

SVRUCILIŠTE U ZAGREBU — PRIRODOSLOVNO-MATEMATIČKI FAKULTET  
GEOFIZIČKI ZAVOD

UNIVERSITY OF ZAGREB — FACULTY OF SCIENCES  
GEOPHYSICAL INSTITUTE

---

# IZVJEŠĆE O POTRESIMA

SEISMOLOGICAL BULLETIN

Godina: 1978.  
Year:

ZAGREB 1981.

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

Godina: 1978  
Year:

REGISTRACIJE SEIZMOGRAFA

Records of Seismographs  
Station: ZAGREB-GRİČ  
(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	G	T	Per.	Amplitude	D°	Remarks
		h	m	s	sec.	NE NW Z	D km	
J A N U A R Y 1978								
1	ePn eSn eM	04	24	34.8			2.9	Yugoslavia, Bosnia and Herze- govina, CSEM:43.26N, 17.56E, H=04:23:46.3, h=10 km, M=4.0 (ZAG).
			25	11.5			326	
				23.4	1.1	6.7 5.8 7.4		
1	eP ePP	07	42 (00)	1.5			7.3	Interrupt. Trace. Romania.
			44 (00)				811	CSEM:45.76N, 26.62E, H=07:40:16.2, h=134 km <sup>+</sup> 4 km, M <sub>B</sub> = 4.7 (CGS).
1	eSn eSg	09	27	14.5			2.9	Croatia. CSEM:43.06N, 15.9E,
				29.4	0.9	1.7	321	H = 09:25:57.0, h = 10 km, USGS:42.91N, 15.77E, H = 09:25:55.7, h = 33 km, M = 3.4 (ZAG).
2	eP eS	06	36	11.1			20.8	Dilat. Caucasus. CSEM:41.6N,
			40 (00)				2312	44.4E, H = 06:31:34.9, h = 56 km, M = 5.3 (ZAG).

Adresa:  
Sveučilište u Zagrebu  
Prirodoslovno-matematički fakultet  
GEOFIZIČKI ZAVOD  
41 000 Z a g r e b, Grič 3.  
Jugoslavija

Address:  
University of Zagreb  
Faculty of Sciences  
GEOPHYSICAL INSTITUTE  
41 000 Z a g r e b, Grič 3.  
YUGOSLAVIA

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks	
						NE	NW	Z			
2	ePKP <sub>2</sub>	07	30	14.9					145.5 16170	Compr. Trace. New Hebrides Islands. USGS:18.95S, 169.35E, H = 07:11:06.5, h = 249 km, M <sub>B</sub> = 5.3 (CGS).	
2	e <sub>1</sub> eS	15	11	07.6		17.5	0.7	2.1	1.3	0.7 74	Yugoslavia, Slovenia. CSEM: 45.9N, 14.9E, H=15:10:57.2, h=10 km. Felt (V <sup>o</sup> MCS) at Peč, (IV <sup>o</sup> MCS) at Novo Mesto (LJU). M=2.2 (ZAG).
2	ePn e <sub>1</sub> eS iM	18	06	13.4						3.0 338	Croatia, Adriatic Sea. CSEM: 42.62N, 16.22E, H=18:05:20.4, h=10 km, USGS:42.69N,16.17E, H=18:05:20.1, h=33 km, M=4.2 (ZAG).
			07	(00)	1.9				0.7		
2	e eSg	21	47	41.4		44.3	1.0	0.8	0.5	1.9 215	Trace. Yugoslavia, Croatia. CSEM:44.10N, 15.11E, H=21:46:44.3, h=10 km. USGS: 43.87N, 14.96E, H=21:46:43.2, h=33 km, M=2.5 (ZAG).
4	e(Pg) eSg	05	33	(00)		47.3				3.7 410	Trace. Romania. CSEM:45.43N, 21.07E, H=05:31:48.6, h=10 km.
5	iSg	12	22	08.8							Trace. Local.
6	eP ePP	04	54	11.9	2.0				0.4	87.0 9668	Dilat. Luzon, Philippine Islands. USGS:18.79N, 121.89E, H=04:41:22.2, h=33 km, M <sub>B</sub> =5.8 (CGS), M=5.8 (ZAG).
10	e <sub>1</sub> eR <sub>1</sub> S <sub>1</sub>	04	57	42.2						1.4 157	Trace. Yugoslavia, Banja Luka region. CSEM:44.75N, 17.56E, H=04:57:16.4, h=10 km, BLU: I <sup>o</sup> =1V <sup>o</sup> MCS, M=2.3 (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks	
						NE	NW	Z			
13	e	12	44	17.0							Trace.
13	eP epP	20	15	14.9						81.0 8996	Compr. Kuril Islands. USGS: 44.69N, 149.70E, H=20:03:03.8, h=52 km, M <sub>B</sub> =M <sub>S</sub> =6.0 (CGS).
14	eP eS eL	03	37	21.2	3.1					6.8 85.2 9468	Dilat. Japan, near Honshu. USGS:34.81N, 139.26E, H=03:24:39.0, h=14 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.6 (CGS), M=7.0 (ZAG).
		04	07		36						
14	ePkP	15	40	51.9						161.8 17981	Trace. Kermedec Island region. USGS:30.11S, 177.49W, H=15:20:54.2, h=44 km, M <sub>B</sub> =5.8 (CGS), M <sub>S</sub> =6.3 (CGS).
14	ePn eSg	19	44	34.3						1.8 205	Trace. Eastern Austria. CSEM: 47.66N, 15.99E, H=19:44:00.8, h=5 km, M=2.8 (ZAG).
			45	(00)	1.2				1.2		
14	eL	23	15	21.0	34						Trace. Japan.
16	e <sub>1</sub> eS	14	33	38.4						5.4 595	Trace. Germany, Schwarzwald. CSEM:48.31N, 08.98E, H=14:31:14.7, h=8 km.
			34	05.2							
17	ePg eM	02	30	42.8						3.6 395	Romania. CSEM:45.77N, 21.06E, H=02:29:32.5, h=10 km, M=3.3 (ZAG).
			31	36.5	0.7				0.9		
21	e <sub>1</sub> eS	10	34	53.2						0.5 52	Trace. Žumberačka gora. ZAG: 45.7N, 15.3E, M=1.4 (ZAG).
			35	(00)	0.6	0.6	0.4				
24	eP	06	06	31.7						81.1 9013	Compr. Trace. Kuril Islands. USGS:44.73N, 149.72E, H=05:54:23.2, h=56 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.9 (CGS).

Date	Phase	M h	G m	T s	Per. Amplitude			D <sup>o</sup> D km	Remarks
					sec.	NE	NW		
27	e $\overline{P}$ e(S)	12	34	26.8 29.5				(0.2) Trace. Local. (23) PTJ: 18 km.	
28	eP e(S)	03	32 34	31.6 55.9	1.6			12.3 Mediterranean, Crete. CSEM: 1370 34.89N, 23.7E, H=03:29:39.2, h=34 km, M <sub>B</sub> =4.9 (CGS).	
31	e e	06	42 44	32.6 48.1	4.4	4.6		Greece. CSEM: 39.29N, 22.97E, H=06:39:21.0, h=40 km, M <sub>B</sub> = 4.5 (CGS), M=4.7 (ZAG).	
F E B R U A R Y 1 9 7 8									
2	ePn eS	11	13 15	27.8 37.4	3.5	2.9		7.2 Central Greece. CSEM: 39.90N, 802 21.55E, H=11:11:43.7, h= 41 km ± 9 km, M=4.5 (ZAG).	
3	e $\overline{P}$ eS	14	34	32.8 35.6	1.2	0.8	0.9	0.2 Trace. Local. H=14:34:30.0 17 (ZAG), M=0.6 (ZAG), PTJ: 7 km.	
8	eSb iM	04	12 13	50.3 27.5	2.5	0.8		Trace. Southern Italy. CSEM: 41.14N, 14.90E, H=04:10:31.4, h=10 km, I <sub>o</sub> =V-VI MCS, M= 3.5 (ZAG).	
9	i $\overline{P}$ iS iR <sub>i</sub> S	16	31	10.0 31.8 40.6	0.9	11.0	13.8	1.6 Dilat. Trace. Yugoslavia, Bos- 173 nia and Herzegovina. CSEM: 44.19N, 16.99E, H=16:30:39.2, h=10 km, I <sub>o</sub> =VI MCS (BLY, SAR), M=3.7 <sup>max</sup> (ZAG).	
9	ePKP epPP M	21	55 59	12.2 50.8				161.5 Kermadec Islands. USGS: 17945 30.68S, 177.36W, H=21:35:12.7, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =7.2 (CGS).	

Date	Phase	M h	G m	T s	Per. Amplitude			D <sup>o</sup> D km	Remarks
					sec.	NE	NW		
10	ePKP ePKP <sub>2</sub>	01	16 17	16.0 07.6	1.9			161.8 Trace. Kermadec Islands. 17981 USGS: 30.65S, 177.54W, H= 00:56:21.8, h=33 km, M <sub>B</sub> = 5.6 (CGS), M <sub>SZ</sub> =16.0 (CGS).	
10	ePn iS iM	07	20 21	29.1 18.5 23.2	1.7			3.0 Central Italy, near Ancona. 332 CSEM: 43.73N, 13.11E, H= 07:19:36.3, h=10 km, M=3.7 (ZAG).	
13	e $\overline{P}$ eS	05	04	45.8 48.2	0.27	1.7		0.2 Trace. Local. M=1.0 (ZAG). PTJ: 16 km.	
13	e $\overline{P}$ e(S) iS	05	06	03.5 04.9 05.8	0.17	1.7		0.2 Trace. Local. M=1.0 (ZAG) 20 PTJ: 15 km.	
16	e $\overline{P}$ iS i iR <sub>s</sub> S	00	27	07.3 37.7 40.0 49.5	0.9		3.2	2.0 Yugoslavia, Bosnia - Croatia 225 border region. CSEM: 43.92N, 16.95E, H=00:26:33.1, h= 6 ± 7 km, USGS: 43.93N, 16.92E, H=00:26:33.7, h=33 km, M <sub>B</sub> = 5.1 (CGS). I <sub>o</sub> =VI MCS, Felt in the Sinj - Livno area. M=3.6 (ZAG).	
18	e $\overline{P}$ iS eR <sub>s</sub> P	11	46	22.0 34.3 36.9	0.5	1.1	0.2	0.9 Trace. 45.4N, 16.6E, 95 M=2.1 (ZAG).	
18	i $\overline{P}$ iR <sub>i</sub> P iS e	15	14	02.8 05.5 14.4 24.9	0.7	52.0	16.8	0.8 Dilat. Yugoslavia, Bosnia - 90 Croatia border region. CSEM: 45.21N, 16.40E, H=15:13:51.3, h=10 km, Felt (VIMCS) at Dvor and Bosanski Novi area. M=3.7 (ZAG).	

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
20	eP iS i	02	49	47.0	58.2	0.7	4.2	1.8	0.8	Yugoslavia, Bosnia - Croatia border region. CSEM:45.12N, 16.12E, H=02:49:34.2, h= 10 km, USGS:45.11N, 16.63E, H=02:49:32.4, h=33 km.
			50	08.6					90	
20	eP eS eL M	04	49	21.6	23.3	21.8			82.8	Japan, near East coast of Hon- shu, USGS:38.79N, 141.95E, H=04:36:58.1, h=60 km, M <sub>B</sub> = 6.1 (CGS). 30 reported inju- red, damage and landslides in the Ofunato area.
			59	25.4					9200	
			05	22						
			29	37.4					18.7	
20	eP iP iS i	12	14	10.2	46.3	1.1	10.5	6.3	1.9	Italy, Friuli. CSEM:46.46N, 13.42E, H=12:13:36.5, h=10 km, Felt (VI <sup>o</sup> MCS) et Pontebba, Ita- ly and (V <sup>o</sup> MCS) at Kobarid, Yugoslavia. M=3.7 (ZAG).
				12.0					215	
				39.6						
21	e ePP eSKS	07	31	40.0	05.8	4.2			107	Banda Sea. USGS:04.84S, 125.41E, H=07:14:54.4, h= 535 km, M <sub>B</sub> =5.9 (CGS).
			32	41.8					11889	
			38							
22	e eS	06	30	45.5	30.6	2.5			91.6	Trace. Guatemala. USGS:14.25N, 91.38W, H=06:07:37.0, h=100 km, M <sub>B</sub> =5.7 (CGS). 2 persons killed, damage reported in the area of Coatepequa.
			31						10178	
22	eP epP eS eSKS	18	13	04.7	16.3	21.0			84.6	Ryukyu Islands. USGS:29.34N, 130.54E, H=18:00:35.8, h= 60 km, M <sub>B</sub> =5.9 (CGS).
				18.0					9400	
			23							
22	e(PKP) ePKP <sub>2</sub>	19	57	05.2	21.6				154.1	Trace. South of Fiji Islands. USGS:22.70S, 176.21W, H= 19:37:17.0, h=85 km, M <sub>B</sub> = 5.6 (CGS).
									17123	

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
23	eSq	09	51	46.7	1.4	0.6			4.4	Trace. Switzerland. CSEM: 46.54N, 09.79E, H=09:49:24.5, h=10 km, Felt (IV <sup>o</sup> ) in Maloja area. M=3.3 (ZAG).
			490							
23	e	09	57	17.1						Trace.
MARCH 1978										
1	eP F	00	20	30.1	1.1				80.5	Trace. Kuril Islands. USGS: 46.29N, 153.11E, H=00:08:19.7, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> = 5.1 (CGS),
			21	8945						
1	e(P) e(S) eM	15	28	49.1	(00)	1.5				Dilat. Trace. Local. LJ:11 km.
			29	19.6					1.7	
2	eS iR <sub>1</sub> PS	09	08	31.3						Trace. Slovenia, Krško.
				46.2						
3	eP ePP eL <sub>R</sub>	11	05	06.8	(00)	2.8			76.4	Komandorsky Islands region. USGS:55.10N, 164.76E, H= 10:53:19.8, h=33 km, M <sub>B</sub> = 5.5 (CGS), M <sub>SZ</sub> =6.2 (CGS).
			08						84890	
			31	44.0						
3	ePKP <sub>2</sub> e(SK <sub>S</sub> ) M	11	08	(00)					148.6	Interrupt. Tonga Islands. USGS: 16511 15.29S, 173.52W, H=10:48:11.1, h=33 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =6.2 (CGS).
			15	(00)						
			37	18.2					5.8	
4	ePKP e(PKP <sub>2</sub> )	05	06	27.3	(00)				155	Trace. Tonga Islands. USGS: 17223 21.89S, 179.85W, H=04:46:36.1, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.3 (CGS).
			07							
4	iP eS	12	01	38.9					0.2	Local. H=12:01:35.1 (ZAG), 22 PTJ:12 km.
				41.2					22	

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
4	ePKP	15	17	05.4						Dilat. Trace. New Britain region. USGS:4.56S, 153.10E, H=14:58:13.0, h=78 km, M <sub>B</sub> =6.2 (CGS).
5	eP eS	14	39	32.0 33.6					0.1 14	Trace. Local. H=14:39:32.5 (ZAG). PTJ:11 km.
7	eP epP	03	00 02	39.7 16.3						Japan, South of Honshu. USGS: 31.96N, 137.61E, H=02:48:39.4, h=442 km, M <sub>B</sub> =6.0 (CGS). Felt.
7	eP epP	03	00 02	47.6 25.3 2.1						Japan. South of Honshu. USGS: 32.01N, 137.61E, H=02:48:47.6, h=439 km, M <sub>B</sub> =6.9 (CGS). Felt (IVJMA) et Utsunaniya.
7	e(P) e(S)	22	37 39	05.1 26.7					(13.5) (1500)	Dilat. SW Crete. CSEM:34.49N, 25.27E, H=22:33:49.4, h=48.4 km, M <sub>B</sub> =5.4 (CGS).
11	e	08	37	31.3						Trace.
11	ePn eSn i	19	22 24 25	43.0 11.9 51.7 2.4			13.9 14.2		7.8 867	Dilat. Southern Italy, CSEM: 38.03N, 16.09E, H=19:20:49.1, h=10 km, M <sub>B</sub> =5.6 (CGS), M=5.2 (ZAG).
15	eP eL <sub>R</sub>	22 23	17 54	21.8 23.8					92.8 10311	Dilat. Bonin Islands. USGS: 26.42N, 140.56E, H=22:04:40.1, h=263 km, M <sub>B</sub> =6.1 (CGS). Felt (IVJMA) on Chichijima.
16	ePn eSn	05	54 56 (00)	15.7					9.9 1095	Trace. Mediterranean. CSEM: 36.73N, 21.52E, H=05:51:58.0, h=48.6 km, M <sub>B</sub> =4.9 (CGS).
16	ePn ePg eSn eSg	06	09 10	27.5 39.4 05.0 16.4					3.1 340	Yugoslavia, Herzegovina. CSEM: 33.09N, 17.92E, H=06:08:39.9, h=10 km, I <sub>o</sub> =VI MCS.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
19	eP eSKS eL M	01 02	52 03 (00)	28.8					94.6 10511	Mexico, Guerrero. USGS:17.03N, 99.74W, H=01:39:14.0, h=36 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.4 (CGS). 1 person killed, 25 injured and damage reported in Acapulco.
20	eP ePPP	15	52 56	54.1 41.2					60.2 6690	Central Mid-Atlantic ridge. USGS: 00.83N, 29.82W, H=15:42:46.7, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.6 (CGS).
20	eP ePP	18	19 22	50.8 3.9 05.0					60.2 6690	Compr. Central Mid-Atlantic ridge. USGS:00.77N, 29.69W, H=18:09:43.6, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.8 (CGS).
22	eP eS ePS eL <sub>Q</sub> eL <sub>R</sub> M <sub>R</sub>	01	02 12 13 31 35 41	47.5 2.7 54.9 42.9 38.6					81.4 9045	Compr. Kuril Islands. USGS: 44.03N, 149.00E, H=00:50:32.2, h=33 km, M <sub>B</sub> =6.3 (CGS), M <sub>SZ</sub> =6.7 (CGS), Felt (IV MSK) at Kurilsk. M=7.8 (ZAG).
22	eP eS eL <sub>R</sub> eM <sub>R</sub>	21 22	46 57 (00) 18 24	49.2 3.1 3.5 17.5 28.2 17.0 32.2					80.8 8978	Dilat. Kuril Islands. USGS: 44.14N, 149.03E, H=21:34:33.4, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.6 (CGS). Felt (V MSK) at Kurilsk.
23	eP eS eL <sub>Q</sub> M <sub>2</sub>	00	43 53 12 23	14.5 20.4 18.1 34.9 16.9 180.5 242.4					80.8 8978	Compr. Kuril Islands. USGS: 44.21N, 148.97E, H=00:31:02.1, h=46 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.8 (CGS). Felt (V MSK) at Kurilsk.
23	e(P) e	00	52 (00)	25.3 1.7					(81.0) (9000)	Interrupt. Trace. Kuril Islands. USGS:44.22N, 149.27E, H=00:39:41.0, h=33 km, M <sub>B</sub> =5.6 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
23	eP M	02	01 41 44	49.3		20.8 13.5 2.5	81.4 9045	Kuril Islands. USGS:43.86N, 148.94E, H=01:49:33.8, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.4 (CGS), M=6.6 (ZAG).
23	eP epP	02	49	11.0 23.3	1.6		80.9 8989	Kuril Islands. USGS:44.20N, 148.73E, H=02:37:00.9, h=50 km, M <sub>B</sub> =5.8 (CGS).
23	eP e(S) eL <sub>R</sub>	03	26 36 59	38.1 39.3	3.3		80.0 8889	Dilat. Kuril Islands USGS: 44.29N, 149.13E, H=03:14:23.3, h=33 km, M <sub>B</sub> =5.9 (CGS).
23	eP iS eSKKS	03	27 37 38	35.1 38.2 16.5	4.4		80.6 8956	Kuril Islands. USGS:44.93N, 148.44E, H=03:15:20.3, h=33 km, M <sub>B</sub> =6.4 (CGS), M <sub>SZ</sub> =7.5 (CGS). Felt (VI MSK) at Kurilsk. Small tsunami re- ported.
23	eP e	04	03	04.5 06.6	1.1		81.2 9022	Trace. Kuril Islands. USGS: 44.38N, 149.58E, H=03:50:52.5, h=50 km, M <sub>B</sub> =6.0 (CGS). Felt (IV MSK) at Kurilsk.
23	eP F	08	26 28	42.9			81.0 9000	Trace. Kuril Islands. USGS: 44.32N, 149.06E, H=08:14:31.9, h=48 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.9 (CGS).
23	ePn	18	46	16.7				Yugoslavia, Croatia, Sinjsko polje. CSEM:43.64N, 16.77E, H=18:45:39.3, h=10 km, USGS: 43.64N, 16.69E, H=18:45:39.3, h=33 km, M <sub>B</sub> =4.2 (CGS). Slight damages at Sinj. I <sub>o</sub> =VI <sup>o</sup> MCS, M=4.0 (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
23	eP eS eL M <sub>1</sub>	19	24 34	39.0 39.8	1.2	18.2 36.0 17.9 24.8	81.2 9022	Kuril Islands. USGS:44.34N, 149.74E, H=19:12:23.6, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.8 (CGS). Felt (III MSK) at Kurilsk.
23	e	19	35	(00)				Interrupt. Trace. Kuril Islands. USGS:44.34N, 149.78E, H=19:21:00.1, h=33 km, M <sub>B</sub> =5.2 (CGS).
24	eP eS L <sub>R</sub>	00	53 02	16.8 (00)		9.6	62.5 6945	Compr. North Atlantic ocean. USGS:29.80N, 67.40W, H=00:42:36.3, h=20 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =5.8 (CGS). Felt.
24	eP eS M	20	00 10 34	05.3 17.8 21.7	3.0 4.3 712.8	29.6	81.2 9022	Compr. Kuril Islands. USGS: 44.24N, 148.86E, H=19:47:50.7, h=33 km, M <sub>B</sub> =6.5 (CGS), M <sub>SZ</sub> = 7.6 (CGS). Felt (VI MSK) at Kurilsk. Small tsunami. M=7.6 (ZAG).
24	eP e	21	13 24	54.8 (00)			43.5 4830	Eastern Kazakhstan, Alma-Ata region. USGS:42.84N, 78.61E, H=21:05:48.2, h=33 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =7.1 (CGS). Felt (VIII MSK) in NE Kirgiz.
25	ePKP ePKP <sub>2</sub>	19	44 45	51.6 07.6	2.2		152.5 16945	Fiji Islands region. USGS: 21.03S, 178.84W, H=19:26:03.2, h=595 km, M <sub>B</sub> =5.7 (CGS).
26	eP ePcP	00	04	28.5 48.8			81.3 9033	Trace. Kuril Islands. USGS: 43.77N, 148.45E, H=23:52:14.8, h=47 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.6 (CGS).
28	e	03	06	(00)				Interrupt. Trace.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
28	eP epP	20	29	07.3 21.8	3.0 1.2		79.4 9922	Dilat. Kuril Islands. USGS: 48.76N, 154.92E, H=20:17:05.8, h=53 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.8 (CGS).
28	eP ePcP	22	24	29.5 39.6	2.5		81.5 9056	Trace. Kuril Islands. USGS: 44.08N, 149.48E, H=22:12:14.0, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.5 (CGS).
29	ePKP epPKP	17	15	18.9 33.8	1.8	0.9	146.8 16311	New Hebrides Islands. USGS: 19.64S, 169.12E, H=16:55:48.2, h=94 km, M <sub>B</sub> =5.9 (CGS), M=6.7 (ZAG).
29	ePKP e	22	20	17.3 30.1	2.9		152.0 16889	Trace. Tonga Islands. USGS: 21.76S, 174.01W, H=22:00:26.7, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.7 (CGS).
31	iP iS	12	59	22.0 23.0	0.1	10.2 7.7 10.2	0.2 17	Dilat. Croatia. Felt (II <sup>o</sup> MCS) at Zagreb. ZAG:45.8N, 16.2E, H=12:59:19.2, M=1.6, PTJ:11 km.

## APRIL 1978.

3	eP eRsS	06	29	34.5 30 (00)			5.8 648	Italy, Corsica. CSEM:42.71N, 09.55E, H=06:26:43.9, h=10 km, M <sub>B</sub> =4.1 (CGS).
3	ePKP ePP	10	07 08 (00)	11.4 3.5			112.0 12445	Trace. West Irian region. USGS: 04.85S, 133.92E, H=09:48:35.0, h=33 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.1 (CGS).
3	ePn eSn e(S) e	10	50	19.0 42.9 48.7			2.0 218	Dilat. Italy. CSEM:46.27N, 13.22E, H=10:49:47.2, h=10 km, M=3.7 (ZAG).
			51	09.4 1.7	9.7			

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
3	ePn ePg eSg i	14	35	36.0 37.1 03:6			1.9 216	Trace. Italy, Friuli. CSEM: 46.27N, 13.20N, H=14:35:00.1, h=10 km. Felt in Western Slovenia. M=3.2 (ZAG).
4	eP eL M <sup>Q</sup>	00 01	49 07	35.1 15.0		16.7 11.1	51.5 5722	Tibet. USGS:33.03N, 82.29E, H=00:40:29.2, M=6.7 (ZAG).
4	eP epP eL	21	24	19.6 33.2	1.9 1.8	(00)	85.7 9512	North of Panama. USGS:10.04N, 77.95W, H=21:11:41.8, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.1 (CGS). Minor damage along Caribbean coast.
5	eM	04	56	21.9	3.9			Trace. Northeastern Peloponnesus.
6	eSn eSb eSg	10	26	47.1 49.3 51.7			2.0 217	Trace. Italy, Friuli. CSEM: 46.23N, 13.19E, H=10:25:48.4, h=10 km.
7	e(P) e	07	57	(00) 19.8			(81.2) (9022)	Trace. Kuril Islands. USGS: 44.41N, 149.34E, H=07:44:56.2, h=50 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> = 5.5 (CGS). Felt (II <sup>o</sup> MKS) at Kurilsk.
7	e	08	25	39.3	1.4			Trace.
7	eS	13	59	19.4	0.4			Trace. Local. PTJ:12 km.
10	eP eSKS	21	06 17	26.6 04.5			106 11780	Southeast Indonesia, near Sumba- wa Island. USGS:11.36S, 116.69E, H=20:52:18.9, h=33 km, M <sub>B</sub> =6.7 (CGS), M <sub>SZ</sub> =6.4 (CGS). Felt (III) on Bali.
11	eP ePcP	05	25	08.8 09.6			81.1 9010	Dilat. Trace. Unimak Islands re- gion. USGS:53.54N, 163.73W, H=05:12:55.1, h=33 km, M <sub>B</sub> =5.5 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
11	eP eR <sub>12</sub> S	22	06 07	21.6 30.4					4.0 440	Trace. Central Italy. CSEM: 42.21N, 13.13E, H=22:05:05.7, h=10 km.
12	ePKP epPKP	00	01 02	57.1 (00)					152.4 16933	Trace. Tonga Islands. USGS: 19.49S, 173.76W, H=23:42:07.6, h=33 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.6 (CGS).
12	eP eS M	03 04	54 03 34	(00) 46.5			16.5 11.6		77.7 8633	Interrupt. Kodiak Island region. USGS:56.42N, 152.69W, H=03: 42:03.5, h=14 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.6 (CGS). Felt (V°MSK) at Sitkinak.
13	ePn iPg iSg	18	06 07	32.7 48.4 49.3 2.8					4.3 480	Yugoslavia, Serbia, Kopaonik. CSEM:43.32N, 21.05E, H=18:05: 25.6, h=10 km. Damage reported in the Brus area.
15	ePg eSg	20	28	33.2 0.3 42.7 1.0					0.7 80	Trace. Croatia. 45.1N, 16.0E, H=20:28:20.2.
15	iPn eiSn M	23	35 37 38	39.5 03.3 12.0					7.5 837	Dilat. South Italy, Sicily. CSEM: 38.23N, 15.08E, H=23:33:49.2, h=18 km, M <sub>B</sub> =5.5 (CGS).
16	ePg eSb	23	20 22	54.9 (00)					4.3 478	Yugoslavia, Serbia, Kopaonik. CSEM:43.27N, 21.04E, H=23:19: 36.1, h=10 km, M <sub>B</sub> =4.1 (CGS).
21	eP esP ePP	15	30 32	25.9 43.9 11.2					41.9 4655	Compr. Afghanistan-USSR border region. USGS:36.62N, 71.27E, H=15:22:57.6, h=227 km, M <sub>B</sub> = 5.9 (CGS). Felt (V°MSK) at Khorog.
22	eP	15	13	04.6 3.0					49.2 5465	Trace. China, Northern Sinkiang Province. USGS:42.00N, 85.92E, H=15:04:15.6, h=20 km, M <sub>B</sub> =5.3 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
23	iP iRsS	11	23 24	28.8					1.7 190	Trace. Northern Italy, Friuli. CSEM:46.09N, 13.61E, H=11:23: 03.6, h=10 km, I <sub>o</sub> =V°MSK, M=3.0 (ZAG).
23	iP eS	11	34	12.2 39.4					1.9 206	Northern Italy, Friuli. CSEM: 46.09N, 13.73E, H=11:33:41.2, h=10 km, I <sub>o</sub> =IV°MCS (LJU).
24	ePKP e	16	04	09.0 3.1 29.7 3.5					155 17223	Trace. Tonga Islands. USGS: 21.27S, 174.38W, H=15:44:18.9, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.8 (CGS).
25	ePP F	04	42 44	48.5					99 11000	Trace. Celebes Sea. USGS:04.72N. 124.59E, H=04:24:53.7, h=43 km, M <sub>B</sub> =5.9 (CGS), M <sub>SZ</sub> =5.7 (CGS).
27	ePn eSn iM	08	35 37 38	26.8 (00) 26.7 3.1 3.0					8.0 890	Central Greece. CSEM:39.05N, 22.02E, H=08:33:32.7, h=39 ± 5 km, M <sub>B</sub> =4.9 (CGS), M <sub>SZ</sub> =3.9 (CGS). Felt (V°MSK) in Oetolie. M=4.6 (ZAG).
29	eP eSKS	02	40 50	(00) 2.5 23.0					92.8 10311	Interrupt. Southern Sumatera. USGS:05.85S, 103.97E, H=02:26: 48.9, h=50 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =5.1 (CGS).
29	ePKP eSKP <sub>2</sub>	04	40 43	17.9 50.4					133 14778	Dilat. Solomon Islands. USGS: 09.85S, 160.45E, H=04:21:10.4, h=46 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> = 5.9 (CGS). Felt (III°MSK) at Honiara.
29	e(Pg) eSg	08	31	(00) 03.9					(0.3) (32)	Interrupt. Trace. Local.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
29	eP	19	37	51.4	2.0				83.4	Trace. Taiwan region. USGS: 24.66N, 122.72E, H=19:25:20.9, h=18 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> = 5.8 (CGS).
	eScS		48	29.8				9267		
	L <sub>R</sub>	20	11	08.8	18.3		9.8			
30	ePn	02	05	18.0				2.1	Trace. Italy, Friuli. CSEM: 46.24N, 13.20E, H=02:04:42.9, h=10 km.	
	eSn			44.7			232			
30	eR <sub>P</sub>	17	36	51.1				2.9	Trace. Central Italy, Marche. ING:43.80N, 13.56E, H=17:35: 45.1, h=13 - 10 km, M=3.5 (AQU).	
	eS <sub>I</sub>		37	18.9		323				

M A Y 1978.

5	eP	09	34	21.5				4.5	Trace. Yugoslavia, Serbia. 494
	eS			35	10.7	2.1			
6	eP	11	24	(00)				42.1	Interrupt. Pakistan. USGS: 29.84N, 66.21E, H=11:16:09.9, h=33 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> = 5.7 (CGS). Felt. h=50 km (ZAG). M=5.8 (ZAG).
	ePcP		26	(00)			4680		
	e		47		13.3	1.7			
7	e	09	11	(00)					Interrupt. Trace.
8	ePn	14	40	49.7				7.5	Greece, Thessaloniki region. CSEM:40.67N, 23.36E, H=14:38: 58.5, h=10 km, M <sub>B</sub> =4.2 (CGS). Felt (V <sup>o</sup> MSK). M=4.3 (ZAG).
	eSg		43	(00)	2.1	1.8	830		
8	ePn	15	02	(00)				7.4	Interrupt. Greece, Thessaloniki region. CSEM:40.71N, 23.36E, H=15:00:09.6, h=10 km, M <sub>B</sub> =4.0 (CGS).
	eSg		04	09.6	2.2		818		
10	ePb	01	38	08.7				3.5	Yugoslavia, Serbia. CSEM: 43.08N, 18.74E, H=01:37:07.1, h=10 km, M <sub>B</sub> =4.8 (CGS).
	eSb			52.9			390		
	eSg		39	(00)	3.5				

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
10	ePn	13	14	32.5				7.5	Greece, Thessaloniki region. CSEM:40.71N, 23.42E, H=13:12: 51.3, h=10 km, M <sub>B</sub> =4.1 (CGS). Felt (V <sup>o</sup> MSK) in Khalkidiki area.	
	eSg			16	47.6		828			
11	eP	02	49	25.8				7.8	Trace. Italy, Sicily. CSEM:38.10N, 15.13E, H=02:46:59.0, h=10 km, M <sub>B</sub> =4.5 (CGS). Felt.	
	eS			51	11.6		862			
12	ePb	20	16	41.2				3.6	Trace. Yugoslavia, Montenegro. 43.1N, 19.3E, H=20:15:36.7.	
	eSn			17	17.2		400			
13	ePKP	07	27	52.3				140.6	Dilat. New Hebrides Islands. USGS:14.52S, 167.32E, H=07:08: 46.2, h=160 km, M <sub>B</sub> =6.7 (CGS).	
	epPKP			28	39.1		15622			
	esPKP			29	(00)					
13	eM	08	39	41.7					Trace. Greece, Thessaloniki region.	
14	e(Sn)	22	49	48.6				(3.1)	Trace. Italy, Marche. ING: 43.21N, 13.77E, H=22:48:18.7, h=5 km, M=3.0 (RMP).	
	e			50	16.2		(345)			
16	ePn	05	33	(00)				3.3	Interrupt. Yugoslavia, Montenegro. CSEM:43.15N, 18.75E, H=05:32: 09.6, h=10 km, I <sub>O</sub> =V-VI <sup>O</sup> MCS.	
	eSg				51.2		372			
16	e(Pg)	08	25	37.0				5.8	Dilat. Yugoslavia, Macedonia, Ohrid region. CSEM:41.12N, 20.98E, H=08:23:44.7, h=10 km, M <sub>B</sub> =3.5 (CGS), I <sub>O</sub> =VI <sup>O</sup> MCS.	
	eSg			26	51.6		650			
17	ePn	04	36	05.8				3.4	Yugoslavia, Montenegro. CSEM: 43.12N, 18.76E, H=04:35:14.4, h=10 km, M=3.8.	
	ePg				15.7		372			
	eSg			37	(00)					
17	ePg	06	43	34.6				3.3	Yugoslavia, Montenegro. 43.1N, 18.9E, H=06:42:31.1, M=3.6.	
	iSg			44	18.1		370			
17	ePKP	10	21	26.1				152.5	Trace. Fiji Islands region. USGS: 17.98S, 178.49W, H=10:02:44.0, h=593 km, M <sub>B</sub> =5.1 (CGS).	
	ePKP <sub>2</sub>				31.1		16945			

