



International
Seismological
Centre

SVEUČILIŠTE U ZAGREBU — PRIRODOSLOVNO MATEMATIČKI FAKULTET
GEOFIZIČKI ZAVOD

UNIVERSITY OF ZAGREB — FACULTY OF SCIENCES
GEOPHYSICAL INSTITUTE

IZVJEŠĆE O POTRESIMA

SEISMOLOGICAL BULLETIN

Godina: 1977
Year:

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Z A G R E B
Y u g o s l a v i a

Godina: 1977
Year:

REGISTRACIJE SEIZMOGRAFA

Records of Seismographs
Zagreb

(lat. = 45°49'N, long. = 15°59'E, H = 155 m)
Horizontal seismograph, Wiechert M = 1000 kg
Vertical " " M = 1300 kg
Horizontal " " M = 80 kg

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o Z D km	Remarks
						NE	NW	Z		

J A N U A R Y 1977.

1	eSn eSg	17	10	10.3 15.9						2.1 233	Trace. Italy, Friuli. CSEM: 46.27N, 13.03E, H=17:09: 07.5, h=10km.
1	eP eS	21	49 56	10.0 29.2						54.4 6050	Dilat. Tsinghai Province, China. USCGS: 38.15N, 91.01E H=21:39:41.3, h=27km, M _B =5.9(CGS), M _S =6.3(CGS).
3	e ₋ eS	18	51	23.0 27.0							Trace.
5	eP e	05	51	44.7 46.7	2.2					36.9 4090	Dilat. Southern Iran. CSEM: 27.38N, 56.26E, H=05:44: 39.1, h=10km, M _B =5.5(CGS).
6	eI (PKP) ePP	06 31	30 31	36.2 45.2	2.8					118.2 13170	Dilat. New Guinea. USCGS: 03.63S, 144.44E, H=06:11: 40.7, h=33km, M _B =6.0(CGS), M _S =6.6(CGS).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e NE	NW	Z	D ^o D km	Remarks
7	eP	19	49	18.9					84.8 9424	Dilat. Taiwan region. USCGS: 21.17N, 120.28E, H=19:36; 46.9, h=33km, M _B =5.7(CGS), M _S =5.1(CGS).
9	ePn ISg	14	27	05.5 35.4	0.8	7.8			2.0 225	Italy, Friuli, CSEM: 46.28N, 13.12E, H=14:26:29.6, h=10km, M=3.7(ZAG).
10	ePKP e	23	37 45	46.5 38.7	2.4				147.0 16335	Loyalty Islands. USCGS: 21.49S, 168.66E, H=23:18; 07.0, h=16km, M _B =5.2(CGS).
13	ePn ISg M	09	19 20	46.6 19.5 34.5	2.6	89.8			2.4 266	Herzegovina, Yugoslavia. CSEM: 43.57N, 17.16E, H= 09:19:08.2, h=15km. Damage (VII ^o MCS in the Imotski- Posušje areas. M=4.9(ZAG).
16	ePn ePb	09	19	09.0 34.6					9.6 1070	Greece. CSEM: 37.92N, 22.91 E, H=09:16:50.8, h=42km±4km.
17	e(P)	05	23	47.8					19.0 2110	Trace. Turkey. CSEM: 39.25N, 43.69E, H=05:19:26.4, h= 36±4km.
17	eL	07	17		15				5.9	Trace. Bonin Islands region.
17	ePKP e	19	24	19.7 22.4					146.8 16314	Trace. Fiji Islands region. USCGS: 14.87S, 177.23W, H= 19:04:37.4, h=36km, M _B =3.6 km, M _B =5.3(CGS), M _S =5.9 (CGS).
17	ePKP eSKS eSKKS	21	44 51 52	48.6 40.0 30.4	5.3	1.7			104 11558	Trace. Chile-Argentina bor- der region. USCGS: 24.85S, 68.67W, H=21:27:12.6, h=33 km, M _B =6.3(CGS). M _S =6.1 (CGS).
19	eP eS	00 01	56 04	10.9 13.9	3.3 4.2	2.7			60.0 6668	Compr. Ttsinghai Province, China. USCGS: 37.02N, 95.70 E, H=00:46:18.3, M _B =5.9 (CGS), M _S =5.8(CGS).
19	eS M	14 15	19 00	(00) 22.5					100.2 11135	Interrupt. Trace. Mindanao, Philippine Islands. USCGS: 05.04N, 126.55E, H=13:54: 04.5, h=50km, M _B =5.8(CGS)

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e NE	NW	Z	D ^o D km	Remarks
19	ePn	20	49	30.3					10.8 1200	Trace. Tunisia. CSEM: 36.51N, 08.49E, H=20:46:55.4 h=23±7km.
21	ePKP epPKP	06	29 32	53.0 08.4					149.5 16614	Trace. Fiji Islands region. USCGS: 18.01S, 178.38W, H= 06:11:05.6, h=604km, M _B = 5.8(CGS).
26	eP̄ eS̄	15	34 35	31.5 (00)					2.0 224	Trace. Italy, Friuli. CSEM: 46.34N, 13.29E, H=15:33:51.7 h=10km.
28	ePKP	18	20	27.3	2.3				143.8 15980	Dilat. New Hebrides Islands. USCGS: 17.44S, 168.69E, H= 18:00:51.8, h=14km, M _B = 5.4(CGS).
28	e	20	29							Trace. Croatia, Yugoslavia.
30	eP̄ eR12P̄ IS̄	21	18	04.3 20.4 27.4	0.5				1.7 185	Croatia, Yugoslavia. CSEM: 44.01N, 15.99E, H=21:17: 31.6, h=10km, USCGS: 44.04N, 15.98E, H=21:17:29.6, h= 10km. Maximum Intensity V ^o MCS. M=3.2(ZAG). Felt at Knin, Drniš, Obrovac area.
30	e e	21	21	15.4 24.8						Trace. Croatia, Yugoslavia.
30	e	21	37	13.9						Trace. Croatia, Yugoslavia.
31	e(Pg) e(Sg)	04	03 04	53.7 17.1					1.7 185	Trace. Croatia, Yugoslavia.
31	ePn ePb eSb	07	11	29.6 31.6 52.3					1.6 173	Croatia, Yugoslavly. CSEM: 44.41N, 16.38E, H=07:11:02.9 h=10km.
31	eP IPP esS	14	33 35 40	49.4 16.8 11.8	2.3				39.7 4412	Dilat. Tadzhik SSR. USCGS: 40.04N, 70.85E, H=14:26:14.8 h=20km, M _B =6.1(CGS), Maxi- mum Intensity VII-VIII MCS.

Date	Phase	M h	G m	T s	Per. Amplitude			D ^o Z D km	Remarks
					sec. NE	NW	Z		
F E B R U A R Y 1 9 7 7									
3	e	20	41	26.0					Trace. Croatia, Yugoslavia.
4	e	07	15	(00)					Interrupt. Trace. Croatia, Yugoslavia.
4	eP ISKS	07 09	59	24.6 (00)	1.9	6.3		100.1 11124	Salta Province, Argentina. USCGS: 24.69S, 63.36W, H=07:46:33.8, h=549km, M _B =6.0(CGS).
4	eSg e	20	58	11.7 15.1				1.9 212	Trace. Italy, Friuli. CSEM: 46.20N, 13.24E, H=20:57:09.9, h=10km.
5	ePKP ePP	03	48 51	34.1 11.5	2.8			134.5 14947	Dilat. Southern Pacific ocean. USCGS: 66.45S, 82.58W, H=03:29:18.9, h=33km, M _B =6.2(CGS), M _S =6.2(CGS).
6	ePKP e	03	29	04.6 20.2	2.1 2.3			154.5 17170	Dilat. Tonga Islands. USCGS: 21.82S, 175.26W, H=03:09:14.0, h=33km, M _B =5.6(CGS), M _S =5.7(CGS).
6	eM	16	05	10.6					Trace. Northern Italy. CSEM: 44.52N, 07.28E, H=16:01:32.2 h=3km.
7	eSg	07	05	20.8				4.6 511	Trace. Northern Italy. CSEM: 45.36N, 09.45E, H=07:02:53.9 h=34km.
10	ePKP e	03	46	38.1 42.7	1.7			148.3 16480	Trace. Loyalty Islands region. USCGS: 21.88S, 169.83E, H=03:26:59.0, h=38km, M _B =4.9(CGS), M _S =5.0(CGS).
10	eP IS	06	21	23.1 40.6				1.1 123	Croatia, Yugoslavia. CSEM: 44.92N, 14.82E, H=06:21:03.3, h=10km.

Date	Phase	M h	G m	T s	Per. Amplitude			D ^o Z D km	Remarks
					sec. NE	NW	Z		
10	IPKP e	08	15	39.9 42.9	1.3			147.6 16403	Dilat. Loyalty Islands region. USCGS: 21.82S, 169.94E, H=07:55:56.7, h=41km, M _B =5.2(CGS), M _S =5.4(CGS).
10	eP eS	10	12 13	53.9 09.5	0.6	2.6		1.1 125	West Hungary. CSEM: 46.32N, 17.41E, H=10:12:33.6, h=10km, M=2.7(ZAG).
10	IP IS	10	14	39.7 54.7	0.5	5.2	0.6	1.1 118	West Hungary. CSEM: 46.43N, 17.29E, H=10:14:18.6, h=10km, M=3.0(ZAG).
16	IP e	00	56 57	57.1 09.4	1.5			39.0 4338	Dilat. Trace. North Atlantic ocean. USCGS: 25.97N, 26.26W, H=00:49:31.2, h=33km, M _B =5.5(CGS).
16	IP IS e	19	34	16.4 19.3 20.1	1.46			0.2 22.5	Compr. Croatia, Yugoslavia. CSEM: 45.98N, 16.18E, H=19:34:12.8, h=10km, USGS: 45.97N, 15.99E, H=19:34:12.2, h=15km, I _o =V-VI MCS, M=4.0(ZAG).
18	eP eS IS	21	04 14	11.8 33.7 49.1	2.0 3.9 1.9			86.6 9624	Dilat. South of Honshu, Japan. USGS: 33.07N, 140.82E, H=20:51:29.8, h=42km, M _B =6.0(CGS), M _S =5.7(CGS).
19	eP eS M	22	46 56 23	04.9 06.5 17	2.1 7.1 20.5			78.7 8746	Compr. Near Islands, Aleutian Islands. USGS: 53.57N, 170.03E, H=22:34:04.1, M _B =6.2(CGS), M _S =6.7(CGS).
20	ePn eSn eSg	11	20 21	31.2 56.1 (00)	0.6		0.8 2.0	1.9 215	Dilat. Croatia. USGS: 43.87N, 15.79E, H=11:19:58.4, M _B =4.3(CGS), Felt (VI MCS) at Lukar. Felt at Drniš. Some damage reported.
24	ePn e	20	49 54	48.1 17.5	9.0			10.2 1134	Trace. Turkey, Izmir. CSEM: 38.63N, 27.82E, H=20:47:19.0, h=10km, M _B =5.0(CGS).

Date	Phase	H h	G m	T s	Per. sec.	A m p l i t u d e	D ^o	Remarks
						NE NW Z	D km	
28	e I	04	01	48.3 54.9	0.47	6.6		Trace. Slovenia. Felt (III ^o MCS) at Metlika (LJU).

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2	ePKP	05	25	(00)			146.6 16295	Interrupt. Trace. Fiji Is- lands. USGS: 16.37S, 177.98E, H=05:05:23.6, M _B = 5.5(CGS), M _S =5.1(CGS).
2	eP ePP ISKS	10	06	53.5 54.3 26.7	3.0 3.2 4.4	0.7	97.2 10802	Compr. Mindanao, Philippine Islands. USGS: 6.77N, 123.74 E, H=09:53:23.2, h=52km, M _B =6.1(CGS), M _S =6.1(CGS).
2	e	10	31	43.4				Trace.
4	eIP IS	19	23	47.4 44.3	3.0		55.7 7.7 856	Compr. Romania, Vrancea region. CSEM: 45.80N, 26.80 E, H=19:21:56.4, h=96±3km, M _B =7.2(CGS).
5	e	00	05	(00)				Interrupt. Trace. Romania, Vrancea region.
8	ePn IS	19	19	32.0 50.2			4.5 500	Yugoslavia, Serbia. CSEM: 43.24N, 21.02E, H=19:18: 12.7, h=10km, M _B =4.8(CGS).
8	eP e eS e	23	29	57.1 09.2 27.7 38.6			84 9335	Northern Sumatra. USGS: 0.45N, 100.02E, H=23:17: 28.0, h=22km, M _B =5.5(CGS), M _S =6.0(CGS).
9	eSg	00	11	49.7			2.1 232	Trace. Italy.
9	eP IS	14	38	43.3 37.8			75.4 8379	North Korea. USGS: 41.61N, 130.88E, H=14:27:53.6, h= 528km, M _B =5.9(CGS), h=580 km (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e	D ^o	Remarks
						NE NW Z	D km	
11	e	11	44	48.6				Trace.
12	eP e	03	07	(00) 13	(00)		52.1 5790	Interrupt. North Atlantic ridge. USGS: 23.74N, 45.17 W, H=02:57:50.6, M _B =5.4 (CGS), M _S =5.6(CGS).
12	eP I IS	08	08	40.9 44.7 48.9	0.4 0.7	6.6	0.4 50	Trace. Croatia, Draganici. M=2.2(ZAG).
12	e e	10	52	37.1 48.7				Trace. Yugoslavia. CSEM: 42.57N, 19.42E, H=10:50: 57.6, h=10km.
14	e(Sg) e	08	50	43.6 (00)			(7.1) 785	Trace. Greece-Albania border region. CSEM: 39.59N, 20.55E, H=08:46:57.2, h= 44±7km.
14	e	10	06	43.0				Trace. Greece-Albania border region. CSEM: 39.85N, 19.98 E, H=10:02:45.9, h=54km.
15	e(Sb) e(Sg)	02	02	18.7 28.4	1.1	0.9	4.4 483	Trace. Yugoslavia. CSEM: 42.24N, 19.49E, H=02:00: 07.2, h=10km, M=3.5(ZAG).
15	eSg	15	48	35.6			2.0 223	Trace. Italy. CSEM: 46.26N, 13.19E, H=15:47:30.7, h= 10km.
17	eP IS	17	55	21.8 43.8 50.1	0.7	1.1	1.6 173	Trace. Hungary. CSEM: 47.32 N, 18.19E, H=17:54:53.1, h= 10km, M=2.7(ZAG).
17	eP eS	18	02	(00) 20.7			1.5 168	Trace. Hungary. CSEM: 48.42 N, 20.22E, H=18:01:14.0, h=10km.
18	eP eSKS eS	21 22	56 07 30	45.4 21.5 30.5	4.3		89.2 9913	Compr. Luzon, Philippine Islands, USGS: 16.77N, 122.33E, H=21:43:52.4, h= 37km, M _B =6.2(CGS), M _S =7.0 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o D km	Remarks
						NE	NW	Z		
19	eP e	11	08	33.7 40.9	1.9	1.3	0.8	80.6 8949	Kuril Islands. USGS: 44.20N, 148.20E, H=10:56:25.1, h= 70km, M _B =6.0(CGS).	
19	eP esSKS	19	48 58	(00) 36.8	2.2		0.8	88.8 9868	Interrupt. Luzon, Philippine Islands. USGS: 16.81N, 122.35E, H=19:35:08.0, h= 39km, M _B =5.6(CGS), M _S =5.8 (CGS).	
19	ePKP	23	20	48.4	1.0			1.8 147.2 16358	Trace. Tuamotu Archipelago region.	
20	ePb eSg e	07	42 43	32.7 20.8 32.8				3.2 358	Yugoslavia, Mratinje. USGS: 43.36N, 18.65E, H=07:41: 38.1, h=33km, M _B =4.7(CGS).	
21	e l l	17	48	19.4 20.7 22.7	0.3				Trace. Slovenia, Črnomelj. I _o =IV-V MCS (LJU).	
21	e(Sg)	19	37	29.1				(3.1) (339)	Trace. Central Italy.	
21	eP IS eL M	21	26 31 39 55	(00) 45.8 32 9.5	4.0 5.2	46.2		36.3 4034	Interrupt. (Compr.) Southern Iran. CSEM: 27.66N, 56.36E, H=21:18:59.8, h=57km, M _B = 6.2(CGS), M _S =6.9(CGS).	
21	eP IS	22	49 54	12.6 54.8				36.4 4045	Compr. Southern Iran. CSEM: 27.74N, 56.41E, H=22:42: 13.5, h=71km, M _B =5.8(CGS).	
22	eL	09	36		17				Trace. Southern Iran.	
22	eP eS eL	12	04 10 17	37.8 19.4		36		36.3 4034	Dilat. Southern Iran. CSEM: 27.62N, 56.50E, H=11:57: 35.2, h=58km, M _B =5.7(CGS), M _S =5.9(CGS).	
23	ePKP ePP	07	38 42	50.4 13.2				146.2 16247	Dilat. Fiji Islands region. USGS: 14.47S, 177.95W, H=07: 19:11.1, h=33km, M _B =5.5(CGS) M _S =6.3(CGS).	
23	e	12	02	(00)					Interrupt. Trace. Turkey.	

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o D km	Remarks
						NE	NW	Z		
23	ePKP e	17	30 31	05.3 09.7				146.4 16270	Fiji Islands region. USGS: 14.43S, 177.9W, H=17:10:19.5 h=2km, M _B =5.6(CGS), M _S = 6.0(CGS).	
23	eP eS	23 24	58 04	22.4 (00)				36.8 4090	Compr. Southern Iran. CSEM: 27.73N, 56.56E, H=23:51: 21.7, h=65km, M _B =5.8(CGS), M _S =5.4(CGS).	
24	e eSq	07	34 35	(00) 30.6				(5.7) (628)	Interrupt. SW.Poland. CSEM: 51.49N, 16.05E, H=07:32: 26.7, h=1km, M _B =5.0(CGS), M _S =3.5(CGS).	
25	eP eS	02	44 48	20.5 (00)				19.0 2115	Eastern Turkey. CSEM: 38.45 N, 40.01E, H=02:40:02.6, h=45km, M _B =5.1(CGS), M _S = 4.9(CGS).	
26	eP eS	04	48 58	33.7 43.1	2.4			82.5 9168	Compr. Fox Islands. Aleuti- an Islands. USGS: 52.30N, 168.26W, H=04:36:14.7, h= 38km, M _B =5.7(CGS), M _S =6.0 (CGS).	
26	e e(Sq)	05	51 54	33.3 (00)				(9.7) (1082)	Trace. Greece.	
26	ePKP ₂ e	08	39	(00) 08.0	1.8		0.4	150 16670	Interrupt. Trace. Tonga Islands. USGS: 18.59S, 174.15W, H=08:19:18.5, h= 93km, M _B =5.6(CGS).	
26	eP e	22	36 39	16.2 (00)				53.3 5925	Trace. North of Ascension Islands. USGS: 00.98S, 13.48W, H=22:26:54.7, h= 33km, M _B =5.3(CGS).	
28	ePKP	01	35	(00)	2.3			140.5 15614	Interrupt. Trace. New Hebrl- des Islands. USGS: 14.68S, 167.10E, H=01:15:41.8, h= 109km, M _B =5.7(CGS).	
28	ePq ISg	08	18 19	21.4 26.7				5.0 557	Trace. Albania. CSEM: 41.79 N, 20.24E, H=08:16:45.5, h=10km.	

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o Z	D km	Remarks
						NE	NW	Z			
29	eSg	01	20	(00)							Interrupt. Trace. South Italy.
A P R I L 1977											
1	IP IpP	13	43	33.0 40.2							36.6 Dilat. Southern Iran. CSEM: 406R 27.64N, 56.39E, H=13:36:30.1 h=58km, M _B =6.2(CGS), M _S =6.0 (CGS).
2	ePKP ePP	07	35 39	08.5 (00)							149.9 Compr. Samoa Islands region. 16658 USGS: 16.70S, 172.10W, H= 07:15:22.7, h=33km, M _B =6.8 (CGS), M _S =7.6(CGS).
3	ePn IS	03	18 19	51.5 23.4							2.1 (compr.) Italy. CSEM: 46.25 228 N, 13.19E, H=03:18:15.9, h= 10km, M=4.1(ZAG).
4	eP e	18	02 10	12.4 2.9 20.6							58.4 Compr. Central Mid-Atlantic 6490 Ocean. USGS: 07.30N, 34.86 W, H=17:52:19.7, h=33km, M _B =5.5(CGS), M _S =6.0(CGS).
6	eP eS	13	42 47	48.0 47.2							30.3 Dilat. Iran. CSEM: 32.02N, 3365 50.66E, H=13:36:40.9, h= 53km, M _B =5.5(CGS), M _S =5.9 (CGS).
9	(PKP)	21	35	53.8							152.0 Compr. Trace. New Hebrides 16895 Islands.
13	eP	11	41	22.4							41.7 Trace. Hindu-Kush region. 4635
13	ePn I ISg	14	03 04	46.5 40.7 41.6	2.2	2.5	1.1				3.4 Compr. Yugoslavia, Gacko. 381 CSEM: 43.09N, 18.83E, H=14: 02:52.7, h=10km, M _V =3.8(LJU).
14	ePKP e	04	24	14.5 22.8							149.3 Dilat. FIJI Islands region. 16592 USGS: 17.67S, 178.65W, H= 04:05:31.2, h=535km, M _B =5.2 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o Z	D km	Remarks
						NE	NW	Z			
18	eP epP	00	20 22	32.6 2.9 25.3 2.1							41.6 Hindu-Kush region. USGS: 4623 36.45N, 70.78E, H=00:13:04.6, h=217km, M _B =5.4(CGS).
19	ePn eSn eSg	02	24 25	30.7 06.2 22.0							3.1 Yugoslavia, Bosnia and Her- 340 zegovina, CSEM: 43.08N, 17.79E, H=02:23:41.8, h= 10km.
20	IP IRIP IRsP IS IRIS ISsS eL	00	32 33	17.8 21.4 27.1 37.8 44.0 53.1				225.0	81.0		1.4 Compr. Yugoslavia, Banja 158 Luka region. CSEM: 44.88N, 17.34E, H=00:31:53.5, h= 10km, M _B =4.6(CGS), I=VI ^o MCS (BLY), M=4.4(ZAG).
20	eP IS	00	47	09.0 27.4	0.5	1.3	0.8				1.3 Trace. Yugoslavia, Banja Lu- 142 ka region. CSEM: 44.81N, 17.18E, H=00:46:45.2, h= 10km, M=2.7(BLY).
20	eP e	20	16	(00) 13.9							87.3 Trace. South of Honshu, Ja- 9700 pan. USGS: 30.60N, 137.48E, H=20:04:29.4, h=493km, M _B = 5.5(CGS).
20	ePKP ePP ePKS	23	32 34 35	21.5 3.3 1.0 39.3 50.9 2.8							129.3 Solomon Islands. USGS: 14369 09.83S, 160.32E, H=23:13: 10.4, h=33km, M _B =6.4(CGS), M _S =6.7(CGS).
21	ePKP M	01 01	02 00	07.9			23				133.0 Solomon Islands. USGS: 14780 09.89S, 160.35E, H=23:42: 50.5, h=19km, M _B =6.3(CGS), M _S =7.5(CGS).
21	ePKP ₂ e	00	08 12	35.1 (00)							131.7 Solomon Islands. USGS: 14636 09.84S, 160.82E, H=23:49: 13.1, h=33km, M _B =6.8(CGS) M _S =7.5(CGS).
21	eP ePP	01 02	59 02	(00) 48.6							926 Interrupt. Bonin Islands 10289 region. USGS: 26.86N, 142.44E, H=01:45:50.2, h= 33km, M _B =5.8(CGS), M _S =6.2 (CGS).

Date	Phase	M		T	Per. sec.	A m p l i t u d e			D ^o Z	D km	Remarks
		h	m			NE	NW	Z			
21	ePKP ePP M	04	43	23.6							130.9 Compr. Solomon Islands. 14547 USGS: 09.97S, 160.73E, H=04:24:09.6, h=33km, M _B =6.6 (CGS), M _S =7.5 (CGS).
23	e	00	00	08.3							Trace. Greece- Ionian Sea. CSEM: 38.94N, 21.02E, H=23:57:08.6, h=65km, M _B =4.3 (CGS).
23	e(P) eSg	12	54	(00) 20.5							1.4 Interrupt. Trace. Yugoslavia, Banja Luka region. M=2.5 (BLJU).
24	eL	21	22								Trace. Honshu, Japan. M _B =5.0 (CGS).
26	e	16	31	21.7							28.5 Trace. Iran. CSEM: 32.62N, 48.93E, H=16:25:31.0, h=50 km, M _B =5.4 (CGS).
28	eP̄ IRIP̄ eRsP̄ IS̄ IRIS̄ eRsS̄	03	42	24.4 27.9 33.8 42.7 49.4 (00)	1.0						1.3 Yugoslavia, Banja Luka region. CSEM: 44.85N, 17.34E, H=03:41:58.6, h=10km, M _B =4.0 (CGS). I _o =V ^o MCS (BLU).
28	e ISb ISn	07	22	06.7 20.6 21.4	1.1 1.5						1.2 Yugoslavia. Banja Luka region. USGS: 44.87N, 16.96E, H=06:21:37.0, h=10km, M=2.5 (ZAG).
29	eP̄ eS̄	12	07	15.4 18.2	0.9		0.4		0.2 22		Trace. Local.
30	IP̄ IS̄	17	56	04.5 07.0	0.2			4.2	0.2 18		Compr. Local.

Date	Phase	M		T	Per. sec.	A m p l i t u d e			D ^o Z	D km	Remarks
		h	m			NE	NW	Z			
M A Y 1977											
7	eP	02	19	17.8							26.7 Trace. Jan Mayen Island 2967 region.
7	eP̄ eS̄	11	34	06.2 10.8	1.0		0.4	0.8	0.3 37		Trace. Local.
8	ePn ePg I	10	03	40.1 45.7 31.6							3.4 Yugoslavia, Mratinje 380 CSEM: 43.23N, 19.03E, H=10:02:43.5, h=10km.
11	e(Sg)	08	38	53.6							Trace. Albania.
11	e	11	30	(00)							Interrupt. Trace.
12	eP ePP	11	29	(00) 42.0							69.6 Interrupt. Northeastern 7735 China. USGS: 39.27N, 117.71E, H=11:17:53.1, h=22km, M _B =5.8 (CGS), M _S =5.4 (CGS).
12	eP IS	12	30	44.8 29.9							66.8 Burma. USGS: 21.75N, 92.99E, H=12:20:00.7, h=40km, M _B =5.4 (CGS).
12	eP e(SKS)	14	14	(00) 25.7	3.5						89.5 Interrupt. Luzon, Philippine 9946 Islands. USGS: 16.00N, 121.15E, H=14:00:57.0, h=16km, M _B =5.0 (CGS), M _S =4.9 (CGS).
12	eP epP	21	49	17.4 48.7	1.9						78.2 Trace. Kuril Islands. USGS: 8690 50.16N, 154.99E, H=21:37:33.4, h=126km, M _B =5.3 (CGS).
13	eIP	11	25	44.7							90.3 Dilat. Bonin Islands region. 10035
13	e(Sg)	16	19	27.0							Trace. Aegean Sea.
13	ePn I	18	19	53.2 38.9							8.8 Greece. CSEM: 39.12N, 23.62E, H=18:17:48.0, h=14km, M _L =5.0 (ATH).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o D km	Remarks
						NE	NW	Z		
14	ePn l l lSb lSg e	03	40	05.4 08.6 39.9 43.4 48.1 (00)				2.6 293	Yugoslavia, Adriatic Sea. CSEM: 43.13N, 16.03E, H= 03:39:23.9, h=35km. USGS: 43.145N, 16.025E, H=03:39 22.1, h=47km, M _B =4.7(CGS).	
15	ePg eSg	15	43 44	45.8 07.1				1.6 175	Trace. Yugoslavia, Croatia, ZAG: 44°56'N, 14°02'E, H= 15:43:09.8.	
15	ePKP e	23	31	38.3 45.3				151.0 16780	Trace. Fiji Islands region. USGS: 19.13S, 177.67W, H= 23:12:53.6, h=499km, M _B = 5.5(CGS).	
17	e	12	20	20.1					Trace.	
18	ePKP e	07	02	31.6 36.9	1.8			0.6 145.0 16114	New Hebrides Islands. USGS: 18.99S, 169.19E, H=06:43: 21.1, h=217km, M _B =5.2(CGS).	
19	eP	23	05	33.2				36.3 4033	Iran. CSEM: 27.12N, 55.32E, H=22:58:50.8, h=30km, M _B = 5.2(CGS).	
20	eP eS	23	04 15	13.8 (00)	2.3			89.3 9924	Trace. Southern Sumatra. USGS: 4.44S, 101.98E, H= 22:51:13.9, h=37km, M _B = 5.7(CGS), M _S =5.3(CGS).	
21	eP esSKS	05	47 58	57.0 30.6				88.7 9858	Luzon, Philippine Islands. USGS: 15.70N, 120.82E, H= 05:35:22.5, h=189km, M _B = 5.7(CGS).	
23	eP	22	08	23.6				84.3 9365	Compr. Trace. Northern Su- matra. USGS: 00.67N, 98.68 E, H=21:55:54.1, h=40km, M _B =5.5(CGS), M _S =4.7(CGS)	
24	ePP	10	41	11.5				104.8 11646	Trace. Mariana Islands.	
25	l(P) l(S)	14	41	16.5 18.9	0.1			(0.2) (17)	Local?	

