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GENERAL BULLETIN INFORMATION

The location program currently used for locating earthquakes is Hypocenter (Lienert et al.,1986). Plane parallel layers are assumed for local and regional events, while the IASPEI travel time tables are used for distant events.

The model used for all local and regional events, is compiled by Havskov & Dushi (2021).

P-wave velocity (km/sec)	depth to top of layer (km)
5.6	0.0
6.0	11.0
6.35	23.5
7.80	41.0
8.20	70.0

Magnitudes are calculated from amplitudes.

Instrument corrected maximum ground amplitudes $A(nm)$ are used to assess the local magnitude M_l , based on the Richter formula (Hutton & Boore, 1987), corrected referred to EMSC:

$$M_l = 1.0 \cdot \log(A) + 1.11 \cdot \log(D) + 0.00189 \cdot D - 1.686$$

where, D is the hypocentral distance (km).

Representative M_L value is the arithmetic mean of the resulted magnitude values for each station. No station corrections are used for either travel times or magnitude. The V_p/V_s velocity ratio, used in the layered velocity model above, is 1.81.

As a general policy, neither depths nor epicenters are fixed unless stated, since this might restrict later use of the data.

As a consequence, some event locations might be unrealistic, like zero depth earthquakes or teleseismic locations off by 1000 km.

However, the locations are based on the available data and reflect the location procedure and the models used.

The bulletin working group is composed of supervising staff:

Prof. Asoc. Edmond Dushi (researcher), MSc. Damiano Koxhaj (researcher), MSc. Klajdi Qoshi (researcher) and the Analysts: Eng. Ardian Minarolli, MSc. Irena Dushi, MSc. Anila Subashi, MSc. Olgert Gjuzi and MSc. Dionald Mucaj. Link to the web bulletine working group

https://www.geo.edu.al/Services/Department_of_Seismology/Bulletin_working_group

STATIONS USED

The stations listed below are those operated by the Department of Seismology, Polytechnic University of Tirana (PUT). However, readings from other cooperating agencies are also used in locating the events and calculating magnitudes and thus more stations will appear in the event lists than in the station list.

STATION	LATITUDE	LONGITUDE	HEIGHT(m)	NAME
BCI	42.3666N	20.0675E	500	Bajram Curri
PUK	42.0426N	19.8926E	900	Puke
PHP	41.6847N	20.4408E	670	Peshkopi
SDA	42.0500N	19.5000E	30	Shkoder
TIR	41.3472N	19.8631E	247	Tirane
BERA	40.7081N	19.9455E	234	Berat
KBN	40.6200N	20.7900E	800	Korce
VLO	40.4700N	19.5000W	50	Vlore
SRN	39.8800N	20.0050W	20	Sarande
LSK	40.1499N	20.5987W	960	Leskovik
BPA1	40.7232N	19.6560E	10	Marinza Oilfield
BPA2	40.7302N	19.6187E	25	Marinza Oilfield
BELS	40.9709N	19.9128E	243	Belsh, Elbasan
BURR	41.6015N	20.0048E	362	Burrel
DRSH	41.2813N	19.5215E	123	Shkembi i Kavajes, Durres
FUST	41.3251N	20.3969E	1161	Fushe Studen, Librazhd
MOGL	40.7054N	20.3916E	497	Moglice, Maliq
PLSA	40.1659N	19.6240E	386	Palase, Vlore
POGR2	40.9376N	20.6340E	747	Memelisht, Pogradec
PRMT	40.2287N	20.3515E	294	Permet
RZM	42.3461N	19.5487E	1177	Razem, Shkoder
VLO2	40.4678N	19.5876E	183	Peshkepi - Vlore
POGR	40.8996N	20.6790E	710	Pogradec
KKS	42.0730N	20.4017E	399	Kukes

MACROSEISMIC DATA

Macroseismic data, if available, are included in the bulletin.

Abbreviations:

TIME: Origin time in UTC (hr. min. and sec.) or data file onset time if event is not located.

LAT: Latitude of epicenter

LON: Longitude of epicenter

DEPTH: Focal depth in kilometer (trailing F indicates fixed depth)

AGENCY: Hypocenter reporting agency e.g. TIR (ASN), EMS (EMSC), etc

MAGNITUDES: Up to 3 different magnitudes can be given followed by type and reporting agency, e.g. 3.1 MC TIR - coda magnitude calculated in TIR.

RMS: Root mean square value of travel time residuals

STAT: Station code

CO: Component, S: short period, L: long period, B: broadband,

DIST: Epicenter distance (km)

AZI: Azimuth from source to station

PHAS: Phase; The first letter characterizes onset E(mergent) or I(mpulsive)

P: Polarity (C for compression, D for dilatation)

HR: Hour

MN: Minute

SECON: Seconds

TRES: Residual (seconds)

CODA: Signal duration in seconds

AMPL: Ground Amplitude ($0.5 * (\text{peak to peak})$), (nm) at period PERI

PERI: Period where amplitude is measured

BAZ: Back azimuth (station to event)

ARES: Back azimuth residual

VELO: Apparent phase velocity (km/sec)

WT: Weight of phase in the location

*: An asterix before the phase arrival time implies a potential timing error. If an S phase is read, differential S-P times will be used in the hypocenter location.

References:

- Ottmoller, Voss and Haskov (2017). Seisan Earthquake Analysis Software for Windows, Solaris, Linux and MacOSx. <http://seisan.info>.
- Hutton, L. K. and Boore, David M. (1987). The Ml scale in Southern California. Bull. of Seimological Society of America, 77 (6). pp. 2074-2094. ISSN 0037-1106, <https://resolver.caltech.edu/CaltechAUTHORS:20140905-113510505>.
- Havskov, J., Kuka, N., Duni, Ll., Dushi, E., Bozo, Rr. (2020). The Albanian Seismic Network, plans and progress towards improving data acquisition and processing. Status January 2020. Cooperation between the Albanian Seismic Network and the Iniversity of Bergen. <ftp://ftp.geo.uib.no/pub/seismo/REPORTS/ALBANIA/albania-uib-report-2.pdf>.

October 7 2023 Hour: 15:33 12.0 Lat: 39.17N Lon: 20.61E D: 14.4 Ag: TIR Local
 Magnitudes: 3.0ML TIR 3.8MW TIR Rms: 0.4 secs

65 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	43	174	EP		1533	9.837	-0.08							1.0
LKD2	HE	43	174	ES		1533	6.908	0.58							1.0
KEK	HZ	92	311	EP		1533	7.578	-0.52							1.0
KEK	HE	92	311	ES		1533	0.922	-0.21							1.0
KEK	HZ	92	311	IAML		1533	5.669			1277	0.5				
SRN	HZ	95	327	EP		1533	8.028	-0.45							1.0
SRN	HE	95	327	ES		1533	2.093	0.28							1.0
SRN	HZ	95	327	IAML		1533	9.591			172	0.4				
VLS	HZ	110	181	EP		1533	0.891	-0.25							1.0
VLS	HN	110	181	ES		1533	6.664	0.02							1.0
AL06AHZ		125	325	EP		1533	3.712	0.08							1.0
AL06AHN		125	325	ES		1533	1.312	0.17							1.0
THL	HZ	129	70	EP		1533	3.779	-0.41							1.0
THL	HN	129	70	ES		1533	1.905	-0.25							1.0
TPE	HZ	135	338	EP		1533	5.186	-0.00							1.0
TPE	HZ	135	338	ES		1533	4.127	0.16							1.0
TPE	HZ	135	338	IAML		1533	7.698			184	0.4				
NEST	HZ	143	15	EP		1533	6.586	-0.06							1.0
NEST	HN	143	15	ES		1533	7.311	0.72							1.0
NEST	HZ	143	15	IAML		1534	4.090			157	0.4				
KZN	HZ	161	38	EP		1533	9.353	-0.14							0.9
KZN	HN	161	38	ES		1534	1.621	-0.13							0.9
KBN	HZ	162	5	EP		1533	9.468	-0.22							0.9
KBN	HN	162	5	ES		1534	2.764	0.65							0.9
KBN	HZ	162	5	IAML		1534	0.476			32	0.5				
AL05AHZ		171	354	EP		1533	0.798	-0.11							0.9
AL05AHE		171	354	ES		1534	4.631	0.31							0.9
BERA	HZ	179	342	EP		1533	2.370	0.51							0.9
BERA	HE	179	342	ES		1534	5.584	-0.45							0.9
BERA	HZ	179	342	IAML		1534	0.521			68	0.3				
SCTE	HZ	209	299	EP		1533	4.386	-1.34							0.5
ITM	HZ	249	152	EP		1533	1.757	0.85							0.9
PLG	HZ	277	60	EP		1533	3.883	-0.60							0.8
PHP	HZ	279	357	EP		1533	4.676	-0.11							0.8
PHP	HZ	279	357	IAML		1534	5.073			29	1.1				

