

GEODÆTISK INSTITUT

Copenhagen, Denmark.

Bulletin of the Seismological Station

IVIGTUT

$$\Phi = 61^{\circ} 12' \text{ N. } \Lambda = 48^{\circ} 11' \text{ W. } h = 20 \text{ m.}$$

Lithologic Foundation: Gneiss.

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

Constants (Mean Values):

Component		T	v	r	V
		sec.		mm	
N	from 18/11 29	12.3	2.6	0.6	150
E	from 18/11 29	12.4	4.4	1.3	200
Z		5.3	4.4	0.1	180

The seismological station IVIGTUT in south-Western Greenland was erected by the Geodetic Institute of Copenhagen. Valuable assistance was rendered by the Kryolith Mine- og Handelsselskab.

The station is equipped with Wiechert instruments: A 1000 kg horizontal and a 1300 kg. vertical seismograph; they are mounted in a cave blasted out of the rock.

The time - marking clock, Strasser & Rohde, is controlled by means of Nauen scientific or ONOGO signals, but it has not been feasible to have it done daily, and though clock - corrections are usually known to the second the uncertainty may occasionally amount to some seconds.

The Ivigtut wireless operator attends to the station. As he has not always been able to deal with the difficulties which have arisen and as in addition there is an exceptionally strong microseismic movement, the number of records has been considerably reduced.

IVIGTUT.

No.	Date	Hour	Forerunners				L	Undef.	Dist.	Remarks		
			P		S							
			m	s	m	s	h	m	h	m	o	
1	1929 Aug. 28	19					13.6	.5				
2	Sept. 1	17							.3			
3 ^x	17 ^x	19					27.9	32.4				Pacific Ocean
4	27	23					38.2	.7				
5 ^x	Oct. 19 ^x	10	125	23	35	39	36	30	.8		81	Chile
6	20	16						.6				
7	24	7						.4				
8	Nov. 1	7						.3				
9	9	1					150	32				
10 ^x	15 ^x	19					15.7	17.4	.6			
11	16	11							.4			Seismic?
12	23	0					38.9	.1				
13	Dec. 6	17						.7				
14	6	21						.3				
15	9	7						.8				Some preceding movement Strong microseisms
16	13	5						.2				
17	14	22					27	30				Iceland
18	14	22						52				
19	15	1					36	38				Iceland
20 ^x	17 ^x	11	9	2	17	13	12.9	24.4			60	
21	18	8						.0				
22	1930 Jan. 5	1	30		39			.6				
23	5	19						.1				
24	14	23						51				
25	16	0						.3				
26	28	7						.6				
27	Febr. 1	19						.6				
28	2	15	6		14.6							
29	2	17								26		
30	12	7						.6				
31 ^x	14 ^x	18					54	19				Aegean Sea
32	14	21						.8				
33	26	3							.0			
34	March 6	16						.8				
35	8	4					2	53	.2			
36	10	16			45	43						Sea of Okhotsk
37	26	7					34					Timor
38	31	12	42	31	49.4			56		48		Aegean Sea

IVIGTUT

No.	Date	Hour	Forerunners				L	Undef.	Dist.	Remarks			
			P		S								
			m	s	m	s	h	m	h	m	o		
	1930												
	April												
39	16	13				54.9							
40	16	14							.9				
41	17	20							.5		No time-service from April 17. to June 2.		
	June												
42	5	12							.6		Preceding movement disturbed		
43	11	1				9.3							
44	12	10								9			
45	13	1						21			Faint preceding movement		
46	15	22						.2			Disturbed		
47	19	14							.2				
48	23	20						.6					
49	25	10	28	48	38	42 ^x					77	Peru	
50	25	12				15.0	19.7	.5					
51	25	21	32	42		42.6						77	Peru
	July												
52	1	1						.5					Preceding movement un-
53 ^x	2 ^x	21	16	26		19.9	33.1	.7					Tibet readable
54	7	14						.0					
55	22	19	137	14	46	40		1.0				72	Kuril Islands
56	23	0				22	57						Italy
57	27	19				19.2		.5					
58	29	6				37		.8					
	Aug.												
59	2	17						.2					Small preceding movement
60	4	5	114	58	123	30	28						Deep focus
61	19	5								36			
62	20	21					18	.7					
63	23	11	4.6		14	1							Persia
	Sept.												
64 ^x	21 ^x	23	17.2		27.7			.7					China
65 ^x	22 ^x	1				50.8		1.8					Assam
66 ^x	22 ^x	14	32.4			43.2		.5					
67	25	19								18			Preceding movement disturbed
68	30	22											
	Oct.												
69	2	1								.9			
70	8	10				40	13	51.3	1.2				
71	11	3	10.4							15			Greenland Sea
72	23	10						.0					No records from Oct.24 to Dec.11.
	Dec.												
73	21	15				8.6							Disturbed

^x affixed to number and date refers to Notes.
^x affixed to time of phase indicates that beginning of phase is in time-mark.

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1929-30.

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No.	Notes
3.	Sept. 17. 19 ^h Pacific Ocean. Forerunners quite small except SS, 35 ^m 6, which is large; almost immediately followed by L of long period. Later large M.
5.	Oct. 19. 10 ^h Chile. P sharp on X, not large. S unusually large. Large waves of long period in first part of L; later L small.
10.	Nov. 15. 19 ^h Caroline Islands. In forerunners phases most clearly marked on N. Additional readings: 19 ^m 0; 25 ^m L earliest on E, about 37 ^m , with waves of period of about 1 min. and large amplitude.
20.	Dec. 17. 11 ^h Between Kamtchatka and Aleutian Islands. Z not working well, P not quite certain. PPP large on N. S sharp on E, 17 ^m 13 ^s ; on N increase of movement 17 ^m 1, large movement begins 17 ^m 25 ^s . Very large movement follows S. 24 ^m 4 excessively large oscillations, largest on E, SSS or LQ? Very large M.
31.	Febr. 14. 18 ^h Aegean Sea. 54 ^m 19 ^s large in all three component records; no other distinct phases.
53.	July 2. 21 ^h Tibet. The beginning of P clearly marked on Z only; larger movement i 16 ^m 41 ^s . e 26 ^m 7 not clearly marked; larger movement e _N 27 ^m 2. In first part of L large movement of long period.
64-66.	Sept. 21-22. There is an uncertainty of several seconds in time-corrections.