

No. 22

1948

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.

Instruments:
Galitzin-Wilip seismographs.
Constants:

No. 22. Jan.—Dec. 1948

Component	<i>l</i>	<i>A</i> ₁		<i>T</i> ₁	μ^2	<i>T</i>	<i>k</i>
	cm.	cm.		sec.		sec.	
<i>N</i>	12.0	100	$\frac{1}{1}-\frac{26}{3}$	11.91	—0.1	11.9	105
			$\frac{26}{3}-\frac{25}{5}$	„	0.0	11.4	105
			$\frac{25}{5}-\frac{4}{8}$	„	0.1	11.2	104
			$\frac{4}{8}-\frac{31}{12}$	„	0.1	11.9	101
<i>E</i>	12.0	100	$\frac{1}{1}-\frac{17}{2}$	13.00	—0.1	12.4	94
			$\frac{17}{2}-\frac{28}{2}$	12.02	0.06	12.4	95
			$\frac{28}{2}-\frac{1}{5}$	„	0.1	11.9	114
			$\frac{1}{5}-\frac{31}{12}$	„	0.1	12.0	108
<i>Z</i>	14.9	100	$\frac{1}{1}-\frac{9}{4}$	10.02	0.1	8	100
			$\frac{9}{4}-\frac{2}{8}$	„		10–11	100
			$\frac{17}{8}-\frac{31}{12}$	„	0.1	9.7	99

No. 22.

— 2 —

1948.

Scoresby-Sund.

No.	Date	Hour	Forerunners								L	△	Remarks	
			P or P'		S									
	1948		m	s	m	s	m	s	m	s	h	m	°	
1	Jan. 6	17	34	33 +	43	48	37	6			1.0		71	No E record. Mexico.
2	16	11	18	26	26	38	22	10						Aleutian Islands.
3	17	7					35	35						Masked by microseisms.
	22													No records 11 ^h 12 ^m –14 ^h 26 ^m .
4	24	18	0	8			3	51	6	44				7 ^m 53 ^s . SKS 10 ^m 36 ^s . 10 ^m 51 ^s . No Z record. Phillipine Islands.
	26	14												Strong microseisms.
5	27	12					18	37	19	56				35 ^m 6 ^s . Strong microseisms.
6	28	16			8	49	12	41	14	53				Turkestan.
7	29	1									25			
8	30	8	54	34 +	63	19	57	11	58	41			66	SS 63 ^m .3. Arabian Sea.
9	Febr. 9	13	i 6	21	12	42	7	58	14	43			42	15 ^m 1 ^s . 16 ^m 2 ^s . P(–1.5, +2.7, +4.5; +2.4, –4.9, –2.0), period ca. 5 ^s . Aegean Sea.
10	9	15									.6			Forerunners disturbed.
11	18	20	33	55	i 37	14	i 33	56	34	57				35 ^m 27 ^s . eS 37 ^m 4 ^s . eP—, iP+. Arctic region.
12	23	9					45.3		55	5				
13	27	2					29	33			68			
14	28	2	6	40 +	13	46	8	30	17	3	22		49	Queen Charlotte Island.
15	March 1	1	26	59			30	4	30	38				PP 31 ^m 35 ^s . SKS 37 ^m 35 ^s . iSKKS 38 ^m 34 ^s . PS 40 ^m 41 ^s . 40 ^m 56 ^s . PPS 41 ^m 57 ^s . SS 47 ^m 6 ^s . SSS 51 ^m 15 ^s . Off west coast of New Guinea.
16	3	9	22	39 +	33	24	25	52	26	6			88	SKS 33 ^m 7 ^s . PS 34 ^m 35 ^s . SS 39 ^m 10 ^s . SSS 45 ^m 51 ^s . Off Luzon.
17	21	22									39			
18	22	21					50.3		60.6		1.1			
19	23	18	21	12 —	29	7	30	34					57	Off Kamchatka.
20	24	5					38	27	44	36				PS 47 ^m .9. Off Sumatra.
21	28	18									46			
22	29	10					37	11						
23	29	12					12	15	13	23				
24	29	20									53			
25	April 12	9					9	9	16	44				PS 18 ^m 37 ^s . SS 25 ^m .2. Solomon Islands.
26	17	16	i 23	16	32	43	24	5	25	57			73	PPP 27 ^m 55 ^s . 29 ^m 6 ^s . 32 ^m 57 ^s . 33 ^m 5 ^s . 33 ^m 30 ^s . 34 ^m 48 ^s . No Z record.
27	18	12					39	8	44	30				P(–5.0, –2.1, x), period 7 ^s . Japan. SKS 45 ^m 12 ^s . SKKS 46 ^m 19 ^s . PS 48 ^m 38 ^s . SS 54 ^m .2. No Z record. New Guinea.
28	21	6									21			
29	21	15									35			

No. 22.

