Geodætisk Institut

Proviantgaarden, Copenhagen, Denmark.

Bulletin

of the seismological station

SCORESBYSUND

 $\varphi = 70^{\circ}29' \text{ N. } \lambda = 21^{\circ}57' \text{ W. } h = 69 \text{ m.}$

Lithologic foundation: Gneiss.

No. 3. Jan.-June 1929.

Instruments:

Galitzin pendulums with galvanometric registration.

Constants:

Component	1	T_1	A_1		T	k
Calculation 1	cm	sec	em		sec	
N	12.0	12.4	100	until 10/6	11	75
				from 10/6	121/2	90
E	12.0	11.9	100	until 2/a	10	65
				2/3-27/6	111/2	70
DO DO				from 27/6	12	85
Z	14.1	10.1	100			

The values of T and k are approximate mean-values; the damping has been nearly aperiodic.

Z has not been very stable; the period has varied from about 2s to 6s.

Time-corrections have been determined daily by means of Nauen scientific time-signals and time is, in general, known to the second.

No.	Date	Hour		Forer	unners		L	Un-	Δ	Remarks
140.	Date	Hour	P	S			L	defined	Δ	Remarks
1	1929 Jan. 4	17	m s	m s	h m s 55 55	m s	h m	h m	0	Near earthquake.
2	6	0		1 0	5 10					Felt in Iceland.
3 4	8	8 9				1361	Up	29 33		
5* 6	13*	0 16	i13 3	i21 4	15.5	i 25 0	36	an. The	58	Kurile Islands. Recording interrupted until 16th36th.
7	13	19			H		24			recording interrupted until 10 50
8 9	14 14	3 18					.4	.1	*	
10* 11*	16* 17*	8	56.6	64 11	22.3	29.5	.8	91.5	55	WITH A LIKE IN
12	19	3	30.0	04 11	mad !		HAS	57	33	
13 14	20 21	15 6			.3		.2	m' j	1 13	
15 16	21 22	10 15	40.2	i 48 12	44.9			.4	58	Alaska. P faint.
17*	24*	20	47 58	56.9	50.8	62.4		.4	67	Central America.
18 19	25 26	2					.1			
20 21	26 28	15 22			4 1 1		.0 .7			
22	30	17		Page 1	21.7		.8			de la companya de
23	31	18	of the last		.5		.7			A CONTRACTOR OF THE PARTY OF TH
24*	Febr.	17	i 23 52	31 32						Zéravchan. Deep focus.
25*	2*	0	11.9	21 9	21 37		.5		70	Atlantic Ocean.
26 27	3	3 18	1	71-5			.5 .7			
28 29	4	7	110 5				.0	.2		
30	5	4					.3			0
31 32	6 8	7 2			7 24 31		.7	100		Sea of Okhotsk.
33 34*	10 10*	4 15	50.6	59.6	53.4	60.0	.3	TT		Central America.
35	10	17	00.0		The state of the s		.7			
36 37	13 15	22 8	4 4 4				.9 .6		75	Some preceding movement.
38 39*	17 22*	21 20	52 6	60 22	61 37	61 58		.4	60	Atlantic Ocean.
40* 41	26* 27	9 20	i 9 59	17.4			.4		53	Alaska.
7.1								WES.		
42	March 1	7	1.00	47.0	42.6	50.5	55			Alaska.
43 44	1	9 16			12.2		.3 .3	11.0		Harry Care Land
45	1	19					.5	1		
46	1	21					.0			

Scoresby-Sund.

