



No. 10.

1933—34.

# Geodætisk Institut

Proviantgaarden, Copenhagen, Denmark.

## Bulletin of the seismological station

# SCORESBY-SUND

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

Lithologic foundation: Gneiss.

No. 10. Dec. 1933—June 1934.

### Instruments:

Galitzin pendulums with galvanometric registration.

Constants :

Component	$l$	$A_1$		$T_1$	$\mu^2$	$T$	$k$
$N$	cm 12.0	cm 100	$1/12-20/4$	11.8	0.1	11.8	48
			$20/4-30/6$	11.8	0.1	11.8	97
$E$	12.0	100	$1/12-20/4$	11.9	0.05	11.8	50
			$20/4-30/6$	11.9	0.0	11.8	91
$Z$	14.9	100	$8/12-19/4$	11.6	0.0	9	51
			$10/4-30/6$	11.6	0.0	9	100

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				L	Un-defined	△	Remarks
			P	S	h m s	m s				
1	1933 Dec. 2	20	m s	m s	h m s	m s	h m	h m	°	Small preceding movement masked by microseisms No records 18 <sup>h</sup> 59 <sup>m</sup> —20 <sup>h</sup> 6 <sup>m</sup> .
2	4	8					15			
3	12	14			30 53	40 23	1.1			46 <sup>m</sup> .7. New Guinea.
4*	13*	21	34 55	44 26	37.6	48.9	1.0		74	Mexico.
5	14	1					.59			
6	14	7					.9			Small preceding movement.
7	14	19			14.6		.4			
8	15	7	45 37	48 39			.49		17	Atlantic Ocean south of Greenland.
9	19	5			44 12					
10	19	17			54 23					51 <sup>m</sup> 54 <sup>s</sup> quite small, not certain.
11	1934 Jan. 2	21					.5			
12*	3*	9	i 51 47	i 59 17	61 7				70	Kamtchatka
13	14	12					.6			
14*	15*	8	54 51*	i 64 1	64 28					North Bihar, India
15	16	19					.6			Faint
16	19	10					.31			No records 12 <sup>h</sup> 40 <sup>m</sup> —16 <sup>h</sup> 52 <sup>m</sup> .
17	20	18					.6			
18	20	23					.7			Masked by microseisms.
19	28	15						.0		
20	28	19	21 18	30 38	23.8	34.7	.7		72	Mexico. PPP 25 <sup>m</sup> .7.
21	30	19			.6		.9			
22	30	20					.44			
23	31	11					.1			
24	1934 Febr. 1	12					.15			
25	2	15			.5		.2			
26	2	20					.9			
27	3	14			52 57	62.5	1.5			69 <sup>m</sup> .5. New Britain.
28	4	9					.9			
29	4	13			44 53		1.0			Persia.
30	4	23					.1			Faint preceding movement.
31	9	10					.5			
32	11	9					.9			
33	12	7					.4			Recording interrupted 12 <sup>h</sup> 7 <sup>m</sup> —
34*	13*	9	52 23							Greenland Sea. [12 <sup>h</sup> 38 <sup>m</sup> .
35*	14*	4	12 29		22 56	23 15	.8			Luzon.
36	14	22					.9			
37	19	11					.0			Faint.
38	20	4					.2			
39	21	12					.1			
40	22	8					.6			Masked by microseisms.
41	24	0					.57			Masked by microseisms.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S	h m s	m s				
42	1934 Febr. 24	6	36 29	m s	47 0	48 5	h m	h m	°	<i>e</i> <sub>N</sub> 46 <sup>m</sup> 50 <sup>s</sup> . <i>e</i> 52 <sup>m</sup> . Masked by strong microseisms. Marianne Islands region.
43	24	14			51 39	58 31	1.3			Some preceding movement. New Guinea region.
44	1934 March 1	22			21 11					No other phases readable; very
45	4	6					.9			[strong microseisms.
46	4	11		34 31			.40			Quite small movement on Z about
47	5	2					.0			27 <sup>m</sup> .2. Bering Sea. Faint.
48	5	12			6 1	28.7				New Zealand. Recording inter-
49	6	15					.2			rupted 12 <sup>h</sup> 9 <sup>m</sup> —12 <sup>h</sup> 22 <sup>m</sup> .
50	7	23			2 13		.14			Faint preceding movement.
51	9	14					.33			Recording interrupted 12 <sup>h</sup> 6 <sup>m</sup> —
52	11	0					.55			[14 <sup>h</sup> 33 <sup>m</sup> .
53	12	15	14 50	22 16	24 46	26.2	.31		53	Near Great Salt Lake, Utah. Aftershock.
54	12	18	29 22		31 59	42.1	1.0			49.0. Santa Cruz. Pacific Ocean.
55	13	13					.19			
56	16	9					.6			
57	16	17					.6			Masked by microseisms.
58	18	4			51.4		.6			
59	20	3			7	13.8	.7			
60	22	20					.5			
61	22	23					.4			
62	23	8					.55			Salomon Islands region.
63*	24*	12			24 40		.5			<i>e</i> 21 <sup>m</sup> 22 <sup>s</sup> . Balkans. Deep focus.
64	29	20	13 53*	18 47	14 32	21.0	.7			Iceland. Small preceding movement.
65	30	4					.5			Followed by other quite small
66	30	21					.7			shocks.
67	1934 April 3	7					.48.2			57 48°
68	3	17					1.4			
69	3	22			44 17	54 26	.6			
70	6	11					.6			
71	6	19	20 52	i 30 7	34.9		.7		71	Japan. <i>L</i> small.
72	7	2					.7			
73	9	2					.80		5	
74	9	15			59 29	66.1	1.3			
75	10	5			51 28	60.6	1.4			Java.
76	10	10			42 14	48.3	1.1			
77	11	21			32.7		.9			
78	12	3			44.1	49.9	1.0			
79	12	9					.9			
80*	15*	22	28 59		33.1	39.8	.8			Mindanao.
81	16	4					.9			
82	17	2					.8			