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o D km	Remarks
						NE	NW	Z		
25	lP eSKS	.15	07 17	50.1 39.9				79.8 8870	Dilat. Northern Sumatra. USGS: 04.24N, 95.77E, H= 14:55:45.0, h=56km, M _B = 5.9(CGS).	
26	eP eS M	01	40 44 51	05.4 (00)	2.4 8.5			22.0 2440	Compr. Turkey. CSEM: 38.92 N, 44.41E, H=01:35:18.2, h=64km, M _B =5.2(CGS).	
29	eP e	03	04	45.7 54.8				41.1 4570	Trace. Semipalatinsk area. Nuclear explosion. USGS: 49.94N, 78.85E, H=02:56: 57.8, h=0km, M _B =5.6(CGS), M _S =5.0(CGS).	
30	eP eS	15	28 38	20.7 30.6				82.3 9146	Dilat. Trace. Fox Islands, Aleutian Islands. USGS: 52.43N, 169.71W, H=15:16: 01.6, h=33km, M _B =5.6(CGS), M _S =6.0(CGS).	
31	l(P) e l(S)	11	46	05.4 08.1 11.6						

J U N E 1977

1	eSg	02	19	(00)				4.4 488	Interrupt. Trace. Yugosla- via, Serbia, CSEM: 43.20N, 20.95E, H=02:16:38.3, h= 10km.
1	ePn lPP e	12 13	58 02	15.8 (00)	3.8 4.7			14.9 1660	Dilat. Southern Turkey- Cyprus region. CSEM: 36.06 N, 31.72E, H=12:54:42.9, h=10km, M _B =5.7(CGS).
2	eSg	13	36	45.0				8.3 920	Germany. CSEM: 53.02N, 09.57E, H=13:32:18.4, h= 10km, M=3.9.

Date	Phase	M G T			Per. A m p l i t u d e			D ^o D km	Remarks
		h	m	s	sec.	NE	NW		
2	eP M	15	01	10.5				26.4 2940	Dilat. Trace. SW Iceland. CSEM: 63.56N, 19.29W, H= 14:55:33.9, h=10km, M _B = 4.9(CGS).
3	eP ePP	01	13	09.0				40.8 4534	Trace. Tadzhik SSR. USGS; 39.87N, 71.79E, H=01:05: 23.7, h=24km, M _B =5.1(CGS), M _S =5.0(CGS).
3	eP eS	02	38	33.2				41.5 4610	Compr. Hindu Kush region. USGS: 36.44N, 70.76E, H= 02:31:04.7, h=210km, M _B = 5.5(CGS).
5	eP eS M	04	50	57.0				27.9 3100	(compr). Western Iran. CSEM: 32.67N, 48.04E, H=04:45: 13.1, h=72km, M _B =5.5(CGS).
5	ePn	14	01	19.7				8.0 885	Trace. Sicily. CSEM: 37.86 N, 14.40E, H=13:59:25.1, h=12km, M _B =4.9(CGS).
5	e(Sn) eSb	23	22	38.9				(6.5) (723)	Trace. Ionian Sea. CSEM: 39.73N, 19.21E, H=23:19: 51.8, h=10km, M _L =4.3(ATH).
6	ePb	04	35	41.8				9.7 1075	Trace. Greece. CSEM: 37.74N, 22.21E, H=04:33:07.4, h= 10km, M _B =4.2(CGS).
6	ePg ISg	18	00	03.5				4.7 527	Southern Italy. CSEM: 41.09 N, 15.37E, H=17:58:35.1, h=10km.
12	e	07	04	44.0					Trace, Slovenia, Črnomelj. I ₀ =IV ^o MCS (LJU).
13	ePKP	10	28	33.9	3.3			152.2 16911	Tonga Islands. USGS: 18.53S, 174.06W, H=10:08:48.0, h= 41km, M _B =5.5(CGS), M _S =5.3 (CGS).
14	eP e	21	50	19.0	2.0			65.3 7257	Dilat. South Atlantic ridge. USGS: 14.12S, 14.43W, H= 21:39:35.2, h=33km, M _S =6.0 (CGS), M _S =5.4(CGS).

Date	Phase	M G T			Per. A m p l i t u d e			D ^o D KM	Remarks
		h	m	s	sec.	NE	NW		
17	e(PKP) ePKP	02	47	42.0				153.2 17025	Dilat. Fiji Islands region. USGS: 19.88S, 179.10W, H= 02:29:09.8, h=690km, M _B = 5.7 (CGS).
18	eSg	11	55	20.0				2.0 219	Trace. Austria. USGS:46.17 N, 13.06E, H=11:54:15.8, h=33km, M _B =4.7(CGS).
18	eP eP	20	49	28.2				65.3 7260	Trace. South Atlantic ridge USGS: 13.72S, 14.61W, H= 20:38:46.6, h=33km, M _B = 5.5(CGS).
18	ePKP ePKS	22	30	05.9				132.3 14703	Solomon Islands region. USGS: 09.77S, 159.67E, H= 22:10:49.6, h=11km, M _B = 5.6(CGS), M _S =5.7(CGS).
19	eP e	07	45	25.0				99.7 11080	Trace. Celebes Sea. USGS: 04.65N, 124.93E, H=07:32: 13.8, h=271km, M _B =5.7CGS).
19	eP e(S)	11	59	08.2				79.5 8820	Dilat. Kuril Islands. USGS: 47.15N, 151.09E, H=11:47: 23.4, h=148km, M _B =5.6(CGS).
20	ePKP ₂ e	20	27	35.0				149.1 16569	Trace. Loyalty Islands re- gion. USGS: 22.70S, 170.63 E, H=20:08:02.1, h=45km, M _B =5.2(CGS). M _S =5.0(CGS).
21	e eS	17	52	43.8					Trace.
22	IPKP e eL M	12	28	19.8	3.0			155.1 17236	Dilat. Tonga Islands region USGS: 22.88S, 175.90W, H= 12:08:33.4, h=65km, M _B =6.8 (CGS).
27	ePn IS	12	34	39.8	0.7			3.4 375	Dilat. Northern Italy. USGS: 44.29N, 11.56E, H= 12:33:36.9, h=33km.
28	IP I(S)	07	14	34.5				7.3 810	Dilat. Sicily. USGS: 38.63 N, 14.71E, H=07:12:49.3, h=261km, M _B =5.3(CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE	Amplitude NW	Amplitude Z	D ^o D km	Remarks
28	eP eS	15	48 55	(00) 48.3	3.1				54.0 6001	Interrupt. North Atlantic ridge. USGS: 22.56N, 45.12W, H=15:38:37.0, h=33km, M _B =5.3(CGS), M _S =5.6(CGS).
28	eP eS	16	27 35	39.3 13.0					54.2 6021	North Atlantic ridge. USGS: 22.65N, 45.14W, H=16:18:15.2, h=33km, M _B =5.5(CGS).
28	eP eS	19	28 35	(00) 39.6	2.5				54.2 6023	Interrupt. North Atlantic ridge. USGS: 22.62N, 45.11W, H=19:18:35.8, h=33km, M _B =5.8(CGS), M _S =6.0(CGS).
29	ePP epPP	07	43	20.9 32.5	3.2				109.5 12169	Trace. Banda Sea. USGS: 07.60S, 127.65E, H=07:24:24.8 h=58km, M _B =6.0(CGS).
30	e	16	06	57.1						Trace.

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1	eSb	12	43	51.0					6.3 700	Trace. Greece. CSEM: 40.7N, 20.84E, H=12:40:37.9, h=10km, M _B =4.3(CGS).
3	ePn eSg	11	45 46	31.3 (00)					2.0 218	Italy. Friuli. CSEM: 46.22N, 13.09E, H=11:44:56.5, h=10km, M _{AW} =3.7(TRI).
3	eP eSKS	14 15	53 03	10.9 47.0					103.2 11470	Maluca Passage. USGS: 01.44N, 126.44E, H=14:39:14.1, h=51km, M _B =5.9(CGS), M _S =6.3(CGS).
6	ePKP e	11	47	11.7 36.4					152.0 16892	FIJI Islands region. USGS: 21.07S, 178.57W, H=11:28:31.5, h=594km, M _B =5.8(CGS), M _B =6.0(PAS).
10	ePKP	02	56	53.2					144.6 16069	Dilat. Trace. New Hebrides Islands. USGS: 19.13S, 168.41E, H=02:37:14.6, h=12km, M _B =M _S =5.5(CGS).

Date	Phase	M h	G m	T s	Per. Sec.	Amplitude NE	Amplitude NW	Amplitude Z	D ^o D km	Remarks
14	eP ePP	05	56 57	(00) 15.4	2.5				34.5 3834	Interrupt. Uzbek SSR. USGS: 40.32N, 63.68E, H=05:49:08.7, h=33km, M _B =5.5(CGS), M _S =5.4(CGS).
16	eP̄ e RIP̄ IS IM	13	13 14	53.6 58.1 11.7 13.5					1.2 138	Yugoslavia, Slovenia. CSEM: 46.28N, 14.34E, H=13:13:32.1, h=10km, M _B =4.6(CGS), I _o =VI ^o MCS(LJU).
16	IP̄ IS	13	14	15.0 33.5					1.3 142	
17	eSg I	09	44	26.1 33.2					(1.2) (128)	Trace. Yugoslavia, Slovenia. USGS: 46.13N, 14.36E, H=09:43:47.9, h=33km, I _o =IV-V ^o MCS(LJU).
18	eRsP̄ eRsP̄S ₂	10	10 11	52.5 53.4	1.1				5.0 558	(dilat.) Albania. CSEM: 41.73N, 20.17E, H=10:09:16.7, h=10km, M _B =4.8(CGS).
19	ePg	13	55	18.2						Trace.
21	ePKP M	12 13	13 52	15.7 17	3.2				154.2 17136	Dilat. Macquarie Islands region. USGS: 53.86S, 158.60E, H=11:53:22.5, h=33km, M _B =6.4(CGS), M _S =6.7(CGS).
21	eP e SKKS M	13 14	58 09 59	47.6 27.3	2.7 14				89 9890	Luzon, Philippine Islands. USGS: 16.88N, 122.36E, H=13:45:54.0, h=33km, M _B =6.1(CGS), M _S =6.9(CGS).
22	ePKP	17	36	40.1					165 18336	Trace. South of Kermadec Islands.
22	e(Sn)	22	36	54.6						Trace. Bosnia and Herzegovina.
24	ePKP ₂ ePP	06	42 46	36.2 (00)					147.6 16403	Tonga Islands. USGS: 15.34S, 173.15W, H=06:22:51.3, h=33km, M _B =6.0(CGS).
24	ePb	09	56	56.8					4.9 545	Southern Italy. CSEM: 41.02N, 14.87E, H=09:55:32.2, h=35km.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D ^o D km	Remarks
28	eP e	01	56 59	57.7 39.3	2.0		53.9 5985	Trace. North Ascension Is- land. USGS: 01.15S, 14.04 W, H=01:47:32.7, h=33km, M _B =M _S =5.3 (CGS).
29	eP	09	22	(00)			43.8 4867	Interrupt. China. USGS: 38.19N, 75.17E, H=09:14: 08.3, h=102km, M _B =5.2 (CGS).
29	ePKP ePP	11	35 37	(00) 14.9			128.2 14247	Interrupt. Solomon Islands. USGS: 08.03S, 155.54E, H= 11:15:45.3, h=33km, M _B =6.4 (CGS), M _S =7.2 (CGS).
29	e	18	22	49.1				
29	I \bar{P} I I \bar{S}	21	55	14.5 15.6 34.6			1.4 154	Yugoslavia, Banja Luka re- gion. CSEM: 44.98N, 17.51E, H=21:54:50.2.
30	eSb e	19	56 56	24.2 44.4			9.9 1103	Trace. Southern Greece. CSEM: 38.85N, 21.69E, H= 19:51:40.2, h=55km, M _B = 4.8 (CGS).

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1	ePKP	13	52	17.6			146.7 16300	Trace. New Hebrides Islands. USGS: 20.49S, 169.62E, H= 13:32:48.8, h=108km, M _B = 5.5 (CGS).
3	ePn eRIP \bar{S} IS I	11	20 21	53.8 18.4 33.2 34.0	1.3		2.7 305	Yugoslavia, Bosnia and Her- zegovina. CSEM: 43.14N, 17.62E, H=11:20:10.3, h= 10km, M=3.4 (ZAG).
5	IPg	13	26	55.3				Trace. Probably local.
8	eSn el	03	12	(00) 10.6			1.8 200	Interrupt. Trace. Austria. CSEM: 47.58N, 15.88E, H= 03:11:03.8, h=10km.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D ^o D km	Remarks
11	ePKP	02	02	29.0	2.4		155.2 17247	Tonga Islands. USGS: 17.56 S, 174.37W, H=01:42:47.5, h=57km, M _B =6.3 (CGS).
14	e	13	34	49.3				Trace.
14	eP	21	52	08.9			96.5 10724	Trace. Java. USGS: 07.76S, 107.57E, H=21:38:51.5, h= 33km, M _B =M _S =5.7 (CGS).
15	IPn I I	21	12 13	15.4 17.9 45.6	1.8		7.0 780	Compr. Southern Italy. CSEM: 38.74N, 17.01E, H=21:10:34.8, h=61km.
17	I I	15	12 13	55.8 05.5				Trace.
18	IPn I(S)	09	30 32	28.6 49.2			11.9 1322	Crete. CSEM: 35.17N, 23.40 E, H=09:27:42.2, h=46km, M _B =5.2 (CGS).
18	ePg eSg	10	12	20.9 24.5			0.3 30	Trace. Local.
18	e(Pg) ISg	10	12	45.1 50.5			(0.4) (45)	Trace. Local.
18	IPg IM	11	00	00.2 09.6				Trace. Local.
18	IP el	12	11 12	52.0 11.4			80.4 8938	Kuril Islands. USGS: 46.63 N, 513.71E, H=11:59:41.2, h=33km, M _B =5.7 (CGS).
19	I \bar{P} eRIP \bar{S} eS eRs \bar{S}	04	18 19	38.5 39.1 29.9 36.0			4.2 470	Central Italy. CSEM: 42.71 N, 12.37E, H=04:17:13.3, h=10km.
19	IP IS	06	23 34	11.1 28.0		18.3 538	103 11446	South of Sumbawa Islands. USGS: 11.09S, 118.46E, H= 06:08:55.2, h=33km, M _B =7.0 (CGS), M _S =7.9 (CGS).
20	ePcP I IM	04	04 05	45.6 13.1 25.4	2.8 1.8		86.8 9646	Caribbean Sea. USGS: 16.70N, 86.61W, H=03:51:54.7, h=36 km, M _B =5.6 (CGS), M _S =5.9 (CGS).

Date	Phase	Time			Per. sec.	Amplitude			D ^o Z D km	Remarks
		h	m	s		NE	NW	Z		
20	e eIPP ePPP	19	35	07.3 18.1 30.0				107.0 11890	South of Sumba Island. USGS: 11.04S, 119.14E, H= 19:16:32.7, h=33km, M _B =6.0 (CGS), M _S =6.1(CGS).	
24	e	02	01	14.7					Trace.	
25	ePKP	07	55	16.4				147.0 16336	Trace. Fiji Islands region. USGS: 14.95S, 177.34W, H= 07:35:33.7, h=33km, M _B = 5.1(CGS), M _S =5.2(CGS).	
25	eM	18	06	20.2					Trace. Central Italy. CSEM: 42.60N, 12.61E, H=18:03: 46.8, h=10km.	
25	ePP e	18	23 24	34.8 16.2				104.1 11570	Trace. South of Sumba Island. USGS: 10.74S, 119.27E, H= 18:05:10.8, h=33km, M _B =6.1 (CGS), M _S =6.0(CGS).	
25	ePn eIPg I ISn	19	34 35	37.1 49.0 19.9 29.1				4.2 460	Central Italy. CSEM: 42.63 N, 12.64E, H=19:33:30.2, h=10km, M=3.8(ZAG).	
25	ePn eP IRIP ⁻ I IS	20	44 45	28.9 41.8 14.3 30.7 37.3				4.0 442	Central Italy. CSEM: 42.64 N, 12.58E, H=20:43:09.7, h= 10km, M=3.5(ZAG).	
26	ePP eIPS ePPS eSS	20	08 18 19 24	23.1 28.1 27.8 22.5				108.6 12156	Southwestern Atlantic Ocean. USGS: 59.43S, 20.51W, H= 19:50:01.4, h=33km, M _B = 6.3(CGS), M _S =7.1(CGS).	
27	e IPP I	07	30 31 33	15.6 30.3 39.0				109.5 12169	Timor Sea. USGS: 08.06S, 125.30E, H=07:12:22.5, h= 25km, M _B =6.4(CGS), M _S =6.8 (CGS).	
28	ePP I IM	09	47 50	42.3 46.4				9.4 1045	Near Sardinia. CSEM: 38.18 N, 08.09E, H=09:45:16.1, h=10km, M _B =5.1(CGS).	

7.1

Date	Phase	Time			Per. sec.	Amplitude			D ^o Z D km	Remarks
		h	m	s		NE	NW	Z		
29	eP I eSKS IS	14	36 37 46 47	27.5 19.7 52.8 07.6				86.7 9635	Northern Philippine Island region. USGS: 17.44N, 119.87 E, H=14:23:40.5, h=12km, M _B =6.0(CGS), M _S =6.2(CGS).	
29	IP e	21	12	18.8 21.7				82.2 9138	Dilat. Trace. Andreanof Islan- ds. USGS: 51.56N, 173.97W, H=20:59:59.2, h=25km, M _B = 5.4(CGS), M _S =5.1(CGS).	
30	eP ePg e	14	47 48 52	26.1 (00) (00)			4.2	10.3 11.40	SW Peloponessus. CSEM: 36.55N, 21.63E, H=14:45:06.0, h=39km.	
31	eP eS eL	00 01	54 05 32	46.8 16.7			19	86.0 9557	Dilat. Northern Colombia. USGS: 07.33N, 76.30W, H=00: 42:05.4, h=33km, M _B =5.7(CGS), M _S =6.4(CGS).	
31	ePn e e	08	24 27	36.7 36.0 38.9			3.4	8.9 988	Southern Greece. CSEM: 37.65 N, 21.16E, H=08:22:08.4, h= 10km, M _B =4.7(CGS).	

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2	ePKP epPP	10	54 55	49.6 27.3				109.5 12169	Trace. South of Sumba Island. USGS: 11.04S, 119.15E, H= 10:36:28.3, h=33km, M _B =6.0 (CGS), M _S =5.9(CGS).
2	eSb	22	49	52.0				5.2 575	Trace. Germany. CSEM: 47.97 N, 09.22E, H=22:47:13.7, h=10km, M=4.
4	ePKP ePP	09	08 10	06.3 57.8			4.5	140.5 15614	New Hebrides Islands. USGS: 13.68S, 166.71E, H=08:48: 39.2, h=33km, M _B =6.0(CGS).
4	eP eS	15 16	53 03	18.8 23.9			1.5	82.6 9197	Rat Islands, Aleutian Islands USGS: 51.21N, 178.39E, H= 15:40:57.3, h=34km, M _B =5.6 (CGS), M _S =6.4(CGS).

Date	Phase	H h	G m	T s	Per. sec.	A m p l i t u d e			D ^o D km	Remarks
						NE	NW	Z		
4	e(P) eS	17	00 11	52.5 24.6					82 9113	Trace. Rat Islands, Aleuti- an Islands. USGS: 51.08N, 178.29E, H=16:48:44.7, h= 37km, M _B =5.1(CGS).
4	eP eS	17	22 33	50.9 (00)					82.4 9156	Compr. Rat Islands, Aleutian Islands. USGS: 51.10N, 178.27E, H=17:10:30.6, h= 31km, M _B =5.5(CGS), M _S =6.4 (CGS).
4	eP e eS H	17	37 47 18	06.5 07.2 21.4 15.6	2.7 3.6				82.1 9124	Compr. Dilat. Rat Islands, Aleuti- an Islands. USGS: 51.14N, 177.95E, H=17:24:42.8, h= 8km, M _B =5.8(CGS), M _S =6.6 (CGS).
4	eP	18	38	08.9					82.7 9191	Dilat. Trace. Rat Islands, Aleutian Islands. USGS: 51.20N, 177.79E, H=18:25: 49.8, h=41km, M _B =5.3(CGS).
4	eP eS	23	33 43	(00) 11.5					81.7 9079	Interrupt. Rat Islands, Ale- utian Islands. USGS: 51.18 N, 178.25E, H=23:20:44.9, h=41km, M _B =5.5(CGS), M _S = 5.3(CGS).
5	eP	03	10	46.9	1.8				41.1 4560	Dilat. Trace. Kazakh SSR. Nuclear explosion. USGS: 50.09N, 78.96E, H=03:02: 57.8, h=0km, M _B =5.9(CGS).
7	ePn eSn	03	28	24.8 57.3		0.7			2.8 310	Trace. Yugoslavia, Croatia. M=3.0(ZAG).
8	e I	10	06	10.6 27.3						Trace.
10	I(P) IP IS	00	54	42.6 43.1 44.3		0.5			0.1 10	Dilat. Croatia.
10	e ePP	06	34	27.8 49.9					12.2 1356	Crete. CSEM: 34.81N, 23.03 E, H=06:31:42.8, h=25km, M _B =4.6(CGS).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o D km	Remarks
						NE	NW	Z		
10	e	10	41							Trace. Near coast of Guate- mala.
11	ePKP	14	27	51.1					148.2 16470	Trace. Tonga Islands. USGS: 15.39S, 173.21W, H=14:08: 04.6, h=33km, M _B =5.4(CGS).
11	ePKP	14	32	17.0					147.9 16436	Tonga Islands. USGS: 15.40 S, 173.30W, H=14:12:29.9, h=33km, M _B =5.3(CGS).
11	eP IS	23	22 24	19.8 26.6	1.3 2.0				12.3 1367	Crete. CSEM: 34.89N, 23.02 E, H=23:19:23.5, h=21km, M _B =5.8(CGS).
12	ePP eS	03	01 03	09.5 (00)					12.1 1345	Trace. Crete. CSEM: 34.91N, 23.23E, H=02:57:57.5, h= 45km, M _B =4.5(CGS).
12	eP	14	28	45.5					64.9 7217	Trace. South Atlantic ridge. USGS: 12.78S, 14.69W, H= 14:18:06.6, h=21km, M _B =M _S = 5.3(CGS).
12	e	16	10	07.8						Trace.
13	ePKP	00	41	36.3					147.4 16380	Dilat. Tonga Islands. USGS: 15.45S, 173.29W, H=00:21: 52.6, h=33km, M _B =5.7(CGS).
14	ePn eSn	08	51 52	41.8 25.8					3.7 412	Yugoslavia, Serbia (LJU).
14	ePn eSg	13	38 39	53.9 22.0					2.0 217	Italy. CSEM: 46.3N, 13.25E, H=13:38:19.1, h=10km.
14	eP	18	51	55.7					12.0 1332	Crete. CSEM: 34.86N, 23.05 E, H=18:49:09.1, h=34km, M _B =4.5(CGS).
14	eP eS e	20	43	21.0 26.5 27.0 39.7					0.5 51	Croatia, Pokupsko region.
16	ePn IS	23	48 49	44.3 11.9					1.9 210	Compr. Northern Italy. CSEM: 46.24N, 13.05E, H=23:48:0 09.4, h=10km, M _B =5.1(CGS), M=5.1(ZAG).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e	D ^o	Remarks
						NE NW Z	D km	
17	eLn	06	25	34.7	28			(107) Trace. South of Marlana (11890) Islands.
17	ePg ISn	23	17	32.3 57.6				2.1 Northern Italy. CSEM: 46.28 N, 12.94E, H=23:16:52.5, h=1km.
18	eSn eSg	07	03	24.6 28.8				2.1 Trace. Northern Italy. CSEM: 46.30N, 12.93E, H=07:02:20.0, h=0km.
18	eSn eSb	09	59	24.0 26.5				2.1 Trace. Northern Italy. CSEM: 46.16N, 13.09E, H=09:58:19.5, h=10km.
20	ePn e IS	20	22	36.2 37.7 28.8	2.0			Yugoslavia, Maratinje. CSEM: 43.11N, 18.74E, H=20:21:39.2, h=10km, M=3.0(ZAG).
20	ePn IS	20	29 30	18.2 06.4	2.0			3.3 Dilat. Yugoslavia, Mratinje. CSEM: 43.18N, 18.76E, H=20:28:17.7, h=10km, M=3.8(ZAG).
21	IP esS	21	13 24	10.9 13.2				77.2 Dilat. Northwest of Kuril Islands. USGS: 51.75N, 155.21E, H=21:01:44.0, h=231km, M _B =5.6(CGS).
23	e	01	22	(00)				Interrupt. Trace.
23	ePn IS	02 03	59 00	21.3 53.9				5.2 Albania. CSEM: 41.51N, 20.16 E, H=02:58:1.3, h=8km, M _B =4.7(CGS).
23	ePP	06	16	27.4				106.0 South of Sumba Island. USGS: 11780 11.21S, 118.22E, H=05:57:55.6, h=33km, M _B =6.0(CGS).
23	e I	16	00	17.8 32.4				Trace.
26	ePKP e	05	16	39.6 48.5				150.0 Trace. West of Macquarie Island. USGS: 60.04S, 150.59 E, H=04:56:57.1, h=33km, M _B =5.3(CGS), M _S =5.7(CGS).

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e	D ^o	Remarks
						NE NW Z	D km	
28	ePn IS	01	43 44	50.5 24.8				2.1 Northern Italy. CSEM: 46.24N, 13.07E, H=01:43:16.2, h=10km.
28	e(Sg)	01	56	19.7				(2.0) Trace. Northern Italy. CSEM: (223) 46.20N, 13.08E, H=01:56:39.2, h=10km.
30	eSn	18	04	19.4				Trace. Yugoslavia, Ploče region.
O C T O B E R 1977.								
2	iP IS	10	47	54.5 58.1	0.1			0.3 Compr. Local. 31
3	e	01	34	27.9				Trace. Croatia
3	eSq	16	30	18.5				6.4 Trace. Greece. CSEM: 40.03 N, 19.77E, H=16:26:51.1, h=41km.
4	e e	21	44 46	13.8 07.9				Trace.
5	eP eSSS M	05	38 41 44	(00) (00) (00)	6.3			13.6 Interrupt. Turkey. CSEM: 41.04N, 33.51E, H=05:34:46.0, h=10km, M _B =5.3(CGS).
5	ePKP epPKP	14	34 36	13.8 28.7				157.8 Dilat. Trace. Fiji Islands region. USGS: 17536 18.57S, 177.72W, H=14:15:24.3, h=573km, M _S =5.6(CGS).
5	e	16	18	41.0				Trace.
6	e e	15	03	48.5 54.7				Trace.
7	e ePP	12	28 29	11.7 25.8				106.1 Trace. South of Sumbawa Island. USGS: 09.95S, 117.32 E, H=12:10:43.7, h=33km, M _B =5.9(CGS), M _S =6.3(CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D ^o D km	Remarks
7	e e	12	45 47	04.1 18.8				Trace. Greece. CSEM; 39.19 N, 20.78E, H=12:42:58.4, h=44km.
7	lPg lSg	12	49	46.4 51.7				Local.
7	eISg	13	49	48.1				Trace. Local.
8	eP e(PP)	21	20 24	09.1 17.5				94.1 Trace. Luzon, Philippine 10456 Islands. USGS: 13.33N, 124.49E, H=21:06:52.8, h= 32km, M _B =5.4(CGS), M _S =5.5 (CGS).
10	ePKP ePKP2 e(PP) el	12	13 14 18 21	49.6 20.6 27.7 21.2				158.2 Compr. South of Tonga 17581 Islands. USGS: 25.86S, 175.41W, H=11:53:53.6, h= 33km, M _B =6.6(CGS), M _S =7.2 (CGS).
14	ePKP	12	48	30.0				144.2 Dilat. Trace. New Hebrides 16025 Islands, USGS: 15.37S, 167.41E, H=12:29:13.8, h= 125km, M _B =5.7(CGS).
14	ePg eSg	20	12 13	37.5 05.1	0.9			2.1 Northern Italy. CSEM: 46.23 238 N13.04E, H=20:11:56.4, h= 1.0km
16	eP eS	02	11 21	47.3 35.5				79.9 Dilat. Trace. Kuril Islands. 8879 USGS: 47.05N, 153.91E, H= 01:59:36.6, h=33km, M _B =M _S = 5.6(CGS).
16	eP	03	18	59.1				69.6 Trace. South Atlantic ridge. 7735 USGS: 18.56S, 12.81W, H= 03:07:50.5, h=21km, M _B =5.3 (CGS).
17	eM e	14	00 01	57.9 07.4				Trace. Yugoslavia, Montene- gro. Felt at Bar, Ulcinj (TTG).
17	ePKP M	17 19	46 01	30.9 1.7 19				154.5 Dilat. North of New Zealand. 17170 USGS: 27.91S, 173.08E, H= 17:26:40.4, h=33km, M _B = 6.3(CGS), M _S =6.7(CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D ^o D km	Remarks
19	eP eS	06	41 47	54.2 10.9				34.7 Iran. CSEM: 27.88N, 54.85E, 3856 H=06:35:17.3, h=70km, M _B = 5.6(CGS).
19	eP e	22	51 59	51.0 41.8	1.6			84.4 Compr. Taiwan region. USGS: 9380 22.61N, 121.61E, H=22:39: 34.1, h=158km, M _B =5.5(CGS).
20	eP	05	52	16.0				80.5 Dilat. Trace. Kuril Islands. 8946 USGS: 47.15N, 154.09E, H= 05:40:05.7, h=44km, M _B =5.4 (CGS).
22	eP e	10	05 07	06.5 26.6				12.0 Crete. CSEM: 34.96N, 23.18E, 1335 H=10:02:12.3, h=41km, M _B = 5.0(CGS).
22	e e	13	00	37.1 39.7				Trace. Argentina. USGS: 28.01S, 62.90W, H=17:54:45.9, h= 603km, M _B =5.3(CGS).
22	e	18	14	23.6				Argentina. USGS: 27.95S, 62.97W, H=17:57:17.4, h= 614km, M _B =6.1(CGS).
23	eSn	05	48	36.6				7.8 Trace. Greece. CSEM: 38.87N, 870 21.12E, H=05:45:10.4, h=55km M _B =4.1(CGS).
23	ePKP ₂	10	51	26.9				147.8 Loyalty Islands region. USGS 16425 21.49S, 170.30E, H=10:31: 53.1, h=89km, M _B =5.6(CGS).
26	eP ePcP	15	23	18.8 24.0				81.5 Trace. Rat Islands, Aleutian 9058 Islands. USGS: 51.45N, 178.33E, H=15:10:58.8, h= 33km, M _B =5.6(CGS), M _S =5.2 (CGS).
26	eP̄ e	21	39 40	51.9 10.2	1.0			Local. Croatia.
27	ePn	07	02	42.6				13.6 Dodecanese Islands. CSEM: 1512 35.49N, 27.71E, H=06:59: 30.8, h=68km, M _B =4.9(CGS).
27	e	10	03	33.0				Trace.

