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Seismological Bulletin

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Institute of GeoSciences(IGEO)

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Institute of GeoSciences(IGEO)
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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 Ml, based on the Richter formula (Hutton & Boore, 1987), corrected refered to EMSC:

$$Ml = 1.0*\log(A) + 1.11*\log(D) + 0.00189*D - 1.686$$

where, D is the hypocentral distance (km).

Representative ML 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 Vp/Vs 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 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*(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:

Ottemoller, 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.

November 5 2023 Hour: 13:50 45.8 Lat: 41.09N Lon: 20.04E D: 18.2 Ag: TIR Local
Magnitudes: 3.9ML TIR 3.9MW TIR Rms: 0.6 secs
3 km SW of Elbasan

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TIR	HN	32	332	ES		1350	7.556	0.15							1.0
AL03A	HN	57	357	ES		1351	4.634	0.17							1.0
AL07A	HZ	58	112	EP		1350	6.837	0.49							1.0
KBN	HZ	82	129	EP		1351	0.154	-0.12							1.0
KBN	HN	82	129	ES		1351	2.103	0.13							1.0
KBN	HZ	82	129	IAML		1351	1.360			307	0.8				
KKS	HZ	113	15	EP		1351	4.855	-0.57							1.0
KZN	HZ	170	120	EP		1351	4.640	0.41							0.9
IGT	HZ	175	172	EP		1351	4.901	0.12							0.9
IGT	HZ	175	172	IAML		1351	8.943			625	0.7				
ME01A	HZ	195	356	EP		1351	8.374	0.97							0.9
ME05A	HZ	198	320	EP		1351	8.374	0.66							0.9
GMRK	HZ	199	29	EP		1351	8.201	0.20							0.9
NKME	HZ	207	334	EP		1351	8.374	-0.51							0.9
ME02A	HZ	241	342	EP		1351	4.039	0.61							0.9
SJES	BZ	241	359	EP		1351	4.269	0.94							0.9
BARS	BZ	241	37	EP		1351	3.488	0.21							0.9
THE	HZ	252	101	EP		1351	4.606	0.04							0.9
THE	HZ	252	101	IAML		1351	7.136			67	0.9				
LKD2	HZ	261	168	EP		1351	4.606	-1.24							0.9
AL08A	HZ			EP	C	1350	9.225								
AL08A	HN			ES		1350	2.318								
TIR	HZ	32	332	EP		1350	2.190	-0.03							1.0
TIR	HZ			IAML		1351	1.503			5548	0.4				
BERA	HZ			EP	D	1350	2.931								
BERA	HZ			IAML		1351	0.724			5430	0.3				
AL05A	HZ			EP	C	1350	5.364								
BPA2	HZ			EP	D	1350	4.361								
NEST	HZ			EP		1351	5.668								
NEST	HZ	114	131	IAML		1351	8.173			594	0.8				
AL06A	HZ			EP		1351	5.183								
SDA	HZ			EP		1351	5.236								
SDA	HZ			IAML		1351	8.100			264	0.5				
SDA	HN			ES		1351	2.173								
SRN	HZ	135	182	EP		1351	8.474	-0.48							1.0
SRN	HZ	135	182	IAML		1351	3.051			838	0.7				
SRN	HZ			IAML		1351	3.141			908	0.7				
KEK	HZ			EP		1351	1.745								
KEK	HZ			IAML		1351	5.594			1056	0.8				
PDG	HZ			EP		1351	2.617								
PDG	HZ			IAML		1351	1.503			663	0.5				
PEJK	HZ			EP		1351	4.706								
PEJK	HN			ES		1351	9.953								
SCTE	HZ			EP		1351	2.151								
THL	HZ			EP		1351	3.711								
NOCI	HZ			EP		1351	1.734								
BOSS	SZ			EP		1351	4.560								
PLG	HZ			EP		1351	0.602								
NVR	HZ			EP		1351	2.915								
MRVN	HZ			EP		1351	0.864								
SGRT	HZ			EP		1351	5.689								
ITM	HZ			EP		1351	9.877								
BLY	HZ			EP		1351	0.151								
BZS	HZ			EP		1351	6.927								
AL04A	HZ			EP	D	1350	4.385								
AL05A	HE			ES		1351	3.496								
AL03A	HZ			EP		1350	5.915								
AL07A	HE			ES		1351	5.684								
AL02A	HZ			EP		1350	8.398								

AL02AHN				ES		1351	7.796							
VLO	HZ			EP		1351	0.001							
VLO	HZ	83	214	IAML		1351	1.622			3614	0.5			
TPE	HZ			EP		1351	0.676							
TPE	HZ			IAML		1351	1.531			1935	0.5			
TPE	HN			ES		1351	4.055							
KKS	HN			ES		1351	0.703							
AL06AHE				ES		1351	1.565							
SRN	HN			ES		1351	7.440							
KEK	HE			ES		1351	2.230							
PDG	HN			ES		1351	4.278							
PVY	HZ			EP		1351	2.856							
PVY	HN			ES		1351	6.638							
KZN	HN			ES		1351	7.653							

November 5 2023 Hour: 16:40 0.2 Lat: 41.08N Lon: 20.02E D: 19.8 Ag: TIR Local
Magnitudes: 3.0ML TIR 2.6MW TIR Rms: 0.8 secs
6 km SW of Elbasan

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL08AHZ		7	68	EP		1640	3.788	-0.15							1.0
AL08AHN		7	68	ES		1640	6.796	-0.14							1.0
TIR	HZ	33	336	EP		1640	6.775	-0.06							1.0
TIR	HN	33	336	ES		1640	2.316	0.13							1.0
TIR	HZ	33	336	IAML		1640	3.378			568	0.5				
AL04AHZ		40	258	EP		1640	7.862	-0.02							1.0
AL04AHN		40	258	ES		1640	5.224	1.15							1.0
BERA	HZ	42	188	EP		1640	7.572	-0.74							1.0
BERA	HN	42	188	ES		1640	4.053	-0.81							1.0
BERA	HZ	42	188	IAML		1640	5.636			855	0.3				
BPA2	HZ	52	221	EP		1640	9.143	-0.62							1.0
AL05AHZ		52	143	EP		1640	9.734	-0.14							1.0
AL05AHE		52	143	ES		1640	7.904	0.21							1.0
AL05AHZ		52	143	IAML		1640	1.074			0.40	0.3				
AL03AHZ		58	359	EP		1640	0.378	-0.45							1.0
AL07AHZ		59	110	EP		1640	1.289	0.30							1.0
AL07AHE		59	110	ES		1640	9.740	0.03							1.0
AL02AHZ		64	305	EP		1640	2.157	0.41							1.0
VLO	HZ	81	213	EP		1640	4.932	0.35							1.0
VLO	HZ	81	213	IAML		1640	9.836			531	0.5				
KBN	HZ	82	128	EP		1640	4.518	-0.27							1.0
KBN	HN	82	128	ES		1640	6.607	0.02							1.0
KBN	HZ	82	128	IAML		1640	6.894			50	1.0				
TPE	HZ	87	180	EP		1640	5.346	-0.25							1.0
TPE	HN	87	180	ES		1640	8.627	0.59							1.0
AL06AHZ		112	192	EP		1640	0.451	0.71							1.0
AL06AHN		112	192	ES		1640	6.092	0.55							1.0
NEST	HZ	114	130	EP		1640	9.652	-0.42							1.0
NEST	HZ	114	130	IAML		1640	9.557			123	0.6				
KKS	HZ	115	16	EP		1640	9.171	-0.98							1.0
KKS	HE	115	16	ES		1640	6.211	-0.07							1.0
SDA	HZ	116	338	EP		1640	0.181	-0.16							1.0
SDA	HN	116	338	ES		1640	7.203	0.57							1.0
SDA	HZ	116	338	IAML		1640	1.026			39	1.6				
KEK	HZ	153	187	EP		1640	6.600	0.45							1.0
KEK	HZ	153	187	IAML		1640	2.710			239	0.5				
PDG	HZ	163	337	EP		1640	7.177	-0.21							0.9
PDG	HZ	163	337	IAML		1640	0.763			205	0.5				
PVY	HZ	168	358	EP		1640	7.971	-0.29							0.9
KZN	HZ	171	120	EP		1640	8.620	0.06							0.9
SCTE	HZ	173	230	EP		1640	9.080	0.40							0.9
IGT	HZ	174	171	EP		1640	9.080	0.23							0.9
IGT	HZ	174	171	IAML		1640	7.170			93	0.5				
ME01AHZ		197	357	EP		1640	2.143	0.33							0.9
ME05AHZ		198	321	EP		1640	2.438	0.49							0.9

GMRK	HZ	202	29	EP		1640	2.591	0.09						0.9
NKME	HZ	207	335	EP		1640	3.494	0.31						0.9
NKME	HE	207	335	ES		1640	9.439	-0.44						0.9
ME02A	HZ	242	342	EP		1640	9.035	1.26						0.9
SJES	BZ	242	359	EP		1640	9.556	1.81						0.9
BARS	BZ	244	37	EP		1640	7.819	0.02						0.9
NOCI	HZ	251	264	EP		1640	9.015	0.24						0.9
LKD2	HZ	260	168	EP		1640	9.239	-0.69						0.9
PLG	HZ	300	104	EP		1640	6.185	1.18						0.8
MRVN	HZ	322	271	EP		1640	4.841	-2.98						0.8
SGRT	HZ	365	283	EP		1640	0.368	-3.12						0.8