— 3 —

1948.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Δ	Remarks
			<i>P</i> or <i>P'</i>	<i>S</i>					
			<i>m</i> <i>s</i>	<i>m</i> <i>s</i>	<i>m</i> <i>s</i>	<i>m</i> <i>s</i>	<i>h</i> <i>m</i>	$^{\circ}$	
30	1948 April 21	20	32 0 +	40 8	32 5	32 52		59	33 ^m 37 ^s . <i>PP</i> 34 ^m 18 ^s . 36 ^m 2 ^s . 39 ^m 34 ^s . 40 ^m 17 ^s . <i>SS</i> 44 ^m .2. Near northeast coast of Dominican Republic.
31	22	0	38 17	46 20	46 33	50.2		59	Aftershock.
32	22	10					33		
33	22	10	50 14	56 12	51 42			39	Greece.
34	22	13			27 1		37		
35	23	12	0 20 +	8 20	8 33		3	58	
36	23	20	19 58				22		
37	26	9					34		
38	26	9	36 40 +	40 16				20	North Atlantic Ocean.
39	May 1	15	22 56				25		
40	3	5					22		
41	8	2	<i>i</i> 57 4 +	65 43					Kurile Islands. Deeper than normal.
42	11	9	<i>i</i> 8 58 +		<i>i</i> 9 16	<i>i</i> 9 37			19 ^m 30 ^s . <i>i</i> 20 ^m 6 ^s . <i>SS</i> 26 ^m .4. Depth about 70 km. Southern Peru.
43	12	1	<i>i</i> 8 18 +	17 35	10 40	18 8		71	<i>SS</i> 22 ^m .5. Japan.
44	12	12	2 35				5		
45	14	13	30 30	39 48	40 11			72	Japan.
46	14	18	50 29	59 10				65	Pacific Ocean.
47	14	22	40 52	48 11	<i>i</i> 40 54	42 57		51	44 ^m 8 ^s . 48 ^m 41 ^s . <i>i</i> <i>S_pS</i> 50 ^m 50 ^s . <i>SS</i> 51 ^m 53 ^s . <i>P</i> (−6.0, +5.0, +6.7), period 9 ^s . South of Alaska Peninsula.
48	15	2	50 54				67		
49	17	17	57 39 +	64 55	59 39	67 31	72	51	South of Alaska Peninsula.
50	20	7			15 4	16 2			Readings possibly <i>P</i> and <i>S</i> .
51	22	19	41 44						<i>P'</i> quite small.
52	23	4			32 59	33 57			42 ^m 8 ^s . 45 ^m .7. <i>e_Z</i> 48 ^m 15 ^s .
53	25	7	22 51	32 16	<i>i</i> 23 8	25 50		73	26 ^m 18 ^s . 27 ^m 38 ^s . 32 ^m 25 ^s . 33 ^m 9 ^s . <i>SS</i> 36 ^m 49 ^s . No <i>Z</i> record. China.
	25								No records 11 ^h –16 ^h .
54	26	9	25 42	32 48	27 40	36 21		49	No <i>Z</i> record.
55	26	14					31		South of Alaska Peninsula.
56	28	5			59 43	60 6			Small preceding movement.
57	28	15			4 47		14		<i>PS</i> 61 ^m 18 ^s . No <i>Z</i> record. Off Peru.
58	29	4	55 30		56 41	62 43			No <i>Z</i> record.
59	29	6					42		
60	29	8					38		
61	29	14			22 45		.6		No <i>Z</i> record.
62	31	15			1 52	6 23	9		Forerunners small, readings uncertain.
									No <i>Z</i> record.
63	June 1	19			19 52	20 32	39		20 ^m 45 ^s . <i>SS</i> 26 ^m .9. Small preceding movement. No <i>Z</i> record.

No. 22.