October 11 2023 Hour: 18:45 36.5 Lat: 39.05N Lon: 21.45E D: 5.1 Ag: TIR Local
 Magnitudes: 4.0ML TIR 4.3MW TIR Rms: 0.6 secs

128 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
THL	HZ	75	40	EP	C	1845	9.737	-0.07							1.0
THL	HN	75	40	ES		1846	0.277	-0.33							1.0
LKD2	HZ	75	247	EP	C	1845	0.273	0.37							1.0
LKD2	HE	75	247	ES		1846	0.751	-0.03							1.0
JAN	HN	85	322	ES		1846	3.439	-0.47							1.0
IGT	HZ	110	299	EP	C	1845	5.402	-0.56							1.0
IGT	HE	110	299	ES		1846	2.482	0.73							1.0
IGT	HZ	110	299	IAML		1846	6.439			1639	0.7				
VLS	HZ	123	218	EP	C	1845	7.393	-0.68							1.0
VLS	HE	123	218	ES		1846	5.230	-0.34							1.0
KZN	HZ	142	11	EP	D	1846	0.855	-0.37							1.0
SRN	HZ	155	307	EP	C	1846	4.012	0.62							1.0
SRN	HN	155	307	ES		1846	5.310	0.10							1.0
NEST	HZ	155	347	EP		1846	3.628	0.18							1.0
NEST	HE	155	347	ES		1846	5.701	0.39							1.0
NEST	HZ	155	347	IAML		1846	9.800			1517	0.7				
SRN	HZ	155	307	IAML		1846	0.081			856	0.7				
KEK	HZ	160	298	EP		1846	4.279	0.00							0.9
KEK	HN	160	298	ES		1846	6.166	-0.64							0.9

KEK	HZ	160	298	IAML		1846	0.150		1892	0.5	
KBN	HZ	183	342	EP	C	1846	8.314	0.28			0.9
KBN	HN	183	342	ES		1846	3.666	0.05			0.9
KBN	HZ	183	342	IAML		1846	9.598		305	1.2	
TPE	HZ	185	319	EP		1846	8.579	0.41			0.9
TPE	HE	185	319	ES		1846	4.479	0.63			0.9
TPE	HZ	185	319	IAML		1846	2.939		1498	1.0	
AL06AHZ		186	309	EP	C	1846	9.017	0.78			0.9
AL06AHN		186	309	ES		1846	2.190	-1.79			0.9
AL05AHZ		205	334	EP		1846	1.915	1.19			0.9
AL05AHE		205	334	ES		1846	8.237	-0.25			0.9
ITM	HZ	212	169	EP		1846	2.070	0.39			0.9
ITM	HN	212	169	ES		1846	0.528	0.32			0.9
AL07AHZ		215	342	EP		1846	3.380	1.25			0.9
AL07AHE		215	342	ES		1846	0.669	-0.36			0.9
THE	HZ	218	36	EP		1846	2.383	0.02			0.9
THE	HZ	218	36	IAML		1846	8.807		157	1.0	
BERA	HZ	224	325	EP		1846	4.045	0.92			0.9
BERA	HE	224	325	ES		1846	2.664	-0.16			0.9
BERA	HZ	224	325	IAML		1847	3.506		750	1.3	
PLG	HZ	225	49	EP		1846	0.824	-2.51			0.0
VLO	HZ	230	314	EP		1846	4.377	0.47			0.9
VLO	HN	230	314	ES		1846	3.765	-0.47			0.9
VLO	HZ	230	314	IAML		1846	9.078		535	0.5	
BPA2	HZ	243	320	EP		1846	5.427	-0.21			0.9
AL08AHZ		255	334	EP		1846	8.468	1.29			0.9
AL08AHN		255	334	ES		1846	0.719	0.56			0.9
AL04AHZ		270	324	EP		1846	1.076	1.97			0.0
AL04AHN		270	324	ES		1846	3.433	-0.22			0.9
SCTE	HZ	280	295	EP		1846	9.768	-0.63			0.8
TIR	HZ	288	333	EP		1846	1.545	0.12			0.8
TIR	HE	288	333	ES		1846	8.239	0.40			0.8
AL03AHZ		309	337	EP		1846	4.157	0.12			0.8
AL03AHN		309	337	ES		1847	2.023	-0.55			0.8
AL02AHZ		315	327	EP		1846	4.166	-0.60			0.8
AL02AHE		315	327	ES		1847	3.837	-0.06			0.8
LACI	HZ	322	333	EP		1846	5.999	0.22			0.8
LACI	HN	322	333	ES		1847	6.629	0.90			0.8
LACI	HZ	322	333	IAML		1847	3.145		167	0.9	
NVR	HZ	327	38	EP		1846	5.056	-1.40			0.8
NVR	HN	327	38	ES		1847	7.032	0.09			0.8
KKS	HZ	347	345	EP		1846	8.764	-0.19			0.8
KKS	HN	347	345	ES		1847	1.672	0.20			0.8
SDA	HZ	372	334	EP		1846	1.756	-0.31			0.8
SDA	HE	372	334	ES		1847	6.335	-0.78			0.8
SDA	HZ	372	334	IAML		1847	1.520		45	0.8	
BOSS	SZ	392	12	EP		1846	3.320	-1.44			0.7
GMRK	HZ	401	357	EP		1846	5.546	-0.40			0.7
PEJK	HZ	411	346	EP		1846	7.584	0.40			0.7
PVY	HZ	413	343	EP		1846	8.653	1.12			0.7
RDO	HZ	418	55	EP		1846	5.351	-2.72			0.0
PDG	HZ	418	334	EP		1846	8.047	0.01			0.7
PDG	HZ	418	334	IAML		1847	7.780		49	0.7	
BARS	BZ	419	4	EP		1846	7.206	-0.98			0.7
BARS	BZ	419	4	IAML		1847	7.552		47	0.8	
NOCI	HZ	422	299	EP		1846	7.718	-0.83			0.7
ME01AHZ		441	343	EP		1846	1.640	0.52			0.7
ME05AHZ		453	328	EP		1846	1.224	-1.24			0.7
NKME	HZ	463	334	EP		1846	3.928	0.05			0.7
ME02AHZ		496	337	EP		1846	8.274	0.09			0.7
KIRK	HZ	567	56	EP		1846	4.509	-2.34			0.0
SGRT	HZ	570	304	EP		1846	5.535	-1.81			0.0

October 12 2023 Hour: 20:10 41.9 Lat: 41.17N Lon: 20.33E D: 5.5 Ag: TIR Local
 Magnitudes: 2.7ML TIR 3.4MW TIR Rms: 0.4 secs
 0 km S of Librazhd

