

No. 11.

1934.

**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. 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
$E$	12.0	100	11.9	$1/10-31/12$	0.1	11.8	48
				$1/7-9/8$	0.0	11.9	91
$Z$	14.9	100	11.6	$1/10-7/11$	0.0	11.9	44
				$7/11-31/12$	0.0	11.9	49
				$1/7-9/8$	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.

No. 11.

— 2 —

1934.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
	1934 July		<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	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, [uncertain.]
14	10	3			.6		.7			
15	10	21			42		1.2			
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. SS 61 <sup>m</sup> .7.
44	19	5					.8			
45	19	6			4.4	5 53	.6			
46	19	7			55.9	57 26				PS 67 <sup>m</sup> .3. e 70 <sup>m</sup> .4. SS 74 <sup>m</sup> .2.
47	19	12			25.3		1.1			

No. 11.

— 3 —

1934.

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			Preceding movement disturbed.
53	20	16						26		
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				$e$ 9 <sup>m</sup> .8; $e_E$ 10 <sup>m</sup> 55 <sup>s</sup> . 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 Z record. Atlantic Ocean.
71	24	2	59.0	68.6			1.3			P and S 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
79	27	12			.9		1.5			
80	28	2	16.0	23.9						Alai Mountains.
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		
89	Aug. 2	7	21 13*	27 33	<i>i</i> 22 55			33	42	Alaska.
90	3	9			.9		1.2			
91	3	20						5		Recording interrupted [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			
	Oct.									
102	5	8					44			
103	5	9					19		Small.	
104	5	21					.0			
105	6	0					25			
106	6	13			9 5		.3		Small preceding movement.	
107	7	11					2			
108	8	7					20		Small.	
109*	10*	16			2 50	i 3 1			South Pacific.	
110	15	8					.8			
111	18	8			18 33	25.3	.8		Pacific Ocean.	
112	21	18	6.4	16 32					P uncertain. e 16 <sup>m</sup> 58 <sup>s</sup> . Pacific Ocean.	
113	26	17		33.2	38.2		.8		Pacific Ocean. Strong microseisms.	
114	29	0					.4			
115	29	3					.2			
116	29	16			31		.6			
	Nov.									
117	4	2			15.4	16 40	.9		e 25 <sup>m</sup> .7. SS 32 <sup>m</sup> .7. New Hebrides.	
118	4	3			35.9	37 8	1.2		Superposed on preceding shock.	
119	5	23	12 7	20.5	15.6	24.0	.5		62 No Z record.	
120	7	14					53			
121	9	4						.6		
122	9	13	48 41						Asia Minor.	
123	9	21					24		Small.	
124	10	9					.3			
125	10	15					46		Forerunners quite small.	
126	12	7						37		
127	16	11					.1			
128	16	14			19		.7			
129	18	3						.7		
130	18	15						.6	Masked by very strong microseisms. Masked by microseisms.	
131	18	23			10.8		.7		» » »	
132	27	6					1.1		Preceding movement masked by strong microseisms.	
133	30	2	i 16 32	i 25 42	26 13		35		70 Mexico. M large.	
	Dec.									
134	3	3					.1			

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Un-defined	△	Remarks
			P	S						
	1934									
	Dec.		<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>	°	
135	4	17			48 29	49.0	70			
136	6	13					8		<i>e</i> 55 <sup>m</sup> .5. Chile.	
137	7	11			31 21				Small.	
138	8	10					.2		Faint.	
139	15	2		17 42	22.1	25.0	.5		Tibet. Strong microseisms.	
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		California.	
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. ( $P_cP$ ) 56<sup>m</sup>.9. ( $P_cS$ ) 60<sup>m</sup>.7. *S* quite small on *E*; larger on *N*, but the beginning somewhat uncertain.  $S_cS$  66<sup>m</sup>.2.  $SS$  68<sup>m</sup>.4;  $SSS$  71<sup>m</sup>.0. *L* soon after  $SSS$ ; *M* large.