

14 OCT 1968

NATIONAL OBSERVATORY OF ATHENS

SEISMOLOGICAL INSTITUTE

ATH ~~EPICENTRES~~ P62
~~INDICATED~~ V10



JULY 1968

ATHENS

NATIONAL OBSERVATORY - SEISMOLOGICAL INSTITUTE
 SEISMOLOGICAL STATIONS NETWORK-GREECE
 PRELIMINARY BULLETIN
 JULY 1968

Station	Location	Type of instruments	Comp.	Mass Kg.	T ₀ sec.	T sec.	v:l	V	Drum speed mm/min.
ATHENS	37°58'20"N	Benioff	Z, N, E	107.5	1.	0.25		12.500	60
(ATH)	23°43'0	E Hiller	Z	1	0.82	0.25	10	5.000	60
(Attica)	h=95 m.	"	N, E	1	0.82	0.25	110	2.000	60
Creaaceous		Wood-Anderson	N, E		0.8		50	2.800	60
Limestone		Sprengnether	Z	11.25	15	100		1.500	.15
		"	N, E	10.75	15	100		1.500	.15
		Wiechert	Z	1300	1.6		0.85	152ca.	.30
		"	N	1000	4.2		5.8	133ca.	.30
		"	E	1000	5.3		8.5	118ca.	.30
		Mainka	N	135	2.8		2.1	56ca.	.31
		"	E	135	3.4		4.5	50ca.	.31
		Kritikos	N	40	2.5		2	4ca.	.40
ARCHANGELOS	36°12'59"N	Sprengnether	Z	1.14	0.5	0.5		57.600	60
(RHD)	28°07'34"E	"	E	1.14	0.5	0.5		31.600	60
Sandstone	h=170 m								
JANINA	39°39'24"N	Sprengnether	Z	1.14	0.5	0.5		88.800	60
(JAN)	20°51'03"E	"	N	1.14	0.5	0.5		8.400	60
Cretaceous	h=540 m	"	E	1.14	0.5	0.5		6.000	60
Limestone									
PARASKEVI	39°14'46"N	Sprengnether	Z	1.14	0.5	0.5		42.500	60
(PRK)	26°16'18"E	"	N	1.14	0.5	0.5		7.800	60
Rhyolite	h=100	"	E	1.14	0.5	0.5		7.200	60
PATRAS	38°14'11"N	Wiechert	Z	80	2.7	4.9		128ca.	.30
(PAT)	21°44'48"E								
Alluvium	h=45 m.								
POLYGYROS	40°22'25"N	Sprengnether	Z	1.14	0.5	0.5		41.000	60
(PLG)	23°26'44"E	"	N	1.14	0.5	0.5		8.000	60
Gneiss	h=580 m.	"	E	1.14	0.5	0.5		7.600	60
VALSAMATA	38°10'36"N	Sprengnether	Z	1.14	0.5	0.5		68.400	60
(VLS)	20°35'23"E	"	E	1.14	0.5	0.5		11.200	60
Cretaceous	h=375 m.								
Limestone									
VAMOS	35°34'25"N	Sprengnether	Z	1.14	0.5	0.5		56.000	60
(VAM)	24°11'59"E	"	N	1.14	0.5	0.5		15.000	60
Marly	h=225 m.	"	E	1.14	0.5	0.5		10.000	60
Limestone									

NOTE : In the "Component" column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram when it is oriented so that time increases from left to right. On all vertical component (Z) instruments upward trace motion corresponds to upward ground motion. Magnitudes of local shocks calculated from Wood-Anderson records are designated by M_L . -

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	VAM	Z	eiPn	11	05	55.3C	130	Athens: H=11:05:31 34.9° N, 25.6° E. M _L =4.0 Felt on Crete Island, especially in the region of Lasithi (IV+ at Limnae, IV at Phourni)
			N	iSg		06	12.0		
		RHD	Z	ePn	11	06	12.8	265	
			E	eiSn			42.4		
		ATH	SPZ	ePn	11	06	27.4	380	
		PRK	Z	ePn	11	06	39.1	480	
		PLG	Z	ePn	11	06	58.5	625	
2	1	VAM	Z	eiPn	11	53	44.4C	135	Athens: H=11:53:20 35.0° N, 25.6° E. M _L =4.0 Felt on Crete Island, especially in the region of Lasithi (IV+ at Limnae, IV at Phourni).
			N	iSg		54	01.6		
		RHD	Z	ePn	11	54	00.0	260	
			E	eiSn			30.1		
		ATH	SPZ	eiPg	11	54	26.0D	370	
			SPE	eiSg		55	11.2		
3	1	VAM	Z	eiPn	11	56	50.3C	130	Athens: H=11:56:26 probably 35° N, 25 1/2° E. Felt on Crete Island (IV at Phourni).
			N	iSg		57	07.2		
		RHD	Z	ePn	11	56	56.6	260	
4	1	PRK	Z	ePn	17	01	53.1	305	Athens: H=17:01:07 39.1° N, 29.7° E.
			E	eiSg		02	38.2		
		RHD	Z	ePn	17	02	00.0	360	
		PLG	Z	ePn	17	02	25.7	550	
5	2	PRK	Z	eiPg	22	38	31.4D	90	Athens: H=22:38:14 39.9° N, 25.6° E.
			E	iSg			42.5		
		PLG	Z	eiPn	22	38	46.0D	190	
			N	eiSg		39	12.0		
		JAN	Z	ePn	22	39	13.5	410	
		RHD	Z	ePn	22	39	21.0	465	
		VAM	Z	ePn	22	39	25.7	505	
6	4	RHD	Z	eiP	02	28	13.0D	90	Athens: H=02:27:54 36.9° N, 28.6° E; h=100 Km. M _L =4.3 USCGS: H=02:27:54 36.9° N, 28.6° E; h=108 Km. Mb=4.4
			E	iS			25.3		
		PRK	Z	eiP	02	28	39.8C	330	
			N	eiS		29	14.2		
		VAM	Z	eiP	02	28	54.2C	440	
			N	eiS		29	40.6		
		ATH	SPZ	eP	02	28	54.4	440	
		PLG	Z	eP	02	29	11.6	585	
7	4	PRK	Z	eiPg	08	37	46.4C	90	Athens: H=08:37:29 40.0° N, 25.8° E. M _L =3.6 The standardised station of ATH was out of operation on account of trouble in the control units from 11h of 4 till 11h of 5 of July.
			N	iSg			57.9		
		PLG	Z	ePn	08	38	03.1	210	
			Z	eiPy			05.1D		
			E	eiSn			28.6		
		ATH	SPZ	ePg	08	38	21.2	290	
			SPE	eiSn			45.8		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
8	4	ATH	WZNE	ei!Pg	21	48	02.8CNE	60	Athens: H=21:47:51 37.7°N, 23.2°E, M _s =5.0 4.2560 u, T_h=2.8 s
			WANE	ei!Pg			02.8NE		
			MNE	i!Sg			10.8		
		PAT	Z	eiPn	21	48	16.8C	145	Ae=788 u, Te=2.3 s. BCIS: H=21:47:49 37.6°N, 23.2°E.
		VLS	Z	eiPn	21	48	30.7C	250	USCGS: H=21:47:55.6 37.8°N, 23.2°E.
		VAM	Z	eiPn	21	48	31.7C	260	h=33 R, Mb=5.3, M=5.8(CLL).
		PLG	Z	eiPn	21	48	35.6D	300	The shock produced sub-
		PRK	Z	eiPn	21	48	37.9D	315	stantial property damage in
			N	iSy		49	21.5D		several localities of the re-
			N	iSg			25.9		gion of Argolis, particularly
		JAN	Z	eiPn	21	48	42.7D	350	in Epidavros. According to
		RHD	Z	ei Pn	21	48	57.5C	460	press reports 5 houses col-
									lapsed and about 36 were
									seriously damaged, slight dam-
									age in 63 houses. Earthslump-
									ing along the seashore was

observed in Nea-Epidauros.

The shock was felt in Argolis (VII at Nea-Epidavros, VI+ at Palaea-Epidavros, VI at Lygourion, Limnae, Arachnaeon, Kranidi, Koutsopodion, Argos, IV+ at Mycenae, Drepanon, IV at Karya, Achladokampos, Asine), Corinthia (VI at Sophikon, V+ at Sikyon, Athikia, St-Vasilios, V at Assos, Isthmia, St-Theodoroe, Stimaga, Velon, Loutraki, Kryoneri, IV+ at Vrachation, Perighiali, Xylokastron, Lechaeon, Panarition, IV at Archaea-Corintos, Derveni), Arcadia (V at Stadion, Kapsia, Kollinae, IV+ at Demetsana, IV at Kakourion, Parthenion, Astros, Megalopolis, St-Andreas, Kandela, Leonidion, St-Petros, Nestane, Doliana, Levidi, III+ at Korakovouni, Kosma, Tripolis, Ano-Doliana, III at Riza, Vytina, St-Nikolaos, Tripotamos), Elis (V+ at Makrisia, IV+ at Kylene, Dounaeika, IV at Myrsine, Varvasaena, Vartholomio, III at Gastouni, Krounoe, Zacharo), Achaia (V at Patras, IV+ at Perithorion, IV at Traganon, Temene, Kalavryta, Kato-Klitoria, III+ at Ano-Klitoria, Rhododaphnae, III at Vrachnaeika, Alisos, Valimitika, Akrata, Aeghion, II+ at Skiada, Kalanistra, Chalandritsa, Ano-Kastritsion), Laconia (V at St-Joanis, IV at Spartiae, Kastorion, Vrontamas, Longanikon, Vresthena, Xerokampion, Niata, Skoura, III+ at Palaeopanaghia, Geraki, Daphni, Neapolis, Magoula, III at Selasia, Elos, Karyae, Mystras, Amyklae), Messenia (III at Pyrgos, Messene, Korone, II+ at Philiatra, Charokopion, Katsaros), Attica (VI at Megara, V+ at Dryope, V at Nea-Chalkidon, Keratsini, IV+ at Athens, Peuki, Acharnae, Galatsi, St-Joannis-Rentis, Neon-Phaleron, Ampelakia, Palaeon-Phaleron, St-Demetrios, St-Varvara, Eleusis, Aphidnae, Korydalos, Nea-Palatia, Kalithea, Nea-Erythraea, Neon-Psychikon, Tauros, Kalamaki, Moschaton, IV at Kypsele, Aspropyrgos, Koropi, Kapandriti, Drapetsona, Keratea, Amarousion, Marathon, Kalamos, Nea-Ionia, Peristeri, Koukouvaounes, Vilia, Mandra, Nea-Peramos, Markopoulon-Cropou, St-Anargyroe, Pentele, Kephesia, Vyron, Avlon, Paeania, Vouliagmenè, Spata, Petroupolis, Daphne, III+ at Helenikon, Stamata, III at Nea-Makre, Erythrae, Lavreotikè, St-Paraskeve, Ano-Liosia, Nea-Philadelphia, Nea-Smyrne, Cholargos, II+ at Kalyvia-Thorikou), Boeotia (V at Plataeae, Thevae, Davlia, Vaghia, IV+ at Aliartos, Eleon, Leuktra, Thespieae, IV at Thisve, St-Demetrios, Mavromati, Kyriakion, St-Georges, St-Trias, Orchomenos, Leondari, Koryne, III+ at Distomon, III at Panaghia, Levadia, St-Vlasios, Arachova, II+ at Akraephion), Phokis (IV+ at Itea, IV at Chrison, Polydrosion, III at St-Euthymia, Galaxidi, Desphina, Lidoriki), Aetolia (III at Nea-Avorane, St-Andreas, Panaetolion, Karnourghion, Mytika), Acarmania (IV at Loutron) and Phthiotis (IV+ at Molos, IV at Zeli).

The shock was further reported from the Islands of Poros (V at Poros), Aeghina (V at Aeghina), Hydra (IV+ at Hydra), Spetsae (IV at Spetsae), Cephalonia (V at Same, IV+ at Skala, Chionata, IV at Digaletion, Vlachata, III at Mousata), Zante (IV at Gerakarion, III at Lithakia) and Euboea (IV+ at Mytika, Styra, IV at Aliveri, III at Chalkis).

Not felt at Vyzikion, Amygdalia, Lagadia, Tropaea (of Arcadia), Adri-tsaena, Goumeron, Vounargos, Kallithea, (of Elis), Drosia, Lechairion, Kato-Achaia, Sagaeika, Lakopetra, Kerteze, Kounina, Metochi (of Achaia), Richia, Ierax, Oetylos, St-Demetrios, Areopolis, Molaoe, Gythion, (of Laconia), Methone, Ano-Dorion, Vlachopoulon, Skala, Dorion, Gargalianoe, Evagelismos, Kopanaki, Pylos, Kyparissia (of Messenia), Grammatikon, Philothee (of Attica), Elikon (of Boeotia), Kasteli, Kallithea (of Phokis).

* St-Trias, Nauplion, V+ at St-Andrianos, V at Nea-Tirynthos, Didyma.-

** Hymetos.- + Lousika.-

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
Paravolas, Papadatae, St-Vlasios, Dokimion, Platanos, Naupaktos, Agelokastron, Zeugaraki, Analepsis, Aetolikon (of Aetolia), Thyrrion, Amphilo- chia, Vonitsa, Katouna, Lepenou, Machaera (of Acarnania), Dilinata, Po- ros, Svoronata, Argostoli (of Cephalonia), Ithake (of Ithake), Keri , Ano-Volimae (of Zante), Kythera (of Kythera). Area of felt shaking about 190.000 Km^2 ; $r_5=11.0 \text{ Km}$. $M_L=6.1^*$ Macroseismic focal depth ca 30 Km.									
9	4	ATH	WAE WAE	ePg eiSg	22	42	16.8 25.1	65	Athens:H= 22:42:04 37.6°N, 23.1°E. $M_L=3.1$ Aftershock.
		VAM	Z Z	ePn ePb	22	42	44.6 470	260	
		PRK	Z	ePg	22	43	04.0	330	
10	4	ATH	WAE WAE	ePg eiSg	23	04	42.1 50.0	60	Athens:H=23:04:30 37.7°N, 23.2°E. $M_L=3.2$ Aftershock.
		VLS	Z	ePg	23	05	15.4	250	
		VAM	Z	ePn	23	05	12.6	270	
		PLG	Z	ePn	23	05	17.2	310	
		PRK	Z	ePg	23	05	26.9	315	
11	4	RHD	Z E	ei!P iS	23	18	09.0D 21.2	100	Athens:H=23:17:52 35.3°N, 27.9°E h=50 Km; $M_L=4.5$ BCIS:H=23:17:52 35.3°N, 27.9°E. h=50 Km.
		VAM	Z N	eiP iS	23	18	41.1C 19 16.1	340	
		PRK	Z	eiP	23	18	55.2D	460	
		ATH	WAE	eP	23	18	57.0	470	
		PLG	Z	eP	23	19	24.1	685	
		VLS	Z	eP	23	19	29.0	715	
12	4	ATH	WAE WAE	ePg eiSg	23	28	39.1 47.5	65	Athens:H=23:28:27 37.7°N, 23.0°E. $M_L=3.0$ Felt in Argolis (IV at Palaea-Epidavros, III at Asi- ne) and Attica (IV at Pi- reaus). Aftershock.
		VAM	Z N	ePn eiSn	23	29	10.5 41.8	285	
		PLG	Z	ePn	23	29	12.4	300	
		JAN	Z	ePn	23	29	16.8	330	
13	4	ATH	WAE WAE	ePg eiSg	23	33	34.8 42.5	60	Athens:H=23:33:23 37.7°N, 23.1°E. $M_L=3.0$ Aftershock.
		VAM	Z N	ePn eiSn	23	34	06.5 37.2	280	
		PLG	Z	ePn	23	34	08.8	300	
14	5	ATH	WAE WAE	ePg eiSg	00	38	08.0 15.8	60	Athens:H=00:37:56 37.7°N, 23.3°E $M_L=2.9$ Aftershock.
		VLS	Z	ePn	00	38	36.0	250	
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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		VAM	Z	ePn	00	38	38.9	270	
			Z	eiPg			45.7D		
			E	eiSn		39	09.9		
		PLG	Z	ePn	00	38	43.7	310	
15	5	ATH	WAE	ePg	02	12	42.0	60	Athens: H=02:12:30
			WAE	eiSg			49.7		37.7°N, 23.2°E. M _L =3.1
		VLS	Z	ePn	02	13	08.9	240	Aftershock.
		VAM	Z	ePn	02	13	13.9	275	
			N	eiSb			46.9		
		PLG	Z	ePn	02	13	16.1	300	
			N	eiSn			46.1		
		PRK	Z	ePg	02	13	27.1	315	
		JAN	Z	ePn	02	13	33.3	350	
16	5	ATH	WAE	ePg	03	26	59.0	55	Athens: H=03:26:43
			WAE	eiSg		27	06.2		37.8°N, 23.2°E; M _L =2.8
		VLS	Z	ePg	03	27	30.1	240	Aftershock.
			E	eiSg		28	00.3		
		VAM	Z	ePn	03	27	30.8	280	
17	5	ATH	WAE	ePg	04	42	58.0	60	Athens: H=04:42:46
			WAE	iSg		43	06.0		37.8°N, 23.2°E. M _L =3.2
		VLS	Z	ePg	04	43	27.0	225	Aftershock.
		PLG	Z	ePn	04	43	30.6	285	
		VAM	Z	ePn	04	43	31.0	285	
		PRK	Z	ePn	04	43	32.1	300	
		JAN	Z	ePg	04	43	44.6	325	
		RHD	Z	ePn	04	44	09.6	465	
18	5	ATH	SPZ	eiPg	11	44	51.0C	65	Athens: H=11:44:38
			SPN	iSg			59.0		37.6°N, 23.2°E. M _L =3.0
		VLS	Z	ePg	11	45	21.6	245	Aftershock.
		VAM	Z	ePn	11	45	20.4	265	
			Z	eiPg			27.0D		
			N	eiSg			59.6		
19	5	ATH	SPZ	eiPg	14	57	08.5C	60	Athens: H=14:56:57
			SPN	iSg			16.2		37.7°N, 23.3°E. M _L =3.1
		VLS	Z	ePn	14	57	36.1	250	Aftershock.
		VAM	Z	ePn	14	57	39.0	270	
			Z	eiPg			46.1D		
20	5	ATH	SPZNE	iPg	15	08	57.3CNE	65	Athens: H=15:08:45
			SPN	iSg		09	05.0		37.7°N, 23.2°E; M _L =3.5
		VLS	Z	ePn	15	09	22.2	230	Aftershock.
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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
21	5	VAM	Z	ePn	15	09	28.0	270	Athens: H=15:14:56 37.7°N, 23.3°E; $M_L=3.3$ Aftershock.
			Z	eiPg			33.8C		
			N	eiSn			58.0		
		PRK	Z	ePn	15	09	34.0	325	
		JAN	Z	ePb	15	09	40.2	350	
		RHD	Z	ePn	15	09	50.5	460	
		ATH	SPZ	eiPg	15	15	07.2C	60	
			SPN	iSg			14.8		
		VLS	Z	ePn	15	15	35.0	250	
		VAM	Z	ePn	15	15	36.4	265	
22	5		Z	eiPg			43.6D		Athens: H=15:19:50 37.8°N, 23.1°E; $M_L=3.0$ Aftershock.
			N	eiSn	16		06.4		
			N	eiSb			10.4		
		PRK	Z	ePn	15	15	42.6	310	
			Z	ePy			47.6		
		JAN	Z	ePn	15	15	47.4	350	
		ATH	SPZ	ePg	15	20	01.2	60	
			SPN	iSg			09.0		
		VLS	Z	ePn	15	20	27.0	235	
		VAM	Z	ePn	15	20	33.0	280	
23	5	ATH	SPZNE	ei!Pg	17	49	34.2CNE	60	Athens: H=17:49:23 37.6°N, 23.3°E. $M_L=3.3$ Aftershock.
			SPE	iSg			42.0		
		VAM	Z	ePn	17	50	02.4	255	
			N	eiSg			39.9		
		PLG	Z	ePn	17	50	10.6	310	
		PRK	Z	ePn	17	50	11.7	320	
		JAN	Z	ePn	17	50	14.0	350	
		ATH	SPZ	eiPg	20	12	31.6C	60	
			SPN	iSg			39.2		
		VLS	Z	ePg	20	13	01.1	225	
24	5	PLG	Z	ePn	20	13	05.0	290	Athens: H=20:12:20 37.8°N, 23.1°E. $M_L=3.1$ Aftershock.
		VAM	Z	ePn	20	13	06.1	300	
		ATH	SPZ	ei!Pg	21	05	26.5C	55	
			SPN	iSg			34.0		
		VAM	Z	ePn	21	05	55.9	260	
			N	eiSg	06		33.4		
		PLG	Z	ePn	21	06	01.0	305	
		PRK	Z	ePn	21	06	14.2	325	
		ATH	SPZ	ei!Pg	21	05	26.5C	55	
			SPN	iSg			34.0		
25	5	VAM	Z	ePn	21	05	55.9	260	Athens: H=21:05:15 37.7°N, 23.2°E; $M_L=3.1$ Felt in Argolis (IV at Assos, III at Argos). Aftershock.
			N	eiSg	06		33.4		
		PLG	Z	ePn	21	06	01.0	305	
		PRK	Z	ePn	21	06	14.2	325	
		ATH	SPZ	ei!Pg	21	05	26.5C	55	
			SPN	iSg			34.0		
		VAM	Z	ePn	21	05	55.9	260	
			N	eiSg	06		33.4		
		PLG	Z	ePn	21	06	01.0	305	
		PRK	Z	ePn	21	06	14.2	325	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
26	5	ATH	SPZ SPN	eiPg iSg	22	26	02.4C 09.8	55	Athens: H=22:25:52 37.6°N, 23.4°E. $M_L=3.2$ Aftershock.
		VLS	Z	ePn	22	26	31.0	250	
		VAM	Z	ePn	22	26	31.9	255	
			Z	eiPg			38.4D		
			N	eiSb		27	02.9		
		PLG	Z	ePn	22	26	38.9	300	
		PRK	Z	ePg	22	26	47.1	305	
		JAN	Z	ePn	22	26	44.3	350	
27	6	VLS	Z E	eiPg iSg	00	40	16.4D 25.5	70	Athens: H=00:40:03 37.6°N, 20.8°E. $M_L=3.0$
		PAT	Z	eiPg	00	40	23.3C	110	
		ATH	SPZ SPN	ePn eiSn	00	40 41	43.8 12.9	260	
		JAN	Z	ePn	00	40	46.4	280	
		VAM	Z	ePn	00	41	00.5	390	
		PRK	Z	ePy	00	41	26.2	505	
28	6	ATH	SPZ SPN	eiPg iSg	01	14	00.0C 07.5	60	Athens: H=01:13:48 37.6°N, 23.3°E. $M_L=2.9$ Aftershock.
		VLS	Z	ePg	01	14	31.7	245	
		VAM	Z	ePg	01	14	35.6	265	
29	6	ATH	SPZ SPN	eiPg iSg	05	27 28	56.0C 02.5	60	Athens: H=05:27:44 37.6°N, 23.3°E. $M_L=2.9$ Aftershock.
		VAM	Z	ePn	05	28	24.4	255	
		PLG	Z	ePn	05	28	30.3	305	
30	6	ATH	SPZ SPN	eiPg iSg	08	03	02.8C 10.5	60	Athens: H=08:02:51 37.6°N, 23.3°E. $M_L=3.2$ Aftershock.
		VLS	Z	ePn	08	03	30.2	250	
		VAM	Z	ePn	08	03	32.7	265	
		PLG	Z	ePn	08	03	37.4	310	
		JAN	Z	ePn	08	03	43.3	350	
31	6	ATH	SPZ SPZ	eiPg iSg	16	26	05.9C 13.5	60	Athens: H=16:25:54 37.1°N, 23.3°E. $M_L=3.5$ Aftershock.
		VLS	Z	ePn	16	26	33.1	250	
		VAM	Z E	ePn eiSb	16 27	26	36.0 08.8	270	
		PRK	Z	ePg	16	26	52.7	325	
		JAN	Z	ePn	16	26	46.3	350	
		RHD	Z	ePy	16	27	10.0	455	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
32	6	ATH	SPZ SPN	eiPg iSg	17	31	06.60 17.6	85	Athens: H=17:30:51 38.2°N, 22.9°E. $M_L=3.4$
		VLS	Z E	ePn iSg	17	31	23.9 53.4	205	
		PLG	Z	ePn	17	31	28.9	240	
		JAN	Z	ePg	17	31	40.8	280	
		PRK	Z	ePn	17	31	37.5	310	
		VAM	Z	ePn	17	31	40.7	330	
33	8	ATH	SPZ SPN	eiPg iSg	19	45 46	54.30 02.0	60	Athens: H=19:45:43 37.6°N, 23.3°E. $M_L=3.0$ Aftershock.
		VLS	Z	ePg	19	46	26.4	245	
		VAM	Z Z	ePn eiPg	19	46	24.2 30.2D	265	
34	6	ATH	SPZNE SPE	iPg iSg	21	55	43.2C 50.9	60	Athens: H=21:55:32 37.7°N, 23.2°E $M_L=3.8$ Aftershock.
		PAT	Z	ePn	21	55	56.3	135	
		VLS	Z	eiPn	21	56	09.0C	235	
		VAM	Z Z N N	eiPn eiPg eiSn eiSy	21	56	12.7D 19.7C 43.0 48.3	265	
		PLG	Z	ePn	21	56	18.2	310	
		PRK	Z Z	ePn eiPg	21	56	22.0 32.7C	335	
		RHD	Z	ePn	21	56	39.0	470	
35	6	ATH	SPZ SPN	eiPg iSg	22	20	36.8C 44.5	60	Athens: H=22:20:25 37.6°N, 23.3°E ; $M_L=3.3$ Aftershock.
		VLS	Z E	ePn eiSn	22	21	04.9 33.9	250	
		VAM	Z N	ePn eiSy	22	21	06.4 43.8	265	
		PRK	Z	ePg	22	21	23.0	320	
		JAN	Z	ePn	22	21	16.0	350	
36	6	ATH	SPZ SPN	eiPg iSg	22	43	34.9C 42.5	60	Athens: H=22:43:23 37.7°N, 23.3°E $M_L=3.2$ Aftershock.
		VLS	Z N	ePn eiSy	22	44	02.9 36.9	250	
		VAM	Z E	ePn eiSn	22	44	06.0 35.2	275	
		PRK	Z	ePg	22	44	19.6	310	
		JAN	Z	ePg	22	44	25.0	345	
		RHD	Z	ePg	22	44	44.1	450	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
37	7	ATH	SPZNE SPN	eiPg iSg	00	51	28.20 35.8	CNE 60	Athens: H=00:51:16 37.7° N, 23.1° E ; $M_L=3.6$ Aftershock.
		PAT	Z	ePn	00	51	42.9	145	
		VLS	Z E	ePg eiSg	00	51 52	55.1 22.6	220	
		VAM	Z E	ePn eiSn	00	51 52	57.9 29.2	275	
		PLG	Z	eiPn	00	52	01.2D	300	
		PRK	Z Z N	ePn eiPg eiSy	00	52	06.3 14.9C 51.3	330	
		JAN	Z E	eiPn eiSn	00	52	08.1D 46.5	350	
		RHD	Z	ePb	00	52	29.1	480	
38	7	ATH	SPZ SPN	eiPg iSg	01	27	16.3C 24.2	60	Athens: H=01:27:05 37.7° N, 23.1° E. $M_L=3.0$ Aftershock.
		VLS	Z	ePg	01	27	44.0	220	
		VAM	Z N	ePn eiSn	01	27 28	47.8 19.9	280	
		PLG	Z	ePb	01	27	55.2	310	
		JAN	Z	ePb	01	27	56.5	325	
		PRK	Z	ePg	01	28	03.9	325	
		RHD	Z	ePy	01	28	24.9	480	
39	7	ATH	SPZ SPN	iPg iSg	05	44	19.5C 27.7	65	Athens: H=05:44:07 37.7° N, 23.0° E. $M_L=3.5$ Aftershock.
		PAT	Z	ePn	05	44	34.3	145	
		VLS	Z E	ePg eiSg	05	44 45	47.5 22.6	225	
		JAN	Z N	ePn eiSn	05	44 45	50.5 12.2	280	
		VAM	Z	ePn	05	44	50.9	290	
		PLG	Z	ePn	05	44	54.7	315	
		PRK	Z	eiPg	05	45	06.9C	335	
40	7	ATH	SPZ SPN	eiPg iSg	08	14	38.2C 45.7	60	Athens: H=08:14:27 37.5° N, 23.4° E. $M_L=2.8$ Aftershock.
		VAM	Z E	ePn eiSg	08	15	04.5 40.8	240	
		VLS	Z	ePg	08	15	11.6	250	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
41	7	ATH	SPZ SPN	eiPg iSg	10	03	40.6C 48.2	60	Athens: H=10:03:29 37.8°N, 23.1°E; $M_L=2.8$ Aftershock.
		VLS	Z	ePg	10	04	09.5	225	
		VAM	Z N	ePn eiSn	10	04	12.6 45.7	285	
		PRK	Z	ePg	10	04	27.0	320	
42	07	ATH	SPZ SPN	eiPg iSg	16	08	19.5D 25.6	50	Athens: H=16:08:10 37.8°N, 23.2°E. $M_L=2.8$ Aftershock. Felt in Attika (II+at Piraeus).
		VLS	Z	ePg	16	08	50.0	225	
		VAM	Z	ePn	16	08	51.5	275	
43	7	ATH	SPZ SPN	eiPg iSg	22	29	29.9C 38.3	65	Athens: H=22:29:17 37.6°N, 23.2°E; $M_L=2.9$ Felt in Attika (II+at Piraeus).
		VLS	Z	ePg	22	30	00.5	240	
		VAM	Z E	ePb eiSn	22	30	02.3 32.1	280	
44	8	PRK	Z N	eiPg iSg	04	25	09.4D 24.1	120	Athens: H=04:24:47 38.5°N, 25.3°E. $M_L=3.3$ Felt in Attika (II+ at Piraeus).
		ATH	SPZ SPN	eiPn ei	04	25	13.5C 28.5	150	
		VAM	Z Z	ePn eiPb	04	25	39.1 41.5D	355	
45	8	ATH	SPZ SPN	eiPg iSg	07	15	24.6C 32.7	60	Athens: H=07:15:13 37.8°N, 23.2°E. $M_L=3.0$ Aftershock.
		VLS	Z	ePg	07	15	55.7	240	
		VAM	Z N	ePn eiSy	07	15 16	56.4 35.7	285	
		PRK	Z	ePg	07	16	10.1	320	
46	8	VAM	ZNE	iPn	17	41	29.9DSE	140	Athens: H=17:41:05 34.4°N, 25.2°E; $M_L=4.8$ BCIS: H=17:41:09 34.7°N, 25.1°E; h=75 Km; $M_{LH}=4.8$ USCGS: H=17:41:05.8 34.4°N, 25.2°E; h=33 R. Mb=5.3
		RHD	Z E	iPn i!Sn	17	41 42	55.7C 33.3	340	
		ATH	SPZ SPZ SPN SPN	eiPn iPb iSn iSb	17	42	03.9C 09.6D 47.8 55.4	410	
		PRK	Z	eiPn	17	42	20.0C	530	
		VLS	Z Z E	ePn eiPb eiSn	17	42 43	24.6 31.9C 22.1	570	
48	8	VAM	ZNE N	iPn iSg	18	18	34.8DSE	155	Athens: H=18:18:08 34.2°N, 25.1°E; $M_L=4.2$ BCIS: H=18:18:08 34 1/4°N, 25 1/2°E USCGS: H=18:18:09.8 34.3°N, 25.2°E; h=33 R. Mb=4.3
		RHD	Z E	eiPn eiSn	18	19	01.4D 38.6	360	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
48	8	ATH	SPZ	ePn	18	19	09.7	430	Athens: H=18:34:30 34.6°N, 25.3°E $M_L=4.1$ USCGS: H=18:34:24 34.4°N, 25.2°E h=14 Km; Mb=4.3
			SPZ	eiPy			19.2C		
			SPN	eiSn			57.2		
		PRK	Z	eiPn	18	19	25.1D	550	
		VLS	Z	ePn	18	19	32.2	600	
		VAM	ZN	iPn	18	34	51.7DS	135	
		RHD	Z	eiPn	18	35	18.1C	320	
			E	eiSn			53.3		
		ATH	SPZ	ePn	18	35	26.8	390	
			SPE	eiSy		36	18.9		
49	9	PRK	Z	ePn	18	35	42.2	510	Athens: H=07:11:56 37.4°N, 21.0°E $M_L=3.6$
		VLS	Z	ePn	18	35	46.4	550	
			E	eiSn		36	44.7		
		VLS	Z	eiPg	07	12	13.1D	90	
			Z	iPn			14.9D		
			E	iSg			24.5		
		ATH	SPZ	ePn	07	12	33.8	245	
			SPN	eiSy		13	07.2		
			SPN	eiSg			10.0		
		VAM	Z	ePb	07	12	54.9	375	
50	9		N	eiSb		13	36.5		
		PLG	Z	ePn	07	12	53.5	395	
		PRK	Z	ePn	07	13	07.5	500	
		ATH	SPZ	eiPg	14	33	01.1D	60	
			SPN	iSg			08.6		
		VLS	Z	ePg	14	33	29.0	220	
		VAM	Z	ePn	14	33	34.2	290	
		PRK	Z	ePg	14	33	48.3	325	
		ATH	SPZ	eiPg	14	33	01.1D	60	
			SPN	iSg			08.6		
51	9	VLS	Z	ePg	14	33	29.0	220	Athens: H=14:32:50 37.8°N, 23.1°E; $M_L=3.0$ After shock.
		VAM	Z	ePn	14	33	34.2	290	
		PRK	Z	ePg	14	33	48.3	325	
		VAM	Z	eiPn	15	01	09.1C	135	
			N	iSg			26.3		
		RHD	Z	eiPn	15	01	36.6C	355	
		ATH	SPZ	ePn	15	01	45.3D	420	
			SPZ	eiPy			53.4D		
		PRK	Z	eiPn	15	02	00.0C	540	
		VLS	Z	ePn	15	02	05.9	585	
52	9	VLS	Z	ePg	16	50	11.4D	60	Athens: H=16:49:59 37.7°N, 23.2°E; $M_L=3.0$ After shock.
			E	eiSg			19.7		
		VLS	Z	ePg	16	50	41.8	240	
			E	eiSg		51	13.2		
		VAM	Z	ePn	16	50	42.4	280	
			N	eiSy		51	19.4		
		PRK	Z	ePg	16	50	57.3	325	
		ATH	SPZ	eiPg	16	50	11.4D	60	
			SPN	iSg			19.7		
		VLS	Z	ePg	16	50	41.8	240	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
53	9	VLS	ZE	iPn	22	53	01.6CS	125	Athens: H=22:52:38 37.0°N, 20.1°E. $M_L=3.9$
			E	iSg			17.0		
		ATH	SPZ	ePn	22	53	30.0	350	
		VAM	Z	ePn	22	53	37.6	405	
			N	eiSg		54	39.6		
		PRK	Z	ePn	22	54	02.3	600	
54	10	ATH	SPZ	iPg	03	48	16.2C	60	Athens: H=03:48:04 37.8°N, 23.1°E. $M_L=3.5$ Felt in Attica (II+ at Piraeus). Aftershock.
			SPN	iSg			24.3		
		VLS	Z	ePg	03	48	45.7	230	
		VAM	Z	ePn	03	48	47.3	285	
			Z	ePy			52.7		
		PRK	Z	ePg	03	49	01.8	320	
			N	eiSg			41.3		
55	10	ATH	SPZ	eiPg	05	32	16.2C	50	Athens: H=05:32:05 37.7°N, 23.2°E; $M_L=3.0$ Aftershock.
			SPN	iSg			30.0		
		VLS	Z	ePg	05	32	46.9	230	
		VAM	Z	ePn	05	32	46.9	270	
			N	eiSn		33	17.2		
		PRK	Z	ePg	05	33	01.5	315	
56	10	ATH	SPZ	eiPg	16	22	24.7C	60	Athens: H=16:22:13 37.8°N, 23.1°E. $M_L=3.0$ Aftershock.
			SPN	iSg			32.8		
		VLS	Z	ePn	16	22	55.4	245	
		VAM	Z	ePn	16	22	57.8	290	
			N	eiSy		23	35.6		
57	10	ATH	SPZNE	eiPg	21	36	40.8CNE	60	Athens: H=21:36:29 37.7°N, 23.2°E $M_L=3.4$ Aftershock.
			SPE	iSg			48.7		
		VLS	Z	ePb	21	37	08.7	240	
			Z	eiPg			12.8D		
			E	eiSg			42.7		
		VAM	Z	ePn	21	37	12.3	280	
			E	eiPg			19.8D		
			N	eiSg			51.1		
		PLG	Z	ePn	21	37	13.7	295	
		PRK	Z	ePb	21	37	21.2	325	
			Z	eiPg			27.0C		
58	10	ATH	SPZ	eiPg	23	29	44.3C	55	Athens: H=23:29:34 37.8°N, 23.2°E. $M_L=2.7$ The station of JAN was out of operation from 04h of 11 till 16 h of 12 of July on account of trouble in the chronometer. Aftershock.
			SPN	iSg			51.6		
		VLS	Z	ePy	23	30	12.7	230	
			Z	ePg			15.2		
		VAM	Z	ePn	23	30	16.0	275	
			N	eiSg			56.9		

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Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
0	11	ATH	SPZ SPN	eiPg iSg	05	50	41.7C 49.1	65 Athens: H=05:50:29 37.6°N, 23.2°E; $M_L=2.7$ Aftershock.
		VLS	Z	ePg	05	51	10.3	230
		VAM	Z	ePg	05	51	16.6	265
		PLG	Z	ePn	05	51	16.3	320
0	12	ATH	SPZ SPN	eiPg iSg	00	34	40.6C 54.3	110 Athens: H=00:34:20 38.8°N, 24.6°E; $M_L=3.8$
		PRK	Z	eiPn	00	34	47.1D	155
			Z	iPg			48.9C	
			N	iSg		35	08.9	
		PLG	Z	eiPn	00	34	52.8C	200
		VLS	Z	ePn	00	35	09.9	340
		VAM	Z	ePn	00	35	15.0	375
61	12	ATH	SPZ SPN	eiPg iSg	00	38	01.1C 14.7	110 Athens: H=00:37:40 38.8°N, 24.6°E; $M_L=3.2$
		PRK	Z	eiPn	00	38	07.2D	160
			N	eiSg			30.8	
		PLG	Z	eiPn	00	38	13.8D	210
		VLS	Z	ePn	00	38	30.0	340
		VAM	Z	ePn	00	38	35.4	380
62	12	ATH	SPZ SPN	eiPg iSg	10	21	11.2C 19.0	60 Athens: H=10:21:00 37.8°N, 23.1°E; $M_L=3.2$ Aftershock.
		VLS	Z	ePg	10	21	40.3	220
		VAM	Z	ePn	10	21	42.5	280
		PLG	Z	ePn	10	21	44.6	300
		PRK	Z	ePg	10	21	57.8	325
		RHD	Z	ePb	10	22	14.0	480
63	13	VLS	Z E	eiPg iSg	02	47	51.0C 05.6	120 Athens: H=02:47:28 39.2°N, 20.1°E; $M_L=3.9$
		JAN	Z	eiPg	02	47	51.0C	120
		PLG	Z	ePn	02	48	15.6	315
		ATH	SPZ	ePn	02	48	20.4	350
		VAM	Z	ePn	02	48	44.6	540
64	13	PRK	Z	eiPg	04	39	03.2D	90 Athens: H=04:38:46 39.8°N, 25.7°E; $M_L=3.4$
			Z	iPn			04.4C	
			N	iSg			14.2	
		PLG	Z	ePn	04	39	18.8	205
			N	eiSn			43.8	
		ATH	SPZ	ePn	04	39	26.0	260
		RHD	Z	ePn	04	39	54.6	470

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No.	St.	Comp.	Phase	h	m	s	D	Remarks
65	13	ATH	SPZ	eiPg	14	50	26.3C	55 Athens:H=14:50:16
			SPE	iSg			33.6	37.8°N, 23.1°E; M _L =2.6
								Aftershock.
		VLS	Z	ePg	14	50	54.5	220
		VAM	Z	ePy	14	51	04.2	285
		JAN	Z	ePn	14	50	59.9	290
		PLG	Z	ePn	14	51	01.0	295
		PRK	Z	ePg	14	51	12.7	320
66	13	ATH	SPZ	eiPg	17	31	13.1C	60 Athens:H=17:31:02
			SPE	iSg			21.1	37.8°N, 23.1°E; M _L =3.3
								Aftershock.
		PAT	Z	ePg	17	31	29.2	145
		VLS	Z	ePg	17	31	41.0	220
		PLG	Z	ePn	17	31	45.4	290
			Z	eiPb			48.0C	
		VAM	Z	ePn	17	31	45.9	290
		PRK	Z	ePg	17	31	58.6	320
		JAN	Z	eP n	17	31	50.4	330
67	13	RHD	Z	eiPg	19	34	22.7D	90 Athens:H=19:34:06
			E	iSg			34.3	35.4°N, 28.0°E; M _L =4.3
		VAM	Z	ePn	19	34	59.6	355
			Z	eiPb		35	02.1C	
		PRK	Z	ePn	19	35	10.3	450
		ATH	SPZ	ePn	19	35	13.4	470
68	13	ATH	SPZ	eiPg	19	38	29.7C	50 Athens:H=19:38:20
			SPE	iSg			36.6	37.7°N, 23.3°E. M _L =3.4
								Aftershock.
		PAT	Z	ePn	19	38	44.5	140
		VLS	Z	ePn	19	38	57.4	240
			E	eiSg		39	32.9	
		VAM	Z	ePn	19	39	00.2	265
			Z	eiPy			03.7C	
		PLG	Z	eiPn	19	39	05.1D	300
			Z	eiPg			13.6C	
		PRK	Z	eiPg	19	39	14.8C	310
			N	eiSg			54.8	
		JAN	Z	eiPn	19	39	11.1D	350
69	14	ATH	SPZ	eiPg	16	27	04.8D	60 Athens:H=16:26:51
			SPN	eiSg			12.2	37.6°N, 23.3°E; M _L =2.7
								Aftershock.
		VLS	Z	ePg	16	27	34.0	240
		VAM	Z	ePg	16	27	37.0	260
		PLG	Z	ePn	16	27	48.2	320

ATHENS SHOCKS IN THE AREA OF GREECE

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
70	14	ATH	SPZ SPN	iPg iISg	18	34	03.10 10.5	55	Athens: H=18:33:52 37.7°N, 23.2°E M _L =3.6 Aftershock.
		PAT	Z	ePg	18	34	18.9	140	
		VLS	Z	ePn	18	34	30.6	240	
			Z	eiPg			35.7D		
			E	eiSg		35	06.9		
		VAM	Z	ePn	18	34	33.9	270	
			N	eiSb		35	07.2		
		PLG	Z	eiPn	18	34	38.1D	300	
			Z	eiPb			40.7C		
		PRK	Z	ePn	18	34	40.8	320	
		JAN	Z	ePn	18	34	43.2	340	
71	15	JAN	Z	eiPg	07	48	53.6C	95	Athens: H=07:48:36 39.2°N, 19.8°E.
			N	eiSg		49	03.4		
		VLS	Z	ePn	07	48	58.8	130	
			E	eiSn		49	15.0		
		PLG	Z	ePb	07	49	29.3	340	
72	15	VLS	Z	iPg	09	47	44.6C	60	Athens: H=09:47:34 37.7°N, 20.8°E; M _L =3.6
			E	eiSg			52.7		
		JAN	Z	ePn	09	48	09.9	220	
		ATH	SPZ SPN	ePn eiSy	09	48	12.0 43.4	240	
		PLG	Z	e(Pn)	09	48	25.4	(345)	
		VAM	Z	e(Pn)	09	48	26.0	(355)	
		PRK	Z	ePn	09	48	45.7	505	
73	16	ATH	SPZ SPN	eiPg eiSg	00	54 55	55.9C 04.5	65	Athens: H=00:54:43 38.7°N, 23.5°E; M _L =3.0
		JAN	Z	ePn	00	55	20.9	240	
		PRK	N	eSg	00	56	06.0	265	
		VLS	Z	ePn	00	55	25.6	275	
74	16	VAM	Z	ePn	20	43	28.3	210	Athens: H=20:42:54 34.6°N, 26.3°E
			N	eiSn			53.1		
		RHD	Z	ePn	20	43	31.7	240	
		PRK	Z	ePn	20	44	06.5	510	
		VLS	Z	ePn	20	44	23.4	645	
		PLG	Z	e(Pn)	20	44	23.4	(660)	
		JAN	Z	ePn	20	44	32.5	720	
75	16	ATH	SPZ SPN	eiPg eiSg	22	43	46.8C 54.6	60	Athens: H=22:43:35 37.6°N, 23.3°E; M _L =2.9 Aftershock.
		VLS	Z	ePn	22	44	17.6	275	
		./.							

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		VAM	Z	ePn	22	44	17.7	275	
		JAN	Z	ePy	22	44	26.1	310	
		PRK	Z	ePg	22	44	32.0	315	
		PLG	Z	e(Pg)	22	44	39.0	(350)	
76	17	PRK	Z	i!Pg	18	41	29.9D	85	Athens: H=18:41:14 40.2° N, 25.9° E. M _L =3.7
		PLG	Z	ePg	18	41	51.4	205	
			N	eiSg		42	13.0		The standardized station of ATH was out of operation on ac- count of trouble in the chrono- meter.
		ATH	W.AN	eSn	18	42	29.1	285	
		JAN	Z	ePn	18	42	16.9	435	
		RHD	Z	ePn	18	42	21.7	475	
		VLS	Z	ePn	18	42	26.0	510	
		VAM	Z	ePn	18	42	27.0	515	
77	18	VLS	Z	eiPg	22	44	45.2C	80	Athens: H=22:44:30 38.8° N, 20.7° E; M _L =3.6
			E	eiSg			56.7		
		JAN	Z	eiPg	22	44	50.0	110	
			E	eiSg		45	03.8		
		ATH	SPZ	ePy	22	45	15.5	275	
			SPE	eiSn			43.0		
		PLG	Z	ePn	22	45	16.0	305	
		VAM	Z	ePn	22	45	39.9	490	
78	19	RHD	Z	ePg	18	00	43.2	115	Athens: H=18:00:22 35.2° N, 28.2° E. M _L =3.8
			E	eiSg			57.8		
		VAM	Z	ePn	18	01	15.9	360	
			Z	ePb			19.4		
		PRK	Z	ePn	18	01	31.8	485	
		ATH	SPZ	eiPn	18	01	33.6	500	
			SPN	eiSn		02	24.5		
79	20	VLS	ZE	iPg	02	33	43.9	Local	
			E	iSg			44.6	shock	
		JAN	Z	ePn	02	34	10.1	165	
80	21	VAM	Z	ePn	13	38	27.9	210	Athens: H=13:37:54 35.9° N, 22.0° E; M _L =3.8
			Z	eiPg			31.2C		
			N	eSg			56.5		
		VLS	Z	eiPn	13	38	38.7C	290	
			E	e(Sn)		39	09.5		
		ATH	SPZ	ePn	13	38	40.6	300	
			SPZ	ei(Py)			44.3C		
			SPE	ei(Sb)		39	17.2		
		JAN	Z	eiPn	13	38	57.0C	440	
			Z	eiPb		39	02.5D		
		PLG	Z	ePn	13	39	05.1	510	
			Z	eiPy			18.7D		
		./.							