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL08AHZ		20	248	EP		2010	4.735	-0.89							1.0
AL08AHE		20	248	ES		2010	7.903	-0.75							1.0
AL07AHZ		43	135	EP		2010	0.099	0.54							1.0
AL07AHN		43	135	ES		2010	5.933	0.16							1.0
TIR HZ		43	297	EP		2010	9.556	-0.11							1.0
TIR HN		43	297	ES		2010	6.370	0.40							1.0
TIR HZ		43	297	IAML		2011	3.753			384	0.6				
AL05AHZ		52	174	EP		2010	0.783	-0.49							1.0
AL05AHE		52	174	ES		2010	9.009	0.14							1.0
AL03AHZ		55	331	EP		2010	1.835	0.12							1.0
AL03AHN		55	331	ES		2011	0.095	0.42							1.0
BERA HZ		61	211	EP		2010	2.047	-0.79							1.0
BERA HE		61	211	ES		2011	1.068	-0.62							1.0
BERA HZ		61	211	IAML		2011	6.572			164	0.5				
AL04AHZ		67	254	EP		2010	4.605	0.76							1.0
AL04AHN		67	254	ES		2011	3.806	0.28							1.0
KBN HN		72	147	ES		2011	5.890	0.52							1.0
LACI HZ		72	316	EP		2010	4.427	-0.42							1.0
LACI HN		72	316	ES		2011	5.215	-0.13							1.0
LACI HZ		72	316	IAML		2011	7.924			209	0.6				
KBN HZ		72	147	EP		2010	4.740	-0.12							1.0
KBN HZ		72	147	IAML		2011	0.372			107	0.6				
AL02AHZ		82	289	EP		2010	7.452	0.87							1.0
AL02AHE		82	289	ES		2011	8.969	0.49							1.0
KKS HZ		100	4	EP		2010	9.486	-0.20							1.0
KKS HN		100	4	ES		2011	4.554	0.46							1.0
TPE HZ		101	195	EP		2010	9.437	-0.35							1.0
TPE HN		101	195	ES		2011	4.424	0.15							1.0
TPE HZ		101	195	IAML		2011	1.595			126	0.9				
NEST HZ		104	144	EP		2011	0.389	0.03							1.0
NEST HN		104	144	ES		2011	5.261	-0.05							1.0
NEST HZ		104	144	IAML		2011	1.832			99	0.6				
SDA HZ		119	325	EP		2011	2.791	-0.04							1.0
SDA HE		119	325	ES		2011	0.265	0.47							1.0
SDA HZ		119	325	IAML		2011	3.452			23	0.4				
AL06AHZ		130	202	EP		2011	4.745	0.19							1.0
AL06AHN		130	202	ES		2011	3.442	0.54							1.0
SRN HZ		146	191	EP		2011	7.792	0.49							1.0
SRN HN		146	191	ES		2011	8.062	0.17							1.0
SRN HZ		146	191	IAML		2011	6.897			40	0.6				
KZN HZ		155	128	EP		2011	8.814	-0.10							1.0
PVY HZ		161	349	EP		2011	9.343	-0.50							0.9
PEJK HZ		163	359	EP		2011	0.503	0.27							0.9
PDG HZ		165	328	EP		2011	9.862	-0.64							0.9
PDG HN		165	328	ES		2011	3.167	-0.51							0.9
PDG HZ		165	328	IAML		2011	7.272			44	0.5				
KEK HZ		168	196	EP		2011	1.256	0.27							0.9
KEK HZ		168	196	IAML		2011	5.778			74	0.7				
GMRK HZ		181	24	EP		2011	2.924	-0.23							0.9
IGT HZ		182	180	EP		2011	3.538	0.34							0.9
IGT HZ		182	180	IAML		2011	7.224			35	0.7				
ME01AHZ		190	349	EP		2011	4.634	0.44							0.9
ME01AHN		190	349	ES		2011	0.037	-0.33							0.9
SCTE HZ		199	233	EP		2011	4.907	-0.44							0.9
ME05AHZ		208	314	EP		2011	6.547	0.08							0.9
NKME HZ		210	328	EP		2011	6.832	-0.05							0.9
THL HZ		229	141	EP		2011	9.486	0.30							0.9
BOSS SZ		231	50	EP		2011	8.893	-0.57							0.9
LKD2 HZ		266	174	EP		2011	3.620	-0.37							0.9

PLG HZ 278 108 EP 2011 5.263-0.25 0.8
 NVR HZ 297 85 EP 2011 7.654-0.36 0.8

October 14 2023 Hour: 6:50 20.0 Lat: 38.92N Lon: 21.43E D: 5.1 Ag: TIR Local
Magnitudes: 2.6ML TIR Rms: 0.4 secs

135 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	69	258	EP		0650	2.095	-0.23							1.0
LKD2	HE	69	258	ES		0650	2.540	0.21							1.0
THL	HZ	87	35	EP		0650	5.861	0.31							1.0
THL	HE	87	35	ES		0650	8.287	0.12							1.0
JAN	HN	96	329	EP		0650	7.213	0.19							1.0
JAN	HE	96	329	IS		0650	0.859	0.04							1.0
VLS	HE	111	222	ES		0650	4.650	-0.75							1.0
IGT	HZ	117	306	EP		0650	0.719	0.22							1.0
IGT	HE	117	306	ES		0650	7.329	0.20							1.0
IGT	HZ	117	306	IAML		0651	2.709			47	0.3				
KZN	HZ	156	11	EP		0650	6.932	-0.22							1.0
KZN	HN	156	11	ES		0651	7.957	-1.21							1.0
SRN	HZ	163	311	EP		0650	8.124	-0.05							0.9
SRN	HE	163	311	ES		0651	0.892	-0.12							0.9
SRN	HZ	163	311	IAML		0651	4.345			24	0.4				
KEK	HZ	166	302	EP		0650	8.712	-0.01							0.9
KEK	HN	166	302	ES		0651	1.975	-0.03							0.9
KEK	HZ	166	302	IAML		0651	9.527			54	0.3				
NEST	HZ	169	349	EP		0650	9.525	0.28							0.9
NEST	HN	169	349	ES		0651	2.969	0.01							0.9
NEST	HZ	169	349	IAML		0651	8.670			35	0.6				
AL06AHZ	194	312	EP		0650	2.697	-0.08								0.9
AL06AHN	194	312	ES		0651	9.395	0.06								0.9
TPE	HZ	195	322	EP		0650	3.181	0.23							0.9
TPE	HE	195	322	ES		0651	0.110	0.46							0.9
TPE	HZ	195	322	IAML		0651	6.524			44	0.8				
KBN	HZ	197	344	EP		0650	3.638	0.39							0.9
KBN	HZ	197	344	IAML		0651	6.551			12	0.8				
ITM	HZ	199	167	EP		0650	3.638	0.19							0.9
ITM	HE	199	167	ES		0651	0.838	0.29							0.9
BERA	HZ	235	328	EP		0650	7.540	-0.51							0.9
PLG	HZ	236	46	EP		0650	8.299	0.03							0.9

October 15 2023 Hour: 11: 8 21.7 Lat: 40.01N Lon: 19.84E D: 13.2 Ag: TIR Local
Magnitudes: 2.5ML TIR 2.6MW TIR Rms: 0.5 secs

13 km SE of Himare

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL06AHZ	11	323	EP		1108	4.604	-0.22								1.0
AL06AHE	11	323	ES		1108	7.002	-0.33								1.0
SRN	HZ	20	136	EP		1108	6.006	0.08							1.0
SRN	HN	20	136	ES		1108	9.489	0.16							1.0
SRN	HZ	20	136	IAML		1108	0.130			565	0.2				
KEK	HZ	33	186	EP		1108	7.864	-0.13							1.0
KEK	HE	33	186	ES		1108	3.417	0.35							1.0
KEK	HZ	33	186	IAML		1108	6.306			419	0.5				
TPE	HZ	35	25	EP		1108	7.961	-0.41							1.0
TPE	HN	35	25	ES		1108	3.063	-0.68							1.0
TPE	HZ	35	25	IAML		1108	4.639			224	0.2				
VLO	HZ	59	330	EP		1108	1.911	-0.36							1.0
VLO	HN	59	330	ES		1108	1.100	0.29							1.0
VLO	HZ	59	330	IAML		1108	5.718			150	0.2				
IGT	HZ	68	141	EP		1108	3.677	-0.06							1.0
IGT	HN	68	141	ES		1108	3.850	0.39							1.0
IGT	HZ	68	141	IAML		1108	4.659			63	0.2				
BERA	HE	78	7	ES		1108	7.256	0.78							1.0
NEST	HZ	112	66	EP		1108	1.609	0.36							1.0
NEST	HN	112	66	ES		1108	7.194	0.13							1.0