November 6 2023 Hour: 1:43 45.7 Lat: 39.66N Lon: 20.43E D: 17.9 Ag: TIR Local
Magnitudes: 2.9ML TIR 3.1MW TIR Rms: 0.4 secs
21 km E of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	16	211	EP	C	0143	9.697	-0.22							1.0
IGT	HN	16	211	ES		0143	3.352	0.02							1.0
IGT	HZ	16	211	IAML		0143	4.496			1730	0.3				
KEK	HZ	54	277	EP	C	0143	5.504	-0.13							1.0
KEK	HE	54	277	ES		0144	3.886	0.20							1.0
KEK	HZ	54	277	IAML		0144	6.886			429	0.5				
AL06A	HZ	75	310	EP		0143	8.764	-0.21							1.0
AL06A	HN	75	310	ES		0144	9.824	0.09							1.0
TPE	HZ	79	334	EP	D	0143	9.908	0.20							1.0
TPE	HN	79	334	ES		0144	1.270	0.22							1.0
TPE	HZ	79	334	IAML		0144	7.834			197	0.8				
LKD2	HZ	98	168	EP		0144	3.542	0.67							1.0
LKD2	HN	98	168	ES		0144	6.608	-0.17							1.0
NEST	HZ	100	32	EP		0144	2.566	-0.54							1.0
NEST	HE	100	32	ES		0144	6.757	-0.46							1.0
NEST	HZ	100	32	IAML		0144	1.909			112	0.3				
KBN	HZ	112	16	EP	C	0144	4.913	-0.21							1.0
KBN	HN	112	16	ES		0144	0.488	-0.37							1.0
KBN	HZ	112	16	IAML		0144	5.578			20	0.6				
AL05A	HZ	117	358	EP	C	0144	5.587	-0.33							1.0
AL05A	HN	117	358	ES		0144	2.124	-0.16							1.0
VLO	HZ	120	319	EP		0144	7.331	0.82							1.0
VLO	HN	120	319	ES		0144	3.975	0.60							1.0
VLO	HZ	120	319	IAML		0144	0.341			119	0.4				
BERA	HZ	123	341	EP		0144	6.813	-0.17							1.0
BERA	HN	123	341	ES		0144	4.562	0.33							1.0
BERA	HZ	123	341	IAML		0144	6.589			118	0.5				
KZN	HZ	135	57	EP		0144	8.850	-0.18							1.0
KZN	HN	135	57	ES		0144	8.507	0.58							1.0
THL	HZ	137	94	EP		0144	9.223	0.10							1.0
THL	HN	137	94	ES		0144	8.529	0.43							1.0
AL07A	HZ	140	9	EP		0144	9.164	-0.52							1.0
AL07A	HE	140	9	ES		0144	9.749	0.64							1.0
AL08A	HZ	163	350	EP		0144	3.096	-0.07							0.9
AL08A	HN	163	350	ES		0144	5.483	0.08							0.9
VLS	HZ	165	175	EP		0144	3.530	0.16							0.9
VLS	HE	165	175	ES		0144	5.588	-0.19							0.9
AL04A	HZ	167	334	EP		0144	3.758	0.11							0.9
AL04A	HE	167	334	ES		0144	6.295	0.02							0.9
SCTE	HZ	174	286	EP		0144	3.891	-0.65							0.9
TIR	HZ	194	346	EP		0144	6.754	-0.32							0.9
TIR	HZ	194	346	IAML		0144	5.276			28	1.3				
AL03A	HZ	219	351	EP		0144	0.318	-0.01							0.9
THE	HZ	242	63	EP		0144	3.892	0.69							0.9
PLG	HZ	269	72	EP		0144	6.939	0.12							0.9
NOCI	HZ	313	295	EP		0144	1.123	-1.23							0.4
PEJK	HZ	332	358	EP		0144	4.589	-0.27							0.8
NVR	HZ	347	56	EP		0144	7.104	0.39							0.8

BOSS	SZ	359	28	EP		0144	8.389	0.09						0.8
BARS	BZ	370	18	EP		0144	9.402	-0.25						0.8
MRVN	HZ	392	295	EP		0144	1.767	-0.76						0.4
SJES	BZ	402	355	EP		0144	3.686	-0.24						0.7
ME02A	HZ	404	345	EP		0144	3.825	-0.33						0.7
SGRT	HZ	459	302	EP		0144	9.176	-2.04						0.2
RDO	HZ	464	67	EP		0144	1.039	-0.65						0.7

November 7 2023 Hour: 18:30 5.2 Lat: 39.49N Lon: 20.47E D: 20.1 Ag: TIR Local
Magnitudes: 4.3ML TIR 3.9MW TIR Rms: 0.6 secs
31 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	13	291	EP	C	1830	9.812	0.45							1.0
IGT	HN	13	291	ES		1830	2.691	-0.07							1.0
IGT	HZ	13	291	IAML		1830	5.612			27809	0.7				
KEK	HZ	63	293	EP	C	1830	6.717	0.13							1.0
KEK	HE	63	293	ES		1830	5.733	-0.10							1.0
KEK	HZ	63	293	IAML		1830	4.945			11388	0.6				
LKD2	HZ	79	168	EP	D	1830	9.395	0.12							1.0
LKD2	HN	79	168	ES		1830	0.573	-0.13							1.0
AL06A	HZ	90	318	EP		1830	1.030	-0.03							1.0
AL06A	HE	90	318	ES		1830	4.083	0.14							1.0
TPE	HZ	98	336	EP	D	1830	1.803	-0.44							1.0
TPE	HE	98	336	ES		1830	6.280	0.20							1.0
TPE	HZ	98	336	IAML		1830	0.215			5421	0.7				
NEST	HZ	114	25	EP	C	1830	4.319	-0.65							1.0
NEST	HN	114	25	ES		1830	1.542	0.53							1.0
NEST	HZ	114	25	IAML		1830	6.376			3878	0.4				
KBN	HZ	129	12	EP	D	1830	6.764	-0.53							1.0
KBN	HE	129	12	ES		1830	5.337	0.12							1.0
KBN	HZ	129	12	IAML		1830	1.448			830	0.6				
THL	HZ	133	86	EP	C	1830	8.073	0.21							1.0
THL	HE	133	86	ES		1830	6.148	-0.11							1.0
AL05A	HZ	135	357	EP		1830	7.958	-0.32							1.0
AL05A	HN	135	357	ES		1830	7.320	0.31							1.0
VLO	HZ	137	323	EP	C	1830	9.689	1.14							1.0
VLO	HN	137	323	ES		1830	7.861	0.37							1.0
VLO	HZ	137	323	IAML		1830	9.684			3915	0.5				
BERA	HZ	142	342	EP	C	1830	9.129	-0.18							1.0
BERA	HN	142	342	ES		1830	9.092	0.22							1.0
BERA	HZ	142	342	IAML		1830	0.275			2929	0.4				
KZN	HZ	143	50	EP	D	1830	8.618	-0.98							1.0
KZN	HN	143	50	ES		1830	8.731	-0.66							1.0
VLS	HZ	146	176	EP	D	1830	9.791	-0.20							1.0
VLS	HE	146	176	ES		1830	0.379	0.27							1.0
BPA2	HZ	156	332	EP		1830	2.430	1.03							1.0
AL07A	HZ	157	6	EP		1830	2.018	0.31							0.9
AL07A	HE	157	6	ES		1830	3.312	0.10							0.9
AL08A	HZ	182	350	EP		1830	5.391	0.59							0.9
AL08A	HE	182	350	ES		1830	8.768	-0.04							0.9
SCTE	HZ	184	291	EP	C	1830	4.612	-0.37							0.9
AL04A	HZ	185	336	EP		1830	5.984	0.77							0.9
TIR	HZ	213	346	EP		1830	9.013	0.30							0.9
TIR	HN	213	346	ES		1831	5.985	0.10							0.9
TIR	HZ	213	346	IAML		1831	4.915			278	0.7				
AL02A	HZ	232	337	EP		1830	1.951	0.80							0.9
AL03A	HZ	238	351	EP	D	1830	2.418	0.45							0.9
THE	HZ	248	58	EP		1830	4.407	1.24							0.9
THE	HZ	248	58	IAML		1831	5.281			119	0.7				
PLG	HZ	272	68	EP		1830	6.273	-0.12							0.9
ITM	HZ	286	153	EP		1830	8.940	0.77							0.8
KKS	HZ	287	359	EP		1830	8.273	0.01							0.8
SDA	HZ	296	344	EP		1830	8.606	-0.76							0.8
SDA	HZ	296	344	IAML		1831	7.618			61	1.1				

PRZK	HZ	303	4	EP		1830	0.718	0.35						0.8
NOCI	HZ	324	297	EP		1830	1.607	-1.45						0.8
PDG	HZ	342	343	EP		1830	4.496	-0.79						0.8
PDG	HZ	342	343	IAML		1831	7.505		135	0.5				
PVY	HZ	347	353	EP		1830	6.052	-0.09						0.8
PEJK	HZ	351	357	EP		1830	6.497	0.03						0.8
NVR	HZ	354	53	EP		1830	7.052	0.15						0.8
GMRK	HZ	357	10	EP		1830	7.163	-0.22						0.8
ME05AHZ		369	334	EP		1830	6.497	-2.24						0.8
BOSS	SZ	374	26	EP		1830	9.386	-0.03						0.8
ME01AHZ		376	353	EP		1831	0.053	0.32						0.8
BARS	BZ	386	17	EP		1831	0.720	-0.27						0.8
NKME	HZ	386	341	EP		1830	9.742	-1.22						0.8
MRVN	HZ	403	297	EP		1831	1.622	-1.60						0.7

November 8 2023 Hour: 11:49 38.7 Lat: 39.23N Lon: 20.59E D: 14.1 Ag: TIR Local Magnitudes: 3.6ML TIR 3.8MW TIR Rms: 0.6 secs
59 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	41	327	EP	C	1149	5.292	-1.00							1.0
IGT	HZ	41	327	IAML		1149	5.545			3093	0.4				
LKD2	HZ	49	173	EP	D	1149	7.589	-0.07							1.0
LKD2	HE	49	173	ES		1149	4.996	0.10							1.0
KEK	HZ	87	309	EP	C	1149	4.362	0.38							1.0
KEK	HE	87	309	ES		1150	6.856	0.52							1.0
KEK	HZ	87	309	IAML		1150	5.486			921	0.4				
VLS	HZ	117	180	EP	C	1149	8.318	-0.57							1.0
VLS	HE	117	180	ES		1150	5.737	0.52							1.0
AL06AHZ		120	323	EP	C	1149	9.756	0.38							1.0
AL06AHE		120	323	ES		1150	6.405	0.30							1.0
THL	HE	128	73	ES		1150	9.140	0.48							1.0
TPE	HZ	128	338	EP	C	1150	0.852	-0.02							1.0
TPE	HE	128	338	ES		1150	9.045	0.24							1.0
TPE	HZ	128	338	IAML		1150	4.953			492	0.6				
THL	HZ	128	73	EP	C	1150	0.140	-0.65							1.0
NEST	HZ	138	16	EP	D	1150	1.678	-0.75							1.0
NEST	HE	138	16	ES		1150	1.514	-0.12							1.0
NEST	HZ	138	16	IAML		1150	9.055			279	0.9				
KBN	HE	156	6	ES		1150	7.112	-0.04							1.0
KZN	HZ	157	40	EP		1150	5.990	0.38							1.0
KZN	HN	157	40	ES		1150	7.409	0.03							1.0
VLO	HZ	167	326	EP		1150	7.234	0.20							0.9
VLO	HZ	167	326	IAML		1150	1.339			312	0.7				
BERA	HE	173	342	ES		1150	1.543	0.19							0.9
AL07AHZ		186	2	EP		1150	9.901	0.34							0.9
BPA2	HZ	187	334	EP		1150	0.394	0.85							0.9
SCTE	HZ	205	298	EP		1150	1.296	-0.66							0.9
AL08AHZ		213	349	EP		1150	3.261	0.33							0.9
AL04AHZ		216	336	EP		1150	3.936	0.55							0.9
TIR	HZ	244	346	EP		1150	7.289	0.41							0.9
TIR	HN	244	346	ES		1150	7.849	0.07							0.9
TIR	HZ	244	346	IAML		1151	5.202			50	1.0				
THE	HZ	256	52	EP		1150	8.729	0.29							0.9
ITM	HZ	256	152	EP		1150	8.729	0.28							0.9
AL03AHZ		268	349	EP		1150	0.078	-0.01							0.9
PLG	HZ	275	62	EP		1150	1.272	0.26							0.8
KKS	HZ	316	357	EP		1150	5.710	-0.55							0.8
SDA	HZ	327	344	EP		1150	6.608	-0.93							0.8
NVR	HZ	365	49	EP		1150	2.147	-0.30							0.8
PVY	HZ	378	352	EP		1150	4.059	-0.17							0.8
BOSS	SZ	396	23	EP		1150	5.748	-0.74							0.7
BARS	BZ	412	14	EP		1150	7.412	-1.05							0.7
NKME	HZ	417	341	EP		1150	8.167	-0.97							0.7
MRVN	HZ	426	300	EP		1150	9.585	-0.79							0.7