ſ					-					Junu.			
	No.	Date	Hour			Forer	unners			L	Un-	Δ	Remarks
	7,721			P	5	S					defined		
	- 4	1929 March	12-1	m s	m	s	h m s	m	s	h m	h m	0	
-1	47	March 3	3								.4		
-1	48	3	9							.4	1.5		
1	49	3	16				- 4 h			59			Charles and the state of the st
	50	3	18	1 4 3						.7			
1	51	5	16							.6			
	52*	7*	1	i 44 25	52	17	2.00					57	Aleutian Islands.
-	53 54*	9 9*	2 -	24.4			34.7	35.0		.9			Bonin Islands region.
-	55	10	0				10.4	15.2		.9			New Zealand region.
-	56*	10*	14				51 53	57	40			1	Marianne Islands,
-	57	10	23				4	20	27	.3			
	58	11	13				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			.9			STATE OF THE PARTY AS
	59	12	3		-					.0			
-	60	13	11				- 57T				19		
1	61 62	14 15	23 13							.0			
-1	63	15	.18				11.6			15			
- 1	64	16	6							.9		19 13	Faint.
-1	65	18	2								12		
- 1	66	18	23	N. A. P. S. D.			41.6			1.0		1.1	
-	67	19	10	- 4						.0			
-	68*	19*	21	5 4			20.0			.9	100	ne i	Central America.
-	69 70*	20 21*	21 2	48 20	58		39.6 62			.9		74	Central America.
- 1	71	23	20	40 20	58	1	34			.9		14	Central America.
- 1	72	26	5				01			.5	30		Care To the Control of the Control o
1	73	27	22							27			100
	74	28	3							.8			THE RESERVE AND ADDRESS OF THE PARTY OF THE
-	75	28	20				.7			1.2			The second second second
1	76 77	30 31	16							.9			
1	78	31	6							.8			Faint preceding movement.
-	79	31	20		38	8				.9			Tank preceding movement.
			P 14	HALL BY								11 19	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	-	April								1033			
	80	2	4							.1			
	81 82	5	9							.2		7.5	
	83	6	1							.0 56			
	84	6	4				15.6			21			THE COLD IN THE STATE OF THE ST
	85	6	5				10000				13		
	86	7	19	43.5	52	48	14-34		48	1.1		70	
	87	8	10				i 39 17	40	16	100		1	Faint preceding movement.
	88	9	3				21			.3		1	
	89 90	9	6	Train !			21			.9 .0			Total Control of the last
	91	10	6						22 7	.0	Ter 1	17. 2	United the party of
	92	10	10	151:17						.0	Feb		
1	93	10	18							.5		LIE	Land De la land
	94	13	7	1 3 3 4					4	.9		k	
	-				_	_		_					

N.	Data	Hour		Forer	unners		L	Un-	Δ	Remarks
No.	Date	riour	P	S			L	defined	4	Remarks
	1929 April		m s	m s	h m s	m s	h m	h m	0	
95	13	21						.6		AND THE PARTY OF T
96	16	15					.0			The state of the s
97	17	3					.6			LES PERSON NOTING
98	19	21	1-1-1				17	93		
99	20	1					.4			
100	21	12		A			.7			Recording interrupted until 12h53m.
101	22 23	8						8		
102	27	12	-		2		.3	0	FIR	
104	27	21	and the		38		1.1	17.13		
105	28	5					.7	100		1 1 10 10 10 10
106	29	18					.9			property and series
107	30	19			13		.6	1 7 1	- AN	
					Water Sales					
100	May		7 == 11	A FE				E	P	
108	1	0 7			55.8	63.3	1.4	27. 1		
109 110*	1 1*	15	46 40	54 2	48.7	05.5	1.4		50	Persia.
111	1	22	10 10	34 2	26.8		1 2 1 1		30	1 Cisia.
112	2	14	36 37	45.2	20.0		.9	la na I	60	Kurile Islands.
113	3	9					.2			
114	3	16	State Land		36.6		.8			10 10 10 10 10 10 10 10 10 10 10 10 10 1
115	4	4					.3	and I		THE RESERVE
116	4	6	nan name			-	.9	D 1	111	
117	6	5			28 23	37.7	1.0	19. 14		New Guinea.
118	7	9			0		.8			New Guinea.
119	7 10	16			.9		1.4			New Guinea.
120 121	11	19	5				.6			
122	12	9			46.2		1.2	May 11		
123	12	20					13			
124	13	7	I THE REAL PROPERTY AND ADDRESS OF THE PERTY ADDRESS OF				.0			
125	13	10					.1			
126	13	13		43.7					12	Persia. Preceding movement
127	17	0					.6			disturbed.
128	18	1 8	46 0	152 22	A7 B	55.1	.5		43	Asia Minor.
129* 130*	18* 20*	6 5	46 0 2 40	i 52 22 10.7	47.6 6.3	33.1		PR 7 3	56	Asia Minor. Aleutian Islands.
-131	21	2	2 40	10.7	0,0		.9	P . 11	00	The state of the s
132	21	16	47.3	57.6			1.2	APP S	1	Japan.
133	22	20	1 -	1 (1	.5		1.3		1	Charles La Carlina
134	24	19	1-61				.3		100	ALTERNATION TO THE REAL PROPERTY.
135	25	4	Harrier H				.4	THE ST		CATALON OF A LONG
136	25	12	12 10	22 21	12 46	23.4			74	Peru.
137	26	9			1.8		.7			10 10 10
138	26	20	40.7	EE 47	E0 F2	50.7	-	.0		Pacific Ocean.
139*	26* 27	22 5	48.7	55 47	50 52 46	59.7	.9			racine Ocean.
140 141	28	0	7 23	16.8	-10		.6		68	
142	28	5					.8			Faint preceding movement.