SCTE	HZ	117	274	EP	1108	1.801	-0.19										1.0
LKD2	HZ	153	152	EP	1108	8.299	0.40										1.0
LKD2	HN	153	152	ES	1109	8.295	-0.81										1.0
KZN	HZ	168	78	EP	1108	0.396	0.03										0.9
KZN	HN	168	78	ES	1109	3.551	-0.01										0.9
THL	HZ	193	104	EP	1108	4.422	0.97										0.9
THL	HN	193	104	ES	1109	8.074	-1.07										0.9
NOCI	HZ	251	291	EP	1109	0.941	-0.02										0.9
BERA	HZ	78	7	EP	1108	5.707	0.31										1.0
BERA	HZ			IAML	1108	1.778				41	0.3						

October 17 2023 Hour: 5:46 1.4 Lat: 39.42N Lon: 20.65E D: 5.0F Ag: TIR Local
Magnitudes: 2.5ML TIR 3.0MW TIR Rms: 0.5 secs
47 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	30	295	EP		0546	6.643	-0.13							1.0
IGT	HE	30	295	ES		0546	0.897	-0.23							1.0
IGT	HZ	30	295	IAML		0546	2.127			289	0.2				
JAN	HZ	32	34	EP		0546	6.888	-0.26							1.0
JAN	HE	32	34	ES		0546	1.325	-0.48							1.0
LKD2	HZ	70	179	EP		0546	3.957	0.01							1.0
LKD2	HE	70	179	ES		0546	4.328	0.22							1.0
SRN	HZ	75	313	EP		0546	4.273	-0.60							1.0
SRN	HE	75	313	ES		0546	5.856	0.07							1.0
SRN	HZ	75	313	IAML		0546	0.370			53	0.4				
KEK	HZ	80	294	EP		0546	5.391	-0.26							1.0
KEK	HN	80	294	ES		0546	7.656	0.46							1.0
KEK	HZ	80	294	IAML		0546	4.347			102	0.6				
AL06AHZ		106	315	EP		0546	0.063	-0.14							1.0
AL06AHE		106	315	ES		0546	6.195	0.75							1.0
TPE	HZ	111	331	EP		0546	0.950	-0.06							1.0
TPE	HN	111	331	ES		0546	7.520	0.62							1.0
TPE	HZ	111	331	IAML		0546	2.775			85	0.5				
NEST	HZ	116	17	EP		0546	1.366	-0.48							1.0
NEST	HN	116	17	ES		0546	8.498	0.09							1.0
NEST	HZ	116	17	IAML		0546	6.736			40	0.6				
THL	HZ	119	82	EP		0546	2.137	-0.18							1.0
THL	HE	119	82	ES		0546	9.943	0.69							1.0
KBN	HZ	134	5	EP		0546	4.418	-0.49							1.0
VLS	HZ	138	182	EP		0546	5.350	-0.17							1.0
VLS	HE	138	182	ES		0546	5.033	-0.02							1.0
KZN	HZ	138	44	EP		0546	6.212	0.70							1.0
AL05AHZ		144	351	EP		0546	5.917	-0.66							1.0
AL05AHN		144	351	ES		0546	8.099	1.12							1.0
BERA	HZ	154	338	EP		0546	8.387	0.18							1.0
BERA	HN	154	338	ES		0546	8.806	-1.12							1.0
BERA	HZ	154	338	IAML		0546	8.849			34	0.4				
AL04AHZ		199	333	EP		0546	5.302	0.41							0.9

October 18 2023 Hour: 8:24 49.1 Lat: 41.89N Lon: 21.01E D: 11.1 Ag: TIR Local
Magnitudes: 3.1ML TIR 3.5MW TIR Rms: 0.5 secs
53 km SE of Kukës

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KKS	HZ	55	293	EP		0824	9.179	0.26							1.0
KKS	HE	55	293	ES		0825	6.445	-0.44							1.0
AL03AHZ		90	250	EP		0825	4.743	0.01							1.0
AL03AHE		90	250	ES		0825	7.452	0.04							1.0
PEJK	HZ	104	325	EP		0825	6.734	-0.36							1.0
PEJK	HN	104	325	ES		0825	1.851	0.16							1.0
LACI	HZ	111	256	EP		0825	8.980	0.68							1.0
LACI	HN	111	256	ES		0825	3.345	-0.52							1.0
LACI	HZ	111	256	IAML		0825	0.461			231	0.6				
TIR	HZ	113	238	EP		0825	9.051	0.48							1.0
TIR	HN	113	238	ES		0825	4.035	-0.33							1.0

TIR HZ	113	238	IAML	0825	2.769	151	0.6	
AL07AHZ	113	194	EP	0825	8.405-0.25			1.0
AL07AHE	113	194	ES	0825	4.151-0.36			1.0
AL08AHZ	115	222	EP	0825	9.508 0.51			1.0
AL08AHN	115	222	ES	0825	4.404-0.73			1.0
PVY HZ	117	313	EP	*0825	8.613-0.80			0.0
PVY HN	117	313	ES	0825	4.993-0.09			1.0
BARS BZ	123	32	EP	0825	0.437 0.17			1.0
BARS BN	123	32	ES	0825	7.357-0.07			1.0
SDA HZ	127	279	EP	0825	1.288 0.40			1.0
SDA HN	127	279	ES	0825	8.325-0.22			1.0
SDA HZ	127	279	IAML	0825	3.667	87	0.4	
BOSS SZ	138	60	EP	0825	3.741 0.96			1.0
BOSS SE	138	60	ES	0825	1.539-0.43			1.0
AL05AHZ	141	202	EP	0825	2.566-0.74			1.0
KBN HN	141	188	ES	0825	2.780-0.31			1.0
AL05AHE	141	202	ES	0825	2.732-0.21			1.0
KBN HZ	141	188	EP	0825	4.021 0.62			1.0
KBN HZ	141	188	IAML	0825	7.037	89	0.6	
ME01AHZ	142	319	EP	0825	3.710 0.28			1.0
ME01AHN	142	319	ES	0825	2.967-0.19			1.0
AL04AHZ	156	232	EP	0825	5.649-0.07			1.0
AL04AHN	156	232	ES	0825	7.943 0.65			1.0
PDG HZ	157	293	EP	0825	5.715-0.20			1.0
PDG HN	157	293	ES	0825	7.148-0.51			1.0
PDG HZ	157	293	IAML	0825	8.872	283	0.4	
BERA HZ	159	214	EP	0825	7.022 0.79			0.9
BERA HN	159	214	ES	0825	8.668 0.45			0.9
BERA HZ	159	214	IAML	0825	4.453	138	0.4	
NEST HZ	163	179	EP	0825	6.910-0.17			0.9
NEST HE	163	179	ES	0825	8.867-0.89			0.9
NEST HZ	163	179	IAML	0825	1.024	369	1.0	
SJES BZ	175	331	EP	0825	8.405-0.48			0.9
SJES BN	175	331	ES	0825	2.356-0.68			0.9
KZN HZ	187	160	EP	0825	1.105 0.77			0.9
KZN HN	187	160	ES	0825	5.641-0.00			0.9
TPE HZ	195	206	EP	0825	1.410 0.02			0.9
TPE HN	195	206	ES	0825	8.483 0.92			0.9
TPE HZ	195	206	IAML	0826	1.453	113	1.1	
NKME HZ	196	301	EP	0825	1.590 0.09			0.9
NKME HE	196	301	ES	0825	7.736-0.03			0.9
ME02AHZ	210	313	EP	0825	3.823 0.44			0.9
ME02AHN	210	313	ES	0825	0.849-0.32			0.9
THE HZ	215	130	EP	0825	3.431-0.42			0.9
THE HZ	215	130	IAML	0825	7.880	31	0.4	
ME05AHZ	216	288	EP	0825	4.886 0.84			0.9
ME05AHN	216	288	ES	0825	3.078 0.70			0.9
AL06AHZ	226	208	EP	0825	6.180 0.92			0.9
AL06AHN	226	208	ES	0825	5.286 0.73			0.9
SRN HZ	238	201	EP	0825	6.749-0.12			0.9
SRN HE	238	201	ES	0825	6.805-0.68			0.9
SRN HZ	238	201	IAML	0826	1.257	45	0.8	
NVR HZ	245	103	EP	0825	7.733-0.08			0.9
KEK HZ	262	203	EP	0825	0.260 0.33			0.9
KEK HZ	262	203	IAML	0826	8.455	70	0.8	
PLG HZ	264	129	EP	0825	9.996-0.27			0.9
IGT HZ	268	193	EP	0825	0.343-0.29			0.9
IGT HE	268	193	ES	0826	4.043-0.25			0.9
IGT HZ	268	193	IAML	0826	5.729	42	0.8	
THL HZ	271	161	EP	0825	1.147 0.06			0.9
SCTE HZ	294	228	EP	0825	3.673-0.32			0.8
LKD2 HZ	345	185	EP	0825	0.884 0.28			0.8
NOCI HZ	352	251	EP	0825	1.036-0.46			0.8
RDO HZ	386	101	EP	0825	5.264-0.59			0.8