ME02A	HZ	453	345	EP		1150	3.073	-0.88						0.7
SGRT	HZ	498	306	EP		1150	8.803	-0.76						0.7
IGT	HE			ES		1149	2.368							
KBN	HZ	156	6	EP		1150	6.817	1.33						1.0
BERA	HZ	173	342	EP	D	1150	8.388	0.58						0.9
BERA	HZ			IAML		1150	5.825			271	0.8			

November 9 2023 Hour: 8:46 47.8 Lat: 39.70N Lon: 20.61E D: 18.0 Ag: TIR Local
Magnitudes: 2.6ML TIR Rms: 0.3 secs
37 km E of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KEK	HZ	70	272	EP		0847	0.168	-0.12							1.0
KEK	HN	70	272	ES		0847	0.234	-0.18							1.0
KEK	HZ	70	272	IAML		0847	3.387			229	0.6				
TPE	HZ	84	323	EP		0847	2.953	0.38							1.0
TPE	HE	84	323	ES		0847	4.417	-0.13							1.0
TPE	HZ	84	323	IAML		0847	9.804			93	0.7				
AL06A	HZ	85	301	EP		0847	2.509	-0.29							1.0
LKD2	HZ	101	178	EP		0847	5.561	0.18							1.0
LKD2	HE	101	178	ES		0847	9.732	0.10							1.0
KBN	HZ	104	8	EP		0847	5.944	-0.00							1.0
KBN	HN	104	8	ES		0847	0.701	0.05							1.0
KBN	HZ	104	8	IAML		0847	5.112			21	0.8				
AL05A	HZ	114	350	EP		0847	6.751	-0.78							1.0
AL05A	HN	114	350	ES		0847	3.486	-0.03							1.0
KZN	HZ	120	55	EP		0847	9.042	0.48							1.0
KZN	HE	120	55	ES		0847	5.101	-0.28							1.0
THL	HZ	121	96	EP		0847	9.298	0.58							1.0
THL	HE	121	96	ES		0847	5.120	-0.55							1.0
BERA	HZ	125	333	EP		0847	9.596	0.16							1.0
BERA	HE	125	333	ES		0847	7.245	0.28							1.0
BERA	HZ	125	333	IAML		0847	5.183			62	0.4				
AL08A	HZ	162	345	EP		0847	5.562	0.43							0.9
AL08A	HE	162	345	ES		0847	7.198	-0.07							0.9
VLS	HZ	169	181	EP		0847	6.121	0.18							0.9
VLS	HE	169	181	ES		0847	8.392	-0.35							0.9

November 9 2023 Hour: 16:25 46.1 Lat: 39.58N Lon: 19.66E D: 13.2 Ag: TIR Local
Magnitudes: 3.8ML TIR 3.8MW TIR Rms: 0.5 secs
43 km SW of Sarande

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KEK	HZ	18	39	EP	D	1625	9.873	-0.20							1.0
KEK	HN	18	39	ES		1625	2.539	-0.79							1.0
AL06A	HZ	57	8	EP	C	1625	5.727	-0.48							1.0
AL06A	HN	57	8	ES		1626	4.475	0.05							1.0
IGT	HZ	58	96	EP	C	1625	6.237	-0.19							1.0
IGT	HE	58	96	ES		1626	5.018	0.18							1.0
IGT	HZ	58	96	IAML		1626	5.808			5170	0.3				
TPE	HZ	84	21	EP	D	1626	0.172	-0.67							1.0
TPE	HN	84	21	ES		1626	2.964	0.15							1.0
TPE	HZ	84	21	IAML		1626	3.758			1583	0.4				
VLO	HZ	99	352	IAML		1626	3.900			1546	0.3				
LSK	HZ	102	52	EP	C	1626	2.812	-0.96							1.0
LSK	HN	102	52	ES		1626	8.098	-0.03							1.0
LSK	HZ	102	52	IAML		1626	5.830			922	0.4				
SCTE	HZ	116	298	EP		1626	6.989	0.92							1.0
LKD2	HZ	123	136	EP		1626	8.295	0.96							1.0
LKD2	HE	123	136	ES		1626	4.241	-0.34							1.0
BERA	HZ	126	11	EP	D	1626	8.358	0.51							1.0
BERA	HE	126	11	ES		1626	5.525	0.03							1.0
BERA	HZ	126	11	IAML		1626	8.671			2220	0.2				
BPA2	HZ	127	358	EP		1626	8.568	0.61							1.0
AL05A	HZ	139	26	EP		1626	0.180	0.22							1.0
AL05A	HN	139	26	ES		1626	9.536	0.20							1.0

NEST	HZ	150	52	EP		1626	1.826	0.01						1.0
NEST	HE	150	52	ES		1626	2.756	0.06						1.0
NEST	HZ	150	52	IAML		1626	8.306			544	0.3			
KBN	HZ	150	39	EP		1626	2.194	0.39						1.0
KBN	HN	150	39	ES		1626	2.884	0.22						1.0
KBN	HZ	150	39	IAML		1626	2.183			257	0.9			
AL04A	HZ	158	357	EP		1626	4.007	0.88						0.9
AL04A	HE	158	357	ES		1626	5.191	0.14						0.9
AL07A	HZ	170	30	EP		1626	5.242	0.35						0.9
AL07A	HN	170	30	ES		1626	7.885	-0.37						0.9
AL08A	HZ	173	12	EP		1626	5.386	0.15						0.9
VLS	HZ	176	152	EP	D	1626	4.873	-0.75						0.9
TIR	HZ	196	5	EP		1626	8.410	0.15						0.9
TIR	HN	196	5	ES		1626	4.776	0.42						0.9
TIR	HZ	196	5	IAML		1626	7.666			135	0.6			
KZN	HZ	197	65	EP		1626	9.019	0.58						0.9
KZN	HN	197	65	ES		1626	4.742	0.08						0.9
THL	HZ	202	90	EP		1626	9.480	0.52						0.9
THL	HN	202	90	ES		1626	6.437	0.82						0.9
AL02A	HZ	204	354	EP		1626	9.778	0.61						0.9
AL03A	HZ	226	7	EP		1626	1.408	-0.63						0.9
SDA	HZ	274	357	EP		1626	7.210	-0.98						0.8
KKS	HZ	283	12	EP		1626	9.180	-0.23						0.8
PRZK	HZ	306	17	EP		1626	1.699	-0.65						0.8
PDG	HZ	318	354	EP		1626	2.917	-0.87						0.8
PDG	HZ	318	354	IAML		1627	0.731			63	0.3			
ITM	HZ	332	143	EP		1626	5.501	-0.19						0.8
MRVN	HZ	337	300	EP		1626	5.610	-0.74						0.8
PEJK	HZ	343	8	EP		1626	6.928	-0.26						0.8
NKME	HZ	358	351	EP		1626	8.666	-0.41						0.8
GMRK	HZ	366	20	EP		1626	9.482	-0.56						0.8

November 9 2023 Hour: 19:51 21.3 Lat: 38.91N Lon: 21.16E D: 10.5 Ag: TIR Local
Magnitudes: 2.6ML TIR 3.3MW TIR Rms: 0.4 secs
118 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	45	253	EP		1951	9.807	0.22							1.0
LKD2	HN	45	253	ES		1951	6.975	0.64							1.0
VLS	HZ	95	212	EP		1951	7.340	-0.51							1.0
VLS	HN	95	212	ES		1951	0.606	-0.68							1.0
IGT	HZ	100	315	EP		1951	8.791	0.19							1.0
IGT	HE	100	315	ES		1951	2.776	0.13							1.0
THL	HZ	104	45	EP		1951	9.787	0.46							1.0
THL	HE	104	45	ES		1951	3.685	-0.28							1.0
LSK	HZ	146	341	EP		1951	6.353	-0.06							1.0
LSK	HE	146	341	ES		1952	6.640	-0.14							1.0
LSK	HZ	146	341	IAML		1952	7.525			53	0.4				
KEK	HZ	147	308	EP		1951	6.687	0.10							1.0
KEK	HN	147	308	ES		1952	6.614	-0.49							1.0
KEK	HZ	147	308	IAML		1952	0.660			73	0.2				
KZN	HZ	164	19	EP		1951	9.256	-0.15							0.9
NEST	HZ	168	357	EP		1951	9.859	-0.15							0.9
NEST	HZ	168	357	IAML		1952	1.143			25	0.4				
AL06A	HZ	178	318	EP		1951	1.287	-0.12							0.9
AL06A	HN	178	318	ES		1952	5.837	0.01							0.9
TPE	HZ	183	328	EP		1951	2.185	0.18							0.9
TPE	HZ	183	328	IAML		1952	5.603			26	0.5				
ITM	HZ	203	160	EP		1951	5.370	0.69							0.9

November 10 2023 Hour: 21:22 25.6 Lat: 41.15N Lon: 20.31E D: 9.7 Ag: TIR Local
Magnitudes: 2.6ML TIR 2.8MW TIR Rms: 0.4 secs
4 km S of Librazhd

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL08A	HZ	18	256	EP		2122	9.347	0.06							1.0
AL08A	HN	18	256	ES		2122	2.212	-0.06							1.0
AL07A	HZ	41	131	EP		2122	3.501	0.31							1.0
AL07A	HN	41	131	ES		2122	9.618	0.28							1.0
TIR	HZ	44	301	EP		2122	3.466	-0.12							1.0
TIR	HN	44	301	ES		2122	0.070	0.01							1.0
TIR	HZ	44	301	IAML		2122	3.336			163	0.1				
AL05A	HZ	49	172	EP		2122	4.303	-0.29							1.0
AL05A	HE	49	172	ES		2122	1.647	-0.23							1.0
AL03A	HZ	57	333	EP		2122	5.993	0.11							1.0
BERA	HZ	58	212	EP		2122	5.669	-0.36							1.0
BERA	HZ	58	212	IAML		2122	4.351			197	0.2				
PHP	HZ	61	10	EP		2122	6.695	0.12							1.0
PHP	HE	61	10	ES		2122	5.448	-0.02							1.0
PHP	HZ	61	10	IAML		2122	7.409			145	0.3				
AL04A	HZ	65	257	EP		2122	8.005	0.81							1.0
KBN	HZ	70	145	EP		2122	8.429	0.25							1.0
KBN	HE	70	145	ES		2122	8.485	0.11							1.0
BPA2	HZ	74	232	EP		2122	8.640	-0.14							1.0
BPA2	HN	74	232	ES		2122	9.988	0.54							1.0
AL02A	HZ	82	291	EP		2122	0.573	0.51							1.0
TPE	HZ	98	195	EP		2122	2.976	0.29							1.0
TPE	HZ	98	195	IAML		2123	3.033			90	0.6				
NEST	HZ	102	142	EP		2122	3.832	0.34							1.0
NEST	HE	102	142	ES		2122	8.012	0.02							1.0
NEST	HZ	102	142	IAML		2123	1.332			70	0.4				
KKS	HZ	103	4	EP		2122	3.695	0.07							1.0
KKS	HN	103	4	ES		2122	8.275	0.04							1.0
LSK	HZ	113	168	EP		2122	4.609	-0.70							1.0
LSK	HN	113	168	ES		2123	0.995	-0.28							1.0
LSK	HZ	113	168	IAML		2123	8.181			84	0.7				
SDA	HZ	121	326	EP		2122	6.255	-0.32							1.0
SDA	HN	121	326	ES		2123	3.638	0.07							1.0
SRN	HZ	143	191	EP		2122	0.828	0.62							1.0
SRN	HZ	143	191	IAML		2123	8.075			46	0.7				
AL01A	HZ	148	335	EP		2122	0.688	-0.39							1.0
KZN	HZ	155	127	EP		2122	2.006	-0.19							1.0
PVY	HZ	164	350	EP		2122	3.155	-0.58							0.9
KEK	HZ	165	195	EP		2122	3.942	0.06							0.9
KEK	HN	165	195	ES		2123	5.652	-1.14							0.9
KEK	HZ	165	195	IAML		2123	7.783			60					
PEJK	HZ	166	359	EP		2122	4.392	0.23							0.9
PDG	HZ	167	329	EP		2122	3.502	-0.76							0.9
PDG	HZ	167	329	IAML		2123	1.636			45	0.4				
IGT	HZ	179	179	EP		2122	6.503	0.52							0.9
IGT	HZ	179	179	IAML		2123	9.052			19	0.2				
NKME	HZ	212	328	EP		2123	0.306	-0.00							0.9