ATHENS SHOCKS IN THE AREA OF GREECE

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N° Date Stat. Comp. Phase h m s D

Remarks

	./.	PRK	Z	ePn	13	39	07.2	520	
			Z	e(Pb)			11.2		
		RHD	Z	ePn	13	39	10.5	545	
			Z	ePb			17.0D		
81	21	ATH	SPZ	iPg	14	40	37.4C	60	Athens: H=14:40:27 38.5°N, 23.7°E; M _L =2.9
			SPE	iSg			50.0		
		PLG	Z	eiPn	14	41	00.1C	205	
		PRK	Z	ePn	14	41	04.2	235	
		VAM	Z	eiPn	14	41	21.8D	375	
			Z	ePb			25.8		
82	21	RHD	Z	eiPn	17	14	14.5D	230	Athens: H=17:13:38 34.4°N, 29.9°E M _L =4.8
			E	eiSn			41.5		
			E	ei(Sg)			46.5		
		VAM	Z	eiPn	17	14	50.9C	520	
		PRK	Z	eiPn	17	15	11.2C	615	
		ATH	SPZ	ePn	17	15	10.3	670	
		PLG	Z	e?(Pn)	17	15	33.1	(850)	
			Z	ePy			57.1		
		JAN	Z	ePn	17	15	51.8	990	
83	22	VLS	Z	ePn	02	37	25.4	140	Athens: H=02:37:00 37.0°N, 20.6°E.
			E	eiSg			44.4		
		PAT	Z	eSn	02	37	49.0	170	
		JAN	Z	ePy	02	37	52.6	290	
		ATH	SPZ	ePb	02	37	47.4	300	
			SPZ	eiPy			50.5C		
			SPZ	eiPg			53.6C		
		VAM	Z	ePb	02	37	58.8	370	
			Z	ePy		39	01.9		
		PLG	Z	ePn	02	38	04.7	450	
84	22	ATH	SPZNE	iPg	07	48	21.6CNE	50	Athens: H=07:48:12 37.6°N, 23.4°E; M _L =3.9 Felt in Attica (III at Athens).
			SPE	iSg			26.4		
		PAT	Z	ePn	07	48	37.9	150	
		VLS	Z	ePn	07	48	49.8	240	
			Z	eiPg			55.3D		
			E	eiSb		49	20.3		
			E	eiSg			25.3		
		VAM	Z	ePn	07	48	50.4	245	
			Z	eiPg			55.3		
		PLG	Z	eiPn	07	48	56.9D	300	
		JAN	Z	ePn	07	48	58.4	310	
		PRK	Z	ePn	07	48	58.8	310	
			Z	eiPb		49	03.3D		
			N	eiSn			32.3		
			E	eiSy			41.2		

./.

ATHENS SHOCKS IN THE AREA OF GREECE JULY 1968

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		./.	RHD	Z	ePb	07	49	20.0	440
85	22	PRK	Z	eiPg	09	22	21.4D	80	Athens: H=09:22:04 39.8°N, 25.6°E; M _L =3.8
			N	eiSg			30.3		
		PLG	Z	eiPn	09	22	36.7C	200	
			N	eiSn		23	00.7		
			N	ei(Sb)			02.4		
		ATH	SPZ	ePn	09	22	44.0	255	
			SPZ	e(Pg)			49.0		
			SPN	eiSy		23	17.6		
		JAN	Z	ePb	09	23	06.2	400	
			Z	eiPg			10.2D		
			Z	eiPg			14.7		
			E	ei(Sb)			52.0		
		RHD	Z	eiPn	09	23	09.6D	460	
		VLS	Z	ePb	09	23	15.7	465	
		VAM	Z	ePn	09	23	14.3	495	
86	22	PRK	ZNE	iPg	10	12	51.8CSE	80	Athens: H=10:12:37 39.8°N, 25.7°E; M _L =3.7
			N	eiSg		13	01.4		
		PLG	Z	ePn	10	13	07.4	185	
			Z	eiPg			09.7C		
			N	eiSg			32.7		
		ATH	SPZ	eiPn	10	13	19.0D	275	
			SPN	eiSn			50.0		
		JAN	Z	ePn	10	13	38.0	420	
		VAM	Z	ePn	10	13	48.2	505	
			Z	eiPb			54.6C		
87	23	JAN	Z	ePn	02	40	08.6	150	Athens: H=02:39:42 41.0°N, 21.2°E. Felt in Florina (III+ at Florina).
			E	eiSg			28.8		
		PLG	Z	ePn	02	40	13.4	190	
			Z	eiPg			15.8D		
			N	ei(Sn)			35.1		
		VLS	Z	e(Pn)	02	40	31.1	320	
			Z	eiPy			36.1C		
			E	eiSn		41	06.8		
		VAM	Z	ePn	02	41	15.1	675	
88	24	PLG	Z	ePg	10	35	41.8	70	Athens: H=10:35:29 41° N, 24° E;
		PRK	Z	ePn	10	36	06.6	275	
			N	eiSg			40.7		
		JAN	Z	ePy	10	36	29.6	300	
			E	eSb			51.1		
		VLS	Z	ePn	10	36	29.5	420	
89	24	VLS	Z	ePg	14	31	37.1	100	Athens: H=14:31:18 37.3° N, 20.9° E; M _L =3.6
			E	eiSg			49.9		
		JAN	Z	ePg	14	32	05.0	260	
		./.							

ATHENS		SHOCKS IN THE AREA OF GREECE					JULY 1968	Page 12
N°	Date	Stat.	Comp.	Phase	h	m	s	Remarks
		./.						
		ATH	SPZ	ePg	14	32	06.0	270
		VAM	Z	ePn	14	32	10.1	355
		PLG	Z	ePn	14	32	16.8	405
90	24	PAT	Z	iPg	20	56	22.9D	35
		VLS	ZE	eiPg	20	56	36.6DE	110
		JAN	Z	ePn	20	56	45.5	165
			E	eiSn	57	06.2		
		ATH	SPZ	eiPn	20	56	47.0	180
			SPZNE	eiPy			47.5CSE	
			SPZN	eiPg			49.1DN	
		PLG	Z	eiPn	20	56	57.2C	260
			N	eiSg	57	33.9		
		PRK	Z	eiPn	20	57	14.1C	395
			Z	eiPy			22.6D	
		VAM	Z	eiPn	20	57	16.2C	410
			Z	eiPb			20.1C	
			N	ei(Sn)			58.5	
		RHD	Z	eiPg	20	58	08.8D	620
91	25	JAN	Z	ePg	04	16	25.6	55
		PAT	Z	ePg	04	16	38.7	130
		VLS	ZE	eiPn	04	16	40.6DE	135
			E	eiSn	17	00.3		
		PLG	Z	eiPn	04	16	48.3C	200
		ATH	SPZ	ePn	04	16	55.6	260
			SPZ	ePb			57.3	
			SPZ	eiPg	17	01.5C		
		PRK	Z	eiPn	04	17	15.0C	410
			Z	eiPy			23.4	
		VAM	Z	ePn	04	17	28.4	510
92	25	JAN	Z	ePn	22	05	53.5	155
			E	eiSg	06	14.6		
		PLG	Z	ePn	22	06	09.1D	280
			N	eiSb			43.5	
		VLS	Z	ei(Pn)	22	06	15.1D	320
			E	ei(Sy)			58.4	
		PAT	Z	ePg.	22	06	25.8	335
		ATH	SPZ	ePn	22	06	33.6	465
			W.AN	eiSn	07	21.6		
		PRK	Z	ePn	22	06	43.9	555
			E	eSn	07	41.7		
		VAM	Z	ePn	22	07	04.7	720
		RHD	Z	ePn	22	07	27.8	865

Athens: H=20:56:17
 38.4°N, 21.8°E; $M_L=4.1$
 BCIS: H=20:56:17
 38.3°N, 21.9°E;
 USCGS: H=20:56:24
 38.4°N, 22.2°E; h=66 Km; $M_L=4.3$
 Felt in Aetolia (V at Do-
 kimion, IV+ at Mesolonghi, IV
 at Platanos), Achaea (IV+
 at Aeghion, IV at Patras) Phlo-
 kis (IV at Amphissa, II+ at
 Ste-Euthemia), Phthiotis (IV
 at Lamia) and Evrytania (IV at
 Karpenisi).
 Area of felt shaking about
 20.000 Km²; $r_5=45$ Km; $M.M=4.6^*$
 Macroseismic focal depth
 21 Km.

Athens: H=04:16:16
 39.5°N, 21.3°E; $M_L=3.7$
 Felt in Trikala (IV at
 Alistra, Myrophyllon).
 = 39.5°N

Athens: H=22:05:26
 41.0°N, 20.1°E; $M_L=4.7$
 BCIS: H=22:05:28
 40.9°N, 20.2°E;
 USCGS: H=22:05:28.8
 40.9°N, 20.0°E; h=22 Km; $M_b=4.5$

ATHENS SHOCKS IN THE AREA OF GREECE

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Remarks

No	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
93	27	RHD	Z	iPg	02	46	04.2D	85	Athens: H=02:45:48 35.4° N, 27.9° E; An=39 u Tn=4.8 s Ae=88 u Te=6.7 sec. BCIS: H=02:45:50 35.4° N, 27.9° E. USCGS: H=02:45:49.2 35.4° N, 27.8° E h=21 Km; Mb=5.0; M _s =5.7 M=5.1/4 (PAL), 5 1/4 - 5 1/2 (GOL), M=5.7 (PRK), 6.1 STR). The Istanbul station has reported that the shock was felt in Southwestern Anatolia.
		VAM	Z	ePn	02	46	39.4	340	
		PRK	Z	ePn	02	46	51.9	440	
			E	eiSb		47	46.1		
			N	eiSy			51.5		
		ATH	SPZNE	eiPn	02	46	54.5CNW	460	
			SPN	eiSb		47	50.1		
			SPE	iSy			57.1		
		PAT	Z	ePn	02	47	19.5	605	
		PLG	Z	ePn	02	47	22.6	685	
		VLS	Z	ePn	02	47	26.1	710	
		JAN	Z	ePn	02	47	36.4	780	
94	27	RHD	Z	eiPg	02	57	20.7D	80	Athens: H=02:57:06 35.5° N, 27.8° E; Aftershock.
			E	eiSg			30.5		
		VAM	Z	ePn	02	57	55.5	330	
			Z	eiPb			58.20		
		PRK	Z	ePn	02	58	07.5	430	
		VLS	Z	ePn	02	58	43.4	710	
95	27	RHD	Z	eiPg	07	47	35.8D	110	Athens: H=07:47:16 35.3° N, 28.4° E; Aftershock.
			E	eiSg			49.1		
		VAM	Z	ePn	07	48	12.0	385	
		PRK	Z	ePy	07	48	32.5	470	
		ATH	SPZ.	ePn	07	48	26.8	500	
			SPN	e(S _n)		49	20.8		
			SPN	eSy			36.1		
		PLG	Z	ePn	07	48	53.8	710	
		JAN	Z	ePn	07	49	06.2	810	
96	29	ATH	SPZ	eiPg	01	41	32.4C	120	Athens: H=01:41:10 38.5° N, 22.8° E; M _L =3.1
			SPE	eiSg			47.2		
		VLS	Z	e?(Pn)	01	41	44.1	195	
			Z	ePg			47.0		
		PLG	Z	eiPg	01	41	47.0	200	
		JAN	Z	ePg	01	41	49.0	210	
		VAM	Z	ePn	01	42	07.1	380	
			Z	eiPb			10.1		
97	29	RHD	Z	eiPg	02	50	13.0	70	Athens: H=02:50:00 35.6° N, 28.0° E; Aftershock.
		VAM	Z	ePn	02	50	50.7	345	
			Z	eiPb			54.0C		
		PRK	Z	ePn	02	51	02.1	425	
			Z	eiPy			11.0D		
		ATH	SPZ	ePn	02	51	05.5	460	
			SPE	eiSn			53.5		
		./.							

N°	Date	Stat.	Comp.	Phase	h	m	s	D
		JAN	Z	e?(Pn)	02	51	42.0	(745)
98	29	ATH	SPZ SPN	eiPn eiSg	03	11	05.70 22.7	140
		PRK	Z Z N	ePn ePg eiSn	03	11	09.1 10.8 30.5	170
		PLG	Z	ePn	03	11	09.8	175
		JAN	Z	ePg	03	11	33.3	300
		VAM	Z	ePn	03	11	41.6	430
99	29	PRK	Z	eiPg	05	50	05.1D	120
		ATH	SPZ SPNE	eiPn eiSn	05	50	13.5 34.6	170
		PLG	Z	ePn	05	50	14.2	180
		JAN	Z	ePn	05	50	35.7	350
		VAM	Z Z Z	ePn ePb eiPg	05	50	44.3 49.4 59.3	420
100	30	RHD	Z E	eiPg eiSg	01	18	13.5D 22.6	70
		VAM	Z Z	ePn eiPb	01	18	51.6 54.5D	350
		PRK	Z Z	eiPn ei(Pb)	01	19	03.8C 09.3D	440
		ATH	SPZ SPZ SPZ	ePn eiPb eiPy	01	19	06.8 11.6 17.1C	470
		PLG	Z	ePb	01	19	43.3	690
		JAN	Z	e?(Pn)	01	19	49.3	(800)
101	30	RHD	Z E	eiPn eiSg	01	30 31	59.3C 08.3	70
		VAM	Z Z Z	ePn ePy eSn	01	31 32	36.8 43.6D 15.5	360
		PRK	Z	ePn	01	31	44.4	415
		ATH	SPZ SPN SPZ	ePn eiSn eiSg	01	31 32 33	49.1 37.2 01.8	460
		PLG	Z	ePb	01	32	31.2	705
		JAN	Z	e?(Pn)	01	32	34.0	(810)
102	30	VLS	Z E	ePn eiSn	09	24	22.1 43.2	170
		./.						

Athens: H=03:10:40
39 1/4° N, 24 1/4° E; M_L=3.0

Athens: H=05:49:44
39.2° N, 24.9° E; M_L=3.1

Athens: H=01:18:00
35.5° N, 28.1° E; M_L=4.3
Aftershock.

The Station of PRK was out of operation from 17h of 30 July till 19 August on account of station's reparation.

Athens: H=01:30:44
35.6° N, 28.1° E; M_L=4.3
Aftershock.

Athens: H=09:23:53
36.7° N, 20.9° E;
Felt in Messenia (IV+ at Meligala).

JULY

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Page

Nº	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
----	------	-------	-------	-------	---	---	---	---	---------

Station	Time	Lat	Long	Mag	Notes
JAN	Z	ePn	09 24	42.2	330
VAM	Z	ePn	09 24	42.9	335
103 31 PAT	Z	e(Pn)	02 57	48.6	75
	Z	ePg		52.8	
VLS	ZE	eiPn	02 58	00.4CW	130
	E	eiSg		16.8	
ATH	SPZ	eiPg	02 58	09.9D	190
	SPN	eiSn		29.6	
JAN	Z	ePn	02 58	14.7	245
	E	eiSb		44.8	
VAM	Z	ePg	02 58	35.0	330
	E	eSg		59 14.9	
PLG	Z	ePn	02 58	27.2	350
104 31 VLS	Z	eiPg	09 22	02.0DW	40
PAT	Z	ePg	09 22	08.3	75
JAN	Z	ePn	09 22	25.9	185
	E	eiSg		50.9	
ATH	SPZ	eiPn	09 22	31.9	235
	SPZ	iSn		58.7	
PLG	Z	ePn	09 22	43.7	330
VAM	Z	eiPn	09 22	51.7D	390
105 31 JAN	ZN	eiPg	14 26	31.9DN	30
	E	eiSg		34.7	
VLS	Z	ePn	14 26	58.4	190
	Z	ei(Py)		59.6	
	E	eiSg	27	24.4	
PLG	Z	ePn	14 26	59.4	200
	Z	eiPg		02.7C	
ATH	SPZ	ePb	14 27	15.6	310
	SPZ	eiPg		22.5	
	SPE	iSn		47.3	
VAM	Z	ePn	14 27	46.4	560
	Z	e(Pb)		52.1	
106 31 RHD	ZE	iPg	19 29	41.9DW	65
VAM	Z	ePn	19 30	16.4	315
	Z	ei(Pb)		18.4D	
	N	eiSy		58.4	
ATH	SPZ	eiPn	19 30	32.6C	445
	SPZ	iPg		37.6C	
	SPNE	iSg	31	42.1	
PAT	Z	ePg	19 30	56.1	630

ATHENS SHOCKS IN THE AREA OF GREECE

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N° Date Stat. Comp. Phase h m s D Remarks

°/°

PLG Z ePn 19 30 58.1 650
Z eiPb 31 06.9

VLS Z ePn 19 31 05.0 700

JAN Z e?(Pn)19 31 14.2 (770)

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
107	1	PRK	Z	ei!P	10	57	26.2D	81.0°	USCGS:H=10:45:11.9 36.0° N, 139.3° E. Honshu Japan. h=67 Km ; Mb=5.9
		RHD	Z	eiP	10	57	31.0D	81.5°	
		PLG	Z	eiP	10	57	35.6D	82.0°	
		ATH	LPZ LPN	eiP eiS	10 11	57 08	42.0D 28.0D	83.5°	
		VAM	Z	eiP	10	57	49.7D	84.0°	
		VLS	Z	eiP	10	57	51.1D	84.5°	
108	2	ATH	LPZ LPZ LPN	eP eiPP eiS	03 04	58 02	42.0 40.0 26.0	100.0°	USCGS:H =03:44:48.9 17.6° N, 100.3° W. Gaerrero , Mexico; h=41 Km; Mb=5.9
109	4	PRK	Z	eiP	07	24	35.6D	80.5°	
		PLG	Z	eiP	07	24	37.7D	81.0°	
		RHD	Z	eiP	07	24	43.7	82.5°	USCGS:H=07:12:24 43.9° N, 147.2° E; Kurile Islands h=42 Km ; Mb=4.4
		JAN	Z	eiP	07	24	48.2D	83.0°	
		VLS	Z	eiP	07	24	52.8D	83.5°	
		VAM	Z	eP	07	24	54.6	84.0°	
110	5	PRK	Z	eiP	11	40	32.1C	82.0°	USCGS:H=11:28:12.6 38.5° N, 142.0° E; Near East Coast of Honshu Japan. h=43 Km; Mb=5.9 ; Ms=6.3 M=6 (BRK).
		RHD	Z	eiP	11	40	33.6C	82.0°	
		PLG	Z	eiP	11	40	36.2C	82.5°	
		ATH	LPZ LPZ LPE	eiP eiPP eiS	11	40 44 51	44.8C 04.5C 00.0	83.5°	
		VAM	Z	eP	11	40	52.3	85.0°	
		VLS	Z	eP			53.1	85.5°	
111	6	JAN	Z	ei(P)	17	47	38.7D		
		ATH	SPZ	ei(P)	17	47	48.7D		
		RHD	Z	e(P)	17	47	49.8		
		VAM	Z	ei(P)	17	47	51.8D		
		VLS	Z	e(P)	17	48	16.5		
112	7	ATH	SPZ	e	02	28	54.0		
113	10	ATH	LPZ	ePKP	00	59	44.9	120.0°	USCGS:H=00:49:45.9 10.5°N, 138.6° E. West Caroline Islands; h=33R ; Mb=5.1; Ms=5.3
114	10	PRK	Z	eP	20	52	53.0	81.0°	USCGS:H=20:40:31.2 40.2°N, 143.2°E Off East Coast of Honshu, Japan. h=33 R; Mb=5.3
		PLG	Z	eiP	20	52	55.0D	81.5°	
		RHD	Z	eiP	20	52	57.9D	82.0°	

ATHENS

SHOCKS IN THE AREA OF GREECE

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
115	12	ATH	LPZ	eiP	20	53	00.2C	84.0°	USCGS: H=00:44:36.5 39.5°N, 143.2°E. Off East Coast of Honshu, Japan. h=28 Km; Mb=6.0, Ms=5.8 M=6 1/4 (PAS), 6 (GOL).
			LPZ	eiPP		56	20.2C		
			LPN	eiS	21	03	26.2		
		VAM	Z	eP	20	53	09.7	85.0°	
		PRK	Z	eP	00	57	00.0	82.5°	
		PLG	Z	eP	00	57	01.5	83.0°	
		ATH	LPZ	eiP	00	57	02.7C	83.5°	
		RHD	Z	eiP	00	57	05.6C	84.0°	
		VLS	Z	eP	00	57	17.1	85.0°	
		VAM	Z	eP	00	57	20.2	86.5°	
116	12	RHD	Z	ei(P)	23	10	06.0D		
		PRK	Z	e(P)	23	10	27.3		
117	14	ATH	SPZ	eP	21	05	36.4	91.0°	USCGS: H=20:52:33 40.0° N, 144.2°E;
118	17	ATH	LPZ	eP	05	42	36.0	42°	
			LPE	eS		48	56.8		
119	18	ATH	LPZ	e	05	10	14.0		
120	19	JAN	Z	eiPn	20	49	14.1D	380	Athens: H=20:48:19
		VLS	Z	iPn	20	49	14.1D	380	
		ATH	SPZ	ePn	20	49	48.5	650	
			SPN	eiSn		50	55.0		
121	21	ATH	LPZ	eP	06	12	35.4		
				e		20	28.6		
				e		21	12.2		
122	21	ATH	LPZ	e(P)	17	49	14.3		
123	22	ATH	LPZ	eP	05	15	44.4	325°	USCGS: H=05:09:16 54.6° S, 1.7° E. Bouvet Islands Region. h=33 Km; Mb=4.3
124	22	PRK	Z	ePKP ₁	18	17	58.8	140.5°	USCGS: H=17:58:30.3 20.1° S, 169.0 E. New Hebrides Islands. h=34 Km; Mb=5.4 ; Ms=5.5 M=5 1/2 (PAL) ; 5.6 - 5.9 (BRK).
		VAM	Z	eiPKP ₁	18	18	08.0C	145.5°	
		PLG	Z	eiPKP ₁	18	18	10.6D	146.5°	
		RHD	Z	ePKP ₁	18	18	14.3	152°	
		ATH	LPZ	ePKP ₁	18	18	17.7	153.5°	
		VLS	Z	ePKP ₁	18	18	22.8	154°	

ATHENS

LONG DISTANCE SHOCKS

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
125	23	PLG	Z	eP	18	21	44.1	84°	USCGS: H=18:09:18.4 39.9° N, 143.4° E.
		JAN	Z	eP	18	21	53.5	86°	Off East Coast of Honshu ; Japan ; h=25 Km; Mb=4.8
126	23	PLG	Z	eP	23	15	01.1	82.5°	USCGS: H=23:02:35.5 40.3° N, 143.3° E.
		ATH	LPZ LPN	eiP eiS	23	15	08.9C 25 30.1	84.5°	Off East coast of Honshu, Japan ; h=14 Km; Mb=5.2 Ms=5.6
		JAN	Z	eP	23	15	09.9	85°	
127	24	ATH	SPZ	e?(P)	08	12	12.5		
128	24	VLS	Z	ePKP ₁	20	40	39.6	152°	USCGS: H=20:20:55.3 15.4° S, 173.2° W.
		JAN	Z	ePKP ₁	20	40	44.9	155.5°	Tonga Islands ; h=84 Km; Mb=5.3
129	25	RHD	Z	ePKP ₁	07	42	58.0	151.5°	USCGS: H=07:23:07.8 30.8° S, 178.4° W.
		PRK	Z	eiPKP ₁	07	42	58.8	152°	Kermadec Islands region ; h=60 Km; Mb=6.4
		PLG	Z	ePKP ₁	07	42	59.5	152.5°	M=6.5-6.9 (BRK); 6 3/4 - 7 (PAL, GOL); 7 - 7 1/4 (PAS).
		ATH	LPZ LPNE	iPKP ₁ eiIS ₁ KKS	07	43 55	00.0C 10.4	155°	
		JAN	Z	ePKP ₁	07	43	02.0	156°	
		VAM	Z	ePKP ₁	07	43	03.4	156.5°	
		VLS	Z	ePKP ₁	07	43	14.9	(161°)	
130	25	PLG	Z	eiP	11	02	43.4D	79°	USCGS: H=10:50:31.5 45.7° N, 146.7° E;
		PRK	Z	eiP	11	02	49.5D	81°	Kurile Islands; h=16 Km; Mb=5.9 ; Ms=5.5
		JAN	Z	eiP	11	02	52.6D	81.5°	
		RHD	Z	eP	11	02	58.3	83°	
		VLS	Z	eP	11	02	59.5	83.5°	
		VAM	Z	eP	11	03	05.1	84°	
131	26	ATH	LPZ	e(P)	06	47	52.1		
132	26	VAM	Z	eP	17	18	19.2	67.5°	USCGS: H=17:07:24.9 22.4° S, 12.6° W.
		RHD	Z	eP	17	18	33.1	69°	South Atlantic ridge ; h=33 Km; Mb=5.3
		JAN	Z	eP	17	18	36.3	70°	
		PRK	Z	eP	17	18	43.2	70.5°	
133	27	RHD	Z	ePKP ₁	11	11	13.6	142°	USCGS: H=10:51:40.1 19.2° S, 175.7° E;
		PRK	Z	ePKP ₁	11	11	13.7	142°	South of Fiji Islands h=88 Km; Mb=5.4
		PLG	Z	ePKP ₁	11	11	16.8	142.5°	
		JAN	Z	ePKP ₁	11	11	20.6C	144°	
		VAM	Z	ePKP ₁	11	11	24.4	146.5°	

ATHENS		LONG DISTANCE SHOCKS							JULY 1968	Page 21
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks	
134	27	PLG	Z	eP	17	54	23.6	86°	USCGS: H=17:41:45.8 52.5° N, 170.6° W. Fox Islands, Aleutian Islands ; h=65 Km; Mb=4.7	
		JAN	Z	eP	17	54	29.4	87°		
		VAM	Z	eP	17	54	49.2	92°		
135	28	VLS	Z	e?PKP ₁	11	18	38.8	(153°)	USCGS: H=10:58:25.7 22.5° S, 174.7° W. Tonga Islands region ; h=33 Km; Mb=5.0 ; Ms=5.2	
		ATH	LPZ	ePKP ₁	11	18	49.6	(156°)		
136	28	PLG	Z	eP	14	15	53.5	81°	USCGS: H=14:03:35.9 40.9° N, 142.3° E. Near East of Coast of Honshu, Japan. h=33 Km; Mb=4.7	
		RHD	Z	eP	14	15	55.7	82°		
		JAN	Z	e?(P)	14	17	03.6	86.5°		
137	28	PLG	Z	eP	21	24	43.6	79°	USCGS: H=21:12:38.1 55.4° N, 166.6° E Komandorsky Islands region ; h=21 Km; Mb=5.4; Ms=5.8 ; M=5 1/4 (PAL) ; 5.5 - 5.7 (BRK); 5 3/4 (GOL).	
		PRK	Z	eP	21	24	45.5	80°		
		JAN	Z	eP	21	24	52.5	81.5°		
		ATH	LPZ LPE	eiP eiS	21	24 35	57.7 06.1	83°		
		RHD	Z	eP	21	25	04.8	83.5°		
		VAM	Z	eP	21	25	09.9	85°		
138	29	ATH	LPZ LPZ LPN LPN	eiPKP ₁ eiPP eiPPS eiSS	11 36 49 56	31 00 30 09	52.40 00.00 30.7 09.2	155°	USCGS: H=11:11:59.5 22.5° S, 175.0° W. Tonga Island region; h=33 Km; Mb=5.6; Ms=6.0	
		JAN	Z	ePKP ₁	11	32	03.3	(161.5°)		
		RHD	Z	ePKP ₁	11	32	07.5	(164°)		
		PRK	Z	ePKP ₁	11	32	21.1	(167°)		
		PLG	Z	ePKP ₁	11	32	21.2	(167°)		
		VAM	Z	ePKP ₁	11	32	40.8	170°		
139	30	PLG	Z	ePP	00	10	43.8	104.5°	USCGS: H=23:52:15.0 0.2° S, 133.4° E. West New Guinea region ; h=12 Km; Mb=6.1 ; Ms=6.1 ; M=6 1/2 (PAS, PAL).	
		ATH	LPZ LPZ LPE LPN LPN	eP eiPP iSKS eiS eiPS	00 10 17 18 20	06 10 04 12 00	20.9 48.90 04.1 12.9 00.1	105°		
		PRK	Z	eP	00	06	26.6	105.5°		
		JAN	Z	ePP	00	11	13.0	108°		
		VAM	Z	eP	00	06	42.5	109°		
140	30	ATH	LPZ	ePKP ₁	04	30	04.1	155°	USCGS: H=04:10:12.1 22.4° S, 175.0° W. Tonga Islands region. h=33 R ; Mb=5.3 ; Ms=5.7	
		PRK	Z	e(PKP) ₁	04	30	31.6	(157°)		

ATHENS			LONG DISTANCE SHOCKS				JULY 1968	Page 28	
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		PLG	Z	e(PKP ₁)	04	30	34.0	(157.5°)	
		JAN	Z	e(PKP ₁)	04	30	42.7	(159°)	
		VAM	Z	ei(PKP ₁)	04	30	50.1	(161°)	
141	30	ATH	LPZ	eiP	20	52	50.5	104.5°	USCGS: H=20:38:42.0 6.9° S, 80.5° W. Near Coast of Northern Peru; h=37 Km; Mb=5.8 ; Ms=6.4 ; M=5 1/2 - 5 3/4 (PAL) ; 5 3/4 - 6 (GOL) ; 6.0-6.2 (BKS).
			LPZ	eiPP		57	04.9		
			LPE	eSKS	21	03	20.5		
			LPN	eiS		04	47.7		
			LPE	eiPS		06	16.5		

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NATIONAL OBSERVATORY OF ATHENS

SEISMOLOGICAL INSTITUTE

11 NOV 1968

V. C.



AUGUST 1968

ATHENS

NATIONAL OBSERVATORY - SEISMOLOGICAL INSTITUTE
SEISMOLOGICAL STATIONS NETWORK - GREECE
PRELIMINARY BULLETIN
AUGUST 1968

Station	Location	Type of instruments	Comp.	Mass Kg.	T ₀ sec.	T _g sec.	v:1	V	Drum speed mm/sec.
ATHENS	37°58'20"N	Benioff	Z, N, E	107.5	1	0.25		12,500	60
(ATH)	23°43'0"	Hillier	Z	1	0.82	0.25	10	5,000	60
(Attica)	h=95 m.	"	N, E	1	0.82	0.25	110	2,000	60
Cretaceous		Wood-Anderson	N, E		0.8		50	2,800	60
Limestone		Sprengnether	Z	11.25	15	100		1,500	15
		"	N, E	10.75	15	100		1,500	15
		Wiechert	Z	1300	1.6		1.4	156	ca.30
		"	N	1000	4.4		5.4	121	ca.30
		"	E	1000	5.0		5.3	143	ca.30
		Mainka	N	135	2.8		2.5	55	ca.31
		"	E	135	3.5		5.2	50	ca.31
		Kritikos	N	40	2.5		2	4	ca.40
ARCHANGELOS	36°12'59"N	Sprengnether	Z	1.14	0.5	0.5		57,600	60
(RHD)	28°07'34"E	"	E	1.14	0.5	0.5		32,000	60
Sandstone	h=170 m								
JANINA	39°39'24"N	Sprengnether	Z	1.14	0.5	0.5		40,600	60
(JAN)	20°51'03"E	"	N	1.14	0.5	0.5		8,400	60
Cretaceous	h=540 m.	"	E	1.14	0.5	0.5		6,200	60
Limestone									
PARASKEVI	39°14'46"N	Sprengnether	Z	1.14	0.5	0.5		42,800	60
(PRK)	26°16'18"E	"	N	1.14	0.5	0.5		8,000	60
Rhyolite	h=100 m.	"	E	1.14	0.5	0.5		7,600	60
PATRAS	38°14'11"N	Wiechert	Z	80	2.7	3.2		125	ca.30
(PAT)	21°44'48"								
Alluvium	h=45 m.								
POLYGYROS	40°22'25"N	Sprengnether	Z	1.14	0.5	0.5		86,400	60
(PLG)	23°26'44"E	"	N	1.14	0.5	0.5		6,000	60
Gneiss	h=580 m.	"	E	1.14	0.5	0.5		4,400	60
VALSAMATA	38°10'36"N	Sprengnether	Z	1.14	0.5	0.5		64,800	60
(VLS)	20°35'23"E	"	E	1.14	0.5	0.5		11,400	60
Cretaceous	h=375 m.								
Limestone									
VAMOS	35°34'25"N	Sprengnether	Z	1.14	0.5	0.5		56,000	60
(VAM)	24°11'59"E	"	N	1.14	0.5	0.5		15,000	60
Marly	h=225 m.	"	E	1.14	0.5	0.5		10,000	60
Limestone									

NOTE : In the "Component" column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram when it is oriented so that time increases from left to right. On all vertical component (Z) instruments upward trace motion corresponds to upward ground motion. Magnitudes of local shocks calculated from Wood-Anderson records are designated by M_L .

ATHENS SHOCKS IN THE AREA OF GREECE AUGUST 1968 Page 2

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	VLS	Z	eiPg	08	07	49.3	65	Athens: H=08:07:37
			E	iISg			57.3		38.7° N, 20.9° E.
		ATH	SPZ	ePn	08	08	16.5	255	M _L =3.6
			SPE	eiSy			49.8		The station of PRK was out of
		PLG	Z	ePy	08	08	26.8	280	operation from 17h of 30 July
		VAM	Z	ePn	08	08	44.9	475	till 04h of 19 August on account
									of station 's reparation.
2	1	VLS	Z	eiPn	15	45	56.00	125	Athens: H=15:45:33
			E	iSg		46	11.3		39.2° N, 20.8° E.
		PLG	Z	ePn	15	46	12.5	255	M _L =3.6
		ATH	SPZ	ePn	15	46	17.2	290	The station of JAN was out of
		VAM	Z	ePn	15	46	46.0	515	operation from 1 till 4 of
									August on account of trouble
									in the recording system.
3	1	PAT	Z	ePn	18	16	33.6	220	Athens: H=18:15:58
			Z	ePg			37.9		36.2° N, 21.6° E.
		VLS	Z	eiPn	18	16	35.30	235	M _L =3.9
			E	eiSn		17	02.6		
			E	eiSg			09.6		
		VAM	Z	eiPg	18	16	43.60	250	
			E	iSg		17	14.6		
		ATH	SPZ	ePn	18	16	39.0	265	
			SPZ	eiPg			45.80		
			SPN	eiSn		17	09.3		
			SPN	eiSy			14.8		
			SPN	iSg			29.2		
		PLG	Z	ePn	18	17	07.0	485	
4	1	PAT	Z	ePg	18	22	17.6	50	Athens: H=18:22:07
		VLS	Z	eiPn	18	22	33.00	140	38.5° N, 22.1° E.
			E	iSn			51.4		M _L =3.2
		ATH	SPZ	ePg	18	22	35.1	160	
			SPE	eiSg			55.0		
		PLG	Z	ePg	18	22	50.5	245	
		VAM	Z	ePn	18	23	04.3	390	
5	1	PAT	Z	eiPg	21	29	28.30	45	Athens: H=21:29:20
			Z	iSg			34.2		38.7° N, 21.7° E.
		VLS	Z	eiPg	21	29	43.00	125	M _L =3.7
			E	iSg			59.0		
		ATH	SPZ	eiPg	21	29	54.50	195	
		PLG	Z	ePg	21	30	02.9	240	
		VAM	Z	ePn	21	30	21.6	425	
6	3	ATH	SPZ	eiPg	13	49	14.80	110	Athens: H=13:48:54
			SPN	iSg			28.5		38.6° N, 22.7° E.
		VLS	Z	eiPn	13	49	25.40	190	M _L =3.4
			E	iSg			51.2		

ATHENS SHOCKS IN THE AREA OF GREECE AUGUST 1968 Page 3

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
7	4	PLG	Z	eiPn	13	49	28.6D	215	Athens: H=00:53:05 38.9° N, 22.2° E; h=50 Km; M_L=4.1 USCGS: H=00:52:57 39.0° N, 21.9° E. h=37 Km; Mb=4.2
		VAM	Z	ePn	13	49	50.0	375	
		PAT	Z	eiP	00	53	20.6C	90	
		VLS	Z	iP	00	53	29.7D	165	
		ATH	SPZ	iP	00	53	30.4C	170	
		PLG	Z	eiP	00	53	32.5D	190	
		VAM	Z	eiP	00	54	02.3D	425	
8	4	RHD	Z	eP	00	54	24.8	600	Athens: H=02:23:56 38.0° N, 21.1° E M_L=3.6
		VLS	Z	eiPg	02	24	04.0D	45	
		PAT	Z	ePg	02	24	07.5	60	
		ATH	SPZ	ePn	02	24	32.5	235	
		PLG	Z	ePn	02	24	44.3	325	
9	4	VAM	Z	ePn	02	24	52.9	395	Athens: H=09:16:54 39.8° N, 25.8° E. M_L=3.5
		PLG	Z	ePn	09	17	28.0	215	
		ATH	SPZ	ePg	09	17	44.0	280	
10	4	JAN	Z	ePn	09	17	55.5	430	Athens: H=16:24:28 40.4° N, 18.7° E.
		VLS	Z	ePg	16	25	22.3	305	
		PLG	Z	ePn	16	25	27.5	405	
11	4	RHD	Z	iPg	18	18	52.2D	95	Athens: H=18:18:35 35.3° N, 27.8° E. M_L=4.6 BOIS: H=18:18:39 35.3° N, 28.0° E; h=60 Km. USCGS: H=18:18:38 35.4° N, 27.9° E. h=41 Km, Mb=4.5
		VAM	Z	eiPn	18	19	24.1C	330	
		ATH	SPZ	eiPb	18	19	26.8D	470	
		PLG	Z	eiSn	18	19	20.0	720	
		VLS	Z	ei	18	20	24.9	770	
		JAN	Z	ePn	18	20	19.8		
		PLG	Z	ePn	18	20	08.0		

ATHENS		SHOCKS IN THE AREA OF GREECE							AUGUST 1968	Page 4
N ^o	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks	
12	4	VLS	Z	iPg	23	24	28.3C	55	Athens: H=23:24:17 37.7°N, 20.8°E. M _L =4.3 BCIS: H=23:24:19 37.7°N, 21.0°E. USGS: H=23:24:18 37.7°N, 20.7°E. h=31 Km; M _S =4.1 Felt on Zante Island (III+ at Zante) and in the region of Elis (III at Strephe).	
			E	iSg			36.1			
		PAT	Z	eiPg	23	24	38.1C	110		
		JAN	Z	ePn	23	24	52.6	225		
			E	eiSn		25	19.8			
		ATH	SPZ	eiPn	23	24	57.8C	265		
			SPZ	eiPg		25	04.0C			
			SPN	eiSb			29.8			
			SPE	eiSsy			32.4			
		VAM	Z	ePn	23	25	12.6	385		
			E	eiSg			46.6			
		RHD	Z	ePn	23	25	49.9	670		
13	5	VAM	Z	eiPg	04	34	31.6C	120	Athens: H=04:34:09 34.3°N, 24.1°E.	
			N	eiSg			46.6			
		RHD	Z	ePn	04	35	11.4	430		
		VLS	Z	ePn	04	35	24.6	530		
14	5	ATH	SPZ	eiPn	04	43	50.2C	125	Athens: H=04:43:27 38.8°N, 22.9°E. M _L =3.3	
			SPE	iSg		44	05.0			
		PLG	Z	ePn	04	43	58.5	195		
		VLS	Z	eiPg	04	44	01.5D	215		
			E	eiSg			32.4			
		JAN	Z	ePn	04	44	04.6	240		
		VAM	Z	ePn	04	44	25.9	400		
15	5	JAN	Z	iPg	07	13	42.5C	55	Athens: H=07:13:32 40.1°N, 20.1°E.	
			E	iSg			50.2			
		VLS	Z	ePn	07	14	07.2	220		
			Z	eiPy			09.1D			
			E	eiSsy			33.3			
		PLG	Z	ePn	07	14	14.0	275		
			Z	eiPy			18.5D			
			N	eiSb			48.5			
		ATH								
		ATH	SPZ	ePn	07	14	27.2	380		
		VAM	Z	ePn	07	14	59.6	625		
16	6	RHD	Z	eiPn	03	53	21.3D	165	Athens: H=03:52:53 34.9°N, 27.2°E.	
			E	iSg			43.2			
		VAM	Z	ePg	03	53	44.6	285		
		ATH	SPE	e(Sg)	03	55	11.1	(460)		
17	7	ATH	SPZNE	iPg	08	22	29.7CSW	120	Athens: H=08:22:07 38.9°N, 24.5°E. M _L =4.0	
			SPN	iSg			44.9			
		PLG	Z	iPn	08	22	37.2C	180		
		PAT	Z	ePn	08	22	47.0	255	The station of PLG was out of operation from 04h of 8th till 14h of 22nd of August, on account of trouble in the recording system.	
		./.								

