No. 13. 1935.

Geodætisk Institut

Proviantgaarden, Copenhagen, Denmark.

Bulletin

of the seismological station

SCORESBY-SUND

$\varphi = 70°29'$ N. $\lambda = 21°57'$ W. $h = 69$ m.

Lithologic foundation: Gneiss.

Instruments:

Galitzin pendulums with galvanometric registration.

Constants:

Component	l	A_1		T_1	μ^2	T	k
	cm	cm		sec		sec	
N	12.0	100	$^1/_7$—$^{28}/_{11}$	11.8	0.0	12.1	100
			$^{28}/_{11}$—$^{31}/_{12}$	11.8	0.0	12.1	51
E	12.0	100	$^1/_7$—$^{28}/_{11}$	11.9	0.1	11.5	99
			$^{28}/_{11}$—$^{31}/_{12}$	11.9	0.0	10.8	50
Z	14.9	100	$^1/_7$—$^{21}/_8$	11.6	0.1	9	92
			$^{21}/_8$—$^8/_{12}$	10.0	0.2	8	108
			$^8/_{12}$—$^{31}/_{12}$	10.0	0.0	8	61

Time-corrections have been determined daily by means of Nauen scientific time-signals and time is known with an accuracy of about $^1/_{10}$ sec.

Scoresby-Sund.

No.	Date	Hour	Forerunners P	Forerunners S	Forerunners	Forerunners	L	Undefined	△	Remarks
	1935 July		*m s*	*m s*	*m s*	*h m s*	*h m*	*h m*	°	
1	3	0					3			Small.
2	3	22			13					
3	5	18	2 30	10 10	13.8				55	Buchara.
4	6	3						50		
5	7	13	36 7	46 45	39.7	52.5			87	Luzon.
6	9	2						.7		
7	9	5						.2		
8	9	7			8.5		.5			Small preceding movement.
9	9	12			40	49.0				
10	10	10					.2			
11	10	21			54					
12	11	8	36 30	45 55*			1.1			Japan. *P* small, uncertain.
13	11	14					.2			
14	12	1			59		1.2			
15	12	21					.7			
16	13	0			12					
17	13	15						41		
18	14	14					.3			
19	15	14			50 18					Preceding movement disturbed.
20	16	16	*i* 31 18	41 40	34.4	47				Formosa. *S* small, uncertain.
21	16	20			25					
22	17	0			7.1		10			
23	17	0			42					
24	17	4						34		
25	17	4			52.2		59			
26	17	11			*i* 5 20	*i* 7 30	.7			*i* 8^m47^s. *e* $10^m.5$. $18^m.2$. South Atlantic Ocean.
27	19	1	*i* 1 14	10 36	4 1	*i* 10 44			72	*SS* $15^m.4$. East of Japan.
28	20	2					49			Small.
29	23	4			19 5		.7			
30	25	21					43			Small.
31	26	4	54 57	64 18			1.2		72	
32	26	8					3			Small.
33	26	8	*i* 13 11	20 57	*i* 14 51	22 14				*e* 25^m36^s. Deep focus.
34	26	9					.8			
35	26	10		52 34			66			China.
36	28	5			34.4	41.6				
37	29	4	26 15	35 35					72	
38*	29*	7	54.0		57 7	*i* 59 3				Pacific Ocean.
39	29	23			33.9	38.6	44			
40	30	6			4		.7			
41	31	10					30			
	Aug.									
42	1	14			19 59	23.9				
43	1	16	19 43	28 57	22.4		.6		71	Costa Rica.
44	1	18					20			
45*	3*	1	23 24	34 39	*i* 27 34	34 2			95	Sumatra.
46	3	5		47.1	43.0		51			Mediterranean Sea.

Scoresby-Sund.