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
17	ePb eSb eSg	10	31 32	23.9 07.0 12.0					3.3 372	Yugoslavia, Montenegro. 43.2N, 18.9E, H=10:29:23.6, M <sub>B</sub> =3.3
18	eSb e	00	23 24	(00) (00)					8.6 950	Interrupt. Greece. CSEM:38.49N, 21.83E, H=00:18:52.5, h=44 ± 7km M <sub>B</sub> =3.9 (CGS). Felt (V <sub>O</sub> MSK).
18	ePn eSn eSg	02	38 39	14.7 10.0 32.3					4.5 504	Yugoslavia, Serbia, Kopaonik. CSEM:43.30N, 21.05E, H=02:37: 08.5, h=10 km, M <sub>B</sub> =5.0 (CGS). Felt (VII <sub>O</sub> MCS) in Brus area.
18	ePKP	05	12	56.5	3.0				146.6 16290	Compr. Trace. New Hebrides Islands. USGS:20.07S, 169.15E, H=04:53:22.0, h=67 km, M <sub>B</sub> =5.3 (CGS).
23	eP e epP eSKS	08	02 03 12	37.4 39.4 20.9 36.4	3.5 4.4				83.0 92 22	Japan, Kyushu. USGS:31.06N, 130.14E, H=07:50:28.2, h=161km, M <sub>B</sub> =6.3 (CGS). Felt (IV <sup>o</sup> JMA) at Miyazaki. h=170 km (ZAG).
23	ePn iSg eiM	23	36 37 39	(00) 09.2 22.5	3.2 6.9	295	131		7.4 60.7 820	Interrupt. Greece, Thessaloniki region. USGS:40.76N, 23.27E, H=23:34:11.4, h=10 km, M <sub>B</sub> =5.7 (CGS), I <sub>O</sub> =VII <sub>O</sub> MSK, M=5.7(ZAG)
24	ePn iSg	02	14 16	18.4 26.4					7.4 822	Greece, Thessaloniki region. CSEM:40.67N, 23.41E, H=02:12: 30.3, h=10 km, M <sub>B</sub> =4.6 (CGS).
24	ePn eSg	05 06	59 01	16.3 26.1					7.4 824	Greece, Thessaloniki region. CSEM:40.67N, 23.35E, H=05:57: 28.8, h=10 km, M <sub>B</sub> =4.3 (CGS).
24	eP eS eL <sub>R</sub> M	06 07	29 39 00 13	15.7 39.3		16.9	24.9	28.7	82.4 9157	Andreanof Islands, Aleutian Is- lands, USGS:51.23N, 179.21W, H=06:16:55.4, h=25 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.7 (CGS). Felt (IV) on Odak.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
24	eSg e	08	17 21	(00) 52.1					(7.3) (807)	Interrupt. Trace. Greece, The- ssaloniki region. CSEM:40.69N, 23.40E, H=08:13:08.3, h=10 km, M <sub>B</sub> =4.1 (CGS).
24	eSg e	08	50 51	31.4 38.1					7.5 832	Trace. Greece, Thessaloniki region. CSEM:40.71N, 23.41E, H=08:46:30.5, h=10 km, M <sub>B</sub> =4.1 (CGS).
26	ePKP	02	01	(00)					145.8 16200	Interrupt. Trace. Loyalty Islands. USGS:20.86S, 168.59E, H=01:41: 19.8, h=33 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =4.6 (CGS).
26	eP eS	13	48 52	35.3 40.3	3.5				22.4 2489	Trace. Caucasus. CSEM:41.99N, 46.71E, H=13:43:41.0, h=57 ± 6 km, M <sub>B</sub> =5.6 (CGS).
27	eP eSKS eL <sub>R</sub> M <sub>R</sub>	00	11 22 50 58	45.3 18.4		22.2	25.6		95.4 10600	Dilat. Volcano Islands region. USGS:24.27N, 142.66E, H= 23:58:22.0, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.8 (CGS).
28	e(P) e(S)	12	53	38.9 43.8					(0.4) (44)	Trace. PTJ:27 km.
J U N E 1978.										
2	ePn eSn eL	22	33 34 36	13.8 37.2		6.0	7.1		7.3 812	Compr. Greece, Thessaloniki region. CSEM:40.75N, 23.28E, H=22:31:27.1, h=20 ± 11 km, M <sub>B</sub> =4.6 (CGS). Felt (VI MSK). M=4.8 (ZAG).
4	iP eS eSS	19	37 42 45	13.1 38.9	1.9				34.4 3823	Compr. Uzbek SSR. USGS:40.38N, 63.62E, H=19:30:23.4, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =5.1 (CGS). Minor damage reported in Gazli region. Felt (VII MSK).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
7	ePg eSb	02	41 42	39.2 17.8					3.3 370	Trace. Yugoslavia, Montenegro. USGS:43.20N, 18.77E, H=02:40: 38.9, h=10 km.
10	eM e	06	13	13.0 14.7						Trace. Yugoslavia, Montenegro. 43.2N, 19.2E, H=06:11:01.8, H=3.4.
12	eP ePP eSKS eL	08	26 30 36 52	49.6 (00) 29.7 50					83.3 9260	Compr. Japan, off Miyogi prefe- cture. USGS:38.19N, 142.03E, H=08:14:26.4, h=44 km, M <sub>B</sub> =6.8 (CGS), M <sub>SZ</sub> =7.7 (CGS). 28 killed, 421 injured and extensive damage in the Sendai area. Felt (V°JMA) on Honshu. Many aftershocks, tsunami. M=8.0 (ZAG).
12	e eS	17	28 29	26.3 (00)					3.5 388	Trace. Northern Italy. CSEM: 43.83N, 11.98E, H=17:27:07.8, h=17 <sup>+</sup> 6 km, M=3.6.
12	eS eSS	17	48	50.2 56.1	3.8				7.4 818	Trace. Greece, Thessaloniki re- gion. CSEM:40.73N, 23.38E, H=17:44:49.2, h=10 km, M <sub>B</sub> =4.1 (CGS), I <sub>o</sub> =VII MSK.
12	eS e	22	25	09.6 19.2					2.0 227	Trace. Italy, Friuli. CSEM: 46.28N, 13.10E, H=22:24:05.8, h=10 km, I <sub>o</sub> =V <sub>o</sub> MCS (LJU).
12	ePn eSg	23	38 40	34.2 43.9					7.3 812	Trace. Greece, Thessaloniki re- gion. CSEM:40.79N, 23.34E, H=23:36:43.4, h=10 km, M <sub>B</sub> =4.2 (CGS).
14	e	10	08	(00)						Interrupt. Trace.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
14	eP ePcP M	11	46 27	44.8 51.0					83.3 9258	Compr. Japan, near East coast of Honshu. USGS: 38.32N, 142.36E, H=11:34: 20.0, h=40 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.3 (CGS). Felt (IV° JMA) in N. Honshu. M=6.8 (ZAG).
14	eP eSKS	12	45 56	58.2 25.0					95.6 10622	Compr. Philippine Islands, Mindanao. USGS: 08.25N, 122.40E, H=12:32:33.9, h=24 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.9 (CGS). h=28 km (ZAG).
14	eP ePP	13	47 51	25.4 21.6					95.6 10622	Philippine Islands, Mindanao. USGS: 08.24N, 122.38E, H=13:34:09.6, h=79 km, M <sub>B</sub> =5.9 (CGS).
15	eS e	00	32 33	(00) 19.8					9.8 1092	Interrupt. Trace. Turkey. CSEM:40.80N, 27.77E, H= 00:26:44.6, h=10 <sup>+</sup> 8 km, M <sub>B</sub> =4.4 (CGS).
17	ePKP ePKP <sup>2</sup> ePP M	15	31 34 50	17.7 24.1 32.9	2.3				145.3 16147	Dilat. Tonga Islands region. USGS: 17.10S, 172.26W, H=15:11:33.5, h=33 km, M <sub>B</sub> =6.6 (CGS), M <sub>S</sub> =7.0 (CGS)
19	ePn iPg iSg i	10	32 33 35	55.5 25.8 22.5		6.5	44.7 54.0		7.4 820	Dilat. Greece, Thessaloniki. CSEM: 40.76N, 23.33E, H=10:31:07.9, h=13 km, M <sub>B</sub> =5.3 (CGS), M <sub>B</sub> =5.6 (ZAG) 1 person killed, 10 injured and damage in the Thessalo- niki area.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
19	ePn eSg e	10	50 52 54	(00) 10.8 24.1				1.8	7.3 812	Interrupt. Trace. Greece, Thessaloniki. CSEM: 40.67N, 23.26E, H=10:48:12.6, h=10 km M <sub>B</sub> =4.6 (CGS), M=4.3 (ZAG).
20	ePn eRiP eS	16	30 31	26.8 38.3 23.9					3.5 385	Trace. Yugoslavia, Monte- negro. 43.17N, 19.00E, H=16:29:30.3, M=3.2.
20	ePn1 ePn2 eiP1 ei eiSg2 iM	20	05 06 07 08	12.1 13.4 40.5 42.0 23.8 31.5			2.3		7.3 814	Compr. Greece, Thessaloniki. CSEM: 40.75N, 23.26E, H=20:03:25.1, h=15 <sup>±</sup> 8 km, M <sub>B</sub> =6.1 (CGS), M <sub>S</sub> =6.4 (CGS) 49 dead, 222 injured and considerable damage in The- ssaloniki area, damage also in Bulgaria and Yugoslavia. M=6.7 (ZAG).
20	eSb eSg	20	31 32	39.8 (00)					7.4 825	Trace. Greece, Thessaloniki. CSEM: 40.61N, 23.10E, H=20:27:59.7, h=10 km, M=3.9.
20	eSg eM	20	41 42	34.4 (00)						Trace. Greece, Thessaloniki. CSEM: 40.73N, 23.13E, H=20:37:42.0, h=39 <sup>±</sup> 13 km, M=3.9.
20	ePn e e(Sg)	20	47 49	11.2 28.2 38.8	1.0 2.9				(7.3) (820)	Trace. Greece, Thessaloniki. CSEM: 40.75N, 23.26E, H=20:45:24.7, h=10 km, M <sub>B</sub> =4.1 (CGS).
20	eSn eSg	20	55 56	41.4 21.7					(6.9) (770)	Trace. Greece, Thessaloniki. ATH:40.7N, 23.1E, H=20:52:40, M <sub>L</sub> =3.9, h=n.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
20	eM	21	04	(00)						Interrupt. Trace. Greece. ATH:40.7N, 23.4E, H=20:59:43, M <sub>L</sub> =3.7, h=n.
20	ePn eS eRs2S M	21	52 55 57	55.6 08.0 19.1 16.4	3.0 2.8				0.8 7.4 818	Greece. Thessaloniki region. CSEM: 40.68N, 23.28E, H=21:51:06.0, h=10 km, M <sub>B</sub> =4.3 (CGS), M=4.3 (ZAG).
21	e	01	07	(00)						Interrupt. Trace. Greece.
21	eSg e	03	24	23.1 30.0					7.3 818	Trace. Greece. Thessaloniki. CSEM: 40.68N, 23.26E, H=03:20:28.0, h=10 km, M <sub>L</sub> =4.0 (ATH).
21	ePn eP	06	02	(00) 27.0					7.3 814	Greece, Thessaloniki. CSEM: 40.73N, 23.39E, H=06:00:08.1 h=10 km, M <sub>B</sub> =5.2 (CGS).
21	eP F	11	06	44.1 11					83.1 9235	Dilat. Japan, Honshu. USGS: 38.33N, 141.76E, H=10:54: 22.6, h=52 km, M <sub>B</sub> =5.7 (CGS).
21	eP epP esP epPP eS	11	21 23 24 26 31	54.6 29.4 (00) 13.5 09.5	1.9 3.1				77.6 8622	Compr. Northwest of Kuril Islands. USGS: 48.31N, 148.61E, H=11:10:38.2, h=377 km, M <sub>B</sub> =5.9 (CGS), h=375 km (ZAG).
21	iPn ePg eSb M	12	31 33 34	33.8 53.3 29.1 (00)	2.1 7.7				7.3 817	Dilat. Greece, Thessaloniki. CSEM: 40.77N, 23.17E, H=12:29:46.5, h=16 <sup>±</sup> 8 km, M=4.9 (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
21	ePn eSn eSg	18	53	55.4 19.3 (00)			7.4 815	Dilat. Greece, Thessaloniki region. CSEM: 40.66N, 23.26E, H=18:52:06.0, h=10 km, M <sub>B</sub> =4.3 (CGS).
22	ePg eSn M	02	34	34.4 (00)	2.3	19.7	3.7 410	Hungary. CSEM: 46.83N, 21.19E, H=02:33:25.8, h=10 km, M <sub>B</sub> =4.6 (CGS). Slight damage in Bekes area. M=4.6 (ZAG).
22	eP	02	39	23.3				
22	ePg	02	45	13.2			3.2 355	Trace. Hungary. CSEM: 47.84N, 19.39E, H=02:44:12.9, h=10 km.
22	ePg iSn	02	59	03.8 36.6			3.6 408	Hungary. CSEM: 46.80N, 21.16E, H=02:57:55.8, h=10 km, M <sub>B</sub> =4.4 (CGS).
22	ePg eSg	05	32	11.3 (00)			3.7 413	Trace. Hungary. CSEM: 46.78N, 21.14E, H=05:31:59.9, h=10 km, M <sub>B</sub> =3.2 (CGS).
22	eM	07	34	26.8				Trace. Philippine, Mindanao.
22	eP ePP	08	43	09.1 09.0	2.0		58.7 6520	Dilat. Central-Mid Atlantic ridge. USGS: 01.14N, 27.71W, H=08:33:11.5, h=33 km, M <sub>B</sub> =5.2 (CGS), M <sub>SZ</sub> =5.3 (CGS).
23	ePg e(Sg)	01 02	59	18.3 (00)			7.3 807	Greece, Thessaloniki. CSEM: 40.83N, 23.18E, H=01:57:03.2, h=10 km, M <sub>B</sub> =4.1 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
23	eP eS	12	33	22.9 (00)			5.1 565	Yugoslavia. ISC: 43.22N, 22.10E, H=12:32:04, h=0 km.
23	eM	20	02	47.1				Trace. Greece, Thessaloniki.
24	ePn ePb iSn eSg M	00	15	50.7 09.7 50.0 21.4		36.1 3.4 14.7 19.8	5.2 580	Albania. CSEM: 41.65N, 20.32E, H=00:14:30.2, h=10 km, M <sub>B</sub> =4.7 (CGS). I <sub>O</sub> =VI <sup>O</sup> MSK. Slight damage in Peshkopi and Debar regions. M=4.9 (ZAG).
24	eSg	00	32	16.9			5.0 558	Trace. Albania. ISC: 41.72N, 20.23E, H=00:29:35.1, M <sub>B</sub> =3.9.
24	eSg e	00	41	06.6 12.1			(5.3) (588)	Trace. Yugoslavia-Albania border region. USGS: 41.65N, 20.31E, H=00:38:16.0, h=10 km, M <sub>B</sub> =3.3 (CGS). Felt V <sup>O</sup> MCS at Debar region.
24	e	04	38	(00)				Trace. Greece, Thessaloniki.
24	eP esP eScS	09	44	49.3 (00) 40.2			91.1 10122	Dilat. Southern Sumatra. USGS: 05.06S, 102.36E, H=09:31:42.7, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.4 (CGS).
25	eSb e	05	01	(00) 33.0			5.3 590	Interrupt. Trace. Albania. CSEM: 41.59N, 20.42E, H=04:58:22.9, h=10 km, M <sub>L</sub> =4.4 (ATH).
25	ePKP ePKP <sub>2</sub>	10	41	16.7 18.6 1.5			150.0 16667	Trace. Tonga Islands. USGS: 17.11S, 174.43W, H=10:21:45.0, h=195 km, M <sub>B</sub> =5.5 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
26	ePg eSg	00	05 06	19.3 18.6	2.8	0.8	4.5 505	Yugoslavia, Serbia. USGS: 43.14N, 20.82E, H=00:03:56.6, h=10 km, M=3.5 (ZAG).
29	ePKP esPKP <sub>2</sub>	14	14	41.7 45.8			145.8 16203	Dilat. Loyalty Islands. USGS: 20.26S, 168.17E, H=13:55: 03.6, h=33 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =4.8 (CGS),
30	ePb ePg eSg eM	07	35 36	23.9 25.5 18.1 39.2	2.3	1.0	3.6 395	Hungary. CSEM: 46.80N, 21.13E, H=07:34:16.7, h=10km, M <sub>B</sub> =3.5 (CGS), M=3.4 (ZAG).

J U L Y 1978.

2	ePKP epPKP <sub>2</sub> esPKP <sub>2</sub>	04	21	14.9 31.7 37.7	3.5		148.1 16456	Tonga Islands. USGS: 15.33S, 175.49W, H=04:01:33.3, h=25 km, M <sub>B</sub> =5.9 (CGS), M <sub>SZ</sub> =6.4 (CGS).
3	eM	20	13	40.3				Trace. Greece, Thessaloniki.
4	eP epP	02	53	04.6 34.4			82.7 9190	Compr. Trace. Japan, Kyushu. USGS: 32.66N, 131.12E, H=02:40:54.0, h=118 km, M <sub>B</sub> =5.7 (CGS). 2 injured. Felt (IV <sup>o</sup> JMA) on Kyushu. h=125 km (ZAG).
4	ePn eSn eiM e	22	25 26 27 28	15.6 41.9 33.9 33.2	4.8 16.4 6.7 11.9		7.3 810	Greece, Thessaloniki. CSEM: 40.75N, 23.15E, H=22:23:31.4 h=27 <sup>+</sup> 10 km, M <sub>B</sub> =5.1 (CGS), M <sub>SZ</sub> =4.8 (CGS). 1 killed, 16 injured. Felt VI <sup>o</sup> MSK. M=5.1 (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
4	eP e	22	42 45	41.2 (00)			14.1 1570	Trace. Central Turkey. CSEM: 39.48N, 33.21E, H=22:39:17.7 h=13 km, M <sub>B</sub> =4.9 (CGS).
6	eP iS	14	09	10.6 11.8	0.1 6.9	5.1	0.1 10	Croatia, Local. M=0.8 (ZAG). Felt (II <sup>o</sup> MCS) at Zagreb.
8	ePKP epPKP	08	30 31	56.3 09.9	2.5		150.0 16650	Samoa Islands region. USGS: 16.74S, 172.71W, H=08:11:19.4 h=33 km, M <sub>B</sub> =5.1 (CGS), M <sub>S</sub> =5.4 (CGS).
13	e eS	13	10 11	56.6 04.3	1.0	0.9		Trace. Local.
13	eP eS eSKS	13	37 47	39.7 51.0 55.9	1.1		82.2 9133	Dilat. Fox Islands, Aleutian Islands. USGS: 52.24N, 168.82W H=13:25:19.7, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =5.6 (CGS).
17	ePKP iPKP <sub>2</sub>	13	45	24.3 31.8	2.4		144.0 16000	Samoa Islands region. USGS: 14.89S, 175.82W, H=13:26:14.9 h=292 km, M <sub>B</sub> =6.0 (CGS), M=6.5 (ZAG).
18	e	12	38	05.8				Trace.
22	eRiPS eS	01	19	23.0 42.5	0.7	0.5	3.4 370	Northern Italy. CSEM: 44.17N, 12.02E, H=01:17:51.8, h=19 <sub>+</sub> 6 km.
22	ePKP epPKP	12	10	40.9 50.6			125.0 13890	New Britain region. USGS: 04.19S, 152.84E, H=11:51:47.0 h=43 km, M <sub>B</sub> =5.9 (CGS), M <sub>S</sub> =6.0 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>O</sup> D km	Remarks
23	eP eS eScS eSP eL	14 15	55 05	09.7 31.7 43.1		53.7 16.5	84.2 9355	Dilat. Taiwan region. USGS: 22.28N, 121.51E, H=14:42:36.9 h=17 km, M <sub>B</sub> =6.5 (CGS), M <sub>SZ</sub> =7.4 (CGS). Felt strongly on Taiwan. Small tsunami. M=7.4 (ZAG).
24	ePKP epPKP	20	05	19.9 3.3 26.0			148.3 16478	Trace. New Hebrides Islands. USGS: 20.67S, 172.50E, H=19:45:35.3, h=37 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.1 (CGS).
26	e	14	58	09.7				Trace.
27	ePKP F	18	44 47	46.0			148.6 16511	Trace. Tonga Islands. USGS: 15.58S, 173.04W, H=18:25: 08.5, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.8 (CGS).
29	e e	04	41 42	33.4 17.9	4.3			Trace. Turkey.
30	ePn eSn iM	05	20 21	27.9 15.6		12.2	4.0 448	Central Italy. CSEM: 42.62N, 12.48E, H=05:19:26.4, h=10 km, M <sub>B</sub> =4.7 (CGS), I <sub>O</sub> =VI-VII <sup>O</sup> MCS, M=4.5 (ZAG).

## AUGUST 1978.

3	eP ePP eSKS eL	18	25 29	44.0 51.9	3.4		106.3 11811	Near coast of Northern Chile. USGS: 26.51S, 70.54W, H=18: 11:17.1, h=58 km, M <sub>B</sub> =6.3 (CGS). 13 injured and major damage in the Copiapo Taltal area.
5	e	11	01	13.5				Trace.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>O</sup> D km	Remarks
5	ePn eSn	18	13	49.6 38.7			4.0 448	Central Italy, Umbria. CSEM: 42.65N, 12.54E, H=18:12:48.2, h=10 km.
5	eP esP	19	05	08.2 31.0			90.5 10056	Compr. Trace. Southern Su- matra. USGS: 4.02S, 102.41E, H=18:52:09.1, h=48 km, M <sub>B</sub> = 5.9 (CGS), h=60 km (ZAG).
8	eM	12	14	38.4				Trace. Albania. Felt V <sup>O</sup> MSK.
10	eP	17	06	25.4			87.0 9667	Trace. South Atlantic ridge. USGS: 35.86S, 17.65W, H=16:53:37.1, h=10 km, M <sub>B</sub> = 5.2 (CGS), M <sub>SZ</sub> =6.0 (CGS).
10	ePKP F	20	27	(00) 1.7			146.2 16245	Interrupt. Fiji Islands region. USGS: 16.66S, 175.67E, H=20:07:20.2, h=33 km, M <sub>B</sub> =5.5 (CGS).
13	eP	03	54	06.0	2.1		84.4 9378	Taiwan region. USGS: 22.23N, 121.52E, H=03:41:31.8, h=19 km, M <sub>B</sub> =5.4 (CGS).
13	ePKP F	21	12	32.4 1.9 14			149.7 16635	Trace. Fiji Islands region. USGS: 17.81S, 178.35W, H=20:53:53.8, h=599 km, M <sub>B</sub> =5.5 (CGS), h=540km (ZAG).
14	eP F	18	58	17.9 1.7 58			78.7 8745	Compr. Trace. Kuril Islands. USGS: 49.87N, 156.28E, H=18:46:24.1, h=86 km, M <sub>B</sub> =5.8 (CGS).
15	eP	09	09	08.3	2.6		20.6 2290	Caucasus. CSEM: 41.47N, 43.99E, H=09:04:26.2, h=10 km, M <sub>B</sub> =4.8 (CGS).

Date	Phase	M G T			Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
		h	m	s		NE	NW	Z		
15	ePKP	12	57	10.1	3.3				161.3	Compr. Kermadec Islands.
	ePP	13	01	44.1	2.8				17923	USGS: 30.53S, 178.18W, H=12:37:12.8, h=33 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.4 (CGS).
17	ePKP	08	51	02.2					154.0	South of Fiji Islands. USGS:
	epPKP		53	29.4					17110	22.17S, 179.56W, H=08:32:19.2, h=593 km, M <sub>B</sub> =5.6 (CGS).
17	ePKP	09	11	41.2					153.9	Tonga Islands. USGS: 21.07S,
	epPKP			43.1	2.6				17100	174.32W, H=08:51:51.3, h=20 km, M <sub>B</sub> =5.7 (CGS).
18	ePn	20	54	40.1					5.2	Dilat. Albania. CSEM: 41.79N,
	eSn		55	39.9					575	20.30E, H=20:53:22.8, h=10
	iSg		56	09.2	1.7	57.4				km, M <sub>B</sub> =5.1 (CGS), M=5.4 (ZAG), I <sub>o</sub> =VII <sup>o</sup> MSK.
21	eM	00	57	(00)	2.2					Interrupt. Trace. Greece, Thessaloniki.
21	eP	22	18	23.9	2.3				94.1	Prince Edward Islands. USGS:
	ePP		22	06.1					10456	47.67S, 32.54E, H=22:05:02.5, h=10 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.2 (CGS).
22	e	12	17	27.7						Trace.
23	eP	00	51	29.0					90.4	Compr. Costa Rica. USGS:
	eSKS	01	02	(00)					10044	10.20N, 85.22W, H=00:38:32.2,
	esS	01	03	(00)						h=56 km, M <sub>B</sub> =5.7 (CGS),
	M		36		16.5	39.1	56.0	44.1		
24	e	19	02	51.6						Trace.

Date	Phase	M G T			Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
		h	m	s		NE	NW	Z		
SEPTEMBER 1978.										
1	ePb	22	48	32.0					8.0	Northern Greece. CSEM:
	eSn		49	39.5					885	39.21N, 21.58E, H=22:46:20.1, h=35 km, M <sub>B</sub> =4.8 (CGS), I <sub>o</sub> =V-VI <sup>o</sup> MCS.
2	eP	02	09	48.6	3.1				82.9	Compr. Taiwan. USGS: 24.90N,
	epP		10	18.6					9210	121.99E, H=01:57:33.4, h=109
	eS		20	(00)						km, M <sub>B</sub> =6.1 (CGS). Several
	esS			44.3						persons injured and minor da- mage at Taipei. h=120 km(ZAG).
3	eP	00	25	(00)					15.7	Interrupt. Caucasus. USGS:
	ePP			10.9					1740	44.40N, 38.05E, H=00:21:15.6, h=33 km, M <sub>B</sub> =5.7 (CGS). Felt
	eS		28	(00)						VI <sup>o</sup> MSK.
3	ePn	05	09	52.3					5.4	Germany. CSEM: 48.29N,
	eRsP		10	14.8					597	08.94E, H=05:08:31.8, h=9 <sup>+</sup> 3
	iRs2P			22.1	2.2					km, M <sub>B</sub> =4.9 (CGS), M <sub>SZ</sub> =5.3
	i		11	22.6	2.6			39.0		(CGS). Several reported in- jured, considerable damage in
	eiS			25.9	2.8	184				the Tailfingen-Austmettingen
	iRsS			29.9	3.4		104			area. I <sub>max</sub> =VIII <sup>o</sup> MCS. M=5.7 (ZAG).
F		32								
3	e(Sb)	05	37	(00)					(5.4)	Interrupt. Trace. Germany.
	eSg			12.2					(599)	USGS: 48.28N, 8.93E, H=05: 34:18.5, h=10 km, M <sub>L</sub> =4.3 (GRF).
3	eP	07	43	14.5					78.5	Trace. Kuril Islands. USGS:
	ePcP			20.6					8722	49.45N, 154.36E, H=07:31:23.8, h=109 km, M <sub>B</sub> =5.5 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
3	eSg e	08	13 14	(00) 10.8			(5.3) (587)	Interrupt. Trace. Germany. USGS: 48.31N, 8.98E, H=08:10: 10.0, h=10 km, M <sub>L</sub> =4.1 (GRF).
3	ePg eSg e	10	04 05	26.7 37.5 42.9	1.7		5.4 600	Germany. CSEM: 48.27N, 8.99E, H=10:02:43.3, h=8 <sup>±</sup> 2 km, M <sub>L</sub> = 4.7 (GRF).
6	ePKP <sub>2</sub> esPKP <sub>2</sub>	04	21	34.1 49.5	1.9		145.4 16158	Dilat. Loyalty Islands. USGS: 20.14S, 168.71E, H=04:01:53.5 h=36 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> = 6.0 (CGS).
6	ePKP epPKP	11	26 27	50.8 34.6			139.4 15489	New Hebrides Islands. USGS: 13.32S, 167.14E, H=11:07:43.1, h=198 km, M <sub>B</sub> =6.0 (CGS).
6	i	16	07	40.1				Dilat. Trace.
7	eP eSg	04	57 58	(00) 47.4			8.9 988	Interrupt. Trace. Greece, Ionian Sea. CSEM: 36.87N, 21.03E, H=04:53:57.8, h=43 <sup>±</sup> 4 km, M <sub>B</sub> =4.5 (CGS).
9	ePn eS e	16	34 36 37	11.3 56.2 44.5	4.3 4.1		9.1 1012	Compr. Central Greece. CSEM: 38.51N, 23.34E, H=16:32:01.5, h=10 km, M <sub>B</sub> =4.2 (CGS), M= 4.7 (ZAG).
11	eP ePP	07	53 57	23.6 (00)			84.6 9440	Dilat. Southern Ryukyu Islands. USGS: 24.93N, 124.85E, H=07: 40:52.5, h=21 km, M <sub>B</sub> =5.7 (CGS).
14	ePn iP iS M	00	07 09	06.6 37.3 22.3 33.5	5.2 5.9		7.6 844	Greece. CSEM: 39.00N, 20.52E, H=00:05:12.6, h=39 <sup>±</sup> 7 km, M <sub>B</sub> = 4.7 (CGS), M=5.0 (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
14	eP eS	02	14 16	15.3 (00)			7.5 838	Trace. Albania-Greece border region. CSEM: 39.17N, 20.53E, H=02:11:46.1, h=47 <sup>±</sup> 7 km, M <sub>B</sub> = 4.2 (CGS).
15	eP ePP	02	44 46	47.7 27.9			41.4 4602	Trace. Eastern Kazakh SSR. Nuclear explosion. USGS: 49.90N, 78.93E, H=02:36:57.3, h=0 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> = 4.4 (CGS).
15	eP epPP	11	51 54	27.8 43.3			79.5 8833	Compr. Kuril Islands. USGS: 48.25N, 154.28E, H=11:39:25.1, h=44 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> = 5.7 (CGS).
16	eP ePP iS M <sub>R</sub> e	15	42 43 48 57 58	38.8 55.2 17.3 (00)	17.5 149 10.3	149 127	33.9 3767	Compr. Iran. CSEM: 33.31N, 57.40E, H=15:35:57.1, h=22 <sup>±</sup> 7 km, M <sub>B</sub> =6.5 (CGS), M <sub>SZ</sub> =7.4 (CGS). <sup>D</sup> Estimated 11000-15000 people killed, many injured, and extensive damage in Tabas area. M=7.6 (ZAG).
18	ePn eRIP eS M	12	31 32	27.2 (00)			2.1 238	Yugoslavia, Bosnia and Herze- govina. CSEM: 43.87N, 17.02E, H=12:30:50.2, h=10 km, M= 3.6 (ZAG).
19	ePKP	13	04	26.1			146.4 16268	Compr. Trace. New Hebrides Islands. USGS: 19.31S, 169.03E, H=12:45:00.2, h=119 km, M <sub>B</sub> = 5.3 (CGS).
19	e(Sb) eSg	23	56	30.1 40.9	1.4		5.4 598	Trace. Germany. CSEM: 48.29N, 8.98E, H=23:53:48.5, h=10 km, M <sub>B</sub> =4.1 (GRF).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
22	eP iM	19	35	37.9 48.1	0.5	0.7				Trace. Probably local.
22	eP eS	23	17	14.9 38.3				1.7 189		Trace, Croatia. 45.4N, 18.3E, H=23:16:35.3, Felt IV-V <sup>o</sup> MCS at Djakovo.
23	ePKP ePP	16	51 54	12.9 09.7				140.2 15578		New Hebrides Islands. USGS: 13.92S, 167.21E, H=16:32:11.1, h=201 km, M <sub>B</sub> =6.3 (CGS).
24	epPKP e	08	03	10.0 26.2	2.0			147.5 16389		Loyalty Islands region. USGS: 21.95S, 169.99E, H=07:43:26.4, h=43 km, M <sub>B</sub> =5.0 (CGS), M <sub>SZ</sub> = 5.4 (CGS).
24	eRsP eS	08	09 10	21.5 28.6				5.1 570		Southern Italy. CSEM: 40.75N, 16.08E, H=08:07:45.4, h=10 km, M <sub>B</sub> =4.2 (CGS).
24	epPKP	18	39	54.0	2.8			147.3 16370		Trace. Loyalty Islands. USGS: 21.89S, 169.99E, H=18:20:10.7, h=42 km, M <sub>B</sub> =5.0 (CGS).
26	eSg e	05	01	(00) 07.8				3.5 387		Interrupt. Trace. Yugoslavia. USGS: 43.25N, 19.18E, H=04: 59:10.3, h=10 km.
26	ePn iSg iM	16	48 49	22.4 58.9 13.7	1.7	6.0	6.1	2.5	2.5 282	Hungary. CSEM: 47.26N, 19.05E H=16:47:34.9, h=10 km, M=3.8 (ZAG).
27	eP ePPP	02	11 13	34.9 09.4	1.9			32.7 3633		Trace. Novaya Zemlya. Nuclear explosion. CSEM: 73.56N, 54.88E, H=02:04:59.3, h=0 km, M <sub>B</sub> =5.6 (CGS).
30	ePg e(Sg)	01	08 10	11.6 17.7	1.8			9.1 1010		Trace. Ionian Sea. CSEM: 37.48N, 20.40E, H=01:05:17.2, h=46 <sup>+</sup> 9 km, M <sub>B</sub> =4.8 (CGS), M <sub>SZ</sub> =4.1 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
30	eP e	09	15 24	52.1 50.4				71.8 7978		Trace. South Burma. USGS: 16.60N, 95.86E, H=09:04:31.2, h=10 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> = 5.7 (CGS).
OCTOBER 1978.										
2	eP e(SS)	20	30 32	39.0 43.9	1.6			7.4 821		Dilat. Romania, Vrancea. CSEM: 45.72N, 26.66E, H=20: 28:53.5, h=164 km, M <sub>B</sub> =5.0 (CGS).
8	eP e	11	31 32	49.6 42.0				24.0 2668		Atlantic. CSEM: 37.22N, 14.13W H=11:26:34.5, h=10 km, M <sub>B</sub> = 4.8 (CGS).
8	eP eS eL	14	27 34 47	59.8 27.1				42.8 4756		Compr. China. USGS: 39.39N, 74.72E, H=14:20:05.6, h=62 km, M <sub>B</sub> =5.8 (CGS).
9	iP iS	07	39	48.1 51.2	0.1 0.1			0.2 22.7	26	Compr. Croatia. 45.8N, 15.7E, H=07:39:33.3, M=2.1 (ZAG).
11	eP eS	02	01 12	40.2 14.1				86.6 9624		Dilat. Trace. Japan, South of Honshu. USGS: 33.42N, 140.79E H=01:49:01.1, h=57 km, M <sub>B</sub> = 5.9 (CGS).
17	ePKP e	00	13 14	58.5 04.9	1.7			151.0 16781		Dilat. Trace. Fiji Islands region. USGS: 17.75S, 178.82W, H=23: 55:15.9, h=565 km, M <sub>B</sub> =5.4 (CGS), h=510 km (ZAG).
17	eP ePP	05	04 05	54.4 09.8				22.1 2456		Compr. Western Kazakh SSR. Nuclear explosion. USGS: 47.91N, 48.21E, H=04:59:57.9, h=0 km, M <sub>B</sub> =6.0 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
17	eP ePP	14	06 07	24.5 33.7			31.5 3506	Ural Mountains region. Nuclear explosion. USGS: 63.21N, 63.19E, H=13:59:59.3, h=0 km, M <sub>B</sub> =5.5 (CGS).
22	ePPP eSg	08	41	04.8 29.9			2.9 319	Trace. Central Italy. CSEM: 43.25N, 13.68E, H=08:39:57.3, h=10 km, M <sub>B</sub> =4.9 (CGS).
23	eSg e	05	01	37.0 42.1			2.0 217	Trace. Austria. CSEM: 47.69N, 16.24E, H=05:00:35.0, h=10km.
23	e(P) e	08	15 18	40.0 (00) 3.0				Disturbed by microseismos. Hindu Kush region. USGS: 36.48N, 70.96E, H=08:07:31.6, h=185 km, M <sub>B</sub> =5.6 (CGS).
26	e	10	00	32.4 1.0 0.9				Trace.
27	eSn eSb	14	05 06	55.4 (00)			2.5 274	Trace. Yugoslavia. USGS: 43.73N, 17.51E, H=14:04:42.6, h=10 km, M <sub>L</sub> =3.3 (LJU).

## NOVEMBER 1978.

1	eP esP eS M	19	56	12.6 32.3 29.1 4.1 7.5			41.4 4600	Dilat. Kirgiz-Tadzhik SSR. USGS: 39.35N, 72.62E, H=19:48:28.0, h=40 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.8 (CGS), M=7.3 (ZAG).
2	e(Pg) eSg eSb	01	57	(00) 18.0 19.5			1.3 140	Interrupt. Trace. Yugoslavia, Slovenia. USGS: 46.01N, 14.25E, H=01:56:39.3, h=10 km, M <sub>V</sub> =3.2 (LJU), I <sub>O</sub> =IV <sup>o</sup> MCS.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
2	eP ePP	06	32	(00) 33 33.6			41.5 4612	Interrupt. Kirgiz-Tadzhik SSR. USGS: 39.33N, 72.69E, H=06:24:13.0, h=27 km, M <sub>B</sub> =5.3 (CGS), M <sub>SZ</sub> =5.2 (CGS).
2	eP ePP	11	23 25	22.5 22.1			41.3 4590	Trace. Kirgiz-Tadzhik SSR. USGS: 39.41N, 72.61E, H=11:15:40.5, h=46 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.2 (CGS).
3	eP iS M	11	48	09.7 14.5 21.7			0.4 40	Trace. Local. M=1.6 (ZAG).
4	eP eS i eL	15	27 32	47.9 16.5 38.5 5.1 27.5 (00) 8.4 11.0			25.5 2832	Northwestern Iran. USGS: 37.67N, 48.90E, H=15:22:19.3, h=34 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.0 (CGS), M=6.3 (ZAG).
4	ePKP ePKS	22	48 52	50.7 26.2			135.2 15025	Solomon Islands. USGS: 11.23S, 162.18E, H=22:29:22.1, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.9 (CGS).
4	ePKS	23	14	43.7			132.0 14670	Trace. Solomon Islands. USGS: 11.18S, 162.09E, H=22:51:54.6, h=33 km, M <sub>B</sub> =5.9 (CGS), M <sub>SZ</sub> =6.0 (CGS).
5	ePKP e(PKS)	22	21 25	26.2 (00)			135.2 15025	Solomon Islands. USGS: 11.13S, 162.14E, H=22:02:07.1, h=33 km, M <sub>B</sub> =6.3 (CGS), M <sub>SZ</sub> =7.1 (CGS).
7	eP eS	17	13 19	37.3 1.5 48.1			40.6 4512	Ethiopia. USGS: 11.54N, 42.59E, H=17:05:55.2, h=33 km, M <sub>B</sub> =5.3 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
7	eSKP e	17	56 57	44.7 (00)	3.0				135.7 15080	Solomon Islands. USGS: 10.99S, 162.22E, H=17:33:59.5, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.1 (CGS).
8	eP epP	01	05	23.1 45.1					40.5 4500	Trace. Kirgiz-Tadzhik SSR. USGS: 39.33N, 72.57E, H=00: 57:47.9, h=41 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =5.0 (CGS).
9	eP eS F	00	30 31	24.0 41.5					1.2 136	Trace. CSEM: 46.13N, 14.53E, H=00:30:03.7, h=10 km, M <sub>V</sub> = 3.3 (LJU), I <sub>o</sub> =IV-V <sup>o</sup> MCS.
10	ePg iSg	17	03	03.6 09.1	0.7				0.4 47	Trace. Local. 46.1N, 16.6E, H=17:02:52.9.
14	ePKP e	05	32	05.8 10.6	2.2				147.4 16381	Trace. Tonga Islands. USGS: 15.66S, 173.23W, H=05:12:24.0, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> = 5.0 (CGS).
23	ePg iSg	01	52	30.8 36.5	0.5	6.4	7.2	7.0	0.4 48	Dilat. Yugoslavia, Croatia. USGS: 46.23N, 16.37E, H=01:52: 21.6, M=3.8 (ZAG), I <sub>o</sub> =V-VI <sup>o</sup> MCS.
25	eM F	01	44 44	14.7	1.0					Trace. Yugoslavia, Livanjsko polje.
26	ePg iSg	06	31	(00) 06.1	0.2	3.7		3.8	0.5 51	Interrupt. Local. Yugoslavia, Croatia. 45.4N, 16.1E, H=06: 30:54.1, M=2.1 (ZAG).
28	eP eS	17	43 44	45.1 49.2					5.9 658	Trace. Albania. USGS: 41.69N, 19.98E, H=17:42:10.3, h=10 km, M <sub>B</sub> =4.6 (CGS).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude			D <sup>o</sup> D km	Remarks
						NE	NW	Z		
29	eP eSKS eL <sub>Q</sub> eL <sub>R</sub> M <sub>R</sub> M <sub>R</sub>	20	06 16 37 40 48 54	06.6 39.6 35.2					93.7 10413	Mexico, Oaxaca. USGS: 16.01N, 96.59W, H=19:52:47.6, h=18 km, M <sub>B</sub> =6.4 (CGS), M <sub>SZ</sub> =7.7 (CGS). One person killed, several in- jured and damage in the State of Oaxaca. M=8.5 (ZAG).
30	ePKP	17	51	49.6					148.3 16480	Dilat, Trace. Tuamotu archipe- lago. USGS: 21.90S, 138.96W, H=17:31:58.4, h=0 km, M <sub>B</sub> =5.9 (CGS).
D E C E M B E R 1978.										
1	ePn eS	03	49 51	37.4 13.4					5.4 605	Albania. CSEM: 40.97N, 19.66E, H=03:48:00.4, h=10 km, M <sub>B</sub> = 5.2 (CGS).
1	eP eS	11 12	55 05	27.8 19.5	2.9				78.4 8713	Compr. Trace. Kuril Islands. USGS: 50.92N, 158.86E, H=11: 43:28.3, h=42 km, M <sub>B</sub> =5.5 (CGS).
2	eP iS	04	06	19.2 45.8	1.1	1.1			1.9 215	Northern Italy, Friuli. CSEM: 46.32N, 13.28E, H=04:05:35.6, h=10 km, M=2.8 (ZAG).
3	eRiPS eS	02	24 25	37.3 (00)					3.7 411	Trace. Yugoslavia. CSEM: 42.67N, 18.71E, H=02:23:01.0, h=10 km.
3	eP eS M	08	12 13 15	38.2 56.7 07.3	4.7	4.8			5.6 625	Albania. CSEM: 40.9N, 19.7E, H=08:10:52, h=12 <sup>+</sup> 6 km, M <sub>B</sub> = 4.7 (CGS), M=4.4 (ZAG).