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		JAN	Z	iPn	08	22	56.1D	330	
		VLS	Z	ePn	08	22	58.1	345	
		VAM	Z	ePn	08	23	05.3	400	
		RHD	Z	ePn	08	23	12.6	460	
18	9	ATH	SPZNEI	iPg SPE iSg	07	39	11.5C 25.9	120	Athens: H=07:38:50 38.9°N, 24.4°E. M _L =4.0
		JAN	Z	iPn	07	39	38.3D	330	Felt on Skyros Island (IV at Skyros).
		VLS	Z	ePn	07	39	40.2	345	
		VAM	Z	eiPn iPy	07	39	45.8C 53.3D	385	
		RHD	Z	ePn	07	39	56.2	465	
19	9	ATH	SPZ SPN	iPg iSg	07	52	07.0C 23.0	130	Athens: H=07:51:43 39.1°N, 24.2°E. M _L =3.3
		VLS	Z	ePn	07	52	32.5	325	Felt on Skyros Island (III+ at Skyros).
		JAN	Z	eiPn	07	52	33.3D	335	
		RHD	Z	ePn	07	52	50.2	465	
20	10	ATH	SPZ SPN	eiPg iSg	08	44	47.3C 54.8	60	Athens: H=08:44:36 37.8°N, 23.1°E. M _L =3.4
		PAT	Z	ePn	08	45	00.5	130	
		VLS	Z	ePg	08	45	16.3	225	
		VAM	Z N	ePn eiSb	08	45	19.7 56.2	285	
		JAN	Z	ePn	08	45	26.0	335	
		RHD	Z	ePb	08	45	49.0	470	
21	11	VLS	Z E	eiPn eiSg	07	46	29.3C 47.4	140	Athens: H=07:46:04 39.1°N, 21.6°E M _L =3.4
		JAN	Z N	eiPn eiSg	07	46	29.8C 48.8	145	
		ATH	SPZ SPN	ePg eiSn	07	46 47	46.3 07.8	235	
		VAM	Z	ePb	07	47	16.7	470	
22	11	ATH	SPZ SPN	ePn eiSn	19	27	26.3 47.7	170	Athens: H=19:26:57 39.5°N, 23.4°E M _L =3.1
		JAN	Z N	eiPn eiSn	19	27 28	33.5C 01.0	230	
		VLS	Z	ePn	19	27	40.3	280	
		VAM	Z	ePn	19	28	04.7	475	

ATHENS SHOCKS IN THE AREA OF GREECE AUGUST 1968 Page 6

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
23	14	ATH	SPZ SPZ SPE	eiPn eiPg eiSg	10	50	44.4C 48.1C 51 15.5	220	Athens: H=10:50:09 38.7°N, 26.1°E M _L =3.6
		RHD	Z	eiPn	10	50	58.3C	330	
		VAM	Z	ePn	10	51	07.2	400	
		VLS	Z	ePn	10	51	17.7	480	
24	14	ATH	SPZ SPE	ePn eiSg	11	05	44.1 06 15.9	220	Athens: H=11:05:09 38.8°N, 26.1°E. M _L =3.5
		RHD	Z	ePn	11	05	58.3	330	
		VAM	Z	ePn	11	06	09.7	420	
		VLS	Z	ePn	11	06	17.7	480	
25	14	PAT	Z	eiPn	18	23	39.4C	160	Athens: H=18:23:12 39.7°N, 21.8°E M=4.0
		VLS	Z Z E	iPn iPy iSn	18	23	44.1D 45.5C 24 07.5	195	Felt in Evrytania (V at Karoplesion) and in Kardi-tsa (IV at Metropolis).
		ATH	SPZ SPE	eiPn iSb	18	23	52.8C 24 24.6	250	In the JAN station the shock occurred in the time of the paper's change.
		VAM	Z	ePn	18	24	26.4	525	
		RHD	Z	ePb	18	24	54.9	680	
26	15	ATH	SPZ SPE	eP iS	01	07	28.0 36.2	50	Athens: H=01:07:15 38.4°N, 24.0°E; h probably =50 Km. M _L =3.1
		JAN	Z	eP	01	07	57.5	290	
		VLS	Z	eP	01	07	59.6	310	
		VAM	Z	eP	01	08	03.7	340	
27	15	RHD	Z	eiPg	02	30	05.0C	100	Athens: H=02:29:47 35 3/4°N, 27.0°E. M _L =4.8
		VAM	Z	ei(Sg)	02	31	17.1	300	
		ATH	SPZ SPE SPE SPE	eiPn iSn iSb iSy	02	30	41.4 31 25.0 32.8 37.6	390	BCIS: H=02:29:46 35.6°N, 27.0°E. USCGS: H=02:29:45.4 35.3°N, 26.8°E; Mb=4.8; h=67 Felt on Crete Island, especially in Lasithe (IV at Zakros).
		PAT	Z	eiPg	02	32	02.5	560	
		VLS	E	eiSn	02	32	14.1	620	
		JAN	Z	eiPn	02	31	21.0	690	
28	17	RHD	Z E	iPg eiSg	05	13	03.7C 17.1	110	Athens: H=05:12:44 35.6°N, 29.0°E.
		VAM	Z N	ePn eiSn	05	13	49.8 14 36.5	455	
		VLS	Z	ePn	05	14	33.0	800	

ATHENS		SHOCKS IN THE AREA OF GREECE						1968	Page 7
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
29	17	VLS	Z	ePn	07	45	19.5	210	Athens: H=07:44:45 36 1/2°N, 21°E. M _L =3.7
			E	eiSn			44.7		
		ATH	SPZ	ePg	07	45	28.0	280	
		VAM	Z	ePn	07	45	34.8	330	
		JAN	Z	ePn	07	45	36.4	340	
30	17	ATH	SPZ	ePg	20	45	03.9	210	Athens: H=20:44:25 39.2°N, 25.7°E. M _L =3.7 In the JAN station the shock occurred in the time of the paper 's change.
			SPE	eiSg			32.5		
		RHD	Z	ePn	20	45	23.4	400	
		VAM	Z	ePn	20	45	23.5	440	
		VLS	Z	ePn	20	45	30.0	450	
31	17	VAM	Z	ePn	22	30	07.2	160	Athens: H=22:29:40 36 1/2°N, 25 3/4°E. M _L =3.5
		RHD	Z	ePn	22	30	11.6	190	
		ATH	SPZ	eiPn	22	30	16.3	230	
			SPN	eiSn			43.2		
32	19	VAM	Z	eiPn	15	36	26.20	235	Athens: H=15:35:49 33 1/2°N, 26°E. PCIS: H=15:35:47 33.8°N, 25.8°E.
			N	eiSg		37	00.6		
		RHD	Z	ePn	15	36	43.6	370	
			N	eiSn		37	23.6		
		ATH	SPZ	ePn	15	37	03.5	530	
		JAN	Z	ePn	15	37	33.3	765	
33	21	VLS	Z	iPg	18	42	14.6	120	Athens: H=18:41:53 37.1°N, 20.6°E. M _L =3.9 In PAT station the shock was lost in the paper change.
			E	eiSg			29.6		
		ATH	SPZ	ePn	18	42	38.8	300	
			SPN	iSy		43	18.7		
		VAM	Z	ePn	18	42	48.2	380	
			Z	ePb			52.3		
		PRK	Z	ePb	18	43	17.4	550	
			Z	e(Py)			24.7		
		RHD	Z	e?(Pn)	18	43	27.4	(680)	
34	22	PRK	Z	eiPn	07	57	19.5	D130	Athens: H=07:56:56 38 1/4°N, 27°E. M _L =3.6
			NE	eiSg			35.6		
		RHD	Z	eiPb	07	57	38.8	D270	
		ATH	SPZ	ePn	07	57	37.8	280	
			SPZ	eiPb			40.3		
		VAM	Z	ePn	07	57	56.9	420	
35	22	PRK	Z	iPn	14	29	34.0	DN140	Athens: H=14:29:09 40.1°N, 25.1°E; M _L =4.0
			NE	iSg			51.0		
		ATH	SPZ	eiPn	14	29	49.1	IC 260	
			SPZ	eiPg			55.7		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		VLS	Z	ePn	14	30	15.0D	460	
			E	eSn		31	03.0		
		RHD	Z	eiPn	14	30	21.2D	510	
		VAM	Z	ePn	14	30	23.5	530	
36	22	ATH	SPZ SPNE	eiPg iSg	22	46	36.7D 43.3	50	Athens: H=22:46:28 37.7°N, 23.4°E. M _L =2.6
		VLS	Z	ePn	22	47	07.4	255	Aftershock of July 4.
		VAM	Z	ePn	22	47	09.5	270	
		PLG	Z	ePn	22	47	11.7	290	
		JAN	Z	e?(Pn)	22	47	13.7	300	
			Z	ePg			21.1		
37	23	ATH	SPZ SPNE	eiPg iSg	12	21	47.5C 55.7	65	Athens: H=12:21:36 37.7°N, 23.2°E M _L =2.6
		VLS	Z	ePb	12	22	15.8	245	Aftershock.
			Z	ePg			20.1		
		VAM	Z	ePn	12	22	17.6	270	
			Z	ePb			19.3		
			N	e(Sn)			46.5		
		PLG	Z	ePb	12	22	22.2	290	
			Z	eiPg			28.0		
38	24	ATH	SPZE SPNE	eiPg iSg	18	17	46.2CE 54.5	65	Athens: H=18:17:34 37.5°N, 23.4°E. M _L =3.2
		VAM	Z	ePy	18	18	16.4	250	Aftershock.
			E	eiSn			43.7		
			N	ei(Sb)			45.7		
			E	eiSy			47.2		
			E	eiSg			50.7		
		VLS	Z	e(Pn)	18	18	14.2	255	
			Z	eiPy			17.1		
			Z	eiPg			19.4		
			E	eSn			42.6		
		PLG	Z	ePn	18	18	19.0	295	
		JAN	Z	ePb	18	18	24.6	320	
			N	eSb		19	02.0		
		PRK	Z	ePn	18	18	23.9	330	
39	24	RHD	Z	eiPn	19	28	13.8C	215	Athens: H=19:27:39 34.4°N, 26.8°E
			E	eSn			39.1		
		VAM	Z	ePn	19	28	18.4	250	
			Z	ePb			20.0		
			E	eiSb			49.7		
		PRK	Z	ePn	19	28	53.8	530	
		PLG	Z	e?(Pn)	19	29	20.7	(745)	

ATHENS		SHOCK IN THE AREA OF GREECE						AUGUST 1968	Page 9
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
40	25	VAM	Z	ePg	07	23	39.0	85	Athens: H=07:23:23 35.0° N, 23.4° E. $M_L=3.8$
			E	eiSg			50.9		
		ATH	SPZ	ePn	07	24	12.0	330	
			SPZ	ePy			18.2		
		VLS	Z	ePn	07	24	24.7	430	
		RHD	Z	ePn	07	24	29.8	465	
		PRK	Z	ePn	07	24	37.9	530	
		JAN	Z	ePn	07	24	41.0	560	
		PLG	Z	ePn	07	24	45.5	590	
41	25	JAN	Z	ePg	11	31	19.5	110	Athens: H=11:30:59 39.2° N, 19.6° E.
			N	eiSg			33.7		
		VLS	Z	ePn	11	31	24.5	140	
			E	eiSg			41.2		
		PLG	Z	e(Pn)	11	31	52.5	350	
			Z	eiPg		32	03.0		
42	26	ATH	SPZ	eiPg	00	24	31.7	60	Athens: H=00:24:20 37.7° N, 23.3° E; $M_L=2.9$ Aftershock of July 4.
			SPNE	eSg			39.9		
		VLS	Z	ePn	00	24	59.0	245	
			Z	ePg		25	03.5		
		VAM	Z	ePn	00	25	01.6	270	
			E	eiSb			35.7		
		PLG	Z	ePn	00	25	04.6	295	
		PRK	Z	e(Py)	00	25	13.6	(320)	
			Z	ePg			18.1		
43	26	VAM	Z	ePn	20	57	35.7	200	Athens: H=20:57:03 35.1° N, 26.3° E. $M_L=4.1$ Felt on Crete Island ; especially in the region of Lasithi (IV+ at Zakros). The standardised station of ATH was out of operation on account of trouble in the control units from 13h of 26 till 19h and 20 m. of 28 August.
			Z	eiPy			36.7		
			E	eiSg		58	03.7		
		RHD	Z	eiPn	20	57	36.50	205	
			E	eiSy		58	03.4		
		ATH	W.ANeSn		20	58	44.0	400	
		PRK	Z	ePn	20	58	07.7	450	
			Z	eiPb			13.2		
		VLS	Z	eiPn	20	58	27.5	610	
		PLG	Z	ePn	20	58	32.6	645	
		JAN	Z	e?(Pn)	20	58	42.3	(720).	
44	26	VAM	Z	eiPn	21	10	17.20	195	Athens: H=21:09:45 35 1/2° N, 26 1/2° E; $M_L=3.1$ Aftershock.
			E	eiSg			44.7		
		RHD	Z	eiPn	21	10	18.0	200	
			E	eiPy			18.8		
		ATH	W.AN	eSg	21	11	33.1	360	
		PRK	Z	e?(Pn)	21	10	42.7	(400)	
		PLG	Z	e?(Pn)	21	11	03.3	(560)	
		VLS	Z	ePy	21	11	18.9	565	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
45	26	PAT	Z	ePg	21	43	43.2	20	Athens: H=21:43:38 38.4°N, 21.8°E.
			Z	eiSg			46.2		
		VLS	Z	ePg	21	43	58.3	110	
		PLG	Z	ePy	21	44	24.6	290	
			Z	ePg			27.0		
		VAM	Z	e?(Pb)	21	44	39.4	(390)	
			Z	ePy			43.2		
46	27	VAM	Z	ePn	10	31	34.5	190	Athens: H=10:31:03 35.3°N, 26.3°E. M _L =4.0 Aftershock.
			Z	eiPy			35.3 ^D		
			N	eiSn			57.5		
		RHD	Z	eiPn	10	31	34.7	190	
		ATH	W.ANE	eSn	10	32	40.9	385	
		PRK	Z	ePn	10	32	05.8	440	
			Z	ePy			15.8 ^C		
		VLS	Z	ePn	10	32	25.7	590	
		PLG	Z	eiPn	10	32	29.4	D620	
		JAN	Z	ePn	10	32	37.0	680	
47	28	PRK	ZNE NE	iPg iSg	06	02	55.2	CNW60	Athens: H=06:02:44 38.7°N, 26.4°E. M _L =3.5
						03	03.0		
		ATH	W.AN W.AN	eSn eSg	06	03	51.8	245	
						04	00.6		
		RHD	Z	e(Pn)	06	03	28.6	300	
			Z	ePg			37.6		
		PLG	Z	ePn	06	03	31.3	315	
			Z	eiPy			37.2 [~]		
			Z	eiSg			40.0 ^D		
		VAM	Z	ePn	06	03	44.5	420	
			Z	ei(Py)			52.9 ^C		
		JAN	Z	ePb	06	03	59.9	490	
48	28	RHD	Z	eiPg	18	07	50.1	90	Athens: H=18:07:34 35.4°N, 27.7°E.
			E	eiSg		08	01.8		
		VAM	Z	ePb	18	08	26.0	330	
			Z	eiPy			29.8 ^C		
			Z	ei(Pg)			34.1 ^C		
			N	eSb		09	04.0		
		PRK	Z	ePn	18	08	37.0	440	
		PLG	Z	e?(Py)	18	09	23.5	(670)	
49	29	PRK	Z	eiPn	12	00	28.6	D 140	Athens: H=12:00:04 38.9°N, 27.9°E.
			NE	eiSg			46.1		
		RHD	Z	ePn	12	00	49.9	305	
			Z	ePb			52.7		
			N	eSn		01	27.8		
		PLG	Z	ePn	12	01	04.5	420	
			Z	ei(Py)			14.2 ^D		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
50	30	JAN	Z	ePn	04	03	42.9	275	Athens: H=04:03:01 41.6°N, 19.0°E
			Z	eiPg			50.00		
			E	e(Sn)		04	13.0		
			E	eiSg			22.8		
		PLG	Z	eiPn	04	03	56.7D	380	
			Z	eiPy		04	04.80		
		VLS	Z	ePn	04	03	58.8	400	
			E	eiSn		04	41.2		
		VAM	Z	ePn	04	04	54.8	840	
51	31	VLS	Z	ePn	04	23	02.0	240	Athens: H=04:22:24 36.1°N, 20.5°E; M _L =3.8
			Z	ePy			04.6		
			E	eSn			30.0		
		ATH	SPZ	ePn	04	23	15.4	350	
			SPZ	ei(Pb)			19.6		
			SPN	eiSn			54.0		
		VAM	Z	ePb	04	23	20.8	360	
		JAN	Z	ePb	04	23	27.5	410	
		PLG	Z	ePn	04	23	40.0	540	
52	31	RHD	Z	iPg	08	35	01.80	80	Athens: H=08:34:48 36.5°N, 28.8°E.
			E	eiSg			10.8		
		PRK	Z	ePn	08	35	44.2	380	
			Z	eiPb			47.4D		
			Z	eiPg			56.1C		
		VAM	Z	ePn	08	35	51.0	440	
		VLS	Z	e?(Pn)	08	36	38.6	(800)	

CONTINUAT

ATHENS LONG DISTANCE SHOCKS AUGUST 1968 Page 11

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	ATH	LPZ	eiPKP	00	33	58.40	156.5°	USCGS: H=00:14:16 26.8° S, 177.5° W. South of Fiji Islands; h=123 Km; Mb=5.6
		PLG	LPZ	eiPP		38	13.8		
		PLG	Z	e(PKP)	00	34	32.7		
		RHD	Z	e(PKP)	00	34	34.1		
2	1	PLG	Z	eiP	20	31	58.10	85.5°	USCGS: H=20:19:21.9 16.5° N, 122.2° E. Luzon, Philippine Islands; h=36 Km; Mb=5.9; Ms=7.3 M=7 (PAS); 6.5 - 7.0 (BRK); 7 (COL).
		RHD	Z	eiP	20	31	59.00	86.0°	
		ATH	LPZ	iP	20	32	00.00	86.0°	
			LPZ	iPP		35	12.00		
			LPN	iS		42	28.4		
		VAM	Z	eiP	20	32	04.10	86.5°	
		PAT	Z	eiP	20	32	09.80	87.0°	
		VLS	Z	eiP	20	32	12.30	87.5°	
3	2	RHD	Z	eP	13	36	45.6	31.5°	USCGS: H=13:30:23.3 27.5° N, 60.9° E. Southern Iran h=62 Km; Mb=5.7
		VAM	Z	eiP	13	36	47.10	32.0°	
		PLG	Z	eiP	13	36	56.40	33.0°	
		ATH	LPZ	eP	13	37	08.00	34.0°	
		VLS	Z	eP	13	37	12.8	35.0°	
4	2	VLS	Z	eP	14	20	30.8	100.5°	USCGS: H=14:06:43.9 16.6° N, 97.7° W. Oaxaca, Mexico. h=40 Km; Mb=6.3; Ms=7.1; M=7 - 7 1/4 (PAS), 6.8 (BRK); 6 3/4 - 7 (PAL); 7 - 7 1/4 (COL).
		PLG	Z	eiP	14	20	32.40	101.0°	
			Z	eiPP		24	45.90		
		ATH	LPZ	iP	14	20	40.00	102.0°	
			LPZ	iPP		24	46.0		
			LPN	iS		31	16.4		
		VAM	Z	eiP	14	20	42.40	102.5°	
5	3	PLG	Z	eiP	05	07	04.50	82.0°	USCGS: H=04:54:32.7 25.6° N, 128.5° E. Ryukyn Islands. h=19 Km; Mb=6.4 Ms=6.7 M=6 3/4 (PAS); 6.7 - 6.9 (BRK).
		ATH	LPZ	eiP	05	07	08.40	83.5°	
			LPN	iS		17	36.4		
		RHD	Z	eiP	05	07	10.10	84.0°	
		VAM	Z	eiP	05	07	14.00	85.0°	
		PAT	Z	eiP	05	07	14.30	85.0°	
		VLS	Z	eiP	05	07	14.90	85.5°	
6	3	PLG	Z	eiP	06	37	42.60	85.0°	USCGS: H=06:25:05.8 16.5° N, 122.3° E Luzon, Philippine Islands h=37 Km; Mb=5.9; Ms=5.9
		RHD	Z	eiP	06	37	43.90	85.5°	
		ATH	SPZ	eiP	06	37	44.50	86.0°	
		VAM	Z	eiP	06	37	48.10	87.0°	
		VLS	Z	eiP	06	37	57.30	87.5°	

LONG DISTANCE SHOCKS AUGUST 1968 Page 12

No	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
7	4	PLG	Z	eiP	11	54	38.60	95.5°	USCGS: H=11:41:24.8 6.8° N, 126.8° E;
		RHD	Z	eP	11	54	39.1	95.5°	Mindanao, Philippine Islands.
		ATH	LPZ	eiPP	11	54	40.60	96.0°	h=107 Km; Mb=5.7
			LPZ	iPP		58	36.00		M=6 1/4 (PAS); 6.3 - 6.5 (BRK).
			LPN	iS	12	05	21.1		
		VAM	Z	eiP	11	54	42.60	96.5°	
		VLS	Z	eP	11	54	52.8	98.0°	
8	5	JAN	Z	eiP	16	29	16.90	80.5°	USCGS: H=16:17:04.8 33.3° N, 132.2° E.
		PLG	Z	eiP	16	29	18.60	81.0°	Shikoku, Japan
		ATH	LPZ	eiP	16	29	25.60	81.5°	h=41 Km; Mb=6.3 Ms=6.1
			LPZ	eiPP		32	36.00		M=7 - 7 1/4 (PAS); 6.4 - 6.6
			LPE	iS	16	39	38.0		(BRK).
		VAM	Z	eiP	16	29	31.30	82.5°	
		RHD	Z	eiP	16	29	32.10	83.0°	
		VLS	Z	eiP	16	29	36.40	84.5	
9	7	PLG	Z	iP	08	12	29.80	81.0°	USCGS: H=08:00:13.4 43.1° N, 144.6° E.
		ATH	SPZ	eiP	08	12	34.70	82.5°	Hokkaido, Japan. Region.
		JAN	Z	iP	08	12	35.60	83.0°	h=54 Km; Mb=5.6
		VLS	Z	eiP	08	12	42.60	83.5°	
		VAM	Z	eiP	08	12	44.90	84.0°	
10	8	ATH	LPZ	eiP	05	07	47.60	84.5°	USCGS: H=04:55:10.0 36.4° N, 141.4° E.
			LPZ	eiPP		11	07.60		Near East Coast of Honshu, Ja-
		JAN	Z	eiP	05	07	50.10	85.0°	pan. h=41 Km; Mb=5.4
		VLS	Z	eP	05	07	50.4	86.0°	
		VAM	Z	eiP	05	07	55.90	86.5°	
11	10	RHD	Z	eiP	02	20	28.00	97.0°	USCGS: H=02:07:04.3 1.4° N, 126.2° E.
		ATH	SPZ	eiP	02	20	40.90	98.0°	Molucca Passage.
		VAM	Z	eiP	02	20	44.70	99.5°	h=33R; Mb=6.3; Ms=7.6
		PAT	Z	eiP	02	20	49.50	101.0°	M=7 1/4 - 7 1/2 (PAS); 7.6 - 8
		JAN	Z	eP	02	20	50.9	101.5°	(BRK), 7.5 (pal).
		VLS	Z	eP	02	20	54.3	102.0°	
12	10	RHD	Z	eiP	04	19	17.50	97.0°	USCGS: H=04:05:50.6 1.3° N, 126.5° E.
		ATH	SPZ	eP	04	19	28.4	98.0	Molucca Passage
		VAM	Z	eP	04	19	33.6	100.0°	h=33 R, Mb=5.7
		JAN	Z	eP	04	19	40.5	101.5°	
		VLS	Z	eP	04	19	42.1	102.0°	

ATHENS LONG DISTANCE SHOCKS AUGUST 1968 Page 13

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
13	10	ATH	SPZ	eP	04	31	38.2	15.5°	USCGS: H=04:27:59.8 36.9°N, 43.0°E. Iraq ; h=29 Km; Mb=5.0
		VAM	Z	eP	04	31	38.3	16.0°	
		JAN	Z	eP	04	32	08.5	17.5°	
		VLS	Z	eP	04	32	09.4	18.0°	
14	10	RHD	Z	eiP	06	05	11.8D	96.5°	USCGS: H=05:51:47.9 1.5°N, 126.2°E. Molucca Passage. h=33R ; Mb=6.2; Ms=6.6
		ATH	SPZ	eP	06	05	23.9	98.0°	
		VAM	Z	eP	06	05	26.9	99.0°	
		JAN	Z	eP	06	05	34.7	100.0°	
		VLS	Z	eP	06	05	37.8	101.5°	
15	14	ATH	LPZ	eP	08	09	21.5	87.5°	USCGS: H=07:56:35.5 15.1°N, 122.5°E. Philippine Islands Region. h=8 Km. Mb=5.4
			LPZ	ePP		12	51.9		
		I		ei	08	07		23.0°	
16	14	RHD	Z	eiP	22	27	30.7D	93.0°	USCGS: H=22:14:19.4 0.2°N, 119.8°E. Northern Celebes. h=23 Km. Mb=6.8 ; Ms=7.4 M=7 3/4 (PAS); 6.8 - 7.2 (BRK). 7 1/4 - 7 1/2 (PAL).
		ATH	LPZ	eiP	22	27	38.6D	94.5°	
			LPN	iS		38	29.8		
		VAM	Z	eiP	22	27	41.5D	95.0°	
		JAN	Z	eP	22	27	51.1	97.0°	
		VLS	Z	eP	22	27	53.6	98.5°	
17	15	JAN	Z	ePKP	07	10	15.0	166°	USCGS: H=06:50:38.7 23.8° S, 177.4° W. South of Fiji Islands. h=188 ; Mb=5.5
		RHD	Z	ePKP	07	10	19.7	167°	
		VAM	Z	e(pPKP)	07	10	50.1	(169°)	This shock was not recorded in the station of ATH on ac- count of the change paper .
18	18	ATH	LPZ	e	18	27	45.6		
19	18	JAN	Z	eiPKP	18	56	31.3C	125°	USCGS: H=18:38:30.6 10.1° S, 159.9°E. Solomon Islands ; h=538 ; Mb=6.2
		VLS	Z	ePKP	18	56	32.2	126°	
		ATH	SPZ	ePKP	18	56	36.0	127°	
		RHD	Z	iPKP	18	56	39.9D	128°	
		VAM	Z	ePKP	18	57	29.1	130°	
20	21	ATH	LPZ	ePKP ₁	18	16	23.8	143°	USCGS: H=17:56:48.0 30.9° S, 179.1° W. Kermadec Island ; h=33 Km; Mb=5.3 ; Ms=6.4 M=6.4 - 6.6 (BRK) 6 1/2 (PAS); 6 3/4 (PAL); 6 1/2 - 6 3/4 (GOL)
		PRK	Z	e?(PKP ₁)	18	17	20.8		
		VAM	Z	e?(PKP ₁)	18	17	32.8		
21	21	ATH	SPZ	ePn	21	56	23.2	565	Athens: H=21:55:09 Probably 41 3/4°N, 28°E.
			SPZ	eiPy			36.4D		
			SPE	eiSg		57	52.7		
		RHD	Z	ePn	21	56	35.5	620	

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LONG DISTANCE SHOCKS

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
22	22	PLG	Z	eP	14	12	30.5	82°	USCGS: H=14:00:06.8 53.0°N, 171.0°E; h=33 Km; Mb=5.4; Ms=6.0
		PRK	Z	eP	14	12	31.5	82.5°	Near Islands; Aleutian Island
		ATH	LPZ	eiP	14	12	39.8	83.5°	M=5 3/4 (PAL); 5 3/4 - 6.0 (GO)
			LPZ	eiPP	15		53.8		6.0 - 6.4 (BRK).
			LPN	eiS	23		03.8		
		RHD	Z	eP	14	12	43.4	85.5°	
		VAM	Z	eP	14	12	57.0	88.5°	
23	23	PLG	Z	eP	06	55	35.8	85.5°	USCGS: H=06:42:59.6 15.7°N, 121.8°E;
		VAM	Z	eP	06	55	41.7	86.5°	Luzon, Philippine Islands h=55 Km; Mb=5.1
24	23	JAN	Z	ePP	22	53	50.0	93.5°	USCGS: H=22:36:51.3 22.0°S, 63.5° W.
		ATH	LPZ	eiP	22	49	45.7	101.5°	Santa Province, Argentina; h=
			LPN	eiS	23	00	40.1		h=533 Km; Mb=5.8; M=5.3-5.5 (BRK); 5 3/4 (PAL).
25	25	PRK	Z	eP	09	19	51.5	82°	USCGS: H=09:07:31.9 40.1°N, 143.3°E.
		PLG	Z	eP	09	19	55.5	82.5°	Off East coast of Honshu, Japa
		RHD	Z	eP	09	19	58.1	83°	h=33 Km; Mb=5.4; Ms=5.5 M=4.8-5.2 (BRK).
		ATH	LPZ	eiP	09	20	02.0	84°	
			LPZ	eiPP	23		20.0		
		JAN	Z	eP	09	20	06.5	84.5°	
		VAM	Z	eP	09	20	12.6	86.5°	
		VLS	Z	e?(P)	09	20	37.6	(91°)	
26	25	PLG	Z	e?(PKP) ₁	11	35	29.5	(147)	USCGS: H=11:15:46.3 20.0° S, 175.3° W
		RHD	Z	ePKP ₁	11	35	36.5	152.5°	Tonga Islands; h=96 Km; Mb=5.5
		PRK	Z	ePKP ₁	11	35	38.6	153°	
		VAM	Z	ePKP ₁	11	35	43.9	156°	
		JAN	Z	ePKP ₁	11	35	58.7	158°	
27	26	PRK	Z	ePKP ₁	09	45	39.1	140°	USCGS: H=09:25:58.7 16.3° S, 178.0° E.
		RHD	Z	ePKP ₁	09	45	39.5	149.5°	Fiji Islands; h=25 Km; Mb=5.7 Ms=5.1 M=4.8-5.4 (BRK).
		PLG	Z	ePKP ₁	09	45	40.6	150.5°	
		JAN	Z	ePKP ₁	09	45	46.4	(C)152°	
		VAM	Z	ePKP ₁	09	45	48.7	153.5°	
		VLS	Z	ePKP ₁	09	45	49.4	155°	
28	28	RHD	Z	ePKP ₁	12	10	09.5	145°	USCGS: H=11:50:30.4 20.0° S, 176.3° E;
		PRK	Z	ePKP ₁	12	10	15.0	148.5°	South of Fiji Islands; h=36 Km; Mb=5.7; Ms=5.6.
		PLG	Z	ePKP ₁	12	10	16.0	149.0°	M=5 1/4 - 5 1/2 (GOL); 5.7 (PAL)
		JAN	Z	ePKP ₁	12	10	20.6	151.5°	5.7 - 6.0 (BRK); 6 - 6 1/4 (PAS)



N° Date Stat. Comp. Phase h m s D

		VAM	Z	ePKP ₁	12	10	20.7	151.5°	
		VLS	Z	e?(PKP ₁)	12	10	38.3	(155°)	
29	28	RHD	Z	eiP	20	54	48.10	97°	USCGS: H=20:42:16.7 15.6° N, 122.0° E;
		PRK	Z	eP	20	54	51.0	97.5°	Philippine Islands region; h=15 Km; Mb=5.7; Ms=6.1
		PLG	Z	eiP	20	54	59.0°(C)	99°	M=5.6-5.8 (BRK); 6.0 (PAL, COL) 6 - 6 1/4 (FAS).
		ATH	LPZ	eiP	20	55	00.4	99.5°	
		VAM	Z	eP	20	55	05.0	101.5°	
		JAN	Z	eP	20	55	09.2	102.0°	
		VLS	Z	eP	20	55	12.2	102.5°	
30	29	PRK	Z	eP	01	48	45.4	83.5°	USCGS: H=01:36:18.8 15.4° N, 121.9° E;
		RHD	Z	eP	01	48	50.2	84.5°	Luzon, Philippine Islands; h=17 Km; Mb=5.3
		PLG	Z	eP	01	49	01.8	87°	
		VAM	Z	eP	01	49	07.5	88°	
31	29	ATH	LPZ	eP	21	20	09.0	79°	USCGS: H=21:08:07.9 15.9° N, 121.7° E;
		RHD	Z	eP	21	20	34.0	84°	Luzon, Philippine Islands, h h=39 Km; Mb=5.2
		PRK	Z	eiP	21	20	36.70	84.5°	
		PLG	Z	eP	21	20	45.20	86°	
		VAM	Z	eP	21	20	50.60	87.5°	
		JAN	Z	eP	21	20	55.6	88.5°	
		VLS	Z	eP	21	20	58.3	89°	
32	29	JAN	Z	e?(P)	22	57	41.4		
		PRK	Z	eP	22	58	11.8		
		PLG	Z	eP	22	58	20.8		
		VLS	Z	eP	22	58	23.9		
		VAM	Z	eP	22	58	42.0		
		RHD	Z	eP	22	58	44.5		
33	30	PRK	Z	eP	02	57	10.5	81°	USCGS: H=02:44:52.9 40.0° N, 142.5° E.
		RHD	Z	eP	02	57	17.5	83°	Near east coast of Honshu Japan; h=38 Km; Mb=5.0; Ms=4
		JAN	Z	eP	02	57	24.1	84.5°	
		PLG	Z	eiP	02	57	24.5(C)	84.5°	
		VAM	Z	eP	02	57	31.6	86°	

N°	Date	Stat.	Comp.	Phase	h	m	s	D	
34	30	VAM	Z	eP	22	09	18.4	36°	USCGS: H=22:02:19.8 34.0°N, 56.3°E;
		PRK	Z	eP	22	09	22.4	36.5°	Arabian Sea
		RHD	Z	eP	22	09	26.7	37°	h=33 Km; Mb=5.2
		ATH	BPZ LPZ LPNE	eiP eiPP eiS	22	09	29.6 11 05.6 15 25.6	37.5°	
		PLG	Z	eP	22	09	41.3	38°	
		JAN	Z	eP	22	09	42.6	38.5°	
		VLS	Z	eP	22	09	48.5	39.5°	
35	31	RHD	Z	eP	10	53	04.6	25°	BCIS: H=10:47:39 34.0°N, 58.7°E.
		PRK	Z	eP	10	53	16.9	26.5°	Khorassan, Iran.
		VAM	Z	eP	10	53	33.5	28°	USCGS: H=10:47:37.4 34.0°N, 59.0°E.
		ATH	LPZ LPZ LPN	eiP eiPP eiS	10	53	36.4 54 36.0 58 26.0	28.5°	h=13 Km; Mb=6.0; Ms=7.3; M _L =6.3 (BNS); 6.5 (CLL, PRA); pvp _{ppv} =6.8 (CLL); M _{LH} =6.8 (PRA); 7.1 (Mox); M _{LV} =7.1 (MOX), M _L =7.1 (ATH); M=7.1 (STR); 7 - 7 1/4 (ROM, PAS); 7.2 (PAS); 7.4 (CLL); 7.5 (Upp) 7 1/2 (GOL); 7.7 (BRK).
		PLG	Z	eP	10	53	37.8	29°	
		PAT	Z Z	eP ePP	10	53	53.8 55 04.	31°	
		JAN	Z	eP	10	53	54.8	31°	
		VLS	Z	eP	10	53	58.2	31.5°	
36	31	RHD	Z	eP	11	39	55.3		
		PRK	Z	eP	11	40	12.9		
		VAM	Z	eP	11	40	32.5		
		PLG	Z	eP	11	40	32.7		
		VLS	Z	eP	11	40	45.7		
		JAN	Z	eP	11	40	50.8		

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15 JAN 1969

NATIONAL OBSERVATORY OF ATHENS

SEISMOLOGICAL INSTITUTE



SEPTEMBER 1968

ATHENS

NATIONAL OBSERVATORY - SEISMOLOGICAL INSTITUTE
SEISMOLOGICAL STATIONS NETWORK - GREECE
PRELIMINARY BULLETIN
SEPTEMBER 1968

Station	Location	Type of instruments	Comp.	Mass Kg.	T ₀ sec.	T _g sec.	v:l	V	Drum speed mm/min.
ATHENS	37°58'20"N	Benioff	Z, N, E	107.5	1	0.25		12,500	60
(ATH)	23°43'0	E Hiller	Z	1	0.82	0.25	10	5,000	60
(Attica)	h=95 m.	"	N, E	1	0.82	0.25	110	2,000	60
Cretaceous		Wood-Anderson	N, E		0.8		50	2,800	60
Limestone		Sprengnether	Z	11.25	15	100		1,500	15
		"	N, E	10.75	15	100		1,500	15
		Wiechert	Z	1300	1.6		1.1	150	ca.30
		"	N	1000	4.3		5.0	130	ca.30
		"	E	1000	5.2		5.4	150	ca.30
		Mainka	N	135	2.8		2.3	55	ca.31
		"	E	135	3.5		5.0	50	ca.31
		Kritikos	N	40	2.5		2.0	4	ca.40
ARCHANGELOS	36°12'59"N	Sprengnether	Z	1.14	0.5	0.5		57,600	60
(RHD)	28°07'34"E	"	E	1.14	0.5	0.5		31,600	60
Sandstone	h=170 m.								
JANINA	39°39'24"N	Sprengnether	Z	1.14	0.5	0.5		14,200	60
(JAN)	20°51'03"E	"	N	1.14	0.5	0.5		8,600	
Cretaceous	h=540 m.	"	E	1.14	0.5	0.5		6,800	60
Limestone									
PARASKEVI	39°14'46"N	Sprengnether	Z	1.14	0.5	0.5		44,000	60
(PRK)	26°16'18"E	"	N	1.14	0.5	0.5		7,800	60
Rhyolite	h=100 m	"	E	1.14	0.5	0.5		7,500	60
PATRAS	38°14'11"N	Wiechert	Z	80	2.7	3.2		125	ca.30
(PAT)	21°44'48"E								
Alluvium	h=45 m.								
POLYGYROS	40°22'25"N	Sprengnether	Z	1.14	0.5	0.5		74,000	60
(PLG)	23°26'44"E	"	N	1.14	0.5	0.5		6,800	60
Gneis	h=580 m.	"	E	1.14	0.5	0.5		5,000	60
VALSAMATA	38°10'36"N	Sprengnether	Z	1.14	0.5	0.5		57,600	60
(VLS)	20°35'23"E	"	E	1.14	0.5	0.5		11,200	60
Cretaceous	h=375 m.								
Limestone									
VAMOS	35°34'25"N	Sprengnether	Z	1.14	0.5	0.5		56,000	60
(VAM)	24°11'59"E	"	N	1.14	0.5	0.5		15,000	60
Marly	h=225 m.	"	E	1.14	0.5	0.5		10,000	60
Limestone									

NOTE : In the "Component" column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram when it is oriented so that time increases from left to right. On all vertical component (Z) instruments upward trace motion corresponds to upward ground motion. Magnitudes of local shocks calculated from Wood-Anderson records are designated by M_L .-

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N°	Date	Stat.	Comp.	Phase	h	m	s	D
1	1	PAT	Z	eiPg	00	20	56.2	80
			Z	eiSg		21	06.2	
		VLS	Z	eiPn	00	21	06.90	145
			E	iSn			25.7	
		ATH	SPZ	eiPn	00	21	13.0D	190
		JAN	Z	ePn	00	21	21.5	260
		VAM	Z	ePy	00	21	34.1	315
			Z	eiPg			36.7D	
			E	iSg		22	15.3	
		PLG	Z	eiPn	00	21	34.1C	355
			Z	eiPg	00	21	43.8D	
		PRK	Z	ePn	00	21	44.2	445
		RHD	Z	ePg	00	22	25.4	580
2	2	VAM	Z	eiPn	11	57	28.9D	200
			N	iSg			56.9	
		ATH	SPZ	ePn	11	58	03.5	470
		PRK	Z	ePn	11	58	18.2	590
		VLS	Z	ePn	11	58	27.0	655
		PLG	Z	ePn	11	58	35.8	730
		JAN	Z	ePn	11	58	38.5	750
3	2	VLS	Z	eiPg	22	50	01.60	110
			E	iSg			15.3	
		JAN	Z	ePg	22	50	29.5	260
			N	eiSy			59.2	
		ATH	SPE	eiSg	22	51	34.2	375
		PLG	Z	ePn	22	50	46.5	455
4	2	VAM	Z	ePn	23	04	25.0	270
			Z	eiPy			28.1D	
			E	iSn			55.4	
		ATH	SPZ	eiPn	23	04	43.4D	420
			SPN	eiSg		05	50.0	
		PRK	Z	ePn	23	04	48.0	450
		PLG	Z	ePn	23	05	12.6	640
		VLS	Z	ePn	23	05	16.6	670
		JAN	Z	ePn	23	05	25.0	740
5	3	VLS	Z	eiPg	08	16	14.4C	120
			E	iSg			30.0	
		JAN	Z	eiPn	08	16	23.0D	180
			E	eiSg			48.5	
		PLG	Z	ePn	08	16	49.5	395
		ATH	SPZ	ePn	08	16	51.0	400
			SPZ	eiPb			54.6C	
			SPE	eiSg		17	52.0	

Athens: H=00:20:41
37.4°N, 21.8°E. $M_L = 3.2$

Athens: H=11:56:56
34.0°N, 25.6°E. $M_L = 4.4$

The station of RHD was out of operation from 08 h of 1st till 11h of 5th of September, on account of trouble in the recording system.

Athens: H=22:49:41
37.7°N, 19.5°E.

Athens: H=23:03:44
35.3°N, 27.1°E. $M_L = 4.4$

Athens: H=08:15:52
38.6°N, 19.3°E. $M_L = 4.0$

ATHENS SHOCKS IN THE AREA OF GREECE SEPTEMBER 1968 Page 3

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
6	(3)	ATH	SPZ	eiPg	23	00	10.50	60	Athens: H=22:59:59 37.7°N, 23.2°E. M _L =3.1
			SPN	iSg			18.5		
		VLS	Z	ePn	23	00	39.0	250	
		VAM	Z	ePn	23	00	41.4	275	
			Z	eiPg			48.9D		
			N	iSg		01	20.6		
		PLG	Z	ePn	23	00	43.9	300	
		JAN	Z	ePn	23	00	44.0	300	
			Z	ePy			49.5		
7	(4)	VAM	ZNE	eiPg	06	30	11.3CNE	40	Athens: H=06:30:03 35.1°N, 24.0°E M _L =3.8
			N	iSg			16.7		
		ATH	SPE	eiSg	06	31	39.8	320	
		PRK	Z	ePb	06	31	22.8	510	
		PLG	Z	ePn	06	31	27.2	590	
8	(5)	VAM	ZNE	iPg	08	42	00.3CNE	35	Athens: H=08:41:53 35.1°N, 24.0°E. M _L =3.8
			E	iSg			05.1		
		ATH	SPZ	ePn	08	42	42.0	325	
		VLS	Z	ePn	08	42	57.5	445	
		JAN	Z	ePn	08	43	13.2	570	
		PLG	Z	ePn	08	43	15.8	590	
9	(5)	RHD	Z	iPg	18	42	56.4D	125	Athens: H=18:42:33 36.3°N, 26.7°E. M _L =4.1
			E	iSg		43	11.9		
		VAM	Z	ePn	18	43	12.4	250	
			Z	eiPb			14.2C		
		PRK	Z	eiPn	18	43	23.3D	335	
		ATH	SPZ	eiPb	18	43	27.6D	340	
		PLG	Z	ePy	18	44	00.8	530	
		VLS	Z	ePb	18	44	00.7	570	
		JAN	Z	ePn	18	44	01.3	630	
10	(5)	VLS	Z	eiPg	22	58	37.0D	80	Athens: H=22:58:22 37.5°N, 20.5°E. M _L =3.6
			E	iSg			47.4		
		JAN	Z	ePn	22	59	02.0	250	
			N	eiSy			36.0		
		ATH	SPZ	ePn	22	59	06.5	290	
		PLG	Z	ePn	22	59	20.3	405	
11	(6)	PRK	Z	eiPg	09	37	26.7D	95	Athens: H=09:37:08 40.1°N, 26.0°E
			E	iSg			38.8		
		PLG	Z	ePn	09	37	44.3	225	
			Z	eiPy			47.0		
		ATH	SPZ	eiSg	09	38	39.2	300	

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SEPTEMBER 1968

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
12	6	PRK	Z E	eiPn iSg	14	21	31.9D 47.8	125	Athens: H=14:21:08 38.7°N, 25.0°E M _L =3.4
		ATH	SPZ SPE	eiPn iSg	14	21	34.2C 53.0	140	
		PLG	Z Z E	ePn eiPg eiSg	14	21 22	45.7 50.8C 19.2	235	
		JAN	Z	ePy	14	22	08.3	360	
		VAM	Z Z E	ePn eiPy eiSg	14	22 23	04.4 11.4D 02.5	380	
		VLS	Z Z	ePn ePy	14	22	04.5 12.0	380	
		RHD	Z	ePg	14	22	13.5	395	
13	8	PRK	Z N	iPg eiSg	00	19	14.6D 27.7	105	Athens: H=00:18:55 39.5°N, 25.1°E.
		PLG	Z	eiPn	00	19	25.5D	185	
		ATH	SPZ	ePn	00	19	30.4	225	
14	9	ATH	SPZ SPZ SPN	eiPg ei! iSg	14	44	19.0C 22.3C 26.0	55	Athens: H=14:44:07 37.8°N, 23.2°E. M _L =2.6
		VAM	Z	eFn	14	44	50.4	275	
		PLG	Z	ePn	14	44	51.8	285	
		JAN	Z	ePg	14	44	58.5	290	
15	9	VAM	Z N	eiPn iSg	22	09	17.0C 32.4	120	Athens: H=22:08:54 34.5°N, 23.8°E.
		RHD	Z E	eiPn eiSn	22 10	09 10	57.0D 41.7	430	The station of PRK was out of operation from 15h of 9th till 17h of 12th.
		JAN	Z	ePn	22	10	20.5	620	
		PLG	Z	ePn	22	10	25.7	660	
16	12	ATH	SPZ SPE	eiPg iSg	10	36	42.8C 50.6	60	Athens: H=10:36:30 37.8°N, 23.2°E. M _L =3.5
		VAM	Z N	ePn eiSb	10	37	11.6 44.4	270	
		PLG	Z	eiPn	10	37	14.9D	295	
17	15	VAM	Z	eiPg	04	56	13.9C	55	Athens: H=04:56:04 35.4°N, 24.8°E; M _L =4.3
		RHD	Z	eiPn	04	56	46.8	280	
		ATH	WZ WA WE HE WZ	ePn eiPn eiSb eSy eSg	04 57	56 57	52.7 52.8 33.4 35.9 41.7	330	BCIS: H=04:56:05 35.6°N, 25.2°E; h=60 Km. The standardized station of Athens was out of operation from 07h 00m of 15 september to 11h 21m of 16 september 1968, on account of trouble in the recording system.

ATHENS SHOCKS IN THE AREA OF GREECE SEPTEMBER 1966

N° Date Stat. Comp. Phase h m s D Remarks

		./.							
		PAT	Z	eiPg	04	57	18.1	410	
		PRK	Z	eiPn	04	57	08.4	460	
		VLS	Z	ePn	04	57	11.8	480	
		PLG	Z	ePn	04	57	24.6	570	
		JAN	Z	ePn	04	57	25.2	580	
18	15	VAM	Z	eiPg	05	47	58.30	95	Athens: H=05:47:40 34.7°N, 24.8°E.
			N	eiSg		48	11.1		
		RHD	Z	eiPn	05	48	32.1	350	
		PRK	Z	ePn	05	48	54.5	530	
		PLG	Z	ePn	05	49	10.1	650	
19	15	VAM	Z	eiPg	10	59	48.60	110	Athens: H=10:59:29 34.6°N, 25.0°E.
			E	iSg	11	00	03.0		
		RHD	Z	ePg	11	00	30.9	345	
		ATH	H.Z	e?(Pb)	11	00	33.9	(385)	
		PRK	Z	ePn	11	00	43.5	530	
		PLG	Z	ePn	11	01	00.9	665	
		JAN	Z	ePn	11	01	02.3	670	
20	15	VAM	Z	eiPn	12	23	20.70	110	Athens: H=12:23:00 34 1/2° N, 24° E.
			N	eiSn			34.2		
		RHD	Z	ePg	12	24	18.0	435	
		PLG	Z	ePn	12	24	32.8	670	
21	15	VAM	Z	eiPg	12	35	05.40	110	Athens: H=12:34:45 34.6°N, 25.0°E.
			N	eiSg			18.9		
		RHD	Z	ePg	12	35	46.5	340	
		PRK	Z	ePn	12	35	59.3	415	
		PLG	Z	e(Pn)	12	36	19.9	(660)	
22	15	VAM	Z	ePn	18	00	16.6	105	Athens: H=17:59:58 About 34 3/4°N, 24 3/4°E.
			E	eiSg			29.6		
		RHD	Z	ePg	18	00	56.4	340	
		PLG	Z	e?(Pn)	18	01	21.8	(635)	
23	15	VAM	Z	ePn	19	50	06.1	115	Athens: H=19:49:45 34.6°N, 25.0°E.
			N	iSg			21.6		
		RHD	Z	ePg	19	50	45.2	335	
		PRK	Z	ePn	19	50	59.0	525	
		VLS	Z	e?(Pn)	19	51	03.2	(555)	
		PLG	Z	e?(Pn)	19	51	16.3	(660)	
		JAN	Z	ePb	19	51	25.3	660	

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No	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
24	16	VLS	Z	iPg	02	55	56.6	60	Athens: H=02:55:45 37.8°N, 20.0°E. M _L =4.0
		PAT	Z	ePn	02	56	11.0	150	
			Z	eiSn			28.3		Felt on Cephalonia Island (IV at Valsamata).
		JAN	Z	ePn	02	56	19.8	215	
			E	eiSn			45.2		
			E	eSg			49.9		
		ATH	H-Z	ePy	02	56	35.9	320	
		PLG	Z	ePn	02	56	42.1	395	
			Z	eiSn		57	23.5		
		VAM	Z	ePb	02	56	57.5	465	
		PRK	Z	ePn	02	57	03.7	565	
25	16	PRK	Z	eiPn	06	24	48.7	230	Athens: H=06:24:12 39.5°N, 28.9°E.
			Z	eiPb			50.2		
			Z	ePg			53.2		
			N	eiSb	25		18.1		
			N	eiSg			21.8		
		RHD	Z	ePn	06	25	07.2	375	
			E	eSn			47.2		
		PLG	Z	ePn	06	25	19.6	470	
26	16	VAM	Z	eiPg	09	42	31.1	80	Athens: H=09:42:16 35°N, 25°E.
		RHD	Z	ePn	09	43	05.0	325	
			Z	eiPb			10.8		
			E	eiSb			46.0		
			E	eiSg			51.0		
		PRK	Z	ePn	09	43	24.2	475	
		VLS	Z	ePn	09	43	31.5	530	
		PLG	Z	ePn	09	43	43.4	630	
27	16	VAM	Z	iPn	14	49	05.1	110	Athens: H=14 48 45 34.7°N, 25.0°E. M _L =4.1
			N	eSn			19.0		
		RHD	E	ePn	14	49	33.7	325	
			E	eiSb		50	13.9		
		ATH	SPN	eSn	14	50	27.0	400	
			SPE	eiSg			45.5		
		PRK	Z	ePn	14	50	00.2	530	
		VLS	Z	eSn	14	50	56.0	710	
		PLG	Z	ePn	14	50	18.1	670	
28	16	VAM	Z	eiPg	15	07	42.0	115	Athens: H=15:07:21 34 3/4° N, 25 1/4° E.
			N	iSg			57.1		
		RHD	Z	ePn	15	08	16.7	315	
		PRK	Z	ePn	15	08	32.7	510	
		PLG	Z	ePn	15	08	52.5	660	

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SHOCKS IN THE AREA OF GREECE

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
29	16	VAM	Z	iPg	16	08	40.1	115	Athens: H=16:08:19 34.6°N, 24.9°E M_L=4.1 The station of JAN was out of operation from 17h 14m of 16 september to 13h 14m of 19 september 1968, on account of trouble in the recording system.
			N	iSg			55.9		
		RHD	Z	e?(Pn)	16	09	13.3	360	
			E	eiSn			52.2		
		ATH	E	eiSg	16	10	15.0	385	
		PRK	Z	ePn	16	09	32.3	530	
		VLS	Z	e?(Pn)	16	09	36.4	(550)	
		PLG	Z	ePn	16	09	51.9	670	
30	16	RHD	Z	ePn	22	14	17.9	155	Athens: H=22:13:53 about 33 1/4°N, 29 1/4°E.
			Z	eSg			38.8		
		PRK	Z	eiPn	22	14	45.4	350	
		VAM	Z	eiPn	22	15	02.1	485	
31	16	VAM	Z	iPg	22	28	33.50	110	Athens: H=22:28:13 34.6°N, 25.0°E. M_L=4.0
			E	iSg			47.0		
		RHD	Z	ePn	22	29	04.5	345	
		ATH	WA-E	eiSn	22	29	50.0	380	
			WA-E	eiSg		30	08.5		
		PRK	Z	ePn	22	29	27.5	525	
		PLG	Z	e?(Pn)	22	29	45.0	(660)	
32	17	VAM	Z	iPg	09	09	45.30	100	Athens: H=09:09:27 34.6°N, 24.8°E M_L=4.1
			N	iSg			58.3		
		RHD	Z	ePn	09	10	20.6	365	
		ATH	SPN	eiSg	09	11	23.6	390	
		PRK	Z	ePn	09	10	41.2	530	
		VLS	E	eSn	09	11	39.6	545	
		PLG	Z	e?(Pb)	09	11	05.3	(660)	
33	17	VAM	Z	eiPg	09	26	50.8	110	Athens: H=09:26:30 34 3/4°N, 24 3/4°E.
			N	eiSg		27	04.8		
		RHD	Z	e?(Pn)	09	27	20.7	(350)	
		PRK	Z	ePn	09	27	40.4	500	
34	17	RHD	Z	ePg	10	14	31.0	90	Athens: H=10:14:14 35.5°N, 28.5°E.
			E	eSg			41.8		
		VAM	Z	ePn	10	15	10.6	390	
		PRK	Z	ePn	10	15	11.6	455	
36	17	VAM	Z	iPn	11	25	16.80	105	Athens: H=11:24:57 34.7°N, 24.9°E M_L=4.1
			E	iSg			29.8		
		RHD	Z	e?(Pb)	11	25	51.2	(340)	