No.	Date	Hour	Forerunners P	Forerunners S			L	Un-defined	△	Remarks
	1935 Aug.		*m s*	*m s*	*m s*	*h m s*	*h m*	*h m*	°	
47	3	11	58.9							*P* uncertain, disturbed. Recording
48	3	13					.8			[interrupted 12^h0^m—13^h12^m.
49	4	2	35 28	44.9			1.0			*S* quite small, uncertain. *e* 46^m53^s.
50	4	9	45.0	51 18	46 36	54.9	60		42	
51	5	14					.8			
52	5	21					.2			
53	6	0			19.1		.7			
54	6	7					.0			
55	6	7					.8			
56	6	14					.4			
57	7	9	14 14*	24 9			.6		78	
58	10	17			53.4	*i* 54 55	1.4			*e* 55^m31^s; $58^m.5$.
59	11	7			56.7		1.3			
60	15	14			47.6		.9			
61*	17*	2	0.7		3 42	*i* 6 11	.6			Pacific Ocean.
62	17	20			49 33		1.3			
63	19	2					.3			
64	19	10					.0			
65	20	9						.1		
	21									No records 4^h—16^h.
66	22	6						23		
67	22	20	34 18	36.8	37 0	37 31				Baffin Bay. *S* quite small, uncertain.
68	23	10						.5		[37^m31^s possibly *L*.
69	23	11					.3			
70	23	11					58			
71	23	14			16.4	22.5	.7			*SS* $31^m.2$. Sumatra.
72	25	5	10 24	12 23						12^m23^s possibly *L*. Spitsbergen.
73	26	16					35			
74	29	11					24			
75	31	0					.9			
76	31	17	50 42	59 26			70			*P* and *S* small, uncertain.
										[South of Kurile Islands.
	Sept.									
77	1	1			19		24			
78	2	7			35.1	44.8	1.2			
79	2	10					56			Small.
80	3	11			20 15		.6			
81	3	17					58			Small preceding movement.
82	3	23					.7			
83	4	1	35 29	41.7	37 10	44.8	.8		41	Alaska.
84	4	1	*i* 50 10		72.4		1.3			Formosa. Superposed on preceding shock.
85	4	3	40.5	50 50					83	Superposed on preceding shock.
86	6	1					10			Small.
87	6	5					30			»
88	6	5					32			»
89	6	5					36			»
90	6	10					40			»
91	6	18					.9			

Scoresby-Sund.

No.	Date	Hour	Forerunners P	Forerunners S	Forerunners	Forerunners	L	Un-defined	△	Remarks
	1935 Sept.		*m s*	*m s*	*m s*	*h m s*	*h m*	*h m*	°	
92	6	21			26		.8			
93	8	1					.8			Faint.
94*	9*	6			35 44	44 45	1.1			Caroline Islands.
95	10	7					7			Small.
96	10	7					42			»
97	11	12					1.0			Small preceding movement.
98*	11*	14	*i* 14 47	23 32	17.0	28.1			66	Japan.
99	15	11			35.1	44.8	1.2			*e* 51m.7. New Guinea.
100	15	14			36.7		56			Faint preceding movement. Pacific Ocean.
101	18	5			19		.6			
102	18	8			43.7		1.0			No *Z* record. Japan.
103	19	2			55 52	57.1	1.4			*e* 62m.7. Pacific Ocean.
104*	20*	2	1.6		*i* 6 4	12.2				South of Caroline Islands.
105*	20*	5			42.3	48 32				Bismarck Archipelago.
106	20	21			24	33 6				
107	23	9					31			Small.
108	23	9			37 38	47 9	64			*SS* 53m29s.
109	24	5			20 38	31 2	56			*e* 28m10s; 36m10s. Celebes.
110	24	9					.1			Faint.
111	24	14						9		Forerunner of succeeding *L*?
112	24	15					.2			
113	24	17					.4			Faint.
114	24	22	21 9	28 22	23 5	32.0	36		51	Off Vancouver Island.
115	25	1					.0			*L*' of preceding shock?
116	25	10			39 0	48.5	1.2			*e* 49m38s. *SS* 54m.7. *P*' just visible in front of *PP* 39m0s.
117	26	23					.6			Forerunners masked by microseisms.
118	30	19	4 7	6.9			8		15	Masked by microseisms. North of Spitsbergen.
	Oct.									
119	7	5					.6			
120	8	9			41		46			
121*	9*	22	10 22							Iceland.
122	10	20					1.1			Faint preceding movement.
123	11	4					.7			
124	11	22			36	50 58	1.1			*e* 51m57s.
125	12	8					15			
126	12	16	56 31	*i* 65 40	59 7	69.9	74		70	*eS* 65m29s. Japan.
127	13	2		17 37			.6			
128	14	10					33			Iceland.
129	15	20					46			North-west of Spitsbergen.
130	18	0	23 7	32 11	36.9		.7			Strong microseisms. Readings not certain. South of Kurile Islands.
131	18	11			23.1	29.7				*PS* 31m.6. *SS* 36m.9. Masked by strong microseisms. Marianne Islands.
132	18	15		14 6			.6			East of Japan. Very strong
133	24	15					.3			[microseisms.

