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## H Y R J E

Buletini sizmologjik përmban ngjarjet sizmike (tërmetet), e regjistruar, lokalizuar dhe analizuar gjatë periudhës kohore një-mujore. Përpos pasqyrimin kronologjik të aktivitetit sizmik të regjistruar, në territorin Shqipëtar dhe rreth tij, me anë të stacioneve të rrjetit sizmologjik shqipëtar, por edhe të rrjeteve fqinjë, periodiku përmban një analizë të gjithanëshme të parametrave të vlerësuar në drejtim të cilësisë së vlerësimit të tyre dhe statistikës së aktivitetit sizmik në vend. Përmbajtja e buletinit konsiston në terminologjinë përkatëse, në karakteristikat e stacioneve sizmologjik, të dhënat parametrike të vlerësuara nga analiza e çdo tërmeti, në analizën e cilësisë së vlerësimit të këtyre parametrave, në analizën e ngjarjeve të veçanta ( $M > 4.0$ ), nëse ka të tilla, si dhe në përpilimin e katalogut mujor dhe paraqitjen grafike në hartë, të epiqendrave të tërmeteve të lokalizuar. Në procesin e monitorim-regjistrimit dhe lokalizimit të ngjarjeve sizmike kontribuojnë drejtpërdrejtë punonjësit ndihmës-shkencor (laborant): Ing. Ardian Minarolli, Ing. Ervin Kasaj dhe Ing. Olgert Gjuzi (Inxhinier Gjeolog/ Monitorues në Qendrën Kombëtare të Sizmologjisë). Në kontrollin dhe analizën e cilësisë së vlerësimit të të dhënave, në analizën statistikore, analizën e ngjarjeve ( $M > 4.0$ ), katalogimin dhe paraqitjen grafike në hartë si dhe përpilimin e këtij buletini, kontribuojnë punonjësit kërkues sizmolog, Prof.Dr. Rrapo Ormeni dhe Dr. Edmond Dushi. Analiza e të dhënave kryhet me anë të programit Hypoinverse-2000 (Pakete rutinash në gjuhën Fortran), me autor Fred W Klein (2002) [Referenca: *Open File Report 02-171, v. 1.0, U. S. Geological Survey, 345 Middlefield Rd., MS#977, Menlo Park CA 94025; klein@usgs.gov*]. Ky program është baza llogaritëse e përdorur nga **Nanometrics** në programin interaktiv të përpunimit dhe lokalizimit të tërmeteve, në sistemin Libra 1, ATLAS (një ndërfaqe grafike në gjuhën Java). Të dhënat e përfutuara ruhen në formatet standart të Hypoinverse 2000, në skedarin hyp.prt dhe atë akiv, që shërbejnë edhe si baza për përpilimin e këtij buletini dhe analizës së kryer.

### Briefing:

The seismological bulletin represents a reassume of the seismic events (earthquakes), occurred within Albania and surroundings for a period of one month. These events are permanently recorded, located and further processed by Albanian Seismological Network. This report, along with the chronologic ordering of events, contains a comprehensive analysis of the evaluated parameters as well as the quality of this process. It contains the description of output parameters, parametric data, statistical analysis and quality data analysis, catalogue and epicenter map. Contributing assistant staff are: Eng. Ardian Minarolli, Eng. Ervin Kasaj, Eng. Olgert Gjuzi (Geologists/Observers) and scientific staff: Prof.Dr. Rrapo Ormeni and Dr. Edmond Dushi (Seismologists). Program used for this analysis is Hyponverse 2000 (Klein, 2002; USGS), implicitly implemented in Atlas (Java Interface Nanometrics Firmware), part of Libra 1 VSAT system.

### **Stacionet Sizmikë** (*Seismic Stations*)

#### **A. Rrjeti Sizmologjik Shqipëtar** (*Albanian Seismological Network, ASN*)

Të dhënat për këtë rrjet janë dhënë në **Tab. 1**.

**3C** – sensor të shpejtësisë me tre komponente regjistrimi (3 – component velocimeters)

**BB** – sensor me reagim frekuencial me bandë të gjerë, në intervalin e frekuencave të fushës sizmike  $10^{-3} - 10^2$  Hz (Broadband sensors)

**RT** – regjistrim dhe tranmetim i të dhënave valore nga stacionet periferik në Qendrën Kombëtare të Monitorimit, në kohë reale (Real time communication)

**T<sub>0</sub>** – perioda vetjake e reagimit të sizmometrit (sensorit), mbi të cilën ai reagon linearisht si filtër i

frekuencave të larta (High-Pass). Ky parametër është karakteristik për një tip të dhënë sensori (Sensor Natural Period)

**Shënim:** të gjithë stacionet janë të regjistruar në regjistrin ndërkombëtar (WDC), ku identifikohen me kodin përkatës të përbërë nga 3-5 karaktere.

**Tab. 1** – Rrjeti Sizmologjik Shqipëtar (Albanian Seismological Network, ASN, Rrjeti Sizmologjik Virtual (Virtual Seismological Network)

Kodi	Regjistruar (Po/Jo)	Gjer. Gjeo.	Gjat. Gjeo.	Lartesia	Tipi i stacionit	Sensori	Terheqja e Informacionit	Komunikimi	T <sub>0</sub>
Station Code	Registered (WDC)	Latitude (degree)	Longitude (degree)	Elev. (m)	Station type	Sensor type	Acquisition system	Communication	Nat.l Period (s)
TIR	Po (Y)	41.3477	19.8650	198	3C-BB	STS-2	Libra VSAT (InterNaqs)	RT satellite	120
BCI	Po (Y)	42.3666	20.0675	500	3C-BB	CMG-40T	Libra VSAT	RT satellite	40
PHP	Po (Y)	41.6847	20.4408	670	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
SDA	Po (Y)	42.0519	19.4986	80	3C-SP	SM-4	GBV-316	Dial-up	0.2
LACI	Po (Y)	41.6363	19.7094	40	3C-SP	SM-4	GBV-316	Dial-up	0.2
TPE	Po (Y)	40.2952	20.0109	240	3C-SP	SM-4	GBV-316	Dial-up	0.2
LSK	Po (Y)	40.1500	20.6000	920	3C-BB	CMG-40T	Libra VSAT	RT satellite	40
KBN	Po (Y)	40.6236	20.7874	800	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
VLO	Po (Y)	40.4686	19.4955	80	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
SRN	Po (Y)	39.8800	20.0005	20	3C-BB	Trillium 40T	Libra VSAT.	RT satellite	40
PUK	Po (Y)	42.0426	19.8926	900	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
KKS	Po (Y)	42.0756	20.4113	300	3C-SP	SM-4	GBV-316	Dial-up	0.2

**Tab. 2** – Rrjeti Sizmologjik Virtual - InterNaqs (INGV, AUTH)

Kodi	Regjistruar (Po/Jo)	Gjer. Gjeo.	Gjat. Gjeo.	Lartesia	Tipi i stacionit	Sensori	Terheqja e Informacionit	Komunikimi	T <sub>0</sub>
Station Code	Registered (WDC)	Latitude (degree)	Longitude (degree)	Elev. (m)	Station type	Sensor type	Acquisition system	Communication	Nat.l Period (s)
MRVN	Po (Y)	41.0609	16.1958	610	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
NOCI	Po (Y)	40.7888	17.0644	420	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
SCTE	Po (Y)	40.0724	18.4675	150	3C-BB	Trillium 40T, 120S	Libra VSAT	RT satellite	40/120
SGRT	Po (Y)	41.7546	15.7437	960	3C-BB	Trillium 40T	Libra VSAT	RT satellite	40
LKD2	Po (Y)	38.7889	20.6578	485	3C-BB	CMG-3ESP/100	Trident	RT	40
THE	Po (Y)	40.6319	22.9628	124	3C-BB	Trillium 120	Taurus	GPRS	120
NEST	Po (Y)	40.4147	21.0489	1056	3C-BB	Trillium 120	Taurus	GPRS	120
FNA	Po (Y)	40.7818	21.3835	750	3C-BB	CMG-3EPS/100	Trident	RT	40
IGT	Po (Y)	39.5315	20.3299	270	3C-BB	CMG-3EPS/100	HRD24	RT	40

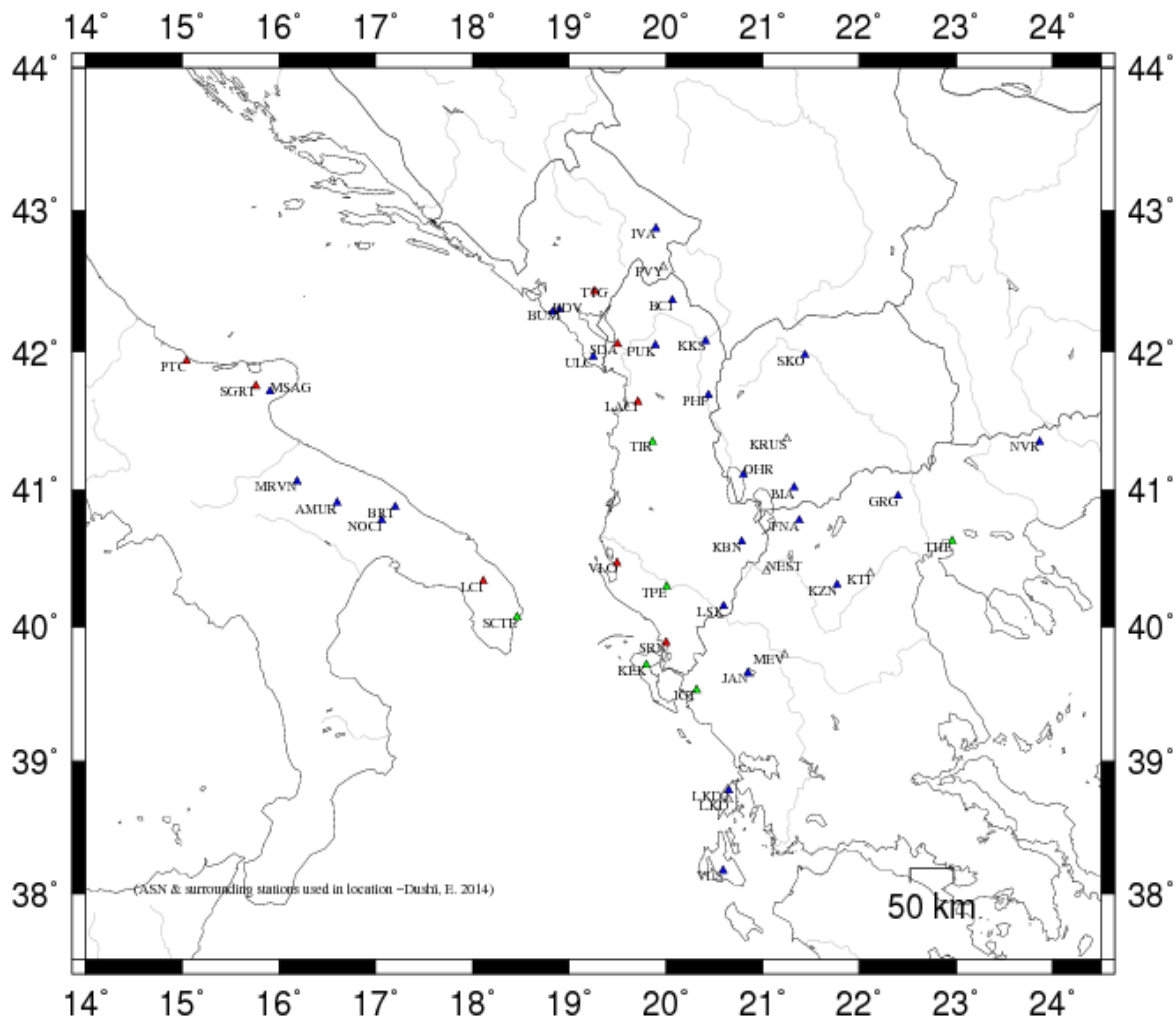
**Tab. 3 – Rrjeti Sizmologjik Ndihmës (MSO, SKO, AUTH, NAO, INGV)**

Kodi	Regjistruar (Po/Jo)	Gjer. Gjeo.	Gjat. Gjeo.	Lartesia	Tipi i stacionit	Sensori	Terheqja e Informacionit	Komunikimi	T <sub>0</sub>
Station Code	Registered (WDC)	Latitude (degree)	Longitude (degree)	Elev. (m)	Station type	Sensor type	Acquisition system	Communication	Nat.l Period (s)
MEV	Po (Y)	39.7850	21.2290	1500	3C-SP	S-13	Trident	RT	<b>1.0</b>
KTI	Po (Y)	40.39289	22.11650	1329	#	#	#	#	#
GRG	Po (Y)	40.9558	22.4029	600	3C-BB	CMG-3EPS/100	Trident	RT	<b>40</b>
LKD	Po (Y)	38.70722	20.65056	1140	#	#	#	#	#
ULC	Po (Y)	41.9633	19.2497	465	3C-SP	S-13	Smart-24D	RT	<b>1.0</b>
TTG	Po (Y)	42.43020	19.25530	97	#	#	#	#	#
PVY	Po (Y)	42.5950	19.9735	1250	3C-SP	S-13	Smart-24D	RT	<b>1.0</b>
BUM	Po (Y)	42.3008	18.8986	724	3C-SP	S-13	Smart-24D	RT	<b>1.0</b>
BDV	Po (Y)	42.28340	18.82790	385	#	#	#	#	#
IVA	Po (Y)	42.87180	19.89310	996	#	#	#	#	#
KEK	Po (Y)	39.7127	19.7962	227	3C-BB	STS-2	DR24-SC	RT	<b>120</b>
JAN	Po (Y)	39.6561	20.8487	526	3C-BB	CMG-3ESPC/60	DR24-SC	RT	<b>40</b>
KZN	Po (Y)	40.3033	21.7820	791	3C-BB	STS-2	DR24-SC	RT	<b>120</b>
VLS	Po (Y)	38.1768	20.5886	402	3C-BB	Trillium 120	DR24-SC	RT	<b>120</b>
NVR	Po (Y)	41.3484	23.8651	627	3C-BB	CMG-3ESPC/60	DR24-SC	RT	<b>40</b>

Kodi	Regjistruar (Po/Jo)	Gjer. Gjeo.	Gjat. Gjeo.	Lartesia	Tipi i stacionit	Sensori	Terheqja e Informacionit	Komunikimi	T <sub>0</sub>
Station Code	Registered (WDC)	Latitude (degree)	Longitude (degree)	Elev. (m)	Station type	Sensor type	Acquisition system	Communication	Nat.l Period (s)
BRT	Po (Y)	40.8778	17.2036	333	#	#	#	#	#
AMUR	Po (Y)	40.9071	16.6041	443	3C-BB	Trillium 40T	Libra VSAT	RT satellite	<b>40</b>
MSAG	Po (Y)	41.712	15.9096	890	3C-BB	Trillium 40T	Libra VSAT	RT satellite	<b>40/120</b>
PTC	Po (Y)	41.7546	15.7437	960	3C-BB	Trillium 40T	Libra VSAT	RT satellite	<b>40</b>
LCI	Po (Y)	40.33461	18.11197	46	#	#	#	#	#
OHR	Po (Y)	41.1114	20.7989	739	#	#	#	#	#
BIA	Po (Y)	41.0194	21.3239	720	#	#	#	#	#
KRUS	Po (Y)	41.3689	21.2488	1015	#	#	#	#	#
SKO	Po (Y)	41.9721	21.4396	346	#	#	#	#	#

**Shënim:**

Rrjeti plotësues (ndihmës) konsiston në stacionet sizmologjike të rajonit, të cilat janë pjesë e Rrjetit Sizmologjik Malazezë (MSO), atij Maqedonas (SKO), të Selanikut (AUTH), Athinës (NAO) dhe Institutit Kombëtar të Gjeofizikës dhe Vullkanologjisë në Romë (INGV), dhe përdoren për përfshirjen manuale të leximeve të fazave sizmike në procesin e lokalizimit. (#) – është përdorur në rastin kur nuk njihet instrumentimi i stacioneve.



**-Fig. 1-**

Harta e shpërndarjes së stacioneve të rrjetit sizmologjik Shqipëtar (ASN), Universitetit ‘Aristotel’ të Selanikut (THE), Observatorit Kombëtar të Athinës (ATH), INGV, rrjetit sizmologjik Malazez (PDG) dhe atij Maqedonas (SKO).  
[Seismological station distribution map for ASN, THE, ATH, INGV, PDG & SKO]

**Përshkrimi i terminologjisë së përdorur për parametrat e përftuar**  
(Output parameter’s description)

**I. Informacioni gjithpërfshirës i kreut të ngjarjes (EVENT HEADER INFORMATION)**

YEAR MO DA Data (viti, muaji, data) [Date]  
ORIGIN Koha (ora, minuta, sekonda) [Origine Time]  
LAT N Gjerësia gjeografike (gradë, minuta) [latitude in degree and minute]  
LON W Gjatësia gjeografike (gradë, minuta) [longitude in degree and minutes]

DEPTH	Thellësia vatrore (km) [ <i>hypocenter depth in km</i> ]
RMS	Shmangia kuadratike mesatare për diferencat e peshuara të kohë-udhëtimin, për Fazat Sizmike, [ <i>root mean square for the weighted travel time residuals</i> ]
ERH	Gabimi horizontal në lokalizim (përafërsisht aksi maksimal i elipsit të gabimit në epiqendër), [ <i>horizontal location error, approximately equal to the major epicenter's error ellipse</i> ].
ERZ	Gabimi në thellësi, [ <i>Defined as the largest projections of the three principal errors on a vertical line</i> ].
XMAG	Magnituda primare bazuar në amplitudë [ <i>Primary weighted median amplitude magnitude</i> ].
FMAG	Magnituda primare bazuar në zgjatshmërinë e sinjalit [ <i>Primary weighted median coda magnitude</i> ].
PMAG	Magnituda e përzgjedhur si përfaqësuese, për ngjarjen e lokalizuar [ <i>preferred magnitude selected by PRE command, as representative of available magnitudes ML and Md</i> ].
NSTA	Numuri i stacioneve të përdorur në lokalizim [ <i>the number of stations read for this event</i> ].
NPHS	Numuri i fazave të përdorura [ <i>Number of used phases in location</i> ].
DMIN	Distanca hypoqender-stacioni më i afërt [ <i>distance to the nearest station</i> ].
MODEL	Modeli shpejtësior i përdorur [ <i>velocity crustal model code</i> ].
GAP	Shmangia maksimale, këndore, ndërmjet stacioneve të përdorur [ <i>the largest azimuthal gap between azimuthally adjacent stations</i> ].
ITR	Numri i iteracioneve për zgjidhje [ <i>number of iterations required for the solution</i> ].
NFM	Numri i hyrjeve të para P [ <i>number of P first motions reported</i> ].
NWR	Numri i fazave P & S me peshë statistikore > 0.1 [ <i>number of P &amp; S readings with weights &gt; 0.1</i> ].
NWS	Numri i fazave S me peshë statistikore > 0.1 [ <i>number of S-phases with weights &gt; 0.1</i> ].
NVR	Numri i fazave P & S, të vlefshme për lokalizim [ <i>number of P &amp; S phases valid for location, assigned weights &gt; 0</i> ].
QGEO	Cilesia e katalogut bazuar ne gjeometrin e rrjetit sizmologjik [Quality rating based on station geometry]
QLOC	Cilesia e katalogut bazuar ne lokalizimin e ngjarjeve sizmike [Quality rating based on localization of seismic event]
REMARKS	Kodi (3 karaktere) i rajonit (region code), bazuar në lokalizim dhe thellësinë e vlerësuar; kodi (1 karakter) për të karakterizuar ngjarjen: F – e ndjerë (felt), Q/ B – shpërthime sipërfaqësore në karriera (quarry blasts), R/N – shpërthime në thellësi (explosions), T – vibrime (tremors) dhe L – kontraktimet me period të gjatë (long period tidal waves); # - problem me konvergjimin e zgjidhjes së përfutur në mënyrë iterative [ <i>convergence problems</i> ], ose zgjidhje e pa pranueshme me RMS të lartë; (-) – tregon se thellësia është fiksuar [ <i>fixed depth solution</i> ]; X – lokalizimi i fiksuar për të rritur performancën në llogaritjen e thellësisë [ <i>fixed location solution</i> ].
AVH	Shënime për statusin [ <i>status remarks</i> ].
N.XMG	Numri i magnitudave bazuar në amplitudë [ <i>number of primary amplitude based magnitudes</i> ].
X.MMAD	Gabimi i bërë në vlerësimin e ML [ <i>weighted median absolute difference for the primary amplitude magnitudes</i> ].
T	Kodi i identifikimit për magnitudën XMAG1 [ <i>label code for XMAG1</i> ].
N.FMAG	Numri i magnitudave, bazuar në zgjatshmërinë e sinjalit [ <i>number of primary coda magnitudes</i> ].
FMMAD	Gabimi i bërë në vlerësimin e Md [ <i>weighted median absolute difference for the primary coda magnitudes</i> ].
T	Kodi i identifikimit për magnitudën FMAG1 [ <i>label code for FMAG1</i> ].

**Shënim:** parametrat XMAG2 dhe FMAG2, së bashku me parametrat e tjerë suksesiv të indeksuar me #####2, paraqesin informacionin për magnitudat dytësore [*secondary magnitude information parameters*].

## **II. Informacioni parametrik i ngjarjes (EVENT PARAMETRIC DATA)**

STA	Kodi i stacionit me 5-karaktare (station code, max 5 characters). (*) –tregon se për këtë stacion është përdorur një model alternative shpejtësie [ <i>alternative crustal velocity model used for that station</i> ].
NET	Kodi i rrjetit [ <i>the network code</i> ].
COM	komponentja e përdorur [3 –letters component code]
C	shkurtimi i kodit të rrjetit (1 karakter) [ <i>abbreviation for the station code</i> ]
R	Shënimi për stacionin [station remark]
DIST	Distanca epiqendrore [ <i>epicentral distance</i> ]
AZM	Azimuti stacion-hypoqendër [ <i>station azimuth in degree</i> ]
AN	Këndi i daljes së rezeve valore në sferën vatrore [ <i>emergence angle at the hypocenter</i> ]
P/S	Kodi i fazave të përcaktuara nga leximi në formën valore [ <i>phase code</i> ]
WT	Pesha e vlerësimin të fazave [ <i>weighted code</i> ].
SEC	Koha e vrojtuar për hyrjet valore [ <i>observed arrival time</i> ]
TOBS	Koha e vrojtuar e udhëtimit vatër-stacion për fazën sizmike [ <i>observed travel time</i> ]
TCAL	Koha e llogaritur nga modeli i shpejtësisë për udhëtimin vatër-stacion, të fazës sizmike [ <i>calculated travel time</i> ].
DLY	Vonesa në kohë, karakteristikë për stacionin [ <i>station delay</i> ].
RES	Diferenca në kohë-përhapjen, model-vrojtim. [ <i>Travel time residuals</i> ].
WT	Pesha e normalizuar, përfshirë këtu edhe peshën e caktuar dhënë më sipër [ <i>normalized weight</i> ].
SR	Kodi i burimit (1 karakter), që zakonisht i referohet rrjetit [ <i>1 letter source code</i> ]
R	Shënime lidhur me formën valore (sizmogramën), mbartur nga të dhënat fazore [ <i>Seismogram remark</i> ].
INFO	Informacioni për rëndësinë e kontributit të stacionit apo fazës në zgjidhjen e përgjithshme [ <i>the information of the importance of contribution</i> ].
CAL	Faktori korigjues që përdoret në llogaritjen e magnitudës [ <i>calibration factor for magnitude calculation</i> ].
DUR	Zgjatshmëria e fazës koda (s) [ <i>coda duration i sec</i> ]
W	Kodi i peshimit 0-4 për magnitudën bazuar në zgjatshmërinë e sinjalit, Md, [ <i>duration magnitude weight code</i> ].
FMAG	Magnituda Md, për stacionin [ <i>duration magnitude for that station</i> ].
T	Kodi për llojin e magnitudës [ <i>the magnitude type code assigned by FC1 &amp; FC2 commands</i> ].
AMP	amplituda maksimale (pik-pik) [ <i>peak to peak maximum amplitude</i> ]
U	Kodi për njësinë e përdorur për amplitudën M – mm, C – counts, etj. [ <i>amplitude units code</i> ]
PER	Perioda (s), ku është matur $A_{max}$ , [ <i>max amplitude corresponding period in sec.</i> ].
W	Kodi i peshimit 0-9, për magnitudën, bazuar në amplitudë, [ <i>amplitude based magnitude weight code</i> ].
XMAG	Magnituda bazuar në amplitudë, për stacionin, [ <i>amplitude magnitude for that station</i> ].
T	Kodi për llojin e magnitudës [ <i>the magnitude type code assigned by XC1 &amp; XC2 commands</i> ].