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
4	eP ePP	03	16 17	44.9 (00)			17.7 1970	Dilat. Turkey. USGS: 38.07N, 37.47E, H=03:12:34.0, h=10 km, M <sub>B</sub> =5.1 (CGS), M <sub>SZ</sub> =4.6 (CGS).
5	eP eS	04	46 47	34.2 25.2			3.7 406	Central Italy. CSEM: 43.04N, 12.82E, H=04:45:28.7, h=10 km,
5	eP iS iM	15	40 41	(00) 43.1 23.9	1.9	42.1	3.1 347	Interrupt. Northern Italy, Ravenna. CSEM: 44.39N, 12.13E, H=15:39:05.5, h=37 <sup>+</sup> -6 km, M <sub>B</sub> =4.4 (CGS), M=4.8 (ZAG).
6	iP eiS e	14	14 23 24	05.8 56.3 (00)	3.7	294	79.9 8879	Kuril Islands region. USGS: 44.59N, 146.58E, H=14:02:01.0, h=91 km, M <sub>B</sub> =6.7 (CGS).
8	e	08	56	08.2				Trace.
9	eP	04	29	14.3			80.5 8950	Trace. Kuril Islands. USGS: 45.34N, 150.11E, H=04:17:05.8, h=54 km, M <sub>B</sub> =5.6 (CGS).
12	eP eSKS M	11 12	57 08 55	42.8 38.5		15.4 12.7	96.6 10740	Mindanao, Philippine Islands. USGS: 07.33N, 123.49E, H=11:44:16.0, h=33 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.9 (CGS), M=7.5 (ZAG).
12	eP epP	13 14	59 00	55.9 06.6			86.0 9557	Trace. Southeast of Taiwan. USGS: 21.95N, 123.81E, H=13:47:19.7, h=33 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.5 (CGS).
12	ePb iSn	15	15	31.0 59.5			2.4 262	Dilat. Northern Italy. CSEM: 46.29N, 12.77E, H=15:14:49.8, h=8 <sup>+</sup> -3 km, M <sub>B</sub> =4.5 (CGS).
14	eP eS	07	11 16	23.2 14.5			29.3 3256	Dilat. Iran. USGS: 32.14N, 49.65E, H=07:05:20.6, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.2 (CGS). 76 dead, many injured in the Izeh region.

Date	Phase	M h	G m	T s	Per. sec.	Amplitude NE NW Z	D <sup>o</sup> D km	Remarks
17	ePn iPg eSb iSg	02	17	32.8 38.4 11.9 15.2			2.7 297	Yugoslavia, Herzegovina. USGS: 43.38N, 17.26E, H=02:16:47.8, h=10 km, M <sub>B</sub> =4.4 (CGS). I <sub>o</sub> =VI-VII MCS.
17	eP iS	03	48	35.9 53.8			1.3 144	Yugoslavia. CSEM: 46.12N, 14.26E, H=03:48:13.4, h=10 km, I <sub>o</sub> =V-VI MCS.
18	eP eS	08	04 09	55.1 (00)			22.0 2443	Compr. Western Kazakh SSR. Nuclear explosion. CSEM: 47.88N, 48.12E, H=07:59:58.9, h=0 km, M <sub>B</sub> =6.0 (CGS).
21	ePg eSg	11	42	07.1 15.5	0.4		0.6 71	Dilat. Yugoslavia, Slovenia. USGS: 45.93N, 15.11E, H=11:41:54.4, h=10 km, I <sub>o</sub> =V MCS.
23	eP eS eL <sup>Q</sup> eL <sup>R</sup> M	11 12	35 46 06 10 15	41.9 (00) 59 17.8 18.1		217.6 9.3	84.4 9375	Compr. Taiwan. USGS: 23.25N, 122.08E, H=11:23:12.0, h=33 km, M <sub>B</sub> =6.6 (CGS), M <sub>SZ</sub> =7.0 (CGS). 2 people killed and 3 injured at Pingtung. M=7.2 (ZAG).
25	eP eS	22	54 55	49.3 38.6	3.0 6.3			Northern Italy. USGS: 44.93N, 11.13E, H=22:53:42.4, h=33 km, M=4.3 (ZAG).
27	iPn iSn eiM	17	47 48	33.7 37.7 46.6	4.1	140.8	5.0 556	Dilat. Southern Italy. USGS: 41.11N, 13.58E, H=17:46:10.4, h=390 km, M <sub>B</sub> =5.6 (CGS), M=5.8 (ZAG).
31	ePn e(S)	15	58	(00) 49.8			(6.5) (718)	Interrupt. Bulgaria. CSEM: 41.98N, 23.28E, H=15:56:15.3, h=14 <sup>+</sup> -5 km, M <sub>B</sub> =4.5 (CGS).
31	e(Pn) eSg	16	28 29	(00) 53.9			(6.5) (725)	Interrupt. Trace. Bulgaria. CSEM: 42.01N, 23.31E, H=16:26:07.7, h=10 km, M <sub>B</sub> =4.4 (CGS).

Geophysical Institute  
Z A G R E B  
J u g o s l a v i a

Godina: 1978  
Year:

REGISTRACIJA SEIZMOGRAFA  
The record of seismograph  
Station: ZAGREB-PUNTIJARKA  
(lat.= 45°54'00''N, long.= 15°57'29''E, H = 988m)  
Long period seismograph "Sprengnether" with  
characteristics:  
period of seismometer  $T_o = 12$  s  
max. magnification of  
instrument  $V = 20.000$   
damping constant  $h = 0.6$

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
2	iP	06	36	11.7	1.2	6.4	2095 2328	Dilat. Western Caucasus. USGS:41.54N, 44.24E, H= 06:31:27.5, h=10 km, $M_B=5.3$ (CGS).
2	iPKP	07	29	51.8	1.5	3.8	135.25 15026	Dilat. New Hebrides Islands. USGS:18.95S, 169.35E, H= 07:11:06.5, h=249 km, $M_B=5.3$ (CGS).
2	iPg iSg	15	11	08.8 18.3		10.0	0.73 81	Dilat. Yugoslavia, Slovenia. CSEM:45.89N, 14.94E, H=15:10: 57.2. USGS:45.77N, 15.04E, H= 15:10:54.6, h=6 km.
2	iPn iSn	18	06	11.9 50.2	0.8	21.0	3.01 334	Dilat. Yugoslavia, Adriatic Sea. CSEM:42.62N, 16.22E, H=18:05: 20.4. USGS:42.69N, 16.17E, H=18:05:20.1, h=33 km.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
2	eiPn iSg	21	47	16.0 46.3		2.0	1.94 216	Yugoslavia, Adriatic Sea. CSEM: 44.10N, 15.11E, H=21:46:44.3. USGS:43.87N, 14.96E, H=21: 46:43.2.
3	iPg	18	27	02.8				Dilat. Trace. Local.
4	eiPn iSn	05	32	58.2 33 47.2			3.96 440	Trace. Romania. CSEM:45.43N, 21.07E, H=05:31:48.6. USGS: 45.32N, 21.01E, H=05:31:48.5.
5	eiPg iSg	12	22	06.8 10.4		2.6	0.23 25	Local.
6	iP	04	54	09.8	2.0	4.8	89.5 9942	Dilat. Philippine Islands, Luzon. USGS:18.79N, 121.89E, H=04: 41:22.2, h=33 km, M <sub>B</sub> =5.8 (CGS).
9	iPg iSn	21	50	39.3 51 01.5			2'18 242	Trace. Northern Italy. CSEM: 46.33N, 13.05E, H=21:49:55.3. USGS:46.31N, 12.98E, H=21:49: 55.2.
10	iP	01	02	21.1	0.8	2.0	80.72 8968	Dilat. Kuril Islands. USGS:46.83N 152.27E, H=00:50:17.1, h=61 km, M <sub>B</sub> =5.6 (CGS).
10	eiPg iSg	04	57	46.2 58 04.8	0.4	3.0	1.48 164	Yugoslavia, Banja Luka region. CSEM:44.75N, 17.56E, H=04:57: 16.4. USGS:44.69N, 17.33E, H= 04:57:16.6, h=11 km. I <sub>O</sub> =IV <sup>o</sup> MCS.
11	eiPb iSb	12	29	24.6 43.8			1.44 160	Trace.
12	eiPn	20	11	25.1			11.21 1245	Trace. Mediterranean Sea. CSEM: 36.00N, 22.26E, H=20:08:40.6, h=49 km.
13	iP	20	15	14.8			82.06 9117	Compr. Kuril Islands. USGS: 44.69N, 149.70E, H=20:03:03.8, h=52 km, M <sub>B</sub> =6.0 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
14	iP iPP iM	03	37	18.8 40 39.3 04 18	16	47.0	86.33 9590	Dilat. Japan, near Coast of Hon- shu. USGS:34.81N. 139.26E, H= 03:24:39.0, h=14 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.6 (CGS).
14	iP	09	15	28.2			82.18 9130	Compr. Kuril Islands. USGS: 44.46N, 149.69E, H=09:03:16.6, h=51 km, M <sub>B</sub> =5.4 (CGS).
14	iPKP	15	40	53.6			164.0 18220	Dilat. Kermadec Islands. USGS: 30.12S, 177.49W, H=15:20:54.2, h=44 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> = 6.3 (CGS).
14	eiPn iPg iSg	19	44	32.0 34.2 56.7			1.71 190	Austria. CSEM:47.66N, 15.99E, H=19:44:00.8, h=5 km. USGS: 47.64N, 15.98E, H=19:43:59.8, h=8 km. Felt (V <sup>o</sup> MCS) in the Semmering-Schott-Wien area.
15	eiPKP	07	17	47.3			168.11 18677	Trace. Kermadec Islands. USGS: 30.21S, 177.55W, H=06:56:34.5, h=17 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> = 6.1 (CGS).
16	eiP	03	27	33.9			41.73 4636	Trace. Hindu Kush region. USGS: 36.39N, 70.72E, H=03:20:05.3, h=221 km, M <sub>B</sub> =5.3 (CGS).
16	eiPn iSg	14	32	35.6 34 09.3			5.31 590	Germany. CSEM:48.31N, 08.98E, H=14:31:14.7, h=8 km. USGS: 48.25N, 08.99E, H=14:31:14.0, h=20 km.
16	eSg	21	08	10.6			4.82 535	Trace. Northern Italy, River Po. CSEM:45.00N, 09.29E, H=21:05: 32.9. USGS:45.04N, 09.23E, H=21:05:34.0, h=33 km.
17	iPg iSg	02	30	42.6 31 28.6	1.2	2.0	3.51 390	Trace. Romania. CSEM:45.77N, 21.06E, H=02:29:32.5. USGS: 45.67N, 20.97E, H=02:29:32.1, h=27 km.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
21	iPg iSg	10	34	54.1 35 01.6			0.58 64	Compr. Yugoslavia, Croatia, Žumberak mountain.
24	iP	06	06	33.4			81.87 9096	Compr. Kuril Islands. USGS: 44.73N, 149.72E, H=05:54:23.5, h=56 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> = 5.9 (CGS).
25	iPKP iPP	23	37	53.0 39 40.4			124.68 13850	Compr. New Britain region. USGS: 05.34S, 151.68E, H=23:18:56.6, h=44 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> = 6.4 (CGS).
26	eiPg iSg	17	58	24.7 27.4	0.5	3.0	0.21 23	Local.
27	eiPg iSg	12	34	26.2 28.3	0.8	2.8	0.16 18	Local.
28	eiP eS	03	32	31.5 34 45.3			12.05 1340	Trace. Crete. CSEM:34.89N, 23.78E, H=03:29:39.2, h=34 km.
28	eiPg iSg	16	05	31.2 41.0			0.74 82	Yugoslavia, Croatia, Zrinska Gora region.
31	eiP	06	41	17.8			8.31 924	Greece. CSEM: 39.29N, 22.97E, H=06:39:21.0, h=40 km. USGS: 39.31N, 22.90E, H=06:39:18.9, h=38 km, M <sub>B</sub> =4.5 (CGS).

## FEBRUARY 1978

1	eiP	15	10	32.4			79.69 8855	Trace. Kuril Islands. USGS: 49.05N, 153.58E, H=14:58:41.2, h=101 km, M <sub>B</sub> =5.1 (CGS).
1	iP	23	49	00.6			80.74 8970	Compr. Kuril Islands. USGS: 45.06N, 150.25E, H=23:36:49.1, h=33 km, M <sub>B</sub> =5.5 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
2	eiP	11	13	26.6			7.53 836	Trace. Greece. CSEM:39.90N, 21.55E, H=11:11:43.7, h=41 km. USGS:39.85N, 21.32E, H=11:11: 40.5, h=33 km, M <sub>B</sub> =4.1 (CGS).
3	iPg iSg	14	34	31.1 31.9		36.0	0.06 7	Compr. Local.
7	iP	12	42	02.5			72.0 8000	Compr. Andaman Islands region. USGS:12.79N, 93.02E, H=12:30: 40.4, h=33 km, M <sub>B</sub> =5.5 (CGS).
7	iP	20	43	17.5			72.11 8012	Compr. Andaman Islands region. USGS:12.86N, 93.07E, H=20:31: 54.6, h=33 km, M <sub>B</sub> =5.6 (CGS).
8	iP	00	28	05.9			83.74 9305	Compr. Taiwan region. USGS: 24.15 N, 122.66E, H=00:15:38.9, h=40 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =5.7 (CGS).
8	eiPn iSn	04	11	44.4 12 47.5		2.0	4.84 538	Southern Italy. CSEM:41.14N, 14.90E, H=04:10:31.4. USGS:41.11 N, 14.89E, H=04:10:31.8, h=95 km, M <sub>B</sub> =5.0 (CGS). Felt (VI <sup>o</sup> MCS) in the Avellino area.
9	iP	08	14	15.0			81.02 9000	Compr. Kuril Islands. USGS: 44.43N, 149.90E, H=08:02:02.0, h=45 km, M <sub>B</sub> =5.7 (CGS).
9	iPn iP <sup>b</sup> iS <sup>g</sup> g	16	31	10.6 11.3 13.2 35.8		23.7	1.71 190	Dilat. Yugoslavia, Bosnia and Her- zegovina. CSEM:44.19N, 16.99E, H=16:30:39.2. USGS:44.13N, 16.92E, H=16:30:37.9, h=20 km, M <sub>B</sub> =3.8 (CGS). Felt (VI <sup>o</sup> MCS) in the Drvar-Glamoč area.
9	eiPKP	21	55	12.4			164.30 18255	Kermadec Islands. USGS:30.68S, 177.36W, H=21:35:12.7, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =7.2 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
9	eiPKP	22	41	42.8	20.0	13.8	161.80 17975	Kermadec Islands. USGS:30.61S, 177.38W, H=22:21:45.6, h=33 km, M <sub>B</sub> =5.5 (CGS).
10	eiPKP	01	16	18.3			161.10 17900	Kermadec Islands. USGS:30.65S, 177.54W, H=00:56:21.8, h=33 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =6.0 (CGS).
10	eiPn iPb iPg iSn	07	20	28.8 32.7 37.8 21 04.1	0.6	8.3	3.02 335	Central Italy. CSEM:43.73N, 13.11 E, H=07:19:36.6. USGS:43.71N, 13.05E, H=07:19:36.4, h=33 km. Felt in the Ancona area.
10	iSn	15	55	02.7			1.82 202	Trace. Yugoslavia, Croatia, Zrma- nja River.
11	eiPg	01	43	01.3			2.84 316	Trace. Central Italy. CSEM:43.87N, 13.20E, H=01:42:03.6. USGS:43.78 N, 13.14E, H=01:42:02.6, h=33 km. Felt in the Ancona area.
11	eiP	13	02	34.0			44.80 4977	Eastern Gulf of Aden. USGS:13.16N, 50.95E, H=12:54:21.6, h=33 km, M <sub>B</sub> =5.3 (CGS).
11	iP	21	47	08.6			36.25 4027	Compr. Trace. Southern Iran. CSEM:28.26N, 55.38E, H=21:40: 17.6, h=68 km.
13	iPg iSg	05	04	43.8 45.7		5.0	0.14 16	Dilat. Local.
13	ePg iSg	05	06	01.1 02.9		6.0	0.14 15	Dilat. Local.
13	eiP	13	14	24.4			74.12 8235	Trace. Near East Coast of Kamcha- tka. USGS:56.11N, 162.78E, H= 13:02:46.1, h=33 km, M <sub>B</sub> =5.3 (CGS)
13	eiPn iSn	14	22	55.2 23 19.0			1.82 202	Trace. Yugoslavia, Croatia, Benko- vac area.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
14	eiPKP	02	44	23.3			149.12 16567	Trace. Samoa Islands region. USGS: 15.82S, 172.52W, H=02:24:32.0, h=33 km, M <sub>B</sub> =5.2 (CGS).
16	eiPn iPg iSn	00	27	08.1 12.1 34.3	0.7	7.5	1.98 220	Central Yugoslavia. CSEM:43.92N, 16.95E, H=00:26:33.1, h=6 km. USGS:43.93N, 16.92E, H=00:26: 33.7, h=33 km, M <sub>B</sub> =5.1 (CGS). Felt (VI <sup>o</sup> MCS) in the Sinj-Livno area.
18	iPg iSn	15	14	04.5 18.8			0.77 85	Dilat. Yugoslavia, Croatia, Zrin- ska Gora region. CSEM:45.21N, 16.40E, H=15:13:51.3. Felt at Si- sak, Dvor, Dubica. I <sub>max</sub> =VI <sup>o</sup> MCS.
20	eiPg iSg	02	49	49.0 50 00.4		5.5	0.85 94	Yugoslavia, Croatia, Zrinska Gora region. CSEM:45.12N, 16.12E, H= 02:49:34.2. USGS:45.11N, 16.63E, H=02:49:32.4, h=33 km, M=2.6 (ZAG).
20	iP	04	49	19.0			84.02 9335	Compr. Japan, near East coast of Honshu. USGS:38.79N, 141.95E, H=04:36:58.1, h=60 km, M <sub>B</sub> =6.1 (CGS).
20	iPn iPg iSn iSb iSg	12	14	10.4 15.2 35.9 38.4 40.9	0.6	6.0	1.93 214	Compr. Yugoslavia-Italy border region. CSEM:46.46N, 13.42E, H= 12:13:36.5. USGS:46.45N, 13.30E, H=12:13:35.1, h=10 km. Felt (VI <sup>o</sup> MCS) at Pontebba, Italy and (V <sup>o</sup> MCS) at Kobarid, Yugoslavia.
21	eiPP	07	31	32.3				Banda Sea. USGS:04.84S, 125.41E, H=07:14:54.5, h=510 km, M <sub>B</sub> =6.3 (CGS).
22	iP	06	20	34.4			93.29 10365	Compr. Trace. Guatemala. USGS: 14.25N, 91.38W, H=06:07:37.0, h=100 km, M <sub>B</sub> =5.7 (CGS).
22	eiP	18	13	05.2			85.73 9525	Ryukyu Islands. USGS: 29.34N, 130.54E, H=18:00:35.8, h=60 km, M <sub>B</sub> =5.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
22	eiPKP	19	57	02.6			158.50 17610	South of Fiji Islands. USGS:22.70S, 176.21W, H=19:37:17.0, h=85 km, M <sub>B</sub> =5.6 (CGS).
22	eiP	20	25	05.6			36.95 4105	Trace. Southern Iran. USGS:28.03N, 56.90E, H=20:17:57.8, h=23 km, M <sub>B</sub> =5.1 (CGS).
24	eP	07	12	22.2			56.69 6300	Dilat. North of Ascension Island. USGS:04.61S, 12.37W, H=07:02: 39.6, h=10 km, M <sub>B</sub> =5.5 (CGS).

## M A R T

1	eiP	00	20	31.3			80.75 8972	Trace. Kuril Islands. USGS:46.29N, 153.11E, H=00:08:19.7, h=33 km, M <sub>B</sub> =5.4 (CGS).
1	eiPg iSg	15	28	48.2 49.5			0.10 11	Trace. Local.
3	eiP	11	05	05.8			76.09 8453	Komandorsky Islands region. USGS: 55.10N, 164.76E, H=10:53:19.8, h=33 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =6.2 (CGS).
4	iPg iSg	12	01	36.8 38.2		9.0	0.11 12	Compr. Local.
4	eiPKP	15	17	05.8			127.0 14110	Trace. New Ireland region. USGS: 04.66S, 153.10E, H=14:58:13.0, h=78 km, M <sub>B</sub> =6.2 (CGS).
5	iPg iSg	14	39	31.2 32.5		6.0	0.10 11	Dilat. Local.
7	iP	03	00	40.4			86.60 9620	Compr. Japan, South of Honshu. USGS:32.01N, 137.61E, H=02:48: 47.6, h=439 km, M <sub>B</sub> =6.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
7	eiP iS	22	36	52.9 39 21.0	6.5	8.0	13.32 1480	Crete. CSEM:34.49N, 25.27E, H= 22:33:49.4, h=48 km. USGS:34.50N, 25.26E, H=22:33:46.7, h=42 km, M <sub>B</sub> =5.4 (CGS).
11	eiPn iSb	19	22	43.4 24 39.3		23.0	7.56 840	Southern Italy. CSEM:38.03N, 16.09E, H=19:20:49.1. USGS: 38.10N, 16.03E, H=19:20:49.1, h=33 km, M <sub>B</sub> =5.6 (CGS).
12	eiP	08	37	43.4			46.31 5145	Trace. China, Southern Sinkiang Province. USGS:41.90N, 79.96E, H=08:29:19.0, h=26 km, M <sub>B</sub> =5.3 (CGS).
15	eiPg	01	42	11.8				Trace. Yugoslavia, Banja Luka re- gion. I <sub>o</sub> =III <sup>o</sup> MCS.
15	eiPg	14	42	49.3				Trace. Local.
15	eiP	22	17	19.4			92.39 10265	Bonin Islands region. USGS:26.42N, 140.56E, H=22:04:40.1, h=263 km, M <sub>B</sub> =6.1 (CGS).
16	eiP	02	07	51.0			42.10 4677	Trace. Pakistan. USGS:29.93N, 66.30E, H=02:00:00.5, h=33 km, M <sub>B</sub> =5.3 (CGS), M <sub>SZ</sub> =5.9 (CGS).
16	eiP	02	21	55.7			83.30 9255	Fox Islands, Aleutian Islands. USGS: 52.30N, 168.62W, H=02:09:38.4, h=49 km, M <sub>B</sub> =5.5 (CGS).
16	eS	05	56	19.6			10.38 1153	Trace. Southern Greece. CSEM: 36.73N, 21.52E, H=05:51:58.0, h=48 km. USGS:36.79N, 21.63E, H=05:51:57.3, h=58 km, M <sub>B</sub> =4.9 (CGS).
16	eiPn iPg iSn	06	09	29.0 39.5 10 07.2			3.0 332	Yugoslavia, Čapljina region. CSEM: 43.09N, 17.92E, H=06:08:39.9. USGS:43.13N, 17.82E, H=06:08: 40.8, h=33 km. Felt (VI <sup>o</sup> MCS) at Sarajevo, Mostar, Čapljina. I <sub>max</sub> =VI <sup>o</sup> MCS.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
16	iSn	06	34	53.0			3.0 330	Trace. Yugoslavia, Čapljina region. CSEM:43.14N, 18.06E, H=06:33: 27.7.
17	eiPg iSg iSn	02	10	01.0 09.0 10.7			0.63 70	Yugoslavia, Croatia, Topusko region.
19	eiP	01	52	33.2			94.37 10525	Mexico, Guerrero. USGS:17.03N, 99.74W, H=01:39:14.0, h=36 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.4 (CGS).
19	ePg	09	33	46.7			3.69 410	Trace. Central Italy. CSEM:42.49N, 13.33E, H=09:32:33.1. USGS:42.53 N, 13.34E, H=09:32:32.0, h=25 km.
19	eiP	15	01	47.5			79.91 8878	Trace. Kuril Islands. USGS:48.83N, 155.20E, H=14:49:47.8, h=61 km, M <sub>B</sub> =5.2 (CGS).
19	eiP	18	53	09.9			54.82 6090	North of Ascension Island. USGS: 01.48S, 15.61W, H=18:43:40.8, h=33 km, M <sub>B</sub> =5.4 (CGS).
20	iP	15	52	53.9			60.22 6690	Compr. Central mid-Atlantic ridge. USGS:0.83N, 29.82W, H=15:42: 46.7, h=33 km, M <sub>B</sub> =5.7 (CGS).
20	iP	18	19	50.8			60.22 6690	Compr. Central mid-Atlantic ridge. USGS:0.77N, 29.69W, H=18:09:43.6 h=33 km, M <sub>B</sub> =5.7 (CGS).
20	eiPg iSg iSb	23	14	37.4 50.1 50.6			0.95 106	Trace. Yugoslavia, Slovenia, Kamnik region.
21	eiPg iSg	10	59	34.3 35.9	2.5	0.12	14	Local.
21	iSg	10	59	44.1				Trace. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
22	iP	01	02	46.9	14	16.0	81.35 9038	Compr. Kuril Islands. USGS: 44.03N, 149.00E, H=00:50:32.2, h=33 km, M <sub>B</sub> =6.3 (CGS), M <sub>SZ</sub> =6.7 (CGS).
22	eiP	01	36	07.5			81.23 9025	Trace. Kuril Islands. USGS:44.03N, 149.15E, H=01:23:53.4, h=33 km, M <sub>B</sub> =5.4 (CGS).
22	eiP	02	44	52.8			81.19 9020	Trace. Kuril Islands. USGS:44.07N, 149.02E, H=02:32:38.9, h=33 km, M <sub>B</sub> =5.6 (CGS).
22	iP	21	46	47.0	14	10.0	81.13 9015	Compr. Kuril Islands. USGS:44.14N 149.03E, H=21:34:33.4, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.6 (CGS).
23	iP	00	43	15.2	14.5	42.0	81.04 9003	Compr. Kuril Islands. USGS:44.21N 148.97E, H=00:31:02.1, h=46 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.8 (CGS).
23	eiP	00	48	46.9			82.16 9128	Kuril Islands. USGS:44.02N, 148.82E, H=00:36:35.4, h=54 km, M <sub>B</sub> =5.6 (CGS).
23	eiP	00	51	54.7			81.15 9015	Kuril Islands. USGS:44.22N, 149.27E, H=00:39:41.0, h=33 km, M <sub>B</sub> =5.6 (CGS).
23	iP	02	01	48.5			81.35 9037	Compr. Kuril Islands region. USGS: 43.86N, 148.94E, H=01:49:33.8, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.4 (CGS).
23	eiP	02	49	11.6			82.0 9110	Kuril Islands. USGS:44.20N, 148.73 E, H=02:37:00.9, h=50 km, M <sub>B</sub> = 5.8 (CGS).
23	eiP	03	26	37.0	14	43.0	81.15 9015	Kuril Islands. USGS:44.29N, 149.13 E, H=03:14:23.3, h=33 km, M <sub>B</sub> =5.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
23	eiP	03	27	29.0			80.21 8910	Kuril Islands. USGS:44.93N, 148.44E, H=03:15:20.3, h=33 km, M <sub>B</sub> =6.4 (CGS), M <sub>SZ</sub> =7.5 (CGS).
23	eiP	04	01	50.4			82.90 9210	Trace. Kuril Islands. USGS:44.38N, 149.47E, H=03:49:27.7, h=33 km, M <sub>B</sub> =5.3 (CGS).
23	iP	04	03	04.6			82.27 9140	Compr. Kuril Islands. USGS:44.38N 149.58E, H=03:50:52.5, h=50 km, M <sub>B</sub> =6.0 (CGS).
23	eiP	07	35	35.4			82.76 9195	Trace. Fox Islands, Aleutian Islands. USGS:52.01N, 169.47W, H=07:23: 13.4, h=23 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.8 (CGS).
23	eiP	08	26	43.2			82.12 9123	Kuril Islands. USGS:44.32N, 149.06 E, H=08:14:31.9, h=48 km, M <sub>B</sub> = 5.7 (CGS), M <sub>SZ</sub> =5.9 (CGS).
23	iPn iSn iSb	18	46	17.2 45.6 49.1		17.2	2.20 244	Dilat. Yugoslavia, Croatia, Sinjsko polje. CSEM:43.64N, 16.77E, H= 18:45:39.3. USGS:43.64N, 16.69E, H=18:45:39.3, h=33 km, M <sub>B</sub> =4.2 (CGS). Felt at Sinj, Dicmo, Trilj. I <sub>max</sub> =V-VI MCS.
23	iP	19	24	37.4	13	11.0	81.17 9018	Compr. Kuril Islands. USGS:44.34 N, 149.74E, H=19:12:23.6, h=33km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.8 (CGS).
23	eiP	19	58	38.6			81.25 9027	Trace. Kuril Islands. USGS:44.38N, 149.67E, H=19:46:24.4, h=33 km, M <sub>B</sub> =5.4 (CGS).
23	eiP	23	45	15.9			81.25 9027	Trace. Kuril Islands. USGS:44.43N, 149.91E, H=23:33:01.7, h=42 km, M <sub>B</sub> =5.2 (CGS).
24	iP	00	53	16.2			65.16 7240	Compr. North Atlantic Ocean. USGS:29.80N, 67.40W, H=00:42: 36.3, h=20 km, M <sub>B</sub> =6.1 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
24	iP	20	00	02.9			80.87 8985	Kuril Islands. USGS:44.24N, 148.86 E, H=19:47:50.7, h=33 km, M <sub>B</sub> =6.5 (CGS), M <sub>SZ</sub> =7.6 (CGS).
24	iP	21	13	53.6			43.93 4880	Compr. Alma region. USGS:42.84N, 76.81E, H=21:05:48.2, h=33 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =7.1 (CGS). Damage (VIII MCS) in Northeastern Kirgiz SSR.
24	eiP	22	21	10.0			82.20 9132	Trace. Kuril Islands. USGS:44.11N, 148.95E, H=22:08:58.3, h=45 km, M <sub>B</sub> =5.6 (CGS).
24	eiP	23	27	58.7			82.47 9162	Trace. Kuril Islands. USGS:44.08N, 148.95E, H=23:15:45.6, h=45 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.7 (CGS).
24	eiP	23	52	19.4			82.61 9178	Trace. Kuril Islands. USGS:44.15N, 149.09E, H=23:40:05.6, h=47 km, M <sub>B</sub> =5.0 (CGS).
25	eiP	18	22	16.2			82.16 9178	Trace. Kuril Islands. USGS:44.08N, 148.98E, H=18:10:02.4, h=45 km, M <sub>B</sub> =5.0 (CGS), M <sub>SZ</sub> =4.8 (CGS).
25	eiPKP	19	44	47.3			154.93 17213	Fiji Islands region. USGS:21.03S, 178.84W, H=19:26:03.2, h=595 km, M <sub>B</sub> =5.7 (CGS).
26	eiP	00	04	27.8			82.45 9160	Trace. Kuril Islands region. USGS: 43.77N, 148.45E, H=23:52:14.8, h=47 km, M <sub>B</sub> =5.6 (CGS).
26	eiP	04	04	43.4			40.94 4548	Trace. SSR, Eastern Kazakh. USGS: 49.73N, 78.07E, H=03:56:57.6, h=0 km, M <sub>B</sub> =5.5 (CGS). Undergrou- nd nuclear explosion.
28	ePb iPg eSn iSb	03	55	51.3 56 00.0 32.3 42.7			3.92 436	Trace. Central Italy. CSEM:42.76N, 12.65E, H=03:54:42.0. USGS: 42.77N, 12.66E, H=03:54:39.7, h=10 km. Slight damage at Spoleto. Also felt at Terni.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
28	eiP	20	29	06.6			80.01 8890	Kuril Islands. USGS:48.76N, 154.92E, H=20:17:05.8, h=53 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.8 (CGS).
28	eiP	22	24	28.7			81.35 9038	Trace. Kuril Islands. USGS:44.08N, 149.48E, H=22:12:14.0, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.5 (CGS).
28	eiPKP	23	09	52.6			149.39 16597	Trace. Loyalty Islands region. USGS: 23.17S, 170.07E, H=22:50:07.9, h=53 km, M <sub>B</sub> =5.3 (CGS).
29	iPg iSg	13	02	22.0 22.4		7.8	0.03 3	Compr. Local.
29	iPKP	17	15	18.6			147.75 16415	Dilat. New Hebrides Islands. USGS: 19.64S, 169.12E, H=16:55:48.2, h=94 km, M <sub>B</sub> =5.9 (CGS).
29	eiPKP	22	20	18.1			156.71 17410	Trace. Tonga Islands. USGS:21.76S, 174.01W, H=22:00:26.7, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.7 (CGS).
31	iPg iSg	12	59	21.0		16.8	0.10 11	Dilat. Local.
31	iSg	13	00	48.9				Trace. Local.