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No.	Date	Hour		Forer	unners		L	Un-	Δ	Remarks
1100	Date	11011	P	S				defined	4	Remarks
	1929		m s	m s	h m s	m s	h m	h m	0	
	May		m s	III S	n m s	m s		in in		
143	28	18	THE RESERVE				.5	A TOWN		
144	29 30	5 9	58.0		62 30	72.1	.3 1.5			Argentine.
146	31	0	30,0	29 59	02 30	12.1	.7			Faint preceding movement.
1.0	0.1			20 00			**			Tank preceding movement.
	June									
147	1	9					30			
148	1	18	10.8	20.9			.6			
149*	2*	21	i 49 40	i 58 48	61 8	10.0	9 40 (1)	1 1/01	68	
150*	3*	20	38 44		40.7	49.7				Turkestan.
151 152	4	7 15	29 5		25 33 19	39 4			100	Philippine Islands.
153	5	9	20 0		00 10	00 4	.4			i imppine islands.
154	6	11	1 38	11.1	12.0				72	Atlantic Ocean.
155	6	14	17 11		.7		40.00			
156	6	16			10		.5		F	
157	7	1	THE STATE OF		1		.2	R. B.		Faint.
158	8	18	21-				.7			
159	9	7	No. of Lot					.5		
161	9	8	1		18.8	26.6		18		
162*	9*	9	18 30	27 2	28 27	20.0	35		63	Kurile Islands.
163	9	23			35		.7		00	
164	10	0			41		1.0	1		
165*	10*	23	i 5 44	i 7 42			-5540		10	Arctic Sea.
166*	12*	12			2.3	4.8				Pacific Ocean.
167	12	15					.1			
168*	13*	0	i 22 50	31 29	32.7	40 10			64	Kurile Islands.
169* 170	13* 13	9 20	38 16		42.4	49 10	1.1			Mindanao region.
171	13	23	14		.1		.9			
172	14	6	11	1	10.1		.7		1	
173	14	23			.6		1.2	-		
174	15	2	1 11 -				.7			
175	15	9			.3		.8	h		
176	15	17			44	***	.1	1-1-1	4 45	
177*	15*	19	I I I		53	59 40	1.5		1400	Mindanao region.
178 179	15 16	21 15			.5		1.1	.7	11	THE RESERVE OF THE PARTY OF THE
180	16	22					.6	.,		
181*	16*	23		14	7.1	i 7 32				New Zealand.
182	17	10	30.3	1119	40 46	41 37	.2	1-1-2	F	Mindanao region. P uncertain.
183	17	14		HE HAR			.3	11/11/11		
184	18	2		- 4 - 1			.0	1	100	
185	19	4					.8		H.A.	
186	19	7	44.4		55 7	55.9				Pacific Ocean.
187 188	19 20	13		3 . 1			.5	1 1 1 1		
189	20	18			.7		1.2	U, i B		
190	20	20	- do		34 49	35.6	1.0			Mindanao region.
	-					No. of the last of				1.8.0

No. 3.

Scoresby-Sund.

No.	Date	Hour		Forer	runners		L	Un-	Δ	Remarks
			P	S				defined		
191 192 193 194 195 196	1929 June 21 22 22 22 23 23	5 16 18 22 4 7	m s	m s	h m s 5.1 59.1	m s 5.8	h m .7 .7 .1 .3	h m	0	Mindanao region. Recording interrupted until 16 ^h 29 ^m . New Zealand.
197 198 199 200 201 202 203	23 24 25 25 26 26 26	22 18 5 7 6 17	39 19 0 46	47.3 10.2	11 29 49 42.8	12.3	.8 1.1 .0 .0 1.0 .4 .9		58 72	Mindanao region. Aleutian Islands. Japan.
204* 205 206* 207 208 209	27* 27 27* 28 28 30	13 22 22 1 2 2	2 55 40.4 58 28	i41 25	6 11	8 6	.7 .5 .6 .3			South Sandwich Islands. Mindanao region.
210	30	5			.5		1.2			
								1		1 min

International Seismological Centre

Scoresby-Sund.

