

BULETINI MUJOR I SIZMOLOGJIS
(MONTHLY BULLETIN OF SEISMOLOGY)

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H Y R J E

Buletini sismologjik përmban ngjarjet sizmike (tërmiset), e regjistruar, lokalizuar dhe analizuar gjatë periudhës kohore një-mujore. Përpos pasqyrimit kronologjik të aktivitetit sismik të regjistruar, në territorin Shqipëtar dhe rrëth tij, me anë të stacioneve të rrjetit sismologjik 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 sismik në vend. Përmbajtja e buletinit konsiston në terminologjinë përkatëse, në karakteristikat e stacioneve sismologjik, të dhënët 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 mëjor dhe paraqitjen grafike në hartë, të epikendrave të tërmeteve të lokalizuar. Në procesin e monitorim-regjistrimit dhe lokalizimit të ngjarve sizmike kontribuojnë drejtpërdrejtë punonjësit ndihmës-shkencor (laborant): Ing. Ardian Minarolli, Ing. Olgert Gjuzi, Ing. Irena Dushi, Ing. Suela Hajrullai (Inxhinier Gjeolog, Gjeofizik, Fizik/ Monitorues në Qendrën Kombëtare të Sismologjisë). Në kontrollin dhe analizën e cilësisë së vlerësimit të dhënavë, në analizën statistikore, analizën e ngjarjeve ($M>4.0$), katalogimin dhe paraqitjen grafike në hartë si dhe përpilimin e këtij buletini, kontribuojnë punonjësit kërkues sismolog, Prof.Dr. Rrapo Ormeni dhe Dr. Edmond Dushi. Analiza e dhënavë 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 ndërsafe grafike në gjuhën Java). Të dhënët e përfshira ruhen ne 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 stuff are: Eng. Ardian Minarolli, Eng. Olgert Gjuzi, Eng. Irena Dushi and Eng. Suela Hajrullai (Geologists, Geophysicist, Physicist /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 Sismologjik Shqipëtar (Albanian Seismological Network, ASN)

Të dhënët 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 transmetim i të dhënavë valore nga stacionet periferik në Qendrën Kombëtare të Monitorimit, në kohë reale (Real time communication)

T₀ – perioda vetjake e reagimit të sismometrit (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.

| Kodi | Regjistruar (Po/Jo) | Gjer. Gjeo. | Gjat. Gjeo. | Lartesia | Tipi i stacionit | Sensori | Terheqja e Informacionit | Komunikimi | T ₀ |
|-----------------|------------------------|----------------------|-----------------------|--------------|---------------------|--------------|-----------------------------|---------------|---------------------|
| 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. 1 – Rrjeti Sizmologjik Shqipëtar (Albanian Seismological Network, ASN, Rrjeti Sizmologjik Virtual (Virtual Seismological Network)

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

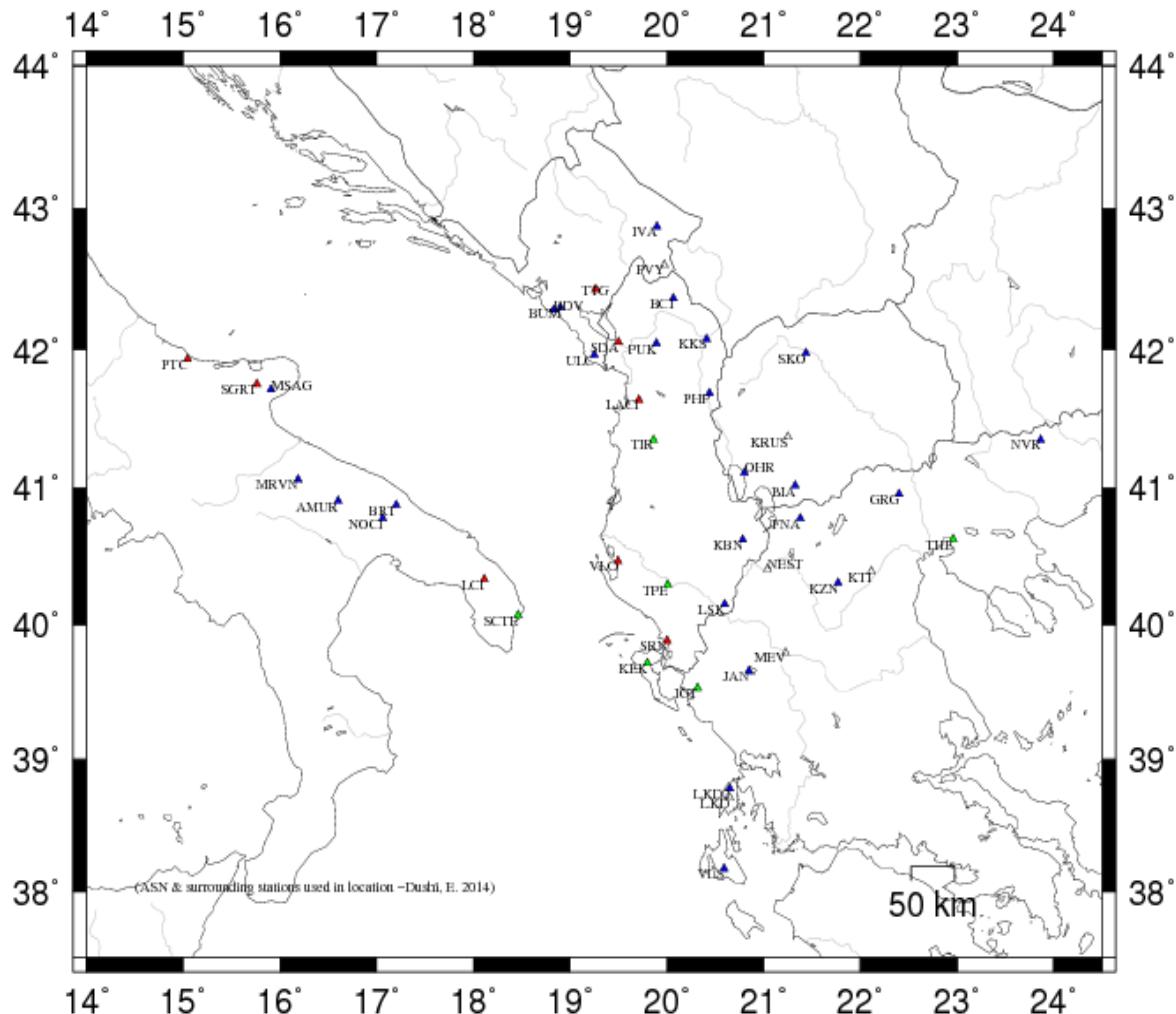
Tab. 3 – Rrjeti Sizmologjik Ndihmës (MSO, SKO, AUTH, NAO, INGV)

| Kodi | Regjistruar (Po/Jo) | Gjer. Gjeo. | Gjat. Gjeo. | Lartesia | Tipi i stacionit | Sensori | Terheqja e Informacionit | Komunikimi | T ₀ |
|--------------|---------------------|-------------------|--------------------|-----------|------------------|--------------|--------------------------|---------------|------------------|
| 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 | 1.0 |
| KTI | Po (Y) | 40.39289 | 22.11650 | 1329 | # | # | # | # | # |
| GRG | Po (Y) | 40.9558 | 22.4029 | 600 | 3C-BB | CMG-3EPS/100 | Trident | RT | 40 |
| LKD | Po (Y) | 38.70722 | 20.65056 | 1140 | # | # | # | # | # |
| ULC | Po (Y) | 41.9633 | 19.2497 | 465 | 3C-SP | S-13 | Smart-24D | RT | 1.0 |
| TTG | Po (Y) | 42.43020 | 19.25530 | 97 | # | # | # | # | # |
| PVY | Po (Y) | 42.5950 | 19.9735 | 1250 | 3C-SP | S-13 | Smart-24D | RT | 1.0 |
| BUM | Po (Y) | 42.3008 | 18.8986 | 724 | 3C-SP | S-13 | Smart-24D | RT | 1.0 |
| 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 | 120 |
| JAN | Po (Y) | 39.6561 | 20.8487 | 526 | 3C-BB | CMG-3EPS/60 | DR24-SC | RT | 40 |
| KZN | Po (Y) | 40.3033 | 21.7820 | 791 | 3C-BB | STS-2 | DR24-SC | RT | 120 |
| VLS | Po (Y) | 38.1768 | 20.5886 | 402 | 3C-BB | Trillium 120 | DR24-SC | RT | 120 |
| NVR | Po (Y) | 41.3484 | 23.8651 | 627 | 3C-BB | CMG-3EPS/60 | DR24-SC | RT | 40 |

| Kodi | Regjistruar (Po/Jo) | Gjer. Gjeo. | Gjat. Gjeo. | Lartesia | Tipi i stacionit | Sensori | Terheqja e Informacionit | Komunikimi | T ₀ |
|--------------|----------------------|-------------------|--------------------|-----------|------------------|--------------|--------------------------|---------------|------------------|
| | Regjistruar (Po (Y)) | | Gjat. Gjeo. | | Tipi i stacionit | | Terheqja e Informacionit | | T ₀ |
| Station Code | Registered (WDC) | Latitude (degree) | Longitude (degree) | Elev. (m) | Station type | Sensor type | Acquisition system | Communication | Nat.l Period (s) |
| BRT | Po (Y) (WDC) | 40.8778 | 17.2036 | 333 | # | # | # | # | # |
| AMUR | Po (Y) | 40.9071 | 16.6041 | 443 | 3C-BB | Trillium 40T | Libra VSAT | RT satellite | 40 |
| MSAG | Po (Y) | 41.712 | 15.9096 | 890 | 3C-BB | Trillium 40T | Libra VSAT | RT satellite | 40/120 |
| PTC | Po (Y) | 41.7546 | 15.7437 | 960 | 3C-BB | Trillium 40T | Libra VSAT | RT satellite | 40 |
| LCI | Po (Y) | 40.33461 | 18.49197 | 46 | 3C-BB | # | Libra VSAT | # | 40/120 |
| OHR | Po (Y) | 41.1114 | 20.7989 | 739 | # | # | # | # | # |
| BIA | Po (Y) | 41.0194 | 21.3239 | 720 | 3C-BB | # | Trident | # | 40 |
| KRUS | Po (Y) | 41.3689 | 21.2488 | 1015 | # | # | # | # | # |
| SKO | Po (Y) | 41.9721 | 21.4396 | 346 | 3C-BB | # | Laurus | # | 120 |
| FNA | Po (Y) | 40.7818 | 21.3835 | 750 | 3C-BB | CMG-3EPS/100 | Trident | R1 | 40 |
| IGT | Po (Y) | 39.5315 | 20.3299 | 270 | 3C-BB | CMG-3EPS/100 | HRD24 | RT | 40 |

Shënim:

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



-Fig. 1-

Harta e shpërndarjes së stacioneve të rrjetit sismologjik Shqipëtar (ASN), Universitetit ‘Aristotel’ të Selanikut (THE), Observatorit Kombëtar të Athinës (ATH), INGV, rrjetit sismologjik Malazez (PDG) dhe atij Maqedonas (SKO).