ATHENS SHOCKS IN THE AREA OF GREECE SE SEPTEMBER 1968 Page 8

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		ATH	SPZ	ePg	11	26	08.0	380	
			SPE	eiSn			36.0		
			SPN	eSb			42.0		
			SPE	eSy			47.0		
			SPN	eiSg			53.5		
		PRK	Z	ePn	11	26	11.0	525	
		VLS	E	eSb	11	27	22.1	550	
		PLG	Z	e?(Pn)	11	26	28.1	(655)	
37	17	RHD	Z	eiPg	17	46	27.20	75	Athens: H=17:46:13
		VAM	Z	eiPg	17	47	07.3	310	35.6°N, 27.8°E.
			E	eiSb			42.9		M _L =3.6
		PRK	Z	eiPn	17	47	14.90	430	
		ATH	SPZ	eiPn	17	47	19.60	455	
			SPN	eiSn		48	07.3		
			SPN	eiSg			30.0		
		PLG	Z	ePb	17	47	51.6	660	
		VLS	E	eSn	17	49	03.6	720	
38	17	RHD	Z	eiPg	19	28	17.90	55	Athens: H=19:28:07
		VAM	Z	ePn	19	28	53.0	320	35.7°N, 27.7°E.
			Z	ePb			56.7		M _L =4.3
			Z	eiPy			59.5		
			N	eiSb		29	33.8		
		PRK	Z	eiPn	19	29	06.1	405	
		ATH	SPZ	eiPn	19	29	09.80	440	
			SPE	eiSn			56.5		
			SPN	eiSb		30	04.0		
			SPN	eiSg			18.0		
		PLG	Z	ePn	19	29	37.3	650	
39	18	VAM	Z	eiPg	04	02	13.00	65	Athens: H=04:02:01
		RHD	Z	eiPn	04	02	47.50	310	35.2°N, 24.8°E
									M _L =4.2
		ATH	SPZ	eiPn	04	02	51.60	340	BCIS: H=04:01:59
			SPNE	ei(Sb)		03	34.5		34.7°N, 25.1°E.
									h=50 Km ± 15 Km.
		PAT	Z	eiSg	04	03	53.0	375	
		PRK	Z	eiPn	04	03	07.10	460	
		VLS	Z	ePn	04	03	10.0	495	
		PLG	Z	ePn	04	03	24.3	580	
40	18	VAM	Z	eiPg	05	00	50.70	90	Athens: H=05:00:35
			E	eiSg			58.7		34 3/4°N, 24 3/4°E.
		RHD	Z	ePn	05	01	25.7	340	
		PLG	Z	ePn	05	02	00.5	625	

ATHENS SHOCKS IN THE AREA OF GREECE SEPTEMBER AUGUST 1968 Page 9

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
41	18	ATH	SPZ SPN	ePg iSg	07	14	22.1 29.0	60	Athens: H=07:14:11 Probably 37.8°N, 23.2°E. M _L =2.9
		VLS	Z	ePn	07	14	49.9	240	
42	18	VAM	Z N	ePg eiSg	09	55	31.4 43.9	95	Athens: H=09:55:14 34.7°N, 24.5°E.
		RHD	Z	ePn	09	56	10.4	385	
		PRK	Z	ePb	09	56	44.4	600	
43	18	VAM	Z E	eiPg eiSg	13	50	52.30 51 05.4	100	Athens: H=13:50:35 34.6°N, 24.7°E.
		RHD	Z	ePn	13	51	26.6	350	
		PLG	Z	ePn	13	52	12.4	650	
44	18	ATH	SPZ SPN	eiPg iSg	14	18	30.80 36.5	45	Athens: H=14:18:22 38.4°N, 23.6°E. M _L =2.9
		PLG	Z	ePn	14	18	57.5	220	
		VLS	Z	ePn	14	19	04.7	270	
45	18	ATH	SPZ WA-E	eiPg eSg	14	27	20.00 25.0	40	Athens: H=14:27:12 38.3°N, 23.7°E. M _L =3.3
		PLG	Z	e(Pn)	14	27	46.4	(210)	
		VLS	Z	eiPn	14	27	54.40	270	
		VAM	Z	eiPn	14	28	01.7	320	
46	18	VAM	Z E	eiPg eiSg	17	23	57.8 24 10.0	100	Athens: H=17:23:40 34 3/4°N, 23 3/4°E.
		VLS	Z	e(Pg)	17	25	15.4	(530)	
		PLG	Z	eiPn	17	25	05.9	620	
47	19	ATH	SPZ SPNE	eiPg iSg	15	09	10.30 18.8	60	Athens: H=15:08:59 37 3/4°N, 23 3/4°E. M _L =2.9
		VLS	Z E	ePn eiSy	15	09	37.8 10 09.6	245	
		VAM	Z Z E	ePn ePb eSb	15	09	44.1 46.6 10 21.0	295	
		PRK	Z	ePn	15	09	57.7	405	
48	19	VAM	Z N	ePn eSn	15	50	38.7 51 01.4	175	Athens: H=15:50:09 34.7°N, 22.7°E M _L =4.0
		ATH	SPZ	ePn	15	51	06.4	390	
		VLS	Z	ePn	15	51	11.4	430	
		RHD	Z	ePn	15	51	21.1	510	
		PRK	Z	ePn	15	51	32.4	605	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
49	19	VAM	Z	eiPn	16	02	02.4D	170	Athens: H=16:01:33 34 3/4°N, 25 3/4°E.
			N	eiSn			23.5		
			E	eiSg			25.3		
		RHD	Z	ePn	16	02	19.8	305	
		VLS	Z	ePn	16	02	53.1	580	
50	19	PRK	Z	eiPg	17	12	36.8D	120	Athens: H=17:12:16 39.3°N, 24.8°E. M _L =3.1
			N	eiSg			52.8		
		PLG	Z	ePn	17	12	41.9	165	
		ATH	SPZ	eiPg	17	12	45.5C	175	
			SPE	eiSg		13	08.4		
		VLS	Z	ePn	17	13	12.4	385	
		VAM	Z	ePn	17	13	16.8	420	
		RHD	Z	e?(Pn)	17	13	20.1	(450)	
51	19	RHD	Z	ePn	20	23	07.5	280	Athens: H=20:22:2
			N	eiSn			37.7		Near Southwestern coast of Turkey.
		PRK	Z	ePn	20	23	47.3	600	
		VAM	Z	ePn	20	23	50.0	615	
52	21	VLS	ZE	iPg	19	14	26.2DW	40	Athens: H=19:14:18 38.1°N, 20.1°E. M _L =3.8
			E	iSg			31.5		
		JAN	Z	ePg	19	14	52.3	190	
			E	oSb		15	14.0		
			N	eiSg			16.3		
		ATH	SPN	eSn	19	15	42.9	330	
		PLG	Z	ePn	19	15	14.4	380	
53	22	ATH	SPZ	eiPg	09	55	37.8C	60	Athens: H=09:55:27 37.8°N, 23.1°E M _L =2.9
			SPNE	iSg			46.0		
		VLS	Z	ePg	09	56	08.0	230	The shock occurred in the time of the paper change of the PAT station.
		JAN	Z	ePg	09	56	17.	280	
		PLG	Z	ePn	09	56	10.9	290	
			Z	ePy			14.9		
		VAM	Z	ePn	09	56	12.1	300	
			Z	eiPb			14.7C		
54	23	JAN	Z	ePg	05	09	38.1	80	Athens: H=05:09:24 39.0°N, 21.4°E
			E	eiSg			48.5		
		VLS	Z	eiPg	05	09	45.2C	120	The station of JAN. was out of operation from 09h of 23rd till 10h of 1st of October on account of trouble in the recording system.
			E	eiSg		10	00.4		
		PLG	Z	eiPn	05	10	01.9(D)	240	The shock occurred in the time of the papers change of the W.-A. seismograph.
			Z	eiPb			03.0(D)		
			Z	eiPg			07.4		
		ATH	SPZ	eiPg	05	10	07.4D	240	

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No	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		./	SPN	ei(Sb)			32.8		
			SPE	eiSg			36.8		
		PRK	Z	ePy	05	10	29.7	420	
		VAM	Z	ei(Pb)	05	10	36.8	480	
			Z	eiPy			43.6C		
55	23	ATH	SPZN	iPg	14	43	50.1C	40	Athens: H=14:43:43
			W.A-NE	iSg			55.5		38.4°N, 23.5°E.
									M _L =3.3
		PLG	Z	eiPn	14	44	16.3	210	
			E	eiPy			18.2		
		PRK	Z	eiPy	14	44	27.3C	260	
			Z	eiPg			29.1C		
		VLS	Z	eiPn	14	44	24.2D		
			Z	ei(Pb)			26.3		
			E	eiSb			56.8		
			E	eiSy			58.9		
		VAM	Z	e(Pn)	14	44	31.9	340	
			Z	eiPb			36.1C		
			E	eiSb		45	14.4		
56	24	VAM	ZNE	iPg	00	51	55.9C	NW100	Athens: H=00:51:38
			NE	iSg		52	07.8		34.5°N, 24.7°E
									M _L =4.2
		RHD	Z	eiPn	00	52	31.0(D)	360	
		ATH	SPZ	ePn	00	52	35.0	390	
			SPZ	ei(Pb)			39.7D		
		VLS	Z	ePn	00	52	54.8	550	
		PLG	Z	e(Pn)	00	53	06.8	(640)	
57	24	RHD	Z	eiPg	16	29	35.9D	70	Athens: H=16:29:24
									35.7°N, 27.7°E.
		VAM	Z	ePn	16	30	12.8	330	
			Z	eiPb			15.6D		
			Z	eiPy			18.7D		
			E	eiSn			48.5		
		PRK	Z	ePn	16	30	23.2	410	
58	25	RHD	Z	eiPg	08	16	45.9D	70	Athens: H=08:16:34
									35.7°N, 27.6°E.
									M _L =4.5
		VAM	Z	ePn	08	17	22.1	320	USCGS: H=08:16:30.7
		PRK	Z	ePn	08	17	32.3	405	35.4°N, 28.0°E ; h=33 Km.
			N	eSb		18	22.8		
		ATH	SPZ	eiPn	08	17	36.5C	430	
			SPNE	iSg		18	43.0		
		PLG	Z	ePn	08	18	02.4	640	
		VLS	Z	ePn	08	18	09.1	690	
			E	e(Sn)		19	20.8		

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
59	26	VLS	Z	iPg eiSg	23	49	55.4D 00.6	40	Athens: H=23:49:43 38.0°N, 20.3°E M _L =3.7
		ATH	SPZ SPE	ePy eSb	23	50	40.1 51 12.7	310	
		PLG	Z	ePn	23	50	43.7	380	
		VAM	Z	ePn	23	50	53.3	455	
60	27	RHD	Z	ePg	01	50	36.2	110	Athens: H=01:50:17.0 35.2°N, 28.0°E. M _L =4.5
		VAM	Z	ePb	01	51	12.6	355	The station of RHD was out of operation from 06h of 27th till 24h of 30th of september, on account of trouble in the recording system.
		PRK	Z	ePn	01	51	22.6	460	
		ATH	SPZ SPE	eiPn eiSn	01	51 52	26.0D 16.5	485	
61	28	PRK	ZNE	iPn	00	53	48.3CSW150		Athens: H=00:53:22 40.5°N, 26.6°E M _L =4.7
		PLG	ZNE N E	iPn eiSn eiSy	00	54	02.0CSW260 31.2 36.7		BCIS: H=00:53:26 40.4°N, 26.7°E. USCGS: H=00:53:25.9 40.5°N, 26.4°E; h=28 Km; Mb=4.4
		ATH	SPZ SPZ LPZ	eiPn eiPy iSg	00	54 55	14.9C 21.4 10.6	360	Felt in Evros (IV+ at Didymotichon) and Rhodope (III at Kosmion).
		PAT	Z	ePb	00	54	35.8	480	
			Z	eSg		55	47.0		
		VLS	Z	ePn	00	54	42.8	580	
		VAM	Z	ePn	00	54	45.9	600	
62	29	VLS	Z E	eiPg eiSg	00	30	04.5C 17.0	100	Athens: H=00:29:46 37 1/2°N, 20 1/4° E. M _L =3.8
		ATH	SPZ SPZ SPE SPN	ePn ePy eiSn eiSb	00	30 31	33.4 37.7 07.2 11.7	310	
		VAM	Z	ePn	00	30	49.9	445	
63	29	VLS	Z E	eiPg eSg	00	39	14.3D 30.5	120	Athens: H=00:38:52 39.2°N, 20.9°E. M _L =3.4
		PLG	Z	ePn	00	39	31.0	250	
		ATH	SPZ SPZ SPE	ePn ePg eiSn	00	39 40	33.9 40.6 04.7	270	
		VAM	Z	ePn	00	40	06.1	525	
64	30	VAM	Z Z NE NE	ePn ePb eiSb eiSg	02	18	00.6 01.5C 26.2 28.6	205	Athens: H=02:17:28 34.3°N, 26.1°E. M _L =4.3
		ATH	SPZ SPE	ePb eiSn	02	18 19	37.9 19.3	450	

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N°	Date	Stat	Comp.	Phase	h	m	s	D	Remarks
65	30	PRK	Z	e?(Pn)	02	18	46.2	540	Athens: H=03:02:02 35.3°N, 27.0°E M _L =4.2
			Z	eiPb			50.2		
			E	eSn	19	39.0			
		PLG	Z	e?(Pb)	02	19	10.1	(600)	
		VAM	Z	ePn	03	02	41.0	250	
			Z	eiPb			42.7		
			E	eiSg	03	17.7			
		ATH	SPZ	eiPn	03	03	03.03	420	
		PRK	Z	eiPn	03	03	05.03	440	
		VLS	Z	ePb	03	03	40.7	650	
PLG	Z	ePb	03	03	42.6	660			
66	30	VAM	Z	ePn	09	52	21.4	170	Athens: H=09:51:56 Probably 36 1/2°N, 25 1/2°E. M _L =3.1
		ATH	SPZN	eiPn	09	52	26.0DS	210	
			SPE	eiSy			53.0		
			SPN	eiSg			54.7		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	JAN	Z	ePn	01	21	15.8	3.0°	Athens: H=01:20:28 43.4°N, 17.5°E. BCIS: H=01:20:31 43.4°N, 17.5°E. Yougoslavie.
			N	eiSg		22	04.3		
		PLG	Z	ePn	01	21	43.2	5.0°	
			N	eiSg		22	42.9		
		VLS	Z	ePn	01	21	45.5	5.5°	
		PRK	Z	ePn	01	22	18.2	7.5°	
		VAM	Z	ePn	01	22	36.6	8.5°	
2	1	PRK	Z	eP	05	43	22.7	15.5°	BCIS: H=05:39:47 39.2°N, 46.2°E h=45+12 Km. USCGS: H=05:39:46.7 39.1°N, 46.0°E NW Iran-USSR Border Region h=38 Km ; Mb=5.1
		PLG	Z	eiP	05	43	50.2D	17.5°	
		ATH	LPZ	eP	05	43	50.4	17.5°	
		VAM	Z	eiP	05	43	53.6D	18.0°	
		JAN	Z	eiP	05	43	57.3D	18.5°	
		VLS	Z	eiP	05	44	15.0D	19.5°	
3	1	VAM	Z	i!P	07	33	04.1C	26.5°	BCIS: H=07:27:28 34.1°N, 58.3°E. Iran. M _L =6.4 ; 6.3 (Moxa). USCGS: H=07:27:30.2 34.0°N, 58.2° E. Iran. h=15 Km; Mb=5.9 Ms=6.3 ; M=6.2 (PAS); 7.0 (BRK) , 6 1/4 - 6 1/2 (GOL) .
		PRK	Z	eiP	07	33	06.9C	27.0°	
		ATH	LPZ LPE	eiP iS	07	33 38	24.0C 12.0	28.5°	
		PLG	Z	eiP	07	33	24.8C	28.5°	
		JAN	Z	eiP	07	33	26.9	29.0°	
		VLS	Z	eP	07	33	41.7	30.5°	
		PLG	Z	ei(P)	13	27	21.2D		
4	2	PLG	Z	ei(P)	13	27	21.2D		
5	3	PRK	Z	eiP	05	35	44.2C	80.0°	USCGS: H=05:23:30 42.9° N, 145.2° E. Hokkaido, Japan Region. h=43 R ; Mb=5.2
		PLG	Z	eiP	05	35	46.8C	80.5°	
		JAN	Z	eiP	05	35	57.4C	82.0°	
		VAM	Z	eiP	05	36	04.7C	83.5°	
		VLS	Z	eiP	05	36	14.9C	85.0°	
6	3	PRK	Z	eiP	08	21	11.9D	5.5°	BCIS: H=08:19:52 41.9°N, 32.3° E. M _L =6.2 USCGS: H=08:19:52.2 41.8°N, 32.3°E. Turkey ; h=5 Km; Mb=5.7 Ms=6.6 ; M=6 1/2 (PAS) ; 6.7 (BRK). 6 3/4 (PAL) .
		PLG	Z	eiP	08	21	34.1D	7.0°	
		ATH	LPZNE LPN	eiP iS	08	21 23	48.4DNE 10.0	8.0°	
		PAT	Z	eiP	08	21	50.2D	8.5°	
		VAM	Z	eiP	08	21	50.8D	8.5°	
		JAN	Z	eP	08	22	07.0	9.0°	
		VLS	Z	eiP	08	22	19.3D	9.5°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
7	3	PRK	Z	eIP	09	14	29.0D	6.0°	USCGS:H=09:13:11.8 41.6°N, 32.3°E.
		PLG	Z	eP	09	14	50.4	7.5°	Turkey ; h=33 R ; Mb=4.6
		JAN	Z	eP	09	15	21.8	8.5°	
8	3	PRK	Z	eP	09	35	59.9		
		PLG	Z	eP	09	36	22.2		
9	3	PRK	Z	eP	09	52	15.9		
		PLG	Z	eP	09	53	37.6		
10	3	VAM	Z	eP	09	59	49.5	29.0°	USCGS:H=09:53:47.0 33.8°N, 59.2°E.
		PLG	Z	eP	09	59	52.6	29.5°	Iran ; h=16 Km. Mb=5.0
		JAN	Z	eP	10	00	06.3	30.5°	
11	3	PRK	Z	eIP	10	57	37.3D	5.5°	USCGS:H=10:56:15 41.8°N, 32.4°E.
		PLG	Z	eIP	10	58	07.3D	7.5°	Turkey ; h=10 Km; Kb=4.5
		VAM	Z	eP	10	58	29.2	8.5°	
		JAN	Z	eP	10	58	31.8	9.0°	
12	3	PRK	Z	eP	12	23	19.5		
		PLG	Z	eP	12	23	36.8		
13	3	PRK	Z	eP	12	31	42.2		
		PLG	Z	eP	12	31	53.6		
14	3	PRK	Z	eIP	14	10	30.0C	6.0°	BCIS:H=14:09:07 41.8°N, 32.6°E.
		PLG	Z	eIP	14	10	52.1C	7.5°	USCGS:H=14:09:10 41.7°N, 32.4°E.
		JAN	Z	eP	14	11	25.5	9.0°	Turkey h=14 Km; Mb=4.6
15	3	PRK	Z	eP	15	00	22.0		
		PLG	Z	eP	15	00	44.1		
16	3	PLG	Z	eIP	15	48	33.6D	73.0°	USCGS:H=15:37:00.2 20.6°N, 62.2°W.
		VAM	Z	eIP	15	48	47.2D	75.0°	North Atlantic Ocean. h=33R ; Mb=5.5 ; Ms=5.9
		PRK	Z	eP	15	48	48.5	75.0°	M=5 - 5 1/4 (PAL).
17	3	PRK	Z	eP	18	55	03.0		
		PLG	Z	eP	18	55	15.6		
18	3	PRK	Z	eP	19	06	02.1		
		PLG	Z	eP	19	06	27.8		
		VAM	Z	eP	19	07	11.4		

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No.	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
19	3	PRK	Z	eiP	21	09	34.1D	5.5°	USCGS: H=21:08:20.3 41.8°N, 31.9°E; Δ =55 Km. Mb=4.5
		PLG	Z	eP	21	09	51.7	6.5°	
20	4	PRK	Z	eiP	06	27	17.8D		
		PLG	Z	eiP	06	27	39.6D		
		JAN	Z	eP	06	28	13.4		
21	4	PRK	Z	eiP	10	25	35.9D		
22	4	PLG	Z	eiP	10	46	32.2C	78.5°	USCGS: H=10:34:28.4 53.2°N, 159.7°E. Near East Coast of Kamchatka. h=30 Km; Mb=4.7; Ms=4.2
		JAN	Z	eiP	10	46	40.7	79.0°	
		VLS	Z	eiP	10	46	47.9	80.5°	
23	4	JAN	Z	eiP	14	54	49.7D		
		VLS	Z	eP	14	54	51.3		
		PLG	Z	eiP	14	55	15.3D		
		PRK	Z	eP	14	55	47.7		
24	4	PRK	Z	eiP	23	30	23.7L	26.5°	BCIS: H=23:40:50 34.1°N, 58.3°E; M_L =4.9 (Pru- honice).
		VAM	Z	eP	23	30	32.8	27.0°	USCGS: H=23:24:47.2 34.0°N, 58.2°E. Iran; h=15 Km; Mb=5.4 Ms=5.2
		ATH	LPZ	eP	23	30	42.6	28.0°	
		PLG	Z	eP	23	30	42.8	28.5°	
		JAN	Z	eP	23	31	00.8	30.0°	
25	5	PLG	Z	eiP	04	13	27.6C	39.5°	BCIS: H=04:06:00 50.0°N, 78.0°E. M=5.2 (Uppsala).
		VAM	Z	eP	04	13	45.7	42.0°	USCGS: H=04:05:57.4 49.8°N, 78.1°E.
26	6	PRK	Z	eP	02	48	35.3		Eastern Kazak SSR; h=0 R; Mb=5.5
27	6	PLG	Z	eP	19	35	10.7	81.5°	USCGS: H=19:22:47.8 31.0°N, 131.9°E; Kyushu, Japan. h=39R; Mb=5.7; Ms=5.7
		VAM	Z	eP	19	35	23.9	84.0°	
28	8	PRK	Z	ei(P)	02	04	33.7C		
		ATH	SPZ	e(P)	02	04	41.5		
		PLG	Z	e(P)	02	04	42.9		
29	8	PRK	Z	ePKP	15	31	00.0	111.0°	USCGS: H=15:12:23.8 3.7°S, 143.0°E. Near North Coast of New Guinea. h=29 R. Mb=6.0 Ms=6.1. M=6.1 (Pas), 6.7 (Pal), 6.0 (Gol).
		PLG	Z	ePKP	15	31	02.1	111.5°	
		ATH	LPZ	eiPKP	15	31	03.2C	113.0°	
			LPZ	iPP		32	10.0C		
		JAN	Z	eiPKP	15	31	05.8D	113.5°	
		VAM	Z	eiPKP	15	31	07.8D	114.0°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
30	9	ATH	LPZ	eiP	00	51	24.00	101.5°	USCGS:H=00:37:43.2 8.7° S, 74.5° W.
		PLG	Z	eP	00	51	30.4	102.5°	Peru-Brazil Border Region. h=120 Km; Mb=6.0
		PRK	Z	eP	00	51	37.4	104.5°	M=6.3 (Pas).
31	9	PRK	Z	ePKP	05	13	20.7	(114.0)	USCGS:H=04:54:46.0 59.0° N, 149.2° W.
		RHD	Z	eiPKP	05	13	36.40	(117.0°)	Konai Peninsula, Alaska. h=17 Km; Mb=5.2
		PLG	Z	ePKP	05	13	42.5	(120.0°)	
32	9	PRK	Z	eiP	11	50	37.30	5.5°	USCGS:H=11:49:19.4 41.3° N, 32.3° E. Turkey.
		RHD	Z	eiP	11	50	53.80	6.5°	h=33 R. Mb=4.4
		PLG	Z	eP	11	50	58.5	7.0°	
		JAN	Z	eP	11	51	30.9	8.5°	
33	9	JAN	Z	e(P)	14	50	37.8		
		PLG	Z	e(P)	14	50	47.0		
		VAM	Z	e(P)	14	50	57.6		
34	10	RHD	Z	eiP	01	50	16.10	6.5°	USCGS:H=01:48:41.4 41.7° N, 32.4° E.
		PLG	Z	eiP	01	50	22.00	7.0°	Turkey. h=33R; Mb=4.2
		JAN	Z	eP	01	50	52.4	9.0°	
35	11	PLG	Z	ePKP	18	45	28.3	118.0°	USCGS:H=12:26:36.8 43.0° S, 75.2° W. Off coast
		RHD	Z	ePKP	18	45	30.8	120.0°	of Southern Chile. h=31R; Bb=5.7; Ms=5.5
		ATH	LPZ	ePKP	18	46	46.0	122.0°	
36	11	RHD	Z	eiP	19	22	42.90	27.0°	BCIS:H=19:17:05 33.5° N, 59.6° E.
		VAM	Z	eP	19	23	12.0	29.5°	M _{LH} =6.3 (Pr.); 5.8 (Coll).
		PLG	Z	eiP	19	23	15.10	30.0°	USCGS:H=19:17:12.9 33.9° N, 59.4° E. Iran.
		ATH	LPZ	eiP	19	23	16.00	30.5°	h=33 R; M _B =5.2; Ms=5.4
37	11	VAM	Z	eP	21	59	42.8	82.0°	USCGS:H=21:47:21.9 24.0° N, 122.3° E. Taiwan Region. h=42 Km; Mb=5.0
38	12	PLG	Z	eiP	13	48	56.40	83.5°	USCGS:H=13:36:27.5 39.7° N, 143.6° E.
		RHD	Z	eiP	13	48	59.30	84.0°	Off East Coast of Honshu, Japan. h=12 Km; Mb=5.2
		JAN	Z	eiP	13	49	13.70	86.0°	
39	12	PLG	Z	eiP	15	44	35.50	41.5°	USCGS:H=15:36:48.8 39.8° N, 77.8° E.
		VAM	Z	eP	15	44	44.0	43.0°	Southern Sinciang. Prov., China. h=8 Km; Mb=4.9
		JAN	Z	eP	15	44	59.5	44.0°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
40	12	RHD	Z	e(PKP)	17	16	53.8		
		PLG	Z	ei(PKP)	17	16	57.9C		
41	12	RHD	Z	eiPKP	23	02	44.4D	158.0°	USCGS: H=22:44:06.5 21.6° S, 179.4° W. Fiji Islands Region. h=635 R. Mb=5.9
		PRK	Z	ePKP	23	02	45.4	159.0°	
		PLG	Z	eiPKP	23	02	46.0D	159.5°	
		ATH	LPZ	eiPKP	23	02	48.0D	160.0°	
		VLS	Z	ePKP	23	02	50.0	162.0°	
		JAN	Z	eiPKP	23	02	52.4D	163.0°	
42	14	RHD	Z	eiP	01	37	15.2C	77.5°	USCGS: H=01:25:19.1 24.5° S, 80.4° E. South Indian Ocean. h=33 R, Mb=5.5
		VAM	Z	eiP	01	37	25.9C	78.5°	
		PRK	Z	eiP	01	37	32.9C	80.0°	
		ATH	SPZ	eiP	01	37	35.8C	81.0°	
		JAN	Z	eiP	01	37	42.5C	82.0°	
43	14	RHD	Z	eiP	13	53	43.4D	23.5°	USCGS: H=13:48:31.2 28.4° N, 53.1° E. Southern Iran. h=33 R, Mb=5.8 ; Ms=5.6
		PRK	Z	eiP	13	53	51.9D	25.0°	
		VAM	Z	eiP	13	53	59.0D	25.5°	
		PLG	Z	eiP	13	54	13.7D	26.5°	
		VLS	Z	eP	13	54	26.3	28.0°	
		JAN	Z	eP	13	54	31.0	28.5°	
44	14	RHD	Z	eiP	19	25	34.9D	23.5°	USCGS: H=19:20:22.7 28.4° N, 53.2° E. Southern Iran. h=44 Km; Mb=5.1
		PRK	Z	eP	19	25	43.2	24.5°	
		VAM	Z	eP	19	25	50.8	25.5°	
		PLG	Z	eiP	19	26	05.7D	27.0°	
		VLS	Z	eP	19	26	17.7	28.0°	
		JAN	Z	eP	19	26	21.1	28.5°	
45	15	PRK	Z	eiP	11	02	31.2D	82°	USCGS: H=10:50:11.8 Off East Coast of Honshu, Japan. h=15 Km; Mb=5.4 * 40.9° N, 143.2° E.
		PLG	Z	eiP	11	02	34.3C	82.5°	
		JAN	Z	eiP	11	02	36.3C	83°	
		RHD	Z	eiP	11	02	42.6D	84.5°	
		VLS	Z	e P	11	02	49.6	86°	
		VAM	Z	e P	11	02	52.6	86.5°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks	
46	15	PRK	Z	ePKP	14	14	20.2	115.5°	USCGS: H=13:55:36.1 6.1° S, 148.7° E. New Britain region; Depth 59 Km; Mb=5.8	
		RHD	Z	ePKP	14	14	21.3	116°		
		PLG	Z	ePKP	14	14	22.0	116.5°		
		VAM	Z	ePKP	14	14	24.3	119.0°		
		JAN	Z	eiPKP	14	14	27.8	119.5°		
		ATH	LPZ	ePKP	14	14	29.0	120°		
		VLS	Z	ePKP	14	14	30.9	121°		
47	16	JAN	Z	eP	14	24	23.8		USCGS: H=14:11:29.4 17.4° S, 178.8° W. Fiji Islands region. Depth 583 ; Mb=5.1	
		ATH	Z	eiP	14	24	29.2			
		VAM	Z	eP	14	24	30.0			
		PLG	Z	e	14	24	32.4			
		PRK	Z	e	14	24	38.4			
		RHD	Z	e	14	24	41.1			
48	17	PRK	Z	eiPKP ₁	18	09	36.80	151°	USCGS: H=17:49:47.6 15.0° S, 175.7° W. Tonga Islands. Depth 17 . Mb=5.2	
		RHD	Z	ePKP ₁	18	09	37.2	152.5°		
		PLG	Z	ePKP ₁	18	09	37.9	152°		
		ATH	LPZ	eiPKP ₁	18	09	38.8	153°		
		VAM	Z	ePKP ₁	18	09	38.8	153°		
		VLS	Z	ePKP ₁	18	10	45.7	156.5°		
49	17	RHD	Z	eP	21	14	34.0	3.0°	ECIS: H=21:13:52 35.3°N, 31.2°E. USCGS: H=21:13:52.6 35.3°N, 31.3°E. Cyprus ; h=33 R; Mb=4.6	
		VAM	Z	eiP	21	15	16.5	5.5°		
		ATH	SPZ	eiP	21	15	29.00	6.5°		
		PLG	Z	eP	21	15	58.1	8.5°		
50	19	ATH	LPZ	eP	11	23	39.5	64°	USCGS: H=11:13:07.4 30.7°N, 41.9°W, North Atlantic Ridge. h=33R Mb=4.9	
51	19	RHD	Z	eP	22	17	35.5	22.5°	USCGS: H=22:12:38.2 28.4°N, 53.2°E Southern Iran. Depth 34 ; Mb=5.1	
		VAM	Z	eiP	22	18	07.00	25°		
		ATH	Z	eP	22	18	14.0	26°		
			E	eS		22	58.4			
		PRK	Z	eP	22	17	59.3	26.5°		
		./.								

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
			./.						
		PLG	Z	eP	22	18	22.0	27.5°	
		VLS	Z	eP	22	18	34.0	28.5°	
52	20	VLS	Z	eiP	06	11	53.70	79.5°	USCGS: H=06:00:03.5 10.7°N, 62.7°W. Near Coast of Venezuela h=107 Km; Mb=6.2 M=6.1-6.3 (BRK); 6 1/2 (GOL); 7. (PAS).
		JAN	Z	eiP	06	11	56.50	80°	
		PLG	Z	eP	06	12	05.1	82°	
		ATH	LPZ LPNE	iP is	06 22	12	06.70 07.1	82°	
		VAM	Z	eP	06	12	11.9	83°	
		PRK	Z	eiP	06	12	17.4	83.5°	
		RHD	Z E	eP eS	06 22	12	26.6 36.6	86°	
53	20	ATH	LPZ	ePKP ₁	18	49	03.9	148.5°	USCGS: H=18:29:09.8 28.1° S, 176.7° W. Kermadec Islands. h=70 Km; Ms=5.3 M=5 - 5.5 (BRK); 5 1/2 - 5 3/4 (GOL).
		JAN	Z	ePKP ₁	18	49	16.7	151.5°	
		PRK	Z	ePKP ₁	18	49	33.1	155.5°	
		RHD	Z	ePKP ₁	18	49	33.1	155.5°	
		PLG	Z	ePKP ₁	18	49	42.7	157.5°	
		VAM	Z	ePKP ₁	18	49	48.6	159°	
54	21	PLG	Z	eP	11	07	14.5	6°	ECIS: H=11:05:53 45 1/4°N, 26 3/4°E. h=175 Km; 30 Km; USCGS: H=11:05:52.9 45.7°N, 26.6°E. Roumania; h=128 Km; M _b =4.3
		PRK	Z	e?P	11	07	25.0	6.5°	
55	21	PLG	Z	eiP	13	18	11.0	81°	USCGS: H=13:05:58.2 42.2°N, 142.6°E: Hokkaido, Japan region; h=33 Km M _b =5.9; M _s =6.4 M=5.7-6.2 ^b (BRK); 6.2 (PAS); 6 1/2 - 6 3/4 (GOL).
		RHD	Z	eiP	13	18	15.90	82°	
		PRK	Z	eP	13	18	16.2	82°	
		ATH	LPZ	iP	13	18	19.10	82.5°	
		VAM	Z	eP	13	18	22.7	83°	
		VLS	Z	eiP	13	18	28.00	85°	
56	22	RHD	Z	eP	09	32	59.1	84°	USCGS: H=09:20:26.4 15.7°N, 121.9° E. Luzon, Philippine Islands; h=20 Km; M _b =5.3
		PRK	Z	eP	09	32	59.8	84°	
		VLS	Z	e?(P)	09	33	03.0	85°	
		PLG	Z	eP	09	33	07.4	86°	
		ATH	Z	eP	09	33	09.4	87°	
		VAM	Z	eP	09	33	14.3	87.5°	
		JAN	Z	eP	09	33	24.3	90.5°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
57	22	ATH	LPZ	e(P)	18	16	57.8		
58	22	ATH	LPZ	e(P)	21	11	09.8		
59	23	PLG	Z	eP	05	16	13.8	81.5°	USCGS:H=05:03:50.0 40.3°N, 143.5°E.
		RHD	Z	eP	05	16	18.6	82.5°	Off east coast of Honshu, Ja-
		ATH	SPZ	eP	05	16	19.8	83°	pan. h=30 Km; Mb=4.8 ; Ms=5.2
		JAN	Z	eP	05	16	24.1	83.5°	
60	23	RHD	Z	eP	21	29	49.4	10°	BCIS:H=21:27:21 36.2°N, 40.9°E.
		PRK	Z	eP	21	30	07.8	11.5°	USCGS:H=21:27:19.9 36.4°N, 40.7°E.
		VAM	Z	eP	21	30	34.0	12.5°	Jordan-Syria region. h=3.1 Km; Mb=4.4
		PLG	Z	eP	21	30	41.0	14°	
		VLS	Z	eP	21	31	04.9	16°	
61	24	PLG	Z	eP	03	47	13.7	82.5°	USCGS:H=03:34:48.5 40.2°N, 143.7°E
			Z	ePP		50	14.5		Off east coast of Honshu,
		RHD	Z	eP	03	47	19.0	84°	Japan ; h=22 Km?; Mb=5.1 Ms=5.1
		ATH	LPZ	eiP	03	47	21.3	85°	
			LPZ	ePP		50	40.1		
			LPZ	e(PPP)		52	29.7		
			LPNE	eiPS		58	43.7		
		VLS	Z	e?(P)	03	47	31.9	86°	
62	24	PRK	Z	eP	04	22	30.0	11°	BCIS:H=04:19:57 39.1°N, 40.1°E.
		RHD	Z	eiP	04	22	55.6	13°	USCGS:H=04:19:54.5 39.2°N, 40.2°E.
		ATH	LPZ	eP	04	23	01.7	13.5°	Turkey ; h=14 Km; Mb=5.1
		PLG	Z	eiP	04	23	02.00	13.5°	
		VAM	Z	eP	04	23	09.0	14°	
		VLS	Z	eP	04	23	44.1	18°	
63	24	PLG	Z	eiP	04	58	28.60	83.5°	USCGS:H=04:46:03.6 40.3°N, 143.6°E.
		RHD	Z	eP	04	58	32.5	84°	Off East coast of Honshu, Japan
		VLS	Z	eP	04	58	43.4	85.5°	h=26 Km; Mb=5.0
64	25	RHD	Z	ePKP ₁	07	22	29.3	144°	USCGS:H=07:02:51.8 46.4°S, 166.8°E.
		VAM	Z	ePKP ₁	07	22	30.3	144.5°	Off W. Coast of S. Island, N. Z.
		PRK	Z	ePKP ₁	07	22	39.8	150.5°	h=N, Mb=5.5 Ms=6.3
		PLG	Z	ePKP ₁	07	22	44.1	153.5°	
		ATH	SPZ	ePKP ₁	07	22	45.2	154°	
		VLS	Z	ePKP ₁	07	22	46.1	159°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
65	25	ATH	LPZ	eiP	10	52	12.00	98.5°	USCGS:H=10:38:38.4 15.6°N, 92.6°W Mexico-Guatemala border region. h=138 Km; Mb=5.7 M=5 1/2 - 5 3/4 (GOL); 5.8-6.2 (BRK), 6 (PAS), 6 1/4 - 6 1/2 (PAL).
			LPZ	eiPP		56	18.00		
		PLG	Z	eP	10	52	14.7	99.5°	
		PRK	Z	e(PP)	10	56	53.6	103°	
66	25	ATH	LPZ	eP	20	55	24.0	13.0°	BCIS:H=20:52:14 39.2°N, 40.2°E USCGS:H=20:52:15.9 39.2°N, 40.2°E. Turkey; h=47 Km; Mb=5.1 M _{1H} = 4.5 (Pruhonice). BCIS:H=06:42:01 38.7°N, 32.9°E USCGS:H=06:42:01.2 38.5°N, 33.0°E. Turkey h=34 Km; Mb=4.8
			VAM	eP	20	55	30.4	13.5°	
		VLS	Z	eP	20	55	56.5	16°	
		RHD	Z	eP	06	43	10.0	5°	
67	26	RHD	E	eS		44	04.5		USCGS:H=08:41:22.0 17.7° S, 178.5° W. Fiji Islands region. h=578 Km. Mb=5.1
			PRK	eiP	06	43	16.0	5.5°	
		PLG	Z	eP	06	43	46.6	7.5°	
		VAM	Z	eP	06	43	55.6	8°	
68	26	PRK	Z	eiPKP ₁	09	00	07.60	152°	USCGS:H=14:37:46.2 20.9° S, 177.0° W. Fiji Islands region. h=251 Km; Mb=5.8 M=6 - 6 1/4° (PAS); 6.0-6.4 (BRK).
		PLG	Z	eiPKP ₁	09	00	09.00	153°	
		RHD	Z	eiPKP ₁	09	00	10.40	154°	
		ATH	LPZ	eiPKP ₁	09	00	12.90	156°	
		VLS	Z	ePKP ₁	09	00	16.6	159°	
		VAM	Z	ePKP ₁	09	00	17.6	160°	
		JAN	Z	e?(PKP ₁)	09	00	36.6	(168.5°)	
69	26	PRK	Z	ePKP ₁	14	57	06.5	156°	USCGS:H=18:02:50.1 30.5° S, 178.2° W. Kermadec Islands region. h=33 Km; Mb=5.8; Ms=6.8 M=6 3/4 - 7 (PAL, GOL); 7 (PAS).
		PLG	Z	ePKP ₁	14	57	07.1	156°	
		ATH	LPZ	eiPKP ₁	14	57	09.80	156.5°	
		VLS	Z	ePKP ₁	14	57	11.7	157.5°	
		RHD	Z	ePKP ₁	14	57	17.0	158.5°	
		VAM	Z	ePKP ₁	14	57	24.0	160°	
70	26	RHD	Z	e?(PKP ₁)	18	22	15.3	137°	USCGS:H=18:02:50.1 30.5° S, 178.2° W. Kermadec Islands region. h=33 Km; Mb=5.8; Ms=6.8 M=6 3/4 - 7 (PAL, GOL); 7 (PAS).
		PRK	Z	ePKP ₁	18	22	44.6	148.5°	
		VLS	Z	ePKP ₁	18	22	45.2	148.7°	
		ATH	LPZ	ei!PKP ₁	18	22	46.20	149°	
		VAM	Z	ePKP ₁	18	22	50.9	150°	
		PLG	Z	ePKP ₁	18	23	25.6	158.5°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
71	27	RHD	Z	eP	04	12	43.9	101°	USCGS:H=03:58:55.1 6.8° S, 129.1° E. Banda Sea, h=127 Km; Mb=6.1 M= 5 3/4 - 6 (PAL).
		PRK	Z	eP	04	12	47.6		
		ATH	LPZ	eiP	04	12	54.93		
		VAM.1	Z	eP	04	12	56.8		
72	27	PRK	Z	eP	10	44	45.1	35°	USCGS:H=10:37:55.9 37.8°N, 72.3°E Tadzhik SSR h=119 Km; Mb=5.2
		PLG	Z	eP	10	45	01.5	37°	
		ATH	SPZ	eiP	10	45	03.50	37.5°	
		VAM	Z	eP	10	45	07.8	38°	
		VLS	Z	eP	10	45	21.7	39.5°	
73	27	ATH	LPZ	eiPKP ₁	17	01	04.80	149.5°	USCGS:H=16:41:07.8 30.7° S, 178.2° W. Kermadec Island region. h=33 Km; Ms=5.4; M=5.7-5.8 (BRK) ; 6 (PAS) .
		PRK	Z	ePKP ₁	17	01	16.7	152°	
		PLG	Z	ePKP ₁	17	01	41.8	158°	
		VAM	Z	ePKP ₁	17	01	41.8	158°	
74	27	VAM	Z	ePKP ₁	19	25	29.5	150°	USCGS:H=19:06:42.2 3.7° S, 143.3°E Near North coast of New- Guinea; h=7 Km; Mb=5.9 ; Ms=6.5 M=5 3/4 - 6 (PAL) ; 6 - 6 3/4 (BRK); 6.2 (PAS).
		ATH	LPZ	ePKP ₁	19	26	32.8	152°	
75	28	PRK	Z	ePn	03	27	09.2	6.5°	BCIS:H=03:25:32 40 1/2°N, 33.0°E. USCGS:H=03:25:51.8 41.7°N, 32.3°E. Turkey ; h=37 Km; Mb=4.1
			E	eiSn		28	11.2		
		PLG	Z	ePn	03	27	31.3	8°	
76	28	PLG	Z	ePP	14	11	01.4	96°	USCGS:H=13:53:35.3 13.2° S, 76.4° W. Near coast of Peru h=70 Km; Mb=6.0 M=5 1/2 - 5 3/4 (PAL); 6.0(PAS) 6.5 - 6.6 (BRK).
		VAM	Z	ePP	14	12	11.9	105°	
		PRK	Z	ePP	14	12	15.3	106°	
		ATH	LPZZ	eP	14	07	59.0	109°	
77	29	PRK	Z	eiP	03	50	17.70	38.5°	BCIS:H=03:43:00 50.0°n, 78.0° E. USCGS:H=03:42:57.5 49.8°N, 78.2°E. Eastern Kazakh SSR h=0 Km; Mb=5.8 m _b =5.8 (Infrane); m=6.2 (UPP).
		PLG	Z	eP	03	50	28.4	39.5°	
		VLS	Z	eiP	03	50	51.40	42.5°	

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SEISMOLOGICAL INSTITUTE



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 SEISMOLOGICAL STATIONS NETWORK - GREECE
 PRELIMINARY BULLETIN
 OCTOBER 1968

Station	Location	Type of instruments	Comp.	Mass Kg	T ₀ sec.	T _g sec.	v:1	V	Drum speed mm/min.
ATHENS	37°58'20"N	Benioff	Z, N, E	107.5	1	0.25		12.500	60
(ATH)	23°43'10"	Hiller	Z	1	0.82	0.25	10	5.000	60
(Attica)	h=95 m.	"	N, E	1	0.82	0.25	10	2.000	60
Cretaceous		Wood-Anderson	N, E		0.8		50	2.800	60
Limestone		Sprengnether	Z	11.25	15	100		1.500	15
		"	N, E	10.75	15	100		1.500	15
		Wiechert	Z	1300	1.6		1.0	152	ca.30
		"	N	1000	4.1		6.0	140	ca.30
		"	E	1000	5.2		4.9	136	ca.30
		Mainka	N	135	2.8		2.0	50	ca.31
		"	E	135	3.5		5.8	50	ca.31
		Kritikos	N	40	2.6		5.8	4	ca.40
ARCHANGELOS	36°12'59"N	Sprengnether	Z	1.14	0.5	0.5		55.000	60
(RHD)	28°07'34"E	"	E	1.14	0.5	0.5		37.000	60
Sandstone	h=170 m.								
JANINA	39°39'24"N	Sprengnether	Z	1.14	0.5	0.5		39.600	60
(JAN)	20°51'03"E	"	N	1.14	0.5	0.5		8.200	60
Cretaceous	h=540 m.	"	E	1.14	0.5	0.5		6.000	60
Limestone									
PARASKEVI	39°14'46"N	Sprengnether	Z	1.14	0.5	0.5		41.800	60
(PRK)	26°16'18"E	"	N	1.14	0.5	0.5		7.600	60
Rhyolite	h=100 m.	"	E	1.14	0.5	0.5		7.500	60
PATRAS	38°14'11"N	Wiechert	Z	80	2.7	4.0		125	ca.30
(PAT)	21°44'48"E								
Alluvium	h=45 m.								
POLYGYIOS	40°22'25"N	Sprengnether	Z	1.14	0.5	0.5		34.000	60
(PLG)	23°26'44"E	"	N	1.14	0.5	0.5		6.400	60
Gneis	h=580 m.	"	E	1.14	0.5	0.5		4.800	60
VALSAMATA	38°10'36"N	Sprengnether	Z	1.14	0.5	0.5		57.600	60
(VLS)	20°35'23"E	"	E	1.14	0.5	0.5		11.200	60
Cretaceous	h=375 m.								
Limestone									
VAMOS	35°34'25"N	Sprengnether	Z	1.14	0.5	0.5		56.000	60
(VAM)	24°11'59"E	"	N	1.14	0.5	0.5		15.000	60
Marly	h=225 m.	"	E	1.14	0.5	0.5		10.000	60
Limestone									

NOTE : In the "Component" column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram when it is oriented so that time increases from left to right. On all vertical component (Z) instruments upward trace motion corresponds to upward ground motion.