NOTES

- No. 5. Jan. 13. 0h. Kurile Islands. Large earthquake. No Z record. First forerunners large on N; iPPP, 15m53h, followed by large oscillations. S exceptionally large on E, followed by large movement, possibly other phases. i_E 27m45h followed by very large movement, largest maxima in the record. L of long duration.
- No. 10. Jan. 16. 8h. Philippine Islands. Additional readings: 30m22s; SS 36m.0.
- No. 11. Jan. 17. 11h. Venezuela. No Z record. P quite small. S clearly marked on N. From S the movement has the appearance of L waves.
- No. 17. Jan. 24. 20h. Central America. P, PP and PPP, 52m40s, clearly marked on E, quite small on N. S small, not clearly marked, read on E; following movement larger. SS and SSS, 65m, large groups of oscillations. The beginning of L uncertain; M large, regular. There may be an error of some seconds in time-determination, since the rate of the clock has changed abruptly.
- No. 24. Febr. 1. 17^h. Zéravchan; △ = c. 54°. Deep focus (depth c. 200 km.). Strong movement follows P. On Z, pP 24m46^s and sS 25m8^s clearly marked. S; isS 32m53^s; 34m.9 clearly marked on N. 37m.0 begins a group of very large oscillations. L small, irregular.
- No. 25. Febr. 2. 0h, Atlantic Ocean. The beginning of P quite small, the reading uncertain; increasing movement without clearly marked phases. S read on E; no corresponding movement on N; 21m37s clearly marked on N and E. After S continued strong movement without clearly marked phases.
- No. 34. Febr. 10. 15h. Central America. Phases not clearly marked. P quite small, the beginning possibly earlier than read. SS 64m.2. The beginning of L uncertain; some regular M groups.
- No. 39. Febr. 22. 20h. Atlantic Ocean. The beginning of P not quite certain. S large and well defined; in following movement distinct onsets. 67m.5 large oscillations (iL?), immediately followed by a few M groups.
- No. 40. Febr. 26. 9h. Alaska. iPz possibly preceded by small movement. S not clearly marked.
- No. 52. March 7. 1h. Aleutian Islands. Very strong record. P very large, followed by large movement. S very large, earliest on N, possibly 52m11s, but not quite certain owing to strong preceding movement; S_E 52m21s. Following movement very strong. M very large.
- No. 54. March 9. 11h. New Zealand region. Increasing movement without clearly marked phases. L begins about 11h.9—12h.0.

 Some regular M groups about 20 min. later.
- No. 56. March 10. 14^h. Marianne Islands. Faint movement on Z 47^m.5, possibly P. PP 51^m53^s. Distinct pulses 57^m40^s; 58^m7^s. L faint, the beginning uncertain.
- No. 68. March 19. 21h. Central America. The beginnings of later phases not clearly marked.
- No. 70. March 21. 2h. Central America. No Z record; N disturbed. The beginning of L uncertain.
- No. 110. May 1. 15h. Persia. Strong record. iP 46m41s, followed by strong movement. PPP 49m.7. On N, S clearly defined, i 54m2s; on E some increase of movement 53m52s; large movement begins i 54m13s. i_N 58m.5 followed by very large movement.
- No. 129. May 18. 6h. Asia Minor. No Z record. P quite small, most clearly marked on E. PP larger. S large, clearly marked on N and E. SS large on N, hardly marked on E. On N strong movement continues into L, the beginning of which is uncertain
- No. 130. May 20. 5h. Aleutian Islands. P small but distinct on Z. S small, not well defined. The beginning of L uncertain.
- No. 139. May 26. 22h. Pacific Ocean near Alaska. The beginning of P quite small, not clearly marked, followed by larger movement; e 48m52s. S large, read on N, begins later on E. SS immediately followed by movement of large amplitude and periods of about 1 min. Later M very large.
- No. 149. June 2. 21h. Two earthquakes, Japan Sea and Pacific Ocean according to URSS. No N record. iP 49m40s, well defined on Z, and iS 58m48s, sharp and large on E, seem to belong to the first earthquake; 61m8s possibly S of the second.
- No. 150. June 3. 20h. Turkestan. No E record. S quite small, the beginning uncertain, about 45m.9.
- No. 162. June 9. 9h. Kurile Islands. E record only. P small, the beginning not quite certain. L early, clearly marked.
- No. 165. June 10. 23h. Arctic Sea. P (dilatation) unusually large, marked by 3 large oscillations of period of about 16 sec. S large; iS read on N; on E earlier increase of movement, later large movement continued in large L group, iL 8m28s. On N, L clearly separated from S; i L_N 9m4s. Regular M groups, period 10—12 sec.
- No. 166. June 12. 12h. Pacific Ocean. Distinct later phases, but beginnings not clearly marked.
- No. 168. June 13. 0h. Kurile Islands. e_Z 24m49s seems to be P of a second shock; the corresponding S not clearly marked. i 36m23s, P of a third, stronger shock; S 45m1s.
- No. 169. June 13. 9h. Mindanao region. The beginning of P small, the reading not quite certain. PP well marked. $\overline{S_cP_cS}$ and later phases, 50m.3; 51m8s; 56m.4, well defined on N. L earliest on E.