[Seismological station distribution map for ASN, THE, ATH, INGV, PDG & SKO]

Përshkrimi i terminlogjisë së përdorur për parametrat e përfthuar
(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 vatreore (km) [hypocenter depth in km] |
| RMS | Shmangia kuadratike mesatare për diferençat e peshuara të kohë-udhëtimin, për Fazat Sizmike, [root mean square for the weighted travel time residuals] |
| ERH | Gabimi horizontal në lokalizim (përafërsisht aksi maksimal i elipsit të gabimit në epiqendër), [horizontal location error, approximately equal to the major epicenter's error ellipse]. |
| ERZ | Gabimi në thellësi, [Defined as the largest projections of the three principal errors on a vertical line]. |
| XMAG | Magnituda primare bazuar në amplitudë [Primary weighted median amplitude magnitude]. |
| FMAG | Magnituda primare bazuar në zgjatshmërinë e sinjalit [Primary weighted median coda magnitude]. |
| PMAG | Magnituda e përzgjedhur si përfaqësuese, për ngjarjen e lokalizuar [preferred magnitude selected by PRE command, as representative of available magnitudes ML and Md]. |
| NSTA | Numuri i stacioneve të përdorur në lokalizim [the number of stations read for this event]. |
| NPHS | Numuri i fazave të përdorura [Number of used phases in location]. |
| DMIN | Distanca hypoqender-stacioni më i afërt [distance to the nearest station]. |
| MODEL | Modeli shpejtësior i përdorur [velocity crustal model code]. |
| GAP | Shmangia maksimale, këndore, ndërmjet stacioneve të përdorur [the largest azimuthal gap between azimuthally adjacent stations]. |
| ITR | Numri i iteracioneve për zgjidhje [number of iterations required for the solution]. |
| NFM | Numri i hyrjeve të para P [number of P first motions reported]. |
| NWR | Numri i fazave P & S me peshë statistikore > 0.1 [number of P & S readings with weights > 0.1]. |
| NWS | Numri i fazave S me peshë statistikore > 0.1 [number of S-phases with weights > 0.1]. |
| NVR | Numri i fazave P & S, të vlefshme për lokalizim [number of P & S phases valid for location, assigned weights > 0]. |
| 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 përfthuar në mënyrë iterative [convergence problems], ose zgjidhje e pa pranueshme me RMS të lartë; (-) – tregon se thellësia është fiksuar [fixed depth solution]; X – lokalizimi i fiksuar për të rritur performancën në llogaritjen e thellësisë [fixed location solution]. |

| | |
|--------|---|
| 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-karaktere (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 [<i>3 –letters component code</i>] |
| C | shkurtimi i kodit të rrjetit (1 karakter) [<i>abbreviation for the station code</i>] |
| R | Shënim i 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 vatér-stacion për fazën sizmike [<i>observed travel time</i>] |
| TCAL | Koha e llogaritur nga modeli i shpejtësisë për udhëtimin vatér-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 korrigues që përdoret në llogaritjen e magnitudës [<i>calibration factor for magnitude calculation</i>]. |
| DUR | Zgjatshmëria e fazëz 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 & 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 ne amplitudo, [<i>amplitude based magnitude weight code</i>]. |
| XMAG | Magnituda bazuar në amplitudo, për stacionin, [<i>amplitude magnitude for that station</i>]. |
| T | Kodi për llojin e magnitudës [<i>the magnitude type code assigned by XC1 & XC2 commands</i>]. |

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

BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785747 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 561 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/01 | 11:57:28.97 | 0.59 | 41.4682 | 19.3202 | | | | | 21.3 | 2.4 | 32 | 28 | 50 | 0.42 | 2.87 | m | |
| 602 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.2 | 0.0 | 9 | 602 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-------------------|-------|
| TIR | 0.43 | 0.0 | Pg | 11:57:39.156 | 0.0 | | | | | | | | | | mdi | 9228 |
| TIR | 0.43 | 106.0 | Sg | 11:57:45.595 | 0.6 | | | | | | | | | | m | 9191 |
| TIR | 0.43 | 106.0 | AM1 | 11:57:45.080 | | | | | | | | | | 4.3 | 0.50 a M1 2.8 | 5179 |
| PUK | 0.72 | 36.0 | Sg | 11:57:52.840 | -0.9 | | | | | | | | | | m | 9193 |
| PUK | 0.72 | 36.0 | Pg | 11:57:42.458 | -0.7 | | | | | | | | | | mde | 9192 |
| PUK | 0.72 | 36.0 | AM1 | 11:57:59.980 | | | | | | | | | | 2.0 | 0.46 a M1 2.9 | 5180 |
| DRME | 0.72 | 353.0 | Pn | 11:57:43.304 | -0.1 | | | | | | | | | | mde | 9194 |
| PHP | 0.87 | 75.0 | Sg | 11:57:54.447 | -3.7 | | | | | | | | | | m | 9196 |
| PHP | 0.87 | 75.0 | Pg | 11:57:45.268 | -0.4 | | | | | | | | | | mci | 9195 |
| BUM | 0.89 | 340.0 | Pn | 11:57:47.178 | 0.9 | | | | | | | | | | mde | 9197 |
| VLO | 1.01 | 172.0 | Pg | 11:57:53.395 | 5.7 | | | | | | | | | | mdi | 9198 |
| BCI | 1.06 | 31.0 | Sg | 11:58:04.642 | 0.3 | | | | | | | | | | m | 9200 |
| BCI | 1.06 | 31.0 | Pg | 11:57:48.284 | -0.9 | | | | | | | | | | mdi | 9199 |
| BCI | 1.06 | 31.0 | AM1 | 11:58:11.210 | | | | | | | | | | | 1.8 0.52 a M1 3.1 | 5181 |
| CEME | 1.12 | 345.0 | Pn | 11:57:50.293 | -0.1 | | | | | | | | | | mci | 9201 |
| HCY | 1.16 | 328.0 | Pn | 11:57:52.778 | 1.7 | | | | | | | | | | mci | 9202 |
| PVY | 1.23 | 23.0 | Pn | 11:57:51.558 | -0.7 | | | | | | | | | | mci | 9203 |
| NKME | 1.32 | 349.0 | Pn | 11:57:54.375 | 0.4 | | | | | | | | | | mde | 9204 |
| KOME | 1.39 | 5.0 | Pn | 11:57:55.581 | 0.4 | | | | | | | | | | mci | 9205 |
| BEY | 1.46 | 16.0 | Pn | 11:57:55.926 | -0.6 | | | | | | | | | | mde | 9206 |
| SCTE | 1.53 | 206.0 | Sn | 11:58:18.941 | -0.3 | | | | | | | | | | m | 9208 |
| SCTE | 1.53 | 206.0 | Pn | 11:58:01.231 | 3.5 | | | | | | | | | | mci | 9207 |
| SCTE | 1.53 | 206.0 | AM1 | 11:58:23.020 | | | | | | | | | | | 1.6 0.56 a M1 3.4 | 5182 |
| BRY | 1.54 | 339.0 | Pn | 11:57:58.884 | 1.0 | | | | | | | | | | mdi | 9209 |
| LSK | 1.64 | 143.0 | Sn | 11:58:22.522 | 0.3 | | | | | | | | | | m | 9211 |
| LSK | 1.64 | 143.0 | Pn | 11:58:01.576 | 2.2 | | | | | | | | | | mce | 9210 |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|----|----|-----|------|
| LSK | 1.64 | 143.0 | AM1 | 11:58:32.790 | | | | | 2.0 | 0.70 | a_ | Ml | 3.6 | 5183 |
| SRN | 1.67 | 161.0 | Sn | 11:58:23.916 | -0.1 | | | | m | | | | | 9213 |
| SRN | 1.67 | 161.0 | Pn | 11:58:00.411 | -0.0 | | | | mde | | | | | 9212 |
| NEST | 1.68 | 128.0 | Sn | 11:58:23.739 | 0.0 | | | | m | | | | | 9215 |
| NEST | 1.68 | 128.0 | Pn | 11:58:00.357 | 0.1 | | | | mdi | | | | | 9214 |
| NEST | 1.68 | 128.0 | AM1 | 11:58:28.540 | | | | | 0.8 | 0.68 | a_ | Ml | 3.2 | 5184 |
| FNA | 1.70 | 113.0 | Sn | 11:58:24.586 | 0.3 | | | | m | | | | | 9217 |
| FNA | 1.70 | 113.0 | Pn | 11:58:01.620 | 1.0 | | | | mce | | | | | 9216 |
| FNA | 1.70 | 113.0 | AM1 | 11:58:30.200 | | | | | 0.6 | 0.60 | a_ | Ml | 3.1 | 5185 |
| UPM | 1.76 | 351.0 | Pn | 11:58:01.440 | -0.1 | | | | mci | | | | | 9218 |
| NOCI | 1.83 | 250.0 | P | 11:58:02.916 | 0.3 | | | | m | | | | | 9219 |
| NOCI | 1.83 | 250.0 | AM1 | 11:58:35.430 | | | | | 1.2 | 0.22 | a_ | Ml | 3.4 | 5186 |
| PLE | 1.86 | 1.0 | Pn | 11:58:04.454 | 1.4 | | | | mce | | | | | 9220 |
| IGT | 2.08 | 157.0 | Sn | 11:58:33.518 | -0.8 | | | | m | | | | | 9222 |
| IGT | 2.08 | 157.0 | Pn | 11:58:07.068 | 0.8 | | | | mce | | | | | 9221 |
| MRVN | 2.39 | 262.0 | Sn | 11:58:42.217 | -0.0 | | | | m | | | | | 9224 |
| MRVN | 2.39 | 262.0 | Pn | 11:58:10.612 | -0.2 | | | | mci | | | | | 9223 |
| SGRT | 2.68 | 278.0 | Pn | 11:58:14.298 | -0.9 | | | | mdi | | | | | 9225 |
| SGRT | 2.68 | 278.0 | AM1 | 11:59:17.780 | | | | | 0.4 | 0.56 | a_ | Ml | 3.4 | 5187 |
| LKD2 | 2.87 | 158.0 | Sn | 11:58:51.845 | -2.6 | | | | m | | | | | 9227 |
| LKD2 | 2.87 | 158.0 | Pn | 11:58:17.286 | -0.5 | | | | mdi | | | | | 9226 |

DATA_TYPE COMMENT GSE2.1

Event 561

Official Magnitude:

Ml 3.20

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 24 | 74 | 2.5200 |
| Intermediate: | 260 | 8 | 0.9000 |
| Min: | 168 | 13 | 0.6800 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785747 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 563 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/02 | 12:50:33.73 | 0.16 | 41.6217 | 19.6872 | | | | | 2.8 | 3.2 | 14 | 16 | 161 | 0.31 | 1.68 | m | |
| 604 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.0 | 0.0 | 3 | 604 |

| Md | 2.6 | 0.0 | 5 | 604 | | | | | | | | | | | | | | | |
|------|------|-------|-------|-----|--------------|------|------|-------|------|------|-----|-----|--|-----|-----|-------|-----------|-------|-----|
| Sta | Dist | EvAz | Phase | | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | | Amp | Per | Qual | Magnitude | ArrID | |
| TIR | 0.30 | 0.0 | Pg | | 12:50:40.399 | 0.0 | | | | | | | | | | mdi | | 9258 | |
| TIR | 0.30 | 153.0 | Sg | | 12:50:45.546 | 0.0 | | | | | | | | | | m | | 9241 | |
| TIR | 0.30 | 153.0 | AM1 | | 12:50:44.900 | | | | | | | | | | 0.8 | 0.28 | a | M1 | 1.9 |
| PUK | 0.45 | 19.0 | Sg | | 12:50:49.936 | -0.1 | | | | | | | | | | m | | 9243 | |
| PUK | 0.45 | 19.0 | Pg | | 12:50:43.265 | 0.2 | | | | | | | | | | mci | | 9242 | |
| PUK | 0.45 | 19.0 | AM1 | | 12:50:52.040 | | | | | | | | | | 1.3 | 0.30 | a | M1 | 2.3 |
| PUK | 0.45 | 19.0 | AMd | | 12:51:28.613 | | | | | | | | | | 0.0 | 45.35 | a | Md | 2.6 |
| ULC | 0.47 | 317.0 | Pg | | 12:50:43.721 | 0.0 | | | | | | | | | | mci | | 9244 | |
| ULC | 0.47 | 317.0 | AMd | | 12:51:16.763 | | | | | | | | | | 0.0 | 33.04 | a | Md | 2.3 |
| PHP | 0.57 | 83.0 | Sg | | 12:50:53.745 | -0.1 | | | | | | | | | | m | | 9246 | |
| PHP | 0.57 | 83.0 | Pg | | 12:50:44.403 | -0.8 | | | | | | | | | | mde | | 9245 | |
| DRME | 0.68 | 327.0 | Pn | | 12:50:47.685 | 0.1 | | | | | | | | | | mce | | 9247 | |
| DRME | 0.68 | 327.0 | AMd | | 12:51:27.899 | | | | | | | | | | 0.0 | 40.21 | a | Md | 2.5 |
| BCI | 0.80 | 20.0 | Sg | | 12:51:01.892 | 0.1 | | | | | | | | | | m | | 9249 | |
| BCI | 0.80 | 20.0 | Pg | | 12:50:49.468 | -0.3 | | | | | | | | | | mde | | 9248 | |
| BCI | 0.80 | 20.0 | AM1 | | 12:51:03.670 | | | | | | | | | | 0.3 | 0.30 | a | M1 | 2.0 |
| BUM | 0.90 | 320.0 | Pn | | 12:50:51.726 | -0.0 | | | | | | | | | | mde | | 9250 | |
| BUM | 0.90 | 320.0 | AMd | | 12:51:34.271 | | | | | | | | | | 0.0 | 42.55 | a | Md | 2.6 |
| PVY | 1.00 | 12.0 | Pn | | 12:50:52.349 | -1.3 | | | | | | | | | | mde | | 9251 | |
| CEME | 1.09 | 329.0 | Pn | | 12:50:55.003 | -0.4 | | | | | | | | | | mci | | 9252 | |
| CEME | 1.09 | 329.0 | AMd | | 12:51:38.367 | | | | | | | | | | 0.0 | 43.36 | a | Md | 2.6 |
| HCY | 1.22 | 314.0 | Pn | | 12:50:57.693 | -0.2 | | | | | | | | | | mce | | 9253 | |
| KOME | 1.23 | 355.0 | Pn | | 12:50:58.381 | 0.2 | | | | | | | | | | mci | | 9254 | |
| BEY | 1.26 | 7.0 | Pn | | 12:50:57.775 | -0.9 | | | | | | | | | | mci | | 9255 | |
| NKME | 1.27 | 335.0 | Pn | | 12:50:58.938 | 0.1 | | | | | | | | | | mde | | 9256 | |
| UPM | 1.68 | 341.0 | Pn | | 12:51:06.365 | 0.1 | | | | | | | | | | mde | | 9257 | |