## APRIL

2	eiPn iSg	18	23	55.9 24 25.8			1.96 218	Trace. Northern Italy. CSEM:46.28 N, 13.30E, H=18:23:22.2. USGS: 46.23N, 13.35E, H=18:23:20.8, h=20 km.
3	eiPn ePg	06	28	28.5 58.8			6.75 750	Trace. Corsica. CSEM:42.17N, 09.55E, H=06:26:43.9. USGS:42.26 N, 09.40E, H=06:26:42.4, h=19 km, M <sub>B</sub> =4.1 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
3	ePP	10	08	01.8			112.25 12470	Trace. West Irian region. USGS: 04.85S, 133.92E, H=09:48:35.0, h=33 km, M <sub>B</sub> =6.1 (CGS).
3	eiPn iPg iSb	10	50	22.5 28.6 51.4			2.01 224	Yugoslavia-Italy border region. CSEM: 46.27N, 13.22E, H=10:49: 47.2. USGS:46.16N, 13.19E, H= 10:49:47.3, h=34 km. Felt at Ko- barid, Yugoslavia.
3	eiPn iSn	14	35	34.6 36 00.3			1.94 216	Yugoslavia-Italy border region. CSEM:46.27N, 13.20E, H=14:35: 00.1. USGS:46.22N, 13.21E, H= 14:35:00.3, h=36 km. Felt in West- ern Slovenia.
4	eiP	00	49	38.8			52.18 5798	Tibet. USGS: 33.03N, 82.29E, H= 00:40:29.2, h=27 km, M <sub>B</sub> =5.6 (CGS) M <sub>SZ</sub> =6.0 (CGS).
4	eiP	21	24	18.5			87.43 9715	North of Panama. USGS:10.04N, 77.95W, H=21:11:41.8, h=35 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.1 (CGS).
5	eiPg iSg	16	49	51.5 53.3			0.13 15	Trace. Local.
5	eiPKP	18	52	05.1			168.16 18682	Trace. Fiji Islands region. USGS: 178.46W, 14.97S, H=18:31:35.0, h=389 km, M <sub>B</sub> =5.1 (CGS).
6	ePb eSb	10	26	26.5 54.0			2.03 226	Trace. Northern Italy. CSEM: 46.23N, 13.19E, H=10:25:48.4, USGS:46.28N, 13.31E, H=10:25: 47.4, h=10 km.
6	eiP	23	42	27.4			85.28 9475	Trace. Japan, near East coast of Honshu. USGS:35.21N, 141.03E, H=23:29:52.7, h=31 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.9 (CGS).
7	eiPg iSg	07	53	23.6 33.4			0.63 70	Trace.
7	iP	07	57	08.9			82.39 9154	Dilat. Kuril Islands. USGS:44.41N, 149.34E, H=07:44:56.2, h=50 km, M <sub>B</sub> =5.8 (CGS).
7	eiPg iSg	13	59	16.1 17.5			0.11 12	Trace. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
7	eiP	23	00	25.6			82.0 9110	Trace. Northern Sumatra. USGS: 03.24N, 96.47E, H=22:48:07.6, h= 22 km, M <sub>B</sub> =5.3 (CGS).
8	eiP	10	38	39.5			84.5 9388	Trace. Taiwan region. USGS:22.73N, 121.12E, H=10:26:08.8, h=25 km, M <sub>B</sub> =5.7 (CGS).
10	eP ePP	21 10	06 46.3	27.1	8	8.5	104.0 11554	Dilat. South of Sumbawa Island. USGS:11.36S, 116.69E, H=20:52: 18.9, h=33 km, M <sub>B</sub> =6.7 (CGS).
11	eiPKP	03	00	44.8			128.52 14280	Trace. East Papua New Guinea regi- on. USGS:09.46S, 148.94E, H=02:41: 41.0, h=13 km, M <sub>B</sub> =5.9 (CGS).
11	eP	05	25	08.2			81.04 9000	Compr. Unimak Island region. USGS: 53.54N, 163.73W, H=05:12:55.1, h=33 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =5.6 (CGS).
11	ePg	22	06	26.6			4.10 456	Trace. Central Italy. CSEM:42.21N, 13.13E, H=22:05:05.7. USGS:42.22N, 13.15E, H=22:05:04.4, h=10 km.
12	eiPKP	00	01	55.3			153.92 17100	Tonga Islands. USGS:19.49S, 173.76W H=23:42:07.6, h=33 km, M <sub>B</sub> =5.6 (CGS).
12	eiP	01	34	31.5			80.86 8985	Trace. Kuril Islands. USGS:44.26N, 148.09E, H=01:22:26.7, h=87 km, M <sub>B</sub> =5.4 (CGS).
12	eiP	03	53	58.2			77.63 8625	Kodiak Island region. USGS:56.42N, 152.69W, H=03:42:03.5, h=14 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.6 (CGS).
12	eiPg iSg	17 15.7	58 0.5	14.4		3.0	0.10 11	Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
13	iPn iSn	18 07	06 22.6	32.3	5.5	42.0	4.14 460	Compr. Yugoslavia, Kopaonik moun- tain. CSEM:43.32N, 21.05E, H=18: 05:25:6. USGS:43.27N, 20.92E, H= 18:05:25.8, h=33 km, M <sub>B</sub> =4.8 (CGS), M <sub>SZ</sub> =5.7 (CGS), I <sub>O</sub> =VII-VIII <sup>o</sup> MCS. Felt (IV <sup>o</sup> MCS) at Belgrade.
15	eiPg iSg	20	28	33.5		6.0	0.77 85	Yugoslavia, Croatia, Radač moun- tain.
15	eiPn iSn iM	23	35 37	40.4 03.7	7.8	54.0	7.29 810	Sicily. CSEM:38.23N, 15.08E, H= 23:33:49.2, h=18 km. USGS:38.39N, 15.07E, H=23:33:47.2, h=14 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =5.7 (CGS), M=6.0 (ZAG).
16	iPg iSn	23	21	03.7 37.2			4.32 480	Yugoslavia, Kopaonik mountain. CSEM:43.27N, 21.04E, H=23:19:36.1 USGS:43.23N, 20.90E, H=23:19:35.7 h=33 km, M <sub>B</sub> =4.1 (CGS).
17	eiPg iSg	01	34	24.8 26.4		3.0	0.12 14	Local.
18	eiP	11	55	51.8			81.21 9023	Trace. Kuril Islands. USGS:44.19N, 149.17E, H=11:43:37.8, h=33 km, M <sub>B</sub> =5.5 (CGS).
18	eiPg iSg	12	47	16.5 17.0			0.04 4	Local.
18	eiP ePP	17	41 45	06.9 23.2			101.84 11315	Trace. Philippine Islands region. USGS:05.14N, 127.41E, H=17:27: 30.6, h=128 km, M <sub>B</sub> =6.0 (CGS).
20	eiPg iSg	10	02	34.9 36.3	0.5	3.0	0.11 12	Local.
20	iPg iSg	13	25	46.3 47.1	0.5	25.8	0.06 7	Compr. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
20	iP	22	31	27.9			81.21 9023	Dilat. Trace. Kuril Islands. USGS: 46.78N, 151.90E, H=22:19:28.6, h=96 km, M <sub>B</sub> =5.5 (CGS).
21	eiPn	01	59	46.4				Trace. Yugoslavia, Livanjsko polje.
21	eP	15	30	26.7	1.3	9.0	42.51 4723	Compr. Afghanistan - USSR border region. USGS:36.62N, 71.27E, H= 15:22:57.6, h=227 km, M <sub>B</sub> =5.9 (CGS).
22	eiP	15	13	03.0			49.26 5473	Trace. China, Northern Sinkiang Province. USGS:42.00N, 85.92E, H=15:04:15.6, h=20 km, M <sub>B</sub> =5.3 (CGS).
23	ei	07	15	20.2				Trace.
23	eiPn iPg iSn	11	23	34.7 37.1 57.3			1.67 185	Yugoslavia - Northern Italy border region. CSEM:46.09N, 13.61E, H= 11:23:03.6. USGS:46.15N, 13.34E, H=11:23:04.0, h=10 km, I <sub>max</sub> <sup>o</sup> <sub>o</sub> MCS. Felt (IV MCS) in Nova Gorica, Kobarid, Tolmin.
23	eiPn iPg iSb	11	34	11.7 13.6 34.3			1.77 197	Yugoslavia - Northern Italy border region. CSEM:46.09N, 13.73E, H= 11:33:41.2. USGS:46.08N, 13.41E, H=11:33:39.6, h=10 km.
24	eiPKP	16	04	11.2			157.38 17485	Tonga Islands. USGS:21.75S, 174.38 W, H=15:44:18.9, h=33 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.8 (CGS).
24	eiPg iSg	16	54	25.2 26.5			0.10 11	Trace. Local.
25	ePP	04	42	52.9			100.42 11156	Celebes Sea. USGS:04.72N, 124.59E, H=04:24:53.7, h=43 km, M <sub>B</sub> =5.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks	
26	iPg iSg	13	15	18.6 19.1	0.3	4.4	0.04 4	Compr. Local.	
26	eiPg iSg	14	21	32.8 33.3	0.5	3.0	0.04 4	Local.	
26	eiP	18	50	51.6			81.35 9037	Trace. Kuril Islands. USGS:44.07N, 149.23E, H=18:38:36.9, h=33 km, M <sub>B</sub> =5.2 (CGS), M <sub>SZ</sub> =5.4 (CGS).	
27	eiPn iSn	08	35	27.4 36	52.6	6.0	3.0	7.83 870	Greece. CSEM:39.05N, 22.02E, H= 08:33:32.7, h=39 km. USGS:39.05N, 21.92E, H=08:33:29.5, h=30 km, M <sub>B</sub> =4.9 (CGS). Felt in Central Gree- ce.
29	eP	02	39	58.5			94.30 10477	Compr. Trace. Southern Sumatra. USGS:05.85S, 103.97E, H=02:26: 48.9, h=50 km, M <sub>B</sub> =5.8 (CGS).	
29	eiPKP ePP	04	40	22.3 43	51.0		143.47 15940	Solomon Islands. USGS:09.85S, 160.45E, H=04:21:10.4, h=46 km, M <sub>B</sub> =6.2 (CGS).	
29	eiP	19	37	50.3			84.22 9357	Taiwan region. USGS:24.66N, 122.72 E, H=19:25:20.9, h=18 km, M <sub>B</sub> =5.4 (CGS), M <sub>SZ</sub> =5.8 (CGS).	
30	eiPn iSn	02	05	19.8 47.7			2.18 242	Trace. Northern Italy. CSEM:46.24N, 13.20E, H=02:04:42.9. USGS:46.16N 13.09E, H=02:04:41.8, h=10 km.	
30	ePg	17	36	43.2			273 303	Trace. Central Italy. USGS:43.81N, 13.40E, H=17:35:48.7, h=33 km.	

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
M A Y								
1	eiPKP	06	25	47.6			149.21 16577	Trace. Fiji Islands region. USGS: 19.25S, 177.50W, H=06:06:57.1, h=578 km, M <sub>B</sub> =5.5 (CGS).
5	eP eR <sub>1</sub> PS	04	34	26.1 47.4			2.16 240	Trace. Austria. USGS:47.58N, 14.13 E, H=04:33:48.4, h=28 km. Felt (V <sup>o</sup> MCS) in Liezen area.
5	eSn	09	35	05.9			3.67 408	Trace. Yugoslavia, Serbia. USGS: 43.22N, 18.87E, H=09:33:20.9, h=20 km. Felt.
6	eiP	11	24	00.5			42.11 4678	Pakistan. USGS:29.84N, 66.21E, H=11:16:09.9, h=33 km, M <sub>B</sub> =5.5 (CGS). Felt in Quetta Peshawar area.
8	eiPn	14	40	47.7			7.41 823	Greece, Thessaloniki area. USGS: 40.68N, 23.27E, H=14:38:58.4, h=34 km, M <sub>B</sub> =4.2 (CGS).
8	eiPn	15	01	58.5			7.19 798	Trace. Greece, Thessaloniki area. USGS:40.72N, 23.33E, H=15:00: 10.0, h=35 km, M <sub>B</sub> =4.0 (CGS).
8	eiPg iSg iSb	17	33	14.2 21.9 23.4			0.59 66	Trace. Yugoslavia, probably Croa- tia, near Glina.
10	ePb eSb	01	38	09.4 52.8			3.48 387	Trace. Yugoslavia, Montenegro. USGS:43.21N, 18.72E, H=01:37:07.9 h=10 km, M <sub>B</sub> =4.8 (CGS). CSEM: 43.08N, 18.74E, H=01:37:07.1.
10	eiPn eRs <sub>2</sub> P	13	14 15	40.0 19.0	5.5	3.0	7.47 830	Greece, Thessaloniki area. USGS: 40.72N, 23.33E, H=13:12:50.2, h= 19 km, M <sub>B</sub> =4.1 (CGS). Felt in the Khalkidhiki area.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
11	eiP ePP	00	35	53.5 39 06.1			83.02 9223	Trace. Andreanof Islands, Aleutian Islands. USGS:51.67N, 176.10W, H=00:23:37.6, h=59 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.9 (CGS).
11	eiPn	02	08	48.5			3.60 400	Trace. Yugoslavia, Montenegro. CSEM:42.60N, 19.00E, H=02:07: 53.3. USGS:42.63N, 19.08E, H= 02:07:53.2, h=10 km.
11	eSg	02	51	18.8			7.86 874	Trace. Sicily. USGS:38.31N, 15.06E, H=02:46:58.2, h=11 km, M <sub>B</sub> =4.5 (CGS). Felt.
12	eiPn eSb	20	16	34.4 17 25.4			3.47 386	Trace. Yugoslavia, Montenegro, Durmitor mountain.
13	iPKP	07	27	52.4	1.9	44	142.65 15848	Dilat. New Hebrides Islands. USGS: 14.52S, 167.32E, H=07:08:46.2, h= 160 km, M <sub>B</sub> =6.7 (CGS).
14	eiPn eSg	22	49	29.2 50 18.9			3.01 334	Trace. Central Italy, South of Anco- na.
16	eiPn iR <sub>1</sub> P	05	33	01.7 11.5			3.36 373	Compr. Yugoslavia, Montenegro. CSEM:43.15N, 18.75E, H=05:32: 09.6. USGS:43.17N, 18.68E, H= 05:32:09.5, h=33 km. Damage (V <sup>o</sup> MCS) reported in epicentral area.
16	iPg iSg	13	17	20.0 20.5			0.04 4	Compr. Local.
17	eiPn iP iS	04	36	08.3 16.7 37 03.8		2.0	3.38 375	Yugoslavia, Montenegro. CSEM: 43.12N, 18.76E, H=04:35:14.4. USGS:43.19N, 18.73E, H=04:35:14.6, h=33 km.
17	eiPn eP	06	43	35.9 45.3			3.42 380	Trace. Yugoslavia, Montenegro, Golija mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
18	iPn iRsP iS	02	38	15.4 33.1 39 30.3		5.0	4.41 490	Compr. Yugoslavia, Serbia. CSEM: 43.30N, 21.05E, H=02:37:08.5. USGS:43.29N, 20.98E, H=02:37: 06.1, h=10 km, M <sub>B</sub> =5.0 (CGS). Felt (VII <sup>o</sup> MCS) in Brus area and (VI <sup>o</sup> MCS) in Kopaonik mountain area.
18	eiPKP	05	12	56.2			146.79 16310	Trace. New Hebrides Islands. USGS: 20.07S, 169.15E, H=04:53:22.0, h=67 km, M <sub>B</sub> =5.3 (CGS).
20	eiP iS	03	57	10.8 28.6			1.26 140	Trace. Yugoslavia, Croatia. Felt at Ilirska Bistrica region.
20	e	10	57	35.2				Trace.
20	eSg	21	35	25.1				Trace. Yugoslavia, Montenegro, Durmitor mountains area.
21	eiPKP	11	33	58.0			149.0 16555	Trace. Fiji Islands region. USGS: 14.52S, 176.42W, H=11:14:07.2, h=33 km, M <sub>B</sub> =4.8 (CGS).
22	eP	07	43	53.4			77.76 8640	Compr. Eastern Sea of Japan. USGS: 43.44N, 139.03E, H=07:31:57.8, h=31 km, M <sub>B</sub> =5.6 (CGS).
23	iP ePPS	08	02	37.1 12 10.8	1.5	18.8	84.50 9390	Compr. Japan, Kyushu. USGS: 31.06N, 130.14E, H=07:50:28.2, h=161 km, M <sub>B</sub> =6.3 (CGS).
23	eP	23	36	01.9			7.30 811	Dilat. Northern Greece, Thessaloni- ki area. CSEM:40.71N, 23.29E, H= 23:34:14.0, h=12 km. Felt (VI <sup>o</sup> MCS) in Southeastern Yugoslavia.
24	eiP iS	02	14	18.9 15 45.6	5.0	17.4	7.34 815	Greece, Thessaloniki area. CSEM: 40.67N, 23.41E, H=02:12:30.3. Felt (V <sup>o</sup> MCS) in Southeastern Yugo- slavia.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
24	eiP	05	59	16.9			7.50 833	Greece, Thessaloniki area. CSEM: 40.67N, 23.35E, H=05:57:28.8. Felt (III <sup>o</sup> MCS) in Southeastern Yugoslavia.
24	iP	06	29	16.7			82.63 9180	Compr. Andreanof Islands, Aleutian Islands. USGS:51.23N, 179.21W, H=06:16:55.4, h=25 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.7 (CGS).
24	eiP	08	48	23.3			7.46 829	Trace. Greece, Thessaloniki area. CSEM:40.71N, 23.41E, H=08:46:30.5
26	eiPKP	02	00	58.4			145.91 16210	Trace. Loyalty Islands. USGS:20.86S 168.59E, H=01:41:19.8, h=33 km, M <sub>B</sub> =5.5 (CGS).
26	eiP	13	48	34.3			22.32 2480	Trace. Eastern Caucasus. USGS: 41.96N, 46.55E, H=13:43:38.2, h=38 km, M <sub>B</sub> =5.6 (CGS).
26	eSg	18	22	51.3			3.47 384	Trace. Yugoslavia, Montenegro, Golija mountain.
27	eP	00	11	44.5			95.47 10606	Dilat. Volcano Islands region. USGS: 24.27N, 142.66E, H=23:58:22.0, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.8 (CGS).
27	eSg	13	21	58.0			3.38 376	Trace. Yugoslavia, Montenegro, Durmitor mountains area.
27	eSb eSg	18	31	16.9 24.6			3.42 380	Trace. Yugoslavia, Montenegro, Durmitor mountain. CSEM:43.11N, 18.90E, H=18:29:31.7.
28	eiP iS	12	53	35.9 39.0			0.24 26	Trace. Local.
29	eP	03	20	25.1			67.45 7495	Trace. Leeward Islands. USGS: 17.69N, 61.57W, H=03:09:22.3, h= 46 km, M <sub>B</sub> =5.2 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D <sup>o</sup> D km	Remarks
30	eP	07	10	02.3			80.89 8985	Trace. Kuril Islands. USGS:44.46N, 149.20E, H=06:57:50.0, h=33 km, M <sub>B</sub> =5.4 (CGS).
30	eP iPP	20	26 28	04.2 01.8			50.34 5593	Arabian Sea. USGS:11.05N, 57.33E, H=20:17:15.2, h=33 km, M <sub>B</sub> =5.3 (CGS), M <sub>SZ</sub> =5.5 (CGS).
31	eP	01	20	14.0			90.38 10040	Near coast of Nicaragua. USGS: 12.77N, 87.16W, H=01:07:22.4, h=76 km, M <sub>B</sub> =5.4 (CGS).

## J U N E

1	eiP	04	40	38.7			70.44 7825	Trace. Chagos archipelago region. USGS:07.06S, 68.05E, H=04:29:25.8, h=33 km, M <sub>B</sub> =5.3 (CGS).
1	eiP iS	12	37	18.8 20.1	0.4	2.2	0.11 12	Compr. Local.
2	eP	12	54	29.4			56.49 6275	Trace. North of Ascension Island. USGS:04.45S, 12.34W, H=12:44:48.3, h=21 km, M <sub>B</sub> =4.9 (CGS).
2	eiPn iSn	22	33 34	13.4 33.8	6.0	10.0	7.20 800	Dilat. Greece. USGS:40.75N, 23.21E, H=22:31:24.4, h=19 km, M <sub>B</sub> =4.6 (CGS). Felt in Thessaloniki area.
4	eP	10	03	11.0			87.71 9745	Trace. Philippine Islands region. USGS:19.30N, 121.22E, H=09:50:32.0, h=48 km, M <sub>B</sub> =5.2 (CGS).
4	iP	19	37	12.8			34.78 3864	Compr. Uzbek, SSR. USGS:40.38N, 63.62E, H=19:30:23.4, h=33 km, M <sub>B</sub> =6.0 (CGS).
6	eiP	04	10	24.5			78.40 8710	Near East coast of Kamchatka. USGS: 51.18N, 157.64E, H=03:58:33.0, h= 66 km, M <sub>B</sub> =5.4 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a(mm)	D <sup>o</sup> D km	Remarks
7	eiP iS	01	36	19.9 20.5			0.05 5	Trace. Local.
7	ePb eSb	02	41 42	40.4 25.0			3.42 380	Trace. Yugoslavia, Montenegro. USGS:43.20N, 18.77E, H=02:40: 38.9, h=10 km.
11	iP	03	04	46.3			41.28 4585	Compr. Eastern Kazakh SSR. USGS: 49.88N, 78.84E, H=02:56:57.7, h= 0 km, M <sub>B</sub> =5.9 (CGS). Underground nuclear explosion.
11	ePKP	14	47	37.5			150.13 16680	Compr. Tonga Islands. USGS:15.26S, 173.56W, H=14:27:55.3, h=33 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =6.2 (CGS).
11	ePb iSg	17	32 33	14.0 03.1			3.28 364	Trace. Northern Italy. USGS:44.59N, 11.87E, H=17:31:15.1, h=10 km.
12	iSg	17	29	04.8			3.47 385	Trace. Northern Italy. USGS:43.97N, 11.65E, H=17:27:10.3, h=29 km.
12	eSb	17	48	27.8			7.27 808	Greece. USGS:40.73N, 23.30E, H= 17:44:48.1, h=20 km, M <sub>B</sub> =4.1 (CGS) M <sub>SZ</sub> =4.3 (CGS). Felt at Thessaloni- ki.
12	iSb	22	25	09.0			2.05 228	Trace. Northern Italy. USGS:46.26N, 13.08E, H=22:24:04.4, h=10 km, Felt.
12	ePn eSn	23	38 40	35.5 04.2			7.38 820	Greece. USGS:40.79N, 23.23E, H= 23:36:43.1, h=27 km, M <sub>B</sub> =4.2 (CGS).
14	iP	11	46	44.9			84.82 9423	Compr. Japan, near East coast of Honshu. USGS:38.32N, 142.36E, H= 11:34:20.0, h=40 km, M <sub>B</sub> =6.0 (CGS)
14	eP	12	45	57.8			95.78 10640	Mindanao, Philippine Islands. USGS: 08.25N, 122.40E, H=12:32:33.9, h=24 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
15	e	00	31	54.9				Trace. Turkey. USGS:40.85N, 27.70E, H=00:26:43.3, h=16 km, M <sub>B</sub> =4.4 (CGS). Felt at Istanbul.
15	iP	09	41	08.5			82.12 9123	Compr. Kuril Islands. USGS:44.03N, 149.16E, H=09:28:57.2, h=63 km, M <sub>B</sub> =5.6 (CGS).
16	eiP	05	45	59.6			83.86 9317	Trace. Japan, off East coast of Honshu. USGS:38.17N, 143.26E, H=05:33:32.0, h=34 km, M <sub>B</sub> =5.5 (CGS).
16	iP	08	10	23.8			99.02 11000	Compr. Mindanao, Philippine Islands. USGS:07.86N, 126.32E, H=07:57:00.1, h=139 km, M <sub>B</sub> =6.0 (CGS).
16	eiPg iSg	13	37	42.5 54.2			0.93 103	Trace. Yugoslavia, Bosnia and Herzegovina, Una valley.
16	iSg	14	46	16.2				Trace. Local.
17	iPKP	15	31	19.5	2	22.0	152.71 16965	Dilat. Tonga Islands region. USGS:17.10S, 172.26W, H=15:11:33.5, h=33 km, M <sub>B</sub> =6.6 (CGS), M <sub>SZ</sub> =7.0 (CGS).
17	eiP	21	21	49.1			9.56 1062	Trace. Aegean Sea. USGS:39.15N, 24.52E, H=21:19:30.8, h=12 km, M <sub>B</sub> =4.3 (CGS).
19	eiPn	03	14	47.8			7.47 830	Trace. Greece. USGS:40.72N, 23.38E, H=03:12:54.5, h=10 km, M <sub>B</sub> =4.0 (CGS).
19	eiPg eSg	06	45	15.8 23.7			0.60 67	Trace. Yugoslavia, Slovenia, Laško region.
19	eiPn eSn	10	32	55.9 34 21.4			7.29 810	Greece. USGS:40.75N, 23.22E, H=10:31:05.4, h=10 km, M <sub>B</sub> =5.3 (CGS). 1 killed, 10 injured, and damage in the Thessaloniki area. Felt strongly in SE Macedonia.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
19	ePn eiSg	10	50	01.1 52 09.4			7.24 804	Greece. USGS:40.71N, 23.22E, H=10:48:10.8, h=10 km, M <sub>B</sub> =4.6 (CGS). Felt at Thessaloniki.
20	iPg iSg	14	07	17.2 17.7			0.04 4	Compr. Local.
20	ePg	16	30	38.9				Trace. Yugoslavia, Montenegro, Durmitor mountains.
20	iPn iPg	20	05	12.4 31.4			7.34 815	Compr. Greece. USGS:40.74N, 23.23E, H=20:03:21.0, h=3 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> =6.4 (CGS), 50 persons killed, damage in the Thessaloniki area. Felt in Southern Yugoslavia.
20	eiPn iSn	21	52	54.6 54 19.4			7.34 814	Trace. Greece. USGS:40.68N, 23.19E, H=21:51:03.6, h=10 km, M <sub>B</sub> =4.3 (CGS).
21	eiPn ePg	03	22	17.5 52.4			7.38 820	Trace. Greece. USGS:40.72N, 23.20E, H=03:20:26.1, h=10 km, M <sub>B</sub> =4.2 (CGS).
21	eiPn iPg	06	01	58.5 02 33.8			7.40 822	Greece. USGS:40.76N, 23.34E, H=06:00:06.0, h=10 km, M <sub>B</sub> =4.2 (CGS).
21	eiP	11	06	43.8			84.08 9340	Compr. Japan, near East coast of Honshu. USGS:38.33N, 141.76E, H=10:54:22.6, h=52 km, M <sub>B</sub> =5.7 (CGS).
21	iP	11	21	54.0			78.15 8683	Compr. Northwest of Kuril Islands. USGS:48.31N, 148.61E, H=11:10:38.2, h=377 km, M <sub>B</sub> =5.9 (CGS).
21	eiPn iSg	12	31	33.0 33 39.0			7.11 790	Greece. USGS:40.78N, 23.01E, H=12:29:44.0, h=10 km, M <sub>B</sub> =4.6 (CGS).
21	eP	17	36	09.0			45.85 5094	Trace. Kirgiz - Sinkiang border region. USGS:41.46N, 79.39E, H=17:27:54.9, h=33 km, M <sub>B</sub> =5.0 (CGS).
21	eiP	18	53	55.5			7.34 816	Greece. USGS:40.71N, 23.21E, H=18:52:04.1, h=10 km, M <sub>B</sub> =4.3 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
22	ePn ePg iSn	02 34 35	22.3 34.4 03.5				3.47 385	Romania. USGS:46.72N, 21.06E, H=02:33:24.0, h=10 km, M <sub>B</sub> =4.6 (CGS). Damage (VII) at Bekes, Hungary.
22	ePn iSg	02 39 40	14.5 01.7				2.88 320	Trace. Probably Northern Italy, Venetian Alps.
22	eiPn	02 45	02.2				2.97 330	Trace. Hungary. CSEM:47.84N, 19.39E, H=02:44:12.9, h=10 km.
22	ePb iSg	02 03	04.4 01.0				3.74 415	Hungary. USGS:46.79N, 21.10E, H=02:57:54.2, h=10 km, M <sub>B</sub> =4.4 (CGS).
22	eiPb eSb	05 32	08.8 56.4				3.78 420	Trace. Hungary. CSEM:46.78N, 21.14E, H=05:30:59.9, h=10 km, M <sub>B</sub> =3.2 (CGS).
22	eP	08 43	09.0				58.81 6535	Trace. Central mid-Atlantic ridge. USGS:01.14N, 27.71W, H=08:33: 11.5, h=33 km, M <sub>B</sub> =5.2 (CGS).
23	ePb	01 59	12.0				7.47 830	Trace. Greece. USGS:40.81N, 23.12 E, H=01:57:01.2, h=10 km, M <sub>B</sub> =4.1 (CGS).
23	ePn iPb iSg	12 33 34	08.6 15.1 08.6				3.60 400	Probably Hungary, Bekes region.
23	eiPn	20 00	19.1				7.34 815	Trace. Greece. USGS:40.73N, 23.20E, H=19:58:27.9, h=10 km, M <sub>B</sub> =4.2 (CGS).
24	eiPn iPg iSn	00 15 16	48.1 09.6 50.6				5.13 570	Albania, Debar region. USGS: 41.71 N, 20.29E, H=00:14:28.2, h=10 km, M <sub>B</sub> =4.7 (CGS). Slight damage (VI) in Peshkopi.
24	ei	00 31	14.4					Trace. Albania, Debar region.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
24	eSb	00 40	59.1				5.31 590	Trace. Albania, Debar region. USGS: 41.66N, 20.31E, H=00:38: 16.0, h=10 km, M <sub>B</sub> =3.3 (CGS). Felt (V) at Debar, Yugoslavia.
24	eP	09 44	46.0				91.26 10140	Southern Sumatera. USGS: 05.06S, 102.36E, H=09:31:42.7, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.4 (CGS).
25	eiPKP	10 41	13.5				157.23 17468	Tonga Islands. USGS: 17.11S, 174.43W, H=10:21:45.0, h=159 km, M <sub>B</sub> =5.5 (CGS).
26	eiPg iSg	00 05 06	22.3 19.0				4.28 475	Trace. Yugoslavia. USGS: 43.14N, 20.82E, H=00:03:56.6, h=10 km. Felt at Leposavić.
27	ePKP	01 24	12.2				151.0 16775	Trace. West of Macquarie Island. USGS: 56.32S, 146.62E, H=01:04: 28.7, h=33 km, M <sub>B</sub> =5.1 (CGS), M <sub>SZ</sub> =5.5 (CGS).
27	eiPKP	01 31	07.2				151.13 16790	Trace. West of Macquarie Island. USGS: 56.47S, 147.07E, H=01:11: 23.5, h=33 km, M <sub>B</sub> =5.0 (CGS).
27	iPg iSn	12 20 21	47.3 38.8				7.29 810	Trace. Bulgaria. USGS: 42.14N, 24.07E, H=12:18:21.6, h=14 km, M <sub>B</sub> =4.2 (CGS).
27	ePKP	15 04	37.4				156.79 17420	Tonga Islands region. USGS:17.10S, 172.53W, H=14:44:45.9, h=33 km, M <sub>B</sub> =5.2 (CGS), M <sub>SZ</sub> =5.4 (CGS).
27	iP	19 23	03.9				84.46 9383	Compr. Japan, off East coast of Honshu. USGS: 37.15N, 142.80E, H=19:10:33.3, h=35 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.6 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
29	eiPKP	14	14	42.7			148.19 16465	Loyalty Islands. USGS: 20.26S, 168.17E, H=13:55:03.6, h=33 km, M <sub>B</sub> =5.6 (CGS).
30	eSb eSg	01	18	25.2 42.2			5.76 640	Hungary-Romania border region. CSEM: 47.88N, 23.47E, H=01:15: 29.9, h=10 km, M <sub>B</sub> =4.3 (CGS). Minor damage at Bekes, Hungary.
30	ePn iSg	07	35 36	26.2 28.2			3.65 406	Hungary. CSEM: 46.80N, 21.13E, H=07:34:16.7, h=10 km, M <sub>B</sub> =3.5 (CGS). Felt at Bekes, Hungary.

## JULY 1978.

1	eiP	09	06	32.9			88.45 9825	Trace. Panama. USGS: 09.32N, 78.48W, H=08:53:57.6, h=92 km, M <sub>B</sub> =5.3 (CGS). Damage at Porto- belo.
2	eiPKP	04	21	18.7	5.0	6.0	147.60 16398	Tonga Islands. USGS: 15.33S, 175.49W, H=04:01:33.3, h=25 km, M <sub>B</sub> =5.9 (CGS), M <sub>SZ</sub> =6.4 (CGS).
3	eiPKP	00	34	19.0			149.34 16592	Trace. Tonga Islands region. USGS: 17.45S, 172.49W, H=00: 14:26.8, h=33 km, M <sub>B</sub> =5.1 (CGS).
3	eiPKP	03	25	09.0			145.21 16133	Trace. New Hebrides Islands. USGS: 18.25S, 168.14E, H=03:05: 33.1, h=33 km, M <sub>B</sub> =5.3 (CGS). Felt (III) at Port Vila.
3	eSg	20	13	51.4			7.29 810	Trace. Greece. USGS: 40.75N, 23.35E, H=20:09:50.3, h=10 km, M <sub>B</sub> =4.0 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
4	iP	02	53	04.9			83.48 9275	Compr. Japan, Kyushu. USGS: 32.66N, 131.12E, H=02:40:54.0, h=118 km, M <sub>B</sub> =5.7 (CGS). 2 inju- red on Kyushu.
4	ePn iSn	22	25	16.6			7.16 795	Greece. USGS: 40.75N, 23.06E, H=22:23:28.0, h=19 km, M <sub>B</sub> =5.1 (CGS). 1 killed, 16 injured, and minor damage in Thessaloniki area.
5	iP	02	54	47.5			41.48 4608	Compr. Eastern Kazakh SSR. USGS: 49.84N, 78.91E, H=02:46:57.3, h=0 km, M <sub>B</sub> =5.8 (CGS). Under- ground explosion.
6	iPg iSg	14	09	11.1			0.10 12	Dilat. Local. Felt (III <sup>o</sup> MCS) at Zagreb-Grič.
8	eiPKP	08	31	10.8			151.0 16775	Samoa Islands region. USGS: 16.74S, 172.71W, H=08:11:19.4, h=33 km, M <sub>B</sub> =5.1 (CGS), M <sub>SZ</sub> = 5.4 (CGS).
9	eiPKP	02	33	11.8			146.38 16263	Fiji Islands region. USGS: 15.78S, 178.69E, H=02:13:31.4, h=33 km, M <sub>B</sub> =5.4 (CGS). Felt on Vanua Levu.
11	iP	12	29	19.9			94.40 10488	Dilat. Trace. Western Brazil. USGS: 07.89S, 71.42W, H=12:17: 07.8, h=645 km, M <sub>B</sub> =5.8 (CGS).
11	eiPg iSg	13	10	14.4			0.07 8	Trace. Local.
13	iPg iSg	13	10	20.6			0.11 12	Compr. Trace. Local.
13	iP	13	37	39.6			82.35 9150	Compr. Fox Islands, Aleutian Islands. USGS: 52.24N, 168.82W, H=13:25:19.7, h=33 km, M <sub>B</sub> =5.8 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
13	eiPn	17	28	48.5		7.34 816	Trace. Greece. USGS: 40.79N, 23.23E, H=17:26:57.2, h=10 km, M <sub>B</sub> =3.9 (CGS). Felt in the Thessaloniki area.	
15	eiPn	01	43	51.6		7.16 795	Trace. Greece. USGS: 40.74N, 23.29E, H=01:42:02.9, h=10 km, M <sub>B</sub> =3.7 (CGS).	
15	eiP	17	57	03.8		81.56 9060	Trace. Japan, Hokkaido. USGS: 41.87N, 142.53E, H=17:44:55.4, h=62 km, M <sub>B</sub> =5.4 (CGS).	
17	ePKP	13	45	23.8	2.5 9.0	147.68 16407	Compr. Samoa Islands region. USGS: 14.89S, 175.82W, H=13:26:14.9, h=292 km, M <sub>B</sub> =6.0 (CGS).	
19	eiP	09	44	00.5		78.47 8718	Trace. Kodiak Island region. USGS: 56.77N, 151.65W, H=09:32:08.6, h=33 km, M <sub>B</sub> =5.7 (CGS).	
22	eiPn eSn	01 19	18 31.0	47.2		3.47 385	Trace. Northern Italy. USGS: 44.27N, 11.92E, H=01:17:50.2, h=10 km.	
22	eiPKP	12	10	50.4		132.5 14720	Trace. New Britain region. USGS: 04.19S, 152.84E, H=11:51:47.0, h=43 km, M <sub>B</sub> =5.9 (CGS), M <sub>SZ</sub> =6.0 (CGS).	
24	eiPKP	20	05	17.9	6.0 5.0	148.88 16540	New Hebrides Islands region. USGS: 20.67S, 172.50E, H=19:45:35.3, h=37 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.1 (CGS).	
25	eiPKP	15	42	23.7		148.00 16443	Trace. New Hebrides Islands region. USGS: 20.81S, 172.67E, H=15:22:37.2, h=19 km, M <sub>B</sub> =5.1 (CGS).	
27	eiPKP	18	44	51.2		150.47 16717	Tonga Islands. USGS: 15.58S, 173.04W, H=18:25:08.5, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =5.8 (CGS).	

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
28	ePKP	11	05	28.2		145.55 16170	Compr. New Hebrides Islands. USGS: 18.82S, 169.00E, H=10:46:13.7, h=205 km, M <sub>B</sub> =5.3 (CGS).	
29	eS	04	41	19.3	4.5 5.0	15.57 1730	Turkey. USGS: 37.58N, 30.01E, H=04:34:41.9, h=16 km, M <sub>B</sub> =4.6 (CGS). Felt in the Burdur area.	
30	eiSn	00	02	14.7		3.87 430	Trace. Yugoslavia. USGS: 42.58N, 18.60E, H=00:00:23.4, h=10 km. CSEM: 42.53N, 18.65E, H=00:00:25.0. Felt in the Boka Kotorska area.	
30	iSb	05	21	32.0		4.14 460	Central Italy. USGS: 42.65N, 12.46E, H=05:19:24.3, h=10 km, M <sub>B</sub> =4.7 (CGS). Slight damage in the Terni area.	

