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ANNUAL REPORT
OF THE
METEOROLOGICAL
AND THE
SEISMOLOGICAL OBSERVATIONS
MADE AT THE
INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA
FOR
THE YEAR 1913.

LATITUDE 39° 8' N., LONGITUDE 141° 7' E.,
HEIGHT ABOVE MEAN SEA LEVEL 63 METRES.

PUBLISHED BY THE INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA.

1914.

The present report contains the results of the meteorological and the seismological observations in the observatory during the year 1913. No alteration is done in the kinds and the methods of observations. The observations and the computations were done by Messrs. T. Oyama and K. Aoki under the superintendence of Dr. M. Hashimoto.

The following are to be generally noticed with respect to the meteorological observations:

Hours of observations.—The *Japanese Central Standard Time* (mean time of the meridian 9h east from Greenwich) is adopted.

Air Pressure.—The barometric readings in millimetres are reduced only to freezing point of water; the corrections to sea level and to standard gravity are given at the bottoms of the respective pages.

Air and Earth Temperatures.—The degrees are given in Centigrades.

Wind.—The velocity is expressed in metres per second. The direction is observed according to the sixteen cardinal points.

Cloud.—The amount is estimated by the scale 0-10, the forms are of the *International classification*, and the direction of motion is observed according to the eight cardinal points.

Tension of Water Vapour.—It is given in millimetres.

Relative Humidity.—It is given in percentages.

Precipitation.—The amount is given in millimetres. The number of days is counted only when the amount is 0.1 mm. or more in a day; but for those days with either snow, hail, or graupel, the amount is not taken into consideration.

Clear and Cloudy Days.—The mean amount of cloud is less than 2 exclusive for the former, and more than 8 inclusive for the latter.

Duration of Sunshine.—It is recorded by a sunshine-recorder of *Jordan's* pattern.

Amount of Ozone.—It is observed by means of *Sedan's* ozonometer, and is given in scale of 0-10.

Amount of Evaporation.—It is given in millimetres, the daily amount being, according to the instruction of the Central Meteorological Observatory in Tokio, that which results from 10^h a. m. of the preceding day till 10^h a. m. of the day in question.

The occurrence of meteorological phenomena is recorded with the following *international symbols*:

●	Rain	~	Glazed frost	c	Cirrus
*	Snow	⊕	Snow drift	cs	Cirro-stratus
⌘	Thunder storm	↑↑↑	Ice crystals	ck	Cirro-cumulus
τ	Thunder without lightning	⊕	Solar corona	kc	Cumulo-cirrus
<	Lightning without thunder	○	Solar halo	sc	Strato-cirrus
△	Graupel	⊖	Lunar corona	sk	Strato-cumulus
▲	Hail	⊖	Lunar halo	n	Nimbus
≡	Mist, fog	↘	Gales	k	Cumulus
┌	Hoar frost	∩	Rainbow	kn	Cumulo-nimbus
⌒	Dew	⊖	Aurora	s	Stratus
∨	Silver thaw	∞	Dust haze		

The *descriptions* of the *meteorological instruments* are found in the annual reports for the years 1902, 1904, 1905, and 1910.

The *seismological instruments* in use are two *Omori's horizontal pendulums*, of the same type as that described in p. 8 of No. 5, "Publication of the Earthquake Investigation Committee in Foreign Language," one serving to register the EW component, and the other the NS component, of seismological movements.

The *instrumental constants* are as follows:

	EW Component Apparatus	NS Component Apparatus
Period of free oscillation	17 seconds	20 seconds
Multiplication of the pointer	100 times	20 times
Weight of heavy cylinder	45.0 kilograms	15.0 kilograms
Horizontal distance of the centre of the cylinder from the point of support }	20 centimetres	40 centimetres
Vertical distance between the points of support and of suspension }	104 centimetres	87 centimetres

The *time* adopted in the seismological observations is the Japanese Central Standard Time reckoned from midnight.

April, 1914.

H. Kimura, *Rigakuhakushi*

Director of the International Latitude Observatory
of Mizusawa.

SEISMOLOGICAL OBSERVATIONS.

TABLE A.