November 13 2023 Hour: 8:30 55.2 Lat: 38.89N Lon: 20.59E D: 0.9 Ag: TIR Local
Magnitudes: 2.5ML TIR Rms: 0.5 secs
93 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
VLS	HZ	79	180	EP		0831	9.215	-0.02							1.0
VLS	HE	79	180	ES		0831	0.620	0.01							1.0
KEK	HZ	115	323	EP		0831	5.791	0.12							1.0
KEK	HE	115	323	ES		0831	2.829	0.57							1.0
KEK	HZ	115	323	IAML		0831	4.518			51	0.5				
THL	HZ	144	58	EP		0831	9.609	-0.91							1.0
THL	HE	144	58	ES		0831	1.678	0.64							1.0

AL06AHZ		152	332	EP		0831	1.993	0.15						1.0
AL06AHE		152	332	ES		0831	3.018	-0.42						1.0
TPE	HZ	164	343	EP		0831	4.179	0.26						0.9
TPE	HE	164	343	ES		0831	6.802	-0.38						0.9
TPE	HZ	164	343	IAML		0831	4.914			21	0.8			
ITM	HZ	223	148	EP		0831	1.523	-0.73						0.9
ITM	HN	223	148	ES		0832	2.922	0.64						0.9

November 13 2023 Hour: 10:52 9.7 Lat: 38.93N Lon: 20.58E D: 12.1 Ag: TIR Local
Magnitudes: 2.6ML TIR Rms: 0.4 secs
88 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	16	158	EP		1052	3.608	0.20							1.0
LKD2	HN	16	158	ES		1052	6.649	0.26							1.0
IGT	HZ	71	342	EP		1052	1.256	-1.01							0.5
IGT	HN	71	342	ES		1052	2.567	0.16							1.0
IGT	HZ	71	342	IAML		1052	3.224			113	0.4				
VLS	HZ	83	180	EP		1052	4.267	-0.05							1.0
VLS	HE	83	180	ES		1052	6.064	-0.06							1.0
KEK	HZ	111	322	EP		1052	8.427	-0.47							1.0
KEK	HN	111	322	ES		1052	5.007	0.59							1.0
KEK	HZ	111	322	IAML		1052	7.122			119	0.6				
SRN	HZ	117	335	EP		1052	0.354	0.36							1.0
SRN	HE	117	335	ES		1052	6.255	-0.14							1.0
SRN	HZ	117	335	IAML		1052	8.349			23	0.3				
THL	HZ	142	60	EP		1052	3.637	-0.53							1.0
THL	HN	142	60	ES		1052	3.771	-0.18							1.0
AL06AHZ		147	331	EP		1052	4.875	-0.15							1.0
AL06AHN		147	331	ES		1052	5.324	-0.18							1.0
TPE	HZ	160	342	EP		1052	7.025	-0.04							0.9
TPE	HN	160	342	ES		1052	9.450	0.25							0.9
TPE	HZ	160	342	IAML		1053	7.005			41	0.6				
NEST	HZ	170	13	EP		1052	8.620	-0.16							0.9
NEST	HN	170	13	ES		1053	2.619	0.32							0.9
NEST	HZ	170	13	IAML		1053	5.374			34	0.6				
KZN	HZ	184	33	EP		1052	0.589	0.04							0.9
KZN	HE	184	33	ES		1053	5.979	0.46							0.9
AL05AHZ		198	355	EP		1052	2.937	0.60							0.9
AL05AHN		198	355	ES		1053	8.046	-0.69							0.9
BERA	HZ	205	345	EP		1052	2.942	-0.16							0.9
BERA	HN	205	345	ES		1053	0.495	0.37							0.9
SCTE	HZ	222	306	EP		1052	4.648	-0.71							0.9
ITM	HZ	227	148	EP		1052	6.076	0.10							0.9

November 17 2023 Hour: 19: 1 34.8 Lat: 41.18N Lon: 20.32E D: 3.2 Ag: TIR Local
Magnitudes: 2.7ML TIR 3.0MW TIR Rms: 0.5 secs
0 km S of Librazhd

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL08AHZ		20	247	EP		1901	8.257	-0.24							1.0
AL08AHN		20	247	ES		1901	0.993	-0.48							1.0
TIR	HZ	43	296	EP		1901	2.450	-0.06							1.0
TIR	HN	43	296	ES		1901	9.376	0.65							1.0
TIR	HZ	43	296	IAML		1901	1.754			121	0.4				
AL07AHZ		43	136	EP		1901	3.152	0.62							1.0
AL07AHN		43	136	ES		1901	9.221	0.45							1.0
AL05AHZ		53	174	EP		1901	3.894	-0.38							1.0
AL05AHN		53	174	ES		1901	1.078	-0.85							1.0
AL03AHZ		54	330	EP		1901	4.880	0.36							1.0
AL03AHN		54	330	ES		1901	2.789	0.42							1.0
BERA	HZ	61	211	EP		1901	5.239	-0.58							1.0
BERA	HN	61	211	ES		1901	4.407	-0.32							1.0
BERA	HZ	61	211	IAML		1901	5.541			170	0.1				
AL04AHZ		67	254	EP		1901	7.560	0.79							1.0
KBN	HZ	73	147	EP		1901	7.534	-0.33							1.0

KBN	HN	73	147	ES		1901	8.631	0.21					1.0
BPA2	HZ	77	230	EP		1901	8.415	-0.26					1.0
AL02A	HZ	82	289	EP		1901	0.580	1.13					1.0
KKS	HZ	100	4	EP		1901	2.604	-0.04					1.0
KKS	HN	100	4	ES		1902	6.709	-0.35					1.0
TPE	HZ	101	195	EP		1901	3.385	0.43					1.0
TPE	HZ	101	195	IAML		1902	6.648		112	1.0			
NEST	HZ	105	144	EP		1901	3.196	-0.31					1.0
VLO	HZ	105	222	IAML		1902	9.404		137	0.5			
NEST	HZ	105	144	IAML		1902	5.057		72	0.4			
VLO	HZ	105	222	EP		1901	3.252	-0.34					1.0
SDA	HZ	119	325	EP		1901	4.867	-0.97					1.0
SDA	HN	119	325	ES		1902	3.152	0.30					1.0
AL06A	HZ	130	202	EP		1901	8.247	0.52					1.0
AL06A	HE	130	202	ES		1902	6.486	0.22					1.0
SRN	HZ	147	191	EP		1902	1.311	0.82					1.0
SRN	HN	147	191	ES		1902	2.011	0.74					1.0
SRN	HZ	147	191	IAML		1902	8.035		36	0.1			
KZN	HZ	156	128	EP		1902	2.425	0.35					1.0
KZN	HN	156	128	ES		1902	3.843	-0.30					1.0
PVY	HZ	160	349	EP		1902	2.124	-0.71					0.9
PVY	HN	160	349	ES		1902	4.666	-0.85					0.9
PEJK	HZ	163	359	EP		1902	3.508	0.29					0.9
PDG	HZ	165	328	EP		1902	2.634	-0.87					0.9
PDG	HN	165	328	ES		1902	6.765	0.04					0.9
PDG	HZ	165	328	IAML		1902	2.133		45	0.5			
KEK	HZ	169	195	EP		1902	3.812	-0.35					0.9
KEK	HZ	169	195	IAML		1902	7.292		53	0.9			
KEK	HN	169	195	ES		1902	7.313	-0.61					0.9
GMRK	HZ	181	24	EP		1902	5.855	-0.34					0.9
ME01A	HZ	189	349	EP		1902	7.765	0.41					0.9
SCTE	HZ	199	233	EP		1902	8.071	-0.54					0.9
ME05A	HZ	207	314	EP		1902	9.863	0.23					0.9
NKME	HZ	210	328	EP		1902	9.959	-0.08					0.9
BARS	BZ	220	34	EP		1902	1.980	0.69					0.9
THL	HZ	230	141	EP		1902	2.991	0.51					0.9

November 18 2023 Hour: 9:21 24.2 Lat: 42.92N Lon: 18.79E D: 2.0F Ag: TIR Local Magnitudes: 3.6ML TIR 3.7MW TIR Rms: 0.4 secs
94 km NW of Koplik

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NKME	HZ	21	142	EP	C	0921	8.798	0.83							0.0
ME02A	HE	38	45	ES		0921	6.642	0.22							1.0
ME05A	HN	56	205	ES		0921	2.211	-0.01							1.0
PDG	HZ	66	145	EP	C	0921	5.076	-0.93							1.0
PDG	HN	66	145	ES		0921	5.359	-0.23							1.0
PDG	HZ	66	145	IAML		0921	7.895		1588	0.4					
ME03A	HZ	67	43	EP		0921	6.035	-0.04							1.0
ME03A	HE	67	43	ES		0921	5.662	-0.05							1.0
ME01A	HZ	89	95	EP		0921	9.944	-0.16							1.0
ME01A	HE	89	95	ES		0921	2.712	-0.29							1.0
PVY	HZ	102	110	EP	C	0921	2.390	0.02							1.0
PVY	HN	102	110	ES		0921	6.797	-0.31							1.0
SJES	BZ	103	68	EP		0921	2.357	-0.29							1.0
SDA	HZ	112	149	EP		0921	4.044	-0.14							1.0
SDA	HN	112	149	ES		0922	0.292	-0.10							1.0
KKS	HZ	162	125	EP	C	0921	2.342	-0.14							0.9
KKS	HN	162	125	ES		0922	5.513	0.11							0.9
AL02A	HZ	175	163	EP		0921	4.543	-0.03							0.9
AL02A	HE	175	163	ES		0922	9.419	0.23							0.9
AL03A	HZ	177	145	EP	D	0921	4.267	-0.70							0.9
AL03A	HN	177	145	ES		0922	9.773	-0.13							0.9
TIR	HZ	195	153	EP		0921	7.590	-0.01							0.9
TIR	HN	195	153	ES		0922	4.981	0.30							0.9

