distant shock 13h 54.5m to 14h 13m
- 11th. 1P 2h 14m 40s 1? 2h 15m 26s 1₂? 2h 16.0m eS 2h 18.2m eL 2h 20.3m Pasadena gives epicentre $33^{\circ}\text{S } 178.5^{\circ}\text{W}$ $H = 2\text{h } 10\text{m } 25\text{s}$ $h = 180\text{km}$.
- 16th. Local quake distant 2° at 8h 51m ca. (Timing unsatisfactory)
- 20th. 1? 1h 16m 41s Large waves for $1\frac{1}{2}$ mins. followed by slight activity
- 21st. 1P 6h 30m 45s 1S 6h 31m 2s Dilatation from an epicentre near $15^{\circ}\text{S } 173^{\circ}\text{W}$ $H = 6\text{h } 30.2\text{m}$
- 23rd. eP 15h 4m 56s 1pP 15h 5m 19s 1S 15h 14m 38s eL (weak) 15h 35m ca. J.S.A. gives epicentre $7^{\circ}\text{S } 111.3^{\circ}\text{E}$ (Java) $H = 14\text{h } 53\text{m } 23\text{s}$ $h = 120\text{ km}$.
- 29th. ePP 3h 21.1m eSKS 3h 27m 22s ePS 3h 30m 23s ePPS 3h 31m 35s eSS 3h 31m 26s eSSS 3h 40.3m eL 3h 52.5m

U.S.C.G.S. gives epicentre $18.9^{\circ}\text{N } 67.0^{\circ}\text{W}$ (Puerto Rico)
H = 3h 2m 16s.

Slight tremors: 4d 11h 55m; 5d 15h 1m; 5d 17h 50m; 9d
3h 41m; 17d 20h 49m (1.2°); 17d 21h
24m; 18d 8h 1m; 20d 13h 12m (1.0°);
21d 11h 50m (5.3°); 26d 13h 51m; 27d
17h 42m; 31d 00h 23m.

August.

- 1st. iP 16h 22m 44s i? 16h 22m 51s 1pP 16h 23m 12s,
eS 16h 26.0m (in gap). Compression. Pasadena
gives epicentre $20^{\circ}\text{S } 170^{\circ}\text{E}$ H = 16h 18m 41s h =
230 km.
- 2nd. (1) eP 0h 53m 39s eS (weak) 0h 59m 30s eL₁ 1h
3m 9s eL₂ 1h 4m 20s Wellington gives epicentre
 $45.5^{\circ}\text{S } 166.8^{\circ}\text{E}$ H = 0h 46.5m h = 50-80km.
(2) iP 4h 47m 33s iS 4h 47m 54s Distance = 2° ca.
(3) e_N? 8h 44.4m e_N? 8h 46.5m Weak trace.
- 4th. iP 11h 4m 5s iS 11h 4m 55s Distance = 5° ca. Deep
focus.
- 27th. (1) e? 0h 47.4m (large) e? 0h 49.8m e? 1h 0,5m
(2) Weak trace commences 4h 9.5m
- 28th. iP 10h 14m 3s iS 10h 14m 24s Compression from
region of $12^{\circ}\text{S } 170^{\circ}\text{W}$ H = 10h 13.5m Felt in
Apia M.M. II-III.
- Slight tremors: 1d 11h 38m; 3d 17h 35m; 28d 17h 46m.

September

- 5th. eP 8h 45m 37s Weak trace. Pasadena gives epicentre
 $4^{\circ}\text{N } 123^{\circ}\text{E}$ (Celebes Sea) H = 8h 34m 17s.
- 6th. (1) iP 3h 49m 54s 1pP 3h 51m 52s iS 3h 56m 50s
eSS 4h 0.1m (in gap) Dilatation. Pasadena gives
epicentre $53^{\circ}\text{S } 159^{\circ}\text{E}$ (S of New Zealand) H = 3h
41m 31s (2) eL 11h 15.4m.
- 10th. (1) e? 8h 53.4m e? 9h 06.4m e? 9h 10.0m. Pasa-
dena gives epicentre $35^{\circ}\text{N } 134^{\circ}\text{E}$ (Japan) H = 8h 36m
56s (2) e? 22h 45.5m
- 11th. (1) iP 5h 50m 36s iS 5h 52m 8s Epicentre near
 $20^{\circ}\text{S } 177^{\circ}\text{W}$ (Tonga) H = 5h 48.6m h = 550km.

- (2) 1P 19h 34m 51s 1? 19h 35m 1s 1S 19h 35m 47s Dilatation. Epicentre near $15^{\circ}\text{S } 175^{\circ}\text{W}$
H = 19h 34.0m.
- 14th. (1) 1P 2h 5m 37s 1PP 2h 6m 5s eS 2h 9m 1s Dilatation. Pasadena gives epicentre $22^{\circ}\text{S } 171^{\circ}\text{E}$ (Loyalty Is.) H = 2h 1m 12s h = 50 km. (2) 1P 3h 51m 35s eS 3h 55m 11s e? 3h 56m 35s Pasadena gives epicentre $22^{\circ}\text{S } 170^{\circ}\text{E}$ H = 3h 47m 15s h = 50 km. (3) eP 7h 22m 4s 1S 7h 25m 15s 1? 7h 25m 28s Pasadena gives epicentre $30^{\circ}\text{S } 177^{\circ}\text{W}$ H = 7h 18m 8s h = 60 km.
- 16th. (1) Weak trace from 0h 32m to 0h 39m (2) Weak trace commences 12h 55.0m (3) Weak trace commences 23h 55m ca.
- 17th. (1) Weak trace commences 1h 24.6m (2) 1P 10h 14m 5s 1S 10h 17m 49s Pasadena gives epicentre $16^{\circ}\text{S } 170^{\circ}\text{E}$ H = 10h 9m 35s
- 18th. Seismic activity 14h 13m to 14h 21m
- 19th. Weak trace commences 6h 11.5m
- 22nd. 1P 23h 23m 10s eS 23h 27.1m Pasadena gives epicentre $34^{\circ}\text{S } 179^{\circ}\text{W}$ (Kermadecs) H = 23h 18m 15s.
- 24th. (1) Weak trace commences 3h 6m ca. (2) 1P (weak) 11h 10m 23s 1S 11h 11m 26s Epicentre $18^{\circ}\text{S } 176^{\circ}\text{W}$ H = 11h 8.9m h = 80km. (3) 1P 13h 39m 54s 1S 13h 40m 13s Distance = 2° ca. (4) 1P 14h 13m 4s 1S 14h 13m 23s Epicentre $15^{\circ}\text{S } 173^{\circ}\text{W}$ H = 13h 39.5m Felt in Apia M.M. III-IV. (5) 1P 16h 27m 30s 1S 16h 27m 50s Distance = 2° ca. Timing inaccurate.
- 27th. eP 22h 7m 35s eS 22h 10m 32s eSS 22h 10m 55s eL 22h 11m 56s Epicentre near $30^{\circ}\text{S } 176^{\circ}\text{W}$ (Kermadecs) H = 22h 3.8m h = 707km.
- 28th. 1P 9h 18m 14s 1S 9h 18m 35s Epicentre $15^{\circ}\text{S } 173^{\circ}\text{W}$
H = 9h 17.8m
- 29th. 1P 9h 18m 10s 1? 9h 18m 15s 1S 9h 18m 30s Dilatation. Epicentre $15^{\circ}\text{S } 172\frac{1}{2}^{\circ}\text{W}$ H = 9h 17.8m
- Tremors:- 2d 1h 34m ($1\frac{1}{2}^{\circ}$); 2d 10h 37m; 9d 3h 48m; 12d 11h 20m; 14d 23h 45m; 20d 9h 20m; 23d 18h 38m; 24d 2h 19m; 24d 5h 0m; 24d 10h 20m ($1\frac{1}{2}^{\circ}$); 24d 17h 21m (0.3°); 24d 21h 59m (1.7°); 25d 10h 20m; 25d 12h 4m ($1\frac{1}{2}^{\circ}$); 27d 14h 46m ($1\frac{1}{2}^{\circ}$);

28d 3h 40m; 28d 17h 47m; 29d 8h 59m.

October.

- 3rd. Weak trace commences 19h 21.3m (Epicentre near Auckland Is.)
- 4th. eP 10h 44m 15s eS 10h 48.0m Pasadena gives epicentre $15\frac{1}{2}^{\circ}\text{S } 168^{\circ}\text{E}$ (New Hebrides) $H = 10\text{h } 39.1\text{m}$
- 7th. iP 7h 31m 10s iS 7h 31m 44s Distance = 2.6°
- 11th. iP 13h 35m 59s iS 13h 36m 15s Distance = 1.1°
- 15th. Local quake 3h 15m ca. (Timing uncertain)
- 17th. eL 22h 15.5m
- 18th. iP 1h 38m 53s iS 1h 39m 12s Distance = 1.4°
- 21st. iP 23h 9m 31s iS 23h 10m 45s Epicentre near $16^{\circ}\text{S } 178^{\circ}\text{W}$ $H = 23\text{h } 8.0\text{m}$
- 24th. iP 16h 6m 47s iP 16h 6m 54s iS 16h 8m 14s iSS 16h 8m 56s Pasadena gives epicentre $22^{\circ}\text{S } 174^{\circ}\text{W}$ $H = 16\text{h } 4\text{m } 36\text{s}$ Felt in Tonga.
- 26th. iP 15h 13m 21s iS 15h 13m 49s Distance = 1.9°
- 28th. (1) iP 0h 37m 46s iS 0h 38m 28s Distance = 3.4°
(2) iP 11h 54m 48s iS 11h 55m 10s Distance = 1.7°
- 29th. (1) Weak trace commences 0h 23m 30s (2) Weak. trace commences 21h 54m ca.
- 30th. eP 9h 5m 0s iS 9h 5m 21s eL 9h 5m 46s Distance = 1.5° ca.
- 31st. iP 3h 12m 30s iS 3h 12m 56s Distance = 2.0°

Slight Tremors:- 2d 2h 16m; 3d 6h 59m; 3d 23h 27m; 6d 16h 1m; 10d 4h 9m; 12d 8h 23m; 13d 9h 7m; 15d 9h ca. (timing uncertain); 18d 6h 38m; 21d 3h 29m; 23d 6h 25m; 25d 15h 9m; 25d 23h 15m; 30d 1h 0m.

November.

- 2nd. Trace of distant earthquake 19h to 20h
- 3rd. iP 14h 44m 12s eS 14h 54.0m eSS 14h 59m 6s eL 15h 7m 48s U.S.C.G.S. gives epicentre $62^{\circ}\text{N } 151^{\circ}\text{W}$ (Alaska) $H = 14\text{h } 32.3\text{m}$.

- 6th. (1) 1P 6h 24m 44s eS 6h 27m 22s Epicentre near
16°S 176°E H = 6h 21.6m (2) 1P 8h 41m 4s (dila-
tation) eS 8h 48.8m 1P 8h 49m 24s U.S.C.G.S.
gives epicentre 5.5°S 134°E H = 8h 31.6m
- 7th. eP 6h 38m 18s eS 6h 39m 29s Deep focus in Tongan
region.
- 8th. 1P 21h 42m 20s 1S 21h 42m 54s Epicentre 17°S
172°W H = 21h 41.6m
- 12th. 1P 4h 16m 36s 1S 4h 17m 13s Distance = 2.3°
- 13th. (1) 1P 18h 48m 13s eS 18h 51.6m eL 18h 53.0m
Pasadena gives epicentre 20°S 170°E H = 18h 43m
59s (2) 1P 10h 29m 40s 1S 10h 29m 56s Distance
= 1.2°
- 18th. (1) 1P 18h 21m 31s 1S 18h 21m 51s Distance = 1.5°
(2) 1P 22h 0m 45s 1S 22h 0m 58s Distance = 1.0°
- 19th. 1P 23h 42m 34s 1S 23h 42m 50s Distance = 1.2°
- 20th. (1) 1P 7h 7m 52s 1S 7h 8m 12s Distance = 1.6°
(2) 1P 21h 26m 24s eS 21h 27m 0s Distance = 3° ca.
Deep focus.
- 21st. 1P 21h 19m 24s eS 21h 20m 0s Distance = 3° ca.
Deep focus
- 26th. (1) 1P 21h 19m 19s 1S 21h 19m 51s Distance = 2.6°
Dilatation from SW. (2) 1PKP 22h 40m 36s ePKS
22h 43m 52s eSKS 22h 47m 31s eSKKS 22h 50m 23s
ePS 22h 54m 19s Kew gives epicentre 41°N 35°E
(Turkey) H = 22h 20.5m
- 27th. (1) eP 19h 46.0m (in gap) eS 19h 47.0m (in gap) Dis-
tance = 5° ca. (2) 1P 21h 11m 35s 1S 21h 11m 54s
Distance 1.4°
- 28th. 1P 21h 46m 14s eS 21h 49m 0s Distance = 14° ca.
Deep focus in region of Kermadec Is.
- 29th. 1P 9h 50m 10s 1S 9h 50m 30s Distance = 1.6°
- 30th. (1) 1P 14h 17m 49s 1S 14h 18m 40s Distance = 5° ca
Dilatation from SW (2) 1P 20h 24m 22s 1S 20h 26m
55s Distance = 2.7°
- Slight tremors: 8d 16h 31m; 9d 22h 34m; 11d 0h 30m; 11d
0h 4.3m; 15d 19h 26m; 16d 22h 21m; 28d
10h 52m; 29d 9h 13m.

December.

- 1st. Seismic activity commences 6h 12.8m
- 2nd. 1P 3h 21m 10s 1 S 3h 22m 5s Distance = 5° ca.
- 3rd. 1P 4h 46m 50s 1? 4h 47m 6s eS 4h 54m 8s Pasadena gives epicentre 3° S 141° E (New Guinea) H= 4h 38m 8s.
- 4th. 1P 4h 26m 24s eS 4h 27.0m (in gap) Distance = 3°
- 5th. Nukualofa reports "sudden moderate brief earth shock felt 11.05 GMT."
- 12th-16th. Unusually large microseisms.
- 18th. 1P 2h 21m 23s 1S 2h 21m 49s Distance = 2.1°
- 19th. 1P 20h 21.0m (in gap) 1S 20h 21m 14s Distance = 1.1°
- 23rd. (1) Trace of distant quake 9h 56m. (2) eP 19h 7m 5s epP 19h 7m 15s ePP 19h 8m 25s 1S 19h 12.5m eL_g 19h 14m 48s Pasadena gives epicentre 5.5° S 155.5° E (New Britain) H = 19h 0m 10s h = 80km.
- 24th. eP 11h 51.0m (weak)
- 25th. 1P (weak) 4h 40m 19s e (S?) 4h 47m 5s eL 4h 50m ca.
- 27th. 1P 3h 59m 39s 1S 4h 3m 13s eL 4h 5.6m Epicentre near 34° S 176° W H = 3h 55.0m
- 28th. 1P 11h 54m 13s 1S (strong) 11h 54m 34s Epicentre 15° S 173° W H= 11h 53.7m. Felt in Apia M.M. II
- 30th. (1) 1P 4h 49m 19s 1S 4h 49m 38s Distance = 1.4°
 (2) 1P 7h 40m 36s 1PP 7h 40m 55s eS 7h 43.4m
 Epicentre near 35° S 175° W H = 7h 36.0m (3) Trace of distant quake eL 22h 17m
- Slight tremors:- 2d 2h 27m; 2d 7h 50m; 2d 12h 6m; 6d 0h 20m; 8d 10h 41m; 20d 13h 29m; 22d 0h 17m; 26d 10h 57m; 30d 22h 4m.

Meteorological Report, 1943

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 1.0 a.m., 7.0 a.m., 9.0 a.m., noon, 1.0 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 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 10.

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 "alight"
- 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 Fig- ure.
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	1 $\frac{1}{2}$ miles	1 $\frac{1}{4}$ miles	5
H	Tree on sky-line to west or Island huts to N.W.	2 $\frac{3}{4}$ miles 2 miles	2 $\frac{1}{2}$ miles	6
J	House at Tapatapao	5 $\frac{3}{4}$ miles	6 $\frac{1}{4}$ miles	7
K	Saluafata Promontory or Mount Tofua	12 $\frac{1}{2}$ miles 13 miles	12 $\frac{1}{2}$ miles	8
M	Promontory of Savail and Puga Hill	35 miles	31 miles	9

Suitable objects corresponding to I (4 miles) and L (18 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

The standard barometer in use is a Kew pattern station model instrument, G 3939. 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. For the range of pressure recorded at Samoa the instrument has no index error. Temperature readings from the attached thermometer 51104 and pressure readings rounded off to the nearest ten millibars are used to enter the correction card. The standard temperature of the instrument is 284.9°a at 1000 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.

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 or 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 derived from the readings of the wet and dry bulb thermometers using tables which were computed at the Apia Observatory. The tables are based on the formula used by the British Meteorological Office, which, converted to degrees centigrade, is:-

$$x = f - 0.000799(t-t')p$$

where

- x = vapour pressure corresponding with given readings of dry and wet bulb thermometers.
- f = saturation vapour pressure at the temperature of the wet bulb. (obtained from the 5th revised edition of the Smithsonian Meteorological Tables)
- t = temperature of the dry bulb in degrees centigrade.
- t' = temperature of the wet bulb in degrees centigrade.
- p = pressure of the air.

The tables were based on a pressure of 1010 millibars so the formula reduced to:-

$$x = f - 0.807(t-t').$$

A continuous record of humidity has also been obtained by means of a hair hygograph 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 hygograph 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 ($25\frac{1}{2}$ 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 1942 to February 1943 (inclusive)

Dry Season - May 1943 to August 1943 (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, 1925 to 1933 and 1935 to 1940.

**Meteorological Instruments
in use during 1943**

- 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.
(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 No. 273.
- Thermometers:** Grass minimum Casella 36182 until 10.1.43
49367 from 11.1.43
until 10.6.43
61521/40 from 11.6.43
- (In screen):
Dry Bulb Calderara No. 34490
Wet Bulb Calderara No. 34491
Maximum Casella No. 17250
Minimum Calderara No. 34686

**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 usual except for slight modifications necessary in view of war-time conditions.

Notes on the Weather of 1943
at Apia Observatory

January

From the 1st. to the 4th. the weather was showery and squally, with northerly winds predominating. From the 5th. to the 9th. the weather was showery, with easterly winds. Rain fell on the 10th. From the 10th. to the 16th. the weather was mainly fair to cloudy, frequently with precipitation in the evenings; winds were mainly easterly. From the 17th. to the 21st. winds were light and variable and the weather fair to cloudy. Northerly winds on the 22nd. to the 24th. brought showers and rain. Easterly winds again from the 25th. to the 27th. brought showery conditions. For the remaining days of the month little wind was experienced, and rain occurred only on the 28th.; the days were mainly cloudy, with some light showers.

The rainfall was less than half the normal value, but the number of rain days, 23, was as great as in the preceding month. Temperatures varied from a minimum of 72.9°F on the 19th. to a maximum of 87.4°F on the 27th., and were generally above normal. The sunshine was greatly in excess of the normal value. The highest pressure of 1015.2 millibars recorded on the 25th. was the highest recorded in January for at least 10 years.

The tropical cyclone reported moving over Fiji in December 1942 continued its southeastward motion, reaching maximum intensity in southeastern Fiji on 31st. December with a centre of 951 millibars and winds of 120 knots. On the 9th. of January frontogenesis occurred northeast of Samoa, and again a few days later. Meanwhile a cold front had moved over Fiji and Tonga, and an anticyclone moved over Sunday Island from the west. The cold front became quasi-stationary through Samoa and the Cook Islands with wave formation. Pressure remained high to the east.

February

From the 1st. to the 8th. winds from a northerly quarter predominated, and the weather was unsettled, with thunderstorms on the 1st. and 2nd., and squalls on the 3rd., 7th., and 8th. From the 9th. to the 18th. winds were from an easterly quarter; during this period the days were mainly fine, but there were frequently showers at night, and a thunderstorm occurred on the evening of the 13th. From the 19th. to the 21st. northerly to westerly winds brought showers, a thunderstorm

and rain. The 22nd. was dull, wet and squally. For the remainder of the month easterly winds brought showery weather, with squalls at times.

The rainfall was about normal, and rain fell on 23 days. Temperatures varied from a minimum of 73.4°F on the 23rd. to a maximum of 87.6°F on the 26th., and were generally above normal. The sunshine was also considerably above normal.

Early in the month an influx of equatorial air, coinciding with the advance of a cold front from the south, caused unsettled weather conditions. Several waves formed in the front as it lay stationary between Rotuma and Rarotonga. The advance of an extensive depression and cold front over New Zealand and Sunday Island caused a northerly drift in the Samoan area. Later wave formation in the cold front near Rarotonga occurred, followed by the formation of a second low near Sunday Island on the 20th. The front eventually became stationary as it extended from northern Tonga to Papeete.

March

The first few days were mainly fair, with little wind. From the 6th. to the 10th. the weather was dull with rain; winds were from a northerly to westerly direction for the first three days, otherwise light and variable. The 11th. and 12th. were fair to cloudy, with some precipitation and northwesterly winds. From the 13th. to the 15th. dull wet weather again predominated, with northerly to easterly winds. The 16th. to the 18th. were mainly showery with easterly winds. More dull wet weather was experienced on the 19th. and 20th., with northerly to easterly winds. For the rest of the month fair weather alternated with showers, winds being predominantly easterly. Squalls were experienced on the 15th., 19th., 20th., 23rd. and 24th.

The rainfall was below normal, although the number of rain days, 20, was rather large. Temperatures varied from 72.7°F to 88.0°F and were generally above normal. The sunshine was normal.

In the early part of the month, frontal activity was mainly to the south of Samoa; and a front reached northern Tonga as a cold front, reversed its motion and moved southward to Sunday Island. On the 8th. another tropical cyclone formed near Rarotonga and maintained considerable intensity in this area for the next three days. As the cyclone moved southwestward, a front formed across Samoa and Niue Island on the 12th. With

pressure high in the Rarotonga-Tonga area for the second half of the month frontal activity near Samoa was restricted.

April

A particularly fine spell of weather was experienced from the 3rd. to the 9th.; otherwise the weather was mainly showery. There were two spells of particularly unsettled weather, with rain: the 18th. and 19th. and the 23rd. to the 25th. Moderate to strong northerly to westerly winds were experienced on the 18th. and 19th; otherwise all winds of moderate or greater force were from an easterly quarter. Wind squalls were frequent from the 10th. to the 19th.

The rainfall was normal, and rain fell on 20 days. Temperatures varied from 74.1°F to 88.2°F and were generally above normal. The sunshine was somewhat above normal.

A front became quasi-stationary through northern Tonga and the Cook Islands early in the month and remained active for some days. Later a meridional front became quasi-stationary through northern Tonga and south of Rarotonga. Anticyclones were centred south and east of the front and considerable wave-formation occurred from the 7th. to the 14th. Frontal activity in the Tonga-Rarotonga region again became considerable on the 17th., and as pressure fell at Sunday Island an extensive wave formed west of Rarotonga. The cold front advanced as far as Samoa and remained quasi-stationary in this area for some days with slight wave formation.

May

Showery and fair weather alternated during the greater part of the month. The most unsettled period was experienced from the 19th. to the 21st. From the 25th. to the 30th. showers occurred early every morning. Winds were predominantly easterly, with some northwesterly and northerly winds during the day. Squalls were experienced on the 2nd., 6th., 10th., 17th. and 24th.

The rainfall was normal, but the number of rain days, 20, indicated the showery nature of the weather. Temperatures varied from 73.2°F to 86.5°F and were generally above normal. The sunshine was also greater than the normal value.

Early in the month the synoptic charts showed an extensive depression centred near Sunday Island associated with a cold front, which moved as far as northern

Tonga. The low moved southwards to Chatham Islands, and anticyclonic conditions were established south of Tonga by the 5th. However, another meridional front soon passed over the Fiji-Tonga area, and became quasi-stationary south of Samoa and north of Palmerston Island on the 10th., with wave-formation. Later the front passed over Samoa and was dissipated. A front formed south of Samoa, north of Niue and south of Rarotonga, with wave formation near Niue on the 17th. The front passed north of Samoa and remained active there till the 24th.

June

The weather was generally fine with many clear days. Showers were reported on a few days and rain and squalls were reported on the 10th.; but there were no dull days. Easterly winds showed considerable predominance, but southerly winds were associated with the cool weather of the 1st. to the 4th., while northeasterly winds brought showers on the 27th. to the 29th.

The rainfall was less than one quarter of the normal value and the lowest for June since 1937. Rain fell on only 8 days. Temperatures varied from 68.7°F to 86.4°F and the mean was somewhat above the normal, but the lowest for June since 1939. The sunshine was also the highest recorded for June since 1939 and greatly in excess of the normal value. Humidities below 60% were recorded on the 2nd. to the 4th., and the 14th. to the 16th.

The synoptic charts showed little frontal activity in the Samoa area. On the 1st. a cold front associated with a depression south of Rarotonga passed over Samoa rapidly with only slight precipitation and was soon north of the Tokelau Group. Pressure remained low south and southeast of Rarotonga until a second front passed over Samoa on the 10th. and became stationary through the Tokelau Group and Penrhyn Island. At the same time the anticyclone behind the front moved from Sunday Island eastwards. Another meridional front became quasi-stationary south of Fiji and Tonga on the 27th., with wave-formation.

July

The weather was mainly fair except for unsettled periods on the 9th., 10th., 25th. and 26th. Squalls occurred on the 9th., 10th., 18th. and 26th. Easterly winds prevailed throughout the month.

This was the driest July since 1930 and the sunniest

since 1939. The pressure of 1017.1 millibars recorded on the 24th. was the highest recorded since September 1939.

There was very little frontal activity in the Samoan region during July although several well developed depressions passed to the south. On the 25th. a cyclone developed over New Caledonia and the passage of the cold front on the 26th. brought widespread showers although the precipitation was not heavy.

August

The month was mainly fine with only occasional showers. Squalls occurred on the 18th., 19th., and 24th. Winds were consistently East or Eastsoutheasterly.

The rainfall, 1.05 inches was the lowest for August since 1930 while both the sunshine and temperature were above the normal for the month.

Samoa was situated mainly in the easterly pressure gradient during August with weak quasi-stationary fronts in the vicinity except on the 4th. and 7th. when weak troughs brought showers.

September

The weather was rather unsettled from the 16th. to 21st. with some squalls, but otherwise fair to fine. Winds were mainly light to moderate easterlies. There was one gust of 44 m.p.h. on the 16th.

The rainfall of 5.53 inches was normal and of this total 3.26 inches fell on the 16th. when squalls and showers continued throughout the day. The sunshine recorded was 261.5 hours which is some 40 hours greater than the normal for September.

There was considerable activity shown on the synoptic maps during September. On the 1st. a wave developed east of New Caledonia and moved slowly towards Rarotonga. The cold front passed over Apia on the 14th. and became quasi-stationary to the north with spasmodic activity. A further wave moved east from Santo on the 8th. bringing showery conditions and rain in places near Samoa from the 14th. to 16th. From then until the 28th. Apia lay in the easterly gradient of a high with two weak fronts lying stationary to the north. On the 28th. a shallow low formed to the east and moved off by the 1st of October.

October

The weather was mainly cloudy with frequent showers and rain except for fine periods from the 3rd. to 6th., 22nd. to 26th. and 30th. to 31st. Several squalls were recorded while thunder and lightning occurred on ten days.

The rainfall was 9.95 inches which is 3.30 inches higher than normal. Of this total 3.48" fell on the 18th. The mean temperature of 79.5°F and sunshine total of 221.5 hours are both near the normal October figures.

A meridional front passed over Fiji on the 8th. becoming quasi-stationary before reaching Samoa. A wave formed North of Fiji and passed off to the southeast bringing rainy weather on the 12th. and 13th. From the 25th. to 31st. the inter-tropical front was fairly active about 200 miles north of Apia. Apart from these cases there was little frontal activity in the region during the month.

November

The weather was mainly fine except from the 14th. to 19th. when showery conditions occurred. Light easterly winds predominated. Cumulonimbus clouds formed over the island nearly every day resulting in lightning or thunder being reported on 23 days.

The outstanding feature of the month was the rainfall of 1.47 inches which is the lowest November total since observations were commenced in 1890. It represents only 14% of the normal fall. The bright sunshine and temperature were considerably above normal being 246.8 hours and 80.26°F respectively compared with normal values of 187 hours and 78.9°F.

The synoptic charts for November were characterised by a general lack of frontal activity in the Samoan area. Most meridional fronts broke up before reaching Apia. A weak front passed over on the 3rd. without precipitation after which the station remained in the easterly gradient north of the migratory highs. On the 17th. a moderate cold front passed over and became quasi-stationary north of Samoa when a wave was generated passing southeast to Rarotonga.

December

The weather was generally showery with clear mornings becoming cloudy in the afternoons. On only one

day was there no rainfall recorded. Southerly winds from the 10th. to the 15th. brought cooler conditions while a period of rainy weather was experienced on the 26th. and 27th.