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o Z	D km	Remarks
						NE	NW	Z			
27	eP eS	16	55	16.5	0.3	25.1			0.7 73	0.7	Local.
27	ePn e	22	46 49	27.0		52.7			11.9 1325	11.9	Western Turkey. CSEM: 37.95N, 28.00E, H=22:43; 33.4, h=10km, M _B =4.7(CGS).
28	e	23	20	14.3							Trace. Albania. CSEM: 41.34 N, 20.24E, H=23:17:11.5, h=10km.
29	eP IRIP IS	02	49	39.9		45.2 52.8			0.9 100	0.9	Yugoslavia, Slovenia. CSEM: 46.09N, 14.78E, H=02:49; 24.7, h=10km, I _o =IV-V ^o MCS (LJU).
29	eP	03	14	43.5					40.9 4542	40.9	Trace. Kazakh SSR. USGS: 49.84N, 78.17E, H=03:06; 57.7, h=0km, M _B =5.5(CGS). Probably nuclear explosion.
29	eP e	03	14	50.3		52.7			40.8 4533	40.8	Kazakh SSR. USGS: 50.06N, 78.91E, H=03:07:05.0, h= 0km, M _B =5.6(CGS). Probably nuclear explosion.
30	ePKP2	13	12	44.5					143.5 15947	143.5	Trace. New Hebrides Islands. USGS: 14.87S, 166.95E, H= 12:53:22.8, h=103km, M _B = 5.6(CGS).

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3	ePn eSg	02	24 26	43.1	3.5	33.7			6.8 755	6.8	Bulgaria-Yugoslavia border region. CSEM: 42.08N, 24.09E, H=02:22:58.1, h= 13km, M _B =5.2(CGS), M _S =5.1 (CGS).
3	ePb eSb	09	06 07	39.7		36.0			4.6 510	4.6	Dilat. Yugoslavia. CSEM: 42.78N, 20.7E, H=09:05:15.5 h=10km.
3	e	12	28	43.0							Trace.

Date	Phase	M h	G m	T s	Per. sec.	A m p l i t u d e			D ^o Z	D km	Remarks
						NE	NW	Z			
4	eP eS eLQ	10	05 15 33	23.2		31.4 26.0			83 9223	83	Andreanof Islands, Aleuti- an Islands. USGS: 51.66N, 175.95W, H=09:52:55.7, h= 33km, M _B =5.7(CGS), M _S =6.7 (CGS).
6	eP e eS	02	51	(00)		27.8 35.3			6.8 760	6.8	Interrupt. Bulgaria. CSEM: 42.05N, 24.06E, H=02:48: 43.5, h=10km, M _B =4.8(CGS).
8	eP	15	11	19.4					80.3 8924	80.3	Dilat. Trace. Kuril Islands. USGS: 47.39N, 154.31E, H= 14:59:10.4, h=33km, M _B =5.5 (CGS). M _S =4.6(CGS).
11	e	13	29	12.8							Trace.
12	iP IS	15	02	32.9	0.2	34.1			0.1 10	0.1	Dilat. Trace.
18	eP eIS	05	29	49.5		38.1			55.6 6180	55.6	China, Tibet. USGS: 32.69 N, 88.39E, H=05:20:11.3, h=38km, M _B =5.7(CGS), M _S = 6.5(CGS).
18	eP	10	30	41.4					89.2 9913	89.2	Trace. Southern Sumatra. USGS: 4.35S, 102.02E, H= 10:17:41.0, h=33km, M _B = 5.5(CGS).
19	eSn ISg	21	43	18.6		28.0			2.9 320	2.9	Trace. Austria. USGS: 47.63 N, 12.70E, H=21:41:54.2, h=10km.
23	eP eIPP eSKS M	09	41 45 51 30	04.4		37.2 36.6			109 12100	109	Western Argentina, San Juan province. USGS: 31.03S, 67.77W, H=09:26:24.7, h= 13km, M _B =6.3(CGS), M _S =7.4 (CGS).
23	e	13	00	37.0							Trace.
24	IPKP	17	19	50.0					147.9 16436	147.9	Dilat. Trace. Tuamotu Archi- pelago region. USGS: 21.89 S, 138.96W, H=16:59:58.5, h=0km, M _B =6.0(CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE	Amplitude NW	Amplitude Z	D ^o D km	Remarks
26	e(Pn) eSn	13	21	45.9					8.0	Trace. Greece. USGS: 38.49N, 20.28E, H=13:19: 47.2, h=66km, M _B =4.6(CGS).
			23	10.6					890	
27	eP eIPcP	08	48	18.4					80.4	Trace. Kuril Islands. USGS: 46.42N, 153.28E, H=08:36: 05.7, h=33km, M _B =5.5(CGS), M _S =5.7(CGS).
				29.0					8935	
27	ePKP e	12	59	08.2					150.3	Trace. South of Fiji Isla- nds. USGS: 20.48S, 178.43 W, H=12:40:15.0, h=558km, M _B =5.6(CGS).
				16.2					16703	
28	eP IPp	03	02	17.3					14.0	Compr. Turkey. USGS: 36.05 N, 27.76E, H=02:59:10.8, h=85km, M _B =5.6(CGS).
				27.6					1557	
30	eP ePP	04	14	46.8					41.3	Trace. Kazakh SSR. USGS: 49.96N, 78.93E, H=04:06: 57.5, h=okm, M _B =5.9(CGS), Underground explosion.
			16	19.0					4585	

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2	eP	13	09	04.5					76.4	Compr. Off East coast of Kamchatka. USGS: 52.93N, 159.71E, H=12:57:10.7, h=15km, M _B =5.8(CGS), M _S = 5.1(CGS).
									8495	
3	I _P I _S	03	01	36.9	0.1				0.2	Dilat. Local. M=2.2(ZAG).
				39.7	0.2				25	
3	e(P) e	05	41	47.9						Albania. CSEM: 40.11N, 19.88E, H=05:39:32.7, h= 48km.
			43	19.9						
3	eP	13	53	30.6					80.5	Dilat. Trace. Off West coast of Northern Sumatra. USGS: 03.51N, 95.89E, H= 13:41:20.9, h=41km, M _B = 5.8(CGS).
									8939	

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE	Amplitude NW	Amplitude Z	D ^o D km	Remarks
5	I	12	22	36.8						Trace.
7	e	03	49	58.1						Trace.
7	I	19	21	44.2						Northern Italy. CSEM: 46.28N, 13.36E, H=19:21: 06.6
9	IPg ISg	10	37	16.6				0.3		Trace. (Local.)
				21.0				30		
11	e(Sg)	14	32	15.2						Trace.
13	eIP eS	01	24	54.0	2.8		4.6		64.4	North Atlantic ocean. USGS: 17.36N, 54.85W, H=01:14: 18.6, h=33km, M _B =5.7(CGS).
			33	33.1					7158	
13	eIPKP	03	26	38.4					148.8	Fiji Islands region. USGS: 16536 17.80S, 178.79W, H=03:07: 47.7, h=534km, M _B =5.3(CGS).
14	eIPKP e	19	11	12.3					154.8	Fiji Islands region. USGS: 17203 21.10S, 179.15W, H=18:52: 34.9, h=659km, M _B =5.6(CGS).
				21.4						
15	eIPn eI(Sn) eISg	11	31	46.3						Trace.
			32	09.4						
				18.8						
15	I	14	49	08.2						Trace.
16	IPg ISg	00	40	43.1					0.2	Dilat. Croatia, D.Stubica.
				45.8		334			21	I=V ⁰ MCS, M=3.3(ZAG), CSEM: 49.9N, 16.1E, H=00:40: 40.0
16	IPg ISg	00	54	09.2					0.2	Dilat. Croatia, D.Stubica.
				12.0		1.3			22	M=0.8(ZAG).
16	ePn eSn IH	07	40	17.7					11.2	Compr. Turkey. USGS: 38.77 1250 N, 27.00E, H=07:37:31.9, h=33km, M _B =5.3(CGS), M= 5.2(ZAG)
			42	26.3						
			44	03.9	4.9	7.2				
19	eP I eSS	23	41	21.5					34.1	Iran. CSEM: 30.96N, 56.44 3790 E, H=23:34:39.0
			42	20.2						
			49	(00)						

Date	Phase	H h	G m	T s	Per. sec.	A m p l i t u d e NE	NW	Z	D ^o D km	Remarks
20	eP	09	02	26.0					78.8 8750	Kuril Islands. USGS: 48.59 N, 153.02E, H=08:50:38.2, h=140km, M _B =5.8(CGS).
21	eP elsSKS	01	13 24	51.0 22.3					94.4 10490	Dilat. Volcano Islands regi- on. USGS: 25.51N, 143.11E, H=01:00:32.8, h=33km, M _B = 6.2(CGS).
21	ePn elSn ISg	09	54 55	56.8 19.2 23.7					1.8 198	
21	eIP	16	51	23.9					76.9 8540	Trace. Off East coast of Kamchatka. USGS: 52.93N, 159.80E, H=16:39:33.0, h=33km, M _B =5.5(CGS).
22	IP	13	42	35.5					87.4 9713	Compr. Atlantic-Indian rise. USGS: 34.42S, 55.30E, H= 13:29:49.4, h=33km, M _B = 5.7(CGS).
23	eP e	21	14	32.0 33.5					83.0 9225	Off East coast of Honshu, Japan, USGS: 39.13N, 143.16 E, H=21:02:07.5, h=19km, M _B =5.6(CGS).
26	IPg ISg	12	51	43.6 44.8						Dilat. Explosion?
27	IPKP	11	57	09.9					148.9 16547	Trace. Fiji Islands region. USGS: 17.97S, 178.63W, H= 11:38:21.3, h=555km, M _B = 5.3(CGS).
28	eP IS	02	52 58	33.1 11.3 4.6 10.6					35.4 3934	Red Sea. USGS: 16.66N, 40.28E, H=02:45:36.7, h=33 km, M _B =6.9(CGS).
28	eP	20	38	17.5					26.1 2900	Trace. Iceland. USGS: 64.60 N, 17.29W, H=20:32:40.8, h=10km, M _B =5.0(CGS).
29	eIPn el(Sn) el(Sg) e	16	55 57 58	15.0 39.7 21.0 1.8 25.6					8.8 974	Central Greece. CSEM: 38.55 N, 22.35E, H=16:52:59.9.

Date	Phase	H h	G m	T s	Per. sec.	A m p l i t u d e NE	NW	Z	D ^o D km	Remarks
30	IPn I I	17	37 38 39	36.6 40.8 15.7		74.4				Compr. Thyreenian Sea. CSEM: 39.99N, 15.44E, H= 17:35:10.5, h=288km, M= 5.6(ZAG).

REGISTRACIJE SEIZMOGRAFA

The record of seismograph

Puntljarka

(lat. = 45°54'00"N, long. = 15°57'29"E, H = 988m)

Long period vertical seismograph "Sprengnether"
with characteristics:

period of seismometer $T_0 = 12$ s

max. static magnification
of instrument $V = 20.000$

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks
JANUARY 1977								
1	IP	21	49	10.5	6.5	5	54.0 6000	China, Tsinghai Province. USGS: 38.15N, 91.00E, H= 21:39:41.3, h=27km, M _B = 5.9(CGS), M _S =6.3(CGS).
2	eSn	10	36	05.5	1.7	1	3.74 415	Trace. Dilat. Central Italy. BCIS: 43.41N, 12.51E, H=10:34:21.7
3	eS	17	51	26.9				Trace. Local.
6	ePKP1	06	30	32.6	2.0	2	119.0 13220	Trace. New Guinea. USGS: 3.63S, 144.45E, H=06:11: 40.7, h=33km, M _B =6.0(CGS).
6	IPn eSn	07	47 48	58.8 23.8	1.1	1.9	1.94 215	Trace. Dilat.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks
9	ePn eSb	14	27	03.4 30.9	3.5	8.8	2.05 228	Compr. Italy. BCIS: 46.28N, 13.12E, H=14:26: 29.6
12	eP	23	47	34.4			85.8 9530	Compr. Northern Sumatra. USGS: 1.58N, 99.86E, H=23:35:19.1, h=178km, M _B =5.6
13	IPn iS	09	19 20	47.8 31.8	1.0	32	2.70 300	Dilat. Yugoslavia. USGS: 43.54N, 17.1E, H=09:19: 06.1, h=20km, M _B =5.3(CGS), M=4.8(ZAG), Damage (VII) in the Imotski, Posušje areas.
16	iSg	09	21	57.6	7.5	4	9.29 1032	Greece. BCIS: 37.92N, 22.91E, H=09:16:50.8, h=42km.
17	eP	05	24	08.3	4.1	1.3	20.4 2266	Compr. Turkey. BCIS: 39.25N, 43.69E, H=05:19: 26.4, h=36km.
17	IP	21	44	58.1	3.0	3.1		Dilat.
19	IP	00	56	10.5	2.0	5	58.0 6450	Compr. China, Tsinghai Province. USGS: 37.02N, 95.69E, H=00:46:18.3, h=33km, M _B =5.9(CGS)
21	e e	06	29 32	48.7 06.7	1.2	2		
26	ePn iSb	15	34	27.4 55.8	1.0	1	2.02 224	Trace. Italy. BCIS: 46.34N, 13.29E, H=15:33:51.7
28	ePn eSn	21	43	13.6 39.9			2.02 224	Trace. Yugoslavia.
30	ePn eSn	21	18	04.0 28.2	0.6	8	1.84 204	Compr. Yugoslavia. Croatia. BCIS: 44.0N, 16.0E, H= 21:17:31.6, Felt at Knin, Drniš, Obrovac. I _o =V _o MCS.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
30	IPn eSn	21	21	02.4 24.7	0.5	1.2	1.75 194	Compr. Yugoslavia, Croatia. Felt at Knin, Drniš, Lukar, Oklač.
30	IPn	21	36	51.3				Trace. Yugoslavia, Croatia. Felt at mountain Promina region.
31	e	04	03	52.7				Trace. Yugoslavia, Croatia. Felt at mountain Promina region.
31	IPn eSn	07	11	30.2 55.8	0.9	4.9	1.96 218	Compr. Yugoslavia, Croatia. Felt at mountain Promina region.
31	eIP	14	33	49.2	6.4	11.8	39.6 4400	USSR, Tadzhik. USGS: 40.04N, 70.85E, H=14:26: 14.8, h=20km. M _B =6.1 (CGS).

F E B R U A R Y 1 9 7 7

3	ePn	20	41	08.5				Trace. Yugoslavia, Croatia. Felt at mountain Promina region.
4	ePn eSn	07	14 15	38.4 02.9			1.89 210	Trace. Yugoslavia, Croatia. Felt at mountain Promina region.
4	eP	07	59	23.9			101.7 11300	Argentina, Salta Province. USGS: 24.69S, 63.36W, H= 07:46:33.8, h=549km, M _B = 6.0 (CGS).
4	ePn	20	57	41.7			1.96 218	Trace. Italy. BCIS: 46.26N, 13.24E, H=20:57:09.9

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
5	ePKP ePP	03	48 51	35.4 04.4	6.0	3	130.0 14450	Southern Pacific Ocean. USGS: 66.45S, 82.58W, H= 03:29:18.9, h=33km, M _B = 6.2 (CGS).
10	IP̄ IRI2P̄	06	21	25.5 47.7	0.6	2.5	1.14 127	Compr. Yugoslavia, Croatia. BCIS: 44.92N, 14.82E, H= 06:21:3.3. Felt at Senj. M=2.7 (ZAG), I _o =4 ^o MCS.
10	IPKP1	08	15	39.4			146.0 16200	Compr. Loyalty Islands region. USGS: 21.82S, 169.94E, H=07:55:56.7, h=41km, M _B =5.2 (CGS).
10	eP̄ IS̄	10	12 13	52.6 08.5	0.7	2.5	1.10 122	Compr. Hungary. BCIS: 46.32N, 17.41E, H=10:12: 33.6
10	IP̄ IS̄	10	14	35.5 51.7	0.7	4	1.13 125	Compr. Hungary. BCIS: 46.43N, 17.29E, H=10:14: 18.6
16	IP	00	56	56.4	1.0	2.1	38.8 4310	Compr. Atlantic. BCIS: 26.03N, 26.34W, H=00:49: 30.4
16	ePP	10	58	32.9			102.1 11350	Trace Molluca Passage. USGS: 0.49N, 125.98E, H=10:40:20.9, h=33km, M _B =6.1 (CGS).
16	IP̄ IS̄	19	34	15.5 17.8	0.4	16	0.18 20	Yugoslavia, Croatia. BCIS: 45.98N, 16.18E, H=19:34: 12.8. Felt (V) at Zellna region. M=4.0 (ZAG), I _o = V-VI ^o MCS.
17	e	03	25	45.0				Trace.
18	IP̄ IS̄	18	49 50	55.8 03.5	0.8	1.1	0.59 65	Yugoslavia, Slovenia.
18	IP IPP	21	04 07	11.7 34.5	2.2	5.5	88.4 9820	South of Honshu, Japan. USGS: 33.07N, 140.82E, H=20:51:29.8, h=42km, M _B =6.0 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
19	IP	22	46	04.2	16.7	31	78.0 8650	Aleutian Islands. USGS: 53.57N, 170.03E, H=22: 34:04.1, h=33km, M _B = 6.2(CGS).
20	IPn ISr ISg	11	20	31.1 56.6 01.5	0.6	3	1.98 220	Compr. Yugoslavia, Croatia. Felt at mountain Promina region.
23	ePn	20	23	39.1			10.04 1115	Trace. Dilat. Greece. BCIS: 36.57N, 21.62E, H= 20:21:10.4
24	IP	09	01	44.2	2.7	1.6	62.5 6950	Compr. Ascension Island region. USGS: 11.69S, 13.62W, H=08:51:16.6, h=33km, M _B =5.1(CGS).
24	IP	11	52	02.9	2.7	1.5		Compr. Hokkaido, Japan region. USGS: 42.39N, 142.51E, H=11:40:00.0, h=75km, M _B =5.3(CGS).
24	ePn IM	20	50 54	02.5 38.6	9.0	10	11.16 1240	Turkey. BCIS: 38.63N, 27.82E, H=20:47:19.0
25	ePKS	01	37	41.9	3.2	1.2	130.0 14440	Trace. Solomon Islands. USGS: 06.05S, 154.75E, H=01:14:36.1, h=102km, M _B =5.2(CGS).
25	ISn	13	39	51.9				Trace. Yugoslavia. Croatia. Probably at the mountain Promina region.
25	IPn ISn	13	51	31.0 56.4		1.1	1.98 220	Compr. Yugoslavia, Croatia.
27	eP	09	29	40.1				Dilat. SSR, Tadzhik. USGS: 38.07N, 72.69E, H=09:21: 57.2, h=112km, M _B =5.1(CGS).
28	eP IS	04	01	46.8 54.9		2.5	0.59 66	Compr. Yugoslavia, Slovenia. Felt (III MCS) at Metlika.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
28	IP IS	10	33	50.2 51.8	0.6	2	0.11 12	Local.
M A R C H 1977								
2	e	07	39	19				Trace.
2	IP	10	06	52.5			98.6 10955	Compr. Mindanao, Philippi- ne Islands. USGS: 6.77N, 123.74E, H=09:53:23.2, h=52km, M _B =6.1(CGS).
2	e(Pn)	17	31	09.1				Trace.
4	IP IS	10	33	48.6 50.0	0.5	2.8	0.10 11	Local.
4	eP IS	13	36	51.3 53.1	0.4	2.3	0.12 13	Local.
4	IP	19	23	44.0			7.70 855	Dilat. Rumania, Vrancea region. USGS: 45.8N, 26.7E, H=19:21:54.3, h= 91km, M _B =6.8(CGS).
5	e(Pn) I(Sg)	17	09	34.0 49.2				
7	ePn eSn	09	37	30.9 56.9	0.9		2.03 225	Trace. Yugoslavia, Croatia.
7	eP	10	49	19.1			58.9 6545	Trace. Central mid-Atlantic ridge. USGS: 7.43N, 35.98W, H=10:39:20.9, h=33km, M _B =4.9(CGS).
8	e(Sg)	05	28	07.7				Trace. Yugoslavia, Slovenia- Croatia border region. Felt (II-III ^o MCS) at Metlika.
8	e	05	40	35.2				Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks
8	e(\bar{P}) eS	12	00	20.2 37.2			(1.23) (137)	Trace. Yugoslavia, Slovenia.
8	IPn IPg ISn ISg IM	19	19	20.3 39.7 16.2 36.7 22.2	5.0	8	4.41 490	Yugoslavia, Serbia. The mountain Jastrebac. BCIS: 43.24N, 21.02E. H=19:18:12.7, Felt (V-VI ^o MCS) at Kruševac, and Lomnica.
8	eP	22	59	44.7			98 10880	Trace. Peru. USGS: 12.06S, 74.03W, H=22:46:04.8, h=14km, M _B =5.6(CGS).
8	eIP IPcP	23	30	07.1 24.7			85 9440	Northern Sumatra. USGS: 0.45N, 100.02E, H=23:17:28.0, h=22km, Damage in western Sumatra. M _B =5.5(CGS).
9	ePn ISn ISg	00	11	22.1 49.0 53.4	0.6		2.02 224	Trace.
9	ISg	00	31	31.1				Trace. Yugoslavia, Slovenia-Croatia border region. Felt (III ^o MCS) at Metlika.
9	I	04	56	38.6				Trace.
9	IP IS	14	38 47	43.3 37.1			15.4 8380	Dilat. North Korea. USGS: 41.61N, 130.88E, H=14:27:53.6, h=528km, M _B =5.9(CGS).
12	eP	03	07	07.5	2.1	3	52.4 5820	Dilat. North Atlantic ridge, USGS: 23.74N, 45.17E. H=02:57:50.6, h=33km, M _B =5.4(CGS).
12	i \bar{P} iS	08	08	37.6 44.2	0.9	2	0.32 36	Compr. Yugoslavia, Croatia. Draganići region.
12	ePn eSn	10	51 52	50.5 32.5			3.42 380	Dilat. Trace. Yugoslavia, Bosnia and Herzegovina.
14	ePn eR12P \bar{S} 3	08	48 50	37.6 29.7			6.98 775	Trace. Greece-Albania border region. BCIS: 39.59N, 20.55E, H=08:46:57.2

