



Geodætisk Institut

Proviantgården, 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. 23. Jan.—Nov. 1949.

Instruments:

Galitzin-Wilip seismographs.

Constants:

Component	l	A_1	T_1		T	k
	cm.	cm.	sec.		sec.	
N	12.0	100	11.91		11.8	100
E	12.0	100	12.02	$\frac{1}{1} - \frac{3}{6}$	11.7	108
				$\frac{3}{6} - \frac{25}{11}$	12.1	108
Z	14.9	100	10.02		$9\frac{1}{2}$	99

Damping was approximately aperiodic.

Recording was suspended on Nov. 25 owing to repairs.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks
			P or P'	S					
1	1949 Jan. 19	15	<i>m s</i>	<i>m s</i>	<i>m s</i>	<i>m s</i>	<i>h m</i>	°	
2	23	1	<i>i 9 14</i>		<i>i 9 19</i>		.7		Near shock. Masked by microseisms.
3	23	1	<i>i 14 47</i>						Near shock. Masked by microseisms.
4	30	2					7		
5	30	7			3 52				No E record.
6	30	7					51		
7	30	8					34		
8	Febr. 1	14					32		
9	1	18			42.1	45.0			
10	2	17	<i>i 50 44 +</i>	58 13	<i>i 51 34</i>			56	Depth about 220 km. Aleutian Islands.
11	10	22					.9		
12	13	18	43 42		46 44	47 25			53 ^m 58 ^s . 59 ^m .2. 65 ^m 9 ^s . Kermadec Islands [region].
13	14	18					42		
14	23	16	17 51 +	25 44	19 59	21 3			25 ^m 23 ^s . 26 ^m 12 ^s . 29 ^m .2. Masked by [microseisms. Eastern Turkestan.
15	28	0			42 3		1.2		
16	March 2	6	56 12	57 23				6	No time-marks on Z. No E record. 50 ^m .6. Sumatra.
17	4	1			41 43	44 51			
18	4	10	28 54	36 33	30 6	32 13		57	<i>pPPP</i> 33 ^m 4 ^s , large; increase of movement 33 ^m 41 ^s . <i>sS</i> 37 ^m 47 ^s . <i>SS</i> 40 ^m .0. <i>P</i> (-5.5, -25.5, -26.3; +8.5, +32.5, +21.8) per. 9 ^s . Depth about 200 km. [Hindu Kush.
19	7	12					3		
20	9	13					0		
21	16	22			34 48	40.6		70	<i>PS</i> 44 ^m 39 ^s . <i>PPS</i> 45 ^m 46 ^s . <i>SS</i> 51 ^m .2. New Britain.
22	17	21			24 51	30 56		59	<i>SKKS</i> 32 ^m .0. <i>PS</i> 34 ^m 28 ^s . <i>PPS</i> 35 ^m 54 ^s . <i>SS</i> 41 ^m .3. New Britain.
23	19	18		40 32					Japan.
24	24	21	6 35	14 20	18.2			56	Pacific Ocean.
25	26	3					2		
26	27	6	48 5		52 38	58 51			<i>P</i> small, uncertain. <i>PS</i> 61 ^m .9. <i>SS</i> 67 ^m .4. Celebes Sea.
27	28	13			11.0	14 16			<i>PS</i> 16 ^m 6 ^s . Philippine Islands.
28	30	13					2		
29	30	15			8.7				Movement small, phases not clearly [marked. Fiji Islands region.
30	30	20					54		
31	31	22			9.6	16.1		.6	
32	April 2	9						41	
33	5	9		<i>i 45 10</i>	48.6				Deep focus. Near Vladivostok.
34	6	9	6 14	6 39				2	No E record.
35	13	15					39		