DATA_TYPE COMMENT GSE2.1
Event 563

Official Magnitude:
M1 2.01

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 271 | 78 | 3.2700 |
| Intermediate: | 48 | 8 | 0.5500 |
| Min: | 139 | 8 | 0.4200 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785747 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 564 0.5 km from Bellaj, Durres, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/02 | 19:32:57.18 | 0.19 | 41.5137 | 19.7790 | | | | | 0.1 | 2.2 | 11 | 13 | 161 | 0.18 | 1.35 | m | |
| 605 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.5 | 0.0 | 3 | 605 |
| Md | 2.4 | 0.0 | 1 | 605 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|-------|-----------|-------|------|
| TIR | 0.16 | 0.0 | Pg | 19:33:02.093 | 0.0 | | | | | | | | | | mdi | 9272 | |
| TIR | 0.18 | 158.0 | Sg | 19:33:04.669 | 0.1 | | | | | | | | | | m | 9259 | |
| TIR | 0.18 | 158.0 | AM1 | 19:33:05.320 | | | | | | | | | 0.4 | 0.28 | a Ml | 1.4 | 5207 |
| PHP | 0.53 | 70.0 | Sg | 19:33:16.376 | -0.0 | | | | | | | | | | m | 9261 | |
| PHP | 0.53 | 70.0 | Pg | 19:33:08.000 | -0.2 | | | | | | | | | | mci | 9260 | |
| PHP | 0.53 | 70.0 | AM1 | 19:33:17.740 | | | | | | | | | 0.3 | 0.26 | a Ml | 1.7 | 5208 |
| PHP | 0.53 | 70.0 | AMd | 19:33:44.074 | | | | | | | | | 0.0 | 36.07 | a Md | 2.4 | 5206 |
| PUK | 0.54 | 9.0 | Sg | 19:33:17.194 | 0.2 | | | | | | | | | | m | 9263 | |
| PUK | 0.54 | 9.0 | Pg | 19:33:08.829 | 0.3 | | | | | | | | | | mde | 9262 | |
| PUK | 0.54 | 9.0 | AM1 | 19:33:24.280 | | | | | | | | | 0.2 | 0.42 | a Ml | 1.5 | 5209 |
| ULC | 0.60 | 319.0 | Pg | 19:33:09.947 | 0.1 | | | | | | | | | | mci | 9264 | |
| DRME | 0.80 | 327.0 | Pn | 19:33:13.434 | -0.4 | | | | | | | | | | mde | 9265 | |
| BCI | 0.88 | 14.0 | S | 19:33:28.453 | -0.1 | | | | | | | | | | m | 9267 | |
| BCI | 0.88 | 14.0 | P | 19:33:15.195 | 0.1 | | | | | | | | | | m | 9266 | |
| BUM | 1.02 | 321.0 | Pn | 19:33:18.175 | 0.2 | | | | | | | | | | mdi | 9268 | |
| CEME | 1.21 | 329.0 | Pn | 19:33:21.360 | -0.3 | | | | | | | | | | mci | 9269 | |
| HCY | 1.34 | 315.0 | Pn | 19:33:24.869 | 0.8 | | | | | | | | | | mci | 9270 | |
| KOME | 1.35 | 352.0 | Pn | 19:33:23.491 | -0.7 | | | | | | | | | | mci | 9271 | |

DATA_TYPE COMMENT GSE2.1
Event 564

Official Magnitude:
Ml 1.50

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 247 | 73 | 2.2500 |
| Intermediate: | 68 | 16 | 0.6100 |
| Min: | 158 | 0 | 0.4400 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785747 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 565 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/02 | 23:47:34.39 | 0.27 | 41.5453 | 19.3302 | | | | | 5.8 | 2.7 | 11 | 11 | 188 | 0.45 | 1.74 | m | |
| 606 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.3 | 0.0 | 5 | 606 |
| Md | 2.8 | 0.0 | 4 | 606 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| TIR | 0.45 | 0.0 | Pg | 23:47:42.996 | 0.0 | | | | | | | | | m | | 9286 | |
| TIR | 0.45 | 115.0 | S | 23:47:50.200 | -0.3 | | | | | | | | | m | | 9273 | |
| TIR | 0.45 | 115.0 | AMl | 23:47:50.080 | | | | | | | | 1.5 | 0.46 | a | Ml | 2.3 | 5214 |
| PUK | 0.65 | 40.0 | Sg | 23:47:57.219 | 0.2 | | | | | | | | | m | | 9275 | |
| PUK | 0.65 | 40.0 | Pg | 23:47:46.984 | -0.4 | | | | | | | | | m | | 9274 | |
| PUK | 0.65 | 40.0 | AMl | 23:48:04.110 | | | | | | | | 0.3 | 0.56 | a | Ml | 1.9 | 5215 |
| PUK | 0.65 | 40.0 | AMd | 23:48:38.641 | | | | | | | | 0.0 | 51.66 | a | Md | 2.8 | 5210 |
| PHP | 0.84 | 80.0 | S | 23:48:02.971 | -0.3 | | | | | | | | | m | | 9277 | |
| PHP | 0.84 | 80.0 | Pg | 23:47:50.017 | -0.9 | | | | | | | | | m | | 9276 | |
| PHP | 0.84 | 80.0 | AMd | 23:48:31.980 | | | | | | | | 0.0 | 41.96 | a | Md | 2.6 | 5211 |
| BCI | 0.99 | 33.0 | Sg | 23:48:08.466 | 0.1 | | | | | | | | | m | | 9279 | |
| BCI | 0.99 | 33.0 | Pg | 23:47:52.630 | -1.2 | | | | | | | | | m | | 9278 | |
| BCI | 0.99 | 33.0 | AMl | 23:48:14.340 | | | | | | | | 0.2 | 0.62 | a | Ml | 2.2 | 5216 |
| BCI | 0.99 | 33.0 | AMd | 23:48:46.861 | | | | | | | | 0.0 | 54.23 | a | Md | 2.9 | 5212 |
| KBN | 1.44 | 129.0 | Sg | 23:48:22.806 | 0.5 | | | | | | | | | m | | 9281 | |
| KBN | 1.44 | 129.0 | P | 23:48:02.083 | 0.3 | | | | | | | | | m | | 9280 | |
| KBN | 1.44 | 129.0 | AMl | 23:48:30.770 | | | | | | | | 0.2 | 0.62 | a | Ml | 2.4 | 5217 |
| KBN | 1.44 | 129.0 | AMd | 23:48:51.282 | | | | | | | | 0.0 | 49.20 | a | Md | 2.8 | 5213 |
| SCTE | 1.61 | 205.0 | Sg | 23:48:28.065 | -0.4 | | | | | | | | | m | | 9283 | |
| SCTE | 1.61 | 205.0 | Pg | 23:48:05.531 | 0.3 | | | | | | | | | m | | 9282 | |
| SCTE | 1.61 | 205.0 | AMl | 23:48:29.940 | | | | | | | | 0.3 | 0.26 | a | Ml | 2.7 | 5218 |
| LSK | 1.69 | 144.0 | Pn | 23:48:06.594 | -0.1 | | | | | | | | | m | | 9284 | |
| SRN | 1.74 | 162.0 | Pn | 23:48:08.148 | 0.1 | | | | | | | | | m | | 9285 | |

DATA_TYPE COMMENT GSE2.1

Event 565

Official Magnitude:

Ml 2.33

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 299 | 84 | 2.6600 |
| Intermediate: | 118 | 5 | 0.8600 |
| Min: | 208 | 0 | 0.4800 |

BEGIN GSE2.1

MSG_TYPE DATA
 MSG_ID 1556785747 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 566 1.9 km from Kudhës, Vlorë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------------------|------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/03 09:35:00.95 | | 0.49 | 40.1122 | 19.8340 | | | | | 12.7 | 1.4 | 24 | 16 | 116 | 0.26 | 2.22 | m | |
| 607 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.1 | 0.0 | 6 | 607 |
| Md | 3.5 | 0.0 | 3 | 607 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|------|
| SRN | 0.26 | 151.0 | Sg | 09:35:12.411 | 0.5 | | | | | | | | | | m | 9288 | |
| SRN | 0.26 | 151.0 | Pg | 09:35:06.405 | -0.8 | | | | | | | | | | mce | 9287 | |
| SRN | 0.26 | 151.0 | AM1 | 09:35:14.320 | | | | | | | | 5.6 | 0.40 | a | Ml | 2.7 | 5222 |
| SRN | 0.26 | 151.0 | AMd | 09:36:50.525 | | | | | | | | 0.0 | 104.12 | a | Md | 3.5 | 5219 |
| VLO | 0.44 | 325.0 | Sg | 09:35:15.999 | 0.3 | | | | | | | | | | m | 9290 | |
| VLO | 0.44 | 325.0 | Pg | 09:35:08.593 | -0.8 | | | | | | | | | | mde | 9289 | |
| VLO | 0.44 | 325.0 | AM1 | 09:35:21.270 | | | | | | | | 30.5 | 0.40 | a | Ml | 3.7 | 5223 |
| VLO | 0.44 | 325.0 | AMd | 09:35:45.491 | | | | | | | | 0.0 | 36.90 | a | Md | 2.4 | 5220 |
| LSK | 0.59 | 86.0 | Sg | 09:35:21.970 | 0.4 | | | | | | | | | | m | 9292 | |
| LSK | 0.59 | 86.0 | Pg | 09:35:11.539 | -1.2 | | | | | | | | | | mci | 9291 | |
| LSK | 0.59 | 86.0 | AM1 | 09:35:26.670 | | | | | | | | 5.4 | 0.50 | a | Ml | 3.1 | 5224 |
| LSK | 0.59 | 86.0 | AMd | 09:37:07.289 | | | | | | | | 0.0 | 115.75 | a | Md | 3.6 | 5221 |
| BPA1 | 0.63 | 348.0 | S | 09:35:23.379 | 0.3 | | | | | | | | | | m | 9294 | |
| BPA1 | 0.63 | 348.0 | P | 09:35:14.010 | 0.4 | | | | | | | | | | m | 9293 | |
| BPA1 | 0.63 | 348.0 | AM1 | 09:35:42.730 | | | | | | | | 4.0 | 1.14 | a | Ml | 3.1 | 5225 |
| IGT | 0.69 | 146.0 | Sn | 09:35:26.256 | 0.9 | | | | | | | | | | m | 9296 | |
| IGT | 0.69 | 146.0 | Pn | 09:35:14.637 | -0.3 | | | | | | | | | | mde | 9295 | |
| KBN | 0.89 | 54.0 | Sg | 09:35:31.199 | 0.2 | | | | | | | | | | m | 9298 | |
| KBN | 0.89 | 54.0 | Pg | 09:35:17.868 | -0.2 | | | | | | | | | | mde | 9297 | |
| KBN | 0.89 | 54.0 | AM1 | 09:35:38.310 | | | | | | | | 2.5 | 0.54 | a | Ml | 3.1 | 5226 |
| NEST | 0.98 | 71.0 | Sn | 09:35:34.415 | -0.2 | | | | | | | | | | m | 9300 | |
| NEST | 0.98 | 71.0 | Pn | 09:35:19.529 | -0.7 | | | | | | | | | | mce | 9299 | |
| SCTE | 1.04 | 0.0 | Pn | 09:35:21.888 | 0.0 | | | | | | | | | | mce | 9312 | |
| SCTE | 1.05 | 269.0 | Sn | 09:35:37.046 | 0.1 | | | | | | | | | | m | 9301 | |
| FNA | 1.36 | 60.0 | Sn | 09:35:46.555 | 0.0 | | | | | | | | | | m | 9303 | |
| FNA | 1.36 | 60.0 | Pn | 09:35:25.955 | -1.1 | | | | | | | | | | mde | 9302 | |
| LKD2 | 1.47 | 153.0 | Sn | 09:35:50.535 | 0.6 | | | | | | | | | | m | 9305 | |
| LKD2 | 1.47 | 153.0 | Pn | 09:35:28.340 | -0.6 | | | | | | | | | | mde | 9304 | |
| PHP | 1.64 | 16.0 | Sn | 09:35:55.513 | 0.8 | | | | | | | | | | m | 9307 | |
| PHP | 1.64 | 16.0 | Pn | 09:35:31.006 | -0.6 | | | | | | | | | | mci | 9306 | |
| PUK | 1.93 | 1.0 | Sn | 09:36:03.899 | 0.3 | | | | | | | | | | m | 9309 | |
| PUK | 1.93 | 1.0 | Pn | 09:35:34.604 | -2.2 | | | | | | | | | | mce | 9308 | |
| PUK | 1.93 | 1.0 | AM1 | 09:36:07.380 | | | | | | | | 0.9 | 0.66 | a | Ml | 3.4 | 5227 |
| NOCI | 2.22 | 289.0 | Sn | 09:36:11.192 | -0.2 | | | | | | | | | | m | 9311 | |