The rainfall was 10.88 inches some $3\frac{1}{2}$ inches below normal but was spread over 24 days, indicating the showery nature of the precipitation. The temperature ranged from 73.2°F to 87.8°F with a normal mean. The sunshine recorded, 182.5 hours, is slightly above normal.

The synoptic charts showed a varying easterly gradient to be the predominating influence in the first ten days except on the 3rd. and 4th. when the inter-tropical front moved south. A stationary low north of Fiji remained from the 10th. to 15th. while on the 25th. a depression developed over Wallis and moved southeast bringing rainy conditions at Apia.

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.			
	Low.	Form.						Direction.	Force (Beaufort Scale).		Observation.	At Time.	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
		High.	Medium.																	
1	Cu.	Sc	As.	Ac	3	10	2000	opr	orr	K	NE	4	1006.0	27.9	25.5	82%	30.7			
2	Cu.	Sc	Ac.		5	8	2000	cpr	c	K	NNE	3	1005.7	28.1	25.2	78	29.7			
3	Sc.	Cb.	As.		8	9+	2500	cpr	c	K	ESE	1	1007.6	27.6	24.9	79	29.3			
4	Cb.	Sc	Ac.	Cl	6	9	2000	cpr	cjpr	K	ENE	4	1009.6	28.4	25.3	77	29.8			
5	Cu.	Fs.	Ac.		5	7	3500	c	bc	K	E	4	1009.8	28.3	25.7	80	31.0			
6	Fs.	Cu	Ac.	Cl.	7	8	3000	bcpr	r	J	E	2	1010.7	27.4	25.2	83	30.3			
7	Cu.	Sc			4	4	3500	bc	b	K	E	3	1009.8	28.7	25.8	78	30.9			
8	Cu.	Ac.		Cl.	1	3	3500	bc	b	M	ESE	4	1010.0	28.8	25.5	76	30.0			
9	Sc.	Cu	Ac.		4	5	3500	b	bcpr	M	ESE	3	1010.1	28.7	26.1	81	31.7			
10	Sc.	Cb			10	10	1500	cpr	cjpr	H	E	5	1010.8	26.5	25.0	88	30.5			
11	Sc.	Cu		Cl.	2	4	2500	orr	cir	M	CALM	0	1012.0	27.9	25.0	78	29.4			
12	Cu.			Cl.	3	6	3000	bcpr	c	K	CALM	0	1012.0	28.4	25.2	76	29.5			
13	Cu.	Ac.		Cl.	3	4	3500	bc	bc	K	ESE	2	1009.7	29.2	26.2	78	31.6			
14	Sc.	Cu	As.		2	9+	3000	bc	bcpr	K	S	1	1009.7	26.5	24.7	86	29.7			
15	Cu.	Cb	Ac.	Cl.	2	7	3500	cpr	c	M	CALM	0	1008.6	28.0	24.8	76	28.7			
16	Cb.	Cu	Ac.		5	9	3000	bc	bcpr	M	ESE	3	1008.4	28.7	25.7	78	30.6			
17	Cu.			Cl.	1	2	2500	cor	bc	M	E	1	1007.1	28.3	25.0	75	29.0			
18	Sc.			Cl.	4	6	3000	bcjpr	bc	M	CALM	0	1006.6	28.9	24.8	70	28.0			
19	Cu.			Cl.	Tr.	9	3000	c	c	M	CALM	0	1006.1	27.5	23.5	70	25.7			
20	Cu.	Sc		Cl.	2	8	3000	c	c	M	CALM	0	1008.9	28.7	24.7	71	27.9			
21	Cu.	Sc		Cl	1	4	3000	c	bc	M	CALM	0	1010.3	28.0	24.0	70	26.6			
22	Cb.	Sc	Ac.	Cl	3	8	3500	cjpr	bcpr	M	E	2	1010.0	28.1	25.1	77	29.5			
23	Sc.	Cu			9	9	2500	cjpr	cjpr	M	NNE	2	1010.9	26.5	24.8	87	30.0			
24	Fs.	Cb			9	9	1500	cjpr	cpr	K	N	1	1013.6	26.0	24.6	89	29.8			
25	Cu.	Sc	Ac.	Cl.	4	7	3000	cpr	bc	K	E	3	1015.2	29.4	25.8	74	30.3			
26	Cu.			Cl.	4	6	3000	bcpr	bc/pr	K	ESE	3	1012.7	27.7	25.6	84	31.3			
27	Cu.	Fs		Cl.	6	7	2000	bcqpr	bcjpr	K	E	4	1008.5	29.0	25.9	77	30.9			
28	Cu.	Sc	Ac.	Cl.	4	8	2500	bcqrr	cjpr	M	SSE	1	1008.9	27.7	25.8	85	31.7			
29	Sc.	Cu	Ac.	As	4	9+	3500	cr	bcpr	M	SE	1	1010.5	26.2	24.9	90	30.5			
30	Sc.	Cu	Ac.	Cl.	2	9+	4000	cbc	prc	M	SE	1	1011.3	27.2	25.0	83	29.9			
31	Sc.	Cb	Ac.	Cl.	2	6	4000	cjpr	bc	M	CALM	0	1010.4	27.0	24.9	84	29.8			
Means					4.0	7.2	2900					1.9	1009.7	27.9	25.2	79%	29.8			



International Seismological Centre

METEOROLOGICAL OBSERVATIONS.

APIA OBSERVATORY

1,000/7/58-3911

3 P.M., JANUARY 1943.

Day of Month.	CLOUD.			WEATHER.			Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	Form.			Since previous Observation.	At Time.	Direction.		Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.	High.													
1	Cb	Fs	Ci		cjpr	K	ENE	3	1003.8	27.8	25.9	85%	31.9			
2	Fs	Cu	-	8	orr	J	NW	3	1005.0	25.8	24.3	88	29.2			
3	Cu	Cb	-	3	c	M	W	1	1005.5	27.7	24.9	79	29.3			
4	Sc	Cu	Ci	5	cqprjpr	K	ESE	1	1008.7	28.0	24.3	72	27.4			
5	Cu	Ac	Ci Co	4	bc	K	E	4	1008.0	30.0	26.7	76	32.4			
6	Cu	Sc	Ci	3	cprbcpr	M	ENE	2	1008.3	29.6	26.0	74	30.7			
7	Cu	Sc	-	4	bcjprbc	M	E	3	1008.2	29.7	26.3	75	31.5			
8	Cu	Fs	Ci	2	bc b	M	E	4	1007.7	30.2	26.5	74	31.7			
9	Cu	Fs	Ci	6	bc q pr	K	ESE	2	1008.9	27.1	25.3	86	30.8			
10	Sc	Fs	-	10	oir	G	E	2	1009.2	26.9	25.0	85	30.2			
11	Cu	Cb	Ci	3	bc	K	E	2	1010.3	29.8	25.9	72	30.3			
12	Cu	Cb	Ci	4	bcjpr	M	NNE	1	1009.3	28.8	25.4	75	29.7			
13	Cu	Cb	Ci	4	bcpr ^e t	M	E	2	1007.9	30.5	26.4	71	31.1			
14	Cu	Ac	-	3	bc c	M	N	2	1007.4	28.5	25.2	75	29.4			
15	Cb	Cu	Ci	4	bc cjpr	M	ENE	3	1006.3	30.1	26.2	72	30.9			
16	Cu	Cb	CS Ci	4	c	M	ENE	2	1006.1	29.4	25.7	73	30.1			
17	Cu	Cb	CS Ci	3	bccjpr	M	ENE	1	1005.0	28.9	24.8	70	28.0			
18	Sc	Cu	Ci	5	bc	K	E	1	1003.7	29.5	25.0	68	28.1			
19	Cu	Sc	CS Ci	2	c	M	ENE	1	1004.3	30.0	24.2	60	25.5			
20	Cu	Sc	Ci	2	bc c	M	NE	1	1007.0	29.7	25.1	67	28.2			
21	Cb	Sc	Ci	3	bc	M	N	1	1009.6	29.7	24.7	65	27.1			
22	Sc	Cb	Ci	8	bc cjpr	M	NNE	3	1008.4	27.8	24.9	78	29.2			
23	Fs	Cu	-	9	cpr rr	K	E	1	1010.5	25.3	24.5	93	30.1			
24	Cu	Ac	Ci	10	cpr	K	SSW	1	1012.1	27.1	25.0	84	30.0			
25	Cu	-	Ci	1	bc	M	E	4	1012.3	30.1	26.7	76	32.3			
26	Cu	-	Ci	2	bcqpr	K	E	4	1009.1	28.9	27.0	85	34.2			
27	Cu	Sc	Ci	5	bcpr ^e jp	K	E	3	1006.4	30.6	26.4	71	31.1			
28	Sc	Cu	Ci	4	cqpr	M	CALM	0	1007.1	28.2	25.2	77	29.7			
29	Sc	Cu	Ci	9	cjprpr ^o	M	NW	1	1008.8	28.0	24.0	70	26.6			
30	Cb	Cu	Ci	5	c	M	N	1	1009.1	28.5	25.1	75	29.1			
31	Sc	Cb	Ci	4	bc cjpr	K	E	2	1008.3	29.5	26.1	75	31.1			
Means	-	-	-	3.9	-	-	-	2.0	1007.8	28.8	25.4	76	29.9			



METEOROLOGICAL OBSERVATIONS.

JANUARY 1943



Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	28.6	24.6	-		8.7	2.1		1.9
2	28.9	24.7	24.6		2.5	4.5		1.6
3	29.8	24.6	22.1		12.6	2.2		1.0
4	29.4	23.8	22.1		0.3	0.7		2.0
5	30.1	25.8	-		10.1	10.9		2.2
6	30.0	24.9	22.8		1.5	10.8		2.1
7	30.2	23.2	21.2		-	11.4		2.5
8	30.2	23.7	-		0.4	12.2		2.6
9	30.2	24.7	22.3		14.2	9.1		1.6
10	28.4	24.8	-		26.5	3.3		0.8
11	30.2	24.0	23.1		6.4	11.1		2.1
12	29.6	24.1	23.2		-	11.7		2.3
13	30.6	23.8	22.7		0.2	10.0		2.2
14	28.5	24.3	23.1		1.8	0.0		1.4
15	30.6	23.4	23.0		25.0	8.1		1.4
16	29.9	23.0	22.6		11.4	11.0		-
17	29.7	23.3	22.3		-	9.3		2.0
18	30.6	23.9	22.7		-	12.3		3.3
19	30.1	22.7	21.0		-	8.5		2.9
20	29.8	23.7	22.4		-	11.5		2.6
21	29.9	23.6	23.1		1.2	8.7		2.5
22	29.9	24.2	23.3		0.3	8.0		2.4
23	28.7	24.1	23.0		20.7	2.0		1.0
24	29.7	24.6	23.8		2.0	0.8		2.1
25	30.7	24.8	24.5		Trace	10.5		3.1
26	30.5	25.2	23.8		12.6	10.5		2.6
27	30.8	25.2	23.9		31.9	11.5		2.2
28	29.7	23.9	23.3		11.8	6.0		1.7
29	29.4	24.5	23.2		0.3	6.5		2.1
30	29.5	24.0	22.8		-	8.5		2.1
31	30.2	23.9	22.7		0.4	6.3		1.8
Sum	-	-	-		202.8	240.0		62.1
Mean	29.8	24.2	22.9		-	7.7		2.1

METEOROLOGICAL OBSERVATIONS.

APIA OBSERVATORY

1,000/7/32-39(1)

9 a.m. FEBRUARY 1943.

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	Low.	Form.						Direction.	Force (Beaufort Scale).		Since previous Observation.	At Time.	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
		High.	Medium.																
1	Cb	Ac	Ci	6	9	2500	ctprlbc	cjpr	M	CALM	0	1010.1	27.3	25.7	87%	31.8			
2	Cb	As	Ci	5	9	3000	ltpr bc	cjpr	M	W	3	1008.7	27.9	25.6	82	31.0			
3	Cb	As	-	6	9	2500	orltcpr	c/pr	M	WSW	1	1008.6	26.7	24.4	82	28.7			
4	Fs	-	-	9	9	3000	corrlcp	cpr	M	SSE	3	1010.0	25.0	24.0	92	29.1			
5	Fs	Ns	-	4	10	1500	cprlORR	oir	J	CALM	0	1007.9	24.0	23.6	97	28.8			
6	Sc	As	Ac	5	9	3000	cjprepr	cjpr	M	CALM	0	1005.6	26.1	24.3	86	28.9			
7	Fs	Sc	-	10	10	1500	opr orr	opr	K	NNW	5	1006.2	27.0	25.0	84	30.1			
8	Sc	As	Ci	5	9	3000	orroopr	cjpr	K	CALM	0	1008.4	28.1	24.3	72	27.3			
9	Cu	Ac	Ci	2	3	2500	orq cbc	bc	K	NNE	4	1009.7	28.2	24.9	75	28.9			
10	Cu	Ac	Cs Ci	1	4	2500	bc cjpr	bc	K	N	1	1010.1	28.1	25.1	77	29.4			
11	Cu	Ac	Ci Cs	4	6	3500	cbc cpr	bc	K	CALM	0	1010.3	27.1	25.7	89	31.9			
12	Cu	As	-	2	2	3500	bc b	b	M	E	5	1010.0	29.0	26.0	76	30.4			
13	Cu	Sc	Ci	3	3	3000	bepbce	bc	K	E	3	1009.9	29.1	26.0	77	31.1			
14	Sc	Ac	Cs	5	9	2000	corrlt	c/pr	K	WNW	1	1012.4	25.5	24.3	90	29.4			
15	Cu	Sc	Ci	2	3	3000	h bepro	bc	K	E	2	1011.5	28.5	25.3	76	29.7			
16	Cu	Sc	Ci	3	3	3000	bepb	bcjpr	M	E	4	1010.9	29.2	25.8	75	30.5			
17	Cu	Ac	Ci	1	2	3000	cprbeb	b	M	E	3	1013.1	29.0	26.0	78	31.2			
18	Cu	-	Ci	2	2	3000	bceprbc	bjpr	M	E	1	1013.4	28.5	25.1	75	29.1			
19	Cu	As	Ci Cs	1	4	3000	bcpr bc	bc	M	W	2	1010.4	27.0	24.5	81	28.9			
20	Cu	Sc	Ci	3	4	3500	bcepf	bcjpr	M	CALM	0	1007.9	27.8	25.3	81	30.3			
21	Sc	Cb	Ci	9	9+	2000	ertlbc	cjpr	H	ESE	2	1009.4	25.0	24.0	92	29.1			
22	Sc	Fs	Ac	4	10	2500	cirqopr	ojpr	K	SSW	1	1011.4	25.5	24.3	90	29.4			
23	Cu	Cb	Cs	2	7	3000	ocprbc	bc	M	NE	1	1010.4	28.2	25.2	77	29.7			
24	Cu	Cb	Ci	4	8	3000	beprcjp	cjpr	M	ESE	2	1009.3	28.2	25.6	79	30.8			
25	Cu	-	Ci	2	5	3500	cpr bc	bc	K	E	1	1011.0	28.8	25.5	76	30.0			
26	Cu	-	Ci	2	4	3500	beb bc	bc	M	ENE	1	1012.7	28.1	24.9	76	28.9			
27	Fs	Cu	Ci	6	7	3000	bctlpr.	bcqpr	K	ESE	4	1011.3	27.4	25.2	83	30.3			
28	Cu	Ac	Cs Ci	3	8	3000	bclpr	c	M	SE	1	1011.2	26.6	25.0	87	30.4			
29																			
30																			
31																			
Means				4.0	6.4	2800			-	-	1.8	1010.1	27.4	25.0	82	30.0			



International Seismological Centre

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	FORM.							Direction.	Force (Beaufort Scale).		Since previous Observation.	At Time.	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.	High.																
1	Cu Cb	AG	Cl	3	8	2500	bc	cjpr	M	N	1	1008.2	28.5	25.7	79%	30.8			
2	Fs	NS	-	9	10	2000	ctrll bc	orr	J	NNE	5	1007.0	24.8	24.2	95	29.7			
3	Cu	AC	Cl	2	7	3000	cpr bc	bc	M	NNW	3	1007.0	28.9	24.9	71	28.3			
4	Sc Fs	AC	Cl	5	8	2000	cpr	cjpr	M	NNW	3	1007.5	27.5	24.7	79	28.5			
5	Sc Cu	AS	-	9	9+	3000	oir	cjpr	M	NW	1	1005.5	26.3	24.1	83	28.5			
6	Cu FC	AC	-	7	9	2500	cpr	cpr	M	WNW	4	1003.4	27.7	25.1	80	29.8			
7	Fs Sc	-	-	10	10	1500	cpr orr	orr	M	NNW	5	1005.4	25.7	24.3	89	29.3			
8	Fs Sc	AS	-	8	10	3000	cjpr	opr	M	CALM	0	1005.8	26.3	24.5	85	29.3			
9	Cu	AC	Cl	4	5	2500	bc	bc	M	NE	4	1006.6	29.1	25.9	77	30.9			
10	Sc Cu	-	Cl Cs	4	8	3000	bc c	c	M	NNE	1	1007.5	29.1	25.8	76	30.6			
11	Cu Sc	-	Cl	2	3	3500	bc	bc	M	E	3	1008.2	30.0	26.1	72	30.7			
12	Cu	AC AS	Cl	2	2	3000	bc	b	M	E	6	1007.2	30.0	26.1	72	30.7			
13	Cb Cu	-	Cl	2	2	3000	bcjpr	b	M	E	4	1007.9	30.1	26.3	73	31.2			
14	Cu	AC	Cl	1	2	3000	c	c	M	E NE	1	1010.2	29.0	25.1	72	28.7			
15	Cu	AC	Cl Cs	3	5	3000	bcqpr b	bc	M	E	3	1009.4	30.0	26.5	75	31.8			
16	Cu Cb	-	Cl	7	7	2500	bcpr jp	bcpr	M	E	3	1009.1	29.4	25.7	73	30.1			
17	Cu Sc	AC	Cl	4	5	3500	b bc	bc	M	E	3	1011.3	30.5	26.2	70	30.6			
18	Cb Cu	AS	Cl	7	8	3000	bcpr jp	bcpr	M	E	3	1011.8	27.5	25.0	81	29.7			
19	Cu Sc	AC	Cl	5	9	3000	cpr	bc	M	W	5	1007.3	28.5	25.2	75	29.4			
20	Cu Sc	-	Cl	5	9	3000	bc	bc	M	NW	4	1005.1	28.7	26.0	80	31.5			
21	Sc Cb	-	-	10	10	2000	crr	cir	H	NW	3	1009.1	25.0	23.3	86	27.5			
22	Sc Fs	AC AS	Cl	4	9+	3000	ojpr	c	M	ENE	1	1009.7	25.9	24.9	77	29.1			
23	Cu	-	Cl	3	5	3500	bc	bc	M	NE	1	1007.6	29.4	25.3	71	29.0			
24	Cu Sc	AC	Cl	3	8	3000	c	c	M	NE	2	1007.4	29.7	26.3	75	31.5			
25	Cb Sc	AC AS	Cl	5	8	3000	bcpr	cqpr	M	ENE	4	1010.1	26.7	25.2	88	30.9			
26	Cb Cu	-	Cl	5	5	3500	bc	bc	M	E	4	1009.8	30.2	27.0	77	35.1			
27	Cb Cu	-	Cl	3	5	3500	bc	bcjpr	M	ENE	3	1008.6	30.2	26.0	71	30.3			
28	Cb Cu	AC	Cl	3	8	3000	c t	cjprt	M	N	1	1009.4	28.1	25.2	78	29.7			
29																			
30																			
31																			
Means				4.3	6.9	2900					2.9	1008.0	28.4	25.4	78	30.0			



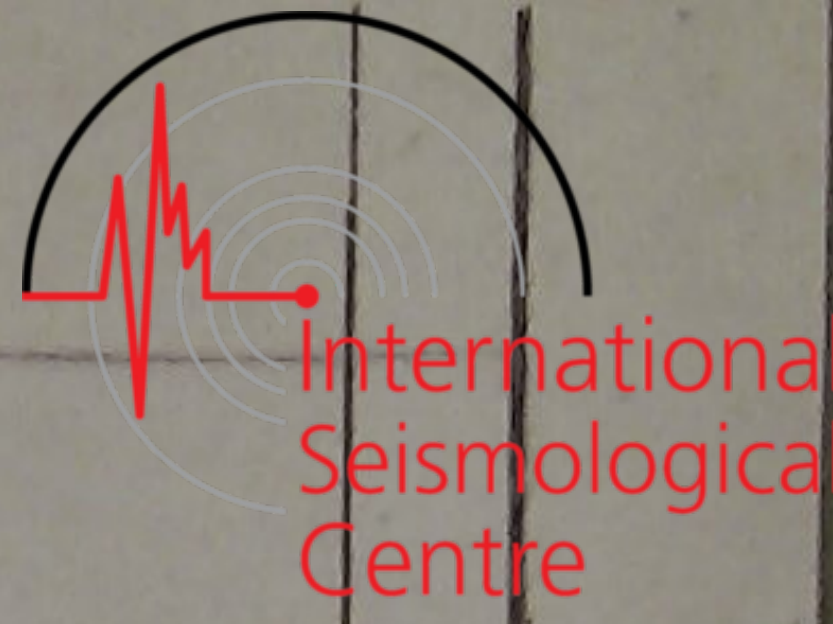
METEOROLOGICAL OBSERVATIONS.



FEBRUARY 1943.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum ()	Black Bulb in vacuo (°)				
1	29.7	24.4	23.8		33.8	7.0		1.7
2	29.5	24.4	-		50.3	2.6		0.8
3	29.2	23.5	22.9		15.4	8.7		1.8
4	28.0	24.2	23.8		40.0	4.3		1.5
5	27.3	23.6	23.2		6.2	0.2		1.1
6	28.1	23.8	22.9		10.2	4.1		1.2
7	28.5	24.1	23.3		13.8	0.0		1.8
8	28.9	23.2	22.4		16.3	2.1		0.4
9	29.8	23.9	22.8		-	10.3		3.1
10	29.8	24.7	23.0		4.3	9.5		1.9
11	30.3	24.5	23.4		-	10.7		2.5
12	30.6	24.0	22.8		3.2	11.9		3.0
13	30.8	25.2	23.6		48.5	10.1		2.2
14	29.9	23.7	23.2		Trace	8.9		2.0
15	30.2	23.8	22.7		0.5	11.5		2.5
16	30.8	24.3	22.7		9.9	9.0		1.8
17	30.8	24.2	22.7		0.3	11.3		2.5
18	29.9	24.0	22.9		Trace	7.7		1.9
19	30.0	24.0	22.3		4.6	9.3		2.5
20	29.5	24.1	22.7		17.2	8.9		1.7
21	27.8	24.4	-		59.8	0.0		0.2
22	28.7	24.2	23.8		21.9	0.5		1.3
23	29.9	23.0	23.4		3.6	10.9		2.2
24	30.3	24.1	22.8		2.6	10.3		1.9
25	30.9	24.2	23.4		1.2	8.1		1.9
26	30.2	23.5	22.9		0.4	10.5		2.6
27	30.5	23.3	-		4.5	9.6		2.4
28	29.7	23.4	-		-	6.6		1.6
29								
30								
31								
Sum	-	-	-		368.5	204.6		52.0
Mean	29.6	24.0	23.1		-	7.3		1.9

APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 9 a.m. MARCH 1943.



Day of Month.	CLOUD.			WEATHER.			Visibility.	WIND.		Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY.			UPPER CLOUD.		
	FORM.			Since previous Observation.	At Time.	Direction.		Force (Beaufort Scale).	Dry Bulb (°).		Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.	High.													
1	Cu		Ci	bcc	bc	M	0	CALM	0	1011.8	28.1	25.1	77%	29.5		
2	Cu.		Ci	bc b	bc	M	2	ESE	2	1011.8	28.6	25.0	74	28.8		
3	Cu		Ci	bccprbc	bc	M	0	CALM	0	1011.1	28.0	24.1	71	26.9		
4	Cu		Ci	bc c	bc	M	0	CALM	0	1009.7	28.6	25.4	76	29.2		
5	Cu		Ci	bc l c	cjpr	M	0	CALM	0	1010.1	28.2	25.1	77	29.4		
6	Cu Sc	AS AC	Ci	epro c	cjpr	M	2	SSW	2	1009.5	27.9	25.0	78	29.4		
7	Sc Cu	AC	Ci	corrlc	cjpr	M	1	W	1	1008.5	27.2	25.0	83	30.0		
8	Sc Cu	AB	Cs	corrc	c	M	3	W	3	1007.8	26.7	24.0	79	27.7		
9	Fs Sc	AS		crpro	oror ^p	J	2	W	2	1008.4	24.9	23.6	89	28.1		
10	Sc Cu	AC AS	Ci	er _o prc	c	M	1	N	1	1006.3	27.4	24.1	75	27.4		
11	Cu Sc	AC	Ci	cbcp _o b	bc	M	3	WNW	3	1005.7	27.4	24.6	79	28.7		
12	Sc Cu	AS	Ci	cpr c	c	M	2	NW	2	1006.3	27.0	25.0	84	30.1		
13	Sc Cu	AS	Ci	cpr lc	c	M	0	CALM	0	1006.3	26.6	24.9	87	30.1		
14	Sc Cu	AS	Ci	cbcp _o c/pr	c/pr	K	2	SE	2	1007.7	25.6	24.7	93	30.4		
15	Fs Sc	AB		corq	orrq	J	3	NNE	3	1011.7	26.4	25.3	91	31.4		
16	Sc Cu	AC	Ci	cpr _o bc	bc	M	3	ESE	3	1012.1	27.7	25.0	79	29.5		
17	Cu Sc	AS AC	Ci	bc _l pr	bc	M	0	CALM	0	1011.6	28.1	25.1	77	29.5		
18	Cu Sc	AS AC	Ci	cpr _l trc	c	M	3	ENE	3	1009.6	27.6	24.1	74	27.2		
19	Sc Cu	AC AB	Ci	cltroro	c	M	0	CALM	0	1010.6	27.2	25.2	84	30.5		
20	Sc Cu	AS AC		cltjpr	c	M	0	CALM	0	1011.2	27.5	25.5	85	31.1		
21	Sc Cu	AC	Ci	orr _l t/q	c	M	1	S	1	1011.4	27.1	25.1	84	30.3		
22	Cu Sc		Ci	bc pr	bc	M	2	ESE	2	1012.0	28.5	25.0	74	28.9		
23	Cu Sc		Ci	bccprbc	bc	M	4	E	4	1012.2	29.3	25.1	70	28.5		
24	Sc Cu		Ci	cpr _l qc	c	K	5	E	5	1011.3	29.0	26.1	79	31.5		
25	Cu	AB AC	Ci	bcqr _o bc	bc	M	0	CALM	0	1011.5	27.5	25.0	81	29.7		
26	Cu Sc		Ci	bc b bc	bc	M	0	CALM	0	1010.7	27.2	23.6	73	26.3		
27	Sc Fs	AB	Ci	bc _o bcpr	c	M	0	CALM	0	1010.7	25.9	24.7	90	30.2		
28	Cu Sc	AB	Ci	cjprp _o bc	bc	M	0	CALM	0	1010.1	28.1	25.1	77	29.5		
29	Cu Cb	AB AC	Ci	cpr bc	bcjpr	M	0	CALM	0	1010.2	26.8	25.2	87	30.8		
30	Cu Sc		Ci	cjprbc _o p	bc	M	1	ESE	1	1011.5	28.0	25.2	79	29.8		
31	Cu Sc		Ci	bc _o bbc	bc	M	3	ESE	3	1010.1	28.3	25.2	77	29.6		
Means							1.4			1010.0	27.5	24.9	80	29.4		



Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	FORM.		Since Previous Observation.					At Time.	Direction.		Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars)	Dry Bulb (C).	Wet Bulb (C).	Relative Humidity (%)	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.																	
1	Cu		Ci Cs	2	7	3000	bc c bc	bc	NE	1	1009.3	29.0	25.1	72%	28.7				
2	Cu		Ci	3	9	3000	bcjpr	bcjpr	E	3	1009.5	30.3	26.2	71	30.7				
3	Cu		Ci	3	5	2500	bcjpr	bc/pr	NNE	2	1008.0	28.7	26.0	80	31.5				
4	Cu		Ci	3	8	3000	bc c jpr	c/pr	NNE	1	1007.5	29.4	25.1	69	28.4				
5	Cu	Ac	Cs Ci	3	6	2500	cjpr	c/pr	NNW	2	1008.0	28.9	25.6	76	30.2				
6	Cu	Ac	Ci	3	9+	2000	cjprpr	c	WNW	2	1007.0	28.0	25.8	83	31.5				
7	Sc	As		3	9	2000	cpr,rtc	cjpr	W	1	1006.0	27.1	25.1	84	30.3				
8	Sc	As	Cs	3	9+	3000	cpr	cpq	NNW	2	1006.1	29.0	24.9	70	28.2				
9	Sc	As		1	9+	2500	or,ro	or,ro	ENE	1	1005.7	26.6	24.4	83	28.8				
10	Sc	As		9	10	4500	cr c	cjr	WSW	1	1004.6	26.6	24.4	83	28.8				
11	Sc	Ac	Ci	5	8	2500	bc cpr	cjpr	W	4	1002.5	29.1	25.6	74	30.0				
12	Sc	As		7	9+	2000	cjr	cjr	NW	3	1004.3	27.4	25.4	85	30.9				
13	Fs	As	Ci	5	9+	2000	cpr,c	cjr	ENE	2	1004.0	29.5	26.0	75	30.8				
14	Sc	As		8	10	2000	cpr,or	cjr	SSW	1	1006.2	26.6	25.0	87	30.4				
15	Sc	As	Ci	5	8	1500	cprq	cjpr	N	3	1010.2	27.1	24.8	82	29.5				
16	Cu		Ci	2	3	3000	bc	bc	E	4	1010.0	29.9	26.0	72	30.5				
17	Cu		Ci	1	3	3500	bcjpr	bc	NE	3	1007.9	29.1	25.7	75	30.3				
18	Cu	As	Ci	3	8	3000	c	c	E	2	1006.9	30.5	26.5	72	31.4				
19	Cb	As		7	10	2500	orr,ltq	o	CALM	0	1007.8	24.3	23.1	90	27.3				
20	Fs	Ns		5	10	150	cjpr,tq	orr,lt	NNE	4	1010.8	25.8	25.0	93	31.1				
21	Cu	Ac	Ci	3	7	2500	c bc	bc	NE	1	1009.6	29.2	25.3	72	29.1				
22	Cu	Ac	Cs	1	2	3000	bc b	b	E	4	1009.9	30.0	25.3	67	28.5				
23	Sc	As	Ci	4	8	2500	bcptbc	c/q	E	5	1010.1	27.9	25.6	82	31.0				
24	Cu		Ci	5	6	3000	c bc	bcjpr	E	5	1009.1	30.0	26.7	76	32.4				
25	Cu	As	Ci	4	5	3000	bcpr	bc	E	3	1009.1	30.3	26.9	76	32.7				
26	Cu		Ci	1	4	3500	bc	bc	ENE	5	1007.5	29.8	26.1	73	30.9				
27	Sc	As	Ci	5	8	2500	bcpr	cjpr	CALM	0	1007.8	27.3	25.5	86	31.2				
28	Cu	As	Ci	4	5	3000	bc	bcjpr	CALM	0	1007.1	28.9	25.8	77	30.7				
29	Cu	As	Ci	2	10	2500	cjpr	o	CALM	0	1007.7	28.0	25.2	79	29.8				
30	Cb	Ac	Ci	5	7	3000	bcjpr	bc,lt	ENE	2	1008.7	29.0	25.7	76	30.4				
31	Cu		Ci	3	4	3500	bc	bc	E	3	1007.4	30.0	26.2	73	31.0				
Means				3.6	7.4	2700				2.3	1007.6	28.5	25.5	78	30.2				

METEOROLOGICAL OBSERVATIONS.