Magnitudes of local shocks calculated from Wood-Anderson records are designated by M_L .-

ATHENS		SHOCKS IN THE AREA OF GREECE					OCTOBER 1968		Page 2
N°	Date	Stat	Comp.	Phase	h	m	s	D	Remarks
1	1	VLS	Z	eiPn	01	58	51.0D	155	<u>Athens: H=01:58:24</u> <u>36.8°N, 21.3°E. $M_L=3.3$</u> The station of JAN was out of operation from 09h, September 23, till 10h, October 4, on account of trouble in the recording system.
			Z	eiPg			53.20		
			E	eiSn		59	10.8		
		ATH	HZ	ePn	01	59	02.1	240	
			HZ	eiPg			06.2D		
			WAE	eiSb			31.8		
		VAM	Z	eiPg	01	59	19.5D	315	
			N	eiSg			59.1		
		PLG	Z	ePn	01	59	27.5	440	
		PRK	Z	ePn	01	59	37.1	520	
2	1	ATH	SPZ	eiPg	10	26	30.20	110	<u>Athens: H=10:26:09</u> <u>37.0°N, 23.7°E. $M_L=2.9$</u>
			SPN	eiSg			44.0		
		VAM	Z	eiPn	10	26	39.40	185	
			N	eiSn		27	02.3		
			E	eiSg			04.4		
		VLS	Z	ePn	10	27	05.8	300	
		PRK	Z	eiPg	10	27	09.6D	340	
3	2	PAT	Z	ePg	16	21	30.4	80	<u>Athens: H=16:21:15</u> <u>37.5°N, 21.8°E. $M_L=3.8$</u>
			Z	eiSg			40.5		
		VLS	Z	eiPn	16	21	38.6D	125	
			E	iSg			54.7		
		ATH	SPZ	ePn	16	21	45.5	180	
			SPN	eiSg		22	07.5		
		VAM	Z	ePy	16	22	07.5	315	
			E	eiSy			46.0		
			N	eiSg			50.0		
		PLG	Z	eiPn	16	22	06.3D	345	
4	3	VLS	Z	ePn	18	19	07.3	250	<u>Athens: H=18:18:29</u> <u>40.2°N, 19.5°E. $M_L=4.1$</u>
			Z	eiPg			13.0D		
			E	iSg			42.5		
		PLG	Z	eiPn	18	19	17.90	325	
			N	eiSn			53.2		
		ATH	SPZ	ePn	18	19	29.5	415	
			SPZ	eiPg			42.8D		
		PRK	Z	eiPn	18	19	49.6D	575	
		VAM	Z	ePn	18	20	01.2	670	
5	4	ATH	SPZ	eiPn	02	14	19.90	140	<u>Athens: H=02:13:54</u> <u>37.8°N, 22.2°E.</u> Felt in Achaia (IV+ at Kalavryta, IV at Kertezze). The stat. of PAT was out of operation from 12 h of 4 of October to 12 h of 5, on account of trouble in the Chronometer.
			SPN	iSg			39.0		
		VLS	Z	eiPn	02	14	20.2D	145	
			E	iSg			40.1		
		PLG	Z	ePn	02	14	39.0	300	
		VAM	Z	ePn	02	14	43.4	330	
			N	eiSn		15	19.6		
		PRK	Z	ePn	02	14	50.8	390	

ATHENS		SHOCKS IN THE AREA OF GREECE						OCTOBER 1968	Page 3
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
6	4	JAN	Z	eiPg	17	19	56.3D	45	Athens: H=17:19:48 39.2°N, 21.1°E.
		VLS	Z	eiPn	17	20	11.6C	130	Felt in Acarnania (V at Phlorias). ✓
			E	iSg			28.4		
		PLG	Z	ePn	17	20	26.6	245	
			Z	eiPg			31.8		
		ATH	SPZ	ePy	17	20	34.0	270	
			SPN	eiSn		21	00.5		
		VAM	Z	ePn	17	21	00.1	510	
7	5	VLS	ZE	i!Pg	06	16	38.9DE	45	Athens: H=06:16:30 37.8°N, 20.9°E.
			E	i!Sg			45.0		
		JAN	Z	eiPg	06	17	07.2C	205	
		PLG	Z	ePb	06	17	27.5	365	
			Z	ePg			35.8		
		VAM	Z	ePg	06	17	42.1	400	
8	6	PAT	Z	ePn	00	41	08.8	160	Athens: H=00:40:41 36.8°N, 22.1°E.
		ATH	SPZ	ePn	00	41	13.0	195	BCIS: H=00:40:45
			SPE	eiSg			40.0		36 3/4 N, 22 1/4 E.
		VLS	Z	eiPn	00	41	14.6D	205	USCGS: H=00:40:44
		VAM	Z	eiPn	00	41	17.5C		35.9°N, 21.9°E; h=55 Km; Mb=4.3
			E	eiSn			43.8	230	The WA-Seismographs were out of
		PLG	Z	ePn	00	41	40.6	410	operation from 12 h, October 5,
		PRK	Z	ePn	00	41	46.6	455	till 06, October 6, on account
									of trouble in the recording system.
9	6	PRK	Z	eiPn	09	32	23.2D	260	Athens: H=09:31:43
			Z	iPg			30.1C		39.0°N, 29.2°E.
			N	iSg		33	01.1		
		RHD	Z	ePg	09	32	42.7	330	
			E	eiSg		33	23.3		
		PLG	Z	ePn	09	32	55.2	510	
10	6	RHD	Z	ei!Pn	15	07	07.1D	160	Athens: H=15:06:39
			E	i!Sg			28.6		37.0°N, 26.5°E; M _L =4.8
		PRK	Z	eiPn	15	07	18.7C	255	BCIS: H=15:06:38
			Z	iPg			24.6C		36.9°N, 26.7°E.
			E	iSg			55.4		USCGS: H=15:06:44.8
		ATH	SPZ	eiPn	15	07	21.3D	265	36.9°N, 26.5°E.
			SPZ	iPg			27.0D		Felt on Samos Island (III at
			SPE	iSg			59.9		Pagonda).
		VAM	Z	eiPn	15	07	22.3D	280	
			E	eiSn			54.5		
		PLG	Z	ePn	15	07	44.9	460	
		VLS	Z	ePn	15	07	56.0	545	

ATHENS		SHOCKS IN THE AREA OF GREECE						OCTOBER 1968	Page 4
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
11	7	RHD	Z	eiPg	17	07	38.10	120	Athens:H=17:07:15 37.2°N, 28.4°E.
			E	eiSg			53.0		
		PRK	Z	eiPn	17	08	11.50	305	
		VAM	Z	ePn	17	08	26.5	420	
12	8	ATH	SPZ	eiPg	04	11	39.20	60	Athens:H=04:11:28 37.7°N, 23.1°E; $M_L=2.5$ Felt in Argolis (IV+ at Nea-Epidaurus).
			SPE	iSg			47.2		
		VLS	Z	ePn	04	12	04.5	230	
		VAM	Z	ePb	04	12	12.1	275	
			N	eiSg			50.0		
		JAN	Z	ePg	04	12	19.8	290	
		PLG	Z	ePn	04	12	13.0	300	
		PRK	Z	ePn	04	12	17.5	330	
13	8	PRK	Z	iPg	14	29	28.70	85	Athens:H=14:29:12 40.1°N, 26.0°E. $M_L=3.8$
			E	iSg			39.7		
		PLG	Z	eiPn	14	29	45.00	200	
		ATH	SPZ	ePn	14	29	58.4	310	
		JAN	Z	ePn	14	30	14.3	435	
		RHD	Z	ePn	14	30	18.6	470	
14	9	VAM	Z	eiPn	22	03	14.20	235	Athens:H=22:02:37 35.6°N, 21.7°E.
			N	eiSn			41.5		
		VLS	Z	ePn	22	03	22.6	300	
			E	eiSn			55.0		
		JAN	Z	ePn	22	03	43.0	460	
		PLG	Z	eiPn	22	03	55.00	560	
15	10	RHD	Z	iPg	05	16	46.10	120	Athens:H=05:16:23 36.7°N, 29.2°E. $M_L=4.5$
			E	iSg		17	00.9		
		PRK	Z	eiPy	05	17	29.30	390	
			E	eiSn		18	01.8		
		VAM	Z	ePb	05	17	35.4	470	
		ATH	SPZ	eiPn	05	17	36.80	515	
			SPN	eiSn		18	29.8		
		PLG	Z	ePn	05	17	52.7	645	
		JAN	Z	ePb	05	18	18.1	770	
16	10	PRK	Z	iPn	10	19	36.70	135	Athens:H=10:19:12 39.4°N, 24.6°E. $M_L=3.2$
			Z	iPg			37.40		
			N	iSg			54.2		
		PLG	Z	eiPn	10	19	38.80	150	
		ATH	SPZ	ePg	10	19	46.6	190	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
17	10	VAM	Z	iPg	21	20	26.20	95	Athens: H=21:20:08 36.0°N, 23.5°E. From 20h to 23h, of October 10, the WA-Seismographs were out of operation, on account of a trouble in the recording system.
			N	iSg			38.2		
		ATH	SPZ	ePn	21	20	43.8	225	
		VLS	Z	ePn	21	20	58.5	340	
		RHD	Z	ePn	21	21	07.9	420	
		PRK	Z	ePn	21	21	10.2	430	
		JAN	Z	ePn	21	21	13.0	455	
		PLG	Z	ePn	21	21	16.5	480	
18	11	VAM	Z	eiPn	03	03	04.60	205	Athens: H=03:02:32 36.7°N, 25.8°E. $M_L=4.5$ USCGS: H=03:02:33.1 36.6°N, 25.9°E; h=21 Km; Mb=4.3
			N	iSg			33.5		
		RHD	Z	iPn	03	03	07.30	215	
		ATH	SPZ	ePn	03	03	08.9	235	
			SPZ	eiPy			11.00		
			SPE	iISy			39.9		
		PRK	Z	eiPn	03	03	16.10	295	
			N	eiSg			04 01.3		
		PLG	Z	ePn	03	03	39.3	480	
		VLS	Z	ePn	03	03	41.8	495	
		JAN	Z	eiPn	03	03	52.30	565	
19	12	PRK	Z	iPg	07	41	14.40	80	Athens: H=07:40:59 39.7°N, 25.4°E. $M_L=3.5$
			N	iSg			24.5		
		PLG	Z	eiPn	07	41	29.60	185	
			Z	iPg			32.00		
		ATH	SPZ	ePn	07	41	37.8	250	
			SPZ	eiPg			44.30		
			SPN	eiSg			42 15.8		
		JAN	Z	ePb	07	42	02.2	400	
		RHD	Z	ePn	07	42	03.3	450	
20	12	ATH	SPZ	eiPg	08	54	13.20	85	Athens: H=08:53:57 38.8°N, 23.9°E. $M_L=3.0$
			SPN	eiSg			23.9		
		PLG	Z	eiPn	08	54	25.80	175	
		PRK	Z	ePn	08	54	32.1	220	
		JAN	Z	ePb	08	54	42.3	280	
		VLS	Z	ePn	08	54	42.2	300	
		VAM	Z	ePn	08	54	52.5	380	
21	12	PAT	Z	ePg	22	40	23.0	10	Athens: H=22:40:21 38.2°N, 21.8°E. $M_L=3.2$
		VLS	Z	eiPg	22	40	42.50	115	
			E	iSg			56.7		
		JAN	Z	eiPn	22	40	50.30	175	
			N	eiSn			41 11.5		
		ATH	SPZ	ei(Pg)	22	40	59.80	190	
			SPZ	i(Sg)			41 25.5		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		PLG	Z	ePn	22	41	04.1	280	
		VAM	Z	ePb	22	41	27.1	390	
22	14	ATH	SPZ SPN	eiPg iSg	00	30	04.1D 12.4	65	Athens: H=00:29:52 37.4° N, 23.4° E. M _L =2.6
		VLS	Z	ePn	00	30	33.1	260	Felt in Argolis (III at Nea-Epidaurus).
		PLG	Z	ePn	00	30	41.7	335	
23	14	ATH	SPZ SPE	eiPg iSg	01	42	42.3C 50.6	65	Athens: H=01:42:30 37.6° N, 23.3° E M _L =3.9
		VLS	Z E	ePn eiSn	01	43	09.5 39.2	255	Felt in Argolis (IV+ at Nea-Epidaurus).
		VAM	Z N	ePn eiSn	01	43	12.8 44.3	280	
		PLG	Z Z	ePn eiPg	01	43	14.8 23.1D	300	
		JAN	Z	ePn	01	43	18.6	320	
		PRK	Z Z E	ePn eiPg eiSg	01	43	18.6 27.6D 44 06.3	320	
24	14	ATH	SPZ SPN	eiPg iSg	03	03	02.4D 10.0	60	Athens: H=03:02:51 37.4° N, 23.5° E. M _L =2.6
		VLS	Z	ePn	03	03	31.4	260	Felt in Argolis (III at Nea-Epidaurus).
		PLG	Z	ePb	03	03	43.7	330	
25	14	ATH	SPZ SPN	eiPg iSg	03	46	29.2D 37.1	60	Athens: H=03:46:18 37.7° N, 23.3° E. M _L =2.6
		VLS	Z	ePn	03	46	56.6	250	Felt in Argolis (III at Nea-Epidaurus).
		VAM	Z	ePg	03	47	07.3	275	
		PLG	Z	ePn	03	47	04.7	305	
26	14	ATH	SPZ SPN	eiPg iSg	07	59	33.0D 41.4	65	Athens: H=07:59:21 37.7° N, 23.3° E. M _L =2.7
		VLS	Z	ePn	07	59	58.7	250	Felt in Argolis (IV+ at Nea-Epidaurus).
		VAM	Z	ePb	08	00	05.8	280	
		PLG	Z	ePn	08	00	05.8	300	
27	14	ATH	SPZ SPN	eiPg iSg	08	52	08.0D 15.5	60	Athens: H=08:51:56 37.7° N, 23.4° E. M _L =2.7
		VAM	Z	ePg	08	52	43.3	260	Felt in Argolis (IV+ at Nea-Epidaurus).
		VLS	Z	ePn	08	52	37.1	265	
		PLG	Z	ePn	08	52	41.7	305	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	D	Remarks
28	14	PRK	Z	iPg	11	04	54.60	85		Athens: H=11:04:38 40.1° N, 26.1° E. From 09:30, October 14, to 07:00, October 15, the WA-Seismographs were out of operation on account of a trouble in the recording system.
			N	iSg		05	05.4			
		PLG	Z	ePn	11	05	12.8	215		
		ATH	SPZ	ePn	11	05	25.5	320		
		JAN	Z	ePn	11	05	43.4	450		
29	14	ATH	SPZ	eiPg	17	08	17.90	50		Athens: H=17:08:02 37.9° N, 23.2° E.
			SPN	iSg			18.6			
		VLS	Z	ePg	17	08	45.5	240		
		PLG	Z	ePn	17	08	45.8	285		
		VAM	Z	ePg	17	08	57.5	305		
		PRK	Z	ePg	17	08	57.9	310		
30	14	PLG	Z	iPg	23	00	35.70	90		Athens: H=23:00:19 40.1° N, 24.3° E.
		PRK	Z	ePg	23	00	57.5	210		
		ATH	SPZ	eiPn	23	00	56.90	240		
			SPZ	eiPg		01	01.50			
			SPN	iSn			25.0			
			SPE	iSb			26.9			
		JAN	Z	eiPn	23	01	06.50	315		
		VLS	Z	ePn	23	01	13.6	370		
		VAM	Z	ePn	23	01	35.4	540		
31	15	JAN	Z	ePn	05	55	07.1	120		Athens: H=05:54:47 39° N, 19 3/4° E.
		VLS	Z	ePn	05	55	09.8	130		
			E	eiSn			26.9			
		PLG	Z	ePb	05	55	45.6	330		
32	15	PRK	Z	ePg	10	53	49.3	80		Athens: H=10:53:35 39 1/2° N, 25 1/4° E.
			N	eiSg			59.2			
		PLG	Z	ePn	10	54	06.5	190		
			E	eSn			29.3			
		JAN	Z	ePn	10	55	11.6	385		
		VLS	Z	ePn	10	55	16.2	405		
33	15	PRK	Z	eiPg	13	48	08.20	100		Athens: H=13:47:50 Probably 39 1/4° N, 25.0° E.
			N	eSg			20.6			
		PLG	Z	ePn	13	48	21.8	190		
		VLS	Z	ePn	13	48	28.3	245		
		JAN	Z	ePn	13	48	33.0	280		

ATHENS		SHOCKS IN THE AREA OF GREECE					OCTOBER 1968	Page 8	
N°	Date	Stat.	Comp.	Phase	h	m	s	L	Remarks
34	15	VLS	Z	ePn	16	49	52.7	180	Athens: H= 16:49:22 36.7°N, 20.6°E. M _L =3.4
			Z	ePg			55.2		
			E	eiSg		50	15.2		
		ATH	SPZ	ePn	16	49	59.7	235	
		VAM	Z	ePg	16	50	11.9	280	
		JAN	Z	ePn	16	50	09.6	315	
		PLG	Z	ePg	16	50	40.7	440	
35	15	PRK	Z	i!Pg	22	10	08.6C	85	Athens: H=22:09:53 Probably 39 3/4°N, 25 1/4°E.
			N	eSg			18.9		
		PLG	Z	eiPn	22	10	21.8C	170	
36	15	PRK	Z	i!Pn	23	21	50.1D	140	Athens: H=23:21:26 39.4°N, 24.4°E. M _L =2.9
		PLG	Z	ePn	23	21	54.8	160	
			Z	eSn		22	16.3		
		ATH	SPZ	ePn	23	21	55.9	175	
			SPN	eSy		22	19.2		
		JAN	Z	ePn	23	22	10.9	295	
		VAM	Z	ePn	23	22	29.1	440	
37	16	PRK	Z	ePg	13	11	32.7	105	Athens: H=13:11:17 40.2°N, 25.8°E. The VAM station was out of operation from 13h 09m, October 16, to 21h 32m, October 17, 1968, on account of trouble in the recording system.
			E	eSg			43.6		
		PLG	Z	ePn	13	11	49.7	200	
			Z	iPg			52.8		
		ATH	SPZ	ePn	13	12	09.5	305	
38	16	RHD	Z	eiPg	14	47	49.3C	120	Athens: H=14:47:28 36.7°N, 29.2°E.
			E	eiSg		48	05.2		
		PRK	Z	ePn	14	48	22.8	375	
		VAM	Z	e(Pn)	14	48	28.9	(430)	
		ATH	SPZ	ePn	14	48	38.9	500	
		PLG	Z	e?(Pn)	14	48	54.5	(660)	
		JAN	Z	e(Pn)	14	49	20.6	820	
39	16	VLS	Z	ePg	16	18	38.3	105	Athens: H=16:18:20 38.6°N, 21.6°E.
			E	eiSg			51.8		
		JAN	Z	ePg	16	18	39.6	110	
		PLG	Z	ePn	16	20	00.8	265	
40	16	VLS	Z	ePg	20	21	17.4	205	Athens: H=20:20:34 36.3°N, 21.5°E.
			E	eSn		22	39.3		
			E	eSb			40.4		
		ATH	SPZ	ePn	20	21	24.7	345	
		JAN	Z	ePn	20	21	25.0	350	
		VAM	Z	ePg	20	21	36.2	350	
		PLG	Z	ePn	20	21	47.0	520	

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N°	Date	Stat.	Comp.	Phase	H	L	S	D	Remarks
41	16	JAN	Z	eiPg	21	52	07.00	120	Athens: H=21:51:46 40.2°N, 19.6°E.
			N	eSg			23.0		
		VLS	Z	ePn	21	52	26.9	260	
		PLG	Z	ePg	21	52	45.7	330	
42	17	ATH	SPZ	ePg	03	49	11.2	75	Athens: H=03:48:59 38 1/4°N, 24 1/2°E.
			SPN	eSg			22.9		
		PRK	Z	e?(Pn)	03	49	26.3	(160)	
		PLG	Z	ePg	03	49	47.4	260	
		VAM	Z	e?(Pn)	03	49	43.4	(290)	
		VLS	Z	ePn	03	49	50.3	345	
43	17	PRK	Z	ePg	05	08	36.3	120	Athens: H=05:08:15 39.9°N, 25.0°E. M _L =3.8
			N	eSg			52.3		
		PLG	Z	ePn	05	08	38.4	140	
		ATH	SPZ	e(Pn)	05	08	49.5	(230)	
44	17	PRK	Z	ePg	05	48	56.9	105	Athens: H=05:48:38 Probably 40 1/4°N, 26 1/4°E.
			NE	eSg		49	09.7		
		PLG	Z	ePn	05	49	15.5	240	
45	17	PLG	Z	ePg	05	50	02.3	55	Athens: H=05:49:53 40.0°N, 24.0°E.
			NE	eSg			09.6		
		PRK	Z	ePn	05	50	23.8	175	
		ATH	SPZ	ePn	05	50	24.7	185	
46	17	ATH	SPZ	ePg	18	43	50.8	110	Athens: H=18:43:31 39.2°N, 24.2°E. M _L =3.1
			SPN	eSg		44	04.7		
		PLG	Z	ePn	18	43	54.5	135	
			E	eSn		44	12.0		
		PRK	Z	ePn	18	43	59.8	170	
		JAN	Z	ePb	18	44	15.3	280	
		VLS	Z	ePn	18	44	18.3	320	
47	17	VLS	Z	iiPg	23	56	16.50	80	Athens: H=23:56:01 37.9°N, 20.2°E; M _L =4.2 BCIS: H=23:56:02 38.1°N, 20.2°E. USCGS: H=23:56:05 38.3°N, 20.2°E Depth 29 Km; Mb=4.5
		JAN	Z	eiPn	23	56	30.90	190	
		ATH	SPZ	eiPn	23	56	47.4	300	
			SPZ	eiPb			49.4		
			SPE	eiSn	57		20.2		
		PLG	Z	ePn	23	56	57.0	380	
		VAM	Z	ePn	23	57	03.9	430	
			E	eiSn			50.3		
		PRK	Z	ei(Pb)	23	57	18.8	545	
			E	eSg		58	41.3		
		RHD	Z	ePn	23	57	44.7	750	

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N°	Date	Stat.	Comp.	Phase	n	m	s	D	Remarks
48	18	PRK	Z	i!Pg	00	41	24.00	75	Athens: H=00:41:11 39 1/2°N, 25 1/2°E; M _L =3.4
			N	eSg			33.9		
		PLG	Z	eiPn	00	41	39.6D	170	
		ATH	SPZ	ePn	00	41	46.1	220	
		JAN	Z	ePn	00	42	10.8	415	
		VAM	Z	ePn	00	42	11.2	420	
		RHD	Z	ePn	00	42	12.2	425	
49	19	PAT	Z	ePg	02	45	17.3	60	Athens: H=02:45:06 37.9°N, 22.2°E. Felt in Arcadia (IV+ at Levi- dion, III+ at Vytina).
		ATH	SPZ	ePn	02	45	28.7	130	
			SPN	eSn			45.8		
		VLS	Z	ePn	02	45	28.7	135	
		JAN	Z	ePn	02	45	41.0	220	
		VAM	Z	ePn	02	45	43.2	240	
		PLG	Z	ePn	02	45	49.5	290	
50	19	VAM	ZE	i!Pg	15	35	07.10E	50	Athens: H=15:34:56 35.5°N, 23.7°E; M _L =3.9 BCIS: H=15:34:57 35.3°N, 23.6°E. USCGS: H=15:34:54.8 35.3°N, 23.5°E. Depth 19; Mb=4.8. Felt on Crete island, espe- cially at Chania (III at Ma- leme).
		ATH	SPZ	ePn	15	35	40.2	280	
			SPZ	eiPg			46.0		
			SPE	eiSn	36		10.4		
			LPE	eiSg			19.2		
		VLS	Z	e?(Pn)	15	35	50.9	370	
		RHD	Z	eiPn	15	35	56.3D	415	
		PRK	Z	ePn	15	36	03.1	460	
		JAN	Z	ePn	15	36	05.3	485	
		PLG	Z	ePn	15	36	11.2	530	
51	21	ATH	SPZ	ePg	16	55	43.2	130	Athens: H=16:55:18 39.1°N, 24.3°E. M _L =3.2 The VLS station is missing from 10h till 17h, October 21, on account of under developed paper.
			SPE	eiSg			57.8		
		PLG	Z	ePn	16	55	45.4	160	
		PRK	Z	eiPn	16	55	45.8	165	
		JAN	Z	ePy	16	56	09.7	300	
		VAM	Z	ePn	16	56	17.8	410	
			Z	e(Pg)			30.2		
52	21	VAM	Z	iPg	18	16	56.6CNE	70	Athens: H=18:16:44 35.4°N, 23.4°E; M _L =4.4 BCIS: H=18:16:40 35.2°N, 23.5°E. Felt on Crete Island, espe- cially in Chania (III at Maleme).
		ATH	SPZ	ePn	18	17	29.0	300	
			SPZ	eiPy			33.6C		
			SPN	eiSn	18		03.7		
			SPN	iSg			14.4		
		PAT	Z	e?(Pn)	18	17	33.2	340	
			Z	eiSg		18	25.0		
		VLS	Z	ePn	18	17	40.3	390	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		RHD	Z	eiPn	18	17	46.6	435	
			E	eiSn		18	32.2		
		PRK	Z	ePn	18	17	54.1	490	
		JAN	Z	ePn	18	17	57.7	520	
			Z	ePb		18	03.2		
		PLG	Z	ePn	18	18	00.8	545	
53	22	VAM	Z	ei!Pg	02	29	12.3	CNE80	Athens:H=02:28:57
			NE	iSg			22.1		After shock.
		ATH	SPZ	ePg	02	29	52.6	310	35.2°N, 23.3°E.
		RHD	Z	ePn	02	30	02.6	460	
		JAN	Z	ePn	02	30	13.1	540	
		PLG	Z	ePn	02	30	13.9	580	
54	22	PLG	Z	eiPn	08	32	32.4	(C)185	Athens:H=08:32:07
			E	eiSn		33	00.6		Probably 41°N, 25 1/2°E.
			E	eiSb			01.4		
		PRK	Z	ePn	08	32	39.2	200	
			Z	eiPg			42.4		
			N	eSn		33	03.4		
			N	eiSg			07.4		
55	23	ATH	SPZ	eiPg	05	17	31.3	55	Athens:H=05:17:22
			SPNE	eiSg			39.8		37.7°N, 23.4°E; M _L =3.0
		VLS	Z	ePn	05	18	01.4	250	The PRK station is missing
		VAM	Z	ePn	05	18	05.0	280	from 22h, October 22, till
			Z	ePb			06.9		16h, October 28, on account
			Z	eiPg			12.00		of unterdeveloped paper.
			E	eSn			36.2		
		PLG	Z	ePn	05	18	08.3	305	
		JAN	Z	ePn	05	18	09.6	315	
			Z	ePg			18.6		
56	23	ATH	SPZ	eiPg	12	20	27.2	60	Athens:H=12:20:17
			SPNE	iSg			35.6		37.8°N, 23.1°E. M _L =3.1
		VLS	Z	ePg	12	20	56.4	220	
		JAN	Z	e?(Pn)	12	21	00.5	285	
			Z	ePy			05.4		
		VAM	Z	ePn	12	21	00.6	285	
			Z	ePb			03.1		
			Z	eiPg			07.60		
			E	eSn			32.6		
		PLG	Z	ePn	12	21	01.1	290	
			Z	ePg			09.6		
57	24	ATH	SPZ	eiPg	01	27	06.80	60	Athens:H=01:26:55
			SPNE	iSg			14.5		37.6°N, 23.3°E. M _L =3.6

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		VLS	Z	ePg	01	27	38.0	240	
		VAM	Z	ePn	01	27	34.4	270	
			E	eiSg		28	15.2		
		PLG	Z	eiPn	01	27	40.7	300	
		JAN	Z	e(Pb)	01	27	44.9	310	
			Z	eiPg			49.9		
58	24	ATH	SPZ	eiPg	04	34	49.2D	20	Athens: H=04:34:44
			SPNE	iSg			52.1		38.1°N, 24.0°E, M _L =1.9
		PLG	Z	ePn	04	35	24.8	260	
		VAM	Z	ePb	04	35	32.2	300	
			Z	ei			49.3D		
59	25	VAM	Z	eiPn	12	19	35.6	200	Athens: H=12:19:03
			Z	eiPy			37.1		35.5°N, 21.9°E
			N	eiSg		20	03.0		
		VLS	Z	ePg	12	19	58.5	310	
			E	eSg		20	32.5		
		ATH	SPZ	ePg	12	20	02.4	330	
		PLG	Z	e?(Pb)	12	20	30.5	(570)	
60	26	PLG	Z	eiPn	00	21	29.0(C)	140	Athens: H=00:21:04
		ATH	SPZ	eiPn	00	21	33.3D	170	39.4°N, 24.3°E M _L =3.1
			SPE	eiSn			54.3		
			SPN	eiSg			55.4		
		JAN	Z	eiPg	00	21	56.2(C)	290	
61	26	PAT	Z	ePg	01	25	52.6	60	
		ATH	SPZ	eiPg	01	25	04.5D	130	Athens: H=01:24:41
			SPNE	iSg			20.4		38.4°N, 22.3°E.
									M _L =3.4
		VLS	Z	ePn	01	25	05.6	150	
		JAN	Z	e(Pn)	01	25	12.4	200	
			Z	eiPg			16.3		
			N	eiSb			37.8		
			E	eiSg			40.6		
		PLG	Z	eiPn	01	25	17.4	230	
		VAM	Z	ePn	01	25	35.2	370	
			E	e(Sn)		26	16.6		
62	26	ATH	SPZ	eiPg	02	03	26.4D	65	Athens: H=02:03:14
			SPNE	iSg			34.6		Probably 38 3/4°N, 23 1/4°E;
		PLG	Z	ePn	02	03	53.7	220	M _L =2.6
		VAM	Z	ePn	02	03	56.6	280	
			E	eSb		04	30.6		
		*PAT							
63	26	VLS	Z	ePg	03	11	35.6	120	Athens: H=03:11:13
			E	e(Sg)			51.8		38 3/4°N, 21 3/4°E.
		JAN	Z	eiPg	03	11	35.8(D)	120	
			E	eiSg			49.8		
		*PAT	Z	e?Pg	03	11	24.6	(60)	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		ATH	SPE	eiSg	03	12	15.9	210	
		PLG	Z	ePn	03	11	51.9	250	
64	26	ATH	SPZ SPNE	eiPg eiSg	06	25	03.30 11.8	70	Athens: H=06:24:50 37.6°N, 23.2°E.
		VLS	Z	ePb	06	25	32.2	260	
			Z	eiPg			36.2		
		VAM	E	eSb	06	26	04.5	265	
		PLG	Z	ePb	06	25	40.9	320	
65	26	ATH	SPZNE SPNE	iPg iISg	06	27 28	58.30 06.8	65	Athens: H=06:27:46 37.6°N, 23.4°E. M _L =3.1
		PAT	Z	e?(Pg)	06	28	18.5	(180)	
		VLS	Z	ePn	06	28	27.1	265	
			Z	ePg			33.2		
			E	eSn			57.3		
		VAM	Z	ePy	06	28	31.9	270	
			E	eiSn			59.7		
		PLG	Z	ePn	06	28	32.9	315	
		JAN	Z	ePb	06	28	37.0	320	
66	26	ATH	SPZ SPNE	eiPg iSg	17	13	10.90 28.2	140	Athens: H=17:12:46 39.1°N, 24.6°E. M _L =3.3
		PLG	Z	ePn	17	13	14.7	170	
		JAN	Z	ePb	17	13	38.8	330	
			Z	ei(Pg)			44.4		
		VLS	Z	ePn	17	13	40.6	370	
		VAM	Z	ePn	17	13	47.0	420	
67	26	ATH	SPZ SPNE	ePn eiSg	17	16	10.2 27.2	140	Athens: H=17:15:45 39°N, 24 1/2°E. M _L =3.1
		PLG	Z	ePn	17	16	12.5	155	
		JAN	Z	e(Py)	17	16	37.8	315	
			Z	ePg			42.5		
		VAM	Z	ePn	17	16	43.8	400	
			Z	e(Py)			48.9		
68	26	ATH	SPZ SPNE	ePn eiISg	19	18	38.8 55.2	135	Athens: H=19:18:14 39.1°N, 24.3°E. M _L =3.0
		PLG	Z	ePn	19	18	43.8	170	
		VAM	Z	ePb	19	19	18.0	410	
			Z	ePg			28.0		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
69	(27)	ATH	SPZ SPNE	eiPb iSn	10	55	30.4C 55.8	240	Athens: H=10:54:52 39.0°N, 26.1°E. $M_L=4.0$ USCGS: H=10:54:56.8 38.9°N, 26.0°E; h=19 Km; Mb=3.9
		PLG	Z N	ePn eiSg	10	55	33.1 56 13.6	270	
		RHD	Z Z	eiPn eiPb	10	55	45.6D 48.6C	360	
		VAM	Z Z Z	ePn ei(Pb) eiPg	10	55	51.7 55.8C 56 05.6	415	
		JAN	Z	ePn	10	55	58.2	455	
		VLS	Z	ePn	10	56	00.8	475	
70	(27)	RHD	Z E	ePn eiSg	11	00	59.6 01 21.1	165	Athens: H=11:00:32 33 3/4°N, 28 1/4°E
		VAM	Z E	ePy eiSg	11	01	45.8 02 40.1	430	
		VLS	Z	e?(Pn)	11	02	27.3	(840)	
71	(27)	VLS	ZE E	eiPg eiSg	13	02	51.7D 03 03.4	90	Athens: H=11:02:36 37.5°N, 20.1°E. $M_L=3.9$
		PAT	Z	ePg	13	03	05.7	165	
		JAN	Z Z E E	ePn ei(Py) ei(Sn) eiSg	13	03	16.8 20.4 47.0 54.7	260	
		ATH	SPZ SPN SPN	ePb eiSn eiSy	13	03	27.5 04 01.0 09.8	330	
		PLG	Z Z	ePn ePy	13	03	37.2 45.7	420	
		VAM	Z Z E E	ePn ei(Py) e(Sn) eSb	13	03	38.8 47.4C 04 26.1 33.4	440	
72	(27)	RHD	Z E	ePg eSg	13	06	42.4 52.3	80	Athens: H=13:06:28 36 1/2°N, 27°E. $M_L=3.9$
		VAM	Z Z E	e(Pb) eiPg eiSn	13	07	10.7 15.9C 40.6	270	
		ATH	SPZ SPN	ePn eiSn	13	07	18.0 54.5	335	
73	(27)	RHD	Z E	eiPg eSg	22	06	42.6D 55.1	100	Athens: H=22:06:25 36.5°N, 27.2°E. $M_L=4.3$
		PRK	Z Z E	eiPn eiPb eiSg	22	07	10.4C 13.2D 55.9	300	
		VAM	Z N	eiPn ei(Sn)	22	07	11.5D 46.5	310	
		./.							

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
74		ATH	SPZ	eiPb	22	07	20.60	360	
			SPZ	eiPy			23.6		
			SPN	eiSb		08	59.8		
		PLG	Z	ePn	22	07	43.4	560	
		VLS	Z	e?(Pb)	22	07	55.6	(590)	
		JAN	Z	ePn	22	07	57.9	670	
	27	RHD	Z	ePg	22	30	00.3	90	Athens: H=22:29:44
		VAM	Z	ePn	22	30	29.0	300	36.6°N, 27.2°E. M _L =4.2
			E	eSb		31	06.5		
		PRK	Z	eiPn	22	30	29.50	300	
75			Z	eiPg			37.40		
			N	eiSb		31	06.5		
		ATH	SPZ	e?(Pn)	22	30	34.4	340	
			SPZ	ei			42.00		
			SPNE	iSy		31	20.7		
		PLG	Z	e?(Pn)	22	30	56.4	510	
			Z	ePb		31	02.2		
		VLS	Z	e?(Pb)	22	31	17.1	(610)	
		JAN	Z	ePn	22	31	16.5	665	
	28	RHD	Z	eiPg	23	04	29.90	100	Athens: H=23:04:12
76			E	eiSg			44.3		36 3/4°N, 27 1/4°E. M _L =3.8
		PRK	Z	ePn	23	04	58.9	310	
			Z	ei(Pg)		05	06.5		
			E	eiSg			44.6		
		VAM	Z	ePn	23	05	00.5	320	
			Z	ePy			06.0		
			Z	ei(Pg)			09.0		
			E	eSy			46.0		
		ATH	SPZ	ePg	23	05	11.4	330	
			SPE	eiSg			51.5		
76	28	JAN	Z	eiPg	00	32	02.00	90	Athens: H=00:31:44
			E	eiSg			14.6		39.2°N, 21.7°E. M _L =3.4
		PAT	Z	ePg	00	32	03.1	110	
		VLS	Z	ePg	00	32	09.6	140	
			E	eiSg			35.6		
		PLG	Z	ePn	00	32	15.8	190	
			Z	eiPg			21.20		
		ATH	SPZ	ePn	00	32	20.7	230	
			SPZ	ePy			23.4		
			SPE	eiSn			47.5		
		PRK	Z	e?(Pn)	00	32	42.5	(400)	
		VAM	Z	e?(Pn)	00	32	50.9	(465)	

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77	28	PRK	Z	eiPg	06	29	39.4D	90	Athens: H=06:29:23 39 3/4°N, 25 1/2°E. M _L =3.5
			NE	ei!Sg			50.7		
		PLG	Z	ePn	06	29	55.7	200	
			Z	e(Pg)			58.2		
		ATH	SPZ	ePn	06	30	01.1	245	
			SPZ	ePy			04.4		
			SPNE	eiSn			29.5		
		JAN	Z	ePn	06	30	22.7	410	
78	28	PRK	Z	iPg	11	58	49.4DS	W55	Athens: H=11:58:39 38 3/4°N, 26° E; M _L =3.6 Felt on Chios Island (II+ at Neochori).
			NE	iSg			55.5		
		ATH	SPZ	eiPn	11	59	13.3D	210	
			SPZ	eiPg			17.5D		
			SPN	ei(Sn)			38.0		
			SPE	i(Sy)			41.0		
			SPE	iSg			43.3		
		PLG	Z	ePn	11	59	18.7	255	
			Z	ePb			20.7		
			Z	ei(Pg)			24.0D		
		RHD	Z	ePn	11	59	27.8	325	
		VAM	Z	ePn	11	59	37.1	400	
			Z	eiPb			41.2		
			E	eSg	12	00	39.9		
		JAN	Z	ePn	11	59	38.2	410	
79	28	PRK	ZNE	iPg	12	54	40.4DS	W65	Athens: H=12:54:29 38.9°N, 25.7°E; M _L =4.8 BCIS: H=12:54:29 38.9°N, 26.0°E. USCGS: H=12:54:33 39.0°N, 25.9°E.; Mb=4.5 Felt on the islands of Lesbos (IV+ at Polychnitos, II+ at Vatousa) and Chios (IV at Chios, III at Neochori).
		ATH	SPZ	eiPn	12	55	02.4C	205	
			SPZ	i!Sn			26.4		
			SPZ	i!Sy			29.2		
		PLG	Z	eiPn	12	55	09.3D	260	
			Z	eiPy			12.2		
			N	eiSg			48.2		
		RHD	Z	e(Pn)	12	55	24.0	(350)	
		PAT	Z	e?(Pb)	12	55	23.8	(350)	
		JAN	Z	e?(Pn)	12	55	27.9	(405)	
		VAM	Z	ePn	12	55	28.6	410	
			Z	eiPg			42.1		
			E	eSg		56	33.4		
		VLS	Z	ePn	12	55	36.9	475	
			E	ei(Sg)		56	54.7		
80	28	RHD	Z	eiPg	13	57	(56.7)C	80	Athens: H=13:57:42 36 3/4°N, 27 3/4°E. M _L =4.0 In VAM station the shock was lost in the sinial of chronometer.
		PRK	Z	ePn	13	58	27.2	300	
			Z	eiPg			35.0D		
			N	eSg		59	12.6		
		ATH	SPZ	ePb	13	58	40.3	380	
			SPN	eiSn		59	18.3		

N°	Date	Stat.	Comp.	Phase	h	m	s	D
91	28	PRK	ZNE NE	i!Pg ei!Sg	15	54	38.5DSW 43.5	60
		ATH	SPZ SPE SPE	eiPn eiSn iSy	15	55	02.7D 27.7 30.6	210
		PLG	Z Z N	ePn eiPg eSg	15	55 56	09.1 14.8C 46.7	260
		VAM	Z Z Z E	ei eiPb eiPg eiSg	15	55 56	30.1D 33.0D 42.1 32.8	410
		JAN	Z	ePn	15	55	34.3	450
		VLS	Z	ePn	15	55	34.9	455
92	28	PRK	ZN E.	iPg i!Sg	16	26	50.0DS 56.0	45
		ATH	SPZ SPZ SPNE	eiPn eiPg iSn	16	27	16.8D 20.7C 42.7	215
		PLG	Z	e?(Pn)	16	27	21.3	(250)
		VAM	Z Z	ePn eiPg	16	27	40.3 53.1	400
		JAN	Z	eiPn	16	27	46.4	450
		VLS	Z	e?(Pn)	16	27	49.5	(475)
93	29	PRK	ZNE NE	ei!Pg iSg	05	03 04	55.0DSW 00.8	45
		ATH	SPZ SPN SPE	eiPb iSn iSy	05	04	22.6C 47.4 50.1	220
		PLG	Z Z N	ePn eiPg eSy	05	04 05	27.3 34.3D 03.8	270
		VAM	Z Z	ePb ePy	05	04	54.0 58.2	430
		JAN	Z	ePn	05	04	51.3	460
94	30	PRK	Z Z E	eiPn eiPg eSg	20	28	13.7D 21.6D 58.2	290
		VAM	Z E	ePn eSn	20	28	21.6 59.8	355
		ATH	SPZ SPZ SPE	eiPb eiPg eiSn	20 29	28	27.4D 37.1C 05.8	375
		PLG	Z	ePn	20	28	57.0	575

Athens: H=15:54:29
38.8°N, 25.9°E; M_L=4.6
USCGS: H=15:54:31
39.0°N, 26.0°E Mb=4.2

Athens: H=16:26:42
38.9°N, 26.0°E M_L=3.5

Athens: H=05:03:46
38.9°N, 26.0°E.
M_L=3.6

Athens: H=20:27:29
36.8°N, 27.6°E.

ATHENS SHOCKS IN THE AREA OF GREECE

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
94	30	VLS	ZE	eiPg	17	59	08.1D	55	Athens: H=17:58:58 37.8°N, 20.0°E M _L =4.0
			E	iSg			14.4		
		PAT	Z	ePn	17	59	25.0	15	
		JAN	Z	ePn	17	59	33.1	220	
			Z	eiPg			36.4D		
			E	eSy	18	00	01.9		
			E	eiSg			03.9		
		ATH	SPZ	ePb	17	59	50.8	330	
			SPE	eiSn	18	00	24.6		
			SPE	eiSy			32.8		
		PLG	Z	ePn	17	59	57.6	410	
		VAM	Z	ePn	18	00	05.6	470	
			N	eiSn			54.9		
			E	eSy			55.6		
		RHD	Z	ePn	18	00	(40.8)	750	
95	31	RHD	ZE	eiPg	03	22	33.9D	110	Athens: H=03:22:14 36.7°N, 27.1°E. M _L =5.6
		PRK	Z	eiPn	03	22	58.4C	290	BCIS: H=03:22:17 36.6°N, 27.1°E.
			E	eiSn		23	31.0		M _L =4.8 (PRH); 5.3 (COLL). 5.5
			N	iSb			33.9		(ROM).
		VAM	Z	ePn	03	22	58.5	290	USCGS: H=03:22:15 36.6°N, 27.1°E.; h=11 Km: Mb=5.1
			Z	eiPb		23	01.1		
		ATH	SPZNE	eiPn	03	23	03.1C	325	The shock was felt on the Islands of Kos (V+ at Anti-machia, V at Kephalos, IV at Kardamaene, Kos, Asphendion), Nisyros (V+ at Mandraki), Rhodes (V+ at St-Isidoros, IV at Megalo-Chorio, II+ at Aphan-tos), Telos (III at Livadia), Kalymnos (IV+ at Kalymnos), Leros (IV at Leros), Patmos (IV+ at Patmos), Astypalaea (III at Astypalaea) Karpathos (III at Menetae), Kasos (III at Kasos), Naxos (III at Naxos), Paros (III at Naousa, Paros).
			LPNE	eiSn			38.3		
			W.A.E	iSy			47.3		
			W.A.E	iSg			51.7		
		PAT	Z	ePb	03	23	28.9	435	
			Z	ePg			40.5		
			Z	eiSg		24	39.0		
		PLG	Z	eiPn	03	23	26.9	515	
		VLS	Z	ePn	03	23	39.4	615	
		JAN	Z	eiPn	03	23	43.7D	640	
			E	eiSb		25	03.6		

of Crete: Lasithi (III at Anatole, Malae), Heraklion (IV at Moerae, III at Gergere, Kounavoe, St-Varvara, Heraklion), Rethymnon (III at Rethymnon) and Chania (IV at Perivolia, Platanos, Palaeochora, III+ at Vatolakos, III at Voukoliae, Maleme).

Not felt at Syme (of Syme), Koskinou, Asklepiion, Rhodes (of Rhodes), Olympos (of Karpathos), Aeghiale, Thera, Emporion (of Thera), Amorgos (of Amorgos), Anaphe (of Anaphe), Philotia, Koronos (of Naxos), Ios (of Ios), Leukae (of Paros), Ano-Syros, Artemon, Trypete, Melos (of Melos), Kimolos (of Kimolos), Pholegandros (of Pholegandros), Tenos (of Tenos), Korthion, Andros (of Andros), Dryopi (of Kythnos), Mykonos (of Mykonos), Kavousion, Elounta, Neapolis, Limnae, St-Nikolaos, Kalamauka, Kritsas (of Lasithi), Zaros, Tyli-sos, Kastelion, Pitsidia, Limen-Chersonesou, Daphnae, Mochos, Epano-Archanae, Pyrgos, Archanae, Malia (of Heraklion), Argyroupolis, Melido-nion, Episkope, Spelion, Anoghia, Livadia, Melampae (of Rethymnon), Alikianos, Daratsos, Souda, Vamos, Kastelion (of Chania).

Area of felt shaking about 340.000 Km²; r₅ = 50 Km. M. M. = 6.3
Macroseismic focal depth ca. 60 Km. -

** (of Syros).

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
96	31	RHD	Z	ePg	03	53	16.0	120	Athens: H=03:52:55 36 3/4° N, 27° E. M _L =4.0
			E	eiSg			30.5		
		PRK	Z	ePn	03	53	40.1	295	
			Z	eiPg			48.0D		
			N	eSy	54		28.4		
			E	eSg			31.4		
		VAM	Z	ePn	03	53	40.6	300	
			Z	eiPy			46.1D		
			E	eiSg	54		25.4		
		ATH	SPZ	ePb	03	53	53.5	350	
			SPN	eiSb	54		30.5		
		PLG	Z	e?(Pb)	03	54	12.1	(51.0)	
		JAN	Z	e?(Pn)	03	54	26.0	(63.0)	
97	31	VLS	Z	iPg	07	00	52.2D	40	Athens: H=07:00:45 37.9°N, 20.3°E.
			E	iSg			57.1		
		PAT	Z	ePg	07	01	12.2	140	
		JAN	Z	ePn	07	01	18.0	200	
			Z	eiPg			21.7C		
			N	eiSn			42.3		
			E	eiSg			45.7		
		PLG	Z	ePn	07	01	42.1	390	
			Z	ePy			49.1		
		VAM	Z	ePn	07	01	50.1	455	
			N	eiSn	02		37.7		
98	31	RHD	Z	eiPg	07	49	(36.3)D	80	Athens: H=07:49:21 36.7°N, 27.3°E,
		PRK	Z	ePn	07	50	06.3	300	
			Z	eiPb			09.9		
			Z	eiPg			14.9		
			E	eiSg			52.0		
		VAM	Z	ePn	07	50	09.6	320	
			Z	eiPg			13.1C		
			N	eSy			53.1		
		ATH	SPZ	ePg	07	50	24.5	360	
			SPZ	eiSy	51		03.3		
99	31	RHD	Z	iPg	07	51	24.6D	100	Athens: H=07:51:06 36.5°N, 27.1°E. M _L =4.1
			E	eiSg			37.5		
		WAM	Z	eiPn	07	51	49.1C	290	
			Z	eiPy			53.6		
			Z	eiPg			56.6		
			N	eiSg	52		32.8		
		PRK	Z	ePn	07	51	54.4	325	
			N	eiSn	52		30.4		
			E	eiSb			34.6		
		ATH	SPZ	ePg	07	52	03.5	325	
			SPZ	iSg			42.5		
		PLG	Z	ePy	07	52	33.1	540	
			Z	ePg			42.6		
		JAN	Z	ePn	07	52	37.5	660	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
100	(31)	RHD	Z	ePg	08	59	23.0	110	Athens: H=08:59:04 36.7°N, 27.1°E; $M_L=3.9$
			EE	eiSg			37.9		
		PRK	Z	ePn	08	59	48.8	290	
			Z	eiPg			56.4		
			N	eiSg	09	00	31.9		
		VAM	Z	ePn	08	59	50.1	305	
			E	eSn	09	00	24.6		
			N	eSb			29.1		
		ATH	SPZ	ePg	09	00	01.0	320	
			SPNE	iSg			40.0		
		PLG	Z	ePn	09	00	20.1	540	
101	(31)	RHD	Z	eiPg	11	01	(24.4)C	80	Athens: H=11:01:11 36 1/2°N, 27 1/4°E.
		VAM	Z	ePn	11	01	57.5	310	
			Z	eiPy		02	02.8		
			N	eSn			31.9		
		PRK	Z	eiPn	11	02	00.1D	330	
			N	eiSn			37.0		
		ATH	SPZ	ePn	11	02	04.2	360	
			SPN	eSn			43.4		
102	(31)	RHD	Z	ePg	11	08	(27.7)(110)		Athens: H=11:08:14 36 1/2°N, 27 1/2°E ; $M_L=4.1$
		PRK	Z	ePn	11	08	59.9	305	
			Z	eiPg		09	07.9D		
			N	eiSb			37.4		
			N	eiSg			45.4		
		VAM	Z	ePn	11	09	01.7	325	
			Z	eiPg			12.2		
			E	eiSn			38.2		
			N	eiSy			45.8		
		ATH	SPZ	ePb	11	09	13.2	380	
			SPNE	iSn			51.5		
		PLG	Z	e(Py)	11	09	49.0	560	
			Z	ePg			53.0		
103	(31)	VLS	Z	ePg	15	29	06.3	110	Athens: H=15:28:45 37.8°N, 21.7°E.
			E	eiSg			19.9		
		ATH	SPZ	ePg	15	29	18.9	190	
		JAN	Z	e?(Pn)	15	29	16.5	205	
			Z	ePg			22.7		
			Z	eiSg			47.8		
10		PLG	Z	e?(Pn)	15	29	35.2(330)		
			Z	e(Pg)			44.3		
		VAM	Z	eiPg	15	29	49.7D	360	
104	(31)	RHD	Z	eiPg	20	40	(58.4)D	80	Athens: H=20:40:44 36 3/4°N, 27 1/2°E $M_L=4.1$
			E	eiSg		41	11.9		
		PRK	Z	ePn	20	41	27.9	290	
			Z	eiPg			36.0C		
			N	eiSg		42	11.9		
		./.							