NOCI 2.22 289.0 Pn 09:35:41.358 0.2 — mce 9310
 DATA_TYPE COMMENT GSE2.1
 Event 566
 Official Magnitude:
 M1 3.12
 Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 135 | 81 | 1.3600 |
| Intermediate: | 47 | 0 | 0.7200 |
| Min: | 317 | 9 | 0.5700 |

 BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785746 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT
 Event 568 0.4 km from Mazha e Madhe, Durres, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/04 | 05:33:00.02 | 0.17 | 41.4728 | 19.6380 | | | | | 19.1 | 0.9 | 13 | 20 | 204 | 0.22 | 1.41 | m | |
| 609 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.5 | 0.0 | 3 | 609 |
| Md | 2.5 | 0.0 | 2 | 609 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| TIR | 0.21 | 0.0 | Pg | 05:33:06.864 | 0.0 | | | | | | | | | | mci | 9348 |
| TIR | 0.21 | 126.0 | Sg | 05:33:09.510 | -0.0 | | | | | | | | | | m | 9333 |
| TIR | 0.21 | 126.0 | AM1 | 05:33:15.840 | | | | | | | | | | | a__ Ml | 5240 |
| ULC | 0.57 | 330.0 | Pg | 05:33:12.005 | 0.3 | | | | | | | | | | mci | 9334 |
| ULC | 0.57 | 330.0 | AMd | 05:33:48.312 | | | | | | | | | | | a__ Md | 5238 |
| PUK | 0.60 | 18.0 | Sg | 05:33:21.319 | 0.1 | | | | | | | | | | m | 9336 |
| PUK | 0.60 | 18.0 | Pg | 05:33:11.785 | -0.4 | | | | | | | | | | mce | 9335 |
| PUK | 0.60 | 18.0 | AM1 | 05:33:23.440 | | | | | | | | | | | a__ Ml | 5241 |
| PUK | 0.60 | 18.0 | AMd | 05:33:51.313 | | | | | | | | | | | a__ Md | 5239 |
| PHP | 0.64 | 70.0 | Sg | 05:33:22.177 | 0.0 | | | | | | | | | | m | 9338 |
| PHP | 0.64 | 70.0 | Pg | 05:33:12.842 | 0.2 | | | | | | | | | | mce | 9337 |
| DRME | 0.79 | 335.0 | Pn | 05:33:15.799 | 0.2 | | | | | | | | | | mde | 9339 |
| BCI | 0.95 | 19.0 | Sn | 05:33:32.116 | 0.0 | | | | | | | | | | m | 9341 |
| BCI | 0.95 | 19.0 | Pn | 05:33:18.111 | -0.2 | | | | | | | | | | mce | 9340 |
| BCI | 0.95 | 19.0 | AM1 | 05:33:33.800 | | | | | | | | | | | a__ Ml | 5242 |
| BUM | 0.99 | 327.0 | Pn | 05:33:19.873 | 0.6 | | | | | | | | | | mce | 9342 |
| PVY | 1.15 | 12.0 | Pn | 05:33:21.858 | -0.1 | | | | | | | | | | mci | 9343 |

| | | | | | | | | | |
|------|------|-------|----|--------------|------|--|--|-----|------|
| CEME | 1.20 | 334.0 | Pn | 05:33:22.673 | -0.2 | | | mde | 9344 |
| KOME | 1.38 | 357.0 | Pn | 05:33:26.694 | 0.6 | | | mce | 9345 |
| NKME | 1.39 | 339.0 | Pn | 05:33:26.313 | 0.1 | | | mci | 9346 |
| BEY | 1.41 | 7.0 | Pn | 05:33:26.773 | 0.1 | | | mci | 9347 |

DATA_TYPE COMMENT GSE2.1

Event 568

Official Magnitude:

M1 2.53

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 197 | 55 | 1.1000 |
| Intermediate: | 59 | 26 | 0.6800 |
| Min: | 319 | 20 | 0.4600 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785746 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 569 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/04 | 18:15:46.10 | 0.03 | 41.5582 | 19.4392 | | | | | 23.6 | 1.1 | 18 | 22 | 75 | 0.39 | 1.95 | m | |
| 610 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.1 | 0.0 | 6 | 610 |
| Md | 3.0 | 0.0 | 13 | 610 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| TIR | 0.38 | 123.0 | Pg | 18:15:54.475 | 0.0 | | | | | | | | | | m | 9350 |
| TIR | 0.38 | 123.0 | Sg | 18:16:00.721 | -0.0 | | | | | | | | | | m | 9349 |
| TIR | 0.38 | 123.0 | AM1 | 18:16:01.930 | | | | | | | | 0.5 | 0.48 | a | M1 | 1.9 |
| TIR | 0.38 | 123.0 | AMd | 18:16:31.464 | | | | | | | | 0.0 | 36.99 | a | Md | 2.4 |
| ULC | 0.43 | 341.0 | Pg | 18:15:55.184 | -0.1 | | | | | | | | | | m | 9351 |
| ULC | 0.43 | 341.0 | AMd | 18:16:44.017 | | | | | | | | 0.0 | 48.83 | a | Md | 2.7 |
| PUK | 0.59 | 34.0 | Sg | 18:16:06.957 | 0.0 | | | | | | | | | | m | 9353 |
| PUK | 0.59 | 34.0 | Pg | 18:15:58.057 | 0.1 | | | | | | | | | | m | 9352 |
| PUK | 0.59 | 34.0 | AM1 | 18:16:15.880 | | | | | | | | 0.4 | 0.36 | a | M1 | 2.0 |
| PUK | 0.59 | 34.0 | AMd | 18:16:53.418 | | | | | | | | 0.0 | 55.36 | a | Md | 2.9 |
| PHP | 0.76 | 80.0 | Sg | 18:16:11.945 | -0.0 | | | | | | | | | | m | 9355 |
| PHP | 0.76 | 80.0 | Pg | 18:16:00.877 | 0.0 | | | | | | | | | | m | 9354 |
| PHP | 0.76 | 80.0 | AM1 | 18:16:20.770 | | | | | | | | 0.1 | 0.44 | a | M1 | 1.7 |
| PHP | 0.76 | 80.0 | AMd | 18:17:03.007 | | | | | | | | 0.0 | 62.13 | a | Md | 3.0 |

| | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-----|-------|---|------|
| BUM | 0.84 | 332.0 | Pg | 18:16:02.613 | -0.0 | | | m | | 9356 |
| BUM | 0.84 | 332.0 | AMd | 18:17:05.494 | | | 0.0 | 62.88 | a | Md |
| CEME | 1.06 | 339.0 | Pg | 18:16:06.534 | 0.1 | | | m | | 9347 |
| CEME | 1.06 | 339.0 | AMd | 18:17:13.633 | | | 0.0 | 67.10 | a | Md |
| PVY | 1.11 | 20.0 | Pg | 18:16:07.342 | 0.0 | | | m | | 9358 |
| PVY | 1.11 | 20.0 | AMd | 18:17:06.851 | | | 0.0 | 59.51 | a | Md |
| HCY | 1.14 | 322.0 | Pg | 18:16:07.815 | 0.0 | | | m | | 9359 |
| HCY | 1.14 | 322.0 | AMd | 18:17:08.659 | | | 0.0 | 60.84 | a | Md |
| KOME | 1.29 | 2.0 | Pg | 18:16:10.573 | -0.0 | | | m | | 9360 |
| KOME | 1.29 | 2.0 | AMd | 18:17:16.798 | | | 0.0 | 66.22 | a | Md |
| SCTE | 1.65 | 207.0 | Pn | 18:16:16.800 | 0.0 | | | m | | 9361 |
| SCTE | 1.65 | 207.0 | AMl | 18:16:36.240 | | | 0.6 | 1.14 | a | Ml |
| SCTE | 1.65 | 207.0 | AMd | 18:17:09.789 | | | 0.0 | 52.99 | a | Md |
| LSK | 1.66 | 0.0 | Pn | 18:16:15.532 | 0.0 | | | m | | 9368 |
| FNA | 1.66 | 117.0 | Sg | 18:16:40.030 | 0.0 | | | m | | 9363 |
| FNA | 1.66 | 117.0 | Pg | 18:16:16.876 | -0.0 | | | m | | 9362 |
| FNA | 1.66 | 117.0 | AMl | 18:16:43.910 | | | 0.1 | 0.56 | a | Ml |
| FNA | 1.66 | 117.0 | AMd | 18:17:23.132 | | | 0.0 | 66.26 | a | Md |
| NEST | 1.67 | 132.0 | Sg | 18:16:39.925 | -0.4 | | | m | | 9365 |
| NEST | 1.67 | 132.0 | Pg | 18:16:17.027 | -0.0 | | | m | | 9364 |
| NEST | 1.67 | 132.0 | AMl | 18:16:50.140 | | | 0.1 | 1.16 | a | Ml |
| NEST | 1.67 | 132.0 | AMd | 18:17:33.984 | | | 0.0 | 76.96 | a | Md |
| NOCI | 1.95 | 248.0 | Sn | 18:16:47.694 | -0.0 | | | m | | 9367 |
| NOCI | 1.95 | 248.0 | Pn | 18:16:21.333 | 0.0 | | | m | | 9366 |
| NOCI | 1.95 | 248.0 | AMd | 18:17:28.554 | | | 0.0 | 67.22 | a | Md |

DATA_TYPE COMMENT GSE2.1
Event 569

Official Magnitude:
M1 2.09

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 27 | 70 | 1.1400 |
| Intermediate: | 210 | 19 | 0.3000 |
| Min: | 120 | 1 | 0.2600 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785746 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 570 5 km from Fterë, Vlorë, Albania