Scoresby-Sund.

No.	Date	Hour	Forerunners P	Forerunners S	Forerunners	Forerunners	L	Undefined	△	Remarks
	1935 Oct.		*m s*	*m s*	*m s*	*h m s*	*h m*	*h m*	°	
134	25	1					.1			
135	25	18					.3			
136	31	19					0			
	Nov.									
137	1	6		16 29			19			No *Z* record. Strong microseisms. Canada.
138	1	16			44.5	50 2				No *Z* record. Strong microseisms. *e* 53m.4. Annam.
139	4	10					46			
140	4	14					.5			Faint preceding movement.
141	5	22					.0			Masked by microseisms.
142	7	4					.9			
143	10	18					46			
144	12	22					.4			
145	14	20			26.3	33.1	.9			
146	23	8	4.9	14 53			26		79	Off Ecuador.
147	25	10		23 56	26 57	27 29				Sumatra. No *Z* record.
148	30	4					.2			Strong microseisms.
	Dec.									-
149	2	0					.5			
150	9	8					.9			
151	14	1	*i* 42 54	52 18	45 9	*i* 52 38				*e* 53m40s. 56m35s. Deep focus. Ecuador.
152	14	13	0	9 50						No *Z* record. Recording interrupted 13h15m—21h25m.
153*	14*	22	*i* 16 37	25 42	19.4	21.8	.5		69	Guatemala. Strong microseisms.
154*	15*	7			29.2	38.0	1.0			Salomon Islands. Masked by strong [microseisms.
155	16	17			18 40					Faint preceding movement.
156	17	13					1.2			
157	17	19	30 8	40 31	33.5	45 59	1.0		84	No *Z* record. East of Formosa.
158	18	7		31 50			.8			No records 13h15m—18h50m.
	18									
159	20	8					17			
160	20	18			57 8	62.7	1.6			No *Z* record. *e* 66m58s. Pacific Ocean.
161	21	6					.1			
162	21	8					.0			
163	21	12			12		.5			No *Z* record.
164	24	12			48 57					Disturbed.
165*	28*	2	49 17	60 54	60 2	62 16				Sumatra.
166	28	18					.3			Faint.
167	28	19					.5			
168	29	23			57	63.5	1.5			No *Z* record.
169	31	2					.5			

Scoresby-Sund.

NOTES

No. 38. July 29. 7^h. Pacific Ocean; $\triangle$ = ca. 135°. Deep focus. *eP* $54^m.0$ small. eP'_Z 57^m7^s; *iP'* 57^m12^s large on *Z*, clearly marked on *N* and *E*. i_Z 59^m3^s; *i* 59^m17^s large. i_Z 59^m58^s. *iPKS* 60^m36^s, very large on *N* and E. *e* $61^m.9$; e_E 63^m3^s; $e_{N,E}$ 63^m17^s; e_Z $64^m.3$. e_N $69^m.0$; e_Z $70^m.3$; $e_{N,E}$ $71^m.4$. e_N $73^m.5$. $e_{N,E}$ $75^m.8$. *L* not large.