International
Seismological
Centre

MARCH 1943.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	29.6	24.0	-		-	11.0		2.4
2	31.1	23.7	22.7		Trace	11.2		2.7
3	30.4	23.5	21.7		Trace	8.9		2.2
4	30.0	24.1	22.9		-	8.8		2.2
5	29.9	24.3	23.3		Trace	8.3		2.1
6	29.6	25.1	23.9		62.0	3.4		1.8
7	29.1	24.1	23.5		20.5	3.5		1.8
8	29.0	23.8	-		14.0	0.8		2.1
9	27.4	24.0	-		8.7	0.0		1.0
10	28.8	23.3	-		6.0	3.4		1.4
11	29.9	24.0	22.8		0.9	9.7		3.0
12	28.2	25.2	23.8		0.4	5.3		1.8
13	28.9	24.0	23.1		3.7	3.6		1.8
14	27.7	24.3	23.4		30.0	0.3		1.4
15	28.5	24.5	23.9		7.0	3.8		2.5
16	30.2	25.1	23.8		Trace	9.5		2.2
17	30.6	24.2	-		3.8	10.4		2.0
18	30.8	24.6	23.3		1.0	1.3		2.1
19	29.9	24.2	22.8		27.3	0.3		0.9
20	30.2	22.9	22.9		14.3	1.4		1.0
21	29.9	22.9	21.6		Trace	6.4		2.5
22	30.1	25.2	23.1		Trace	10.6		3.0
23	30.3	23.9	22.7		12.2	4.3		2.4
24	30.2	25.0	23.5		4.4	9.4		2.6
25	30.5	24.7	23.0		Trace	9.9		2.3
26	29.9	22.6	-		0.5	10.7		2.3
27	30.1	24.0	22.6		6.9	3.6		1.3
28	29.2	23.6	22.2		0.9	9.9		1.9
29	28.5	24.3	22.8		Trace	0.5		1.3
30	30.1	23.8	22.2		1.2	9.6		2.2
31	30.5	23.2	21.7		Trace	9.4		2.4
Sums	-	-	-		225.7	189.2		62.6
MEAN	29.7	24.1	22.9		-	6.1		2.0

APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 9 a.m. APRIL 1943.

1,000/7/32-3011

Day of Month.	CLOUD.			WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.							
	Low.	Medium.	High.	Amount of Low.	Total Amount.		Height of Base.	How Height was obtained.	Since previous Observation.	At Time.	Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Sc Cu	-	Ci	4	4	3500	bcpr ₀ b	bc	ESE	2	1009.0	28.9	25.9	79%	31.3					
2	Sc Cu	Ac	Cs Ci	2	8	3000	cqprej _p c	c	SSE	1	1010.7	27.5	25.3	83	30.5					
3	Cu Sc	Ac	-	4	4	3000	cjpb ₀ cpr	bc	E	2	1011.7	28.3	25.5	79	30.4					
4	Cu Sc	-	Ci	1	2	3500	bcb ₀ cb	b	CALM	0	1011.7	28.1	23.7	68	25.8					
5	Cu Sc	Ac	Ci	2	7	3500	b bc c	bc	ESE	1	1011.1	28.9	25.1	72	28.8					
6	Cu Cb	Ac	Ci	2	5	3500	bcb ₀ cw	bc	CALM	0	1011.5	28.3	25.3	77	29.9					
7	Cu	Ac	Ci	2	7	3000	bcpr ₀ l	bc	CALM	0	1010.1	28.7	25.3	75	29.5					
8	Cu Cb	-	Ci	1	4	3000	bcj ₀ pr b	bc	E	1	1012.3	28.3	25.0	75	29.0					
9	Cu Sc	Ac	Ci	3	3	3000	bep ₀ rbc	bcj ₀ pr	E	2	1011.8	29.0	25.8	76	30.7					
10	Cu Sc	-	Ci	5	7	3000	b bc bc	bc	ESE	3	1010.8	28.8	25.8	78	30.8					
11	Cu Sc	-	Ci	3	4	3000	bqrc ₀ bc	bc	ESE	2	1011.3	29.0	26.0	78	31.2					
12	Cu Sc	-	Ci	4	9	2500	bc cj ₀ pr	c/pr	SE	1	1011.9	28.1	25.8	83	31.4					
13	Cu Sc	Ab	Ci	6	7	3000	cjr ₀ cb	bcpr ₀ q	SE	2	1013.0	27.2	25.9	90	32.4					
14	Cu	-	Ci	2	5	3000	cpr q	bc	SE	1	1012.8	26.9	24.5	81	28.8					
15	Cu	-	Ci	3	8	3000	bqpr ₀ c	c/pr	ESE	3	1011.8	28.0	25.9	84	31.8					
16	Cu	-	Ci	1	7	3000	bep ₀ qbc	bc	ESE	3	1012.4	28.2	25.2	77	29.7					
17	Cu Sc	Ab	Ci	2	9	3000	coq ₀ rc	c	S	1	1012.0	26.8	25.8	92	32.4					
18	Cu Sc	Ab	Ci	3	9	2000	ebc ₀ pr ₀ c	c	W	3	1010.9	27.2	25.6	88	31.7					
19	Fs Sc	Ab	-	8	10	1500	opr ₀ r ₀ q	ojr/r	NNW	5	1010.6	26.1	25.0	91	30.8					
20	Cu Cb	Ab Ac	Ci	1	8	3000	cpr c	c	W	1	1010.0	27.1	24.5	80	28.7					
21	Cu Sc	Ab Ac	Cs Ci	1	9	3000	cpr ₀ l ₀ tc	c	SSW	1	1011.9	27.0	24.9	84	29.8					
22	Sc Cu	Ac	Ci	3	5	2500	bc cpr	bcj ₀ pr	S	1	1012.4	27.2	25.5	87	31.5					
23	Sc Cb	Ab	-	7	10	1000	cor ₀ r ₀ l ₀ t	orr	ESE	2	1012.7	25.3	24.8	96	30.9					
24	Sc Cu	Ac	Ci	4	5	2000	er ₀ l ₀ pr ₀ o	bcj ₀ pr	ENE	2	1012.6	26.8	25.1	87	30.5					
25	Cu Sc	Ac	Ci	1	3	3000	or ₀ l ₀ cpr	bc	SSE	1	1012.4	27.1	24.1	77	27.6					
26	Fs Cu	-	-	7	7	3000	bc rr	bc rr	CALM	0	1014.4	24.3	23.5	93	28.5					
27	Cu Sc	-	Ci	4	5	3000	bcj ₀ r ₀ pr ₀ o	bc	SE	2	1012.5	28.1	25.7	82	31.1					
28	Cu Sc	Ac	Ci	2	4	3000	bcpr ₀ b	bc	E	1	1011.7	28.4	25.5	78	30.3					
29	Cu Sc	-	Ci	2	5	3000	cpr ₀ cb	bcj ₀ pr	ESE	1	1011.2	28.4	25.5	78	30.5					
30	Cu Sc	-	Ci	1	2	3500	cpr ₀ l ₀ bpr	b	SE	1	1010.6	28.3	25.6	79	30.7					
31	-	-	-	3.0	6.0	2700	-	-	-	1.5	1011.3	27.7	25.2	82	30.2					
Means	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



International Seismological Centre

METEOROLOGICAL OBSERVATIONS. 3 P.M. APRIL 1943.

APIA OBSERVATORY

1.000 7/32-39111

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	Form.		At Time.					Since previous Observation.	Direction.		Force (Beaufort Scale).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.	
	Low.	Medium.																	High.
1	Cb	Ac	C1	4	6	3500	bcjpr	bcjpr	K	ENE	3	30.5	26.5	72%	31.4				
2	Cu	Ac	Cs	5	8	3500	bcjpr	bcjpr	M	ENE	2	29.9	25.8	71	29.9				
3	Sc	-	C1	4	5	3500	bc	bc	M	NE	1	29.6	25.5	71	29.3				
4	Cu	-	C1	2	5	3500	b	b	M	ENE	4	30.0	26.0	72	30.4				
5	Cb	Ac	C1	5	5	3000	bcjpr	bcjpr	M	NW	1	29.2	25.2	71	28.9				
6	Cu	-	C1	4	7	3000	bc	bc	M	N	1	29.3	25.0	69	28.2				
7	Cu	-	C1	1	4	3000	bcjpr	bcjpr	M	NNW	1	29.4	25.0	69	28.1				
8	Cu	Ac	C1	3	9	3000	bcjpr	bcjpr	M	ENE	1	30.0	25.8	70	29.9				
9	Cu	Ac	C1	3	7	3000	bcpr, bc	bcpr, bc	M	ENE	4	29.1	25.8	76	30.6				
10	Cu	-	C1	5	7	3000	bccrqb	bccrqb	K	ENE	3	30.0	26.2	73	31.0				
11	Cu	-	C1	3	4	2500	bc	bc	M	E	3	30.8	26.5	70	31.2				
12	Cu	-	C1	3	8	2500	cprqc	cprqc	M	E	4	29.0	25.2	72	29.0				
13	Cu	As	C1	7	7	3000	cpr q	cpr q	K	E	3	29.9	26.2	73	31.1				
14	Cu	-	C1	2	3	3000	bccrbc	bccrbc	M	E	4	30.1	26.2	72	30.9				
15	Cb	-	C1	4	8	3000	cqpr	cqpr	K	E	4	29.0	26.0	78	31.2				
16	Cu	-	C1	2	6	3000	bc c	bc c	K	E	3	29.1	26.0	77	31.1				
17	Sc	As	Cs	9	9+	2500	cpr c	cpr c	M	NNE	1	28.2	26.0	83	31.9				
18	Fs	Ns	-	Tr.	10	500	corrqt	corrqt	H	WNW	2	25.1	24.1	92	29.2				
19	Sc	As	-	4	9+	3000	opr	opr	M	WNW	5	27.6	24.6	77	28.5				
20	Sc	As	C1	3	9+	3000	cpr	cpr	K	E	2	28.5	25.5	78	30.2				
21	Cu	Ac	Cs	3	7	3000	cjpr	cjpr	M	ENE	3	29.5	26.0	75	30.8				
22	Cb	Ac	C1	5	6	2500	bcjprpr	bcjprpr	K	E	2	29.2	25.6	74	30.0				
23	Sc	Ac	C1	8	9	2000	orrIt	orrIt	K	ESE	2	28.0	25.0	77	29.3				
24	Fb	Ns	-	5	10	150	ccjpr	ccjpr	E	SSE	2	25.2	24.8	97	31.0				
25	Sc	Ac	C1	7	9	2000	cir	cir	K	WNW	1	27.2	24.9	82	29.7				
26	Cu	Ac	C1	2	5	3000	bc	bc	M	N	1	28.5	25.3	76	29.7				
27	Cu	Ac	C1	4	6	3000	bcpr	bcpr	K	NE	1	28.8	25.9	78	31.1				
28	Cu	Ns	C1	3	9	3000	bcjprc	bcjprc	M	E	2	28.5	26.0	81	31.6				
29	Sc	Ac	C1	5	6	3000	cpr bc	cpr bc	M	ENE	2	30.1	26.1	72	30.6				
30	Cu	-	C1	2	3	3500	b	b	M	NE	3	30.0	25.6	69	29.3				
31																			
Means				3.6	6.8	2800			-	-	2.3	29.0	25.6	76	30.2				



International Seismological Centre

METEOROLOGICAL OBSERVATIONS.

APRIL 1943.



Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Grass Minimum (°)	Black Bulb in vacuo (°)				
1	30.7	24.2	23.2		11.0	9.6		2.0
2	30.1	23.8	-		4.8	10.2		2.1
3	29.9	24.2	22.9		-	10.3		2.3
4	30.5	23.4	21.7		-	10.9		2.6
5	30.0	24.1	23.1		-	11.0		2.4
6	29.7	24.5	23.2		Trace	10.6		2.1
7	29.9	24.6	23.3		-	10.9		2.4
8	30.8	23.6	22.1		Trace	10.6		2.3
9	31.0	23.5	22.2		Trace	9.5		3.0
10	31.0	25.6	23.2		0.3	9.8		2.6
11	31.2	25.2	23.2		Trace	10.0		2.8
12	30.8	25.3	23.6		5.6	6.2		2.3
13	30.5	25.6	23.1		6.1	6.5		2.1
14	30.5	24.0	22.7		13.1	8.0		2.2
15	30.5	25.1	22.8		5.8	8.0		1.9
16	30.1	23.9	22.0		25.8	7.1		1.7
17	29.8	24.0	22.9		12.0	4.0		1.5
18	28.7	25.0	23.3		22.7	0.2		1.0
19	28.2	25.4	23.9		4.1	0.0		1.4
20	29.3	24.7	23.1		1.6	0.8		1.5
21	30.0	23.8	22.8		3.0	7.1		2.2
22	29.7	25.2	23.8		47.9	7.1		1.4
23	28.3	24.2	23.4		39.7	0.5		0.6
24	28.7	24.0	23.5		27.4	5.0		1.0
25	28.5	23.8	22.4		12.2	5.9		1.0
26	29.5	24.5	22.8		4.8	9.1		2.3
27	30.2	24.7	22.9		Trace	9.9		2.1
28	29.8	24.7	22.3		0.8	6.0		1.5
29	30.2	23.7	22.1		7.4	7.7		1.8
30	29.9	24.9	23.1		-	10.1		2.2
31								
Sum	-	-	-		256.1	222.6		58.3
Mean	29.9	24.4	22.9		-	7.4		1.9

APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 9 a.m. MAY 1943.

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	Low.	Form.						Direction.	Force (Beaufort Scale).		Since previous Observation.	At Time.	Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
		Medium.	High.																
1	Cu Sc	-	C1	1	2	3500	bcjprbl	b	ESE	M	2	28.1	25.0	77%	29.2				
2	Cu Sc	-	C1	2	3	3000	bcpr	bc	ESE	K	2	28.1	25.6	80	30.9				
3	Fo Sc	-	C1	2	5	2000	cqprbc	cjpr	ENE	K	2	27.7	25.7	85	31.4				
4	Sc	As	C1	2	8	3500	qqelbc	b	CALM	M	0	27.0	24.8	83	29.5				
5	Sc Cu	As	C1	4	6	3000	bcjpr	c	ESE	M	3	27.8	24.9	78	29.0				
6	Cu Cb	As	C1	5	4	3000	bcjpr	bcjpr	ESE	M	4	28.4	25.5	78	30.7				
7	Cu Sc	As	C1	4	7	3000	cqprbc	bc	SE	M	1	28.0	25.2	79	29.8				
8	Cu Sc	As	C1	3	8	3000	bcpr	lo	ESE	M	2	27.5	25.2	82	30.2				
9	Cu Sc	-	C1	3	9	3000	bcpr	bc	CALM	M	0	28.3	25.3	77	29.9				
10	Cu Sc	-	C1	3	4	2000	errqbc	bc	CALM	M	0	26.8	25.1	87	30.7				
11	Cu	As	C1	2	7	3000	bcjpr	bc	SSW	M	1	28.1	25.6	80	30.9				
12	Cu	As	C1	1	3	3000	bcjpr	bc	CALM	M	0	28.1	25.0	77	29.2				
13	Cu	As	C1	1	9	2500	bcjpr	c	SE	M	1	28.6	24.4	69	27.2				
14	Sc Cu	As	-	8	8	3000	cpr	tlq	CALM	M	0	26.0	23.4	79	26.7				
15	Sc Cu	As	-	4	9	2500	bcpr	tlq	SE	M	1	24.1	22.2	83	25.2				
16	Cu	As	-	1	1	3000	orltbc	b	CALM	M	0	27.1	23.9	75	27.1				
17	Cu Sc	As	C1	3	7	3000	bcpr	bc	CALM	M	0	28.0	25.3	80	30.1				
18	Cu Sc	As	-	7	9	2500	bcpr	bc	CALM	M	0	27.0	24.6	81	29.0				
19	Sc Cu	As	Cb	3	9	2500	bcpr	bc	SE	M	1	25.6	23.8	85	28.1				
20	Cb Sc	As	C1	3	6	2500	corqpr	bcjpr	ENE	M	1	26.8	24.2	80	28.1				
21	Sc Cu	As	C1	4	9	2500	ptr	c	CALM	M	0	26.1	24.2	85	28.7				
22	Cu Sc	As	-	2	3	3000	bcpr	bc	ESE	M	2	27.6	24.9	79	29.3				
23	Cu	-	-	2	2	3000	bcpr	b	ESE	M	3	28.4	25.5	78	30.3				
24	Cu Sc	-	C1	4	6	2500	bcjpr	bcjpr	E	M	4	29.0	26.1	78	31.2				
25	Sc Cu	-	C1	2	2	3500	bcjpr	b	ESE	M	2	28.5	25.8	80	31.1				
26	Sc Cu	-	-	4	4	3000	bcpr	bcjpr	ESE	M	2	27.9	25.4	81	30.5				
27	Cu Sc	As	C1	2	2	3000	bcpr	b	ESE	M	4	28.4	25.2	76	29.5				
28	Sc Cb	As	C1	9	9	1000	bcpr	cpr	N	M	2	27.0	24.8	83	29.5				
29	Sc Cu	As	C1	4	9	2000	bcpr	bcjpr	WSW	M	1	26.8	25.2	87	30.8				
30	Cu	As	C1	1	5	3500	cpr	bc	SE	M	1	26.7	24.7	84	29.5				
31	Cu	-	C1	1	2	3000	bcpr	b	E	M	2	28.7	25.3	75	29.5				
Mean	-	-	-	3.0	5.7	2800	-	-	-	-	1.4	27.5	24.9	80	29.5				



APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 3.00 p.m. MAY 1943.

1,000/7/2-3011

Day of Month	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	Low Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	Form.		At Time.					Since previous Observation.	Direction.		Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.																	
1	Cu Sc	As	Ci	2	5	3000		b bc	bc	M	NE	2	1008.6	29.3	26.1	77%	31.3		
2	Cu Fb	-	Ci	6	8	3000		bc	cjqr	K	E	3	1007.4	29.6	26.2	75	31.3		
3	Fs Cb	Ab	-	8	10	3000		cjpr t	ojprt	K	ESE	1	1008.2	28.0	25.5	81	30.6		
4	Cb Cu	Ac	Ci	4	6	2500		bcjpr t	cjpr	M	ENE	4	1009.0	29.0	25.8	76	30.7		
5	Cb Cu	Ac	Ci	4	9	2500		bcjpr	bcjpr	M	E	5	1008.5	29.6	26.4	77	31.9		
6	Cb Cu	Ac	Ci	4	5	3000		bcjpr	bcjpr	M	E	3	1008.1	30.1	26.6	75	32.0		
7	Cu Sc	-	Ci	3	6	3000		cjprbc	bc	M	ENE	4	1007.5	29.3	25.3	71	29.1		
8	Cu Cb	-	Ci	4	6	2000		bcjpr	bcjpr	M	N	1	1007.5	29.1	25.3	72	29.2		
9	Cu Sc	-	Ci	4	7	3000		bc	bc	M	N	2	1008.2	29.0	25.6	75	30.1		
10	Cu	Ab Ac	Ci	4	7	2000		cqpr	bcjpr	M	NNW	3	1008.2	28.5	25.2	75	29.4		
11	Cu Cb	Ac	Ci	4	7	2500		bc b	bcjpr	M	NW	3	1008.5	28.6	25.0	74	28.8		
12	Cb Cu	-	Ci	2	3	3000		bc b	b	M	N	1	1007.8	29.0	25.0	71	28.5		
13	Cu Sc	Ac Ab	Ci	3	9	2000		cjpr	cjpr	M	ENE	3	1008.9	28.9	25.1	72	28.8		
14	Sc Cu	Ac	-	5	9	3000		bcjpr	bcjpr	M	ENE	2	1008.8	29.0	25.1	72	28.7		
15	Sc Cu	Ac	-	7	9	2500		cpr	cjpr	M	ESE	4	1008.1	26.6	24.0	80	27.8		
16	Cu Cb	Ac	-	5	5	3000		b bc	bcjpr	M	ENE	3	1007.1	29.0	26.0	78	31.2		
17	Cu Sc	Ac	Ci	7	8	2500		bcjpr	bcjpr	M	NNE	1	1006.8	28.9	24.9	71	28.3		
18	Sc Cu	Ab	Cb	2	9	3000		bcjpr	c	M	NW	2	1007.1	28.5	25.3	76	29.7		
19	Sc Cu	Ab	Ci	8	9+	2000		corr c	cr	K	ENE	1	1008.0	26.0	24.0	84	28.3		
20	Fs Sc	Ab	-	8	10	1000		bcjpr	cpr	K	SSE	2	1009.2	24.5	23.9	95	29.2		
21	Sc Cu	Ab Ac	Ci	6	9	2000		cr	cjr/t	M	ESE	4	1011.0	29.0	25.1	72	28.7		
22	Cu Sc	Ac	-	3	4	3000		bcjpr	bc	M	E	4	1010.7	29.4	26.7	80	32.9		
23	Cu Sc	Ac	-	3	3	3000		bcjpr	bc	M	E	4	1009.2	29.6	26.0	74	30.7		
24	Cb Sc	-	Ci	2	8	2500		cqcjpr	cpr	M	ENE	3	1008.2	29.2	26.2	78	31.6		
25	Cu Sc	-	-	2	3	3000		b	bc	M	ENE	4	1008.1	30.0	26.7	76	32.4		
26	Sc Cu	Ac	Ci	2	2	3000		bc	b	M	E	3	1008.2	29.6	26.4	77	31.9		
27	Cu	Ac	Ci	2	3	3000		b bc	bc	M	E	5	1008.3	29.7	25.9	73	30.4		
28	Sc Ci	Ac	-	9	6	2000		bcprq	bcjpr	M	N	3	1007.9	29.0	26.0	78	31.2		
29	Sc Cu	Ab Ac	-	3	9+	2000		cjpr	cjpr	M	ENE	3	1009.3	28.2	25.6	79	30.8		
30	Cu Cb	Ac	Ci	2	4	3000		bc	bcjpr	M	ENE	4	1010.2	29.6	26.0	74	30.7		
31	Cu Sc	Ac	Ci	2	4	3000		bcpr bc	bc	K	ENE	1	1009.6	29.6	26.0	74	30.7		
Mean	-	-	-	4.1	3.1	2600		-	-	-	-	2.8	1008.5	28.8	25.6	76	30.2		



International Seismological Centre

METEOROLOGICAL OBSERVATIONS.

MAY 1943.

International
Seismological
Centre

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°C)	Minimum (°C)	Gross Minimum (°C)	Black Bulb in vacuo (°C)				
1	30.3	23.9	22.5		Trace	10.1		2.1
2	30.0	24.4	22.8		7.5	9.6		1.8
3	28.8	24.0	22.8		9.8	0.8		1.9
4	30.0	23.2	22.3		Trace	9.9		2.1
5	30.1	24.1	23.6		-	8.0		2.2
6	30.1	24.2	22.7		7.4	6.4		1.6
7	30.2	23.6	22.9		1.2	9.4		2.1
8	30.0	24.3	23.3		0.3	8.3		1.8
9	29.1	25.3	23.4		26.8	8.5		2.0
10	29.4	23.4	-		6.6	5.7		1.7
11	29.1	24.0	22.8		-	8.5		2.0
12	29.5	24.0	22.7		-	9.5		2.0
13	29.9	23.2	21.7		0.4	4.5		2.0
14	29.8	24.0	22.3		5.9	7.3		2.0
15	28.7	23.7	22.2		20.2	2.2		1.5
16	29.6	22.7	23.7		Trace	9.9		1.8
17	29.7	23.7	22.2		11.5	6.9		1.8
18	28.7	22.9	22.2		Trace	6.3		2.5
19	26.9	25.0	23.3		34.3	0.5		0.7
20	29.2	23.5	22.6		5.0	6.5		1.2
21	29.2	23.3	22.5		Trace	5.2		1.8
22	29.9	23.5	22.2		Trace	10.9		2.2
23	30.1	25.3	23.4		1.9	10.7		2.2
24	30.2	25.9	24.3		1.3	6.9		1.8
25	30.2	25.3	25.2		3.9	10.1		2.2
26	30.1	25.2	23.3		2.2	10.3		2.2
27	30.0	25.0	23.2		6.5	10.3		2.4
28	29.2	26.0	24.4		2.5	7.3		1.8
29	30.1	25.1	24.3		2.0	3.5		1.5
30	30.1	24.0	22.8		-	9.3		2.2
31	30.3	24.0	22.4		Trace	9.3		2.0
Sum	-	-	-		157.2	232.6		59.1
Mean	29.6	24.2	23.0		-	7.5		1.9

APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 9 a.m. JUNE 1943.