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

2019/04/04 16:28:03.45 0.09 40.0815 19.9377 1.8 1.0 14 12 105 0.21 2.30 m
611

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.1 | 0.0 | 4 | 611 |
| Md | 3.0 | 0.0 | 8 | 611 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| SRN | 0.21 | 166.0 | Sg | 16:28:12.296 | 0.0 | | | | | | | | | m | | 9370 |
| SRN | 0.21 | 166.0 | Pg | 16:28:08.406 | -0.1 | | | | | | | | | m | | 9369 |
| SRN | 0.21 | 166.0 | AM1 | 16:28:15.050 | | | | | | | | 1.5 | 0.38 | a | Ml | 2.1 |
| SRN | 0.21 | 166.0 | AMd | 16:28:31.760 | | | | | | | | 0.0 | 23.35 | a | Md | 1.9 |
| LSK | 0.50 | 0.0 | Pg | 16:28:13.832 | 0.0 | | | | | | | | | m | | 9386 |
| LSK | 0.51 | 82.0 | Sg | 16:28:22.086 | 0.0 | | | | | | | | | m | | 9371 |
| VLO | 0.51 | 319.0 | Sg | 16:28:21.597 | 0.4 | | | | | | | | | m | | 9373 |
| VLO | 0.51 | 319.0 | Pg | 16:28:12.816 | -0.8 | | | | | | | | | m | | 9372 |
| VLO | 0.51 | 319.0 | AMd | 16:29:05.603 | | | | | | | | 0.0 | 52.79 | a | Md | 2.8 |
| IGT | 0.63 | 151.0 | Sg | 16:28:26.247 | 0.1 | | | | | | | | | m | | 9375 |
| IGT | 0.63 | 151.0 | Pg | 16:28:16.365 | -0.1 | | | | | | | | | m | | 9374 |
| IGT | 0.63 | 151.0 | AM1 | 16:28:28.750 | | | | | | | | 0.2 | 0.18 | a | Ml | 1.6 |
| IGT | 0.63 | 151.0 | AMd | 16:29:01.084 | | | | | | | | 0.0 | 44.72 | a | Md | 2.1 |
| NEST | 0.91 | 68.0 | Sn | 16:28:35.732 | -0.0 | | | | | | | | | m | | 9377 |
| NEST | 0.91 | 68.0 | Pn | 16:28:21.971 | 0.1 | | | | | | | | | m | | 9376 |
| NEST | 0.91 | 68.0 | AMd | 16:29:34.992 | | | | | | | | 0.0 | 73.02 | a | Md | 3.2 |
| SCTE | 1.13 | 271.0 | Sn | 16:28:42.738 | -0.2 | | | | | | | | | m | | 9379 |
| SCTE | 1.13 | 271.0 | Pn | 16:28:26.064 | 0.1 | | | | | | | | | m | | 9378 |
| SCTE | 1.13 | 271.0 | AMd | 16:29:19.167 | | | | | | | | 0.0 | 53.10 | a | Md | 2.9 |
| FNA | 1.31 | 57.0 | Sn | 16:28:48.857 | -0.0 | | | | | | | | | m | | 9381 |
| FNA | 1.31 | 57.0 | Pn | 16:28:29.337 | -0.1 | | | | | | | | | m | | 9380 |
| FNA | 1.31 | 57.0 | AM1 | 16:28:53.090 | | | | | | | | 0.1 | 0.70 | a | Ml | 2.1 |
| FNA | 1.31 | 57.0 | AMd | 16:29:37.031 | | | | | | | | 0.0 | 67.69 | a | Md | 3.1 |
| LKD2 | 1.41 | 156.0 | Sn | 16:28:52.943 | 0.8 | | | | | | | | | m | | 9383 |
| LKD2 | 1.41 | 156.0 | Pn | 16:28:31.234 | -0.0 | | | | | | | | | m | | 9382 |
| LKD2 | 1.41 | 156.0 | AM1 | 16:28:57.370 | | | | | | | | 0.2 | 0.60 | a | Ml | 2.5 |
| LKD2 | 1.41 | 156.0 | AMd | 16:29:45.166 | | | | | | | | 0.0 | 73.93 | a | Md | 3.2 |
| NOCI | 2.30 | 289.0 | Sn | 16:29:17.618 | -0.8 | | | | | | | | | m | | 9385 |
| NOCI | 2.30 | 289.0 | Pn | 16:28:46.440 | 0.2 | | | | | | | | | m | | 9384 |
| NOCI | 2.30 | 289.0 | AMd | 16:30:02.121 | | | | | | | | 0.0 | 75.68 | a | Md | 3.3 |

DATA_TYPE COMMENT GSE2.1
Event 570

Official Magnitude:
Ml 2.08

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 219 | 84 | 0.9500 |
| Intermediate: | 338 | 2 | 0.3100 |
| Min: | 68 | 5 | 0.2600 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785746 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 572 1.0 km from Sasaj, Vlorë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------------------|------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/05 05:54:31.72 | | 0.27 | 40.0180 | 19.9025 | | | | | 19.5 | 0.8 | 16 | 11 | 120 | 0.15 | 2.02 | m | |
| 613 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.2 | 0.0 | 7 | 613 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| SRN | 0.16 | 151.0 | Sg | 05:54:40.596 | 0.0 | | | | | | | | | | m | 9400 |
| SRN | 0.16 | 151.0 | Pg | 05:54:36.855 | 0.1 | | | | | | | | | | mci | 9399 |
| SRN | 0.16 | 151.0 | AM1 | 05:54:42.050 | | | | | | | | | | | a Ml | 5283 |
| VLO | 0.55 | 326.0 | Sg | 05:54:50.416 | 0.2 | | | | | | | | | | m | 9402 |
| VLO | 0.55 | 326.0 | Pg | 05:54:42.538 | 0.2 | | | | | | | | | | mdi | 9401 |
| VLO | 0.55 | 326.0 | AM1 | 05:54:54.960 | | | | | | | | | | | a Ml | 5284 |
| IGT | 0.59 | 145.0 | Sn | 05:54:52.874 | 0.2 | | | | | | | | | | m | 9404 |
| IGT | 0.59 | 145.0 | Pn | 05:54:44.726 | 1.0 | | | | | | | | | | mde | 9403 |
| KBN | 0.91 | 47.0 | Sg | 05:55:01.631 | -0.2 | | | | | | | | | | m | 9406 |
| KBN | 0.91 | 47.0 | Pg | 05:54:48.177 | -0.8 | | | | | | | | | | mdi | 9405 |
| KBN | 0.91 | 47.0 | AM1 | 05:55:03.490 | | | | | | | | | | | a Ml | 5285 |
| NEST | 0.96 | 65.0 | Sg | 05:55:04.603 | 0.2 | | | | | | | | | | m | 9408 |
| NEST | 0.96 | 65.0 | Pg | 05:54:49.220 | -1.2 | | | | | | | | | | mde | 9407 |
| NEST | 0.96 | 65.0 | AM1 | 05:55:08.610 | | | | | | | | | | | a Ml | 5286 |
| SCTE | 1.10 | 274.0 | S | 05:55:08.516 | -0.2 | | | | | | | | | | m | 9410 |
| SCTE | 1.10 | 274.0 | P | 05:54:52.671 | -0.2 | | | | | | | | | | m | 9409 |
| SCTE | 1.10 | 274.0 | AM1 | 05:55:11.490 | | | | | | | | | | | a Ml | 5287 |
| TIR | 1.33 | 0.0 | Pg | 05:54:56.387 | 0.0 | | | | | | | | | | mde | 9418 |
| TIR | 1.33 | 359.0 | Sg | 05:55:15.742 | 0.0 | | | | | | | | | | m | 9411 |
| TIR | 1.33 | 359.0 | AM1 | 05:55:19.540 | | | | | | | | | | | a Ml | 5288 |
| LKD2 | 1.36 | 154.0 | S | 05:55:16.739 | 0.0 | | | | | | | | | | m | 9413 |
| LKD2 | 1.36 | 154.0 | P | 05:54:55.362 | -2.1 | | | | | | | | | | m | 9412 |
| FNA | 1.36 | 55.0 | Sn | 05:55:16.938 | 0.1 | | | | | | | | | | m | 9415 |
| FNA | 1.36 | 55.0 | Pn | 05:54:56.997 | -0.5 | | | | | | | | | | mde | 9414 |
| FNA | 1.36 | 55.0 | AM1 | 05:55:21.550 | | | | | | | | | | | a Ml | 5289 |
| PUK | 2.02 | 0.0 | S | 05:55:35.951 | 0.4 | | | | | | | | | | m | 9417 |
| PUK | 2.02 | 0.0 | P | 05:55:06.189 | -2.0 | | | | | | | | | | m | 9416 |

DATA_TYPE COMMENT GSE2.1

Event 572

Official Magnitude:
Ml 3.16

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 214 | 70 | 0.8100 |
| Intermediate: | 68 | 16 | 0.4700 |
| Min: | 335 | 11 | 0.4000 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785746 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 573 1.7 km from Zagrađe, Gusinje, Montenegro

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/05 | 20:21:55.49 | 0.11 | 42.5925 | 19.8388 | | | | | 6.0 | 1.1 | 10 | 31 | 79 | 0.10 | 1.01 | m | |
| 614 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.8 | 0.0 | 2 | 614 |
| Md | 2.2 | 0.0 | 1 | 614 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| PVY | 0.10 | 88.0 | Pg | 20:21:57.983 | -0.0 | | | | | | | | | | m | 9419 |
| BEY | 0.28 | 9.0 | Pg | 20:22:01.466 | -0.0 | | | | | | | | | | m | 9420 |
| BCI | 0.28 | 0.0 | Pg | 20:22:01.055 | 0.0 | | | | | | | | | | m | 9431 |
| BCI | 0.28 | 143.0 | Sg | 20:22:05.681 | -0.2 | | | | | | | | | | m | 9421 |
| BCI | 0.28 | 143.0 | AM1 | 20:22:07.050 | | | | | | | | 1.3 | 0.22 | a | Ml | 2.1 |
| KOME | 0.35 | 318.0 | Pg | 20:22:02.935 | 0.1 | | | | | | | | | | m | 9422 |
| PUK | 0.55 | 175.0 | Sg | 20:22:14.717 | -0.1 | | | | | | | | | | m | 9424 |
| PUK | 0.55 | 175.0 | Pg | 20:22:06.734 | 0.2 | | | | | | | | | | m | 9423 |
| PUK | 0.55 | 175.0 | AM1 | 20:22:15.420 | | | | | | | | 0.2 | 0.36 | a | Ml | 1.6 |
| PUK | 0.55 | 175.0 | AM1 | 20:22:15.150 | | | | | | | | 0.3 | 0.44 | a | Ml | 1.8 |
| PUK | 0.55 | 175.0 | AMd | 20:22:36.361 | | | | | | | | 0.0 | 29.63 | a | Md | 2.2 |
| DRME | 0.63 | 231.0 | Pg | 20:22:08.075 | -0.1 | | | | | | | | | | m | 9425 |
| NKME | 0.67 | 286.0 | Pg | 20:22:08.879 | -0.1 | | | | | | | | | | m | 9426 |
| CEME | 0.68 | 267.0 | Pg | 20:22:08.362 | -0.8 | | | | | | | | | | m | 9427 |
| BUM | 0.75 | 248.0 | Pg | 20:22:10.504 | -0.0 | | | | | | | | | | m | 9428 |
| PHP | 1.01 | 153.0 | Sn | 20:22:30.042 | 0.2 | | | | | | | | | | m | 9430 |
| PHP | 1.01 | 153.0 | Pn | 20:22:17.204 | 2.1 | | | | | | | | | | m | 9429 |

DATA_TYPE COMMENT GSE2.1
Event 573

Official Magnitude:

M1 1.75

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 37 | 67 | 1.1900 |
| Intermediate: | 242 | 19 | 0.5200 |
| Min: | 149 | 9 | 0.3400 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785746 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 574 1.0 km from Vrast, Vlorë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/06 | 01:22:25.58 | 0.21 | 40.3162 | 19.6280 | | | | | 8.9 | 2.2 | 11 | 31 | 181 | 0.18 | 1.74 | m | |
| 615 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.2 | 0.0 | 3 | 615 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|-------|-----------|-------|------|
| VLO | 0.18 | 0.0 | Pg | 01:22:28.426 | 0.0 | | | | | | | | | | md_ | 9444 | |
| VLO | 0.18 | 327.0 | Sg | 01:22:31.693 | 0.0 | | | | | | | | | | m_ | 9432 | |
| VLO | 0.18 | 327.0 | AM1 | 01:22:33.320 | | | | | | | | | 7.4 | 0.36 | a_ M1 | 2.8 | 5295 |
| VLO | 0.18 | 327.0 | AM1 | 01:22:32.770 | | | | | | | | | 4.0 | 0.18 | a_ M1 | 2.5 | 5294 |
| SRN | 0.52 | 146.0 | Sg | 01:22:44.916 | 0.1 | | | | | | | | | | m_ | 9434 | |
| SRN | 0.52 | 146.0 | Pg | 01:22:36.232 | -0.3 | | | | | | | | | | m_ | 9433 | |
| SRN | 0.52 | 146.0 | AM1 | 01:22:48.480 | | | | | | | | 0.1 | 0.34 | a_ M1 | 1.1 | 5296 | |
| LSK | 0.76 | 102.0 | Sg | 01:22:51.659 | -0.3 | | | | | | | | | | m_ | 9436 | |
| LSK | 0.76 | 102.0 | Pg | 01:22:40.574 | -0.1 | | | | | | | | | | m_ | 9435 | |
| IGT | 0.95 | 145.0 | Sg | 01:22:58.744 | 0.2 | | | | | | | | | | m_ | 9438 | |
| IGT | 0.95 | 145.0 | Pg | 01:22:44.212 | -0.2 | | | | | | | | | | m_ | 9437 | |
| NEST | 1.09 | 84.0 | Sn | 01:23:03.549 | 0.4 | | | | | | | | | | m_ | 9440 | |
| NEST | 1.09 | 84.0 | Pn | 01:22:47.192 | 0.1 | | | | | | | | | | m_ | 9439 | |
| FNA | 1.42 | 70.0 | Sn | 01:23:13.242 | -0.2 | | | | | | | | | | m_ | 9442 | |
| FNA | 1.42 | 70.0 | Pn | 01:22:53.147 | 0.3 | | | | | | | | | | m_ | 9441 | |
| FNA | 1.42 | 70.0 | AM1 | 01:23:16.830 | | | | | | | | 0.1 | 1.12 | a_ M1 | 1.9 | 5297 | |
| PUK | 1.74 | 6.0 | Pn | 01:22:57.741 | -0.7 | | | | | | | | | | m_ | 9443 | |

