No. 4 1933.

GEODÆTISK INSTITUT

Copenhagen, Denmark.

Bulletin of the Seismological Station

IVIGTUT

$\varnothing$ = 61° 12' N. λ = 48° 11' W. h = 20 m.

Lithologic Foundation: Gneiss.

Instruments: WIECHERT 1000 Kg. Horizontal Seismograph
WIECHERT 1300 Kg. Vertical Seismograph.

Constants (June - Dec.)

Component	T	v	r	V
	sec		mm	
N	9.2	3.8	o.4	175
E	9.4	4.2	o.5	21o
Z	5.1	4.2	o.1	2oo

Until May the instruments were not in good working order. In May the instruments and the clock were repaired and since then they have been working well. The clock corrections have been determined daily and time known with an accuracy of 1/1o sec.

No.	Date 1933	Hour	Forerunners P m s	Forerunners S m s	h m s	m s	L h m	Undef. h m	△ o	Remarks
	Jan.									
1	4	2					.2			Strong microseisms.
2	4	4					.3			" "
3	7	4					.8			" "
										No records $8^d\ 18^h$ - $1o^d\ 15^h$.
4	18	9					.4			
5	21	19			42	13	1.2			Indian Ocean.
6	23	18			36		54			
7	27	23			7		.4			
	Febr.									
8	3	22	i23 8	32 22			47		71	Kurile Islands.
9	13	3						.3		
10	19	9					.7			
11x	23x	8	21 41		31	58	.8			Chile.
12	27	17					.6			Faint.
	March									
13x	2x	17	43 o	53 6	46	14	54 2ox	66	8o	Pacific Ocean East of Japan.
14	2	2o					1.4			Small preceding movement.
15	3	9					.9			Superposed on preceding shock. $3^d\ 15^h$ - $14^d\ 15^h$ no N or E records.
16	11	2	3.2		14.7		24			P uncertain. Califomia.
17	17	16	i 5 46	14 6			.4		61	Kamtchatka.
18	17	19					1.4			Small preceding movement.
19	18	4					.1			
2o	26	19					.5			
21	28	4					.7			
	April									
22	9	3					26			Small preceding movement.
23	9	4	8 8	16 14			27		59	Off west coast of Mexico.

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No.	Date	Hour	Forerunners P	Forerunners S			L	Undef.	△	Remarks
	1933		m s	m s	h m s	m s	h m	h m	o	
	April									
24	9	21					35			
25	19	7					34			
26	25	22					49			
27x	27x	2	i44 18	51 o	46 14		55		46	Alaska.
28	27	12			13.4		.4			Near Alaska.
	May									
29	1	1o					26			
3o	1	19					.3			Some preceding movement.
31	1	2o	2 42	12.2			.5		74	No records 27d 13h - 27d 18h.
32	29	11					.3			
33	3o	12					.2			
	June									
34	2	7	51 22				1.4			Japan. P quite small.
35	6	3					.4			
36	7	11	i58 56		69 39		1.5			China.
37	8	18		32.7			.8			Japan.
38	1o	11					.9			P small, between 22m and 23m.
39x	1ox	12					12			Iceland.
4o	1o	13					43			
41	1o	14					21			
42	1o	15					19			
43	1o	16					36			
44	1o	2o					44			
45	12	15					46			
46	13	2o			55.4		1.2			Japan.
47	13	22			34 45	38.2	42			Alaska.
48	18	4					.9			
49	18	21	i49 46	59 5o			1.2		8o	Japan.
5o	19x	19			2.5		1o			Alaska.
51x	24x	22					45			Sumatra.
52	25	21			4.7		8			
53	28	23	i44 33	52 35			1.o		58	Aleutian Islands. S quite small.
54	29	3					.1			
55	29	15					26			Small.
56	29	16					43			
57	29	16					59			
58	29	17					48			Quite small.
59	29	18					34			
	July									
6o	9	1	i41 34	i51 o	41 46	51 38	1.1		73	East of Hokkaido, Japan.
61	9	5	44	52.5			63			Mexico.
62	9	9	39.5	49.o			1.o			Kurile Islands.
63	9	9	59 45				1.4			Superposed on preceding shock.
64	9	12					.o			
65	9	12	i42 11	51 38			1.1		73	East of Hokkaido, Japan.
66	9	16	18 36	28.1			.7			" " " " P quite small.
67	9	18					.5			
68	9	22					.9			
69	1o	o	i33 4o	43 39			1.1		79	East of Japan.
7o	1o	3	31 49	39.9	35.4		.9		6o	Mexico.
71	1o	11					.6			
72	19	5					.5			
73	19	11					.3			Faint preceding movement.