1,000/7/32-56111

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.			UPPER CLOUD.		
	FORM.		At Time.					Since previous Observation.	Direction.		Force (Beaufort Scale).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction when coming.	Speed: Height Ratio.
	Low.	Medium.																
1	Cu	Ac	C1	1	2	3500		b	b	M	CALM	0	28.0	25.2	79%	29.8		
2	Cu	Ac	C1	Tr.	2	3500		by	b	M	E	3	26.6	21.1	59	20.4		
3	Sc	Ac	-	Tr.	6	2500		bc	bc	M	CALM	0	24.1	21.5	78	23.6		
4	Sc	Ac	C1	Tr.	6	3500		bc	bc	M	CALM	0	25.8	21.1	64	21.3		
5	Cu	Ac	C1	2	5	3000		bc	b	M	CALM	0	27.4	21.7	71	23.1		
6	Cu	Ac	C1	1	5	3000		bc	b	M	CALM	0	25.6	22.9	66	24.3		
7	Cu	Ac	C1	2	2	3500		bc	b	M	CALM	0	25.0	22.6	76	25.0		
8	Sc	Ac	C1	1	2	2500		bc	b	M	CALM	0	27.9	22.9	83	26.3		
9	Sc	Ac	C1	7	8	2000		bc	bc	M	ESE	4	27.9	24.9	77	29.1		
10	Sc	Ac	C1	7	10	1500		bc	bc	M	ENE	4	26.6	25.5	91	31.8		
11	Cu	Ac	C1	1	6	3500		bc	bc	M	E	4	27.8	24.4	74	27.8		
12	Cu	Ac	C1	Tr.	9	3500		bc	bc	M	CALM	0	25.5	22.9	79	25.8		
13	Sc	Ac	C1	7	7	2000		bc	bc	M	ESE	2	26.5	24.1	81	28.1		
14	Sc	Ac	C1	2	2	3000		bc	bc	M	E	1	27.5	23.0	67	24.5		
15	Sc	Ac	C1	3	3	3000		bc	bc	M	ESE	2	26.8	21.7	62	21.9		
16	Sc	Ac	C1	1	1	3000		bc	bc	M	SE	1	26.2	21.4	63	21.6		
17	Cu	Ac	C1	3	3	3000		bc	bc	M	E	3	25.9	21.8	68	22.8		
18	Sc	Ac	C1	9	6	3000		bc	bc	M	CALM	0	25.1	22.9	82	26.2		
19	Sc	Ac	C1	1	5	3000		bc	bc	M	ESE	3	27.1	23.0	69	24.8		
20	Sc	Ac	C1	Tr.	9	3000		bc	bc	M	ESE	3	27.1	23.0	69	24.8		
21	Cu	Ac	C1	5	6	2500		bc	bc	M	E	6	27.8	25.8	85	31.6		
22	Cu	Ac	C1	3	3	3000		bc	bc	M	E	2	27.4	24.2	76	27.6		
23	Cu	Ac	C1	3	3	3000		bc	bc	M	ESE	4	28.0	24.8	76	28.7		
24	Cu	Ac	C1	2	5	3000		bc	bc	M	ESE	3	27.1	23.6	73	26.3		
25	Cu	Ac	C1	1	1	3000		b	b	M	SE	2	27.0	24.0	77	27.4		
26	Cu	Ac	C1	1	1	4500		b	b	M	SE	2	27.0	23.5	73	26.2		
27	Sc	Ac	C1	6	8	2000		bc	bc	M	SE	1	26.1	24.1	84	28.4		
28	Cu	Ac	C1	1	2	3000		bc	bc	M	CALM	0	26.9	24.6	82	29.1		
29	Cu	Ac	C1	2	2	3000		bc	bc	M	ESE	4	27.6	25.2	82	30.1		
30	Sc	Ac	C1	2	2	3000		bc	bc	M	E	5	28.0	23.8	69	26.1		
31				2.8	4.3	3000						2.0	26.7	23.4	75	26.1		
Meas																		



METEOROLOGICAL OBSERVATIONS.

JUNE 1943

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Grass Minimum (°)	Black Bulb in vacuo (°)				
1	30.2	24.5	22.1		0.3	7.4		3.2
2	28.9	24.3	-		Trace	10.9		4.5
3	27.4	23.3	-		-	4.9		3.2
4	28.3	20.4	-		-	7.2		2.6
5	29.5	21.2	17.9		-	8.9		2.6
6	29.9	21.4	18.9		-	8.1		2.6
7	29.7	20.7	17.8		-	9.7		2.6
8	29.7	21.1	18.3		Trace	9.7		2.1
9	29.4	23.5	21.7		14.2	5.1		1.3
10	29.5	25.1	23.6		4.0	4.4		1.7
11	29.9	22.3	20.3		-	9.6		1.7
12	29.2	21.6	19.4		Trace	9.5		2.5
13	29.0	22.4	20.1		-	8.0		2.0
14	29.2	22.5	20.3		-	10.6		3.0
15	29.5	22.8	19.4		Trace	10.7		3.2
16	28.0	21.7	18.1		-	10.4		3.5
17	28.5	23.1	20.2		Trace	10.4		3.2
18	29.1	21.5	19.7		Trace	6.5		3.2
19	29.1	24.6	22.2		Trace	8.0		2.5
20	29.5	24.5	21.7		0.9	9.0		2.8
21	29.8	25.0	21.7		0.9	10.1		2.5
22	29.8	25.2	22.5		Trace	10.0		2.3
23	29.7	23.4	21.2		Trace	10.4		3.2
24	29.8	23.9	21.2		-	9.7		2.8
25	29.4	21.5	19.3		-	10.7		3.0
26	29.7	20.6	18.7		1.4	10.4		3.0
27	29.2	25.2	23.0		5.8	7.0		1.9
28	29.7	23.5	22.1		2.8	10.5		1.8
29	29.8	23.2	21.2		Trace	9.7		3.4
30	29.7	24.9	22.2		Trace	10.3		3.1
31								
Sum	-	-	-		30.3	267.8		81.0
Mean	29.3	22.9	20.5		-	8.9		2.7



International
Seismological
Centre

METEOROLOGICAL OBSERVATIONS. 9 a.m. JULY 1943.

APIA OBSERVATORY

1,000/7/32-3911

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	Low.	Medium.	High.					Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu Se	-	Cl	3	5	2000	b b c c p r o	b c j p r	M	ESE	3	27.9	25.0	78%	29.4				
2	Sc Cu	Ac Ab	Cs	2	5	2500	c p r l b c	c	M	ESE	5	27.3	24.2	76	27.7				
3	Cu Sc	-	Cl	2	5	3000	e b c b	b c	M	ESE	4	26.2	23.1	76	25.8				
4	Sc Cu	-	Cl	2	5	2500	c p r b c	b c j p r	M	ESE	4	27.9	24.2	72	27.2				
5	Cu Sc	Ac	Cl	2	5	3500	b c p r o b	b c	M	E	1	27.0	23.9	76	27.2				
6	Cu Sc	Ac	Cl	1	5	3000	b c p r o h	b c	M	CALM	0	26.9	23.4	73	26.0				
7	Sc Cu	As	Cl	5	2	2500	c o p r o	c	M	SE	1	25.5	23.8	86	28.1				
8	Cu Sc	-	Cl	2	2	3500	e b c b	b	M	E	2	27.8	25.3	81	30.3				
9	Cu Sc	Ac	Cl	1	4	3000	b c p r o	b c	M	ESE	2	27.2	24.6	80	28.9				
10	Cu Se	-	Cl	3	4	3000	e r b c p r b	b c p r o	M	E	3	26.9	24.2	79	28.0				
11	Cu Se	-	Cl	2	3	3500	o c i r q b c	b c	M	E	4	27.2	23.8	74	26.8				
12	Cu Se	-	Cl	2	2	3000	b c e p r o	b	M	ESE	4	26.9	22.7	70	24.5				
13	Sc Cu	-	Cl	2	2	3500	b c b j p r	b	M	CALM	0	26.0	23.8	76	27.0				
14	Sc Cu	-	Cl	2	2	3000	b b e p r o b	b	M	CALM	0	25.2	22.9	75	25.4				
15	Sc Cu	Ac	Cl	3	3	3000	b c p r o c	b c	M	W	1	24.9	21.2	68	22.0				
16	Sc Cu	Ac	-	6	1	6000	e b c c	b c	M	CALM	0	24.9	21.3	71	22.4				
17	Cu Cu	-	-	1	5	3000	e b c b	b c	M	E	1	25.5	22.4	75	24.6				
18	Sc Cu	Ac	-	5	5	3000	b b c q p r	b c	M	WSW	1	26.1	24.2	85	28.7				
19	Sc Cu	-	-	5	9	3000	b b c e b c	b c	M	S	1	26.2	23.1	76	25.8				
20	Sc Cu	-	Cl	7	9	6000	b c p r o b c	c	M	E	1	26.0	23.0	76	25.7				
21	Sc Cu	-	-	2	2	3000	b c c p r b c	b	M	CALM	0	25.5	24.1	89	28.9				
22	Cu Sc	-	-	3	3	3000	b b e p r b c	b c	M	ESE	1	27.2	24.3	78	28.1				
23	Cu	-	Cl	1	3	3000	b b c	b c	M	CALM	0	26.1	23.1	76	25.9				
24	Cu	-	-	1	1	3000	b c b	b	M	ESE	1	26.1	23.0	76	25.7				
25	Sc Cu	-	Cl	4	4	3000	b c b b o	b c	M	E	1	26.1	23.4	79	26.6				
26	Cu Sc	As	-	7	8	2500	c p r q b c	c j p r	M	E	5	26.4	24.2	83	28.4				
27	Sc Cu	-	Cl	5	2	2500	b c p r q c	b c	M	E	4	27.5	24.6	78	28.6				
28	Cu	-	Cl	2	1	3000	b b c	b	M	CALM	0	26.3	23.0	74	25.5				
29	Cu Sc	-	Cl	Tr.	6	4500	b b c	b w	M	CALM	0	25.4	22.0	73	23.7				
30	Sc Cu	Ac	-	6	8	3000	b b c	c / p r o	M	SSW	2	24.8	23.9	92	28.9				
31	Cu Sc	Ac	-	3	3	3000	b e b b e w	b c	M	SSW	1	26.5	24.0	80	27.9				
Means	-	-	-	3.1	4.1	3200	-	-	-	-	1.8	26.4	23.5	77	26.8				

APIA OBSERVATORY METEOROLOGICAL OBSERVATIONS. 3.00 P.M. JULY 1943.



Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	FORM.		Since previous Observation.					At Time.	Direction.		Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.																	
1	Sc Cb	AS	CI	5	9+	2000		cjpr	E	2	1010.7	28.2	25.0	76%	29.1				
2	Cu Sc	AC	CI	2	8	3500		c	ENE	6	1010.2	29.0	24.0	64	25.8				
3	Sc Cu	AO	CI	4	6	3000		bc	ENE	6	1009.1	28.8	24.9	72	28.4				
4	Sc Cu	AC	CI	4	5	3000		bc/pr	ENE	3	1010.1	29.0	25.2	72	29.0				
5	Sc Cu	AC	CI	4	7	3000		bcjpr	ENE	3	1009.5	29.2	25.2	71	28.9				
6	Sc Cb	AC	CI	4	8	3000		bc c	E	5	1007.7	28.2	25.2	77	29.7				
7	Fc Cu	AS AC	CI	2	6	2500		cpr	ENE	1	1009.3	28.1	25.1	77	29.5				
8	Cu Sc	-	CI	2	3	3500		b bc	ENE	5	1008.5	29.0	26.0	78	31.2				
9	Fs Sc	NS	-	8	10	1000		bcqpr	ENE	6	1010.9	26.1	25.1	92	31.1				
10	Fs Sc	NS	-	8	10	1000		ep ₀ r ₀	ENE	7	1011.4	26.1	24.1	84	28.4				
11	Cu Sc	-	CI	2	2	3500		bc b	E	6	1009.7	28.1	24.1	71	26.8				
12	Cu Sc	-	-	1	1	3000		b	E	4	1009.8	28.2	23.0	62	23.9				
13	Cu Sc	-	-	1	1	3000		bjpr b	NE	1	1008.7	27.8	23.9	71	26.5				
14	Cu Sc	-	-	4	4	3000		bc	S	1	1008.3	28.1	23.9	69	26.5				
15	Cu Sc	Ac	CS	2	2	3000		bc b	N	1	1008.0	26.7	21.8	63	22.2				
16	Sc Cu	-	-	6	6	3000		b bc	E	3	1007.4	27.5	22.9	66	24.2				
17	Cu Sc	-	-	1	1	4000		b	NNE	2	1006.7	27.2	22.8	67	24.2				
18	Cu Sc	-	-	1	1	4000		bc b	WSW	3	1007.0	29.9	24.7	64	26.9				
19	Sc	-	CI	9	9	3000		bc	NNE	2	1008.6	27.0	24.0	77	27.4				
20	Cu	-	CI	1	1	3000		c bc b	ESE	2	1008.1	28.2	24.1	70	26.7				
21	Cu Sc	-	-	3	3	3000		bc	N	1	1009.6	27.6	24.5	77	28.3				
22	Cu Sc	-	-	2	2	3000		b bc	ENE	2	1012.2	28.1	24.2	71	27.1				
23	Cu Sc	-	-	3	3	3000		bc b bc	E	3	1013.6	28.5	25.0	74	28.9				
24	Cu Sc	-	CI	3	4	3000		bc	E	5	1013.4	28.2	24.3	71	27.3				
25	Sc Fs	-	-	8	8	2500		bcjpr	E	6	1012.5	26.1	24.1	84	28.4				
26	Fs Cb	Ac	-	5	6	2000		cpr	E	4	1012.4	28.6	25.2	75	29.3				
27	Cu Sc	-	CI	3	5	3000		bcjpr	E	3	1012.4	29.0	25.0	71	28.5				
28	Cu Sc	-	CI	2	2	3000		b bc	E	4	1011.0	28.4	24.8	73	28.4				
29	Cu Cb	Ac	CI	1	3	3000		b bc	E	4	1010.1	28.5	24.2	69	26.7				
30	Cu	-	CI	3	5	3500		bc	ENE	3	1009.2	29.1	24.9	70	28.1				
31	Cu Cb	-	CI	1	2	3000		b	NE	1	1010.4	28.4	24.0	68	26.3				
Means	-	-	-	3.3	4.5	2900		-	-	3.4	1009.9	28.1	24.4	73	27.5				

METEOROLOGICAL OBSERVATIONS.

JULY 1943



Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum ()	Black Bulb in vacuo (°)				
1	29.1	23.7	21.6		Trace	2.7		2.5
2	30.0	24.8	22.8		-	6.7		2.7
3	29.8	21.8	19.5		Trace	10.6		1.9
4	29.7	22.2	20.1		Trace	10.0		2.2
5	29.5	22.7	20.6		Trace	8.9		2.3
6	29.9	22.8	19.6		1.0	7.3		2.0
7	28.6	23.5	21.2		Trace	0.0		1.5
8	29.8	23.9	22.3		Trace	10.2		2.4
9	29.4	23.5	22.2		7.4	4.8		1.0
10	29.1	22.7	21.1		6.7	4.9		2.3
11	28.5	23.9	22.3		Trace	10.4		2.6
12	28.5	23.2	20.4		-	10.8		3.4
13	28.5	22.0	20.1		3.5	9.0		2.1
14	28.6	22.2	19.6		Trace	10.2		3.0
15	28.3	22.4	-		-	7.6		3.0
16	28.3	21.3	18.9		-	7.9		3.3
17	28.0	20.9	18.9		5.3	11.1		2.4
18	30.1	23.2	21.6		-	10.4		3.3
19	28.4	24.0	21.7		Trace	7.3		2.2
20	28.8	21.9	18.9		3.0	9.4		3.0
21	28.5	23.1	22.2		Trace	9.3		1.8
22	28.9	22.8	21.4		-	11.0		2.3
23	29.1	21.8	20.0		-	10.0		1.4
24	29.0	22.0	19.9		-	10.6		2.3
25	28.9	22.7	20.3		1.9	7.4		2.3
26	29.0	24.4	22.6		12.1	8.4		1.4
27	29.3	24.0	22.2		-	10.1		2.4
28	28.9	22.7	20.0		-	10.9		2.6
29	29.2	21.3	19.4		0.2	11.1		2.6
30	29.4	21.9	20.0		-	9.1		2.5
31	28.9	23.0	21.0		-	10.4		2.6
Sum	-	-	-		41.1	268.5		73.3
Mean	29.0	22.8	20.7		-	8.7		2.4



Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.			UPPER CLOUD.				
	Low.	Medium.	High.					Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°C).	Wet Bulb (°C).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu.		C1	1	5	3000	b bc	bc	M	CALM	0	1013.9	26.0	22.9	75%	25.4				
2	Sc	Ac	C1	3	5	3500	b bc	bc	M	CALM	0	1014.4	26.1	23.0	76	25.6				
3	Cu	Ac	C1	1	5	3000	bc b	b	M	CALM	0	1014.6	26.4	21.5	63	21.7				
4	Cu	Ac	C1	5	8	3500	b bcpr.c	c	M	ESE	3	1013.2	27.2	24.2	77	27.8				
5	Cu	Sc	C1	1	1	3500	b	b	M	E	2	1012.4	27.4	24.8	80	29.2				
6	Cu	Sc		2	2	3000	bcpr b	b	M	ESE	2	1012.4	27.4	24.4	77	28.2				
7	Cu	Sc		7	7	3500	bcprbc	bc	M	E	1	1013.3	27.0	24.5	81	28.9				
8	Cu	Sc		3	3	2000	bc b	bc	M	SE	3	1012.9	27.6	24.5	77	28.3				
9	Cu	Sc	C1	9	9	2000	b bcjpr	bcjpr	M	ENE	4	1011.6	28.1	25.2	78	29.7				
10	Cu	Sc	C1	1	3	3000	bcpr.c	bc	M	ESE	3	1012.1	27.8	25.0	79	29.5				
11	Cu	Sc	C1	1	2	4000	bcpr.b	b	M	ESE	2	1013.1	27.5	24.2	75	27.5				
12	Cu		C1	1	2	3000	bcpr.b	bc	M	ESE	5	1013.2	27.7	23.8	71	26.4				
13	Cu		C1	1	2	3500	b bc	b	M	ESE	2	1013.1	28.2	23.8	68	26.0				
14	Cu	Sc		2	2	3000	bcpr.b	b	M	ESE	4	1014.2	27.9	24.0	71	26.7				
15	Cu	Sc		3	3	3000	b bc	bc	M	ESE	3	1013.7	26.9	23.7	75	26.7				
16	Cu	Ac	C1	Tr.	Tr.	3000	b bc	b	M	CALM	0	1013.4	26.1	22.1	69	23.4				
17	Cu			Tr.	Tr.	3000	b	b	M	CALM	0	1013.3	26.0	22.1	70	23.5				
18	Cb	Sc		8	9	3000	bcpr.c	cpr.o	M	ESE	2	1013.3	26.4	24.2	83	28.4				
19	Cu	Sc	C1	5	9	3500	bcpr.o	bc	M	E	5	1015.0	27.2	24.4	78	28.4				
20	Cu	Ac		2	2	3000	bcpr.o	b	M	ESE	2	1014.1	27.4	23.8	73	26.3				
21	Cu			2	2	3000	bcpr.bc	b	M	ESE	2	1013.3	27.6	24.8	79	29.1				
22	Cu			1	1	4000	bcpr.pr	b	M	E	3	1015.1	27.6	24.3	75	27.7				
23	Cu	Sc		2	2	3000	b bcpr.o	b	M	ESE	6	1014.7	27.8	24.3	67	25.0				
24	Sc	Cu		5	5	3000	b bc	bc	M	ESE	5	1013.0	28.2	23.3	65	24.7				
25	Sc	Cu		2	2	4000	bcpr.o	b	M	ESE	5	1013.5	27.5	23.7	71	26.3				
26	Cu	Sc	Ac	2	3	3500	b bcpr.o	bc	M	ESE	4	1013.1	28.0	24.1	71	26.9				
27	Cu	Sc	Ac	1	2	3000	b	b	M	E	2	1012.0	28.5	24.5	71	27.5				
28	Sc	Cu	Ac	8	8	2500	b bc	cpr.o	M	E	2	1012.3	27.0	23.5	73	26.2				
29	Sc	Cu	Ac	8	9	2500	bcpr	cjr	M	E	1	1012.4	27.0	23.0	70	24.9				
30	Sc	Cu	Ac	7	7	3000	bcprbc	bc	M	ESE	3	1014.0	26.5	22.5	69	24.1				
31	Cu	Sc	Ac	3	3	3000	bcjpr	bcjpr	M	ESE	4	1013.7	26.5	22.6	70	24.3				
Means				2.9	3.5	3100					2.6	1013.4	27.2	23.7	73	26.6				



METEOROLOGICAL OBSERVATIONS. 3 p.m. AUGUST 1943

1000/7/32-3011

APIA OBSERVATORY

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.			
	Low.	Medium.	High.					Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
1	Cu Sc		Ci	1	3	3000	bc	bc	M	E	4	1011.9	28.5	24.1	68%	26.5				
2	Cu Sc		Ci	5	5	3000	bcjpr	bc	M	E	6	1011.7	27.9	24.1	72	27.0				
3	Cu Sc	Ac	Ci	8	5	3000	bc	cjpr	M	E	5	1010.5	29.2	25.6	74	30.0				
4	Cu Sc		Ci	5	8	3000	bc	bc	M	ENE	7	1010.0	28.9	25.1	72	28.8				
5	Cu Sc			1	1	3000	bc	bc	M	E	7	1008.9	29.0	25.4	74	29.6				
6	Cu Sc			4	7	3000	bc	bc	M	ENE	7	1010.2	29.3	26.0	76	31.0				
7	Cu Sc		Ci	2	3	3000	bc	bc	M	E	1	1011.4	29.2	24.5	67	27.0				
8	Cu Sc		Ci	1	2	3500	bc	b	M	E	4	1010.2	28.9	25.0	72	28.5				
9	Cu Sc		Ci	5	5	2500	bcjpr	bcpr	M	ENE	4	1008.6	28.9	25.7	76	30.5				
10	Cu Sc	Ac	Ci	5	5	3000	b	bcjpr	M	ESE	4	1009.4	29.4	26.0	75	30.9				
11	Sc Cb	Ac	Ci	7	8	2500	bcjpr	cjpr	K	ESE	5	1010.4	28.1	25.0	77	29.2				
12	Cu Sc		Ci	1	2	4000	bc	bc	M	E	9	1010.1	28.4	24.0	68	26.3				
13	Cu Sc	Ac	Ci	2	3	3000	bc	bc	M	E	9	1010.8	29.0	25.0	71	28.5				
14	Cu Sc	Ac	Ci	2	3	3500	bc	bc	M	E	9	1011.5	28.6	24.8	72	28.3				
15	Cu Sc			2	2	3000	bc	b	M	E	5	1011.0	28.6	24.2	68	26.7				
16	Cu Sc	Ac		2	2	3000	b	b	M	E	5	1010.2	29.4	25.0	69	28.1				
17	Cu Sc	Ac		2	2	3500	b	b	M	E	5	1009.8	28.4	23.2	63	24.3				
18	Cu Sc	Ac		8	5	2500	cqpr	c	M	ENE	3	1011.2	27.2	24.2	77	27.8				
19	Cu Sc	Ac		7	5	3000	cqpr	bc	M	E	4	1012.7	28.6	24.8	72	28.3				
20	Cu Cb			3	3	3000	bc	bc	M	E	5	1011.1	28.6	25.0	74	28.8				
21	Sc Cu			2	2	3000	b	b/bpr	K	E	4	1011.6	28.6	26.0	81	31.5				
22	Cu Cb			2	2	3000	b	b	K	E	6	1012.5	28.9	24.5	68	27.2				
23	Sc Cu		Ci	2	2	3500	bc	b	M	ESE	9	1012.0	28.7	23.7	64	25.3				
24	Cb Sc	Ac		4	9	1000	cprq	cpr	J	ENE	9	1010.9	26.2	24.1	83	28.3				
25	Cu Sc	Ac		2	2	3500	bc	b	M	E	6	1010.2	29.0	24.8	70	27.9				
26	Cu Sc			2	2	3500	bc	b	M	E	6	1009.3	28.5	25.0	74	28.9				
27	Cu Sc			2	2	3000	b	b	M	E	9	1009.3	28.6	25.1	74	29.0				
28	Sc Cu	Ac		8	8	2500	cjpr	cjpr	M	ESE	3	1008.8	29.0	24.4	67	26.9				
29	Sc Cu	Ac		8	9+	3000	cjpr	cpr	M	SW	1	1009.3	29.0	23.2	59	23.8				
30	Cu Sc	Ac		3	3	3000	bc	bc	M	E	5	1010.4	27.6	23.6	70	25.9				
31	Cu Sc		Ci	3	3	3000	bc	bcjpr	M	E	5	1009.9	28.2	23.9	69	26.2				
Mean				3.4	4.1						4.5	1010.5	28.6	24.7	71	28.0				

METEOROLOGICAL OBSERVATIONS.

AUGUST 1943.



Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	28.5	21.8	19.4		-	10.6		2.7
2	29.1	21.8	19.4		-	7.9		2.7
3	29.9	20.9	18.3		1.5	8.5		2.5
4	29.2	23.7	19.7		Trace	10.2		3.6
5	29.7	21.6	19.1		3.4	11.1		2.4
6	29.8	23.0	21.1		6.8	10.0		2.1
7	29.1	24.0	21.2		-	10.6		3.6
8	28.8	22.5	20.8		-	10.8		3.6
9	29.8	25.4	23.7		0.3	9.7		2.6
10	30.0	24.0	22.1		Trace	10.5		2.4
11	29.8	24.1	22.3		Trace	7.9		2.7
12	29.2	23.8	21.6		-	10.1		3.0
13	29.8	22.0	19.4		Trace	10.8		3.4
14	29.0	24.8	22.3		-	10.7		3.0
15	29.1	21.8	19.6		-	10.7		3.0
16	29.6	21.0	18.9		-	10.0		3.8
17	29.3	20.0	18.8		1.4	10.2		3.2
18	28.5	22.6	20.7		4.2	2.0		1.6
19	29.2	22.3	20.7		2.0	7.7		2.2
20	29.0	23.0	21.0		Trace	10.6		3.6
21	30.0	24.0	22.3		1.7	10.5		
22	29.1	23.0	21.2		Trace	11.1		6.2
23	29.5	22.6	20.1		-	10.6		3.7
24	29.3	23.4	21.2		4.9	5.3		2.5
25	29.8	24.9	22.5		0.5	10.5		3.7
26	29.3	25.3	22.9		-	10.7		3.1
27	29.4	22.6	21.1		Trace	10.5		2.7
28	30.1	23.8	21.6		-	4.8		2.8
29	29.8	23.9	21.6		-	3.0		3.4
30	28.5	22.8	20.8		-	7.8		3.3
31	28.5	22.2	-		-	10.5		3.1
Sum	-	-	-		26.7	285.9		92.2
Mean	29.3	23.0	20.8		-	9.2		3.0



METEOROLOGICAL OBSERVATIONS. 9 a.m. SEPTEMBER 1943.

APIA OBSERVATORY

1.000/7/32-3011

Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.			
	Low.	Form.						Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
		High.	Medium																	
1	Cu	-	-	1	1	3000		bcjpr b	b	M	ESE	2	1012.6	27.8	24.0	72%	26.8			
2	Cu	Ac	-	3	3	4500		b bc	bc	M	ESE	2	1011.2	28.0	24.1	71	26.9			
3	Cu	Sc	-	3	3	3000		bc b	bcjpr	M	ESE	1	1010.6	28.2	24.4	72	27.5			
4	Cu	Sc	-	2	2	3500		bcbpr ₀	b	M	CALM	0	1010.4	27.4	24.3	76	27.9			
5	Cu	Sc	-	1	1	6000		bcbpr ₀	b	M	CALM	0	1011.0	27.2	23.6	73	26.3			
6	Cu	Sc	Cc	2	5	4000		b bc	bc	M	ESE	1	1012.0	28.3	24.7	73	28.2			
7	Cu	Cb	-	3	3	3500		bcbprbc	bcjpr	M	E	3	1012.1	27.9	24.8	77	28.8			
8	Cu	Sc	-	6	9	3000		bc b bc	bc	M	ENE	3	1012.1	28.4	24.7	73	28.1			
9	Sc	Cu	-	9	8	3000		bcbpr ₀	c	M	ESE	3	1013.4	28.4	25.2	76	29.5			
10	Cu	Cb	Ci	5	5	3000		cbpbcpr	bcjpr	K	E	3	1013.7	27.8	25.0	79	29.4			
11	Cu	Cb	-	4	4	3000		bcbpr ₀	bcjpr	K	E	4	1013.6	28.3	25.2	77	29.6			
12	Cu	Sc	-	3	3	3000		bcbpr ₀	bc	M	E	1	1012.7	28.2	24.1	70	26.7			
13	Cu	Cb	Ci	2	5	3500		b bc	bc	M	E	4	1013.2	27.9	24.2	72	27.2			
14	Cu	Sc	Ci	2	2	3000		cbcbbc	bc	M	E	5	1013.6	28.2	23.0	62	23.9			
15	Cu	Sc	-	2	2	3000		b bc	b	M	ESE	5	1014.4	27.9	24.1	72	27.0			
16	FS	Cu	-	9+	9+	2000		bcbqpr ₀	cjpr	H	ESE	4	1014.7	25.4	24.5	93	30.0			
17	Cu	Sc	Ci	7	8	3500		cbpr ₀	c	K	ESE	6	1014.5	27.6	25.0	80	29.6			
18	Cu	Sc	-	3	3	3000		cbcbprq	bc	M	ESE	5	1013.9	28.5	24.4	70	27.3			
19	Cu	Sc	-	4	4	3000		bcbqpr	bc	K	ESE	9	1013.4	27.7	25.1	80	29.8			
20	Sc	Cu	Ci	7	7	2500		cjpbpr ₀	bcjpr	K	ESE	3	1014.1	27.2	23.6	73	26.3			
21	Sc	Cu	Ci	6	6	3000		bcbpr ₀	bcjpr	M	ESE	4	1011.9	27.8	23.5	68	25.5			
22	Cu	Sc	-	5	5	3000		cbprqcir	bcjpr	M	ESE	4	1011.9	27.6	24.2	74	27.5			
23	Cu	Sc	Ci	1	6	4000		b bc	bc	M	ESE	3	1013.6	28.1	25.0	77	29.2			
24	Sc	Cu	Ci	6	8	3000		cbpr ₀	cbpr ₀	M	ESE	3	1013.9	28.0	25.2	79	29.8			
25	Sc	Cu	Ci	2	2	3000		b bc	b	M	ESE	3	1013.1	28.1	24.8	75	28.7			
26	Cu	Sc	Ci	1	2	4000		b bc	b	M	CALM	0	1012.7	26.7	22.0	65	22.7			
27	Cu	Sc	Ci	1	2	3000		b bc	b	M	CALM	0	1012.2	26.8	22.2	65	23.1			
28	Cu	Sc	Ci	7	8	3000		cbcbz	cbz	M	SSW	1	1011.9	27.1	23.1	70	25.1			
29	Sc	Cu	-	9	7	3000		cbpr ₀	cbz	K	CALM	0	1012.4	26.7	23.1	73	25.4			
30	Cu	Sc	-	2	3	3500		bcbpr ₀	bc	M	ENE	2	1013.1	27.8	24.1	72	27.1			
31	-	-	-	3.4	4.4	3300		-	-	-	-	2.7	1012.8	27.7	24.2	74	27.4			
Means	-	-	-	3.4	4.4	3300		-	-	-	-	2.7	1012.8	27.7	24.2	74	27.4			

METEOROLOGICAL OBSERVATIONS.