(Earthquakes)

No.	Date 1913	Time of Occurrence †						Duration of Total Earthquake (mean)	Maximum Range of Motion		Character of Motion	Intensity	Remarks	
		(E W)			(N S)				(E W)	(N S)				
		h	m	s	h	m	s	m	mm					
1	January	2	8	48	04	—	—	—	1.8	0.02	—	Quick	Feeble	Felt
2		2	9	00	44	—	—	—	?	0.29	—	"	"	
3		7	0	23	28	—	—	—	4.4	0.02	—	Slow	"	
4		7	14	07	59	14	07	59	2.9	0.02	0.03	"	"	
5		11	22	24	39	22	24	42	52.7	0.05	0.05	"	"	
6		13	5	27	57	—	—	—	3.2	0.02	—	Quick	"	
7		20	6	24	35	—	—	—	1.7	0.02	—	"	"	
8		20	8	50	22	8	50	22	19.2	0.52	0.65	Slow	"	
9		21	22	21	11	22	21	11	6.6	0.05	0.04	"	"	
10		25	18	15	37	18	15	37	1.8	0.03	0.03	"	"	
11		26	23	44	44	—	—	—	2.3	0.02	—	Quick	"	
12	February	4	14	55	31	14	55	32	4.1	0.05	0.05	"	"	
13		7	12	07	49	12	08	01	9.6	0.06	0.05	Slow	"	
14		14	10	02	43	—	—	—	2.7	0.01	—	"	"	
15		14	18	58	12	—	—	—	3.3	0.01	—	"	"	
16		15	4	01	11	—	—	—	2.9	0.02	—	"	"	
17		15	15	27	33	15	28.1	—	4.4	0.01	0.01	"	"	
18		16	6	01	05	6	01	30	10.8	0.09	0.09	"	"	
19		18	22	56	12	—	—	—	3.3	0.01	—	"	"	
20		20	7	25	01	7	25	00	7.2	0.10	0.08	"	"	
21		20	18	00	01	18	00	01	21.4	?	4.20	Quick	Weak	Felt
22		26	5	05	17	5	05	18	6.3	0.03	0.05	Slow	Feeble	
23		26	14	41	57	—	—	—	2.3	0.01	—	Quick	"	
24	March	2	14	11	33	14	11	34	5.5	0.02	0.05	Slow	"	
25		3	15	30	26	15	30.8	—	5.2	0.04	0.05	"	"	
26		4	5	05	34	5	05.7	—	5.5	0.03	0.05	"	"	
27		10	1	42	18	1	42	19	3.0	0.01	0.03	"	"	
28		10	1	55	04	1	55	05	1.3	0.01	0.02	"	"	
29		14	17	52	09	17	52	10	53.7	0.80	1.62	"	"	
30		18	10	26	15	—	—	—	11.2	0.03	—	"	"	
31		24	5	51	13	5	51	13	33.4	0.89	0.80	"	"	
32		28	18	57	08	18	57.2	—	2.9	0.03	0.03	Quick	"	
33		31	12	47	19	12	47	29	70.8	0.04	0.05	Slow	"	
34	April	1	2	55	25	—	—	—	4.8	0.04	0.01	"	"	
35		1	10	00	29	10	00	28	4.7	0.04	0.02	"	"	
36		1	10	06	15	—	—	—	2.8	0.02	—	Quick	"	
37		3	8	55	27	8	55	28	9.5	0.05	0.05	Slow	"	
38		3	23	16	06	—	—	—	1.6	0.01	—	Quick	"	
39		5	14	38.3	—	14	38.8	—	3.6	0.01	0.00	Slow	"	
40		5	16	23	04	16	23	03	2.0	0.04	0.03	Quick	"	
41		7	22	48	30	22	50	14	51.8	0.39	0.50	Slow	"	
42		8	11	22	41	11	23	57	14.0	0.09	0.15	"	"	
43		10	2	18	28	—	—	—	2.0	0.01	—	Quick	"	
44		11	18	28	45	18	28	43	17.8	0.07	0.03	Slow	"	
45		11	18	58	08	—	—	—	3.5	0.01	—	"	"	
46		13	15	42	53	15	43	03	16.4	?	?	"	"	
47		15	22	08	04	22	08.2	—	4.9	0.04	0.04	"	"	
48		19	11	08	28	11	08	16	6.8	0.05	0.03	Quick	"	
49		19	18	45	08	—	—	—	2.2	0.01	—	"	"	
50		26	3	02	58	3	03	01	74.0	?	?	Slow	"	
51		28	16	31	20	—	—	—	4.9	0.02	0.02	"	"	
52		30	5	14	43	5	14	43	4.6	0.13	0.26	Quick	"	Felt
53	May	4	15	02	42	15	02	41	8.9	0.55	0.97	"	"	
54		5	1	08	40	1	08.5	—	8.8	0.02	0.02	Slow	"	
55		6	10	28	19	10	28.4	—	?	0.04	?	"	"	
56		6	22	18	29	22	18	29	3.1	0.08	0.10	Quick	"	
57		17	17	48	06	17	48.0	—	2.0	0.05	0.03	"	"	Felt
58		18	11	14	22	11	14	23	22.9	0.15	0.10	Slow	"	
59		22	5	36	38	5	36	38	13.8	0.27	0.36	"	"	
60		28	7	58	10	7	58.6	—	3.9	0.03	0.03	"	"	

† Japanese Central Standard Time (9h east from Greenwich), reckoned from midnight.