## Tërmetet Lokalë (Parametric Data for Albanian local Events)

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537609 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 213 0.5 km from Librazhd-Qendër, Elbasan, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/01	22:59:41.99		0.34	41.1923	20.3357				10.7	1.8	17	12	107	0.39	1.34	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.8	0.0	9	255
Md	2.9	0.0	5	255

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.39	294.0	Sg	22:59:56.139	0.0									m		3944
TIR	0.39	294.0	Pg	22:59:49.301	-0.8									m		3943
TIR	0.39	294.0	AMl	22:59:55.920								5.4	0.30	a	Ml	2.8
TIR	0.39	294.0	AMd	23:00:43.632								0.0	54.33	a	Md	2.8
PHP	0.50	9.0	Sg	23:00:00.329	1.0									m		3946
PHP	0.50	9.0	Pg	22:59:51.940	0.1									m		3945
PHP	0.50	9.0	AMl	23:00:02.870								3.1	0.26	a	Ml	2.7
PHP	0.50	9.0	AMd	23:00:51.048								0.0	59.11	a	Md	2.9
KBN	0.66	148.0	Sg	23:00:04.970	0.5									m		3948
KBN	0.66	148.0	Pg	22:59:55.055	0.2									m		3947
KBN	0.66	148.0	AMl	23:00:09.910								1.9	0.60	a	Ml	2.8
KBN	0.66	148.0	AMd	23:00:44.780								0.0	49.72	a	Md	2.8
BPA2	0.71	230.0	Sg	23:00:06.845	-0.1									m		3950
BPA2	0.71	230.0	Pg	22:59:56.171	-0.1									m		3949
FNA	0.89	116.0	Sg	23:00:12.838	-0.1									m		3952
FNA	0.89	116.0	Pg	22:59:59.276	-0.4									m		3951
FNA	0.89	116.0	AMl	23:00:15.380								2.8	0.24	a	Ml	3.2
PUK	0.91	339.0	Sg	23:00:14.062	0.7									m		3954
PUK	0.91	339.0	Pg	22:59:59.308	-0.6									m		3953
PUK	0.91	339.0	AMl	23:00:16.700								2.8	0.28	a	Ml	3.2
PUK	0.91	339.0	AMd	23:01:00.622								0.0	61.31	a	Md	3.0
VLO	0.96	222.0	S	23:00:15.819	1.7									m		3956
VLO	0.96	222.0	P	23:00:00.789	0.4									m		3955
VLO	0.96	222.0	AMl	23:00:22.040								2.5	0.36	a	Ml	3.2
VLO	0.96	222.0	AMd	23:00:56.455								0.0	55.67	a	Md	2.9



LSK	1.06	169.0	Sg	23:00:18.311	0.0	---											m		3958
LSK	1.06	169.0	Pg	23:00:01.407	-1.3	---											m		3957
LSK	1.06	169.0	AMl	23:00:31.480		---					1.0	0.50	a	Ml	2.8				2195
BCI	1.19	0.0	Pg	23:00:04.200	0.0	---											m		3962
BCI	1.19	351.0	Sg	23:00:22.339	-0.1	---											m		3959
BCI	1.19	351.0	AMl	23:00:23.590		---					1.0	0.62	a	Ml	2.9				2196
SRN	1.34	192.0	Sg	23:00:27.770	0.0	---											m		3961
SRN	1.34	192.0	Pg	23:00:07.849	-0.3	---											m		3960
SRN	1.34	192.0	AMl	23:00:29.640		---					0.2	0.56	a	Ml	2.4				2197

DATA\_TYPE COMMENT GSE2.1  
Event 213

Official Magnitude:  
Ml 2.84

Error ellipse:

	Azim	Dip	Mag
Max:	354	88	1.8000
Intermediate:	65	0	0.6600
Min:	155	2	0.4500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537609 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 214 0.5 km from Librazhd-Qendër, Elbasan, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/01	22:59:41.99		0.34	41.1923	20.3357				10.7	1.8	17	12	107	0.39	1.34	m	
OrigID 256																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.8	0.0	9	256
Md	2.9	0.0	5	256

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
TIR	0.39	294.0	Sg	22:59:56.139	0.0					---				m		3964	
TIR	0.39	294.0	Pg	22:59:49.301	-0.8					---				m		3963	
TIR	0.39	294.0	AMl	22:59:55.920						---		5.4	0.30	a	Ml	2.8	2203
TIR	0.39	294.0	AMd	23:00:43.632						---		0.0	54.33	a	Md	2.8	2198
PHP	0.50	9.0	Sg	23:00:00.329	1.0					---				m		3966	
PHP	0.50	9.0	Pg	22:59:51.940	0.1					---				m		3965	
PHP	0.50	9.0	AMl	23:00:02.870						---		3.1	0.26	a	Ml	2.7	2204
PHP	0.50	9.0	AMd	23:00:51.048						---		0.0	59.11	a	Md	2.9	2199
KBN	0.66	148.0	Sg	23:00:04.970	0.5					---				m		3968	

KBN	0.66	148.0	Pg	22:59:55.055	0.2	---				m							3967
KBN	0.66	148.0	AM1	23:00:09.910		---			1.9	0.60	a	M1	2.8				2205
KBN	0.66	148.0	AMd	23:00:44.780		---			0.0	49.72	a	Md	2.8				2200
BPA2	0.71	230.0	Sg	23:00:06.845	-0.1	---					m						3970
BPA2	0.71	230.0	Pg	22:59:56.171	-0.1	---					m						3969
FNA	0.89	116.0	Sg	23:00:12.838	-0.1	---					m						3972
FNA	0.89	116.0	Pg	22:59:59.276	-0.4	---					m						3971
FNA	0.89	116.0	AM1	23:00:15.380		---			2.8	0.24	a	M1	3.2				2206
PUK	0.91	339.0	Sg	23:00:14.062	0.7	---					m						3974
PUK	0.91	339.0	Pg	22:59:59.308	-0.6	---					m						3973
PUK	0.91	339.0	AM1	23:00:16.700		---			2.8	0.28	a	M1	3.2				2207
PUK	0.91	339.0	AMd	23:01:00.622		---			0.0	61.31	a	Md	3.0				2201
VLO	0.96	222.0	S	23:00:15.819	1.7	---					m						3976
VLO	0.96	222.0	P	23:00:00.789	0.4	---					m						3975
VLO	0.96	222.0	AM1	23:00:22.040		---			2.5	0.36	a	M1	3.2				2208
VLO	0.96	222.0	AMd	23:00:56.455		---			0.0	55.67	a	Md	2.9				2202
LSK	1.06	169.0	Sg	23:00:18.311	0.0	---					m						3978
LSK	1.06	169.0	Pg	23:00:01.407	-1.3	---					m						3977
LSK	1.06	169.0	AM1	23:00:31.480		---			1.0	0.50	a	M1	2.8				2209
BCI	1.19	0.0	Pg	23:00:04.200	0.0	---					m						3982
BCI	1.19	351.0	Sg	23:00:22.339	-0.1	---					m						3979
BCI	1.19	351.0	AM1	23:00:23.590		---			1.0	0.62	a	M1	2.9				2210
SRN	1.34	192.0	Sg	23:00:27.770	0.0	---					m						3981
SRN	1.34	192.0	Pg	23:00:07.849	-0.3	---					m						3980
SRN	1.34	192.0	AM1	23:00:29.640		---			0.2	0.56	a	M1	2.4				2211

DATA\_TYPE COMMENT GSE2.1  
Event 214

Official Magnitude:  
M1 2.84

Error ellipse:

	Azim	Dip	Mag
Max:	354	88	1.8000
Intermediate:	65	0	0.6600
Min:	155	2	0.4500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537609 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 219 1.0 km from Bokaj, Elbasan, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
OrigID																		

2019/01/02 00:03:52.26            0.17 41.1927 20.2942            17.1 1.0 20 29 104 0.36 1.86 m  
261

Magnitude	Err	Nsta	Author	OrigID
M1	2.2	0.0	7	261
Md	2.5	0.0	3	261

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.36	0.0	P	00:03:59.843	0.0					---				m		4059
TIR	0.36	296.0	S	00:04:05.583	-0.3					---				m		4037
TIR	0.36	296.0	AM1	00:04:06.550						---		1.2	0.32	a	M1	2.2
TIR	0.36	296.0	AM1	00:04:06.000						---		1.2	0.24	a	M1	2.2
PHP	0.50	12.0	S	00:04:09.918	-0.1					---				m		4039
PHP	0.50	12.0	P	00:04:02.621	0.2					---				m		4038
PHP	0.50	12.0	AM1	00:04:13.520						---		0.6	0.26	a	M1	2.1
PHP	0.50	12.0	AMd	00:04:41.875						---		0.0	39.25	a	Md	2.5
KBN	0.68	146.0	S	00:04:15.609	0.2					---				m		4041
KBN	0.68	146.0	P	00:04:05.673	0.2					---				m		4040
KBN	0.68	146.0	AM1	00:04:20.570						---		0.4	0.54	a	M1	2.1
KBN	0.68	146.0	AMd	00:04:39.922						---		0.0	34.25	a	Md	2.4
PUK	0.90	341.0	S	00:04:24.803	1.8					---				m		4043
PUK	0.90	341.0	P	00:04:10.067	0.2					---				m		4042
PUK	0.90	341.0	AM1	00:04:26.380						---		0.5	0.22	a	M1	2.5
PUK	0.90	341.0	AM1	00:04:27.350						---		0.6	0.26	a	M1	2.5
PUK	0.90	341.0	AMd	00:04:54.528						---		0.0	44.46	a	Md	2.6
FNA	0.92	116.0	S	00:04:23.806	-0.1					---				m		4045
FNA	0.92	116.0	P	00:04:10.043	-0.3					---				m		4044
FNA	0.92	116.0	AM1	00:04:25.620						---		0.5	0.62	a	M1	2.4
NEST	0.96	143.0	S	00:04:25.173	-0.1					---				m		4047
NEST	0.96	143.0	P	00:04:10.862	-0.2					---				m		4046
NEST	0.96	143.0	AM1	00:04:26.110						---		0.2	0.32	a	M1	2.1
LSK	1.07	167.0	S	00:04:28.034	-0.1					---				m		4049
LSK	1.07	167.0	P	00:04:11.176	-1.6					---				m		4048
ULC	1.10	315.0	P	00:04:12.943	-0.5					---				m		4050
BCI	1.18	352.0	S	00:04:31.981	0.1					---				m		4052
BCI	1.18	352.0	P	00:04:14.745	-0.1					---				m		4051
BCI	1.18	352.0	AM1	00:04:35.750						---		0.2	0.48	a	M1	2.3
SRN	1.33	190.0	P	00:04:18.031	0.1					---				m		4053
PVY	1.42	351.0	P	00:04:19.135	-0.0					---				m		4054
BUM	1.52	318.0	P	00:04:20.775	-0.2					---				m		4055
SCTE	1.78	232.0	P	00:04:25.742	0.3					---				m		4056
HCY	1.84	314.0	P	00:04:26.550	0.1					---				m		4057
NKME	1.86	329.0	P	00:04:26.765	0.0					---				m		4058

DATA\_TYPE COMMENT GSE2.1  
Event                    219

Official Magnitude:  
M1 2.19

Error ellipse:

	Azim	Dip	Mag
Max:	18	85	0.9500
Intermediate:	243	3	0.5500
Min:	153	4	0.2600

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537608 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 221 0.6 km from Broshkë, Elbasan, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/02	06:24:24.87		0.27	41.0598	19.9120				3.7	2.0	26	26	94	0.29	1.85	m	

Magnitude	Err	Nsta	Author	OrigID
M1	2.1	0.0	10	263
Md	2.6	0.0	4	263

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.29	0.0	P	06:24:31.942	0.0									m		4103
TIR	0.29	353.0	S	06:24:35.934	-0.1									m		4074
TIR	0.29	353.0	AM1	06:24:37.560								1.2	0.34	a	M1	2.1
TIR	0.29	353.0	AM1	06:24:37.580								1.0	0.18	a	M1	2.0
BPA2	0.40	215.0	S	06:24:44.804	5.2									m		4076
BPA2	0.40	215.0	P	06:24:33.091	-0.2									m		4075
VLO	0.67	209.0	S	06:24:47.703	0.2									m		4078
VLO	0.67	209.0	P	06:24:37.756	-0.0									m		4077
VLO	0.67	209.0	AM1	06:24:58.150								0.8	0.22	a	M1	2.4
PHP	0.74	32.0	S	06:24:50.482	-0.1									m		4080
PHP	0.74	32.0	P	06:24:39.341	-0.2									m		4079
PHP	0.74	32.0	AM1	06:24:53.750								0.3	0.20	a	M1	2.1
PHP	0.74	32.0	AMd	06:25:08.098								0.0	28.76	a	Md	2.2
KBN	0.79	122.0	S	06:24:54.258	2.2									m		4082
KBN	0.79	122.0	P	06:24:40.681	0.3									m		4081
KBN	0.79	122.0	AM1	06:24:55.250								0.3	0.68	a	M1	2.1
KBN	0.79	122.0	AMd	06:25:22.204								0.0	41.52	a	Md	2.6
PUK	0.98	0.0	S	06:24:58.748	-0.2									m		4084
PUK	0.98	0.0	P	06:24:44.247	-0.1									m		4083
PUK	0.98	0.0	AM1	06:25:03.540								0.2	0.42	a	M1	2.1
ULC	1.03	332.0	P	06:24:45.742	0.4									m		4085
LSK	1.05	149.0	S	06:25:01.137	-0.0									m		4087
LSK	1.05	149.0	P	06:24:45.392	-0.2									m		4086
LSK	1.05	149.0	AM1	06:25:08.990								0.3	0.62	a	M1	2.3
NEST	1.08	126.0	S	06:25:02.399	0.0									m		4089

NEST	1.08	126.0	P	06:24:46.020	-0.3	---											m		4088
NEST	1.08	126.0	AMl	06:25:09.510		---				0.1	0.46	a	Ml	1.8					2271
NEST	1.08	126.0	AMd	06:25:31.057		---				0.0	45.04	a	Md	2.7					2262
FNA	1.15	103.0	S	06:25:04.752	0.0	---											m		4091
FNA	1.15	103.0	P	06:24:47.776	0.1	---											m		4090
FNA	1.15	103.0	AMl	06:25:08.080		---				0.3	0.42	a	Ml	2.3					2272
SRN	1.18	176.0	S	06:25:06.173	-0.3	---											m		4093
SRN	1.18	176.0	P	06:24:48.648	0.0	---											m		4092
SRN	1.18	176.0	AMl	06:25:13.850		---				0.1	0.68	a	Ml	1.9					2273
BCI	1.31	5.0	S	06:25:10.388	0.4	---											m		4095
BCI	1.31	5.0	P	06:24:51.073	0.4	---											m		4094
BCI	1.31	5.0	AMl	06:25:16.350		---				0.3	0.44	a	Ml	2.4					2274
BCI	1.31	5.0	AMd	06:25:31.359		---				0.0	40.29	a	Md	2.6					2263
BUM	1.45	329.0	P	06:24:52.881	-0.4	---											m		4096
SCTE	1.47	229.0	S	06:25:13.485	-1.7	---											m		4098
SCTE	1.47	229.0	P	06:24:54.156	0.5	---											m		4097
PVY	1.53	1.0	P	06:24:54.509	-0.2	---											m		4099
HCY	1.75	323.0	P	06:24:57.984	-0.5	---											m		4100
BEY	1.81	0.0	P	06:24:59.714	0.1	---											m		4101
NKME	1.85	338.0	P	06:24:59.141	-1.2	---											m		4102

DATA\_TYPE COMMENT GSE2.1  
Event 221

Official Magnitude:  
Ml 2.07

Error ellipse:

	Azim	Dip	Mag
Max:	260	86	2.0400
Intermediate:	82	3	0.5300
Min:	172	0	0.3100

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537608 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 222 0.4 km from Gjanç, Korçë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
2019/01/02	22:33:34.57		0.09	40.5408	20.6498				17.2	0.8	13	26	122	0.13	1.88	m		
264																		

Magnitude	Err	Nsta	Author	OrigID
Ml	2.4	0.0	7	264
Md	2.4	0.0	3	264

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
KBN	0.13	51.0	S	22:33:40.960	0.0					---				m		4105
KBN	0.13	51.0	P	22:33:38.236	0.0					---				m		4104
KBN	0.13	51.0	AM1	22:33:42.160						---		5.5	0.26	a	M1	2.7
KBN	0.13	51.0	AM1	22:33:42.000						---		9.5	0.32	a	M1	2.9
KBN	0.13	51.0	AMd	22:34:13.237						---		0.0	35.00	a	Md	2.4
NEST	0.33	112.0	S	22:33:47.258	-0.0					---				m		4107
NEST	0.33	112.0	P	22:33:41.867	0.0					---				m		4106
NEST	0.33	112.0	AM1	22:33:51.250						---		1.2	0.30	a	M1	2.2
LSK	0.39	186.0	S	22:33:49.141	0.1					---				m		4109
LSK	0.39	186.0	P	22:33:42.661	-0.2					---				m		4108
LSK	0.39	186.0	AM1	22:33:51.150						---		2.1	0.48	a	M1	2.4
LSK	0.39	186.0	AMd	22:34:33.797						---		0.0	51.14	a	Md	2.8
FNA	0.61	66.0	S	22:33:56.256	0.1					---				m		4111
FNA	0.61	66.0	P	22:33:46.757	-0.2					---				m		4110
FNA	0.61	66.0	AM1	22:33:58.790						---		2.0	0.38	a	M1	2.7
SRN	0.83	218.0	S	22:34:03.920	0.1					---				m		4113
SRN	0.83	218.0	P	22:33:50.804	-0.5					---				m		4112
SRN	0.83	218.0	AM1	22:34:06.230						---		0.1	0.32	a	M1	1.7
SRN	0.83	218.0	AM1	22:34:06.470						---		0.2	0.50	a	M1	1.9
SRN	0.83	218.0	AMd	22:34:25.430						---		0.0	34.63	a	Md	2.4
PHP	1.15	353.0	S	22:34:12.927	0.1					---				m		4115
PHP	1.15	353.0	P	22:33:56.478	0.0					---				m		4114
PHP	1.15	353.0	AM1	22:34:21.020						---		0.2	0.54	a	M1	2.2
PUK	1.60	340.0	S	22:34:27.189	0.0					---				m		4117
PUK	1.60	340.0	P	22:34:04.464	-0.2					---				m		4116
BCI	1.88	0.0	P	22:34:10.705	0.0					---				m		4119
BCI	1.88	347.0	S	22:34:36.293	1.2					---				m		4118
BCI	1.88	347.0	AM1	22:34:49.050						---		0.2	1.22	a	M1	2.7

DATA\_TYPE COMMENT GSE2.1  
Event 222

Official Magnitude:  
M1 2.44

Error ellipse:

	Azim	Dip	Mag
Max:	107	59	0.9100
Intermediate:	262	28	0.3300
Min:	358	11	0.2800

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537607 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 225 1.3 km from Vane, Vlorë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/04	19:27:38.13		0.36	40.0582	19.8812				27.5	1.1	16	13	120	0.20	2.31	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	4.8	0.0	11	267
Md	4.4	0.0	7	267

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
SRN	0.20	152.0	Sg	19:27:49.882	0.3									m		4158	
SRN	0.20	152.0	Pg	19:27:44.346	-0.3									m		4157	
SRN	0.20	152.0	AMl	19:27:53.090								196.0	0.66	a	Ml	4.4	2321
SRN	0.20	152.0	AMd	19:31:57.888								0.0	253.54	a	Md	4.4	2314
VLO	0.51	325.0	Sg	19:27:55.991	0.2									m		4160	
VLO	0.51	325.0	Pg	19:27:47.628	-0.6									m		4159	
VLO	0.51	325.0	AMl	19:28:00.620								592.8	0.44	a	Ml	5.1	2322
VLO	0.51	325.0	AMd	19:31:06.177								0.0	198.55	a	Md	4.1	2315
LSK	0.56	80.0	Sg	19:28:00.190	1.9									m		4162	
LSK	0.56	80.0	Pg	19:27:49.780	0.1									m		4161	
LSK	0.56	80.0	AMl	19:28:04.630								242.5	1.24	a	Ml	4.8	2323
LSK	0.56	80.0	AMd	19:32:22.883								0.0	273.10	a	Md	4.5	2316
KBN	0.89	50.0	Pg	19:27:55.280	0.1									m		4163	
KBN	0.89	50.0	AMl	19:28:18.000								104.3	0.88	a	Ml	4.7	2324
KBN	0.89	50.0	AMd	19:31:36.096								0.0	220.82	a	Md	4.3	2317
SCTE	1.08	272.0	Pn	19:27:59.012	0.0									m		4164	
SCTE	1.08	272.0	AMl	19:28:17.770								266.5	1.44	a	Ml	5.3	2325
TIR	1.29	0.0	Pg	19:28:02.016	0.0									m		4175	
TIR	1.29	0.0	Sg	19:28:20.986	0.1									m		4165	
TIR	1.29	0.0	AMl	19:28:27.780								38.3	0.72	a	Ml	4.6	2326
FNA	1.36	57.0	Sn	19:28:24.446	1.5									m		4167	
FNA	1.36	57.0	Pn	19:28:03.798	0.1									m		4166	
FNA	1.36	57.0	AMl	19:28:31.010								57.3	1.24	a	Ml	4.8	2327
FNA	1.36	57.0	AMd	19:30:25.423								0.0	141.62	a	Md	3.9	2318
PHP	1.68	14.0	Sn	19:28:32.708	1.2									m		4169	
PHP	1.68	14.0	Pn	19:28:08.208	-0.5									m		4168	
PHP	1.68	14.0	AMl	19:28:42.090								73.1	1.02	a	Ml	5.2	2328
PHP	1.68	14.0	AMd	19:32:36.187								0.0	267.98	a	Md	4.5	2319
PUK	1.98	0.0	Sn	19:28:39.460	-0.2									m		4171	
PUK	1.98	0.0	Pn	19:28:12.183	-1.1									m		4170	
PUK	1.98	0.0	AMl	19:28:43.000								21.7	1.06	a	Ml	4.8	2329
PUK	1.98	0.0	AMd	19:32:44.883								0.0	272.70	a	Md	4.6	2320
NOCI	2.27	290.0	Sn	19:28:47.669	0.3									m		4172	
NOCI	2.27	290.0	AMl	19:28:57.290								56.4	0.60	a	Ml	5.4	2330
BCI	2.31	3.0	Sn	19:28:48.524	0.4									m		4174	
BCI	2.31	3.0	P	19:28:17.044	-1.1									m		4173	
BCI	2.31	3.0	AMl	19:29:08.210								48.2	0.96	a	Ml	5.3	2331

DATA\_TYPE COMMENT GSE2.1  
 Event 225

Official Magnitude:  
 Ml 4.83

Error ellipse:

	Azim	Dip	Mag
Max:	179	50	1.4200
Intermediate:	75	11	0.8500
Min:	336	38	0.5700

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537607 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 226 Region N/A

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/04	19:39:12.06		0.34	39.9558	19.7090				32.5	0.8	13	9	235	0.23	2.42	m	
OrigID 268																	