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
105	31	VAM	Z	ePn	20	41	34.3	340	Athens: H=22:15:07 36 3/4°N, 27°E ; M _L =3.8
			Z	ciPg			40.1D		
			E	eSn		42	11.9		
		ATH	SPZ	ePn	20	41	39.4	380	
			SPN	iSg		42	22.9		
		PLG	Z	ePg	20	42	21.7	550	
		RHD	Z	eiPg	22	15	28.9D	120	
			E	eiSg			44.3		
		PRK	Z	ePn	22	15	52.9	300	
			Z	eiPg		16	00.9		
			E	eSg			37.9		
		VAM	Z	e?(Pn)	22	15	55.3	310	
			Z	ePg		16	03.3L		
		ATH	SPZ	e(Pb)	22	16	05.9	320	
			SPN	iSg			43.3		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	VLS	Z	eP	16	32	15.2	5.0°	BCIS: H=16:31:03 40.2°N, 15.4°E. h=287 Km.
		PLG	Z	ei!P	16	32	33.6D	7.0°	USCGS: H=16:31:03.1 40.2°N, 15.4°E.
		PRK	Z	eiP	16	33	02.2D	8.5°	Southern Italy
		VAM	Z	eP	16	33	02.8	8.5°	h=291 Km; Mb=4.2
2	5	PRK	Z	eiP	15	16	50.7D	18.0°	USCGS: H=15:12:51.0 41.7°N, 49.5°E.
		PLG	Z	eiP	15	17	17.7D	19.0°	Caspian Sea
		ATH	SPZ	eiP	15	17	22.6D	19.5°	h=56 Km; Mb=5.1
		RHD	Z	eiP	15	17	23.0D	19.5°	
		VAM	Z	eiP	15	17	27.3D	20.0°	
		VLS	Z	eiP	15	17	35.6D	20.5°	
		JAN	Z	eiP	15	17	40.5D	21.0°	
3	6	PRK	Z	eiP	22	08	22.8D	5.0°	BCIS: H=22:07:11 38.7°N, 32.5°E;
		RHD	Z	eiP	22	08	35.5	6.0°	USCGS: H=22:07:10.9 38.8°N, 32.6°E.
		PLG	Z	eP	22	08	54.2	7.0	Turkey ; h=39 Km; Mb=4.8
		VAM	Z	eP	22	09	02.3	8.0°	
		JAN	Z	eP	22	09	27.5	9.0°	
4	7	PRK	Z	eiP	19	32	26.8D	90.5°	USCGS: H=19:20:20.3 26.3°N, 140.6°E.
		RHD	Z	eiP	19	32	30.3D	91.5°	Bouin Islands Region.
		PLG	Z	eiP	19	32	31.7D	92.0°	h=516 Km; Mb=6.1
		ATH	LPZ	i!P	19	32	38.0D	93.0°	M=7.5 (Pas)?; 6.3 -6.7 (BRK).
		JAN	Z	eiP	19	32	42.1D	95.0°	
		VAM	Z	eP	19	32	44.4	95.5°	
		VLS	Z	eP	19	32	46.3	96.0°	
5	7	PRK	Z	eP	21	01	12.0	80.5°	USCGS: H=20:49:01.3 42.0°N, 142.4°E.
		PLG	Z	iP	21	01	15.5D	81.5°	Hokkaido, Japan Region.
		RHD	Z	eiP	21	01	19.5D	82.0°	h=32 Km; Mb=5.7; Ms=6.1
		ATH	LPZ	iP	21	01	24.0D	83.0°	
		JAN	Z	eiP	21	01	25.6D	83.5°	
		VLS	Z	eP	21	01	30.8	84.5°	
6	9	PLG	Z	ePKP ₁	03	58	30.4	155.0°	USCGS: H=03:38:39.9 14.7°S, 175.5°W;
		PRK	Z	ePKP ₁	03	58	33.2	155.5°	Samoa Islands Region.
		ATH	SPZ	eiPKP ₁	03	58	38.6D	157.0°	h=11 Km; Mb=5.2 ; Ms=5.6 ;
		JAN	Z	ePKP ₁	03	58	39.5	157.5°	M=5.4 - 5.8 (BRK); 6 (Gol).
		VAM	Z	ePKP ₁	03	58	41.5	158.5°	

N°	Date	Stat.	Comp.	Phase	h	m	s	D	R
7	12	JAN	Z	ePKP	19	36	25.5	161.5°	USCGS:H=19:17:39.9° 20.9° S, 178.8° W. Fiji Islands Region. h=607 Km; Mb=5.7; M=5.9 (BRK).
		PRK	Z	eiPKP	19	36	27.2D	162.0°	
		ATH	SPZ	ePKP	19	36	28.6	162.5°	
		PLG	Z	eiPKP	19	36	29.6D	163.0°	
		VAM	Z	ePKP	19	36	37.0	164.5°	
		RHD	Z	ePKP	19	36	38.6	165.0°	
8	14	ATH	LPZ	eiPKP	03	17	23.5D	112.0°	USCGS:H=02:58:47.8 31.5° S, 117.0° E; Western Australia. Mb=6.0; Ms=6.8; M=7 1/4 - 7 1/2 (Pas); 6.5 - 6.9 (BRK); 7 1/4 (Pal); 7 - 7 1/4 (Gol).
			LPZ	eiPP	18	09	09.6D		
			LPN	eiSKS	24	01	01.0		
			LPN	iPS	27	34	00.0		
		PRK	Z	ePKP	03	17	23.8	112.5°	
		JAN	Z	ePKP	03	17	29.2	114.5°	
		PLG	Z	ePKP	03	17	29.4	115.5°	
9	15	ATH	LPZ	e(P)	02	21	59.7		In the VLS station the shock was occurred in the paper change.
		RHD	Z	e(P)	02	22	16.7		
		VAM	Z	e(P)	02	22	23.9		
		PRK	Z	e(P)	02	22	24.5		
		PLG	Z	e(P)	02	22	36.5		
		JAN	Z	e(P)	02	22	46.7		
10	16	VAM	Z	eP	15	31	56.6	19.0°	USCGS:H=15:27:29.4 32.6°N, 48.8° E. Western Iran; Mb=4.1
		ATH	SPZ	eP	15	32	14.4	21.0°	
		PLG	Z	eP	15	32	20.5	21.5°	
		JAN	Z	eP	15	32	38.1	23.0°	
		VLS	Z	eP	15	32	38.7	23.0°	
11	19	ATH	SPZ	eP	02	40	15.9	34.0°	USCGS:H=02:33:30.9 37.3°N, 73.1°E. Tadzik SSR. Depth 51; Mb=5.2
		RHD	Z	eP	02	40	24.4	34.5°	
		PRK	Z	eP	02	40	31.0	36.0°	
		PLG	Z	eP	02	40	46.4	37.0°	
		VAM	Z	eP	02	40	53.8	38.0°	
		JAN	Z	eP	02	41	04.4	39.5°	
12	19	ATH	LPZ	eP	09	59	27.8	38.5°	USCGS:H=09:52:03.4 37.5°N, 73.3°E; Tadzik SSR; Mb=5.5
			LPN	eS	10	05	21.8		
		VAM	Z	eP	09	59	32.3	39.5°	
		JAN	Z	eP	09	59	38.6	39.5°	
		PLG	Z	eP	09	59	54.5	41.5°	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
13	20	RHD	Z	eP	07	20	26.5	79.5°	USCGS: H=20:03:17 25.0°N, 122.5°E; Taiwan region; h=15 Km; Mb=5.4; Ms=5.7
		VAM	Z	eP	07	20	46.0	83.5°	
		VLS	Z	eP	07	20	57.3	86.5°	
14	20	ATH	LPZ	e?(P)	13	13	35.3		
15	20	PLG	Z	eiP	23	16	09.3	4.5°	BCIS: H=23:15:04 45.8°N, 26.6°E; h=130±5 Km; USCGS: H=23:15:04 45.7°N, 26.6°E. Roumania. h=123 Km; Mb=4.6
			E	eiS		17	03.8		
		PRK	Z	eP	23	16	39.0	6.5°	
		JAN	Z	eP	23	16	52.1	7.5°	
		VLS	Z	eP	23	16	53.5	8.0°	
		RHD	Z	eP	23	17	23.9	10°	
		VAM	Z	eP	23	17	47.7	11.5°	
16	22	PLG	Z	eiP	07	24	45.4	8.5°	USCGS: H=07:23:18 43.5°N, 17.0°E Yugoslavia.
		JAN	Z	eiP	07	24	32.2	9.5°	
			N	eS		25	22.9		
		PRK	Z	eP	07	25	19.3	10°	
		VAM	Z	eP	07	25	39.5	10.5°	
17	23	VAM	Z	ePP	21	22	40.7	100.5°	USCGS: H=21:04:41.3 3.3°S, 143.3°E. Near North coast of New Guinea- a; h=12 Km; Mb=6.1; Ms=6.8 M=6.8 (PAS); 6.6 - 6.9 (BRK); 7 - 7 1/4 (PAL).
		RHD	Z	ePP	21	22	56.1	102°	
		ATH	LPZ	eP	21	19	33.8	103°	
			LPZ	eiPP		24	17.8		
			LPN	eiSS		39	51.8		
		PLG	Z	eP	21	23	22.6	106°	
		JAN	Z	eP	21	23	29.3	107.5°	
		VLS	Z	eP	21	23	36.5	109°	
18	24	RHD	Z	eP	00	55	29.1	92°	USCGS: H=00:42:21.9 7.2°W, 126.6°E. Midanao, Philippine Island. h=77 Km. Mb=5.4
		PLG	Z	eP	00	55	38.1	94°	
		JAN	Z	eP	00	55	48.9	96.5°	
19	24	RHD	Z	eP	05	20	20.6	83.5°	USCGS: H=05:07:53.9 45.6°S, 34.1°E. Prince Edward Island region; h=N; Mb=5.3; Ms=5.5
		JAN	Z	eP	05	20	21.6	84°	
		ATH	LP(Z)	e(S)	05	30	53.2	85.5°	
		VAM	Z	eP	05	20	36.2	87°	
		PLG	Z	eP	05	20	42.1	88°	
20	24	RHD	Z	eP	16	04	30.7	69.5°	USCGS: H=15:51:18.5 5.9°N, 127.0°E; Philippine Islands; h=70 Km; Mb=5.4
		ATH	LPZ	eiP	16	04	41.0	72°	
			LPZ	ei(PP)		08	40.6		
			LPE	i(PPS)		15	03.2		
		.	.	.					

ATHENS		LONG DISTANCE SHOCKS							OCTOBER 1968	Page 26
N°	Date	St.	Comp.	Phase	h	m	s	D	Remarks	
		JAN	Z	eiPKP	07	40	09.7	162°		
			Z	ei			23.2			
		VLS	Z	eP	07	40	13.2	166°		
28	29	PLG	Z	eP	11	47	12.8	169°	USCGS: H=11:26:51.8	
		JAN	Z	eP	11	47	21.4	170.5°	22.5° S, 175.2° W.	
									Tonga Islands region.	
									N. Mb=5.1	
29	29	PLG	Z	eiP	22	27	57.1	75°	USCGS: H=22:16:15.6	
		JAN	Z	eP	22	28	00.7	75.5°	65.4° N, 150.1° W.	
		PRK	Z	eP	22	28	05.7	76°	Alaska. h=7 Km; Mb=6.0, Ms=6.5	
		VLS	Z	eP	22	28	08.9	77°	M=6.8 (PAS), 6.3-6.5 (BRK).	
		ATH	LPZ	eP	22	28	10.9	77.5°	7.0 (GOL), M _L =7.1 (CGS)	
			LPNE	eS		37	56.9			
			LPE	e(SSS)		46	18.9			
		RHD	Z	eiP	22	28	13.2D	79°		
		VAM	Z	eiP	22	28	25.9C			
30	30	PLG	Z	eiP	04	14	44.4	39°	USCGS: H=04:07:20.7	
		JAN	Z	eP	04	14	58.6	41°	37.4° N, 73.2° E	
		PRK	Z	eP	04	15	01.7	41.5°	Tadzhik SSR; h=12 Km; Mb=5.5	
		VLS	Z	e?(P)	04	15	08.6	(42°)		
31	30	JAN	Z	eP	11	46	20.7	19.5°	USCGS: H=11:41:56.9	
		VLS	Z	eP	11	46	25.8	20°	35.1° N, 3.6° W.	
		PLG	Z	eP	11	46	48.0	22°	Straits of Gibraltar.	
		ATH	SPZ	eP	11	46	54.5	23°	h=34 Km; Mb=4.6	
		VAM	Z	eP	11	46	59.1	23.5°		
		PRK	Z	eP	11	47	22.3	25.5°		
32	30	PRK	Z	eP	16	53	58.8	10°	USCGS: H=16:51:33.5	
		RHD	Z	eP	16	54	09.5	11°	37.9° N, 38.6° E	
		VAM	Z	eP	16	54	27.2	12°	Turkey;	
		ATH	SPZ	eP	16	54	27.8	12°	h=3 Km; Mb=4.9	
		JAN	Z	eP	16	54	58.3	14.5°		
		PAT	Z	e	16	56	25.6			
		VLS	Z	eP	16	55	02.7	15°		

ATHENS LONG DISTANCE SHOCKS OCTOBER 1968 Page 27

N°	Date	Stat.	Comp.	Phase	h	m	s	D	D	Remarks
33	31	PRK	Z	eiP	09	20	06.4(D)	97°		USCGS:H=09:06:36.4
		PLG	Z	eP	09	20	14.6(D)	99.5°		1.2° N, 126.3°
		RHD	Z	eP	09	20	(16.6)	100°		Molucca Passage.
		VAM	Z	eP	09	20	17.6	100.5°		h=N ; Mb=6.1 ; Ms=6.0
		ATH	LPZ	eP	09	20	20.3	101.5°		
			LPN	eiSKKS			37.5			
		JAN	Z	eP	09	20	23.6	102°		
		VLS	Z	eP	09	20	26.6	102.5°		

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5 MAR 1969

NATIONAL OBSERVATORY OF ATHENS

SEISMOLOGICAL INSTITUTE



NOVEMBER 1968

ATHENS

NATIONAL OBSERVATORY - SEISMOLOGICAL
SEISMOLOGICAL STATIONS NETWORK - GREECE
PRELIMINARY BULLETIN
NOVEMBER 1968

Station	Location	Type of instruments	Comp.	Mass Kg	T ₀ sec.	T _g sec.	v:l	V	Drum speed mm/min.
ATHENS	37°58'20"N	Benioff	Z,N,E	107.5	1	0.25		12.500	60
(ATH)	23°43'0"	Hiller	Z	1	0.82	0.25	10	5.000	60
(Attica)	h=95 m.	"	N, E	1	0.82	0.25	10	2.000	60
Cretaceous Limestone		Wood-Anderson	N, E		0.8		50	2.800	60
		Sprengnether	Z	11.25	15	100		1.500	15
		"	N, E	10.75	15	100		1.500	15
		Wiechert	Z	1300	1.6		1.2	150	ca.30
		"	N	1000	4.2		5.5	135	ca.30
		"	E	1000	5.2		5.0	140	ca.30
		Mainka	N	135	2.8		2.1	49	ca.31
		"	E	135	3.5		5.6	53	ca.31
		Kritikos	N	40	2.5		5.9	4	ca.40
ARCHANGELOS	36°12'58"N	Sprengnether	Z	1.14	0.5	0.5		40.000	60
(RHD)	28°07'34"	"	E	1.14	0.5	0.5		23.200	60
Sandstone	h=170 m.								
JANINA	39°39'24"N	Sprengnether	Z	1.14	0.5	0.5		40.000	60
(JAN)	20°51'03"E	"	N	1.14	0.5	0.5		8.400	60
Cretaceous Limestone	h=540 m.	"	E	1.14	0.5	0.5		5.800	60
PARASKEVI	39°14'46"N	Sprengnether	Z	1.14	0.5	0.5		42.500	60
(PRK)	26°16'18"E	"	N	1.14	0.5	0.5		7.600	60
Rhyolite	h=100 m	"	E	1.14	0.5	0.5		7.600	60
PATRAS	38°14'11"N	Wiechert	Z	80	2.7	3.6		132	ca.30
(PAT)	21°44'48"E								
Alluvium	h=45 m.								
POLYGYROS	40°22'25"N	Sprengnether	Z	1.14	0.5	0.5		84.000	60
(PLG)	23°26'44"E	"	N	1.14	0.5	0.5		4.800	60
Gneis	h=580 m.	"	E	1.14	0.5	0.5		6.800	60
VALSAMATA	38°10'36"N	Sprengnether	Z	1.14	0.5	0.5		56.000	60
(VLS)	20°35'23"E	"	E	1.14	0.5	0.5		11.200	60
Cretaceous Limestone	h=375 m								
VAMOS	35°34'25"N	Sprengnether	Z	1.14	0.5	0.5		56.000	60
(VAM)	24°11'59"E	"	N	1.14	0.5	0.5		15.000	60
Marly Limestone	h=225 m.	"	E	1.14	0.5	0.5		10.000	60

NOTE : In the "Component" column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram which is oriented so that time increases from left to right. On all vertical component (Z) instruments upward trace motion corresponds to upward ground motion. Magnitudes of local shocks calculated from Wood-Anderson records are designated by M_L .

ATHENS SHOCKS IN THE AREA OF GREECE NOVEMBER 1968 Page 2

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	PRK	ZNE E	ei!Pg iSg	03	25	56.8CNE 03.8	50	Athens: H=03:25:47 38.9°N, 25.9°E; $M_L=3.5$
		ATH	SPZ SPN	ePg iSg	03	26	24.5 49.8	210	
		PLG	Z	ePn	03	26	27.8	265	
		JAN	Z	ePn	03	26	49.8	435	
2	1	VLS	Z E	eiPg iSg	07	21	51.8D 58.0	45	Athens: H=07:21:43 37.7°N, 20.5°E.
		JAN	Z N	ePn eiSg	07	22	17.8 48.2	215	
		PLG	Z	ePb	07	22	43.8	390	
3	1	PAT	Z	ePg	10	29	19.5	70	Athens: H=10:29:06 38.3°N, 22.6°E $M_L=3.0$
		ATH	SPZ SPNE	eiPg iSg	10	29	26.4D 39.7	110	
		VLS	Z E	ePn eiSg	10	29	35.5 58.5	170	
		JAN	Z Z N	ePn ePy eiSg	10	29	39.6 41.8 10.1	210	
		PLG	Z	eiPn	10	29	42.8D	235	
		VAM	Z Z	ePn eiPb	10	29	58.0 01.6C	350	
4	1	RHD	Z	eiPg	18	50	58.7D	70	Athens: H=10:50:49 35.8°N, 28.7°E.
		VAM	Z N	ePn ePg	18	51 52	48.5 01.9	410	
		PRK	Z Z N	ePn eiPy eiSg	18	51 52	50.1 01.0C 55.9	425	
		ATH	SPZ SPE	ePg iSb	18	52 53	20.5 05.0	510	
5	2	RHD	Z E	ePg iSg	19	35	45.0 54.4	75	Athens: H=19:35:31 Felt on Kos Island (IV at Kardamaene).
6	2	PRK	Z N	eiPg iSn	19	52 53	54.9D 07.2	95	Athens: H=19:52:37 40.1°N, 25.8°E.
		PLG	Z N	ePn eiSn	19	53	09.9 33.5	200	
		ATH	SPZ	ePg	19	53	28.9	290	
7	2	ATH	SPZ SPE	ePg iSg	22	58	51.0 59.7	65	Athens: H=22:58:38 37.6°N, 23.3°E. $M_L=3.0$
		VLS	Z	ePg	22	59	20.1	235	
		./.							

ATHENS		SHOCKS IN THE AREA OF GREECE						NOVEMBER 1900	Page 3
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		VAM	Z	ePn	22	59	17.8	255	
			E	eiSg			52.0		
		PLG	Z	ePn	22	59	23.9	310	
		PRK	Z	ePg	22	59	33.8	310	
		JAN	Z	ePn	22	59	25.1	315	
8	3	VAM	Z	eiPg	02	04	10.7	130	Athens: H=02:03:57 36.3°N, 23.3°E. M _L =2.9 Felt on Kythera Island (III at Chora).
			E	iSg			27.4		
		ATH	SPZ	ePn	02	04	26.9	185	
			SPN	iSg			52.8		
		VLS	Z	ePn	02	04	43.0	310	
9	3	JAN	Z	eiPn	04	50	16.6C	290	Athens: H=04:49:33 42.0°N, 19.4°E M _L =4.9 BCIS: H=04:49:33 42.0°N, 19.3°E; M _L =5.7 (Moxa). USCGS: H=04:49:31.8 42.1°N, 19.4°E; h=17 Km; Mb=5.0; Ms=5.3
			N	eiSb			54.1		
			N	iSg		51	01.4		
		PLG	Z	eiPn	04	50	27.9C	375	
			N	eiSn		51	09.1		
			E	eiSb			13.9		
		VLS	Z	eiPn	04	50	33.0D	430	
			E	iSn		51	19.9		
		PAT	Z	ePn	04	50	39.0	455	
		ATH	SPZ	eiPn	04	50	51.2D	570	
			SPZ	eiPb			59.8C		
			LPE	iSg		52	21.3		
		PRK	Z	eiPn	04	51	02.7C	650	
			Z	eiPb			11.4		
			E	eiSn		52	08.7		
		VAM	Z	ePn	04	51	24.2	825	
			E	eiSn		52	46.9		
		RHD	Z	ePn	04	51	43.4	970	
10	3	JAN	Z	eiPn	05	16	50.8C	300	Athens: H=05:16:06 42.0°N, 19.3° E.
			N	eiSg		17	35.9		
		PLG	Z	eiPn	05	17	03.2C	390	
			N	eiSn			45.7		
		VLS	Z	eiPn	05	17	06.9D	430	
			E	eiSn			53.1		
		ATH	SPZ	ePn	05	17	25.1	570	
		PRK	Z	ePn	05	17	36.9	650	
		VAM	Z	ePn	05	17	56.9	825	
11	3	RHD	Z	eiPg	10	17	32.2D	85	Athens: H=10:17:16 36.7°N, 27.3°E.
			E	iSg			43.0		
		PRK	Z	ePn	10	17	00.9	300	
			N	eiSg			45.9		
		VAM	Z	ePn	10	17	02.9	315	
			Z	eiPb			06.7C		
		ATH	SPZ	ePg	10	18	15.9	340	
			SPN	eiSy			53.2		

12	3	RHD	Z	eiPg	14	08	17.7C	95	Athens:H=14:00
			E	iSg			29.8		36.7°N, 27.2° E. M _L =4.0
		PRK	Z	ePn	14	08	43.4	295	
			Z	eiPg			51.1D		
			N	eiSg		09	27.9		
		VAM	Z	ePn	14	08	44.4	300	
			N	eiSy		09	24.9		
			N	eiSg			28.7		
		ATH	SPZ	ePg	14	08	59.0	335	
			SPN	eiSy		09	35.0		
		JAN	Z	ePn	14	09	28.7	640	
13	3	PRK	ZNE	iPn	18	40	37.9DSE	240	Athens:H=18:40:00
			N	eiSn		41	05.9		38.8°N, 29.0°E M _L =4.7
			E	eiSg			12.4		BCIS:H=18:40:01
									38.8°N, 28.7°E.
		RHD	Z	eiPn	18	40	47.1C	310	USCGS:H=18:39:58.8
			E	eiSg		41	33.8		38.8°N, 29.2° E.
									h=5 Km; Mb=5.0
		ATH	SPZ	eiPn	18	41	08.0D	475	
			SPZ	eiPb			14.1C		
			SPZ	eiPg			25.2C		
			SPE	iSg		42	23.8		
		PLG	Z	eiPn	18	41	11.5D	505	
			N	iSy		42	22.7		
		VAM	Z	eiPn	18	41	21.5D	580	
			N	eiSn			53.8		
		JAN	Z	eiPn	18	41	38.0D	705	
		VLS	Z	ePn	18	41	42.5	735	
14	3	PRK	Z	eiPn	18	44	40.4D	310	Athens:H=18:43:54
			E	eiSn		45	14.5		38.6°N, 29.7°E.
			E	eiSb			19.1		USCGS:H=18:44:02
									38.6°N, 29.7°E. h=12 Km; Mb=4.6
		PLG	Z	eiPn	18	45	14.4D	580	
		VAM	Z	ePn	18	45	18.0	610	
		JAN	Z	ePn	18	45	37.1	760	
15	3	JAN	Z	ePn	19	16	43.0	300	Athens:H=19:15:58
			E	eiSn		17	17.0		42.0°N, 19.3°E.
		PLG	Z	eiPn	19	16	54.2C	385	
		VLS	Z	ePn	19	16	59.6	430	
			E	eiSn		17	43.9		
16	4	RHD	Z	eiPg	20	06	09.3C	85	Athens:H=20:05:53
			E	iSg			20.0		36.4°N, 27.2°E. M _L =4.8
		VAM	Z	eiPn	20	06	37.7D	290	BCIS:H=20:05:58.0
			Z	iPg			45.2C		36.0°N, 27.0°E.
			E	iSg		07	27.6		USCGS:H=20:05:59.4
									36.5°N, 27.1°E. h=39 Km; Mb=4.6
									Felt on the Islands of Nisy-
		PRK	Z	eiPn	20	06	39.3C	315	ros (IV+ at Mandraki) and Ka-
			Z	iPg			47.1C		lymnos (IV+ at Kalymnos).
			E	iSg		07	25.9		
		ATH	SPZ	eiPn	20	06	47.6D	355	

ATHENS SHOCKS IN THE AREA OF GREECE

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		PLG	Z	ePn	20	07	08.2	535	
		VLS	Z	ePn	20	07	20.4	620	
		JAN	Z	ePn	20	07	23.5	655	
17	5	VLS	ZE E	iPg iSg	00	46	32.8 39.2	50	Athens: H=00:46:23 37.8°N, 20.3°E; M _L =3.8
		PAT	Z	ePn	00	47	47.0	130	
		JAN	Z N	ePg eiSg	00	47	02.0 28.5	215	
		ATH	SPZ SPE	ePg eiSg	00	47	15.5 52.1	295	
		PLG	Z	ePn	00	47	21.3	395	
		VAM	Z N	ePn eiSn	00	47	27.0 14.3	435	
		PRK	Z	ePn	00	47	39.2	535	
		RHD	Z	ePn	00	47	59.7	700	
18	6	ATH	SPZN SPNE	iPg iSg	05	12	37.2 51.5	115	Athens: H=05:12:15 39.0°N, 23.5°E. M _L =4.0 USCGS: H=05:12:17.9 39.0°N, 23.5°E. h=21 Km; Mb=4.3
		PLG	Z	eiPg	05	12	43.2	160	
		PAT	Z	ePn	05	12	44.1	170	
		JAN	Z N	ePn eiSg	05	12	51.2 21.3	225	
		PRK	Z E	eiPn eiSg	05	12	52.6 27.2	235	
		VLS	Z	ePn	05	12	57.9	260	
		VAM	Z	ePn	05	13	13.9	400	
19	6	PRK	ZNE E	iPg iSg	14	49	58.2 09.3	90	Athens: H=14:49:41 39.7°N, 25.4°E. M _L =3.8
		PLG	Z N	eiPn eiSg	14	50	12.7 37.1	185	
		ATH	SPZ SPZ SPE	ePn ePg iSg	14	50	19.6 25.2 55.3	245	
		JAN	Z	ePn	14	50	40.0	390	
		RHD	Z	ePn	14	50	47.5	460	
		VLS	Z	ePb	14	50	52.4	460	
		VAM	Z	ePn	14	50	50.8	490	
20	6	PRK	Z E	eiPg iSg	17	31	19.0 30.3	90	Athens: H=17:31:02 39.8°N, 25.5°E. M _L =3.4
		PLG	Z Z	ePn eiPg	17	31	33.5 36.3	185	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		./.							
		ATH	SPZ	ePg	17	31	45.0	240	
		JAN	Z	ePy	17	32	05.6	385	
		RHD	Z	ePn	17	32	07.1	460	
		VAM	Z	ePn	17	32	12.1	500	
21	8	PRK	Z	iPg	15	27	06.0D	85	Athens: H=15:26:50 39.7°N, 25.4°E. $M_L = 4.0$ BCIS: H=15:26:49 39.7°N, 25.5°E.
			N	iISg			16.8		
		PLG	Z	eiPn	15	27	20.4D	180	
		ATH	SPZ	eiPn	15	27	28.4C	245	
			SPN	eiSn			57.1		
			SPE	eiSg		28	03.9		
		JAN	Z	ePb	15	27	51.5	395	
		RHD	Z	iPn	15	27	54.2C	450	
		VLS	Z	ePb	15	28	00.8	460	
		VAM	Z	ePn	15	27	58.7	480	
22	8	ATH	SPZ	ePn	17	11	31.5	165	Athens: H=17:11:03 36.7°N, 22.9°E. Felt in Laconia (III at Elous). The W-A.- Seismograph was out of operation from 16:00, November 8, to 08:00, November 9, on account of trouble in the recording system.
			SPN	eiSn			52.1		
			SPN	eiSg			53.6		
		PAT	Z	eiPg	17	11	37.5D	190	
		VAM	Z	iPg	17	11	38.3C	200	
			E	eiSb		12	00.2		
		VLS	Z	ePn	17	11	44.7	270	
			E	eiSy		12	20.3		
		JAN	Z	ePn	17	11	59.2	385	
		PLG	Z	eiPn	17	12	01.4C	400	
		PRK	Z	ePn	17	12	02.5	410	
		RHD	Z	eiPn	17	12	08.7D	460	
23	8	RHD	Z	eiPn	20	28	09.0D	130	Athens: H=20:28:06 37.3°N, 28.5°E.
			E	eiSg			25.8		
		PRK	Z	ePn	20	28	50.8	295	
24	9	VAM	Z	ePn	20	29	03.0	415	Athens: H=12:38:55 40.3°N, 28.2°E. $M_L = 4.3$ BCIS: H=12:38:56 40.3°N, 28.7°E. USCGS: H=12:38:58 40.1°N, 28.7°E; h=41 Km; Mb=4.2
		PRK	Z	iPn	12	39	25.6C	185	
			N	iSg			51.4		
		PLG	Z	eiPn	12	39	51.9D	395	
		RHD	Z	ePn	12	40	01.5	470	
			Z	eiPb			57.4C		
		ATH	SPZ	ePb	12	40	09.0	485	
		VAM	Z	ePy	12	40	38.7	635	
		JAN	Z	eiPn	12	40	24.8 C	650	
25	10	VAM	Z	iPg	12	50	57.0D	50	Athens: H=12:50:45 35.0°N, 23.8°E. $M_L = 4.0$ BCIS: H=12:50:42 34.5°N, 24.0°E.
			E	iSg		51	04.7		
			N	iSn			11.2		

27.57
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Remarks

	Station	Depth	Time	Lat	Long	Temp	Pressure	Remarks
	ATH	SPZ	eiPn	12	51	35.0C	335	USCGS: H=12:50:42.9 34.8°N, 24.3°E. Mb=5.0
	RHD	Z	ePn	12	51	44.5	410	
	VLS	Z	ePn	12	51	49.8	450	
	PRK	Z	ePn	12	51	57.7	515	
	JAN	Z	ePn	12	52	04.8	570	
	PLG	Z	eiPn	12	52	07.0D	590	
26	10 VAM	Z	iPg	14	29	50.2C	100	Athens: H=14:29:31 34.5°N, 24.1°E. M _L =4.1
		N	i!Sn		30	05.7		USCGS: H=14:29:35.1 34.4°N, 23.9°E. M _b =4.4
	ATH	SPZ	ePn	14	30	27.5	390	
	RHD	Z	ePy	14	30	38.1	400	
	PRK	Z	ePn	14	30	52.2	575	
	JAN	Z	ePn	14	30	57.9	630	
	PLG	Z	eiPn	14	31	00.4C	645	
27	11 ATH	SPZNE	iPg	04	59	01.5CSE	55	Athens: H=04:58:51 38.1°N, 24.3°E. M _L = 3.2
		SPE	iSg			09.0		
	PRK	N	eiSn	04	59	47.9	205	
	PLG	Z	ePn	04	59	33.1	275	
	VAM	Z	ePn	04	59	34.5	285	
	VLS	Z	ePn	04	59	38.0	310	
	JAN	Z	ePn	04	59	39.5	325	
28	11 VAM	Z	ePn	13	30	30.8	250	Athens: H=13:29:52 34.4°N, 26.6°E.
		N	eiSn			59.7		
	RHD	Z	eiPn	13	30	31.2C	250	
	PLG	Z	ePn	13	31	28.1	700	
29	11 RHD	Z	iPn	23	34	44.9C	130	Athens: H=23:34:21 36.8°N, 26.7°E. M _L =4.8
	VAM	Z	ePn	23	35	02.7	275	BCIS: H=23:34:21 36.8°N, 27.0°E.
		N	iSg			43.1		USCGS: H=23:34:21 36.7°N, 27.1°E.
	PRK	Z	eiPg	23	35	12.6C	290	h=23 Km; Mb=4.8
	ATH	SPZ	eiPn	23	35	07.1C	300	Felt on Nisyros Island (V at
		SPZ	eiPb			09.4D		Mandraki) .
		SPZ	iPg			15.2C		
		SPE	i!Sg			52.6		
	PLG	Z	ePn	23	35	30.8	490	
	VLS	Z	ePn	23	35	45.6	570	
	JAN	Z	eiPb	23	35	50.7D	590	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
30	11	RHD	Z	iPn	23	53	29.9D	130	Athens: H=23:53:06 36.8°N, 26.7°E. M _L =4.4
		VAM	Z	ePn	23	53	46.9	270	BCIS: H=23:53:03 36.5°N, 27.1°E.
		PRK	Z	eiPn	23	53	47.2C	270	USCGS: H=23:53:04.1 36.5°N, 27.2°E.
		ATH	SPZ	eiPn	23	53	51.0C	300	h=21 Km; Mb=4.5
			SPZ	eiPg			59.0D		Felt on Nisyros Island (III at
			SPN	iSg		54	36.5		Mandraki).
		PLG	Z	ePn	23	54	14.6	490	
		VLS	Z	ePb	23	54	30.4	560	
		JAN	Z	eiPb	23	54	34.2C	590	
31	12	RHD	Z	iPg	01	17	00.0D	110	Athens: H=01:16:39 36.8°N, 27.1°E. M _L =3.9
		PRK	Z	ePn	01	17	23.1	290	
			Z	eiPg			31.0C		
		VAM	Z	ePn	01	17	26.7	320	
			N	eiSb		18	06.8		
		ATH	SPZ	ePg	01	17	36.5	325	
		JAN	Z	ePy	01	18	23.9	640	
32	12	RHD	Z	iPg	01	20	24.6D	115	Athens: H=01:20:03 36.8°N, 27.2°E M _L =3.9
			E	iSg			39.3		
		PRK	Z	ePn	01	20	48.3	295	
			Z	eiPg			56.0C		
		VAM	Z	ePn	01	20	51.4	320	
		ATH	SPZ	ePg	01	21	01.5	325	
33	12	RHD	Z	eiPg	02	10	00.3D	115	Athens: H=02:09:39 36.7°N, 27.0°E; M _L =3.9
			E	eiSg			14.8		Felt on Nisyros Island (III
		PRK	Z	ePn	02	10	23.8	300	at Mandraki).
		VAM	Z	ePn	02	10	24.9		
		ATH	SPZ	ePb	02	10	29.5	320	
		JAN	Z	ePg	02	11	31.5	630	
34	12	RHD	Z	eiPg	03	27	03.8C	110	Athens: H=03:26:43 36.8°N, 27.0°E. M _L =3.9
			E	iSg			17.9		
		PRK	Z	eiPg	03	27	34.8C	290	
		VAM	Z	ePg	03	27	36.9	300	
		ATH	SPZ	eiPg	03	27	41.1C	320	
35	12	RHD	Z	i!Pg	03	37	54.8D	105	Athens : H=03:37:35 36.8°N, 27.3°E. M _L =5.1
		PRK	Z	i!Pn	03	38	18.3C	280	BCIS: H=03:37:37 36.8°N, 27.1°
			N	iSg			59.5		USCGS: H=03:37:35.7 36.6°N, 27.3°E.
		VAM	Z	i!Pn	03	38	22.9D	315	h=17 Km; Mb=4.7
			N	iSb		39	01.9		Felt on Nisyros Island (III at Mandraki).
		./.							

		ATH	SPZ	eiPn	03	38	23.2C	320	
			SPN	iSg		39	11.0		
		PLG	Z	eiPn	03	38	47.2D	510	
		VLS	Z	ePn	03	39	01.8	615	
		JAN	Z	ePn	03	39	06.9	655	
36	12	RHD	Z	iPg	03	42	15.6D	110	Athens: H=03:41:55 36.8°N, 27.2°E. $M_L=4.3$
		PRK	Z	iPy	03	42	42.2C	280	
			N	iSg		43	18.3		
		VAM	Z	ePn	03	42	42.0	315	
		ATH	SPZ	ePn	03	42	42.8	320	
			SPZ	eiPy			47.6D		
			SPN	i!Sy		43	25.5		
		PLG	Z	ePn	03	43	05.8	500	
		JAN	Z	ePn	03	43	22.8	620	
		VLS	Z	ePy	03	43	36.9	620	
37	12	RHD	Z	iPg	04	01	17.9D	110	Athens: H=04:00:57.0 36.8°N, 27.2°E. $M_L=4.2$
		PRK	Z	eiPn	04	01	42.5C	300	
			Z	eiPg			50.8C		
			N	eiSg		02	27.3		
		VAM	Z	ePn	04	01	44.5	315	
		ATH	SPZ	ePy	04	01	50.5	320	
			SPE	i!Sg		02	33.6		
		PLG	Z	ePn	04	02	11.8	525	
		JAN	Z	eiPb	04	02	30.1D	610	
38	12	RHD	Z	iPg	06	09	10.7D	115	Athens: H=06:08:49 36.8°N, 27.2°E. $M_L=4.0$
		PRK	Z	eiPn	06	09	35.6D	300	BCIS: H=06:08:49
			Z	iPg			42.5D		36.5°N, 27.6°E.
			N	eiSg		10	19.2		USCGS: H=06:08:54
		VAM	Z	ePn	06	09	36.9	320	36.6°N, 27.3°E.
			N	eiSn		10, 12.2			h=24 Km; Mb=4.7
		ATH	SPZ	i!Pg	06	09	49.8D	335	Felt on Nisyros Island (III at Mandraki).
		PLG	Z	ePn	06	10	04.5	530	
		JAN	Z	eiPb	06	10	23.6C	620	
		VLS	Z	ePn	06	10	17.6	640	
39	12	RHD	Z	iPg	06	52	42.4D	90	Athens: H=06:52:25 36.8°N, 27.3°E. $M_L=4.1$
		PRK	Z	ePn	06	53	10.4	300	
			E	eiSg			55.9		
		VAM	Z	ePn	06	53	15.0	330	
		ATH	SPZ	eiPn	06	53	16.5C	340	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
	./.								
	JAN	Z		eiPb	06	53	58.7C	615	
	VLS	Z		ePn	06	52	51.0	620	
40	12	ATH	SPZ	eiPg	07	07	51.9C	110	Athens: H=07:07:32 38.9°N, 24.4°E. $M_L=3.4$
			SPN	i!Sg		08	05.2		
	PRK	Z		ePn	07	07	59.4	165	
	PLG	Z		iPn	07	08	02.5C	185	
	JAN	Z		ePn	07	08	17.0	300	
	VLS	Z		ePn	07	08	22.2	340	
	VAM	Z		ePb	07	08	32.7	395	
41	12	RHD	Z	eiPn	09	29	02.3C	175	Athens: H=09:28:32.9 37.6°N, 28.5°E. $M_L=4.2$
			E	iSg			26.0		
	PRK	Z		eiPn	09	29	14.4C	265	
			N	eiSn			44.4		
	ATH	SPZ		ePg	09	29	48.1	420	
	VAM	Z		ePn	09	29	37.2	450	
	PLG	Z		ePg	09	30	06.6	525	
42	12	RHD	Z	iPg	23	09	59.6	110	Athens: H=23:09:39 36.7°N, 27.2°E. $M_L=3.8$
			E	iSg		10	13.9		
	PRK	Z		ePn	23	10	24.3	295	
			Z	eiPg			31.7D		
			N	eiSg		11	08.7		
	VAM	Z		ePn	23	10	25.2	305	
	ATH	SPZ		eiPg	23	10	36.9D	325	
		SPE		iSg		11	18.1		
	JAN	Z		ePn	23	11	10.8	660	
43	13	PRK	Z	eiPn	11	10	54.9C	300	Athens: H=11:10:09 39.0°N, 29.6°E. The W.A. seismographs were out of operation from 12 of November to 17 of December on account of trouble in the recording system.
			N	eiSb		11	31.8		
	RHD	Z		ePn	11	11	08.9	330	
	PLG	Z		ePn	11	11	25.8	540	
44	13	RHD	Z	eiPg	11	33	31.7D	105	Athens: H=11:33:12 36.7°N, 27.2°E.
	PRK	Z		ePn	11	33	56.6	295	
			Z	eiPg		34	04.1C		
			N	eiSg			41.1		
	VAM	Z		ePn	11	33	58.8	305	
	ATH	SPZ		ePg	11	34	09.5	325	
45	13	VAM	N	eiSn	12	49	47.0	250	Athens: H=12:48:40 35.6°N, 21.6°E.
	VLS	Z		ePn	12	49	26.4	310	
	./.								