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
83	1934 April	13					9			
84	19	16	i 24 49	i 34 12					Japan. Deep focus.	
85	24	18			6	14	.5			
86	26	5			52.8	54.5	1.7			
87	26	8			19.9		1.1			
88	26	21			21.1	31.0	1.1		37 <sup>m</sup> 53 <sup>s</sup> .	
89	27	21			9	43	15.8	.9	Some preceding movement.	
90	28	16						.1	Faint	
91	28	18						.9	New Caledonia.	
92	May	7						.5	Strong microseisms.	
93	3	2						.3		
94	3	8							4	
95	3	9						22	Seismic?	
96*	4*	4	i 44 5	i 50 30	i 45 46				43	
97	5	2						.0	Alaska.	
98	5	14			55	73.0		1.8	Small preceding movement.	
99	6	8						37		
100	7	5						.1		
101	9	16						.7		
102*	13*	9			21 34					
103	13	17						.9	Pacific Ocean.	
104*	14*	22	21 19	i 28 7	i 23 23	31 11		34	Faint.	
105	15	5			1.8	4.0		5	Alaska.	
106	15	22						7	Faint.	
107	19	11			3.4	8 16		.4	Small.	
108	20	19			6 45			9		
109	21	5						.5	Faint.	
110	21	10	9 5*					10	Greenland Sea.	
111	22	2						.3		
112	22	11							22	
113	23	22						6		
114	24	0						.2		
115	26	22						.9		
116	27	19						.5	Faint.	
117	28	5			43 8	51.5			Faint.	
118	28	23						.9		
119	30	12						.5		
120	31	15						.2		
121*	June	6	6 6	15 34	6 34					
122	2*	13	i 43 49							
123	2	16	53 35	59 50					Burma. Deep focus.	
124	2	18						40	Iceland. Strong record.	
125	2	21	i 6 0	13 45				.4	Alaska. P quite small.	
126	3	16								
127	3	20			33.9			36	Kamtchatka.	