DATA_TYPE COMMENT GSE2.1
Event 574

Official Magnitude:
M1 2.21

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 247 | 70 | 2.3200 |
| Intermediate: | 58 | 19 | 0.7200 |
| Min: | 149 | 3 | 0.4800 |

MSG_TYPE DATA
MSG_ID 1556785745 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 575 0.5 km from Lagjja e Shkallës, Berat, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/07 | 11:15:57.94 | 0.29 | 40.7410 | 19.8952 | | | | | 0.0 | 1.3 | 22 | 31 | 90 | 0.18 | 1.63 | m | |
| 616 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.1 | 0.0 | 12 | 616 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|------|------|
| BPA1 | 0.18 | 265.0 | Pg | 11:16:02.353 | 0.1 | | | | | | | | | | m | 9446 | | |
| BPA1 | 0.18 | 265.0 | Sg | 11:16:05.662 | 0.1 | | | | | | | | | | m | 9445 | | |
| BPA1 | 0.18 | 265.0 | AM1 | 11:16:07.610 | | | | | | | | | | | a | M1 | 2.5 | 5298 |
| BPA2 | 0.21 | 0.0 | Pg | 11:16:02.361 | 0.0 | | | | | | | | | | m | | 9470 | |
| BPA2 | 0.21 | 268.0 | Sg | 11:16:06.586 | 0.0 | | | | | | | | | | m | | 9447 | |
| BPA2 | 0.21 | 268.0 | AM1 | 11:16:12.920 | | | | | | | | | | | a | M1 | 2.6 | 5299 |
| VLO | 0.41 | 229.0 | Sg | 11:16:12.822 | 0.3 | | | | | | | | | | m | | 9449 | |
| VLO | 0.41 | 229.0 | Pg | 11:16:06.246 | -0.0 | | | | | | | | | | m | | 9448 | |
| VLO | 0.41 | 229.0 | AM1 | 11:16:18.160 | | | | | | | | | | | a | M1 | 2.7 | 5300 |
| TIR | 0.61 | 358.0 | Sg | 11:16:20.450 | 0.0 | | | | | | | | | | m | | 9451 | |
| TIR | 0.61 | 358.0 | Pg | 11:16:10.383 | -0.4 | | | | | | | | | | m | | 9450 | |
| TIR | 0.61 | 358.0 | AM1 | 11:16:28.600 | | | | | | | | | | | a | M1 | 1.8 | 5301 |
| KBN | 0.69 | 99.0 | Sg | 11:16:22.441 | 0.1 | | | | | | | | | | m | | 9453 | |
| KBN | 0.69 | 99.0 | Pg | 11:16:11.328 | -0.6 | | | | | | | | | | m | | 9452 | |
| KBN | 0.69 | 99.0 | AM1 | 11:16:27.690 | | | | | | | | | | | a | M1 | 2.1 | 5302 |
| SRN | 0.86 | 174.0 | Sg | 11:16:29.452 | -0.2 | | | | | | | | | | m | | 9455 | |
| SRN | 0.86 | 174.0 | Pg | 11:16:15.792 | -0.3 | | | | | | | | | | m | | 9454 | |
| SRN | 0.86 | 174.0 | AM1 | 11:16:33.740 | | | | | | | | | | | a | M1 | 1.8 | 5303 |
| NEST | 0.94 | 109.0 | Sg | 11:16:31.513 | 0.0 | | | | | | | | | | m | | 9457 | |
| NEST | 0.94 | 109.0 | Pg | 11:16:16.414 | -0.7 | | | | | | | | | | m | | 9456 | |
| NEST | 0.94 | 109.0 | AM1 | 11:16:38.510 | | | | | | | | | | | a | M1 | 1.8 | 5304 |
| PHP | 1.03 | 23.0 | Sg | 11:16:35.179 | 1.2 | | | | | | | | | | m | | 9459 | |
| PHP | 1.03 | 23.0 | Pg | 11:16:18.082 | -0.5 | | | | | | | | | | m | | 9458 | |
| PHP | 1.03 | 23.0 | AM1 | 11:16:41.760 | | | | | | | | | | | a | M1 | 1.7 | 5305 |
| FNA | 1.13 | 87.0 | Sg | 11:16:38.032 | 0.1 | | | | | | | | | | m | | 9461 | |
| FNA | 1.13 | 87.0 | Pg | 11:16:20.378 | -0.4 | | | | | | | | | | m | | 9460 | |
| FNA | 1.13 | 87.0 | AM1 | 11:16:42.170 | | | | | | | | | | | a | M1 | 2.0 | 5306 |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|---|------|-----|
| IGT | 1.25 | 164.0 | Sg | 11:16:42.195 | 0.2 | | | | | m | | 9463 | |
| IGT | 1.25 | 164.0 | Pg | 11:16:23.835 | 0.7 | | | | | m | | 9462 | |
| IGT | 1.25 | 164.0 | AM1 | 11:16:48.040 | | | | | 0.1 | 0.66 | a | Ml | 2.1 |
| SCTE | 1.27 | 240.0 | Pn | 11:16:21.109 | -2.4 | | | | | m | | 5307 | |
| SCTE | 1.27 | 240.0 | AM1 | 11:16:46.240 | | | | | 0.4 | 0.50 | a | Ml | 2.6 |
| PUK | 1.30 | 0.0 | Sg | 11:16:43.429 | 0.1 | | | | | m | | 9464 | |
| PUK | 1.30 | 0.0 | Pg | 11:16:24.210 | 0.3 | | | | | m | | 5308 | |
| PUK | 1.30 | 0.0 | AM1 | 11:16:46.110 | | | | | 0.2 | 0.56 | a | Ml | 2.2 |
| ULC | 1.31 | 339.0 | Pn | 11:16:23.077 | -1.2 | | | | | m | | 5309 | |
| BCI | 1.63 | 4.0 | Sn | 11:16:54.000 | 0.2 | | | | | m | | 9467 | |
| BCI | 1.63 | 4.0 | Pn | 11:16:29.672 | -0.2 | | | | | m | | 9468 | |

DATA_TYPE COMMENT GSE2.1
Event 575

Official Magnitude:
Ml 2.10

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 275 | 85 | 1.3000 |
| Intermediate: | 353 | 0 | 0.3700 |
| Min: | 83 | 5 | 0.3600 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785745 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 576 7 km from Shetaj, Durres, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/08 | 02:37:24.20 | 0.31 | 41.5192 | 19.4200 | | | | | 16.6 | 1.6 | 19 | 31 | 117 | 0.38 | 1.66 | m | |
| 617 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.7 | 0.0 | 6 | 617 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| TIR | 0.39 | 0.0 | Pg | 02:37:32.850 | 0.0 | | | | | | | | | md | | 9492 | |
| TIR | 0.38 | 116.0 | Sg | 02:37:38.506 | 0.2 | | | | | | | | | m | | 9471 | |
| TIR | 0.38 | 116.0 | AM1 | 02:37:39.950 | | | | | | | | 0.5 | 0.46 | a | Ml | 1.8 | 5310 |
| ULC | 0.46 | 345.0 | Pg | 02:37:33.356 | -0.5 | | | | | | | | | m | | 9472 | |
| PUK | 0.63 | 33.0 | Sg | 02:37:46.310 | -0.0 | | | | | | | | | m | | 9474 | |
| PUK | 0.63 | 33.0 | Pg | 02:37:36.627 | -0.2 | | | | | | | | | m | | 9473 | |
| PUK | 0.63 | 33.0 | AM1 | 02:37:52.480 | | | | | | | | 0.1 | 0.26 | a | Ml | 1.6 | 5312 |
| PUK | 0.63 | 33.0 | AM1 | 02:37:53.550 | | | | | | | | 0.1 | 0.24 | a | Ml | 1.6 | 5311 |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|-----|------|---|------|------|------|
| DRME | 0.69 | 346.0 | Pg | 02:37:37.745 | -0.3 | | | | m | | 9475 | | |
| PHP | 0.78 | 77.0 | Sg | 02:37:51.277 | 0.3 | | | | m | | 9477 | | |
| PHP | 0.78 | 77.0 | Pg | 02:37:39.586 | 0.1 | | | | m | | 9476 | | |
| PHP | 0.78 | 77.0 | Am1 | 02:37:57.590 | | | | 0.1 | 0.40 | a | Ml | 1.5 | 5314 |
| PHP | 0.78 | 77.0 | Am1 | 02:37:54.490 | | | | 0.1 | 0.40 | a | Ml | 1.7 | 5313 |
| BUM | 0.87 | 334.0 | Pn | 02:37:41.284 | -0.1 | | | | | m | | 9478 | |
| BCI | 0.97 | 29.0 | Sg | 02:37:57.572 | 0.3 | | | | | m | | 9480 | |
| BCI | 0.97 | 29.0 | Pg | 02:37:42.155 | -1.0 | | | | | m | | 9479 | |
| BCI | 0.97 | 29.0 | Am1 | 02:38:04.180 | | | | 0.1 | 0.58 | a | Ml | 1.8 | 5315 |
| CEME | 1.09 | 341.0 | Pn | 02:37:45.160 | -0.2 | | | | | m | | 9481 | |
| PVY | 1.15 | 20.0 | Pn | 02:37:46.668 | 0.3 | | | | | m | | 9482 | |
| HCY | 1.16 | 324.0 | Pn | 02:37:46.554 | 0.1 | | | | | m | | 9483 | |
| NKME | 1.29 | 345.0 | Pn | 02:37:49.076 | 0.2 | | | | | m | | 9484 | |
| KOME | 1.33 | 3.0 | Pn | 02:37:50.517 | 1.0 | | | | | m | | 9485 | |
| SCTE | 1.61 | 207.0 | Sn | 02:38:15.923 | -1.3 | | | | | m | | 9487 | |
| SCTE | 1.61 | 207.0 | Pn | 02:37:55.078 | 0.6 | | | | | m | | 9486 | |
| NEST | 1.65 | 131.0 | Sn | 02:38:18.253 | -0.4 | | | | | m | | 9489 | |
| NEST | 1.65 | 131.0 | Pn | 02:37:56.724 | 1.4 | | | | | m | | 9488 | |
| NEST | 1.65 | 131.0 | Am1 | 02:38:24.290 | | | | 0.0 | 0.44 | a | Ml | 2.0 | 5316 |
| FNA | 1.66 | 115.0 | Sg | 02:38:18.251 | -0.4 | | | | | m | | 9491 | |
| FNA | 1.66 | 115.0 | Pg | 02:37:56.379 | 1.1 | | | | | m | | 9490 | |
| FNA | 1.66 | 115.0 | Am1 | 02:38:20.540 | | | | 0.1 | 0.62 | a | Ml | 2.4 | 5317 |

DATA_TYPE COMMENT GSE2.1
Event 576

Official Magnitude:
Ml 1.71

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 51 | 80 | 1.5700 |
| Intermediate: | 227 | 9 | 0.7300 |
| Min: | 317 | 1 | 0.4800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785745 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 577 2.0 km from Shqiponjë, Elbasan, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/08 | 04:17:28.17 | 0.39 | 41.0133 | 20.3837 | | | | | 12.0 | 2.0 | 21 | 31 | 116 | 0.49 | 1.95 | m | |
| 618 | | | | | | | | | | | | | | | | | |