TABLE A.

(Earthquakes)

No.	Date		Time of Occurrence †						Duration of Total Earthquake (mean)	Maximum Range of Motion		Character of Motion	Intensity	Remarks
	1913		(E W)			(N S)				(E W)	(N S)			
61	May	29	h	m	s	h	m	s	m	mm	mm	Quick	Feeble	
62		29	19	13	06	19	13	06	25.8	0.60	1.26	Slow	"	
63		30	22	34	34	22	34	37	12.2	0.03	0.03	"	"	
64		30	2	03.0					5.3	0.01		"	"	
65	June	2	20	55	22	20	55	26	72.3	?	?	"	"	
			14	16	20	14	17.0		6.3	0.02	0.01	"	"	
66		2	22	09	05				0.9	0.01		"	"	
67		2	22	28	04	22	29.0		5.4	0.02	0.01	"	"	
68		3	6	48	27				1.8	0.01		"	"	
69		4	19	05	21	19	05	21	61.1	0.04?	?	"	"	
70		6	11	42	41	11	42	41	20.9	0.12	0.14	"	"	
71		11	15	00	32				17.8	0.05	0.10	"	"	
72		14	19	14.0	?	19	15.0	?	?	?	?	"	"	
73		17	18	14	50				2.9	0.02	0.02	"	"	
74		19	6	46	24				7.9	0.02		"	"	
75		22	22	56	31	22	56	33	29.8	?	?	"	"	
76		26	2	18	47	2	18	47	4.2	0.03	0.03	"	"	
77		26	14	08	48	14	08	49	75.7	?	?	"	"	
78		7	1	20	39	1	20	34	27.2	?	?	"	"	
79		8	2	44	56	2	44	50	22.5	?	?	"	"	
80		12	19	26	43	19	26	50	46.8	0.15	0.22	"	"	
81		13	9	19	22	9	19	22	6.6	0.07	0.07	Quick	"	
82		15	17	20	58	17	21	01	10.3	0.08	0.09	Slow	"	
83		16	13	42	47	13	42	47	2.7	0.03	0.02	"	"	
84		21	0	54	51	0	55	33	5.7	0.02	0.02	"	"	
85		23	23	57	42	23	57	41	5.6	0.03	0.04	"	"	
86		24	5	56	53	5	57.0		5.3	0.02	0.02	"	"	
87		28	20	51	16	20	51	18	7.1	0.05	0.02	Quick	"	
88		31	21	18	37				3.8	0.02		Slow	"	
89	August	1	7	05	33	7	05	33	9.2	0.19	0.28	Quick	"	Felt
90		2	2	14	14	2	14	11	30.8	0.17	0.10	Slow	"	
91		4	10	22	11	10	22	16	5.9	0.10	0.17	Quick	"	
92		4	21	11	22	21	11	21	3.6	0.05	0.05	"	"	
93		5	6	22.4					9.8	0.02		Slow	"	
94		7	7	25	19	7	34.5		114.1	?	?	"	"	
95		9	11	02	05	11	02.1		7.9	0.03	0.02	"	"	
96		11	3	06	30				1.1	0.00		"	"	
97		11	12	37	20				3.8	0.01		"	"	
98		13	2	07	05				1.6	0.01		Quick	"	Felt
99		13	12	32.5					2.0	0.00		Slow	"	
100		13	13	35	25	13	35.4		5.4?	0.01	0.01	"	"	
101		15	14	58	40	14	58	37	4.6	0.03	0.03	"	"	
102		16	4	06	04	4	05.9		37.0	?	?	"	"	
103		19	9	47	50	9	47	51	5.3	0.02	0.01	"	"	
104		21	0	21	03	0	21	02	6.3	0.03	0.04	"	"	
105		24	22	11	56				5.8	0.02		"	"	
106		25	14	11	55	14	12.0		4.5	0.04	0.05	"	"	
107		28	13	57	23	13	57	23	7.6	?	0.81	Quick	"	Felt
108		30	23	18	17				4.6	0.01		Slow	"	
109	September	4	5	59	51	5	59	52	22.8	0.03	0.03	"	"	
110		5	12	55	31	12	55	31	7.8	0.09	0.14	"	"	
111		5	22	24	29	22	24	31	6.4	0.03	0.04	"	"	
112		7	17	27	02	17	27.5		4.8	0.01	0.00	"	"	
113		7	19	26	09	19	26	06	8.5	0.02	0.03	"	"	
114		8	17	37	48	17	37	46	6.4	0.05	0.05	"	"	
115		8	18	25	39	18	25	39	8.4	0.19	0.20	Quick	"	
116		8	21	49	13	21	49.2		5.0	0.02	0.02	Slow	"	
117		9	7	30	32	7	30.7		7.8	0.02	0.02	"	"	
118		9	12	27	09				4.0	0.01		"	"	
119		15	14	51.4					3.1	0.01		"	"	
120		19	22	59	03				4.6	0.02	0.00	"	"	