SEPTEMBER 1943.



Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	29.8	22.3	20.4		-	9.7		2.8
2	29.7	22.6	-		-	11.0		2.6
3	29.4	23.6	21.6		0.9	9.5		2.2
4	28.6	24.0	21.1		4.8	10.3		2.2
5	29.7	23.2	21.1		Trace	11.2		2.5
6	29.8	23.0	21.1		1.1	8.3		2.2
7	29.9	22.6	20.6		-	11.2		3.6
8	30.0	24.3	22.4		Trace	10.0		3.0
9	30.2	24.7	22.9		11.2	6.3		1.9
10	29.8	24.2	22.8		Trace	10.1		2.6
11	30.0	25.3	23.9		Trace	9.1		3.2
12	29.9	24.8	22.9		-	10.8		3.4
13	30.1	21.4	19.4		-	7.8		4.6
14	29.9	24.7	22.8		-	11.2		4.0
15	29.8	21.5	19.6		4.3	10.6		3.2
16	27.8	24.3	23.4		82.8	0.6		0.9
17	29.4	23.8	21.8		0.6	6.7		2.9
18	30.2	24.5	22.4		7.2	10.2		2.4
19	28.3	24.5	22.8		22.6	7.2		0.4
20	28.9	24.2	21.2		Trace	10.2		3.5
21	28.5	22.2	19.5		4.5	5.9		1.4
22	29.8	22.1	20.3		Trace	11.9		2.4
23	29.8	22.9	21.1		0.4	9.5		2.6
24	29.9	24.7	22.8		Trace	10.9		2.6
25	29.2	22.8	21.1		-	7.2		2.5
26	28.9	21.3	18.6		-	9.7		3.0
27	28.4	22.0	19.7		-	7.4		2.6
28	28.6	21.8	19.6		Trace	0.9		1.8
29	29.2	22.8	21.1		Trace	5.0		2.3
30	30.1	23.2	21.7		-	11.1		2.8
31								
Sum	-	-	-		140.4	261.5		78.1
Mean	29.5	23.3	21.4		-	8.7		2.60

METEOROLOGICAL OBSERVATIONS.

9 a.m. OCTOBER 1943.



Day of Month.	CLOUD.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.			UPPER CLOUD.		
	FORM.		Direction.					Force (Beaufort Scale).	Since previous Observation.		At Time.	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.																
1	Cu	Sc	-	3	3	3000		bc	bc	M	E	3	28.7	25.6	76%	30.1		
2	Cu	Sc	-	4	4	3000		bbcpr	bc	K	ESE	4	28.6	25.2	75	29.3		
3	Sc	Cu	Cl	4	8	3000		bep	c	K	E	4	27.9	25.2	79	29.9		
4	Cu	Sc	-	7	7	2500		bep	bep	K	ESE	3	27.3	24.9	81	29.6		
5	Sc	Cu	Cl	2	2	3500		bjprbc	b	K	SSE	4	28.6	25.0	74	28.8		
6	Sc	Cu	-	2	2	3500		bep	b	M	ESE	2	28.5	25.0	74	28.9		
7	Cu	Sc	-	2	2	3500		b	b	M	ESE	4	28.7	24.7	71	27.9		
8	Fs	Sc	-	10	10	1000		bccopr	or	J	ENE	2	25.0	24.1	94	29.3		
9	Cu	Sc	Cl	2	4	3000		or bc	bep	K	E	3	28.9	25.5	75	29.9		
10	Fs	Cb	-	10	10	1000		coRq	oir	J	ESE	1	24.4	23.6	93	28.5		
11	Cu	Sc	Cl	3	8	2500		ocpr	cjpr	K	E	4	28.5	24.9	73	28.6		
12	Sc	Cu	As	5	9+	2500		colpr	cjpr	K	E	5	28.1	24.8	75	28.7		
13	Sc	Cu	Ac	7	9	6500		coltrrr	c	M	ESE	4	25.7	22.6	75	24.9		
14	Sc	Cu	Ac	Tr.	3	6000		er bcb	bc	M	N	1	27.1	23.1	70	25.1		
15	Cu	Cb	Ac	2	2	4000		bl w	bjpr	M	ENE	2	28.3	25.0	75	29.0		
16	Sc	Cu	As	6	9+	2500		bccprlq	cjpr	M	ESE	3	28.1	25.3	79	30.0		
17	Cu	Sc	Ac	2	2	4500		erqbcpr	b	M	E	4	28.2	25.0	76	29.1		
18	Cu	Sc	Ac	4	7	3000		bbcpr	bep	M	ESE	3	27.1	24.6	81	28.9		
19	Fs	Cb	As	4	10	2000		orRqt1	orr	F	ESE	3	23.8	22.9	92	27.2		
20	Fs	Sc	As	7	7	3000		ebcpr	bep	K	SE	4	26.7	24.8	85	29.8		
21	Cu	Cb	Cl	3	3	3500		bep	bep	K	SSE	3	28.0	24.5	74	27.9		
22	Sc	Cu	Cl	4	8	2500		c/gropr	cjpr	K	ESE	2	26.1	23.4	79	26.6		
23	Sc	Cb	Cl	8	8	2500		epr	cjpr	M	E	3	27.4	24.4	77	28.2		
24	Cu	Sc	Cl	2	3	3500		bc	bc	M	ESE	4	28.3	25.0	75	29.0		
25	Sc	Cu	Ac	8	9	3000		epr bcc	cjpr	M	ESE	4	26.6	24.6	84	29.3		
26	Cu	Fc	-	3	3	3500		ebcprbc	bc	K	ESE	4	28.6	25.3	76	29.6		
27	Fs	Cb	As	4	9+	2000		bccor	cjpr	K	ESE	3	25.2	24.1	91	29.1		
28	Cu	Sc	-	2	2	3000		epr bcb	b	M	SSW	1	28.1	24.6	74	28.1		
29	Sc	Cu	-	2	7	3000		bcc	bc	M	ESE	3	28.8	25.3	74	29.5		
30	Cu	Cb	Ac	4	6	3000		bccpr	bc	K	ESE	1	25.9	25.0	93	31.0		
31	Cu	Sc	Cl	2	2	3000		bep	b	M	ESE	3	28.7	25.4	76	29.8		
Means	-	-	-	4.1	5.8	3100		-	-	-	-	3.0	27.4	24.6	79	28.8		

METEOROLOGICAL OBSERVATIONS.

APIA OBSERVATORY

3 p.m. OCTOBER 1943.

Day of Month.	CLOUD.			WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.			UPPER CLOUD.			
	Low.	Form.		At Time.	Since previous Observation.		Direction.	Force (Beaufort Scale).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
		High.	Medium.												
1	Cu	-	-	bc	b	M	E	5	29.6	25.8	30.2				
2	Cu Cb	Ac	-	bcjpr	bcpr _o	K	ENE	6	29.2	26.3	29.1				
3	Cu Sc	-	Cl	bc	bc	K	E	3	29.7	26.0	30.7				
4	Cu Sc	-	Cl	bjpr	bcjpr b	K	E	4	29.3	25.4	29.3				
5	Cu Cb	-	Cl	bcjpr	bbcjpr	K	E	4	29.0	25.1	28.7				
6	Cu Sc	Ac	-	bc	b bc	M	E	5	29.2	25.3	29.1				
7	Sc Cu	Ac	-	bc	bc	M	ESE	3	29.8	25.8	30.0				
8	Sc Cu	Ac	-	cjpr	opr	K	ENE	3	29.5	26.1	31.1				
9	Cu Sc	Ac	Cl	bc	bcpr _o	M	ENE	1	29.1	25.2	28.9				
10	Sc Cb	Ns Ab	-	ojpr	oirq	K	E	3	27.8	25.1	29.7				
11	Cu Sc	Ac	Cl	c	cpr _o bec	K	E	4	30.0	26.2	31.0				
12	Cu Sc	Ac	Cl	cjpr	cjpr	K	E	3	29.3	26.0	31.0				
13	Sc Cu	Ab	-	cbccjpr	cbccjpr	M	NNE	2	27.3	24.1	27.5				
14	Cu Sc	Ac	-	b	bc b	M	NE	2	28.6	25.0	28.8				
15	Cu Sc	Ac	Cc	bcjpr	bbcjpr	M	E	3	29.9	25.2	28.3				
16	Sc Cu	Ab	Cl	cjpr	cpr	K	ESE	3	28.2	25.1	28.4				
17	Cu Sc	-	Cl	bc	bbcpr	M	E	4	29.7	25.6	29.4				
18	Fb Sc	Ab	-	cjr/r	coRRqt1	K	SSW	1	23.2	22.5	26.7				
19	Sc Cb	Ab	Ac	cjpr	ojpr	M	ESE	5	27.0	24.1	27.7				
20	Cu Sc	Ac	Ab	bc	bcpr _o	K	E	5	29.0	25.5	29.8				
21	Sc Cu	-	-	cjpr	cpr	K	ESE	3	28.5	25.2	29.4				
22	Sc Cu	Ac	Ab	cjpr	bcjpr	M	NE	4	27.3	24.8	29.3				
23	Sc Fb	-	-	cpr _o	cpr _o	M	SE	1	26.1	23.6	27.1				
24	Fb Cb	-	Cl	cpr _o t	bcpr _o t	M	ESE	4	25.9	24.0	28.3				
25	Cu Cb	Ab	Cl	bcjpr	bcpr _o	H	E	6	27.2	24.7	29.1				
26	Cu Sc	-	-	bc	bc	M	E	5	28.3	26.0	31.0				
27	Sc Cu	Ab	Ac	c	cpr	M	SE	1	28.2	25.0	29.1				
28	Fc Cu	-	Cl	b	bjpr	M	E	3	29.2	24.5	27.0				
29	Sc Cu	-	Cl	bc	bc	M	E	4	29.8	26.0	30.6				
30	Cu Sc	Ac	-	bc	bc	M	E	5	29.6	26.0	30.7				
31	Cb Sc	Ac	Cl	bc	bc	M	E	4	29.6	25.5	29.3				
Means	-	-	-	-	-	-	-	3.5	28.5	25.2	29.3				



International
Seismological
Centre

METEOROLOGICAL OBSERVATIONS.

OCTOBER 1943.



Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	30.1	25.1	22.9		0.7	10.9		3.9
2	30.2	23.2	22.2		1.6	8.2		2.7
3	30.4	25.4	23.9		0.4	7.2		2.5
4	29.9	25.3	23.6		Trace	9.2		3.0
5	29.7	22.2	20.3		-	10.1		2.9
6	30.9	22.4	20.7		-	11.2		3.4
7	29.8	23.8	21.7		9.9	7.7		2.7
8	30.8	24.7	23.8		12.6	1.4		1.4
9	30.9	24.3	23.9		11.6	8.2		1.3
10	28.7	23.2	23.3		9.7	0.0		2.4
11	30.0	24.8	24.4		0.6	7.9		2.8
12	30.2	25.5	23.8		30.6	7.4		2.1
13	28.8	22.1	20.6		3.2	2.9		1.5
14	29.0	22.6	21.2		-	11.8		2.4
15	30.1	23.0	21.2		11.0	10.5		2.4
16	30.1	24.2	23.0		7.2	4.0		1.7
17	30.1	24.5	22.2		10.5	9.7		2.7
18	27.2	24.5	22.3		88.3	0.8		0.6
19	28.6	21.9	20.4		3.1	0.4		2.2
20	30.0	22.8	23.4		Trace	10.1		2.2
21	29.8	22.8	21.7		9.2	8.4		1.5
22	29.4	23.2	22.3		0.8	7.3		2.2
23	28.5	23.2	21.8		0.2	2.9		2.1
24	29.5	23.1	21.6		1.7	6.6		2.1
25	29.0	24.5	22.8		0.5	4.3		2.3
26	29.5	23.6	22.2		0.2	9.8		3.0
27	28.8	24.1	22.8		5.4	1.6		1.4
28	29.8	22.3	20.6		-	12.0		2.9
29	30.2	23.2	21.2		33.8	11.1		2.1
30	30.2	24.4	22.9		-	9.4		2.6
31	30.2	24.0	21.9		-	8.5		3.4
Sum	-	-	-		252.8	221.5		72.4
Mean	29.7	23.7	22.3		-	7.1		2.3

METEOROLOGICAL OBSERVATIONS. 9 a.m. NOVEMBER 1943.

APIA OBSERVATORY

1,000/7/30-3011

Day of Month.	CLOUD.			WEATHER.			Visibility.	WIND.		TEMPERATURE AND HUMIDITY.				UPPER CLOUD.		
	FORM.			Since previous Observation.	At Time.	Direction.		Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.	High.													
1	Sc		Cl	bc l b	bc	ESE	3	1011.0	28.8	24.9	72%	28.4				
2	Cu		Cl	bc b	bc	ESE	2	1012.1	28.2	24.3	71	27.3				
3	Cu	Ac	Cl	e bc	b	ESE	3	1012.3	29.3	25.8	75	30.4				
4	Cu	Ac	Cl	b l bc	b	ENE	4	1012.1	29.6	25.1	68	28.3				
5	Sc	Ac	Cl	ct bc	bcjpr	ESE	4	1011.4	28.6	25.3	76	29.6				
6	Cu	As		belteor	oir°	S	1	1011.6	26.4	24.9	88	30.3				
7	Cu	Ac	Cl	coljt	bc	NE	1	1009.8	27.8	24.2	73	27.3				
8	Cu	Ac	Cl	epr° tbc	cjpr	NNE	1	1009.9	28.0	24.0	70	26.6				
9	Cu	Ac	Cl	ebc b	b	ESE	1	1010.1	28.6	24.4	69	27.2				
10	Cu			epr° bc	b	S	1	1009.7	28.3	24.9	75	28.8				
11	Cu	Ac		cjpr bcl	b	SE	1	1009.7	28.4	24.0	68	26.3				
12	Cu		Cl	epr lb	bc/r	E	3	1009.7	29.1	24.8	69	27.9				
13	Cu		Cl	ebcpr°	bcjpr	ESE	5	1010.0	29.2	25.2	71	28.9				
14	Cu	Ac	Cl	b bc b	bc	ESE	4	1009.6	29.3	26.0	76	31.0				
15	Sc	Ac		epr° l t	cjr	ESE	2	1011.2	26.6	24.0	80	27.8				
16	Cu	As	Cl	bc b	b	E	3	1009.2	29.0	25.0	71	28.5				
17	Cu			bcprqt	b	ESE	3	1009.7	29.5	25.5	71	29.4				
18	Sc	Ac	Cl	epr° bc	bc	SSW	1	1010.1	27.5	25.5	85	31.1				
19	Sc	Ac	Cl	cjpr° bc	bc	E	2	1010.7	29.1	26.3	79	32.0				
20	Sc	Ac	Cl	bcpr bc	bcjpr	ESE	2	1011.9	29.1	26.6	81	32.8				
21	Sc	Ac	Cl	bc t l	bcjpr	E	1	1012.1	29.4	25.2	70	28.7				
22	Sc		Cl	epr° bc	bc	E	1	1010.9	28.7	25.4	76	29.8				
23	Cu	Ab		cjpr L	cjpr	ESE	3	1010.7	28.7	25.4	76	29.8				
24	Cu	Ac	Cl	bccjrlt	bcjpr	E	4	1011.7	28.9	25.9	78	31.0				
25	Cu	Ab	Cl	epr° lbc	c	ESE	3	1011.5	28.9	26.3	81	32.2				
26	Sc		Cl	epr° t	bc	E	3	1010.2	29.4	26.3	77	31.7				
27	Cu	Ac		b	bcjpr	E	2	1009.5	29.6	26.0	74	30.7				
28	Cu	Ac		bcjpr b	bc	E	1	1009.7	29.0	25.1	72	28.7				
29	Cu		Cl	bc b	b	E	2	1009.5	28.1	24.1	71	26.8				
30	Sc	Ab	Cl	bcjpr	bcjpr	ENE	2	1009.6	28.9	25.0	72	28.5				
31							2.3	1010.6	28.7	25.2	75	29.3				
Means																



International Seismological Centre



International Seismological Centre

Day of Month.	CLOUD.			WEATHER.		Visibility.	WIND.		TEMPERATURE AND HUMIDITY.			UPPER CLOUD.				
	FORM.			Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).	Barometer reduced to M.S.L. (Millibars).	Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.	High.													
1	Sc Cu	Ac	Cl	bc	bc	M	ENE	3	1009.1	30.0	25.7	70%	29.6			
2	Cu Sc	-	Cl	bc c	c	M	E	3	1010.0	29.7	25.2	68	28.5			
3	Cu Sc	-	Cl	b	b	M	E	4	1010.2	30.0	25.8	70	29.9			
4	Cu Cb	Ac	Cl	betqpr.	cjpr	M	ENE	2	1010.6	28.8	25.7	77	30.5			
5	Cu Cb	Ac	Cl	bc	bcjpr	M	ENE	3	1008.2	29.7	25.8	72	30.1			
6	Sc Cb	AS Ac	-	cjpr	cjpr	M	ESE	1	1009.0	27.3	23.3	70	25.4			
7	Sc Cb	AS Ac	Cl	bccpr. t	cjpr	M	S	1	1007.6	27.7	23.8	71	26.4			
8	Cu Sc	AS Ac	Cl	cjpr	c	M	E	1	1007.3	29.0	25.3	73	29.3			
9	Cu Sc	Ac	-	b	bcjpr	M	E	5	1007.3	30.0	25.9	71	30.1			
10	Sc Fs	AS Ac	-	bccpr. c	cjr	M	ESE	3	1007.4	27.9	24.6	75	28.3			
11	Cu Sc	Ac	-	b	bc	M	NE	2	1007.0	29.4	25.0	69	28.1			
12	Sc Cu	AS	Cl	bcjpr	cjpr	M	ESE	3	1008.2	28.2	24.1	70	26.7			
13	Cu Sc	-	Cl	bcjpr b	b	M	E	3	1007.8	30.6	26.0	68	29.9			
14	Sc Cu	Ac	Cl	bccpr.	bcjpr	M	ENE	2	1007.5	29.8	26.0	73	30.6			
15	Sc Cu	Ac AS	Cl	cqpr	c	M	ESE	2	1007.8	28.4	24.1	69	26.6			
16	Cb Sc	Ac	Cl	bjpr	cjpr	M	ESE	4	1008.0	28.6	25.3	76	29.6			
17	Cu Sc	Ac	-	b	bc	M	E	3	1007.2	30.3	26.0	76	31.0			
18	Sc Cu	AS	-	cpr.	ojpr	M	S	2	1008.7	27.0	25.4	87	31.2			
19	Cu	-	Cl	b	b	M	ENE	2	1009.5	29.4	25.5	72	29.5			
20	Cu	Ac	Cl	bcjpr	bc	M	NW	2	1010.2	28.7	25.2	74	29.2			
21	Sc Cb	Ac	-	cpr. t	cjpr	M	SSW	1	1009.9	29.0	25.0	71	28.5			
22	Cb. Cu	Ac	Cl	cjpr	bc	M	ESE	1	1007.9	29.3	25.5	73	29.6			
23	Cu. Fc	AS Ac	Cl	bc	cjpr	M	E	4	1008.2	29.5	26.6	79	32.5			
24	Cu Sc	-	Cb	bcjpr	bc	M	E	2	1009.7	30.0	26.4	74	31.5			
25	Cu Sc	AS Ac	-	cjpr	cjpr.	M	E	4	1009.8	29.8	26.8	78	32.9			
26	Cb Cu	Ac	Cl	bcjprbc	bc	M	ENE	3	1007.9	30.5	26.5	72	31.4			
27	Cu Cb	Ac AS	-	bc	bcjpr	M	ENE	2	1007.5	30.2	26.0	74	30.3			
28	Cu Sc	Ac	-	bccpr. t	cjpr	M	ESE	1	1007.7	28.5	25.0	74	28.9			
29	Sc Cu	-	-	bccpr.	bcjpr	M	ESE	3	1006.9	30.3	26.1	71	30.5			
30	Cu Sc	Ac	Cl	bcjpr	bcjpr	M	ENE	4	1007.4	30.4	26.6	73	31.8			
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Means	-	-	-	-	-	-	-	2.5	1008.4	29.3	25.5	73	29.6	-	-	-

METEOROLOGICAL OBSERVATIONS.



NOVEMBER 1943.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	30.0	23.2	21.6		-	10.7		2.7
2	29.9	22.6	21.0		-	11.3		2.6
3	30.2	23.2	21.7		-	11.5		2.7
4	30.1	24.1	22.7		Trace	8.2		2.6
5	30.8	25.4	-		0.8	10.2		2.7
6	28.0	24.8	23.3		Trace	0.8		2.2
7	29.3	23.3	21.7		Trace	7.0		2.2
8	30.2	23.7	22.2		-	8.1		2.1
9	30.4	24.0	22.2		Trace	9.3		2.6
10	30.2	23.5	20.8		Trace	7.0		2.2
11	30.3	22.6	19.9		1.9	10.5		2.9
12	30.4	22.5	20.7		Trace	7.1		2.8
13	31.0	23.3	21.3		-	11.3		3.2
14	30.7	23.6	21.9		4.8	8.4		2.2
15	29.8	24.3	22.6		Trace	3.9		2.6
16	30.3	22.9	21.2		1.8	9.3		2.6
17	30.2	23.7	21.8		6.9	11.4		2.4
18	29.3	24.2	21.8		3.6	3.2		1.7
19	30.3	23.2	24.0		7.8	11.7		2.9
20	30.5	24.9	25.7		-	10.7		2.4
21	30.7	24.4	25.1		Trace	3.8		1.6
22	30.1	24.3	25.0		-	6.1		3.4
23	30.9	24.6	26.0		-	3.7		2.6
24	32.0	25.6	25.8		5.5	9.5		2.4
25	32.1	25.8	23.7		0.4	4.2		2.6
26	31.1	24.9	22.9		-	9.7		2.6
27	30.9	24.2	22.7		Trace	8.8		3.4
28	30.1	24.9	22.9		3.9	8.4		2.1
29	30.7	22.8	20.7		Trace	11.6		2.7
30	30.8	23.8	22.2		-	9.4		2.7
31								
Sum	-	-	-		37.4	246.8		76.4
Mean	30.4	23.9	22.6		-	8.2		2.5

APIA OBSERVATORY

METEOROLOGICAL OBSERVATIONS.

9 a.m. DECEMBER 1943.

Day of Month.	FORM.			Amount of Low.	Total Amount.	Height of Base.	How Height was obtained.	WEATHER.		Visibility.	WIND.		Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY.				Upper Cloud.		
	Low.	Medium.	High.					Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).		Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed : Height Ratio.
1	Cu	Sc	C1	2	7	3000		bcjpr b	bc	M	E	3	1009.3	28.8	25.5	76%	30.0			
2	Fs	Sc	C1	6	8	2000		bcjpr b	bcjpr	M	SE	4	1008.6	28.4	25.6	78	30.6			
3	Cu	Sc	C1	2	3	3000		bcjpr t	bc	M	ENE	1	1008.1	28.8	25.5	76	30.0			
4	Cb	Sc	C1	4	6	2500		oltrRbc	bcjpr	M	E	1	1009.1	28.1	25.2	78	29.7			
5	Sc	Cu	C1	5	5	2500		bcjpr	bcjpr	M	ESE	1	1005.7	28.1	25.2	78	29.7			
6	Cu	Sc	C1	1	8	4000		cpr _o bc	c	M	NE	1	1004.5	28.4	24.0	68	26.3			
7	Cu	Sc	C1	1	4	3500		bcjpr	bc	M	ESE	1	1005.1	28.3	23.5	65	25.1			
8	Cu	Sc	C1	1	2	3000		bcjpr	bc	M	ESE	1	1006.5	28.8	24.0	66	26.0			
9	Sc	Cb	C1	7	8	3000		cjpr _o bc	cpr _o	M	S	2	1005.4	28.8	25.0	72	28.6			
10	Sc	Cu	C1	4	8	4000		cprbc	cjpr	M	SSW	1	1006.0	28.3	24.8	74	28.5			
11	Sc	Fs	-	8	10	2500		cr _o OPR	cr _o	K	WNW	3	1006.2	26.6	24.6	84	29.3			
12	Sc	Cu	C1	3	8	4500		or _o r _o c	c	M	ESE	1	1005.9	28.5	25.3	76	29.7			
13	Sc	Cb	-	5	10	3000		cqpr	ofjpr	M	SSW	1	1006.2	26.5	25.3	90	31.6			
14	Ns	Cu	-	6	10	1500		or _o cjpr	or	H	W	2	1004.8	25.2	24.9	97	31.3			
15	Cu	Sc	C1	2	7	3000		ORoprbc	bcjpr	M	SSE	2	1007.5	28.1	25.4	80	30.3			
16	Cu	Sc	C1	2	4	3000		cr _o rrbc	bc	M	WNW	1	1008.2	28.1	24.9	76	28.9			
17	Cu	Sc	C1	1	1	3000		bc b	b	M	WNW	1	1008.7	28.0	24.0	70	26.6			
18	Cu	Sc	C1	1	3	3000		crr bc	bc	M	ESE	1	1008.9	28.2	24.3	71	27.3			
19	Cu	Sc	C8	4	7	3000		bcpr _o l	bc	M	E	2	1009.8	28.8	25.0	72	28.6			
20	Cu	Cb	C1	4	7	3000		ctlqpr _o	bcjpr	M	ENE	2	1010.1	28.5	26.0	81	31.6			
21	Sc	Fs	-	10	10	1500		cprtlor	ofjpr	H	WSW	1	1010.7	26.6	24.8	86	29.9			
22	Cu	So	C1	1	9+	2000		clrcjpr	c	M	CALM	0	1009.8	28.1	25.0	77	29.2			
23	Cb	So	C8	5	9	3000		cpr _o bc	cjpr	M	W	2	1008.7	27.6	25.3	82	30.4			
24	Sc	Cu	C8	2	9	3000		orcjpr	c	M	W	3	1005.2	27.0	24.6	80	28.9			
25	Cb	Sc	C8	Tr.	6	3000		clrlc	bc	M	CALM	0	1007.0	27.8	24.5	75	28.1			
26	Cu	Sc	C1	4	6	3000		bccopr	bc	M	WNW	2	1006.7	27.6	25.1	81	29.9			
27	Cu	Fs	C1	4	9	1500		clORRcp	cjpr	M	NW	3	1006.4	27.3	25.0	82	29.8			
28	Sc	Cu	C1	1	9	3000		cqORlc	c	M	SE	1	1006.9	26.7	25.0	86	30.3			
29	Cu	Cb	C1	3	7	3000		cpr _o bc	bcjpr	M	NNW	1	1007.1	28.3	25.0	75	29.0			
30	Cb	Cu	C1	5	9	2500		cjprtb	cpr _o	M	NNE	3	1007.3	27.2	25.0	83	29.9			
31	Bc	Cu	C1	5	9+	3000		bccRgt	cjpr	M	S	1	1006.3	26.8	25.0	86	30.3			
Means	-	-	-	3.5	7.1	2900		-	-	-	-	1.6	1007.3	27.8	24.9	78	29.2			

METEOROLOGICAL OBSERVATIONS. 3 p.m. DECEMBER 1943.