Magnitude Err Nsta Author OrigID

M1 2.3 0.0 8 618

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|
| KBN | 0.50 | 141.0 | Sg | 04:17:45.281 | 0.2 | | | | | | | | | m | | 9494 |
| KBN | 0.50 | 141.0 | Pg | 04:17:38.003 | 0.1 | | | | | | | | | m | | 9493 |
| KBN | 0.50 | 141.0 | AM1 | 04:17:48.980 | | | | | | | | 2.8 | 0.68 | a | M1 | 2.7 |
| TIR | 0.51 | 0.0 | Pg | 04:17:38.163 | 0.0 | | | | | | | | | m | | 9516 |
| TIR | 0.51 | 311.0 | Sg | 04:17:46.671 | 0.1 | | | | | | | | | m | | 9495 |
| TIR | 0.51 | 311.0 | AM1 | 04:17:48.920 | | | | | | | | 0.5 | 0.56 | a | M1 | 2.0 |
| PHP | 0.67 | 3.0 | Sg | 04:17:51.992 | 0.7 | | | | | | | | | m | | 9497 |
| PHP | 0.67 | 3.0 | Pg | 04:17:41.262 | -0.1 | | | | | | | | | m | | 9496 |
| NEST | 0.78 | 139.0 | Sg | 04:17:55.815 | 0.3 | | | | | | | | | m | | 9499 |
| NEST | 0.78 | 139.0 | Pg | 04:17:43.389 | -0.4 | | | | | | | | | m | | 9498 |
| NEST | 0.78 | 139.0 | AM1 | 04:17:58.440 | | | | | | | | 0.4 | 0.36 | a | M1 | 2.2 |
| FNA | 0.79 | 106.0 | Sg | 04:17:55.780 | -0.1 | | | | | | | | | m | | 9501 |
| FNA | 0.79 | 106.0 | Pg | 04:17:43.383 | -0.6 | | | | | | | | | m | | 9500 |
| FNA | 0.79 | 106.0 | AM1 | 04:18:01.630 | | | | | | | | 0.7 | 0.28 | a | M1 | 2.5 |
| LSK | 0.88 | 169.0 | Sg | 04:17:58.647 | 0.2 | | | | | | | | | m | | 9503 |
| LSK | 0.88 | 169.0 | Pg | 04:17:44.272 | -1.2 | | | | | | | | | m | | 9502 |
| LSK | 0.88 | 169.0 | AM1 | 04:18:04.530 | | | | | | | | 0.7 | 0.64 | a | M1 | 2.6 |
| PUK | 1.09 | 341.0 | Sn | 04:18:05.811 | 0.5 | | | | | | | | | m | | 9505 |
| PUK | 1.09 | 341.0 | Pn | 04:17:48.945 | -0.5 | | | | | | | | | m | | 9504 |
| PUK | 1.09 | 341.0 | AM1 | 04:18:09.350 | | | | | | | | 0.1 | 0.36 | a | M1 | 2.0 |
| SRN | 1.17 | 195.0 | Sn | 04:18:10.475 | 1.9 | | | | | | | | | m | | 9507 |
| SRN | 1.17 | 195.0 | Pn | 04:17:51.302 | 0.0 | | | | | | | | | m | | 9506 |
| SRN | 1.17 | 195.0 | AM1 | 04:18:13.270 | | | | | | | | 0.1 | 0.56 | a | M1 | 1.9 |
| ULC | 1.28 | 319.0 | Pn | 04:17:52.162 | -0.6 | | | | | | | | | m | | 9508 |
| BCI | 1.37 | 351.0 | Sn | 04:18:15.467 | 1.4 | | | | | | | | | m | | 9510 |
| BCI | 1.37 | 351.0 | Pn | 04:17:57.184 | 2.8 | | | | | | | | | m | | 9509 |
| BCI | 1.37 | 351.0 | AM1 | 04:18:25.340 | | | | | | | | 0.2 | 0.42 | a | M1 | 2.4 |
| DRME | 1.47 | 324.0 | Pn | 04:17:55.426 | -0.9 | | | | | | | | | m | | 9511 |
| IGT | 1.48 | 182.0 | Pn | 04:17:56.834 | 0.4 | | | | | | | | | m | | 9512 |
| BUM | 1.70 | 320.0 | Pn | 04:18:00.544 | 0.2 | | | | | | | | | m | | 9513 |
| CEME | 1.88 | 325.0 | Pn | 04:18:03.602 | 0.1 | | | | | | | | | m | | 9514 |
| KOME | 1.95 | 341.0 | Pn | 04:18:04.533 | 0.1 | | | | | | | | | m | | 9515 |

DATA_TYPE COMMENT GSE2.1
Event 577

Official Magnitude:
M1 2.27

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 76 | 70 | 2.1200 |
| Intermediate: | 236 | 18 | 1.0000 |
| Min: | 328 | 6 | 0.4400 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785744 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 581 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/10 | 13:49:24.88 | 0.23 | 40.2032 | 20.6815 | | | | | 4.3 | 1.2 | 16 | 31 | 129 | 0.08 | 1.93 | m | |
| 622 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.7 | 0.0 | 9 | 622 |
| Md | 2.4 | 0.0 | 1 | 622 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|------|------|
| LSK | 0.08 | 0.0 | Sg | 13:49:28.404 | 0.0 | | | | | | | | | | m | 9578 | | |
| LSK | 0.08 | 231.0 | Pg | 13:49:26.800 | -0.0 | | | | | | | | | | md | 9560 | | |
| LSK | 0.08 | 231.0 | AM1 | 13:49:31.508 | | | | | | | | | | | a | Ml | 3.9 | 5345 |
| NEST | 0.35 | 52.0 | Sg | 13:49:38.014 | 0.0 | | | | | | | | | | m | | 9562 | |
| NEST | 0.35 | 52.0 | Pg | 13:49:32.191 | -0.2 | | | | | | | | | | m | | 9561 | |
| NEST | 0.35 | 52.0 | AM1 | 13:49:45.858 | | | | | | | | | | | a | Ml | 2.7 | 5346 |
| KBN | 0.43 | 10.0 | Sg | 13:49:39.641 | -0.1 | | | | | | | | | | m | | 9564 | |
| KBN | 0.43 | 10.0 | Pg | 13:49:33.532 | 0.2 | | | | | | | | | | m | | 9563 | |
| KBN | 0.43 | 10.0 | AM1 | 13:49:48.198 | | | | | | | | | | | a | Ml | 2.4 | 5347 |
| SRN | 0.61 | 239.0 | Sg | 13:49:47.376 | -0.0 | | | | | | | | | | m | | 9566 | |
| SRN | 0.61 | 239.0 | Pg | 13:49:36.638 | -1.1 | | | | | | | | | | m | | 9565 | |
| SRN | 0.61 | 239.0 | AM1 | 13:49:53.118 | | | | | | | | | | | a | Ml | 2.4 | 5348 |
| SRN | 0.61 | 239.0 | AMd | 13:50:12.035 | | | | | | | | | | | a | Md | 2.4 | 5344 |
| IGT | 0.72 | 203.0 | Sg | 13:49:50.524 | 0.1 | | | | | | | | | | m | | 9568 | |
| IGT | 0.72 | 203.0 | Pg | 13:49:39.823 | 0.4 | | | | | | | | | | m | | 9567 | |
| IGT | 0.72 | 203.0 | AM1 | 13:49:55.238 | | | | | | | | | | | a | Ml | 2.5 | 5349 |
| FNA | 0.79 | 42.0 | Sg | 13:49:52.784 | 0.2 | | | | | | | | | | m | | 9570 | |
| FNA | 0.79 | 42.0 | Pg | 13:49:40.389 | -0.3 | | | | | | | | | | m | | 9569 | |
| FNA | 0.79 | 42.0 | AM1 | 13:50:00.228 | | | | | | | | | | | a | Ml | 2.7 | 5350 |
| TIR | 1.30 | 332.0 | Sn | 13:50:09.546 | -0.2 | | | | | | | | | | m | | 9572 | |
| TIR | 1.30 | 332.0 | Pn | 13:49:50.767 | 0.3 | | | | | | | | | | m | | 9571 | |
| TIR | 1.30 | 332.0 | AM1 | 13:50:21.478 | | | | | | | | | | | a | Ml | 2.5 | 5351 |
| LKD2 | 1.41 | 181.0 | Pn | 13:49:52.214 | -0.3 | | | | | | | | | | m | | 9573 | |
| LKD2 | 1.41 | 181.0 | AM1 | 13:50:21.608 | | | | | | | | | | | a | Ml | 3.1 | 5352 |
| PHP | 1.49 | 354.0 | Sn | 13:50:16.553 | 1.4 | | | | | | | | | | m | | 9575 | |
| PHP | 1.49 | 354.0 | Pn | 13:49:54.330 | 0.7 | | | | | | | | | | m | | 9574 | |
| PHP | 1.49 | 354.0 | AM1 | 13:50:28.028 | | | | | | | | | | | a | Ml | 2.9 | 5353 |
| SCTE | 1.70 | 267.0 | Pn | 13:49:57.340 | -0.3 | | | | | | | | | | m | | 9576 | |
| PUK | 1.93 | 343.0 | Pn | 13:50:02.140 | 0.6 | | | | | | | | | | m | | 9577 | |

DATA_TYPE COMMENT GSE2.1

Event 581

Official Magnitude:
Ml 2.65

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 197 | 85 | 1.2100 |
| Intermediate: | 303 | 1 | 0.6400 |
| Min: | 33 | 5 | 0.3300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785744 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 584 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/11 | 14:19:03.49 | 0.41 | 41.4853 | 19.3618 | | | | | 23.6 | 2.5 | 28 | 27 | 78 | 0.40 | 2.71 | m | |
| 626 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.7 | 0.0 | 7 | 626 |
| Md | 3.0 | 0.0 | 1 | 626 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| TIR | 0.40 | 0.0 | Pg | 14:19:12.736 | 0.0 | | | | | | | | | | mdi | 9639 |
| TIR | 0.40 | 109.0 | Sg | 14:19:19.147 | 0.4 | | | | | | | | | | m | 9609 |
| TIR | 0.40 | 109.0 | AM1 | 14:19:19.660 | | | | | | | | 3.3 | 0.36 | a | Ml 2.7 | 5379 |
| ULC | 0.48 | 351.0 | Pg | 14:19:13.368 | -0.3 | | | | | | | | | | mci | 9610 |
| PUK | 0.68 | 35.0 | Sg | 14:19:27.277 | 0.1 | | | | | | | | | | m | 9612 |
| PUK | 0.68 | 35.0 | Pg | 14:19:16.717 | -0.3 | | | | | | | | | | mde | 9611 |
| PUK | 0.68 | 35.0 | AM1 | 14:19:33.050 | | | | | | | | 1.1 | 0.44 | a | Ml 2.6 | 5380 |
| PUK | 0.68 | 35.0 | AMd | 14:20:22.057 | | | | | | | | 0.0 | 65.34 | a | Md 3.0 | 5378 |
| DRME | 0.71 | 350.0 | Pn | 14:19:17.581 | -0.1 | | | | | | | | | | mce | 9613 |
| PHP | 0.83 | 75.0 | Sg | 14:19:31.798 | 0.2 | | | | | | | | | | m | 9615 |
| PHP | 0.83 | 75.0 | Pg | 14:19:19.409 | -0.1 | | | | | | | | | | mde | 9614 |
| PHP | 0.83 | 75.0 | AM1 | 14:19:40.220 | | | | | | | | 0.7 | 0.92 | a | Ml 2.5 | 5381 |
| BUM | 0.88 | 338.0 | Pn | 14:19:21.713 | 1.0 | | | | | | | | | | mde | 9616 |
| BCI | 1.03 | 30.0 | Sn | 14:19:37.762 | -0.1 | | | | | | | | | | m | 9618 |
| BCI | 1.03 | 30.0 | Pn | 14:19:22.338 | -0.8 | | | | | | | | | | mce | 9617 |
| BCI | 1.03 | 30.0 | AM1 | 14:19:43.550 | | | | | | | | 0.8 | 0.58 | a | Ml 2.8 | 5382 |
| CEME | 1.11 | 343.0 | Pn | 14:19:24.982 | 0.2 | | | | | | | | | | mde | 9619 |
| HCY | 1.16 | 327.0 | Pn | 14:19:26.704 | 1.1 | | | | | | | | | | mce | 9620 |
| NKME | 1.31 | 347.0 | Pn | 14:19:27.860 | -0.5 | | | | | | | | | | mde | 9621 |
| KOME | 1.37 | 4.0 | Pn | 14:19:29.520 | 0.2 | | | | | | | | | | mde | 9622 |
| KBN | 1.38 | 128.0 | P | 14:19:29.062 | 0.0 | | | | | | | | | | m | 9623 |
| BEY | 1.44 | 15.0 | Pn | 14:19:30.832 | 0.2 | | | | | | | | | | mde | 9624 |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|-----|------|---|------|------|------|
| SCTE | 1.56 | 207.0 | S | 14:19:54.544 | -0.1 | | | | m | | 9626 | | |
| SCTE | 1.56 | 207.0 | P | 14:19:32.870 | 0.1 | | | | m | | 9625 | | |
| SCTE | 1.56 | 207.0 | AM1 | 14:19:59.220 | | | | 1.0 | 0.26 | a | Ml | 3.2 | 5383 |
| LSK | 1.63 | 144.0 | P | 14:19:34.810 | 1.1 | | | | m | | | 9627 | |
| SRN | 1.68 | 162.0 | S | 14:19:57.865 | -0.6 | | | | m | | | 9629 | |
| SRN | 1.68 | 162.0 | P | 14:19:34.852 | -0.1 | | | | m | | | 9628 | |
| SRN | 1.68 | 162.0 | AM1 | 14:20:08.410 | | | | 0.2 | 0.40 | a | Ml | 2.5 | 5384 |
| FNA | 1.68 | 114.0 | S | 14:19:58.133 | 0.2 | | | | m | | | 9631 | |
| FNA | 1.68 | 114.0 | P | 14:19:35.428 | 0.8 | | | | m | | | 9630 | |
| FNA | 1.68 | 114.0 | AM1 | 14:20:03.970 | | | | 0.3 | 0.42 | a | Ml | 2.8 | 5385 |
| UPM | 1.75 | 350.0 | Pg | 14:19:35.666 | -0.0 | | | | mci | | | 9632 | |
| NOCI | 1.87 | 249.0 | S | 14:20:03.646 | 0.6 | | | | m | | | 9634 | |
| NOCI | 1.87 | 249.0 | P | 14:19:37.311 | -0.2 | | | | m | | | 9633 | |
| IGT | 2.09 | 158.0 | S | 14:20:08.366 | -0.2 | | | | m | | | 9636 | |
| IGT | 2.09 | 158.0 | P | 14:19:39.595 | -1.1 | | | | m | | | 9635 | |
| MRVN | 2.42 | 261.0 | P | 14:19:44.061 | -1.6 | | | | m | | | 9637 | |
| SGRT | 2.71 | 277.0 | P | 14:19:45.763 | -4.2 | | | | m | | | 9638 | |

