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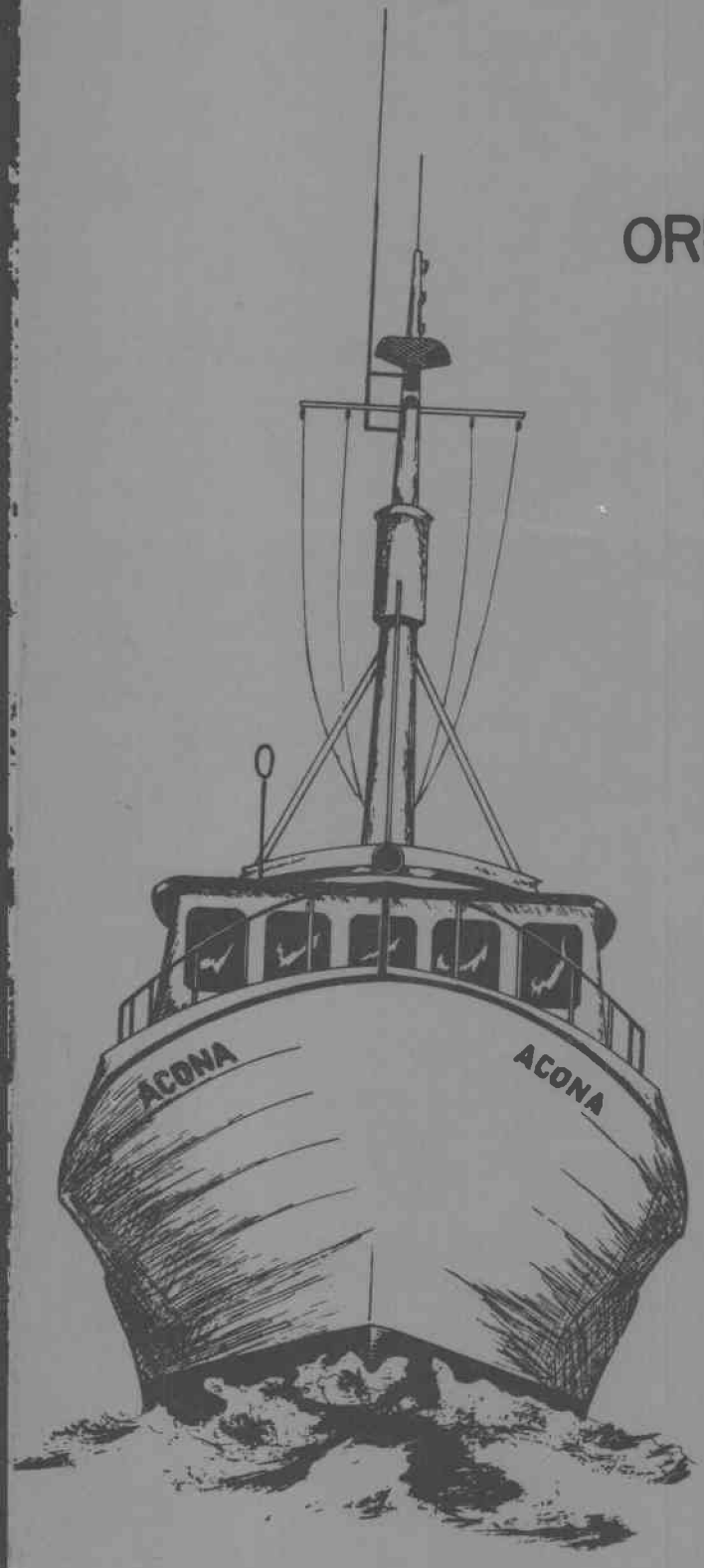
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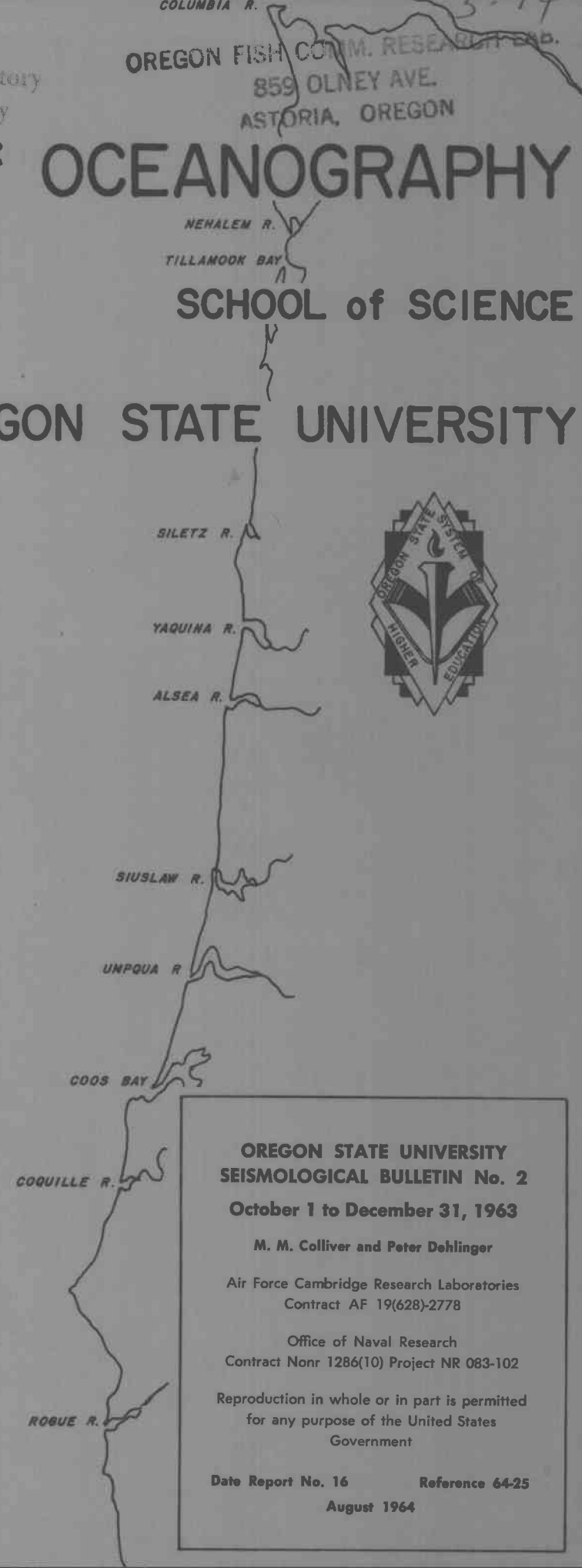
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DEPARTMENT of OCEANOGRAPHY