TIR	HZ	195	153	IAML		0922	7.571			154	0.8			
GMRK	HZ	201	97	EP		0921	8.352	-0.01						0.9
AL04A	HZ	221	163	EP		0922	0.957	0.04						0.9
AL08A	HZ	228	151	EP		0922	1.903	0.05						0.9
BLY	HZ	241	328	EP		0922	3.449	-0.05						0.9
BLY	HN	241	328	ES		0922	5.128	-0.22						0.9
BARS	BZ	247	92	EP	C	0922	4.310	0.05						0.9
BERA	HZ	264	158	EP		0922	6.265	-0.11						0.9
BERA	HN	264	158	ES		0922	1.284	0.74						0.9
BERA	HZ	264	158	IAML		0922	8.077			129	0.6			
NOCI	HZ	276	212	EP		0922	7.919	-0.10						0.8
SGRT	HZ	283	244	EP		0922	8.861	-0.00						0.8
KBN	HZ	304	146	EP		0922	1.818	0.25						0.8
BOSS	SZ	304	98	EP		0922	1.544	-0.05						0.8
TPE	HZ	308	160	EP		0922	2.274	0.18						0.8
TPE	HZ	308	160	IAML		0923	7.380			120	0.7			
NEST	HZ	335	145	EP		0922	5.629	-0.01						0.8
NEST	HZ	335	145	IAML		0923	3.847			71	1.0			
SRN	HZ	352	163	EP		0922	7.657	0.01						0.8
SRN	HZ	352	163	IAML		0923	4.054			48	0.3			
KEK	HZ	365	166	EP		0922	9.262	-0.16						0.8
KEK	HZ	365	166	IAML		0923	7.654			79	1.2			
IGT	HZ	397	161	EP		0922	3.370	-0.12						0.7
IGT	HN	397	161	ES		0923	1.937	0.40						0.7
IGT	HZ	397	161	IAML		0923	7.614			47	0.8			
NVR	HZ	454	111	EP		0922	0.937	0.14						0.7
THL	HZ	460	143	EP		0922	1.620	0.15						0.7
NKME	HN			ES		0921	1.063							
ME02A	HZ			EP	D	0921	1.019							
ME05A	HZ			EP	D	0921	4.319							
AL05A	HZ	279	151	EP		0922	8.412	0.04						0.8
AL05A	HN			ES		0922	4.425							
TPE	HN			ES		0922	1.098							

November 20 2023 Hour: 8:16 41.7 Lat: 42.89N Lon: 18.86E D: 8.1 Ag: TIR Local
Magnitudes: 2.8ML TIR 2.3MW TIR Rms: 0.5 secs
89 km NW of Koplik

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NKME	HZ	16	153	EP		0816	5.093	0.20							1.0
NKME	HN	16	153	ES		0816	8.299	0.80							1.0
ME02A	HZ	36	36	EP		0816	8.193	-0.12							1.0
ME02A	HN	36	36	ES		0816	3.618	-0.07							1.0
ME05A	HZ	56	211	EP		0816	0.871	-0.97							1.0
ME05A	HN	56	211	ES		0817	0.253	0.19							1.0
PDG	HZ	61	148	EP		0816	1.602	-1.04							1.0
PDG	HN	61	148	ES		0817	0.763	-0.75							1.0
PDG	HZ	61	148	IAML		0817	3.775				258	0.4			
ME03A	HZ	65	38	EP		0816	3.859	0.52							1.0
ME03A	HN	65	38	ES		0817	2.823	0.04							1.0
ME01A	HZ	83	93	EP		0816	6.611	0.13							1.0
ME01A	HN	83	93	ES		0817	8.366	-0.10							1.0
PVY	HZ	96	110	EP		0816	8.717	0.15							1.0
PVY	HN	96	110	ES		0817	2.440	0.19							1.0
SJES	BZ	99	65	EP		0816	9.162	-0.00							1.0
SJES	BN	99	65	ES		0817	3.127	-0.20							1.0
SJES	BZ	99	65	IAML		0817	6.864				508	0.6			
SDA	HZ	107	151	EP		0817	0.036	-0.41							1.0
SDA	HN	107	151	ES		0817	5.705	0.06							1.0
PEJK	HZ	119	103	EP		0817	2.796	0.34							1.0
PEJK	HN	119	103	ES		0817	8.348	-0.94							1.0
KKS	HZ	156	125	EP		0817	8.754	0.20							1.0
KKS	HE	156	125	ES		0817	0.529	0.21							1.0
AL03A	HZ	171	146	EP		0817	1.286	0.10							0.9
AL02A	HN	171	165	ES		0817	5.010	0.24							0.9

AL03AHE		171	146	ES		0817	5.933	0.86						0.9
AL02AHZ		171	165	EP		0817	1.679	0.67						0.9
TIR	HZ	191	154	EP		0817	3.239	-0.49						0.9
TIR	HN	191	154	ES		0817	9.617	-0.07						0.9
TIR	HZ	191	154	IAML		0817	8.270			22	0.3			
GMRK	HZ	194	97	EP		0817	4.948	0.62						0.9
GMRK	HN	194	97	ES		0817	0.727	-0.05						0.9
BARS	BZ	241	91	EP		0817	9.715	-0.54						0.9
BLY	HZ	247	327	EP		0817	1.422	0.50						0.9
NOCI	HZ	277	213	EP		0817	4.462	-0.44						0.8
BOSS	SZ	298	97	EP		0817	7.631	0.07						0.8
LSK	HZ	337	154	EP		0817	3.008	0.38						0.8
LSK	HZ	337	154	IAML		0818	0.376			10	0.6			

November 21 2023 Hour: 14: 1 57.5 Lat: 41.86N Lon: 19.67E D: 24.9 Ag: TIR Local Magnitudes: 3.4ML TIR 3.6MW TIR Rms: 0.5 secs
9 km N of Lezhe

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SDA	HZ	25	326	EP	D	1402	3.242	-0.28							1.0
SDA	HE	25	326	ES		1402	7.793	-0.64							1.0
SDA	HZ	25	326	IAML		1402	8.468			1769	0.1				
AL03AHZ		40	136	EP	D	1402	5.801	0.19							1.0
AL03AHN		40	136	ES		1402	1.730	-0.47							1.0
AL02AHZ		56	204	EP		1402	8.511	0.66							1.0
TIR	HZ	60	164	EP	C	1402	8.185	-0.32							1.0
TIR	HN	60	164	ES		1402	7.631	0.19							1.0
TIR	HZ	60	164	IAML		1402	4.385			684	0.7				
KKS	HZ	65	69	EP	C	1402	9.135	-0.22							1.0
KKS	HN	65	69	ES		1402	9.009	0.03							1.0
PDG	HZ	71	332	EP	C	1402	9.577	-0.76							1.0
PDG	HN	71	332	ES		1402	0.818	0.06							1.0
PDG	HZ	71	332	IAML		1402	3.023			707	0.2				
PVY	HZ	85	16	EP	C	1402	1.983	-0.53							1.0
PVY	HN	85	16	ES		1402	4.761	0.06							1.0
AL08AHZ		92	157	EP		1402	3.163	-0.38							1.0
AL08AHN		92	157	ES		1402	6.999	0.44							1.0
AL04AHZ		96	185	EP		1402	6.299	2.15							1.0
AL04AHN		96	185	ES		1402	6.935	-0.72							1.0
PEJK	HZ	100	30	EP	C	1402	4.383	-0.52							1.0
PEJK	HN	100	30	ES		1402	9.223	0.20							1.0
ME01AHZ		110	9	EP	C	1402	6.448	-0.09							1.0
ME01AHN		110	9	ES		1402	2.261	0.27							1.0
NKME	HZ	116	330	EP		1402	7.050	-0.43							1.0
NKME	HN	116	330	ES		1402	3.609	-0.08							1.0
ME05AHZ		117	305	EP		1402	7.214	-0.23							1.0
ME05AHN		117	305	ES		1402	3.852	0.22							1.0
BERA	HZ	131	170	EP	D	1402	9.956	0.23							1.0
BERA	HN	131	170	ES		1402	7.849	0.10							1.0
BERA	HZ	131	170	IAML		1402	9.173			440	0.5				
AL07AHZ		136	141	EP		1402	1.360	0.75							1.0
AL07AHN		136	141	ES		1402	9.738	0.39							1.0
AL05AHZ		142	155	EP		1402	1.545	0.04							1.0
AL05AHE		142	155	ES		1402	0.789	-0.19							1.0
ME02AHZ		150	343	EP		1402	2.665	-0.05							1.0
ME02AHN		150	343	ES		1402	2.965	-0.20							1.0
GMRK	HZ	155	55	EP	C	1402	4.403	1.11							1.0
GMRK	HE	155	55	ES		1402	4.414	0.21							1.0
VLO	HZ	156	185	EP		1402	3.161	-0.04							1.0
VLO	HN	156	185	ES		1402	3.817	-0.23							1.0
VLO	HZ	156	185	IAML		1402	4.894			379	0.4				
SJES	BZ	157	9	EP	C	1402	3.688	0.14							1.0
SJES	BE	157	9	ES		1402	5.406	0.73							1.0
ME03AHZ		167	351	EP		1402	4.741	-0.03							0.9
ME03AHN		167	351	ES		1402	7.829	0.95							0.9

KBN	HZ	167	145	EP		1402	5.582	0.89						0.9
KBN	HN	167	145	ES		1402	6.341	-0.40						0.9
TPE	HZ	177	170	EP		1402	6.012	0.09						0.9
TPE	HE	177	170	ES		1402	9.071	0.11						0.9
TPE	HZ	177	170	IAML		1403	2.930			316	0.7			
AL06A	HZ	197	178	EP		1402	8.505	-0.05						0.9
AL06A	HN	197	178	ES		1402	2.966	-0.76						0.9
NEST	HZ	198	144	EP		1402	9.782	1.00						0.9
NEST	HN	198	144	ES		1402	4.224	0.08						0.9
NEST	HZ	198	144	IAML		1403	2.779			151	0.6			
LSK	HZ	206	157	IAML		1403	7.290			138	0.8			
BARS	BN	206	58	ES		1402	5.330	-0.48						0.9
LSK	HZ	206	157	EP		1402	0.317	0.58						0.9
LSK	HN	206	157	ES		1402	5.564	-0.30						0.9
BARS	BZ	206	58	EP	C	1402	0.261	0.56						0.9
SRN	HZ	222	173	EP		1402	1.445	-0.26						0.9
SRN	HZ	222	173	IAML		1403	6.605			99	0.5			
KEK	HZ	239	177	EP		1402	3.141	-0.78						0.9
KEK	HZ	239	177	IAML		1403	4.559			171	1.0			
BOSS	SZ	241	72	EP		1402	4.220	-0.02						0.9
BOSS	SN	241	72	ES		1403	3.375	-0.65						0.9
KZN	HZ	247	134	EP		1402	5.361	0.33						0.9
KZN	HN	247	134	ES		1403	4.929	-0.52						0.9
IGT	HZ	265	168	EP		1402	7.100	-0.13						0.9
IGT	HZ	265	168	IAML		1403	5.134			74	0.6			
THE	HZ	308	115	EP		1402	2.622	-0.13						0.8
THL	HZ	323	141	EP		1402	4.512	-0.16						0.8
SGRT	HZ	327	269	EP		1402	2.815	-2.41						0.0
LKD2	HZ	352	166	EP		1402	7.086	-1.29						0.8
NVR	HZ	354	98	EP		1402	8.596	-0.15						0.8
PLG	HZ	358	116	EP		1402	9.144	-0.00						0.8
PLG	HN	358	116	ES		1403	9.766	-1.24						0.8
VLS	HZ	417	169	EP		1402	4.186	-2.53						0.0
BZS	HZ	446	20	EP		1403	0.132	-0.37						0.7
RDO	HZ	496	97	EP		1403	7.010	0.18						0.7
KIRK	HZ	617	88	EP		1403	1.708	-0.07						0.6