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks
14	i \bar{P} iS	09	30	57.4 58.9	0.5	2	0.11 12	Local.
14	IPKP I	19	21 23	52.3 18.2	1.2	3		Compr. Fiji Islands region. USGS: 20.73S, 178.51W, H=19:03:07.8, h=577km, M _B =5.4(CGS).
15	ePn	02	01	14.5	1.0	1.1	4.50 500	Yugoslavia-Albania border region. BCIS: 42.24N, 19.49E, H=02:00:07.2
17	e \bar{P} IR12 \bar{P} iS	17	55	19.5 39.5 41.8		2.5	1.58 175	
17	e \bar{P} IR12 \bar{P} iS	18	01 02	55.1 15.3 17.6			1.58 175	
18	i \bar{P} iS	09	27	15.0 17.1			0.14 15	Local.
18	IP	21	56	45.2			90.8 10090	Compr. Philippine Islands. USGS: 16.77N, 122.33E, H=21:43:52.4, h=37km, M _B =6.2(CGS).
19	IP	11	08	32.4	1.6	8	81.4 9045	Compr. Kuril Islands. USGS: 44.20N, 148.20E, H=10:56:25.1, h=70km, M _B =6.0
19	e	14	08	08.0				Trace. Yugoslavia, Bosnia and Herzegovina. Sarajevo region.
19	I	19	19	43.3				Trace. Albania. BCIS: 41.83N, 19.21E, H=19:18:20.7.
19	IP	19	48	00.5	2.2	5.5		Compr. Luzon, Philippine Islands. USGS: 16.81N, 122.35E, H=19:35:08.0, h=39km, M _B =5.6(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
19	IPKP	23	20	46.4	1.1	4	148 16440	Dilat. Tuamotu Archipelago region. USGS: 21.93S, 138.96W, H=23:00:58.2, M _B =5.9(CGS).
20	eR12P̄	02	30	40.4			3.47 385	Trace. Yugoslavia, Montenegro.
20	ePn IP IS	07	42	26.5 36.3 21.7	1.4	3	3.40 378	Yugoslavia, Montenegro.
21	eP eS	21	26	01.3 42.6			37 4100	Iran. BCIS: 27.66N, 56.36E, H=21:18:59.8, h=57km.
25	ePg ISg	20	02	22.7 30.7			0.59 65	Trace. Yugoslavia, Slovenia. Felt (II-III MCS) at Črnomelj.
25	ePn	20	42	03.0			3.24 360	Trace. Central Italy. BCIS: 43.55N, 12.2E, H=20:41:10.3
26	eP	04	48	34.3	1.5	9		Compr. Fox Islands, Aleutian Islands. USGS: 52.30N, 168.26W, H=04:36:14.7, h=38km, M _B =5.7(CGS).
26	eP	05	09	21.9			20.9 2320	Trace. Turkey. BCIS: 38.57N, 43.51E, H=05:04:45.7, h=93km.
26	eP	05	51	04.3			9.7 1075	Trace. Greece. BCIS: 37.85N, 23.23E, H=05:48:46.4, h=38km.
26	IPKP I	08	38	58.8 05.0	2.5	4		Compr. Tonga Islands. USGS: 18.59S, 174.15W, H=08:19:18.5, h=93km, M _B =5.6(CGS).
26	eP	22	36	13.0				Compr. Southern Bolivia. USGS: 20.34S, 66.36W, H=22:23:26.5, h=207km, M _B =4.8(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
28	ePKP	01	35	00.6	4.7	2.8		New Hebrides Islands. USGS: 14.68S, 167.10E, H=01:15:41.8, h=109km, M _B =5.7(CGS).
29	ePn IPg ISn	01	18	53.0 15.5 40.7		2	4.68 520	South Italy. BCIS: 41.33N, 16.29E, H=01:17:37.3
29	eP	04	04	44.6				Compr. Eastern Kazakhstan, SSR. USGS: 49.79N, 78.15E, H=03:56:57.7, h=0km, M _B =5.4(CGS), Underground nuclear explosion.
30	eP̄ IS	11	57	3.2 4.5		1.4	0.10 11	Local.
A P R I L 1977.								
1	eP̄ IS	04	01	25.4 44.6		4	1.40 155	Yugoslavia, Bosnia and Herzegovina. Felt (IV ^o MCS) at Banja Luka, and (IV-V ^o MCS) at Laktaši. I _o = V ^o MCS.
1	IP IPP IS	13	43	33.9 44 49			37.3 4140	Compr. Iran, Bandar Abbas region. BCIS: 27.64N, 56.39E, h=58km.
2	ePKP I I	07	35	07.8 15.8 04.2				Compr. Samoa Islands region. USGS: 16.70S, 172.10W, H=07:15:22.7, h=33km, M _B =6.8(CGS).
3	IPn IPg ISg	03	18	50.9 55.8 22.1	0.5	27.1	1.98 220	Italy. BCIS: 46.25N, 13.19E, H=03:18:15.9, M=4.2(ZAG).
3	IPn ISn	22	21	10.4 34.5	0.7	1.0	1.89 210	Yugoslavia, Croatia.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o Dkm	Remarks
4	IP	18	02	16.5				Trace. Central mid-Atlantic ridge. USGS: 07.30N, 34.86W, H=17:52:19.7, h=33km, M _B =5.5(CGS).
4	IP	19	19	21.3				Southern Sumatra. USGS: 02.77S, 102.28E, H=19:06:35.5, h=133km, M _B =5.6(CGS).
5	ISg	13	34	12.9		1.49 165		Trace. Yugoslavia, Slovenia.
6	IPn ISg	07	55	24.4 54.5		1.96 218		Trace. Probably Northern Italy.
6	eIPg ISg	08	16	58.6 59.8	2	0.09 10		Local.
6	ePg ISg	08	21	57.8 59.4	6.8	0.12 13		Local.
6	ePg ISg	11	58	25.5 26.8	1.6	0.10 11		Local.
6	eP eS	13	42 47	46.4 54.5	4.0	8.3 30.5 3390		Iran. BCIS: 32.02N, 50.66E, H=13:36:40.9, h=53km.
7	ISg	02	55	27.5				Trace. Local.
9	ePb eSn	10	58 59	54.4 38.5		4.23 470		Trace. Italy. BCIS: 44.1N, 10.11E, H=10:57:40.5, Felt (IV ^o MCS) at Lunigiana.
9	ePg ISg	13 14	59 00	59.3 00.6	1.8	0.10 11		Local.
9	eIPKP	21	35	54.9	2.5	8 145 16110		New Hebrides Islands. USGS: 19.08S, 169.59E, H=21:16:14.6, h=25km, M _B =5.4(CGS).
10	eIPKP	01	13	56.8	2.1	4 145 16110		New Hebrides Islands. USGS: 19.0S, 169.59E, H=00:54:16.5, h=18km, M _B =4.9(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
10	IP	08	43	38.5			80.9 8990	Kuril Islands. USGS: 44.47N, 147.55E, H=08:31:33.4, h=84km, M _B =5.4(CGS).
11	IPn	16	26	27.9			14.5 1610	Trace. Turkey. BCIS: 36.86N, 30.88E, H=16:22:59.5, I _{max} =VI ^o MCS.
12	ISn	02	25	33.7			4.32 480	Trace. Central Italy. BCIS: 42.44N, 13.21E, H=02:23:33.1
13	eP I	11	41 46	23.3 46.1			42.1 4675	Compr. Hindu Kush region. USGS: 36.47N, 70.91E, H=11:33:51.8, h=196km, M _B =5.3(CGS).
13	IP	12	59	33.7				Trace. Taland Islands. USGS: 03.78N, 126.76E, H=12:45:42.0, h=43km, M _B =5.7(CGS).
13	ePn ISg	14	03 04	46.4 40.8	1.4	5.6	3.29 365	Yugoslavia, Bosnia and Herzegovina. BCIS: 43.09N, 18.83E, H=14:02:52.7, Felt (V ^o MCS) at Gacko, I _o =VI ^o MCS.
13	eI(Sg)	16	48	32.3				Trace. Yugoslavia, Bosnia and Herzegovina.
14	IPKP I	04	24	16.2 21.6				Dilat. Fiji Islands region. USGS: 17.66S, 178.65W, H=04:05:31.2, h=535km, M _B =5.2(CGS).
14	IPg ISg	16	09	18.1 18.7			0.05 5	Trace. Local.
15	IP IRIP IS	14	11	49.3 57.3 03.2			1.04 115	
16	eP eI	06	49 50	57.5 04.9		2.2		Fiji Islands region. USGS: 21.49S, 179.21W, H=06:31:13.7, h=600km, M _B =5.2(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D° D km	Remarks
18	IP	00	20	32.9				Compr. Near coast of central Chile. USGS: 32.84S, 71.81W, H=00:12:41.6, h=33km.
19	eIPn eIPg ISn	02	24 25	29.6 40.0 07.5	1.1	2	3.06 340	Compr. Yugoslavia. Bosnia and Herzegovina. BCIS: 43.08N, 17.79E, H=02:23:41.8, Felt (V ⁰ MCS) at Čapljina.
19	I(Sn)	04	15	05.1				Trace.
19	ePg ISg	13	17	36.6 38.8	0.4	1.7	0.17 19	Local.
20	I \bar{P} IRI \bar{P} I \bar{S}	00	32	17.7 23.3 38.6			1.46 162	Compr. Yugoslavia, Bosnia and Herzegovina. BCIS: 44.88N, 17.34E, H=00:31:53.5, Felt (V ⁰ MCS) at Banja Luka, Prnjavor. I ₀ = VI ⁰ MCS.
20	e \bar{P} I \bar{S}	00	47	08.6 28.3		6.4	1.40 156	Yugoslavia, Bosnia and Herzegovina. BCIS: 44.81N, 17.18E, H=00:46:45.2, Felt (IV-V ⁰ MCS) at Hrvaćani.
20	eIP	04	29	30.0	1.6	1.3	36.8 4090	Iran. Bandar Abas region. BCIS: 27.09N, 55.47E, H=04:22:29.6, h=56km.
20	I \bar{S}	06	23	48.4				Trace. Yugoslavia, Bosnia and Herzegovina. Felt (IV ⁰ MCS) at Drugovići, and (III-IV ⁰ MCS) at Hrvaćani.
20	IP IS	20	16 27	22.8 23.2		3	88 9780	Dilat. Japan, South of Honshu. USGS: 30.59N, 137.48E, H=20:04:29.4, h=493km, M _B =5.5(CGS).
20	eIPKP IPP	23	32 34	23.1 57.1			130.4 14490	Compr. Solomon Islands. USGS: 9.83S, 160.32E, H=23:13:10.4, h=33km, M _B =6.4(CGS), M _S =6.7(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D° D km	Remarks
21	ePKP	00	02	05.4			131.5 14500	Solomon Islands. USGS: 9.89S, 160.35E, H=23:42:50.5, h=19km, M _B =6.3(CGS), M _S =7.5(CGS).
21	ePPP	01	59	03.0				Solomon Islands. USGS: 9.92S, 160.35E, H=01:34:04.8, h=33km, M _B =5.1(CGS).
21	IPKP IPP	04	43 45	22.9 53.4			130.6 14510	Compr. Solomon Islands. USGS: 9.96S, 160.73E, H=04:24:09.6, h=33km, M _B =6.6(CGS), M _S =7.5(CGS).
22	e(Sn)	13	07	10.2				Trace.
22	e \bar{P} I \bar{S}	13	25	14.5 28.6			1.01 112	Trace. Yugoslavia, Slovenia.
22	IPKP	23	30	36.9	2.0	1.4		Dilat. Fiji Islands region. USGS: 17.75S, 178.28W, H=23:11:47.9, h=538km, M _B =5.5(CGS).
22	eP IS	23	58 00	58.6 27.0		1.2	7.74 860	Greece. Ionian Sea. BCIS: 38.94N, 21.02E, H=23:57:08.6, h=65km.
23	I \bar{P} I \bar{S}	11	16	08.2 09.1			0.07 8	Compr. Local.
23	e \bar{P} eRI \bar{P} IRI2 \bar{P} I \bar{S}	12	54	03.1 06.8 19.6 22.2		1.8	1.40 155	Yugoslavia, Bosnia and Herzegovina. Felt (IV ⁰ MCS) at Hrvaćani and Drugovići.
23	ePg ISg	13	34	23.1 39.8			1.26 140	Trace. Yugoslavia, Croatia.
24	eRI2 \bar{P} eRI \bar{P} \bar{S} eI \bar{S}	02	45	08.9 30.0 55.6			3.96 440	Trace. Central Italy.
25	ePn eSn	13	12 13	57.7 29.1				Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ⁰ D km	Remarks
26	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	13	04	08.9 10.0	0.4	2	0.08 9	Trace. Local.
26	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	13	07	06.0 07.5	0.5	3.2	0.11 13	Local.
26	$\bar{I}\bar{P}$	16	31	21.6			29 3220	Compr. Western Iran. USGS: 32.66N, 48.92E, H=16; 25:29.0, h=47km, $M_B=5.4$ (CGS).
27	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	19	09	38.5 40.3		3	0.14 15	Dilat. Local.
29	$\bar{I}\bar{S}$	11	34	06.0				Trace. Local.
29	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	12	07	14.5 16.4	1.0	2.9	0.14 16	Local.
30	eIP	14	42	43.4				Trace. Southern Iran. USGS: 27.60N, 56.49E, H=14; 35:37.3, h=38km, $M_B=5.0$ (CGS).
30	eP	16	30	55.7	2.0	2	44 4900	North Atlantic ridge. USGS: 32.43N, 40.34W, H=16; 22:45.3, h=33km, $M_B=4.6$ (CGS).
30	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	17	56	04.2 05.9	0.3	11	0.14 15	Compr. Local. $M=1.9$ (ZAG).

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4	eP	02	45	47.9			45.3 5030	Trace. Afghanistan-USSR border region. USGS: 36.93N, 71.39E, H=02:37:44.4, h= 122km, $M_B=5.3$ (CGS).
5	IPn ISg	08	36	06.0 42.1			2.25 290	Trace. Yugoslavia, Livanjsko Polje.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ⁰ D km	Remarks
5	IP IPcP	22	26	39.7 27	1.9	2.8	80.9 8990	Hokkaido, Japan region. USGS: 41.89N, 142.34E, h H=22:14:34.7, h=71km, $M_B=5.0$ (CGS).
6	IP	04	05	41.6	2.0	2	79.8 8865	Compr. Kuril Islands region. USGS: 45.94N, 152.06E, H=03:53:30.2, h=29km, $M_B=5.4$ (CGS).
6	ePg ISg	04	55	47.2 56			1.89 210	Trace. Italy.
6	eP	21	49	48.6			79.5 8830	Trace. Kuril Islands region. USGS: 46.51N, 153.98E, H=21:37:38.4, h=35km, $M_B=$ 5.2(CGS).
7	IP	02	19	15.0	2.0	2	30.6 3400	Jan Mayen Island region. USGS: 71.75N, 01.81W, H=02:13:32.7, h=33km, $M_B=5.4$ (CGS).
7	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	11	34	02.2 03.8	0.9	2.8	0.13 14	Local.
7	IPKP	19	55	25.1	1.5	1.5	148.2 16470	Trace. Tonga Islands region. USGS: 17.98S, 172.59W, H= 19:35:32.2, h=33km, $M_B=$ 5.0(CGS).
8	ePKP	00	16	30.9				Trace. Samoa Islands region. USGS: 16.42S, 172.64W, H= 23:56:45.6, h=62km, $M_B=4.4$ (CGS).
8	ePKP	04	57	25.6			148.5 16500	Trace. Tonga Islands. USGS: 19.64S, 175.93W, H=04:37:31.5, h=33km, $M_B=$ 5.0(CGS).
8	ePn IP IRsP IS	10	03	37.7 46.6 51.9 04	1.4	4.6	3.51 390	Yugoslavia, Mratinje. BCIS: 43.23N, 19.03E, H=10:02: 43.5
8	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	22	09	35.4 42.4			0.45 50	Trace. Yugoslavia, Slovenia.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
9	eRIP eS	06	58	35.8 55.2			1.76 195	Trace. Yugoslavia, Croatia-Bosnia and Herzegovina region.
11	eSn	08	38	48.4				Trace. Albania.
12	IP	11	29	04.6	11.5	6.2	69.4 7710	Dilat. Northeastern China. USGS: 39.27N, 117.71E, H=11:17:53.1, h=22km, M _B =5.8(CGS).
12	IP	12	30	43.6	2.6	3.3	66.7 7410	Dilat. Burma. USGS: 21.75N, 92.99E, H=12:20:00.7, h=40km, M _B =5.4(CGS).
12	IP	21	49	18.5	1.2	2.8	78.5 8720	Kuril Islands. USGS: 50.16N, 154.98E, H=21:37:33.4, h=126km, M _B =5.3(CGS).
13	IP	11	25	43.8	2.1	7	90.9 10100	Dilat. Bonin Islands region. USGS: 28.42N, 139.50E, H=11:13:31.2, h=430km, M _B =5.8(CGS).
13	IPn ISg	18 22	19 28.2	54.0 28.2	2.2	17	8.3 920	Greece. BCIS: 39.12N, 23.62E, H=18:17:48.0, h=14km.
14	IPn IP IR12P IR1P5 IS	03	40	05.6 11.9 22.9 37.8 48.8			2.70 300	Dilat. Yugoslavia. Adriatic Sea, near Vis Island. BCIS: 43.13N, 16.03E, H=03:39:23.7, h=35km, USGS: 43.14N, 16.03E, H=03:39:22.1, h=47km, M=4.2(ZAG), I=VI ^o MCS. Slight damage on Vis.
15	IPg ISg	15	43 44	46.6 08.4	1.0	1.2	1.49 166	Dilat. Yugoslavia, Croatia.
15	IP	16	03	05.2	1.5	2	82 9100	Compr. Aleutian Islands. USGS: 52.45N, 168.03E, H=15:50:47.1, h=33km, M _B =5.3(CGS).
15	ePKP	23	31	44.0				Dilat. Fiji Islands region. USGS: 19.13S, 177.67W, H=23:12:53.6, h=499km, M _B =5.5(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
17	iS	17	49	01.9				Trace. Local.
18	IPKP	07	02	34.5	1.9	5		Compr. New Hebrides Islands. USGS: 18.99S, 169.19E, H=06:43:21.1, h=217km, M _B =5.2(CGS).
18	IP iS	13	05	51.6 52.9	0.4	4.5	0.10 11	Local.
18	iS	13	06	05.7				Trace. Local.
19	eIP	23	05	33.5	1.6	2.0	36.3 4033	Compr. Southern Iran. USGS: 27.12N, 55.32E, H=22:58:30.8, h=30km, M _B =5.2(CGS).
19	IP	23	11	55.9			36.3 4033	Trace. Southern Iran. USGS: 27.14N, 55.31E, H=23:04:53.6, h=35km, M _B =5.3(CGS).
20	IP iS	16	56	58.0 59.9		2	0.14 16	Dilat. Local.
20	eP	23	04	13.6	1.9	3	90.5 10055	Compr. Southern Sumatra. USGS: 04.44S, 101.97E, H=22:51:13.9, h=37km, M _B =5.7(CGS).
21	IP eIS	05	47 58	56.2 25.2	3.2	5.2	90 10000	Dilat. Philippine Islands, Luzon. USGS: 15.69N, 120.82E, H=05:35:22.5, h=189km, M _B =5.7(CGS).
22	ePKP	23	46	17.1				Trace. Fiji Islands region. USGS: 19.52S, 177.25W, H=23:27:03.8, h=350km, M _B =5.2(CGS).
23	iS	11	51	28.4				Trace. Local.
23	ePn	15	11	39.9				Trace.
23	IP	22	08	24.6	1.0	3	86 9550	Compr. Northern Sumatra. USGS: 0.66N, 98.68E, H=21:55:54.1, h=40km, M _B =5.5(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
24	eP	07	59	33.1		93.7 10410	Trace. Volcano Islands region. USGS: 25.47N, 142.51E, H=07:46:13.5, h=9km, M _B =5.7(CGS).	
24	IPP	10	41	47.4		100.4 11600	Trace. Mariana Islands. USGS: 18.81N, 145.35E, H=10:23:23.4, h=207km, M _B =5.7(CGS).	
25	IP	11	07	48.4		29.5 3280	Trace. Compr. Iran. USGS: 34.89N, 52.06E, H=11:01:45.5, h=26km, M _B =5.4(CGS).	
25	ePKP	12	28	42.2		152 16890	Trace. Compr. Fiji Islands region. USGS: 17.86S, 178.62W, H=12:10:01.2, h=578km, M _B =5.4(CGS).	
25	IP IS	14	41	14.4 14.9	0.5	36.5 4	Compr. Local.	
25	IP eS	15	07 17	49.5 44.2	1.5	7 80.8 8980	Compr. Northern Sumatra. USGS: 04.24N, 95.77E, H=14:55:45.0, h=56km, M _B =5.9(CGS).	
25	ePn IR12P IS	17	04 05	16.3 33.8 14.0		3.51 390	Trace.	
26	IP eS	01	40 44	06.2 01.0	10.0	10 22.5 2500	Dilat. Turkey-Iran border region. USGS: 38.93N, 44.38E, H=01:35:13.8, h=37km, M _B =5.2(CGS).	
26	eP	09	55	18.8		22.5 2500	Trace. Iran-USSR border region. USGS: 38.96N, 44.38E, H=09:50:24.6, h=41km, M _B =4.8(CGS).	
26	IS	11	07	07.8	0.4	3	Local.	
26	IS	12	24	32.6			Trace. Local.	

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
26	IP IS	13	23	42.1 42.9	0.4	1.2	0.06 7	Local.
27	ePg ISb ISg	00	14 15	12.8 57.3 06.8			4.14 460	Trace. Adriatic Sea.
27	e	11	44	42.3				Trace.
28	eP	06	05	43.6	2.5	2	102.8 11420	Sulawesi. USGS: 01.73S, 120.52E, H=05:51:48.1, h=54km, M _B =5.9(CGS).
29	IP	03	04	43.6	1.4	4	40.9 4545	Compr. Eastern Kazakhstan, USSR. USGS: 49.94N, 78.85E, H=02:56:57.8, h=0km, M _B =5.6(CGS). Underground nuclear explosion.
30	IP eM	15 16	28 06	19.6	19.0	2	83.4 9265	Compr. Fox Islands, Aleutian Islands. USGS: 52.43N, 169.71W, H=15:16:01.6, h=33km, M _B =5.6(CGS).
31	ePg IPb ISg	11	46	07.4 08.9 14.4		3	0.54 60	
31	IPKP	15	07	08.8	4.0	2		Trace. Santa Cruz Islands. USGS: 11.81S, 166.51E, H=14:47:59.1, h=138km, M _B =5.6(CGS).

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1	eIPn ISg	02	17 19	48.4 03.1			4.32 480	Trace. Yugoslavia. BCIS: 43.20N, 20.95E, H=02:16:38.3, USGS: 43.19N, 21.01E, H=02:16:38.3. Felt in Kruševac area.
1	IPKP	09	17	27.5			156.5 17387	Trace. Tonga Islands. USGS: 21.19S, 174.37W, H=08:57:30.9, h=33km, M _B =5.2(CGS).

Date	phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
1	IP IS	12	51	31.9 33.2	0.5	2	0.17 19	Compr. Local.
1	IP IS eH	12 13	58 01 03	18.6 11.7	8.0	29	15.5 1720	Dilat. Turkey. USGS: 36.24N, 31.34E, H=12:54: 49.2, h=67km, M _B =5.7(CGS). Felt in Southern Turkey and on Cyprus.
2	eP IS	08	17	18.3 27.6			0.68 75	Trace.
2	ePn ePb eSg	13	34 36	20.0 16.5 37.5			7.79 865	Trace. Germany. USGS: 53.07N, 9.55E, H=13:32: 14.8, h=0km, Felt in Soltau-Fallingbostel area. Possibly near surface nontectonic event.
2	IP eH	15	01 13	09.5	15.0	15	26.4 2930	Trace. Compr. Iceland. BCIS: 63.56N, 19.29W, H=14:55:33.9.
3	eP	01	13	06.5			41.2 4580	Tadzhik, USSR. USGS: 39.87N, 71.79E, H=01:05: 23.7, h=24km, M _B =5.1(CGS). Damage (VII) reported South of Fergana.
3	ePKP	14	51	47.9				Trace. Fiji Islands region. USGS: 18.94S, 177.63W, H= 14:33:07.0, h=573km, M _B = 5.3(CGS).
3	ePKP	15	36	50.8				Trace. New Hebrides Islands. USGS: 14.15S, 166.56E, H= 15:17:25.1, h=38km, M _B = 5.4(CGS).
4	ePn	01	50	49.9				Trace.
5	IP	04	50	56.3			28.6 3180	Compr. Western Iran. USGS: 32.64N, 48.09E, H= 04:45:07.6, h=40km, M _B = 5.5(CGS). Felt in Western Iran and at Baghdad.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
5	IP	08	31	21.1	1.9	1.8	27.5 3055	Compr. Iran. BCIS: 32.49N, 48.22E, H=08:25:35.3,
5	IPn	14	01	22.1			7.97 885	Compr. Sicily. USGS: 37.88N, 14.46E, H=13:59: 21.7. h=8km, M _B =4.9(CGS).
5	IPn ISn	15	15 16	47.5 13.5	0.5	1.8	1.98 220	Italy. BCIS: 46.32N, 13.25E, H=15:15:11.1
5	ePn	23	21	33.7			6.84 760	Southern Italy. USGS: 39.68N, 18.87E, H=23:19: 49.0
6	ePn	04	35	17.3			8.73 970	Greece. BCIS: 37.74N, 22.21E, H=04:33:7.4
6	IPKP	13	05	37.8				Trace. Tonga Islands. USGS: 19.24S, 175.64W, H=12:46:11.8. h=253km, M _B =5.1(CGS).
6	IPn ISn	17 18	59 00	43.8 36.8	0.9	3	4.32 480	Southern Italy. BCIS: 41.09N, 15.37E, H=17:58: 35.1.
6	e(Sn)	18	55	25.2				Trace. Central Italy.
7	e(Pn) e(Sn)	05	21 22	57.8 18.3			(1.49) (166)	Trace.
7	IP I IS	15	58	39.9 40.5 41.3			0.11 12	Compr. Local.
8	ePn eSn	04	29 30	54.3 21.3			2.07 230	Trace. Yugoslavia, Bosnia and Herzegovina.
8	eIP	14	38	03.3			83.6 9290	Near East coast of Honshu, Japan. USGS: 38.54N, 141.48E, H=14:25:46.5, h=78km, M _B =5.5(CGS).
9	e(Pn) I e(Sn)	11	29	03.6 16.6 25.4			(1.62) (180)	Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude D ^o		Remarks
						2a(mm)	D km	
10	IP	02	48	08.5		89.3 9920		Compr. Southern Sumatra. USGS: 3.10S, 101.49E, H=02:35:14.0, h=33km, M _B =5.4(CGS).
12	eP̄ IS	07	04	35.6 44.3	0.5	2	0.66 73	Yugoslavia, Slovenia. Felt (IV ^o MCS) at Črnomelj.
13	IPKP	10	28	32.9		3.8	152 16870	Compr. Tonga Islands. USGS: 18.53S, 174.06W, H=10:08:48.0, h=41km, M _B =5.5(CGS).
13	eP	12	00	54.6			93.5 10380	Trace. Luzon, Philippine Islands. USGS: 13.31N, 124.65E, H=11:47:41.4, h=35km, M _B =5.6(CGS).
13	eP̄ IS	15	56	02.5 04.1		2.5	0.13 14	Local.
14	IP	21	50	19.9	2.5	6	57 6330	Compr. South Atlantic ridge. USGS: 14.12S, 14.43W, H=21:39:35.2, h=33km, M _B =6.0(CGS).
15	eP̄	08	22	47.0				Trace. Local.

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16	IP̄ IS	13	13 14	54.4 10.4			1.15 128	Yugoslavia, Slovenia. BCIS: 46.28N, 14.34E, H=13:13:32.1, I _{max} =VI ^o MCS.
19	eP̄ IS	13	15	22.6 24.2			0.13 14	Trace. Local.
19	IPn IPg ISn ISg	13	55	17.4 18.6 38.1 40.7	0.6	2.6	1.53 170	Dilat. Yugoslavia, Croatia.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude D ^o		Remarks	
						2a(mm)	D km		
20	IP̄ IS	10	53	06.4 07.3	0.4		19	8	Compr. Local.
21	IP̄ IS	11	29	48.2 49.2	0.4		4	8	Compr. Local.
21	IPKP	12	13	12.5	2.7		25.5	155.8 17310	Compr. Macquarie Islands region. USGS: 53.86S, 158.60E, H=11:53:22.5, h=33km, M _B =6.4(CGS).
22	IPKP	17	36	39.6	4.5		6	164 18200	Compr. South of Kermadec Islands. USGS: 33.79S, 179.72W, H=17:16:40.3, h=31km, M _B =6.0(CGS).
22	ePn IPb ISn	22	36	29.0 31.9 01.9				2.59 288	Yugoslavia, Bosnia and Herzegovina. Nertva valley.
23	eP	07	05	36.8				47.5 5270	Trace. Northern Sinkiang Province, China. USGS: 42.20N, 83.39E, H=06:57: 03.7, h=33km, M _B =5.1(CGS).
23	IP	13	57	03.9				80.5 8930	Trace. Compr. Alasca Penin- sula. USGS: 54.32N, 162.41W, H=13:44:54.6, h=27km, M _B =5.1(CGS).
24	IPKP	06	42	32.9	4.5		11	149.8 16630	Compr. Tonga Islands. USGS: 15.34S, 173.15W, H=06:22:51.3, h=33km, M _B =6.0(CGS).
24	ePn IPg ISn	09	56 57	42.3 02.8 38.4				4.68 520	Southern Italy. BCIS: 41.02N, 14.87E, H=09:55: 32.2, h=35km.
25	eP	05	04	02.6					Trace.
28	eP	01	56	54.6	12.5		4	53.8 5975	North of Ascension Island. USGS: 01.15S, 14.04W, H= 01:47:32.7, h=33km, M _B = 5.3(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks
29	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	21	55	15.1 34.8	0.5	43	1.42 158	Yugoslavia, Bosnia and Herzegovina. USGS: 44.92N, 17.48E, H=21:54:47.8, h=10km, Felt (III ^o MCS) at Banja Luka.
30	eP	07	40	37.4			53.4 5930	Trace. North of Ascension Island. USGS: 03.18S, 12.19W, H=07:31:07.0, h=33km, M _B =5.1 (CGS).
30	ePn eSn	19	53 55	57.8 44.8	0.4	1.8	9.7 1075	Trace. Southern Greece. USGS: 36.84N, 21.65E, H=19:51:37.5, h=51km, M _B =4.8 (CGS).

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1	IPKP I	13	52	17.4 48.9	1.5	3	151.7 16840	New Hebrides Islands. USGS: 20.49S, 169.62E, H=13:32:48.8, h=108km, M _B =5.5 (CGS).
3	ePn ISn	11	20 21	58.9 37.1		4	3.02 335	Yugoslavia, Croatia. BCIS: 43.14N, 17.62E, H=11:20:10.3, Felt at Vrgorac, Ploče, M=3.4 (ZAG).
3	$\bar{I}\bar{S}$	12	35	55.3				Trace. Local.
3	eSg	12	51	19.7				Trace. Yugoslavia, Croatia-Bosnia and Herzegovina border region.
3	ISg	14	33	11.3				Trace. Yugoslavia, Croatia-Bosnia and Herzegovina border region.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks
3	ePn ISn	21	35	15.0 51.3			2.88 320	Trace. Yugoslavia, Croatia-Bosnia and Herzegovina border region.
4	I(Sg)	09	37	51.2				Trace.
4	I(Sn)	09	59	42.0				Trace.
5	IPn	13	23	21.4			14.04 1560	Trace. Crete. BCIS: 34.31N, 25.83E, H=13:19:59.0, h=37km,
5	$\bar{I}\bar{P}$ $\bar{I}\bar{S}$	13	26	53.8 55.0	0.4	9.8	0.09 10	Compr. Local
6	eIPKP	11	45	11.5			130.3 14480	Compr. Trace. Solomon Islands. USGS: 07.08S, 155.83E, H=11:26:12.2, h=83km, M _B =5.4 (CGS).
6	e(Sn)	11	55	28.1				Trace. Yugoslavia, Serbia. Novi Pazar region.
7	e	07	21	32.9				Panama-Costa Rica border region. USGS: 08.55N, 82.75W, H=07:08:05.6, h=33km, M _B =5.2 (CGS).
8	ePg ISg	03	11 12	40.6 03.6			1.80 200	Trace. Austria. BCIS: 47.58N, 15.88E, H=03:11:03.8, I _{max} =V ^o MCS.
8	eP	07	12	55.3			88.2 9800	Trace. Near West coast of Colombia. USGS: 06.93N, 77.78W, H=07:00:06.3, h=33km, M _B =5.2 (CGS).
9	e(Sg)	15	00	30.5				Trace.
10	eP	09	47	53.8			77.7 8630	Trace. Kodiak Island region. USGS: 56.64N, 152.73W, H=09:35:58.7, h=33km, M _B =5.0 (CGS).