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		ATH	SPZ	ePn	12	49	30.4	340	
			SPZ	eiPy			36.5C		
			SPE	eiSn		50	07.2		
		JAN	Z	ePn	12	49	43.5	445	
		PLG	Z	ePn	12	49	55.8	550	
46	13	RHD	Z	ePg	15	16	59.0	95	Athens:H=15:16:41
			E	iSg		17	10.3		36.8°N, 28.4°E.
		PRK	Z	eiPn	15	17	33.5D	350	
		VAM	Z	ePn	15	17	41.1	415	
		ATH	SPZ	ePn	15	17	41.6	420	
			SPZ	eiPg			55.6C		
			SPE	eiSn		18	26.0		
		PLG	Z	ePn	15	18	02.9	585	
		VLS	Z	ePy	15	18	37.5	710	
		JAN	Z	ePn	15	18	19.5	715	
47	13	VAM	Z	iPg	17	31	24.4D	70	Athens:H=17:31:10
			N	iSg			33.4		35.8°N, 23.8°E.
		ATH	SPZ	ePn	17	31	53.5C	260	
		RHD	Z	eiPn	17	32	05.7D	380	
		PRK	Z	ePn	17	32	16.0	460	
		JAN	Z	eiPn	17	32	18.0C	480	
		PLG	Z	ePn	17	32	21.5	505	
48	13	RHD	Z	iPg	17	48	50.4C	115	Athens:H=17:48:29
			E	iSg		49	04.5		36.8°N, 27.2°E.
		PRK	Z	eiPn	17	49	14.0C	300	
			N	iSg			58.8		
		VAM	Z	ePn	17	49	15.9	315	
		ATH	SPZ	ePn	17	49	20.6	350	
		PLG	Z	ePn	17	49	42.7	520	
		JAN	Z	eiPn	17	50	01.3D	670	
49	13	VLS	Z	ePn	18	46	23.0	125	Athens:H=18:46:00
			E	eiSg			38.7		37.1°N, 20.7°E.
		JAN	Z	ePn	18	46	42.9	285	
		ATH	SPZ	eiPb	18	46	46.0C	290	
		VAM	Z	ePn	18	46	54.0	375	
		PLG	Z	eiPn	18	46	59.0C	410	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
50	13	VAM	Z	ePn	21	17	02.5	150	Athens: H=21:16:36
			Z	i(Pg)			03.8°D		35.5°N, 26.0°E.
			N	iSg			22.6		
		RHD	Z	ePn	21	17	09.0	200	
			E	iSy			35.7		
		ATH	SPZ	ePn	21	17	28.0	350	
			SPE	eiSn		18	05.2		
		PRK	Z	ePn	21	17	35.9	415	
		PLG	Z	ePn	21	17	56.3	570	
		VLS	Z	ePn	21	17	57.4	580	
		JAN	Z	ePn	21	18	05.8	645	
51	14	RHD	Z	eiPg	01	57	33.3	110	Athens: H=01:57:14
			E	eSg			47.8		26 3/4°N, 27 1/4°E.
		VAM	Z	ePg	01	57	59.0	300	3 = 27 1/4 E
		PRK	Z	ePn	01	58	02.5	325	
		ATH	SPZ	ePn	01	58	10.0	370	
52	14	JAN	Z	eiPn	03	10	10.5	230	Athens: H=03:09:34
			N	eiSn			37.1		Probably 41 3/4°N, 20 1/4°E.
		PLG	Z	ePn	03	10	19.3	300	
53	14	JAN	Z	eiPg	06	04	59.7	75	Athens: H=06:04:47
			NE	eiSg		05	09.5		39.2°N, 21.2°E.
		VLS	Z	eiPn	06	05	09.4	130	
			E	eiSg			26.8		
		PLG	Z	ePn	06	05	25.9	255	
54	14	RHD	Z	ePg	11	42	04.5	120	Athens: H=11:41:44
			E	eiSg			20.8		35 3/4°N, 27°E.
		VAM	Z	ePg	11	42	31.5	265	
		PRK	Z	ePn	11	42	33.7	345	
			NE	eiSn		43	11.9		
		ATH	SPZ	ePn	11	42	40.0	390	
55	14	JAN	Z	ePn	12	06	55.8	400	Athens: H=12:05:58
			E	eSn		07	38.2		Probably 43°N, 20 1/2°E.
		PLG	Z	ePn	12	07	03.7	465	
56	14	PRK	Z	eiPg	16	46	58.4	100	Athens: H=16:46:40
			N	eiSg		47	11.3		40.0°N, 25.5°E.
		PLG	Z	eiPn	16	47	10.1	180	
			Z	eiSn			32.2		
		ATH	SPNE	eSn	16	47	47.0	250	
		JAN	Z	ePn	16	47	38.7	400	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
57	14	JAN	Z	ePg	19	44	35.6	110	Athens: H=19:44:14 Probably 39 1/4°N, 19 3/4°E.
			N	eSg			48.0		
		VLS	Z	ePn	19	44	40.5	145	
			E	eSn			58.9		
58	14	JAN	Z	eiPn	23	16	01.8D	290	Athens: H=23:15:18 41.9°N, 19.1°E
			N	eSn			45.8		
		PLG	Z	eiPn	23	16	15.8	400	
		VLS	Z	ePn	23	16	21.8	440	
			E	eiSn		17	06.3		
		ATH	SPZ	ePn	23	16	39.6	590	
		VAM	Z	ePn	23	17	10.5	835	
59	15	RHD	Z	ePg	03	07	23.6	125	Athens: H=03:07:02 36.7°N 29.2°E.
			N	eSg		08	39.6		
		PRK	Z	eiPn	03	07	00.2	400	
		VAM	E	eSn	03	08	57.7	470	
		ATH	SPZ	ePn	03	08	14.0	505	
60	15	RHD	Z	ePg	03	08	26.6	105	Athens: H=03:08:07 36 1/4°N, 27.0° E.
			N	eiSg			39.6		
		VAM	N	eSg	03	09	35.7	290	
		PRK	N	eSn	03	09	32.0	335	
		ATH	SPN	ePg	03	09	38.0	360	
61	15	ATH	SPZ	eiPg	04	23	00.0D	115	Athens: H=04:22:40 39.0°N, 22.9°E. M _L = 3.2
			SPE	eiSg			14.5		
		PLG	Z	eiPn	04	23	02.8	130	
		JAN	Z	ePn	04	23	09.8	170	
			Z	ePg			11.0		
		VLS	Z	ePn	04	23	17.8	235	
			E	eiSg			50.6		
		PRK	Z	ePn	04	23	27.2	310	
		VAM	Z	ePn	04	23	37.2	390	
62	16	RHD	Z	ePn	11	39	12.8	155	Athens: H=11:38:47 37.2°N, 29.2°E.
			E	eiSn			30.8		
		PRK	Z	ePn	11	39	38.5	345	
		VAM	Z	ePy	11	40	04.5	495	
63	16	ATH	SPZ	ePg	15	38	53.5	60	Athens: H=15:38:43 38°N, 24 1/2°E. M _L 3.3
			SPN	iSg		39	01.5		
		PRK	Z	ePn	15	39	16.4	200	
		PLG	Z	ePn	15	39	26.7	290	
		VAM	Z	ePn	15	39	28.2	295	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
64	16	RHD	Z	eiPg	22	50	37.4	105	Athens: H=22:50:18 36.7°N, 27.0°E.
			E	eiSg		51	50.4		
		PRK	Z	eiPn	22	51	01.7	290	
			Z	eiPg			09.5		
			N	eiSy			42.0		
			NE	eSg			45.5		
		VAM	Z	ePn	22	51	02.3	300	
			E	eSn			36.9		
		ATH	SPZ	eiPg	22	51	15.0C	320	
			SPE	iSg			55.3		
		PLG	Z	ePn	22	51	30.3	515	
		JAN	Z	ePn	22	51	48.1	650	
65	16	RHD	Z	eiPg	23	25	48.3	125	Athens: H=23:25:26 36 3/4°N, 29 1/4°E.
			E	eiSg		26	04.3		
		PRK	Z	ePn	23	26	22.0	380	
		VAM	Z	ePn	23	26	38.2	510	
66	17	RHD	Z	ePg	20	32	26.1	120	Athens: H=20:32:05 37 1/4°N, 28 1/2°E.
			E	eSg			41.1		
		PRK	Z	eSg	20	33	36.3	300	
		PLG	Z	ePn	20	33	26.6	580	
67	18	JAN	Z	eiPn	14	53	11.9D	300	Athens: H=14:52:26 42.0°N, 19.1°E
			N	eiSy			52.6		
		PLG	Z	eiPn	14	53	24.6D	400	
			Z	eiSn		54	06.9		
		VLS	Z	ePn	14	53	30.3	445	
			E	eSn		54	14.9		
		VAM	Z	ePn	14	54	20.3	850	
68	18	JAN	Z	ePn	21	40	40.5	235	Athens: H=21:40:03 41.7°N, 20.0°E.
			N	eiSn		41	07.6		
		PLG	Z	eiPn	21	40	51.4D	310	
		VLS	Z	ePn	21	40	00.4	385	
69	20	PRK	ZNE	eiPg	00	23	16.0CSE	100	Athens: H=00:22:57 39.6°N, 25.3°E.
			NE	iSg			27.7		
		PLG	Z	ePn	00	23	28.2	190	
			Z	eiPg			30.1		
			E	eiSg			53.8		
		ATH	SPZ	eiPg	00	23	37.4C	225	
			SPE	eiSg		24	05.6		
		JAN	Z	ePb	00	23	57.6	380	
		VAM	Z	ePn	00	24	05.1	480	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
70	20	ATH	SPZ SPNE	eiPg iSg	05	17	43.8C 52.3	60	Athens: H=05:17:33 37.6°N, 23.2°E. $M_L=3.3$
		VLS	Z Z E	ePy ePg eiSg	05	18	14.3 16.5 45.8	240	
		VAM	Z Z N	ePy ePg eSg	05	18	15.8 18.7 49.5	250	
		PLG	Z Z Z	ePn e(Pb) eiPg	05	18	16.8 19.8 24.6(D)	290	
		JAN	Z Z	ePn ePy	05	18	20.6 25.4	310	
		PRK	Z	ePg	05	18	31.6	330	
71	20	VLS	Z	ePn	12	47	21.5	155	Athens: H=12:46:54 37 1/4°N, 22°E.
		ATH	SPZ SPE	ePn eiSg	12	47	23.5 46.9	170	
		JAN	Z	ePb	12	47	40.6	290	
		VAM	Z	ePb	12	47	43.3	305	
		PLG	Z	e?(Pn)	12	47	44.5	(335)	
72	20	ATH	SPZ SPNE	ePg iSg	19	47	00.0 07.1	55	Athens: H=19:46:50 38.5°N, 23.9°E ; $M_L=2.1$
		PLG	Z N	eiPn .	19	47	25.2(D) .1	220	
		PRK	Z Z	ePn ePg	19	47	25.9 24.5(C)	220	
		VAM	Z Z	ePn e(Pb)	19	47	41.3 43.9	340	
73	20	ATH	SPZ SPNE	eiPg iSg	19	59	37.0C 44.3	55	Athens: H=19:59:27 38.5°N, 24.0°E. $M_L=2.9$
		PRK	Z N	ePn eSg	20	00	01.1 30.1	210	
		PLG	Z Z	eiPn eiPy	20	00	02.2(D) 04.6(C)	220	
		VAM	Z Z	ePn ePy	20	00	18.3 24.8	345	
74	22	ATH	SPZNE SPNE	eiPg iSg	01	06	24.6CSW 32.4	60	Athens: H=01:06:13 38 1/4°N, 24 1/2°E. $M_L=3.0$
		PLG	Z	ePg	01	06	59.3	260	
		VLS	Z E	ePb eSb	01	07	04.3 42.2	325	
		JAN	Z Z	ePn ePy	01	07	03.2 08.9	340	

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Ref
75	23	RHD	Z	ePn	15	25	27.3	210	Athens: H=15:24:51 35 1/2°N, 27° E.
			Z	ePg			27.7		
		VAM	Z	ePn	15	25	27.6	230	
			Z	ePy			29.6C		
			N	eSn			54.7		
			E	eiSy			58.7		
		ATH	SPZ	ePb	15	25	52.7	395	
		PRK	Z	ePn	15	25	48.9	400	
			Z	eiPg		26	01.8		
		PLG	Z	ePb	15	26	21.7	595	
76	23	VLS	ZE	eiPg	20	50	14.6CE	125	Athens: H=20:49:51 37°N, 20 1/2°E.
			E	iSg			29.7		
		JAN	Z	e	20	50	37.9	300	
			Z	e(Pb)			39.8		
			Z	ePg			44.9		
			E	eSb		51	14.0		
		PLG	Z	ePn	20	50	55.6	450	
77	24	VLS	ZE	eiPg	01	04	40.0CW	110	Athens: H=01:04:20 37.3°N, 21.1°E. Felt in Elis (IV at Pyrgos , III+ at Strephi).
			E	eiSg			53.7		
		ATH	SPZ	ePb	01	05	00.5	250	
			SPZ	eiPy			01.5C		
			SPE	eiSb			29.0		
		JAN	Z	ePn	01	04	59.9	260	
			E	eiSg		05	40.4		
		VAM	Z	e(Pn)	01	05	16.3	370	
			Z	eiPb			17.9		
			N	eiSy		06	04.8		
		PLG	Z	eiPn	01	05	15.2(D)	375	
			Z	eiPb			18.7(C)		
		PRK	Z	ePn	01	05	32.2	510	
			Z	ePb			43.2		
78	24	PRK	ZNE	eiPg	08	08	45.2DS	120	Athens: H=08:08:24 38 1/4° N, 26 1/4° E.
			N	eiSg			59.8		
		ATH	SPZ	ePn	08	08	56.5	200	
			SPZ	eiPy			58.0C		
		RHD	E	eSn	08	09	39.2	280	
		PLG	Z	e?(Pn)	08	09	17.2	(360)	
		VAM	Z	eiPb	08	09	26.3C	375	
79	24	VLS	ZE	iPg	15	09	36.2D	40	Athens: H=15:09:29 38.2°N, 21.1°E. Felt on Cephalonia Island (IV at Valsamata).
		JAN	Z	eiPn	15	09	57.6(D)	165	
			E	eiSg		10	19.1		
		ATH	SPZ	ePy	15	10	10.5	250	
			SPZ	e(Pg)			13.7		
			SPN	eSy			41.0		
			SPE	eiSg			44.5		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D		
80		PLG	Z	ePn	15	10	16.9	315		
			Z	ePb			19.3			
			Z	ePy			21.3			
		VAM	Z	ePb	15	10	32.3	410		
		N	eSg		11	31.8				
	24	ATH	SPZ	ePn	21	11	31.0	160		Athens: H=21:11:03
			SPNE	eiSn			51.0			39 1/2°N, 23° E.
		JAN	Z	ePn	21	11	32.2	170		
		E	eSn			53.9				
	VLS	Z	ePy	21	11	47.4	250			
PRK	Z	e?(Pg)	21	11	55.3	(290)				
81	24	VLS	Z	ePn	23	41	12.8	160		Athens: H=23:40:45
									37.1°N, 21.6°E.	
		ATH	SPZ	ePn	23	41	20.5	220		
			SPZ	e(Pg)			23.5			
		SPE	eiSg			51.6				
	JAN	Z	ePn	23	41	28.8	285			
	VAM	Z	eiPn	23	41	31.3C	300			
		Z	eiPg			39.8C				
	E	eSn		42	03.8					
	PLG	Z	ePn	23	41	43.6	400			
82	25	PRK	ZNE	iPg	06	13	40.9DSW	50		Athens: H=06:13:32
		E	iSg			46.7			39.0°N, 25.7°E	
									An=8 u, Tn=2.5 sec.	
									Ms=4.2	
	ATH	SPZ	ePn	06	14	05.5	205			
		SPZ	eiPg			08.0D			Ae=5 u, Te=2.3 sec.	
		SPE	iSg			33.3				
	PLG	Z	ePn	06	14	09.9	250			
		Z	eiPg			15.5(D)				
	RHD	Z	ePn	06	14	(29.0)	395			
VAM	Z	ePn	06	14	31.2	410				
	Z	eiPb			35.9 D					
JAN	Z	eiPb	06	14	37.8(D)	420				
VLS	Z	ePb	06	14	41.0	445				
	Z	eiPy			45.7C					
83	25	PRK	Z	eiPg	10	19	50.3C	110		Athens: H=10:19:31
			NE	iSg		20	04.6			38.2°N, 26.5°E.
		ATH	SPZ	ePn	10	20	10.6	250		Felt on Chios Islands (IV+
			SPZ	ePy			13.5			at Chios, Neochorion, Thymiana
		SPN	eiSn			38.7				
	RHD	Z	eiPg	10	20	(19.7)D	270			
		E	eiSb			(45.9)				
		E	eiSg			(52.9)				
	VAM	Z	ePn	10	20	23.4	360			
		N	eSg		21	19.5				
PLG	Z	ePb	10	20	30.2	380				
JAN	Z	e?(Pb)	10	20	48.0	(500)				

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Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
25	PRK	ZNE NE	iPg i!Sg	21	44	17.0 22.5	ODSW 40	Athens: H=21:44:10 38.9°N, 25.9°E.
	ATH	SPZ SPNE	ePn eiSn	21	44 45	44.4 09.8	210	
	PLG	Z	ePn	21	44	58.1	270	
	VAM	Z	ePn	21	45	12.0	430	
26	RHD	Z	e?(Pg)	04	30	11.6	(80)	Athens: H=04:29:57 36.5°N, 27.4°E.
	VAM	Z	ePn	04	30	42.8	300	An=6 u, Tn=3.1 sec. Ms=4.5
		Z	eiPb			45.0C		
		Z	eiPy			47.3D		Ae=5 u, Te=1.6 sec.
		N	ei(Sb)		31	18.9		USCGS: H=04:30:02
		N	eiSg			27.3		36.4°N, 27.5°E.
	PRK	Z	ePn	04	30	43.0	300	h=56 Km; Mb=4.2
		Z	ePb			45.0		
		E	eiSy		31	23.0		
		N	eiSg			27.1		
	ATH	SPZ SPE	eiPb eiSn	04	30 31	53.5D 28.0	355	
	PLG	Z	e?(Pb)	04	31	21.6	550	
		Z	ePg			36.5		
	VLS	Z	ePb	04	31	31.9	620	
		Z	e(Pg)			47.0		
	JAN	Z	ePn	04	31	29.3	660	
		Z	e(Pb)			37.3		
26	PRK	Z NE	ePn ei!Sg	16	56	30.1 50.1	155	Athens: H=16:56:03 39.1°N, 28.1°E.
	RHD	Z	eiPn	16	56	(51.2)	320	
	ATH	SPZ	ePb	16	57	05.8	400	
	PLG	Z	ePn	16	57	04.8	430	
		Z	ePy			10.8		
	VAM	N	eiSn	16	58	09.7	520	
	JAN	Z	e?(Pn)	16	57	32.4	620	
		Z	ePb			38.7		
26	VLS	ZE E	eiPg eiSg	17	57	06.5C 07.8	Local	shock: Felt on Cephalonia Is- land (IV at Vlachata).
27	JAN	Z NE	eiPg iSg	01	19	05.4(C) 21.7	100	Athens: H=01:18:47 40 1/4°N, 19 3/4° E.
	VLS	Z	ePn	01	19	25.8	250	
		E	ei(Sb)			56.8		
		E	eiSg		20	03.3		
	PLG	Z	ePn	01	19	34.7	320	
		Z	eiPb			37.9(D)		
		E	eSn		20	10.0		
	ATH	SPZ	ePn	01	19	48.9	430	
	PRK	Z	ePn	01	20	05.5	560	
		Z	ePb			12.0		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
89	(27)	VLS	ZE	iPg	02	27	35.0CW	40	Athens: H=02:27:28 38.1°N, 21.1°E.
		JAN	Z	eiPn	02	27	56.2D	165	Felt on Cephalonia Island (IV+ at Vlachata).
			N	eiSn		28	16.7		
			E	eiSg			17.7		
		PLG	Z	eiPn	02	28	16.9C	325	
90	(28)	PRK	Z	eiPg	10	11	52.3C	110	Athens: H=10:11:31 39.9°N, 25.3°E
			E	eiSg		12	06.0		
		PLG	Z	eiPg	10	12	02.3(C)	175	
			N	ei Sy			23.7		
		ATH	SPZ	ePn	10	12	08.4	240	
			SPZ	eiPy			11.5C		
			SPN	eiSn			36.0		
		JAN	Z	ePb	10	12	30.7	380	
91	(28)	VLS	Z	eiPg	13	14	17.5C	100	Athens: H=13:14:00 38.8°N, 21.3°E.
			E	eiSg			30.9		
		JAN	Z	ePg	13	14	20.7	110	
			NE	eiSg			36.8		
		ATH	SPZ	ePy	13	14	41.0	240	
			SPZ	e(Pg)			42.9		
			SPN	eiSb		15	08.0		
			SPNE	eiSy			10.7		
		PLG	Z	ePn	13	14	41.0	260	
		VAM	Z	ePb	13	15	12.9	470	
92	(28)	JAN	Z	ePn	18	21	48.2	160	Athens: H=18:21:25 40 1/2°N, 19 1/2°E.
			Z	ePg			49.9		
			NE	eiSg		22	10.0		
		VLS	Z	ePn	18	22	07.7	280	
			Z	ei(Py)			11.4		
			E	eiSb			42.4		
		PLG	Z	ePn	18	22	11.5	305	
			Z	eiPb			14.0(C)		
			Z	eiPy			16.0(C)		
		PRK	Z	ePn	18	22	44.9	570	
		VAM	Z	e?(Pn)	18	22	57.6	(670)	
93	(30)	RHD	Z	ePg	00	33	(09.6)	115	Athens: H=00:32:49 36.7°N, 27.0°E
			E	eiSg			(24.6)		
		PRK	Z	ePn	00	33	32.7	290	
			Z	ePg			40.2		
			E	eiSg		34	16.2		
		VAM	Z	ePb	00	33	36.6	300	
			Z	ePg			42.4		
		ATH	SPZ	ePg	00	33	46.5	320	
			SPN	eiSg		34	25.5		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
94	30	RHD	Z	ePg	00	35	(34.6)	130	Athens: H=00:35:10 36.9°N, 27.1°E.
			E	eiSg			(57.7)		
		PRK	Z	ePn	00	35	52.0	270	
		VAM	Z	ePg	00	36	04.6	305	
			N	eSg			42.4		
		ATH	SPZ	eiSg	00	36	51.0	335	
95	30	PRK	ZNE	eiPg	06	21	14.0	CE105	Athens: H=06:20:54 39.5°N, 25.2°E.
			N	eiSg			37.7		
		PLG	Z	ePn	06	21	23.6	180	
			Z	ei(Pg)			26.2(C)		
			NE	eSg			47.7		
		ATH	SPZ	eiPn	06	21	27.2C	210	
			SPZ	eiPy			29.2D		
			SPZ	eiPg			31.1D		
			SPNE	ei!Sg			56.5		
		JAN	Z	ePb	06	21	51.2	370	
			Z	ePg			59.5		
		VLS	Z	ePb	06	22	00.5	425	
		RHD	Z	ePn	06	21	57.1	445	
			E	eSn		22	44.1		
		VAM	Z	ePn	06	21	59.6	460	

CONTINUATION

ATHENS		LONG DISTANCE SHOCKS				NOVEMBER 1968		Page 21	
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	4	PRK	Z	eiPKP	09	25	59.1C	149.5°	USCGS:H=09:27:38.5
		PLG	Z	iPKP	09	26	02.3C	150.5°	14.2° S, 172.0° E.
		ATH	SPZ	ei!PKP	09	26	05.9C	151.5°	New Hebrides Islands Region.
		JAN	Z	i!PKP	09	26	08.9C	151.5°	
		VAM	Z	iPKP	09	26	08.9C	151.5°	
		VLS	Z	eiPKP	09	26	13.3C	153.0°	
2	6	RHD	Z	eiPn	13	41	10.3D	440	BCIS:H=13:41:06
		PRK	Z	eiPn	13	42	40.7D	700	35.2°N, 32.9°E. Cyprus.
			E	eiSn		43	53.2D		h=70 Km;
		VAM	Z	ePn	13	42	48.0	760	USCGS:H=13:41:04.5
		ATH	SPZ	eiPn	13	42	57.0D	825	35.2° N, 32.8° E; h=54Km;
			SPN	eiSn		44	20.1		Mb=4.8
		PLG	Z	ePn	13	43	13.4	950	
		VLS	Z	ePn	13	43	31.3	1090	
		JAN	Z	eiPn	13	43	32.8	1120	
3	7	PRK	Z	ePKP ₁	03	52	34.2	151.0°	USCGS:H=03:32:50.8
		ATH	LPZ	ePKP ₁	03	52	42.0	152.5°	16.6° S, 172.7° W.
			LPZ	eiPP ₁		56	36.0C		Samoa Islands Region.
		JAN	Z	ePKP ₁	03	52	43.0	153.0°	Mb=5.1 ; Ms=5.5
4	7	PLG	Z	iP	10	09	13.0C	36.5°	USCGS:H=10:02:05.3
		PRK	Z	eiP	10	09	16.9C	37.0°	73.4° N, 54.9° E.
		JAN	Z	iP	10	09	23.9C	38.0°	Navaye Zemlya.
		ATH	SPZ	i!P	10	09	31.2C	38.5°	Mb=6.0
		VLS	Z	eiP	10	09	45.7C	40.5°	
		VAM	Z	iP	10	09	48.9C	41.0°	
		RHD	Z	iP	10	09	52.2C	41.5°	
5	9	ATH	LPZ	eP	13	50	56.0	38.0°	USCGS:H=13:43:38.4
			LPZ	eiPP		52	24.8D		23.8°N, 64.7°E.
			LPN	eiS		56	44.8		Near east Coast of west
		PLG	Z	eP	13	50	58.0	38.5°	Pakistan. Mb=5.2; Ms=5.3
		JAN	Z	eP	13	51	17.7	40.5	
6	9	JAN	Z	eP	17	13	41.2	78.5°	USCGS:H=17:01:41.1
		PLG	Z	eiP	17	13	48.9C	80.0°	37.96°N, 88.46°W.
		PRK	Z	eP	17	14	00.9	82.0°	Southern Illinois.
		VAM	Z	ePn	17	14	09.2	83.0°	h=19 Km; M=5 - 5 1/2(Pal);
		RHD	Z	eiP	17	14	13.4C	84.0°	6.0 (Gol) ; Mb=5.3

ATHENS LONG DISTANCE SHOCKS					NOVEMBER 1968				Page 22
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
7	9	PRK	Z	eP	20	44	09.9	96.5°	USCGS:H=20:30:41.9 24.0° N, 126.8° E. Molucca Passage M=6.1 (Pas) ; Mb=5.5; Ms=6
		RHD	Z	eP	20	44	10.8	97.0°	
		ATH	LPZ	eP	20	44	18.4	98.5°	
		VAM	Z	eP	20	44	21.2	99.0	
		PLG	Z	eP	20	44	22.5	99.5°	
8	10	RHD	Z	eP	17	14	16.3	94.5°	USCGS:H=17:01:59.2 20.0° N, 121.4° E. Philippine Islands Region. Mb=5.2 ; Ms=5.5
		PLG	Z	eP	17	14	23.5	96.0°	
		VAM	Z	eP	17	14	30.2	96.5°	
		JAN	Z	eP	17	14	34.8	97.5°	
9	11	PLG	Z	eiP	14	53	38.5C	83.0°	USCGS:H=14:41:15.9 40.1° N, 143.0° E ; Off East Coast of Honshu, Japan ; h=35 Km; Mb=5.5 ; Ms=5.9
		ATH	LPZ	eiP	14	53	46.0C	84.0°	
		RHD	Z	eiP	14	53	47.8C	84.5°	
		JAN	Z	eiP	14	53	48.8C	85.0°	
		VLS	Z	eP	14	53	50.4	86.0°	
		VAM	Z	eP	14	54	01.7	87.5°	
10	12	RHD	Z	iP	00	56	12.6C	79.0°	USCGS:H=00:44:12.8 27.5° N, 128.4° E. Ryukyu Islands ; h=48 Km; Mb=5.8 ; Ms=5.6
		PRK	Z	iP	00	56	27.3C	81.0°	
		PLG	Z	eiP	00	56	33.6C	82.5°	
		ATH	SPZ	iP	00	56	39.5C	83.0°	
		VAM	Z	eP	00	56	40.4	83.5°	
		JAN	Z	eiP	00	56	45.1C	84.5°	
		VLS	Z	eiP	00	56	51.7	85.0°	
11	12	ATH	LPZ	ePKP ₁	22	20	32.0	156.0°	USCGS:H=22:00:39.1 15.6° S, 172.8° W. Samoa Islands Region ; h=47 Km; Mb=5.2
12	13	RHD	Z	eP	18	54	06.7	84.5°	USCGS:H=18:41:47.9 40.2° N, 142.5° E. Near east Coast of Honshu, Japan ; h=49 Km; Mb=5.5 Ms=5.8
		PLG	Z	iP	18	54	07.1C	85.0°	
		PRK	Z	eP	18	54	11.6	86.0°	
		ATH	LPZ	eiP	18	54	15.2C	87.0°	
		JAN	Z	eiP	18	54	16.4C	87.5°	
		VAM	Z	eP	18	54	24.2	88.5°	
		VLS	Z	eP	18	54	26.6	89.0°	

ATHENS LONG DISTANCE SHOCKS NOVEMBER 1968

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
13	14	PRK	Z	ePKP	23	28	18.8	136.5°	USCGS: H=23:08:54.4 21.5°S, 170.1° E. Loyalty island; Depth = 103 Km; Mb=5.4
		PLG	Z	eiPKP	23	28	22.9C	139°	
		JAN	Z	eiPKP	23	28	23.6D	139.5°	
		ATH	SPZ	eiPKP	23	28	25.5C	140.5°	
		VAM	Z	ePKP	23	28	29.0	142°	
		VLS	Z	ePKP	23	28	34.5	145°	
14	15	RHD	Z	e	06	30	44.1		
		VLS	Z	e	06	30	50.7		
		PRK	Z	e	06	30	56.7		
			Z	e		31	06.5		
		ATH	LPZ	e	06	31	24.0		
		VAM	Z	e	06	31	33.7		
		JAN	Z	e	06	31	42.8		USCGS: H=07:45:51.7 16.6° S, 175.9° E; Fiji Islands Region. Magn. 6 - 6 1/4 (PAS); 6.3 - 6.5 (BRK); 6 - 6 1/4 (GOL); Depth = 66; Mb=5.6
15	16	PRK	Z	ePKP	08	05	24.4	141°	
		RHD	Z	ePKP	08	05	25.1	141.5°	
		PLG	Z	ePKP	08	05	26.6	142.5°	
		VAM	Z	ePKP	08	05	29.9	144.5°	
		ATH	SPZ	eiPKP	08	05	29.9D	144.5°	
		JAN	Z	ePKP	08	05	32.7	146°	
16	17	VLS	Z	e	00	27	38.2		
		JAN	Z	e	00	28	34.2		
		PLG	Z	ei	00	28	44.3C		
		ATH	SPZ	e	00	28	47.2C		
		VAM	Z	e	00	28	52.1		
		PRK	Z	e	00	28	54.7		USCGS: H=07:41:16.1 1.3° S, 13.6° W; North of Ascension Islands; Mag. 6 1/2 (GOL); Mb=5.3
17	17	VLS	Z	eP	07	50	16.7	56.5°	
		VAM	Z	eP	07	50	17.3	56.5°	
		ATH	SPZ	eiP	07	50	26.0C	57.5°	
		PLG	Z	eP	07	50	35.6	59°	
		RHD	Z	eP	07	50	37.2	59°	
		PRK	Z	eP	07	50	41.6	60	

ATHENS					LONG DISTANCE SHOCKS				NOVEMBER	1968	Page 24
N°	Date	Stat.	Comp	Phase	h	m	s	D	Remarks		
18	20	PLG	Z	eP	01	52	38.3	6°	BCIS: H=01:51:15. 45.6°N, 26.6° E.		
		PRK	Z	eP	01	52	47.8	6.8°	h=140±5 Km; USCGS: H=01:51:13.9		
		JAN	Z	eP	01	53	04.3	8°	45.7°N, 26.8°E; Rumania ; h=110 Km; Mb=4.0		
19	21	PLG	Z	eP	03	11	29.4	38°	USCGS: H=03:04:39.0 36.4° N, 70.6° E.		
			Z	epP		12	13.6		Hindu Kush region. h=204 Km;		
		PRK	Z	eP	03	11	55.7	41°	Mb=5.0		
		JAN	Z	eiP	03	12	32.9D	42°			
20	22	PRK	Z	eP	09	11	54.2	83.5°	USCGS: H=08:59:23.1 16.3°N, 122.3°E.		
		RHD	Z	eP	09	11	59.2	84.5°	Luzon, Philippine Islands ; h=26 Km; Mb=5.3 Ms=5.8		
		PLG	Z	eP	09	12	01.7	85°			
		ATH	SPZ	eP	09	12	04.4	87°			
		VAM	Z	eP	09	12	10.6	88°			
		JAN	Z	eP	09	12	31.4	92.5°			
21	22	PRK	Z	eP	10	45	15.5	94°	USCGS: H=10:31:45.1 1.5° N, 125.6° E.		
		RHD	Z	eP	10	45	10.7	95°	Molucca Passage h=7 Km; Mb=5.7		
		PLG	Z	eP	10	45	23.6	97°			
		VAM	Z	eP	10	45	27.6	98°			
		JAN	Z	eP	10	45	33.1	99°			
		VLS	Z	eP	10	45	38.2	100.5°			
22	22	RHD	Z	eP	11	51	00.4	87°	USCGS: H=11:38:17.3 13.1°N, 122.6°E.		
		PRK	Z	eP	11	51	01.1	87.5°	Luzon, Philippe Islands ; h=17 Km; Mb=5.5		
		PLG	Z	eP	11	51	08.9	89°			
		VAM	Z	eP	11	51	15.3	89.5°			
		JAN	Z	eP	11	51	19.2	91°			
23	24	PLG	Z	ePKP ₁	21	29	24.8	138°	USCGS: H=21:09:47.9 15.6° S, 176° W.		
		ATH	LPZ	ePKP ₁	21	29	20.0	141°	Fiji Island region h=N ; Mb=5.3		
		RHD	Z	ePKP ₁	21	29	39.9	146.5°			
		JAN	Z	ePKP ₁	21	29	40.8	147°			
		PRK	Z	ePKP ₁	21	29	41.7	147.5°			
24	24	PRK	Z	eP	21	33	13.8	81°	USCGS: H=21:20:59.9 40.3°N, 142.3°E.		
		PLG	Z	eP	21	33	17.8	81.5°	Near east coast of Honshu , Japan ; h=51 Km; Mb=5.9		
		RHD	Z	eP	21	33	20.5	82°			
		ATH	SPZ	ei!P	21	33	25.0C	82.5°			

ATHENS LONG DISTANCE SHOCKS				NOVEMBER 1968				Page 25	
No	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		JAN	Z	eP	21	33	28.3C	83.5°	
		VAM	Z	eP	21	33	35.4C	86°	
		VLS	Z	eP	21	33	36.1	86.5°	
25	25	ATH	LPZ	e(P)	00	00	44		
26	25	PRK	Z	eP	18	50	11.9	83.4°	USCGS:H=18:37:58.8
		ATH	LPZ	eP	18	50	20.8	84.8°	15.9°N, 92.4°W.
			LPE	eS	19	00	56.0		Mexico-Guatemala border region ; h=105 Km; Mb=4.6
		VAM	Z	eP	18	50	26.4	86°	
27	26	JAN	Z	ePKP ₁	01	29	05.6	120.5°	USCGS:H=01:10:12.9
									5.3° S, 152.0° E.
									New Britain region.
									h=68 Km; Mb=5.5
28	26	PRK	Z	eiPKP	02	08	51.1	(168°)	USCGS:H=01:49:56.3
		RHD	Z	ePKP	02	08	52.0	(170°)	21.3° S, 179.5° W.
		PLG	Z	ePKP	02	08	55.7	(174°)	Fiji Islands region.
		JAN	Z	ePKP	02	09	04.5	(177°)	h=672 Km; Mb=5.0
29	26	JAN	Z	ePn	15	36	10.8	355	Athens:H=15:35:18
			Z	ei(Py)			18.2D		42°N, 18 1/4°E.
			Z	eiPg			22.3		
			E	eiSn			49.1		
			E	eiSy			59.3		
		PLG	Z	eiPn	15	36	24.0C	460	
		VLS	Z	ePb	15	36	30.8	470	
			E	eSn		37	13.9		
30	28	PRK	Z	eP	07	12	23.8	80.5°	USCGS:H=07:00:08.1
		PLG	Z	eiP	07	12	27.4C	81°	40.1°N, 142.3°E.
		RHD	Z	eP	07	12	30.1	82°	Near east coast of Honshu,
		JAN	Z	eP	07	12	37.8	83°	Japan ; h=47 Km; Mb=5.0
		VLS	Z	eP	07	12	46.4	85°	
31	28	PLG	Z	eP	10	49	26.5	95°	USCGS:H=10:36:07.7
									15.4°N, 94.6°W.
		ATH	LPZ	eiP	10	50	00.0	102°	Near coast of Oaxaca, Mexico,
			LPZ	e(PP)		54	03.2		h=33 Km; Mb=5.2 ; Ms=6.4
			LPNE	eSKS	11	00	40.0		M=6.1 (PAS).
			LPN	e(S)		01	46.0		
			LPE	eiPS		03	16.0		
32	28	RHD	Z	ePKP ₁	16	49	12.2	128°	USCGS:H=16:30:32.4
		PRK	Z	ePKP ₁	16	49	12.9	128.4°	6.8° S, 156.2° E.
		PLG	Z	ePKP ₁	16	49	15.0	128.8°	Solomon Islands, h=169 Km,
									Mb=4.7
		ATH	LPZ	e?(PP)	16	51	24.0	(129°)	

ATHENS				LONG DISTANCE SHOCKS				NOVEMBER 1968	Page 26
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		JAN	Z	ePKP ₁	16	49	20.4	132.8°	
		VAM	Z	ePKP ₁	16	49	21.9	133.2°	
		VLS	Z	ePKP ₁	16	49	24.3	134°	
33	30	PLG	Z	eP	04	43	47.2		
		JAN	Z	eP	04	43	55.9		
		ATH	SPZ	eP	04	44	47.0		
		PRK	Z	eP	04	44	48.5		
34	30	PRK	Z	ePKP ₁	06	27	06.5	143.5	USCGS:H=06:07:33.9
		ATH	SPZ	ePKP ₁	06	27	07.5	144°	61.7°N, 160.7°E.
		PLG	Z	ePKP ₁	06	27	10.7	145°	Balleny Islands region.
		JAN	Z	ePKP ₁	06	27	12.5	146°	h=N ; Mb=5.1
35	30	VAM	Z	e(P)	19	52	48.7		
		PRK	Z	e(P)	19	52	58.5		
36	30	PRK	Z	e(P)	21	57	44.5		
37	30	PRK	Z	e(P)	22	01	37.2		
38	30	PRK	Z	e(P)	22	20	26.5		

The Director
of the Seismological Institute

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10 MAR 1969

U. C.

NATIONAL OBSERVATORY OF ATHENS

SEISMOLOGICAL INSTITUTE



DECEMBER 1968

ATHENS

NATIONAL OBSERVATORY - SEISMOLOGICAL INSTITUTE
SEISMOLOGICAL STATIONS NETWORK - CREECE
PRELIMINARY BULLETIN
DECEMBER 1968

Station	Location	Type of instruments	Comp.	Mass Kg	T _o sec.	T _g sec.	v:1	V	Drum speed mm/min.
ATHENS	37°58'20"N	Benioff	Z,N,E	107.5	1	0.25		12.500	60
(ATH)	23°43'0"E	Hiller	Z	1	0.82	0.25	10	5.000	60
(Attica)	h=95 m.	"	N, E	1	0.82	0.25	10	2.000	60
Cretaceous		Wood-Anderson	N, E		0.8		50	2.800	60
Limestone		Sprengnether	Z	11.25	15	100		1.500	15
		"	N, E	10.75	15	100		1.500	15
		Wiechert	Z	1300	1.6		1,6	152	ca.30
		"	N	1000	4,4		4,8	130	ca.30
		"	E	1000	4,9		5,2	157	ca.30
		Mainka	N	135	2.8		2.5	76	ca.31
		"	E	135	3.5		4,0	48	ca.31
		Kritikos	N	40	2.5		5.7	4	ca.40
ARCHANGELOS	36°12'58"N	Sprengnether	Z	1.14	0.5	0.5		45.600	60
(RHD)	28°07'34"E								
Sandstone	h=170 m.								
JANINA	39°39'24"N	Sprengnether	Z	1.14	0.5	0.5		40.000	60
(JAN)	20°51'03"E	"	N	1.14	0.5	0.5		8.400	60
Cretaceous	h=540 m.	"	E	1.14	0.5	0.5		6.000	60
Limestone									
PARASKEVI	39°14'46"N	Sprengnether	Z	1.14	0.5	0.5		42.800	60
(PRK)	26°16'18"	"	N	1.14	0.5	0.5		7.600	60
Rhyolite	h=100 m	"	E	1.14	0.5	0.5		7.600	60
PATRAS	38°14'11"N	Wiechert	Z	80	2.7	3.5		125	ca.30
(PAT)	21°44'48"E								
Alluvium	h=45 m.								
POLYGYROS	40°22'25"N	Sprengnether	Z	1.14	0.5	0.5		92.400	60
(PLG)	23°26'44"E	"	N	1.14	0.5	0.5		5.600	60
Gneis	h=580 m.	"	E	1.14	0.5	0.5		6.000	60
VALSAMATA	38°10'38"N	Sprengnether	Z	1.14	0.5	0.5		56.000	60
(VLS)	20°35'23"E	"	E	1.14	0.5	0.5		11.200	60
Cretaceous	h=375 m								
Limestone									
VAMOS	35°34'25"N	Sprengnether	Z	1.14	0.5	0.5		56.000	60
(VAM)	24°11'59"E	"	N	1.14	0.5	0.5		15.000	60
Marly	h=225 m.	"	E	1.14	0.5	0.5		10.000	60
Limestone									

NOTE : In the "Component," column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram when it is oriented so that time increases from left to right. On all vertical component (Z) instruments upward trace motion corresponds to upward ground motion.

Magnitudes of local shocks calculated from Wood-Anderson records are designated by M_L .-

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	1	PRK	Z	eiPg	11	51	06.8C	55	Athens:H=11:50:56 39.2°N, 25.6° E.
			N	iSg			13.9		
		ATH	SPZ	ePg	11	51	34.2	210	The W.A. seismographs were out of operation from November 12 to December 17 on account of trouble in the recording system.
			SPE	eiSg			59.8		
		PLG	Z	ePn	11	51	31.5	220	
2	2	PRK	Z	eiPn	00	22	46.2D	185	Athens:H=00:22:18
			N	iSn		23	08.2		40.8°N, 25.6°E.
		PLG	Z	eiPn	00	22	46.3D	185	Felt in Evros (IV at Makre).
			N	iSg		23	11.2		
		JAN	Z	ePy	00	23	23.6	410	
3	2	VLS	Z	eiPn	10	33	52.6D	175	Athens:H=10:33:23
			E	iSg		34	16.6		36.6°N, 20.5° E.
		JAN	Z	ePg	10	34	24.1	340	
			N	eiSy		35	00.1		
		PLG	Z	ePg	10	34	51.5	490	
4	3	JAN	Z	ePn	02	30	53.1	135	Athens:H=02:30:29
			N	eiSg		31	10.3		39.1°N, 22.3°E.
		PLG	Z	ePg	02	31	01.0	175	Felt in Karditsa (IV+ at Anavra)
		VLS	Z	ePg	02	31	03.3	185	
			E	eiSg			27.1		
5	3	VLS	Z	eiPg	07	02	53.3C	115	Athens:H=07:02:31
			E	iSg		03	07.3		37.5°N, 19.6°E
		JAN	Z	ePg	07	03	19.1	265	
			N	eiSb			46.1		
			N	eiSy			48.6		
		PLG	Z	ePn	07	03	38.4	465	
6	4	RHD	Z	eiPg	18	42	49.5C	100	Athens:H=18:42:30
			Z	iSg		43	01.8		36.6°N, 27.0°E.
		VAM	Z	ePn	18	43	13.7	280	
			Z	eiPg			20.5D		
			N	eiSn			44.2		
		PRK	Z	ePn	18	43	16.9	310	
			E	iSb			54.7		
		ATH	SPZ	eiPg	18	43	25.9C	315	
			SPN	eiSg		44	04.5		
		PLG	Z	ePn	18	43	47.0	540	
		VLS	Z	ePn	18	43	50.9	580	
		JAN	Z	ePn	18	43	58.5	635	
7	4	RHD	Z	eiPg	18	43	44.1C	105	Athens:H=18:43:24
			Z	iSg			57.5		36.5° N, 26.9° E.
		VAM	E	iSg	18	44	47.8	275	Ms=4.8 An=21.0 u, Ae=14.0 u Tn=3.0 sec.Te=3.0 sec.

ATHENS SHOCKS IN THE AREA OF GREECE

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
8	4	PRK	Z	eiPn	18	44	09.5D	305	USCGS: H=18:43:28 36.4°N, 27.1°E. h=49 Km; Mb=4.4 Felt on Kos Island (III+ at Kardamaene).
			E	iSg			55.0		
		ATH	SPE	iSg	18	45	325	325	
		PLG	Z	ePn	18	44	39.8	530	
		VLS	Z	ePg	18	45	09.6	585	
		JAN	Z	ePn	18	44	52.3	630	
		RHD	Z	eiPg	18	52	33.9	110	Athens: H=18:52:13 36.6°N, 26.9°E. BCIS: H=18:52:19 36.4°N, 26.9°E. USCGS: H=18:52:17.6 36.5°N, 27.1°E. h=39 Km; Mb=3.9
			Z	iSg			47.0		
		VAM	Z	ePn	18	52	55.6	270	
			Z	eiPb			57.2C		
			Z	eiPg		53	01.2D		
			E	iSg			33.9		
		PRK	Z	ePn	18	52	57.3	290	
			N	iSg		53	32.8		
		ATH	SPZ	ePb	18	53	04.1	315	
			SPZ	eiPg			10.8D		
9	4		SPE	eiSg			48.5		
		PLG	Z	ePn	18	53	26.9	520	Athens: H=19:37:18 36.6°N, 27.0°E. An=23.0 u, Ae=17.0 u Ms=4.9 Tn=3.0 s. Te=2.9 s. BCIS: H=19:37:23 36.5°N, 27.0°E. USCGS: H=19:37:23.5 36.5°N, 27.1°E. h=51 Km; Mb=4.7 Felt on Kos Island (III+at Kardamaene).
		VLS	Z	ePb	18	53	39.6	575	
		JAN	Z	ePb	18	53	45.8	610	
		RHD	Z	eiPg	19	37	38.2C	105	
			Z	iSg		38	51.4		
		VAM	Z	ePn	19	38	02.2	290	
			N	eiSn			33.6		
		PRK	Z	ePn	19	38	02.7	300	
			E	iSg			48.0		
		ATH	SPZ	ePn	19	38	06.6	315	
10	4		SPZ	eiPg			15.2D		Athens: H=20:10:56 36.6°N, 26.9°E
			SPE	iSg		39	53.3		
		PLG	Z	ePn	19	38	30.3	515	
		VLS	Z	ePb	19	38	59.5	580	
		JAN	Z	ePn	19	38	59.3	630	
		RHD	Z	eiPg	20	11	17.1C	110	
			Z	eiSg			30.8		
		VAM	Z	ePn	20	11	38.5	275	
			Z	ePb			40.4		
			E	iSn		12	09.4		
		PRK	Z	ePn	20	11	40.4	295	Athens: H=20:10:56 36.6°N, 26.9°E
			Z	eiPy			46.1C		
			E	iSg		12	24.7		
		PLG	Z	ePg	20	12	26.8	510	
		JAN	Z	ePn	20	12	24.2	630	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
11	4	RHD	Z	eiPg	20	30	39.20	105	Athens: H=20:30:19
			Z	eiSg			52.4		36.6°N, 27.0°E.
		VAM	Z	ePn	20	31	02.3	285	Ms=4.6 An=12 u, Ae=10 u
			Z	eiPg			09.9D		Tn=3.1 s. Te=2.9 s.
			N	eiSn			35.5		USCGS: H=20:30:23.6
									36.7°N, 26.9°E. Mb=4.1
		PRK	Z	ePn	20	31	03.3	290	
			Z	eiPg			10.8D		
			N	iSg			47.3		
		ATH	SPZ	ePg	20	31	15.0	320	
			SPN	eiSg			54.5		
		PLG	Z	ePn	20	31	33.5	520	
		VLS	Z	ePy	20	31	53.6	575	
		JAN	Z	ePn	20	31	47.0	630	
12	4	RHD	Z	eiPg	20	48	38.9C	105	Athens: H=20:48:19
			Z	eiSg			52.3		36.6°N, 27.0°E
		VAM	Z	ePn	20	49	03.9	290	
			E	iSg			46.9		
		PRK	Z	ePn	20	49	04.9	305	
			Z	eiPy			10.2D		
			N	iSg			50.2		
		ATH	SPZ	ePg	20	49	16.6	320	
			SPE	eiSg			55.6		
		PLG	Z	ePn	20	49	32.8	520	
		JAN	Z	ePn	20	49	48.5	640	
13	5	RHD	Z	ei!Pg	07	52	24.1C	100	Athens: H=07:52:05
		VAM	ZE	eiPn	07	52	50.2CW	295	36.6°N, 27.1°E.
			Z	ei!Pg			59.5C		Ms=6.1 An=311 u, Ae=280 u
		PRK	ZN	eiPn	07	52	51.4CN	310	Tn=3.8 s. Te=5.5 s.
			Z	iPy			57.4D		BCIS: H=07:52:09
			E	iSg		53	38.1		36.6°N, 26.9°E
		ATH	SPZNE	eiPn	07	52	55.9CWN	335	M=5.9 (Upps.); M _L =5.8 (Moxa).
			SPZ	ei!Pb			59.0D		USCGS: H=07:52:11
			MNE	iSn		53	32.7		36.6°N, 27.0°E.
			ME	i!Sg			47.0		h=35 Km; Mb=5.5
		PAT	Z	ePn	07	53	17.5	505	Felt on the Islands of Nisyros
			Z	eiSn		54	09.8		(V+ at Mandraki), Kos (IV at
									Kardamaene) and Naxos (IV at
		PLG	Z	ei!Pn	07	53	22.3D	540	Naxos).
			Z	iPg			35.6C		Area of felt shaking about
		VLS	Z	ePn	07	53	31.2	610	90.000 Km ² ; M. M.=5.6* ;
		JAN	Z	eiPn	07	53	34.7C	635	Macroseismic focal depth
									ca 37 Km.
14	5	RHD	Z	ePg	10	56	14.9	110	Athens: H=10:55:54
			Z	eiSg			28.5		36.6°N, 26.9°E.
		VAM	Z	ePn	10	56	37.9	285	
			E	eiSg		57	09.6		
		PRK	Z	ePn	10	56	39.4	300	
			E	eiSg		57	24.4		
		./.							