November 22 2023 Hour: 15:43 24.6 Lat: 41.04N Lon: 21.17E D: 8.9 Ag: TIR Local Magnitudes: 2.6ML TIR 2.7MW TIR Rms: 0.4 secs
35 km NE of Pustec

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL07A	HZ	44	250	EP		1543	2.182	-0.45							1.0
AL07A	HN	44	250	ES		1543	9.614	0.47							1.0
KBN	HZ	56	215	EP		1543	5.086	0.34							1.0
KBN	HE	56	215	ES		1543	2.787	-0.19							1.0
AL05A	HZ	75	241	EP		1543	8.375	0.39							1.0
AL05A	HN	75	241	ES		1543	9.042	0.20							1.0
AL08A	HZ	90	275	EP		1543	0.371	-0.06							1.0
AL08A	HN	90	275	ES		1543	2.964	-0.31							1.0
PHP	HZ	94	320	EP		1543	0.303	-0.88							1.0
PHP	HE	94	320	ES		1543	4.998	0.37							1.0
PHP	HZ	94	320	IAML		1543	8.685			64	0.5				
KZN	HZ	96	148	EP		1543	1.876	0.43							1.0
KZN	HN	96	148	ES		1543	4.545	-0.54							1.0
BERA	HZ	109	251	EP		1543	3.949	0.30							1.0
LSK	HZ	110	206	EP		1543	3.781	0.01							1.0
LSK	HE	110	206	ES		1543	9.099	-0.21							1.0
LSK	HZ	110	206	IAML		1544	6.468			69	0.6				
AL03A	HZ	116	303	EP		1543	4.857	0.08							1.0
AL03A	HE	116	303	ES		1544	0.921	-0.21							1.0
TPE	HZ	128	230	EP		1543	6.977	0.25							1.0
TPE	HE	128	230	ES		1544	4.693	0.04							1.0
KKS	HZ	132	331	EP		1543	7.010	-0.39							1.0
KKS	HN	132	331	ES		1544	6.059	0.18							1.0

PRZK	HZ	135	345	EP		1543	7.755	-0.19							1.0
PRZK	HN	135	345	ES		1544	6.521	-0.33							1.0
SRN	HZ	162	218	EP		1543	2.144	-0.33							0.9
SRN	HE	162	218	ES		1544	4.803	-0.25							0.9
THL	HZ	179	156	EP		1543	4.364	-0.62							0.9
SDA	HZ	179	309	EP		1543	5.617	0.58							0.9
SDA	HN	179	309	ES		1544	9.769	0.07							0.9
GMRK	HZ	180	1	EP		1543	5.714	0.40							0.9
BOSS	SZ	195	33	EP		1543	7.254	0.13							0.9
PVY	HZ	200	330	EP		1543	8.085	0.19							0.9
BARS	BZ	205	15	EP		1543	7.929	-0.45							0.9
PLG	HZ	206	110	EP		1543	9.666	1.12							0.9

November 24 2023 Hour: 10:10 40.1 Lat: 41.03N Lon: 21.18E D: 12.6 Ag: TIR Local
Magnitudes: 2.6ML TIR 2.6MW TIR Rms: 0.4 secs
36 km NE of Pustec

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KBN	HZ	56	217	EP		1010	9.683	-0.57							1.0
KBN	HE	56	217	ES		1010	8.586	0.11							1.0
NEST	HZ	69	190	EP		1010	1.791	-0.65							1.0
NEST	HN	69	190	ES		1011	2.776	0.34							1.0
AL05AHZ		76	242	EP		1010	3.930	0.41							1.0
AL05AHE		76	242	ES		1011	3.774	-0.62							1.0
AL08AHZ		91	276	EP		1010	6.263	0.20							1.0
AL08AHN		91	276	ES		1011	9.023	0.04							1.0
KZN	HZ	94	148	EP		1010	6.428	-0.18							1.0
KZN	HN	94	148	ES		1011	0.215	0.24							1.0
PHP	HZ	96	320	EP		1010	6.462	-0.34							1.0
PHP	HE	96	320	ES		1011	9.938	-0.40							1.0
PHP	HZ	96	320	IAML		1011	5.427			71	0.5				
LSK	HZ	110	207	EP		1010	8.896	-0.26							1.0
LSK	HN	110	207	ES		1011	4.619	0.03							1.0
LSK	HZ	110	207	IAML		1011	3.294			62	0.6				
BERA	HZ	110	251	EP		1010	9.623	0.40							1.0
BERA	HN	110	251	ES		1011	4.894	0.19							1.0
AL03AHZ		117	303	EP		1011	0.062	-0.36							1.0
AL03AHN		117	303	ES		1011	7.203	0.32							1.0
KKS	HZ	133	331	EP		1011	4.736	1.74							0.2
SRN	HZ	163	219	EP		1011	7.996	0.09							0.9
SRN	HN	163	219	ES		1011	0.561	0.14							0.9
THL	HZ	177	156	EP		1011	9.914	0.00							0.9
THL	HN	177	156	ES		1011	3.405	-0.65							0.9
IGT	HZ	181	204	EP		1011	1.315	0.85							0.9
IGT	HN	181	204	ES		1011	5.065	0.01							0.9
SDA	HN	181	309	ES		1011	4.316	-0.46							0.9
GMRK	HZ	181	1	EP		1011	2.030	1.55							0.2
SDA	HZ	181	309	EP		1011	1.810	1.50							0.2
AL01AHZ		200	318	EP		1011	3.374	0.45							0.9
AL01AHN		200	318	ES		1011	9.695	0.19							0.9
PVY	HZ	201	330	EP		1011	3.525	0.38							0.9
PVY	HN	201	330	ES		1011	9.574	-0.33							0.9
BARS	BZ	205	15	EP		1011	3.845	0.34							0.9

November 24 2023 Hour: 15:26 49.1 Lat: 39.19N Lon: 20.59E D: 15.3 Ag: TIR Local
Magnitudes: 2.7ML TIR Rms: 0.5 secs
62 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	44	330	EP		1526	6.543	-0.69							1.0
IGT	HN	44	330	ES		1527	3.829	-0.02							1.0
IGT	HZ	44	330	IAML		1527	5.286			336	0.5				
LKD2	HZ	45	172	EP		1526	7.521	0.15							1.0
LKD2	HN	45	172	ES		1527	4.464	0.38							1.0
KEK	HZ	90	311	EP		1527	3.888	-0.86							1.0
KEK	HE	90	311	ES		1527	7.955	0.52							1.0

KEK	HZ	90	311	IAML	1527	6.454		176	0.5					
SRN	HZ	92	327	EP	1527	4.225	-0.90							1.0
SRN	HN	92	327	ES	1527	8.204	0.08							1.0
SRN	HZ	92	327	IAML	1527	5.856		64	0.4					
LSK	HZ	107	0	EP	1527	6.880	-0.76							1.0
LSK	HN	107	0	ES	1527	2.830	0.15							1.0
LSK	HZ	107	0	IAML	1527	7.982		113	0.6					
THL	HZ	130	71	EP	1527	1.192	-0.22							1.0
THL	HN	130	71	ES	1527	9.566	0.06							1.0
TPE	HZ	132	338	EP	1527	2.740	0.89							1.0
TPE	HE	132	338	ES	1527	0.923	0.62							1.0
TPE	HZ	132	338	IAML	1527	9.503		49	0.4					
NEST	HZ	142	16	EP	1527	3.617	0.15							1.0
NEST	HE	142	16	ES	1527	3.815	0.58							1.0
NEST	HZ	142	16	IAML	1527	1.104		55	0.4					
KZN	HZ	160	39	EP	1527	6.175	-0.25							0.9
KZN	HN	160	39	ES	1527	8.547	-0.04							0.9
KBN	HZ	160	6	EP	1527	6.250	-0.17							0.9
KBN	HN	160	6	ES	1527	8.357	-0.22							0.9
AL05A	HZ	169	354	EP	1527	7.725	0.12							0.9
AL05A	HN	169	354	ES	1527	0.671	-0.05							0.9
BERA	HZ	177	342	EP	1527	9.225	0.71							0.9
BERA	HN	177	342	ES	1527	2.278	-0.09							0.9
BERA	HZ	177	342	IAML	1527	8.744		33	0.7					
PLG	HZ	278	61	EP	1527	1.534	0.02							0.8

November 25 2023 Hour: 17:56 20.5 Lat: 38.70N Lon: 20.85E D: 26.3 Ag: TIR Local
Magnitudes: 2.7ML TIR Rms: 0.2 secs
120 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	19	300	EP		1756	5.741	-0.33							1.0
LKD2	HN	19	300	ES		1756	0.795	0.18							1.0
KEK	HZ	144	321	EP		1756	4.928	0.30							1.0
KEK	HE	144	321	ES		1757	3.923	-0.27							1.0
SRN	HZ	150	331	EP		1756	5.213	-0.10							1.0
SRN	HN	150	331	ES		1757	5.555	0.13							1.0
SRN	HZ	150	331	IAML		1757	1.539			56	2.7				
LSK	HZ	162	353	EP		1756	6.993	-0.02							0.9
LSK	HE	162	353	ES		1757	8.440	-0.08							0.9
LSK	HZ	162	353	IAML		1757	2.638			29	1.1				
TPE	HZ	191	338	EP		1756	0.797	0.21							0.9

November 25 2023 Hour: 17:57 33.2 Lat: 42.38N Lon: 19.03E D: 15.3 Ag: TIR Local
Magnitudes: 2.5ML TIR Rms: 0.4 secs
38 km NW of Koplik