MRVN	HZ	413	259	EP		0825	8.085-1.17										0.4
VLS	HZ	413	185	EP		0825	8.483-0.85										0.7

October 21 2023 Hour: 21:049.5 Lat: 40.45N Lon: 20.67E D: 12.0 Ag: TIR Local
Magnitudes: 3.1ML TIR 3.5MW TIR Rms: 0.5 secs

10 km N of Erseke

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KBN	HZ	22	26	EP	C	2100	4.522	0.58							1.0
KBN	HE	22	26	ES		2100	7.412	-0.12							1.0
KBN	HZ	22	26	IAML		2100	8.927			566	0.1				
NEST	HZ	32	97	EP	C	2100	6.231	0.60							1.0
NEST	HE	32	97	ES		2101	0.534	-0.06							1.0
NEST	HZ	32	97	IAML		2101	2.090			1067	0.4				
AL05AHZ		37	320	EP	C	2100	6.663	0.22							1.0
AL05AHE		37	320	ES		2101	2.462	0.40							1.0
AL07AHN		50	0	ES		2101	6.254	0.32							1.0
TPE	HZ	59	253	EP	C	2100	9.695	-0.31							1.0
TPE	HN	59	253	ES		2101	8.549	0.05							1.0
TPE	HZ	59	253	IAML		2101	3.189			446	0.5				
BERA	HZ	68	295	EP	C	2101	0.615	-0.86							1.0
BERA	HN	68	295	ES		2101	0.490	-0.68							1.0
BERA	HZ	68	295	IAML		2101	7.366			727	0.3				
SRN	HZ	86	222	EP		2101	4.768	0.30							1.0
SRN	HN	86	222	ES		2101	6.636	0.05							1.0
SRN	HZ	86	222	IAML		2101	8.852			137	0.3				
AL08AHZ		87	327	EP		2101	4.581	-0.20							1.0
AL08AHN		87	327	ES		2101	7.158	0.01							1.0
AL06AHZ		88	243	EP		2101	5.259	0.41							1.0
AL06AHN		88	243	ES		2101	7.650	0.38							1.0
JAN	HN	89	170	ES		2101	7.776	-0.04							1.0
KZN	HZ	94	99	EP		2101	6.010	-0.00							1.0
KZN	HN	94	99	ES		2101	9.470	0.09							1.0
BPA2	HZ	95	289	EP		2101	6.198	0.21							1.0
BPA2	HN	95	289	ES		2101	9.108	-0.24							1.0
VLO	HZ	100	272	EP		2101	7.237	0.34							1.0
VLO	HE	100	272	ES		2101	1.464	0.48							1.0
VLO	HZ	100	272	IAML		2101	8.599			436	0.3				
IGT	HZ	106	196	EP		2101	8.204	0.30							1.0
IGT	HE	106	196	ES		2101	2.539	-0.27							1.0
KEK	HZ	111	223	EP		2101	8.559	-0.15							1.0
KEK	HN	111	223	ES		2101	4.267	0.00							1.0
KEK	HZ	111	223	IAML		2101	8.350			238	0.2				
AL04AHZ		113	304	EP		2101	8.739	-0.24							1.0
AL04AHN		113	304	ES		2101	5.070	0.32							1.0
TIR	HZ	121	326	EP		2101	0.223	-0.13							1.0
TIR	HE	121	326	ES		2101	6.619	-0.62							1.0
TIR	HZ	121	326	IAML		2101	1.702			79	0.8				
AL03AHZ		140	336	EP		2101	3.774	0.25							1.0
AL03AHN		140	336	ES		2101	2.550	-0.44							1.0
THL	HZ	151	130	EP		2101	5.042	-0.32							1.0
THL	HN	151	130	ES		2101	5.632	-0.67							1.0
LACI	HZ	154	329	EP		2101	5.320	-0.63							1.0
LACI	HN	154	329	ES		2101	7.422	0.06							1.0
LACI	HZ	154	329	IAML		2101	2.762			169	0.6				
KKS	HZ	182	353	EP		2101	0.399	0.42							0.9
KKS	HE	182	353	ES		2101	4.938	0.28							0.9
LKD2	HZ	184	180	EP		2101	0.710	0.36							0.9
LKD2	HN	184	180	ES		2101	5.164	-0.16							0.9
THE	HZ	195	83	EP		2101	0.951	-0.70							0.9
THE	HZ	195	83	IAML		2101	3.824			19	0.7				
PRZK	HZ	196	2	EP		2101	2.428	0.62							0.9
PLG	HZ	235	91	EP		2101	6.333	-0.53							0.9
PEJK	HZ	246	352	EP		2101	8.020	-0.22							0.9
PEJK	HE	246	352	ES		2101	9.595	-0.03							0.9

PVY	HZ	246	346	EP	2101	9.766	1.49										0.9
GMRK	HZ	249	10	EP	2101	8.555	-0.19										0.9
GMRK	HE	249	10	ES	2102	0.855	0.32										0.9
PDG	HZ	250	332	EP	2101	8.724	0.09										0.9
PDG	HN	250	332	ES	2102	0.482	0.15										0.9
PDG	HZ	250	332	IAML	2102	1.006				43	0.6						
VLS	HZ	252	182	EP	2101	9.337	0.29										0.9
VLS	HN	252	182	ES	2102	1.365	0.29										0.9
BOSS	SZ	272	33	EP	2101	1.339	-0.26										0.9
ME01AHZ	274	346	EP	2101	4.444	2.56											0.0
BARS	BZ	279	20	EP	2101	2.240	-0.27										0.8
BARS	BZ	279	20	IAML	2102	6.890				14	0.6						
NVR	HZ	287	69	EP	2101	3.424	-0.05										0.8
NKME	HZ	295	331	EP	2101	4.859	0.37										0.8
NKME	HN	295	331	ES	2102	9.848	-1.08										0.8
NOCI	HZ	308	278	EP	2101	4.674	-1.48										0.8
SJES	BZ	318	350	EP	2101	7.927	0.42										0.8
SJES	BZ	318	350	IAML	2102	3.205				180	0.7						
ME02AHZ	327	337	EP	2101	0.162	1.41											0.2
ITM	HZ	379	163	EP	2101	6.399	1.12										0.2
MRVN	HZ	384	282	EP	2101	4.330	-1.64										0.0
RDO	HZ	417	78	EP	2101	8.236	-1.92										0.0
SGRT	HZ	439	291	EP	2101	1.097	-1.91										0.0