Magnitude	Err	Nsta	Author	OrigID
Ml	4.0	0.0	7	268
Md	3.8	0.0	5	268

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
SRN	0.24	108.0	Sg	19:39:24.987	-0.2									m		4177	
SRN	0.24	108.0	Pg	19:39:19.998	0.4									m		4176	
SRN	0.24	108.0	AMl	19:39:27.620								45.8	0.78	a	Ml	3.8	2337
SRN	0.24	108.0	AMd	19:41:55.810								0.0	155.81	a	Md	3.9	2332
VLO	0.54	343.0	Sg	19:39:31.139	0.1									m		4178	
VLO	0.54	343.0	AMl	19:39:34.950								109.0	0.60	a	Ml	4.4	2338
LSK	0.71	73.0	Sg	19:39:36.606	-0.5									m		4180	
LSK	0.71	73.0	P	19:39:25.448	-0.9									m		4179	
LSK	0.71	73.0	AMl	19:39:48.420								27.3	0.78	a	Ml	4.0	2339
LSK	0.71	73.0	AMd	19:42:13.875								0.0	168.43	a	Md	4.0	2333
BPA2	0.78	355.0	Pg	19:39:27.248	-0.4									m		4181	
KBN	1.06	50.0	Sg	19:39:47.590	0.6									m		4183	
KBN	1.06	50.0	Pg	19:39:32.180	0.2									m		4182	
KBN	1.06	50.0	AMl	19:39:47.970								9.8	0.66	a	Ml	3.9	2340
KBN	1.06	50.0	AMd	19:41:09.577								0.0	97.40	a	Md	3.5	2334
TIR	1.40	0.0	Pg	19:39:37.557	0.0									m		4190	
PHP	1.81	17.0	Sn	19:40:09.528	1.2									m		4185	
PHP	1.81	17.0	Pn	19:39:44.474	0.3									m		4184	
PHP	1.81	17.0	AMl	19:40:17.580								6.2	1.02	a	Ml	4.2	2341





LSK	0.53	81.0	AMd	03:13:21.196	---	0.0	45.40	a__	Md	2.6	2345	
KBN	0.87	50.0	Sg	03:12:53.646	-0.1	---		m__			4197	
KBN	0.87	50.0	Pg	03:12:41.486	0.1	---		m__			4196	
KBN	0.87	50.0	AMl	03:12:58.230		---	0.2	0.48	a__	Ml	2.1	2349
PHP	1.66	13.0	Pn	03:12:55.588	-0.0	---		m__			4198	

DATA\_TYPE COMMENT GSE2.1  
Event 227

Official Magnitude:  
Ml 2.06

Error ellipse:

	Azim	Dip	Mag
Max:	226	52	2.7200
Intermediate:	106	20	0.3900
Min:	4	30	0.3400

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537607 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 228 2.2 km from Velë-Vend, Lezhë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/05	19:02:46.70		0.10	41.8335	19.7060				30.0	1.5	7	8	125	0.25	0.60	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.1	0.0	3	270
Md	2.3	0.0	2	270

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
PUK	0.25	0.0	Pg	19:02:53.399	0.0									m__		4208	
PUK	0.25	33.0	Sg	19:02:58.826	0.0									m__		4200	
PUK	0.25	33.0	AMl	19:02:59.300								1.4	0.10	a__	Ml	2.3	2352
ULC	0.36	291.0	P	19:02:55.408	0.1									m__		4201	
TIR	0.50	166.0	P	19:02:57.638	0.1									m__		4203	
TIR	0.50	166.0	Sg	19:03:05.506	-0.1									m__		4202	
PHP	0.57	104.0	Sg	19:03:07.229	0.1									m__		4205	
PHP	0.57	104.0	Pg	19:02:58.127	-0.3									m__		4204	
PHP	0.57	104.0	AMl	19:03:08.470								0.3	0.24	a__	Ml	1.9	2353
PHP	0.57	104.0	AMd	19:03:31.433								0.0	33.31	a__	Md	2.3	2350
BCI	0.60	26.0	S	19:03:08.859	0.6									m__		4207	
BCI	0.60	26.0	Pg	19:02:58.945	-0.1									m__		4206	
BCI	0.60	26.0	AMl	19:03:10.280								0.4	0.28	a__	Ml	2.1	2354

BCI 0.60 26.0 AMd 19:03:32.120 \_\_\_\_\_ 0.0 33.17 a\_\_ Md 2.3 2351

DATA\_TYPE COMMENT GSE2.1  
Event 228

Official Magnitude:  
Ml 2.08

Error ellipse:

	Azim	Dip	Mag
Max:	43	81	1.5500
Intermediate:	263	6	0.6000
Min:	172	6	0.4500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537607 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 229 0.7 km from Lëngëz, Korçë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/06	04:30:06.61		0.49	40.3568	20.6397				21.0	42.3	12	8	110	0.21	1.33	m	
OrigID 271																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.1	0.0	4	271
Md	2.4	0.0	4	271

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
LSK	0.21	189.0	Sg	04:30:16.413	0.8					___				m__		4210
LSK	0.21	189.0	Pg	04:30:11.177	-0.6					___				m__		4209
LSK	0.21	189.0	AMl	04:30:18.360						___		1.1	0.30	a__ Ml	2.1	2359
LSK	0.21	189.0	AMd	04:30:45.169						___		0.0	33.99	a__ Md	2.3	2355
KBN	0.29	22.0	Sg	04:30:17.824	0.3					___				m__		4212
KBN	0.29	22.0	Pg	04:30:11.917	-0.9					___				m__		4211
KBN	0.29	22.0	AMl	04:30:18.350						___		0.4	0.36	a__ Ml	1.7	2360
KBN	0.29	22.0	AMd	04:30:41.582						___		0.0	29.67	a__ Md	2.2	2356
NEST	0.32	0.0	Pg	04:30:14.241	0.0					___				m__		4222
NEST	0.32	79.0	Sg	04:30:19.625	0.4					___				m__		4213
SRN	0.68	227.0	S	04:30:30.999	-0.2					___				m__		4215
SRN	0.68	227.0	Pg	04:30:18.721	-1.9					___				m__		4214
SRN	0.68	227.0	AMd	04:30:52.225						___		0.0	33.50	a__ Md	2.4	2357
FNA	0.71	52.0	Sg	04:30:31.772	0.5					___				m__		4217
FNA	0.71	52.0	Pg	04:30:20.079	-0.7					___				m__		4216
FNA	0.71	52.0	AMl	04:30:34.910						___		0.3	0.22	a__ Ml	2.1	2361
FNA	0.71	52.0	AMd	04:31:00.132						___		0.0	40.05	a__ Md	2.5	2358

VLO	0.88	278.0	Sg	04:30:35.862	0.4	---										m		4219
VLO	0.88	278.0	Pg	04:30:23.600	0.5	---										m		4218
VLO	0.88	278.0	AMl	04:30:39.030		---				0.5	0.26	a	Ml	2.4				2362
PHP	1.33	354.0	Sg	04:30:50.089	-0.2	---										m		4221
PHP	1.33	354.0	P	04:30:31.253	-0.3	---										m		4220

DATA\_TYPE COMMENT GSE2.1  
Event 229

Official Magnitude:  
Ml 2.06

Error ellipse:

	Azim	Dip	Mag
Max:	0	90	42.3300
Intermediate:	315	0	1.1400
Min:	45	0	0.7500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 230 1.6 km from Sheshaj, Lezhë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/07	09:43:01.36		0.20	41.7528	19.8653				29.1	1.1	10	14	114	0.29	1.61	m	
273																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.0	0.0	4	273
Md	2.8	0.0	7	273

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
PUK	0.29	4.0	S	09:43:14.310	0.1					---				m		4236	
PUK	0.29	4.0	P	09:43:08.238	-0.5					---				m		4235	
PUK	0.29	4.0	AMl	09:43:14.990						---		5.0	0.16	a	Ml	2.8	2381
PUK	0.29	4.0	AMd	09:43:34.111						---		0.0	25.87	a	Md	2.1	2374
TIR	0.40	181.0	S	09:43:17.572	0.1					---				m		4238	
TIR	0.40	181.0	P	09:43:11.003	0.4					---				m		4237	
TIR	0.40	181.0	AMl	09:43:19.770						---		0.2	0.20	a	Ml	1.5	2382
TIR	0.40	181.0	AMd	09:43:53.434						---		0.0	42.43	a	Md	2.6	2375
PHP	0.44	98.0	S	09:43:17.693	-0.2					---				m		4240	
PHP	0.44	98.0	P	09:43:10.703	-0.1					---				m		4239	
PHP	0.44	98.0	AMl	09:43:18.970						---		0.4	0.30	a	Ml	1.8	2383
PHP	0.44	98.0	AMd	09:43:55.153						---		0.0	44.45	a	Md	2.6	2376
ULC	0.51	295.0	P	09:43:11.963	-0.3					---				m		4241	



NEST	0.41	0.0	P	04:30:14.245	0.0	---										m	4277
NEST	0.41	82.0	S	04:30:20.987	0.3	---										m	4267
NEST	0.41	82.0	AMl	04:30:23.800		---				0.3	0.42	a	Ml	1.7			2404
SRN	0.62	220.0	S	04:30:28.023	-0.2	---										m	4269
SRN	0.62	220.0	P	04:30:18.364	-0.1	---										m	4268
SRN	0.62	220.0	AMl	04:30:30.540		---				0.1	0.30	a	Ml	1.5			2405
SRN	0.62	220.0	AMd	04:30:44.997		---				0.0	26.63	a	Md	2.1			2401
FNA	0.78	57.0	S	04:30:31.131	-1.6	---										m	4271
FNA	0.78	57.0	P	04:30:20.111	-1.0	---										m	4270
FNA	0.78	57.0	AMl	04:30:34.910		---				0.3	0.22	a	Ml	2.1			2406
VLO	0.79	279.0	S	04:30:32.054	0.4	---										m	4273
VLO	0.79	279.0	P	04:30:19.373	-1.1	---										m	4272
PHP	1.32	358.0	S	04:30:49.475	0.4	---										m	4275
PHP	1.32	358.0	P	04:30:30.441	0.1	---										m	4274
PUK	1.74	345.0	P	04:30:37.347	-0.7	---										m	4276

DATA\_TYPE COMMENT GSE2.1  
Event 232

Official Magnitude:  
Ml 1.74

Error ellipse:

	Azim	Dip	Mag
Max:	138	68	2.5100
Intermediate:	297	19	0.6500
Min:	30	7	0.5200

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 233 0.1 km from Barbas, Tirana, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/07	18:51:36.91		0.03	41.2765	19.9117				10.0	0.7	6	29	290	0.08	1.10	m	277

Magnitude	Err	Nsta	Author	OrigID
Ml	1.5	0.0	3	277
Md	2.2	0.0	3	277

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
TIR	0.08	0.0	P	18:51:39.816	0.0											4285	
TIR	0.08	334.0	S	18:51:41.297	-0.0											4278	
TIR	0.08	334.0	AMl	18:51:41.150								0.6	0.10	a	Ml	1.5	2410



PHP	0.57	44.0	AMd	18:52:10.501	___	0.0	22.31	a__	Md	1.9	2407	
PUK	0.77	359.0	S	18:52:03.437	0.0	___		m__			4282	
PUK	0.77	359.0	P	18:51:51.719	-0.3	___		m__			4281	
PUK	0.77	359.0	AM1	18:52:10.390		___	0.1	0.38	a__	M1	1.6	2413
PUK	0.77	359.0	AM1	18:52:09.140		___	0.1	0.22	a__	M1	1.5	2412
PUK	0.77	359.0	AMd	18:52:23.827		___	0.0	32.11	a__	Md	2.3	2408
BCI	1.10	6.0	S	18:52:14.446	0.0	___			m__		4284	
BCI	1.10	6.0	P	18:51:58.320	-0.0	___			m__		4283	
BCI	1.10	6.0	AMd	18:52:24.895		___	0.0	26.57	a__	Md	2.2	2409

DATA\_TYPE COMMENT GSE2.1  
Event 233

Official Magnitude:  
M1 1.51

Error ellipse:

	Azim	Dip	Mag
Max:	212	31	1.2700
Intermediate:	328	36	0.8100
Min:	93	39	0.5600

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 234 1.0 km from Mushqeta, Tirana, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/08	04:16:32.45		0.20	41.2247	19.9500				17.6	0.8	18	28	147	0.13	1.64	m	278

Magnitude	Err	Nsta	Author	OrigID
M1	1.8	0.0	5	278
Md	2.0	0.0	2	278

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.14	333.0	S	04:16:39.744	-0.1					___				m__		4287
TIR	0.14	333.0	P	04:16:37.054	0.4					___				m__		4286
TIR	0.14	333.0	AM1	04:16:40.110						___		1.0	0.30	a__	M1	2416
TIR	0.14	333.0	AMd	04:16:58.234						___		0.0	21.18	a__	Md	2414
PHP	0.59	38.0	S	04:16:52.819	-0.1					___				m__		4289
PHP	0.59	38.0	P	04:16:44.050	-0.1					___				m__		4288
PHP	0.59	38.0	AM1	04:16:58.860						___		0.1	0.28	a__	M1	2417
PHP	0.59	38.0	AMd	04:17:14.427						___		0.0	30.38	a__	Md	2415
PUK	0.82	358.0	S	04:17:00.479	-0.1					___				m__		4291



PUK	0.82	358.0	P	04:16:48.404	-0.1	---											m		4290
PUK	0.82	358.0	AM1	04:17:05.770		---				0.1	0.32	a	M1	1.6					2419
PUK	0.82	358.0	AM1	04:17:05.150		---				0.1	0.38	a	M1	1.6					2418
ULC	0.91	325.0	P	04:16:50.191	-0.0	---											m		4292
DRME	1.12	330.0	P	04:16:54.144	0.2	---											m		4293
BCI	1.15	0.0	P	04:16:55.042	0.0	---											m		4306
BCI	1.14	4.0	S	04:17:10.959	0.2	---											m		4294
BCI	1.14	4.0	AM1	04:17:15.590		---				0.1	0.88	a	M1	2.0					2420
NEST	1.16	133.0	S	04:17:11.858	0.4	---											m		4296
NEST	1.16	133.0	P	04:16:54.503	-0.3	---											m		4295
FNA	1.17	111.0	S	04:17:11.726	-0.0	---											m		4298
FNA	1.17	111.0	P	04:16:54.871	-0.1	---											m		4297
FNA	1.17	111.0	AM1	04:17:13.480		---				0.1	0.74	a	M1	1.9					2421
LSK	1.18	155.0	S	04:17:12.076	0.2	---											m		4300
LSK	1.18	155.0	P	04:16:54.935	-0.0	---											m		4299
BUM	1.33	325.0	P	04:16:57.649	-0.1	---											m		4301
SRN	1.34	178.0	S	04:17:17.446	-0.3	---											m		4303
SRN	1.34	178.0	P	04:16:59.500	1.2	---											m		4302
PVY	1.37	0.0	P	04:16:59.176	0.8	---											m		4304
HCY	1.64	319.0	P	04:17:00.764	-2.4	---											m		4305

DATA\_TYPE COMMENT GSE2.1  
Event 234

Official Magnitude:  
M1 1.78

Error ellipse:

	Azim	Dip	Mag
Max:	290	72	0.8000
Intermediate:	65	12	0.6300
Min:	158	12	0.3000

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 235 0.9 km from Kuçok, Durrës, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/08	11:08:31.23		0.08	41.4578	19.5653				19.2	2.0	9	9	218	0.25	1.63	m	
280																	

Magnitude	Err	Nsta	Author	OrigID
M1	2.2	0.0	3	280
Md	2.6	0.0	2	280

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.25	115.0	S	11:08:41.746	-0.1					---				m		4320
TIR	0.25	115.0	P	11:08:37.386	0.1					---				m		4319
TIR	0.25	115.0	AMl	11:08:42.280						---		2.2	0.38	a	Ml	2.4
TIR	0.25	115.0	AMd	11:09:17.448						---		0.0	40.06	a	Md	2.5
ULC	0.56	336.0	P	11:08:42.216	-0.5					---				m		4321
PUK	0.63	22.0	S	11:08:53.480	0.0					---				m		4323
PUK	0.63	22.0	P	11:08:44.115	0.2					---				m		4322
PUK	0.63	22.0	AMl	11:08:57.220						---		0.6	0.38	a	Ml	2.2
PUK	0.63	22.0	AMd	11:09:32.100						---		0.0	47.99	a	Md	2.7
PHP	0.70	0.0	P	11:08:45.198	0.0					---				m		4330
PHP	0.69	70.0	S	11:08:55.104	0.0					---				m		4324
PHP	0.69	70.0	AMl	11:08:59.570						---		0.4	0.50	a	Ml	2.2
BUM	0.98	330.0	P	11:08:50.981	0.8					---				m		4325
PVY	1.18	14.0	P	11:08:53.690	0.0					---				m		4326
NKME	1.38	342.0	P	11:08:57.382	0.0					---				m		4327
BEY	1.43	9.0	P	11:08:58.205	-0.0					---				m		4328
BRY	1.63	333.0	P	11:09:01.655	-0.1					---				m		4329

DATA\_TYPE COMMENT GSE2.1  
Event 235

Official Magnitude:  
Ml 2.22

Error ellipse:

	Azim	Dip	Mag
Max:	191	51	2.5100
Intermediate:	66	24	0.6700
Min:	322	28	0.3800

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 244 0.9 km from Qeparoi i Sipërm, Vlorë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/09	20:39:07.68		0.05	40.0748	19.8223				16.3	2.1	8	29	147	0.23	1.38	m	
289																	

Magnitude	Err	Nsta	Author	OrigID
Ml	1.7	0.0	3	289
Md	2.2	0.0	2	289

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
SRN	0.24	144.0	S	20:39:18.086	-0.1					---				m		4390	
SRN	0.24	144.0	P	20:39:13.771	0.1					---				m		4389	
SRN	0.24	144.0	AMl	20:39:19.800						---		0.3	0.36	a	Ml	1.4	2469
SRN	0.24	144.0	AMd	20:39:37.779						---		0.0	24.01	a	Md	2.0	2467
LSK	0.60	82.0	S	20:39:28.755	-0.0					---				m		4392	
LSK	0.60	82.0	P	20:39:19.731	0.0					---				m		4391	
LSK	0.60	82.0	AMl	20:39:34.300						---		0.2	0.68	a	Ml	1.7	2470
LSK	0.60	82.0	AMd	20:39:57.928						---		0.0	38.20	a	Md	2.5	2468
NEST	1.02	0.0	P	20:39:27.989	0.0					---				m		4398	
NEST	1.00	69.0	S	20:39:41.773	0.0					---				m		4393	
SCTE	1.04	271.0	S	20:39:43.980	1.0					---				m		4395	
SCTE	1.04	271.0	P	20:39:27.831	-0.0					---				m		4394	
FNA	1.38	58.0	S	20:39:53.735	-0.0					---				m		4397	
FNA	1.38	58.0	P	20:39:33.759	-0.3					---				m		4396	
FNA	1.38	58.0	AMl	20:40:01.240						---		0.1	0.36	a	Ml	1.9	2471

DATA\_TYPE COMMENT GSE2.1  
Event 244

Official Magnitude:  
Ml 1.74

Error ellipse:

	Azim	Dip	Mag
Max:	166	54	2.6200
Intermediate:	312	30	0.4300
Min:	52	17	0.3500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 246 0.9 km from Gradec, Shkodër, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/10	11:23:15.16		0.09	42.2480	19.4668				31.2	0.8	11	29	152	0.38	2.05	m	
291																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.3	0.0	3	291
Md	2.4	0.0	3	291

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
ULC	0.32	0.0	P	11:23:23.764	0.0					---				m		4421
PUK	0.38	122.0	S	11:23:30.735	0.1					---				m		4409

PUK	0.38	122.0	P	11:23:24.042	0.1	---											m		4408
PUK	0.38	122.0	AM1	11:23:32.040		---				1.2	0.16	a	M1	2.3					2481
PUK	0.38	122.0	AM1	11:23:33.230		---				1.3	0.16	a	M1	2.3					2480
PUK	0.38	122.0	AMd	11:23:51.609		---				0.0	27.57	a	Md	2.2					2477
BUM	0.42	278.0	P	11:23:25.750	0.9	---											m		4410
BCI	0.46	74.0	S	11:23:32.828	-0.1	---											m		4412
BCI	0.46	74.0	P	11:23:25.153	-0.2	---											m		4411
BCI	0.46	74.0	AM1	11:23:33.230		---				1.0	0.20	a	M1	2.3					2482
BCI	0.46	74.0	AMd	11:24:00.997		---				0.0	35.84	a	Md	2.4					2478
PVY	0.51	47.0	P	11:23:26.296	0.1	---											m		4413
NKME	0.64	325.0	P	11:23:28.378	0.0	---											m		4414
BEY	0.70	27.0	P	11:23:29.472	0.1	---											m		4415
HCY	0.75	286.0	P	11:23:30.195	-0.1	---											m		4416
PHP	0.92	127.0	S	11:23:45.978	-0.1	---											m		4418
PHP	0.92	127.0	P	11:23:32.839	0.0	---											m		4417
PHP	0.92	127.0	AM1	11:23:48.880		---				0.2	0.68	a	M1	2.1					2484
PHP	0.92	127.0	AM1	11:23:49.490		---				0.1	0.42	a	M1	1.8					2483
PHP	0.92	127.0	AMd	11:24:07.315		---				0.0	34.48	a	Md	2.4					2479
FNA	2.05	134.0	S	11:24:18.292	0.1	---											m		4420
FNA	2.05	134.0	P	11:23:52.601	1.4	---											m		4419

DATA\_TYPE COMMENT GSE2.1  
Event 246

Official Magnitude:  
M1 2.28

Error ellipse:

	Azim	Dip	Mag
Max:	39	55	0.9800
Intermediate:	224	34	0.6000
Min:	132	2	0.3800

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537605 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 256 Region N/A

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/11	21:43:48.47		0.02	40.0450	19.8425				14.5	0.6	11	10	130	0.21	2.25	m	
301																	

Magnitude	Err	Nsta	Author	OrigID
M1	2.3	0.0	5	301
Md	3.1	0.0	6	301

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
SRN	0.20	143.0	S	21:43:59.990	2.2					---				m		4526
SRN	0.20	143.0	P	21:43:53.764	0.0					---				m		4525
SRN	0.20	143.0	AM1	21:44:02.560						---		0.7	0.32	a	M1	2534
SRN	0.20	143.0	AMd	21:44:27.525						---		0.0	33.76	a	Md	2528
VLO	0.50	329.0	S	21:44:05.263	0.0					---				m		4528
VLO	0.50	329.0	P	21:43:58.053	-0.0					---				m		4527
VLO	0.50	329.0	AM1	21:44:08.910						---		1.9	0.38	a	M1	2535
VLO	0.50	329.0	AMd	21:44:43.159						---		0.0	45.11	a	Md	2529
NEST	0.99	67.0	P	21:44:07.952	-0.0					---				m		4529
NEST	0.99	67.0	AMd	21:45:22.585						---		0.0	74.63	a	Md	2530
SCTE	1.05	273.0	S	21:44:24.460	0.0					---				m		4531
SCTE	1.05	273.0	P	21:44:09.078	0.1					---				m		4530
SCTE	1.05	273.0	AM1	21:44:26.260						---		0.3	0.36	a	M1	2536
SCTE	1.05	273.0	AMd	21:45:11.029						---		0.0	61.95	a	Md	2531
FNA	1.39	57.0	S	21:44:34.822	0.0					---				m		4533
FNA	1.39	57.0	P	21:44:14.923	-0.0					---				m		4532
FNA	1.39	57.0	AM1	21:44:43.270						---		0.1	0.46	a	M1	2537
FNA	1.39	57.0	AMd	21:45:21.456						---		0.0	66.53	a	Md	2532
PUK	2.00	0.0	P	21:44:21.407	0.0					---				m		4537
PUK	2.00	1.0	S	21:44:52.558	0.0					---				m		4534
NOCI	2.25	291.0	S	21:44:59.268	-0.0					---				m		4536
NOCI	2.25	291.0	P	21:44:28.884	-0.0					---				m		4535
NOCI	2.25	291.0	AM1	21:45:10.430						---		0.2	1.00	a	M1	2538
NOCI	2.25	291.0	AMd	21:45:36.407						---		0.0	67.52	a	Md	2533

DATA\_TYPE COMMENT GSE2.1  
Event 256

Official Magnitude:  
M1 2.33

Error ellipse:

	Azim	Dip	Mag
Max:	164	66	0.7000
Intermediate:	3	22	0.4300
Min:	270	7	0.2800

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537605 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 261 1.6 km from Krej-Lurë, Dibër, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
OrigID																	

2019/01/13 03:50:26.72            0.08 41.8320 20.1613            19.6 0.6 14 26 132 0.25 1.57 m  
306