SCHOOL of SCIENCE

OREGON STATE UNIVERSITY





OREGON STATE UNIVERSITY SEISMOLOGICAL BULLETIN No. 2

October 1 to December 31, 1963

M. M. Colliver and Peter Dehlinger

Air Force Cambridge Research Laboratories
Contract AF 19(628)-2778

Office of Naval Research
Contract Nonr 1286(10) Project NR 083-102

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Date Report No. 16 **Reference 64-25**

August 1964

DEPARTMENT OF OCEANOGRAPHY
Geophysics Research Group
OREGON STATE UNIVERSITY
Corvallis, Oregon

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Wayne V. Burt
Chairman

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Oregon State University operates a World-Wide Standard Seismograph Station at Corvallis (COR) and a seismic station at Klamath Falls (KFO), Oregon.

The Corvallis station includes three short-period Benioff seismographs (T_o = 1 sec, T_g = 0.75 sec), three long-period Sprengnether seismographs (T_o = 30 sec, T_g = 100 sec), and a small short-period vertical Benioff seismograph (T_o = 1.0 sec, T_g = 0.2 sec) to provide visual recording on the OSU campus.

The Klamath Falls station consists of a small short-period vertical Benioff seismograph (T_o = 1.0 sec, T_g = 0.2 sec), with visual recording on the campus of the Oregon Technical Institute.

Station Constants:	Corvallis	Klamath Falls
Latitude	44°35.1'N.	42°16.0'N.
Longitude	123°18.2'W.	121°44.7'W.
Elevation	123 meters	4720 meters

Abbreviations:

i - impetus (sudden beginning of motion).

e - emersio (gradual beginning of motion).

(Z, N, E) (following phase of arrival) - recorded on vertical, north-south, east-west component seismometers, respectively.

c, r (following phase of arrival) - first motion arrived as a compression or rarefaction, respectively.

u, d, N, S, E, W (following phase of arrival) - first motion is up, down, north, south, east, or west, respectively.