APIA OBSERVATORY

1,000/7/32-3911

Day of Month.	CLOUD.			WEATHER.		Visibility.	WIND.		Barometer reduced to M.S.L. (Millibars).	TEMPERATURE AND HUMIDITY.		UPPER CLOUD.				
	FORM.			Since previous Observation.	At Time.		Direction.	Force (Beaufort Scale).		Dry Bulb (°).	Wet Bulb (°).	Relative Humidity (%).	Vapour Pressure (Millibars).	Type observed.	Direction whence coming.	Speed: Height Ratio.
	Low.	Medium.	High.													
1	Cu Sc	-	Ci	bcjpr	bc	M	E	3	1007.5	30.5	25.8	67%	29.3			
2	Sc Cu	Ac	Ci	bcjpr	bcjpr	M	NNE	3	1006.5	27.6	25.6	85	31.3			
3	Cb Cu	As	Ci	bcjpr t	cjpr	K	ENE	2	1006.6	29.1	25.9	77	30.9			
4	Sc Cb	Ac	Ci	c	bcjpr	M	NW	2	1005.9	28.9	24.2	66	26.4			
5	Sc Cu	Ac	-	cpr.	cpr.	K	ENE	2	1002.7	27.3	25.1	83	30.1			
6	Sc Cu	As	Ci	cbepr.	cjpr	M	NW	2	1001.9	28.8	24.0	66	26.1			
7	Sc Fs	As	Ac	bc	cpr	M	SSW	3	1002.9	26.1	24.0	83	28.2			
8	Sc Cu	Ac	Ci	bbejpr	cjpr	M	ESE	3	1005.5	29.9	25.9	72	30.2			
9	Sc Cu	-	-	cpr.	cjpr	H	ENE	4	1005.0	27.1	25.8	90	32.2			
10	Sc Cu	As	Ac	or cjr	cjr	K	ENE	1	1004.2	28.0	25.1	78	29.5			
11	Sc Ns	As	-	or	ojpr	M	CALM	0	1002.2	25.3	24.2	91	29.3			
12	Sc Cu	Fc	Ci	cjpr	cjpr.	M	NNW	3	1004.0	28.4	25.6	78	30.6			
13	Cu Sc	As	Ac	opr.	cjpr.	K	N	1	1003.8	27.8	25.4	82	30.8			
14	Cb Sc	As	Ac	cjpr	cjpr	K	WSW	2	1004.3	28.2	25.0	76	29.1			
15	Ns Cb	As	Ci	cjprtZ	cr	H	CALM	0	1006.4	24.9	23.9	92	28.9			
16	Cu Cb	-	Cs Ci	bc	bc	M	ENE	3	1006.1	30.3	25.5	67	28.8			
17	Cu Ns	As	Ac	bcjpr	cjpr	H	S	2	1006.4	27.1	24.6	81	28.9			
18	Sc Cu	As	Ac	bcctr	cr.	K	E	1	1007.5	26.2	24.6	87	29.7			
19	Cu Cb	As	Ac	cjprt Z	cjpr	K	N	1	1007.8	28.1	25.0	77	29.2			
20	Cu Cb	As	Ac	cjpr	cjpr	M	NNW	2	1007.8	28.1	25.4	80	30.3			
21	Sc Cu	As	Ac	opr.	ojpr	H	NNW	3	1008.3	27.5	25.5	81	29.7			
22	Cu Cb	As	Ac	cjpr	c	M	N	1	1007.7	28.5	25.7	79	30.8			
23	Sc Cu	As	Ac	opr.	o	K	SSW	2	1005.9	26.5	24.0	80	27.9			
24	Fc Sc	As	Ac	oir.	cir.	K	W	3	1004.6	26.4	25.0	89	30.6			
25	Sc Cu	Ac	Ci	bc c	bc	M	NNW	2	1005.1	28.6	24.5	70	27.5			
26	Cu Cb	As	Ac	bc t	cjpr	K	NNW	3	1004.1	28.6	25.2	75	29.3			
27	Fs Cb	-	Ci	cpr bc	cjr	M	NW	4	1003.7	28.8	26.0	79	31.4			
28	Sc Cb	As	Ac	cjr t	cjr	M	NNW	2	1005.5	28.2	25.2	77	29.7			
29	Sc Fs	As	Ac	bccjpr	cjpr	K	ENE	1	1006.3	27.3	25.0	82	29.8			
30	Cu Sc	Ac	Ci	cbejpr	bcjpr	M	NNE	1	1004.8	29.4	26.0	75	30.9			
31	Sc Cu	As	Ac	cpr.	cjpr	K	E	2	1004.8	28.0	25.0	77	29.3			
Means	-	-	-	-	-	-	-	2.1	1005.3	27.9	25.1	79	29.6			



METEOROLOGICAL OBSERVATIONS.

DECEMBER 1943.

Day of Month.	Thermometers.				Rainfall (mm.)	Sunshine (hrs.)	Heat Integrator.	Evaporimeter.
	Maximum (°)	Minimum (°)	Gross Minimum (°)	Black Bulb in vacuo (°)				
1	31.0	24.4	22.8		Trace	9.9		2.6
2	30.5	24.2	21.8		0.7	6.4		1.8
3	30.6	24.3	22.7		21.6	6.8		1.8
4	29.3	23.7	22.6		4.2	8.3		2.1
5	29.5	24.4	22.7		3.5	8.9		2.2
6	30.0	24.9	21.7		Trace	9.9		3.1
7	30.5	23.5	22.0		0.9	7.6		2.7
8	30.5	22.9	21.2		Trace	8.5		3.4
9	30.9	25.1	23.8		2.3	6.1		2.1
10	29.4	25.0	23.6		6.2	5.7		2.2
11	28.6	25.3	23.3		21.2	0.3		0.6
12	29.9	23.4	21.0		5.6	5.7		2.0
13	28.0	24.5	22.9		36.3	0.4		1.9
14	29.7	23.6	21.7		18.5	0.0		0.9
15	29.9	24.0	22.9		5.6	4.1		1.5
16	30.8	23.3	21.9		-	11.6		2.7
17	28.7	23.4	21.4		17.5	7.6		1.6
18	29.6	23.0	21.1		8.1	5.8		1.7
19	29.2	23.5	21.7		Trace	6.8		1.7
20	29.7	24.2	22.6		18.2	6.2		2.1
21	28.2	24.9	23.7		8.9	0.0		2.2
22	29.4	24.1	22.6		1.7	6.0		1.0
23	29.6	24.2	23.3		4.7	0.9		2.1
24	29.6	24.3	23.3		7.0	1.7		1.4
25	29.3	23.3	22.2		0.2	10.8		2.1
26	29.4	23.9	22.2		25.1	10.3		1.8
27	30.0	23.9	22.6		37.6	6.5		1.2
28	28.8	23.9	22.9		Trace	3.4		1.7
29	29.2	24.9	23.3		Trace	5.5		1.5
30	29.8	24.1	22.7		20.5	8.8		1.5
31	29.4	23.9	22.8		0.3	2.0		1.3
Sum	-	-	-		276.4	182.5		58.5
Mean	29.6	24.1	22.5		-	5.9		1.9

METEOROLOGICAL ELEMENTS: EXTREME VALUES, NORMALS AND VARIATIONS, 1943

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
<u>Pressure</u>													
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 1943	+1.2	+0.7	-0.2	+0.6	-1.0	0.0	-0.4	-0.2	-0.6	0.0	+0.1	-1.7	-0.1
Absolute Maximum	1015.2	1013.7	1012.9	1014.4	1013.8	1015.3	1017.1	1015.8	1015.1	1015.0	1012.7	1010.7	1017.1
Absolute Minimum	1003.3	1003.3	1002.3	1005.0	1006.3	1008.0	1006.2	1008.5	1008.0	1007.7	1006.3	1001.9	1001.9
<u>Temperature</u>													
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 1943	+0.52	+0.25	+0.26	+0.56	+0.51	+0.19	+0.32	+0.42	+0.32	+0.33	+0.73	+0.07	+0.37
Absolute Maximum	30.8	30.9	31.2	31.2	30.3	30.2	30.1	30.1	30.2	30.9	32.1	31.0	32.1
Absolute Minimum	22.7	23.0	22.6	23.4	22.7	20.4	20.9	20.0	21.3	21.9	22.5	22.9	20.0
Greatest Daily Range	7.4	6.9	7.4	7.5	6.9	9.1	8.0	9.3	8.7	7.5	7.9	7.6	9.3
Mean Maximum	29.82	29.63	29.65	29.93	29.63	29.34	29.03	29.34	29.45	29.69	30.38	29.65	29.63
Mean Minimum	24.16	23.99	24.07	24.44	24.18	22.93	22.78	22.99	23.31	23.67	23.94	24.06	23.71
<u>Rainfall</u>													
Normal (mm)	455	385	358	255	161	130	82	89	133	169	267	370	2854
Variation 1943	-252	-16	-132	+1	-4	-100	-41	-62	+7	+84	-230	-94	-839
<u>Sunshine</u>													
Normal (hours)	160	158	185	195	215	210	232	238	224	222	187	174	2400
Variation 1943	+80	+47	+4	+28	+18	+58	+37	+48	+37	-1	+60	+9	+425



PRESSURE: MEANS OF HOURLY VALUES, 1943

From readings in millibars at exact hours (1000 mb. + tubular 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	9.21	8.54	8.12	7.90	8.03	8.37	9.21	9.54	9.73	9.83	9.64	9.25	8.76	8.27	7.82	7.50	7.52	7.84	8.58	9.15	9.50	9.63	10.08	9.87		8.84
February	9.59	8.85	8.40	8.23	8.37	8.65	9.31	9.74	10.06	10.17	9.87	9.47	8.86	8.26	8.00	7.54	7.53	7.91	8.60	9.04	9.43	9.73	9.96	9.85		8.97
March	9.38	8.80	8.37	8.12	8.21	8.44	9.11	9.47	9.98	10.14	9.94	9.45	8.77	8.05	7.63	7.35	7.41	7.69	8.41	8.91	9.43	9.82	9.90	9.67		8.85
April	10.90	10.36	9.96	9.83	9.81	10.00	10.69	11.12	11.66	11.88	11.68	10.97	10.29	9.65	9.11	8.83	8.91	9.26	9.96	10.53	11.13	11.36	11.44	11.34		10.45
May	10.35	9.82	9.44	9.32	9.25	9.45	10.02	10.51	11.07	11.31	11.01	10.36	9.65	8.84	8.46	8.29	8.51	8.87	9.43	10.05	10.43	10.62	10.70	10.60		9.85
June	12.10	11.66	11.37	11.15	11.11	11.23	11.59	12.12	12.70	12.88	12.50	11.89	11.20	10.67	10.16	9.96	10.11	10.52	11.20	11.75	12.18	12.45	12.39	12.28		11.55
July	11.68	11.34	10.95	10.69	10.77	10.95	11.56	11.99	12.71	12.96	12.58	11.85	11.16	10.44	9.89	9.74	9.86	10.19	10.80	11.37	11.83	12.01	12.03	11.93		11.30
August	12.37	11.98	11.69	11.52	11.56	11.75	12.42	12.86	13.36	13.67	13.25	12.50	11.75	11.05	10.51	10.22	10.27	10.48	11.37	11.83	12.29	12.62	12.68	12.60		11.94
September	11.66	11.12	10.76	10.66	10.75	10.98	11.87	12.38	12.80	12.96	12.65	11.99	11.34	10.71	10.20	9.95	9.98	10.30	11.03	11.57	11.95	12.22	12.19	12.04		11.42
October	11.35	10.93	10.61	10.51	10.62	10.91	11.71	12.16	12.49	12.60	12.34	11.78	11.00	10.35	10.03	9.80	9.91	10.28	10.91	11.38	11.72	12.00	12.02	11.81		11.22
November	9.54	8.89	8.56	8.56	8.76	9.11	10.05	10.39	10.57	10.58	10.20	9.67	9.20	8.73	8.38	8.12	8.12	8.47	9.11	9.55	9.92	10.21	10.28	10.05		9.38
December	6.80	6.16	5.77	5.59	5.69	6.04	6.90	7.10	7.31	7.36	7.08	6.61	6.20	5.68	5.35	5.10	5.15	5.56	6.32	6.67	7.10	7.48	7.51	7.34		6.41
Year	10.39	9.87	9.50	9.34	9.41	9.66	10.37	10.78	11.20	11.36	11.06	10.48	9.85	9.23	8.79	8.53	8.61	8.95	9.64	10.15	10.58	10.86	10.93	10.78		10.01
Wet Season 1942-43	9.32	8.69	8.27	8.15	8.29	8.65	9.35	9.78	10.02	10.07	9.81	9.36	8.82	8.33	7.95	7.61	7.67	8.04	8.73	9.23	9.63	9.92	10.09	9.87		8.99
Dry Season 1943	11.63	11.20	10.87	10.67	10.67	10.85	11.40	11.87	12.46	12.71	12.33	11.65	10.94	10.25	9.75	9.55	9.69	10.01	10.70	11.25	11.68	11.93	11.95	11.85		11.16



PRESSURE: DIURNAL CHANGES, 1943

The departures in millibars from the mean of the day are adjusted for non-cycloic 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	1000																								
January	8.84	+0.43	-0.25	-0.67	-0.90	-0.77	-0.44	+0.40	+0.72	+0.91	+1.00	+0.61	+0.41	-0.09	-0.58	-1.04	-1.36	-1.35	-1.03	-0.30	+0.27	+0.61	+0.94	+1.18	+0.97
February	8.97	+0.43	-0.11	-0.56	-0.73	-0.59	-0.31	+0.35	+0.77	+1.09	+1.20	+0.90	+0.50	-0.13	-0.71	-0.97	-1.43	-1.45	-1.07	-0.38	+0.06	+0.45	+0.75	+0.98	+0.87
March	8.65	+0.50	-0.08	-0.50	-0.75	-0.66	-0.42	+0.25	+0.61	+1.12	+1.28	+1.09	+0.60	-0.08	-0.79	-1.21	-1.49	-1.45	-1.15	-0.42	+0.08	+0.60	+1.00	+1.08	+0.85
April	10.45	+0.47	-0.07	-0.47	-0.60	-0.62	-0.44	+0.25	+0.68	+1.22	+1.43	+1.23	+0.52	-0.16	-0.80	-1.35	-1.63	-1.55	-1.20	-0.51	+0.06	+0.66	+0.91	+0.97	+0.86
May	9.65	+0.52	-0.01	-0.39	-0.52	-0.59	-0.39	+0.18	+0.67	+1.23	+1.46	+1.16	+0.51	-0.20	-1.01	-1.40	-1.57	-1.35	-0.99	-0.45	+0.19	+0.56	+0.75	+0.83	+0.73
June	11.55	+0.56	+0.12	-0.17	-0.39	-0.43	-0.31	+0.05	+0.58	+1.15	+1.33	+0.95	+0.34	-0.35	-0.88	-1.39	-1.60	-1.45	-1.04	-0.36	+0.19	+0.62	+0.89	+0.83	+0.72
July	11.30	+0.38	+0.04	-0.34	-0.61	-0.53	-0.35	+0.26	+0.69	+1.41	+1.66	+1.28	+0.55	-0.14	-0.66	-1.41	-1.56	-1.44	-1.11	-0.50	+0.07	+0.53	+0.71	+0.73	+0.63
August	11.94	+0.42	+0.03	-0.26	-0.43	-0.39	-0.20	+0.46	+0.92	+1.42	+1.73	+1.31	+0.56	-0.19	-0.89	-1.43	-1.72	-1.67	-1.45	-0.56	-0.10	+0.56	+0.69	+0.75	+0.67
September	11.42	+0.24	-0.30	-0.66	-0.76	-0.67	-0.44	+0.45	+0.96	+1.38	+1.54	+1.23	+0.57	-0.08	-0.71	-1.22	-1.47	-1.44	-1.12	-0.39	+0.15	+0.53	+0.80	+0.77	+0.62
October	11.22	+0.13	-0.29	-0.61	-0.71	-0.60	-0.31	+0.49	+0.94	+1.27	+1.38	+1.12	+0.56	-0.22	-0.67	-1.19	-1.42	-1.31	-0.94	-0.31	+0.16	+0.50	+0.78	+0.80	+0.59
November	9.38	+0.12	-0.52	-0.85	-0.85	-0.64	-0.29	+0.65	+1.00	+1.18	+1.19	+0.82	+0.29	-0.18	-0.64	-0.99	-1.25	-1.24	-0.89	-0.25	+0.20	+0.57	+0.86	+0.94	+0.69
December	6.41	+0.34	-0.30	-0.68	-0.86	-0.75	-0.40	+0.47	+0.67	+0.89	+0.94	+0.66	+0.20	-0.20	-0.72	-1.05	-1.29	-1.24	-0.82	-0.06	+0.50	+0.73	+1.12	+1.15	+0.99
Year	10.01	+0.38	-0.15	-0.51	-0.68	-0.60	-0.36	+0.36	+0.77	+1.19	+1.35	+1.05	+0.47	-0.17	-0.79	-1.22	-1.48	-1.41	-1.07	-0.37	+0.14	+0.56	+0.85	+0.92	+0.77
Wet Season 1942-43	8.99	+0.34	-0.30	-0.72	-0.84	-0.70	-0.34	+0.36	+0.79	+1.03	+1.08	+0.83	+0.37	-0.17	-0.65	-1.03	-1.37	-1.32	-0.95	-0.26	+0.25	+0.65	+0.93	+1.10	+0.69
Dry Season 1943	11.16	+0.47	+0.05	-0.29	-0.49	-0.49	-0.31	+0.24	+0.71	+1.30	+1.55	+1.17	+0.49	-0.22	-0.91	-1.41	-1.61	-1.48	-1.15	-0.46	+0.09	+0.52	+0.76	+0.79	+0.59



International
Seismological
Centre

TEMPERATURE: MEANS OF HOURLY VALUES, 1943

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	25.57	25.14	25.01	24.89	24.69	24.61	25.14	26.00	27.65	28.48	28.55	28.67	28.85	28.78	28.70	28.56	28.43	27.89	27.30	26.63	26.25	25.95	25.70	25.53	26.79
February	25.05	24.77	24.72	24.55	24.45	24.46	24.83	25.62	27.37	28.27	28.57	28.49	28.27	28.33	28.30	28.13	27.69	27.22	26.57	26.03	25.74	25.44	25.19	26.51	
March	25.29	24.90	24.79	24.66	24.64	24.59	24.78	25.34	27.49	28.28	28.64	28.74	28.50	28.39	28.45	28.35	28.12	27.69	27.19	26.47	26.04	25.71	25.45	25.27	26.57
April	25.22	24.94	24.90	24.82	24.83	24.83	25.03	25.50	27.68	28.43	28.71	28.72	29.07	29.02	28.96	28.75	28.39	27.72	27.02	26.31	26.04	25.79	25.60	25.42	26.74
May	24.90	24.69	24.63	24.56	24.52	24.49	24.75	25.19	27.48	28.43	28.89	28.87	28.98	28.96	28.76	28.30	27.92	27.38	26.79	25.96	25.63	25.40	25.12	24.99	26.48
June	25.94	25.66	25.59	25.47	25.38	25.27	25.57	24.28	26.69	28.12	28.45	28.66	28.64	28.63	28.47	28.12	27.54	26.72	25.95	25.30	25.06	24.61	24.40	24.21	25.79
July	23.96	23.76	23.64	23.48	23.31	23.11	23.22	23.65	26.40	27.87	28.24	28.21	28.22	28.05	28.12	27.75	27.34	26.67	26.03	25.38	25.04	24.64	24.44	24.18	25.61
August	24.57	24.02	23.84	23.64	23.49	23.42	23.61	24.45	27.15	27.99	28.67	28.69	28.58	28.44	28.54	28.16	27.74	27.13	26.70	25.85	25.42	25.08	24.79	24.57	26.01
September	24.53	24.24	24.00	23.85	23.76	23.67	24.16	25.91	27.67	28.15	28.39	28.46	28.50	28.51	28.17	27.83	27.50	27.03	26.56	25.75	25.39	25.11	24.86	24.68	26.11
October	25.09	24.86	24.63	24.56	24.42	24.31	24.85	25.85	27.39	27.74	28.15	28.45	28.64	28.53	28.48	28.01	27.63	27.19	26.61	26.01	25.79	25.59	25.45	25.40	26.40
November	24.98	24.67	24.42	24.22	24.08	24.12	25.38	26.36	28.65	29.21	29.29	29.29	29.50	28.98	29.23	28.80	28.29	27.83	27.36	26.53	26.07	25.67	25.37	25.09	26.81
December	25.05	24.80	24.65	24.48	24.34	24.35	25.21	26.39	27.79	28.31	28.34	28.26	28.24	28.06	27.87	27.57	27.30	27.04	26.85	26.22	25.93	25.75	25.45	25.20	26.59
Year	24.81	24.54	24.40	24.27	24.16	24.10	24.54	25.38	27.47	28.27	28.57	28.63	28.67	28.55	28.51	28.21	27.86	27.35	26.80	26.08	25.72	25.42	25.17	24.98	26.35

Wet Season
1942-43

24.97 24.72 24.58 24.47 24.33 24.29 24.91 26.17 27.55 28.17 28.28 28.31 28.35 28.33 28.28 28.08 27.83 27.43 26.93 26.40 25.92 25.61 25.38 25.15 26.43

Dry Season
1943

24.29 24.03 23.93 23.79 23.67 23.57 23.79 24.39 26.93 28.10 28.56 28.61 28.61 28.52 28.47 28.08 27.63 26.97 26.37 25.62 25.29 24.93 24.69 24.49 25.97



International
Seismological
Centre

TEMPERATURE: DIURNAL CHANGES, 1943

The departures in degrees centigrade 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	26.79	-1.44	-1.67	-1.80	-1.91	-2.11	-2.19	-1.66	-0.80	+1.05	+1.69	+1.76	+1.88	+2.06	+1.99	+1.92	+1.78	+1.65	+1.11	+0.52	-0.15	-0.52	-0.82	-1.07	-1.24
February	26.51	-1.45	-1.73	-1.78	-1.95	-2.05	-2.04	-1.67	-0.88	+0.86	+1.76	+2.06	+1.98	+1.76	+1.82	+1.78	+1.61	+1.17	+0.70	+0.05	-0.49	-0.78	-1.08	-1.33	
March	26.57	-1.29	-1.68	-1.79	-1.92	-1.94	-1.99	-1.80	-1.24	+0.92	+1.71	+2.07	+2.17	+1.93	+1.82	+1.88	+1.79	+1.56	+1.13	+0.63	-0.09	-0.52	-0.85	-1.11	-1.29
April	26.74	-1.52	-1.80	-1.84	-1.92	-1.91	-1.91	-1.71	-1.24	+0.94	+1.69	+1.97	+1.98	+2.33	+2.28	+2.22	+2.01	+1.65	+0.98	+0.28	-0.43	-0.70	-0.95	-1.14	-1.32
May	26.48	-1.58	-1.79	-1.85	-1.92	-1.96	-1.99	-1.73	-1.29	+1.00	+1.95	+2.41	+2.39	+2.50	+2.48	+2.28	+1.82	+1.44	+0.90	+0.31	-0.52	-0.85	-1.08	-1.36	-1.46
June	25.78	-1.83	-2.11	-2.18	-2.30	-2.39	-2.50	-2.21	-1.50	+0.91	+2.34	+2.67	+2.88	+2.86	+2.85	+2.69	+2.34	+1.76	+0.93	+0.16	-0.49	-0.73	-1.18	-1.39	-1.58
July	25.61	-1.69	-1.88	-2.00	-2.16	-2.32	-2.52	-2.41	-1.97	+0.78	+2.25	+2.63	+2.60	+2.61	+2.45	+2.52	+2.15	+1.75	+1.08	+0.44	-0.20	-0.54	-0.94	-1.13	-1.39
August	26.01	-1.62	-1.97	-2.15	-2.36	-2.51	-2.58	-2.39	-1.55	+1.15	+1.98	+2.66	+2.68	+2.57	+2.43	+2.52	+2.14	+1.72	+1.11	+0.68	-0.17	-0.61	-0.95	-1.24	-1.46
September	26.11	-1.57	-1.86	-2.10	-2.25	-2.34	-2.43	-1.94	-0.19	+1.56	+2.04	+2.28	+2.35	+2.39	+2.40	+2.06	+1.71	+1.38	+0.91	+0.44	-0.37	-0.73	-1.01	-1.26	-1.44
October	26.40	-1.32	-1.55	-1.78	-1.85	-1.99	-2.10	-1.56	-0.56	+0.99	+1.34	+1.75	+2.05	+2.25	+2.13	+2.08	+1.62	+1.24	+0.80	+0.22	-0.38	-0.60	-0.80	-0.94	-0.99
November	26.81	-1.83	-2.14	-2.39	-2.59	-2.73	-2.69	-1.43	-0.45	+1.84	+2.40	+2.48	+2.48	+2.69	+2.17	+2.42	+1.99	+1.48	+1.02	+0.55	-0.28	-0.74	-1.14	-1.44	-1.72
December	26.39	-1.34	-1.59	-1.74	-1.91	-2.05	-2.04	-1.18	0.00	+1.40	+1.92	+1.95	+1.87	+1.85	+1.67	+1.48	+1.18	+0.91	+0.65	+0.46	-0.17	-0.46	-0.64	-0.96	-1.19
Year	26.35	-1.54	-1.81	-1.95	-2.09	-2.19	-2.25	-1.81	-0.97	+1.12	+1.92	+2.22	+2.28	+2.32	+2.20	+2.16	+1.86	+1.51	+0.98	+0.45	-0.27	-0.62	-0.93	-1.18	-1.37
Wet Season 1942-43	26.43	-1.46	-1.71	-1.86	-1.96	-2.10	-2.14	-1.53	-0.26	+1.11	+1.73	+1.85	+1.88	+1.92	+1.90	+1.85	+1.64	+1.40	+0.99	+0.50	-0.03	-0.51	-0.82	-1.05	-1.29
Dry Season 1943	25.97	-1.68	-1.94	-2.05	-2.19	-2.29	-2.40	-2.19	-1.58	+0.96	+2.13	+2.59	+2.64	+2.63	+2.55	+2.50	+2.11	+1.67	+1.01	+0.40	-0.35	-0.68	-1.04	-1.28	-1.48





FOURIER COEFFICIENTS: BAROMETRIC PRESSURE AND TEMPERATURE, 1943

Values of P_n and A_n in the series $\sum P_n \sin(15nt + A_n)$, 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
Wet Season 1942-43	0.32	21	1.33	146	0.03	154	0.04	5
Dry Season 1943	0.55	11	1.10	143	0.16	342	0.07	236
Year 1943	0.43	11	1.11	144	0.07	17	0.03	253
Barometric Pressure								
	mb	°	mb	°	mb	°	mb	°
Wet Season 1942-43	2.08	236	0.45	104	0.35	5	0.17	234
Dry Season 1943	2.52	234	0.76	75	0.39	333	0.34	182
Year 1943	2.28	235	0.60	84	0.35	349	0.24	193
Temperature								
	°C	°	°C	°	°C	°	°C	°

RELATIVE HUMIDITY, 1943

Percentages at exact even hours

	2	4	6	8	10	noon	14	16	18	20	22	24	Mean
M o n t h													
January	85	86	85	80	76	75	75	75	77	82	84	85	81
February	87	87	86	83	77	75	77	77	78	83	85	86	82
March	86	86	86	83	76	75	76	76	79	84	86	83	81
April	89	89	89	85	78	77	76	77	79	86	87	89	83
May	89	89	89	87	79	77	77	79	82	87	88	89	84
June	86	86	87	83	72	70	70	71	76	80	83	85	79
July	86	87	87	84	75	74	74	75	78	82	85	86	81
August	83	84	84	77	72	71	72	72	74	77	81	83	78
September	81	81	81	77	73	71	70	72	73	77	80	80	76
October	81	81	81	79	77	76	75	76	77	79	80	81	79
November	84	84	84	76	73	72	72	73	75	79	81	82	78
December	86	87	86	80	77	77	76	79	79	82	85	86	82
Y e a r	85	86	85	81	75	74	74	75	77	81	84	85	80
Wet Season 1942-43	85	85	85	81	77	76	77	77	79	83	84	85	81
Dry Season 1943	86	87	87	83	75	73	73	74	77	81	84	86	81



Mean values in millibars at exact even hours

M o n t h	H o u r												Mean
	2	4	6	8	10	noon	14	16	18	20	22	24	
January	27.1	27.1	26.3	27.6	29.7	29.5	29.7	29.3	29.0	28.5	28.9	27.8	28.5
February	27.2	26.9	26.4	27.3	29.8	29.3	29.8	29.8	29.0	29.0	28.1	27.6	28.4
March	27.1	26.7	26.6	26.8	29.3	29.5	29.5	29.3	29.4	29.2	28.5	26.8	28.2
April	28.1	27.8	27.9	27.8	30.2	30.3	30.6	30.3	29.4	29.5	28.9	29.0	29.0
May	27.7	27.6	27.6	28.0	30.6	30.7	30.9	30.4	30.0	29.3	28.7	28.3	29.2
June	25.1	25.0	24.9	25.2	27.3	27.7	27.5	27.0	26.6	25.8	25.7	25.7	26.3
July	25.4	25.2	24.6	24.6	28.2	28.3	28.1	29.5	27.3	26.7	26.3	25.9	26.5
August	24.8	24.4	24.3	23.7	27.3	27.9	27.9	27.5	26.6	25.8	25.8	25.7	26.2
September	24.4	24.1	23.8	25.8	27.8	27.7	27.3	27.0	26.1	25.4	25.4	24.9	25.8
October	25.6	31.5	24.6	26.4	28.6	29.7	29.4	28.7	27.8	26.6	26.3	26.2	27.2
November	26.2	28.4	25.2	26.1	29.3	29.3	28.8	28.9	27.9	27.3	26.7	26.2	27.5
December	26.9	26.8	26.1	27.4	29.8	29.8	28.9	29.2	28.2	27.8	28.1	27.6	28.2
Y e a r	26.2	26.1	25.5	26.3	29.0	28.9	28.9	28.7	28.0	27.4	27.7	27.0	27.5
Wet Season 1942-43	26.5	26.2	25.8	27.6	29.7	29.3	29.8	29.2	28.9	28.6	27.5	27.2	27.8
Dry Season 1943	25.6	25.7	25.4	25.4	28.6	28.5	28.5	28.1	27.4	26.5	26.6	26.4	27.2

NOTE: Every value, including seasonal and annual means, is deduced from corresponding values of dry bulb temperature and relative humidity, using vapour pressure tables.