Magnitude	Err	Nsta	Author	OrigID
Ml	2.0	0.0	5	306
Md	2.0	0.0	3	306

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
PHP	0.26	125.0	S	03:50:36.937	-0.1					---				m		4595
PHP	0.26	125.0	P	03:50:32.534	-0.1					---				m		4594
PHP	0.26	125.0	AMl	03:50:37.460						---		1.9	0.28	a	Ml	2.3
PHP	0.26	125.0	AMd	03:50:57.600						---		0.0	25.07	a	Md	2.0
PUK	0.29	317.0	S	03:50:38.328	0.0					---				m		4597
PUK	0.29	317.0	P	03:50:33.326	-0.0					---				m		4596
PUK	0.29	317.0	AMl	03:50:41.970						---		0.9	0.18	a	Ml	2.0
PUK	0.29	317.0	AMl	03:50:39.490						---		0.8	0.22	a	Ml	2.0
PUK	0.29	317.0	AMd	03:50:56.632						---		0.0	23.31	a	Md	1.9
TIR	0.53	0.0	P	03:50:37.785	0.0					---				m		4609
TIR	0.53	205.0	S	03:50:46.063	0.0					---				m		4598
TIR	0.53	205.0	AMl	03:50:47.650						---		0.1	0.16	a	Ml	1.4
BCI	0.54	353.0	S	03:50:46.057	0.0					---				m		4600
BCI	0.54	353.0	P	03:50:37.796	0.1					---				m		4599
BCI	0.54	353.0	AMl	03:50:49.430						---		0.2	0.18	a	Ml	1.7
BCI	0.54	353.0	AMd	03:51:14.861						---		0.0	37.07	a	Md	2.4
ULC	0.69	282.0	P	03:50:40.510	-0.1					---				m		4601
PVY	0.78	350.0	P	03:50:42.035	-0.0					---				m		4602
BUM	1.05	297.0	P	03:50:47.031	0.1					---				m		4603
NKME	1.29	317.0	P	03:50:51.104	-0.1					---				m		4604
HCY	1.39	297.0	P	03:50:52.725	-0.2					---				m		4605
FNA	1.40	138.0	S	03:51:12.527	-0.3					---				m		4607
FNA	1.40	138.0	P	03:50:53.186	0.1					---				m		4606
FNA	1.40	138.0	AMl	03:51:15.240						---		0.1	0.42	a	Ml	1.9
FNA	1.40	138.0	AMl	03:51:15.990						---		0.1	0.64	a	Ml	2.3
NEST	1.57	154.0	P	03:50:57.192	1.1					---				m		4608

DATA\_TYPE COMMENT GSE2.1  
Event 261

Official Magnitude:  
Ml 1.98

Error ellipse:

	Azim	Dip	Mag
Max:	78	70	0.6500
Intermediate:	237	18	0.4400
Min:	329	7	0.2700

BEGIN GSE2.1

MSG\_TYPE DATA  
 MSG\_ID 1549537605 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 265 1.9 km from Sotirë, Gjirokastër, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/13	20:21:22.07		0.15	39.8083	20.3430				6.5	1.5	8	29	241	0.27	1.47	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	1.5	0.0	4	310
Md	1.9	0.0	1	310

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
SRN	0.27	286.0	S	20:21:33.080	0.1									m		4646
SRN	0.27	286.0	P	20:21:28.173	-0.1									m		4645
SRN	0.27	286.0	AMl	20:21:35.230								0.1	0.22	a	Ml	1.1
SRN	0.27	286.0	AMd	20:21:51.277								0.0	23.10	a	Md	1.9
LSK	0.38	0.0	P	20:21:29.176	0.0									m		4654
LSK	0.39	29.0	S	20:21:36.117	0.0									m		4647
LSK	0.39	29.0	AMl	20:21:44.020								0.3	0.36	a	Ml	1.6
LSK	0.39	29.0	AMl	20:21:44.150								0.3	0.66	a	Ml	1.5
NEST	0.81	41.0	S	20:21:50.132	-0.2									m		4649
NEST	0.81	41.0	P	20:21:36.975	-1.2									m		4648
NEST	0.81	41.0	AMl	20:21:55.290								0.1	0.32	a	Ml	1.4
FNA	1.26	38.0	S	20:22:05.348	0.2									m		4651
FNA	1.26	38.0	P	20:21:47.058	0.4									m		4650
FNA	1.26	38.0	AMl	20:22:09.680								0.1	0.34	a	Ml	1.9
SCTE	1.47	282.0	S	20:22:11.557	-0.1									m		4653
SCTE	1.47	282.0	P	20:21:50.522	0.1									m		4652

DATA\_TYPE COMMENT GSE2.1  
 Event 265

Official Magnitude:  
 Ml 1.51

Error ellipse:

	Azim	Dip	Mag
Max:	342	38	2.1700
Intermediate:	150	50	1.8900
Min:	247	6	0.3300

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537604 athena

DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 267 1.4 km from Tragjas, Vlorë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/14	11:58:57.88		0.75	40.3303	19.4943				25.0	1.8	19	14	114	0.13	3.00	m	
OrigID 312																	

Magnitude	Err	Nsta	Author	OrigID
Ml	3.3	0.0	8	312
Md	3.3	0.0	3	312

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.00	0.0	P	11:59:20.150	0.0					---				m		4700
TIR	1.05	15.0	S	11:59:37.286	4.0					---				m		4688
TIR	1.05	15.0	AMl	11:59:41.470						---		1.5	0.26	a	Ml	2654
VLO	0.14	0.0	S	11:59:05.047	-0.6					---				m		4679
VLO	0.14	0.0	P	11:59:02.719	0.4					---				m		4678
VLO	0.14	0.0	AMl	11:59:08.150						---		102.0	0.18	a	Ml	2649
VLO	0.14	0.0	AMd	11:59:45.571						---		0.0	42.85	a	Md	2646
BPA2	0.41	13.0	S	11:59:13.458	-0.3					---				m		4681
BPA2	0.41	13.0	P	11:59:07.572	0.6					---				m		4680
BPA2	0.41	13.0	AMl	11:59:34.800						---		8.0	1.20	a	Ml	2650
SRN	0.59	139.0	S	11:59:19.320	-0.5					---				m		4683
SRN	0.59	139.0	P	11:59:09.627	-0.8					---				m		4682
SRN	0.59	139.0	AMl	11:59:21.340						---		2.3	0.42	a	Ml	2651
SRN	0.59	139.0	AMd	12:01:14.854						---		0.0	125.23	a	Md	2647
SCTE	0.82	253.0	S	11:59:26.676	0.5					---				m		4685
SCTE	0.82	253.0	P	11:59:14.964	0.9					---				m		4684
SCTE	0.82	253.0	AMl	11:59:29.230						---		12.7	0.32	a	Ml	2652
SCTE	0.82	253.0	AMd	12:00:37.978						---		0.0	83.01	a	Md	2648
LSK	0.86	101.0	S	11:59:31.477	4.3					---				m		4687
LSK	0.86	101.0	P	11:59:14.718	0.1					---				m		4686
LSK	0.86	101.0	AMl	11:59:35.000						---		8.8	0.66	a	Ml	2653
NEST	1.19	85.0	S	11:59:41.869	4.3					---				m		4690
NEST	1.19	85.0	P	11:59:21.554	1.0					---				m		4689
NEST	1.19	85.0	AMl	11:59:43.200						---		1.9	0.38	a	Ml	2655
PHP	1.53	27.0	S	11:59:49.155	1.6					---				m		4692
PHP	1.53	27.0	P	11:59:27.057	0.8					---				m		4691
ULC	1.64	354.0	P	11:59:27.347	-0.9					---				m		4693
PUK	1.74	9.0	S	11:59:53.267	-0.2					---				m		4695
PUK	1.74	9.0	P	11:59:29.430	-0.2					---				m		4694
PUK	1.74	9.0	AMl	12:00:02.270						---		1.1	0.38	a	Ml	2656
BUM	2.02	348.0	P	11:59:32.574	-1.4					---				m		4696
HCY	2.25	341.0	P	11:59:34.920	-2.4					---				m		4697
UPM	2.90	352.0	P	11:59:46.140	-0.8					---				m		4698
PLE	3.00	359.0	P	11:59:48.673	0.3					---				m		4699

DATA\_TYPE COMMENT GSE2.1



Event 267

Official Magnitude:

Ml 3.31

Error ellipse:

	Azim	Dip	Mag
Max:	160	73	1.9200
Intermediate:	263	3	1.6100
Min:	354	17	1.3300

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537604 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 269 0.6 km from Kukatin, Dibër, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/14	10:24:19.06		0.10	41.5252	20.1168				18.4	0.5	18	30	80	0.26	1.90	m	
OrigID 314																	

Magnitude	Err	Nsta	Author	OrigID
Ml	1.9	0.0	6	314
Md	1.7	0.0	3	314

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.26	227.0	P	10:24:24.652	-0.6											4727
TIR	0.26	227.0	S	10:24:29.824	0.0											4726
TIR	0.26	227.0	AMl	10:24:34.700								0.2	0.18	a__	Ml	1.2
TIR	0.26	227.0	AMd	10:24:42.652								0.0	18.00	a__	Md	1.7
PHP	0.29	56.0	S	10:24:30.193	-0.0											4729
PHP	0.29	56.0	P	10:24:25.591	0.2											4728
PHP	0.29	56.0	AMl	10:24:30.910								0.8	0.18	a__	Ml	2.0
PHP	0.29	56.0	AMd	10:24:42.531								0.0	16.94	a__	Md	1.6
PUK	0.54	343.0	S	10:24:38.359	-0.1											4731
PUK	0.54	343.0	P	10:24:30.059	-0.1											4730
PUK	0.54	343.0	AMl	10:24:39.660								0.5	0.16	a__	Ml	2.1
PUK	0.54	343.0	AMl	10:24:41.250								0.4	0.36	a__	Ml	2.0
PUK	0.54	343.0	AMd	10:24:54.993								0.0	24.93	a__	Md	2.1
ULC	0.78	305.0	P	10:24:34.541	-0.1											4732
BCI	0.84	358.0	S	10:24:47.843	-0.0											4734
BCI	0.84	358.0	P	10:24:35.601	0.1											4733
BCI	0.84	358.0	AMl	10:24:48.350								0.2	0.34	a__	Ml	1.9
BCI	0.84	358.0	AMl	10:24:48.720								0.2	0.38	a__	Ml	1.9
DRME	0.96	314.0	P	10:24:37.521	-0.2											4735
PVY	1.07	355.0	P	10:24:39.426	-0.3											4736

BUM	1.19	311.0	P	10:24:42.092	0.2	---	m	---	4737
FNA	1.21	127.0	S	10:24:59.474	-0.0	---	m	---	4739
FNA	1.21	127.0	P	10:24:42.060	-0.1	---	m	---	4738
FNA	1.21	127.0	AM1	10:25:01.480		---	0.1	0.34 a	M1 1.7 2689
NEST	1.31	0.0	P	10:24:45.474	0.0	---	m	---	4745
NEST	1.31	147.0	S	10:25:02.805	0.1	---	m	---	4740
NEST	1.31	147.0	AM1	10:25:09.250		---	0.0	0.36 a	M1 1.6 2690
CEME	1.36	320.0	P	10:24:44.829	0.1	---	m	---	4741
HCY	1.52	308.0	P	10:24:47.426	-0.3	---	m	---	4742
BRV	1.80	321.0	P	10:24:52.870	0.3	---	m	---	4743
UPM	1.90	333.0	P	10:24:54.095	0.1	---	m	---	4744

DATA\_TYPE COMMENT GSE2.1  
Event 269

Official Magnitude:  
M1 1.89

Error ellipse:

	Azim	Dip	Mag
Max:	337	87	0.5300
Intermediate:	58	0	0.3600
Min:	148	3	0.2500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537604 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 271 1.2 km from Dars, Dibër, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/14	10:43:44.68		0.22	41.5040	20.0695				6.7	2.2	13	30	83	0.22	1.80	m	316

Magnitude	Err	Nsta	Author	OrigID
M1	1.8	0.0	5	316
Md	2.2	0.0	3	316

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.22	0.0	S	10:43:56.228	0.0				---					m		4781
TIR	0.22	225.0	P	10:43:49.400	-0.1				---					m		4764
TIR	0.22	225.0	AM1	10:44:01.090					---			0.1	0.48	a	M1 1.1	2703
PHP	0.33	56.0	S	10:43:56.029	-0.3				---					m		4766
PHP	0.33	56.0	P	10:43:51.312	-0.1				---					m		4765
PHP	0.33	56.0	AM1	10:43:56.680					---			0.7	0.16	a	M1 1.9	2704
PHP	0.33	56.0	AMd	10:44:09.665					---			0.0	18.35	a	Md 1.7	2700



Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
SRN	1.05	0.0	P	05:31:05.747	0.0					---				m		4831
SRN	1.06	150.0	S	05:31:21.066	0.3					---				m		4822
SRN	1.06	150.0	AM1	05:31:30.790						---		0.9	0.66	a	M1	2.8
SRN	1.06	150.0	AM1	05:31:36.380						---		0.8	1.02	a	M1	2.7
LSK	1.17	123.0	S	05:31:23.720	0.1					---				m		4824
LSK	1.17	123.0	P	05:31:06.097	-0.4					---				m		4823
LSK	1.17	123.0	AM1	05:31:30.640						---		3.2	0.62	a	M1	3.4
PHP	1.21	43.0	S	05:31:24.533	-0.2					---				m		4826
PHP	1.21	43.0	P	05:31:04.770	-2.4					---				m		4825
PHP	1.21	43.0	AM1	05:31:28.570						---		5.5	0.70	a	M1	3.7
PUK	1.31	18.0	S	05:31:28.328	0.4					---				m		4828
PUK	1.31	18.0	P	05:31:08.901	-0.1					---				m		4827
PUK	1.31	18.0	AM1	05:31:33.290						---		1.9	0.56	a	M1	3.3
BCI	1.66	19.0	S	05:31:39.620	0.8					---				m		4830
BCI	1.66	19.0	P	05:31:14.979	-0.2					---				m		4829
BCI	1.66	19.0	AM1	05:31:58.970						---		2.1	1.08	a	M1	3.6

DATA\_TYPE COMMENT GSE2.1  
Event 275

Official Magnitude:  
M1 3.36

Error ellipse:

	Azim	Dip	Mag
Max:	247	60	6.5600
Intermediate:	83	28	1.8800
Min:	349	7	0.5900

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537603 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 278 0.7 km from Hasturkas, Fier, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/15	05:30:44.39		0.73	40.8418	19.4647				10.7	2.5	23	26	194	0.16	2.05	m	
323																	

Magnitude	Err	Nsta	Author	OrigID
M1	3.3	0.0	12	323
Md	3.1	0.0	5	323

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
BPA2	0.16	133.0	S	05:30:53.903	2.7					---				m		4853

BPA2	0.16	133.0	P	05:30:48.094	-0.2	---			m			4852
BPA2	0.16	133.0	AM1	05:30:54.920		---	60.2	0.52	a	M1	3.6	2745
BPA2	0.16	133.0	AMd	05:32:00.154		---	0.0	72.06	a	Md	3.1	2740
BPA1	0.19	129.0	S	05:30:52.918	0.9	---			m			4855
BPA1	0.19	129.0	P	05:30:48.130	-0.6	---			m			4854
BPA1	0.19	129.0	AM1	05:30:55.740		---	15.3	0.44	a	M1	3.1	2746
BPA1	0.19	129.0	AMd	05:31:54.693		---	0.0	66.56	a	Md	3.0	2741
VLO	0.37	176.0	P	05:30:53.968	2.5	---			m			4856
VLO	0.37	176.0	AM1	05:31:11.110		---	34.0	0.58	a	M1	3.6	2747
KBN	1.03	101.0	S	05:31:19.143	0.1	---			m			4858
KBN	1.03	101.0	P	05:31:03.470	-0.7	---			m			4857
KBN	1.03	101.0	AM1	05:31:28.810		---	2.6	0.70	a	M1	3.2	2748
KBN	1.03	101.0	AMd	05:32:02.997		---	0.0	59.53	a	Md	3.0	2742
SRN	1.04	156.0	S	05:31:21.188	0.1	---			m			4860
SRN	1.04	156.0	P	05:31:06.647	1.3	---			m			4859
SRN	1.04	156.0	AM1	05:31:30.790		---	0.9	0.66	a	M1	2.8	2749
LSK	1.11	128.0	S	05:31:24.289	2.1	---			m			4862
LSK	1.11	128.0	P	05:31:05.355	-0.6	---			m			4861
LSK	1.11	128.0	AM1	05:31:30.640		---	3.2	0.62	a	M1	3.4	2750
LSK	1.11	128.0	AMd	05:32:30.466		---	0.0	85.11	a	Md	3.3	2743
PHP	1.12	40.0	S	05:31:23.184	0.9	---			m			4864
PHP	1.12	40.0	P	05:31:04.700	-1.3	---			m			4863
PHP	1.12	40.0	AM1	05:31:28.570		---	5.5	0.70	a	M1	3.6	2751
ULC	1.13	352.0	P	05:31:07.043	0.5	---			m			4865
PUK	1.24	14.0	S	05:31:29.135	2.8	---			m			4867
PUK	1.24	14.0	P	05:31:08.856	0.5	---			m			4866
PUK	1.24	14.0	AM1	05:31:33.290		---	1.9	0.56	a	M1	3.2	2752
PUK	1.24	14.0	AMd	05:32:20.348		---	0.0	71.49	a	Md	3.2	2744
NEST	1.28	108.0	S	05:31:28.116	0.4	---			m			4869
NEST	1.28	108.0	P	05:31:08.405	-0.8	---			m			4868
NEST	1.28	108.0	AM1	05:31:33.140		---	1.4	0.48	a	M1	3.1	2753
FNA	1.46	91.0	S	05:31:32.960	-0.3	---			m			4871
FNA	1.46	91.0	P	05:31:10.934	-1.4	---			m			4870
FNA	1.46	91.0	AM1	05:31:36.110		---	5.6	0.62	a	M1	3.9	2754
IGT	1.47	152.0	S	05:31:33.658	0.1	---			m			4873
IGT	1.47	152.0	P	05:31:13.233	0.7	---			m			4872
IGT	1.47	152.0	AM1	05:31:44.060		---	0.8	0.62	a	M1	3.0	2755
BCI	1.58	0.0	P	05:31:14.767	0.0	---			m			4879
BCI	1.59	16.0	S	05:31:38.275	1.1	---			m			4874
BCI	1.59	16.0	AM1	05:31:58.970		---	2.1	1.08	a	M1	3.6	2756
HCY	1.76	336.0	P	05:31:14.898	-2.9	---			m			4875
PVY	1.79	12.0	P	05:31:18.047	-0.2	---			m			4876
NKME	1.96	350.0	P	05:31:20.159	-0.9	---			m			4877
BEY	2.05	8.0	P	05:31:22.262	-0.1	---			m			4878

DATA\_TYPE COMMENT GSE2.1  
Event 278

Official Magnitude:  
M1 3.31

Error ellipse:

	Azim	Dip	Mag
Max:	212	75	2.5500
Intermediate:	75	10	1.7600
Min:	343	10	0.8700

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537603 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 293 1.7 km from Mazha e Madhe, Durrës, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/18	18:14:05.75		0.04	41.4800	19.6153				10.4	0.8	13	17	134	0.23	1.52	m	
OrigID	339																

Magnitude	Err	Nsta	Author	OrigID
Ml	2.0	0.0	6	339
Md	2.8	0.0	8	339

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
TIR	0.23	125.0	S	18:14:14.682	-0.0					---				m		5121	
TIR	0.23	125.0	P	18:14:10.929	0.1					---				m		5120	
TIR	0.23	125.0	AMl	18:14:16.350						---		1.0	0.18	a	Ml	2.0	2903
TIR	0.23	125.0	AMd	18:14:36.549						---		0.0	25.62	a	Md	2.1	2895
ULC	0.55	331.0	P	18:14:17.030	0.0					---				m		5122	
ULC	0.55	331.0	AMd	18:15:14.740						---		0.0	57.71	a	Md	2.9	2896
PUK	0.60	20.0	S	18:14:26.762	0.1					---				m		5124	
PUK	0.60	20.0	P	18:14:17.718	0.0					---				m		5123	
PUK	0.60	20.0	AMl	18:14:33.860						---		0.1	0.20	a	Ml	1.6	2904
PUK	0.60	20.0	AMd	18:15:08.562						---		0.0	50.84	a	Md	2.8	2897
PHP	0.65	71.0	S	18:14:28.103	-0.1					---				m		5126	
PHP	0.65	71.0	P	18:14:18.612	0.0					---				m		5125	
PHP	0.65	71.0	AMl	18:14:33.520						---		0.2	0.36	a	Ml	1.7	2905
PHP	0.65	71.0	AMd	18:15:02.946						---		0.0	44.33	a	Md	2.6	2898
BCI	0.95	0.0	P	18:14:20.262	0.0					---				m		5135	
BCI	0.95	20.0	S	18:14:38.696	0.3					---				m		5127	
VLO	1.01	186.0	S	18:14:39.588	0.0					---				m		5129	
VLO	1.01	186.0	P	18:14:25.043	-0.0					---				m		5128	
VLO	1.01	186.0	AMl	18:14:43.010						---		3.1	0.06	a	Ml	3.3	2906
VLO	1.01	186.0	AMd	18:15:08.281						---		0.0	43.24	a	Md	2.6	2899
HCY	1.28	320.0	P	18:14:30.539	-0.0					---				m		5130	
HCY	1.28	320.0	AMd	18:15:26.815						---		0.0	56.28	a	Md	2.9	2900
FNA	1.51	116.0	S	18:14:56.244	0.1					---				m		5132	
FNA	1.51	116.0	P	18:14:34.305	-0.3					---				m		5131	

FNA	1.51	116.0	AMl	18:15:01.190	---	0.1	0.38	a__	Ml	2.3	2907
FNA	1.51	116.0	AMd	18:15:37.489	---	0.0	63.18	a__	Md	3.1	2901
NEST	1.52	133.0	S	18:14:56.630	0.0	---	---	m__	---	---	5134
NEST	1.52	133.0	P	18:14:34.832	0.0	---	---	m__	---	---	5133
NEST	1.52	133.0	AMl	18:15:24.120	---	0.1	1.96	a__	Ml	2.1	2908
NEST	1.52	133.0	AMd	18:15:35.804	---	0.0	60.97	a__	Md	3.0	2902

DATA\_TYPE COMMENT GSE2.1  
Event 293

Official Magnitude:  
Ml 2.04

Error ellipse:

	Azim	Dip	Mag
Max:	347	86	0.7800
Intermediate:	76	0	0.3600
Min:	166	4	0.2500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537603 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 294 1.2 km from Rilë, Lezhë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/18	21:48:22.64		0.24	41.7175	19.6280				19.2	1.1	15	27	158	0.38	1.69	m	
340																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.4	0.0	6	340
Md	2.5	0.0	3	340

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
ULC	0.37	312.0	P	21:48:31.204	0.4									m__		5136	
PUK	0.38	31.0	S	21:48:37.103	0.2									m__		5138	
PUK	0.38	31.0	P	21:48:30.672	-0.1									m__		5137	
PUK	0.38	31.0	AMl	21:48:38.520								2.0	0.10	a__	Ml	2.4	2913
PUK	0.38	31.0	AMl	21:48:38.840								1.9	0.10	a__	Ml	2.4	2912
PUK	0.38	31.0	AMd	21:49:08.153								0.0	37.48	a__	Md	2.4	2909
TIR	0.42	0.0	P	21:48:31.255	0.0									m__		5153	
TIR	0.41	154.0	S	21:48:37.653	-0.4									m__		5139	
TIR	0.41	154.0	AMl	21:48:37.940								0.6	0.24	a__	Ml	2.0	2914
PHP	0.61	92.0	S	21:48:44.013	0.1									m__		5141	
PHP	0.61	92.0	P	21:48:34.737	-0.0									m__		5140	
PHP	0.61	92.0	AMl	21:48:45.400								1.2	0.16	a__	Ml	2.5	2915