## AUGUST 1978.

1	eiPKP	20	49	30.2		148.13 16457	Trace. Tonga Islands. USGS: 15.29S, 173.33W, H=20:29:42.9, h=33 km, M <sub>B</sub> =5.3 (CGS), M <sub>SZ</sub> =5.5 (CGS).
3	eiPKP	13	00	53.5		144.19 16020	Trace. New Hebrides Islands. USGS: 15.37S, 167.48E, H=12:41:36.7, h=131 km, M <sub>B</sub> =5.7 (CGS).
3	iPP	18	29	49.0		103.13 11458	Near coast of Northern Chile. USGS: 26.51S, 70.54W, H=18:11:17.1, h=58 km, M <sub>B</sub> =6.3 (CGS). 13 injured and major damage (max. intensity IX) in the Copiapo-Taltal area.
3	e	18	41	16.2			Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
3	ei	23	43	19.5				Trace. West Irian region. USGS: 00.17S, 131.80E, H=23:25:32.1, h=33 km, M <sub>B</sub> =5.9 (CGS).
4	eiPKP	01	36	49.1			148.08 16450	Trace. Tonga Islands. USGS: 15.67S, 173.05W, H=01:17:02.0, h=33 km, M <sub>B</sub> =5.3 (CGS).
4	eP	09	07	38.6			85.90 9543	Dilat. Philippine Islands region. USGS: 19.93N, 120.45E, H=08:55: 00.9, h=33 km, M <sub>B</sub> =5.4 (CGS).
4	eiP	14	20	06.1			67.79 7532	Trace. Chagos archipelago region. USGS: 03.48S, 68.67E, H=14:09: 09.5, h=33 km, M <sub>B</sub> =5.4 (CGS).
5	eiPKP	04	31	39.5			124.26 13805	Trace. New Ireland region. USGS: 03.60S, 151.01E, H=04:12:43.9, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> = 6.1 (CGS).
5	iPg iSg	11	01	13.6 14.0	14.0		0.03 3	Compr. Local.
5	eiPKP	16	05	05.5			126.74 14080	Trace. New Ireland region. USGS: 03.58S, 152.29E, H=15:46:36.0, h=255 km, M <sub>B</sub> =5.7 (CGS).
5	ePg eSn eSb	18	14	08.5 41.5 51.8			4.05 450	Central Italy. USGS: 42.58N, 12.57E, H=18:12:47.2, h=33 km. Felt in the Terni area.
5	iP	19	05	08.6			92.09 10230	Compr. Southern Sumatera. USGS: 04.02S, 102.41E, H=18:52:09.1, h=48 km, M <sub>B</sub> =5.9 (CGS).
10	iP	08	06	33.8			32.69 3632	Compr. Novaya Zemlya. USGS: 73.34N, 54.79E, H=07:59:57.7, h=0 km, M <sub>B</sub> =5.9 (CGS). Under- ground nuclear explosion.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
10	eiP	17	06	25.0			88.0 9777	Trace. South Atlantic ridge. USGS: 35.86S, 17.65W, H=16:53:37.1, h= 10 km, M <sub>B</sub> =5.2 (CGS), M <sub>SZ</sub> =6.0 (CGS).
10	eiPKP	20	27	00.0			148.63 16512	Fiji Islands region. USGS: 16.66S, 175.67E, H=20:07:20.2, h=33 km, M <sub>B</sub> =5.5 (CGS).
12	eiSb	03	14	29.4			2.95 328	Trace. Yugoslavia, Bosnia and Herzegovina, Ljubuški area.
13	eiP	03	54	05.5			85.08 9452	Trace. Taiwan region. USGS: 22.23N, 121.52E, H=03:41:31.8, h=19 km, M <sub>B</sub> =5.4 (CGS).
13	iPKP	21	12	33.0			151.36 16815	Fiji Islands region. USGS: 17.81S, 178.35W, H=20:53:53.8, h=599 km, M <sub>B</sub> =5.5 (CGS).
14	eiP	14	22	16.6			19.43 2158	Trace. Strait of Gibraltar. USGS: 36.63N, 06.87W, H=14:17:50.4, h=30 km, M <sub>B</sub> =5.0 (CGS). Felt in Province of Huelva, Spain.
14	iP	18	58	18.1			78.85 8760	Compr. Kuril Islands. USGS: 49.87N, 156.28E, H=18:46:24.1, h=86 km, M <sub>B</sub> =5.8 (CGS), Felt (V) at Severo-Kurilsk.
15	eiP	09	09	05.0			20.87 2318	Trace. Western Caucasus. USGS: 41.30N, 44.02E, H=09:04:23.5, h=15 km, M <sub>B</sub> =4.8 (CGS). Max. intensity VI <sub>B</sub> . Felt (IV) in the Le- ninakan - Tbilisi area.
15	eiP	12	07	31.1			79.26 8805	Trace. South Atlantic ridge. USGS: 29.12S, 13.08W, H=11:55:27.5, h=33 km, M <sub>B</sub> =5.2 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
15	iPKP	12	57	09.6			161.40 17930	Compr. Kermadec Islands. USGS: 30.53S, 178.18W, H=12:37:12.8, h=33 km, M <sub>B</sub> =6.1 (CGS), M <sub>SZ</sub> = 6.4 (CGS).
16	eiPKP	13	00	08.4			151.12 16790	Trace. Fiji Islands region. USGS: 21.79S, 176.38W, H=12:40:35.2, h=210 km, M <sub>B</sub> =5.2 (CGS).
17	eiPKP	08	51	03.0			154.71 17188	South of Fiji Islands. USGS: 22.17S, 179.56W, H=08:32:19.2, h=593 km, M <sub>B</sub> =5.6 (CGS).
17	eiPKP	09	11	43.0			149.22 16580	Tonga Islands. USGS: 21.07S, 174.32W, H=08:51:51.3, h=20 km, M <sub>B</sub> =5.7 (CGS).
18	eiP	15	48	12.6			92.67 10295	Trace. Guatemala. USGS: 14.37N, 91.45W, H=15:35:17.8, h=96 km, M <sub>B</sub> =5.5 (CGS). Felt (V) at Guate- mala city and San Salvador.
18	eiP	19	04	07.6			77.47 8607	Trace. Southern Alaska. USGS: 59.89N, 153.53W, H=18:52:28.4, h=123 km, M <sub>B</sub> =5.4 (CGS). Felt from Kodiak Island to Fairbanks.
18	ePn	20	54	40.6	34.0		5.17 574	Dilat. Albania. USGS: 41.86N, 20.30E, H=20:53:19.8, h=5 km, M <sub>B</sub> =5.1 (CGS). Damage (VII) in Albanian and Yugoslavian villages in the epicentral area. Felt at Sko- pje.
21	eiP eiPP	22	18 22	23.3 05.3			95.09 10565	Prince Edward Islands region. USGS: 47.67S, 32.54E, H=22:05:02.5, h=10 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> = 6.2 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
22	eP	22	52	50.6			20.66 2295	Compr. Western Caucasus. USGS: 41.95N, 43.92E, H=22:48:11.2, h=10 km, M <sub>B</sub> =4.8 (CGS). Felt (VI) at Gori.
23	eP	00	51	28.3	17	9.0	91.35 10150	Compr. Costa Rica. USGS: 10.20N, 85.22W, H=00:38:32.2, h=56 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =7.0 (CGS). Felt strongly at San Jose.
23	eP	21	11	17.4			82.20 9132	Compr. Rat Islands, Aleutian Is- lands. USGS: 51.74N, 176.43E, H=20:59:05.7, h=54 km, M <sub>B</sub> =5.4 (CGS).
24	eiSg	01	28	04.7			7.78 865	Trace. Greece. USGS: 40.62N, 23.26E, H=01:23:47.5, h=10 km, M <sub>B</sub> =4.2 (CGS).
24	eiPg iSg	19	02	54.9 58.8			0.30 33	Trace. Local.
28	eP	00	13	02.0			29.58 3287	Compr. Western Iran. USGS: 32.65N, 49.80E, H=00:07:04.1, h=49 km, M <sub>B</sub> =5.2 (CGS).
29	iP	02	44	55.0			41.27 4585	Compr. Eastern Kazakh SSR. USGS: 50.01N, 79.00E, H=02:37:06.5, h=0 km, M <sub>B</sub> =5.9 (CGS). Under- ground nuclear explosion.
29	eiP	14	17	30.9			32.14 3570	Trace. Southern Iran. USGS: 29.56N, 51.57E, H=14:11:04.3, h=34 km, M <sub>B</sub> =4.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
SEPTEMBER 1978.								
1	eiPKP	04	36	12.5			143.65 15960	New Hebrides Islands. USGS: 17.41S, 168.00E, H=04:16:42.1, h=32 km, M <sub>B</sub> =5.6 (CGS), M <sub>SZ</sub> =5.9 (CGS).
1	eiPKP	10	15	12.2			132.63 14735	Solomon Islands. USGS: 07.45S, 156.60E, H=09:56:00.6, h=33 km, M <sub>B</sub> =6.0 (CGS), M <sub>SZ</sub> =6.2 (CGS).
1	eiPn iSb	22 50	48 08.1	12.6				Greece. USGS: 39.12N, 21.46E, H=22:46:16.6, h=37 km, M <sub>B</sub> =4.8 (CGS). Felt in the Kardhitsa-Tri- kkala area.
2	eP	02	09	47.1			84.04 9337	Compr. Taiwan region. USGS: 24.90N, 121.99E, H=01:57:33.4, h=109 km, M <sub>B</sub> =6.1 (CGS).
3	eiP	00	24	54.8	6.0	4.0	15.62 1735	Western Caucasus. USGS: 44.40N, 38.05E, H=00:21:15.6, h=33 km, M <sub>B</sub> =5.7 (CGS). Felt (VI) in the epicentral area.
3	ePn iSn iSb	05 10 11	09 53.7 07.9	50.7	43.0		5.13 570	Dilat. Germany. USGS: 48.29N, 09.01E, H=05:08:30.2, h=8 km, M <sub>B</sub> =4.9 (CGS), M <sub>SZ</sub> =5.3 (CGS). Felt throughout Southwestern Ger- many and Alsace, France. Also felt in Austria and Switzerland. Max. intensity MM (VIII).
3	eiPg eiSn	05	36	01.4 43.6			5.13 570	Germany. USGS: 48.28N, 08.93E, H=05:34:18.5, h=10 km.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
3	eiP	07	43	13.4			79.39 8820	Trace. Kuril Islands. USGS: 49.45N, 154.36E, H=07:31:23.8, h=109 km, M <sub>B</sub> =5.5 (CGS).
3	eiPn iSb	10 05	04 23.2	04.5			5.31 590	Germany. USGS: 48.30N, 08.96E, H=10:02:42.1, h=10 km.
5	eiP	03	54	41.1			80.25 8915	Trace. Taiwan region. USGS: 23.95N 121.69E, H=03:42:32.2, h=17 km, M <sub>B</sub> =5.2 (CGS), M <sub>SZ</sub> =5.3 (CGS).
6	eiPKP	04	21	24.9			146.08 16230	Loyalty Islands. USGS: 20.14S, 168.71E, H=04:01:53.5, h=36 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =6.0 (CGS).
6	eiPKP	11	26	43.9			139.50 15500	New Hebrides Islands. USGS: 13.32S, 167.14E, H=11:07:43.1, h=198 km, M <sub>B</sub> =6.0 (CGS).
6	iPg iSg	16	07	37.4 37.8		14	0.04 4	Compr. Local.
7	eiPn eSn	04	56 57	00.9 38.2			8.42 935	Trace. Ionian Sea. USGS: 37.83N, 20.94E, H=04:53:54.7, h=43 km, M <sub>B</sub> =4.5 (CGS).
7	eiSn eiSg	16	50	16.8 28.3			2.86 318	Trace. Yugoslavia, Adriatic Sea, West of Jabuka Island.
8	eiPg iSg	13	15	40.7 43.2			0.18 20	Local.
8	eiPKP	23	16	52.6			160.6 17843	Trace. Kermadec Islands. USGS: 30.37S, 178.15W, H=22:56:56.6, h=33 km, M <sub>B</sub> =5.9 (CGS).
9	eiP	12	59	37.3			87.56 9728	South Indian Ocean. USGS: 26.54S, 67.75E, H=12:46:59.0, h=33 km, M <sub>B</sub> =5.4 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
9	eiPn	16	34	12.0	6.5	7.0	8.82 980	Greece. USGS: 38.47N, 23.17E, H=16:31:59.8, h=21 km, M <sub>B</sub> =4.2 (CGS). Felt in the Thivai-Khalkis area.
9	eiPg eSn eSg	17	42 43	48.8 11.3 15.7			2.05 228	Trace. Yugoslavia, Bosnia and Herzegovina, Livno area.
10	eiP	16	03	00.4			83.49 9275	Trace. Taiwan. USGS: 24.18N, 121.78E, H=15:50:34.7, h=21 km, M <sub>B</sub> =5.1 (CGS). Felt on Taiwan.
10	eiP	16	46	28.9			83.69 9298	Trace. Taiwan. USGS: 24.12N, 121.71E, H=16:34:02.2, h=15 km, M <sub>B</sub> =5.4 (CGS). Felt on Taiwan.
10	eiP	23	37	12.9			93.22 10357	Guatemala. USGS: 14.27N, 91.50W, H=23:24:15.6, h=94 km, M <sub>B</sub> =5.6 (CGS). Felt at Huehuetenango and Guatemala City.
11	eiPn eiSn	07	13 15	41.3 01.5			7.02 780	Trace. Greece-Albania border region. USGS: 39.00N, 20.23E, H=07:11:51.8, h=60 km, M <sub>B</sub> =4.4 (CGS).
11	eP	07	53	25.0			86.37 9595	Dilat. Southwestern Ryukyu Islands. USGS: 24.93N, 124.85E, H=07:40:52.5, h=21 km, M <sub>B</sub> =5.7 (CGS).
11	eiP	08	53	23.0			82.20 9132	Trace. Kuril Islands. USGS: 46.44N, 153.61E, H=08:41:11.3, h=33 km, M <sub>B</sub> =5.2 (CGS).
11	eiPn eiSn	18	37 38	29.4 48.4			7.02 780	Trace. Ionian Sea. USGS: 38.70N, 18.03E, H=18:35:42.5, h=10 km.
12	eiP	00	54	05.3			83.96 9328	Trace. Ryukyu Islands. USGS: 29.87N, 129.46E, H=00:41:52.0, h=144 km, M <sub>B</sub> =5.3 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
13	iSg	12	19	56.3				Trace. Local.
14	eiPn iSb	00	06 08	59.6 47.0		7.0	7.11 790	Greece-Albania border region. USGS: 39.05N, 20.52E, H=00:05:10.7, h=56 km, M <sub>B</sub> =4.7 (CGS). Felt in the area of Preveza-Levkas, Greece.
14	eiPn	02	13	31.3			7.02 780	Trace. Greece-Albania border region. USGS: 39.16N, 20.48E, H=02:11:44.2, h=57 km, M <sub>B</sub> =4.2 (CGS). Felt in the area of Preveza, Greece.
14	eiPg iSg	12	36	09.5 11.5		4.0	0.15 17	Local.
14	eiPn	16	55	04.5			6.98 775	Trace. Greece. USGS: 38.92N, 20.53E, H=16:53:18.2, h=53 km, M <sub>B</sub> =3.9 (CGS).
14	eiPn	18	45	38.0				Trace.
15	iP	02	44	46.6	1.5	4.0	41.37 4595	Compr. Eastern Kazakh SSR. USGS: 49.90N, 78.93E, H=02:36:57.3, h=0 km, M <sub>B</sub> =6.0 (CGS). Underground nuclear explosion.
15	iP	11	51	28.1			80.53 8947	Compr. Kuril Islands. USGS: 48.25N, 154.28E, H=11:39:25.1, h=44 km, M <sub>B</sub> =6.0 (CGS).
16	iP	15	42	38.9			33.95 3772	Compr. Iran, Tabas area. USGS: 33.39N, 57.43E, H=15:35:56.6, h=33 km, M <sub>B</sub> =6.5 (CGS), M <sub>SZ</sub> =7.4 (CGS).
16	eiSg	22	35	59.7			8.75 972	Trace. Aegean Sea. USGS: 40.32N, 25.57E, H=22:31:10.5, h=33 km, M <sub>B</sub> =3.4 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
16	eiPKP	23	57	44.7			164.0 18220	Trace. South of Fiji Islands. USGS: 25.73S, 177.95W, H=23:38:08.9, h=221 km, M <sub>B</sub> =5.7 (CGS).
17	eiPb eSn eSg	20	03 04	37.6 00.6 04.3			1.80 200	Trace. Austria. CSEM: 47.73N, 15.78E, H=20:03:03.4, Felt (IV- V) in the Payerbach area.
17	eiPKP	21	35	41.3			156.42 17380	Trace. Fiji Islands region. USGS: 19.67S, 175.95W, H=21:16:21.3, h=258 km, M <sub>B</sub> =5.2 (CGS).
18	iSg	12	08	37.8				Trace. Local.
18	iPn iPg iSn	12	31	25.7 30.3 53.3	0.6	10.0	2.14 238	Compr. Yugoslavia, Bosnia and Herzegovina, Livno-Duvno area. CSEM:43.87N, 17.02E, H=12:30: 50.2. USGS: 43.89N, 16.96E, H= 12:30:48.1, h=10 km.
18	eiPg eiSg	14	07	36.6 51.6			1.13 126	Trace.
18	eiPn eSb	23	45 46	29.3 23.2			3.67 408	Trace. Yugoslavia, Montenegro, Žabljak mountain.
19	eiPKP	13	04	26.0			146.56 16283	New Hebrides Islands. USGS: 19.31S, 169.03E, H=12:45:00.2, h=119 km, M <sub>B</sub> =5.3 (CGS).
19	eiPg iSg	13	19	42.8 43.9			0.09 10	Trace. Local.
19	iPg iSg	13	20	15.8 17.4	0.5	5.0	0.12 14	Dilat. Local.
19	iPg iSg	13	29	33.1 33.6	0.4	28.4	0.05 5	Compr. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
19	eiPb eiSb	23	55	28.5 56			5.58 620	Germany. CSEM: 48.29N, 08.98E, H=23:53:48.5.
21	eiP	11	13	05.8			18.84 2093	Trace. Turkey. USGS: 38.11N, 38.65E, H=11:08:46.3, h=10 km, M <sub>B</sub> =4.7 (CGS).
21	eiP	15	07	47.9			41.50 4610	Trace. Central Siberia. USGS: 66.54N, 86.25E, H=14:59:57.5, h=0 km, M <sub>B</sub> =5.2 (CGS). Under- ground nuclear explosion.
21	eiPg eSg	15	24	19.5 24.9			0.41 46	Trace. Local.
21	eiP	19	42	05.5			18.83 2092	Trace. Turkey. USGS: 37.94N, 38.56E, H=19:37:46.1, h=10 km, M <sub>B</sub> =4.6 (CGS).
22	eiPn iPg iSn	10	44	40.3 42.8 45			1.67 186	Trace. Yugoslavia, Croatia, Dja- kovo area.
22	eiPg eSg	16	14	24.1 27.8			0.28 31	Trace. Local.
22	eiPg iSg	19	35	37.7 41.9		3.4	0.32 36	Local.
22	eiPn iSn	23	17	09.2 31.9			1.69 188	Trace. Yugoslavia, Croatia, Dja- kovo area.
23	ePKP	16	51	09.9		30.0	138.42 15378	Dilat. New Hebrides Islands. USGS: 13.92S, 167.21E, H=16:32:11.1, h=201 km, M <sub>B</sub> =6.3 (CGS).
23	eiP	22	55	38.0			83.82 9313	Trace. Japan, off East coast of Honshu. USGS: 38.39N, 143.11E, H=22:43:10.6, h=31 km, M <sub>B</sub> =5.4 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
24	ePKP	08	03	09.8			149.07 16562	Compr. Loyalty Islands region. USGS: 21.95S, 169.99E, H=07:43: 26.4, h=43 km, M <sub>B</sub> =5.0 (CGS), M <sub>SZ</sub> =5.4 (CGS).
24	eiPn iPg iSg	08	09 10	03.5 25.0 29.0			4.95 550	Southern Italy. CSEM: 40.75N, 16.08E, H=08:07:45.4, h=10 km. USGS: 40.80N, 16.11E, H=08:07: 44.8, h=28 km, M <sub>B</sub> =4.2 (CGS). Felt at Bari, Potenza and Matera.
24	eiPKP	18	39	53.6			148.95 16548	Loyalty Islands region. USGS: 21.89S, 169.99E, H=18:20:10.7, h=42 km, M <sub>B</sub> =5.0 CGS).
26	eiSb	05	01	00.6			3.56 395	Trace. Yugoslavia, Montenegro, Žabljak mountain. CSEM: 43.11N, 19.07E, H=04:59:11.0. USGS: 43.25N, 19.19E, H=04:59:10.3, h=10 km.
26	eiPn eiSn	09	48 49	39.4 02.1			1.69 188	Trace. Yugoslavia, Croatia, Dja- kovo-Levanjska Varoš area.
26	eiPP	14	43	02.0			104.49 11610	Trace. South of Mariana Islands. USGS: 12.58N, 143.26E, H=14:24: 44.3, h=91 km, M <sub>B</sub> =5.8 (CGS).
26	eiPg eiSg	15	25 26	49.9 13.3			1.75 194	Trace. Yugoslavia, Croatia, Ob- rovac-Gračac area.
26	eiPn iPg iSn iSb	16	48	19.0 26.8 53.1 58.0	1.1	8.0	2.66 295	Hungary. USGS: 47.16N, 18.96E, H=16:47:33.1, h=10 km, Felt (V) at Dunaharaszti.
27	iP	02	11	34.6			31.67 3518	Compr. Novaya Zemlya. USGS: 73.38N, 54.67E, H=02:04:58.2, h=0 km, M <sub>B</sub> =5.6 (CGS). Under- ground nuclear explosion.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
28	iPg iSg	10	12	24.2 25.3			0.09 10	Compr. Local.
28	ePKP	10	50	52.2			145.92 16212	Compr. New Hebrides Islands. USGS: 19.14S, 168.98E, H=10:31: 28.9, h=145 km, M <sub>B</sub> =5.6 (CGS). Felt (III) at Port Vila.
29	eP	16	34	55.1			96.91 10767	Dilat. Mexico, Michoacan. USGS: 18.62N, 102.26W, H=16:21:41.0, h=96 km, M <sub>B</sub> =5.5 (CGS).
30	eiP	01	07	23.2			9.15 1017	Trace. Ionian Sea. USGS: 37.34N, 20.32E, H=01:05:12.4, h=33 km, M <sub>B</sub> =4.8 (CGS).
30	iP	09	15	53.5			72.02 8000	Dilat. South Burma. USGS: 16.60N, 95.86E, H=09:04:31.2, h=10 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =5.7 (CGS). Slight damage in the Pegu area.
OCTOBER 1978.								
2	eiP	20	30	39.8	1.5	6.0	7.48 830	Romania. USGS: 45.73N, 26.48E, H=20:28:52.6, h=164 km, M <sub>B</sub> =5.0 (CGS). Felt (VI) in the Vrancea area and (IV) at Kishinev, USSR.
4	iP	04	06	18.4	1.2	5.0	81.35 9037	Compr. Kuril Islands. USGS: 46.27N, 151.72E, H=03:54:18.4, h=115 km, M <sub>B</sub> =5.7 (CGS). Felt (IV) on Urup and (III) on Simushir.
4	eiPb eSb	17	42 43	45.7 22.7			2.75 305	Yugoslavia, Bosnia and Herzegovina, Neretva valley.
4	eP	20	07	34.2			81.73 9080	Dilat. Aleutian Islands region. USGS: 50.93N, 173.53E, H=19:55: 17.5, h=33 km, M <sub>B</sub> =5.3 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
5	eiPg iSg	11	53	56.8 57.6			0.06 7	Local.
5	eiPg eSg	12	23	16.0 19.1			0.24 26	Trace. Local.
5	eiPb eSn	17	52 53	37.7 12.4			3.11 345	Central Italy. USGS: 43.82N, 13.20E, H=17:51:42.1, h=10 km.
6	eiP	04	20	49.6			49.23 5470	Trace. Lake Tanganyika region. USGS: 01.96S, 28.97E, H=04:12: 02.4, h=33 km, M <sub>B</sub> =4.9 (CGS).
6	eiPg iSg	06	25	23.2 27.6			0.34 37	Trace. Local.
6	eiP	16	21	45.0			91.65 10182	Trace. Philippine Islands, Luzon. USGS: 16.50N, 122.07E, H=16:08: 39.9, h=16 km, M <sub>B</sub> =5.1 (CGS).
7	eiPKP	08	36	10.1			153.08 17007	Fiji Islands region. USGS: 20.19S, 177.68W, H=08:17:22.3, h=501 km, M <sub>B</sub> =5.1 (CGS).
8	eiP	11	31	47.4			24.32 2702	North Atlantic Ocean. USGS: 37.30N, 14.14W, H=11:26:31.8, h=10 km, M <sub>B</sub> =4.8 (CGS).
8	iP	14	27	59.8	10.5	10.0	43.36 4817	Compr. China, Southern Sinkiang Province. USGS: 39.39N, 74.72E, H=14:20:05.6, h=62 km, M <sub>B</sub> =5.8 (CGS). Felt (IV) at Andizhan and Fergana, Uzbekistan, USSR.
9	iPg iSg	07	39	49.3 53.1	0.3	28.0	0.29 32	Dilat. Local. Felt at Samobor and Zagreb.
11	eP ePP	02	01 05	40.4 08.4			87.77 9750	Compr. Japan, South of Honshu. USGS: 33.42N, 140.79E, H=01:49: 01.1, h=57 km, M <sub>B</sub> =5.9 (CGS). Felt at Tokio, Yokohama.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
11	eiP	10	38	26.6			82.25 9140	Kuril Islands. USGS: 44.24N, 149.03E, H=10:26:14.6, h=49 km, M <sub>B</sub> =5.3 (CGS). Felt (III) in Bureves- tnik area.
11	iPg iSg iSb	11	56	07.7 18.6 19.3	3.4		0.81 90	Dilat. Yugoslavia, Slovenia. Felt (III-IV) at Litiija.
11	eiPg iSg	12	09	03.6 06.3			0.21 23	Trace. Local.
12	eiP	17	20	12.2			76.30 8477	Mid-Indian rise. USGS: 15.13S, 66.78E, H=17:08:24.9, h=33 km, M <sub>B</sub> =4.8 (CGS), M <sub>SZ</sub> =5.0 (CGS).
13	iPg iSg	09	15	40.1 41.3	0.5	4.0	0.06 7	Compr. Local.
14	eiPKP	23	14	57.7			128.79 14308	Trace. New Britain region. USGS: 04.48S, 152.90E, H=22:56:01.4, h=47 km, M <sub>B</sub> =5.4 (CGS).
15	eiP	05	54	51.1			127.30 14143	Trace. New Britain region. USGS: 05.58S, 148.06E, H=05:36:13.1, h=154 km, M <sub>B</sub> =5.8 (CGS).
17	eiPKP	00	13	57.7			147.12 16345	Fiji Islands region. USGS: 17.75S, 178.82W, H=23:55:15.9, h=565 km, M <sub>B</sub> =5.4 (CGS).
17	iP	05	04	54.2	1.6	8.8	22.02 2446	Compr. SSR, Western Kazakh. USGS: 47.82N, 48.11E, H=04:59: 56.5, h=0 km, M <sub>B</sub> =5.8 (CGS). Underground nuclear explosion.
17	iPg iSg	09	42	51.6 52.3	0.5	19.0	0.05 6	Compr. Local.
17	eiP	14	06	23.1			31.45 3495	Ural mountains region. USGS: 63.14N, 63.39E, H=13:59:57.8, h=0 km, M <sub>B</sub> =5.5 (CGS). Under- ground nuclear explosion.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
20	eiPg iSg	16	19	27.1 28.2			0.08 9	Trace. Local.
22	eiPn eSn	08	40 41	52.2 28.2			2.97 330	Central Italy. USGS: 43.62N, 13.4E, H=08:40:00.0, h=33 km, M <sub>B</sub> =4.9 (CGS).
23	eiPg eSb	05	01	10.9 33.4			1.85 206	Austria. USGS: 47.70N, 16.17E, H=05:00:34.2, h=10 km.
23	eiP	08	15	04.5			49.93 5548	Afghanistan-USSR border region. USGS: 36.48N, 70.96E, H=08:07: 31.6, h=185 km, M <sub>B</sub> =5.6 (CGS). Felt (IV) in epicentral area. Also felt at Peshawar, Pakistan.
26	eiPg eSg	12	17	30.1 32.7			0.20 22	Trace. Local.
27	eiPn ePb	14	05	24.1 28.4			2.70 300	Yugoslavia, Croatia-Bosnia and Herzegovina border region. CSEM: 43.38N, 17.00E, H=14:04:43.9. USGS: 43.73N, 17.51E, H=14:04: 42.6, h=10 km.
28	eiPg iSg	11	43	08.5 10.5			0.15 17	Trace. Local.
28	eiP	16	42	03.0			78.48 8720	Kuril Islands. USGS: 50.25N, 155.69E, H=116:30:18.3, h=135 km, M <sub>B</sub> =5.5 (CGS).
29	eiPg iSg	04	43	19.7 21.0			0.10 11	Trace. Local.
30	ePP	13	59	32.9	5.0	5.0	95.17 10573	Mindanao, Philippine Islands. USGS: 08.05N, 122.29E, H=13:42:14.6, h=33 km, M <sub>B</sub> =5.7 (CGS).
31	iPg iSg	15	04	07.0 07.8			0.06 7	Compr. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
NOVEMBER 1978.								
1	ei	10	48	01.6				Trace.
1	iP	19	56	12.7			42.20 4688	Dilat. SSR Kirgiz. USGS: 39.35N, 72.62E, H=19:48:28.0, h=40 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.8 (CGS). Felt (VI) in the Osh-Andizhan area, and (V) at Tashkent.
2	eiPg iPn iSg iSn	01	57	01.6 02.3 17.6 19.3			1.17 130	Yugoslavia, Slovenia. CSEM:45.98N, 14.17E, H=01:56:39.0. USGS: 46.01N, 14.25E, H=01:56:39.3, h=10 km. Felt (IV) in the Ljubljana area.
2	eiP	06	31	59.8			41.65 4627	SSR Kirgiz. USGS: 39.33N, 72.69E, H=06:24:13.0, h=27 km, M <sub>B</sub> =5.3 (CGS). Felt (IV) at Andizhan and (III) at Tashkent.
2	eiP	11	23	24.3			42.09 4675	SSR Kirgiz. USGS: 39.41N, 72.61E, H=11:15:40.5, h=46 km, M <sub>B</sub> =5.4 (CGS). Felt (III) in the Andizhan- Tashkent area.
3	eiPg eSg	11	48	00.2 07.4	0.5	3.2	0.55 61	Local.
3	eSg	11	48	19.1				Trace. Local.
3	eSb eSg	20	41	26.9 29.1			1.74 193	Trace. Yugoslavia, Bosnia and Her- zegovina, Čemernica mountain.
4	eiP	05	13	46.7			41.35 4595	Trace. SSR Eastern Kazakh. USGS: 50.05N, 78.98E, H=05:05:57.5, h=0 km, M <sub>B</sub> =5.6 (CGS). Under- ground nuclear explosion.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
4	iP	15	27	49.1	2.0	58.0	26.47 2940	Compr. Southwestern Iran. USGS: 37.67N, 48.90E, H=15:22:19.3, h=34 km, M <sub>B</sub> =6.1 (CGS). Felt in the Rasht-Zanjan area.
4	eiPKP	22	48	42.5			137.39 15265	Solomon Islands. USGS: 11.23S, 162.18E, H=22:29:22.1, h=33 km, M <sub>B</sub> =5.8 (CGS), M <sub>SZ</sub> =6.9 (CGS). Felt on San Cristobal and Guadalcanal.
5	eiPKS	04	19	54.3			133.33 14812	Trace. Solomon Islands. USGS: 11.15S, 162.24E, H=03:57:04.0, h=33 km, M <sub>B</sub> =5.5 (CGS), M <sub>SZ</sub> =5.7 (CGS).
5	eiP	06	49	43.9			60.37 6707	Trace. Central mid-Atlantic ridge. USGS: 08.10N, 38.55W, H=06:39:35.7, h=10 km, M <sub>B</sub> =5.2 (CGS).
5	eiSg	07	29	51.6			1.27 141	Trace. Yugoslavia, Croatia, Krk Island.
5	eSg	07	30	42.2			1.27 141	Trace. Yugoslavia, Croatia, Krk Island.
5	eiPg eSg	13	05	45.1 45.7			0.05 5	Trace. Local.
5	eiPKP	22	21	26.1			136.63 15180	Solomon Islands. USGS: 11.13S, 162.14E, H=22:02:07.1, h=33 km, M <sub>B</sub> =6.3 (CGS), M <sub>SZ</sub> =7.1 (CGS). Felt strongly on San Cristobal.
7	eiP	03	12	34.5			42.46 4717	Trace. Afghanistan-USSR border region. USGS: 37.22N, 71.82E, H=03:04:53.9, h=125 km, M <sub>B</sub> =5.0 (CGS). Felt (III) at Khorog, Kulyab.
7	iP	17	13	38.8			41.26 4583	Dilat. Ethiopia. USGS: 11.54N, 42.59E, H=17:05:55.2, h=33 km, M <sub>B</sub> =5.3 (CGS), M <sub>SZ</sub> =5.4 (CGS). Felt at Djibouti, French territory of Afars and Issas.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
7	ei	17	56	49.3				Solomon Islands. USGS: 11.0 S, 162.22E, H=17:33:59.5, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.1 (CGS). Felt at Kira Kira and Honiara.
8	eiP	01	05	32.9			42.23 4692	SSR, Kirgiz. USGS: 39.33N, 72.57E, H=00:57:47.9, h=41 km, M <sub>B</sub> =5.5 (CGS).
8	iP	05	15	42.7			41.74 4638	Compr. Ethiopia. USGS: 11.56N, 42.57E, H=05:08:01.7, h=62 km, M <sub>B</sub> =4.9 (CGS).
8	eiPg iSg	09	54	42.1 43.2			0.08 9	Local.
8	eP	12	43	08.2			86.14 9570	Atlantic-Indian rise. USGS: 28.48S, 62.36E, H=12:30:29.3, h=10 km, M <sub>B</sub> =5.7 (CGS).
8	eSg	23	55	23.5			1.26 140	Trace. Yugoslavia, Slovenia, Ilirska Bistrica region.
8	eiPb eSg	23	57	11.7 29.3			1.25 139	Trace. Yugoslavia, Slovenia, Ilirska Bistrica region.
9	eiPb ePn iSg iSn	00	30	23.9 25.1 40.2 41.7	0.5	5.0	1.17 130	Yugoslavia, Slovenia, Ilirska Bistrica region. CSEM: 46.13N, 14.53E H=00:30:03.7, I <sub>o</sub> =IV-V <sup>o</sup> MCS.
9	eSn	00	45	32.0			1.25 139	Trace. Yugoslavia, Slovenia, Ilirska Bistrica region.
9	eiPg iSg	09	41	22.4 25.1			0.21 23	Trace. Local.
9	eSg	13	30	25.0			1.24 138	Trace. Yugoslavia, Slovenia, Ilirska Bistrica region.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
9	eiPb iSn	13	45	04.1 21.1	0.5	3.0	1.17 130	Yugoslavia, Slovenia, Ilirska Bistrica region.
10	eiPKP	13	44	22.4			138.39 15375	Trace. Solomon Islands. USGS: 11.21S, 162.07E, H=13:25:00.2, h=33 km, M <sub>B</sub> =5.6 (CGS).
10	eiPg iSg	17	03	02.3 08.1			0.47 52	Yugoslavia, Croatia. Felt (IV <sup>o</sup> MCS) in the Križevci area.
12	eSn	21	43	30.9			1.13 125	Trace. Yugoslavia, Croatia, Gacka River.
13	eP	07	55	12.4			77.58 8620	Compr. Cuba region. USGS: 19.84N, 76.05W, H=07:43:18.0, h=33 km, M <sub>B</sub> =5.1 (CGS). Felt at Santiago de Cuba.
13	eP	08	34	27.9			81.23 9025	Compr. Kuril Islands. USGS: 44.55N, 148.06E, H=08:22:21.2, h=64 km, M <sub>B</sub> =5.3 (CGS). Felt (III) at Kurilsk.
14	eiPKP	00	27	39.4			149.25 16580	Trace. Fiji Islands region. USGS: 14.73S, 178.06W, H=00:07:58.6, h=33 km, M <sub>B</sub> =4.9 (CGS).
14	eiPKP	05	32	06.4			150.27 16695	Tonga Islands. USGS: 15.66S, 173.23W, H=05:12:24.0, h=33 km, M <sub>B</sub> =5.4 (CGS).
15	iP	07	59	14.4			77.22 8580	Compr. Northwest of Kuril Islands. USGS: 47.89N, 146.57E, H=07:47:22.0, h=29 km, M <sub>B</sub> =5.9 (CGS).
15	iPg iSg	12	37	52.3 52.8	0.2		0.04 4	Compr. Local.
16	iPg iSg	12	33	29.6 30.7		5.0	0.08 9	Dilat. Local.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
16	eiP	22	09	12.6			33.69 3745	Trace. Azores Islands. USGS: 39.85N, 29.77W, H=22:02:32.6, h=10 km, M <sub>B</sub> =5.0 (CGS), M <sub>SZ</sub> =5.2 (CGS).
18	eiPKP	15	51	54.7			151.07 16785	Fiji Islands region. USGS: 16.76S, 176.91W, H=15:32:56.4, h=402 km, M <sub>B</sub> =5.3 (CGS).
19	eiP	19	54	40.4			80.85 8982	Near Islands, Aleutian Islands. USGS: 52.70N, 172.48E, H=19:42:35.7, h=47 km, M <sub>B</sub> =5.3 (CGS).
20	eiSg	08	54	21.9				Trace. Yugoslavia, Bosnia and Herzegovina, Livanjsko polje.
20	eiPb	09	57	17.2			4.55 505	Trace. Yugoslavia, Serbia. CSEM: 42.90N, 20.76E, H=09:55:52.0. USGS: 42.85N, 20.30E, H=09:55:56.1.
20	eiPg eiSg	10	46	40.9 54.7			1.02 113	Yugoslavia, Croatia, Rijeka region.
23	iPg iSg	01	52	27.7 32.9	0.4	16.0	0.40 44	Dilat. Yugoslavia, Croatia, near Novi Marof.
23	ei	05	01	48.0			158.53 17613	Trace. South of Fiji Islands. USGS: 26.18S, 177.69W, H=04:41:39.3, h=172 km, M <sub>B</sub> =5.5 (CGS).
23	eiPg iSg	16	10	16.4 22.9			0.50 55	Trace. Local.
23	eiS	19	45	44.9			8.09 900	Trace. Greece. USGS: 38.99N, 21.21E, H=19:42:10.0, h=36 km, M <sub>B</sub> =4.0 (CGS).
25	eiPg eSg	01	43 44	50.2 17.6			2.03 216	Yugoslavia, Livanjsko polje.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
26	eiPg iSg	06	31	02.5 10.0	9.0	0.54 60	Yugoslavia, Croatia, Pokupsko region.	
28	eiPn iSb	17	43 44	30.7 47.2		5.13 570	Albania. USGS: 41.69N, 19.98E, H=17:42:10.3, h=10 km, M <sub>B</sub> =4.6 (CGS).	
29	iP	04	40	51.4		41.28 4585	Compr. Eastern Kazakh SSR. USGS: 49.96N, 78.77E, H=04:33:02.9, h=0 km, M <sub>B</sub> =6.0 (CGS). Underground nuclear explosion.	
29	eP	20	06	05.2	18.0 59.0	94.39 10485	Compr. Mexico, Oaxaca. USGS: 16.01N, 96.59W, H=19:52:47.6, h=18 km, M <sub>B</sub> =6.4 (CGS), M <sub>SZ</sub> =7.7 (CGS).	
30	eiPKP	17	51	46.4		150.40 16710	Tuamotu Archipelago region. USGS: 21.90S, 138.98W, H=17:31:58.4, h=0 km, M <sub>B</sub> =5.9 (CGS).	
D E C E M B E R 1978.								
1	eiPn ePg eSg	03	49	23.7 45.2 51.2		5.22 580	Albania. CSEM: 40.97N, 19.66E, H103:48:00.4, Felt (V) at Lushnja, Babullinje.	
1	eiP	11	55	26.2		79.60 8840	Kuril Islands. USGS: 50.92N, 158.86E, H=11:43:28.3, h=42 km, M <sub>B</sub> =5.5 (CGS).	
2	eiPn eSb	04	06	09.6 36.6		1.91 212	Northern Italy. CSEM: 46.32N, 13.28E, H=04:05:35.6, Felt (IV) at Kobarid and Trenta.	
3	eiPn eSg	02	23 25	58.9 02.4		3.70 410	Trace. Yugoslavia, Montenegro. CSEM: 42.67N, 18.71E, H=02:23:01.0.	