NOTES

- No. 177. June 15. 19h, Mindanao region. Additional readings: 60m28s; 77m.1.
- No. 181. June 16. 23h. New Zealand. $\triangle = 150^{6}$. Several well marked phases, especially on N. PP $10^{m}55^{s}$; $14^{m}6^{s}$; i_{N} $15^{m}33^{s}$, a strong phase, on N only; $20^{m}.4$; $25^{m}.6$; $27^{m}.6$; SS $30^{m}.3$; $31^{m}.4$. M large, regular.
- No. 204. June 27. 13h. South Sandwich Islands. P small; P' larger. Phases most clearly marked on N, but no time-marks; largest phases about 9m.6; 17m; 24m; 28m. On E 12m48s; 15m.0. Large, regular M.
- No. 206. June 27. 22^{h} . $\triangle = \text{c.}$ 500 km. P begins quite faintly, increases without distinct pulse; continued oscillations of about 10 sec. period. i_N 41^m25^s; e_E 41^m.5; movement increases into regular M group of period of about 10 sec.

BIANCO LUNOS BOGTRYKKERI A/S KØBENHAVN

	No.	Date	Hour		Forer	unners		L	Un-	Δ	Remarks
				P	S			183	defined	-	
		1929 July	93	m s	m s	h m s	m s	h m	h m	0	
	1	2	0			.9	62.3	1.5			
	2	2	2					.9	THE S		
	3	3	1	0 58	7.3	3.1	10.9	WE		43	Alaska.
-	4	3	2 8					.8			
	5	3	18			22.8	DO PAGE DE	.8	.8		
	7	3	21			24.0		.8	.1		
	8*	4*	4	36 17	42.3	37.8	45		***	40	Alaska.
	9*	4*	7	18 7	21.2			VI. VI.	-		
	10*	4*	7			UEG	T-H		M. E.	Pall	
-	11*	4*	8	0 25	3.4			7.0			
	12	4 5*	9	200 50	20 47	.8	40.5	1.2	THE PARTY		
	13*	5*	22	i 28 52 46 5	36 47 54.1	31.2 48.3	40,5 58,3	Total S	M. III	57 58	Aleutian Islands. Pacific Ocean.
	15	6	2	13 38	21.7	25.7	00.0	411-1	4	00	S uncertain.
	16*	6*	9	56 14	i 64 19	68.1		3	17.17	59	Atlantic Ocean.
	17	6	14					.3			
-	18	7	3					.3			
	19	7	6 9			29		.7		(4)	
	20 21*	7*	21	i 32 59	40 57	37.0 35.4	44.8	1.0		57	Aleutian Islands.
	22	8	2	132 39	40 37	14.5	44.0	.6		31	Aleutian Islands.
	23	8	10					.6	Call Trails	in He	Secretary and the second second
- 1	24	8	17					.3			Some preceding movement.
- 1	25	8	18					.8			25 26 27
	26	8	19			.4		.6			
	27 28	9	5			55		.3			
	29	9	8			.9		1.7			
- 1	30	9	17			48		1.3			
- 1	31	10	15	1000			100	.2	100		
	32	10	16	TO SERVICE SER				.8			
	33	11	1				197	.9	1 500		
	34	11	13 21	6 52	15	54 10.4	19	1.0			Aleutian Islands.
	35 36	12	16	2,5	8 38	4 0	19	.4	had my	41	Alaska.
	37	12	18	11.5	21.6		- 10 -	.7	49 30	100	, modu.
	38	12	23	THE P					40	114	Faint.
	39	13	5					.8			Faint.
	40	13	7			.8	1,111	1.0			
	41 42	13	15 6			10.3		.7			Some preceding movement.
	43	14	8					.6			Some preceding movement.
	44	14	9			18,4					
	45*	14*	9	47 4	55 28	50 55				62	Sea of Okhotsk.
	46*	15*	7	53 37	61 13	55.6	64 52	1.2		54	Persia.
	47	15	10					.3			In preceding shock.
	48 49	16 16	20				E F I'E I'I	.9			Faint preceding movement.
	50*	17*	8	147 54	55 48	51.2	60.2	.2		57	Pacific Ocean.
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						coresby				
No.	Date	Hour		Forer	unners		L	Un- defined	Δ	Remarks
			P	S				denned		
	1929		m s	m s	h m s	m s	h m	h m	0	
=1	July	20	""	3		" 3	200			Possibly 2 earthquakes.
51 52	17 18	20			.4		1.0	1	a. I	Small preceding movement.
53	20	12					.0			oman precessing movement.
54	21	10			47.2		1.1	lia 1		12 17 12 18
55	21	13			40.2		1.1			ALLEY OF STREET
56	23	15					.8			Faint preceding movement.
57*	23*	18	44 48	45 56					100	Iceland.
58	23	20		7 23				2		Repetition.
59	23 23	21						2		
60	24	3					.8		-	
62	24	19					35	170		
63	25	0			33.9				, had	to the later of the later of
64	25	13					.1		1. 140	the state of the
65	25	15	18 30	27.0			.7	1 8	63	THE RESERVE OF THE PARTY OF THE
66	25	23	9 52		20.3					Atlantic Ocean.
67	26	18	FO 40	00 10	22.0	00 D	.0		72	Isaas
68 69	26 27	22 13	59 46	69 16	62.6 12.1	69.9	1.4		72	Japan.
70	30	4	5 3	14.2	12.1		.5		69	of street and the latest
71	30	7	55.0	64.0			1.3		11999	P and S small, uncertain.
(0)										
18	Aug.						100		3	
72	1	5	14 41		24 57	25 14	100			
73	1	8			35.1		1.4			
74 75	3	13 15			10.0		.8			
76	3	18	55 22	63 17	15.9		1.3		57	Aleutian Islands.
77	3	21	00 22	05 11			1,0	.9		
78	4	9			19.4	22.6	27	244-1		The second second second
79	4	15			25 33		28	100		
80	4	22			40		1.4			
81	5	14	26		.8		1.3	1 9		In Mason
82*	6*	1	31 27				.3	175	1	Jan Mayen.
83 84	6	13 18		Tiple.			.5	23	HE	
85	7	7					.6			The same of the latest and
86	7	20		1 9 3			.9	1-6-4		The second second second
87	8	13	9 31	19 37	12.6	24.6			79	Burma.
88	9	3	45- 14	E .			.5			Faint.
89	10	2	1125					10		
90	11	18			28.8		1.3	42		
91	12	11 20					.9	43		
93	13	19			31		.9			
94	13	20		75	- 32		1003111	46		
95	14	2		18	37.5		1.3			
96	14	6					57			C. C
97	14	15						.8	- 3	Possibly 2 earthquakes.
98	14	19		ELU	13 9		.6			