— 4 —

1948.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks
			P or P'	S					
			m s	m s	m s	m s	h m	°	
64	1948 June 2	13		59 27					No Z record.
65	8	3			42.0	48.8			
66	15	11	56 26	66 0	56 33	61 49		75	66 ^m 32 ^s . 71 ^m .4. No Z record. Japan.
67	15	21			24 43		51		No Z record.
68	17	14	17 19		19 16				Iran.
69	18	1			13 41	19 25			21 ^m 25 ^s . PS 23 ^m 27 ^s . PPS 24 ^m 36 ^s .
70	19	15					6		SS 29 ^m .4. Solomon Islands region.
71	21	12			23 42	25 18			SKS 30 ^m 10 ^s . 31 ^m 3 ^s . SS 38 ^m .2. Celebes Sea.
72	24	2					9		
73	24	2					15		
74	27	0	20 4	29 43				75	China.
75	27	12	59 0 —	67 41	72.3			65	Off north-coast of Honduras.
76	27	21	48 13 +	55 18	50 10	55 35		49	58 ^m 6 ^s . 59 ^m 8 ^s . South of Alaska.
77	28	7	24 57	34 21	25 16	35 47		73	Japan.
78	29	10	47 32		i 49 3	54 25			54 ^m 58 ^s . 55 ^m 58 ^s . 56 ^m 33 ^s . 58 ^m 48 ^s .
									59 ^m 8 ^s . 60 ^m 43 ^s . SS 65 ^m .6. Samoa Islands region.
79	29	16	i 14 35 +	21 9	16 4	21 27		44	SS 24 ^m 30 ^s . Caucasus region.
80	30	12	28 41 +	34 38	30 8			38	Ionian Sea.
81	July 3	15			47 28		49		
82	5	14	3 22	11 25	6 40	17 4			17 ^m 52 ^s . 19 ^m 16 ^s . No Z record. Persia.
83	6	13					37		
84	7	2	30 57	40 38	33 54	35 40			SS 45 ^m 20 ^s . SSS 49 ^m 3 ^s . No Z record. Japan.
85	8	4			43.5	47.6	50		
86	8	9					3		
87	8	12			24 19	25.5			
88	8	12	36 2 +	37 2				5	P (—1.0, —3.0, +0.7; +2.5, +6.9, —2.1), period 13 ^s .
89	9	15					36		
90	10	5					0		
91	14	22			48 25	49 23			50 ^m 50 ^s . 55 ^m 46. 56 ^m 21 ^s . 57 ^m 40 ^s .
92	15	11	14 6	23 58	17 1	29 4	39	78	59 ^m 37 ^s . 63 ^m 14 ^s . 64 ^m 19 ^s . New Guinea. SW. of Mexico.
93	15	17					22		
94	16	7			28.0	30 45			35 ^m 6 ^s . 39 ^m 48 ^s . 44 ^m 20 ^s . 47 ^m 43 ^s . Two shocks. Guatemala.
95	18	7			2.2	7.6			8 ^m 9 ^s . 11 ^m 15 ^s . 19 ^m .3. 21 ^m 10 ^s . No Z record. Celebes Sea.
96	18	22			49 40	59 15	78		
97	20	1			1 26	8 27			11 ^m 3 ^s . New Hebrides Islands.
98	20	11	15 34 +		18.7	23.2			25 ^m 30 ^s . 26 ^m 6 ^s . 27 ^m 6 ^s . 27 ^m 53 ^s .
									28 ^m 13 ^s . Peru.
99	20	15					27		
100	21	14					28		

No. 22.

— 5 —

1948.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks			
			<i>P</i> or <i>P'</i>		<i>S</i>							
	1948		<i>m</i>	<i>s</i>	<i>m</i>	<i>s</i>	<i>m</i>	<i>s</i>	<i>h</i>	<i>m</i>	°	
	July											
101	22	13							14			
102	22	18					7.9		15			
103	22	20			21	28	25	7	28			
104	22	21			8	44	12.1		16			
105	23	12					40.6					
106	23	20	59.1									Atlantic Ocean.
107	23	21	11	0								Atlantic Ocean.
108	24	6	<i>i</i> 11	16	<i>i</i> 17	43	11	28	11	36		13 ^m 20 ^s . 18 ^m 4 ^s . 20 ^m 7 ^s . 21 ^m 6 ^s . <i>P</i> (+0.2, —0.6, +0.9; —0.8, +1.4, —1.8), period 4 ^s . Deeper than normal. Crete.
109	29	0	43	47	52	40						Japan.
110	29	0	47	33								Japan.
111	30	3	39	42	47	22					55	No <i>Z</i> record. Persian Gulf.
112	31	19			25	16			36			No <i>Z</i> record. Off Panama.
113	Aug. 3	17					40.3		1.1			No records 3 ^d 23 ^h –4 ^d 18 ^h .
114	4	23					41	14	70			
115	7	14	51	51	61	22	51	58	78			SS 66 ^m .3. <i>P</i> not clearly marked, the reading uncertain.
116	10	13					34	51	.8			No <i>Z</i> record.
117	11	10	47	12	56	5	47.8		59			No <i>Z</i> record. Mexico.
118	12	22	43	58			46.5		1.4			54 ^m .8. 64 ^m .0. No <i>Z</i> record. South Atlantic Ocean.
119	14	17	7	17	16	41	9	58	.5			
120	17	5					17	6	46			No <i>N</i> and <i>Z</i> records.
121	17	17					20	51				
122	17	19							40			
123	17	22							50			Small.
124	18	19			21	12	24	32	32			Anatolia.
125	19	13	58.6		64	51	59	8				SS 68 ^m .3. <i>P</i> quite small, the reading uncertain. Depth about 100 km.
126	19	20	10	48	20	26	20	50			75	Alaska.
127	20	19					4	16	37			South of Panama.
128	21	17							31			East of Mindanao.
129	23	11					52	53	54			Masked by microseisms.
130	25	6	23	10			26.5		27	11		32 ^m 29 ^s . 33 ^m .6. 34 ^m 4 ^s . <i>iPS</i> 36 ^m 10 ^s . SS 41 ^m .5. 43 ^m .4. No <i>Z</i> record. Argentina.
131	26	20			<i>i</i> 58	45						Near Japan. Deep focus.
132	26	21			15	53						Near Japan. Deep focus.
133	28	2	37	26	44	56	39	16	54		53	47 ^m 15 ^s . 48 ^m 34 ^s . The beginning of <i>P</i> small, the reading uncertain.
134	28	20							37			Kamchatka.
135	29	17					58.6		63	54		Small.