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
	1934 June									
128	3	21							28.4	
129	5	22							1.0	
130	6	0							.3	
									.0	
131	6	3							61.4	
132	6	6							43.6	
133	6	11							1.4	
134	6	12							.9	
135	6	17							.4	
136	6	21							.4	
137	7	16							.2	
138	8	2							.9	
139	8	3							.6	
140	8	4							.5	
									58.0	
141	8	5							61	
142	8	16							18	
143	8	19							43	
144	9	2							.5	
145*	9*	13							50.1	
146	9	22							1.3	
147	10	6							.9	
148	10	9							.9	
149	10	16							26	
150	10	20							.1	
									.7	
151	10	22							14.6	
152	12	2							2.8	
153	12	9	43 39						12.9	
154*	13*	2	i 1 31	i 10 7					52.9	
155	13	9							1.2	
156*	13*	22	i 20 44	29.0					.4	
157	14	22							24 35	
158	15	3							35 35	
159	15	6							.1	
160	16	5	21 33	29.8					.7	
									38.5	
161	16	19							42 6	
162	17	5							.44	
163	17	15							.6	
164*	18*	9	21 56	i 28 27	i 22 15	i 29 0			.9	
165	18	21			8.7				.0	
166	19	4							36	
167	19	7							14	
168	19	18	51 12	57.5					.1	
169	19	23							13	
170	22	18							39	
									.4	
171	23	5	30 49	39.8					35	
172	23	11							.4	
173	24	2							1.5	
174	24	3							.4	
175	24	6	i 13 5		i 13 33	25 55			1.1	
176	24	14							.7	

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
	1934									
	June		<i>m s</i>	<i>m s</i>	<i>h m s</i>	<i>m s</i>	<i>h m</i>	<i>h m</i>	°	
177	24	17					.9			
178	26	15					1		Small preceding movement. Small.	
179	27	12					.0			
180	28	1			16.5	22.2	1.0		26m21s. Pacific Ocean.	
181	28	6					.3			
182 <sup>a</sup>	29 <sup>a</sup>	8	38 47		<i>i</i> 52 9				No records 12h40m—14h45m.	
	29									
183	29	22					24			
184	30	0					56			
185	30	9					42			
186	30	10					37			
187	30	12					17			
	30								No records 13h0m—16h23m.	
188	30	17			29 24					
189	30	20					.9			

Scoresby-Sund.