No.	Date	Hour		Forer	unners		L	Un-	Δ	Remarks
140.	Date	riour	P	S				defined	Δ	Kemarks
	1929 Aug.		m s	m s	h m s	m s	h m	h m	0	100
99 100	15 15	15 20	8 9	17 45			.6	DE V	73	Central America.
101	16	11		17 10	- and I		.0		70	Central America.
102	16	21	220 1/2		48 58		1.3	STALL Y		
103	16 17	23	31 48		15. 19		34	3	1	Faint.
105	17	23	52 2	61 20	56.3	59.8	1.3	3	70	Central America.
106	18	6	111				.8			
107 108	18 19	8 2	/EE 07	05.7	55	71.0	1.5			Die Vie tale 1
109	19	11	i 55 27	65.7	58.6	71.2	1.4		81	Riou Kiou Islands region.
110	19	17			59.1		1.2			
111	19	20	56 50	67.1			1.5	BU 7	81	China Sea.
112	20	16 10	50 41	60.9	.0		1.3	- 43	80	Riou Kiou Islands.
114	22	17			.0		.6	12.00		
115*	27*	23						29		
116*	28*	5					no 1	41		
117*	28* 28*	5 15					1/1/19	59 37		
119*	28*	15	on the				17-19	49	10	
120*	28*	15						57	71.3	
121	28 28*	19 22	2.8	12.0	5.4		.4			Japan.
123	29	6						.5		Faint.
124	29	18					F 2 / 1	34		
125	29	20					.5			Faint preceding movement.
126* 127	29* 30	23			34.7		1.0	36		
128	31	19			39.7		.9	100		
11.1	1	0.00								The state of the s
100	Sept.	100	435-4				1.0	30	L. I	m
129 130	1 2	16 11			.3 37 0	37 50	1.0			The beginning disturbed. Faint beginning 31 ^m .
131	3	12	18.1	26 34	33.6	0.0	.7		62	Persia.
132	4	9	p. T.				45			Director of the state of the
133	4 5	22			45		.9	1		
134 135	5	14	U Est				.6			
136	8	8			12 4 6			.32		Small movement lasts c. 1/2 min.
137	8	11					18			
138 139	8 9	14		11 15			.5	.6		
140	10	20			42.9		1.4		= 4.7	
141	10	22		W.E.			.5	(6. 3)	14	pulses or leg ut
142	11	22	15 41		41 22		1.0			Formosa.
143 144	14 14	3			27.9		.2			MANUFACTURE OF THE LAST
145	17	5			55		1.2		175	NAME OF THE OWNER OWNER OF THE OWNER
146	17	13		1			.3			The same of the same