TIR	0.24	114.0	AM1	23:39:02.680	---	1.4	0.38	a	M1	2.2	2921
TIR	0.24	114.0	AM1	23:39:02.350	---	0.5	0.32	a	M1	1.7	2920
ULC	0.57	335.0	P	23:39:03.642	0.0	---	---	m	---	---	5155
PUK	0.64	21.0	S	23:39:14.373	-0.0	---	---	m	---	---	5157
PUK	0.64	21.0	P	23:39:04.564	-0.2	---	---	m	---	---	5156
PUK	0.64	21.0	AM1	23:39:18.180	---	0.2	0.18	a	M1	1.7	2922
PUK	0.64	21.0	AMd	23:39:33.069	---	0.0	28.51	a	Md	2.2	2919
PHP	0.69	69.0	S	23:39:15.759	0.1	---	---	m	---	---	5159
PHP	0.69	69.0	P	23:39:05.080	-0.5	---	---	m	---	---	5158
PHP	0.69	69.0	AM1	23:39:22.110	---	0.1	0.56	a	M1	1.7	2923
BCI	0.99	21.0	S	23:39:26.101	0.4	---	---	m	---	---	5161
BCI	0.99	21.0	P	23:39:11.493	0.2	---	---	m	---	---	5160
BCI	0.99	21.0	AM1	23:39:28.380	---	0.1	0.44	a	M1	1.8	2924
BUM	0.99	330.0	P	23:39:12.771	1.4	---	---	m	---	---	5162
PVY	1.19	14.0	P	23:39:14.565	-0.3	---	---	m	---	---	5163
HCY	1.29	322.0	P	23:39:17.719	1.0	---	---	m	---	---	5164
BEY	1.44	9.0	P	23:39:19.441	0.0	---	---	m	---	---	5165
NEST	1.52	132.0	S	23:39:42.274	0.0	---	---	m	---	---	5169
NEST	1.52	132.0	P	23:39:21.190	0.5	---	---	m	---	---	5168
FNA	1.52	115.0	S	23:39:41.843	-0.4	---	---	m	---	---	5167
FNA	1.52	115.0	P	23:39:22.912	2.2	---	---	m	---	---	5166
FNA	1.52	115.0	AM1	23:39:47.400	---	0.1	0.94	a	M1	2.0	2925
BRY	1.65	333.0	P	23:39:22.874	-0.1	---	---	m	---	---	5170

DATA\_TYPE COMMENT GSE2.1  
Event 295

Official Magnitude:  
M1 1.75

Error ellipse:

	Azim	Dip	Mag
Max:	62	74	1.4500
Intermediate:	238	15	0.9700
Min:	328	1	0.4700

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537602 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 297 0.8 km from Katundi i Ri, Elbasan, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/19	01:00:59.36		0.25	41.1048	20.0413				18.6	1.3	22	30	143	0.28	1.85	m	
343																	

Magnitude	Err	Nsta	Author	OrigID
M1	2.2	0.0	8	343
Md	2.5	0.0	4	343

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.29	0.0	P	01:01:05.875	0.0									m		5205
TIR	0.28	332.0	S	01:01:10.710	0.1									m		5180
TIR	0.28	332.0	AM1	01:01:13.710								1.3	0.22	a	M1 2.2	2933
PHP	0.65	27.0	S	01:01:21.949	0.0									m		5182
PHP	0.65	27.0	P	01:01:12.088	-0.2									m		5181
PHP	0.65	27.0	AM1	01:01:23.110								0.3	0.20	a	M1 2.0	2934
PHP	0.65	27.0	AMd	01:01:43.600								0.0	31.51	a	Md 2.3	2929
KBN	0.74	130.0	S	01:01:24.408	-0.1									m		5184
KBN	0.74	130.0	P	01:01:14.116	0.4									m		5183
KBN	0.74	130.0	AM1	01:01:32.050								0.3	0.50	a	M1 2.1	2935
KBN	0.74	130.0	AMd	01:01:51.884								0.0	37.77	a	Md 2.5	2930
PUK	0.94	354.0	S	01:01:31.543	0.3									m		5186
PUK	0.94	354.0	P	01:01:17.754	0.2									m		5185
PUK	0.94	354.0	AM1	01:01:34.770								0.3	0.28	a	M1 2.3	2936
PUK	0.94	354.0	AMd	01:01:54.645								0.0	36.89	a	Md 2.5	2931
NEST	1.03	131.0	S	01:01:33.921	-0.3									m		5188
NEST	1.03	131.0	P	01:01:19.157	-0.1									m		5187
NEST	1.03	131.0	AM1	01:01:42.290								0.1	0.60	a	M1 1.8	2937
ULC	1.04	326.0	P	01:01:19.081	-0.4									m		5189
LSK	1.04	155.0	S	01:01:34.157	-0.2									m		5191
LSK	1.04	155.0	P	01:01:19.254	-0.1									m		5190
LSK	1.04	155.0	AM1	01:01:40.890								0.3	0.62	a	M1 2.3	2938
FNA	1.07	107.0	S	01:01:36.008	0.7									m		5193
FNA	1.07	107.0	P	01:01:19.925	0.0									m		5192
FNA	1.07	107.0	AM1	01:01:40.960								0.2	0.32	a	M1 2.2	2939
SRN	1.22	182.0	S	01:01:41.071	0.2									m		5195
SRN	1.22	182.0	P	01:01:23.280	0.2									m		5194
DRME	1.25	330.0	P	01:01:23.084	-0.2									m		5196
BCI	1.26	0.0	S	01:01:42.115	1.0									m		5198
BCI	1.26	0.0	P	01:01:23.421	0.2									m		5197
BCI	1.26	0.0	AM1	01:01:51.230								0.2	0.50	a	M1 2.3	2940
BCI	1.26	0.0	AMd	01:02:18.501								0.0	55.08	a	Md 2.9	2932
BUM	1.47	325.0	P	01:01:27.725	0.7									m		5199
PVY	1.49	359.0	P	01:01:27.205	-0.2									m		5200
IGT	1.59	171.0	S	01:01:52.620	1.1									m		5202
IGT	1.59	171.0	P	01:01:30.921	1.8									m		5201
KOME	1.79	348.0	P	01:01:31.785	-0.8									m		5203
NKME	1.85	335.0	P	01:01:33.403	-0.1									m		5204

DATA\_TYPE COMMENT GSE2.1  
Event 297

Official Magnitude:  
M1 2.20

Error ellipse:

	Azim	Dip	Mag
Max:	8	80	1.2700
Intermediate:	249	4	0.7200
Min:	158	9	0.3100

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537601 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 310 Region N/A

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/21	07:02:36.85		0.28	41.7728	20.1437				12.2	1.2	17	15	116	0.24	1.70	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.9	0.0	6	356
Md	3.3	0.0	10	356

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
PHP	0.24	111.0	Sg	07:02:45.742	-0.0									m__		5391	
PHP	0.24	111.0	Pg	07:02:41.660	-0.3									mci		5390	
PHP	0.24	111.0	AMl	07:02:45.740								52.6	0.20	a__	Ml	3.7	3051
PHP	0.24	111.0	AMd	07:03:44.895								0.0	63.24	a__	Md	3.0	3041
PUK	0.33	326.0	Sg	07:02:48.906	0.0									m__		5393	
PUK	0.33	326.0	Pg	07:02:44.521	0.8									mci		5392	
PUK	0.33	326.0	AMl	07:02:54.610								5.5	0.44	a__	Ml	2.8	3052
PUK	0.33	326.0	AMd	07:04:22.850								0.0	98.33	a__	Md	3.4	3042
TIR	0.47	0.0	Pg	07:02:46.252	0.0									mci		5408	
TIR	0.47	207.0	Sg	07:02:53.813	-0.1									m__		5394	
TIR	0.47	207.0	AMl	07:02:55.410								1.0	0.18	a__	Ml	2.2	3053
BCI	0.60	355.0	Sg	07:02:57.987	0.2									m__		5396	
BCI	0.60	355.0	Pg	07:02:49.432	0.6									mde		5395	
BCI	0.60	355.0	AMl	07:03:00.330								3.2	0.68	a__	Ml	2.9	3054
BCI	0.60	355.0	AMd	07:04:00.203								0.0	70.77	a__	Md	3.1	3043
ULC	0.69	287.0	Pn	07:02:51.044	0.3									mdi		5397	
ULC	0.69	287.0	AMd	07:04:08.713								0.0	77.67	a__	Md	3.2	3044
PVY	0.83	352.0	Pn	07:02:53.308	-0.1									mdi		5398	
PVY	0.83	352.0	AMd	07:04:26.400								0.0	93.09	a__	Md	3.4	3045
BEY	1.11	351.0	Pn	07:02:58.134	-0.4									m__		5399	
BEY	1.11	351.0	AMd	07:04:26.157								0.0	88.02	a__	Md	3.4	3046
KBN	1.25	156.0	Sg	07:03:18.336	0.1									m__		5401	
KBN	1.25	156.0	Pg	07:03:01.083	0.6									mci		5400	
KBN	1.25	156.0	AMl	07:03:23.310								0.7	0.46	a__	Ml	2.8	3055
KBN	1.25	156.0	AMd	07:04:00.298								0.0	59.21	a__	Md	3.0	3047

HCY	1.40	300.0	Pn	07:03:03.235	-0.5	---											m		5402				
HCY	1.40	300.0	AMd	07:04:25.268		---											0.0	82.03	a	Md	3.3	3048	
BRY	1.64	314.0	Pn	07:03:07.858	-0.0	---													m			5403	
BRY	1.64	314.0	AMd	07:04:36.031		---												0.0	88.17	a	Md	3.4	3049
PLE	1.65	341.0	P	07:03:09.661	1.5	---													m			5404	
LSK	1.66	167.0	Sn	07:03:31.683	0.1	---													m			5406	
LSK	1.66	167.0	Pn	07:03:07.494	-0.6	---													m			5405	
LSK	1.66	167.0	AM1	07:03:42.220		---												0.6	0.76	a	M1	3.0	3056
UPM	1.70	328.0	Pn	07:03:09.015	0.1	---													m			5407	
UPM	1.70	328.0	AMd	07:04:31.619		---												0.0	82.60	a	Md	3.3	3050

DATA\_TYPE COMMENT GSE2.1  
Event 310

Official Magnitude:  
M1 2.86

Error ellipse:

	Azim	Dip	Mag
Max:	52	75	1.2200
Intermediate:	247	13	0.7100
Min:	156	4	0.3800

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537600 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 313 Region N/A

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/21	16:41:12.15		0.19	40.1425	19.8785				14.0	0.9	14	18	108	0.28	1.90	m	359

Magnitude	Err	Nsta	Author	OrigID
M1	2.4	0.0	6	359

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
SRN	0.28	160.0	S	16:41:23.579	-0.1					---				m		5427	
SRN	0.28	160.0	P	16:41:18.454	-0.3					---				m		5426	
SRN	0.28	160.0	AM1	16:41:25.740						---		0.9	0.28	a	M1	2.0	3068
VLO	0.44	319.0	S	16:41:27.078	0.2					---				m		5429	
VLO	0.44	319.0	P	16:41:20.519	-0.1					---				m		5428	
VLO	0.44	319.0	AM1	16:41:33.550						---		3.6	0.50	a	M1	2.7	3069
LSK	0.55	89.0	S	16:41:30.930	-0.7					---				m		5431	
LSK	0.55	89.0	P	16:41:23.105	-0.2					---				m		5430	
LSK	0.55	89.0	AM1	16:41:38.200						---		1.1	0.42	a	M1	2.4	3070

IGT	0.70	150.0	S	16:41:37.077	0.3	---	m	---	5433
IGT	0.70	150.0	P	16:41:26.600	0.4	---	m	---	5432
NEST	0.94	72.0	S	16:41:44.300	-0.1	---	m	---	5435
NEST	0.94	72.0	P	16:41:30.677	0.1	---	m	---	5434
NEST	0.94	72.0	AM1	16:41:57.630		---	0.1	0.48 a M1	1.9 3071
SCTE	1.09	0.0	P	16:41:33.572	0.0	---	m	---	5442
SCTE	1.08	268.0	S	16:41:48.991	-0.1	---	m	---	5436
SCTE	1.08	268.0	AM1	16:41:50.710		---	0.7	0.40 a M1	2.7 3072
FNA	1.31	60.0	P	16:41:37.376	0.1	---	m	---	5437
LKD2	1.48	155.0	S	16:42:01.268	-0.1	---	m	---	5439
LKD2	1.48	155.0	P	16:41:41.586	1.3	---	m	---	5438
LKD2	1.48	155.0	AM1	16:42:09.030		---	0.2	0.40 a M1	2.4 3073
PHP	1.60	15.0	P	16:41:42.327	0.3	---	m	---	5440
PUK	1.90	0.0	P	16:41:47.059	-0.3	---	m	---	5441

DATA\_TYPE COMMENT GSE2.1  
Event 313

Official Magnitude:  
M1 2.37

Error ellipse:

	Azim	Dip	Mag
Max:	236	83	0.9400
Intermediate:	52	6	0.4700
Min:	142	0	0.3400

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537601 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 314 3.1 km from Gur-Lurë, Dibër, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/21	07:02:36.60		0.17	41.7522	20.1883				18.2	0.7	21	30	117	0.20	1.73	m	
360																	

Magnitude	Err	Nsta	Author	OrigID
M1	2.9	0.0	7	360
Md	2.2	0.0	2	360

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
PHP	0.20	109.0	S	07:02:44.896	-0.3					---				m		5444
PHP	0.20	109.0	P	07:02:41.705	0.2					---				m		5443
PHP	0.20	109.0	AM1	07:02:45.740						---		52.6	0.20	a M1	3.7	3076
PHP	0.20	109.0	AMd	07:03:03.828						---		0.0	22.12	a Md	1.9	3074

PUK	0.36	323.0	S	07:02:50.584	0.3	---	m	---	5446
PUK	0.36	323.0	P	07:02:44.593	0.2	---	m	---	5445
PUK	0.36	323.0	AMl	07:02:54.610		---	5.5	0.44 a	Ml 2.9 3077
PUK	0.36	323.0	AMd	07:03:27.736		---	0.0	43.14 a	Md 2.6 3075
TIR	0.47	212.0	S	07:02:53.871	0.0	---	m	---	5448
TIR	0.47	212.0	P	07:02:46.357	-0.1	---	m	---	5447
TIR	0.47	212.0	AMl	07:02:59.850		---	1.1	0.50 a	Ml 2.3 3078
BCI	0.62	0.0	P	07:02:49.082	0.0	---	m	---	5467
BCI	0.62	352.0	S	07:02:58.384	-0.1	---	m	---	5449
BCI	0.62	352.0	AMl	07:03:00.330		---	3.2	0.68 a	Ml 3.0 3079
ULC	0.73	288.0	P	07:02:51.026	-0.2	---	m	---	5450
PVY	0.86	350.0	P	07:02:53.350	-0.1	---	m	---	5451
DRME	0.86	301.0	P	07:02:53.100	-0.5	---	m	---	5452
BUM	1.10	301.0	P	07:02:57.911	0.1	---	m	---	5453
BEY	1.14	350.0	P	07:02:58.359	-0.1	---	m	---	5454
KOME	1.21	336.0	P	07:02:59.644	0.0	---	m	---	5455
KBN	1.21	157.0	S	07:03:16.616	0.2	---	m	---	5457
KBN	1.21	157.0	P	07:03:00.264	0.9	---	m	---	5456
FNA	1.32	136.0	S	07:03:19.485	-1.1	---	m	---	5459
FNA	1.32	136.0	P	07:03:01.744	0.0	---	m	---	5458
FNA	1.32	136.0	AMl	07:03:22.060		---	0.7	0.44 a	Ml 2.9 3080
HCY	1.44	300.0	P	07:03:03.437	-0.4	---	m	---	5460
NEST	1.49	153.0	S	07:03:25.663	0.0	---	m	---	5462
NEST	1.49	153.0	P	07:03:04.516	-0.1	---	m	---	5461
NEST	1.49	153.0	AMl	07:03:37.160		---	0.3	0.50 a	Ml 2.6 3081
LSK	1.63	168.0	S	07:03:29.792	-0.1	---	m	---	5464
LSK	1.63	168.0	P	07:03:07.794	0.8	---	m	---	5463
LSK	1.63	168.0	AMl	07:03:42.220		---	0.6	0.76 a	Ml 3.0 3082
BRY	1.68	314.0	P	07:03:07.896	-0.1	---	m	---	5465
UPM	1.73	328.0	P	07:03:09.235	0.3	---	m	---	5466

DATA\_TYPE COMMENT GSE2.1  
Event 314

Official Magnitude:  
Ml 2.87

Error ellipse:

	Azim	Dip	Mag
Max:	59	68	0.7000
Intermediate:	245	21	0.5200
Min:	154	2	0.2700

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537600 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 315 Region N/A

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/23	03:45:00.72		0.13	40.4057	20.0842				16.8	1.4	13	19	92	0.45	1.31	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	1.5	0.0	5	362
Md	2.0	0.0	1	362

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
VLO	0.45	279.0	S	03:45:15.998	-0.1									m		5485	
VLO	0.45	279.0	P	03:45:09.940	0.4									m		5484	
VLO	0.45	279.0	AMl	03:45:18.630								0.9	0.18	a	Ml	2.2	3092
VLO	0.45	279.0	AMl	03:45:19.380								1.0	0.18	a	Ml	2.2	3091
VLO	0.45	279.0	AMd	03:45:33.118								0.0	23.18	a	Md	2.0	3090
LSK	0.47	122.0	S	03:45:17.708	0.1									m		5487	
LSK	0.47	122.0	P	03:45:10.258	-0.1									m		5486	
LSK	0.47	122.0	AMl	03:45:23.790								0.2	0.22	a	Ml	1.5	3093
SRN	0.53	187.0	S	03:45:20.523	0.1									m		5489	
SRN	0.53	187.0	P	03:45:11.904	-0.1									m		5488	
SRN	0.53	187.0	AMl	03:45:24.620								0.2	1.22	a	Ml	1.5	3094
KBN	0.58	67.0	S	03:45:20.851	0.3									m		5491	
KBN	0.58	67.0	P	03:45:11.972	-0.1									m		5490	
KBN	0.58	67.0	AMl	03:45:25.950								0.1	0.76	a	Ml	1.4	3095
NEST	0.73	0.0	P	03:45:16.672	0.0									m		5499	
NEST	0.74	88.0	S	03:45:26.379	-0.1									m		5492	
IGT	0.89	167.0	S	03:45:33.008	1.5									m		5494	
IGT	0.89	167.0	P	03:45:19.495	1.2									m		5493	
FNA	1.06	68.0	S	03:45:36.622	0.0									m		5496	
FNA	1.06	68.0	P	03:45:21.065	-0.2									m		5495	
FNA	1.06	68.0	AMl	03:45:41.170								0.0	0.74	a	Ml	1.5	3096
PHP	1.31	11.0	S	03:45:43.824	0.1									m		5498	
PHP	1.31	11.0	P	03:45:25.413	0.1									m		5497	

DATA\_TYPE COMMENT GSE2.1  
Event 315

Official Magnitude:  
Ml 1.53

Error ellipse:

	Azim	Dip	Mag
Max:	192	75	1.4800
Intermediate:	323	9	0.3600
Min:	55	11	0.3200

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537600 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 316 2.3 km from Vodicë, Vlorë, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/22	15:54:20.66		0.29	40.4335	19.5597				25.7	0.8	23	19	100	0.06	1.93	m	
363																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.5	0.0	8	363
Md	2.8	0.0	6	363

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
VLO	0.06	0.0	P	15:54:24.494	0.0									m		5525
VLO	0.06	306.0	S	15:54:27.517	-0.1									m		5500
VLO	0.06	306.0	AMl	15:54:29.250								28.1	0.28	a	Ml	3.5
BPA2	0.30	8.0	S	15:54:33.477	-0.0									m		5502
BPA2	0.30	8.0	P	15:54:28.009	0.0									m		5501
BPA2	0.30	8.0	AMd	15:55:02.004								0.0	34.00	a	Md	2.3
SRN	0.65	148.0	S	15:54:44.269	-0.0									m		5504
SRN	0.65	148.0	P	15:54:33.174	-1.0									m		5503
SRN	0.65	148.0	AMl	15:54:47.880								0.3	0.22	a	Ml	2.0
SRN	0.65	148.0	AMd	15:55:28.840								0.0	55.67	a	Md	2.9
LSK	0.84	109.0	S	15:54:49.535	0.1									m		5506
LSK	0.84	109.0	P	15:54:36.904	-0.2									m		5505
SCTE	0.91	248.0	S	15:54:51.486	-0.2									m		5508
SCTE	0.91	248.0	P	15:54:38.493	0.1									m		5507
SCTE	0.91	248.0	AMl	15:54:53.880								1.9	0.34	a	Ml	3.0
TIR	0.94	14.0	S	15:54:52.087	-0.6									m		5510
TIR	0.94	14.0	P	15:54:40.257	1.3									m		5509
TIR	0.94	14.0	AMl	15:54:58.470								0.3	0.24	a	Ml	2.3
KBN	0.96	78.0	S	15:54:52.198	-0.1									m		5512
KBN	0.96	78.0	P	15:54:37.998	-0.7									m		5511
KBN	0.96	78.0	AMl	15:54:57.140								0.4	0.50	a	Ml	2.4
KBN	0.96	78.0	AMd	15:55:24.698								0.0	46.70	a	Md	2.7
IGT	1.08	146.0	S	15:54:57.097	0.2									m		5514
IGT	1.08	146.0	P	15:54:41.418	0.1									m		5513
IGT	1.08	146.0	AMl	15:55:02.340								0.2	0.38	a	Ml	2.1
IGT	1.08	146.0	AMd	15:56:07.496								0.0	86.08	a	Md	2.7
NEST	1.14	90.0	S	15:54:58.271	-0.5									m		5516
NEST	1.14	90.0	P	15:54:43.084	0.7									m		5515
PHP	1.42	27.0	S	15:55:07.309	0.4									m		5518
PHP	1.42	27.0	P	15:54:47.560	0.5									m		5517
PHP	1.42	27.0	AMd	15:55:45.821								0.0	58.26	a	Md	3.0
FNA	1.43	75.0	S	15:55:07.814	-0.1									m		5520
FNA	1.43	75.0	P	15:54:47.832	0.2									m		5519



PUK	1.63	8.0	S	15:55:13.191	0.0	---											m	5522
PUK	1.63	8.0	P	15:54:50.307	-0.4	---											m	5521
PUK	1.63	8.0	AMl	15:55:19.390		---					0.2	0.46	a	Ml	2.6			3109
PUK	1.63	8.0	AMd	15:55:51.456		---					0.0	61.15	a	Md	3.0			3102
NOCI	1.93	282.0	S	15:55:24.338	2.9	---											m	5524
NOCI	1.93	282.0	P	15:54:55.378	-0.0	---											m	5523
NOCI	1.93	282.0	AMl	15:55:29.360		---					0.3	0.18	a	Ml	2.9			3110

DATA\_TYPE COMMENT GSE2.1  
Event 316

Official Magnitude:  
Ml 2.48

Error ellipse:

	Azim	Dip	Mag
Max:	220	79	0.8300
Intermediate:	58	10	0.4800
Min:	327	3	0.4600

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537600 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 317 Region N/A

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/24	11:46:25.90		0.15	40.0743	19.8528				0.7	0.9	20	14	118	0.22	2.24	m	
364																	

Magnitude	Err	Nsta	Author	OrigID
Ml	3.1	0.0	8	364
Md	2.8	0.0	2	364

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
SRN	0.22	149.0	S	11:46:35.676	0.1					---						m	5527
SRN	0.22	149.0	P	11:46:31.464	0.0					---						m	5526
SRN	0.22	149.0	AMl	11:46:37.770						---		13.5	0.38	a	Ml	3.0	3113
SRN	0.22	149.0	AMd	11:47:39.734						---		0.0	68.27	a	Md	3.0	3111
LSK	0.58	82.0	S	11:46:46.957	-0.0					---						m	5529
LSK	0.58	82.0	P	11:46:37.472	-0.5					---						m	5528
LSK	0.58	82.0	AMl	11:46:54.860						---		3.6	0.62	a	Ml	2.9	3114
IGT	0.65	145.0	S	11:46:49.870	0.1					---						m	5531
IGT	0.65	145.0	P	11:46:39.616	0.1					---						m	5530
IGT	0.65	145.0	AMd	11:47:53.726						---		0.0	74.11	a	Md	2.6	3112
KBN	0.90	52.0	S	11:46:57.202	-0.0					---						m	5533