TABLE A.

(Earthquakes)

No.	Date		Time of Occurrence †			Duration of Total Earthquake (meam)	Maximum Range of Motion		Character of Motion	Intensity	Remarks			
	1913		(E W)	(N S)	(E W)		(N S)							
121	September	22	h	m	s	h	m	s	m	mm	mm	Slow	Feeble	
122	October	3	5	57	54	5	58.4		3.2	0.01	0.00	Quick	"	
123		3	2	26	46	2	26	46	10.1	0.13	0.10	Slow	"	
124		3	8	55	49	8	55	49	6.1	0.12	0.10	Quick	"	
125		3	9	16	14	9	16	15	8.5	?	1.46	Slow	"	
		3	12	59.2		—	—	—	3.7	0.01	—		"	
126		3	13	34	03	—	—	—	2.1	0.02	—	Quick	"	
127		5	2	48	57	2	49.0		4.7	0.12	0.14	Slow	"	
128		5	2	57	25	—	—	—	1.2	0.00	—	"	"	
129		5	3	10	31	—	—	—	1.8	0.00	—	"	"	
130		5	3	55	04	—	—	—	2.2	0.00	—	"	"	
131		5	6	19	21	—	—	—	2.6	0.00	—	"	"	
132		5	21	02	17	—	—	—	2.4	0.01	—	"	"	
133		6	0	38	22	0	38	23	3.6	0.06	0.03	"	"	
134		6	3	08	20	—	—	—	1.7	0.00	—	"	"	
135		6	3	20	15	—	—	—	3.1	0.01	—	"	"	
136		6	3	38	03	—	—	—	2.5	0.01	—	"	"	
137		6	3	41	28	—	—	—	3.2	0.01	—	"	"	
138		6	17	25	30	—	—	—	3.0	0.01	—	"	"	
139		6	19	17	53	19	17	52	4.4	0.05	0.04	"	"	
140		6	20	44.2		—	—	—	2.3	0.01	—	"	"	
141		9	2	44	42	—	—	—	1.7	0.01	—	"	"	
142		9	5	04	55	—	—	—	2.7	0.01	0.00	"	"	
143		11	7	00	45	—	—	—	3.6	0.01	0.02	"	"	
144		11	10	42	48	—	—	—	3.0	0.01	—	"	"	
145		11	13	14	44	13	14.3		3.3	0.03	0.05	"	"	
146		11	18	10	27	18	10	26	21.2	?	?	Quick	Weak	Felt
147		11	18	50	08	18	50	11	5.2	0.16	0.18	"	Feeble	
148		11	19	47	06	—	—	—	2.8	0.01	—	Slow	"	
149		11	21	23	19	—	—	—	3.8	0.01	—	"	"	
150		11	22	33	42	—	—	—	4.5	0.02	—	"	"	
151		12	1	48	20	1	48.6		3.1	0.03	0.02	"	"	
152		12	4	18	49	—	—	—	3.5	0.01	—	"	"	
153		12	5	48	34	5	48.6		5.6	0.09	0.06	"	"	
154		12	8	29	09	8	29.2		7.3	0.22	0.34	Quick	"	
155		12	10	26	19	10	26	23	6.0	0.05	0.02	Slow	"	
156		12	10	33	07	10	33.2		8.6	0.24	0.31	Quick	"	
157		12	10	58	42	—	—	—	4.0	0.02	—	Slow	"	
158		12	11	32	38	—	—	—	3.6	0.02	—	"	"	
159		12	11	38	20	—	—	—	3.3	0.01	—	"	"	
160		12	12	43	56	—	—	—	3.0	0.01	—	"	"	
161		12	13	25	36	—	—	—	1.2	0.01	—	"	"	
162		12	13	26	55	13	26	58	5.3	0.07	0.05	"	"	
163		12	15	33	47	—	—	—	4.2	0.01	—	"	"	
164		12	16	35	34	16	35	37	6.1	0.10	0.07	"	"	
165		12	17	35	58	—	—	—	5.4	0.03	—	"	"	
166		12	21	13	24	—	—	—	4.1	0.02	—	"	"	
167		12	21	24	01	21	24	02	11.0	0.57	1.16	Quick	"	
168		12	21	39	34	—	—	—	3.5	0.01	—	Slow	"	
169		13	2	04	17	2	04	18	21.8	?	5.90	Quick	Weak	Felt
170		13	6	59	22	—	—	—	2.4	0.01	—	Slow	Feeble	
171		13	12	57	44	—	—	—	3.1	0.00	—	"	"	
172		13	14	47	30	—	—	—	2.0	0.01	—	"	"	
173		13	17	39	36	—	—	—	1.2	0.00	—	"	"	
174		13	19	12	13	19	12.4		2.7	0.02	0.02	"	"	
175		13	23	29	57	23	29	57	6.2	0.12	0.15	Quick	"	
176		13	23	46	56	—	—	—	2.1	0.00	—	Slow	"	
177		13	23	53	53	23	53.8		2.8	0.02	0.01	"	"	
178		14	0	37	51	0	37	50	7.9	0.21	0.25	Quick	"	
179		14	1	20.2		—	—	—	1.2	0.00	—	Slow	"	
180		14	1	58	22	—	—	—	1.6	0.01	—	"	"	