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
PDG	HZ	20	74	EP	D	1757	7.322	-0.21							1.0
PDG	HN	20	74	ES		1757	0.794	-0.29							1.0
PDG	HZ	20	74	IAML		1757	0.807			689	0.2				
NKME	HZ	44	352	EP		1757	1.128	-0.12							1.0
NKME	HE	44	352	ES		1757	8.284	0.47							1.0
ME05A	HZ	44	282	EP		1757	0.912	-0.34							1.0
ME05A	HN	44	282	ES		1757	7.679	-0.12							1.0
SDA	HZ	53	133	EP		1757	2.019	-0.79							1.0
SDA	HN	53	133	ES		1757	0.585	-0.04							1.0
PVY	HZ	80	72	EP		1757	7.271	-0.04							1.0
PVY	HE	80	72	ES		1757	8.661	-0.11							1.0
ME02A	HZ	87	5	EP		1757	7.866	-0.55							1.0
ME02A	HN	87	5	ES		1758	1.153	0.38							1.0
ME01A	HZ	87	53	EP		1757	8.860	0.44							1.0
ME01A	HN	87	53	ES		1758	0.718	-0.08							1.0
PEJK	HZ	107	74	EP		1757	1.499	-0.22							1.0
PEJK	HN	107	74	ES		1758	6.802	0.05							1.0
KKS	HN	118	106	ES		1758	0.418	0.24							1.0

AL03AHZ		118	137	EP		1757	3.344	-0.26						1.0
KKS	HZ	118	106	EP		1757	3.699	0.09						1.0
AL03AHE		118	137	ES		1758	0.321	0.15						1.0
TIR	HZ	134	149	EP		1757	6.414	0.21						1.0
TIR	HN	134	149	ES		1758	5.119	0.24						1.0
PHP	HZ	140	123	EP		1757	6.704	-0.55						1.0
PHP	HN	140	123	ES		1758	7.389	0.62						1.0
PHP	HZ	140	123	IAML		1758	2.481			32	0.9			
AL04AHZ		159	164	EP		1758	0.894	0.68						0.9
AL04AHE		159	164	ES		1758	2.014	-0.12						0.9
GMRK	HZ	183	79	EP		1758	3.926	0.46						0.9
GMRK	HN	183	79	ES		1758	7.746	-0.28						0.9
BERA	HZ	201	157	EP		1758	6.108	0.35						0.9
BERA	HE	201	157	ES		1758	1.092	-1.08						0.9
BERA	HZ	201	157	IAML		1758	4.016			16	0.3			
AL05AHZ		218	148	EP		1758	8.911	0.98						0.9
AL05AHN		218	148	ES		1758	6.454	0.36						0.9
BARS	BZ	234	77	EP		1758	0.380	0.44						0.9
BARS	BE	234	77	ES		1758	9.658	-0.08						0.9
BOSS	SZ	283	86	EP		1758	6.180	-0.07						0.8
BOSS	SN	283	86	ES		1758	0.462	-0.70						0.8

November 27 2023 Hour: 10:24 3.1 Lat: 39.26N Lon: 21.08E D: 7.2 Ag: TIR Local
Magnitudes: 2.6ML TIR Rms: 0.4 secs
88 km SE of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
THL	HZ	88	67	EP		1024	8.411	-0.22							1.0
THL	HN	88	67	ES		1024	1.452	0.20							1.0
LSK	HZ	107	338	EP		1024	1.737	-0.16							1.0
LSK	HE	107	338	ES		1024	7.021	-0.13							1.0
LSK	HZ	107	338	IAML		1024	0.258			63	0.7				
SRN	HZ	115	307	EP		1024	3.054	-0.15							1.0
SRN	HE	115	307	ES		1024	9.524	0.00							1.0
KEK	HZ	121	295	EP		1024	4.027	-0.12							1.0
KEK	HN	121	295	ES		1024	1.455	0.22							1.0
KEK	HZ	121	295	IAML		1024	7.633			34	0.5				
VLS	HZ	127	199	EP		1024	4.821	-0.42							1.0
VLS	HE	127	199	ES		1024	3.390	0.17							1.0
TPE	HZ	146	322	EP		1024	9.644	1.22							1.0
TPE	HN	146	322	ES		1024	8.513	-0.47							1.0
TPE	HZ	146	322	IAML		1024	6.402			65	0.8				
AL05AHZ		171	340	EP		1024	2.425	-0.09							0.9

November 28 2023 Hour: 23: 7 0.7 Lat: 38.99N Lon: 20.03E D: 19.7 Ag: TIR Local
Magnitudes: 3.0ML TIR 3.2MW TIR Rms: 0.4 secs
75 km S of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	66	23	EP		2307	2.520	-0.10							1.0
IGT	HE	66	23	ES		2307	1.792	-0.47							1.0
IGT	HZ	66	23	IAML		2307	3.412			211	0.4				
KEK	HZ	83	346	EP		2307	5.697	0.31							1.0
KEK	HN	83	346	ES		2307	7.300	0.03							1.0
KEK	HZ	83	346	IAML		2307	9.525			274	0.4				
SRN	HZ	99	359	EP		2307	8.241	0.19							1.0
SRN	HN	99	359	ES		2307	2.206	0.12							1.0
SRN	HZ	99	359	IAML		2307	4.802			137	0.8				
VLS	HZ	102	151	EP		2307	9.058	0.46							1.0
VLS	HN	102	151	ES		2307	3.073	-0.01							1.0
AL06AHZ		125	349	EP		2307	2.419	0.26							1.0
AL06AHN		125	349	ES		2307	9.766	0.24							1.0
LSK	HZ	138	21	EP		2307	4.577	0.20							1.0
LSK	HE	138	21	ES		2307	3.215	-0.31							1.0
LSK	HZ	138	21	IAML		2307	0.758			175	0.7				
TPE	HZ	145	360	EP		2307	5.719	0.30							1.0

TPE	HN	145	360	ES		2307	5.457	0.02						1.0
TPE	HZ	145	360	IAML		2308	0.378			108	0.7			
VLO	HZ	171	345	EP		2307	9.173	0.26						0.9
VLO	HN	171	345	ES		2307	1.982	0.22						0.9
VLO	HZ	171	345	IAML		2308	2.215			94	0.3			
SCTE	HZ	180	312	EP		2307	0.227	0.08						0.9
THL	HZ	183	69	EP		2307	1.374	0.87						0.9
THL	HE	183	69	ES		2307	4.369	-0.27						0.9
BERA	HZ	191	358	EP		2307	1.435	-0.04						0.9
BERA	HN	191	358	ES		2307	7.320	0.94						0.9
BERA	HZ	191	358	IAML		2308	2.087			57	0.6			
AL05AHZ		193	9	EP		2307	2.098	0.22						0.9
AL05AHN		193	9	ES		2307	7.419	0.31						0.9
KBN	HZ	193	19	EP		2307	1.850	-0.02						0.9
KBN	HN	193	19	ES		2307	7.315	0.21						0.9
KBN	HZ	193	19	IAML		2308	2.180			12	0.6			
BPA2	HZ	197	350	EP		2307	2.345	0.11						0.9
BPA2	HN	197	350	ES		2307	7.908	0.14						0.9
KZN	HZ	209	45	EP		2307	3.828	-0.16						0.9
KZN	HN	209	45	ES		2308	0.914	-0.02						0.9
AL08AHZ		235	2	EP		2307	7.577	0.36						0.9
ITM	HZ	261	140	EP		2307	0.587	0.08						0.9
TIR	HZ	263	357	EP		2307	0.886	0.18						0.9
BURR	EZ	290	360	EP		2307	3.425	-0.87						0.8
AL03AHZ		290	360	EP		2307	3.843	-0.45						0.8
LACI	HZ	295	355	EP		2307	4.393	-0.51						0.8
NOCI	HZ	323	309	EP		2307	7.635	-0.83						0.8
PLG	HZ	331	61	EP		2307	8.929	-0.61						0.8
SDA	HZ	343	353	EP		2307	0.192	-0.82						0.8
KKS	HZ	344	5	EP		2307	1.160	-0.04						0.8
AL01AHZ		375	354	EP		2307	4.290	-0.99						0.8
PDG	HZ	388	351	EP		2307	6.843	0.10						0.7
PDG	HZ	388	351	IAML		2308	0.385			12	1.2			
MRVN	HZ	400	306	EP		2307	7.168	-1.20						0.4
PVY	HZ	401	359	EP		2307	8.621	0.07						0.7
PEJK	HZ	407	3	EP		2307	8.644	-0.61						0.7
ME02AHZ		469	351	EP		2308	6.455	-0.91						0.3
SJES	BZ	475	359	EP		2308	7.377	-0.67						0.7
SGRT	HZ	476	312	EP		2308	6.899	-1.29						0.0

November 29 2023 Hour: 1:18 20.4 Lat: 39.70N Lon: 20.50E D: 3.4 Ag: TIR Local Magnitudes: 2.8ML TIR 3.4MW TIR Rms: 0.6 secs
27 km E of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
IGT	HZ	24	218	EP	C	0118	5.499	0.77							1.0
IGT	HN	24	218	ES		0118	9.146	0.91							1.0
IGT	HZ	24	218	IAML		0118	0.261			1592	0.3				
SRN	HZ	47	295	EP	C	0118	8.344	-0.51							1.0
SRN	HN	47	295	ES		0118	5.468	-0.24							1.0
SRN	HZ	47	295	IAML		0118	6.051			361	0.6				
LSK	HZ	50	9	EP	D	0118	9.729	0.34							1.0
LSK	HN	50	9	ES		0118	6.705	0.03							1.0
LSK	HZ	50	9	IAML		0118	7.722			532	0.5				
KEK	HZ	60	271	EP	D	0118	0.626	-0.57							1.0
KEK	HE	60	271	ES		0118	9.510	-0.44							1.0
KEK	HZ	60	271	IAML		0118	4.600			364	0.7				
AL06AHZ		77	304	EP		0118	3.564	-0.54							1.0
AL06AHN		77	304	ES		0118	4.286	-0.92							1.0
TPE	HZ	78	328	EP		0118	4.419	0.14							1.0
TPE	HN	78	328	ES		0118	5.640	0.11							1.0
TPE	HZ	78	328	IAML		0118	8.409			264	1.0				
NEST	HZ	92	30	EP		0118	7.053	0.27							1.0
NEST	HN	92	30	ES		0118	9.875	-0.18							1.0
NEST	HZ	92	30	IAML		0118	2.290			72	0.9				