October 22 2023 Hour: 2:11 4.4 Lat: 39.18N Lon: 20.62E D: 15.6 Ag: TIR Local
Magnitudes: 3.0ML TIR 3.3MW TIR Rms: 0.4 secs
65 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	43	176	EP	C	0211	2.138	-0.28							1.0
LKD2	HE	43	176	ES		0211	9.242	0.31							1.0
IGT	HZ	47	328	EP	C	0211	2.338	-0.62							1.0
IGT	HE	47	328	ES		0211	9.619	-0.30							1.0
IGT	HZ	47	328	IAML		0211	1.160			598	0.3				
JAN	HZ	57	20	EP		0211	4.554	-0.07							1.0
JAN	HN	57	20	ES		0211	2.952	0.02							1.0
KEK	HZ	93	310	EP		0211	0.441	-0.09							1.0
KEK	HN	93	310	ES		0211	3.825	0.19							1.0
KEK	HZ	93	310	IAML		0211	8.083			6271	0.5				
SRN	HZ	95	326	EP		0211	0.577	-0.28							1.0
SRN	HN	95	326	ES		0211	4.516	0.30							1.0
SRN	HZ	95	326	IAML		0211	8.002			116	0.3				
VLS	HZ	111	181	EP		0211	2.928	-0.70							1.0
VLS	HN	111	181	ES		0211	0.156	0.93							1.0
AL06AHZ	125	324	EP	0211	6.224	0.21									1.0
AL06AHN	125	324	ES	0211	3.429	-0.12									1.0
THL	HZ	127	70	EP		0211	5.951	-0.38							1.0
THL	HN	127	70	ES		0211	4.451	0.33							1.0
TPE	HZ	135	337	EP		0211	7.525	0.01							1.0
TPE	HE	135	337	ES		0211	6.383	0.11							1.0
TPE	HZ	135	337	IAML		0211	0.274			118	0.7				
NEST	HZ	142	15	EP		0211	8.895	0.05							1.0
NEST	HN	142	15	ES		0211	8.845	0.17							1.0
NEST	HZ	142	15	IAML		0211	5.582			117	0.8				
KZN	HZ	159	38	EP		0211	1.354	-0.23							0.9
KZN	HN	159	38	ES		0211	3.788	0.16							0.9
KBN	HZ	161	5	EP		0211	2.269	0.41							0.9
KBN	HN	161	5	ES		0211	4.849	0.73							0.9
KBN	HZ	161	5	IAML		0212	2.156			22	0.8				
AL05AHZ	171	353	EP	0211	3.859	0.80									0.9
VLO	HZ	173	326	EP		0211	4.100	0.83							0.9
VLO	HN	173	326	ES		0211	7.098	0.42							0.9
VLO	HZ	173	326	IAML		0212	3.534			143	0.5				
BERA	HZ	179	341	EP		0211	4.022	-0.02							0.9
BERA	HN	179	341	ES		0211	7.324	-0.76							0.9

BERA HZ	179	341	IAML	0212	3.026			65	0.6					
AL08AHZ	219	348	EP	0211	9.346	0.19								0.9
AL08AHN	219	348	ES	0212	7.416	0.08								0.9
ITM HZ	249	152	EP	0211	2.962	-0.18								0.9
TIR HZ	249	345	EP	0211	3.022	-0.08								0.9
AL03AHZ	274	349	EP	0211	5.934	-0.38								0.8
PLG HZ	276	60	EP	0211	6.015	-0.52								0.8
LACI HZ	284	345	EP	0211	6.969	-0.51								0.8
LACI HZ	284	345	IAML	0212	6.247			39	2.0					
NOCI HZ	353	302	EP	0211	5.855	-0.51								0.8
NVR HZ	366	48	EP	0211	7.849	-0.29								0.8
PVY HZ	384	352	EP	0212	0.189	-0.25								0.8
RDO HZ	472	61	EP	0212	1.103	-0.54								0.7

October 22 2023 Hour: 7:53 47.2 Lat: 40.17N Lon: 19.83E D: 10.4 Ag: TIR Local
Magnitudes: 3.5ML TIR 3.7MW TIR Rms: 0.4 secs
10 km NE of Himare

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL06AHZ		11	215	EP	D	0753	9.637	-0.31							1.0
AL06AHN		11	215	ES		0753	2.174	-0.02							1.0
TPE HZ		20	49	EP	D	0753	0.600	-0.67							1.0
TPE HN		20	49	ES		0753	4.323	-0.28							1.0
TPE HZ		20	49	IAML		0753	5.298		11371	0.5					
SRN HZ		36	157	EP	C	0753	3.360	-0.41							1.0
SRN HN		36	157	ES		0753	9.004	-0.11							1.0
SRN HZ		36	157	IAML		0754	3.516		2287	0.3					
VLO HZ		44	319	EP		0753	5.359	0.17							1.0
VLO HN		44	319	ES		0754	1.529	-0.16							1.0
VLO HZ		44	319	IAML		0754	8.305		5337	0.3					
KEK HZ		51	184	EP	C	0753	6.009	-0.45							1.0
KEK HE		51	184	ES		0754	4.177	0.19							1.0
KEK HZ		51	184	IAML		0754	7.225		2058	0.6					
BERA HZ		60	9	EP	C	0753	7.469	-0.38							1.0
BERA HE		60	9	ES		0754	6.830	0.33							1.0
BERA HZ		60	9	IAML		0754	0.302		2102	0.7					
BPA2 HZ		65	344	EP	D	0753	9.015	0.35							1.0
AL05AHZ		76	38	EP	C	0754	0.489	-0.06							1.0
AL05AHN		76	38	ES		0754	1.250	-0.14							1.0
IGT HZ		83	149	EP		0754	1.629	-0.12							1.0
IGT HN		83	149	ES		0754	3.875	0.32							1.0
IGT HZ		83	149	IAML		0754	9.574		771	0.5					
KBN HZ		95	58	EP		0754	3.932	0.13							1.0
KBN HN		95	58	ES		0754	7.488	0.21							1.0
KBN HZ		95	58	IAML		0754	4.855		177	0.2					
AL04AHZ		95	346	EP		0754	4.360	0.54							1.0
AL04AHE		95	346	ES		0754	7.148	-0.17							1.0
JAN HE		104	123	ES		0754	0.354	0.38							1.0
AL08AHZ		106	12	EP		0754	5.782	0.21							1.0
AL08AHN		106	12	ES		0754	1.370	0.88							1.0
NEST HZ		107	75	EP		0754	5.844	0.10							1.0
NEST HN		107	75	ES		0754	1.112	0.31							1.0
NEST HZ		107	75	IAML		0754	0.340		500	0.7					
AL07AHZ		108	41	EP		0754	5.854	-0.07							1.0
AL07AHE		108	41	ES		0754	0.607	-0.51							1.0
SCTE HZ		117	265	EP		0754	8.022	0.58							1.0
SCTE HN		117	265	ES		0754	4.009	0.14							1.0
TIR HZ		130	1	EP		0754	9.811	0.15							1.0
TIR HE		130	1	ES		0754	8.177	0.29							1.0
TIR HZ		130	1	IAML		0754	9.989		235	0.8					
AL02AHZ		142	345	EP		0754	2.000	0.41							1.0
AL02AHN		142	345	ES		0754	1.268	-0.11							1.0
AL03AHZ		159	5	EP		0754	4.015	-0.46							0.9
AL03AHN		159	5	ES		0754	6.327	-0.27							0.9
LACI HZ		163	357	EP		0754	4.661	-0.39							0.9