Scoresby-Sund.

- 5 **-**

No.	Date	Hour		Forer	runners	coresby	L	Un-	^	Remarks
110.	Date	Hour	P	S			L.	defined	Δ	Remarks
147* 148 149 150 151	1929 Sept. 17* 21 22 26 27	19 17 13 16 23	m s	m s	h m s 33.6	m s	h m .7	h m 0 .4	0	Pacific Ocean. Strong microseisms.
152 153 154 155* 156 157* 158 159 160 161 162 163 164	Oct. 2 2 5 5* 6 6* 6 7 8 14 14 16 18	9 17 3 17 6 8 14 16 17 10 20 20	9 36 4.1 19 16	i 17 27 14 32 27.0	.8 .5 27.9 20.0 37 48 30.5 48 59	23.9 38 49 54.0	1.4 .9 .5 .7 .5 .6 .3 .6 .6 1.1	38	57	Kamtchatka. Pacific Ocean. N record only. " " Burma. Possibly another shock superposed.
165* 166 167 168 169 170 171 172	19* 19 20 21 24 Nov. 1 4 5	10 20 16 11 7 7	26.5		36 50 44 51 5 38	37.8	.6 .5 .3			Rumania. Faint preceding movement.
173 174 175 176 177* 178 179* 180 181* 182*	8 9 11 13 15* 16 17* 18 18* 23*	4 2 12 1 19 11 4 6 20 0 8	38 19		8 30 1.2 - 43 23 21.3	15 4 8 2 28 15	.0 .2 .7 .6 .5	28		Some preceding movement. Strong Near earthquake. [microseisms. Caroline Islands. Mindanao region. New Foundland. New Guinea.
184 185 186 187 188 189	Dec. 6 6 6 9 13 13 14	12 17 21 7 5 9 22			.2 .2 .1.6		.3 .5 .7 .4 .8	32		Strong microseisms. Very strong microseisms. " "



No. 4.

Scoresby-Sund.

No.	Date	Hour		Forer	unners		1	Un-	107	
140.	Date	Hour	P	S			L	defined	Δ	Remarks
191 192* 193 194 195 196 197 198 199	1929 Dec. 15 17* 17 18 18 18 24 30	1 11 18 21 5 7 13 5	m s	m s	h m s 10 46 58.0 22	m	.2 .4 .5 .7 .5 .8	h m 40	0	Small preceding movement. Small preceding movement.
200 201	31 31	1 5			27.3	36.1	.8	TOTAL TR. NO.		THE PERSON NAMED OF THE PARTY O
STEEL STATESTS										

Scoresby-Sund.