NOTES

- No. 4. Dec. 13. 21<sup>h</sup>. Mexico. *P* clearly marked on *E* and *Z*.  $eS_E$  44m26s;  $e_N$  44m40s;  $SS_E$  48m.9. *L* earliest on *N*.
- No. 12. Jan. 3. 9<sup>h</sup>. Kamchatka. Deep focus. *P* large on *N* and *Z*.  $e_Z$  52m50s, 53m25s.  $e_{N,Z}$  55m28s. *S* large.  $e_{N,E}$  1m6s,  $e_E$  3m12s,  $e_N$  5m55s.
- No. 14. Jan. 15. 8<sup>h</sup>. North Bihar, India. Very strong record. *P* in minute-break; 54m59s larger. *PP* 57m.4 not large; *PPP* 59m17s, larger.  $e_E$  60m42s.  $iS$  64m1s, on *E* preceded by increase of period and amplitude. *iPS* 64m28s very large on *N*. 65m.2 large on *E*.  $SS$  69m.0. 72m.0, very large on *N*, *SSS* or *L*;  $SSS_E$  72m.3.
- No. 34. Febr. 13. 9<sup>h</sup>. Greenland Sea.  $i_E e_Z$  52m23s large on *E*.  $e_N$  52m27s.  $e_{E,Z}$  52m35s, on *E* followed by large, regular, increasing oscillations.  $i_N e_Z$  52m50s large on *N*;  $i_{E,Z} e_N$  55m7s, very large.
- No. 35. Febr. 14. 4<sup>h</sup>. Luzon;  $\Delta = \text{ca. } 90^\circ$ . Phases clearly marked. *iP*, dilatation, large. *PP* 15m58s.  $e_N \overline{S_e P_e S}$  22m56s,  $e_N i_E S_N$  23m15s; *PS* 24m27s.  $SS$  29m3s;  $SSS$  33m17s;  $e$  36m.0.
- No. 63. March 24. 12<sup>h</sup>. Salomon Islands region.  $\Delta = \text{ca. } 125^\circ$ . Phases not very clearly marked. Small movement precedes *PP* 24m40s;  $e$  25m1s.  $e_N$  29m.3;  $e_N$  30m20s.  $e_E$  32m.6. 34m.4; 35m.6.  $SS$  41m.1. *L* regular, earliest on *E*.
- No. 80. April 15. 22<sup>h</sup>. Mindanao;  $\Delta = \text{ca. } 100^\circ$ . *PP* 33m.1.  $e_{N,E}$  33m26s.  $e$  37m.1. ( $\overline{S_e P_e S}$ ) 39m.8; (*PS*) 42m.4.  $SS$  47m.7.  $SSS$  51m.3.
- No. 96. May 4. 4<sup>h</sup>. Alaska. Strong microseisms. No *Z* record. Forerunners very large; much oscillatory movement.  $i$  45m46s, 46m8s;  $i_E$  46m28s;  $i_N$  46m41s.  $e_E$  53m.6;  $i_N$  53m47s;  $e_E$  53m.9. *L* not very large.
- No. 102. May 13. 9<sup>h</sup>. Pacific Ocean;  $\Delta = \text{ca. } 110^\circ$ . Probably some depth of focus.  $PP_N$  21m34s,  $e_Z$  21m43s.  $\overline{S_e P_e S_N}$  27m.4;  $\overline{S_e P_e P_e S_N}$  28m34s;  $i_E (S_N)$  29m19s. *iPS* 31m19s.  $SS$  37m.4; 37m35s.  $SSS$  41m.8; 42m47s.  $L_E$  50m;  $L_N$  55m; regular, not very large.
- No. 104. May 14. 22<sup>h</sup>. Alaska. Deep focus. *P* small. *pP* 21m31s larger. *S* large.  $sS$  28m34s.  $SS$  31m11s; 31m.7. *L* not large.
- No. 121. June 2. 6<sup>h</sup>. Burma. Deep focus. *P* small. *pP* 6m34s larger. *PP* 9m27s. *S* clearly marked;  $e_N$  16m2s, 16m.6.  $SS$  20m.5.37m *L* of long period, possibly another shock.
- No. 145. June 9. 13<sup>h</sup>. New Guinea;  $\Delta = \text{ca. } 115^\circ$ .  $P'_Z$  17m.1 preceded by faint movement. *PP* 18m11s,  $e$  19m0s.  $\overline{S_e P_e S_N}$  23m55s. *PS* 28m.2.  $SS$  34m.1.
- No. 154. June 13. 2<sup>h</sup>. Kurile Islands. *P* and *S* large; *iP* dilatation. *PPP* 11m.2.  $eS_E$  15m30s;  $iS_N$  15m35s.  $i(S_e S)$  16m42s, large and clearly marked.
- No. 156. June 13. 22<sup>h</sup>. Afghanistan. Depth of focus greater than normal. *iP*, dilatation.  $i$  21m0s. *PPP* 24m35s; 24m55s.  $eS_N$  29m.0;  $iS_E$  29m6s, large;  $e_{N,Z}$  29m10s.  $i(S_e S)_E$  30m36s large.  $SS$  33m.6, not large;  $SSS$  35m35s large. *L* not large.
- No. 164. June 18. 9<sup>h</sup>. Alaska. Focus deeper than normal. *P* quite small;  $i$  22m15s large. *PP* 23m52s.  $iS$  small;  $i$  29m0s large.  $iSS$  31m49s;  $i$  32m26s. *L* small.
- No. 182. June 29. 8<sup>h</sup>. According to J.S.A. epicentre 6°2 S 123°3 E, depth 700 km.  $\Delta = \text{ca. } 110^\circ$ . *P* small, condensation.  $i_Z$  42m39s, small. *PP* 43m31s.  $e$  46m.8.  $e_N$  49m31s.  $i_Z e_{N,E}$  52m9s,  $e$  53m23s. 56m.3. *L* small.

## Geodætisk Institut

Proviantgaarden, Copenhagen, Denmark.

Bulletin  
of the seismological station

## SCORESBY-SUND

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

Lithologic foundation: Gneiss.

No. 11. July—Dec. 1934.

## Instruments:

Galitzin pendulums with galvanometric registration.

## Constants:

Component	$l$	$A_1$	$T_1$		$\mu^2$	$T$	$k$
	cm	cm	sec			sec	
N	12.0	100	11.8	$1/7-9/8$	0.1	11.8	97
				$1/10-31/12$	0.1	11.8	48
E	12.0	100	11.9	$1/7-9/8$	0.0	11.9	91
				$1/10-7/11$	0.0	11.9	44
				$7/11-31/12$	0.0	11.9	49
Z	14.9	100	11.6	$1/7-9/8$	0.1	9	98
				$9/8-31/12$	0.1	9	53

Recording was suspended from Aug. 9th. to Oct. 1st. owing to repairs of the pendulum cellar.