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		ATH	SPZ	ePg	10	56	50.5	315	
			SPN	iSg		57	28.5		
		PLG	Z	ePn	10	57	10.5	530	
		VLS	Z	ePb	10	57	25.2	590	
		JAN	Z	ePb	10	57	28.9	620	
15	5	RHD	Z	ePg	14	12	08.5	105	Athens: H=14:11:48 36.6°N, 27.0°E
			Z	eiSg			22.3		
		VAM	Z	ePn	14	12	31.9	285	
			N	eiSy		13	10.9		
		PRK	Z	ePn	14	12	34.4	305	
			Z	eiPy			40.4D		
			N	iSg		13	21.1		
		ATH	SPZ	ePg	14	12	46.4	325	
			SPE	iSg		13	26.0		
16	5	RHD	Z	ePg	14	19	18.2	105	Athens: H=14:18:58 36.6°N, 27.0°E
			Z	eiSg			31.0		
		VAM	Z	ePn	14	19	40.4	275	
			E	eiSn		20	11.2		
		PRK	Z	ePn	14	19	43.4	300	
			Z	eiPy			49.0D		
			N	eiSg		20	28.8		
		ATH	SPZ	eiPg	14	19	55.4D	320	
			SPN	eiSy		20	30.1		
			SPE	eiSg			35.0		
17	5	RHD	Z	eiPg	17	27	39.1C	110	Athens: H=17:27:18 36.6°N, 27.0°E. USCGS: H=17:27:21.7 36.6°N, 26.9°E. Mb=3.8
			Z	eiSg			52.5		
		VAM	Z	ePn	17	28	01.4	285	
			N	eiSb			37.0		
		PRK	Z	ePn	17	28	03.4	300	
			N	eiSb			40.1		
			N	iSg			47.6		
		ATH	SPZ	eiPg	17	28	15.5C	320	
			SPE	eiSy			49.1		
			SPN	iSg			54.3		
		PLG	Z	ePn	17	28	31.4	515	
		JAN	Z	ePn	17	28	47.2	640	
18	5	VAM	Z	eiPn	23	07	22.4C	205	Athens: H=23:06:49 35.6°N, 22.1°E.
			E	eiSg			50.4		
		PAT	Z	ePg	23	07	43.1	300	
		ATH	SPZ	ePg	23	07	43.8	305	
			SPE	eiSy		08	16.9		
			SPE	iSg			21.5		
		VLS	Z	eiPn	23	07	37.2D	320	
			E	eiSy		08	21.7		
			E	eiSg			25.2		

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		JAN	Z	eiPb	23	08	02.00	470	
			N	eiISb			53.2		
		PLG	Z	eiPn	23	08	07.80	550	
		PRK	Z	ePn	23	09	09.0	570	
19	6	JAN	Z	ePn	12	29	50.0	195	Athens: H=12:29:18
			N	eiSg		30	17.1		40.5°N, 18.9°E
		VLS	Z	ePg	12	30	12.8	305	
		PLG	Z	ePg	12	30	26.2	380	
20	6	RHD	Z	ePg	23	46	00.2	105	Athens: H=23:45:40
		VAM	Z	ePn	23	46	23.9	285	36.6°N, 27.0°E
			N	eiSy		47	03.4		
		PRK	Z	ePn	23	46	26.1	305	
			Z	eiPy			30.9		
			N	iSy		47	07.9		
		ATH	SPZ	eiPg	23	46	36.40	315	
			SPN	eiSg		47	14.5		
		JAN	Z	ePn	23	47	07.7	630	
21	7	PRK	Z	ePn	08	54	26.6	295	Athens: H=08:53:42
			Z	iPg			34.30		36.7°N, 27.5°E.
			N	eiSg		55	10.6		The RHD station was out of
		VAM	Z	ePn	08	54	28.1	315	operation from 04 h, December
		ATH	SPZ	ePb	08	54	39.5	370	7, to 16 h, October 8, on acc.
			SPN	eiSn		55	15.6		count of trouble in the
		PLG	Z	ePg	08	55	20.5	555	chronometer.
		JAN	Z	ePn	08	55	15.0	680	
22	7	VAM	Z	ePn	11	19	55.1	250	Athens: H=11:19:16
			Z	eiPg		20	00.90		36.3°N, 26.8°E.
		PRK	Z	eiPn	11	20	02.20	310	
		ATH	SPZ	ePn	11	20	08.00	345	
			SPN	eiSn			45.0		
		PLG	Z	ePb	11	20	39.8	540	
		JAN	Z	ePn	11	21	09.6	630	
23	8	PRK	Z	eiPg	12	56	36.00	320	Athens: H=12:55:38
			E	eiSg		57	14.2		36.5°N, 27.7°E.
		VAM	Z	ePn	12	56	28.3	330	
		ATH	SPZ	ePb	12	56	41.6	405	
			SPZ	ePy			45.3		
			SPN	eiSn		57	21.8		

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24	8	VAM	Z	eiPn	13	01	20.3C	205	Athens: H=13:00:47 36.4° N, 22.3° E.
			Z	iPy			22.6D		
		ATH	SPZ	ePn	13	01	23.0	225	
			SPZ	eiPg			27.0D		
			SPN	iSb			50.9		
		VLS	Z	ePg	13	01	31.9	250	
		JAN	Z	ePg	13	01	53.5	370	
		PRK	Z	ePn	13	01	53.0	460	
25	8	RHD	Z	eiPg	18	13	09.1C	90	Athens: H=18:12:52 36.9° N, 27.6° E.
		PRK	Z	ePn	18	13	33.5	275	
			Z	eiPg			40.5C		
		VAM	Z	ePn	18	13	41.5	340	
		ATH	SPZ	ePb	18	13	48.0	360	
			SPN	eiSn		14	23.5		
26	9	PRK	Z	eiPn	04	16	13.1C	285	Athens: H=04:15:30 37.2° N, 28.2° E.
			Z	iPg			20.6C		
		ATH	SPZ	eiPn	04	16	26.5C	390	The RHD Station was out of operation from 20 h, December 8, to 14 h, December 13, on account of trouble in the recording system.
		VAM	Z	ePn	04	16	30.1	415	
		JAN	Z	ePn	04	17	00.8	655	
27	9	PRK	Z	i!Pg	04	46	07.1C	110	Athens: H=04:45:46 38.4° N, 26.0° E.
			E	iSg			20.4		
		ATH	SPZ	eiPn	04	46	20.5C	210	
			SPN	eiSn			44.5		
28	9	PLG	Z	ePn	04	46	29.9	290	
		VAM	Z	ePg	04	46	59.5	410	
		JAN	Z	eiPn	04	46	54.4C	480	
29	9	PRK	Z	eiPn	20	22	57.0D	295	Athens: H=20:22:12 36.8° N, 27.1° E.
			E	iSg		23	40.7		
		VAM	Z	ePn	20	22	57.5	300	
			Z	eiPy		23	02.8D		
		ATH	SPZ	eiPn	20	23	07.5C	325	
			SPN	iSn			46.0		
		PLG	Z	ePn	20	23	25.6	520	
		VLS	Z	ePb	20	23	41.4	590	
		JAN	Z	eiPn	20	23	43.8C	660	
30	10	JAN	Z	iPg	11	28	47.1C	80	Athens: H=11:28:32 39.0° N, 21.4° E.
			N	i!Sg		29	01.5		
		PAT	Z	eiPg	11	28	47.5D	85	Ms=4.5 Tn=2 s. Te=3 s.
		VLS	Z	i!Pg	11	28	50.2C	100	BCIS: H=11:28:35 38.7° N, 21.5° E.
		./.							Felt in Acarnania (IV+ at Astakos).

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		./.							
	PLG	Z	iPn	11	29	06.50	220		
		E	eiSb			34.9			
	ATH	SPZ	eiPn	11	29	08.00	230		
		SPZ	ei!Py			10.00			
		SPZNE	iPg			12.9CSW			
		SPN	iSn			34.5			
		SPE	ei!Sy			37.8			
	PRK	Z	eiPn	11	29	31.60	410		
		Z	eiPb			35.50			
	VAM	Z	ePn	11	29	38.7	470		
31	10	JAN	Z	eiPg	11	34	50.70	110	Athens: H=11:34:30
		VLS	Z	eiPn	11	34	53.60	125	38.0°N, 21.5°E.
		N	iSn		35	10.6			
	ATH	SPZ	ePg	11	35	12.5	235		
	PLG	Z	eiPb	11	35	10.30	245		
32	10	ATH	SPZE	eiPg	20	13	39.00	85	Athens: H=20:13:23
		SPN	eiSg			49.4			38.5°N, 23.0°E.
									Ms=3.3
	PLG	Z	eiPn	20	13	55.40	200		
	VLS	Z	ePg	20	14	01.4	215		Felt in Boeotia (IV at Ali-
	JAN	Z	ePg	20	14	03.4	225		artos), Phthiotis (III+ at
	PRK	Z	ePg	20	14	16.4	295		Zeli) and Attica (II+ at Kal-
	VAM	Z	ePn	20	14	16.8	360		lithea).
33	11	VAM	Z	eiPn	20	50	48.70	130	Athens: H=20:50:25
		N	iSg		51	04.8			34.8°N, 25.5°E.
	ATH	SPZ	ePn	20	51	21.5	390		
	PRK	Z	ePn	20	51	36.1	500		
	VLS	Z	ePn	20	51	43.3	555		
	JAN	Z	ePn	20	51	55.3	650		
	PLG	Z	ePn	20	51	57.5	670		
34	14	JAN	Z	ePn	09	07	12.3	250	Athens: H=09:06:33
		N	eiSn			41.1			41 1/2°N, 19 1/4°E.
	PLG	Z	ePn	09	07	24.2	340		
	VLS	Z	ePn	09	07	26.5	360		
35	15	RHD	Z	ePg	08	02	28.4	120	Athens: H=08:02:07
		Z	eiSg			43.6			36 1/2°N, 29 1/4°E.
	PRK	Z	ePn	08	03	05.7	400		
	VAM	Z	ePb	08	03	21.7	480		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
36	15	VLS	Z	ePg	08	07	21.1	135	Athens: H=08:06:58 37.3°N, 21.2°E.
			E	eiSg			37.9		
		JAN	Z	ePn	08	07	38.3	260	
		ATH	SPZ	ePn	08	07	38.5	260	
		VAM	Z	ePg	08	07	57.6	335	
		PLG	Z	ePn	08	07	54.8	385	
37	15	PRK	Z	ePg	19	02	38.3	90	Athens: H=19:01:22 Probably 39 1/4°N, 25° E.
			N	eSg			49.8		
		ATH	SPN	eSg	19	02	15.0	185	
38	16	VLS	Z	ePg	03	47	27.3	55	Athens: H=03:47:16 Probably 37 1/4°N, 20 1/2°E.
			E	eiSy			33.1		
		JAN	Z	ePn	03	47	53.9	230	
			N	eSn		48	18.5		
39	16	ATH	SPN	i!Pg	15	34	41.9	25	Athens: H=15:34:37 37.8°N, 23.7° E. An=2.3 u, Ae=4.2 u. Ms=3.3 Tn=1.6 s. Te=1.6 s. M _L =2.9
			SPE	eiSg			45.5		
		VLS	Z	ePy	15	35	23.1	270	
		PLG	Z	ePn	15	35	17.9	270	
		VAM	E	eSb	15	35	52.4	270	
		PRK	Z	ePg	15	35	25.5	270	
		JAN	Z	ePn	15	35	23.8	310	
40	17	JAN	Z	ePg	03	05	31.4	100	Athens: H=03:05:13 39.0°N, 21.5°E.
			N	eSg			42.7		
		VLS	Z	ePg	03	05	34.4	125	
			N	eSg			50.4		
		PLG	Z	ePn	03	05	50.2	240	
41	17	ATH	SPN	ePg	03	39	05.5	90	Athens: H=03:38:48 38.8°N, 23.4°E. M _L =2.7
		PLG	Z	ePn	03	39	16.2	160	
			Z	eiSn			35.5		
		VLS	Z	ePn	03	39	26.8	245	
		JAN	Z	ePn	03	39	26.8	245	
		PRK	Z	e?(Pn)	03	39	27.3	(250)	
42	17	RHD	Z	ePn	08	39	50.4	245	Athens: H=08:39:12 Probably 38° N, 29 3/4° E.
			Z	eSn		40	18.2		
		PRK	Z	ePn	08	40	02.1	325	
			E	eSg			51.5		
43	17	JAN	Z	eiPg	15	37	58.5	60	Athens: H=15:37:47 39.3°N, 21.4°E.
		VLS	Z	ePn	15	38	13.3	150	
			E	eiSn			32.9		
		PLG	Z	ePn	15	38	22.1	220	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
44	17	RHD	Z	eiPn	15	42	41.3	120	Athens: H=15:42:20 36.8°N, 27.1°E. M _L =2.8
			Z	eiSn		43	01.2		
		PRK	Z	ePn	15	43	03.5	285	
			Z	ePg			09.9		
			N	eSg			47.4		
		VAM	Z	ePn	15	43	05.4	300	
			N	eSb			43.9		
		ATH	SPZ	ePb	15	43	14.4	320	
			SPZ	ePg			16.5		
			SPE	eiSy			52.1		
			SPE	eiSg			56.2		
		PLG	Z	ePg	15	43	49.6	500	
		JAN	Z	e(Pg)	15	44	05.7	(600)	
45	18	JAN	Z	ePg	08	10	32.5	50	Athens: H=08:10:23 39.2°N, 21.1°E.
		VLS	Z	eiPn	08	10	44.8	120	
			E	eSg		11	00.6		
		PLG	Z	ePn	08	11	01.2	245	
46	18	PRK	Z	ePn	18	53	44.6	350	Athens: H=18:52:51 40.6°N, 29.7°E.
			N	eSn		54	21.1		
		RHD	Z	ePn	18	54	00.7	510	
		PLG	Z	ePn	18	54	15.5	515	
47	18	PLG	Z	ePn	19	01	36.8	400	Athens: H=19:00:39 Probably 43°N, 27°E.
			Z	ePb			41.5		
			Z	eSn		02	19.2		
		PRK	Z	ePn	19	01	39.6	420	
48	19	ATH	SPZ	eiPg	02	11	34.0D	30	Athens: H=02:11:29 37.8°N, 23.4°E. M _L =2.7
			SPE	eiSg			39.0		
		VAM	Z	ePn	02	12	08.9	260	
		PLG	Z	ePn	02	12	10.6	270	
			Z	eSn			40.6		
		PRK	Z	ePg	02	12	20.2	285	
49	19	JAN	Z	ePg	03	54	06.4	90	Athens: H=03:53:51 38.9°N, 21.2°E.
			N	eSg			18.9		
		VLS	Z	ePn	03	54	09.1	100	
		PLG	Z	ePn	03	54	31.1	260	
			Z	eSy		55	06.1		
50	19	JAN	Z	ePg	04	44	01.9	105	Athens: H=04:43:42 39°N, 21 3/4°E.
			E	eiSg			14.4		
		VLS	Z	ePg	04	44	05.1	130	
			N	eiSg			21.7		
		PLG	Z	ePn	04	44	14.6	200	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
51	19	VAM	Z	eiPg	13	42	45.4D	120	Athens: H=13:42:24
			NE	eiSg		43	00.0		35 1/4° N, 22 3/4° E.
		VLS	Z	ePb	13	43	24.8	380	
		PLG	Z	ePn	13	43	46.2	590	
52	19	JAN	Z	ePn	14	49	22.3	130	Athens: H=14:49:00
			E	eiSn			38.9		Probably 40 3/4° N, 21 3/4° E.
		PLG	Z	ePn	14	49	26.6	150	
			E	eiSn			45.6		
53	19	RHD	Z	ePn	21	17	39.6	255	Athens: H=21:17:00.
									Probably 34° N, 27 3/4° E.
		VAM	Z	e?(Pn)	21	17	49.3	(330)	
			E	eSn		18	25.6		
54	21	VAM	Z	eiPn	00	33	42.8D	230	Athens: H=00:33:07
			E	eiSg		34	14.8		35.6° N, 21.6° E. M _L =3.8
		VLS	Z	ePb	00	33	53.9	290	
			E	eSn		34	24.4		
		ATH	SPZ	ePn	00	33	56.0	330	
		JAN	Z	ePn	00	34	12.1	455	
		PLG	Z	e?(Pn)	00	34	22.2	540	
			Z	ePb			29.8		
55	21	RHD	Z	eiPg	00	36	56.7	120	Athens: H=00:36:35
									36.7° N, 27.0° E.
		PRK	Z	iPn	00	37	19.3	290	M _L =5.0
			Z	i!(Pg)			27.0D		BCIS: H=00:36:36
			E	eiSy			58.9		36.5° N, 27.0° E.
			NE	iSg		38	03.1		USCGS: H=00:36:37
		VAM	Z	ePn	00	37	20.3	295	36.6° N, 27.1° E.
			Z	eiPb			22.5C		h=17 Km; Mb=4.6
			Z	iPg			28.0D		
			E	iSn			52.8		
			E	iSy			59.4		
		ATH	SPZ	ePn	00	37	24.5	325	
			SPZ	eiPb			27.2D		
			SPZ	i(Pg)			33.1DSE		
			W.AE	eiSb		38	04.8		
			W.AE	ei(Sy)			09.5		
		PAT	Z	e?(Pb)	00	37	46.6	(465)	
		PLG	Z	ePn	00	37	47.8	520	
			Z	eiPb			54.2D		
		VLS	Z	e	00	38	01.8	600	
			Z	eiPg			21.9		
		JAN	Z	e	00	38	07.1	620	
			Z	eiPb			09.9D		
			Z	eiPg			26.1D		

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
56	21	RHD	Z	ePg	02	53	20.1	110	Athens: H=02:53:02 36.6°N, 27.1°E. M _L =3.8
		PRK	Z	ePn	02	53	45.0	285	
			Z	ei(Pg)			51.6		
			N	eiSg		54	27.1		
		VAM	Z	ePn	02	53	47.1	300	
			Z	ePy			52.3		
		ATH	SPZ	e	02	53	57.4	330	
			SPZ	ePg		54	00.0		
			SPN	eSn			26.5		
			SPN	ei(Sy)			35.7		
57	21	RHD	Z	eSg	02	57	25.7	110	Athens: H=02:56:52 36 3/4°N, 27 1/4°E. M _L =3.8 Strong microseisms in RHD obscured the onset of P.
		PRK	Z	e(Pn)	02	57	39.8	310	
			Z	eiPg			47.4D		
			NE	eiSg		58	25.8		
		VAM	Z	e?(Pn)	02	57	41.8	(330)	
		ATH	SPZ	ePg	02	57	52.3	335	
			SPE	eiSg		58	32.5		
58	21	RHD	Z	eiPg	03	05	00.6C	110	Athens: H=03:04:41 36.6°N, 27.0°E. BCIS: H=03:04:43 M _L =4.3
		PRK	Z	ePn	03	05	24.8	290	
			Z	ePy			29.0		
			Z	eiPg			32.0D		
			N	ei(Sy)	06		04.6		
			E	eiSg			01.2		
		VAM	Z	e(Pn)	03	05	26.8	300	
			Z	eiPb			27.3C		
			Z	ei(Pg)			33.4C		
			NE	eiSb	06		02.2		
			N	eiSg			09.6		
		ATH	SPZ	e(Py)	03	05	33.4	320	
			SPZ	eiPg			38.0D		
			SPNE	eiSg	06		16.9		
		PLG	Z	ePn	03	05	53.3	510	
			Z	ePy	06		04.8		
		VLS	Z	ePb	03	06	11.4	590	
		JAN	Z	e?(Pb)	03	06	12.0	(600)	
59	21	RHD	Z	eiPg	03	54	43.0D	90	Athens: H=03:54:27 36.6°N, 27.3°E. M _L =4.1 BCIS: H=03:54:30
		PRK	Z	eiPn	03	55	12.8D	300	
			Z	eiPg			21.0D		
			N	eiSg			57.2		
		VAM	Z	eiPb	03	55	16.0D	310	
			Z	eiPg			22.3D		
			E	eiSy			44.6		
			N	eiSg			58.8		
		ATH	SPZ	ePn	03	55	18.5	350	
			SPN	eiSb			58.5		
			SPN	eiSy	56		06.5		
		./.							

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		./.							
		PLG	Z	e?(Pb)	03	55	50.1	540	
			Z	ePg		56	04.8		
		VLS	Z	e?(Pb)	03	56	00.2	620	
		JAN	Z	ePn	03	55	55.2	640	
60	21	ATH	SPZ SPNE	ePg iSg	06	33 34	45.0 00.0	120	Athens: H=06:33:24 39.2°N, 23.6°E. M _L =2.9
		PLG	Z NE	iPg eiSg	06	33 34	46.6C 03.0	135	
		PRK	Z Z NE	ePn ePy eiSy	06	34	00.6 03.6 32.2	235	
		JAN	Z Z N	ePb eiPg eiSb	06	34	03.9 07.5 33.0	245	
		VLS	Z	ePn	06	34	07.4	285	
61	21	RHD	Z	iPg	06	43	53.4C	125	Athens: H=06:43:31 36 3/4°N, 27 1/4°E. M _L =4.1
		PRK	Z Z N	ePn eiPg eiSg	06	44	15.6 23.4D 59.2	290	
		VAM	Z N E	ePn ei(Sn) eiSb	06	44	17.0 52.2 55.3	310	
		ATH	SPZ SPNE	eiPg eiSg	06	44 45	29.1D 10.0	330	
		JAN	Z	ePn	06	45	01.8	660	
62	21	VAM	Z NE	eiPg eiSg	16	39	12.3 25.1	100	Athens: H=16:38:53 35.4°N, 23.1°E. M _L =3.6
		ATH	SPZ SPNE	ePb eiSb	16	39 40	41.2 15.5	300	
		VLS	Z E	ePn e(Sn)	16	39 40	52.3 38.6	380	
		RHD	Z Z	e(Pn) eiPy	16	39 40	56.3 07.1C	450	
		JAN	Z	eiPb	16	40	09.1C	500	
		PRK	Z	ePn	16	40	06.1	520	
63	22	VAM	Z NE	eiPg iSg	04	20	31.5C 42.7	90	Athens: H=04:20:15 35.0°N, 25.1°E. The W.A seismographs were out of operation from 21h, December 21, till 07h, December 22, on account of trouble in the recording system.
		RHD	Z Z	ePn ePy	04	21	01.3 06.1C	310	
		ATH	SPZ SPZ SPE	ePn ei(Pg) eSb	04	21	09.5 20.5C 54.4	370	
		PRK	Z	ePn	04	21	24.3	490	
		./.							

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N°	Date	Stat.	Comp.	Phase	H	M	S	D	Remarks
		VLS	E	eSn	04	22	24.0	530	
		JAN	Z	ePn	04	21	42.6	630	
		PLG	Z	ePn	04	21	43.3	640	
64	22	RHD	Z	ePn	05	26	13.2	190	Athens: H=05:25:42 36°N, 26 1/4°E.
			Z	eiPy			14.10		
		VAM	Z	ePn	05	26	16.6	215	
			E	eSg			46.7		
		ATH	SPZ	ePb	05	26	29.5	300	
			SPZ	eiPy			33.20		
			SPE	eSy		27	06.8		
		PRK	Z	e(Pn)	05	26	34.7	355	
			NE	eiSb		27	17.9		
65	22	PRK	ZNE	ePn	08	54	45.3	CSW 170	Athens: H=08:54:16 39.1°N, 28.2°E.
			E	eiSn		55	06.4		
			N	eiSg			07.7		
		RHD	Z	ePn	08	55	04.1	320	
			Z	e(Pb)			06.2		
		PLG	Z	ePn	08	55	18.8	435	
		VAM	Z	ePg	08	55	54.0	550	
66	22	JAN	Z	ePn	22	10	45.0	160	Athens: H=22:10:16 39 1/4°N, 22 1/2°E. M _L = 3.1
			N	eiSg		11	06.2		
		PLG	Z	ei	22	10	47.9	180	
			Z	eiPg			49.9		
			E	eiSb		11	11.1		
			E	eiSg			13.1		
		ATH	SPZ	ePg	22	10	53.0	200	
			SPNE	eSb		11	15.0		
		VLS	Z	e(Py)	22	10	54.1	220	
			ZE	eiPg			56.1	CSW	
			E	e(Sy)		11	20.5		
			E	eiSg			21.5		
		PRK	Z	ePn	22	11	12.4	315	
		VAM	Z	ePb	22	11	29.7	470	
67	23	RHD	Z	ePg	00	20	53.4	130	Athens: H=00:20:30 36 3/4°N, 27°E; M _L =3.7
			Z	eiSg		21	09.5		
		PRK	Z	ePn	00	21	16.4	310	
			Z	ei(Pg)			24.1	D	
			N	eiSg		22	02.9		
		VAM	Z	ePn	00	21	16.7	310	
			N	eiSg		22	02.7		
		ATH	SPZ	ePg	00	21	28.0	325	
			SPNE	eiSg		22	08.0		

ATHENS SHOCKS IN THE AREA OF GREECE									
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
68	23	JAN	Z	eiPn	11	35	28.3D	340	Athens: H=11:34:38 39.5°N, 16.9°E. BCIS: H=11:34:40 39.8°N, 17.0°E. M _L =4.7
			Z	ei(Pg)			33.2		
			E	eiSg		36	05.8		
		VLS	Z	eiPn	11	35	29.9	350	
			Z	eiPg			40.3		
		PLG	Z	ePn	11	35	55.9	560	
			Z	eiPy		36	06.4		
			E	eiSa			52.9		
		ATH	SPZ	eiPn	11	36	03.00	610	
			SPN	eiSn		37	04.7		
		VAM	Z	eiPn	11	36	24.9	785	
		PRK	Z	ePn	11	36	26.4	800	
		RHD	Z	ePn	11	36	57.2	1030	
69	23	PRK	Z	eiPn	23	05	58.6	275	Athens: H=23:05:16 40° N, 29 1/2°E.
			Z	eiPb		06	00.6		
			Z	ei(Pg)			06.0		
			N	eiSy			35.1		
			E	eiSg			38.6		
		RHD	Z	ePb	23	06	24.4	440	
			Z	ePg			34.9		
		PLG	Z	ePb	23	06	39.6	545	
70	24	JAN	Z	ePg	00	18	11.2	75	Athens: H=00:17:50 38.8°N, 21.9°E M _L =3.2
			NE	eiSg			26.4		
		VLS	Z	ePg	00	18	14.2	130	
			E	eiSg			30.7		
		ATH	SPNE	eSg	00	18	50.3	200	
		PLG	Z	eiPg	00	18	30.8	230	
			E	eSg			58.6		
		PRK	Z	ePy	00	18	55.4	395	
71	24	PRK	Z	ePn	07	15	07.1	260	Athens: H=07:14:27 39 3/4°N, 29 1/4°E.
			Z	eiPg			12.6		
			NE	eSg			44.1		
		PLG	Z	ePg	07	15	55.4	495	
			E	eSg		16	54.5		
		JAN	Z	ePg	07	16	31.0	700	
72	24	JAN	Z	ePg	07	37	41.0	100	Athens: H=07:37:24 40.4° N, 21.5° E M _L =3.8 Felt in Kastoria (IV at Argos Orestikon)
		PLG	Z	ePn	07	37	52.5	160	
			NE	eiSg		38	14.0		
		VLS	Z	ePn	07	38	04.2	260	
			Z	ePb			05.7		
			Z	ei(Pg)			11.2		
		ATH	SPZ	ePn	07	38	13.8	330	
			SPE	e(Sn)			48.5		
		VAM	Z	ePn	07	38	49.4	615	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
73	24	PLG	Z	ePg	14	02	40.4	80	Athens: H=14:02:26 39.8°N, 23.5°E. M _L =3.2
		ATH	SPZ	ePy	14	03	01.0	205	
			SPZ	e(Pg)			03.4		
			SPE	eSg			27.5		
		JAN	Z	ePg	14	03	07.5	230	
		PRK	Z	ePn	14	03	04.6	245	
			Z	ePb			07.6		
			Z	eiPg			10.1C		
			N	eSb			35.1		
74	25	ATH	SPZ	ePg	04	19	32.0	70	Athens: H=04:19:20 38.1°N, 23.0°E. M _L =2.6
			SPNE	eiSg			40.8		
		PLG	Z	ePg	04	20	08.6	270	
		VAM	Z	ePn	04	20	08.4	320	
75	25	VAM	ZNE	iP	12	17	28.4	DSW50	Athens: H=12:17:17 34.8°N, 24.2°E; h=50 Km. M _L =4.8
		ATH	SPZN	eiP	12	18	06.0	OCN345	BCIS: H=12:17:19 34.9°N, 24.4°E; h=80.
		RHD	Z	iP	12	18	11.2	420	USCGS: H=12:17:21 35.1°N, 24.3°E; h=68 Km; Mb=5.0
		PAT	Z	e	12	18	16.8	430	
			Z	eS		19	11.8		
		VLS	Z	eiP	12	18	22.1C	485	Felt on Crete Island, especially in Rethymnon (III at Melampae).
			E	eiS		19	12.1		
		PRK	Z	eiP	12	18	27.0D	520	
		JAN	Z	eP	12	18	37.7	610	
			N	eiS		19	39.7		
		PLG	Z	eP	12	18	38.1	620	
			E	e(S)		19	30.1		
76	25	VLS	ZE	eiPg	16	59	53.4	CEI100	Athens: H=16:59:36 38 3/4°N, 19 1/2°E.
			E	ei(Sg)	17	00	02.5		
		JAN	Z	ePn	17	00	00.5	140	
			E	eiSg			17.0		
		PLG	Z	ePn	17	00	31.5	380	
77	25	RHD	Z	eiPg	17	00	14.6D	125	Athens: H=16:59:52 36 3/4°N, 27 1/4°E. M _L =3.7
			Z	eiSg			29.8		
		PRK	Z	eiPn	17	00	38.8	310	
			N	eiSg		01	25.6		
		VAM	Z	ePn	17	00	41.9	335	
			Z	ePb			44.8		
			E	eSn		01	19.9		
		ATH	SPZ	ePg	17	00	51.9	335	
			SPE	eSy		01	27.5		
78	26	RHD	Z	eiPg	20	48	18.7D	90	Athens: H=20:48:02 35 1/4°N, 27 3/4°E.
			E	eiSg			30.2		
		VAM	Z	ePn	20	48	50.5	320	
			Z	e(Py)			55.3D		
			N	eSy		49	34.5		
			E	eSg			39.7		

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N°	Date	St.	Comp.	Phase	h	m	s	D	Remarks	
		PRK	Z	ePn	20	49	08.2	460		
		VLS	Z	ePn	20	49	38.6	700		
79	27	RHD	Z	ePg	01	39	43.2	125	Athens: H=01:39:21	
		VAM	Z	e?(Pn)	01	40	13.5	355	Probably 35° N, 28° E.	
			Z	ePb			17.5			
			E	eSg		41	08.0			
80	27	PRK	ZNE	ei!Pg	01	43	22.1	CNW 60	Athens: H=01:43:10	
			NE	iSg			30.1		38.6°N, 26.5°E.	
		ATH	SPZ	e?(Pg)	01	43	56.2	265	M _L =3.7	
			SPN	eiSn		44	21.0		Felt on Chios Island (III+ at Chios).	
		RHD	Z	ePn	01	43	53.8	280		
			Z	eiSg		44	34.9			
		PLG	Z	ePn	01	43	57.8	320		
			E	eSg		44	47.0			
		VAM	Z	e?(Pn)	01	44	08.0	405		
			Z	eiPb			13.5	D		
			Z	eiPg			22.1			
		JAN	Z	ePb	01	44	22.3	470		
		VLS	Z	ePb	01	44	29.5	520		
81	27	PRK	ZNE	ei!Pg	01	51	19.3	CNW 60	Athens: H=01:51:08	
			NE	iSg			27.4		38.7°N, 26.6°E.	
		ATH	SPZ	ePg	01	51	56.1	265	M _L =3.6	
			SPN	eiSb		52	22.0			
			SPN	eiSy			24.4			
			SPE	eiSg			27.5			
		RHD	Z	e(Pn)	01	51	51.2	290		
			Z	ePg		52	00.6			
			Z	ei!Sg			32.1			
		PLG	Z	e(Pn)	01	51	53.7	310		
			Z	ePg		52	03.8			
		VAM	Z	ePn	01	52	10.3			
			E	e(Sy)		53	08.0	430		
			E	eSg			16.5			
		JAN	Z	ePn	01	52	18.8	500		
82	28	PRK	ZE	eiPg	01	14	44.8	DE 70	Athens: H=01:14:32	
			NE	iSg			53.5		38.7°N, 26.8°E. M _L =3.4	
		ATH	SPZ	e?(Pg)	01	15	19.6	270		
		PLG	Z	ePn	01	15	21.8	335		
		VAM	Z	e	01	15	32.7	445		
			Z	eiPg			51.8			
		JAN	Z	ePn	01	15	46.0	525		
83	29	PAT	Z	ePg	05	45	13.0	40	Athens: H=05:45:05	
			Z	ei!Sg			17.9		38.5°N, 22.1°E. M _L =2.8	

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
		VLS	Z	ePn	05	45	28.5	130	
			E	eiSg			44.9		
		ATH	SPE	eSg	05	45	51.3	150	
		JAN	Z	ePg	05	45	37.4	180	
		PLG	Z	ePy	05	45	49.4	270	
			Z	ei!Pg			52.4		
		VAM	Z	ePg	05	46	13.6	380	
84	30	RHD	Z	ePn	02	28	26.6	130	Athens: H=02:28:04
		PRK	Z	eiPn	02	28	49.3D	300	36 3/4°N, 27° E. M _L =3.9
			Z	eiPg			57.3D		
			N	eiSg		29	33.6		
		VAM	E	eSg	02	29	35.1	310	
		ATH	SPZ	ei(Pg)	02	29	03.0C	330	
			SPNE	eiSy			39.9		
		PLG	Z	e(Pg)	02	29	34.4	(505)	
85	30	RHD	Z	eiPg	08	58	53.5C	70	Athens: H=08:58:40
			Z	ei!Sg		59	02.7		36 1/4°N, 28 3/4°E.
		PRK	Z	eiPn	08	59	38.2C	400	
			NE	eSn	09	00	19.8		
		VAM	Z	ePn	08	59	38.9	410	
			E	eSn	09	00	22.6		
		VLS	Z	ePn	09	00	22.9	750	
86	30	VLS	Z	ePn	13	16	22.5	160	Athens: H=13:15:55
			E	eiSg			43.3		37 1/2°N, 22 1/4°E. M _L =2.9
		ATH	SPN	eiSn	13	16	43.5	160	
			SPE	eiSg			44.5		
		JAN	Z	ePg	13	16	39.4	250	
87	31	PRK	Z	ePn	21	00	52.3		
			Z	ei			54.4		
			Z	ei!		01	06.2		
			N	ei			36.3		
		PLG	Z	e(Pn)	21	02	13.0		
88	31	VLS	Z	iPg	22	02	16.5	15	Athens: H=22:02:13
			E	i!Sg			18.9		38.2°N, 20.4°E. M _L =3.5
		JAN	Z	ePn	22	02	40.6	160	
			Z	eiPg			42.1D		
			E	eiSg		03	01.4		
		ATH	SPZ	ePy	22	03	02.3	300	
			SPZ	eiPg			05.5C		
			SPNE	ei(Sn)			29.5		
			SPE	eiSb			34.9		
		./.							

ATHENS

SHOCKS IN THE AREA OF GREECE

DECEMBER



From the ISC collection scanned by SISMOS

N°	Date	Stat.	Comp.	Phase	h	m	s	D
		./.						
		PLG	Z	ePn	22	03	04.5	350
			Z	e(Pb)			07.2	
			Z	eiPy			11.0	
			E	eSy			50.5	
		PRK	Z	ePb	22	03	08.0	350
		VAM	Z	ePn	22	03	18.2	
			Z	e(Py)			28.6	
			E	eSn	04	06.1	455	

ATHENS LONG DISTANCE SHOCKS DECEMBER 1968 Page 20

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
1	2	VAM	Z	eiP	02	42	38.3D	50.5°	USCGS:H=02:33:41.6 13.9° S, 23.8° E.
		ATH	LPZ	eiP	02	42	50.0D	51.5°	Zambia ; h=7 Km; Mb=6.0
		VLS	Z	eiP	02	42	54.3D	52.0°	
		PRK	Z	eiP	02	43	01.7D	52.5°	
		JAN	Z	eiP	02	43	05.1D	53.0°	
		PLG	Z	eiP	02	43	08.7D	53.5°	
2	3	JAN	Z	eP	20	58	48.9	5.5°	BCIS:H=20:57:33 44.4°N, 18.5°E.
		PLG	Z	eiP	20	58	55.9D	6.0°	USCGS:H=20:57:31.2 44.6°N, 18.4°E.
		VLS	Z	eP	20	59	08.1	6.5°	Yugoslavia
		VAM	Z	eP	20	59	13.3	7.0°	h=7 Km; Mb=4.7
		PRK	Z	eiP	20	59	26.2D	8.0°	
3	4	JAN	Z	eiP	21	49	29.0D		
4	5	JAN	Z	eP	09	51	03.7	35.5°	BCIS:H=09:44:09 63.9°N, 22.0° W.
		PLG	Z	eiP	09	51	07.5D	36.0°	M=6.3 (Moxa) ; M _L =5.8 (Pruhonic).
		VLS	Z	eiP	09	51	15.2D	36.5°	USCGS:H=09:44:11 63.9°N, 21.7°E.
		ATH	LPZ LPE	eP eiS	09	51 57	26.0 18.0	38.5°	Iceland Region; h=5 Km; Mb=5.5 ; Ms=6.0
		PRK	Z	eiP	09	51	27.9	39.0°	M=5.9 (PAS) ; 6 1/4 (BRK) ; 6.0 (GOL) .
5	5	PLG	Z	eiP	13	11	09.7C	71.0°	USCGS:H=12:58:59.6 42.1° N, 142.8°E;
		JAN	Z	eiP	13	11	19.2C	72.0°	Hokkaido, Japan Region. h=70 Km; Mb=4.9
		VLS	Z	eiP	13	11	26.7C	73.0°	
		VAM	Z	eiP	13	11	28.4C	73.5°	
6	7	ATH	LPZ	eiPP	05	17	55.2C	118.5°	USCGS:H=04:57:49 3.4° S, 145.9° E. Near North Coast of New Guinea. h=15 Km; M=6.2 (Pas) ; 6 3/4 (Brk) ; Mb=5.3 ; Ms=6.5
7	7	PRK	Z	ePKP	21	55	09.9	137.0°	USCGS:H=21:35:44.8 20.7° S, 169.4° E.
		ATH	SPZ	eiPKP	21	55	16.9C	138.5°	New Hebrides Islands M=6 (Pas) ; 6 (Brk) ; h=61 Km; Mb=5.6
		VAM	Z	eiPKP	21	55	20.6C	139.5°	
		VLS	Z	ePKP	21	55	24.0	140.5°	
		JAN	Z	ei(PKP)	21	55	52.9C		
		PLG	Z	ei(PKP)	21	55	56.2C		

ATHENS		LONG DISTANCE SHOCKS					DECEMBER 1968		Page 21
N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
8	11	PRK	Z	eiPP	11	57	45.7D	95.0°	USCGS:H=11:40:25.5 65.8°N, 149.8°W. Alaska ; h=53 Km.
		VLS	Z	eiPP	11	57	48.0D	95.5°	
		PLG	Z	eiPP	11	57	51.4D	96.0°	
		JAN	Z	eiPP	11	57	59.7D	97.0°	
9	11	PRK	Z	ePP	21	54	20.1	90.5°	USCGS:H=21:37:37.8 37.2°N, 121.6° W. Central California h=8 Km; M=4 (Brk) ; Mb=4.6
		PLG	Z	eiPP	21	54	25.0C	91.0°	
		JAN	Z	eiPP	21	54	27.0C	91.5°	
		ATH	SPZ	eiPP	21	54	33.9C	92.0°	
10	12	PLG	Z	ePKP ₁	07	38	38.9	150.0°	USCGS:H=07:19:44.8 16.0° S, 177.8° W. Fiji Islands Region . h=431 Km; Mb=5.5
		PRK	Z	ePKP ₁	07	38	42.8	152.0°	
		ATH	SPZ	eiPKP ₁	07	38	48.0C	153.5°	
		JAN	Z	ePKP ₁	07	38	49.1	154.0°	
11	15	PRK	Z	eP	02	26	54.6	83.5°	USCGS:H=02:14:17.5 51.6°N, 175.8°E. Rat Islands, Aleutian Islands; h=N. Mb=5.7 ; Ms=6.2 ; M=5 3/4 (BRK) , 6 1/4 - 6 1/2 (PAS) .
		ATH	LPZ	eP	02	27	02.0	84°	
			LPZ	eiPP		30	28.0C		
			LPN	ePS		37	26.6		
		PLG	Z	eP	02	27	02.6	85°	
		JAN	Z	eP	02	27	05.0	86°	
		VLS	Z	eP	02	27	05.9	86.5°	
12	15	VAM	Z	eP	02	27	14.9	87°	USCGS:H=02:28:32.4 51.7°N, 175.8°E. Rat Islands, Aleutian Islands h=N ; Mb=5.4 ; Ms=6.1
		PRK	Z	eP	02	41	08.3	83.5°	
		PLG	Z	eP	02	41	06.4	85°	
		JAN	Z	eP	02	41	14.4	87°	
		RHD	Z	eP	02	41	18.6	90°	
13	15	VAM	Z	eP	02	41	35.9	91°	
		ATH	LPZ	e	22	17	04.0		
14	16	PLG	Z	e(PKP)	11	06	15.0	(139°)	USCGS:H=10:46:46.6 18.0° S, 168.1° E. New Hebrides Islands; h=46 Km; Mb=5.1 ; Ms=5.4
		VAM	Z	ePKP	11	06	16.9	140°	
		JAN	Z	ePKP	11	06	17.2	140°	
		VLS	Z	ePKP	11	06	21.4	142°	
		PRK	Z	e?	11	06	54.9		

ATHENS		LONG DISTANCE SHOCKS				DECEMBER 1968			Remarks	
N°	Date	Stat.	Comp.	Phase	h	m	s	D		
15	17	JAN	Z	eP	12	14	01.4	77.5°	USCGS:H=12:02:15 60.2°N, 152.8°W. Southern Alaska. Felt in South Central area. Mag. 6 1/2 (Pas.) ; 6 1/2 (BRK) ; Depth 86 ; Mb=5.9	
		PLG	Z	eP	12	14	15.0	80°		
		PRK	Z	eP	12	14	22.8	82°		
		VLS	Z	eP	12	14	26.9	82°		
		ATH	SPZ	eP	12	14	28.50	82.5°		
		RHD	Z	eP	12	14	30.4	83°		
		VAM	Z	eP	12	14	40.2	85°		
16	18	VAM	Z	ePKP	04	57	34.3	146°	USCGS:H=04:37:50.7 21.8° S, 169.9° E. Loyalty Islands region ; Depth 24 ; Mb=4.8	
		JAN	Z	ePKP	04	57	36.6	146.5°		
17	18	RHD	Z	ePKP	20	22	56.5	150°	USCGS:H=20:03:43.9 19.9° S, 177.6° W; Fiji Islands region ; h=367 Km; Mb=5.5	
		PRK	Z	ePKP	20	22	56.7	150°		
		PLG	Z	ePKP	20	22	57.9	150°		
		VAM	Z	ePKP	20	23	06.8	151°		
		JAN	Z	ePKP	20	23	19.8	151.5°		
		VLS	Z	ePKP	20	23	25.8	152°		
18	19.	RHD	Z	eiP	05	24	18.6D	31.5°	USCGS:H=05:17:51.6 36.1° N, 70.1° E. Hindu Kush. region ; h=151 Km; Mb=5.4	
		PRK	Z	eiP	05	24	28.7D	32°		
		ATH	LPZ	eiP	05	24	32.0D	32.5°		
		PLG	Z	eiP	05	24	45.0D	33°		
		VAM	Z	eiP	05	24	49.0D	33.5°		
		JAN	Z	eiP	05	25	01.5D	34°		
		VLS	Z	eiP	05	25	06.3D	34°		
19	19	PLG	Z	eP	15	28	00.2	78.5°	USCGS:H=15:15:55.7 53.3° N, 160.1° E; Near East Coast of Kamchatka: h=N ; Mb=5.4 ; Ms=5.6	
		PRK	Z	eP	15	28	01.2	78.5°		
		JAN	Z	eiP	15	28	08.0D	79°		
		RHD	Z	eP	15	28	10.6	79°		
		ATH	LPZ	eP	15	28	12.0	79.5°		
		VLS	Z	eR	15	28	16.9	80°		
		VAM	Z	eP	15	28	23.7	80.5°		

ATHENS LONG DISTANCE SHOCKS DECEMBER 1968 Page 23

N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
20	22	RHD	Z	eP	09	16	25.3	57°	USCGS:H=09:06:36.3 36.2°N, 101.9°E.
		PRK	Z	eP	09	16	28.8	57.5°	Tsinghai province, China ; h=N ; Mb=5.5
		PLG	Z	eiP	09	16	38.3C	59.5°	
		VAM	Z	eP	09	16	51.4	61.0°	
		JAN	Z	eP	09	16	53.4	61.5°	
		VLS	Z	eP	09	16	58.4	62°	
21	22	PLG	Z	eP	16	57	08.5	83°	USCGS:H=16:44:44.2 56.3°N, 153.8°W.
		JAN	Z	eP	16	57	15.1	84°	Kodiak Island region. h=N ; Mb=5.3 ; M=5.1 (BRK).
		PRK	Z	eP	16	57	17.5	84.5°	
		VLS	Z	eP	16	57	22.7	85.5°	
		RHD	Z	eP	16	57	31.0	88°	
		VAM	Z	eP	16	57	36.7	88.5°	
22	25	PRK	Z	eP	04	08	54.7	81°	USCGS:H=03:56:39.2 41.7°N, 142.8°E.
		PLG	Z	eP	04	08	55.0	81°	Hokkaido, Japan region. h=36 Km; Mb=5.3 ; Ms=4.8
		RHD	Z	eP	04	08	57.6	81.5°	
		ATH	SPZ	eP	04	09	02.5	82.5°	
		JAN	Z	eP	04	09	03.1	83°	
		VLS	Z	eP	04	09	10.7	84°	
		VAM	Z	eP	04	09	13.2	85°	
23	28	PLG	Z	eiP	12	57	42.9D		
24	29	VAM	Z	eP	07	27	46.6	77°	USCGS:H=07:15:50.5 13.6°N, 120.5° E.
		PRK	Z	eP	07	28	24.4	84.5°	Mindoro, Philippine Islands ; h=N ; ? Mb = 5.4 .
		PLG	Z	eP	07	28	30.9	85.5°	
		ATH	SPZ	ePP	07	32	02.6	87.5°	
		VLS	Z	eP	07	28	51.3	90.5°	
25	30	PLG	Z	eiP	07	15	31.4D	81.5°	USCGS:H=07:03:11.7 57.6°N, 151.4° W.
		PRK	Z	eP	07	15	37.6	82.5°	Kodiak Island region. h=34 Km; Mb=5.4
		VLS	Z	eP	07	15	43.2	83.5°	
		RHD	Z	eiP	07	15	52.7D	86°	
		VAM	Z	eP	07	15	57.1	88°	

ATHENS

LONG DISTANCE SHOCKS

DECEMBER 1968

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N°	Date	Stat.	Comp.	Phase	h	m	s	D	Remarks
26	30	PLG	Z	eP	10	34	16.0	37°	BCIS:H=10:27:06 76.9° N, 11.0° E. USCGS:H=10:27:09.7 76.2° N, 7.5° E. Svalbard region ; h=23 Km; Mb=5.0 ; Ms=5.5 ; M=5 1/2 - 5 3/4 (GOL).
		JAN	Z	eiP	10	34	20.10	38°	
		ATH	SPZ	eP	10	34	33.0	39°	
		VLS	Z	eP	10	34	41.6	40°	
		PRK	Z	eP	10	34	45.1	41°	
		VAM	Z	eP	10	35	05.1	43°	

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