M - magnitude

h - depth of focus

Δ epicentral distance from Corvallis

DATE 1963	STA.	PHASE	TIME (GCT) h,m,s	PERIOD sec	REMARKS
4 Oct.	COR	iP (Z)dr	07:16:36.2	0.6	Vancouver Island region. USCGS (card 81-63): 49.0°N, 131.9°W; 07:14:53.2; h about 33 km; M 4.4. Δ about 730 km.
		e (N,E)	17:33	6	
		e (N,E)	17:33.2	1.4	
9 Oct.	COR	iP (Z,N)u,S	23:53:20.8	0.5	Local.
		eS (N,E)	53:30.5	0.8	
		e (Z)	53:42.4	1.2	
12 Oct.	COR	eP (Z)	11:36:58.9	1.2	Kurile Islands. USCGS (card 85-63): 44.8°N, 149.0°E; 11:26:57.9; h about 40 km; M 7 (BKS). Δ about 6600 km.
		eS (E)	45:07	28	
		e (N)	45:48	20	
		eScS (N)	46:46	24	
		eSS (E)	48:57	28	
		e (E)	50:09	20	
		e (N)	51:44	40	
	KFO	eP	11:37:14.8	1.5	
13 Oct.	COR	eP (Z)	05:27:54	1.5	Kurile Islands. USCGS (card 84-63): 44.8°N, 149.5°E; 05:17:57.1; h about 60 km; M 8¼ (Pas). Δ about 6600 km.
	KFO	eP	05:28:15.4	3	
14 Oct.	COR	iP (Z)r	13:31:34.6	1.0	Kurile Islands. USCGS (card 84-63): 44.8°N, 151.0°E; 13:21:45.2; h about 60 km; M 5.9. Δ about 6400 km.
		eP (N,E)S,W	31:36.5	1.6	
		eS (E)	39:40	28	
		eLQ (N,E)	46:00	25	
		eLR (Z,E)	49:00	24	
16 Oct.	COR	eP (Z)d	17:02:17.3	1.5	
	KFO	eP	17:01:41.8	1.0	
20 Oct.	COR	eP (Z,N,E) d,S	01:03:10.5	2	Kurile Islands. USCGS (card 85-63): 44.7°N, 150.7°E; 00:53:07.2; h about 25 km; M 7¼ (Pas). Δ about 6300 km.
29 Oct.	COR	eP (Z)c	07:02:47.4	.8	Near coast of Humboldt County, Calif. USCGS (card 88-63): 40.4°N, 124.7°W; 07:01:42.7; h about 38 km; M 4.7. Δ about 480 km.
		ePP (Z)r	02:54.3	.7	
		e (Z)c	02:56.6	.8	
		ePPP (Z)c	03:01.0	1.0	
		iS (N,E)S,W	03:34.6	1.0	
3 Nov.	COR	eP (Z)c	03:20:36.6	2.0	Peru-Ecuador border. USCGS (card 90-63): 3.5°S, 77.8°W; 03:10:12.7; h about 33 km; M 6.0. Δ about 7000 km.
		eS (Z,E)	29:11	12	
		eSS (E)	33:31	35	
		e (E)	38:36		
		eLR (N,E)	40:07	36	
		e (N,E)	44:40	28	
		e (Z,N,E)	47:48	18	