THL	HN	155	53	ES	1502	2.464	-0.12								1.0
AL06AHZ		166	335	EP	1501	2.412	-0.08								0.9
AL06AHE		166	335	ES	1502	5.366	-0.46								0.9
NEST	HZ	191	12	EP	1501	6.707	0.27								0.9
NEST	HN	191	12	ES	1502	3.245	0.27								0.9
NEST	HZ	191	12	IAML	1502	8.884			29	0.8					
KZN	HZ	203	30	EP	1501	8.184	0.26								0.9
KZN	HN	203	30	ES	1502	5.647	-0.02								0.9
KBN	HN	210	5	ES	1502	7.291	-0.17								0.9
ITM	HZ	210	145	EP	1501	9.106	0.30								0.9
ITM	HE	210	145	ES	1502	7.539	0.27								0.9
KBN	HZ	210	5	EP	1501	8.791	-0.12								0.9
AL05AHZ		219	356	EP	1501	0.110	0.10								0.9
BERA	HZ	225	346	EP	1501	9.842	-0.83								0.9
BERA	HE	225	346	ES	1502	0.608	-0.03								0.9
BERA	HZ	225	346	IAML	1502	7.790			30	0.3					

October 26 2023 Hour: 4:21 32.2 Lat: 40.04N Lon: 20.05E D: 2.9 Ag: TIR Local
Magnitudes: 2.5ML TIR 2.9MW TIR Rms: 0.4 secs

9 km SW of Gjirokaster

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SRN	HZ	18	192	EP	C	0421	6.151	0.65							1.0
SRN	HN	18	192	ES		0421	8.442	0.30							1.0
SRN	HZ	18	192	IAML		0421	0.822			537	0.2				
AL06AHZ		25	283	EP	C	0421	6.282	-0.49							1.0
AL06AHN		25	283	ES		0421	0.239	-0.21							1.0
TPE	HZ	29	355	EP	D	0421	7.125	-0.25							1.0
TPE	HE	29	355	ES		0421	1.505	-0.03							1.0
TPE	HZ	29	355	IAML		0421	4.681			279	0.2				
KEK	HZ	42	210	EP	C	0421	9.500	-0.24							1.0
KEK	HE	42	210	ES		0421	5.898	0.09							1.0
KEK	HZ	42	210	IAML		0421	7.436			443	0.3				
IGT	HZ	61	156	EP	D	0421	3.678	0.48							1.0
IGT	HZ	61	156	IAML		0421	3.934			130	0.3				
VLO	HZ	67	316	EP		0421	4.428	0.23							1.0
VLO	HN	67	316	ES		0421	3.836	-0.05							1.0
VLO	HZ	67	316	IAML		0422	1.202			113	0.6				
BERA	HZ	74	354	EP	C	0421	5.278	-0.23							1.0
BERA	HE	74	354	ES		0421	6.227	-0.03							1.0
BERA	HZ	74	354	IAML		0421	7.630			105	0.2				
KBN	HZ	91	44	EP		0421	7.990	-0.43							1.0
KBN	HE	91	44	ES		0422	1.342	-0.18							1.0
KBN	HZ	91	44	IAML		0422	2.354			12	0.6				
AL07AHZ		110	29	EP		0421	2.349	0.55							1.0
AL04AHZ		115	339	EP		0421	3.509	0.85							1.0
AL04AHN		115	339	ES		0422	8.909	-0.30							1.0
AL08AHZ		119	2	EP		0421	3.136	-0.11							1.0
AL08AHE		119	2	ES		0422	0.942	0.69							1.0
SCTE	HZ	135	272	EP		0421	5.508	-0.42							1.0
TIR	HZ	146	354	EP		0421	8.186	0.34							1.0
TIR	HE	146	354	ES		0422	8.843	0.26							1.0
TIR	HZ	146	354	IAML		0422	6.362			16	0.6				
LKD2	HZ	148	159	EP		0421	8.103	-0.12							1.0
LKD2	HE	148	159	ES		0422	8.480	-0.79							1.0
KZN	HZ	150	78	EP		0421	8.681	0.17							1.0
KZN	HN	150	78	ES		0422	0.027	0.24							1.0
AL03AHZ		174	359	EP		0422	2.453	0.02							0.9
AL03AHE		174	359	ES		0422	7.148	0.26							0.9
THL	HZ	177	107	EP		0422	3.101	0.20							0.9
THL	HN	177	107	ES		0422	6.953	-0.78							0.9
LACI	HZ	180	351	EP		0422	2.774	-0.64							0.9
LACI	HN	180	351	ES		0422	7.957	-0.70							0.9
LACI	HZ	180	351	IAML		0422	4.563			19	0.6				
VLS	HZ	212	167	EP		0422	8.077	0.39							0.9

SDA	HZ	228	349	EP	0422	9.666	-0.06										0.9
KKS	HZ	228	7	EP	0422	0.243	0.49										0.9
NOCI	HZ	266	289	EP	0422	4.961	0.27										0.9
PVY	HZ	284	359	EP	0422	6.567	-0.48										0.8
PLG	HZ	292	82	EP	0422	7.932	-0.02										0.8

October 26 2023 Hour: 21:47 33.7 Lat: 40.42N Lon: 19.64E D: 14.4 Ag: TIR Local
Magnitudes: 3.1ML TIR 3.5MW TIR Rms: 0.4 secs
12 km S of Selenice

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
VLO	HZ	14	294	EP	C	2147	6.838	-0.38							1.0
VLO	HN	14	294	ES		2147	0.022	-0.02							1.0
VLO	HZ	14	294	IAML		2147	0.991		23673	0.3					
BPA2	HZ	35	357	EP	D	2147	0.897	0.60							1.0
BPA2	HE	35	357	ES		2147	5.748	0.15							1.0
BPA2	HZ	35	357	IAML		2147	7.850		46330	0.2					
TPE	HZ	35	114	EP	D	2147	9.871	-0.48							1.0
TPE	HN	35	114	ES		2147	5.368	-0.33							1.0
TPE	HZ	35	114	IAML		2147	1.025		951	0.2					
AL06AHZ		38	165	EP		2147	0.801	-0.09							1.0
AL06AHE		38	165	ES		2147	6.742	0.06							1.0
BERA	HZ	41	40	EP	D	2147	0.780	-0.54							1.0
BERA	HE	41	40	ES		2147	6.647	-0.82							1.0
BERA	HZ	41	40	IAML		2147	1.028		1500	0.2					
AL04AHZ		66	354	EP		2147	6.272	0.87							1.0
AL04AHN		66	354	ES		2147	5.219	0.37							1.0
SRN	HZ	67	153	EP		2147	5.494	-0.20							1.0
SRN	HN	67	153	ES		2147	5.649	0.27							1.0
SRN	HZ	67	153	IAML		2147	8.354		171	0.8					
KEK	HZ	80	170	EP		2147	7.804	0.05							1.0
KEK	HE	80	170	ES		2147	9.605	0.49							1.0
KEK	HZ	80	170	IAML		2148	5.249		210	0.7					
AL08AHZ		86	27	EP	D	2147	8.665	-0.06							1.0
AL08AHE		86	27	ES		2148	0.899	0.04							1.0
KBN	HZ	100	77	EP		2147	0.648	-0.49							1.0
KBN	HN	100	77	ES		2148	5.621	0.40							1.0
KBN	HZ	100	77	IAML		2148	0.500		133	0.8					
AL07AHZ		103	58	EP		2147	1.850	0.23							1.0
AL07AHN		103	58	ES		2148	6.597	0.50							1.0
TIR	HZ	105	10	EP		2147	2.392	0.47							1.0
TIR	HN	105	10	ES		2148	7.077	0.42							1.0
TIR	HZ	105	10	IAML		2148	2.286		170	0.6					
SCTE	HZ	107	249	EP	C	2147	2.500	0.19							1.0
IGT	HZ	115	149	EP		2147	3.505	-0.12							1.0
IGT	HZ	115	149	IAML		2148	5.405		140	1.0					
NEST	HZ	119	90	EP		2147	4.136	-0.30							1.0
NEST	HE	119	90	ES		2148	1.760	0.56							1.0
NEST	HZ	119	90	IAML		2148	7.110		359	0.7					
LACI	HZ	135	3	EP		2147	6.568	-0.44							1.0
LACI	HN	135	3	ES		2148	5.578	-0.27							1.0
LACI	HZ	135	3	IAML		2148	7.982		209	0.3					
AL03AHZ		135	13	EP		2147	6.311	-0.62							1.0
SDA	HZ	181	356	EP		2148	3.038	-0.83							0.9
SDA	HZ	181	356	IAML		2148	8.953		23	0.6					
KKS	HZ	194	19	EP	D	2148	6.043	0.47							0.9
LKD2	HZ	201	154	EP		2148	6.341	-0.10							0.9
PVY	HZ	243	6	EP	D	2148	1.732	-0.18							0.9
PEJK	HZ	253	12	EP		2148	3.040	-0.05							0.9