Magnitude	Err	Nsta	Author	OrigID
Ml	2.1	0.0	5	376
Md	2.4	0.0	2	376

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.15	0.0	P	18:14:44.921	0.0									m		5713
TIR	0.15	299.0	Sg	18:14:48.290	-0.0									m		5703
TIR	0.15	299.0	AMl	18:14:48.430								2.2	0.16	a	Ml	2.1
PHP	0.51	36.0	Pg	18:14:52.274	-0.3									m		5704
PHP	0.51	36.0	AMl	18:15:06.870								0.3	0.18	a	Ml	1.7
PHP	0.51	36.0	AMd	18:15:26.187								0.0	33.91	a	Md	2.4
PUK	0.77	352.0	Sg	18:15:09.417	-0.3									m		5706
PUK	0.77	352.0	Pg	18:14:56.681	-1.1									m		5705
PUK	0.77	352.0	AMl	18:15:12.950								0.2	0.36	a	Ml	1.8
PUK	0.77	352.0	AMd	18:15:31.530								0.0	34.85	a	Md	2.4
BCI	1.09	0.0	S	18:15:20.634	0.3									m		5708
BCI	1.09	0.0	Pg	18:15:04.175	0.3									m		5707
BCI	1.09	0.0	AMl	18:15:27.430								0.2	0.52	a	Ml	2.1
FNA	1.13	115.0	Sn	18:15:21.785	-0.0									m		5710
FNA	1.13	115.0	Pn	18:15:04.837	0.1									m		5709
FNA	1.13	115.0	AMl	18:15:26.590								0.2	0.28	a	Ml	2.1
LSK	1.20	159.0	Sn	18:15:24.201	0.1									m		5712
LSK	1.20	159.0	Pn	18:15:05.572	-0.4									m		5711

DATA\_TYPE COMMENT GSE2.1  
Event 335

Official Magnitude:  
Ml 2.06

Error ellipse:

	Azim	Dip	Mag
Max:	250	87	1.9500
Intermediate:	57	2	0.8400
Min:	147	1	0.4200

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537599 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 336 0.8 km from Kryezi, Tirana, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/30	19:21:54.99		0.14	41.2680	19.9498				16.3	1.2	6	11	209	0.10	1.19	m	377

Magnitude	Err	Nsta	Author	OrigID
Ml	2.0	0.0	4	377
Md	2.3	0.0	2	377

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
TIR	0.12	0.0	Pg	19:21:58.061	0.0									m		5721	
TIR	0.10	322.0	Sg	19:22:01.287	-0.0									m		5714	
TIR	0.10	322.0	AMl	19:22:01.540								2.5	0.20	a	Ml	2.3	3239
PHP	0.56	41.0	Sg	19:22:14.429	0.1									m		5716	
PHP	0.56	41.0	Pg	19:22:05.384	-0.7									m		5715	
PHP	0.56	41.0	AMl	19:22:18.960								0.2	0.18	a	Ml	1.7	3240
PHP	0.56	41.0	AMd	19:22:38.013								0.0	32.63	a	Md	2.3	3237
PUK	0.78	357.0	Sg	19:22:22.654	0.9									m		5718	
PUK	0.78	357.0	P	19:22:10.250	-0.1									m		5717	
PUK	0.78	357.0	AMl	19:22:26.920								0.2	0.34	a	Ml	2.0	3241
PUK	0.78	357.0	AMd	19:22:41.869								0.0	31.62	a	Md	2.3	3238
FNA	1.19	113.0	Sn	19:22:34.812	-0.2									m		5720	
FNA	1.19	113.0	Pn	19:22:18.028	0.2									m		5719	
FNA	1.19	113.0	AMl	19:22:39.720								0.1	0.26	a	Ml	2.1	3242

DATA\_TYPE COMMENT GSE2.1  
Event 336

Official Magnitude:  
Ml 2.03

Error ellipse:

	Azim	Dip	Mag
Max:	286	54	1.4400
Intermediate:	33	11	0.7200
Min:	130	33	0.3600

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537599 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 340 0.6 km from Përpunje, Tirana, Albania

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/31	06:38:23.82		0.52	41.3117	20.0173				9.5	3.7	12	11	130	0.12	1.24	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.6	0.0	6	381
Md	2.6	0.0	2	381

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
TIR	0.14	0.0	Pg	06:38:26.392	0.0					---				m		5787
TIR	0.12	288.0	Sg	06:38:28.915	-0.3					---				m		5774
TIR	0.12	288.0	AMl	06:38:30.720						---		6.0	0.46	a	Ml	2.6
PHP	0.49	40.0	Sg	06:38:40.934	0.1					---				m		5776
PHP	0.49	40.0	Pg	06:38:33.066	-0.5					---				m		5775
PHP	0.49	40.0	AMl	06:38:43.220						---		1.7	0.24	a	Ml	2.5
PHP	0.49	40.0	AMd	06:39:10.195						---		0.0	37.13	a	Md	2.4
PUK	0.74	353.0	Sg	06:38:49.847	0.5					---				m		5778
PUK	0.74	353.0	Pg	06:38:38.146	-0.3					---				m		5777
KBN	0.90	139.0	Sg	06:38:54.609	0.4					---				m		5780
KBN	0.90	139.0	P	06:38:41.620	0.4					---				m		5779
KBN	0.90	139.0	AMl	06:38:58.690						---		0.8	0.64	a	Ml	2.6
BCI	1.05	2.0	Sg	06:39:00.760	0.8					---				m		5782
BCI	1.05	2.0	Pg	06:38:43.730	-0.8					---				m		5781
BCI	1.05	2.0	AMl	06:39:03.800						---		1.4	0.50	a	Ml	3.0
BCI	1.05	2.0	AMd	06:39:29.950						---		0.0	46.22	a	Md	2.7
FNA	1.16	116.0	Sg	06:39:02.806	-0.8					---				m		5784
FNA	1.16	116.0	Pg	06:38:44.729	-1.9					---				m		5783
FNA	1.16	116.0	AMl	06:39:06.530						---		0.9	0.32	a	Ml	2.9
LSK	1.24	158.0	Sn	06:39:07.354	1.4					---				m		5786
LSK	1.24	158.0	Pn	06:38:48.305	0.4					---				m		5785
LSK	1.24	158.0	AMl	06:39:12.620						---		0.5	0.60	a	Ml	2.6

DATA\_TYPE COMMENT GSE2.1  
Event 340

Official Magnitude:  
Ml 2.64

Error ellipse:

	Azim	Dip	Mag
Max:	272	71	3.9000
Intermediate:	60	15	1.2800
Min:	153	10	0.7600

**Tërmetet Rajonalë (Parametric Data for Regional Events recorded by ASN)**

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537608 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 223 4.3 km from Dolo, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/04	10:45:03.75		0.11	39.9747	20.4867				15.7	0.6	13	8	133	0.20	2.11	m	

OrigID  
265

Magnitude	Err	Nsta	Author	OrigID
Ml	2.7	0.0	6	265
Md	3.0	0.0	3	265

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
LSK	0.20	26.0	S	10:45:11.912	-0.1					---				m		4121
LSK	0.20	26.0	P	10:45:08.016	-0.5					---				m		4120
LSK	0.20	26.0	AMl	10:45:14.920						---		14.8	0.72	a	Ml	3.1
LSK	0.20	26.0	AMd	10:46:05.068						---		0.0	57.05	a	Md	2.9
SRN	0.39	256.0	S	10:45:18.843	0.1					---				m		4123
SRN	0.39	256.0	P	10:45:12.309	-0.0					---				m		4122
SRN	0.39	256.0	AMl	10:45:23.800						---		3.1	0.56	a	Ml	2.6
SRN	0.39	256.0	AMd	10:46:13.989						---		0.0	61.68	a	Md	3.0
NEST	0.61	0.0	P	10:45:14.476	0.0					---				m		4135
NEST	0.62	44.0	S	10:45:25.018	-0.5					---				m		4124
NEST	0.62	44.0	AMl	10:45:27.010						---		1.7	0.68	a	Ml	2.7
KBN	0.69	19.0	S	10:45:27.368	0.3					---				m		4126
KBN	0.69	19.0	P	10:45:17.205	0.1					---				m		4125
KBN	0.69	19.0	AMl	10:45:33.640						---		0.9	0.84	a	Ml	2.5
FNA	1.06	40.0	S	10:45:39.955	0.2					---				m		4128
FNA	1.06	40.0	P	10:45:24.297	-0.0					---				m		4127
FNA	1.06	40.0	AMl	10:45:43.820						---		1.8	0.64	a	Ml	3.1
LKD2	1.19	173.0	S	10:45:43.764	-0.1					---				m		4130
LKD2	1.19	173.0	P	10:45:26.756	0.1					---				m		4129
LKD2	1.19	173.0	AMl	10:45:45.670						---		0.7	0.26	a	Ml	2.8
LKD2	1.19	173.0	AMd	10:46:33.444						---		0.0	66.69	a	Md	3.1
PHP	1.71	359.0	S	10:45:59.379	-0.0					---				m		4132
PHP	1.71	359.0	P	10:45:35.411	-0.1					---				m		4131
PUK	2.11	348.0	S	10:46:10.713	0.0					---				m		4134
PUK	2.11	348.0	P	10:45:41.844	-0.2					---				m		4133

DATA\_TYPE COMMENT GSE2.1  
Event 223

Official Magnitude:  
M1 2.72

Error ellipse:

	Azim	Dip	Mag
Max:	281	75	0.6200
Intermediate:	111	14	0.4900
Min:	20	2	0.2900

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537606 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 245 0.8 km from Chrysorrachi, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/10	05:14:52.81		0.13	39.8245	20.6208				40.4	1.9	7	6	147	0.32	1.12	m	

Magnitude	Err	Nsta	Author	OrigID
M1	1.7	0.0	3	290
Md	2.2	0.0	1	290

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
LSK	0.40	0.0	P	05:15:01.596	0.0					---				m		4407	
LSK	0.33	357.0	S	05:15:08.394	-0.1					---				m		4399	
LSK	0.33	357.0	AM1	05:15:14.650						---		0.3	0.34	a	M1	1.7	2473
SRN	0.48	277.0	S	05:15:13.199	0.1					---				m		4401	
SRN	0.48	277.0	P	05:15:04.113	-0.3					---				m		4400	
SRN	0.48	277.0	AM1	05:15:16.350						---		0.2	0.46	a	M1	1.7	2475
SRN	0.48	277.0	AM1	05:15:15.500						---		0.2	0.26	a	M1	1.7	2474
SRN	0.48	277.0	AMd	05:15:32.905						---		0.0	28.79	a	Md	2.2	2472
NEST	0.67	28.0	S	05:15:17.670	0.1					---				m		4403	
NEST	0.67	28.0	P	05:15:07.193	0.2					---				m		4402	
LKD2	1.03	178.0	S	05:15:27.488	-0.0					---				m		4404	
FNA	1.12	31.0	S	05:15:28.910	-1.0					---				m		4406	
FNA	1.12	31.0	P	05:15:13.919	-0.1					---				m		4405	
FNA	1.12	31.0	AM1	05:15:40.830						---		0.0	0.58	a	M1	1.6	2476

DATA\_TYPE COMMENT GSE2.1  
Event 245

Official Magnitude:  
Ml 1.71

Error ellipse:

	Azim	Dip	Mag
Max:	298	65	2.0600
Intermediate:	110	24	0.6700
Min:	201	3	0.4700

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537605 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 257 1.7 km from Vitsa, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/12	09:11:52.78		0.05	39.8610	20.7395				11.0	1.9	7	12	157	0.57	1.07	m	
OrigID 302																	

Magnitude	Err	Nsta	Author	OrigID
Ml	1.8	0.0	3	302
Md	2.9	0.0	4	302

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
LSK	0.31	0.0	P	09:11:57.589	0.0					---				m		4546	
LSK	0.31	340.0	S	09:12:03.843	-0.3					---				m		4538	
LSK	0.31	340.0	AMl	09:12:07.950						---		2.4	0.60	a	Ml	2.4	2543
SRN	0.57	273.0	S	09:12:13.644	0.0					---				m		4540	
SRN	0.57	273.0	P	09:12:04.674	-0.0					---				m		4539	
SRN	0.57	273.0	AMd	09:12:44.628						---		0.0	39.95	a	Md	2.5	2539
NEST	0.60	23.0	S	09:12:14.140	0.1					---				m		4542	
NEST	0.60	23.0	P	09:12:04.849	-0.1					---				m		4541	
NEST	0.60	23.0	AMl	09:12:15.380						---		0.1	0.48	a	Ml	1.5	2544
NEST	0.60	23.0	AMd	09:13:06.109						---		0.0	61.26	a	Md	3.0	2540
FNA	1.04	27.0	S	09:12:28.741	0.0					---				m		4544	
FNA	1.04	27.0	P	09:12:13.316	-0.0					---				m		4543	
FNA	1.04	27.0	AMl	09:12:33.950						---		0.1	0.40	a	Ml	1.8	2545
FNA	1.04	27.0	AMd	09:13:22.967						---		0.0	69.65	a	Md	3.1	2541
LKD2	1.07	184.0	P	09:12:13.903	0.0					---				m		4545	
LKD2	1.07	184.0	AMd	09:13:10.459						---		0.0	56.56	a	Md	2.9	2542

DATA\_TYPE COMMENT GSE2.1  
Event 257

Official Magnitude:  
Ml 1.78



Error ellipse:

	Azim	Dip	Mag
Max:	310	72	2.0100
Intermediate:	139	17	0.5400
Min:	48	3	0.2800

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537605 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 263 0.7 km from Kastanofyto, West Macedonia, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/13	14:26:10.56		0.05	40.3638	21.1490				11.4	1.0	6	15	221	0.09	0.47	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	1.8	0.0	4	308
Md	2.6	0.0	3	308

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
NEST	0.09	304.0	S	14:26:15.606	0.0									m		4618
NEST	0.09	304.0	P	14:26:13.400	-0.0									m		4617
NEST	0.09	304.0	AMl	14:26:17.538								3.1	0.18	a	Ml	2.3
NEST	0.09	304.0	AMd	14:26:46.328								0.0	32.93	a	Md	2.3
KBN	0.36	0.0	P	14:26:17.111	0.0									m		4624
KBN	0.38	314.0	S	14:26:23.652	0.0									m		4619
KBN	0.38	314.0	AMl	14:26:27.318								0.2	0.34	a	Ml	1.5
FNA	0.45	23.0	S	14:26:26.925	-0.0									m		4621
FNA	0.45	23.0	P	14:26:20.234	0.3									m		4620
FNA	0.45	23.0	AMl	14:26:28.658								0.7	0.14	a	Ml	2.0
FNA	0.45	23.0	AMd	14:27:06.405								0.0	46.17	a	Md	2.7
LSK	0.47	244.0	S	14:26:27.261	-0.1									m		4623
LSK	0.47	244.0	P	14:26:20.232	0.1									m		4622
LSK	0.47	244.0	AMl	14:26:29.988								0.3	0.24	a	Ml	1.6
LSK	0.47	244.0	AMd	14:27:03.279								0.0	43.05	a	Md	2.6

DATA\_TYPE COMMENT GSE2.1  
 Event 263

Official Magnitude:  
 Ml 1.84

Error ellipse:

Azim	Dip	Mag
------	-----	-----

Max: 311 58 1.1400  
 Intermediate: 127 31 0.7500  
 Min: 218 2 0.3800

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537605 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 266 3.5 km from Marnóra, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/14	02:41:08.33		0.40	39.2495	20.4307				29.0	1.2	20	29	142	0.49	3.13	m	
311																	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.9	0.0	11	311
Md	3.0	0.0	4	311

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
LKD2	0.49	158.0	S	02:41:27.276	0.3									m		4656
LKD2	0.49	158.0	P	02:41:18.475	-0.5									m		4655
LKD2	0.49	158.0	AMl	02:41:35.770								3.7	0.68	a	Ml	2.9
SRN	0.71	333.0	S	02:41:34.296	0.2									m		4658
SRN	0.71	333.0	P	02:41:22.887	-0.2									m		4657
SRN	0.71	333.0	AMl	02:41:39.350								0.4	0.22	a	Ml	2.2
SRN	0.71	333.0	AMd	02:42:19.627								0.0	56.74	a	Md	2.9
LSK	0.91	8.0	S	02:41:39.247	0.0									m		4660
LSK	0.91	8.0	P	02:41:25.930	-0.1									m		4659
LSK	0.91	8.0	AMl	02:41:43.950								1.5	0.80	a	Ml	2.9
LSK	0.91	8.0	AMd	02:42:40.891								0.0	74.96	a	Md	3.2
NEST	1.26	22.0	S	02:41:49.388	-0.7									m		4662
NEST	1.26	22.0	P	02:41:30.532	-1.6									m		4661
NEST	1.26	22.0	AMl	02:41:56.010								0.7	0.40	a	Ml	2.8
NEST	1.26	22.0	AMl	02:41:55.640								0.7	0.66	a	Ml	2.9
KBN	1.40	11.0	S	02:41:54.504	1.0									m		4664
KBN	1.40	11.0	P	02:41:34.993	0.8									m		4663
KBN	1.40	11.0	AMl	02:41:59.240								0.8	0.72	a	Ml	3.0
KBN	1.40	11.0	AMl	02:42:02.940								0.5	0.52	a	Ml	2.8
KBN	1.40	11.0	AMd	02:42:31.596								0.0	56.60	a	Md	2.9
VLO	1.41	330.0	S	02:41:54.741	1.2									m		4666
VLO	1.41	330.0	P	02:41:37.688	3.5									m		4665
VLO	1.41	330.0	AMl	02:42:05.570								1.2	0.46	a	Ml	3.2
FNA	1.70	25.0	S	02:42:02.282	-0.3									m		4668
FNA	1.70	25.0	P	02:41:39.779	0.5									m		4667
FNA	1.70	25.0	AMl	02:42:11.800								0.3	0.66	a	Ml	2.8
SCTE	1.72	300.0	S	02:42:03.028	-0.3									m		4670

SCTE	1.72	300.0	P	02:41:39.921	0.2	---											m		4669			
SCTE	1.72	300.0	AM1	02:42:13.460		---											0.5	0.30	a	M1	3.0	2642
SCTE	1.72	300.0	AMd	02:42:41.977		---											0.0	62.06	a	Md	3.1	2632
TIR	2.14	0.0	P	02:41:46.539	0.0	---													m			4677
PHP	2.43	0.0	S	02:42:21.367	0.4	---													m			4672
PHP	2.43	0.0	P	02:41:49.956	0.1	---													m			4671
PHP	2.43	0.0	AM1	02:42:37.260		---											0.2	0.76	a	M1	2.9	2643
PUK	2.82	352.0	S	02:42:31.060	-0.2	---													m			4674
PUK	2.82	352.0	P	02:41:55.087	-0.6	---													m			4673
PUK	2.82	352.0	AM1	02:42:50.300		---											0.1	0.38	a	M1	2.8	2644
BCI	3.13	356.0	S	02:42:39.011	-0.2	---													m			4676
BCI	3.13	356.0	P	02:42:00.128	-0.1	---													m			4675
BCI	3.13	356.0	AM1	02:42:49.190		---											0.1	1.18	a	M1	3.2	2645

DATA\_TYPE COMMENT GSE2.1  
Event 266

Official Magnitude:  
M1 2.86

Error ellipse:

	Azim	Dip	Mag
Max:	128	59	1.3600
Intermediate:	252	18	1.1200
Min:	350	24	0.6500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537603 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 277 0.9 km from Kačanik, Gusinje, Montenegro

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/16	06:26:02.62		0.05	42.5692	19.8155				15.7	2.4	9	11	107	0.12	0.99	m	
322																	

Magnitude	Err	Nsta	Author	OrigID
M1	1.6	0.0	2	322
Md	2.3	0.0	2	322

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
PVY	0.12	77.0	P	06:26:06.316	-0.1											4842	
BCI	0.28	137.0	S	06:26:13.339	0.0											4844	
BCI	0.28	137.0	P	06:26:08.693	-0.0											4843	
BCI	0.28	137.0	AM1	06:26:14.800								0.5	0.12	a	M1	1.7	2738
BCI	0.28	137.0	AMd	06:26:40.409								0.0	31.72	a	Md	2.3	2736

BEY	0.31	11.0	P	06:26:09.455	0.1	---	m	4845
PUK	0.53	173.0	S	06:26:21.364	-0.0	---	m	4847
PUK	0.53	173.0	P	06:26:13.338	-0.0	---	m	4846
PUK	0.53	173.0	AMl	06:26:23.300		---	0.1 0.16 a	Ml 1.5 2739
PUK	0.53	173.0	AMd	06:26:48.715		---	0.0 35.38 a	Md 2.4 2737
BUM	0.73	249.0	P	06:26:17.174	-0.0	---	m	4848
ULC	0.74	215.0	P	06:26:17.430	0.1	---	m	4849
UPM	0.92	0.0	P	06:26:20.676	0.0	---	m	4851
HCY	0.99	264.0	P	06:26:21.887	-0.1	---	m	4850

DATA\_TYPE COMMENT GSE2.1  
Event 277

Official Magnitude:  
Ml 1.61

Error ellipse:

	Azim	Dip	Mag
Max:	79	67	2.5600
Intermediate:	225	19	0.4500
Min:	319	12	0.3900

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537603 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 279 1.4 km from Baçkë, Prizren, Kosovo

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/16	10:35:25.10		0.11	42.0143	20.6830				5.3	4.0	9	31	222	0.38	1.62	m	324

Magnitude	Err	Nsta	Author	OrigID
Ml	1.9	0.0	3	324
Md	2.0	0.0	3	324

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
PHP	0.38	209.0	S	10:35:38.242	-0.1					---				m		4881
PHP	0.38	209.0	P	10:35:32.357	-0.3					---				m		4880
PHP	0.38	209.0	AMl	10:35:39.450						---		0.3	0.18	a	Ml 1.6	2760
PHP	0.38	209.0	AMd	10:35:57.375						---		0.0	25.02	a	Md 2.0	2757
BCI	0.58	308.0	S	10:35:45.764	0.4					---				m		4883
BCI	0.58	308.0	P	10:35:36.694	-0.0					---				m		4882
BCI	0.58	308.0	AMl	10:35:48.980						---		0.4	0.18	a	Ml 1.9	2761
BCI	0.58	308.0	AMd	10:36:02.205						---		0.0	25.51	a	Md 2.1	2758
PUK	0.59	274.0	S	10:35:45.747	-0.0					---				m		4885

PUK	0.59	274.0	P	10:35:36.817	-0.1	---											m		4884			
PUK	0.59	274.0	AM1	10:35:48.970		---											0.3	0.18	a	M1	1.9	2762
PUK	0.59	274.0	AMd	10:36:01.191		---											0.0	24.37	a	Md	2.0	2759
DRME	1.13	0.0	P	10:35:47.111	0.0	---																4889
BUM	1.36	283.0	P	10:35:51.629	0.0	---																4886
NKME	1.48	302.0	P	10:35:53.630	-0.2	---																4887
NEST	1.62	170.0	P	10:35:56.387	0.1	---																4888

DATA\_TYPE COMMENT GSE2.1  
Event 279

Official Magnitude:  
M1 1.89

Error ellipse:

	Azim	Dip	Mag
Max:	53	73	4.1400
Intermediate:	247	15	0.7000
Min:	156	4	0.4200

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537603 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 280 1.5 km from Asproneri, West Macedonia, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
OrigID																		
2019/01/17	01:34:42.93		0.87	40.4143	21.2257				18.0	2.5	13	30	178	0.13	1.68	m		
325																		

Magnitude	Err	Nsta	Author	OrigID
M1	1.9	0.0	7	325
Md	2.4	0.0	1	325

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
NEST	0.00	0.0	P	01:34:47.166	0.0					---						4904
NEST	0.13	271.0	S	01:34:50.959	0.6					---						4890
NEST	0.13	271.0	AM1	01:34:52.500						---		0.9	0.26	a	M1	2765
NEST	0.13	271.0	AM1	01:34:54.630						---		0.9	0.34	a	M1	2764
FNA	0.39	18.0	S	01:34:57.794	0.3					---						4892
FNA	0.39	18.0	P	01:34:51.571	0.3					---						4891
FNA	0.39	18.0	AM1	01:35:01.400						---		1.1	0.24	a	M1	2766
KBN	0.39	303.0	S	01:34:59.360	2.5					---						4894
KBN	0.39	303.0	P	01:34:51.297	0.4					---						4893
KBN	0.39	303.0	AM1	01:35:02.880						---		0.2	0.34	a	M1	2767
LSK	0.55	242.0	S	01:35:00.897	-1.5					---						4896