Date	Phase	G h	M m	T s	Per. sec	Amplitude 2a(mm)	D ^o D km	Remarks
11	ePKP	02	02	30.4	2.4	22	156.2 17350	Dilat. Tonga Islands. USGS: 17.56S, 174.37W, H=01:42:47.5, h=57km, M _B =6.3(CGS).
11	e(Pn)	09	41	02.0				Trace. Yugoslavia, Serbia. Štip region.
14	eP I	09	15	12.6 50.8		2.8	73 8110	South Atlantic ridge. USGS: 22.75S, 12.75W, H=19:03:44.2, h=33km, M _B =4.9(CGS).
14	IP	21	52	21.9			97.2 10800	Compr. Java. USGS: 07.76S, 107.57E, H=21:38: 51.5, h=33km, M _B =5.7(CGS).
15	IP IS	21	12 13	17.4 34.3	0.9	12	7.1 788	Compr. Southern Italy. BCIS: 38.76N, 17.01E, H= 21:10:34.8, h=61km, M= 4.5(ZAG).
16	IPKP	06	34	54.7			147.5 16390	Dilat. New Hebrides Islands. USGS: 19.28S, 167.65E, H=06:15:16.7, h=12km, M _B =5.5(CGS).
16	eIPKP	07	22	35.7			145.3 16150	Dilat. Trace. New Hebrides Islands region. USGS: 18.97S, 167.58E, H=07:03: 01.3, h=33km, M _B =5.1(CGS).
17	e	03	27	18.4			151.2 16800	Trace. Tonga Islands region. USGS: 17.87E, 172.49W, H=03:07:29.2, h=15km, M _B =5.1(CGS).
17	ePg ISg	15	12	44.7 55.3			0.81 90	Trace.
17	ePn	22	34	19.6			5.58 620	Trace. Yugoslavia, Mace- donia. BCIS: 41.42N, 20.90E, H=22:32:53.4; Felt at Kičevo, Kruševo. I _{max} = V ^o MCS.
18	eP I(S)	09	30 32	28.7 49.0	10.2	32	11.80 1311	Crete. BCIS: 35.17N, 23.40E, H=09:27:42.2, h=46km, M _B =5.2(CGS)

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
18	iP̄ IS	10	12	14.9 16.9	0.1	4	0.15 17	Local.
18	iS	10	12	43.2				Trace. Local.
18	iP̄ IS	10	59 11 00	59.7 01.2			0.12 13	Trace. Local.
18	IP	12	11	52.2			82 9110	Compr. Kuril Islands. USGS: 46.63N, 153.71E, H=11:59:41.2, h=33km, M _B =5.7(CGS).
18	IP	13	09	09.7			83.4 92.65	Dilat. Trace. Aleutian Islands region. USGS: 50.91N, 174.67E, H=12:56: 51.9, h=33km, M _B =5.3(CGS).
19	ePb IPg ISn	04	18	28.2 37.7	1.5	2.2	4.25 472	Central Italy. BCIS: 42.71N, 12.37E, H=04:17: 13.3
19	IP	06	23	08.5			104.8 11643	Dilat. South of Sumbawa Islands. USGS: 11.09S, 118.46E, H=06:08:55.2, h=33km, M _B =7.0(CGS).
19	IPP	13	42	13.4			105.3 11700	Sumba Island region. USGS: 10.80S, 119.17E, H=13:23:37.0, h=33km, M _B =5.8(CGS).
19	ePP	19	57	38.5			105.6 11730	Trace. Sumba Island region. USGS: 10.80S, 119.14E, H=19:38:59.7, h=33km, M _B =5.8(CGS).
20	eP	02	58	56.5	1.6	3.4	87.3 9700	Caribbean Sea. USGS: 16.61N, 86.85W, H=02:46: 11.8, h=14km, M _B =5.3(CGS).
20	eP IPcP	04	04	37.0 48.5	2.0	8	86.8 9648	Caribbean Sea. USGS: 16.70N, 86.61W, H=03: 51:54.7, h=36km, M _B =5.6 (CGS).
20	ePP	09	40	26.0			105.2 11688	Trace. South of Sumba Island. USGS: 11.11S, 119.13E, H=09:21:50.3, h=33km, M _B =5.7(CGS).

Date	Phase	G h	M m	T s	Per. Amplitude D ^o			Remarks
					sec.	2a(mm)	D km	
20	ePP	19	35	11.6			106.6 11850	South of Sumba Island. USGS: 11.04S, 119.14E, H=19:16:32.7, h=33km, M _B =6.0(CGS).
21	eP	05	32	07.7			86.6 9618	Trace. Near East coast of Honshu, Japan. USGS: 35.24N, 141.12E, H=05: 19:34.2, h=42km, M _B = 5.5(CGS).
21	eP̄ IS	10	06	34.2 34.7			0.04 4	Trace. Local.
21	e(Sn)	20	51	34.0				Trace.
22	ePg IPb IPn ISn	18	42	23.8 24.3 26.1 38.5			0.81 90	Trace.
23	IP̄ IS	16	09	30.1 30.6	0.4	28.3	0.05 5	Compr. Local.
24	ePn ISn	12	00 01	50.0 17.0	0.5	2	2.09 232	Italy. BCIS: 46.36N, 13.01E, H=12:00:13.7
25	ePKP	07	55	13.5			148.2 16465	Trace. Fiji Islands region. USGS: 14.95S, 177.34W, H=07:35:33.7, h=33km, M _B =5.1(CGS).
25	ePg eSb ISg	18	05 06	10.4 56.0 05.7			4.10 455	Trace. Central Italy. BCIS: 42.60N, 12.61E, H=18:03:46.8.
25	IPP	18	23	50.5			104.6 11621	South of Sumba Island. USGS: 10.74S, 119.27E, H=18:05:10.8, h=33km, M _B =6.1(CGS).
25	IPg ISn ISb	19	34 35	46.0 24.2 33.7	1.0	6	3.78 420	Central Italy. BCIS: 42.63N, 12.64E, H=19:33: 30.2, M=3.8(ZAG).

Date	Phase	G h	M m	T s	Per. Amplitude D ^o			Remarks
					sec.	2a(mm)	D km	
25	IPg ISb ISg	20	44 45	24.7 04.4 14.1			3.69 410	Central Italy. BCIS: 42.64N, 12.58E, H=20:43: 09.7, M=3.5(ZAG).
26	IP̄ IS	13	05	27.8 29.1	0.1	5.5	0.11 12	Compr. Local.
26	IP IPP	20	04 09	32.3 00.0			108.4 12043	Southwestern Atlantic Ocean. USGS: 59.43S, 20.51W, H=19:50:01.4, h=33km, M _B =6.3(CGS).
27	eIP	07	26	49.6			108 12000	Timor Sea. USGS: 08.06S, 125.30E, H=07:12:22.5, h= 25km, M _B =6.4(CGS).
27	eP̄ IS	15	33	38.7 44.2			0.42 47	Trace. Local.
27	IR12S	17	40	05.2			3.89 432	Trace. Central Italy. USGS: 42.83N, 12.70E, H=17:37:42.1, h=10km,
28	IPn ISn	09	47 49	36.3 21.3	10.4	42	9.40 1045	Near Sardinia. BCIS: 38.13N, 08.09E, H=09:45: 16.1, M _B =5.1(CGS)
29	IP	14	36	26.6	4.5	18	86.8 9645	Compr. Northern Philippine Island region. USGS: 17.44N, 119.87E, H=14: 23:40.5, h=12km, M _B =6.0 (CGS).
29	IP	21	12	21.2				Trace. Andreanof Island. USGS: 51.56N, 173.97W, H=20:59:59.2, h=25km, M _B = 5.4(CGS).
30	eP	14	47	26.4			10.17 1130	Trace. SW Peloponnesus. BCIS: 36.55N, 21.63E, H=14:45:06.0, h=39km.
31	IP	00	54	46.3	9.2	12	86.3 9588	Dilat. Northern Colombia. USGS: 07.33N, 76.30W, H= 00:42:05.4, h=33km, M _B = 5.7(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude D ^o		Remarks
						2a(mm)	D km	
31	ePn	08	24	16.9	6.5	8	8.57 952	Southern Greece. BCIS: 37.65N, 21.16E, H=08:22: 08.4, M _B =4.7 (CGS).

S E P T E M B E R 1977

1	ePg IPn ISn	01	28	10.5 11.7 26.9			1.08 120	Trace. Yugoslavia, Slove- nia. I _o =III ^o MCS (LJU).
1	IP	03	06	32.9				Trace. Novaya Zemlya. Nuc- lear explosion. BCIS: 73.49N, 54.59E, H=02:59: 59.4, h=0km, M=5.9 (UPP).
1	ISn	20	48	31.7				Trace. Yugoslavia, Neretva valley. M=2.8 (SAR).
2	eP	05	54	07.7			85.7 9520	Trace. Ryukyu Islands. USGS: 26.41N, 126.41E, H=05:41:45.6, h=97km, M _B =5.6 (CGS).
2	I	10	55	06.7	4.5	5.8		South of Sumba Island: USGS: 11.04S, 119.15E, H=10:36:28.3, h=33km, M _B 6.0 (CGS).
2	I ⁻	12	53	57.0				Trace. Local.
2	I ⁻ IS	13	33	03.1 06.0			0.22 24	Dilat. Local.
2	ePn	22	48	30.1			2.8	Trace. Germany. BCIS: 47.97N, 09.22E, H=22:47: 13.7, h=10km.
3	ePn e(Sn)	12	08 09	45.9 10.9			(1.89) (210)	Trace.
3	ePKP	12	16	07.5				Trace. Tonga Islands. USGS: 15.29S, 173.24W, H= 11:56:18.4, h=18km, M _B 5.4 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude D ^o		Remarks
						2a(mm)	D km	
4	eP	09	08	04.8	2.6	12		New Hebrides Islands. USGS: 13.68S, 166.71E, H=08:48:39.2, h=33km, M _B 6.0 (CGS).
4	eP	15	53	16.8			82.3 9144	Compr. Rat Islands, Aleu- tian Islands. USGS: 51.21N, 178.39E, H=15:40:57.3, h= 34km, M _B =5.6 (CGS).
4	IP	17	22	50.9			82.4 9155	Compr. Rat Islands, Aleu- tian Islands. USGS: 51.10N, 178.27E, H=17:10:30.6, h= 31km, M _B =5.5 (CGS).
4	IP	23	33	04.2			82.3 9144	Compr. Rat Islands, Aleu- tian Islands. USGS: 51.18N, 178.25E, H=23:20:44.9, h= 41km, M _B =5.5 (CGS).
5	IP	03	10	47.2	1.2	3.5	41.1 4570	Kazakh SSR. Nuclear explo- sion. USGS: 50.09N, 78.96E, H=03:02:57.8, h=0km, M _B 5.9 (CGS).
7	ePn I(Sn)	03	28	23.0 59.4				Trace. Yugoslavia, Croatia.
7	e ⁻ I ⁻	09	11	02.9 07.5			0.32 35	Trace. Local.
7	e ⁻ I ⁻	13	22 23	58.3 04.7			0.45 50	Trace. Local.
8	ePn ISn	10	05 06	57.9 25.5			2.12 235	Trace.
9	e	09	23	34.6				Trace.
9	I ⁻ I ⁻	12	27	33.9 34.1			0.02 2	Dilat. Local.
9	e ⁻	12	49 50	59.2 00.9			0.12	Trace. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D° D km	Remarks
10	$\bar{I}\bar{P}$ IS	00	54	42.6 43.3		33.2	0.05 6	Compr. Local.
10	eP IS	06	34 36	34.7 45.7	6.0	7.8	11.75 1305	Crete. BCIS: 34.81N, 23.03E, H=06:31:42.8, h=25km, $M_B=4.6$ (CGS).
11	IP	23	22	14.8			12 1330	Compr. Crete. BCIS: 34.89N, 23.02E, H=23:19:23.5, h= 21km, $M_B=5.8$ (CGS).
12	eP	03	00	45.0			11.9 1322	Trace. Crete. BCIS: 34.91N, 23.23E, H=02:57: 57.5, h=45km, $M_B=4.5$ (CGS).
12	$\bar{e}\bar{P}$ IS	16	10	13.3 14.7		3.2	0.11 12	Local.
13	ePKP	00	41	36.4			147.4 16380	Dilat. Tonga Islands. USGS: 15.45S, 173.29W, H=00:21:52.6, h=33km, $M_B=$ 5.7(CGS).
13	ePKP	04	19	31.1			151.9 16875	Trace. Tonga Islands. USGS: 15.67S, 173.87W, H=03:59:40.9, h=33km.
14	ePn ISn	08	51 52	45.0 32.0			3.78 420	Trace. Yugoslavia, Serbia. $I_o=VI^{\circ}$ MCS.
14	IPn ISn	13	38 39	52.1 17.6		3	1.93 214	Italy. BCIS: 46.3N, 13.25E, H=13:38:19.1
14	eP	18	51	58.6			12 1330	Trace. Crete. BCIS: 34.86N, 23.05E, H=18:49:09.1, h= 34km, $M_B=4.5$ (CGS).
14	$\bar{e}\bar{P}$ eS	20	43	22.5 28.8		3	0.43 48	Yugoslavia, Croatia.
15	eP	15	56	29.8			12 1330	Trace. Crete. BCIS: 34.89N, 22.91E, H=15:53:41.8, h= 37km, $M_B=4.5$ (CGS).
16	IPn IPg ISg	23	48 49	44.8 48.6 16.6			1.98 220	Compr. Northern Italy. BCIS: 46.24N, 13.05E, H= 23:48:09.4, $M_B=5.1$ (CGS). $I_{max}=VII-VIII^{\circ}$ MCS (TRI).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D° D km	Remarks
17	ePg eSg	00	31 32	50.2 16.2			1.94 216	Trace. Northern Italy. BCIS: 46.24N, 13.03E, H= 00:31:11.7.
17	ePn ISn	23	17	29.0 46.0			2.05 228	Northern Italy. BCIS: 46.28N, 12.94E, H=23:16: 52.5, h=1km.
18	ePn	07	02	54.9			1.98 220	Trace. Northern Italy. BCIS: 46.30N, 12.93E, H=07:02:20.0, h=0km.
23	ePg	02	59	45.5			5.31 590	Trace. Albania. BCIS: 41.51N, 20.16E, H=02:58: 01.3, h=8km, $M_B=4.7$ (CGS).
28	IPb ISn	01	43 44	52.7 17.2			1.98 220	Northern Italy. BCIS: 46.24N, 13.07E, H=01:43: 16.2, h=10km.
28	ePb	01	57	18.7			2.07 230	Trace. Northern Italy. BCIS: 46.20N, 13.08E, H=01:56:39.2, h=10km.
28	e(Pn)	13	40	44.3				Trace.
30	e	16	43	46.5				Trace. Tyrrhenian Sea. BCIS: 38.75N, 10.56E, H=16:41: 45.1, h=10km.
30	ePn eSn	18	03 04	49.2 26.6			2.97 330	Trace. Yugoslavia, Ploče region.
30	$\bar{I}\bar{P}$ IS	20	17	29.0 29.5			0.04 4	Local.
30	eIPKP	21	42	45.1	1.6	4	150.1 16675	Samoa Islands region. USGS: 16.04S, 172.93W, H=21:22:57.5, h=33km, $M_B=5.4$ (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
O C T O B E R 1977								
1	eSn	04	56	27.6		2.07 230		Trace. Yugoslavia, Bosnia and Herzegovina.
1	$\bar{I}\bar{P}$ IS	07	53	30.0 30.3	0.2	5	0.03 3	Compr. Local.
2	$\bar{I}\bar{P}$ IS	10	47	54.7 59.1		13	0.33 37	Dilat. Local. Samobor region.
2	ePn ISg	11	50 51	42.3 12.3			1.93 214	Trace. Northern Italy.
3	ePn ISn	01	34	06.6 31.3	0.8	2	1.85 206	Yugoslavia, Croatia.
3	ePKP	05	08	13.5			148.2 16467	Trace. Loyalty Islands. USGS: 20.41S, 168.29E, H=04:48:33.6, h=33km, M _B =5.4(CGS).
3	eSg	12	08	03.2			5.67 630	Trace. Albania. BCIS: 40.79N, 19.70E, H=12:04: 56.7, h=10km.
3	IPKP	12	40	03.3			146.7 16298	Dilat. Trace. Loyalty Islands. USGS: 20.36S, 168.29E, H=12:20:21.5, h=11km, M _B =5.1(CGS).
3	$\bar{e}\bar{P}$ IS	17	23	00.2 05.3			0.39 43	Trace. Local.
3	IP	22	57	27.0			96.1 10677	Dilat. Trace. Northern Sumatra. USGS: 00.48N, 98.73E, H=22:44:52.3, h=13km, M _B =5.5(CGS).
4	$\bar{I}\bar{P}$ IS	12	59	31.4 32.5	0.5	5.6	0.09 10	Compr. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
4	eS	14	00	16.1			6.98 775	Trace. Greece-Albania border region. BCIS: 40.00N, 19.82E, H=13:56: 25.3, h=10km.
5	IP	05	38	02.0			13.6 1510	Dilat. Turkey. BCIS: 41.04N, 33.51E, H=05:34: 46.0, h=10km, M _B =5.3(CGS).
5	IPKP I	14	34	06.4 12.5	1.7	5.2	150.5 16715	Dilat. Fiji Islands region. USGS: 18.58S, 177.72W, H= 14:15:24.3, h=573km, M _S = 5.6(CGS).
6	ePn ISn	11	35	10.9 36.9			1.98 220	Trace.
7	IPg ISg	12	45 47	26.1 04.1			7.38 820	Greece. BCIS: 39.19N, 20.78E, H=12:42:58.4, h=44km.
7	$\bar{I}\bar{P}$ IS	12	49	44.3 45.5	0.5	10	0.10 11	Compr. Local.
7	$\bar{I}\bar{P}$ IS	16	36	49.7 50.9	0.2	5.4	0.10 11	Compr. Local.
8	ePg ISn ISb ISg	13	31 32	52.7 21.2 29.2 34.7			3.24 360	Trace.
10	IPKP	12	13	47.2		53	158.1 17560	Dilat. South of Tonga Islands. USGS: 25.86S, 175.41W, H=11:53:53.6, h=33km, M _B =6.6(CGS), M _S = 7.2(CGS).
13	IPKP	00	59	16.0			154.0 17110	Compr. West of Macquarie Islands. USGS: 54.52S, 144.72E, H=00:39:36.3, h=33km, M _S =5.7(CGS).
13	IPg ISg	07	03	14.5 17.0			0.20 22	Trace. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude D ⁰		Remarks
						2a(mm)	D km	
14	IPKP	05	15	17.0	2.0	8.5	155.8 17310	Compr. Tonga Islands. USGS: 15.72S, 173.05W, H=04:55:34.8, h=33km, M _B =5.9(CGS).
14	ePb ISg	07	19	10.5 20.9			0.81 90	Trace.
14	ePn IPg ISn	20	12	31.7 36.0 56.9	0.7	4.0	1.89 210	Northern Italy. BCIS: 46.23N, 13.04E, H=20:11: 56.4, h=10km.
16	IP	02	11	44.9	1.6	6.7	81.5 9060	Compr. Kuril Islands. USGS: 47.05N, 153.91E, H=01:59:36.6, h=33km, M _B =5.6(CGS).
16	IP	03	18	58.4		3.0	69.6 7735	Compr. South Atlantic ridge. USGS: 18.56S, 12.81W, H=03:07:50.5, h=21km, M _B =5.3(CGS).
16	I	19	23	18.4				Trace. Kuril Islands region. USGS: 46.95N, 154.06E, H= 19:06:21.6, h=45km, M _B = 4.6(CGS).
17	ePn I(Sg)	13	58 59	57.5 51.5			(3.15) (350)	Trace. Yugoslavia, Bosnia and Herzegovina. South of Sarajevo felt V ⁰ MCS.
17	IPg ISg	16	12	49.8 50.9	0.5	19	0.09 10	Compr. Local.
17	IPKP	17	46	30.5			162.7 18076	Compr. North of New Zealand. USGS: 27.91S, 173.08E, H=17:26:40.4, h=33km, M _B =6.3(CGS).
18	eP	20	34	29.7			81.9 9095	Trace. Kuril Islands regi- on. USGS: 46.92N, 154.28E, H=20:22:20.2, h=33km, M _B =5.1(CGS).
19	IP	06	42	06.6			35.5 3942	Compr. Iran. BCIS: 27.88N, 54.85E, H=06:35:17.3, h= 70km, M _B =5.6(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude D ⁰		Remarks
						2a(mm)	D km	
19	eP	17	38	47.2				Trace. Southern Sinkiang Province, China. USGS: 39.16N, 91.04E, H=17:29: 24.8, h=33km, M _B =5.1(CGS).
19	ePn IPg ISg	20	54	17.2 20.3 43.7			1.76 195	Trace.
19	IP	21	32	39.2		1.8	79.5 8834	Compr. Kuril Islands. USGS: 49.35N, 155.63E, H=21:20:41.6, h=62km, M _B =5.3(CGS).
19	IP	22	51	49.6		3.2	84.4 9377	Dilat. Taiwan region. USGS: 22.61N, 121.61E, H= 22:39:34.1, h=158km, M _B = 5.5(CGS).
20	IP	05	52	13.6		3.0	81.5 9050	Compr. Kuril Islands. USGS: 47.15N, 154.09E, H=05:40:05.7, h=44km, M _B = 5.4(CGS).
20	eP	08	09	18.1			81.5 9052	Trace. Kuril Islands. USGS: 47.24N, 153.95E, H=07:57:10.1, h=37km, M _B =5.2(CGS).
20	eP	08	29	44.5			75.9 8432	Trace. Komandorsky Islands region. USGS: 56.43N, 164.13E, H=08:18:07.0, h=40km, M _B =5.2(CGS).
21	ePg ISg	13	07	24.2 25.6			0.09 10	Local.
21	ISg	13	07	52.0			4	Local.
21	ISg	13	08	04.2		3.8		Local.
22	eP IS	10	05 07	00.8 33.0	7.0	5.5	12.0 1330	Crete. BCIS: 34.96N, 23.18E, H=10:02:12.3, h=41km, M _B =5.0(CGS).
22	e(P)	18	14	19.8				Argentina. USGS: 27.95S, 62.97W, H=17:57:17.4, h= 614km, M _B =6.1(CGS).

Date	Phase	G h	M m	T s	Per. Amplitude D ^o			Remarks
					sec.	2a(mm)	D km	
22	e(P)	18	10	12.3				Argentina. USGS: 28.01S, 62.90W, H=17:54:45.9, h= 603km, M _B =5.3(CGS).
23	IPKP	10	51	25.7	1.7	9.0	149.0' 16554	Dilat. Loyalty Islands. USGS: 21.49S, 170.30E, H=10:31:53.1, h=89km, M _B =5.6(CGS).
23	IPg ISg	19	18	46.3 52.8			0.65 72	Trace. Yugoslavia, Slovenia.
24	e(Sg)	16	55	47.3			(1.89) (210)	Trace.
26	ePKP	02	40	21.6			164 18220	Fiji Islands region. USGS: 15.57S, 177.29W, H=02:20: 35.1, h=33km, M _S =5.5(CGS).
26	e(Pg) e(Sg)	21	24	47.5 56.6			(0.72) (80)	Trace.
26	ePg ISg	21	39 40	51.8 01.3			0.77 85	
27	eP	07	02	40.1			13.6 1510	Dodecanese Islands. BCIS: 35.49N, 27.71E, H=06:59: 30.8, h=68km, M _B =4.9(CGS).
27	IPg ISg	16	55	16.5 23.8	0.5	5.2	0.63 70	
27	eP I	22	46 49	26.2 42.7			12.1 1344	Western Turkey. BCIS: 37.95N, 28.00E, H=22:43: 33.4, h=10km, M _B =4.7(CGS).
28	ePn ISb	23	18 19	33.9 58.9			5.58 620	Trace. Albania. BCIS: 41.34N, 20.24E, H=23:17: 11.5, h=10km.
29	IPb IPg IPn ISn	02	49	38.8 39.4 40.3 53.8			0.88 98	Compr. Yugoslavia, Slove- nia. BCIS: 46.09N, 14.78E, H=02:49:24.7, h=10km, I _o = IV-V ^o MCS.
29	IP	03	14	43.0	6.0		40.7 4520	Compr. Kazakhstan SSR. USGS: 49.84N, 78.17E, H= 03:06:57.7, h=0km, M _B =5.5 (CGS).

Date	Phase	G h	M m	T s	Per. Amplitude D ^o			Remarks
					sec.	2a(mm)	D km	
29	IP	03	14	51.3	1.2	3	41.1 4570	Compr. Kazakhstan SSR. USGS: 50.06N, 78.91E, H=03:07:02.9, h=0km, M _B =5.6(CGS).
30	ePn ISn	00	34 35	13.4 14.7			5.04 560	Trace. Albania. BCIS: 41.86N, 20.20E, H=00:32: 59.6, h=10km.
30	IPKP	06	44	19.4			159.2 17687	Trace. Fiji Islands region. USGS: 20.42S, 178.57W, H=06:25:30.0, h=600km, M _B =5.6(CGS).
30	ePKP	13	12	39.4			144.2 16023	Trace. New Hebrides Islands. USGS: 14.87S, 166.95E, H=12:53:22.8, h=103km, M _B =5.6(CGS).

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3	IPn ISn	02	24 26	39.0 02.0			7.02 780	Compr. Bulgaria-Yugoslavia border region. BCIS: 42.08N, 24.09E, H=02:22: 58.1, h=13km, M _B =5.2(CGS). Felt (VII ^o MCS) in Velingrad area.
3	ePn IPg ISg	09	06 07	23.7 40.7 40.5			4.37 485	Yugoslavia, Serbia. BCIS: 42.78N, 20.74E, H=09:05: 15.5, h=10km.
4	e	10	02	37.0				Trace.
4	IP	10	05	18.6			84.4 9380	Compr. Andreanof Islands, Aleutian Islands. USGS: 51.66N, 175.95W, H=09: 52:55.7, h=33km, M _B =5.7 (CGS), M _S =6.7(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
6	eIPn ISn	02	50 51	26.6 50.4		7.11 790	Bulgaria. BCIS: 42.05N, 24.06E, H=02:48:43.5, h=10km, M _B =4.8(CGS).	
7	I	00	25	52.9			Trace. Western Germany. BCIS: 48.02N, 09.27E, H= 00:23:07.2, h=2km.	
8	IPg ISg	12	20	15.9 16.9	1.6	0.08 9	Compr. Local.	
8	ISg	14	46	45.0			Trace.	
8	eP	15	11	18.4	1.1	3.1	81.5 9052	Compr. Kuril Islands. USGS: 47.39N, 154.31E, H=14:59:10.4, h=33km, M _B =5.5(CGS).
12	eIPKP	19	23	37.7			154.5 17165	Trace. Fiji Islands region. USGS: 20.49S, 177.77W, H=19:04:48.0, h=507km, M _B =5.0(CGS).
16	IPg I(Sg)	12	46	42.2 43.2		0.08 9	15	Compr. Local.
17	eIPn e(Sn)	06	30 31	07.0 07.2		(4.95) (550)		Trace.
17	eIP	17	32	56.0			85.9 9543	South of Honshu, Japan. USGS: 33.64N, 139.87E, H=17:20:32.6, h=112km, M _B =5.5(CGS).
18	IP	05	29	48.1	12.5	22	56.8 6310	Compr. China, Tibet. USGS: 32.69N, 88.39E, H=05:20:11.3, h=38km, M _B =5.7(CGS).
18	IP	10	30	41.9			92.4 10270	Compr. Southern Sumatra. USGS: 04.35S, 102.02E, H=10:17:41.0, h=33km, M _B =5.5(CGS).
19	eIPn ISn	21	42 43	42.4 18.4		2.88 320		Trace. Austria. USGS: 47.63N, 12.70E, H=21:41: 54.2, h=10km.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
19	ePn ISn	23	45	13.4 47.6			2.70 300	Trace. Austria. USGS: 47.65N, 12.83E, H=23:44: 28.6, h=10km.
22	IPKP	16	15	53.3			131.4 14595	Compr. Solomon Islands. USGS: 10.23S, 161.13E, H=15:56:44.1, h=92km, M _B =5.9(CGS).
23	eP	09	40	45.7			106.4 11821	Western Argentina, San Juan Province. USGS: 31.03S, 67.77W, H=09:26:24.7, h= 13km, M _B =6.3(CGS).
24	ePKP	17	19	46.2			146.9 16320	Tuamotu Archipelago region. USGS: 21.89S, 138.96W, H= 16:59:58.5, h=0km, M _B = 6.0(CGS).
26	eP IS	13	21 23	41.8 15.3			7.9 878	Trace. Greece. USGS: 38.19N, 20.28E, H=13:19: 47.2, h=66km, M _B =4.6(CGS).
27	IP	02	33	12.4				Compr. Samar, Philippine Islands. USGS: 11.80N, 125.47E, H=02:19:52.3, h=33km, M _B =5.5(CGS).
27	eP	08	48	17.6			82.2 9136	Trace. Kuril Islands. USGS: 46.42N, 153.28E, H=08:36: 05.7, h=31km, M _B =5.5(CGS).
27	I	12	59	20.5				South of Fiji Islands. USGS: 20.48S, 178.43W, H=12:40:15.0, h=558km, M _B =5.6(CGS).
28	IP	03	02	17.0			12.8 1425	Compr. Turkey. USGS: 36.05N, 27.76E, H=02:59: 10.8, h=85km, M _B =5.6(CGS).
30	IP	04	14	46.4	1.0	4	41.2 4570	Compr. Kazakhstan B.A. USGS: 49.96N, 78.93E, H= 04:06:57.5, h=0km, M _B =5.9 (CGS). Underground explo- sion.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
D E C E M B E R 1977								
3	I _P I _S	03	01	38.3 41.8	0.4	16	0.27 30	Dilat. Local.
3	IP	05	41	06.0	2.0	4.8	6.3 701	Albania. BCIS: 40.11N, 19.88E, H=05:39:32.7, h=48km.
3	IP	13	53	31.1	1.5	9.3	80.7 8966	Dilat. Off West coast of Northern Sumatra. USGS: 03.51N, 95.89E, H=13:41: 20.9, h=41km, M _B =5.8(CGS).
7	ePn ePg ISn ISg	19	21	42.6 46.5 07.2 10.7	0.3	4.2	1.91 212	Northern Italy. BCIS: 46.28N, 13.36E, H=19:21: 06.6.
8	ePKP	06	35	17.8			153.4 17045	South of Tonga Islands. USGS: 24.15S, 175.60W H=06:15:16.2, h=33km, M _B = 5.5(CGS).
9	e _P I _S	10	37	16.3 18.8	0.8	2.3	0.19 21	Local.
13	IP	01	24	53.6	6.0	17.2	65.5 7275	Compr. North Atlantic Ocean. USGS: 17.36N, 54.85W, H=01:14:18.6, h=33km, M _B =5.7(CGS).
13	IP	03	26	37.6		2	154.6 17181	Compr. Fiji Islands region. USGS: 17.80S, 178.79W, H= 03:07:47.7, h=534km, M _B = 5.3(CGS).
13	ePn I(Sn)	14	21 22	43.3 46.1			(3.60) (400)	Trace. Central Italy. USGS: 43.33N, 12.47E, H=14:20:33.7, h=33km.
14	eIPKP	19	11	11.2	1.0	3.0	153.6 17065	Fiji Islands region. USGS: 21.10S, 179.15W, H=18:52: 34.9, h=659km, M _B =5.6(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D ^o D km	Remarks
15	eP	15	12	34.1			21.5 2390	Trace. Eastern Caucasus. USGS: 43.24N, 45.17E, H= 15:07:51.8, h=33km, M _B = 4.9(CGS).
16	IPg ISg	00	40	42.4 44.5		52.5	0.12 13	Compr. Yugoslavia, Croatia. D.Stubica. BCIS: 45.9N, 16.1E, H=00:40:40.0, M= 3.2(ZAG), I ₀ =V ^o MCS.
16	IPg ISg	00	54	08.8 10.8	0.1	8.6	0.12 13	Compr. Yugoslavia, Croatia, D.Stubica. M=1.1(ZAG).
16	eIP IM	07	40 44	10.0	6.0	30	11.2 1243	Turkey. USGS: 38.77N, 27.00E, H=07:37:31.9, h=33km, M _B =5.3(CGS).
16	IP	15	22	54.9		2	85.2 9468	Compr. Near East coast of Honshu, Japan. USGS: 36.62N, 140.99E, H=15:10: 28.0, h=46km, M _B =5.6(CGS).
17	ePg ISg ISn	13	28	19.1 35.1 37.6			1.17 130	Trace. Yugoslavia, Croatia, probably Vinodol area.
18	eP IM	16 17	55 16	31.4	10	13.0	45.9 5100	Southern Sinkiang Province, China. USGS: 39.87N, 77.33E, H=16:47:17.1, h=33km, M _B =5.3(CGS).
19	IP	23	41	22.5			34.8 3870	Compr. Iran. BCIS: 30.96N, 56.44E, H=23:34:39.0
20	IP	09	02	25.8	1.5	12	77.7 8630	Dilat. Kuril Islands. USGS: 48.59N, 153.02E, H=08:50: 38.2, h=140km, M _B =5.8(CGS).
20	IP	20	06	00.3			11.7 1300	Compr. Tyrrhenian Sea. BCIS: 38.58N, 15.66E, H=20:04: 18.6, h=193km, M _B =4.7(CGS).
21	IP IM	01 02	13 00	51.9	14	27	96.4 10705	Dilat. Volcano Islands re- gion. USGS: 25.51N, 143.11E, H=01:00:32.8, h=33km, M _B = 6.2(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks	
21	eIP	05	07	01.4		84.4	9372	Trace. Southeast of Shikoku, Japan. USGS: 31.79N, 133.45E, H=04:54:38.8, h=33km, M _B =5.1 (CGS).	
21	eIP	05	27	36.4		157.9	17543	Trace. Fiji Islands region. USGS: 18.18S, 178.55W, H=05:08:54.4, h=606km, M _B =4.9 (CGS).	
21	IP	16	51	23.0	1.0	4.2	78.1	8680	Off East coast of Kamchatka. USGS: 52.93N, 159.80E, H=16:39:33.0, h=33km, M _B =5.5 (CGS).
22	I (Sg)	00	58	43.8				Trace. Yugoslavia, Montenegro.	
22	eIP IM	04 05	57 41	34.0	12	9	83.7	9300	East China Sea. USGS: 29.55N, 127.81E, H=04:45:14.7, h=33km, M _B =5.5 (CGS).
22	IP	13	42	35.1	4.5	4.8	89.1	9902	Dilat. Atlantic-Indian rise. USGS: 34.42S, 55.30E, H=13:29:49.4, h=33km, M _B =5.7 (CGS).
23	IP IM	21	14 55	33.5	14	24.8	83.5	9282	Compr. Off East coast of Honshu, Japan. USGS: 39.13N, 143.16E, H=21:02:07.5, h=19km, M _B =5.6 (CGS).
23	IP IM	21 22	21 02	45.8	14	8	83.2	9240	Compr. Off East coast of Honshu, Japan. USGS: 39.14N, 143.10E, H=21:09:21.7, h=23km, M _B =5.4 (CGS).
23	eIP IM	21 22	26 07	49.2	14	20	84.3	9370	Off East coast of Honshu, Japan. USGS: 39.07N, 143.05E, H=21:14:26.7, h=41km, M _B =5.4 (CGS).
25	eIPKP	04	45	05.3			152.7	16966	Loyalty Islands region. USGS: 22.02S, 170.91E, H=04:25:27.7, h=76km, M _B =5.0 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D ^o D km	Remarks	
27	IPKP	11	57	08.9			157.6	17511	Dilat. Fiji Islands region. USGS: 17.97S, 178.63W, H=11:38:21.3, h=555km, M _B =5.3 (CGS).
28	IP IS IM	02 03	52 12	33.0 06.9	9.5	18.8	36.4	4038	Dilat. Red Sea. USGS: 16.66N, 40.28E, H=02:45:36.7, h=33km, M _B =5.9 (CGS).
28	eIP e(S) IM	20	38 42 43	17.3 58.3	6.5	6	26.5	2950	Iceland. USGS: 64.60N, 17.29W, H=20:32:40.8, h=10km, M _B =5.0 (CGS).
29	IPg ISg	02	26	42.1 43.4		2	0.10	11	Dilat. Local.
29	eIP IS IM	16	55 56 59	05.5 41.3	5.5	9.5	8.8	975	Central Greece. BCIS: 38.55N, 22.35E, H=16:52:59.9.
30	IPn ISn	17	36 37	37.5 40.8			5.7	636	Compr. Tyrrhenian Sea. BCIS: 39.99N, 15.44E, H=17:35:10.5, h=288km, M _B =5.6 (ZAG).