KBN	HZ	105	13	EP		0118	9.014	-0.13						1.0
KBN	HN	105	13	ES		0118	4.273	-0.05						1.0
KBN	HZ	105	13	IAML		0118	9.845			20	0.7			
AL05A	HZ	112	355	EP		0118	0.095	-0.13						1.0
BERA	HZ	120	337	EP		0118	0.800	-0.88						1.0
BERA	HN	120	337	ES		0118	8.610	-0.31						1.0
BERA	HZ	120	337	IAML		0119	5.800			73	0.4			
VLO	HZ	121	315	EP		0118	2.464	0.74						1.0
VLO	HN	121	315	ES		0118	9.763	0.76						1.0
VLO	HZ	121	315	IAML		0119	5.093			111	0.6			
KZN	HZ	127	58	EP		0118	2.990	0.12						1.0
KZN	HN	127	58	ES		0119	1.156	0.09						1.0
THL	HZ	131	96	EP		0118	3.709	0.33						1.0
THL	HN	131	96	ES		0119	1.743	-0.26						1.0
AL07A	HZ	134	6	EP		0118	3.828	-0.08						1.0
BPA2	HZ	137	327	EP		0118	4.598	0.25						1.0
BPA2	HE	137	327	ES		0119	4.699	0.94						1.0
AL08A	HZ	159	348	EP		0118	8.089	-0.06						0.9
AL08A	HN	159	348	ES		0119	1.074	0.44						0.9
AL04A	HZ	165	331	EP		0118	0.026	0.87						0.9
AL04A	HE	165	331	ES		0119	3.060	0.62						0.9
VLS	HZ	170	177	EP		0118	0.069	0.18						0.9
VLS	HN	170	177	ES		0119	3.004	-0.78						0.9
TIR	HZ	190	344	EP		0118	2.621	-0.39						0.9
TIR	HZ	190	344	IAML		0119	3.325			25	1.8			
AL03A	HZ	215	349	EP		0118	6.550	0.37						0.9
BURR	EZ	215	349	EP		0118	6.795	0.62						0.9
BURR	EZ	215	349	IAML		0119	6.844			19	0.9			
LACI	HZ	225	343	EP		0118	5.985	-1.40						0.9
LACI	HZ	225	343	IAML		0119	5.072			22	0.6			
THE	HZ	234	63	EP		0118	8.890	0.34						0.9
PLG	HZ	262	73	EP		0119	2.212	-0.00						0.9
KKS	HZ	263	358	EP		0119	2.211	-0.17						0.9
SDA	HZ	274	342	EP		0119	2.419	-1.28						0.8
AL01A	HZ	304	345	EP		0119	6.432	-1.30						0.8
NOCI	HZ	316	293	EP		0119	0.285	1.09						0.8

November 30 2023 Hour: 4: 4 8.8 Lat: 38.65N Lon: 20.48E D: 17.1 Ag: TIR Local Magnitudes: 3.2ML TIR Rms: 0.7 secs
114 km S of Konispol

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
LKD2	HZ	22	46	EP	D	0404	3.316	-0.43							1.0
VLS	HZ	54	169	EP	D	0404	8.515	-0.10							1.0
VLS	HN	54	169	ES		0404	6.349	-0.18							1.0
IGT	HZ	99	353	EP		0404	5.962	-0.09							1.0
IGT	HN	99	353	ES		0404	9.960	-0.03							1.0
IGT	HZ	99	353	IAML		0404	3.795			549	0.3				
KEK	HZ	132	334	EP		0404	2.600	1.07							1.0
KEK	HN	132	334	ES		0404	9.847	-0.07							1.0
KEK	HZ	132	334	IAML		0404	8.829			325	0.4				
SRN	HZ	142	343	EP		0404	4.020	0.78							1.0
SRN	HN	142	343	ES		0404	2.979	-0.02							1.0
SRN	HZ	142	343	IAML		0405	6.569			133	0.9				
LSK	HN	167	4	ES		0404	9.813	0.16							0.9
THL	HZ	167	52	EP		0404	6.848	-0.03							0.9
THL	HN	167	52	ES		0404	9.732	0.14							0.9
LSK	HZ	167	4	EP		0404	7.551	0.63							0.9
LSK	HZ	167	4	IAML		0405	8.922			221	0.6				
AL06A	HZ	171	339	EP		0404	8.523	1.13							0.9
AL06A	HN	171	339	ES		0405	0.575	0.05							0.9
TPE	HZ	187	348	EP		0404	9.386	-0.01							0.9
TPE	HN	187	348	ES		0405	4.388	0.25							0.9
TPE	HZ	187	348	IAML		0405	0.112			171	0.6				
NEST	HZ	202	14	EP		0404	3.275	1.84							0.5

NEST	HN	202	14	ES		0405	7.295	-0.54					0.9
NEST	HZ	202	14	IAML		0405	7.061		105	0.7			
ITM	HZ	207	142	EP		0404	3.353	1.31					0.9
ITM	HE	207	142	ES		0405	8.951	0.02					0.9
KZN	HZ	215	31	EP		0404	4.391	1.30					0.7
KZN	HE	215	31	ES		0405	0.976	0.15					0.9
VLO	HZ	219	338	EP		0404	4.108	0.64					0.9
VLO	HN	219	338	ES		0405	1.495	-0.02					0.9
VLO	HZ	219	338	IAML		0405	5.317		159	0.4			
KBN	HZ	221	7	EP		0404	4.453	0.64					0.9
KBN	HN	221	7	ES		0405	2.324	0.19					0.9
KBN	HZ	221	7	IAML		0405	5.740		23	0.7			
AL05AHZ		228	358	EP		0404	5.512	0.77					0.9
AL05AHN		228	358	ES		0405	3.998	0.17					0.9
BERA	HZ	232	349	EP		0404	5.472	0.26					0.9
BERA	HN	232	349	ES		0405	4.709	0.05					0.9
BERA	HZ	232	349	IAML		0405	0.295		97	0.5			
SCTE	HZ	234	313	EP		0404	5.197	-0.27					0.9
BPA2	HZ	242	343	EP		0404	6.588	0.10					0.9
AL07AHZ		250	4	EP		0404	7.149	-0.45					0.9
AL08AHZ		274	353	EP		0404	0.772	0.15					0.8
TIR	HZ	304	350	EP		0404	4.331	-0.08					0.8
TIR	HZ	304	350	IAML		0405	0.372		17	1.4			
THE	HZ	307	43	EP		0404	4.795	0.05					0.8
THE	HZ	307	43	IAML		0405	7.070		13	0.9			
PLG	HZ	319	52	EP		0404	5.696	-0.68					0.8
BURR	EZ	330	353	EP		0404	7.507	-0.28					0.8
AL03AHZ		330	353	EP		0404	7.744	-0.05					0.8
BURR	EZ	330	353	IAML		0405	8.462		17	0.9			
LACI	HZ	338	349	EP		0404	8.016	-0.72					0.8
LACI	HZ	338	349	IAML		0405	4.062		24	0.8			
NOCI	HZ	377	310	EP		0405	2.814	-0.95					0.8
KKS	HZ	380	359	EP		0405	3.742	-0.45					0.8
SDA	HZ	386	348	EP		0405	3.903	-1.07					0.8
SDA	HZ	386	348	IAML		0405	8.398		4	0.3			
NVR	HZ	416	43	EP		0405	7.995	-0.89					0.4
AL01AHZ		418	349	EP		0405	8.101	-1.03					0.7
PDG	HZ	432	347	EP		0405	9.409	-1.41					0.4
PDG	HZ	432	347	IAML		0405	5.197		15	0.5			
PVY	HZ	440	354	EP		0405	1.874	-0.14					0.7
PEJK	HZ	444	358	EP		0405	1.404	-1.00					0.7
GMRK	HZ	449	8	EP		0405	1.853	-1.33					0.7
MRVN	HZ	454	307	EP		0405	2.765	-0.88					0.7
ME05AHZ		455	339	EP		0405	2.168	-1.54					0.3
BOSS	SZ	459	21	EP		0405	3.246	-1.12					0.7
ME02AHZ		513	348	EP		0405	0.107	-1.24					0.3
SJES	BZ	514	355	EP		0405	0.380	-1.01					0.6
RDO	HZ	514	56	EP		0405	9.865	-1.36					0.3

November 30 2023 Hour: 21:47 8.8 Lat: 41.11N Lon: 19.72E D: 26.6 Ag: TIR Local Magnitudes: 2.5ML TIR 3.0MW TIR Rms: 0.6 secs
5 km NE of Rrogozhine

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
AL04AHZ		17	230	EP		2147	3.933	-0.28							1.0
AL04AHN		17	230	ES		2147	8.984	0.38							1.0
TIR	HZ	29	25	EP		2147	4.753	-0.83							1.0
TIR	HN	29	25	ES		2147	0.296	-0.78							1.0
TIR	HZ	29	25	IAML		2147	0.695		89	0.8					
AL08AHZ		32	90	EP		2147	5.487	-0.47							1.0
AL08AHN		32	90	ES		2147	1.931	0.17							1.0
BPA2	HZ	43	191	EP		2147	7.845	0.49							1.0
AL02AHZ		43	321	EP		2147	7.946	0.56							1.0
AL02AHE		43	321	ES		2147	5.246	0.89							1.0
BERA	HZ	49	156	EP		2147	7.424	-0.86							1.0

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BERA HN   49 156 ES       2147 5.723-0.24                          1.0
BERA HZ   49 156  IAML    2147 8.956            159  0.3
LACI HZ   59   0 EP       2147 8.528-1.23                          1.0
LACI HN   59   0 ES       2147 7.592-1.04                          1.0
LACI HZ   59   0  IAML    2147 3.372             47  0.4
AL05AHZ   72 128 EP       2147 1.635-0.24                          1.0
AL05AHN   72 128 ES       2147 2.429-0.03                          1.0
VLO  HZ   73 195 EP       2147 2.093 0.09                          1.0
VLO  HN   73 195 ES       2147 2.945 0.25                          1.0
VLO  HZ   73 195  IAML    2147 8.781            140  0.3
PHP  HZ   88  43 EP       2147 3.252-1.12                          1.0
PHP  HE   88  43 ES       2147 7.258 0.27                          1.0
PHP  HZ   88  43  IAML    2147 0.382             45  0.5
TPE  HZ   94 164 EP       2147 5.540 0.34                          1.0
TPE  HE   94 164 ES       2147 9.237 0.75                          1.0
TPE  HZ   94 164  IAML    2147 7.387             93  0.5
KBN  HZ  105 120 EP       2147 8.351 1.33                          1.0
KBN  HN  105 120 ES       2147 1.731-0.05                          1.0
KBN  HZ  105 120  IAML    2147 5.792             13  0.9
SDA  HZ  106 350 EP       2147 7.389 0.23                          1.0
SDA  HE  106 350 ES       2147 2.768 0.74                          1.0
KKS  HZ  121  28 EP       2147 9.861 0.28                          1.0
KKS  HN  121  28 ES       2147 6.765 0.34                          1.0
SRN  HZ  138 170 EP       2147 2.547 0.40                          1.0
SRN  HN  138 170 ES       2147 0.686-0.38                          1.0
SRN  HZ  138 170  IAML    2147 6.247             35  1.0
PDG  HZ  152 346 EP       2147 3.782-0.08                          1.0
PDG  HE  152 346 ES       2147 3.336-0.83                          1.0
PDG  HZ  152 346  IAML    2147 4.227             38  0.7
KEK  HZ  155 177 EP       2147 4.206-0.10                          1.0
KEK  HN  155 177 ES       2147 4.395-0.58                          1.0
KEK  HZ  155 177  IAML    2147 7.714             57  0.5
SCTE HZ  156 223 EP       2147 4.418-0.04                          1.0
SCTE HN  156 223 ES       2147 4.237-1.00                          1.0
PVY  HZ  166   7 EP       2147 6.379 0.47                          0.9
PVY  HE  166   7 ES       2147 9.158 1.29                          0.9
PEJK HZ  177  15 EP       2147 8.006 0.83                          0.9
PEJK HE  177  15 ES       2148 0.270 0.10                          0.9
ME01AHZ  194   4 EP       2147 0.126 0.80                          0.9
ME01AHN  194   4 ES       2148 4.257 0.21                          0.9
NKME HZ  195 341 EP       2147 9.731 0.24                          0.9
NKME HE  195 341 ES       2148 3.233-1.12                          0.9
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