NOTES

- No. 8. July 4. 4h. Alaska. P small, PP larger. S quite small on E, larger but not very clearly marked on N. After SS movement continues into L, which is irregular.
- Nos. 9-11. July 4. 7h, 8h. 3 records of similar appearance, probably earthquakes from one and the same origin. The first shock the strongest, but P and S quite small, their readings not certain. The beginning of L uncertain; a regular M group. The second, smallest, shock about 17 min. after the first one, P and S not distinguishable. P and S of the third shock small, uncertain.
- No. 13. July 5. 14h. Aleutian Islands. Strong record, phases clearly marked. PP small, PPP 32m25s much larger, and larger than P. SSS 43m.3 large and clearly marked on N. M large.
- No. 14. July 5. 22h. Pacific Ocean. PPP 49m.6 larger than P and PP. S quite small, uncertain, followed by larger movement, which on N begins by a clearly marked pulse 54m36s, possibly PS. 56m.0 a clearly marked phase.
- No. 16. July 6. 9h, Atlantic Ocean. First forerunners quite small. From about 70m some waves of long period and large amplitude; following L small.
- No. 21. July 7. 21^h. Aleutian Islands. Large record, clearly marked phases. PP small. PPP 36^m.4, larger than P and PP. A distinct phase 38^m.9. Some increase of movement before S. PS large, 41^m28^s; following movement large. SSS, 47^m.4, and following movement very large. Very large M.
- No. 45. July 14. 9h. Sea of Okhotsk. No E record. Phases clearly marked. P increases 47m15s. PPP about as large as P. After S, movement of long period; the beginning of L uncertain. 10h16m.3 a clearly marked phase on Z, possibly P of another shock, but other phases not distinguishable.
- No. 46. July 15. 7h. Persia. Clearly marked phases. On N, a well defined phase 63m24s, possibly SoPoS. L regular, not large.
- No. 50. July 17. 8h. Pacific Ocean. No Z record. No PP but large PPP. The beginning of S small. 57m.7 possibly $S_c P_c S$. 62m.4 SSS or the beginning of L.
- No. 57. July 23. 18h. Iceland. No N record. P begins quite faintly, possibly a few seconds earlier than read; from 44m57s stronger movement of short period superposed on long period movement. 45m56s a pulse on E, read for S. i_E 46m7s, immediately followed by very large M. e_Z 46m7s; M_Z begin about ¹/s min. later.
- No. 82. Aug. 6. 1h. Near earthquake; Jan Mayen according to URSS. The beginning of P not very clearly marked, followed by oscillations of period of about 10 sec., large on E. e_N 32m23s; large M groups begin on N 32m.8. On E, irregular not large movement from about 32m.5; small M groups begin about 33m.4, a large M group about 34m.7. In M period of about 8 sec.
- Nos. 115-120, 122. Aug. 27, 28. Small wave-groups, all very much alike but of different strength. They all begin quite faintly, earliest on E; N records on the whole stronger. The first group begins on E 28m21s with waves of period of about 10 sec.; from about 29m.3 smaller movement with waves of short period superposed; from about 30m.0 larger waves of period of 6-7 sec. N begins 28m.8 with somewhat irregular waves; from about 29m.7 quite regular waves of period of 6-7 sec. Small Z records of first 2 groups only.
- No. 126. Aug. 29. 23h. Group of waves, larger and of a somewhat different type from nos. 115—120. The beginning more definite, and simultaneous on N and E, 35m.6. No Z record.
- No. 147. Sept. 17. 19h. Pacific Ocean. No Z record. Very strong microseisms. Some movement previous to first phase read. e_N 33m45s. Large M.
- No. 155. Oct. 5. 17h. Kamtchatka. P clearly marked on N and Z; PP and PPP distinct phases on N, but beginning not clearly marked. After S, about 19m.0, another phase. SR visible, but not clearly marked. On N, some large regular waves in first part of L.
- No. 157. Oct. 6. 8h. Pacific Ocean. No Z record; some microseismic movement; the reading of P not certain. PR quite small. No. 165. Oct. 19. 10h. Chile. No Z record; some microseismic movement; the beginning of P faint, possibly earlier than read.
- PP 29m.9, not large. 37m.8 on N only; followed by large movement of long period. e_E 38m.6. SS 43m.3. Rather strong movement of long period continues after S. In first part of L somewhat irregular large oscillations of long period; later L not large.
- No. 177. Nov. 15. 19h. Caroline Islands; $\triangle = \text{ca. }100^\circ$. P possibly 4m.3, quite faint. $PP \text{ 8m}30^\text{s}$. On N, following phases very clearly marked: $\overline{S_cP_cS}$ 15m4s; $PS \text{ 17m}35^\text{s}$; SS 23m.2. $e_E \text{ 15m}.7$ possibly $\overline{S_cP_cP_cS}$.
- No. 179. Nov. 17. 4h. Mindanao region. $S_c P_c S$ 8m2s very clearly marked on N and E. Followed by irregular movement without clearly marked phases.
- No. 181. Nov. 18. 20^h . New Foundland. N and E records quite unreadable owing to exceptionally strong microseismic movement. The beginning of P not quite certain. Z stopped working at about 47^m .

NOTES

No. 182. Nov. 23. 0h. New Guinea; $\triangle=$ ca. 110°. Additional readings: PS $30^{\rm m}43^{\rm s}$; SS $36^{\rm m}.6$.

No. 192. Dec. 17. 11h. Between Kamtchatka and Aleutian Islands according to Strasbourg. Very strong record. On Z, P seems to begin quite faintly 8m16s, increases 8m23s and again i 8m38s. The reading of S not quite certain owing to the difficulty of disentangling the traces of the different lines; later phases unreadable.

BIANCO LUNOS BOGTRYKKERI A/S