Godina: 1977.
Year: 1977.

REGISTRACIJE SEIZMOGRAFA
The record of seismograph
HVAR

(Lat.=43°10'38"N, Long.=16°27'15"E, H=20 m)

Short period vertical seismograph "Vegik" with
characteristics:

period of seismometer

$T_0 = 1.0$ S

max.magnification of
instrument

$V = 40.000$

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
F E B R U A R Y 1977.								
6	eIPb iPn ISb	20	09	43.7 45.0 57.5	0.5	4.5	1.04 115	
7	eIPn IPb	07	04	11.6 22.6			5.13 570	
10	iPn ISg	06	21 22	36.4 05.3	0.5	4.0	1.94 216	(Compr.) Yugoslavia, Croatia. CSEM: 44.92N, 14.82E, H=06:21: 03.3, M=2.7(ZAG).
10	el	08	15	51.0				Loyalty Islands region. USGS: 21.82S, 169.94E, H=07:55:56.7, h=41km, M _B =5.2(CGS).
12	eIP	10	59	31.4				Obscured by microseismes.
13	eIPn	18	39	23.0			1.58 175	
16	iPn ISn ISg	19	34 35	57.8 28.3 37.1	0.6	11.2	2.48 275	Yugoslavia, Croatia. CSEM: 45.98N, 16.18E, H=19:34:12.8, M=4.0(ZAG).
18	el(Pg)	11	00	45.7				Trace. Local.
18	eIPg ISg	12	05	49.0 56.0	0.4	5.1	0.54 60	
18	eIPg	13	50	08.2				Trace. Local.
18	eIPn	19	52	57.7				Trace.
18	eIP	21	04	19.0				South of Honshu. USGS: 33.07N 140.82E, H=20:51:29.8, h=42km M _B =6.0(CGS).
19	el	22	46	16.7				Trace. Aleutian Islands region USGS: 53.57N, 170.03E, H=22:3 04.1, M _B =6.2(CGS).
20	iPg ISg	11	20	10.4 19.0	0.4	17.4	0.66 73	Yugoslavia, Croatia. USGS: 43.87N, 15.79E, H=11:19:58.4, M _B =4.3(CGS), Felt (VI ^o MCS) at Lukar.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
21	ISg	06	59	34.5		4.0		Local.
21	eIPn ISg	09	00	22.4 50.4	0.4	6.0	1.78 198	
21	eIPg eISg	21	38	29.1 34.7		7.0	0.43 48	
23	eI(S)	19	47	21.0				Trace.
23	IPn eISg	20	23 24	00.4 19.5		6.0	7.67 852	Dilat. Greece. CSEM: 36.57N, 21.62E, H=20:21:10.4
25	eIPn ISg	10	48	01.2 23.7		5.0	1.60 178	
25	IPg ISg ISn	13	51	11.0 24.6 28.1		4.0	1.03 114	(Compr.). Yugoslavia, Croatia.
26	IPg ISg	08	17	50.7 59.7			0.63 70	Compr.
26	eIPg eISg	16	58 59	55.8 06.9			0.85 94	Trace.
28	eI(S)	06	15	49.0				Trace.
28	eI(Pg)	10	54	43.4				Trace.
28	eIPn ISn ISg	13	26	32.8 56.1 59.6	0.6	8.3	1.85 206	Probably Yugoslavia. Montene- gro-Bosnia and Herzegovina border region.

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2	eIPg	15	15	38.8				Trace. Local.
2	IPn IPg ISn ISg	16	50 51	22.8 32.6 59.9 12.2			3.02 335	Compr. Albania. CSEM: 42.04N, 20.25E, H= 16:49:32.6

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
3	IPg ISg	16	44	50.0 55.8		2.7	0.45 50	Compr.
4	eIPg ISg	09	46	09.2 14.3		3.5	0.39 43	
4	ISg	11	39	41.8				Trace.
4	ePn	19	23	45.8				Compr. Romania. CSEM: 45.80N, 26.80E, H=19:21:56.4, h=96km, M _B =7.2(CGS).
4	eIPn	19	43	53.3				Trace.
5	eIPn	00	46	49.8				Romania, CSEM: 45.52N, 27.06E.
7	eIPg IPn ISg	04	35	26.0 27.3 38.8	0.5	6.0	0.91 101	Yugoslavia, Croatia, Sinjsko Polje.
7	eIP	09	24	50.8				Trace. Japan. USGS: 43.10N, 145.77E, H=09:12:28.1, h=24km, M _B =5.4(CGS).
7	IPb ISn	09	37	11.9 29.2		4.8	1.08 120	Yugoslavia, Croatia, 15.5 E, 44.0 N.
8	eIP	05	40	06.6				Trace.
8	ePn ISn ISg	19	19 20	05.9 48.3 06.3	0.7	7.0	3.42 380	Dilat. Yugoslavia, Serbia. CSEM: 43.24N, 21.02E, H=19: 18:12.7, h=10km, M _B =4.8(CGS).
9	eIPg ISg	04	56	17.6 31.9			1.08 120	
9	IPn ISn ISg	10	23	05.0 31.7 37.3			2.09 232	Dilat. Yugoslavia, Montenegro, Plevlja region.
9	IP eS	14	38 47	52.2 53.6	1.2	5.2	77.6 8621	Dilat. North Korea. USGS: 41.61N, 130.88E, H=14:27: 53.6, h=528km, M _B =5.9(CGS).
11	eIPn ISn	02	59	01.8 27.5			2.03 225	Yugoslavia, Montenegro, River Tara.

Date	Phase	G h	M m	T s	Per. sec	Amplitude mm	D ^o D km	Remarks
12	eIPn ISn	10	51	17.5 37.2	0.6	14.0	1.49 165	Yugoslavia, Bosnia and Herzegovina, Gacko Polje.
12	eIPn ISn ISg	19	31	29.3 53.6 56.1		6.0	1.91 212	Yugoslavia, Montenegro. CSEM: 43.26 N, 19.20 E, H=19:30:57.0, M=2.4
14	IPn IPb ISb	08	48	04.3 15.2 59.4	0.8	2.5	4.97 552	Compr. Greece-Albania border region. CSEM: 39.59N, 20.55E, H=08:46:57.2, h=44km.
14	eIPn	09	24	54.5				Trace. Yugoslavia, Montenegro-Bosnia and Herzegovina border region.
14	eIPn ISn ISg	10	03 04	45.5 39.7 01.4			4.50 500	
14	eIP IS	14	38	14.9 29.3	0.6	6.0	1.08 120	Yugoslavia, Bosnia and Herzegovina, River Neretva.
14	eIPn ISg	20	04 05	59.9 29.8	0.7	3.0	1.96 218	Yugoslavia, Montenegro. CSEM: 43.09 N, 18.90 E, H=20:04:34.5, M=2.8
15	eI	00	28	08.6				Trace.
15	IPn ISn	02	00 01	46.2 16.3	0.6	10.0	2.41 268	Yugoslavia. CSEM: 42.24N, 19.49E, H=02:00:07.2, h=10km, M=3.5(ZAG).
16	eIPb ISb	18	08	35.5 50.5	0.6	5.2	1.13 125	Adriatic Sea, 42.0 N, 16.9 E.
17	eIPn ISg	01	32	26.8 52.4			1.76 195	Yugoslavia, Montenegro, Golija mountain.
17	eIPg	12	10	05.0				Trace. Local.
18	eIP	21	56	49.5				Philippine Islands. USGS: 16.77N, 122.33E, H=21:43:52.4, h=37km, M _B =6.2(CGS).
19	eIPn I	14	07 08	39.2 03.2	1.0	5.0		Yugoslavia, Bosnia and Herzegovina, Sarajevo region.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
19	eIPn ISg	19	19	07.3 23.2			2.61 290	Albania. CSEM: 41.83N, 19.21E, H=19:18:20.7, M=3.5
20	IPn ISn	02	29 30	38.6 02.1	0.3	3.3	1.73 192	Compr. Yugoslavia, Montenegro, Golija mountain.
20	IPn IPg ISn ISg	07	42	04.8 08.4 27.6 31.1	0.6	31.0	1.67 186	Compr. Yugoslavia, Mratinje. USGS: 43.36N, 18.56E, H=07:41:38.1, h=33km, M _B =4.7(CGS).
20	IPn ISn	08	30 31	38.6 02.1		6.2	1.73 192	Compr. Yugoslavia, Montenegro. Golija mountain.
21	eIPn	17	48	48.7				
21	IPn ISn	19	36	30.0 58.0			2.09	Compr. Central Italy.
21	eI(Pn) I(Sn)	19	36 37	44.0 14.1			(2.19) (243)	Central Italy.
21	IP	21	25	51.4				Compr. Iran. CSEM: 27.66N, 56.36E, H=21:18:59.8, h=57km.
21	eIP	22	49	03.1				Iran. CSEM: 27.74N, 56.41E, H=22:42:13.5, h=71km, M _B =5.8(CGS).
23	eIPn	19	45	10.3	0.5	4.1		Yugoslavia, Montenegro-Bosnia and Herzegovina border region.
23	eP	23	58	12.5				Compr. Iran. CSEM: 27.73N, 56.56E, H=23:51:21.7, h=65km, M _B =5.8(CGS).
24	IPn	02	32	49.4				Compr. Yugoslavia, Montenegro Golija mountain.
24	IPn ISg	02	54	11.6 37.2	1.0	7.8	1.71 190	Compr. Yugoslavia, Montenegro, Golija mountain.
24	eIPn ISg	05	02	10.7 38.5	0.6	2.6	1.84 204	Yugoslavia, Montenegro, Durmitor mountain.
24	IP	08	58	12.7				Compr.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
24	eIPg eISg	11	24	08.9 23.2		6.1	1.08 120	Probably Adriatic Sea.
24	eIPn eI(Sn)	14	57 58	55.5 21.9			(2.07) (230)	
24	eIPn ISn	15	16	22.7 49.7			2.12 235	Yugoslavia, Montenegro, 43.2 N, 19.2 E.
25	eIPn eISn ISg	00	57	28.1 53.3 58.4	0.6	3.4	1.98 220	Yugoslavia. CSEM: 42.93 N, 18.95 E, H=00:57:02.8, M=2.5.
25	eIPn eISn	04	36	09.3 34.7			1.98 220	
25	eIPn eISn	20	41 42	57.8 35.5			2.99 332	Central Italy. CSEM: 43.55N, 12.2E, H=20:41:10.3.
25	eIPn ISn	22	20 21	55.6 33.0			3.06 340	Central Italy.
26	eIP	04	48	46.6				Trace. Aleutian Islands. USGS: 52.30N, 168.26W, H= 04:36:14.7, h=38km M _B =5.7 (CGS).
26	eI	08	39	08.5				Trace. Tonga Islands. USGS: 18.59S, 174.15W, H=08:19: 18.5, h=93km, M _B =5.6(CGS).
27	eI e(S)	03	49 50	31.8 38.1				
27	IPg ISg	13	33	09.7 18.7	0.2	11.0	0.71 78	Adriatic Sea. 42.6 N, 15.9 E
27	eIPn eI(Sg)	21	27	30.6 56.3				
28	IPn ISn ISg	08	17 18	33.6 15.9 28.8	0.4	7.8	3.22 358	Compr. Albania. CSEM: 41.79N, 20.24E, H=08:16:45.5, h=10km.
29	IPn ISb	01	18	08.6 34.0	0.6	13.1	1.85 206	South Italy. CSEM: 41.33N, 16.29E, H=01:17:37.3

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o Dkm	Remarks
30	eIPg ISg	14	35	22.0 37.0	0.4	6.0	1.17 130	Yugoslavia, Bosnia and Her- zegovina, Čapljina region, 43.0 N, 18.0 E.
31	eIPn ISg	05	15 16	45.1 12.3	0.7	3.8	1.85	Yugoslavia, Montenegro, 43.4 N, 19.4 E.
31	eIPn ISg	06	26 27	42.5 09.0			1.71 190	Yugoslavia, Montenegro, Gollja mountain.
31	eI	20	56	11.0				Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
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1	IPn ISg	04	01	33.0 59.4	0.4	4.0	1.78 198	Yugoslavia, Bosnia and Herze- govina, Banja Luka region.
1	eIPg eISg	09	02	11.4 56.1			3.31 368	Albania, CSEM: 41.96N, 20.31E, H=09:01:05.5
1	IP	13	43	21.4				Dilat. Iran. CSEM: 27.64N, 56.39E, h=58km.
1	eIPn ISg	19	24	02.2 24.5	0.7	5.2	1.58 175	Yugoslavia, Montenegro, Golija mountain.
2	e	07	34	52.8				Dilat. Samoa Islands region. USGS: 16.70S 172.10W, H=07: 15:22.7, h=33km, M _B =6.8 (CGS).
2	eIPn eISg	17	48 49	55.2 21.8			1.77 197	
2	ei	21	04	42.9				Trace.
3	IPn ISn IS	03	19 20	15.2 09.8 06.7	1.3	30.0	4.01 445	Dilat. Italy. CSEM: 46.25N, 13.19E, H=03:18:15.9, M=4.2
3	eIPn eISn	05	52	14.3 48.4			2.77 308	Albania, Adriatic Sea.
3	eIPn eISg	06	12 13	52.0 17.1	0.4	3.0	1.73 192	Yugoslavia, Montenegro, Durmi- tor mountain.
3	eIS	06	22	14.6				Trace.
3	eIPn eISg	06	12 13	52.0 17.1			1.75 194	Yugoslavia, Montenegro, Dur- mitor mountain
3	eIS	06	22	14.6				Trace.
3	eIPn ISg	09	51	16.4 47.1	0.5	4.1	2.00 222	Yugoslavia, Montenegro.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
3	eIPn	10	54	39.8				Trace. Yugoslavia, Montenegro.
3	eIS	17	21	40.7				Trace.
3	eIPg IPn ISg ISn	22	20	46.6 48.1 00.3 03.2			1.03 114	Yugoslavia, Croatia, 44.05N, 16.1E.
3	eIPn ISg	25	58 59	43.4 09.7			1.80 200	Yugoslavia, Montenegro, Durmi- tor mountain.
4	eIPn ISg	08	59	11.7 38.2			1.78 198	
4	eP	18	02	05.1				Compr. Central mid-Atlantic ridge. USGS: 07.30N, 34.86E, H=17:52:19.7, h=33km, M _B =5.5 (CGS).
5	eIPn ISg	04	01	16.7 43.7			1.83 203	Yugoslavia, Montenegro, Durmi- tor mountain.
6	eIP	13	42	35.1				Iran. CSEM: 32.02N, 50.66E, H=13:36:40.9, h=53km, M _S =5.9 (CGS).
6	eIPn	19	06	12.3				Trace. Yugoslavia, Montenegro.
6	eIPn eISg	22	26 27	48.0 14.2	0.7	3.6	1.76 196	Yugoslavia. CSEM: 42.8N, 18.3E, H=22:26:15.6
7	ei	00	59	50.3				Trace.
7	eIPn ISn	02	13 14	48.0 12.3			4.7 1.87 208	Yugoslavia, CSEM: 43.08N, 18.52 E, H=02:13:13.9
12	eIPn ISn	02	24	18.8 51.4			2.52 280	Central Italy. CSEM: 42.44N, 13.21E, H=02:23:33.1
13	eP	11	41	23.8				Compr. Hindu Kush region. USGS: 36.47N, 70.91E, H=11:33:51.8, h=196km, M _B =5.3 (CGS).
13	eIPn	13	57	02.2				Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
13	IPn eIRIP IS	14	03	23.5 29.5 48.5	1.0	32.0	1.76 195	Dilat, Yugoslavia, Bosnia and Herzegovina. CSEM: 43.09N, 18.83E, H=14:02:52.7, Felt (V ^o MCS) at Gacko, I _o =VI ^o MCS.
13	eIPn eISn	16	47	15.2 36.7	0.7	6.0	1.60 178	Yugoslavia, Bosnia and Herzegovina.
14	eP	04	24	27.5				Dilat, Fiji Islands. USGS: 17.66S, 178.65W, H=04:05:31.2, h=535 km, M _B =5.2(CGS).
14	eIPn ISg	13	49	21.9 47.5			1.71 190	
15	eIPg ISg	06	42	09.9 16.2	0.4	3.5	0.49 54	
15	eIPn	22	31	32.8				Trace.
16	eIPn	20	35	49.8				Trace.
18	IP	00	20	32.4				Compr. Near coast of central Chile. USGS: 32.84S, 71.81W, H=00:12:41.6, h=33km.
18	eIPn ISg	01	41 42	39.9 05.4			1.71 190	Yugoslavia, Montenegro, Njegoš mountain.
18	eIPn ISg	07	15 16	42.6 11.7	0.7	3.0	1.89 210	Yugoslavia, Montenegro, Durmitor mountain.
19	IPg eIRIP IS	02	23 24	58.7 06.9 13.7	0.3	24.0	1.06 118	Compr. Yugoslavia, Bosnia and Herzegovina. CSEM: 43.08N, 17.79E, H=02:23:41.8, Felt (V ^o MCS) at Čapljina.
19	eIPn	04	14	12.2				
19	e(S)	04	16	00.5				
20	IPn ISg	00	32	16.5 42.5	0.5	5.5	1.76 195	Dilat. Yugoslavia, Bosnia and Herzegovina. CSEM: 44.88N, 17.34E, H=00:31:53.5, Felt (V ^o MCS) at Banja Luka, Prnjavor, I _o =VI ^o MCS.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
20	IPn ISn ISg	00	47	26.0 49.6 52.5			1.76 196	Dilat. Yugoslavia, Bosnia and Herzegovina. CSEM: 44.81N, 17.18E, H=00:46:45.2, Felt (IV-V ^o MCS) at Horvaćani.
20	IP	04	14	19.0				Compr.
20	IPg ISg	12	41	38.6 42.6			0.31 34	Compr.
20	eI	20	19	25.0				Japan. USGS: 30.59N, 137.48E, H=20:04:29.4, h=493km, M _B =5.5(CGS).
21	eI	00	02	27.1				Solomon Islands. USGS: 09.89S, 160.35E, H=23:42:50.5, h=19km, M _B =6.3(CGS).
21	eI	00	43	28.4				
22	eIPn ISg	07	50 51	21.1 04.6			2.65 294	Albania, Prokletije mountain.
22	eIPn ISn	23	58 59	26.5 24.7	0.6	12.3	5.18 576	Ionian Sea. CSEM: 38.94N, 21.02E, H=23:57:08.6, h=65km.
23	eIS	12	53	12.4			1.67 186	Yugoslavia, Bosnia and Herzegovina, Banja Luka region. M=2.5(BLU).
23	eIPn ISg	13	48	32.6 58.3			1.76 196	Yugoslavia, Bosnia and Herzegovina, 44.9N, 17.4E.
24	eIPg ISg	08	47	32.2 44.1			0.90 100	
24	eI(Pg) eISg	16	17	(02.6) 16.1			(1.04) (115)	
26	IPb ISb	01	14	33.6 52.5	0.4	3.1	1.42	(Dilat.) Yugoslavia, Bosnia and Herzegovina, Bileća mountain, M=2.8.
26	eI(Pn)	06	27	28.5				Trace.
26	eIPg	20	28	09.2				Trace. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
27	eIPg ISg	12	59	16.3 22.3			0.46 51	
28	eIPn	00	12	01.1				Trace.
28	eIPn eISg	01	29	27.3 55.2			1.85 205	Yugoslavia, Montenegro - Bosnia and Herzegovina border region.
28	eIPn eISg	03	42	30.8 57.1	0.6	13.5	1.75 194	Yugoslavia, Banja Luka regi- on. CSEM: 44.85N, 17.34E, H=03:41:58.6, h=10km, M _B = 4.0(CGS), I _o =V ^o MCS.
28	eIPn ISb ISg	06	22	09.1 34.7 36.7			1.80 200	Yugoslavia, Bosnia and Herze- govina, Banja Luka region. CSEM: 44.87N, 16.96E, H=06: 21:37.0, h=10km, M=2.5(ZAG).
29	eIS	15	42	23.4				Adriatic Sea, 41.7N, 18.5E.
29	eIPn eISn	17	08 09	58.1 21.4			1.82 202	Yugoslavia, Montenegro, Dur- mitor mountain.
29	eIPb eISb	18	40 41	55.4 33.9			2.90 322	Albania. CSEM: 41.55N, 19.53 E, H=18:40:03.2.

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3	eIS	15	07	56.0				
3	eIPn	22	24	48.2				Trace. Yugoslavia, Montenegro - Bosnia and Herzegovina border region.
5	IPg ISg	08	35	35.0 44.6	0.7	13.0	0.74 82	Yugoslavia, Livanjsko Polje, 43.75N, 17.0E.
7	eIPn	01	05	26.8				
7	ISb	07	37	55.1			2.88 320	Albania. CSEM: 41.58N, 19.56 E, H=07:36:25.6, M=3.3

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
8	IPn IPg ISg	10	03	15.4 19.1 43.0	0.7	31.0	1.85 206	Compr. Yugoslavia, Mrati- nje. CSEM: 43.23N, 19.03 E, H=10:02:43.5
9	eIPb ISb	06	58	16.0 31.2			1.12 124	Yugoslavia, Croatia- Bosnia and Herzegovina border region.
9	eIPn eISg	09	35 36	52.7 17.8			1.73 192	Yugoslavia, Montenegro- Bosnia and Herzegovina border region.
9	eIPg eISg	12	54	47.8 54.2			0.49 54	
10	eIPn	02	46	50.1				
11	IPg ISg	08	01	02.3 07.7	0.4	32.2	0.41 46	Compr.
11	eIPn ISn	08	37	07.6 48.0	0.8	6.0	3.27 363	Albania, Korab mountain.
12	IPn ISg	06	54	22.0 47.6	0.5	5.4	1.73 192	Compr. Yugoslavia, Monte- negro, Golija mountain.
12	eIP	12	30	43.3				Burma. USGS: 21.75N, 92.99 E, H=12:20:00.7, h=40km, M _B =5.4(CGS).
12	eIPn	15	27	08.7	0.4	4.5		
12	eIP	21	49	30.4				Kuril Islands. USGS: 50.16 N, 154.98E, H=21:37:33.4, h=126km, M _B =5.3(CGS).
13	IPn	18	19	24.9	0.8	13.0		Greece. CSEM: 39.12N, 23.62E, H=18:17:48.0, h=14km.
14	IPg IRIS	03	39	26.4 47.4			0.26 29	Yugoslavia, Adriatic Sea. CSEM: 43.13N, 16.03E, H= 03:39:23.7, h=35km, M=4.2 (ZAG), I _o =VI ^o MCS, slight damage on Vis.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
14	eIPg	03	53	08.8				Local. Obscured by microseismes.
14	ISg	04	34	59.0				Local. Obscured by microseismes.
15	eIPn ISb	15	44	01.8 37.2			2.48 275	Yugoslavia, Croatia, 45.2N, 14.1E.
16	eIPg ISg	03	29	25.5 30.2		8.0	0.36 40	
16	IPKP	11	34	05.2				Compr. New Hebrides Islands. USGS: 17.42S, 167.92E, H=11:14:30.7, h=30km, M _B =5.1(CGS).
16	IPg	11	40	01.7				Trace. Local.
17	eIPn el(Sg)	05	40 41	34.6 01.3			(1.78) (198)	
17	eIPg ISg	18	19	39.7 49.5			0.77 86	
18	eIPn ISg	03	42	12.7 39.4			1.82 202	Yugoslavia, Montenegro, Durmitor mountain.
18	eIPg	08	08 09	54.7 02.2	0.3	3.0	0.58 64	
18	eIPg elSg	17	14	26.8 30.9			0.32 35	
19	eIPn elSb ISg	00	10 11	52.1 17.2 18.7			1.80 200	Yugoslavia, Montenegro, Golija mountain.
19	eIPn elSn	07	36	37.9 55.1	0.4	7.0	1.35 150	Yugoslavia, Herzegovina, Ljubinje.
19	eIPn	11	41	22.7	0.4	4.5	1.82 202	Yugoslavia, Montenegro, Golija mountain.
19	eIPg elSg	12	11	19.6 23.8			0.32 36	

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
20	eIPn el(Sg)	10	50 51	58.1 55.7			(3.44) (382)	Central Italy.
21	eIPn ISg	15	02	13.7 39.0			1.73 192	Yugoslavia, Montenegro, Golija mountain.
22	IPg ISg	12	40	41.8 47.4	0.3	3.0	0.43 48	Dilat.
23	IPn	15	10	09.2				Compr.
23	IP	22	08	20.4				Compr. Northern Sumatra. USGS: 0.66N, 98.68E, H=21:55:54.1, h=40km, M _B =5.5(CGS).
24	IPn elS	04	25 26	47.7 13.8				
24	eIPg	08	46	29.4				Trace. Local.
24	eIPg elSg	12	19	31.2 47.7			1.26 140	
25	eIPn elSn	06	33	13.9 39.5			2.03 226	Yugoslavia, Montenegro, Nikšić region.
25	IPn ISn	12	53 54	52.2 47.0			4.68 520	Compr. Albania. CSEM: 39.3N, 20.5E, H=12:52: 39.0, M=4.2.
25	IP	15	07	42.8				Northern Sumatra. USGS: 04.24N, 95.77E, H=14:55: 45.0, h=56km.
26	eIP	01	39	59.9				Turkey-Iran border region. USGS: 38.93N, 44.38E, H= 01:35:13.8, M _B =5.2(CGS).
26	eIPn	11	43	09.9				Trace. Yugoslavia, Monte- negro - Serbia border region.
27	IPn ISn	00	13 14	38.2 00.5	0.5	10.6	1.73 192	Dilat. Yugoslavia, Adria- tic Sea. 42.05N, 17.8E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
27	eIPn eISg	00	33 34	34.2 01.5			1.83 203	Yugoslavia, Montenegro, River Tara.
27	eIPg eIPn ISg	15	11	16.2 19.8 24.7	0.4	8.5	0.63 70	
29	IPg ISg	01	29	52.3 59.3	0.3	5.4	0.56 62	Compr.
29	eIP	03	04	53.7				USSR. USGS: 49.94N, 78.85E, H=02:56:57.8, h=0km, M _B =5.6(CGS). Underground nuclear explosion.
29	eIPn eISg	05	22	01.7 35.4	0.6	3.5	2.07 230	Yugoslavia, Montenegro, river Čohotina, M=3.4
30	IPn eISg	01	36 37	40.7 07.0	0.7	4.0	1.78 198	Yugoslavia, Montenegro, Durmitor mountain.
30	eP	15	28	32.6				Compr. Aleutian Islands. USGS: 52.43N, 169.7W, H= 15:16:01.6, M _B =5.6(CGS).
30	eIS	23	27	46.0				Trace. Yugoslavia, Monte- negro.