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks
			P or P'	S					
36	1949 April 13	20	<i>i 4 32</i>	<i>i 11 41</i>	5 50	6.3		18	7 ^m .5. 14 ^m 20 ^s . 15 ^m .8. <i>P</i> (-0.7, +1.8, +2.3; +0.9, -1.6, -3.2) per. 5 ^s . Deeper than normal. State of Washington, U.S.A.
37	14	23			30 42				
38	17	1						.3	
39	20	3			48.9	51.7			<i>SKS</i> 54 ^m .5. <i>PS</i> 57 ^m .9. 58 ^m .4. 62 ^m .7. Masked by very strong microseisms, reading uncertain. Chile.
40	24	4	<i>i 32 24 +</i>	40 43	41 53			61	No time-marks on E. Persian Gulf.
41	25	14	8 50	19 26	18 46	20 24			25 ^m .9. No Z record. Northern Chile.
42	25	23		24 16	27.6			35	No Z record. Turkey.
43	30	1	37 10 +		<i>i 37 12</i>	41 18			41 ^m 52 ^s . <i>SKS</i> 47 ^m 36 ^s . 48 ^m .4. 49 ^m .4. 50 ^m .5. Deeper than normal. Mindanao.
44	May 2	12						0	
45	3	6	6 46 +	14 54	11.0	15 56			<i>i 16</i> 27 ^s . 17 ^m 30 ^s . No N record. Part of Z record missing. Deeper than normal. [Kurile Islands.
46	3	11						23	Near shock.
47	8	13						23	Near shock.
48	8	13						34	Near shock.
49	8	14	46 48						Near shock.
50	8	21	3 34						Near shock.
51	8	21						56	Near shock.
52	9	13	49 40	60 57	53 30	60 16		95	<i>PS</i> 62 ^m 10 ^s . <i>SS</i> 67 ^m 36 ^s . Sumatra.
53	10	0			45 14			58	
54	10	3						48	
55	13	7	16 22	16 53				3	
56	16	4			52 5	61.8			
57	17	2	<i>i 40 8 +</i>	48 31				60	62 Kurile Islands.
58	21	21	<i>i 51 30 +</i>	<i>i 60 49</i>	<i>i 54 11</i>	61 14			<i>SS</i> 65 ^m .4. Japan.
59	23	4			40 28			1.4	
60	24	2			51 9			1.7	
61	24	14						25	
62	24	16						55	
63	25	0			35 25				Near shock.
64	25	7						29	
65	25	8	<i>i 33 27 +</i>	41 26	35.5	36 36		58	43 ^m 22 ^s . 47 ^m .0. Eastern Turkestan.
66	26	6						38	
67	27	11						23	
68	30	1			56 41	64.7			Chile.
69	June 7	5						56	
70	11	7			56.0				
71	11	14			36 55			58	
72	11	18			10 53			13	
73	11	20						24	

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks
			P or P'	S					
74	1949 June 12	18	<i>m s</i>	<i>m s</i>	<i>m s</i>	<i>m s</i>	<i>h m</i>	°	12 ^m .6. SKS 15 ^m .4 ^s . SP 17 ^m .49 ^s . PS 19 ^m .10 ^s . sS 20 ^m .0. Depth ca. 600 km. Northern Argentina.
75	14	0			44 50	46.5	65		57 ^m .2.
76	14	6					21		
77	16	18			18.8				
78	19	9					1.0		Small preceding movement.
79	19	12			43.6				
80	20	5					11		Near shock.
81	20	10					26		SS 65 ^m .7. New Hebrides Islands.
82	23	22			48.4	51.5			64 ^m .1 ^s . PS 67 ^m .0. SS 72 ^m .0. Java.
83	24	22	53 4		57 34	63 46			
84	25	19			38.7	48.4			
85	26	8	55 40	67.6	66 10	69 20	93		SS 75 ^m .1. P quite small, uncertain. Molucca Sea.
86	26	21		16.8	11.3	20.6	27		Kamchatka region.
87	27	1					4		Small preceding movement.
88	27	21			29.3	39.6			
89	27	23					1.1		Small preceding movement.
90	28	20			24.4				
91	July 1	23					.4		
92	2	3					.1		
93	2	11			52 2	58 52			60 ^m .6 ^s . 62 ^m .27 ^s . SS 72 ^m .4. Southwest of New Zealand.
94	2	20	<i>i</i> 10 26—		21 30	14 12	16 54	93	<i>i</i> SKS 20 ^m .56 ^s . PS 22 ^m .42 ^s . SS 27 ^m .9. SSS 33 ^m .9. Marianne Islands region.
95	4	3	<i>i</i> 50 53+		59 11	53 5	63.1	61	SSS 65 ^m .5. Persian Gulf.
96	5	2	40 16		48 37	55.2		62	Persian Gulf.
97	5	8				3.8			
98	6	1				31.7			
99	6	4					14		
100	7	4			45 2		48		North Atlantic Ocean.
101	7	12				30.8		46	Turkestan.
102	8	8			19 33	22.6		20	
103	8	11					76		P and S small, uncertain.
104	8	12	51.8		61 16			21	Arctic Sea.
105	8	18	19 51		60 7			67	Atlantic Ocean.
106	9	18	53 15		10 51	5 12	9.5	55	9 ^m .9. 11 ^m .11 ^s . 13 ^m .1. 14 ^m .5. P (-0.3, -2.0, +1.9; +3.0, +11.7, -8.0) per. 8 ^s . Turkestan.
107	10	4	<i>i</i> 3 9						Small preceding movement.
108	10	11					15		
109	10	12					27		
110	10	14	22 58		30 39	26 10		55	Turkestan.
111	10	15			36 17		46		Recording interrupted 15 ^h 21 ^m -15 ^h 29 ^m .
112	10	15	58 46		66 32	68 36	70 21	56	71 ^m .4.