RAINFALL AT APIA OBSERVATORY - 1943

Month	Number of Days on which stated Amounts of Precipitation were recorded (Amount of rain in millimetres)				Total Rain Days	Total Rain-fall mm.	Greatest Amount in 24 hours. mm.	Date	Greatest Amount in one hour. mm.	Date	Time
	0.2 - 0.9	1.0 - 9.9	10.0 - 24.9	25.0 - 99.9							
January	7	6	7	3	0	202.8	31.9	27th.	17.3	15th.	7-8 p.m.
February	3	9	6	5	0	368.5	59.8	21st.	32.0	2nd.	3-4 p.m.
March	4	9	4	3	0	225.7	62.0	6th.	25.9	20th.	noon-1 p.m.
April	2	11	3	4	0	256.1	47.9	22nd.	24.9	23rd.	11 a.m.-noon
May	2	14	2	2	0	157.2	34.3	19th.	18.8	15th.	10-11 p.m.
June	3	4	1	0	0	30.3	14.2	9th.	3.3	10th.	9-10 a.m.
July	1	6	1	0	0	41.1	12.1	26th.	5.8	9th.	3-4 p.m.
August	2	8	0	0	0	26.7	6.8	6th.	5.6	7th.	2-3 a.m.
September	4	4	2	1	0	140.4	82.8	16th.	28.2	16th.	noon-1 p.m.
October	7	9	4	3	0	252.8	88.3	18th.	19.8	30th.	8-9 a.m.
November	2	8	0	0	0	37.4	7.8	19th.	6.6	20th.	2-3 a.m.
December	4	11	6	3	0	276.4	37.6	27th.	21.1	27th.	9-10 p.m.
T o t a l	41	99	36	24	0	2015.4	88.3	18th Oct.	32.0	2nd Feb.	3-4 p.m.

NOTE: The rainfall is measured at 9 a.m. each morning and entered to the previous day.
The greatest rain in an hourly period is credited to the day it occurs.



RAINFALL IN SAMOA, 1943

(Expressed in inches)

Station	Elevation (feet)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year	Authority
UFOLU															
Alefua	185	8.73	18.76	14.68	7.40	10.06	2.46	1.29	0.47	5.85		10.66	16.65		Mr. M.R. Mechem
Aleisa	910	17.36	23.04	13.99	6.94	22.67	3.13	1.92	1.24	6.95		1.60	17.26	114.18	W.Z. Reparation Estates
Iotofaga	40	8.38	10.48	13.34	3.28	2.12	1.57	8.00	4.20	9.52	8.66	3.47	7.75	54.84	Rev. Father Beauchemin
Mulifanua	14	3.60	9.45	8.84	10.08	6.19	1.19	3.55	1.58	6.85	2.78	1.47	10.88	79.35	N.Z. Reparation Estates
Mulinu'u	5	7.99	14.51	8.89	10.08	14.32	8.27	1.62	1.05	5.53	9.95				Apia Observatory
Piule	65	6.80	12.80	11.49	4.19	7.33	1.52	9.13	2.73						Rev. R.W. Allardice
Satapu'ala	10				9.64	8.57	2.28	4.15	0.73	5.87		7.26	10.96		U.S. Marine Corps
Tafa'isata	550				14.99	10.40	2.13	2.09	0.82	4.62	8.58	1.68	6.68	98.72	N.Z. Reparation Estates
Ivona'imato	105	13.33	16.62	18.12	12.93	7.96	3.64	0.75	0.67	6.99	10.46				N.Z. Reparation Estates
Va'ilima	616	7.16	13.76	13.27	12.93	6.56	1.20	5.83	1.73	8.44	4.57	6.74	13.09		Government House Va'ilima
Va'ipepa	720	12.58	22.00	14.10	11.37	10.28	2.61	1.44	1.12	8.06	11.76	7.62	13.88	116.82	N.Z. Reparation Estates
Va'ipoto	400	8.97	13.72	8.63	11.18	5.10	1.67	0.89	1.38	5.30	10.03	1.70	11.64	80.21	Mr. A.R. Cobcroft
Va'itele	20														N.Z. Reparation Estates
SAVAI'I															
Fegemalo	8	3.07	18.96	12.65	8.57	2.18	9.53	2.59	1.47	1.23		5.77	17.42		The Wireless Operator
Falealupo	8	4.69	35.92			5.06	1.14	0.70	3.30	6.21	9.45	8.05			Rev. Father Bourke
Gaga'emalae						9.68	2.27	5.12	1.80	6.77	20.18	3.67	15.08	114.66	Tolo Laupu'e
Tuasivi	25	9.20	8.89	8.67	21.01	11.36	3.22	4.81							The Resident Commissioner
Va'ipouli	210					5.79	6.22								The Superintendent of Schools
TUTU'ILA (American Samoa)															
Tafuna		9.06	8.19	19.15	7.15	14.56	1.94	3.00	1.50	9.20	8.30	5.00	29.00	116.05	U.S. Naval Station
Swains Island		10.53	7.64	15.72											U.S. Naval Station
Ta'u Manu'a		11.08	15.91	23.08	6.52	16.41	7.10								U.S. Naval Station

- NOTE:**
- (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 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, 1945

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	%
Month																
January	1.2	15.6	20.9	21.1	23.5	24.0	24.2	20.4	19.8	17.9	17.8	12.1	1.5		240.0	60
February	00.0	10.0	18.2	18.2	20.0	20.9	19.6	19.5	17.0	15.9	17.0	8.7	0.3		204.6	58
March	00.0	8.2	17.0	18.4	21.5	21.2	17.9	18.6	15.6	14.4	13.1	5.8	00.0		189.2	50
April	00.0	7.0	19.7	22.8	23.7	21.8	22.9	19.7	19.2	19.5	18.1	7.2	00.0		222.6	65
May	00.0	5.6	21.1	25.3	24.7	25.5	24.9	24.8	20.4	18.2	15.5	5.1	00.0		232.6	65
June	00.0	8.1	24.1	26.6	26.8	25.7	26.4	26.6	24.7	23.8	21.8	7.5	00.0		267.8	79
July	00.0	7.3	23.0	27.0	28.9	28.2	28.0	26.0	23.9	23.4	19.2	7.5	00.0		268.5	76
August	00.0	8.2	27.4	28.2	28.9	27.8	26.8	27.4	25.2	24.6	23.7	10.9	00.0		285.9	79
September	00.0	9.9	26.2	27.6	25.4	26.2	26.4	24.2	22.4	21.4	18.8	9.5	0.6		261.5	73
October	0.1	11.7	18.5	20.6	22.2	22.1	22.1	21.5	19.0	16.6	15.2	9.5	0.7		222.4	58
November	1.2	18.3	24.1	25.6	26.6	23.8	22.9	23.5	16.2	17.0	16.2	11.2	1.0		246.8	65
December	1.0	14.2	20.4	20.1	21.1	20.3	18.5	17.3	10.5	8.9	8.7	5.8	0.6		182.5	45
T o t a l	3.5	124.1	260.6	279.5	293.3	287.5	280.6	269.3	253.9	221.6	205.1	100.6	4.5		2824.4	



International
Seismological
Centre



ANALYSIS OF SUNSHINE, 1943

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	20	18	15	20	19	25	26	27	24	21	23	11	249
Partly Cloudy	5	4	9	6	9	5	3	3	4	3	6	13	70
Cloudy	6	6	7	4	3	0	2	1	2	7	1	7	46

WIND, 1943

Means of Hourly Values of Wind Speed in Miles per hour

Hour	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	4.9	4.6	4.2	4.2	4.0	3.9	4.1	4.5	5.5	6.1	6.4	7.3	7.5	7.2	6.8	6.3	6.1	7.7	6.2	6.0	4.3	3.8	4.3	4.9	5.4
February	4.0	4.0	3.5	3.5	3.7	4.0	4.1	3.9	4.2	6.1	7.1	8.4	8.3	8.7	8.0	8.0	7.0	6.3	6.8	5.7	3.9	3.5	3.2	3.9	5.4
March	3.0	3.2	3.3	4.0	3.5	3.8	4.3	3.2	3.3	5.7	6.9	7.5	8.2	7.8	7.7	7.3	6.9	6.0	6.0	4.2	3.8	3.4	4.0	3.6	5.0
April	3.9	3.6	3.6	3.7	3.5	3.8	4.1	3.8	3.5	5.5	6.9	7.7	6.8	6.7	7.6	7.1	7.0	6.6	5.7	3.6	3.1	3.2	3.5	4.1	4.9
May	3.7	3.8	3.8	3.6	3.7	4.6	4.2	3.6	3.2	5.1	7.0	8.1	8.3	8.7	9.3	8.9	7.5	7.0	5.3	3.4	3.7	3.3	3.6	4.1	5.3
June	5.6	5.3	5.2	4.9	5.2	5.0	4.9	5.4	5.1	9.0	11.4	13.8	14.9	15.0	14.1	12.8	12.0	11.4	9.1	6.6	6.1	6.2	5.6	5.3	8.3
July	4.3	4.1	4.0	3.8	3.6	3.5	3.4	3.5	4.2	7.0	8.8	10.8	11.4	11.7	11.9	11.6	11.0	9.9	7.5	6.0	4.9	4.5	4.6	4.3	6.7
August	5.7	5.2	4.8	4.9	4.6	4.5	4.3	4.9	7.2	10.9	15.9	15.5	16.3	16.2	16.6	15.5	14.5	14.4	12.8	7.1	5.6	5.6	5.7	5.8	9.3
September	4.9	4.0	3.6	3.7	3.7	4.1	4.3	4.9	7.0	10.0	11.1	11.8	11.8	11.4	11.1	10.7	10.4	10.4	9.5	6.9	4.6	4.5	4.6	4.5	7.2
October	4.9	5.4	4.8	4.4	5.2	4.9	4.5	5.9	9.2	11.4	12.1	12.4	12.5	12.7	12.8	12.4	11.9	11.0	9.6	6.6	4.8	4.9	5.2	5.7	8.1
November	3.8	3.5	3.5	3.3	3.6	3.5	3.2	2.6	4.8	9.0	9.0	8.9	9.2	9.2	7.8	7.9	7.6	6.3	5.6	3.8	3.5	3.2	3.2	3.5	5.4
December	3.1	3.4	3.4	3.1	3.2	3.0	2.6	3.2	3.4	5.3	6.5	6.5	7.0	6.4	5.4	5.2	5.3	4.8	3.7	3.7	5.4	2.9	3.1	2.6	4.1
Year	4.3	4.2	3.9	3.9	4.0	4.1	4.0	4.1	5.1	7.6	8.9	9.9	10.2	10.1	9.9	9.5	8.9	8.5	7.3	5.3	4.3	4.1	4.2	4.4	6.3
Wet Season 1942-43	4.1	3.8	3.9	3.9	4.0	3.9	3.9	4.1	5.8	7.7	8.2	9.3	9.3	9.2	8.7	8.4	7.8	7.8	7.1	5.8	4.4	3.9	4.1	4.3	6.0
Dry Season 1943	4.8	4.6	4.5	4.3	4.3	4.4	4.2	4.3	4.9	8.0	10.4	12.1	12.7	12.9	12.9	12.2	11.3	10.7	8.7	5.8	5.1	4.9	4.9	4.9	7.4



PERCENTAGE FREQUENCIES OF WINDS, 1943

(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	2	8	12	27	16	25	8	1	2	0	248
February	2	6	11	19	12	23	14	5	7	0	223
March	6	5	9	19	12	18	16	10	5	0+	248
April	2	5	8	20	24	23	10	4	4	0	240
May	4	4	5	25	24	23	9	1	3	0	247
June	1	1	3	34	27	25	8	0+	0+	0	240
July	7	2	6	32	20	26	6	2	1	0	248
August	4	0	1	47	21	24	3	0+	0	0	248
September	6	3	4	40	19	23	5	0	0+	0	240
October	0+	0+	3	40	28	22	7	0	0	0	248
November	0+	1	7	31	13	31	14	0+	1	0	240
December	13	5	4	13	4	27	11	8	13	0	240
Year	4	3	6	29	19	24	9	3	3	0+	2910

NOTE: The individual percentages are rounded off to the nearest whole number.
0+ means that there were some observations but less than 0.5%.

MONTHLY WIND SPEED AND DIRECTION, 1943

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 5.4 5.4 5.0 4.9 5.3 8.3 6.7 9.3 7.2 8.1 5.4 4.1 7.4

Greatest speed in Gust 37 30 47 37 32 34 40 41 44 42 32 34 47
 Direction of Gust NE E N ENE E E ENE E ENE NE ENE ESE N

Greatest speed for
 one hourly period 22 25 21 26 23 27 25 28 28 22 23 20 28

Prevailing direction
 of wind E & CALM E CALM ESE ESE CALM E ESE ESE ESE E & ESE ESE
 E E E ENE E & ENE E ENE E

Most frequent direction
 of wind (Eight points
 only). E S E SE E E E E E E E & S S E



THUNDER AND LIGHTNING, 1943

M o n t h	Number of Days with				Lightning only	Lightning and Thunder	Total
January	3	4	7
February	3	7	10
March	8	6	14
April	5	5	10
May	5	9	14
June	4	0	4
July	1	1	2
August	0	0	0
September	0	2	2
October	7	3	10
November	6	17	23
December	6	13	19
Y e a r	48	66	114

Pilot Balloon Ascents, 1943

The usual method of observing the balloon with a single theodolite was used during 1943, assuming a constant rate of ascent calculated from the formula.

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

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.

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 HHddv₅ HHddv₅ ----- C_LC_MHHM

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). 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 is shown in the annual report for 1941.

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

v₅ = average wind velocity in the layer expressed in code (see below)

$C_L C_M$ = usual information about clouds

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

Code for V_5 in miles per hour.

<u>dd = 01 - 36</u>		<u>dd = 51 - 86</u>	
<u>V_5</u>	<u>m.p.h.</u>	<u>V_5</u>	<u>m.p.h.</u>
0	0- 1	0	30-32
1	2- 4	1	33-35
2	5- 7	2	36-38
3	8-10	3	39-41
4	11-14	4	42-45
5	15-17	5	46-48
6	18-20	6	49-51
7	21-23	7	52-54
8	24-26	8	55-57
9	27-29	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	5 = entered cloud layer
1 = obscured by passing clouds	6 = lost accidentally
2 = balloon burst	7 = obscured by rain
3 = lost in haze	8 = confused with star
4 = lost near the sun	9 = for use when none of the above apply.

January

0122	00025	02015	05025	08016	57095		
0209	00033	02034	05034	10045			
0223	00012	02344	05344	09364	54115		
0309	00000	02241	05312	10315	15354	52181	
0423	00043	02054	05045	10046	15049	51195	
0508	00151	02114	05095	10075	15075	20074	30063
	54295						
0523	00095	02105	05098	10583	13122		
0608	00133	02114	05095	10085	74145		
0622	00114	02093	05073	10085	15085	18074	44201
0709	00170	02113	05114	10104	15124	20144	30106
	10338						
0722	00081	02094	05095	10085	15085	20085	20292
0808	00163	02114	05104	10095	15104	20093	50209
0822	00113	02106	05105	10094	15096	20096	26085
	10292						

January (contd.)

0908	00151	02114	05094	10066	15075	20073	30113
	35124	10379					
0922	00082	02085	05095	10095	15085	20075	30073
	40073	47104	10479				
1008	00122	02093	05084	10074	15074	20074	20231
1022	00100	02121	05062	10035	15029	90152	
1122	00102	02082	05064	10044	15054	20065	30112
	10322						
1208	00090	02072	05073	08073	20095		
1222	00071	02062	05072	10062	15072	20082	30083
	40083	50073	60104	70163	80173	90203	00204
	10195	20186	30177	20149			
1308	00201	05112	10112	15092	20092	26051	20278
1322	00083	02084	05083	10083	15083	20083	30131
	40083	50032	60343	70314	37705		
1408	00200	02112	05112	10112	15112	20132	27142
	41278						
1500	00000	02102	05103	10104	15114	20112	25032
	30023	38365	97385				
1508	00180	02112	05073	10094	15093	20072	26002
	47275						
1522	00094	02084	05084	10094	14095	80145	
1623	00362	02084	05084	10064	15065	20085	30074
	20349						
1708	00180	02122	05104	10094	20115		
1721	00060	02063	05072	10113	15154	20102	30102
	40142	48154	20492				
1808	00181	02142	05182	10162	15162	20121	23101
	24249						
1822	00061	02022	20065				
1908	00181	02251	05251	10262	15292	20301	30283
	10329						
1922	00031	02361	05341	10182	10119		
2008	00901	02191	05130	10201	15270	20274	41239
2022	00361	02042	05071	10091	15112	20052	24323
	20269						
2109	00181	02151	05051	10353	15361	10189	
2122	00362	02323	05302	10302	15261	20294	25294
	26292						
2209	00190	02102	05102	10241	15191	20282	30254
	57329						
2222	00071	02072	05062	10073	15072	18351	83205
2308	00232	02294	05286	10285	57145		
2322	00072	02042	05032	10361	15242	20304	54216
2408	00342	02342	05363	10014	15014	20013	27074
	11299						
2422	00361	02081	05023	09025	57109		
2508	00112	02083	05064	20085			
2522	00084	02104	05095	10096	15580	13185	
2608	00132	02114	05116	10098	14097	00175	
2622	00095	02106	05097	10107	24145		

January (Contd.)

2708	00096	02096	05097	10108	14108	30155	
2722	00093	02084	05096	10086	15083	20084	30102
	40142	50243	80531				
2808	00162	02113	05083	10084	15075	20072	25052
	20269						
2822	00034	02024	05052	09063	54095		
2909	00211	02202	05322	10332	15023	18013	20189
2922	00051	02051	05041	10363	15090	84175	
3008	00141	02122	05102	10162	15251	18360	20189
3022	00061	02082	05062	10021	15032	20142	30073
	24341						
3108	00202	02242	05321	10322	15052	20072	30083
	40063	10469					
3121	00050	02042	05091	10132	15132	20092	27085
	23275						

February

0109	00191	02191	05111	08171	40109		
0122	00061	02062	05052	10072	15052	20082	30102
	40113	50161	60262	70233	80252	44829	
0222	00291	02262	05232	10222	15212	20232	30273
	36412						
0322	00363	02314	05325	10334	15352	20014	86243
0410	00211	02242	05303	10354	15312	20321	27302
	5x291						
0509	00201	02232	05292	09282	50115		
0601	00270	02312	05314	10325	15282	20251	30174
	52395						
0609	00191	02261	05342	10293	15263	20232	23232
	40241						
0622	00303	02314	05323	10322	15182	20222	24241
	81245						
0709	00190	02221	05191	10132	15192	20283	27283
	10279						
0722	00344	02344	05333	52095			
0805	00355	02356	05357				
0822	00335	02026	05016	10332	52155		
0908	00191	02261	05023	10035	15065	22179	
0922	00074	02054	05054	08054	13095		
1008	00062	02062	05054	10045	15048	20179	
1021	00021	02062	05053	10074	15066	20074	30093
	35054	20361					
1108	00190	02112	05073	10054	15065	20054	20211
1122	00113	02093	05084	10094	15085	20089	24055
	80262						
1208	00170	02134	05106	10097	15098	20098	10249
1221	00117	02107	05117	10095	15087	20088	11219
1308	00123	02115	05117	10108	15108	20098	20239
1321	00115	02106	05117	10107	15600	20108	20219
1408	00123	02115	05095	10094	20125		

February (Contd.)

1421	00200	02281	05354	10367	15027	20015	84215
1508	00190	02112	05071	10033	15042	20093	27102
	50279						
1522	00093	02074	05083	10085	20064	30114	28322
1608	00161	02123	05104	10094	15094	20104	27104
	10279						
1622	00094	02095	05095	10085	15074	20076	30078
	20305						
1708	00151	02123	05094	10064	15065	20065	27084
	36275						
1722	00093	02103	05094	10074	15085	20075	30074
	37086	20371					
1808	00161	02113	05083	10074	15084	20094	27094
	60277						
1821	00041	02052	05082	10084	15104	20115	30114
	40171	50214	60184	70145	80144	90179	20919
1908	00201	02222	05032	10041	15102	20132	20239
1921	00274	02284	05274	10274	15272	20283	29264
	27295						
2008	00252	02224	05225	10225	15206	51205	
2021	00362	02353	05314	10262	15242	80175	
2108	00263	02263	05316	10307	15304	20294	26303
	36265						
2121	00202	02103	05034	94075			
2210	00364	02006	05355	92085			
2221	00271	02332	05353	10367	15510	96175	
2308	00170	02151	05033	10017	15366	20355	52239
2321	00052	02053	05053	10074	15074	20084	30104
	40115	47105	10490				
2409	00181	10024	15044	20034	27053	40291	
2421	00121	02112	05073	10053	15053	20054	10201
2508	00140	02122	05073	10063	15073	20083	23073
	40249						
2521	00082	02093	05094	10084	15085	20075	30074
	40074	50065	60054	10686			
2608	00160	02123	05093	10085	15075	20076	50219
2621	00093	02104	05117	10107	15097	20097	30106
	40107	50096	60106	65105	10682		
2708	00062	02093	05116	10108	15116	50181	
2721	00121	02113	05084	10097	13095	70131	
2808	00181	02123	05104	10085	15085	20114	10219
2821	00061	02062	05043	10053	15064	30185	

March

0108	00180	02272	05293	10332	15111	20124	50239
0121	00060	02342	05012	10042	15062	20063	30093
	40084	50052	20529				
0208	00180	02113	05112	10074	15045	20054	25056
	50269						
0221	00112	02103	05094	10083	15063	20044	30064
	40082	50093	60086	20581			

March (Contd.)

0321	00061 40232	02072 50182	05093 60212	10093 60200	15112	20093	30081
0408	00180 20279	02102	05052	10054	15072	20102	27092
0421	00050 40231	02051 50192	05061 10505	10041	15061	20042	30083
0508	00181 20309	02151	05061	10062	15042	20051	30052
0521	00000 40341	02361 20340	05362	10022	15023	20022	30341
0608	00000 40265	02253	05264	10273	15312	20282	24261
0621	00283 21242	02265	05255	10274	15293	20292	24292
0722	00342	02333	05352	17065			
0808	00285	02285	05285	10268	92115		
0821	00304	02304	05286	08278	57095		
1008	00252	02263	10274	15253	80155		
1021	00042	02291	05312	10232	15242	20172	73236
1108	00231	02273	05324	10325	86225		
1121	00302	02304	05316	10313	15315	20304	71205
1208	00252 46265	02264	05296	10286	15275	20263	26243
1222	00292	02324	05294	10264	15275	17276	72185
1308	00251 12242	02273	05284	10276	15277	20287	23287
1322	00000 34284	02272 52355	05293	10274	15283	20284	30283
1408	00111	02123	05053	10332	15011	18052	52202
1422	00054	02064	6x035				
1508	00077	02057	05046	09047	94112		
1521	00345	02356	05368	10017	97125		
1608	00053	02054	05044	10036	15026	20175	
1622	00094	02106	05095	10096	15084	46171	
1708	00171	02124	05106	09096	20105		
1721	00071 40109	02072 50089	05092 21509	10115	15104	20107	30108
1808	00171	02162	05142	10144	12134	20141	
1822	00501	02102	05114	10124	15125	18125	47199
1908	00210	02142	05114	10116	15115	17114	51185
1921	00093	02093	05114	10116	57115		
2002	00000	02000	05000	10270	15320	20270	32236
2009	01801	02102	05102	10182	13134	36145	
2021	00091	02092	05102	10063	15073	19084	77206
2108	00191	02212	05332	10354	15335	53179	
2121	00060 84359	02071	05023	10024	15044	20055	30052
2208	00171	02113	05084	10074	15076	20209	
2221	00093	02104	05116	10105	15096	20088	10212
2308	00000	02127	05116	10097	15086	20097	10249
2321	00097	02107	05118	10108	15098	20108	21215

March (Contd.)

2408	00142	02134	05105	10089	15099	20098	62205
2421	00095	02095	05098	80081			
2508	00122	02104	20055				
2521	00094	02105	05106	10097	15097	20087	30116
	40098	22439					
2608	00190	02132	05123	10124	15114	10179	
2621	00094	02095	05124	10125	15125	20105	30116
	40114	50115	10589				
2708	00171	02132	05114	10124	15125	20114	70210
2721	00000	02092	05084	10074	52121		
2808	00000	02121	05102	10103	15093	20093	10249
2821	00091	02031	05022	10032	15032	20052	30052
	40123	50162	60162	70155	80168	90169	24919
2908	00000	02092	05012	10013	15024	20072	50207
2921	00000	02101	05031	10352	15362	20341	22242
3008	00000	02201	05061	10032	15042	18000	71215
3021	00091	02083	05073	10073	15053	20062	30121
	35102	23362					
3108	00104	02104	05104	10094	12104		
3121	00093	02104	05095	10105	15095	20085	30075
	10346						

April

0108	00000	02134	05115	10077	15095	20094	80249
0122	00092	02104	05105	10104	15095	20094	30105
	40105	46105	80495				
0208	00121	02123	05073	10073	15073	20093	70239
0221	00092	02103	05093	10064	15066	20074	30074
	10326						
0308	00141	02114	05085	10086	80115		
0321	00091	02092	05073	10064	15055	14161	
0408	00000	02123	05093	10093	15083	70179	
0421	00000	02000	05112	10114	15114	20104	30084
	46095	70466					
0508	00000	02000	05112	10103	20124	30123	70278
0521	00051	02032	05032	10032	15032	20032	20212
0608	00000	02072	05102	10113	15082	10158	
0621	00000	02011	05362	10362	15352	20342	30362
	40311	20419					
0708	00000	02171	05171	10000	15301	20175	
0721	00301	02291	05283	10252	15263	30273	40303
	50262	60213	70183	80188	90169	00137	06107
	10026						
0808	00000	02121	05121	10251	15321	10189	
0821	00092	02093	05094	10073	15063	20041	30301
	40313	10412					
0908	00000	02122	05093	10083	15033	20102	26083
	20278						
0921	00092	02104	05116	10104	15094	20084	30092
	40151	20435					

April (Contd.)