LSK	0.55	242.0	P	01:34:52.596	-1.5	---											m		4895
LSK	0.55	242.0	AM1	01:35:01.650		---				0.5	0.52	a	M1			2.0		2768	
LSK	0.55	242.0	AMd	01:35:26.809		---				0.0	34.21	a	Md			2.4		2763	
SRN	1.08	241.0	S	01:35:21.159	1.1	---											m		4898
SRN	1.08	241.0	P	01:34:38.830	-10.0	---											m		4897
SRN	1.08	241.0	AM1	01:35:23.410		---				0.1	0.36	a	M1			1.8		2769	
IGT	1.12	219.0	S	01:35:21.954	1.4	---											m		4900
IGT	1.12	219.0	P	01:35:03.656	-0.8	---											m		4899
IGT	1.12	219.0	AM1	01:35:27.100		---				0.1	0.36	a	M1			1.7		2770	
PHP	1.40	336.0	S	01:35:28.232	-0.6	---											m		4902
PHP	1.40	336.0	P	01:35:09.044	-0.1	---											m		4901
PHP	1.40	336.0	AM1	01:35:36.830		---				0.0	0.40	a	M1			1.7		2771	
LKD2	1.68	196.0	P	01:35:14.257	-0.2	---											m		4903

DATA\_TYPE COMMENT GSE2.1  
Event 280

Official Magnitude:  
M1 1.86

Error ellipse:

	Azim	Dip	Mag
Max:	298	21	3.3400
Intermediate:	96	66	2.7100
Min:	205	8	1.3500

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537602 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 301 15 km from Antipaxos, Ionian Islands, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/20	06:54:30.30		0.18	39.0970	20.3843				29.8	0.7	15	30	160	0.38	2.97	m	
347																	

Magnitude	Err	Nsta	Author	OrigID
M1	2.7	0.0	7	347

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
LKD2	0.37	145.0	S	06:54:45.987	0.3											m	5250
LKD2	0.37	145.0	P	06:54:38.821	-0.3											m	5249
LKD2	0.37	145.0	AM1	06:54:48.740								7.5	0.36	a	M1	3.1	2964
IGT	0.44	355.0	S	06:54:47.386	-0.0											m	5252
IGT	0.44	355.0	P	06:54:39.529	-0.5											m	5251
IGT	0.44	355.0	AM1	06:54:49.310								1.7	0.22	a	M1	2.5	2965

SRN	0.84	340.0	S	06:54:59.910	0.0	---											m	5254
SRN	0.84	340.0	P	06:54:47.263	0.0	---											m	5253
SRN	0.84	340.0	AM1	06:55:06.360		---				0.5	0.42	a	M1	2.4			m	2966
LSK	1.06	8.0	S	06:55:06.078	0.2	---											m	5256
LSK	1.06	8.0	P	06:54:50.717	0.1	---											m	5255
LSK	1.06	8.0	AM1	06:55:12.940		---				0.9	0.54	a	M1	2.8			m	2967
NEST	1.41	21.0	S	06:55:16.418	-0.2	---											m	5258
NEST	1.41	21.0	P	06:54:56.127	-0.6	---											m	5257
NEST	1.41	21.0	AM1	06:55:21.700		---				0.4	0.34	a	M1	2.7			m	2968
KBN	1.56	11.0	S	06:55:19.844	0.1	---											m	5260
KBN	1.56	11.0	P	06:55:00.932	2.4	---											m	5259
KBN	1.56	11.0	AM1	06:55:26.310		---				0.2	0.56	a	M1	2.6			m	2969
SCTE	1.78	0.0	P	06:55:03.796	0.0	---											m	5265
SCTE	1.77	305.0	S	06:55:26.534	0.1	---											m	5261
FNA	1.85	24.0	S	06:55:28.342	0.0	---											m	5263
FNA	1.85	24.0	P	06:55:03.513	0.1	---											m	5262
FNA	1.85	24.0	AM1	06:55:34.320		---				0.4	0.40	a	M1	3.0			m	2970
PUK	2.97	353.0	P	06:55:19.446	-0.3	---											m	5264

DATA\_TYPE COMMENT GSE2.1  
Event 301

Official Magnitude:  
M1 2.68

Error ellipse:

	Azim	Dip	Mag
Max:	188	58	0.8300
Intermediate:	79	11	0.7600
Min:	343	29	0.3700

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537602 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 305 1.5 km from Kato Zotiko, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/20	19:54:42.01		0.04	39.4402	20.6697				23.6	1.0	13	9	165	0.28	1.81	m	351

Magnitude	Err	Nsta	Author	OrigID
M1	2.2	0.0	5	351
Md	3.1	0.0	6	351

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
-----	------	------	-------	------	------	------	-------	------	------	-----	-----	-----	-----	------	-----------	-------

IGT	0.28	290.0	S	19:54:53.389	0.0	---											m		5305
IGT	0.28	290.0	P	19:54:48.516	0.0	---											m		5304
IGT	0.28	290.0	AMd	19:55:37.728		---			0.0	49.21	a	Md	2.1						2997
LKD2	0.65	181.0	S	19:55:04.916	-0.0	---											m		5307
LKD2	0.65	181.0	P	19:54:55.130	0.0	---											m		5306
LKD2	0.65	181.0	AMl	19:55:14.328		---			0.5	0.34	a	Ml	2.2						3003
LKD2	0.65	181.0	AMd	19:55:59.253		---			0.0	64.12	a	Md	3.0						2998
SRN	0.68	311.0	S	19:55:06.464	0.0	---											m		5309
SRN	0.68	311.0	P	19:54:55.942	-0.0	---											m		5308
SRN	0.68	311.0	AMl	19:55:09.998		---			0.3	0.54	a	Ml	1.9						3004
SRN	0.68	311.0	AMd	19:55:55.041		---			0.0	59.10	a	Md	2.9						2999
LSK	0.71	356.0	S	19:55:06.580	0.0	---											m		5311
LSK	0.71	356.0	P	19:54:56.073	0.0	---											m		5310
LSK	0.71	356.0	AMl	19:55:14.668		---			0.9	0.50	a	Ml	2.5						3005
LSK	0.71	356.0	AMd	19:56:11.890		---			0.0	75.82	a	Md	3.2						3000
NEST	1.02	16.0	S	19:55:16.361	0.1	---											m		5313
NEST	1.02	16.0	P	19:55:01.551	-0.0	---											m		5312
NEST	1.02	16.0	AMl	19:55:26.618		---			0.3	0.36	a	Ml	2.2						3006
NEST	1.02	16.0	AMd	19:56:21.718		---			0.0	80.17	a	Md	3.3						3001
KBN	1.19	0.0	P	19:55:07.775	0.0	---											m		5317
KBN	1.19	4.0	S	19:55:20.643	-0.1	---											m		5314
KBN	1.19	4.0	AMl	19:55:29.618		---			0.2	1.00	a	Ml	2.3						3007
SCTE	1.81	292.0	S	19:55:40.065	0.0	---											m		5316
SCTE	1.81	292.0	P	19:55:15.158	-0.0	---											m		5315
SCTE	1.81	292.0	AMd	19:56:37.162		---			0.0	82.00	a	Md	3.3						3002

DATA\_TYPE COMMENT GSE2.1  
Event 305

Official Magnitude:  
Ml 2.22

Error ellipse:

	Azim	Dip	Mag
Max:	88	78	1.0300
Intermediate:	276	11	0.4000
Min:	186	2	0.2700

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537601 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 308 1.7 km from Sývota, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author	
OrigID																		



2019/01/21 04:19:34.25            0.34 39.3937 20.2395            2.2 1.6 17 30 147 0.15 2.66 m  
354

Magnitude	Err	Nsta	Author	OrigID
M1	2.3	0.0	8	354
Md	2.6	0.0	3	354

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
IGT	0.15	26.0	S	04:19:40.030	-0.4					---				m		5347	
IGT	0.15	26.0	P	04:19:37.961	0.2					---				m		5346	
IGT	0.15	26.0	AMd	04:20:04.435						---		0.0	26.47	a	Md	1.5	3023
SRN	0.52	340.0	S	04:19:53.852	-0.1					---				m		5349	
SRN	0.52	340.0	P	04:19:45.710	0.2					---				m		5348	
SRN	0.52	340.0	AM1	04:20:04.120						---		0.3	0.40	a	M1	1.8	3026
SRN	0.52	340.0	AMd	04:20:28.982						---		0.0	43.27	a	Md	2.6	3024
LKD2	0.69	151.0	S	04:19:58.820	-0.1					---				m		5351	
LKD2	0.69	151.0	P	04:19:48.276	-0.0					---				m		5350	
LKD2	0.69	151.0	AM1	04:20:09.020						---		0.7	0.58	a	M1	2.3	3027
LSK	0.80	20.0	S	04:20:02.863	0.3					---				m		5353	
LSK	0.80	20.0	P	04:19:50.557	0.1					---				m		5352	
LSK	0.80	20.0	AM1	04:20:09.700						---		0.7	0.52	a	M1	2.5	3028
LSK	0.80	20.0	AMd	04:20:52.900						---		0.0	62.34	a	Md	3.0	3025
NEST	1.19	31.0	S	04:20:15.765	-0.1					---				m		5355	
NEST	1.19	31.0	P	04:19:57.506	-0.5					---				m		5354	
NEST	1.19	31.0	AM1	04:20:22.640						---		0.3	0.48	a	M1	2.3	3029
KBN	1.30	18.0	S	04:20:18.562	0.0					---				m		5357	
KBN	1.30	18.0	P	04:20:00.014	0.5					---				m		5356	
KBN	1.30	18.0	AM1	04:20:23.480						---		0.2	0.84	a	M1	2.3	3030
SCTE	1.53	298.0	S	04:20:26.556	0.0					---				m		5359	
SCTE	1.53	298.0	P	04:20:03.928	-0.2					---				m		5358	
SCTE	1.53	298.0	AM1	04:20:36.300						---		0.3	0.64	a	M1	2.6	3031
FNA	1.64	31.0	S	04:20:29.961	-0.1					---				m		5361	
FNA	1.64	31.0	P	04:20:06.980	0.8					---				m		5360	
FNA	1.64	31.0	AM1	04:20:36.720						---		0.2	0.40	a	M1	2.6	3032
PHP	2.29	3.0	S	04:20:44.338	-4.0					---				m		5363	
PHP	2.29	3.0	P	04:20:15.481	-1.1					---				m		5362	
PHP	2.29	3.0	AM1	04:21:03.700						---		0.0	1.18	a	M1	2.2	3033
PUK	2.66	355.0	S	04:20:53.725	-4.2					---				m		5365	
PUK	2.66	355.0	P	04:20:20.016	-2.1					---				m		5364	

DATA\_TYPE COMMENT GSE2.1  
Event            308

Official Magnitude:  
M1 2.33

Error ellipse:

	Azim	Dip	Mag
Max:	84	81	1.6400
Intermediate:	270	8	0.7900

Min: 179 1 0.6000

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537601 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 311 3.3 km from Zagrade, Gusinje, Montenegro

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/21	07:08:20.04		0.04	42.6085	19.8380				6.9	10.3	8	9	216	0.30	1.03	m	

OrigID  
357

Magnitude	Err	Nsta	Author	OrigID
Ml	1.5	0.0	2	357
Md	2.3	0.0	4	357

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
PVY	0.10	0.0	Pg	07:08:22.813	0.0					---				mdi		5417	
BCI	0.29	144.0	Sg	07:08:30.823	-0.0					---				m__		5410	
BCI	0.29	144.0	Pg	07:08:26.216	0.0					---				mde		5409	
BCI	0.29	144.0	AMl	07:08:31.450						---		0.8	0.26	a__	Ml	1.9	3061
BCI	0.29	144.0	AMd	07:08:54.708						---		0.0	28.49	a__	Md	2.1	3057
PUK	0.57	175.0	Sg	07:08:39.859	-0.0					---				m__		5412	
PUK	0.57	175.0	Pg	07:08:31.337	-0.0					---				mce		5411	
PUK	0.57	175.0	AMl	07:08:41.290						---		0.1	0.22	a__	Ml	1.1	3062
PUK	0.57	175.0	AMd	07:08:57.665						---		0.0	26.33	a__	Md	2.1	3058
BUM	0.76	247.0	Pg	07:08:35.228	0.1					---				mce		5413	
BUM	0.76	247.0	AMd	07:09:09.637						---		0.0	34.41	a__	Md	2.4	3059
BRY	1.00	288.0	Pg	07:08:39.733	-0.0					---				mdi		5414	
BRY	1.00	288.0	AMd	07:09:16.888						---		0.0	37.15	a__	Md	2.5	3060
PHP	1.03	153.0	Pn	07:08:40.103	0.1					---				mce		5416	
PHP	1.03	153.0	Sn	07:08:54.955	0.0					---				m__		5415	

DATA\_TYPE COMMENT GSE2.1  
Event 311

Official Magnitude:  
Ml 1.53

Error ellipse:

	Azim	Dip	Mag
Max:	83	88	10.3200
Intermediate:	224	1	0.9400
Min:	314	1	0.3200

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1549537599 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 319 1.1 km from Bigovo, Tivat, Montenegro

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/24	20:20:13.69		0.05	42.3665	18.6997				24.7	1.1	10	10	213	0.94	2.63	m	

Magnitude	Err	Nsta	Author	OrigID
Ml	2.8	0.0	3	366
Md	3.6	0.0	6	366

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
PUK	0.94	109.0	S	20:20:45.497	0.0									m		5567	
PUK	0.94	109.0	P	20:20:31.972	0.1									m		5566	
PUK	0.94	109.0	AMl	20:20:56.350								1.0	0.16	a	Ml	2.8	3142
PUK	0.94	109.0	AMd	20:21:44.986								0.0	73.01	a	Md	3.2	3136
BCI	1.01	0.0	P	20:20:31.215	0.0									m		5577	
BCI	1.01	89.0	S	20:20:47.636	-0.1									m		5568	
BCI	1.01	89.0	AMl	20:20:51.110								1.2	0.22	a	Ml	2.9	3143
TIR	1.34	139.0	S	20:20:57.950	-0.1									m		5570	
TIR	1.34	139.0	P	20:20:38.370	-0.6									m		5569	
TIR	1.34	139.0	AMd	20:22:10.068								0.0	91.70	a	Md	3.4	3137
NOCI	2.00	219.0	S	20:21:16.297	-0.0									m		5572	
NOCI	2.00	219.0	P	20:20:49.547	0.1									m		5571	
NOCI	2.00	219.0	AMd	20:22:33.183								0.0	103.64	a	Md	3.6	3138
MRVN	2.28	236.0	P	20:20:53.633	-0.1									m		5573	
MRVN	2.28	236.0	AMd	20:22:38.838								0.0	105.21	a	Md	3.6	3139
FNA	2.56	127.0	S	20:21:30.866	0.0									m		5575	
FNA	2.56	127.0	P	20:20:57.719	-0.1									m		5574	
FNA	2.56	127.0	AMl	20:21:40.520								0.1	0.52	a	Ml	2.8	3144
FNA	2.56	127.0	AMd	20:22:40.318								0.0	102.60	a	Md	3.6	3140
NEST	2.63	137.0	P	20:20:58.798	-0.0									m		5576	
NEST	2.63	137.0	AMd	20:22:39.330								0.0	100.53	a	Md	3.6	3141

DATA\_TYPE COMMENT GSE2.1  
 Event 319

Official Magnitude:  
 Ml 2.75

Error ellipse:

	Azim	Dip	Mag
Max:	29	64	1.2000
Intermediate:	166	19	0.8700

Min: 262 16 0.3300

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537599 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 329 1.4 km from Amygdaléa, Epirus, Greece

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/27	01:21:08.67		0.24	39.5242	20.4562				19.0	0.6	21	18	138	0.10	2.85	m	
370																	

Magnitude	Err	Nsta	Author	OrigID
Ml	4.2	0.0	12	370
Md	3.5	0.0	4	370

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID	
IGT	0.10	275.0	S	01:21:15.599	0.0									m		5612	
IGT	0.10	275.0	P	01:21:12.893	0.3									m		5611	
IGT	0.10	275.0	AMl	01:21:16.760								303.3	0.30	a	Ml	4.4	3167
SRN	0.50	316.0	S	01:21:27.562	0.0									m		5614	
SRN	0.50	316.0	P	01:21:19.480	0.0									m		5613	
SRN	0.50	316.0	AMl	01:21:28.250								11.3	0.46	a	Ml	3.3	3168
SRN	0.50	316.0	AMd	01:23:18.109								0.0	118.63	a	Md	3.6	3163
LSK	0.63	9.0	S	01:21:31.375	0.4									m		5616	
LSK	0.63	9.0	P	01:21:21.038	-0.4									m		5615	
LSK	0.63	9.0	AMl	01:21:41.940								59.9	0.78	a	Ml	4.3	3170
LSK	0.63	9.0	AMl	01:21:36.260								39.2	0.38	a	Ml	4.1	3169
LSK	0.63	9.0	AMd	01:22:59.375								0.0	98.34	a	Md	3.4	3164
LKD2	0.75	167.0	S	01:21:34.954	0.2									m		5618	
LKD2	0.75	167.0	P	01:21:23.640	0.0									m		5617	
LKD2	0.75	167.0	AMl	01:21:42.420								52.4	0.52	a	Ml	4.3	3172
LKD2	0.75	167.0	AMl	01:21:45.440								44.3	0.46	a	Ml	4.2	3171
NEST	1.00	26.0	S	01:21:42.526	0.0									m		5620	
NEST	1.00	26.0	P	01:21:27.792	-0.2									m		5619	
NEST	1.00	26.0	AMl	01:21:49.790								12.1	0.38	a	Ml	3.9	3173
KBN	1.13	12.0	S	01:21:45.822	0.2									m		5622	
KBN	1.13	12.0	P	01:21:29.860	0.1									m		5621	
KBN	1.13	12.0	AMl	01:21:59.430								9.2	1.56	a	Ml	3.9	3174
KBN	1.13	12.0	AMd	01:23:05.738								0.0	95.88	a	Md	3.5	3165
VLO	1.20	323.0	S	01:21:47.280	-0.2									m		5624	
VLO	1.20	323.0	P	01:21:33.658	2.8									m		5623	
VLO	1.20	323.0	AMd	01:23:18.521								0.0	104.86	a	Md	3.6	3166
FNA	1.44	29.0	S	01:21:55.987	-0.3									m		5626	
FNA	1.44	29.0	P	01:21:35.846	-0.0									m		5625	
FNA	1.44	29.0	AMl	01:22:01.320								10.7	0.94	a	Ml	4.2	3176

FNA	1.44	29.0	AM1	01:22:02.180	___	10.2	0.40	a__	M1	4.1	3175
SCTE	1.63	291.0	P	01:21:38.821	-0.3	___	___	m__	___	___	5627
SCTE	1.63	291.0	AM1	01:22:10.860	___	16.9	0.56	a__	M1	4.5	3177
TIR	1.88	0.0	P	01:21:43.024	0.0	___	___	m__	___	___	5635
TIR	1.88	347.0	S	01:22:09.701	0.6	___	___	m__	___	___	5628
TIR	1.88	347.0	AM1	01:22:27.630	___	4.5	1.42	a__	M1	4.1	3178
PHP	2.16	0.0	S	01:22:16.016	0.2	___	___	m__	___	___	5630
PHP	2.16	0.0	P	01:21:47.056	0.0	___	___	m__	___	___	5629
PHP	2.16	0.0	AM1	01:22:29.860	___	4.5	0.78	a__	M1	4.2	3179
THE	2.22	59.0	P	01:21:47.134	-1.1	___	___	m__	___	___	5631
PUK	2.55	351.0	P	01:21:51.930	-1.1	___	___	m__	___	___	5632
PUK	2.55	351.0	AM1	01:22:43.580	___	2.4	1.00	a__	M1	4.1	3180
BCI	2.85	355.0	S	01:22:34.123	0.0	___	___	m__	___	___	5634
BCI	2.85	355.0	P	01:21:56.925	-0.6	___	___	m__	___	___	5633
BCI	2.85	355.0	AM1	01:22:55.760	___	2.8	0.82	a__	M1	4.3	3182
BCI	2.85	355.0	AM1	01:22:55.560	___	2.8	1.08	a__	M1	4.3	3181

DATA\_TYPE COMMENT GSE2.1  
Event 329

Official Magnitude:  
M1 4.18

Error ellipse:

	Azim	Dip	Mag
Max:	256	45	0.8500
Intermediate:	125	32	0.5000
Min:	17	27	0.3800

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1549537599 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 337 0.7 km from Zli Potok, Prizren, Kosovo

Date	Time	Err	RMS	Latitude	Longitude	Smaj	Smin	Az	Depth	Err	Ndef	Nsta	Gap	mdist	Mdist	Qual	Author
2019/01/30	19:22:37.94		0.01	41.9725	20.6575				32.5	2.7	4	5	257	0.33	0.59	m	
378																	

Magnitude	Err	Nsta	Author	OrigID
M1	1.9	0.0	3	378
Md	2.0	0.0	2	378

Sta	Dist	EvAz	Phase	Time	Tres	Azim	AzRes	Slow	SRes	Def	SNR	Amp	Per	Qual	Magnitude	ArrID
BCI	0.00	0.0	Pg	19:22:48.607	0.0				___					m__		5727
BCI	0.59	313.0	Sg	19:22:59.457	0.0				___					m__		5726

BCI	0.59	313.0	AM1	19:23:00.800	---	0.4	0.16	a	M1	2.1	3247
PHP	0.33	210.0	Sg	19:22:52.092	0.0	---	---	m	---	---	5723
PHP	0.33	210.0	Pg	19:22:45.416	-0.6	---	---	m	---	---	5722
PHP	0.33	210.0	AM1	19:22:53.270	---	0.5	0.32	a	M1	1.9	3245
PHP	0.33	210.0	AMd	19:23:06.900	---	0.0	21.48	a	Md	1.9	3243
PUK	0.57	278.0	S	19:22:58.985	0.0	---	---	m	---	---	5725
PUK	0.57	278.0	Pg	19:22:49.965	0.0	---	---	m	---	---	5724
PUK	0.57	278.0	AM1	19:23:01.470	---	0.3	0.28	a	M1	1.9	3246
PUK	0.57	278.0	AMd	19:23:14.835	---	0.0	24.87	a	Md	2.1	3244

DATA\_TYPE COMMENT GSE2.1  
Event 337

Official Magnitude:  
M1 1.89

Error ellipse:

	Azim	Dip	Mag
Max:	192	75	2.8300
Intermediate:	77	6	1.7700
Min:	346	13	0.5400

### Tèrmete të largëta (Long distance earthquake)

Y	M	D	HM	Sec	Lat	Long	Dep	Net Nr	Rms Mag	Epicenter
2018-01-05	1925	39.2							590	6.8 ACRE BRAZIL
GAP=		hor.err=		ver.err=						
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SCTE	AC	iP		1938	00.58					
PUK	AC	iP		1938	07.23					
BCI	AC	iP		1938	08.16					
LSK	AC	iP		1938	09.39					
PHP	AC	iP		1938	09.45					
FNA	AC	iP		1938	11.21					

Tërmete të pa-lokalizueshëm, me më pak se tre stacione (un-locatable earthquakes with less than three stations)

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
---	---	---	----	-----	-----	------	-----	-----	----	-----	-----	-----------

2019-01-02			2040	11.91								PHP-PUK
GAP=					hor.err=		ver.err=					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2040	11.91					
PHP	SE	ISG		2040	16.79					
PUK	SZ	IPG		2040	12.69					
PUK	SE	ISG		2040	18.47					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
---	---	---	----	-----	-----	------	-----	-----	----	-----	-----	-----------

2019-01-10			0852	07.18								BCI
GAP=					hor.err=		ver.err=					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0852	07.18					
BCI	SE	ISG		0852	15.06					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
---	---	---	----	-----	-----	------	-----	-----	----	-----	-----	-----------