J U N E 1977.

2	eIS	05	27	21.7				Trace.
2	IPn ISg	07	56 57	57.5 23.5			1.75 194	Compr. Yugoslavia, Mon- tenegro, Durmitor moun- tain.
2	I(Sg)	09	46	15.6				Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
3	IP	02	38	33.4				Compr. Hindu Kush region. USGS: 36.44N, 70.76E, H=01:31:04.7, h=210km, M _B =5.5(CGS).
4	eIPn eISg	01	49 50	52.7 32.9	0.6	7.4	3.03 337	Probably Central Italy.
4	eIPn eI(Sn)	14	58 59	38.8 03.4			1.85 206	
5	IP	04	50	46.6				Compr. Western Iran. USGS: 32.64N, 48.09E, H=04:45:07.6, h=40km, M _B =5.5(CGS).
5	eIP	08	31	10.4				Iran. CSEM: 32.49N, 48.22E, H=08:25:35.3.
5	eIPn	13	28	30.4				Albania. M. Jezerce moun- tain. 42.4N, 19.8E.
5	IPn eISn	14	00 01	46.7 53.7			5.49 610	Compr. Sicily. USGS: 37.88N, 14.46E, H=13:59: 21.7, h=8km, M _B =4.9(CGS).
5	eIPn eISb	15	16 17	12.8 01.5			3.83 426	Italy. CSEM: 46.32N, 13.25E, H=15:15:11.1.
5	eIPn eISn	23	20 21	49.8 35.1	0.9	3.0	3.60 400	Southern Italy. USGS: 39.68N, 18.87E, H=23:19: 49.0
6	eIPn	04	34	40.0				Greece. CSEM: 37.74N, 22.21E, H=04:33:07.4.
6	eIS	08	46	28.4				Trace.
6	eIPg eISg	08	58	27.5 40.9			0.98 109	Yugoslavia, Croatia, Kor- natl Islands.
6	eIPg ISg	12	12	33.7 38.7			0.38 42	
6	eIPn eISn eISg	17	59	10.0 43.8 52.8	0.9	24.8	0.38 286	Southern Italy. CSEM: 41.09N, 15.37E, H=17: 58:35.1.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
6	eIPb eISn ISg	18	00	30.0 58.5 07.6	0.8	32	2.55 283	Southern Italy. 41.1N, 15.4E.
6	eIPn eISn eISb	18	49	38.9 04.1 06.5			1.94 216	Yugoslavia, Montenegro, Durmitor mountain.
6	eIPn eISg	18	53	53.1 29.1	0.8	9.1	2.29 254	Central Italy, 41.09N, 15.37E.
7	eIS	02	04	31.8				Trace. Italy.
7	IPg ISg	02	16	56.0 05.2		4.5	0.70 78	Dilat. Yugoslavia, Adria- tic Sea, 42.5N, 16.0E.
7	eI(S)	02	47	15.2				Trace.
8	IPn eISg	04	29	36.2 59.3			1.55 172	Compr, Yugoslavia, Bosnia and Herzegovina, 44.4N, 17.7E.
10	eI	02	47	55.4				Southern Sumatra. USGS: 03.10S, 101.49E, H=02: 35:14.0, h=33km, M _B =5.4 (CGS).
10	eIPn ISg	16	03	02.6 23.5			1.50 167	Yugoslavia, Croatia, Ver- lebit mountain.
10	eIPn eISn	23	04	45.2 29.4			9.04 1004	Mediterranean Sea. CSEM: 35.01N, 22.73E, H=23:02: 31.6, M=3.5
13	eI	10	40	13.7				
14	IPg ISg	08	06	39.3 50.1			0.83 92	Yugoslavia, Bosnia and Herzegovina, Ljubuški region.
14	eI(Pn)	10	40	07.4				Trace. Yugoslavia, Mon- tenegro, Durmitor mountain.
14	eI(Pn)	17	41	19.6				Trace. Albania, 42.0N, 20.3 E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
14	IPn ISg	19	59	17.2 43.9	0.4	7.1	1.75 194	Compr. Yugoslavia, Montenegro, Gollja moun- tain.
15	eI(Pn)	02	21	22.2				Trace. Yugoslavia, Mon- tenegro.
15	eIPg ISg	04	49	13.2 23.8			0.81 90	
15	eIPg eI(Sg)	12	23	32.2 38.5			(0.49) (54)	
15	IPg ISg	13	11	35.2 45.0			0.77 86	Compr.
17	eI	02	48	08.7				Trace. Fiji Islands regi- on. USGS: 19.88S, 179.10 W, H=02:29:09.8, h=690km, M _B =5.7(CGS).
17	eI(S)	15	44	10.2				Greece. CSEM: 38.44N, 20.35E, H=15:41:45.4, h=59km, M=4.5.
17	eIPn eIS	19	44	06.5 34.2				
18	eIPn ISg	11	55	16.4 19.9				Northern Italy. USGS: 46.17N, 13.06E, H=11:54: 15.8, h=33km, M _B =4.7(CGS).
18	eIPg ISg	14	23	33.3 45.3			0.92 102	
18	eP	14	36	15.5				Dilat. Turkey. CSEM: 41.94N, 43.99E, H=14: 32:31.6, M=4.7.
19	eP	11	59	24.3				Dilat. Kuril Islands. USGS: 47.15N, 151.09E, H=11:47:23.4, h=149km, M=5.6
21	eIPn	19	16	24.4				Mediterranean Sea. CSEM: 35.54N, 29.75E, H=19:13: 27.4, M=5.2.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
22	eIPb ISn	07	40 41	47.7 05.6			1.15 128	Yugoslavia, Croatia, Benkovac.
22	IPg ISg	08	02	42.1 48.6			0.50 55	Compr.
22	eIPg ISn	10	25	39.9 56.7			1.03 114	Yugoslavia, Croatia, River Zrmanja. 44.15N, 15.9E.
22	eP el	12	28	21.3 57.3	1.0	28.5		Compr. Tonga Islands region. USGS: 22.88S, 175.90W, H=12:08:33.4, h=65km, M _B =6.8(CGS).
24	eIPn eIS	07	38	28.0 54.1				Trace. Yugoslavia, Bosnia and Herzegovina, Banja Luka region.
25	el	05	01	26.6				Trace. Albania.
27	eIPn	12	34	34.9	0.8	6.5		
27	el(Pn)	14	55	29.7				Trace. Yugoslavia, Monte- negro.
27	eIPn eIS	16	34 35	53.5 17.4				Yugoslavia, Montenegro.
27	IPg ISg	17	53	28.0 37.2	0.2	5.0	0.70 78	Dilat. Yugoslavia, Croa- tia, Sinjsko Polje, 43.5N, 17.3E.
27	eIPb ISn	23	28 29	57.0 15.6		3.5	1.28 142	Yugoslavia, Croatia, Udbina, 44.4N, 16.0E.
28	e(P)	07	15	02.0				Dilat.
28	el	21	05	30.2				Trace.
30	el	16	07	37.0				Northern Italy.
30	el	23	04	51.2				Trace. Adriatic Sea. 43.5N, 13.8E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
J U L Y 1977								
1	eIPg	13	54	57.6				Trace. Local.
3	IPn ISn	11	45 46	56.9 45.4	0.3	7.5	4.01 446	Dilat. Northern Italy. CSEM: 46.22N, 13.09E, H=11:44:55.6, h=10km, M _{AW} =3.7(TRI).
4	eIPb eISb	08	54	24.6 42.5			1.37 152	Yugoslavia, Bosnia and Herzegovina, Travnik re- gion, 44.4N, 17.7E, M=2.4
4	eIPn eISg	20	24 25	58.4 23.5			1.71 190	Yugoslavia, Montenegro, Golija mountain.
5	IPg ISg	11	59	23.0 29.5			0.50 55	Compr.
5	eIPn	23	39	19.9				
6	IPn el	04	06	11.4 35.5			1.35 150	Dilat. Yugoslavia, Bosnia and Herzegovina, Popovo Polje, 42.75N, 18.1E.
6	eIPn eIS	05	07	23.4 47.5				
6	el	11	47	25.8				Fiji Islands region. USGS: 21.07S, 178.57W, H=11:28:31.5, h=594km, M _B =5.8(CGS).
8	eIS	01	16	30.5				Trace.
9	eIPn eISn	10	26 28	39.0 16.4			8.73 970	Crete. CSEM: 32.25N, 23.39E, H=10:24:27.4, M=5.0.
9	eIPn el(S)	19	00 01	33.0 22.9				

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
10	IP	02	56	57.1				Compr. New Hebrides Islands. USGS: 19.13S, 168.41E, H=02:37:14.6, h=12km, M _B =5.5(CGS).
10	eIPn el(Sg)	04	23	13.4 37.4			(1.67) (186)	
10	eIPKP	05	29	46.1				Trace. Fiji Islands. USGS: 21.917S, 179.251W, H=05:11:40.8, h=607km, M=5.4.
10	eIPn elSg	21	33	20.3 47.1			1.83 203	Yugoslavia, Montenegro, Durmitor mountain.
12	ISg	17	17	06.1				Trace. Local.
12	eIPn ISg	18	01 02	46.7 13.2			1.80 200	Yugoslavia, Montenegro, Durmitor mountain.
12	eIPn ISg	18	02 03	55.2 23.0			1.96 218	Yugoslavia, Montenegro, Pljevlja region.
14	IP	05	55	59.2				Compr. Uzbek, USSR. USGS: 40.32N, 63.68E, H=05:49:08.7, h=33km, M _B =5.5(CGS).
15	eIPb elSb	01	33	39.3 58.8			1.44 160	Yugoslavia, Bosnia and Herzegovina, 44.5N, 16.9E.
16	eIPn ISg	13	14 15	26.1 23.9	1.0	24.2	3.44 382	Yugoslavia, Slovenia, CSEM: 46.28N, 14.34E, H=13:13:32.1, I ₀ =V ² MCS.
18	eIPn I(Sg)	10	10 11	06.0 01.1			(3.26) (362)	Albania, CSEM: 41.73N, 10.17E, H=10:09:16.7, h=10km, M _B =4.8(CGS).
19	eIPn elSn	13	55 56	31.2 05.1	0.8	3.5	2.66 295	Yugoslavia, Croatia. 45.1N, 14.0E.
21	eIP	12	13	17.3				Marquarie Islands. USGS: 53.86S, 158.60E, H=11:53:22.5, M _B =6.4(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
21	eIP	13	58	49.5				Philippine Islands. USGS: 16.88N, 122.36E, H=13:45:54.0, h=33km, M=6.1
21	eIS	22	49	27.4				Trace.
23	eIPn el	22	35 36	54.0 14.0	0.5	10.0		
24	eIPKP	06	42	46.3				Tonga Islands. USGS: 15.34S, 173.15W, H=06:22:51.3, M _B =6.0(CGS).
24	el(Pn) elS	09	53 54	38.8 04.6				
24	IPn ISb ISg	09	56	06.3 43.3 48.6	0.7	32.0	2.56 284	Dilat. Southern Italy. CSEM: 41.02N, 14.87E, H=09:55:32.2, h=35km.
25	eIS	02	21	36.9				Trace.
25	el	22	31	11.8				Trace. Crete. USGS: 35.10N, 23.78E, H=22:28:54.9, h=46km, M _B =4.3(CGS).
27	eIPn elS	19	37	13.8 35.9				
29	eIP	01	10	32.5				Trace.
29	eIP el	11	34 37	52.1 10.2				Solomon Islands. USGS: 08.03S, 155.54E, H=11:15:43.3, h=33km, M _B =6.4(CGS).
29	eIPb ISb	18	21	30.2 46.0	0.5	29.0	1.12 124	Yugoslavia, Croatia, Ston region, 42.8N, 17.75E.
29	IPn ISg	21	55	22.6 40.5	0.4	34.0	1.84 204	Compr. Yugoslavia, Bosnia and Herzegovina. USGS: 44.92N, 17.48E, H=21:54:47.8, h=10km, Felt (III ^o MCS) at Banja Luka.

Date	Phase	G h	M m	T s	Per. Amplitude		D ^o D km	Remarks
					sec.	mm		
AUGUST 1977								
1	IPg ISg	22	46 47	52.8 03.5	0.4	9.0	0.82 91	Compr. Yugoslavia, Croatia, Vrgorac-Ploče.
3	IPg ISg	11	20	22.0 33.1	0.4	29.0	0.85 94	Compr. Yugoslavia, Croatia. CSEM: 43.14N 17.62E, H=11:20:10.3, M=3.4(ZAG), Felt at Vrgorac, Ploče.
3	eIPb ISg	12	50	07.4 24.9	0.6	13.5	1.15 128	Yugoslavia, Croatia, Adriatic Sea, 42.8N, 17.7E.
3	eIPg ISg	14	31 32	53.3 03.6	0.4	8.0	0.77 86	Yugoslavia, Croatia- Bosnia and Herzegovina border region.
3	eISg	19	14	47.1				Yugoslavia, Croatia - Bosnia and Herzegovina border region.
3	eIPg eISg	21	34	33.8 45.3	0.4	5.0	0.88 98	Yugoslavia, Croatia - Bosnia and Herzegovina border region.
3	eIPg ISg	23	15	29.9 40.9			0.84 93	Yugoslavia, Croatia - Bosnia and Herzegovina border region.
5	eI(Pn)	23	18	43.0				Trace. Yugoslavia, Bosnia and Herzegovina - Montenegro border region.
6	eIPn ISn	11	54	10.3 44.8	0.9	10.0	2.79 310	Yugoslavia, Serbia, Novi Pazar region.
6	eIPn eISn	19	59	25.5 47.0			1.80	Yugoslavia, Montenegro, Durmitor mountain.
8	eIS	05	54	26.8			200	

Date	Phase	G h	M m	T s	Per. Amplitude		D ^o D km	Remarks
					sec.	mm		
8	eP	07	12	56.7				Near West coast of Co- lumbia. USGS: 06.93N, 77.78W, H=07:00:06.3, M _B =5.2(CGS).
8	eI(Sn)	10	38	50.8				Trace.
10	eIP	09	48	06.8				Kodiak Islands region. USGS: 56.64N, 152.73W, H=09:35:58.7, M _B =5.0 (CGS).
11	ePn	02	02	51.4				Dilat. Yugoslavia, Ser- bia, Štíp region.
11	eIS	02	47	41.9				Trace. Yugoslavia, Monte- negro, Golija mountain.
11	eIS	03	23	18.3				Trace. Yugoslavia, Monte- negro, Golija mountain.
11	eIPn	03	26	12.2				Trace. Yugoslavia, Monte- negro, Golija mountain.
11	eIPn eISg	04	23	10.5 33.9			1.82 202	Yugoslavia, Montenegro, Golija mountain.
11	eIS	05	46	16.1				Trace.
11	eI	09	40	42.7				Trace. Yugoslavia, Serbia, Štíp region.
11	IPn ISn	13	57 58	41.1 05.6	0.6	4.5	1.75 194	Compr. Yugoslavia, Monte- negro, Golija mountain.
12	eIPg ISg	09	26	18.7 29.9			0.86 95	Probably Yugoslavia, Adriatic Sea (42.75N, 17.75E).
12	eIPg ISg	09	38	39.8 45.5			0.43 48	
13	eISg	07	42	56.9				Trace. Local.
14	eP	04	34	18.5				Dilat. Windward Islands. USGS: 10.97N, 62.37W, H=04:22:49.7, h=112km, M=4.9.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
14	eIPb ISb	11	09	42.9 58.3			1.06 118	Probably Yugoslavia, Croatia, Metković region.
14	eIPn	15	29	46.8				Trace. Probably Yugosla- via, Croatia, Metković region.
15	eIPn el	07	43	29.9 59.2				Trace.
15	IPn	21	11	37.4				Dilat. Southern Italy. BCIS: 38.76N, 17.01E, H=21:10:34.8, h=61km, M=4.5(ZAG).
16	eIS	01	57	08.7				Trace.
16	eIPn	09	02	38.0				Italy. 40.9N, 17.6E.
16	eIS	11	58	45.0				Trace.
17	eIPn ISg	22	33 34	50.4 54.5			3.73 414	Yugoslavia, Macedonia. CSEM: 41.42N, 20.90E, H=22:32:53.4, I = V ^o MCS, Felt at Klčevo, Kruševo.
18	eIPg ISg	07	58	09.6 16.3			0.51 57	
18	IPn ISn	09	29 30	54.5 48.3	0.6	11.5	8.69 966	Dilat. Crete. CSEM: 35.17N, 23.40E, H=09: 27:42.2, h=46km, M _B =5.2 (CGS).
18	ei	10	09	51.4				Trace. Crete. CSEM: 34.98N, 23.42E, H=10:04: 42.9, M=3.9
19	ePn elSn	04	17 18	59.6 36.1			2.99 332	Compr. Central Italy. CSEM: 42.71N, 12.37E, H=04:17:13.3
19	eIPb elSb	05	37	24.7 40.6	0.6	2.6	1.15 128	
19	el(P)	0.6	07	38.1				

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
19	ei (Pg)	13	40	24.7				Local.
25	eIPn el (Sn)	07	30	06.1 41.2			(2.79) (310)	
25	eIPn	18	04	33.9			2.85 317	Central Italy. CSEM: 42.60N, 12.61E, H=18: 03:46.8
25	eIPn IPg ISn	19	34	15.3 24.2 50.2			2.77 308	Central Italy. CSEM: 42.63N, 12.64E, H=19: 33:30.2, M=3.8(ZAG).
25	eIPn	20	43	52.6				Central Italy. CSEM: 42.64N, 12.58E, H=20:43: 09.7
26	e	20	08	37.2				Southwestern Atlantic Ocean. USGS: 59.43S, 20.51W, H=19:50:01.4, M _B =6.3(CGS).
27	e	07	31	24.6				Timor Sea. USGS: 08.06S, 125.30E, H=07:12:22.5, h=25km, M _B =6.4(CGS).
27	IPn ISb	17	38 39	30.1 10.7			2.79 310	Compr. Central Italy. USGS: 42.83N, 12.70E, H=17:37:42.1, h=10km.
28	eIPn	09	47	13.2			7.74 860	Near Sardinia. CSEM: 38.13N, 08.09E, H=09: 45:16.1, M _B =5.1(CGS).
29	eP	14	36	26.5				Dilat. Philippine Islands region. USGS: 17.44N, 119.87E, H=14:23:40.5, h=12km, M _B =6.0(CGS).
29	IPg ISg ISb	20	16	21.1 32.1 33.0	0.4	4.5	0.81 90	Dilat. Yugoslavia, Croa- tia, Pelješac Island.
29	IP	21	12	34.2				Compr. Andreanof Islands. USGS: 51.56N, 173.97W, H=20:59:59.2, h=25km, M _B =5.4(CGS).

30

Date	Phase	G h	M m	T s	Per. Amplitude sec. mm	D ^o D km	Remarks
30	IPg ISg	13	30	07.3 17.3		0.77 85	Compr.
30	eIPn	14	46	52.5			Peloponnessus. CSEM: 36.55N, 21.63E, H=14: 45:06.0, h=39km.
30	e(P)	15	25	01.8			Compr. Aleutian Islands. USGS: 51.38N, 173.78W, H=15:12:27.6, h=33km, M _B =5.4
30	eIP	20	53	43.4			Southern Greece. USGS: 36.38N, 21.56E, H=20:51: 50.2, h=33km, M _B =4.6(CGS).
30	eIP	21	03	51.3			Southern Greece. USGS: 36.42N, 21.29E, H=21: 01:58.4, h=33km, M _B =4.6 (CGS).
30	eI(P)	22	14	38.9			
30	eIPn ISg	22	31 32	26.6 02.0		2.28 253	Yugoslavia, Montenegro, River Morača.
31	eP	00	54	48.5			Northern Columbia. USGS: 07.33N, 76.30W, H=00: 42:05.4, h=33km, M _B 5.7 (CGS).
31	eI	08	23	42.5			Trace. Greece. CSEM: 37.65N, 21.16E, H=08: 22:08.4, M _B =4.7(CGS).

Date	Phase	G h	M m	T s	Per. Amplitude sec. mm	D ^o D km	Remarks
S E P T E M B E R 1977							
1	eIP	03	06	52.7			Trace. Novaya Zemlya. CSEM: 73.49N, 54.59E, H=02:59:59.4, h=0km, M _B =5.9, Nuclear explo- sion.
1	eIPg ISg	20	47	16.5 31.8	0.3 7.9	1.13 125	Yugoslavia, Neretva valley, M=2.8(SAR).
2	eP	05	54	13.5			Dilat. Ryukyu Islands. USGS: 26.41N, 126.41E, H=05:41:45.6, h=97km, M _B =5.6(CGS).
2	eP	10	55	03.8			Dilat. Sumba Islands. USGS: 11.04S, 119.15E, H=10:36:28.3, M _B =6.0 (CGS).
2	IPn	17	13	50.7			Compr. Yugoslavia, Bosnia and Herzegovina, 44.3N, 18.2E.
3	eIS	07	36	22.3			Trace.
3	IPn	23	23	16.0			Dilat.
4	eI	09	08	01.5			Trace. New Hebrides Is- lands. USGS: 13.68S, 166.71E, H=08:48:39.2, M _B =6.0(CGS).
4	eIP	15	52	26.3			Aleutian Islands. USGS: 51.21N, 178.38E, H=15: 40:57.3, M _B =5.6(CGS):
4	eP	17	23	02.7			Compr. Aleutian Islands USGS: 51.10N, 178.27E, H=17:10:30.6, M _B =5.5 (CGS).
4	IPn ISn	17	26 27	44.4 02.7		1.37 152	Compr, Yugoslavia, Adri- atic Sea. 42.58E, 14.75E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
4	eP /	17	37	18.2				Compr. Aleutian Islands region. USGS: 51.14N, 177.95E, H=17:24:42.8, h=8km, M _B =5.8(CGS).
4	eIP	18	38	20.7				Aleutian Islands. USGS: 51.20N, 177.79E, H=18: 25:49.8, h=41km, M _B = 5.3(CGS).
4	eIPg ISg	23	22	41.2 52.7			0.88 98	
4	IP	23	33	15.7				Compr. Aleutian Islands. USGS: 51.18N, 178.25E, H=23:20:44.9, h=41km, M _B =5.5(CGS).
5	IPg ISg	03	16	26.0 39.0	0.5	6.0	0.99 110	Dilat.
5	eIP	11	02	21.1				Trace.
5	ISg	19	47	17.3				Trace. Local.
7	IPg ISg	03	27	44.9 54.0			0.70 78	Compr. Yugoslavia, Croa- tia. M=3.0(ZAG).
7	eIS	12	05	31.8				Trace.
8	eIPn	09	08	06.7				
9	eIS	09	25	04.0				
9	eIPg ISg	12	17	04.3 11.0			0.51 57	Trace.
9	eISg	16	05	38.6				
10	eIPn	06	34	01.6				Trace.
11	eIPg ISg	04	47	20.6 33.5			0.99 110	Crete. CSEM: 34.81N, 23.03E, H=06:31:42.8, h=25km, M _B =4.6(CGS). Yugoslavia, Adriatic Sea, 42.55N, 15.4E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
11	IPn IPg	23	21 22	39.7 24.7	1.0	22.5	9.07 1008	Compr. Crete. CSEM: 34.89N, 23.02E, H=23: 19:23.5, h=21km, M _B = 5.8(CGS).
12	eIS	02	10	41.8				Trace.
12	eI(Sb)	03	01	56.5				Crete. CSEM: 34.91N, 23.23E, H=02:57:57.5, h=45km, M _B =4.5(CGS).
12	eI	07	08	29.7				Trace.
13	IPn eI(Sb)	07	02 03	54.8 21.7	0.4	6.0		Yugoslavia, Bosnia and Herzegovina. 43.8N, 18.9E.
13	eIP	13	06	27.6				Crete. CSEM: 34.86N, 23.12E, H=13:04:12.3.
14	IPg ISg	00	35	35.6 53.7	0.5	6.4	1.39 154	Dilat.
14	eIPn ISb	08	51 52	30.9 07.2	0.5	18.0	2.56 284	Yugoslavia, Serbia, 43.3N, 20.1E, I _o =VI MCS.
14	eIS	11	41	35.8				Trace. Yugoslavia, Mon- tenegro, River Morača.
14	eIPn ISn	13	39 40	21.6 09.8			3.89 432	Northern Italy. CSEM: 46.3N, 13.25E, H=13:38: 19.1
14	eI(P)	18	52	24.6				Trace. Crete. CSEM: 34.86N, 23.05E, H=18:49: 09.1, M _B =4.5(CGS).
15	eIPn eI	15	55 56	54.6 33.8				Crete. CSEM: 34.89N, 22.91E, H=15:53:41.8, h=37km, M _B =4.5(CGS).
15	IPg ISg	16	23	29.8 34.1			0.33 37	Compr.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
16	eIPg ISg	11	49	16.1 23.2			0.54 60	
16	IPn ISg	23	49 50	09.4 16.6			3.96 440	Dilat. Northern Italy. CSEM: 46.24N, 13.05E, H=23:48:09.4, M _B =5.1 (CGS).
17	eIPn	23	17	54.1				Northern Italy. CSEM: 46.28N, 12.94E, H=23: 16:52.5, h=1km.
18	eIPn eISn	07	03 04	21.3 10.1			4.05 450	Northern Italy. CSEM: 46.30N, 12.93E, H=07: 02:20.0, h=0km.
20	IPn ISg	20	22	08.6 32.3	0.4	31.5	1.66 184	Compr. Yugoslavia, Mon- tenegro - Bosnia and Herzegovina border re- gion, Maglić mountain.
20	IPn ISg	20	28 29	47.6 11.6	0.4	36.0	1.66 184	Yugoslavia, Herzegovina. CSEM: 43.2N, 18.7E, H=20:28:17.7.
20	eIS	20	22	14.6				Trace. Yugoslavia. Montenegro-Bosnia and Herzegovina border region.
20	eIPg ISg	20	24	14.1 19.7			0.43 48	
21	IP	21	13	21.8				Dilat. Kuril Islands. USGS: 51.75N, 155.21E, H=21:01:44.0, h=231km, M _B =5.6(CGS).
22	IPg ISg	01	07	01.6 13.6	0.4	16.5	0.92 102	Compr. Yugoslavia, Bosnia and Herzegovina, River Neretva, 43.1N, 17.7E.
22	eIPn eISn	07	52 53	31.6 18.6			3.85 428	Northern Italy. Carnia.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
23	eIPn IPg	02	58 59	52.7 05.3			3.13 348	Albania. CSEM: 41.51N, 20.16E, H=02:58:01.3
23	eIPn ISg	03	51 52	26.7 19.1			3.15 350	Albania. CSEM: 41.5N, 20.24E, H=03:50:33.0, M=3.6
25	eIPn eISb	08	07 08	53.4 17.6			1.76 196	Yugoslavia, Montenegro, Golija mountain.
25	eIPn eI(Sg)	12	43	19.7 53.8			(2.18) (242)	Probably Italy, Ancona region.
25	eI(Pn)	14	57	14.1				Trace. Albania.
26	eIS	15	44	15.6				Trace. Yugoslavia, Cro- atia, Promina mountain.
26	eIPn eISn	17	22 23	53.6 16.8	0.4	9.0	1.83 203	Yugoslavia, Montenegro, River Tara.
28	eIS	13	41	59.1				Trace. Northern Italy.
28	eIPn	18	21	16.1				Trace. Probably Yugo- slavia, Montenegro- Bosnia and Herzegovina border region.
28	eIPn ISg	20	07	07.3 34.2		16.4	1.80 200	Yugoslavia, Montenegro, River Pliva, M=3.3
29	eIS	06	10	18.7				Trace.
29	eIPg ISg	12	30	48.3 54.8			0.50 55	
30	eIPg ISg	08	45	29.9 34.4			0.34 38	
30	IPg IPn ISg	18	03	09.4 12.6 18.4	0.5	32.0	0.69 77	Dilat. Yugoslavia, Ploče region, 43.1N, 17.4E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
O C T O B E R 1977								
1	IPn ISn	04	55 56	49.3 15.3			1.98 220	Compr, Yugoslavia, Bosnia and Herzegovina, River Spreča, 44.7N, 18.25E.
1	eIPn ISb	13	12	05.9 23.2	4.5		1.26 140	Yugoslavia, Adriatic Sea, Dubrovnik region, 42.5N, 17.9E, M=2.9.
2	eIS	09	41	11.0				
3	eIPg ISg ISn	01	33 34	47.9 02.6 04.8	8.0		0.92 102	Yugoslavia, Dinara moun- tain, 44.1N, 16.4E, M= 2.3(LJU).
3	eIPn	12	05	47.9				Obscured by microseismes. Albania, CSEM: 40.7 N, 19.70E, H=12:04:56.7, h=10km.
3	eI	16	27	51.3				Obscured by microseismes. Greece. CSEM: 40.03N, 19.77E, H=16:26:51.1, h=41km.
4	eIPn	12	57	26.4				Albania. CSEM: 40.00N, 19.82E, H=12:56:25.3
4	eIPn	21	44	03.6				
5	eIP	05	38	01.1				Turkey. CSEM: 41.04N, 33.51E, H=05:34:46.0, h=10km, M _B =5.3
6	eIP	03	07	16.0				Obscured by microseismes.
6	eIPn	03	56	24.6				Trace. Yugoslavia, Montenegro.
6	eI(Pn)	04	06	47.2				Obscured by Microseismes.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
7	eIPn	12	43	57.1				Greece. CSEM: 39.19N, 20.78E, H=12:42:58.4, h=44km.
8	IPg ISn	13	30 31	56.1 12.0	0.6	19.0	0.92 102	Compr. Yugoslavia, Neretva river, 43.0N, 17.6E.
10	eIPKP	12	13	34.9				Fiji Islands, USGS: 25.66S, 174.78W, H=11:53: 56.6, h=33km, M _S =7.4 (CGS).
12	ISg	06	14	01.3			(0.40) (44)	Trace. Local.
12	eIPn eIS	10	15 16	45.3 47.3				
14	IP	05	15	26.7				Compr. Tonga Islands. USGS: 15.72S, 173.05W, H=04:55:34.8, h=33km, M _B =5.9(CGS).
14	eIPn	20	12	58.7				Obscured by Microseismes. Northern Italy. CSEM: 46.23N, 13.04E, H=20: 11:56.4, h=10km.
17	IPn ISg	13	58 59	20.2 02.8		9.0	2.63 292	Dilat. Albania, 42.3N, 19.7E.
17	eI	17	46	41.7				New Zeland. USGS: 27.91S, 173.08E, H=17:26:40.4, M _B =6.3(CGS).
18	eIPg ISg	09	40	24.1 30.0			0.46 51	
19	eP	06	41	57.1				Compr. Iran. CSEM: 27.88 N, 54.85E, H=06:35:17.3, h=70km, M _B =5.6(CGS).
19	eIPn	12	54	07.9				Greece. CSEM: 38.54N, 21.86E, H=12:52:38.4, M=3.8