TABLE A.

(Earthquakes)

No.	Date		Time of Occurrence †						Duration of Total Earthquake (mean)	Maximum Range of Motion		Character of Motion	Intensity	Remarks
	1913		(E W)			(N S)				(E W)	(N S)			
			h	m	s	h	m	s	m	mm	mm			
181	October	14	2	34	10	—	34	10	7.0	0.18	0.15	Quick	Feeble	
182		14	3	06	56	—	—	—	2.9	0.02	—	Slow	”	
183		14	5	26.7	—	—	—	—	1.1	0.00	—	”	”	
184		14	10	58	18	—	—	—	5.0	0.01	—	”	”	
185		14	14	37.2	—	—	—	—	1.4	0.00	—	”	”	
186		14	15	04.2	—	—	—	—	2.0	0.00	—	”	”	
187		14	15	37	38	15	37.9	—	3.7	0.01	0.01	”	”	
188		14	15	52.8	—	—	—	—	4.5	0.02	—	”	”	
189		14	16	00	09	16	00	14	5.0	0.05	0.05	”	”	
190		14	17	19	03	17	19	03	7.4	0.09	0.05	”	”	
191		14	17	27	28	17	27	28	16.2	0.27	0.30	”	”	
192		14	17	47	59	—	—	—	5.6	0.01	—	”	”	
193		14	18	54	52	—	—	—	1.7	0.00	—	”	”	
194		14	20	13	57	20	13	59	5.7	0.07	0.09	”	”	
195		14	20	46	58	20	47	00	5.4	0.08	0.05	”	”	
196		14	22	26	15	22	26	19	4.5	0.03	0.02	”	”	
197		14	23	18	56	23	18	56	?	1.14	0.90	Quick	”	
198		14	23	28	20	23	28.4	—	5.9	0.18	0.18	”	”	
199		15	1	07	33	1	07.9	—	12.1	1.06	0.80	”	”	
200		15	1	40	38	1	40	43	6.4	?	?	Slow	”	
201		15	3	21	41	—	—	—	3.7	0.02	—	”	”	
202		15	3	44	38	3	44	40	4.9	0.13	0.09	”	”	
203		15	—	—	—	5	31	03	3.7	—	0.12	”	”	
204		15	10	49	01	—	—	—	1.8	0.00	—	”	”	
205		15	13	52	09	13	52	16	2.7	0.02	0.01	”	”	
206		15	16	59	44	16	59	51	2.8	0.02	0.02	”	”	
207		16	2	36	55	—	—	—	3.0	0.01	—	”	”	
208		17	5	00	26	—	—	—	0.9	0.01	—	Quick	”	
209		19	0	55	59	0	55	58	1.9	0.10	0.10	”	”	
210		21	7	02	52	7	02	47	9.1	0.08	0.11	Slow	”	
211		21	23	51	50	23	51.8	—	3.5	0.03	0.01	”	”	
212		30	12	45	12	—	—	—	0.7	0.00	—	”	”	
213		30	12	50	22	—	—	—	0.6	0.00	—	”	”	
214		30	18	43	32	—	—	—	3.6	0.02	—	”	”	
215	November	2	15	01	10	15	01.2	—	5.2	0.03	0.08	”	”	
216		2	16	20	54	16	21	05	5.3	0.03	0.06	”	”	
217		3	8	43	41	—	—	—	1.0	0.01	—	Quick	”	
218		8	20	51.5	—	—	—	—	?	0.01	—	Slow	”	
219		8	—	—	—	20	54	17	2.5	0.02	0.05	”	”	
220		9	5	54	35	5	54.7	—	5.3	0.02	0.03	”	”	
221		10	1	52	42	1	52	42	6.1	0.09	0.10	”	”	
222		12	17	38	16	—	—	—	4.7	0.02	0.01	”	”	
223		19	12	28	48	12	28.8	—	16.2	0.01 ?	0.10	”	”	