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
3	eiPn iSn iSb	08	12 13	15.1 19.3 36.3		10.0	5.36 595	Albania. CSEM: 40.90N, 19.64E, H=08:10:52.1, h=12 km. Felt (V) at Lushnje.
4	eP	03	16	41.8			17.9 1985	Compr. Turkey. USGS: 38.07N, 37.47E, H=03:12:34.0, h=10 km, M <sub>B</sub> =5.1 (CGS).
5	eiPn iSb	04	46 47	29.5 22.2			3.70 410	Central Italy. CSEM: 43.04N, 12.82E, H=04:45:28.7.
5	eiPn iPg iSb iSg	15	39 40 41	51.2 01.9 37.5 44.7	0.6	61.6	3.15 350	Northern Italy. CSEM: 44.39N, 12.13E, H=15:39:05.5, h=37 km, Felt (II-III) at Ljubljana.
6	eiP	14	14	00.3			79.8 8870	Kuril Islands region. USGS: 44.59N, 146.58E, H=14:02:01.0, h=91 km, M <sub>B</sub> =6.7 (CGS).
8	eiPn eSn	06	18	11.8 37.9			2.0 222	Trace. Northern Italy. CSEM: 46.26N, 13.23E, H=06:17:36.8. Felt (II-III) at Kobarid.
8	iPg iSg	08	56	04.6 05.8	0.4	5.4	0.09 10	Compr. Local.
9	iP	04	29	12.8			81.3 9030	Compr. Kuril Islands. USGS: 45.34N, 150.11E, H=04:17:05.8, h=54 km, M <sub>B</sub> =5.6 (CGS).
9	eP	07	18	03.8			23.89 2654	Dilat. Arab Republic of Egypt. USGS: 23.95N, 26.35E, H=07:12:52.4, h=10 km, M <sub>B</sub> =5.3 (CGS).
12	eiP	11	57	45.8			97.1 10785	Mindanao, Philippine Islands. USGS: 07.33N, 123.49E, H=11:44:16.0, h=33 km, M <sub>B</sub> =6.2 (CGS), M <sub>SZ</sub> =6.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
12	ePn iSb	15	15 16	28.2 00.9	0.2	34.0	2.23 248	Compr. Northern Italy. CSEM: 46.29N, 12.77E, H=15:14:49.8, h=8 km. Felt (III-IV) at Ljubljana.
14	eP	07	11	22.7			29.4 3263	Dilat. Iran. USGS: 32.14N, 49.65E, H=07:05:20.6, h=33 km, M <sub>B</sub> =5.7 (CGS), M <sub>SZ</sub> =6.2(CGS).
14	eiPg iSg	13	37	10.2 12.6			0.18 20	Trace. Local.
15	eP	08	42	45.2			81.96 9105	Compr. Rat Islands, Aleutian Is- lands. USGS: 52.11N, 175.23E, H=08:30:34.7, h=47 km, M <sub>B</sub> =5.6 (CGS).
17	iPn iPg iSn iSb iSg	02	17 18	33.3 41.9 06.4 11.6 15.4	1.2	43.0	2.66 295	Compr. Yugoslavia, Herzegovina. CSEM: 43.38N, 17.29E, H=02:16: 50.1, h=10 km, M <sub>B</sub> =4.4 (CGS). I <sub>o</sub> =VI-VII MCS. Felt (V) at Mostar.
17	iPg iPn iSg iSn	03	48	34.7 35.4 50.1 51.5		26.0	1.15 128	Compr. Yugoslavia, Slovenia. CSEM: 46.12N, 14.26E, H=03:48: 13.4. I <sub>o</sub> =V-VI MCS.
18	iP	08	04	54.5	1.5	20	21.8 2423	Compr. Western Kazakh SSR. CSEM: 47.88N, 48.12E, H=07:59:58.9, h=0 km, M <sub>B</sub> =6.0 (CGS). Nuclear explosion.
18	eP	08	38	22.0			80.2 8910	Dilat. Northern Sumatera. USGS: 04.19N, 95.38E, H=08:26:20.8, h=62 km, M <sub>B</sub> =5.6 (CGS).
18	eiPP	10	33	52.0			99.4 11040	Bouvet Island region. USGS: 55.40S, 01.10E, H=10:16:01.2, h=33 km, M <sub>B</sub> =5.5 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
21	eiPKP	00	54	41.8				Trace. Fiji Islands region. USGS: 21.82S, 179.50W, H=00:35:50.3, h=593 km, M <sub>B</sub> =5.6 (CGS).
21	eiP	04	11	41.3			41.5 4610	Trace. Ethiopia. USGS: 11.51N, 43.09E, H=04:03:55.7, h=33 km, M <sub>SZ</sub> =5.4 (CGS).
21	iPg iPb iSb	11	42	06.6 07.4 15.9		8.0	0.59 66	Compr. Yugoslavia, Slovenia. CSEM: 45.94N, 14.99E, H=11:41: 56.5. USGS: 45.93N, 15.11E, H= 11:41:54.4. I <sub>o</sub> =V MCS. Felt (V) in the Kum region.
21	eiPg iSg	22	46	23.0 24.2			0.09 10	Trace. Local.
22	eiPb	23	01	07.7			2.16 240	Trace. Northern Italy. CSEM: 46.23N, 13.04E, H=23:00:27.3.
23	eiPn eiSn	07	34 35	35.7 16.9			3.47 385	Trace. Italy. CSEM: 44.31N, 12.24E, H=07:33:38.4, h=30 km.
23	eiPg iSg	10	20	45.1 46.1			0.08 9	Trace. Local.
23	iP	11	35	41.2	2.0	58	84.2 9350	Compr. Taiwan. USGS: 23.25N, 122.08E, H=11:23:12.0, h=33 km, M <sub>B</sub> =6.6 (CGS), M <sub>SZ</sub> =7.0 (CGS).
25	eiPn ePb iSg	22	54	36.7 43.2 37.1	1.5	7.0	3.6 395	Northern Italy. USGS: 44.93N, 11.13E, H=22:53:42.4, h=33 km.
27	iP iS	17	47 48	34.3 39.8			5.06 562	Dilat. Southern Italy. USGS: 41.11N, 13.58E, H=17:46:10.4, h=390 km, M <sub>B</sub> =5.6 (CGS).
30	eiPg eSg	10	39 40	54.9 39.8			3.42 380	Northern Italy. CSEM: 44.90N, 11.09E, H=10:38:47.1.
30	eiPb iSh iSg	14	54 55	43.7 08.5 11.7	1.0	4.8	1.93 214	Yugoslavia, Croatia, near Biograd n/m.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
31	eiPn iSb iSg	15	57	51.7 32.2 50.9			6.6 735	Bulgaria. CSEM: 41.98N, 23.28E, H=15:56:15.3, h=14 km, M <sub>B</sub> =4.5 (CGS).
31	eiPn iSb iSg	16	27	47.6 03.7 26.2			6.5 725	Bulgaria. CSEM: 42.01N, 23.31E, H=16:26:07.7, h=10 km, M <sub>B</sub> =4.4 (CGS).

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

Godina: 1978  
Year:

## REGISTRACIJE SEIZMOGRAFA

The record of seismograph  
Station: 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<sub>0</sub> = 1.0 s  
max. magnification of instrument V= 40.000  
damping constant h= 0.6

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
1	iPg iRiP iS	04	24	00.1 06.6 14.4			1.10 122	Compr. Yugoslavia, Bosnia and Herzegovina. CSEM: 43.3N, 17.8E, H=04:23:46.3, M=4.0, I <sub>0</sub> =V-VI MCS.
1	iPg iSg	09	26	00.4 03.6	0.6		0.24 27	Compr. Yugoslavia, Adriatic Sea. CSEM: 43.2N, 15.9E, H=09:25:57.0, M=3.6.
1	eiPg iSg	09	29	50.1 54.2			0.32 36	Yugoslavia, Adriatic Sea.
2	eiP	06	36	06.4				USSR. CSEM: 41.64N, 44.40E, H=06:31:34.9, M=5.4.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
2	eiPn iSg	15	11 12	43.3 29.0			2.79 310	Yugoslavia, Slovenia. CSEM: 45.85N, 15.10E, H=15:10:57.2, M=3.2.
2	iPg iSg	18	05	29.2 37.2			0.61 68	Dilat. Yugoslavia, Adriatic Sea. CSEM: 42.6N, 16.4E, H=18:05: 20.4, M=4.0. Felt (IV-V <sup>o</sup> MCS) at Palagruža.
2	iPb iSn	21	47	02.7 16.7	0.6	17.5	1.31 145	Yugoslavia, Adriatic Sea. M=2.4 (ZAG). Felt (IV <sup>o</sup> MCS) at Sali.
2	eiPn eiS	23	44 45	38.7 31.7				Southern Italy.
9	eiPn eiSn	21	51	00.0 49.2			4.05 450	Northern Italy. CSEM: 46.33N, 13.05E, H=21:49:55.3, M=2.9.
9	ei	22	10	08.6				Trace. Albania. CSEM: 40.99N, 19.98E, H=22:08:37.7, M=2.6.
10	iPn iSn	04	57 58	45.2 08.8	0.4	2.6	1.76 195	Dilat. Yugoslavia, Bosnia and Her- zegovina. CSEM: 44.8N, 17.3E, H=04:57:16.4, M=2.5. Felt (IV <sup>o</sup> MCS) at Hrvacani.
10	eiPg iSg	12	10	50.6 57.0			0.49 54	Yugoslavia, Adriatic Sea.
11	eiPn	05	09	30.2			5.27 586	Greece. CSEM: 40.82N, 22.87E, H=05:08:11.7, M=3.7.
16	eiPg iSg	01	09 10	58.3 11.4			0.97 108	Yugoslavia, Bosnia and Herzegovina, V. Čvrstica mountain.
16	eiPn eiS	10	55	31.3 49.4				Trace.
16	ei	14	33	01.1				Trace. Schwarzwald. CSEM: 48.31N, 08.98E, H=14:31:14.7, M=4.2.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
17	eiPn iSn	02	30 31	36.5 30.0			4.34 482	Romania. CSEM: 45.77N, 21.06E, H=02:29:32.5, M=3.7.
17	eiPb eiSn	02	48	02.8 22.0			1.33 148	Yugoslavia, Bosnia and Herzego- vina, River Vrbas. M=2.5.
24	iP	06	06	16.8				Compr. Kuril Islands. USGS: 44.73N, 149.72E, H=05:54:23.5, h=56 km, M <sub>B</sub> =5.7 (CGS).
27	iPg	10	16	24.5				Local.
27	iPg iSg	15	03	57.7 58.1	0.2	3.0	0.03 3	Local.
28	eiP	03	32	02.5			9.90 1100	Greece. CSEM: 34.89N, 23.78E, H=03:29:39.2, M=4.8.
31	eiPn	06	40	48.0				Obscured by microseismes. Greece. CSEM: 39.29N, 22.97E, H=06:39: 21.0, M=4.1.
31	eiPn	11	50	42.2			4.87 541	Ionian Sea. CSEM: 39.30N, 20.59E, H=11:49:29.5, M=3.3.

## FEBRUARY 1978.

2	eiPn iSn	11	12 13	44.0 51.4	0.8	5.9	4.77 530	Greece. CSEM: 39.9N, 21.5E, H=11:11:43.7, M=4.2.
6	eiPg iSg	11	10	19.8 26.9	0.4	8.3	0.54 60	Probably Yugoslavia, Croatia, Sinj- sko Polje.
7	eiPg iSg	19	55	43.5 52.0			0.65 72	Trace.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
8	eiPn iSn iSg	04	11	08.3 40.2 48.9	0.9	8.5	2.52 280	Southern Italy. USGS: 41.11N, 14.89E, H=04:10:31.8, h=93 km, M <sub>B</sub> =5.0 (CGS).
9	iPb iSg iSn	16	30 31	54.9 10.5 12.6	0.7	22.0	1.15 128	Dilat. Yugoslavia, Bosnia and Her- zegovina. CSEM: 44.4N, 16.5E, H=16:30:39.2, M=4.5, I <sub>o</sub> =VI <sup>o</sup> MCS.
10	iPn iSn iSg	07	20	16.7 47.7 56.2	0.9	12.4	2.41 268	Italy. CSEM: 43.73N, 13.11E, H= 17:19:36.6, M=3.9.
13	eiPn iSg	07	36 37	54.5 58.3			3.78 420	Yugoslavia, Macedonia. CSEM: 41.2N, 20.9E, H=07:35:53.6, M= 3.6.
13	eiPb iSb	14	22 23	50.6 07.6	0.4	7.0	1.25 139	Yugoslavia, Croatia, Novigrad region. M=2.0.
14	eiPb ei(Sb)	14	57	39.0 56.6				Trace. Yugoslavia, Croatia, No- vigrad region.
16	iPg iSg	00	26	44.5 56.5	0.6	32.9	0.91 101	Dilat. Yugoslavia, Bosnia and Her- zegovina. CSEM: 43.9N, 16.8E, H=00:26:33.1, M=3.5. I <sub>o</sub> =VI <sup>o</sup> MCS.
16	eiPg iSg	10	14	05.1 11.5			0.49 54	Trace. Local.
16	eiPn iSg	10	25	30.5 57.0			1.76 195	Yugoslavia, Montenegro, Piva's mountains.
16	eiPg iSg	12	52	46.1 56.2			0.85 94	Trace.
18	iPn iPg iSg	15	14	25.8 29.6 52.3	0.6	28.0	1.77 197	Dilat. Yugoslavia, Croatia. CSEM: 45.21N, 16.40E, H=15:13:51.3, I <sub>max</sub> =VI <sup>o</sup> MCS.
20	ei(Sb)	02	50	33.5			(1.85) (206)	Obscured by microseismes. Yugos- lavia, Bosnia and Herzegovina. CSEM: 45.0N, 16.3E, H=02:49:34.2, M=2.6.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
20	ei	04	49	27.3				Obscured by microseismes. Japan. USGS: 38.79N, 141.95E, H=04:36: 58.1, h=60 km, M <sub>B</sub> =6.1 (CGS).
20	eiPn iSn iSg	12	14 15	36.8 24.5 42.5	0.7	11	3.85 428	Northern Italy. CSEM: 46.46N, 13.48E, H=12:13:36.5, M=4.0, I <sub>o</sub> =VI <sup>o</sup> MCS.
22	eiP	06	20	34.8				Guatemala. USGS: 14.25N, 91.38W, H=06:07:37.0, h=100 km, M <sub>B</sub> =5.7 (CGS).
22	eiP	18	13	10.8				Ryukyu Island. USGS: 29.34N, 130.54E, H=18:00:35.8, h=60 km, M <sub>B</sub> =5.9 (CGS).
22	ei	19	57	12.2				Trace. South of Fiji Islands. USGS: 22.70S, 176.21W, H=19:37:17.0, h=85 km, M <sub>B</sub> =5.6 (CGS).
23	ei	09	50	58.7				Trace. Switzerland. CSEM: 46.54N, 09.79E, H=09:49:24.2, M=3.8.
23	eiPn iSg	09	57	08.3 34.5			1.74 193	Yugoslavia, Bosnia and Herzegovina. M=2.8. Felt (III-IV <sup>o</sup> MCS) at Banja Luka.
23	ei	19	49	01.0				Trace. Italy, Etna. CSEM: 37.41N, 15.20E, H=19:47:37.4, M=4.1.
24	iPg iSg	11	49	24.3 30.0	0.3	3.0	0.43 48	Yugoslavia, Adriatic Sea.
25	eiPn iSn iSb	18	14 15	35.6 13.5 20.4			3.00 333	Yugoslavia, Serbia. CSEM: 43.54N, 20.80E, H=18:13:46.3, M=3.4.
28	eiPn iSn	12	34	21.3 53.7			2.62 291	Yugoslavia-Albania border region, Prokletije mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
M A R C H 1978.								
1	eiPn	07	08	06.1		4.06 451		Obscured by microseismes. Albania. CSEM: 40.76N, 20.11E, H=07:07:04.8, M=3.4.
1	eP	20	53	30.5		9.70 1077		Compr. Greece. CSEM: 36.22N, 27.22E, H=22:51:10.3, M=4.2.
3	eiP	11	05	17.2				Trace. Komandorsky Islands. USGS: 55.10N, 164.76E, H=10:53:19.8, M <sub>B</sub> =5.5 (CGS).
3	eiPg iSg	22	16	20.8 31.3	0.4 3.9	0.81 90		Yugoslavia, Croatia-Bosnia and Herzegovina border region, Vrgorac region.
4	eiPn	04	17	30.8		3.15 350		Albania. CSEM: 42.1N, 20.2E, H=04:16:42.2, M=3.4.
4	ePKP	15	17	07.2				Compr. New Ireland region. USGS: 04.66S, 153.10E, H=14:58:13.0, h=78 km, M <sub>B</sub> =6.2 (CGS).
4	eiPb iSb	22	37	15.5 29.2		0.99 110		Yugoslavia, Adriatic Sea.
5	eiPn eiSn	00	48	18.5 38.3		1.83 203		Yugoslavia, Montenegro, Piva's mountains.
5	eiPg iSg	05	59	26.3 38.9	0.5 5.8	0.95 105		Yugoslavia, Adriatic Sea, 42.3N, 16.1E.
5	eiS	10	09	21.8				Obscured by microseismes. Greece. CSEM: 35.83N, 22.04E, H=10:05:52.4, M=3.9.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
7	iP	03	00	40.4				Compr. Japan, South of Honshu. USGS: 32.01N, 137.61E, H=02:48:47.6, h=439 km, M <sub>B</sub> =6.9 (CGS).
7	iPn iSn	22	36	21.3 38	0.6 14.1	9.0	10.26 1140	Dilat. Greece. CSEM: 34.49N, 25.27E, H=22:33:49.4, M=5.1.
7	eiPn	23	02	34.0				Greece, aftershock.
8	iPg iSg	18	40	33.5 42.4	0.4	3.8	0.69 77	Yugoslavia, Adriatic Sea.
11	iPn iSn	19	22	05.6 23	1.1 06.7	23.0	5.24 582	Italy. CSEM: 38.03N, 16.09E, H=19:20:49.1, M=5.5.
15	eiPg iSn	07	54	24.1 41.9			1.17 130	Yugoslavia, Croatia, Obrovac region.
15	eP	22	17	28.1				Compr. Bonin Islands. USGS: 26.48N, 140.36E, H=22:04:43.9, h=300 km, M <sub>B</sub> =6.1 (CGS).
16	eiP	02	22	08.6				Trace. Fox Islands, Aleutian Islands. USGS: 52.30N, 168.62W, H=02:09:38.4, h=49 km, M <sub>B</sub> =5.5 (CGS).
16	eiPn iSn	05	53	42.5 55	05.0		7.20 800	Greece. CSEM: 36.73N, 21.52E, H=05:51:58.0, M=4.8.
16	eiPn iSn	05	59	58.5 06	0.5 01	3.2	6.95 772	Greece. CSEM: 36.69N, 21.39E, H=05:58:12.3, M=4.6.
16	eiPg iSg	06	08	57.5 09	0.6 10.9	28.1	1.01 112	Yugoslavia, Bosnia and Herzegovina. CSEM: 43.0N, 17.8E, H=06:08:39.9, M=4.1, h=10 km, I <sub>o</sub> =VI <sup>o</sup> MCS.
16	iPg iSn	06	33	43.0 58.2	0.4	11.0	0.88 98	Yugoslavia, Bosnia and Herzegovina. CSEM: 43.1N, 17.7E, H=06:33:27.7, M=3.4.
16	eiPg eiSg	06	39	06.0 18.8			0.98 109	Yugoslavia, Bosnia and Herzegovina, Čapljina region.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
18	eiPn iSn	06	35 36	33.7 18.7			3.69 410	Yugoslavia, Serbia. CSEM: 43.8N, 21.3E, H=06:34:41.1, M=3.4.
19	iPn iSn	09	33	10.2 39.5	0.6	7.0	2.34 260	Italy. CSEM: 42.49N, 13.33E, H= 09:32:33.1, M=3.9.
20	eiP	10	36	45.3				Japan. USGS: 36.05N, 139.68E, H=10:24:13.6, h=66 km, M <sub>B</sub> =5.7 (CGS).
22	eiP	21	46	58.5				Kuril Islands. USGS:44.49N, 149.15E, H=21:34:34.9, M <sub>B</sub> =7.1 (CGS).
23	iP	00	43	26.3				Dilat. Kuril Islands. USGS: 44.57N, 149.07E, H=00:31:02.0, M <sub>B</sub> =6.0 (CGS).
23	eiP	03	26	50.6				Kuril Islands. USGS: 44.33N, 146.27E, H=03:14:13.1, M <sub>B</sub> =5.5 (CGS).
23	eiP	03	27	41.5				Kuril Islands. USGS: 43.82N, 148.79E, H=03:15:19.7.
23	iP	04	03	14.8				Compr. Kuril Islands. USGS: 44.38N, 149.58E, H=03:50:52.5, h=50 km, M <sub>B</sub> =6.0 (CGS).
23	eiP	08	26	53.5				Kuril Islands. USGS: 44.62N, 149.33E, H=08:14:32.1, M <sub>B</sub> =5.6 (CGS).
23	iPg iSg	18	45	48.2 56.9			0.67 74	Dilat. Yugoslavia, Croatia. CSEM: 43.64N, 16.77E, H=18:45:39.3, M=4.0, I <sub>O</sub> =VI MCS.
23	eiP	19	24	43.5				Kuril Islands. USGS: 44.26N, 149.88E, H=19:12:23.4.
24	iPg iSg	09	35	24.9 33.7	0.3	18.5	0.50 56	Yugoslavia, Croatia, Sinjsko Polje. 43.6N, 16.8E, M=3.2.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
24	eiP	20	00	18.9				Kuril Islands. USGS: 44.09N, 148.26E, H=19:47:47.6.
24	eiP	21	13	57.2				USSR. USGS: 43.29N, 72.50E, H=21:05:50.5.
26	eiPg eiSg	06	01	36.7 45.7			0.70 78	Trace. Yugoslavia, Adriatic Sea.
26	eiPn	13	57	46.7			4.98 553	Trace. Yugoslavia, Macedonia. CSEM: 41.23N, 22.73E, H=13:56: 32.3, M=3.5.
26	eiPg iSn	17	52 53	49.4 07.6			1.22 136	Yugoslavia, Croatia, Obrovac region.
28	eiPn eiSn	03	55	25.4 59.8	0.7	5.5	2.72 302	Central Italy. CSEM: 42.76N, 12.65E, H=03:54:42.0, M=3.5.
28	eiPn	18	06	35.9				Central Italy.
28	eP	20	29	17.5				Kuril Islands. USGS: 49.23N, 155.38E, H=20:17:13.8, M <sub>B</sub> =5.6 (CGS), h=100 km.
28	eiPg iSg	22	32	20.5 28.6			0.61 68	Probably Yugoslavia, Adriatic Sea.
29	eiPg iSg	08	30	00.8 07.3	0.4	4.5	0.50 55	Probably Yugoslavia, Adriatic Sea.
29	eiPg iSg	13	37	43.8 51.4			0.59 65	Trace. Probably Yugoslavia, Adria- tic Sea.
29	ePKP	17	15	19.5				Compr. New Hebrides. USGS: 19.82S, 168.68E, H=16:55:48.2, h=100 km, M <sub>B</sub> =5.6 (CGS).
30	eiPg iSg	20	16	00.8 14.7	0.7	3.8	1.07 119	Yugoslavia, Adriatic Sea.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
A P R I L 1978.								
2	iPg iSg	04	19	37.3 40.2	0.4	4.9	0.23 25	Dilat. Local.
2	eiPn iSn	18	24 25	22.7 09.6			3.83 426	Northern Italy. CSEM: 46.28N, 13.30E, H=18:23:22.2, M=3.4.
3	iPn iSb	10	50 51	47.0 43.0	0.6	20.0	3.85 428	Compr. Northern Italy. CSEM: 46.27N, 13.22E, H=10:49:47.2, M=3.9.
3	eiPg iSg	11	58	33.9 46.7			0.97 108	Yugoslavia, Croatia, River Krka, 44.0N, 16.1E.
3	iPn iSb	14	35 36	56.2 51.8	0.6	5.8	3.85 428	Northern Italy. CSEM: 46.27N, 13.20E, H=14:35:00.1, M=3.6.
4	eiPg iSg	00	17	31.8 45.1			1.02 113	Yugoslavia, Croatia, Dinara moun- tain, 44.09N, 16.16E.
4	eiP	00	49	37.9				Trace. Tibet. USGS: 33.03N, 82.29E, H=00:40:29.2, h=27 km, M <sub>B</sub> =5.6 (CGS).
4	iP	21	24	22.8				Compr. North of Panama. USGS: 10.04N, 77.95W, H=21:11:41.8, h=35 km, M <sub>B</sub> =5.8 (CGS).
5	iPg iSg	01	31	29.3 32.3	8.1		0.23 25	Dilat. Local.
5	eiPn iSn	04	52 53	31.5 56.3			7.38 820	Greece. USGS: 37.80N, 23.16E, H=04:50:46.3, h=45 km, M <sub>B</sub> =4.4 (CGS).
6	eiPn iSg	10	26 27	48.0 50.1			3.67 408	Northern Italy. CSEM: 46.23N, 13.19E, H=10:25:48.4, M=3.4.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
7	eiPn iSn	00	51	17.4 48.7			2.43 270	Albania, Prokletije mountain.
7	eiP	07	57	18.3				Kuril Islands. USGS: 44.41N, 149.34E, H=07:44:56.2, h=50 km, M <sub>B</sub> =5.8 (CGS).
8	iSg	22	50	53.3				Trace. Local.
9	eiPn ei(Sn)	13	20 21	57.2 27.9			(2.39) (265)	Central Italy. Obscured by micro- seismes.
10	eiPg eiSg	13	20	42.2 48.4			0.48 53	Trace. Local.
10	eiP	21	06	25.2				Sumbawa Islands. USGS: 11.09S, 116.33E, H=20:52:21.4.
11	eiPn iSg	22	05 06	49.1 30.1	0.7	8.0	2.57 285	Central Italy. CSEM: 42.21N, 13.13E, H=22:05:05.7, M=4.0.
12	iP	03	54	14.8				Compr. Kodiak Island region. USGS: 56.74N, 152.64W, H=03:42: 05.7, M <sub>B</sub> =6.7 (CGS).
13	eiPn iPb iSn	18	06	18.9 23.6 57.6	1.4		3.19 354	Yugoslavia, Serbia, Kopaonik moun- tain. CSEM: 43.32N, 21.05E, H= 18:05:25.6, M=4.9, I <sub>O</sub> =VII-VIII <sup>O</sup> MCS.
15	iPn iSn	23	35 36	03.0 02.0	1.0	27.5	5.04 560	Dilat. Italy. CSEM: 38.23N, 15.08E H=23:33:49.2, M=5.5.
17	iPg iSg	08	36	45.1 52.6		6.0	0.58 64	Yugoslavia, Adriatic Sea.
18	eiPn eiSn	13	12 13	39.4 33.1			4.41 490	Ionian Sea, 39.6N, 19.9E, M=3.5.
20	eP	22	31	38.7				Dilat. Kuril Islands. USGS: 46.78N, 151.90E, H=22:19:28.6, h=96 km, M <sub>B</sub> =5.5 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
21	eiPn i(Sg)	00	20	45.5 21 12.6				
21	eiPg iSg	01	59	17.0 29.5	15.0	0.95 106		Yugoslavia, Croatia, Svilaja mountain, 43.7N, 16.6E, M=3.4.
21	eP	15.	30	26.4				Hindu Kush region. USGS: 36.66N, 71.43E, H=15:22:55.9, h=204 km, M <sub>B</sub> =5.8 (CGS).
22	eiPn iSg	01	50	24.8 51 28.3		3.73 415		Yugoslavia, Macedonia. CSEM: 41.31N, 20.92E, H=01:49:23.4, M=3.3.
22	eiPn iSn	11	24	07.3 33.2		1.99 221		Yugoslavia, Adriatic Sea.
22	eiPg iSg	13	28	21.4 23.0		0.13 14		Local.
23	eiPn eiSn	07	15	12.0 37.0		1.87 208		Yugoslavia, Adriatic Sea, 43.6N, 14.0E, M=2.4.
23	eiPn iSg	10	42	44.0 43 11.0		1.86 207		Yugoslavia, Adriatic Sea.
23	eiPn iSn	11	24	00.2 43.0	1.1 5.8	3.47 385		Northern Italy. CSEM: 46.09N, 13.61E, H=11:23:03.6, M=3.4.
23	eiPn iSn iSg	11	34	36.1 35 19.1 35.5		3.42 380		Northern Italy. CSEM: 46.09N, 13.73E, H=11:33:41.2, M=3.4.
23	eiS	23	37	52.7				Trace. Yugoslavia, Adriatic Sea.
27	iPn iSn	08	34	56.9 36 05.4	0.6 18.5	5.76 640		Greece. CSEM: 39.0N, 22.0E, H=08:33:32.7, M=4.5.
28	eiPn iSg	12	49	30.4 58.2		1.83 203		Yugoslavia, Adriatic Sea.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
29	iPg i(Sg)	21	47	42.1 51.6			(0.75) (83)	Compr.
30	eiPn iSb iSg	02	05	44.2 06 39.6 49.1			3.78 420	Northern Italy. CSEM: 46.24N, 13.20E, H=02:04:42.9, M=3.2.
M A Y 1978.								
3	iPg iSg	05	28	20.0 22.4		4.0	0.18 20	Dilat. Local.
3	eiPn iSg	22	26	07.2 32.7			1.73 192	Yugoslavia, Adriatic Sea.
4	eiPn iSg	20	46	16.1 41.3			1.71 190	Yugoslavia, Adriatic Sea.
4	eiP	21	53	15.5				Kuril Islands. USGS: 43.98N, 149.08E, H=21:40:50.4, M <sub>B</sub> =5.3 (CGS).
5	eiPn iSn iSb	09	33	52.8 34 19.8 21.0	0.6 26.0		2.03 225	Yugoslavia, Serbia. CSEM: 42.96N, 18.36E, H=09:33:21.6, M=3.4.
5	eiPn iSg	17	15	22.0 49.0			1.78 198	Yugoslavia, Montenegro, Golija mountain.
6	eiPg iSg	09	05	24.5 38.3	0.7 13.8		1.05 117	Yugoslavia, Adriatic Sea.
7	eiPn iSn	10	25	45.0 26 11.5			2.00 222	Yugoslavia, Montenegro, River Tara.
8	eiPn eiSn	07	50	48.0 51 14.1			1.98 220	Yugoslavia, Montenegro, River Tara.
8	eiP	14	40	22.7				