October 27 2023 Hour: 9:31 57.6 Lat: 40.75N Lon: 20.52E D: 12.3 Ag: TIR Local
 Magnitudes: 2.6ML TIR 3.0MW TIR Rms: 0.5 secs
 15 km W of Maliq

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL05AHZ		12	247	EP		D	0932	0.328-0.36							1.0
AL05AHN		12	247	ES			0932	2.494-0.68							1.0
AL07AHZ		22	39	EP		C	0932	2.443 0.34							1.0
AL07AHN		22	39	ES			0932	6.160 0.43							1.0
KBN HZ		27	121	EP		C	0932	2.991 0.13							1.0
KBN HN		27	121	ES			0932	7.174 0.07							1.0
KBN HZ		27	121	IAML			0932	7.997		163	0.3				1.0
BERA HZ		48	264	EP		C	0932	5.620-0.77							1.0
BERA HN		48	264	ES			0932	2.596-0.91							1.0
BERA HZ		48	264	IAML			0932	3.120		413	0.1				1.0
AL08AHZ		53	319	EP			0932	6.983-0.19							1.0
AL08AHE		53	319	ES			0932	4.721-0.20							1.0
NEST HZ		58	129	EP			0932	8.083 0.00							1.0
NEST HN		58	129	ES			0932	6.701 0.14							1.0
NEST HZ		58	129	IAML			0932	7.384		156	0.3				1.0
TPE HZ		66	220	EP			0932	8.540-0.78							1.0
TPE HE		66	220	ES			0932	9.063 0.26							1.0
TPE HZ		66	220	IAML			0932	6.958		106	0.4				1.0
BPA2 HZ		76	269	EP			0932	0.520-0.48							1.0
BPA2 HE		76	269	ES			0932	2.353 0.51							1.0
AL04AHZ		86	290	EP			0932	2.974 0.36							1.0
TIR HZ		86	321	EP			0932	2.830 0.09							1.0
TIR HZ		86	321	IAML			0932	4.358		33	0.6				1.0
VLO HZ		92	251	EP			0932	4.192 0.54							1.0
VLO HZ		92	251	IAML			0932	3.493		88	0.3				1.0
AL06AHZ		98	222	EP			0932	4.587 0.00							1.0
AL06AHE		98	222	ES			0932	8.784 0.45							1.0
AL03AHZ		104	336	EP			0932	5.608-0.12							1.0
AL03AHE		104	336	ES			0932	0.510 0.12							1.0
SRN HZ		106	205	EP			0932	6.630 0.66							1.0
SRN HN		106	205	ES			0932	1.441 0.60							1.0
SRN HZ		106	205	IAML			0932	8.066		86	0.5				1.0
KZN HZ		117	114	EP			0932	7.768-0.09							1.0
KZN HN		117	114	ES			0932	3.663-0.58							1.0
LACI HZ		119	326	EP			0932	8.514 0.27							1.0
LACI HN		119	326	ES			0932	5.076 0.13							1.0
LACI HZ		119	326	IAML			0932	0.320		35	0.3				1.0
KEK HZ		130	208	EP			0932	0.465 0.43							1.0
KEK HN		130	208	ES			0932	7.865-0.32							1.0
KEK HZ		130	208	IAML			0932	3.087		101	0.6				1.0
IGT HZ		136	187	EP			0932	1.118 0.14							1.0
IGT HN		136	187	ES			0932	0.040 0.15							1.0
IGT HZ		136	187	IAML			0932	6.229		39	0.9				1.0
KKS HZ		148	356	EP			0932	3.310 0.36							1.0
KKS HE		148	356	ES			0932	3.003-0.46							1.0
SDA HZ		168	330	EP			0932	5.747-0.50							0.9
SDA HE		168	330	ES			0932	9.639 0.20							0.9
THL HZ		183	135	EP			0932	8.176-0.00							0.9
THL HN		183	135	ES			0932	1.538-1.40							0.9
PVY HZ		210	347	EP			0932	2.360 0.51							0.9
PVY HN		210	347	ES			0932	9.640 0.05							0.9
PDG HZ		214	331	EP			0932	2.307 0.11							0.9
PDG HE		214	331	ES			0933	0.138-0.06							0.9
PDG HZ		214	331	IAML			0933	0.516		19	0.3				0.9
LKD2 HZ		218	177	EP			0932	3.600 0.91							0.9

October 29 2023 Hour: 7:58 47.9 Lat: 39.44N Lon: 20.54E D: 17.3 Ag: TIR Local
 Magnitudes: 2.7ML TIR Rms: 0.3 secs
 39 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	20	301	EP	D	0758	2.322	-0.32							1.0
IGT	HN	20	301	ES		0758	6.110	-0.34							1.0
IGT	HZ	20	301	IAML		0758	6.669			1938	0.2				
SRN	HZ	67	317	EP		0758	9.785	-0.15							1.0
SRN	HE	67	317	ES		0759	9.928	0.27							1.0
SRN	HZ	67	317	IAML		0759	2.004			66	0.3				
KEK	HZ	70	296	EP		0759	0.751	0.28							1.0
KEK	HN	70	296	ES		0759	1.107	0.49							1.0
KEK	HZ	70	296	IAML		0759	6.502			176	0.4				
LKD2	HZ	73	172	EP		0759	1.023	0.12							1.0
LKD2	HE	73	172	ES		0759	1.782	0.39							1.0
AL06AHZ		98	318	EP		0759	4.880	-0.21							1.0
AL06AHE		98	318	ES		0759	9.010	0.02							1.0
TPE	HZ	105	335	EP		0759	6.334	0.12							1.0
TPE	HE	105	335	ES		0759	1.034	0.03							1.0
TPE	HZ	105	335	IAML		0759	7.087			81	0.6				
NEST	HZ	117	22	EP		0759	8.059	-0.18							1.0
NEST	HN	117	22	ES		0759	4.645	-0.03							1.0
NEST	HZ	117	22	IAML		0759	0.368			54	0.4				
THL	HZ	128	83	EP		0759	9.260	-0.74							1.0
KBN	HZ	133	9	EP		0759	1.008	0.05							1.0
KBN	HN	133	9	ES		0759	0.214	0.62							1.0
KBN	HZ	133	9	IAML		0759	0.183			11	0.7				
VLS	HZ	140	178	EP		0759	2.052	0.07							1.0
VLS	HN	140	178	ES		0759	1.478	0.02							1.0
AL05AHZ		141	355	EP		0759	2.110	-0.06							1.0
AL05AHE		141	355	ES		0759	1.533	-0.27							1.0
KZN	HZ	143	47	EP		0759	2.236	-0.24							1.0
KZN	HN	143	47	ES		0759	3.065	0.71							1.0
BERA	HZ	149	341	EP		0759	3.461	0.09							1.0
BERA	HN	149	341	ES		0759	3.722	-0.25							1.0
BERA	HZ	149	341	IAML		0759	7.561			46	0.6				
SCTE	HZ	191	292	EP		0759	8.493	-0.49							0.9
PLG	HZ	269	66	EP		0759	9.016	-0.10							0.9