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				L	Un-defined	△	Remarks
			P	S						
			<i>m s</i>	<i>m s</i>	<i>h m s</i>	<i>m s</i>	<i>h m</i>	<i>h m</i>	°	
1	1934 July 1	20			19		.9			
2	2	19					3		Small.	
3	2	19					15		"	
4	2	23					38		"	
5	3	4					.6		Faint.	
6	3	7						24		
7	3	9					16		Small.	
8	4	2			2.2		.6			
9	5	7			55		60			
10*	6*	22	<i>i</i> 58 33	<i>i</i> 66 25	70.3				57	Off California.
11	7	15					.7			Faint.
12	8	16						4		
13	10	1	12.6	20.9			.5			Caribbean Sea. <i>P</i> quite small,
14	10	3			.6		.7			[uncertain.
15	10	21					1.2			42
16	11	7						8		
17	12	10	3.0	12 14			.5		71	Pacific Ocean.
18	12	11					.5			
19	12	14			44 26		1.4			
20	13	10			47.8		.9			
21	13	11			49		1.1			
22	13	13					.1			
23	13	16						2		Small.
24	15	2						14		
25	16	8	30 20	39.7			.9		72	Mexico.
26	16	18			8.2					
27	16	22						.7		
28	17	13			5.4					
29	17	18					.4			
30*	18*	1	<i>i</i> 47 54		<i>i</i> 50 45	52.6				Panama.
31	18	4	12 6	21 37			.5			Panama. Superposed on preceding shock. <i>P</i> and <i>S</i> not quite certain.
32	18	6	47 2				1.2			Panama. Superposed on preceding shock. <i>P</i> small, uncertain.
33	18	11					26			Small.
34	18	11					32			"
35	18	11					55			"
36	18	12					.2			
37	18	13					.8			Disturbed.
38	18	14					.0			
39	18	16	21 20	30.7			.7		72	Panama.
40*	18*	17	<i>i</i> 11 11		<i>i</i> 13 31	15 42				"
41*	18*	19	55 41		59 15	60 44	1.5			New Hebrides region.
42	19	0			25 44	<i>i</i> 27 14				Salomon Islands region.
43	19	1	41.9		<i>i</i> 46 31	55 48				New Guinea region. <i>SS</i> 61 <sup>m</sup> .7.
44	19	5					.8			
45	19	6			4.4	5 53	.6			
46	19	7			55.9	57 26				<i>PS</i> 67 <sup>m</sup> .3. <i>e</i> 70 <sup>m</sup> .4. <i>SS</i> 74 <sup>m</sup> .2.
47	19	12			25.3		1.1			

## Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks	
			P	S							
			<i>m s</i>	<i>m s</i>	<i>h m s</i>	<i>m s</i>	<i>h m</i>	<i>h m</i>	°		
48	1934 July 19	15					.4				
49	19	23			18		1.0				
50*	20*	2			20 28					Aleutian Islands.	
51	20	4			12.9		.8				
52	20	13					1.0		26	Preceding movement disturbed.	
53	20	16									
54	20	17			8 48		.8				
55	20	18			.5						
56	20	19			9.2						
57	21	1					.3				
58	21	5			1.0		.2				
59*	21*	6	33.9		39 8	48 59				New Hebrides region.	
60*	21*	10	<i>i</i> 50 37	60.1	53 26	55.2			74	Panama.	
61	21	13					.9			Superposed on preceding shock.	
62	21	19					.7				
63	21	20			36.9		1.2				
64	22	3			18 17	23.8	.9				
65	22	14					.6				
66	22	19						.2		Faint.	
67	22	20	6 23	<i>i</i> 14 1	<i>i</i> 7 19	15 36				<i>e</i> 9 <sup>m</sup> .8; <i>e</i> <sub>E</sub> 10 <sup>m</sup> 55°. 19 <sup>m</sup> .5. Deep focus.	
68	23	5					.0			Faint.	
69	23	14					.6				
70	23	18	32.1	40 42				48	64	No <i>Z</i> record. Atlantic Ocean.	
71	24	2	59.0	68.6			1.3			<i>P</i> and <i>S</i> quite small.	
72	24	15					.2				
73	25	11					.6				
74	25	16					.5				
75	26	4					.4				
76	26	14							53		
77	26	15						8			
78	27	2	36 52	45.9	41.2	46.4	1.0			69	Guatemala.
79	27	12			.9		1.5				Alaï Mountains.
80	28	2	16.0	23.9							
81	28	16					.3				
82	28	21	<i>i</i> 45 55	<i>i</i> 53 6	<i>i</i> 47 54	55 48	1.0		50	Alaska.	
83	30	2			18 50			22			
84	30	3			7 55			12			
85	30	4					.0				Disturbed by wind.
86	31	6			22.2		.8				
87	31	12			13.4		.7				
88	31	15						29			
	Aug.										
89	2	7	21 13*	27 33	<i>i</i> 22 55		33		42	Alaska.	
90	3	9			.9		1.2				
	3										Recording interrupted
91	3	20						5			[13 <sup>h</sup> 22 <sup>m</sup> —20 <sup>h</sup> 5 <sup>m</sup> .
92	4	6					.4				
93	4	13			27 25		1.0				

## Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
			m s	m s	h m s	m s	h m	h m	°	
94	1934 Aug. 5	21					.9			
95	6	12	18 56	28 39			.7		76	
96	6	16					.2			
97	7	3						17		
98	7	3	55.5		59 3*	60 36	1.5			
99	7	10					.48			
100	7	11	59 41	67 21			1.3		55	
101	9	6					.3			
102	Oct. 5	8					.44			
103	5	9					.19			
104	5	21					.0			
105	6	0					.25			
106	6	13			9 5		.3			
107	7	11					.2			
108	8	7					.20			
109*	10*	16			2 50	i 3 1				
110	15	8					.8			
111	18	8			18 33	25.3	.8			
112	21	18	6.4	16 32						
113	26	17		33.2	38.2		.8			
114	29	0					.4			
115	29	3					.2			
116	29	16			31		.6			
117	Nov. 4	2			15.4	16 40	.9			
118	4	3			35.9	37 8	1.2			
119	5	23	12 7	20.5	15.6	24.0	.5		62	
120	7	14						53		
121	9	4						.6		
122	9	13	48 41				.24			
123	9	21					.3			
124	10	9					.46			
125	10	15						37		
126	12	7					.1			
127	16	11					.7			
128	16	14			19					
129	18	3					.7			
130	18	15					.6			
131	18	23			10.8		.7			
132	27	6					1.1			
133	30	2	i 16 32	i 25 42	26 13			35	70	
134	Dec. 3	3					.1			

## Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
			m s	m s	h m s	m s	h m	h m	°	
135	1934 Dec. 4	17			48 29	49.0	.70			
136	6	13					.8			
137	7	11			31 21					
138	8	10					.2			
139	15	2		17 42	22.1	25.0	.5			
140	17	3					.2			
141	17	4					.47			
142	17	16			.3	28	.7			
143	18	12					.1			
144	21	19					.3			
145	22	14					.8			
146	23	10			16 26					
147	24	15					.1			
148	24	16					.1			
149	28	12					.6			
150	30	14		10 54	14.8		.20			
151*	31*	18	56 5	64.4	68.4	71.0			61	