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
8	iPn iSn	22 09	08 23.1	57.7 23.1	0.8	10.0	1.95 217	Compr. Yugoslavia, Montenegro, Žabljak region, 43.2N, 19.1E, M=2.8.
8	iPn iSn	22	55	03.5 28.4	0.8	6.0	1.95 217	Compr. Yugoslavia, Montenegro, Žabljak region.
9	eiPn iSn	14 26	25 25.1	59.7 25.1	0.7	3.2	1.95 217	Yugoslavia, Montenegro, Žabljak region.
10	iPn iSn	01 38	37 03.8	37.7 03.8	0.8		1.94 215	Compr. Yugoslavia; Montenegro. CSEM: 43.08N, 18.74E, H=01:37:07.1, M=3.3.
10	eiP	13	14	15.4			5.00 556	Greece, Thessaloniki area. USGS: 40.72N, 23.33E, H=13:12:50.2, h=19 km, M <sub>B</sub> =4.1 (CGS).
10	eiPn iSn	22	43	07.1 24.5	0.5	4.8	1.31 146	Adriatic Sea, 43.8N, 14.8E, M=2.3.
11	iPn iSn iSb	02	08	15.0 39.5 40.9	0.6	7.2	1.85 206	Dilat. Yugoslavia, Montenegro. CSEM: 42.60N, 19.00E, H=02:07:53.3, M=3.1.
11	eiPn iSn	12	47	01.0 25.4			1.85 205	Yugoslavia, Montenegro, aftershock.
12	eiPn iSn	20	16	10.3 35.5	1.0	11.3	1.98 220	Yugoslavia, Montenegro, Žabljak region, 43.2N, 19.1E, M=3.6.
12	eiPn iSn	21	12 13	53.6 19.8			2.02 224	Yugoslavia, Montenegro, Žabljak region.
13	eiPn iSn	04	52	06.0 32.7			2.10 233	Yugoslavia, Montenegro, Žabljak region.
13	iPKP i	07 31	27 04.5	55.5 04.5			140.4 15600	New Hebrides. USGS: 14.65S, 167.41E, H=07:08:45.3, h=150 km, M <sub>B</sub> =5.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
13	iPg iSg	11	20	07.3 13.7			0.49 54	Compr. Probably Yugoslavia, Croatia, Sinjsko Polje.
14	eiPn	22	48	59.6			2.62 292	Italy. ING: 43.21N, 13.77E, H=22:48:18.7, h=5 km, M=3.0 (RMP).
15	eiPn iSg	21	53	19.0 46.4	1.0	3.1	1.78 198	Yugoslavia, Montenegro, Piva's mountains.
16	iPn iSg	05	32	38.0 04.0			1.70 189	Compr. Yugoslavia, Montenegro. CSEM: 43.15N, 18.75E, H=05:32:09.6, M=3.9.
16	eiPn iSb	05	50	51.0 15.2			1.75 194	Yugoslavia, Montenegro, Piva's mountains.
16	iPn iSg	06	21	49.1 23.0			1.69 188	Dilat. Yugoslavia, Montenegro, Piva's mountains.
16	eiPn iSn	08	24	45.6 33.0	0.8	3.1	3.89 432	Yugoslavia. Macedonia. CSEM: 41.12N, 20.98E, H=08:23:44.7, M=4.1.
16	eiP	08	36	19.7				Japan. USGS: 41.00N, 141.26E, H=08:23:58.0, h=23 km, M <sub>B</sub> =5.8 (CGS).
16	iPg iSg	12	58	44.0 51.0			0.53 59	Dilat. Probably Yugoslavia, Croatia, Sinjsko Polje.
16	eiPn eiSn	18	58	40.2 02.9			1.72 191	Yugoslavia, Montenegro, Piva's mountains.
17	eiPn iSg	04	35	43.2 09.2			1.70 189	Yugoslavia, Montenegro. CSEM: 43.12N, 18.76E, H=04:35:14.4, M=4.4.
17	eiPn iSg	06	15	31.9 56.7			1.65 183	Yugoslavia, Montenegro, Piva's mountains.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
17	iPn iSg	06	43	12.1 37.5	0.8		1.71 190	Compr. Yugoslavia, Montenegro, Piva's mountains.
17	eiPn iSn	09	58 59	41.7 05.7			1.78 198	Yugoslavia, Montenegro, Piva's mountains.
17	eiPn iSg	10	30 31	55.8 22.9	0.6	18.0	1.80 200	Yugoslavia, Montenegro, Durmi- tor mountain.
17	eiPn iSn	10	34	06.8 30.5			1.76 196	Yugoslavia, Montenegro, Piva's mountains.
17	eiPn iSg	12	26 27	52.8 18.8			1.75 194	Yugoslavia, Montenegro, Piva's mountains.
17	eiPn iSg	16	32	14.7 41.1			1.76 196	Yugoslavia, Montenegro, Piva's mountains.
17	iPn iSg	21	52	15.4 41.1	0.7	3.2	1.72 191	Dilat. Yugoslavia, Montenegro, Piva's mountains.
18	iPn iSn	00	20 21	18.5 29.8	0.7	4.0	6.12 680	Compr. Greece. CSEM: 38.89N, 21.83E, H=00:18:52.5, M=3.8.
18	eiS	01	00	54.1				Trace. Yugoslavia, Montenegro, River Tara.
18	eiPn iSg	02	38	01.0 57.1	0.9	18.0	3.35 372	Yugoslavia, Serbia. CSEM: 43.30N, 21.05E, H=02:37:08.5, M=4.3. Felt (VII <sup>o</sup> MCS) in Brus area.
18	eiPKP	05	12	59.4				New Hebrides. USGS: 20.10S, 169.43E, H=04:53:17.3, M <sub>B</sub> =5.5 (CGS).
18	eiPg iSg	07	54	03.3 09.7			0.49 54	Yugoslavia, Adriatic Sea.
18	eiP	17	20	35.3				Turkestan. CSEM: 39.85N, 54.82E, H=17:14:36.1, M=4.6.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
20	eiPn iSn	03	57 58	33.9 10.3			2.92 325	Yugoslavia, Slovenia, Ilirska Bis- trica region.
20	eiPn iSb	18	02	04.0 30.0	0.8	3.8	1.89 210	Yugoslavia, Montenegro, River Tara.
20	iPn iSb	21	33 34	58.4 23.8	0.7	4.4	1.81 201	Compr. Yugoslavia, Montenegro, Durmitor mountain.
21	eiPg iSg	05	40	15.7 25.2			0.73 81	Yugoslavia, Adriatic Sea, 42.8N, 15.7E.
21	eiPn iSb	07	58	15.1 40.3			1.82 202	Yugoslavia, Montenegro, Durmitor mountain.
21	eiPn iSg	08	45 46	44.8 09.2			1.67 186	Yugoslavia, Montenegro, Durmitor mountain.
21	eiPn iSb	18	56	27.5 52.9		3.0	1.85 205	Yugoslavia, Montenegro, Piva's mountains, 43.1N, 18.9E.
22	eiPn iSb	22	40 41	38.8 02.4	0.5	8.4	1.71 190	Yugoslavia, Montenegro, Piva's mountains, 43.2N, 18.8E.
23	iP	08	02	43.0				Compr. Japan. USGS: 31.055N, 130.135E, H=07:50:28.2, h=161 km, M <sub>B</sub> =6.3 (CGS).
23	iPn iSn	23	35 36	37.4 46.0	2.0		5.83 648	Dilat. Greece. CSEM: 40.71N, 23.29E, H=23:34:14.0, M=5.6.
24	eiPn	02	13	54.6			5.61 623	Greece. CSEM: 40.67N, 23.41E, H=02:12:30.3, M=4.6.
24	eiPn	05	58	52.0			5.58 620	Greece. CSEM: 40.67N, 23.25E, H=05:57:28.8, M=4.2.
24	iP	06	29	29.3				Compr. Aleutian Islands. USGS: 51.45N, 179.10W, H=06:19:59.3, h=49 km, M <sub>B</sub> =5.9 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
24	eiP	10	25	36.5				
24	eiPn iSn	21	42	56.6 19.7			1.71 190	Yugoslavia, Montenegro, Piva's mountains.
25	iPn iSb	11	13	32.2 57.8	0.6 3.6		1.82 202	Dilat. Yugoslavia, Montenegro, Durmitor mountain.
25	eiPn iSn	20	24 25	50.2 14.9	0.6	10.0	1.85 205	Yugoslavia, Montenegro, Durmitor mountain.
26	iPKP	02	01	02.7				Dilat. Loyalty Islands. USGS: 20.90S, 168.69E, H=01:41:20.0, h=33 km.
26	eiPn iSb	07	29	04.2 29.6			1.85 206	Yugoslavia, Montenegro, Durmitor mountain.
26	eiPn iSn	10	06 07	19.6 04.9			3.67 408	Yugoslavia, Serbia. CSEM: 41.36N, 21.11E, H=10:05:20.2, M=3.2.
26	eiP	13	48	31.5				USSR. CSEM: 41.99N, 46.71E, H=13:43:41.0, M=5.4.
26	eiPn iSn	18	21	36.1 56.4	0.6 7.5		1.86 207	Yugoslavia, Montenegro, Durmitor mountain.
26	iPn iSn	18	48 49	49.7 13.9	0.7 8.8		1.82 202	Compr. Yugoslavia, Montenegro, Piva valley.
26	eiPn iSb	21	24 25	53.8 23.0			1.83 203	Yugoslavia, Montenegro, Piva valley.
27	iPn iSb	13	20 21	41.4 07.5	0.8 5.0		1.93 214	Compr. Yugoslavia, Montenegro, Tara valley.
27	eiPn iSb	18	30	02.2 29.0	0.8 7.8		1.92 213	Compr. Yugoslavia, Montenegro, Tara valley.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
29	eiPn	08	23	41.6			5.39 598	Ionian Sea. CSEM: 37.88N, 20.27E, H=08:22:21.5, M=3.8.
30	eiPg i(Sg)	08	16	29.1 43.2			(1.08) (120)	Obscured by microseismes. Yugoslavia, Croatia, Velebit mountain.
30	eiPn iSb	09	41 42	47.5 14.0			1.90 211	Yugoslavia, Montenegro, 43.2N, 19.3E.
31	eiPg	12	20	40.8				Trace. Yugoslavia, Croatia, Adriatic Sea, 43.1N, 15.3E.
J U N E 1978.								
1	eiP	04	40	25.7				Chagos archipelago. USGS: 07.06S, 68.05E, H=04:29:25.8, M <sub>B</sub> =5.3 (CGS).
1	eiS	10	52	36.0				Trace. Yugoslavia, Croatia, Dinara mountain.
1	eiPg iSg	12	04	01.8 07.9			0.47 52	Probably Yugoslavia, Croatia, Sinjsko Polje.
1	eiPg iSg	17	18	06.6 14.1			0.58 64	Probably Yugoslavia, Croatia, Sinjsko Polje.
2	iPb iSb	09	45	29.4 44.1			1.12 124	Compr.
2	eiPg iSg	12	14	47.7 58.9			0.86 95	Yugoslavia, Croatia, Dinara mountain.
2	eiPg iSg	15	54	35.8 46.6			0.83 92	Yugoslavia, Croatia, Dinara mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
2	eiPn	22	32	49.6			5.56 617	Greece. CSEM: 40.75N, 23.28E, H=22:31:27.1, M=4.6.
4	eiPn iSg	03	28 29	49.5 19.1			1.94 216	Yugoslavia, Montenegro, 43.1N, 19.4E, M=2.8.
4	iPn iSg	04	50	14.4 43.5	0.7 2.7	2.7	1.93 214	Compr. Yugoslavia, Montenegro, Piva's mountains, M=3.5.
4	iP	19	37	13.0				Compr. USSR. CSEM: 40.31N, 63.48E, H=19:30:23.5, M=5.8.
5	eiPn iSg	01	08	29.6 55.0	0.5 6.2	6.2	1.69 188	Yugoslavia, Montenegro, Piva's mountains.
5	eiPn iSg	01	43	08.5 33.2			1.67 186	Yugoslavia, Montenegro, Piva's mountains.
5	eiPn iSg	02	12	15.0 42.0	0.6 4.0	4.0	1.81 201	Yugoslavia, Montenegro, 43.2N, 18.9E.
6	eiP	04	10	36.4				Kamchatka. USGS: 51.56N, 157.76E, H=03:58:30.5, M <sub>B</sub> =5.6 (CGS).
6	eiPn iSn	10	16 17	58.7 23.0			1.76 195	Yugoslavia, Montenegro, Durmi- tor mountain.
6	eiPn iSg	13	12	06.7 36.0			1.94 215	Yugoslavia, Montenegro, Sinjaje- vina mountain, 43.1N, 19.1E.
6	iPg iSg	17	07	14.4 15.9	0.1	36.8	0.12 13	Compr. Yugoslavia, Croatia, Adria- tic Sea, 43.1N, 16.4E.
7	eiPn	00	24	32.2				Yugoslavia, Montenegro, Piva's mountains.
7	eiPn iSg	02	41	08.0 34.1	0.4 27.6	27.6	1.76 196	Yugoslavia, Montenegro, 43.1N, 18.9E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
7	eiPn iSb	15	10	10.4 37.8			1.95 217	Yugoslavia, Montenegro, Piva's mountains.
8	eiPn iSb	04	14	26.2 53.4			1.91 212	Yugoslavia, Montenegro, Piva's mountains.
8	eiPb iSb	13	32 33	39.3 06.6		3.0	1.29 143	Yugoslavia, Bosnia and Herzegovina, Zenica region.
9	eiPg iSg	12	14	35.0 41.5			0.50 55	Probably Yugoslavia, Croatia, Sinjsko Polje.
10	eiPn iSb	04	01	01.0 27.8	0.7 3.1	3.1	1.91 212	Yugoslavia, Montenegro, Piva's mountains.
10	eiPn iSb	05	23	28.4 57.0			2.01 223	Yugoslavia, Montenegro, Tara valley.
10	iPn iSg	06	11 12	41.3 10.0	0.5	19.4	1.89 210	Compr. Yugoslavia, Montenegro, 43.1N, 19.2E, M=3.6.
11	eiPg iSg	02	53	40.4 49.4	0.3 5.4	5.4	0.68 76	Yugoslavia, Adriatic Sea, 42.8N, 16.9E, M=2.7.
11	iP	03	04	53.2				Compr. USSR. USGS: 49.91N, 78.89E, H=02:56:57.5, h=0 km, M <sub>B</sub> =5.7 (CGS). Underground nuclear explosion.
11	eiPn iSb	04	50 51	50.4 18.7			2.01 223	Yugoslavia, Montenegro, 43.1N, 19.3E.
11	iPn iSn	05	22	19.0 44.9			1.99 221	Dilat. Yugoslavia, Montenegro, Zeta valley.
11	eiPn iSg	07	21	17.2 45.2	0.5 4.2	4.2	1.89 210	Yugoslavia, Montenegro, Durmi- tor mountain.
11	eiPn iSg	08	30	31.5 56.6			1.71 190	Yugoslavia, Montenegro, Durmi- tor mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
11	eiPn iSg	22	18 19	41.4 07.0			1.77 197	Yugoslavia, Montenegro, Durmitor mountain.
11	eiPn iSg	23	45 46	57.7 22.4	0.6	9.0	1.67 186	Yugoslavia, Montenegro, Tara valley.
12	eiPn iSn	00	01	13.7 36.4	0.7	5.2	1.71 190	Yugoslavia, Montenegro, Tara valley.
12	eiPn iSb	01	07	15.1 39.4			1.67 186	Yugoslavia, Montenegro, 43.2N, 19.3E.
12	eiP	08	26	58.0				Japan, Honshu. USGS: 38.40N, 141.96E, H=08:14:26.8, h=42 km, M <sub>B</sub> =7.5 (CGS).
12	eiPn	17	46	13.0			5.57 619	Greece. CSEM: 40.73N, 23.38E, H=17:44:49.2, M=4.0.
12	ei(Pn)	21	27	29.9				Obscured by microseismes. Italy. CSEM: 39.87N, 16.24E, H=21:26:41.7, M=4.3.
12	eiPn iSg	22	25 26	06.0 10.5			3.74 416	Northern Italy. CSEM: 46.28N, 13.10E, H=22:24:05.8, M=3.3.
12	eiPn	23	38	10.6			5.89 654	Greece, Solun. CSEM: 40.79N, 23.34E, H=23:36:43.4, M=3.8.
14	iP	11	46	52.8				Compr. Japan, Honshu. USGS: 38.36N, 142.39E, H=11:34:19.1, M <sub>B</sub> =5.5 (CGS).
14	iPn iSn iSb	22	31	25.3 50.9 53.3	0.7	8.0	2.0 222	Compr. Yugoslavia, Montenegro, 43.1N, 19.0E.
14	eiPn iSn	23	46 47	48.6 14.1			1.94 215	Yugoslavia, Montenegro, Piva's mountains.
15	eiPn iSn	00	55	08.5 33.9			1.94 215	Yugoslavia, Montenegro, Piva mountains.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
15	eiP	03	30	28.1				USSR. USGS: 43.44N, 135.33E, H=03:19:07.3, h=350 km, M <sub>B</sub> =5.2 (CGS).
15	eiPn iSb	07	17 18	36.0 01.0			1.93 214	Yugoslavia, Montenegro, Piva's mountains.
15	eiPn iSb	07	26	25.0 52.4	0.4	3.0	1.94 215	Yugoslavia, Montenegro, 43.1N, 19.0E.
15	iP	09	41	19.8				Compr. Kuril Islands. USGS: 44.10N, 149.03E, H=09:28:53.4, M <sub>B</sub> =5.2 (CGS).
15	iPn iSg	11	40 41	38.1 06.8			1.89 210	Dilat. Yugoslavia, Montenegro, Piva's mountains.
16	eiS	11	33	59.2				Trace. Yugoslavia, Croatia, Mala Kapela region.
16	eiPn iSg	13	38 39	58.8 27.0			1.85 206	Yugoslavia, Bosnia and Herzegovina, River Una.
17	iPKP	15	31	23.3				Compr. Tonga Islands. USGS: 17.38S, 172.13W, H=15:11:31.9, M <sub>B</sub> =6.8 (CGS).
17	eiPg iSg	15	35	15.2 24.3	0.6	5.3	0.69 77	Yugoslavia, Croatia, Lastovo Island.
19	eiPn	03	14	21.5			5.61 623	Greece. CSEM: 40.73N, 23.39E, H=03:12:56.6, M=3.9.
19	eiPn iSb	05	28	17.8 42.8			1.83 203	Yugoslavia, Montenegro, Durmitor mountain.
19	iPn iS	10	32 33	31.8 44.2	1.2	26.5	5.76 640	Dilat. Greece. CSEM: 40.76N, H=10:31:07.9, M=4.9.
19	eiPn	10	49	36.9			5.61 623	Greece. CSEM: 40.67N, 23.26E, H=10:48:12.6, M=4.2.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
19	eiPn	11	43	09.1			5.59 621	Greece. CSEM: 40.80N, 23.26E, H=11:41:46.1, M=3.8.
20	eiPn iSb	03	47	03.3 31.5	3.2		2.01 223	Yugoslavia, Montenegro, River Tara.
20	eiPn	07	05	38.8			5.57 619	Ionian Sea. CSEM: 38.39N, 20.17E, H=07:04:16.0, M=3.9.
20	iPn iSb	16	30	06.3 34.1			1.95 217	Dilat. Yugoslavia, Montenegro, Durmitor mountain.
20	iPn	20	04	48.5			5.62 624	Dilat. Greece. CSEM: 40.75N, 23.26E, H=20:03:25.1, M=6.0.
20	iPn	20	39	03.0			5.45 605	Compr. Greece. CSEM: 40.73N, 23.13E, H=20:37:42.0, M=4.0.
20	eiPn	20	46	49.5			5.64 627	Greece. CSEM: 40.75N, 23.26E, H=20:45:24.7, M=3.7.
20	eiPn	20	54	05.5			5.61 623	Greece. CSEM: 40.74N, 23.11E, H=20:52:42.1, M=4.2.
20	iPn	21	52	30.7			5.64 626	Dilat. Greece. CSEM: 40.68N, 23.28E, H=21:51:06.0, M=4.3.
20	eiPn	23	00	06.7			5.55 617	Greece. CSEM: 40.74N, 23.29E, H=22:58:42.3, M=3.2.
21	eiPn	03	21	51.0			5.59 621	Greece. CSEM: 40.68N, 23.26E, H=03:20:28.0, M=3.9.
21	eiPn iSb	03	53 54	41.6 09.7			1.96 218	Yugoslavia, Montenegro, Durmi- tor mountain.
21	eiPn	05	54	55.0				Yugoslavia, Montenegro, Piva's mountains.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
21	eiPn	06	01	32.7			5.64 627	Greece. CSEM: 40.73N, 23.39E, H=06:00:08.1, M=4.2.
21	eiP	11	06	53.0				Japan. USGS: 38.81N, 141.59E, H=10:54:19.7, M <sub>B</sub> =5.1 (CGS).
21	iP	11	22	06.1				Dilat. Kuril Islands. USGS: 48.44N, 148.57E, H=11:10:44.8, M <sub>B</sub> =5.8 (CGS).
21	eiPn	12	31	09.5			5.65 628	Greece. CSEM: 40.77N, 23.17E, H=12:29:46.5, M=4.3.
21	eiPn	18	53	30.6			5.71 634	Greece. CSEM: 40.66N, 23.26E, H=18:52:06.0, M=4.0.
22	eiPn iSn	02	34	42.3 36 05.5	1.2	9.1	4.81 534	Hungary. CSEM: 46.83N, 21.19E, H=02:33:25.8, M=4.5.
22	iPn iSn	12	58	42.5 59 07.2		3.6	1.87 208	Compr. Yugoslavia, Montenegro, Durmitor mountain.
23	eiPn	01	58	25.8			5.66 629	Greece. CSEM: 40.83N, 23.18E, H=01:57:03.2, M=4.0.
23	eiPn iSb	05	57	01.6 30.0			2.03 226	Yugoslavia, Montenegro, Sinjaje- vina mountain.
23	eiPn iSb	10	48	40.7 49 07.5			1.95 217	Yugoslavia, Montenegro, River Piva.
23	eiPg iSg	16	49	10.1 20.0	0.4	4.5	0.77 85	Yugoslavia, Croatia, Imotski area.
24	iPn iPg iSn	00	15	21.7 34.5 16 01.5			3.28 364	Compr. Albania. CSEM: 41.65N, 20.32E, H=00:14:30.2, M=4.3.
24	eiPn iSn	00	30	37.4 31 07.4	0.8	4.1	3.24 360	Albania, Korab mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
25	eiPn	04	59	15.4				Albania, Korab mountain.
26	eiPn	00	24	53.8				Yugoslavia, Serbia, Kopaonik mountain.
26	eiPg iSg	16	12	32.6 35.0			0.18 20	Local.
27	eiPn	12	19	49.2			5.74 638	Bulgaria. CSEM: 42.08N, 24.10E, H=12:18:24.1, M=3.9.
28	eiPg iSg	11	05	27.4 34.1			0.51 57	Yugoslavia, Croatia, Sinjsko Polje.
28	eiPg iSg	11	59	01.4 08.0	0.4 3.7		0.59 66	Yugoslavia, Croatia, Dinara mountain.
28	ei(Pn)	19	39	00.7				Obscured by microseismes. Yugoslavia, Adriatic Sea, 40.5N, 19.4E.
29	eiPg iSg	12	16	19.2 26.4			0.48 53	Yugoslavia, Croatia, Sinjsko Polje.
29	eiPg iSg	12	31	48.1 54.1			0.46 51	Yugoslavia, Croatia, Sinjsko Polje.
30	ei	07	35	36.3				Trace. Hungaria. CSEM: 46.80N, 21.13E, H=07:34:16.7, M=3.5.

## JULY 1978.

2	eiPKP	04	21	22.0				Tonga Islands. USGS: 15.33S, 175.49W, H=04:01:33.3, h=25 km, M <sub>B</sub> =5.9 (CGS).
3	eiS	01	13	13.9				Trace. Yugoslavia, Montenegro, River Tara.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
3	eiPg iSg	03	02	36.2 38.7			0.19 21	Yugoslavia, Adriatic Sea, 43.3N, 16.5E.
3	iPg iSg	07	24	43.7 47.9			0.34 38	Dilat. Yugoslavia, Croatia, Biokovo mountain.
3	eiPn	20	11	15.9			5.78 642	Greece. USGS: 40.75N, 23.35E, H=20:09:50.3, h=10 km, M <sub>B</sub> =4.0 (CGS).
4	iP	02	53	11.0				Compr. Japan. USGS: 32.66N, 131.12E, H=02:40:54.0, h=118 km, M <sub>B</sub> =5.7 (CGS).
4	eiPn	06	43	25.9				Yugoslavia, Montenegro, Durmitor mountain.
4	eiPg iSg	19	58	48.8 59 01.4			0.96 107	Yugoslavia, Bosnia and Herzegovina, Blagaj region.
4	iPn iSn	22	24	38.4 25 40.4	0.9 17.5		5.27 586	Dilat. Greece. USGS: 40.75N, 23.06E, H=22:23:28.0, h=19 km, M <sub>B</sub> =5.1 (CGS).
5	ei(Pn)	11	14	18.4				Obscured by microseismes. Yugoslavia, Montenegro, River Lim.
5	ei(Pn)	12	55	34.6				Obscured by microseismes. Yugoslavia, Serbia, Javor mountain.
6	eiPg iSg	09	48	25.0 31.5			0.50 55	Yugoslavia, Croatia, Sinj region.
7	eiPn iSn	02	10	27.8 54.1			2.03 225	Yugoslavia, Montenegro, River Tara.
7	eiPn iSb	02	14	22.4 47.0			1.89 210	Yugoslavia, Montenegro, River Tara.
7	eiPn iSn	06	18	20.0 45.1	0.8 5.2		1.92 213	Yugoslavia, Montenegro, River Tara.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
8	eiPg iSg	18	47	52.2 54.5	4.9	0.18 20	Yugoslavia, Croatia, Šolta Island.	
8	eiPg iSg	20	01	28.2 31.8		0.28 31	Local.	
8	ei	20	48	32.0			Trace. Yugoslavia, Montenegro, Durmitor mountain.	
10	eiPg iSg	14	59	19.4 29.4		0.77 85	Yugoslavia, Bosnia and Herzegovina, Livno region.	
10	eiPn iSb	20	36	29.6 50.4	5.1	1.50 167	Yugoslavia, Bosnia and Herzegovina, Travnik area.	
11	eiPg iSg	12	23	20.7 27.1		0.49 54	Yugoslavia, Croatia, River Cetina.	
11	eP	12	29	19.0			Western Brazil. USGS: 07.89S, 71.42W, H=12:17:07.8, h=645 km, M <sub>B</sub> =5.8 (CGS).	
12	eiPg iSg	04	49 50	51.7 06.1	0.3 11,1	1.06 118	Yugoslavia, Bosnia and Herzegovina, River Trebišnjica.	
12	iPg iSn	05	05	25.7 42.4		1.05 117	Compr. Yugoslavia, Bosnia and Herzegovina, River Trebišnjica.	
12	eiPg iSg	08	15	05.1 10.7		0.43 48	Yugoslavia, Croatia, Mosor mountain.	
12	eiPn iSb	08	20	27.7 56.0		2.00 222	Yugoslavia, Montenegro, River Tara.	
12	iPg iSg	14	28	44.0 50.0		0.48 53	Compr. Yugoslavia, Croatia, River Cetina.	
13	eiPg iSg	04	38	02.3 07.8		0.42 47	Yugoslavia, Croatia, Sušac Island.	
13	iP	13	37	52.0			Compr. Fox Islands, Aleutian Islands. USGS: 52.24N, 168.82W, H=13:25:19.7, M <sub>B</sub> =5.8 (CGS).	

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
13	eiPn	17	28	21.3			6.50 722	Greece. USGS: 40.79N, 23.23E, H=17:26:57.2, h=10 km, M <sub>B</sub> =3.9 (CGS).
15	eiP	01	43	28.0				Trace. Greece. USGS: 40.74N, 23.29E, H=01:42:02.9, h=10 km, M <sub>B</sub> =3.7 (CGS).
16	iPg iSn	14	59	16.6 33.0			1.01 112	Compr. Yugoslavia, Adriatic Sea. 42.2N, 16.3E.
17	eiPg iSg	09	31	23.3 36.0	3.0	0.96 107	Yugoslavia, Adriatic Sea, 42.3N, 15.9E.	
17	eiPKP	13	45	26.4				Samoa Islands region. USGS: 14.89S, 175.82W, H=13:26:14.9, h=292 km, M <sub>B</sub> =6.0 (CGS).
19	eiPg iSg	12	01	03.5 08.9			0.43 48	Yugoslavia, Croatia, River Cetina.
20	eiPn iSg	04	34	17.3 44.8	0.6 8.5	1.82 202	Yugoslavia, Montenegro. CSEM: 42.84N, 18.21E, H=04:33:45.8, M=2.8.	
20	eiPg iSg	11	42 43	56.8 03.2			0.49 54	Yugoslavia, Croatia, Drvenik Mali Island.
20	eiPg iSg	12	41 42	54.8 00.5			0.43 48	Yugoslavia, Croatia, Drvenik Mali Island.
23	eiPn	06	17	09.3				Trace. Yugoslavia, Croatia, River Jadova.
23	iP	14	55	14.5				Dilat. Taiwan. USGS: 22.25N, 127.31E, H=14:42:38.5, M <sub>B</sub> =6.9 (CGS).
24	eiPKP	20	05	12.8				New Hebrides Islands region. USGS: 20.67S, 172.50E, H=19:45:35.3, h=37 km, M <sub>B</sub> =5.7 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
26	iPn iSn	09	37 38	38.6 01.6	3.9	1.69 188	Compr. Yugoslavia, Bosnia and Herzegovina, Golija mountain.	
26	eiPg iSg	12	06	37.3 43.5		0.48 53	Yugoslavia, Croatia, Biokovo mountain.	
26	eiPg iSg	12	21	06.3 1311		0.54 60	Yugoslavia, Croatia, Biokovo mountain.	
26	eiPg iSg	12	27	07.6 15.0		0.50 55	Yugoslavia, Croatia, Biokovo mountain.	
26	eiPb iSb	13	29	29.3 44.4	5.4	1.13 125	Yugoslavia, Bosnia and Herzegovina, Velež mountain.	
28	iPKP	11	05	31.1			Compr. New Hebrides Islands. USGS: 18.82S, 169.00E, H=10:46:13.7, h=205 km, M <sub>B</sub> =5.3 (CGS).	
30	iPn iSn iSb	00	00 01	55.0 18.8 19.7	0.2	18.1 1.77 197	Dilat. Yugoslavia, Montenegro. CSEM: 42.53N, 18.65E, H=00:00:25.0, h=10 km,	
30	iPn iSn iSb	05	20	12.3 47.5 53.6	0.7	28.1 2.84 316	Compr. Central Italy. USGS: 42.65N, 12.46E, H=05:19:24.3, M=4.7.	
31	eiPn iSb	01	52	23.4 49.3		1.85 205	Yugoslavia, Montenegro, River Piva.	
31	eiPg iSg	17	18	47.0 51.5		0.34 38	Yugoslavia, Croatia, Čiovo Island.	

## AUGUST 1978.

1	eiPKP	20	49	34.2			Tonga Islands. USGS: 15.29S, 173.33W, H=20:29:42.9, M <sub>B</sub> =5.3 (CGS).
---	-------	----	----	------	--	--	--

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
3	eiPg iSn	03	28	22.5 39.1			1.03 114	Yugoslavia, Bosnia and Herzegovina, Livanjsko Polje.
3	eiP	06	16	43.5				USSR. USGS: 52.03N, 97.03E, H=06:07:35.1, M <sub>B</sub> =5.3 (CGS).
3	eiP	18	28	39.1				Trace. Near coast of Northern Chile. USGS: 26.51S, 70.54W, H=18:11:17.1, h=58 km, M <sub>B</sub> =6.3 (CGS).
5	eiPn iSn iSb	04	52	32.0 05.9 09.9			2.64 293	Yugoslavia, Serbia, Sjenica region.
5	eiPn iSg	06	46	11.2 51.3			2.52 280	Yugoslavia, Serbia. CSEM: 43.30N, 19.84E, H=06:45:24.7.
5	eiPn	18	13	34.0	0.9	8.2	3.02 336	Central Italy. USGS: 42.58N, 12.57E, H=18:12:47.2.
5	iP	19	05	03.9				Compr. Southern Sumatera. USGS: 04.02S, 102.41E, H=18:52:09.1, h=48 km, M <sub>B</sub> =5.9 (CGS).
9	eiPg iSg	08	23	20.3 30.4		3.6	0.75 83	Yugoslavia, Croatia, 42.9N, 17.3E.
10	iP	08	06	53.0				Compr. USSR. USGS: 73.34N, 54.79E, H=07:59:57.7, h=0 km, M <sub>B</sub> =5.9 (CGS). Underground nuclear explosion.
10	eiPb iSn	11	15 16	49.2 06.1		3.8	1.09 121	Yugoslavia, Bosnia and Herzegovina, Blagaj region.
11	eiPg iSg	13	37	13.8 20.5			0.51 57	Yugoslavia, Croatia, Biokovo mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
12	iPb iSb iSn	03	13	14.2 29.2 32.4	0.2	14.0	1.10 122	Dilat. Yugoslavia, Bosnia and Herzegovina, Ljubuški area.
12	eiPg iSg	13	16	23.4 33.4			0.77 85	Yugoslavia, Croatia, Imotsko Polje.
12	eiPn iSg	16	18 19	38.0 06.3			1.85 205	Yugoslavia, Montenegro, Sinjajevina mountain.
13	eiPn iSn	02	32	08.5 34.2			1.87 208	Yugoslavia, Montenegro, River Piva.
13	eiPn iSn	16	28 29	50.4 11.7	4.6		1.51 168	Yugoslavia, Montenegro-Bosnia and Herzegovina border region, Golija mountain.
13	eiPn iSb	16	54 55	52.7 31.7			4.37 485	Thyrranian Sea, CSEM:38.65N, 15.79E, H=16:53:48.3, M=4.8.
13	eiPKP	21	12	35.2				Fiji Islands region. USGS: 17.81S, 178.35W, H=20:53:53.8, h=599 km, M <sub>B</sub> =5.5 (CGS).
14	eiPg iSg	13	16	15.2 26.6			0.87 97	Yugoslavia, Adriatic Sea, 43.1N, 15.3E.
14	iP	18	58	28.7				Compr. Kuril Islands. USGS: 49.87N, 165.28E, H=18:46:24.1, h=86 km, M <sub>B</sub> =5.8 (CGS).
15	eiPn iSb	06	54 55	56.5 23.8			1.94 216	Yugoslavia, Adriatic Sea, 44.1N, 18.9E.
15	eiP	09	08	00.1				Western Caucasus. USGS: 41.30N, 44.02E, H=09:04:23.5, h=15 km, M <sub>B</sub> =4.8 (CGS).
15	iS	10	40	09.5				Trace. Yugoslavia, Montenegro, River Piva.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
15	eiP	12	06	16.5				South Atlantic ridge. USGS: 29.12S, 13.08W, H=11:57:27.5, M <sub>B</sub> =5.2 (CGS).
15	eiPKP	12	57	11.0				Kermadec Islands. USGS: 30.53S, 178.18W, H=12:37:12.8, M <sub>B</sub> =6.1 (CGS).
16	eiPn iSg	20	05	14.3 38.4			1.66 184	Yugoslavia, Montenegro, Durmitor mountain.
18	eiPg iSg	05	58	41.6 50.3	0.4	8.5	0.67 74	Yugoslavia, Croatia, Biokovo mountain.
18	eiPn iPg iSn	20	54	12.3 25.2 52.6			3.24 360	Albania. USGS: 41.86N, 20.30E, H=20:53:19.8, h=5 km, M <sub>B</sub> =5.1 (CGS).
19	iPb iSb	04	21	37.5 52.7			1.10 122	Compr. Yugoslavia, Bosnia and Herzegovina, Blagaj-Nevesinje region.
19	iPn iSg	04	47	18.4 43.3			1.69 188	Compr. Yugoslavia, Bosnia and Herzegovina, River Sutjeska.
21	eiPg iSg	12	24	20.0 26.1	0.4	3.0	0.47 52	Yugoslavia, Croatia, River Cetina.
21	eiPn iSn	21	18	18.0 41.5			1.76 195	Yugoslavia, Montenegro, River Piva.
22	eiPn iSg	04	43 44	51.1 17.2			1.76 195	Yugoslavia, Montenegro, River Piva.
22	eiP	22	52	48.5			20.00 2222	Western Caucasus. USGS: 41.95N, 43.92E, H=22:48:11.2, h=10 km, M <sub>B</sub> =4.8 (CGS).
22	eiPb iSb	23	08	37.7 56.2			1.37 152	Yugoslavia, Croatia, Plješivica mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
23	eiP	00	51	35.0				Costa Rica. USGS: 10.20N, 85.22W, H=00:38:32.2, h=56 km, M <sub>B</sub> =5.7 (CGS).
23	eiPg iSg	12	08	21.3 27.5		0.48 53		Yugoslavia, Croatia, Biokovo mountain.
23	eiPg iSg	12	16	09.0 15.5		0.50 55		Yugoslavia, Croatia, Biokovo mountain.
23	eiPn iSb	16	43	49.6 15.8	3.2	1.90 211		Yugoslavia, Montenegro, Durmi- tor mountain.
23	iPn iSg	20	44	36.5 01.5	2.7	1.67 186		Compr. Yugoslavia, Montenegro, River Piva.
23	iP	21	11	30.3				Compr. Rat Islands, Aleutian Is- lands. USGS: 51.74N, 176.43E, H=20:59:05.7, h=54 km, M <sub>B</sub> =5.4 (CGS).
23	eiPn	21	48	24.5		5.96 663		Greece. CSEM: 38.40N, 22.28E, H=21:46:56.3, M=3.8.
23	eiPn	23	47	32.2		6.89 766		Greece. CSEM: 37.25N, 21.67E, H=23:45:50.9, M=3.9.
24	eiP	01	25	18.8				Trace. Greece. USGS: 40.62N, 23.26E, H=01:23:47.5, h=10 km, M <sub>B</sub> =4.2 (CGS).
25	eiPn iSn	02	35	26.8 50.4		1.76 195		Yugoslavia, Montenegro, Golija mountain.
25	eiPg iSg	11	37	18.9 32.3		0.99 110		Yugoslavia, Adriatic Sea, 42.2N, 17.0E.
25	eiP iSn	12	04	49.7 45.1		10.71 1190		Greece. CSEM: 34.11N, 25.18E, H=12:02:11.3, M=4.0.
26	eiPn iSg	13	44	49.6 31.5		2.61 290		Yugoslavia, Adriatic Sea, 41.3N, 18.8E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
26	eiPn	18	45	02.1			5.33 592	Italy. CSEM: 37.92N, 14.22E, H=18:43:42.8, M=4.4.
27	iPg iSg	21	33	32.5 38.1	0.2	8.0	0.43 48	Dilat. Yugoslavia, Adriatic Sea, 43.2N, 15.9E.
28	eiP	00	12	53.0				Western Iran. USGS: 32.65N, 49.80E, H=00:07:04.1, h=49 km, M <sub>B</sub> =5.2 (CGS).
28	eiPg iSn	01	44	34.7 49.2			0.79 88	Yugoslavia, Croatia, Dinara moun- tain.
28	eiPn iSb	22	57	49.1 13.5			1.74 193	Yugoslavia, Montenegro, Njegos mountain.
29	iP	02	45	02.9				Compr. USSR, Eastern Kazakh. USGS: 50.01N, 79.00E, H=02:37: 06.5, h=0 km, M <sub>B</sub> =5.9 (CGS). Undergroun nuclear explosion.
30	eiPg iSn	10	17	35.3 50.3			0.81 90	Yugoslavia, Bosnia and Herzegovina, Livanjsko Polje.
30	eiPg iSg	12	48	20.7 28.2			0.58 64	Yugoslavia, Croatia, Svilaja moun- tain.
31	iPb iSb	10	06	52.7 07	0.3	5.1	1.08 120	Yugoslavia, Adriatic Sea, 43.7N, 15.1E.
31	eiPg iSg	15	40	23.0 30.1			0.54 60	Yugoslavia, Croatia, Kozjak moun- tain.
31	eiPn iSn	16	04	19.4 38.9	0.6	14.2	1.31 146	Yugoslavia, Adriatic Sea, 42.7N, 17.9E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
SEPTEMBER 1978.								
1	eiPg iSg	09	48	10.4 19.4			0.69 77	Probably Yugoslavia, Adriatic Sea.
1	eiPn	22	47	39.9			5.75 639	Greece. USGS: 39.12N, 21.46E, H=22:46:16.6, h=37 km, M <sub>B</sub> =4.8 (CGS).
3	eiP	00	24	57.1				Causasus. CSEM: 44.52N, 38.00E, H=00:21:15.5, M=5.4.
3	iPn	05	10	17.7			7.34 815	Dilat. Germany. USGS: 48.29N, 09.01E, H=05:08:30.2, h=8 km, M <sub>B</sub> =4.9 (CGS).
3	eiP	07	43	25.2				Kuril Islands. USGS: 49.45N, 154.36E, H=07:31:23.8, h=109 km, M <sub>B</sub> =5.5 (CGS).
3	eiPn	10	04	36.3			7.44 827	Germany. USGS: 48.30N, 08.96E, H=10:02:42.1, h=10 km.
3	eiPn	19	00	57.5			5.75 639	Greece. CSEM: 40.74N, 23.40E, H=18:59:33.8, M=4.1.
3	eiPb iSb	20	29	41.2 55.0			1.05 117	Yugoslavia, Adriatic Sea.
4	eiPg iSg	10	06	31.5 37.6			0.47 52	Yugoslavia, Croatia, Biokovo mountain.
4	eiPb iSb	12	37	27.2 36.1	0.3	3.2	1.12 124	Yugoslavia, Adriatic Sea, 43.1N, 15.1E.
4	ei(Pg)	13	29	43.5				Trace. Yugoslavia, Bosnia and Herzegovina, Vran mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
5	eiPg iSg	10	59	50.8 57.2			0.49 54	Yugoslavia, Croatia, Biokovo mountain.
6	eiPn iSg	06	18	00.5 26.7			1.74 193	Yugoslavia, Montenegro, Mratinje region.
6	eiPKP	11	26	46.7				New Hebrides Islands. USGS: 13.32S, 167.14E, H=11:07:43.1, h=198 km, M <sub>B</sub> =6.0 (CGS).
6	eiPn iSn	17	56	43.0 57	0.6	8.8	1.90 211	Yugoslavia, Montenegro, Žabljak mountain.
6	eiPn iSn	20	19	20.2 47.0	0.4	2.6	2.02 224	Yugoslavia, Montenegro, Durmi- tor mountain.
7	eiPn	04	55	27.5			6.37 707	Ionian Sea. USGS: 37.83N, 20.94E, H=04:53:54.7, h=43 km, M <sub>B</sub> =4.5 (CGS).
7	eiPg iSg	12	09	45.7 51.5			0.44 49	Yugoslavia, Croatia, River Cetina.
7	eiPg iSg	13	39	38.4 45.1			0.51 57	Yugoslavia, Croatia, Podgora re- gion.
7	eiPn iSg	16	49	14.3 26.5	0.3	6.6	1.01 112	Yugoslavia, Adriatic Sea, West of Jabuka Island.
7	eiPn iSg	20	28	27.5 39.6		3.2	0.99 110	Yugoslavia, Adriatic Sea.
8	iPb iSn	08	52	19.5 39.1	0.2	7.0	1.22 136	Dilat. Yugoslavia, Bosnia and Herzegovina, River Trebišnjica.
9	eiPn	16	33	41.6			6.68 742	Greece. USGS: 38.47N, 23.17E, H=16:31:59.8, h=21 km, M <sub>B</sub> =4.2 (CGS).
9	iPg iSg	17	42	21.3 34.8	0.2	6.4	1.04 115	Compr. Yugoslavia, Bosnia and Herzegovina, Livanjsko Polje.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
10	eiPn iSn	05	21	11.7 36.1			1.88 209	Yugoslavia, Montenegro, Durmitor mountain.
11	eiPn	07	13	05.8			4.79 532	Albania. CSEM: 39.02N, 20.25E, H=07:11:54.1, M=3.5.
11	eiP	07	53	30.4				Japan. USGS: 24.94N, 124.86E, H=07:40:53.8, M <sub>B</sub> =6.0 (CGS).
11	eiS	18	37	35.9	0.6	6.2		Ionian Sea. USGS: 38.70N, 18.03E, H=18:35:42.5, h=10 km,
12	eiPg iSg	15	34 35	58.2 04.7			0.50 56	Yugoslavia, Croatia, Biokovo mountain.
13	eiPg iSg	20	20 21	57.3 10.9			1.04 116	Yugoslavia, Adriatic Sea.
14	iPn	00	06	26.9			5.18 575	Compr. Greece-Albania border region. USGS: 39.05N, 20.52E, H=00:05:10.7, h=56 km, M <sub>B</sub> =4.7 (CGS).
14	eiPn	00	11	07.5	0.7	5.4	4.90 544	Greece-Albania border region. CSEM: 39.08N, 20.56E, H=00:09:54.4, M=4.7.
14	iPn	02	12	58.5	0.7	5.2	5.00 556	Compr. Greece-Albania border region. USGS: 39.19N, 20.48E, H=02:11:44.2, h=57 km, M <sub>B</sub> =4.2 (CGS).
14	iPn	16	54	34.4			5.18 575	Compr. Greece. USGS: 38.92N, 20.53E, H=16:53:18.2, h=53 km, M <sub>B</sub> =3.9 (CGS).
15	eiS	01	25	49.4				Trace. Yugoslavia, Montenegro, Bar region.
15	iP	02	44	54.0				Compr. USSR. USGS: 49.85N, 78.69E, H=02:36:57.4, h=0 km, M <sub>B</sub> =6.0 (CGS). Underground nuclear explosion.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
15	eiP	11	51	37.7				Kuril Islands. USGS: 48.25N, 154.28E, H=11:39:25.1, h=44 km, M <sub>B</sub> =6.0 (CGS).
16	eiPg iSg	03	31	20.9 35.6			1.12 124	Yugoslavia, Adriatic Sea.
16	iP	15	42	32.6				Compr. Iran, Tabas area. USGS: 33.39N, 57.43E, H=15:35:56.6, M <sub>B</sub> =6.5 (CGS).
17	iPg iSg	23	45	35.9 48.5			0.96 107	Compr. Yugoslavia, Bosnia and Herzegovina, Cincer mountain.
18	eiPn iSb	04	17	09.0 46.9		6.5	2.05 228	Yugoslavia, Adriatic Sea, 42.0N, 18.4E.
18	iPg iSg	12	31	02.3 16.4	0.5	36.4	1.04 115	Dilat. Yugoslavia. CSEM: 43.87N, 17.02E, H=12:30:50.2, M=3.8.
18	eiPn iSn	23	45	03.4 29.2	0.6	11.2	1.97 219	Yugoslavia, Montenegro, Žabljak mountain.
19	eiPKP	13	04	29.4				New Hebrides Islands. USGS: 19.31S, 169.03E, H=12:45:00.2, h=119 km, M <sub>B</sub> =5.3 (CGS).
19	eiPn	15	19	24.6				Obscured by microseismes. Yugoslavia, Montenegro, River Zeta.
20	eiPn iSg	17	26 27	37.6 03.7		3.0	1.78 197	Yugoslavia, Montenegro, River Piva.
20	eiPn iSg	18	35	09.3 36.3			1.78 197	Yugoslavia, Montenegro, River Piva.
20	eiPn iSg	22	30	15.3 33.7			1.23 137	Yugoslavia, Bosnia and Herzegovina, Nevesinje area.
20	iPn iSg	22	50	04.3 31.0	0.3	7.0	1.78 197	Yugoslavia, Montenegro, River Piva.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
21	eiPg iSg	14	11	08.9 18.4			0.72 80	Yugoslavia, Adriatic Sea.
22	eiPg iSg	14	27	09.9 14.0			0.32 35	Yugoslavia, Adriatic Sea, 43.2N, 16.9E.
22	eiPg iSg	20	43	05.9 18.8			0.99 110	Yugoslavia, Croatia, Dinara moun- tain.
22	eiPn	23	17	17.5				Trace. Yugoslavia, Croatia, Dja- kovo area.
22	eiPg iSg	23	36	31.9 43.8			0.91 101	Yugoslavia, Bosnia and Herzego- vina, Cincer mountain.
23	iPKP	16	51	14.9				Compr. New Hebrides Islands. USGS: 13.92S, 167.21E, H=16:32: 11.1, h=201 km, M <sub>B</sub> =6.3 (CGS).
23	eP	22	55	46.6				Japan, off East coast of Honshu. USGS: 38.39N, 143.1E, H=22:43: 10.6, h=31 km, M <sub>B</sub> =5.4 (CGS).
24	eiPg iSg	01	27	42.5 52.0			0.72 80	Yugoslavia, Bosnia and Herzego- vina, Duvanjsko Polje.
24	eiS	04	21	46.5				Trace. Albania.
24	eiPKP	08	03	13.8				Loyalty Islands region. USGS: 21.95S, 169.99E, H=07:43:26.4, h=43 km, M <sub>B</sub> =5.0 (CGS).
24	eiPn iPg iSb	08	08	25.5 31.6 01.0			2.43 270	Southern Italy. CSEM: 40.75N, 16.08E, H=08:07:45.4, M=4.2.
24	eiPg iSg	13	17	42.1 54.3			0.94 104	Yugoslavia, Adriatic Sea.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
25	iPg iSg	22	11	42.2 49.7	0.3	4.3	0.58 64	Dilat. Yugoslavia, Croatia, Per- ković area.
26	eiPn iSn	04	59	38.2 01.5	0.5	7.8	1.75 194	Yugoslavia, CSEM: 43.11 N, 19.07E, H=04:59:11.0, M=3.4.
26	iPn iSg	06	14	55.4 22.6			1.82 202	Compr. Yugoslavia, Montenegro, Durmitor mountain.
26	eiPn iSg	06	53	53.4 20.4			1.82 202	Yugoslavia, Montenegro, Durmi- tor mountain.
26	eiPn iSn	09	48	47.5 19.5			2.57 286	Yugoslavia, Croatia, Djakovo area.
26	eiPg iSg	12	12	52.6 58.0			0.41 46	Yugoslavia, Croatia, River Cetina.
26	eiPg iSg	12	21	53.4 00.4			0.53 59	Yugoslavia, Croatia, Biokovo moun- tain.
26	eiPb iSn	15	25	37.4 55.4	0.4	3.2	1.21 134	Yugoslavia, Croatia, Obrovac- Gračac region.
26	iPn iSn	16	48	43.9 35.4	0.4	3.9	4.28 476	Dilat. Hungary. USGS: 47.16N, 18.96E, H=16:47:33.1, h=10 km.
27	eiPg iSg	01	20	33.1 43.6			0.81 90	Yugoslavia, Adriatic Sea.
27	iP	02	11	54.5			35.00 3890	Compr. USSR. USGS: 73.38N, 54.67E, H=02:04:58.2, h=0 km, M <sub>B</sub> =5.6 (CGS). Underground nuclear explosion.
27	iPn iSb	04	14	59.4 25.0			1.83 203	Compr. Yugoslavia, Montenegro, Durmitor mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
27	eiPn iSn	11	43 44	56.0 10.5	0.4	3.3	1.08 120	Yugoslavia, Adriatic Sea, 42.1N, 16.1E.
27	eiPg iSg	12	56	52.5 58.9	0.4		0.49 54	Yugoslavia, Croatia, Biokovo moun- tain.
27	eiPg iSg	15	29	36.4 43.9			0.58 64	Yugoslavia, Croatia, Dinara moun- tain.
28	eiPKP	10	50	55.3				New Hebrides Islands. USGS: 19.14S, 169.98E, H=10:31:28.9, h=145 km, M <sub>B</sub> =5.6 (CGS).
29	iPg iSg	13	39	35.1 37.1		35.0	0.15 17	Dilat. Yugoslavia, Adriatic Sea, 43.1N, 16.5E.
29	eiPg	15	00	51.2				Trace. Yugoslavia, Croatia, Bioko- vo mountain.
29	eiPg iSg	15	57	44.8 51.3			0.48 53	Yugoslavia, Croatia, Biokovo moun- tain.
30	eiPn iSn	01	06 08	47.2 03.2	0.5	7.9	6.50 722	Ionian Sea. USGS: 37.34N, 20.32E, H=01:05:12.4, M <sub>B</sub> =4.8 (CGS).