1008	00161	02113	05104	10086	15076	18085	20208
1021	00094	02094	05095	10085	15076	74185	
1108	00161	02113	05084	10075	15073	20073	21073
	21231						
1121	00093	02094	05094	10086	20094	30083	70321
1208	00160	02123	05105	10105	15104	20103	23103
	20248						
1221	00104	02105	05095	10095	15085	20084	29094
	20295						
1308	00162	02114	05105	10087	50145		
1321	00094	02095	05095	10086	15087	20201	
1408	00141	02123	05085	10074	15075	20066	27095
	74279						
1421	00123	02104	05085	10086	15076	20075	29094
	24297						
1508	00142	02104	05096	10088	10149		
1521	00083	02086	05104	10096	15097	20182	
1608	00142	02124	05107	10086	15087	20085	30094
	74309						
1621	00093	02104	05105	10095	15095	20082	30074
	40055	10462					
1708	00181	02113	05084	10064	15054	20054	24245
1721	00000	02000	05000	10364	15014	20024	20275
1808	00211	05015	10367	84141			
1821	00324	02315	05315	52065			
1908	00345	02344	05345	62055			
1922	00304	02304	92055				
2008	00142	02313	05323	51095			
2021	00231	02222	05223	10238	15257	18239	62201
2103	00061	02011	05101	97089			
2108	00201	02132	05104	10192	15202	18183	51205
2121	00091	02112	05112	10113	15072	20061	30296
	77326						
2208	00103	02104	04104	20055			
2222	00051	02062	05032	08022	3x099		
2301	00092	02102	05052	10034	15013	20352	30322
	40031	50202	60203	70253	21739		
2408	00181	02092	05062	10012	15002	20322	50209
2421	00042	02063	05093	10113	15121	84175	
2508	00202	05182	10132	15122	50159		
2521	00000	02051	05231	10121	15152	20142	30335
	84309						
2604	00351	02313	05271	10181	15181	20092	53210
2608	12203	22804	43605				
2621	00361	05312	10334	15355	20353	30022	37142
	82375						
2708	00202	02101	05042	10023	15042	20052	23051
	53249						
2721	00083	02083	05074	10075	15085	20085	30104
	40115	50135	60136	20602			
2808	00161	02123	05084	10094	15094	20104	26104
	50278						

April (Contd.)

2821	00082 20261	02083	05083	10093	15112	20083	24073
2908	00161	02122	05083	10053	15053	50179	
3008	00182	02123	05084	10073	14052	50155	
3022	00000 40103	02091 50102	05052 60102	10052 60100	15012	20053	30075

May

0108	00191 10248	02121	05091	10182	15246	20302	23312
0121	00112 40364	02093 50352	05084 60013	10103 70294	15141 80297	20162 85269	30352 20853
0208	00181 40354	02102 10428	05093	10093	15103	20112	30362
0222	00113 20245	02084	05084	10056	15046	20046	23026
0308	00181	02132	05073	08054	81095		
0321	00142	02082	05043	10013	12354	96125	
0408	00141 52269	02102	05102	10241	15332	20332	26323
0421	00093 40051	02094 46436	05093	10084	15093	20093	30051
0508	00141	02114	05104	10104	15102	20185	
0522	00084	02106	05106	10096	15094	14155	
0608	00161	02133	05125	10105	15094	20104	70209
0621	00094 40112	02104 50162	05105 60172	10085 67214	15075 24702	20095	30114
0708	00101	02115	05106	10075	15064	20151	
0722	00084 50075	02095 60055	05095 70077	10083 80095	20102 90265	30034 00266	40044 20379
0808	00162	02113	05084	10064	15043	20022	50219
0822	00900 50342	02082 60327	05054 70346	10044 80335	20364 90255	30324 00721	40015 24091
0908	00181	06352	10343	15333	20303	80231	
0921	00360	02312	05322	10324	15314	20313	20212
1008	00000	09253	10264	15283	20284	52235	
1022	00000	10344	15333	26171			
1108	00201	13302	15292	20304	04219		
1122	00332 40326	02323 50335	05282 60326	10252 70349	15272 26702	20284	30304
1208	00181	05072	11052	15282	20186		
1222	00361 40294	02342 50304	05341 60306	10321 70296	15322 76287	20333 10762	30294
1308	00181	05071	10091	17362	20343	10246	
1321	00092	02082	05181	10181	82146		
1401	00054 37304	02064 27385	05082	10082	15073	20251	30332
1408	00201	02212	05212	10172	15113	20082	07216
1421	00083 50306 24169	02104 60750	05113 70279	10061 80760	20113 90269	30252 00772	40294 01754

May (Contd.)

1508	00000 20248	02000	05000	10122	15132	20133	23171
1521	00111 53275	02112	05143	10104	15083	20045	26054
1621	00103 20322	02104	05095	10114	15081	20351	30283
1708	00141	02113	05113	10123	15092	77151	
1721	00000 24345	02131	05022	10363	15014	20354	30285
1808	00000 28231	02021	05352	10334	15344	20324	21334
1821	00000 24262	02000	05343	10336	15306	20307	25317
1908	00272	02265	05276	10297	15316	18317	24209
2008	00121 63239	02142	05181	10151	15181	20241	21311
2020	00050 40285	02041 24402	05030	10311	15312	20325	30286
2108	00211	05121	10122	12092	53145		
2121	00000	02102	05113	10145	15123	20142	52205
2208	00181	02124	05117	10125	15074	44179	
2221	00096 20266	02086	05107	10105	15096	20096	24093
2308	00141	02115	05118	10104	15124	18142	80209
2321	00095 37085	02108 10382	05097	10086	15096	20084	30086
2408	00141	02123	05095	08086	20099		
2422	00094	02095	05086	10085	20111		
2508	00171 10269	02114	05085	10054	15074	20066	26054
2521	00102 40301	02103	05084	10085	15083	20063	30104
2608	00142 10328	02115	05107	10095	15095	20124	30103
2621	00104 80341	02106	05095	10097	15087	20067	30066
2708	00172	02114	05096	09087	20115		
2721	00104 80349	02105	05116	10096	15094	20076	30075
2808	00114	02116	05098	10088	15088	20075	20215
2821	00021	02023	05014	10026	15017	20369	50231
2908	00191 50271	02213	05084	10363	15333	20341	26334
2921	00121	02112	05072	10054	15044	27171	
3008	00191 20359	02132	05092	10074	15075	20074	30096
3021	00000	02082	05114	10094	15094	20085	24242
3108	00191 30118	02133 40119	05105 10469	10085	15074	20104	27097
3121	00072	02113	05073	10085	15054	17055	27185

June

0108	00201	02241	05321	10331	15333	18333	40209
0122	00202	02224	05233	10234	15256	20274	30275
	40241	50255	11522				
0208	00205	02197	05197	10233	41125		
0222	00182	02203	05232	10222	15231	17241	00184
0308	00182	02193	05196	10182	15263	20283	27213
	40290						
0321	00231	02192	05194	10214	15203	52175	
0403	00184	0219x	0519x	10202	15161	20264	40265
	49185	10500					
0404	00173	02204	05161	10500			
0408	00183	02164	05175	10164	15214	18214	50209
0421	00070	02062	05181	10211	15212	20252	26231
	13274						
0508	00162	02172	05174	10182	15193	40189	
0521	00000	02112	05112	10134	15221	20263	30225
	40244	14434					
0608	00181	02172	05134	10144	15133	40185	
0621	00092	02093	05104	10104	15123	70185	
0708	00192	02124	05116	10105	15072	20163	23144
	40249						
0721	00000	02000	05121	10172	15172	20193	30242
	10326						
0808	00181	02141	05103	10083	15182	20024	13229
0821	00000	02191	05171	10162	15133	20132	30125
	40107	24469					
0908	00102	02114	05117	10094	14074	53155	
0921	00095	02114	05106	08116	80095		
1008	00084	02105	05086	08089	92095		
1021	00132	02094	05086	52065			
1108	00102	02114	05096	10094	15084	18073	80201
1121	00105	02106	05116	10155	15125	20093	30063
	40064	50023	60032	70331	20689		
1209	00181	10105	15103	20083	23083	10249	
1221	00000	02091	05061	10140	15152	20153	30163
	40105	50099	60582	14609			
1308	00181	02122	05141	10121	15102	20113	76221
1321	00094	02114	05114	10123	12123	6x141	
1408	00141	02134	05145	10136	15084	17083	10181
1421	00115	02124	05153	10133	15074	20053	30053
	20341						
1508	00000	02142	05143	10124	15063	20132	10239
1521	00112	02146	05159	10164	15175	20312	30254
	40233	50304	14509				
1608	00121	02134	05126	09116	51111		
1621	00123	05134	10155	15195	20134	30202	40193
	50184	10541					
1708	00122	02125	05127	10118	15118	40159	
1721	00114	02115	05117	10127	15085	20123	30165
	40154	50183	70516				
1808	00121	02124	05095	10083	15035	50171	

June (Contd.)

1821	00114	02105	05114	10361	15250	40185	
1822	00096	02107	05105	10161	15221	20181	54215
1909	00122	02114	05117	10117	15192	20321	10210
1921	00104	02127	05620	10610	15262	20053	30063
	40323	50352	55303	10543			
2008	00102	02115	05105	10144	15143	54175	
2021	00104	02114	05106	10108	15133	18134	04205
2108	00121	02124	05127	10097	15077	20088	50219
2121	00108	02600	05601	10592	15584	20069	30053
	40047	10419					
2209	00096	02097	05105	10105	09117		
2222	00123	02105	05109	20111			
2308	00182	02152	05124	10118	15620	20108	70249
2321	00097	02107	05116	10107	15099	20119	10211
2408	00097	02108	05107	10087	15077	70181	
2421	00103	02104	05097	14081			
2501	00094	02107	05107	10085	15072	20342	30108
	40079	50068	60077	70055	10769		
2508	00121	02114	05105	10122	15171	20132	26095
	00169						
2521	00094	02094	05105	10094	15063	2xxxx	30076
	10349						
2608	00181	02132	05112	10131	15182	10179	
2621	00095	02105	05106	10087	15055	20073	30065
	40034	50364	60367	70367	10731		
2708	00122	02115	05107	20099			
2721	00106	02107	05096	50091			
2821	00000	02082	05093	10362	15023	20044	30366
	40015	50039	60038	70037	20709		
2909	00190	02213	05xxx	10071	15082	50175	
2921	00105	02107	05097	10096	15107	20105	30037
	37037	20381					
3008	00095	02085	05096	09097	40115		

July

0108	00141	02114	05117	10590	15570	20561	24069
	50269						
0209	00121	02134	05127	10109	12096	50149	
0218	00084	02115	05125	10127	15107	13179	
0308	00170	02143	05116	10107	15087	18096	50209
0321	00084	02105	05125	10136	15095	20124	30075
	13349						
0408	00170	02124	05125	10117	15116	20034	26043
	10279						
0421	00085	02115	05117	10095	15096	20095	21096
	24236						
0508	00190	02123	05105	10104	15052	20033	29355
	10309						
0521	00094	02096	05105	10102	15123	20121	30272
	16340						

July (Contd.)

0608	00201	02123	05104	10084	10109		
0621	00000	02103	05111	10143	13105		
0708	00120	02123	05114	10074	15113	20072	51235
0722	00111	02103	05086	10076	15074	20064	30044
	12321						
0808	00000	02113	05105	10094	15074	20102	13200
0821	00094	02105	05096	10085	15075	20074	26085
	10276						
0908	00142	02114	05126	10117	15105	20105	25102
	10279						
0921	00094	02106	05096	10096	44141		
1008	00142	02115	05107	10088	15085	20085	30125
	53329						
1022	00093	02115	05126	10098	15109	20106	27097
	20296						
1108	00113	02124	05126	53059			
1122	00092	02117	05610	10107	10129		
1208	00097	02109	05601	10581	10097		
1221	00095	02117	05117	10118	15106	20161	10249
1308	00121	02114	05096	10086	15096	50171	
1321	00072	02052	05062	10091	15261	10186	
1408	00200	02232	05234	10214	15203	70209	
1422	00000	15234	20224	30275	35267	10409	
1508	00161	02173	05175	10173	15192	50185	
1521	00000	02242	05221	10231	15261	20313	30264
	32265	54315					
1608	00180	02201	05202	50065			
1621	00000	02342	05022	10000	15232	54156	
1708	00180	02133	05126	10361	15303	75175	
1721	00000	02071	05012	10053	15087	20292	30276
	40278	10449					
1808	00352	02334	05333	08323	40095		
1821	00322	02314	05304	10306	44125		
1908	00242	02225	05217	10187	15186	20188	10239
1921	00191	02203	05162	10282	15271	20286	30289
	50329						
2008	00000	02000	05000	40067			
2021	00000	02051	05092	10351	15344	20316	30352
	40112	50409					
2108	00141	02113	05074	10024	14364	40155	
2121	00000	02320	05353	10344	15355	20334	30333
	40355	50364	55499				
2208	00211	02321	05351	10353	15353	20304	26303
	80271						
2221	00101	02092	05072	10031	15341	20302	30352
	40362	50033	60133	70174	80172	20809	
2308	00181	02152	05073	10072	17181	00186	
2321	00093	02093	05103	10103	15113	20132	30091
	10322						
2408	00181	03132	05133	10143	14143	40146	
2421	00090	02122	05113	10123	15083	20112	21102
	23102						

July (Contd.)

2508	00200	02172	05143	10133	15082	20063	10238
2520	00111	02113	05125	10126	15115	20114	27086
	76299						
2608	00114	02104	05097	08089	40096		
2622	00096	02095	05108	10119	53145		
2709	00121	02104	05087	06097	60089		
2721	00064	02085	05086	10087	15088	50175	
2808	00141	02123	05094	10065	12065	20055	50216
2821	00074	02105	05104	10105	15095	20074	30083
	40242	50353	60349	70277	10709		
2908	00181	02113	05104	10104	15113	20082	27114
	10299						
2921	00000	02362	05123	10073	15063	20083	30046
	40252	50285	60277	70288	80247	90237	00246
	10731	14152					
3008	00210	10124	15073	20043	24102	10266	
3021	00092	02094	05065	10076	15067	20033	25215
3108	00142	02073	05063	06054	10075		
3121	00000	02062	05043	10034	15352	20342	25315
	24309						

August

0108	00211	05121	10231	15171	20061	10216	
0121	00091	02101	05121	10082	15053	30281	40293
	10420						
0208	00210	05104	10xxx	15xxx	20092	30141	50309
0221	00111	02092	05104	10060			
0308	00000	05134	10134	15104	20102	10208	
0321	00094	02114	05135	10134	15115	20114	30115
	40105	50106	60156	70158	14809		
0408	00191	02143	05116	10094	15085	20114	20249
0421	00105	02126	05116	10103	15118	11175	
0508	00141	02124	05105	10126	15105	20104	20219
0521	00134	02125	05124	10096	15104	20093	30092
	40077	14469					
0608	00170	02133	05104	10095	20145		
0621	00112	02114	05113	10102	15093	20082	30252
	40112	50022	60320	70343	20749		
0708	00121	02132	05092	10103	15103	10209	
0721	00102	02123	05094	10084	15075	20144	30364
	40022	50112	70601				
0808	00161	02133	05124	10074	15074	10189	
0821	02115	05105	10084	15064	20103	30045	40367
	10439						
0908	00143	02125	05116	10107	10109		
0922	00064	02084	05086	10077	14078	70155	
1009	00084	02103	50055				
1108	00162	02133	05094	10074	15064	10188	
1121	00103	02114	05124	10113	15103	20073	30093
	40013	50067	57066	10572			

August (Contd.)

1208	00200	02142	05144	10145	15134	50205	
1222	00097	02118	05126	10146	15149	20148	27145
	16295						
1308	00201	02152	05135	10097	15096	20128	10219
1322	00088	02115	05136	10125	15107	20610	30119
	40138	10469					
1408	00161	02124	05126	94097			
1422	00087	02117	05126	10125	15097	20087	14232
1508	00141	02125	05116	10097	15055	70209	
1521	00084	02114	05123	10092	15055	20056	30084
	24352						
1608	00201	02133	05124	10161	10152		
1622	00094	02092	05212	10245	15314	20302	30352
	40510	50035	14586				
1708	00000	02141	05091	10152	15262	20252	40219
1722	00094	02105	05123	10183	15235	20321	30032
	40045	50284	62285	10646			
1808	00161	02133	05133	10116	15072	20065	25093
	10279						
1822	00092	02163	05095	10096	15098	54185	
1908	00160	02133	05125	10085	15104	20114	23124
	51241						
1922	00094	02094	05094	06085	97085		
2001	00103	02114	05106	10084	15094	20114	30085
	35093	23385					
2008	00151	02114	05106	10095	15085	40189	
2022	00095	02106	05114	10094	20088	30125	40112
	50102						
2108	00151	02124	05116	10097	15087	18096	10196
2122	00094	02105	05106	10096	15077	20087	30107
	40165	10436					
2208	00112	02114	05106	10095	15087	20078	10239
2222	00097	02109	05119	10109	15127	20189	
2308	00141	02115	05117	10117	15117	20116	10215
2322	00107	02118	05109	10106	15043	20023	25600
	10295						
2408	00123	05118	09128	50109			
2421	00108	02129	05612	10109	24135		
2508	00096	02106	05107	10591	15582	17581	50181
2522	00206	02117	05118	10099	15590	20097	80236
2608	00126	02116	05107	10099	15086	40176	
2622	00094	02106	05115	20075	30104	40135	
2708	00161	02114	05117	10117	15108	18108	10208
2722	00097	02107	05105	10135	15109	20117	28165
	24289						
2808	00141	02124	05115	10095	15073	20014	21044
	10239						
2821	00105	02114	05134	10134	15124	14185	
2908	00091	02092	05091	10144	15135	17145	80185
2921	00094	02114	05142	10112	12112	87145	
3008	00161	02133	05152	10121	15332	50175	

August (Contd.)

3021	00095 54259	02105	05122	10122	15092	20012	25266
3108	00142	02114	05115	10161	15232	20262	50209
3121	00094 40248	02105 80414	05105	10000	15141	20161	30225

September

0108	00142	02125	05114	10152	50159		
0121	00092 40184	02084 50226	05074 60227	10112 70248	15192 10729	20152	30224
0208	00081	02122	05103	10099			
0221	00092 40191	02083 50212	05073 60225	10063 70268	15042 24804	20051	30086
0308	00181	02112	05063	10042	20159		
0321	00071	02062	05053	10044	15363	84171	
0408	00201	02091	05032	20109			
0421	00051 40314	02012 50255	05331 60237	10283 70760	15324 80741	20354 90750	30294 20929
0521	00007 40252	02082 45252	05082 40460	10032	15362	20322	30242
0608	00230	02122	05083	10111	15201	20282	20239
0622	00072 40081	02073 50366	05073 60254	10062 30060	15071	20081	30091
0708	00140	02112	05073	10073	15063	54175	
0722	00093 20301	02095	05085	10053	15074	20032	30362
0808	00141	02113	05074	10034	10159		
0822	00073	02064	05073	10033	12024	10141	
0908	00141	02124	05084	10074	14159		
0922	00093 84271	02084	05084	10082	15062	20073	26054
1008	00xxx	02113	05084	10054	55145		
1021	00123	02104	05095	10083	24145		
1108	00083	02093	05073	10045	14045	54155	
1122	00094 20306	02095	05094	10093	15072	20042	27043
1208	00121	02103	05083	10073	80155		
1221	00092 80351	02092	05083	10114	15083	20104	30072
1308	00161	02134	05114	10082	15041	20042	14269
1322	00097 35173	02096 14361	05105	10116	15113	20144	30143
1408	00132	02124	05116	10115	15105	87155	
1422	00095	02097	05097	10107	15095	10171	
1501	00085 40113	02094 50011	05095 60233	10117 10659	15134	20074	30104
1508	00161	02105	05106	10094	15116	10178	
1522	00117 40073	02109 50122	05115 60195	10107 70182	15009 80308	20095 10889	30105
1621	00125	02116	05601	10099	6x140		

September (Contd.)

1722	00116	02117	05116	10117	15107	20116	22215
1821	00116	02107	05116	09128	20112		
1922	00126	02107	05099	10590	15099	96151	
2021	00107	02106	05124	10126	15114	20119	25601
	54261						
2221	00095	02106	05096	09085	50111		
2322	00063	02074	05083	10102	15141	20101	30032
	40092	50125	86546				
2421	00105	02105	05095	10095	15104	20062	30124
	20321						
2522	00085	02097	05095	10112	15113	30182	
2622	00000	02031	05031	10162	15172	20182	30204
	40235	43235	10446				
2721	00331	02343	05302	10231	20152		
2822	00251	02252	05302	10311	6x155		
2922	00094	02094	05142	10122	15121	20162	27182
	54301						
3021	00092	02083	05094	10045	15046	20205	

October

0121	00097	02104	05105	10094	15064	20053	30044
	40023	50023	60013	20649			
0221	00116	02107	05108	10087	15078	20172	
0321	00094	02085	05094	14065			
1208	00106	02107	05097	10087	74115		
1222	00095	02097	05096	10066	15067	58175	
1309	00000	02071	05022	10364	15356	76151	
1322	00053	02064	05084	10152	15223	20344	30324
	35254	55371					
1408	00211	02101	05031	10032	15303	20325	56211
1421	00051	02021	05011	10332	15344	20364	30325
	13326						
1508	00000	02142	05061	10091	15332	10196	
1522	00063	02083	05082	10081	15052	20022	30273
	40252	23416					
1608	00181	02132	05093	10083	15083	50175	
1622	00093	02105	05094	10085	15074	20085	30132
	40180	43061	22446				
1708	00181	02124	05095	10085	15075	76185	
1722	00095	02095	05096	10086	15085	20077	30064
	14300						
1808	00122	02115	05107	10097	15079	70175	
1821	00144	02127	05095	52088			
1922	00000	02101	05074	10045	15033	20074	52235
2008	00116	02115	52055				
2022	00113	02104	05105	10085	15084	26176	
2108	00000	02103	05084	10085	15085	20103	54235
2122	00123	02104	05084	10084	15074	20084	26093
	30275						
2208	00132	02103	05074	10064	52151		

October (Contd.)

2222	00103	02104	05094	10084	15084	20076	87216
2308	00181	02113	05104	10062	15093	20104	51268
2323	00053	02063	05093	10092	15103	20094	77245
2408	00000	02112	05104	10094	15082	54181	
2422	00096	02095	05106	10114	15104	20084	30115
	10300						
2508	00121	02115	05117	10096	15106	76171	
2521	00117	02108	05105	82085			
2608	00114	02116	05108	10104	15114	20103	24134
	50268						
2622	00096	02096	05106	10104	15093	20102	30082
	40144	80436					
2708	00132	02124	05095	10103	15091	57171	
2808	00161	02124	05105	10102	15352	20053	29161
	50309						
2822	00094	02094	05104	10103	15082	20122	30082
	40093	50082	60131	70184	75164	10783	
2908	00181	02123	05104	10091	15151	20162	10216
2922	00096	02097	05097	10133	15113	20054	30052
	20342						
3008	00141	02114	05095	10075	15074	20074	30073
	35101	10371					
3022	00114	02104	05096	10107	15104	20113	30083
	26345						
3108	00142	02103	05094	08085	10095		
3121	00093	02095	05105	10103	15064	20013	30161
	40012	10430					

November

0108	00191	02112	05093	10141	15151	20151	21131
	50239						
0121	00063	02075	05093	10122	15081	20151	30192
	10351						
0208	00201	02111	10082	20062	50239		
0221	00102	02102	05093	10082	15052	20363	30062
	40066	50066	54055	10572			
0308	00161	02124	05104	10085	15043	20072	24073
	10268						
0322	00084	02096	05095	10103	15075	20065	30054
	10351						
0408	00111	02113	05104	10094	15083	20085	24094
	70269						
0421	00085	02086	05096	10103	15093	20103	30042
	40140	23411					
0508	00161	02113	05093	10107	15093	20053	00269
0521	00084	02104	05095	10095	15105	20084	14212
0608	00162	02123	05083	10053	15052	20042	39239
0622	00061	02101	05032	10036	52155		
0708	00202	02233	05243	10243	15252	20313	52219
0721	00051	02042	05021	10212	14000	23154	

November (Contd.)

0808	00211	02261	05032	10051	15101	18192	53198
0822	00061	02072	05071	10131	15171	20101	30321
	40312	50243	23556				
0908	00201	02071	05042	10201	15151	20191	50219
0921	00094	05111	10141	15142	20301	30353	40204
	10424						
1008	00201	02142	05115	10093	15112	20152	13245
1021	00095	05071	10142	15182	20233	30294	20324
1108	00202	02212	05203	10203	15141	20152	14219
1122	00021	02012	05272	10233	15274	20304	30325
	40092	50163	60198	10649			
1208	00000	05102	10221	15360	54189		
1222	00084	02084	05084	10113	15123	20122	23132
	50241						
1308	00114	02114	05107	10096	26155		
1322	00095	02104	05104	10108	15106	20105	30105
	40104	50331	60232	10639			
1408	00201	02132	05103	10063	15044	20062	14239
1421	00092	02082	05063	10072	15064	20083	10225
1508	00000	02201	05121	10141	20155		
1601	00062	02092	05082	10022	15085	20055	30023
	40093	54410					
1608	00172	02112	05090	09261	10119		
1621	00094	02084	05114	10104	15104	20095	14272
1708	00161	02133	05073	10064	15064	80185	
1721	00092	02072	05093	10074	15055	20054	30064
	40022	10419					
1808	00142	02104	20051				
1821	00292	02333	05343	10365	12015	23145	
1908	00191	02181	05xxx	10355	92151		
1921	00094	02084	05085	10055	15068	20185	
2008	00172	02123	05084	10075	15076	54179	
2021	00093	02103	05073	10074	15075	17075	24185
2108	00191	02142	05082	10092	15082	34179	
2121	00073	02074	05094	10131	15161	86155	
2208	00181	02121	05083	10103	15122	20209	
2221	00071	02061	05061	10072	15082	20122	30153
	34173	20355					
2308	00171	02122	05052	10043	15063	17073	10181
2321	00092	02092	05082	10062	15092	17092	11185
2409	00161	02112	05084	10074	15074	20094	26103
	51275						
2422	00093	02093	05074	10074	15055	17047	27182
2508	00142	02114	05095	10085	15095	20105	26104
	10279						
2521	00095	02096	05106	10133	12124	34149	
2608	00201	02113	05116	10108	15108	20117	30215
2621	00093	02094	05084	10084	15063	20084	30096
	40126	43126	20446				
2708	00201	02122	05104	10113	15123	18133	10205
2721	00072	02072	05092	10112	15102	20123	30112
	34325						

November (Contd.)

2808	00201 10269	02131	05071	10111	15121	20131	24172
2821	00062 30236	02052	05062	10161	15261	20231	21291
2908	00211 50298	02231	05271	10202	15233	20213	27212
2921	00032	02032	05091	10153	15144	20125	10272
3008	00181	02112	05113	10124	15135	17134	14186
3021	00074	02085	05093	10152	15124	20114	24201

December

0108	00000	02231	05271	10161	15151	18132	40199
0121	00094	02085	05095	10104	15095	20106	30232
0208	00151	02103	05093	10124	15104	44796	
0221	00123	02114	05093	10085	15084	20172	
0308	00181	02182	05000	10071	15063	84189	
0321	00071 40363	02072 50333	05082 60296	10113 14649	15122	20052	30102
0422	00231	05332	54065				
0501	00341	02342	05354	10322	14292	20152	
0508	00202	02302	05292	10273	15254	18233	70199
0521	00072	02081	05182	54090			
0608	00000	02171	05182	10174	15214	18234	74198
0622	00082	02062	05121	08172	20095		
0708	00000	02081	05151	10081	42125		
0808	00201	02252	05113	10103	52149		
0822	00083 40296	02082 44316	05161 14454	10111	15202	20272	30316
0908	00161 84309	02124	05104	10083	15092	20331	30263
0922	00144 23252	02104	05104	10053	15043	20043	24034
1008	00000	02241	05321	10089			
1021	00094 57245	02097	05104	10142	15252	20264	22223
1108	00201	02272	05323	10294	85149		
1208	00000	02253	05256	10269	85119		
1221	00071	02071	05322	10322	15333	20325	24242
1408	00000	02283	05304	10304	52149		
1422	00252 62235	02243	05234	10217	15226	20207	21208
1521	00091	02083	05122	10232	84159		
1621	00342	02311	05071	10141	27155		
1708	00000	05131	10211	50122			
1721	00343 40244	02333 50264	05312 60273	10252 70272	15212 34769	20232	30233
1821	00092	02082	05052	10211	15232	20181	20239
1908	00180	02122	05083	10023	30145		
1922	00021 26235	02031	05362	10342	15281	20293	21303

December (Contd.)

2021	00092 26325	02083	05053	10032	15352	20312	30302
2108	00041	02031	05032	09361	62105		
2121	00344	02334	05324	09312	62105		
2208	00000	02000	05351	10012	62129		
2221	00072 40312	02062 24435	05092	10152	15231	20231	30160
2308	00221	05294	10343	15072	20062	27064	62295
2321	05294						
2408	00190	05325	08327	62095			
2421	00274	02304	05245	10268	15267	20263	54235
2508	00000	02222	05224	10255	12265	51145	
2521	00342	08252	10233	15283	20263	30263	50329
2608	00000 62291	02000	05271	10292	15303	20293	27284
2622	00112	02362	05313	08284	24095		
2708	00161 50238	02121	05321	10294	15285	20285	21276
2722	00304	02315	05315	24065			
2822	00051	02332	05360	10052	15360	20052	51230
2908	00201	02261	05322	10051	15052	77180	
2922	00342	02352	05022	10201	15201	80165	
3008	00181	02132	05051	10351	15222	74159	
3022	00331 40032	02000 80415	05351	10333	15323	20023	30024
3121	00000 91255	02261	05263	10283	15295	20276	24277