No. 22.

— 6 —

1948.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	△	Remarks					
			P or P'		S									
			m	s	m	s	m	s	m	s	h	m	°	
136	1948 Aug.	23	41	39	51	35	52	17	56.7				78	South of Japan.
137	30	1	39	40	40	45							6	The reading of S uncertain.
138	Sept.	19									51			
139	1	20									27			
140	2	23					49	13	52	51				Superposed on preceding shock. 53 ^m 4 ^s . 54 ^m 33 ^s . 56 ^m .7. SKS 59 ^m 25 ^s . SKKS 59 ^m 48 ^s . 61 ^m 48 ^s . Off Mindanao.
141	4	15					39.2		45.7					
142	6	8					34	38	37	2				Chile.
143	7	8			32	35	33	55						Hindu Kush.
144	8	15	25	13			28	19	30	20				30 ^m 45 ^s . 32 ^m .1. SKS 35 ^m 10 ^s . 37 ^m 42 ^s , 56 ^s . 40 ^m .6. 41 ^m .8. 43 ^m .8. 47 ^m 21 ^s . Tonga region.
145	10	13	i 59	20	68	5	63	37	68	25				69 ^m 36 ^s . SS 72 ^m .7. P(—1.2, x, +1.3; +3.3, x, —4.7), period 8 ^s . Deeper than normal. Japan.
146	10	17									53			
147	11	0									23			
148	11	2									12			
149	11	5									44			
150	11	9			6	20	0.8		2.5					SS 9 ^m .5. Greece.
151	21	17					57	29	58	9				64 ^m 31 ^s .
152	23	1			12	37					23			Japan.
153	23	15			30.8						43			Japan.
154	24	21					8.5		16.8		29			Phases in preceding movement not clearly marked. New Guinea.
155	24	23	40	39			51	3			67			Phases small, the readings uncertain. Philippine Islands.
156	25	3					33.5		38.6		1.0			
157	26	1					19	30	24	45				25 ^m 40 ^s . 28 ^m 50 ^s . 29 ^m 37 ^s . Solomon Islands.
158	Oct.	20	i 21	16	28	25	22	37	23.2			50		24 ^m 24 ^s . The trace is faint, records difficult to read. Iran.
159	15	23					6.7							
160	21	5									26			
161	21	5					21	46	31	26				Solomon Islands.
162	28	14									.7			
163	28	20	i 56	56	66	20	59	38	67	31	81			SS 70 ^m 50 ^s . No Z record. Japan.
164	Nov.	12	15	18 +	22	52	18	33	25	17		54		Kamchatka.
165	3	5					40	33	57	45	72			Loyalty Islands.
166	14	6					36	19						
167	17	19					37.5							Very strong microseisms.
168	18	0					43.5							Very strong microseisms.
169	19	1	15	43	24	59					35	71		No E record. Costa Rica.

No. 22.

— 7 —

1948.

Scoresby-Sund.

No.	Date	Hour	Forerunners				L	Δ	Remarks
			<i>P</i> or <i>P'</i>	<i>S</i>					
170	1948 Nov. 21	19	<i>m s</i>	<i>m s</i>	<i>m s</i> 30 46	<i>m s</i> 31 26	<i>h m</i> 61	$^{\circ}$	<i>PS</i> 40 ^m .3. <i>SS</i> 47 ^m 11 ^s . Hebrides Islands.
171	22	9	16.8	24.7	20.5	25 11			<i>SS</i> 29 ^m .0. Aleutian Islands.
172	22	23			36 59				
173	26	5			56 22	65 39	91		<i>SS</i> 71 ^m 50 ^s . New Guinea.
174	28	22			4.7				
	Dec. 4								Very strong microseisms.
175	15	19			33 52	35.1			39 ^m 53 ^s . Bonin Islands.
176	23	8	50 33	58 17	50 40	61 59	65		Masked by microseisms. Kamchatka.