224		20	14	43	45	—	—	—	1.0	0.01	—	Quick	”	
225		20	15	57	10	—	—	—	1.0	0.01	—	”	”	
226		24	6	22	22	6	22	22	36.0	?	0.05	Slow	”	
227		26	12	17	53	—	—	—	4.5	0.01	—	”	”	
228		26	19	38	37	—	—	—	1.7	0.01	—	”	”	
229		27	7	18	22	7	18	22	3.2	0.15	0.14	Quick	”	
230	December	6	16	12	44	—	—	—	4.9	0.04	—	Slow	”	
231		8	15	55	12	The instrument is removed for its modification in its construction.			6.5	0.22	—	Quick	”	Felt
232		9	9	52	30				6.7	0.31	—	”	”	
233		10	0	26	21				4.6	0.01	—	Slow	”	
234		13	5	17	02				3.8	0.11	—	”	”	
235		18	23	15	50				1.3	0.01	—	Quick	”	Felt
236		20	16	12	19				3.9	0.02	—	Slow	”	
237		22	0	44	50	—	—	—	35.1	0.06	—	”	”	
238		22	10	35	47	—	—	—	4.2	0.02	—	”	”	
239		22	18	53	45	—	—	—	1.3	0.02	—	”	”	
240		28	1	32	06	—	—	—	6.2	0.07	—	”	”	
241		29	18	49	43	—	—	—	8.7	0.12	—	”	”	

TABLE B.
(*Pulsatory Oscillations*)
(*EW Component.*)

Beginning		Ending		Maximum		
Date 1913	Hour	Date 1913	Hour	Date 1913	Hour	Double Amplitude
January	1	January	3	January	1	0.01
	4		9		9	0.01
	17		20		18	0.01
	22		25		22-23	0.02
	30	February	1		30-31	0.02
February	6		8	February	7	0.01
	8		9		9	0.01
	19		20		19-20	0.01
	23		24		23	0.02
	26		27		26	0.01
March	6	March	8	March	7	0.01
	21		24		21-22	0.02
	29		30		30	0.01
April	1	April	2	April	1	0.01
	7		7		7	0.01
	12		13		13	0.02
	20		22		21	0.01
	23		25		24	0.01
May	1	May	2	May	1-2	0.02
	8		8		8	0.01
	10		12		10	0.01
	14		15		14	0.01
	27		28		28	0.01
June	7	June	8	June	7	0.01
	15		18		15	0.01
	29		29		17	0.01
July	4	July	5	July	29	0.01
	8		10		4	0.01
August	3	August	4	August	4	0.01
	26		29		9	0.01
					3-4	0.02
					27	0.05
September	20	September	21	September	3-4	0.02
	27		29		27	0.01
October	4	October	5	October	20	0.02
	16		20		27	0.02
November	7	November	8	October	4	0.03
	10		11		17-18	0.04
	14		15	November	7-8	0.01
	18		19		10	0.01
	22		23		13-20	0.01
	24		25		14	0.03
	27		27		18	0.01
December	2	December	6		19	0.01
	12		15		22	0.02
	17		19		23	0.02
	31		31		24	0.01
					27	0.01
					12-16	0.01
					14-23	0.02
					13	0.02
					14	0.02
					18	0.02
					19	0.02
					31	0.01