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No.	Date	Hour	Forerunners P	Forerunners S			L	Undef.	△	Remarks
	1933 July		m s	m s	h m s	m s	h m	h m	o	
74	19	14					.2			Disturbed.
75	19	15	9 57				.4			Aleutian Islands region.
76	19	2o					.5			
77	2o	23	i26 6							Japan.
78	21	2o			27 37	37.o	1.o			Atlantic Ocean.
79	22	21	i 5 1	12 55			2o		57	Pacific Ocean.
8o	23	4	25 13	35 15					8o	Peru. P and S quite small.
81	23	9			44 4o	48.9	5o			Atlantic Ocean.
82	24	19			25.6		.8			Samoa.
83	26	5					.3			
84	3o	18					.4			
85	31	9					13			
86	31	11					39			
	Aug.									
87	11	9					.7			
88	13	1o					.6			
89	15	o			55 4o		57			
9o	2o	12					.6			
91	25	8	3 3[x]	13 34	i 6 18	19.o			85	China.
92[x]	28[x]	22			i38 39	4o 7[x]				South Sandwich Islands.
93	29	15	i 3 1o	ill 52	i 5 19					Brazil. Deep focus.
94	31	3			12.4		16			
	Sept.									
95	2	17		63 9	55 o	63 37				Recording interrupted 64m - 68m.
96[x]	6[x]	22			i26 29	28 42				Fiji Islands region.
97	7	23					.1			
98	9	21					1.3			Faint preceding movement.
99	19	23					58			
1oo	24	15	29 44	37.9			.8		6o	S quite small. Aleutian Islands.
1o1	25	14					.7			
1o2	25	19	i 3 1o	12 4o	21.3		.5			Turkestan. Possibly an earlier small beginning of P.
1o3	3o	15					.4			
	Oct.									
1o4	2	15					.o			
1o5[x]	2[x]	15	i4o 24	49 15	42 55	5o 22	.9		67	Ecuador.
1o6	5	5					57			
1o7	5	6					28			
1o8	5	13	i4o 41	49.6			1.o		67	Persia
1o9	14	22					.8			
11o[x]	25[x]	23	4o 32[x]	5o 45	52 2o	56 29				Argentina.
111	26	12			37.4	44.2	1.1			
	Nov.									
112	2	12					.8			
113[x]	2o[x]	23	24 56							Baffin Bay.
114	22	13					.6			
115	23	19					.5			
116	28	11		29 31		37	.7			Persia.
	Dec.									
117	2	21					.1			Strong microseisms.
118	4	19			i53 38					" "
119	12	15					.2			

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No.	Date	Hour	Forerunners P	Forerunners S			L	Undef.	△	Remarks.
	1933 Dec.		m s	m s	h m s	m s	h m	h m	o	
120	13	21			41.9		.9			
121	14	1					54			
122x	14x	7					51			
123x	15x	7	44 10	46 8					11	South of Greenland.
124	19	5					.9			
125	19	17					56			

x affixed to number and date refers to Notes.

x affixed to time of phase indicates that beginning of phase is in time-mark.

Notes.

No. 11. Febr. 23. 8^h. Chile; Δ = ca. 85^o. P, condensation, very large on Z. i_Z 21^m 56^s. $i(\overline{S_c P_c S})_E$ 31^m 58^s, large, e_N 32^m 6^s. PS_N 32^m 58^s.

No. 13. March 2. 17^h. Pacific Ocean East of Japan. Very strong record. The beginning of P small, on Z only; possibly 1 sec. earlier than read. $i_{N,Z}$ 43^m 3^s, followed by increasing, very large oscillations. PP 46^m 14^s. $e_{E,Z}$ $47^m.8$; e_N $48^m.4$. S_N 53^m 6^s, large; on E gradually increasing, very large oscillations. PS_Z $53^m.9$. e_N 54^m $2o^s$ (in time-mark), very large. SS_N $58^m.2$. Large waves of long period in first part of L; very large M.

No. 27. April 27. 2^h. Alaska. iP 44^m18^s, condensation; followed by a group of rather large oscillations. $e_{N,Z}$ $45^m.5$. PP 46^m 14^s, increase of movement 46^m 24^s. $S_{N,E}$ 51^m 0^s, large. PS_Z 51^m 12^s. $e_{N,E}$ (S_cS) $53^m.7$. SS_E $54^m.4$.

No. 39. June 10. 12^h. Iceland; Δ = ca. 12^o. L rather large, forerunners hardly discernible.

No. 51. June 24. 22^h. South Sumatra; Δ = ca. $12o^o$. PP small, shortly after 15^m. Increasing movement in forerunners, but phases not clearly marked. First L waves large, the period about 1 min.

No. 92. Aug. 28. 22^h. South Sandwich Islands; Δ = ca. 125^o. i P'_Z 38^m 39^s, quite small; i_Z 38^m 51^s. e PP $4o^m7^s$.e 47^m 11^s. PS $5o^m$. 1. SS 56^m 42^s. $7o^m$ a very large wave of long period. Later L regular, not very large.

No. 96. Sept. 6. 22^h. Fiji Islands region; Δ = ca. $13o^o$. Deep focus. i P'_Z 26^m 29^s, dilatation; i_Z 26^m 34^s. PP_Z 28^m 42^s. $e_{N,E}$ 29^m 54^s.

No. 105. Oct. 2. 15^h. Ecuador. iP, condensation. PP 42^m55^s. e S_N 49^m15^s, e S_E 49^m $2o^s$, large. S_cS 50^m22^s, large and clearly marked. L not very large, about 56^m.

Notes.

No. 110. Oct. 25. 23^h. Argentina. Deep focus. P not large, but clearly marked. e S_E 50^m45^s, i S_N 50^m47^s, large. e_E 52^m2o^s, large; e_N $52^m.8$. SS 56^m29^s. L small.

No. 113. Nov. 2o. 23^h. Baffin Bay. iP, dilatation; strong increase of movement i 25^m8^s; continued strong oscillatory movement. e_E 27^m24^s, movement of long period, S or L ? $e_{N,E}$ 27^m48^s. i_E 28^m5^s, large oscillations. M very large.

No. 123. Dec. 15. 7^h. South of Greenland. Forerunners small, disturbed by microseisms. L rather large, immediately after S.