DATE 1963	STA.	PHASE	TIME (GCT) h,m,s	PERIOD sec	REMARKS
4 Nov.	COR	ePP (Z)d	01:31:27.5	3	New Hebrides Island. USCGS (card 91-63): 15.1°S; 167.3°E; 01:14:32.8; h about 154 km; M 5.8. Δ about 10300 km.
		e (Z)	35:58	4	
		e (Z)	36:24	14	
9 Nov.	COR	eP (Z,E)u,W	21:25:50.9	1.0	Western Brazil. USCGS (card 93-63): 9.0°S, 71.5°W; 21:15:30.4; h about 600 km; M 5.9. Δ about 7800 km.
		esP (Z)	28:53	10	
		esPP (Z)	31:22	20	
		eS (Z,N,E)	34:28	32	
		eSS (N,E)	37:56	30	
10 Nov.	COR	eP (Z)d	01:10:59.9	1.2,8	Western Brazil. USCGS (card 93-63): 9.2°S, 71.5°W; 01:00:38.8; h about 600 km; M about 5.6. Δ about 7800 km.
		epP (Z)	12:58	10	
		eS (Z,N,E)S,W	19:30	14	
		eScS (E)	20:08	10	
		e (Z)	20:44	18	
		esS (E)	22:31	9	
		eSS (N)	24:08	25	
15 Nov.	COR	eP (Z,N)u,N	21:16:35.3	1.4,8	Kurile Islands. USCGS (card 93-63): 44.3°N, 149.0°E; 21:06:34.0; h about 50 km; M about 6.0. Δ about 6700 km.
		eS (N,E)	24:30	10	
		esS (N)	25:06	8	
		eSS (N)	28:40	30	
		e (N,E)	31:31	24	
		e (Z)	34:20	35	
	KFO	eP	21:16:49	2	
18 Nov.	KFO	eP	14:41:50.0	2	Gulf of California. USCGS (card 93-63): 29.9°N, 113.6°W; 14:38:28.9; h about 14 km; M about 6.5 (PAS). Δ about 1800 km.
	COR	eP (Z)d	14:42:26.8	2.4	
		eS (Z,N,E)	45:39	25	
		eSS (E)	46:18	30	
		eSSS (N)	46:32	40	
		eLR (Z)	47:00	36	
22 Nov.	KFO	eP	14:56:09	2	Kurile Islands. USCGS (card 93-63): 44.4°N, 149.0°E; 14:45:51.7; h about 33 km; M about 5.6. Δ about 6800 km.
23 Nov.	KFO	eP	07:54:05	1.5	Gulf of California. USCGS (card 96-63): 30.1°N, 114.0°W; 07:50:46.3; h about 14 km; M about 6. Δ about 1900 km.
	COR	eP (Z,N)d,N	54:42	2,10	
		eS (Z,E)	58:06	16	
		e (N)	58:58	15	
		eLR (Z,E)	59:04	20	
24 Nov.	KFO	eP	11:17:24.3	1.5	South of Honshu, Japan. USCGS (card 96-63): 28.2°N, 140.1°E; 11:05:56.8; h about 260 km; M about 5.2. Δ about 8300 km.

DATE 1963	STA.	PHASE	TIME (GCT) h,m,s	PERIOD sec	REMARKS
26 Nov.	KFO	iP	04:17:30.2	0.4	Local.
	KFO	iP u	21:13:58	0.5	Local.
	COR	eP (Z)d	21:14:06.1	2	
		e (N)S	15:16	10	
3 Dec.	KFO	eP d	23:15:55	1.2	Northern Chili. USCGS (card 97-63): 22.4°S; 69.3°W; 23:03:41.6; h about 18 km; M about 6.1. Δ about 9100 km.
11 Dec.	COR	eP (Z)	17:15:24.5	1.5	Andreanof Island, Aleutian Islands. USCGS (card 100-63): 51.2°N, 179.3°W; 17:08:12.3; h about 32 km; M about 5.3. Δ about 4100 km.
		e (N,E)	24:08	40	
		e (Z)	25:46	32	
15 Dec.	COR	ipPP (Z)c	19:52:27.1	1.2	Java Sea. USCGS (card 103-63): 4.8°S, 108.0°E; 19:34:45.5; h about 650 km; M about 6.4. Δ about 10000 km.
		ePPP (Z)	52:44.2	1.0	
		esPP (Z)	54:03	4	
		eSKS (Z)	56:09	10	
		e (Z)	57:16	8	
		e (E)	59:56	16	
		esS (N,E)	20:00:56	12	
		eSS (E)	02:42	30	
		e (E)	05:34	12	
		eSSS (N,E)	06:58	8	
		e (Z)	08:18	16	
		eG? (N)	12:44	10	
18 Dec.	KFO	eP	00:42:28	2.0	Tonga Islands. USCGS (card 107-63): 24.8°S, 176.6°W; 00:30:02.6; h about 46 km; M about 6.5. Δ about 9000 km.
	COR	eP (Z)r	00:42:32.0	1.5,8	
		ePP (Z,N)d	46:00	18	
		ePPP (Z)	47:26	20	
		eS (N,E)	52:46	20	
		e (N)	54:12		
		e (Z)	55:34	32	
		eSS (N,E)	59:00	36	
		eSSS (N,E)	01:02:24	48	
		eLQ (N)	04:37	40	
		e (N)	08:18	52	
27 Dec.	COR	iP (Z,E)d,W	02:36:37.7	0.7	West of Portland, Oregon.
		eS (E)	36:53	2	
	KFO	iP	02:37:16.1		
		e	38:00.3		
27 Dec.	COR	eP (Z,N)d,N	03:17:52.2	0.5	West of Portland, Oregon.
		eS (Z,N)S	18:07.1	1.0	