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No.	Date	Hour	Forerunners				L	△	Remarks
			P or P'	S					
113	1949 July 10	16	<i>i</i> 33 33	<i>m s</i>	<i>m s</i>	<i>m s</i>	<i>h m</i>	°	40 ^m .5 ^s . 42 ^m .9. 43 ^m .24 ^s . 44 ^m .9.
114	11	16	22 23—	41 10	35 38	36 39	48	74	Japan.
115	12	4		31 53	22 35	27.1	50		
116	12	17					44		
117	13	9					22		
118	13	10					42		Small preceding movement.
119	13	18					58		
120	14	0					.8		
121	14	3					.7		
122	14	11					27		
123	14	19					52		
124	14	20					1.5	79	Forerunners not clearly marked. Depth about 400 km. Bonin Islands.
125	14	23	32 31	41 55	34 2	44 33	1.2		
126	15	9			45.2		1.1		
127	15	11			43.5		.35		P small, uncertain. Off coast of Guate-
128	16	10	8 39				.7		[mala.
129	17	15			58.0	62 8	1.4		Some preceding movement.
130	18	0							
131	18	4			66 13	67 11			69 ^m .27 ^s . Depth ca. 120 km. No Z record. Mindanao.
132	19	17	51 43+	59 27	54.9	61.5		55	Turkestan.
133	20	22	39 29		41 49	49.8		93	SS 54 ^m .8. Southwest of Java.
134	21	8	14 38—	25 36	15 8	25.1			26 ^m .28 ^s . Depth 115 km. Peru.
135	23	9			1 26	3 57			
136	23	10	<i>i</i> 45 34+		<i>i</i> 47 39+	48 56			52 ^m .26 ^s . SS 64 ^m .7. Depth ca. 200 km. New Hebrides Islands.
137	23	15	11 12	<i>i</i> 17 27	11 16	12 52		41	14 ^m .6. Turkey.
138	24	20					42		
139	25	11			44.9		1.3		
140	27	11			21 9	30 41			
141	27	15	31 0		33 33	34 26	1.1		SKS 38 ^m .2. 39 ^m .8. 43 ^m .7. 45 ^m .8.
142	28	5					.5		[SS 51 ^m .4. Kermadec Islands region.
143	28	8					9		
144	28	13					49		
145	29	7					1.3		Small forerunners.
146	30	17			56.6		69		
147	30	21					45		
148	31	0			23.7		39		
149	Aug. 1	7				49 51	58.1		
150	1	8					.6		
151	2	7				29.2			Small movement.
152	3	0					.0		
153	3	4					.6		
154	3	21					.5		
155	4	8				20.8	.8		