No. 45. Aug. 3. 1^h. Sumatra; $\triangle$ = ca. 95°. *P* not large, *iPP* 27^m34^s larger. e_Z 31^m9^s. *SKS* 34^m2^s; S_E 34^m39^s; e_N 34^m47^s; *PS* $35^m.8$ followed by rather large oscillations. *SS* $41^m.3$. The beginning of *L* not certain.

No. 61. Aug. 17. 2^h. Pacific Ocean; $\triangle$ = ca. 130°. *P* quite small. *P'* 3^m42^s small. *ePP* 5^m56^s; *i* 6^m11^s. *iPKS* 7^m21^s, very large on *N*. *S* $13^m.0$. *PS* $16^m.4$ and *PPS* $18^m.1$, large oscillations. *SS* $23^m.5$.

No. 94. Sept. 9. 6^h. Caroline Islands. $\triangle$ = ca. 105°. Masked by microseisms. *P* not discernible. *PP* 35^m44^s small. (*S*) $42^m.5$. *PS* 44^m45^s. *SS* $50^m.6$, large on *N*. e_N 52^m24^s.

No. 98. Sept. 11. 14^h. Japan. Focus deeper than normal. *P* and *S* very large and clearly marked; followed by large oscillations probably due to other waves, but phases not well defined. *PPP* 19^m17^s. $eS_{E,Z}$ 23^m32^s; iS_N 23^m34^s. *SSS* $31^m.7$; *L* immediately afterwards. *M*, regular groupes of oscillations, relatively not very large.

No. 104. Sept. 20. 2^h. South of Caroline Islands; $\triangle$ = ca. 108°. Very strong record. *P* $1^m.6$ small. P' $5^m.6$ small. *iPP* 6^m4^s followed by strong oscillatory movement. PPP_N 8^m12^s; *e* 9^m24^s; 9^m55^s; $10^m.9$. *SKS* $12^m.2$. *e* $13^m.2$; 13^m27^s; 13^m54^s; 14^m25^s. *i*(*PPS*) 15^m50^s, very large on *N*, followed by large oscillations. SS_N $20^m.4$; $e_{N,E}$ $21^m.5$; e_N $22^m.4$ very large. SSS_E $25^m.4$; i_N 26^m0^s. *e* 33^m, some very large waves of long period. *L* large, of long duration.

No. 105. Sept. 20. 5^h. Bismarck Archipelago; $\triangle$ = ca. 110°. *PP* $42^m.3$; e_Z 43^m53^s. *PPP* 44^m54^s. e_E $45^m.4$. SKS_N 48^m32^s. (*S*) $49^m.4$. e_E 50^m38^s. *PS* $52^m.1$. *SS* $57^m.7$.

No. 121. Oct. 9. 22^h. Felt in south-western Iceland. *P* read on *N*, quite small on *E* and *Z*. e_E 11^m31^s. *iL* 11^m44^s. *M* very large.

No. 153. Dec. 14. 22^h. 15°.0 N 92°.9 W according to *J.S.A.* Strong microseisms. *eP* 16^m30^s, not certain; *iP* 16^m37^s, large, condensation. PP_E $19^m.4$. *e* $21^m.8$. *S* most clearly marked on *N*; followed by several rather large oscillations. *M* large.

No. 154. Dec. 15. 7^h. Salomon Islands; $\triangle$ = ca. 120°. Masked by strong microseisms. $29^m.2$, uncertain beginning possibly *PP*. e_N $35^m.1$; e_E $36^m.3$; PS_N $38^m.0$, followed by several, rather large oscillations. SS_E $44^m.7$.

No. 165. Dec. 28. 2^h. Sumatra; $\triangle$ = ca. 100°. No *E* record. eP_Z, condensation, not very large. (*P'*) 52^m35^s small. *PP* 53^m22^s large. *PPP* 55^m34^s. *e* 57^m35^s. *SKS* 60^m2^s, large; $i(S_n)$ 60^m54^s, very large. *PS* 62^m16^s, followed by several large oscillations. *SS* 67^m47^s, very large; continued large oscillatory movement; the beginning of *L* not certain.

BIANCO LUNOS BOGTRYKKERI A/S
KØBENHAVN