## Scoresby-Sund.

## NOTES

- No. 10. July 6. 22<sup>h</sup>. Off northern California. *iP*, condensation.  $PP_E$  61<sup>m</sup>6<sup>s</sup>;  $PPP_E$  61<sup>m</sup>51<sup>s</sup>.  $iS_N$  66<sup>m</sup>25<sup>s</sup>, large oscillations;  $S_E$  66<sup>m</sup>28<sup>s</sup> small;  $PS_E$  66<sup>m</sup>36<sup>s</sup> large.  $e_N$  70<sup>m</sup>.0;  $SS_E$  70<sup>m</sup>.3;  $SS_N$  70<sup>m</sup>.6 large. *L* soon after *SS*, the beginning not quite certain. *M* large, regular.
- No. 30. July 18. 1<sup>h</sup>. Panama. *iP*, dilatation.  $iPP$  50<sup>m</sup>45<sup>s</sup>;  $PPP$  52<sup>m</sup>.6.  $eS_E$  57<sup>m</sup>.2, not large;  $iS_N$  57<sup>m</sup>26<sup>s</sup> large;  $i_E$  58<sup>m</sup>9<sup>s</sup>; continued very large oscillations on *N* and *E*. The beginning of *L* uncertain.
- No. 40. July 18. 17<sup>h</sup>. Panama. Depth probably below normal. *iP*, dilatation. Some increase of movement on *Z* 11<sup>m</sup>21<sup>s</sup>, on *E* 11<sup>m</sup>27<sup>s</sup>,  $iPP$  13<sup>m</sup>31<sup>s</sup>.  $PPP$  15<sup>m</sup>42<sup>s</sup>.  $eS_E$  20<sup>m</sup>.4;  $e_N$  20<sup>m</sup>.7;  $e_N$  20<sup>m</sup>50<sup>s</sup> followed by a large oscillation;  $e_E$  21<sup>m</sup>.4 large.
- No. 41. July 18. 19<sup>h</sup>. New Hebrides region;  $\Delta = \text{ca. } 120^\circ$ . Strong record; on *N* forerunners very large, on *E* much smaller and phases not well defined.  $P'$  59<sup>m</sup>15<sup>s</sup> clearly marked on *Z*, not readable on *N* and *E*.  $PP$  60<sup>m</sup>44<sup>s</sup> followed by rather strong oscillations continuing for 3 minutes. (*SKS*) 66<sup>m</sup>.5 followed by oscillatory movement; increase about 68<sup>m</sup>.5.  $PS$  70<sup>m</sup>.6 and  $PPS$  71<sup>m</sup>.7 very large.  $SS$  77<sup>m</sup>.7 and  $SSS$  82<sup>m</sup>.5 very large.
- No. 50. July 20. 2<sup>h</sup>. Aleutian Islands. A clearly marked pulse on *Z* 20<sup>m</sup>28<sup>s</sup>, probably *P*. On *E* and *Z* a movement of the appearance of *L* begins about 19<sup>m</sup>.6; disturbance or another shock?
- No. 59. July 21. 6<sup>h</sup>. New Hebrides region;  $\Delta = \text{ca. } 120^\circ$ . *P* small.  $P'_Z$  37<sup>m</sup>.8.  $PP$  39<sup>m</sup>8<sup>s</sup>.  $e_E$  47<sup>m</sup>17<sup>s</sup>.  $PS_N$  48<sup>m</sup>59<sup>s</sup> large.  $PPS$  50<sup>m</sup>.3.  $SS$  55<sup>m</sup>.7 and  $SSS$  60<sup>m</sup>.3 large. The beginning of *L* soon after  $SSS$ , not quite certain.
- No. 60. July 21. 10<sup>h</sup>. Panama. *S* not clearly marked.  $PS$  60<sup>m</sup>51<sup>s</sup>;  $SS_E$  65<sup>m</sup>.0;  $SS_{N,Z}$  65<sup>m</sup>.4.  $SSS$  68<sup>m</sup>.4.
- No. 109. Oct. 10. 16<sup>h</sup>. South Pacific;  $\Delta = \text{ca. } 150^\circ$ . Deep focus. No *Z* record. Phases clearly marked on *N*.  $e$  2<sup>m</sup>50<sup>s</sup>;  $i$  3<sup>m</sup>1<sup>s</sup>.  $e$  5<sup>m</sup>.9; 6<sup>m</sup>48<sup>s</sup>; 8<sup>m</sup>53<sup>s</sup>; 12<sup>m</sup>.1;  $i$  19<sup>m</sup>39<sup>s</sup> a large oscillation on *N* and *E*. *L* small.
- No. 151. Dec. 31. 18<sup>h</sup>. California. Rather strong record, but phases not very clearly marked. The beginning of *P* quite small, not certain; successive increase of movement. ( $P_eP$ ) 56<sup>m</sup>.9. ( $P_eS$ ) 60<sup>m</sup>.7. *S* quite small on *E*; larger on *N*, but the beginning somewhat uncertain.  $S_eS$  66<sup>m</sup>.2.  $SS$  68<sup>m</sup>.4;  $SSS$  71<sup>m</sup>.0. *L* soon after  $SSS$ ; *M* large.