2019-01-11			0558	10.50								PHP-PUK
GAP=					hor.err=		ver.err=					

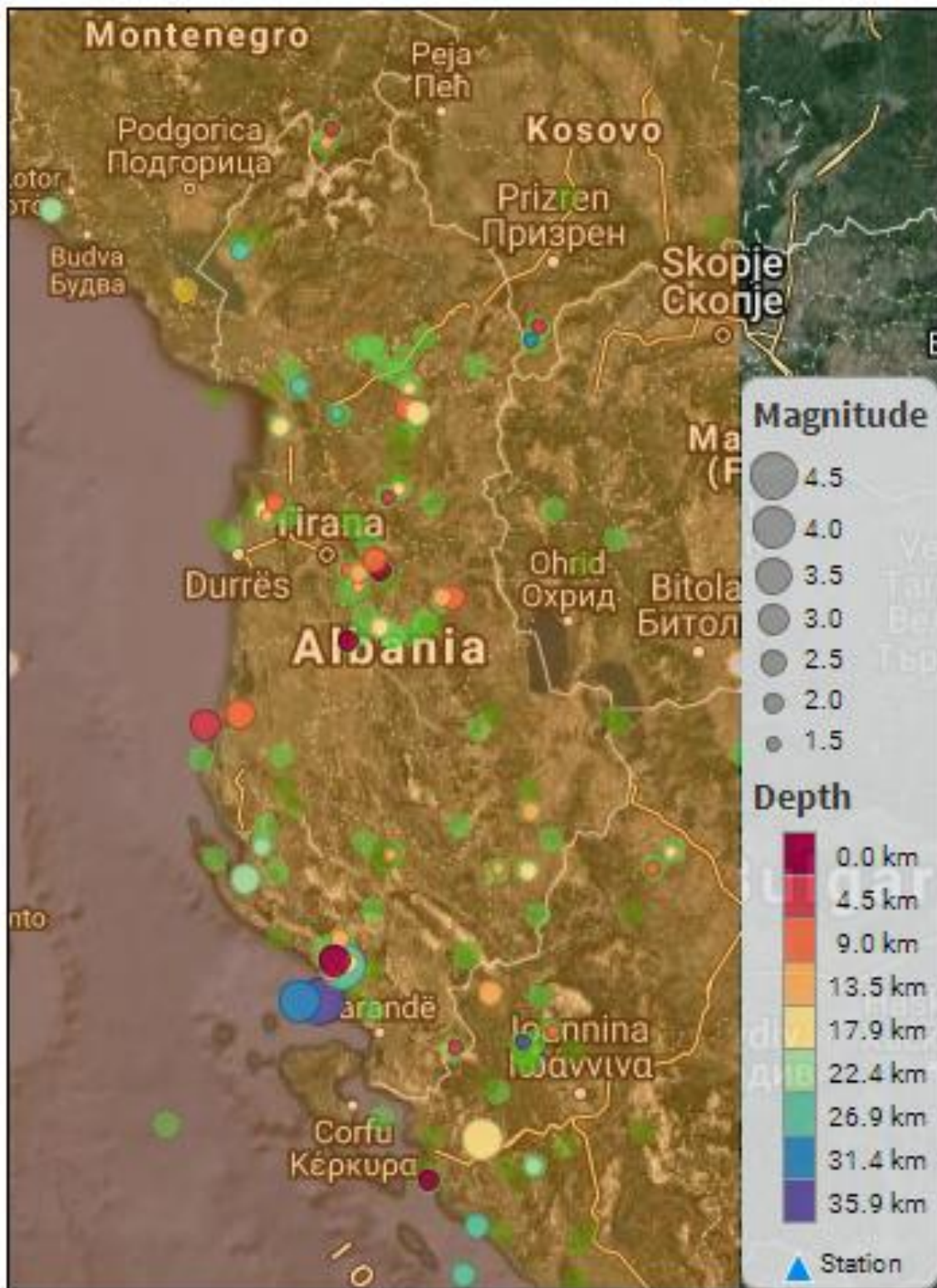
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0558	53.28					
PHP	SE	ISG		0558	56.50					
PUK	SZ	IPG		0558	56.74					
PUK	SE	ISG		0559	04.46					



### Katalogu i termeteve

Date	Origin time	Time rms	Latitude	Longitude	Mag	Depth (km)	Depth Error	No. Stations	No. Phases	Azimuth Gap
2019-01-01	22:59:41	0.34	41.192	20.336	2.8	10.7	1.8	12	17	107
2019-01-01	22:59:41	0.34	41.192	20.336	2.8	10.7	1.8	12	17	107
2019-01-02	00:03:52	0.17	41.193	20.294	2.2	17.1	1	29	20	104
2019-01-02	06:24:24	0.27	41.060	19.912	2.1	3.7	2	26	26	94
2019-01-02	22:33:34	0.09	40.541	20.650	2.4	17.2	0.8	26	13	122
2019-01-04	10:45:03	0.11	39.975	20.487	2.7	15.7	0.6	8	13	133
2019-01-04	19:27:38	0.36	40.058	19.881	4.8	27.5	1.1	13	16	120
2019-01-04	19:39:12	0.34	39.956	19.709	4	32.5	0.8	9	13	235
2019-01-05	03:12:24	0.05	40.072	19.912	2.1	19.7	2.2	9	8	162
2019-01-05	19:02:46	0.1	41.834	19.706	2.1	30	1.5	8	7	125
2019-01-06	04:30:05	0.33	40.362	20.518	1.7	16.8	2.3	29	13	81
2019-01-06	04:30:06	0.49	40.357	20.640	2.1	21	2.3	8	12	110
2019-01-07	09:43:01	0.2	41.753	19.865	2	29.1	1.1	14	10	114
2019-01-07	18:51:36	0.03	41.277	19.912	1.5	10	0.7	29	6	290
2019-01-08	04:16:32	0.2	41.225	19.950	1.8	17.6	0.8	28	18	147
2019-01-08	11:08:31	0.08	41.458	19.565	2.2	19.2	2	9	9	218
2019-01-09	20:39:07	0.05	40.075	19.822	1.7	16.3	2.1	29	8	147
2019-01-10	05:14:52	0.13	39.825	20.621	1.7	40.4	1.9	6	7	147
2019-01-10	11:23:15	0.09	42.248	19.467	2.3	31.2	0.8	29	11	152
2019-01-11	21:43:48	0.02	40.045	19.843	2.3	14.5	0.6	10	11	130
2019-01-12	09:11:52	0.05	39.861	20.740	1.8	11	1.9	12	7	157
2019-01-13	03:50:26	0.08	41.832	20.161	2	19.6	0.6	26	14	132
2019-01-13	14:26:10	0.05	40.364	21.149	1.8	11.4	1	15	6	221
2019-01-13	20:21:22	0.15	39.808	20.343	1.5	6.5	1.5	29	8	241
2019-01-14	02:41:08	0.4	39.250	20.431	2.9	29	1.2	29	20	142
2019-01-14	10:24:19	0.1	41.525	20.117	1.9	18.4	0.5	30	18	80
2019-01-14	10:43:44	0.22	41.504	20.070	1.8	6.7	2.2	30	13	83

2019-01-14 11:58:57	0.75	40.330	19.494	3.3	25	1.8	14	19	114
2019-01-15 05:30:43	0.3	40.804	19.329	3.4	8.9	5.7	5	8	228
2019-01-15 05:30:44	0.73	40.842	19.465	3.3	10.7	2.5	26	23	194
2019-01-16 06:26:02	0.05	42.569	19.816	1.6	15.7	2.4	11	9	107
2019-01-16 10:35:25	0.11	42.014	20.683	1.9	5.3	4	31	9	222
2019-01-17 01:34:42	0.87	40.414	21.226	1.9	18	2.5	30	13	178
2019-01-18 18:14:05	0.04	41.480	19.615	2	10.4	0.8	17	13	134
2019-01-18 21:48:22	0.24	41.718	19.628	2.4	19.2	1.1	27	15	158
2019-01-18 23:38:51	0.26	41.446	19.579	1.8	15	1.4	30	15	190
2019-01-19 01:00:59	0.25	41.105	20.041	2.2	18.6	1.3	30	22	143
2019-01-20 06:54:30	0.18	39.097	20.384	2.7	29.8	0.7	30	15	160
2019-01-20 19:54:42	0.04	39.440	20.670	2.2	23.6	1	9	13	165
2019-01-21 04:19:34	0.34	39.394	20.240	2.3	2.2	1.6	30	17	147
2019-01-21 07:02:36	0.17	41.752	20.188	2.9	18.2	0.7	30	21	117
2019-01-21 07:02:36	0.28	41.773	20.144	2.9	12.2	1.2	15	17	116
2019-01-21 07:08:20	0.04	42.609	19.838	1.5	6.9	10.3	9	8	216
2019-01-21 16:41:12	0.19	40.143	19.879	2.4	14	0.9	18	14	108
2019-01-22 15:54:20	0.29	40.434	19.560	2.5	25.7	0.8	19	23	100
2019-01-23 03:45:00	0.13	40.406	20.084	1.5	16.8	1.4	19	13	92
2019-01-24 11:46:25	0.15	40.074	19.853	3.1	0.7	0.9	14	20	118
2019-01-24 20:20:13	0.05	42.367	18.700	2.8	24.7	1.1	10	10	213
2019-01-27 01:21:08	0.24	39.524	20.456	4.2	19	0.6	18	21	138
2019-01-30 18:14:41	0.24	41.277	20.043	2.1	20	2	11	9	140
2019-01-30 19:21:54	0.14	41.268	19.950	2	16.3	1.2	11	6	209
2019-01-30 19:22:37	0.01	41.973	20.658	1.9	32.5	2.7	5	4	257
2019-01-31 06:38:23	0.52	41.312	20.017	2.6	9.5	3.7	11	12	130



**-Fig. 2 -**

Harta e shpërndarjes në hapësirë të epiqendrave, në përputhje me magnitudë (madhësia e simbolit) dhe thellësinë (ngjyra e simbolit); Ngjarjet janë lokalizuar gjatë muajit Janar 2019, bazuar në regjistrimet e ASN dhe stacioneve sizmologjike në rajon.  
*(Epicentral map for located seismicity within Albania and surrounding during January 2019)*

## 1. Statistika e ngjarjeve (Events Statistics)

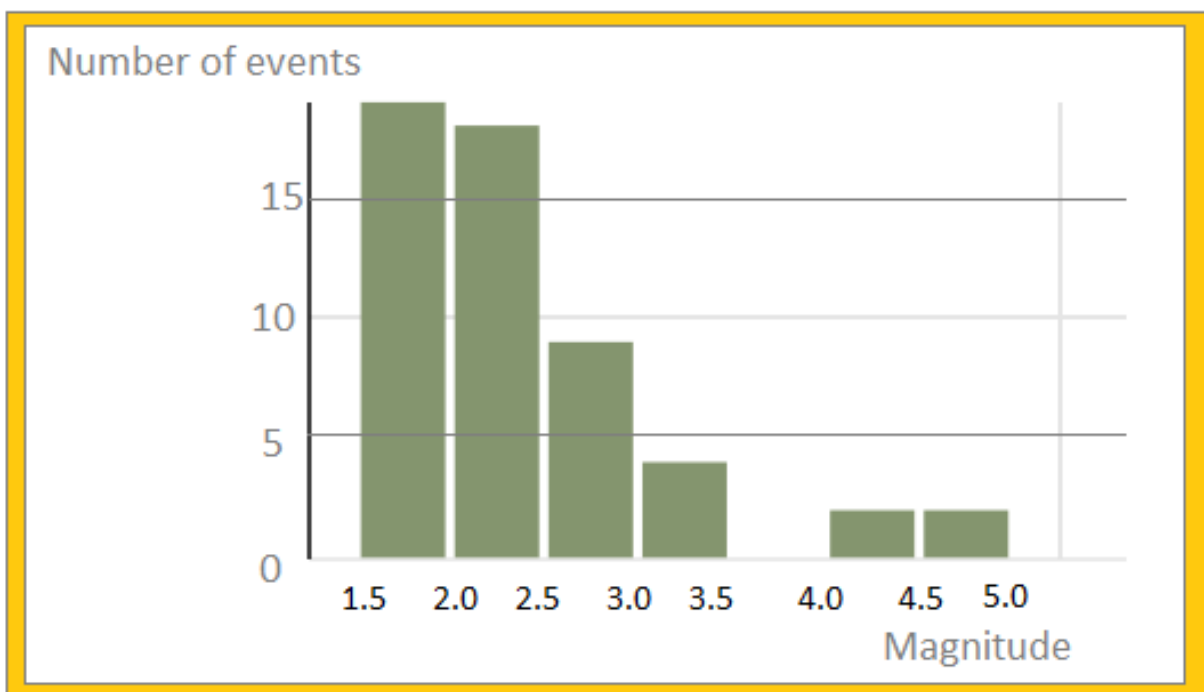
**Tab. 5** – Të dhënat përfaqësuese për statistikën e ngjarjeve (representative earthquake statistical data)

Të dhënat përfaqësuese	Representative Parameters	Vlerat (observed values)
Numuri i përgjithshëm i ngjarjeve të regjistruara (kuadrati 39 <sup>o</sup> -43 <sup>o</sup> V; 18.5 <sup>o</sup> -21.5 <sup>o</sup> L)	[total recorded number of seismic events]	53
Numuri i ngjarjeve sizmike brenda kufirit shtetëror	[earthquakes occurred within state border]	40
Thellësia mesatare e vrojtuar (km)	[mean observed depth]	17
Thellësia maksimale e vrojtuar (km)	[maximum observed depth]	40
Magnituda lokale minimale e vrojtuar ( $M_{L/d}$ )	[minimum observed local magnitude]	1.5
Magnituda lokale maksimale e vrojtuar ( $M_{L/d}$ )	[maximum observed local magnitude]	4.8
Intensiteti maksimal i vrojtuar (MSK-64)	[maximum observed intensity]	V-VI

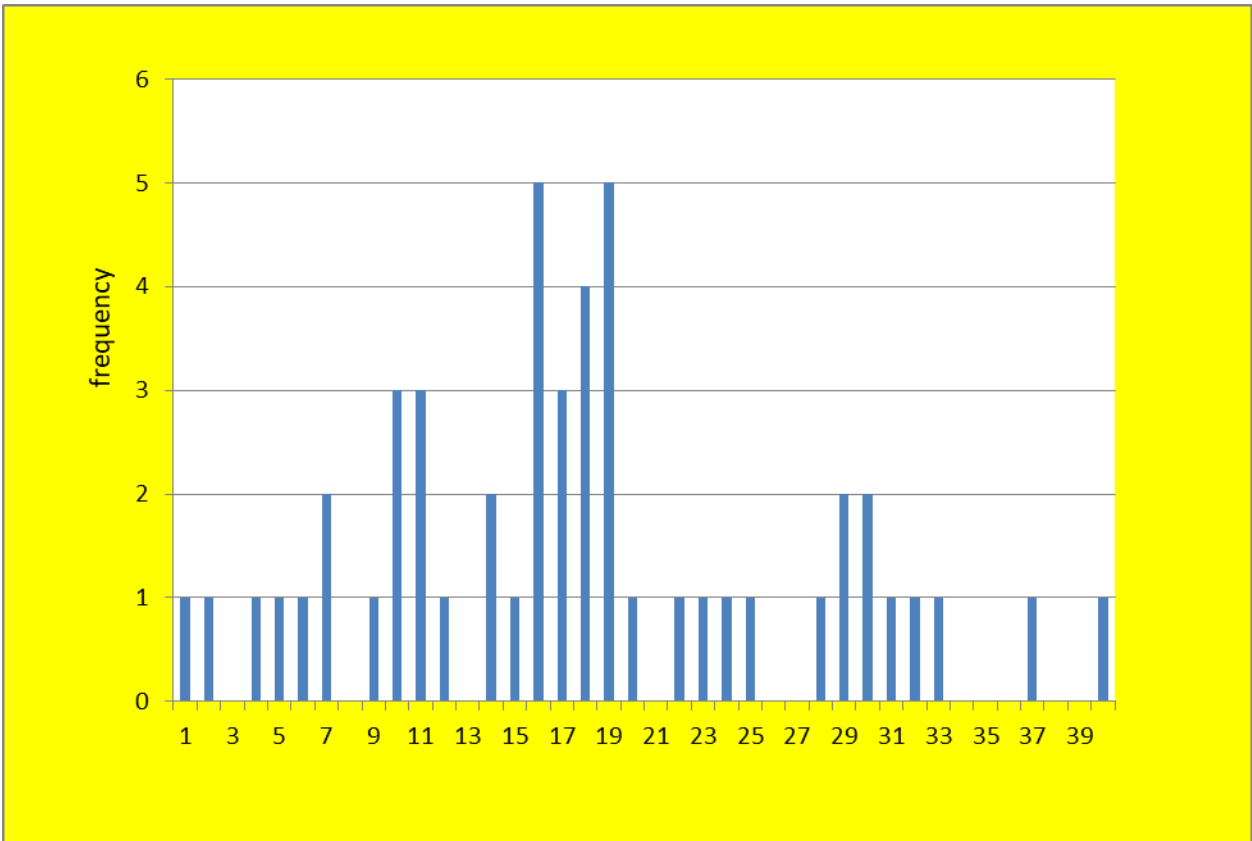
## 2. Karakteristikat kryesore të sizmicitetit për muajin dhe vlerësimi i cilësisë së katalogut sizmik

Sizmiciteti i muajit Janar 2019 është dominuar nga aktiviteti sizmik në rajonin e Himares, ku është regjistrimi i ngjarjes së datës 4 Janar 2019, ora 19:26 (UTM), me  $M_L = 4.8$  (Rihter).

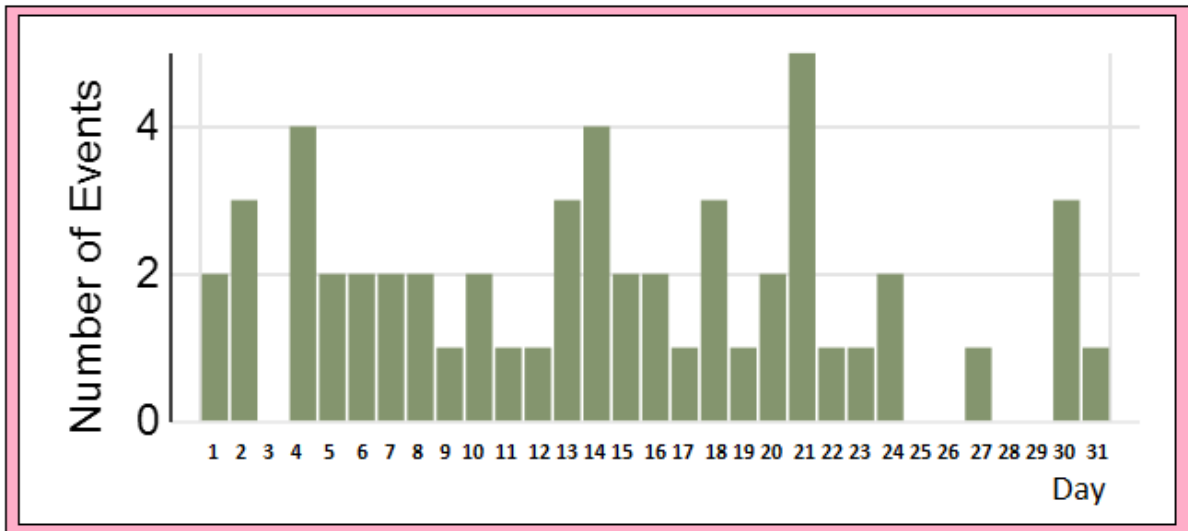
Bazuar në gabimet në lokalizim dhe në gjeometrine e rrjetit për çdo termat është vlerësuar cilësia e katalogut e paraqitur në histogramat respektive në vijim.



Grafiku i numurit të ngjarjeve për nivelin e magnitudave



Grafiku i frekuences se termeteve ne lidhje me thellesin.



Grafiku ishperndarjes se numurit te ngjarjeve per dite



### 3. Mekanizmi fokal (Focal mechanisms)

#### 1. Main shock

#### Source parameters (relocated)

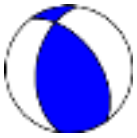
Date	Time	Coordinates	Depth	Magnitude
2019 0104 1927 37.0	40.10 19.85	5.1	4.8L (amplitude estimated magnitude)	

GAP=118

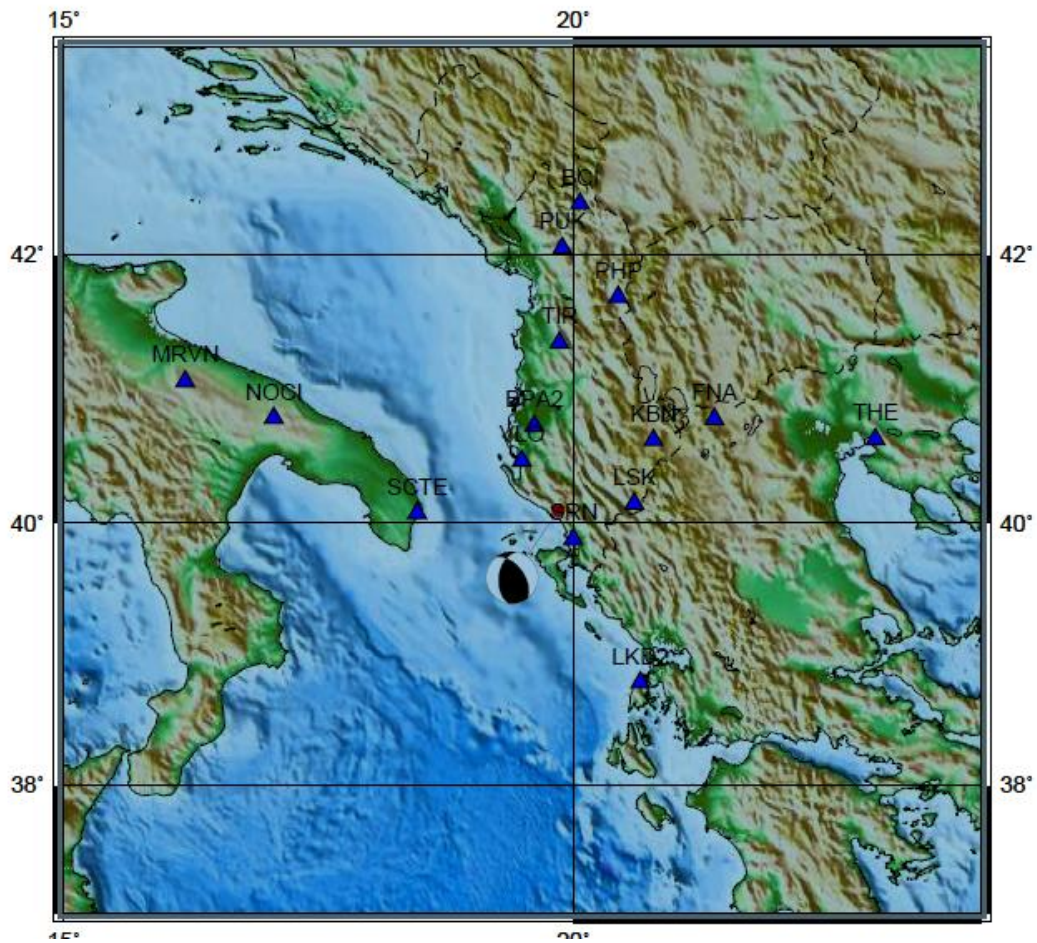
#### Source geometry (active plane) : FOCMEC F

Strike	Dip	Rake (1)
323.52	323.52	59.07

Strike	Dip	Rake (2)
187.9	47.00	124.00



ID201901041927Mw4.8



#### 4. Përshkrim i të dhënave makrosizmike (*Macro-seismic data description for individual events*)

##### Ngjarja 1:

Datë 04.01.2019, në orën 19:26:20.01(UTC); (21:26:20.01ora lokale); lokalizuar 40.025V; 19.881L, 3km ne perendim te Borshit, Sarande; Intensiteti i tërmetit në epiqendër  $I_0 = V-VI$  ballë (EMS-98); Ndjerë: V-VI ballë në Borësh dhe Himarë; V ballë në Dhërmi, Gjirokaster, Sarande dhe Tepelene; IV-V ballë ne qytetin e Përmetit, Këlcyres, Memaliaj dhe Vlorës; IV ballë ne Ballesh, Berat; III - IV ballë ne Feir, Lushnje, Elbasan, Kavaj dhe Korce;

(Event 1):

(Intensity  $I_0 = V-VI$  degree EMS-98, felt V-VI degree at Borshi and Himara towns; V at Dhermi, Gjirokaster, Sarande dhe Tepelene towns; IV-V at Permeti, Kelcyra, Memaliaj and Vlora towns; IV at Balleshi and Berati towns; III - IV at Fieri., Lushnje, Elbasan, Kavaj and Korca towns ).

**Shënim:** Intensiteti i tërmetit në epiqendër  $I_0$  është përcaktuar nga relacioni  $I_0 = (\text{Mag} (M_{L/d}) - 1)/0.6$

**Note:** The earthquake Intensity in epicenter  $I_0$  is derived from the relation  $I_0 = (\text{Mag} (ML/d) - 1)/0.6$

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