## OCTOBER 1978.

2	eiP	20	30	41.8			7.61 846	Romania. USGS: 45.73N, 26.48E, H=20:28:52.6, h=164 km, M <sub>B</sub> =5.0 (CGS).
3	eiPg iSg	12	49	00.7 07.6	0.4	6.9	0.53 59	Yugoslavia, Croatia, River Cetina.
4	iPg iSn	17	42	15.1 31.6	0.4	34.7	1.05 117	Compr. Yugoslavia, Bosnia and Herzegovina, River Neretva.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
4	eiPg iSg	18	24	37.4 49.6			0.94 104	Yugoslavia, Bosnia and Herzego- vina, Vran mountain.
5	eiPn iSg	00	46	32.0 51.5			1.37 152	Yugoslavia, Adriatic Sea, 42.4N, 18.0E.
5	eiS	17	53	15.9	0.8	5.0		Obscured by microseismes. Central Italy. USGS: 43.82N, 13.20E, H= 17:51:42.1, h=10 km.
5	eiS	20	51	59.0				Obscured by microseismes. Cen- tral Italy.
7	eiPg iSg	11	26	57.8 03.8			0.46 51	Yugoslavia, Croatia, Biokovo moun- tain.
7	eiPn	13	51	39.8				Trace. Yugoslavia, Montenegro, Durmitor mountain.
8	eiPn iSg	04	04	41.3 05 08.3			1.76 196	Yugoslavia, Montenegro, Durmitor mountain.
8	eiPb iSg	14	27	09.9 37.4	0.8	5.7	1.89 210	Yugoslavia, Montenegro, Durmitor mountain.
8	eiPn iSg	15	51	26.8 53.0			1.76 196	Yugoslavia, Montenegro, Durmitor mountain.
8	iPn iSg	16	54	17.9 42.4	0.6	9.0	1.65 183	Dilat. Yugoslavia. CSEM: 43.27N, 19.02E, H=16:53:42.2.
9	eiPn iSg	01	33	59.6 34 52.6	0.7	6.0	1.77 197	Yugoslavia. CSEM: 43.39N, 19.11E, H=01:33:22.1, M=3.1.
9	eiPn iSn	07	40	31.0 41 04.8			2.68 298	Yugoslavia, Croatia, Žumberačka Gora.
9	eiP	16	30	55.5				Trace. Iran. CSEM: 32.61N, 49.89E, H=16:25:02.3, M=4.5.
9	eiPn	20	08	26.2				Trace. Yugoslavia, Montenegro, Durmitor mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
10	eiPn iSg	05	23	49.9 17.8	0.6	5.4	1.85 206	Yugoslavia, Montenegro, Durmitor mountain.
10	eiPg	14	50	15.4				Trace. Yugoslavia, Croatia, Imotsko Polje.
10	eiS	16	18	02.3				Trace. Yugoslavia, Bosnia and Herzegovina, Čabulja mountain.
11	eiP	02	01	46.7				Japan, South of Honshu. USGS: 33.42N, 140.79E, H=01:49:01.1, h=57 km, M <sub>B</sub> =5.9 (CGS).
11	eiP	10	38	37.2				Kuril Islands. USGS: 44.24N, 149.03E, H=10:26:14.6, h=49 km, M <sub>B</sub> =5.3 (CGS).
11	eiPn iSg	11	13	36.5 58.0	0.3	6.5	1.49 166	Yugoslavia, Bosnia and Herzegovina, Trebinje region.
11	eiPn	11	56	39.1				Trace. Yugoslavia, Slovenia, Litija region.
13	eiPn iSb	09	48	01.2 28.4			1.94 215	Yugoslavia, Montenegro, River Tara.
13	eiPg iSg	11	46	56.5 04.7			0.63 70	Yugoslavia, Croatia, Kamešnica mountain.
13	eiPg iSg	11	52	48.3 55.9			0.59 66	Yugoslavia, Croatia, Kamešnica mountain.
13	eiPg iSg	12	03	04.3 10.8			0.49 54	Yugoslavia, Croatia, Biokovo mountain.
13	eiPg iSg	15	35	24.7 30.8			0.47 52	Yugoslavia, Croatia, Biokovo mountain.
15	eiPb iSb	15	05	53.1 10.2			1.26 140	Yugoslavia, Adriatic Sea, 43.2N, 14.8E.
16	eiPn iSn	19	19	55.7 29.4	0.6		2.68 298	Southern Italy.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
17	eiPKP	00	14	06.7				Fiji Islands. USGS: 17.75S, 178.82W, H=23:55:15.9, h=565 km, M <sub>B</sub> =5.4 (CGS).
17	iP	05	04	58.7			22.5 2500	Dilat. USSR. USGS: 47.82N, 48.11E, H=04:59:56.5, h=0 km, M <sub>B</sub> =5.8 (CGS). Underground nuclear explosion.
17	eiPg iSg	12	07	50.7 57.0			0.49 54	Yugoslavia, Croatia, Biokovo mountain.
17	eiPg iSg	12	13	04.3 10.6	0.3	3.0	0.49 54	Yugoslavia, Croatia, Biokovo mountain.
17	eiPg iSg	12	24	55.3 02.8			0.58 64	Yugoslavia, Croatia, Kamešnica mountain.
17	eiPg iSg	12	40	27.6 35.6			0.61 68	Yugoslavia, Croatia, Kamešnica mountain.
18	eiPg iSg	14	40	18.5 25.2			0.51 57	Yugoslavia, Adriatic Sea, Drvenik Mali Island region.
18	eiPn	23	39	41.1			10.9 1211	Greece. CSEM: 34.99N, 25.89E, H=23:37:07.5, M=4.6.
19	eiPg iSg	10	33	56.4 02.9			0.50 55	Yugoslavia, Croatia, Biokovo mountain.
20	iPn iSn	00	39	33.1 58.8	0.4	3.8	1.95 217	Compr. Yugoslavia, Montenegro, River Tara.
22	eiPn iSn	08	40	31.4 00.5	0.8	6.8	2.29 254	Central Italy. USGS: 43.62N, 13.40E, H=08:40:00.0, M <sub>B</sub> =4.9 (CGS).
22	i(Sg)	17	37	07.9	0.4	3.1		Yugoslavia, Bosnia and Herzegovina, Breza region.
23	iP	08	15	03.6				Dilat. Afghanistan-USSR border region. USGS: 36.48N, 70.69E, H=08:07:31.6, h=185 km, M <sub>B</sub> =5.6 (CGS).

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
23	eiPg iSg	11 12	59 00	56.6 02.5			0.45 50	Yugoslavia, Croatia, River Cetina.
24	eiPg iSg	14	30	40.0 44.0			0.31 34	Local.
24	eiPg iSg	23	34	17.4 20.4			0.23 25	Local.
25	eiPn iSb	13	02	35.0 59.0			1.73 192	Yugoslavia, Montenegro, River Piva.
26	eiPg iSg	12	51 52	53.7 06.5			0.97 108	Yugoslavia, Bosnia and Herzegovina, Neum area.
27	iPg iSg	14	04 05	52.1 03.5	0.4	23.9	0.85 94	Yugoslavia, CSEM: 43.38N, 17.00E, H=14:04:43.9, M=3.5.
29	eiPg iSg	13	37	08.4 20.7	0.4	4.5	0.94 104	Yugoslavia, Adriatic Sea, 43.2N, 15.2E.
30	eiPg iSg	16	37	16.8 29.9		6.0	1.00 111	Yugoslavia, Bosnia and Herzegovina, Neum area.
31	eiPg iSg	12	23	17.6 23.7			0.47 52	Yugoslavia, Croatia, Biokovo mountain.
31	eiPn iSg	19	41	33.5 57.5			1.65 183	Yugoslavia, Bosnia and Herzegovina, Romanija mountain.
31	iPn iSg	21	02	07.3 32.9		3.9	1.73 192	Dilat. Yugoslavia, Montenegro, Kri-vošije region.

## NOVEMBER 1978.

1	iP	19	56	13.8				Dilat. USSR, Kirgiz. USGS: 39.35N, 72.62E, H=19:48:28.0, h=40 km, M <sub>B</sub> =6.2 (CGS).
---	----	----	----	------	--	--	--	--

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
2	eiPn iSn	01	57 58	31.1 12.9			3.31 368	Yugoslavia. CSEM: 45.98N, 14.17E, H=01:56:39.0, M=3.2.
2	eiP	06	32	01.2				USSR, Kirgiz. USGS: 39.33N, 72.69E, H=06:24:13.0, h=27 km, M <sub>B</sub> =5.3 (CGS).
2	eiPg iSg	08	25	28.8 41.0			0.94 104	Yugoslavia, Bosnia and Herzegovina, Staretina mountain.
2	eiP	11	23	26.2				USSR, Kirgiz. USGS: 39.41N, 72.61E, H=11:15:40.5, h=46 km, M <sub>B</sub> =5.4 (CGS).
2	eiPg iSg	12	03	19.8 26.0			0.48 53	Yugoslavia, Croatia, River Cetina.
3	eiPn iSn	20	40 41	45.8 17.0	0.4	4.8	1.53 170	Yugoslavia, Bosnia and Herzegovina, Čemernica mountain.
4	iP	15	27	43.0				Compr. Iran. CSEM: 37.67N, 48.98E, H=15:22:23.7, M=5.9.
7	eiPn iSn	03	17	00.1 22.0			1.53 170	Yugoslavia, Bosnia and Herzegovina, Čemernica mountain.
7	eiPg iSg	12	03 04	57.9 03.6			0.43 48	Yugoslavia, Croatia, Biokovo mountain.
8	eiPg iSg	15	05 06	59.6 06.0			0.49 54	Yugoslavia, Croatia, Biokovo mountain.
9	eiPn iSn	00	30 31	47.7 24.8			2.88 320	Yugoslavia. CSEM: 46.13N, 14.53E, H=00:30:03.7, M=3.3.
9	eiPg iSg	13	24	04.3 12.2			0.60 67	Yugoslavia, Croatia, Svilaja mountain.
9	eiPn	13	45	25.4				Trace. Yugoslavia, Slovenia, Ilirska Bistrica region.
10	eiPg iSg	12	02	42.9 49.7			0.52 58	Yugoslavia, Croatia, Biokovo mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
11	eiPg iSn	06	11	30.4 45.9			0.92 102	Yugoslavia, Adriatic Sea, 42.4N, 17.0E.
12	eiPn eiSn	21	43	31.2 59.6			2.19 243	Yugoslavia, Croatia, Ogulin region.
13	eiPg iSg	11	10	00.1 07.1			0.53 59	Yugoslavia, Croatia, Biokovo moun- tain.
14	eiPg iSg	12	17	00.0 05.8			0.44 49	Yugoslavia, Croatia, River Cetina.
15	eiPg iSg	20	21	10.8 15.4	0.3	7.4	0.35 39	Yugoslavia, Croatia, Vis Island.
16	eiPn iSn iSb	10	00 01	31.3 03.4 07.5			2.52 280	Central Italy.
16	eiPn	20	24	26.8			3.96 440	Yugoslavia. CSEM: 41.88N, 21.51E, H=20:23:26.4, M=3.5.
18	eiPg iSg	12	13	20.8 31.0			0.78 87	Yugoslavia, Croatia-Bosnia and Herzegovina border region, Trog- lav mountain.
18	eiPg iSg	12	48	08.1 18.3			0.78 87	Yugoslavia, Croatia-Bosnia and Herzegovina border region, Trog- lav mountain.
19	eiPn iSg	22	20	23.4 52.8			1.89 210	Yugoslavia, Montenegro, River Zeta.
20	iPg iSg	08	53	19.3 25.5	0.6	15.5	0.48 53	Yugoslavia, Bosnia and Herzegovina, Livanjsko Polje.
20	eiPn iSn	09	56 57	46.0 27.3	0.6	5.6	3.26 362	Yugoslavia. CSEM: 42.91N, 20.63E, H=09:55:52.0.
20	eiPn iSn	10	46 47	56.8 25.4			2.22 247	Yugoslavia, Croatia, 45.1N, 15.0E.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
20	eiPg iSg	12	28	34.8 41.1	0.3	5.1	0.49 54	Yugoslavia, Croatia, Biokovo moun- tain.
21	eiPg iSg	05	30 31	56.4 09.4			0.99 110	Yugoslavia, Bosnia and Herzegovina, 43.3N, 17.7E.
21	eiPg iSg	13	36	29.8 37.5			0.51 57	Yugoslavia, Croatia, Perković re- gion.
21	eiPg iSg	15	24 25	58.8 10.4			0.89 99	Yugoslavia, Bosnia and Herzegovina, Vran mountain.
24	eiPg iSg	12	03 04	56.2 02.3			0.47 52	Yugoslavia, Croatia, Biokovo moun- tain.
25	iPg iSg	01	43	22.0 33.1	0.4	15.2	0.85 94	Dilat. Yugoslavia, Bosnia and Her- zegovina, Livanjsko Polje.
25	iPg iSg	15	07	53.0 58.9		4.9	0.47 52	Compr. Yugoslavia, Croatia, River Cetina.

D E C E M B E R 1978.

1	eiPn iSn	03	48 49	51.0 34.3	0.9	16.5	3.51 390	Albania. CSEM: 40.97N, 19.66E, H=03:48:00.4, M=4.2.
1	eiPg iSg	10	14	38.0 44.4			0.49 54	Yugoslavia, Croatia, Biokovo moun- tain.
2	eiPn iSn	04	06 07	35.4 22.6			3.91 434	Northern Italy. CSEM: 46.32N, 13.28E, H=04:05:35.6, M=3.5.
3	eiPn iSg	02	23	31.2 55.3		31.8	1.76 195	Yugoslavia. CSEM: 42.67N, 18.71E, H=02:23:01.0, M=3.2.
3	eiPn iSn	08	11 12	43.7 25.7		32.8	3.42 380	Albania. CSEM: 40.90N, 19.64E, H=08:10:52.1, M=4.1.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
5	eiPn	04	46	11.3			2.74 305	Obscured by microseismes. Italy. CSEM: 43.04N, 12.82E, H=04:45: 28.7.
5	iPn	15	39	54.6			3.19 355	Dilat. Italy. CSEM: 44.39N, 12.13E, H=15:39:05.5, M=4.9.
8	eiPn iSn	19	03	02.2 37.8	0.6	4.9	2.84 316	Albania. CSEM: 40.86N, 19.70E, H=19:02:11.2.
12	iPn	15	15	52.7			4.17 463	Obscured by microseismes. Dilat. Italy. CSEM: 46.29N, 12.77E, H= 15:14:49.8, M=4.2.
13	eiPg	11	13	56.2				Obscured by microseismes. Yugo- slavia, Bosnia and Herzegovina, Ča- bulja mountain.
17	eiPg	02	17	02.6			0.64 71	Obscured by microseismes. Yugo- slavia. CSEM: 43.38N, 17.29E, H=02:16:50.1, M=4.4.
17	eiPn	03	49	04.6			3.34 372	Obscured by microseismes. Yugo- slavia. CSEM: 46.20N, 14.16E, H=03:48:13.4, M=3.2.
17	eiPg iSg	17	39 40	50.7 02.2	0.5	8.0	0.88 98	Yugoslavia, Croatia, Vrgorac region.
18	eP	08	04	58.8			22.25 2472	USSR. USGS: 47.87N, 48.21E, H=07:59:58.9, M <sub>B</sub> =5.1 (CGS).
18	iPg	23	19	05.9				Compr. Local. Yugoslavia, Adriatic Sea, 43.2N, 16.4E.
23	iP	11	35	46.2			85.00 9443	Dilat. Taiwan. USGS: 23.28N, 122.11E, H=11:23:14.1, h=38 km, M <sub>B</sub> =6.3 (CGS).
24	eiPg iSg	11	12	40.8 52.3			0.88 98	Yugoslavia, Bosnia and Herzegovina, Čabulja mountain.
25	iPg iSg	12	10	25.3 34.8			0.73 81	Yugoslavia, Bosnia and Herzegovina, Tušnica mountain.

Date	Phase	G h	M m	T s	Per. sec.	Amplitude a (mm)	D <sup>o</sup> D km	Remarks
25	eiPg iSg	13	50	34.0 43.5		4.7	0.73 81	Yugoslavia, Bosnia and Herzegovina, Tušnica mountain.
25	eiPn	22	54	45.5			4.24 471	Italy. CSEM: 44.94N, 11.15E, H= 22:53:42.4, M=4.1.
27	iPn iSn	17	47	14.1 48	03.2		2.74 305	Thyrranean Sea. USGS: 41.11N, 13.53E, H=17:46:12.1, h=398 km, M <sub>B</sub> =5.9 (CGS).
29	eiPg iSg	07	50	28.2 34.5			0.49 54	Yugoslavia, Croatia, Biokovo moun- tain.
30	eiPb iSn	14	54	28.5 45.8	0.7	22.7	1.14 127	Yugoslavia, Croatia, Pašman Island.
31	eiS	02	06	21.7				Obscured by microseismes. Central Italy.
31	eiP	15	57	32.3			5.24 582	Bulgaria. CSEM: 41.98N, 23.28E, H=15:56:15.3, h=14 km, M=4.3.
31	eiP	16	27	27.8			5.40 600	Bulgaria. CSEM: 42.01N, 23.31E, H=16:26:07.7, M=4.1.

MAKROSEIZMIČKI IZVJEŠTAJ  
IZ S.R.HRVATSKE

MACROSEISMICAL REPORT  
FROM S.R.CROATIA

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

SIJEČANJ - JANUARY 1978.

1	1	05	23	46.3	Split	Nova Sela	IV-V	Not felt at: Metković, Grab, Trogir, Tučepi.
						Aržano	IV	
						Brela	IV	
						Opuzen	IV	
						Vel.Prolog	IV	
						Vrgorac	IV	
						Ploče	III	
						Sinj	III	
						Trilj	III	
						Muč	II-III	
Bol	II							
2	1	10	25	57.0	Split	Bogomolje	III	Not felt at Milna.
						Bol	III	
3	2	19	05	20.4	Split	Palagruža	IV-V	
4	2	22	47		Split	Kukljica	IV	Not felt at: Brbinj, Molat, Petrčane, Stan- kovci, Tkon, Trogir, Veli Rat.
						Sali	IV	
						Ždrelac	IV	
						Nevidjane	III-IV	
						Preko	III	
						Rava	III	
Veli Iž	III							

VELJAČA - FEBRUARY 1978.

5	16	01	26	33.1	Split	Han	IV	
						Muč	IV	
						Sinj	IV	

Br. No.	Dan Date	Sr.ev. MET	vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
---------	----------	------------	---------	----------------	-----------------	------------	------------------

OŽUJAK - MARCH 1978.

12	16	07	08	39.9	Split	Brštanica	IV	Not felt at: Babino Polje, Čara, Čilipi, Dragljane, Gradac, Nova Sela, Ploče, Selca, Veliki Prolog, Vrgorac, Žuljana.
						Burmazi	IV	
						Hutovo	IV	
						Metković	IV	
						Zaton Mali	IV	
						Lovište	III	
						Rogotin	III	
						Topolo	III	
						Šipanska Luka	II-III	
13	23	19	45	39.3	Split	Otišić	V-VI	
						Dicmo	V	
						Grab	V	
						Sinj	V	
						Tijarica	V	
						Trilj	V	
						Dugopolje	IV-V	
						Klis	IV-V	
						Muč	IV-V	
						Žrnovnica	IV-V	
						Prisoje	IV	
						Prolog	IV	
						Aržano	III-IV	
						Duvno	III-IV	
Krivodol	III-IV							
Livno	III-IV							
Priluka	III-IV							
Dugi Rat	III							
Gata	III							
Kaštel Lukšić	III							
Lečevica	III							
Župa	III							
Knin	Kljevo	II-III						

Br. No.	Dan Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
				Trilj	IV	
				Grab	III-IV	
				Lečevica	III-IV	
				Solin	III	
6	17	16	Sisak	Graboštani	III	
7	18	12 45	Sisak	Divuša	III	
8	18	14 30	Karlovac	G.Sjeniĉak	III	
9	18	16 13 51.3	Sisak	Divuša	VI	Not felt at: Blinja, G.Buĉica, Cetingrad, DreŹnik-grad, Jabukovac, Kistanje, Krapje, Krateĉko, Kravarsko, Lekenik, Mali Obljaj, Novska, Pokupsko, Skavac, Slunj, Stankovac, Staza, ŹiŹljaviĉ Utinja, Veljun, Zdenĉina.
				Golubovac	V-VI	
				Graboštani	V	
				Zrin	V	
				Brdjani Źama-riĉki	IV-V	
				M.Gradusa	IV-V	
				Rujevac	IV-V	
				Hajtiĉ	IV	
				Meĉenĉani	IV	
				Vlahoviĉ	IV	
				Gora	III-IV	
				M.Gradac	III	
			Karlovac	Vrginmost	III	
				Lasinjski Sjeniĉak	II-III	
10	20	03 49 34.2	Sisak	Golubovac	V	Not felt at: BuŹim, Mali Gradac, Rujevac.
				M.Gradusa	III-IV	
11	20	04 15	Sisak	Kostajniĉki Majur	IV	
				Graboštani	IV	

Br. No.	Dan Date	Sr.evr.vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
20	23	00 15	Osijek	ViŹkovci	III-IV	Not felt at: Osijek, Velika Kopanica, Stari Mikanovci, Gundin- ci, Donji Andrijeviĉi, Cerna, Vuka.

21	26	10 48	Osijek	ViŹkovci	III	
----	----	-------	--------	----------	-----	--

LISTOPAD - OCTOBER 1978.

22	9	08 39	Zagreb	Martin pod Okiĉem	III-IV	Not felt at: Bistra, Dubrava, Donja Stubica, Jakovlje, Jastrebarsko, Kapela (Kalniĉka), Kostanjevac, Ludbreg, PuŹca, Remete, Remetinec, Savski Marof, Sesvete, Veliko TrgoviŹce.
				Zagreb	III	
				Samobor	II-III	
23	9	13 30	Zagreb	Klanjec	III-IV	
				MarkuŹevac	II-III	

STUDENI - NOVEMBER 1978.

24	10	07	Bjelovar	KriŹevci	III-IV	Not felt at: BudinŹĉina, Novi Marof, Zelina, Zrinski Topolovac, Źabno.
----	----	----	----------	----------	--------	--

Br. Dan No. Date	Sr. ev. vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješke Remarks
---------------------	--------------------	-------------------	--------------------	---------------	---------------------

14	31	13	59	Zagreb	Zagreb	II	
----	----	----	----	--------	--------	----	--

SRPANJ - JULY 1978.

15	6	15	09	Zagreb	Zagreb	II	Not felt at: Donja Stubica, Gračani, Jakovlje, Kašina, Klara, Nedjelja, Martin pod Oklčem, Šestine, Vrapče.
----	---	----	----	--------	--------	----	---

RUJAN - SEPTEMBER 1978.

16	18	12	30	50.2	Split	Dicmo	III
						Dragljane	III

17	19	22	35	Zagreb	Zagreb	II	
----	----	----	----	--------	--------	----	--

18	22			Varaždin	Varaždin	II	Not felt at: Bartolovečki Trnovec, Bednja, Cestica, Klenovnik, Legrad, Lepoglava, Lohor, Macinec, Mala Subotica, Nedelišće, Petrijanec, Trakošćan, Turčin, Varaždinske Toplice, Vidovec.
----	----	--	--	----------	----------	----	--

19	22	11	45	Osijek	Viškovci	III	
----	----	----	----	--------	----------	-----	--

Br. Dan No. Date	Sr. ev. vr. MET	Kotar District	Mjesto Locality	M.C.S. Sc.	Bilješka Remarks
---------------------	--------------------	-------------------	--------------------	---------------	---------------------

25	10	20	30	Varaždin	Visoko	III-IV	Not felt at: Knežinec, Ljubešćica, Radovan.
----	----	----	----	----------	--------	--------	---

26	23	02	52	21.6	Varaždin	Novi Marof	V	Not felt at: Legrad, Raven, Vinica.
						Varaždinske Tolice	V-VI	
						Breznički Hum	V	
						Knežinec	V	
						Ljubešćica	V	
						Radovan	V	
					Zagreb	Budinščina	IV-V	
						Zelina	IV-V	
					Varaždin	Ivanec	IV	
					Zagreb	Zagreb	IV	
					Bjelovar	Križevci	III-IV	
					Zagreb	Novo Mesto	III	
					Varaždin	Klenovnik	II-III	

PROSINAC - DECEMBER 1978.

27	17	03	16	50.1	Split	Vrgorac	V
						Dragljane	IV-V
						Gradac	IV-V
						Proložac	IV-V
						Zagvozd	IV-V
						Grabovac	IV
						Igrane	IV
						Krivodol	IV
						Makarska	IV
						Nova Sela	IV
						Sućuraj	IV
						Vel. Prolog	III-IV

Date	Phase	G h	M m	T s	Per. sec.	Amplitude 2a (mm)	D <sup>o</sup> D km	Remarks
M A Y 1978								
1	eiPKP	06	25	47.6		149.21 16577		Trace.Fiji Islands region. USGS:19.25S, 177.50W, H=06:06:57.1, h=578 km, M <sub>B</sub> =5.5 (CGS).
5	eP̄ eRiPS	04	34	26.1 47.4		2.16 240		Trace.Austria.USGS:47.58N, 14.13E, H=04:33:48.4, h=28 km. Felt (V <sup>o</sup> MCS) in Liezen area.
5	eSn	09	35	05.9		3.67 408		Trace.Yugoslavia, Serbia. USGS:43.22N, 18.87E, H=09:33: 20.9, h=20 km. Felt.
6	eiP	11	24	00.5		42.11 4678		Pakistan. USGS:29.84N, 66.21E, H=11:16:09.9, h=33 km, M <sub>B</sub> =5.5 (CGS). Felt in Quetta Peshawar area.
8	eiPn	14	40	47.7		7.41 823		Greece,Thessaloniki area. USGS: 40.68N, 23.27E, H=14:38:58.4, h=34 km, M <sub>B</sub> =4.2 (CGS).
8	eiPn	15	01	58.5		7.19 798		Trace.Greece,Thessaloniki area. USGS:40.72N, 23.33E, H=15:00: 10.0, h=35 km, M <sub>B</sub> =4.0 (CGS).
8	eiPg iSg iSb	17	33	14.2 21.9 23.4		0.59 66		Trace.Yugoslavia, probably Croatia, near Glina.
10	ePb eSb	01	38	09.4 52.8		3.48 387		Trace.Yugoslavia, Montenegro. USGS:43.21N, 18.72E, H=01:37: 07.9, h=10 km, M <sub>B</sub> =4.8 (CGS). CSEM:43.08N, 18.74E, H=01:37: 07.1 .
10	eiPn eRS <sub>2</sub> P̄	13	14 15	40.0 19.0	5.5 3.0	7.47 830		Greece,Thessaloniki area. USGS:40.72N, 23.33E, H=13:12: 50.2, h=19 km, M <sub>B</sub> =4.1 (CGS). Felt in the Khalkidhiki area.

## Errata

## For the Station Zagreb-Puntijarka

Page 1 Below the line with Data,Phase etc. write January 1978

Page 3 Instead of Mart write March 1978

Page 4 Instead of April write April 1978

Instead of page 24 these should be page 20 which is typed in the appendix.

Page 24 Instead of June write June 1978

## For the Station Hvar

Page 1 Below the line with Data,Phase etc.write January 1978

In Macroseismical Report it ought to be followed earthquake ordinal because two pages are wrongly bound