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks			
			P or P'		S							
			m	s	m	s	m	s	h	m	°	
156	1949 Aug. 5	19	i 21	1	31	8	24	2	31	57	81	36 ^m .4. P (+0.3, +0.8, +1.4; -1.4, -2.1, -3.7) per. 6 ^s . Ecuador.
157	6	0	54	34 -			56	20	57	45		SKS 61 ^m 36 ^s . (S) 64 ^m .4. PS 66 ^m 32 ^s . 67 ^m 8 ^s . SS 73 ^m .3. 76 ^m 8 ^s . Tonga Islands region.
158	8	7					28.3		37	1	1.0	No N record. Indian Ocean.
159	8	14									.7	No N record. Small preceding movement.
160	11	14									.4	
161	12	23					43.1					
162	13	18	43.9				53.5		59.1			
163	16	12									25	
164	17	18	i 44	53	53	39						
165	17	18	i 52	27	59	5	54	10	62.1		45	Japan. P (-0.8, x, +1.0; +1.0, x, +1.8) per. 4 ^s . Deeper than normal. 62 ^m 36 ^s . P (-0.2, +1.3, -1.0; +0.3, -1.0, +1.3) per. 5 ^s . Eastern Turkey. The two records are superposed. The following phases could not be identified: 54 ^m 34 ^s . 55 ^m 38 ^s . 61 ^m 17 ^s . 61 ^m 29 ^s . Panama.
166	18	10					18	55				
167	18	13	44	51 +	54	13					72	Queen Charlotte Islands. Trace too faint for record to be readable.
168	22	4	i 9	44 -								
169	23	3									24	
170	23	15					37.9				.9	
171	23	20					2.8				.1	
172	23	20	33	11	40	8	35	1	43	6	48	SS 43 ^m 38 ^s . P (x, x, +0.6; +1.8, -2.7, -2.8) per. ca. 7 ^s . Queen Charlotte [Islands]. Off coast of Oregon. Pacific Ocean.
173	24	3									5	
174	24	6			24	30					.6	
175	24	9					40.2		53.8		1.1	
176	24	23									2	
177	25	3									14	
178	25	4	24	9 +	32	0					39	Aleutian Islands.
179	25	23			i 45	18			50	56		52 ^m 3 ^s . 52 ^m 49 ^s . 54 ^m 38 ^s . 55 ^m 37 ^s . 60 ^m .6. Banda Sea.
180	26	5					41.2		44.6		50	Off British Columbia.
181	26	22					58.4				63	Off British Columbia.
182	27	21									56	Off British Columbia.
183	28	19	33	20 -	36	57					20	North Atlantic Ocean.
184	Sept. 5	3	7.0		17	43					88	P quite small, uncertain. Philippine Islands.
185	5	3	31	10 -			41.6					Philippine Islands.
186	5	7									19	
187	5	21									15	
188	12	10									21	
189	14	17									.5	Small preceding movement.
190	14	20	4	34			8.3		8	54		SKS 15 ^m 10 ^s . 15 ^m 59 ^s . 16 ^m 21 ^s . PS 18 ^m .0. PPS 19 ^m .0. SS 23 ^m .9. Celebes region.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks				
			P or P'		S								
			m	s	m	s	m	s	h	m	°		
191	1949 Sept. 16	19					36.1		39.5			Celebes region.	
192	17	2									57		
193	17	23									.9	Some preceding movement. No clearly [marked phases].	
194	19	22					19.8				.7		
195	20	2					47.3				1.1		
196	20	12	14	44			17.4		18	20	1.0	18 ^m 47 ^s . 28 ^m .9. 29 ^m .8. 34 ^m .7. Kermadec Islands.	
197	21	13	i 6	8 +	15	4	6	36	16	4	69	20 ^m .2. Depth ca. 110 km. Southern [Mexico].	
198	21	19					0.1				.3		
199	24	4					37.6		47.1		1.2	52 ^m .4. Solomon Islands region.	
200	25	15					44.6				1.2		
201	27	15	38	57	45	30	40	49	42	57	52	44	PcS 44 ^m 50 ^s . 48 ^m 7 ^s . iSS 48 ^m 54 ^s . P irregular, masked by microseisms, possibly 2 sec. earlier than read. [Alaska].
202	30	4					37.8				1.1		
203	Oct. 4	10					41	10	49.2				Mid-Atlantic Ocean.
204	7	12	21.5				22	25	27.1		1.0	46	SKS 28 ^m 20 ^s . 29 ^m 5 ^s . 29 ^m 32 ^s . PS 32 ^m .1. 35 ^m 17 ^s . SS 39 ^m .0. Indian Ocean.
205	8	3									.4		No records 17d 14h to 27d 7h.
206	27	8									57		
207	31	0					41.0				1.0		
208	31	1	47	52	54	35	49	40	57.8				Alaska.
209	31	18					15.3		22	53			PS 24 ^m 47 ^s . SS 31 ^m .0. New Hebrides Islands region.
210	Nov. 1	13									.6		
211	4	21							30.4		31	55	Masked by strong microseisms.
212	7	6									.45		
213	11	11									.4		
214	11	16									.40		
215	11	17									.2		
216	13	5											Small preceding movement.
217	20	7					29	2	33.1				Masked by microseisms. Gulf of California.
218	22	1	10	57			13.6		14	11			15 ^m 31 ^s . 19 ^m 55 ^s . 23 ^m 14 ^s . 24 ^m .7. 25 ^m .9. 30 ^m .4. Kermadec Islands. Deeper than normal. Masked by microseisms.
													25d 16h recording suspended.