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
19	eIPn eISn	20	54	04.9 21.8			1.31 145	Yugoslavia, Croatia, Velebit mountain, 44.3N, 15.8E.
19	IP	22	51	53.9				Dilat. Taiwan region. USGS: 22.61N, 121.61E, H=22:39:34.1, h=158km, M _B =5.5(CGS).
20	eIP	05	52	24.3				Kuril Islands. USGS: 47.15N, 154.09E, H=05:40:05.7, M _B =5.4
20	eIPg I(Sg)	11	28	21.9 30.5			(0.66) (73)	Obscured by microseisms.
20	eIPn	14	19	15.9				Yugoslavia, Montenegro-Bosnia and Herzegovina border region.
20	eIPn	18	45	50.9				Yugoslavia, Montenegro, Golija mountain.
22	eIPn	10	04	26.2				Crete. CSEM: 34.96N, 23.18E, H=10:02:12.3, h=40km, M _B =5.0
23	eIPn eISn	05	46 47	24.4 33.0			5.85 650	Greece. CSEM: 38.87N, 21.12E, H=05:45:10.4, M=4.1.
23	eIPKP	10	51	27.7				Loyalty Islands. USGS: 21.49S, 170.30E, H=10:31:53.1, h=89km, M _B =5.6(CGS).
24	IPg ISg	00	02	25.0 31.2	0.4	12.0	0.48 53	Dilat.
24	eIS	09	49	56.0				Trace. Yugoslavia, Montenegro.
25	eIPg ISg	08	00	42.5 49.9			0.57 63	
25	IPg ISg	17	41	12.6 14.2		4.0	0.13 14	Compr.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
25	eIPg ISg	21	05	22.0 34.6			0.94 104	
26	eP	15	23	30.4				Compr. Aleutian Islands region. USGS: 51.45N, 178.33E, H=15:10:58.8, h=33km, M _B =5.6(CGS).
27	eIPn	07	02	10.4				Dodecanese Islands. CSEM: 35.49N, 27.71E, H=06:59:30.8, h=68km, M _B =4.9(CGS).
27	e	12	26	10.8				Trace. Fiji Islands. USGS: 16.38S, 177.52W, H=12:06:19.2, h=33km, M _B =5.1(CGS).
27	eI(S)	16	56	32.3				Trace. Yugoslavia, Croatia.
27	eIP	22	44	57.3				Turkey. CSEM: 37.95N, 28.00E, H=22:43:33.4, h=10km, M _B =4.7(CGS).
28	eI	00	43	38.3				Trace. Turkey. CSEM: 37.98N, 28.10E, H=00:41:13.9, M=4.2.
28	IPg ISg	05	26	38.3 48.3			0.77 85	Compr.
28	eIPn	23	18	02.9				Albania. CSEM: 41.34N, 20.24E, H=23:17:11.5, h=10km.
29	eIPn eISg	02	50 51	14.4 07.4			3.19 354	Yugoslavia, Slovenia. CSEM: 46.09N, 14.78E, H=02:49:24.7, h=10km, I _o =IV-V ^o MCS.
29	eP	03	14	50.1				Compr. Kazakhstan, USSR. USGS: 49.84N, 78.17E, H=03:06:57.7, h=0km, M _B =5.5(CGS).
29	e	20	34	59.7				Trace. New Guinea. USGS: 06.2S, 146.6E, H=20:15:45.1, M=5.9, h=106km.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
30	eIPn ISg	00	33 34	46.3 36.1	0.6	14.0	2.97 330	Albania. CSEM: 41.86N, 20.20E, H=00:32:59.6, h=10km.
30	eI	06	44	39.4				Trace. Fiji Islands. USGS: 20.42S, 178.57W, H=06:25: 30.0, h=600km, M _B =5.6(CGS).
30	eIPn	07	02	31.1				Trace.

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.2	eIPn	03	04	06.9				Obscured by microseismes. Yugoslavia, Montenegro, River Tara.
3	IPn IPg	02	24	22.5 47.1	1.0	23.0	5.56 618	Dilat. Bulgaria-Yugoslavia border region. CSEM: 42.08N, 24.09E, H=02:22:58.1, h= 13km, M _B =5.2(CGS).
3	eIPg ISg	12	13	08.9 15.0		4.0	0.46 51	Yugoslavia, Croatia, Blo- kovo mountain, 43.5N, 16.9E.
3	IPg ISg	13	59	06.1 12.4	0.5	5.0	0.49 54	Compr. Yugoslavia, Croatia, Blokovo mountain.
4	eIPb ISg	07	17 18	46.9 02.8			1.24 138	Yugoslavia, Croatia, Adri- atic Sea, Dubrovnik region. 42.7N, 18.0E.
4	eI	10	05	37.2				Obscured by microseismes. Aleutian Islands. USGS: 51.66N, 175.95W, H=09:52: 55.7, M _S =6.7(CGS).
5	eIPg eISg	13	59	43.4 53.1			0.36 40	Trace.
5	eIPn eISg	21	44	42.9 53.8		8.0	1.85 205	Yugoslavia, Montenegro, Herceg Novi region.
6	eIP	02	50	11.4				Bulgaria. CSEM: 42.05N, 25.06E, H=02:48:43.5, M _B =4.8(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
9	eI	02	13	57.2				Obscured by microseismes. Yugoslavia, Kosovo and Metohija, 42.8N, 20.8E.
18	eIP	05	29	49.5				China, Tibet. USGS: 32.69N, 88.39E, H=05:20:11.3, M _B = 5.7(CGS).
18	IPn	13	27	12.2		9.0		Compr. Obscured by micro- seismes.
23	ISg	11	54	11.8		6.0		Local. Obscured by micro- seismes.
26	IPn ISn	13	21 22	07.5 08.1	1.0	8.0	5.09 566	Dilat. Greece. USGS: 38.49N, 20.28E, H=13:19: 47.2, h=66km, M _B =4.6(CGS).
28	IPn	13	01	48.6				Dilat.
29	eI	20	18	52.7				Trace. Greece. CSEM: 38.0N, 21.8E, H=20:17:12.3, h=44km, M=4.0.
30	eI(Sg)	02	59	31.7				Trace. Cypar. CSEM: 36.51N, 27.79E, H=02:59:06.7.
30	eIP	04	14	53.5				Kazakhstan, USSR. USGS: 49.96N, 78.93E, H=04:06: 57.5, h=0km, M _B =5.9(CGS).

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1	eIPn ISn	10	41	05.2 39.7			2.75 306	Yugoslavia, Montenegro, probably Ivangrad region.
2	eP	13	09	15.2				Off East coast of Kamchat- ka. USGS: 52.93N, 159.71E, H=12:57:10.7, h=15km, M _B = 5.8(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
3	eIPn ISn	05	40 41	31.5 14.6		13.0	3.49 388	Albania. CSEM: 40.11N, 19.88E, H=05:39:32.7, h=48km.
4	IPg	17	27	09.7				Compr. Obscured by micro- seismes. Yugoslavia, Bosnia and Herzegovina, Livanjsko Polje, 43.8N, 16.9E, M=2.8.
5	eIPn	08	41	12.9				Trace. Yugoslavia, Kosovo and Metohija. 42.4N, 20.8E.
5	eIPn IS	18	11 12	48.7 33.3				
7	eIPn ISn ISg	19	22 23	06.3 51.3 09.8	6.0		3.69 410	Northern Italy. CSEM: 46.28N, 13.36E, H=19:21: 06.6.
8	eIPn	00	42	57.6				Trace.
8	IPn eISn	18	29	08.3 34.0			1.98 220	Compr. Yugoslavia, Monte- negro, 43.4N, 19.1E
9	el	15	56	54.5				Turkey. CSEM: 38.87N, 27.35E, H=15:53:40.5, M=5.2
10	eIPg ISg	20	16 17	56.4 02.2			0.44 49	
11	eIPn IS	10	13	14.5 30.5				
12	eIPn ISb	04	05	25.3 50.7	0.6	9.0	1.84 204	Yugoslavia, Montenegro, Njegos mountain.
13	IPb eISb	14	21	27.3 07.5			2.97 330	Central Italy. USGS: 43.33N, 12.47E, H=14:20: 33.7, h=33km.
13	eIS	14	43	29.2				Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
14	eIPg ISg	14	19	37.6 40.7			0.23 26	
14	ePKP	19	11	23.4				Dilat. Fiji Islands region. USGS: 21.10S, 179.15W, H= 18:52:34.9, h=659km, M _B = 5.6(CGS).
15	eIPg ISg	07	49 50	50.9 04.0			0.99 110	Yugoslavia, Bosnia and Herzegovina, Raduša moun- tain.
16	IPn	00	41	25.7				Compr. Yugoslavia, Croatia, Donja Stubica. CSEM: 45.9N, 16.1E, H=00:40:40.0, M= 3.2(ZAG), I ₀ =V ^o MCS.
16	IP	07	39	45.5				Dilat. Turkey. USGS: 38.77N, 27.0E, H=07:37:31.9, M _B = 5.3(CGS).
16	IPn ISn ISg	11	35 36	54.9 18.3 22.2	0.4	8.0	1.82 202	Compr. Yugoslavia, Monte- negro, Durmitor mountain, M=3.0.
16	eISg	12	23	52.9				Trace.
18	eIPn eIS	00	30 31	30.1 59.7				
18	eIS	00	56	38.7				Trace.
19	IP	23	41	14.6				Compr. Iran. CSEM: 30.96N, 56.44E, H=23:34:39.0.
20	eP	09	02	36.7				Dilat. Kurill Islands. USGS: 48.59N, 153.02E, H= 08:50:38.2, h=140km, M _B = 5.8(CGS).
20	eIP	20	05	24.7				Trace. Tyrrhenian Sea. CSEM: 38.58N, 15.66E, H=20:04: 18.6, h=193km, M _B =4.7(CGS).
21	eIP	01	13	57.6				Volcano Islands region. USGS: 25.51N, 143.11E, H= 01:00:32.8, h=33km, M _B = 6.2(CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
21	eIPg ISg	12	20	57.4 03.7			0.41 45	
21	IP	16	51	35.2				Compr. East coast of Kam- chatka. USGS: 52.93N, 159.80E, H=16:39:33.0, h=33km, M _B =5.5(CGS).
21	eIPg ISg	17	04	55.4 57.6		3.0	0.17 19	Probably artif.
22	IS	00	57	46.1	0.6	7.5		Yugoslavia, Montenegro.
22	IPn IPg ISg	07	47	02.4 05.6 28.2	0.7	3.5	1.76 195	Dilat. Yugoslavia, Monte- negro, Golija mountain.
22	eIS	17	00	24.6				Trace. Yugoslavia, Monte- negro, Durmitor mountain.
23	eIPn ISg	04	54	29.7 56.7			1.84 204	Yugoslavia, Bosnia and Herzegovina - Montenegro border region, River Čo- tina.
23	IPg ISg	10	44	21.2 26.9			0.43 48	Dilat. Probably artif.
23	eIS	11	52	58.9				Trace.
23	eIPg ISg	16	06	14.5 20.5			0.46 51	Probably artif.
23	eIP	21	21	55.1				Japan. USGS: 39.14N, 143.10E, H=21:09:21.7, h= 23km, M=5.4.
25	eIP	02	12	26.4				Tyrrhenian Sea. CSEM: 40.4N, 12.95E, H=02:11:12.5, h= 485km, M=4.9.
25	eIPn ISg	16	38 39	36.7 27.3			3.08 342	Albania-Yugoslavia border region. River Bijeli Drim, 42.1N, 20.5E, M=3.4.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude mm	D ^o D km	Remarks
26	IPg ISg	13	52	44.6 51.6		3.5	0.54 60	Dilat. Yugoslavia, Croatia, Dinara mountain, 43.5N, 16.9E.
27	eIS	07	20	50.6				Trace. Yugoslavia, Monte- negro, 42.8E, 20.1E.
27	IP	11	57	13.7				Compr. Fiji Islands region. USGS: 17.97S, 178.63', H=11:38:21.3, h=555km, M _B =5.3(CGS).
27	eIPb ISn	17	35 36	37.3 00.2			1.94 215	Yugoslavia, Montenegro, River Tara, 43.3N, 19.1E, M=2.8.
28	eIP	02	52	13.0				Red Sea. USGS: 16.66N, 40.28E, H=02:45:36.7, M _B =5.9(CGS).
29	eP	16	54	31.9				Dilat. Central Greece. CSEM: 38.55N, 22.35E, H= 16:52:59.9.
29	eIPn IPb ISn	18	37 38	46.5 49.5 20.1			2.68 298	Yugoslavia, Serbia, Jelica mountain, 43.9N, 20.2E, M=3.6.
30	IPn IS	17	36	07.0 54.2			3.24 360	Compr. Tyrrhenian Sea. CSEM: 39.99N, 15.44E, H=17:35: 10.5, h=288km, M=5.6(ZAG).
30	IP	18	09	48.8				Compr. Tyrrhenian Sea. CSEM: 40.06N, 15.42E, H=18:08: 53.5, h=294km, M=4.7.

Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
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SIJEČANJ - JANUARY 1977.

1	3		Split	Knin	III-IV	
2	13	10 19 08.2	Split	Studenci	VI	Not felt at:
				Kozlica	V	Blato
				Krivodol	V	Dicmo
				Aržano	IV-V	Gdinj
				Grab	IV	Gospić
				Gradac	IV	Grabovac
				Slivno	IV	Jelsa
				Vel. Prolog	IV	Kaštel Lukšić
				Brela	III-IV	Lastovo
				Klis	III-IV	Ploče
				Šinj	III-IV	Sisak
				Kamenmost	III	Slano
				Vrgorac	III	Šibenik
				Zadvarje	III	Vela Luka
				Bol	II	Zadar
				Kostanje	II	Zagvozd
				Split	II	
				Trilj	II	
			Zagreb	Zagreb	II	
3	29		Split	Kistanje	III-IV	Some small earthquakes were felt at Krupa during the last three days.
4	30	22 17 31.6	Split	Oklaj	V	Not felt at:
				Drniš	IV-V	Otrčić
				Kistanje	III-IV	Perković
				Muč	III-IV	Peruča
				Obrovac	III-IV	Šibenik
				Ražanac	III-IV	Široke
				Knin	III	Zadar
5	30	23 07	Split	Krupa	II	
6	31	08 11	Split	Knin	III-IV	Not felt at:
				Žegar	III	Medak
				Krupa	II-III	Otrčić
						Perković
						Peruča
						Šibenik
						Široke
						Tribunj
						Unešić
						Zadar

MAKROSEIZMIČKI IZVJEŠTAJ
IZ S.R. HRVATSKE

MACROSEISMICAL REPORT
FROM S.R. CROATIA



Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
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VELJAČA - FEBRUARY 1977.

7	10 02 30	Rijeka	Novi Vinodolski	III	
8	10 07 20	Rijeka	Goli otok	IV	Not felt at:
			Lukovo	IV	Crikvenica
			Starigrad	IV	Klenovica-Zrnovica
			Jurjevo	III-IV	Krasno Polje
			Senj	III-IV	Krivi Put
			Baška	III	Partizanska Drežnica
			Jablanac	III	Punat
			Lopar	III	Selce
			Lun	III	Švica
			Vrbnik	II	
9	16 20 35	Zagreb	Bedenica	VI	Not felt at:
			D.Konjščina	VI	Bjelovar
			D.Orešje	VI	Ivanić Grad
			Jertovec	VI	Klenovnik
			Nespeš	VI	Sisak
			Šušabreg	VI	
			Turkovčina	VI	
			Zitomir	VI	
			Blaškovec	V-VI	
			D.Zelina	V-VI	
			Goričanec	V-VI	
			Hrastje	V-VI	
			Komir	V-VI	
			Marija Bistrica	V-VI	
			Podgorje	V-VI	
			Poljanica	V-VI	
			Zelina	V-VI	
			Helena	V	
			Kašina	V	
			Majkovec	V	
			Vugrovec	V	
			Zlatar-Bistrica	V	
			Žerjavinec	V	
			Mače	IV-V	
			Popovec	IV-V	
			Šaštinovec	IV-V	
			Štakorovac	IV-V	
			Zlatar	IV-V	
			Banja S.	IV	
			Bedekovčina	IV	
			Laz	IV	
			Sesvete	IV	
			Stančić	IV	

Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
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		Zagreb	Zagreb	IV	
			Drenčec	III-IV	
			Jakovlje	III-IV	
			Vrbovec	III-IV	
			Božjakovina	III	
			Brckovljani	III	
			Lučko	III	
			Podsused	III	
			Donje Selo	II-III	
			Krapina	II-III	
		Varaždin	Novi Marof	II-III	
10	20 12 20	Split	Lukar	VI	Not felt at:
			Oklaaj	V-VI	Lozovac
			Drniš	V	Runić
			Kistanje	IV	Šibenik
					Široke
					Unešić
11	20 12 55	Split	Kistanje	III	

OŽUJAK - MARCH 1977.

12	4	Osijek	Borovo	IV-V	Not felt at:
			Belišće	IV	Batina
			Osijek	IV	Bel Manastir
			Ilok	III	Delnice
			Nova Gradiska	III	Drenovci
			Slavonski Brod	III	Drniš
			Slav.Požega	III	Gospić
			Vukovar	III	Karlovac
		Bjelovar	Bjelovar	III-IV	Krapina
			Daruvar	III	Mursko Središće
			Križevci	III	Novska
		Zagreb	Zagreb	III	Obrovac
					Ogulin
					Opatija
					Orahovica
					Podravska Slatina
					Senj
					Sisak
					Slunj
					Solin
					Split
					Ston



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Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
					Umag Varaždin Veli Iž Velika Vis Zlatar.
13 12 05 05		Karlovac	Ribnik	III	Not felt at:
		Zagreb	Kamanje	II-III	Kalje
			Gorica Svetojan.	II	Karlovac Kašt Mali Erjavec Netretić Radatovići Rečica Šišljavić Vivodina

TRAVANJ - APRIL 1977.

14 3 04 15		Pula	Momjan	IV	Not felt at:
			Umag	IV	Delnice
		Rijeka	Buzet	II	Dragozići
			Klana	III	Gerovo
			Rijeka	II-III	Krk Novigrad Novi Vinodolski Opatija Roč Senj Slum

15 20 01 32		Osijek	Brodski Stupnik	V	Not felt at:
			Davor	V	Aržano
			Nova Kapela	V	Banova Jaruga
			Stara Gradiška	V	Beli Manastir
			Voćin	V	Bjelovar
			Čaglin	IV-V	Bunčić
			Okučani	IV-V	Donji Lapac
			Slavonski Kobaš	IV-V	Gornja Bučica
			St. Petrovo Selo	IV-V	Gospić
			Jakšić	IV	Djakovo
			Levanjska Varoš	IV	Nova Gradiška
			Sibinj	IV	Osijek
			Velika	IV	Rijeka

Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
			Slav. Požega	III-IV	Rujevac
			Čačinci	III	Slunj
			Lužani	III	Sukošan
			Pleternica	III	Šibenik
		Bjelovar	Ivanjska	V	Totova Korenica
			Lipik	IV-V	Trnjan
			Virovitica	IV-V	Udbina
			Kanička Iva	IV	Vuka
		Sisak	Daruvar	III	Vrbanja
			Bobovac	IV-V	Zapolje
			Gradusa	IV-V	
			Dvor	IV	
			Hajtić	IV	
			Kostajnica	IV	
			Novska	IV	
			Sisak	IV	
			Kost. Majur	III-IV	
			Gora	III	
		Karlovac	Karlovac	IV	
			Rajić	III-IV	
			Topusko	III-IV	
			Nabljusi	III	

16 20 15 30		Split	Tijesno	III	
17 21 03 25		Split	Ploče	IV-V	

SVIBANJ - MAY 1977.

18 14 04 39 23.7		Split	Komiža	VI	Not felt at:
			Vis	VI	Babino Polje
			Podšpilje	V-VI	Biograd
			Brusje	IV-V	Obrovac
			Nerežišća	IV-V	Perković
			Brela	IV	Pirovac
			Donje Selo	IV	Primošten
			Drvenik	IV	Rogoznica
			Gornje Selo	IV	Sali
			Grohote	IV	Šibenik
			Hvar	IV	Unešić
			Ložišće	IV	Zadar
			Maslinica	IV	Zlarin
			Omiš	IV	
			Rogač	IV	
			Slatine	IV	
			Starigrad	IV	



Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
			Stomorska	IV	
			Sućura]	IV	
			Supetar	IV	
			Sutivan	IV	
			Šilvno	III-IV	
			Trogir	III-IV	
			Boj	III	
			Čiovo	III	
			Jelsa	III	
			Kaštel Lukšić	III	
			Lovište	III	
			Marina	III	
			Muč	III	
			Široke	III	
			Vela Luka	III	
			Split	II-III	
			Vodice	II	

19	19	15	15	Pula	Raša	III-IV	Not felt at: Barban Cres Krnica Martinšćica Medveja Nedešćina Porozine Pula Rabac Rovinj Labin
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KOLOVOZ - AUGUST 1977.

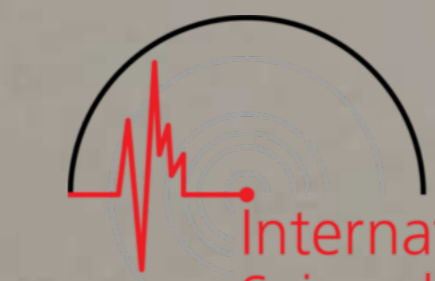
20	3	12	20	10.3	Split	Vel.Prolog	V	Not felt at:
						Komin	IV-V	Brela
						Gradac	IV	Drvenik
						Nova Sela	IV	Potomje
						Ploče	III-IV	Runović
						Janjina	III	Some small earthquakes were felt during one day.
						Korčula	III	
						Kozica	III	
						Kuna	III	
						Metković	III	
						Vrgorac	III	
						Zrnovo	III	
						Čara	II-III	

Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješka Remarks
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RUJAN - SEPTEMBER 1977.

21	7	04	27	55.5	Split	Drvenik	V	Not felt at:
						Brela	IV	Ljubuški
						Gradac	IV	Nova Sela
						Klobuk	IV	Sovići
						Korčula	IV	
						Kozica	IV	
						Orebić	IV	
						Ploče	IV	
						Vitina	IV	
						Vrgorac	IV	
						Bogomolje	III-IV	
						Čara	III-IV	
						Janjina	III-IV	
						Kuna	III-IV	
						Podgora	III-IV	
						Potomje	III-IV	
						Vel.Prolog	III-IV	
						Trnovo	III-IV	
						Dragljane	III	
						Ružići	III	
						Studenci	III	
						Trpanj	III	
						Zuljana	III	

22	10	01	55		Zagreb	D.Stubica	IV-V	
						G.Stubica	IV	
						Markuševac	IV	
						Podsused	IV	
						Stubičke Topl.	IV	
						Zagreb	IV	Črnomerec
							III-IV	Bijenik 14
							III-IV	Bukovčev trg
							III-IV	Grškovićeva ul.
							III-IV	Kranjčevićeva ul.
							III-IV	Radnička c.
							III-IV	Šestinski dol
							III	Barutanski jarak
							III	Solovljeva ul.
							III	Petrova ul.
							II	Jabukovac
							II	Lenjinov trg
							II	Maksimir
							II	Susedgrad
							II	Trg žrtava fašizma



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Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješka Remarks
			Gornje Vrapče	III-IV	Not felt at: Brckovljani Bistra Donja Zelina Dugo Selo Hrvatski Leskovac Krapinske Toplice Lobor Mače Oborovo Rakovec Samobor Savski Marof Stručec Vrbovec Zlatar
			Slatina	III-IV	
			Zaprešić	III-IV	
			Kašina	II	
			Martin pod Okučem	II	
			Puntijarka	II	
			Sesvete	II	
			Zabok	II	
			Zelina	II	
23 14		Karlovac	Topusko	III-IV	
24 17 00 48		Pula	Poreč	IV	Not felt at: Baraban Dubravica Jasenak Kalje Klenovnik Koprivnica Krki Legrad Nin Novska Ogulin Porozine
			Rovinj	IV	
			Umag	IV	
			Bale	III-IV	
		RIJeka	Novigrad	II-III	
			Delnice	III-IV	
			Klana	III-IV	
			Opatija	III-IV	
			Baška	III	
			Crni Lug	III	
			Karjuba	III	
			Lokve	III	
			Lopar	III	

Br. Dan No. Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
		Zagreb	Kraljevica	II-III	Plitvička jezera Prelog Pula Punat Radatovići Ravna Gora Samobor Senj Severin na Kupi Sisak Slunj Šenkovec Varaždin Velika Kladuša Zlatar
			Kuželj	II-III	
			Desinić	III	
			Zagreb	III	

PROSINAC - DECEMBER 1977.

25 3		Zagreb	Martin pod Okučem Zagreb	IV III-IV	Not felt at: Adlešići Brckovljani Donja Stubica Dubravica Duga Resa Gorica Svetojanska Hrvatski Leskovac Kalje Kamanje Kašt Kostanjevac Lekenik Mače Mihovljan Nedjelja Radatovići Rakovec Ribnik Samobor Vivodina Zagreb-Klara Zelina.
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