DATA_TYPE COMMENT GSE2.1
Event 584

Official Magnitude:
Ml 2.69

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 25 | 71 | 2.6100 |
| Intermediate: | 279 | 5 | 0.6600 |
| Min: | 187 | 18 | 0.5100 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785744 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 585 0.6 km from Mercëq, Gjirokastër, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/12 | 00:44:59.80 | 0.11 | 40.1638 | 20.5058 | | | | | 26.0 | 1.3 | 13 | 31 | 116 | 0.07 | 1.56 | m | |
| 627 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.8 | 0.0 | 7 | 627 |
| Md | 2.6 | 0.0 | 1 | 627 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| LSK | 0.07 | 101.0 | Sg | 00:45:08.394 | 0.5 | | | | — | | | | | | m | 9641 |

| | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-----|-------|---|------|------|
| LSK | 0.07 | 101.0 | Pg | 00:45:04.620 | 0.2 | | | m | | 9640 | |
| LSK | 0.07 | 101.0 | AM1 | 00:45:09.950 | | | 1.2 | 0.26 | a | M1 | 2.1 |
| LSK | 0.07 | 101.0 | AMd | 00:45:48.095 | | | 0.0 | 43.48 | a | Md | 5386 |
| SRN | 0.48 | 0.0 | Pg | 00:45:10.107 | 0.0 | | | md | | 9654 | |
| SRN | 0.48 | 235.0 | Sg | 00:45:18.370 | -0.1 | | | m | | 9642 | |
| SRN | 0.48 | 235.0 | AM1 | 00:45:22.510 | | | 0.2 | 0.42 | a | M1 | 5389 |
| SRN | 0.48 | 235.0 | AM1 | 00:45:22.080 | | | 0.2 | 0.46 | a | M1 | 5388 |
| NEST | 0.48 | 58.0 | Sg | 00:45:17.713 | -0.2 | | | m | | 9644 | |
| NEST | 0.48 | 58.0 | Pg | 00:45:10.156 | 0.0 | | | m | | 9643 | |
| NEST | 0.48 | 58.0 | AM1 | 00:45:19.060 | | | 0.3 | 0.48 | a | M1 | 1.8 |
| NEST | 0.48 | 58.0 | AM1 | 00:45:19.650 | | | 0.3 | 0.26 | a | M1 | 1.7 |
| KBN | 0.51 | 24.0 | Sg | 00:45:17.807 | 0.1 | | | m | | 9646 | |
| KBN | 0.51 | 24.0 | Pg | 00:45:09.978 | -0.1 | | | m | | 9645 | |
| KBN | 0.51 | 24.0 | AM1 | 00:45:21.930 | | | 0.2 | 0.48 | a | M1 | 1.6 |
| IGT | 0.65 | 193.0 | Sg | 00:45:22.627 | -0.1 | | | m | | 9648 | |
| IGT | 0.65 | 193.0 | Pg | 00:45:12.973 | 0.1 | | | m | | 9647 | |
| IGT | 0.65 | 193.0 | AM1 | 00:45:24.360 | | | 0.2 | 0.32 | a | M1 | 1.8 |
| FNA | 0.91 | 47.0 | Sg | 00:45:30.945 | 0.1 | | | m | | 5393 | |
| FNA | 0.91 | 47.0 | Pg | 00:45:17.307 | -0.3 | | | mc | | 9650 | |
| FNA | 0.91 | 47.0 | AM1 | 00:45:35.260 | | | 0.1 | 0.40 | a | M1 | 1.9 |
| LKD2 | 1.38 | 175.0 | Sn | 00:45:45.388 | 0.0 | | 0.1 | m | | 5394 | |
| LKD2 | 1.38 | 175.0 | Pn | 00:45:25.879 | 0.1 | | | m | | 9652 | |
| LKD2 | 1.38 | 175.0 | AM1 | 00:45:44.990 | | | 0.2 | 1.42 | a | M1 | 2.3 |
| SCTE | 1.56 | 268.0 | Pn | 00:45:29.188 | 0.3 | | | m | | 9653 | |

DATA_TYPE COMMENT GSE2.1
Event 585

Official Magnitude:

M1 1.75

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 312 | 81 | 1.3300 |
| Intermediate: | 119 | 8 | 0.6700 |
| Min: | 209 | 2 | 0.2500 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785744 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 587 Region N/A

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.9 | 0.0 | 2 | 629 |
| Md | 2.9 | 0.0 | 3 | 629 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| LKD2 | 0.34 | 138.0 | Sg | 18:05:03.360 | -0.3 | | | | | | | | | m | | 9691 |
| LKD2 | 0.34 | 138.0 | Pg | 18:04:57.945 | 0.0 | | | | | | | | | m | | 9690 |
| LKD2 | 0.34 | 138.0 | AM1 | 18:05:12.680 | | | | | | | | 0.4 | 0.28 | a | M1 | 1.7 |
| LKD2 | 0.34 | 138.0 | AMd | 18:05:59.424 | | | | | | | | 0.0 | 61.48 | a | Md | 2.9 |
| IGT | 0.48 | 357.0 | Sg | 18:05:08.121 | 0.0 | | | | | | | | | m | | 9693 |
| IGT | 0.48 | 357.0 | Pg | 18:05:00.439 | -0.0 | | | | | | | | | m | | 9692 |
| IGT | 0.48 | 357.0 | AMd | 18:05:44.892 | | | | | | | | 0.0 | 44.45 | a | Md | 2.0 |
| SRN | 0.88 | 342.0 | Sn | 18:05:21.258 | 0.2 | | | | | | | | | m | | 9694 |
| LSK | 1.12 | 0.0 | Pn | 18:05:12.785 | 0.0 | | | | | | | | | m | | 9697 |
| NEST | 1.46 | 20.0 | Sn | 18:05:38.472 | 0.0 | | | | | | | | | m | | 9696 |
| NEST | 1.46 | 20.0 | Pn | 18:05:17.846 | 0.0 | | | | | | | | | m | | 9695 |
| NEST | 1.46 | 20.0 | AM1 | 18:05:45.180 | | | | | | | | 0.1 | 0.62 | a | M1 | 2.0 |
| NEST | 1.46 | 20.0 | AMd | 18:06:26.937 | | | | | | | | 0.0 | 69.09 | a | Md | 3.1 |

DATA_TYPE COMMENT GSE2.1
Event 587

Official Magnitude:

M1 1.85

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 254 | 31 | 2.6900 |
| Intermediate: | 95 | 56 | 0.8000 |
| Min: | 350 | 10 | 0.4000 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785743 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 590 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/13 | 14:22:09.35 | 0.07 | 42.0562 | 19.1663 | | | | | 21.9 | 1.1 | 16 | 22 | 113 | 0.11 | 2.17 | m | |
| 632 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.8 | 0.0 | 5 | 632 |
| Md | 2.9 | 0.0 | 12 | 632 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| ULC | 0.11 | 146.0 | Pg | 14:22:12.604 | -0.3 | | | | | | | 0.0 | 17.18 | a | m | 9726 |
| ULC | 0.11 | 146.0 | AMd | 14:22:29.782 | | | | | | | | 0.0 | | a | m | 5429 |
| DRME | 0.13 | 7.0 | Pg | 14:22:13.251 | 0.0 | | | | | | | 0.0 | 44.31 | a | m | 9727 |
| DRME | 0.13 | 7.0 | AMd | 14:22:57.559 | | | | | | | | 0.0 | 49.86 | a | m | 5430 |
| BUM | 0.31 | 321.0 | Pg | 14:22:16.462 | -0.0 | | | | | | | 0.0 | | a | m | 9728 |
| BUM | 0.31 | 321.0 | AMd | 14:23:06.323 | | | | | | | | 0.0 | | a | m | 5431 |
| PUK | 0.54 | 91.0 | Sg | 14:22:28.139 | -0.5 | | | | | | | 0.5 | | a | m | 9730 |
| PUK | 0.54 | 91.0 | Pg | 14:22:20.276 | -0.1 | | | | | | | 0.5 | | a | m | 9729 |
| PUK | 0.54 | 91.0 | AMl | 14:22:30.050 | | | | | | | | 0.5 | 0.14 | a | M1 | 5441 |
| PUK | 0.54 | 91.0 | AMd | 14:23:11.225 | | | | | | | | 0.5 | 50.95 | a | Md | 5432 |
| HCY | 0.64 | 309.0 | Pg | 14:22:22.218 | 0.0 | | | | | | | 0.6 | | a | m | 9731 |
| HCY | 0.64 | 309.0 | AMd | 14:23:25.931 | | | | | | | | 0.6 | 63.71 | a | Md | 5433 |
| BCI | 0.74 | 0.0 | Pg | 14:22:23.692 | 0.0 | | | | | | | 0.7 | | a | m | 9744 |
| BCI | 0.74 | 64.0 | Sg | 14:22:34.779 | -0.0 | | | | | | | 0.7 | | a | m | 9732 |
| BCI | 0.74 | 64.0 | AMl | 14:22:37.750 | | | | | | | | 0.7 | 0.28 | a | M1 | 5442 |
| KOME | 0.83 | 17.0 | Pg | 14:22:25.623 | -0.1 | | | | | | | 0.8 | | a | m | 9733 |
| KOME | 0.83 | 17.0 | AMd | 14:23:29.941 | | | | | | | | 0.8 | 64.32 | a | Md | 5434 |
| TIR | 0.88 | 143.0 | Sg | 14:22:39.454 | 0.1 | | | | | | | 0.8 | | a | m | 9735 |
| TIR | 0.88 | 143.0 | Pg | 14:22:26.554 | 0.0 | | | | | | | 0.8 | | a | m | 9734 |
| TIR | 0.88 | 143.0 | AMl | 14:22:44.690 | | | | | | | | 0.8 | 0.52 | a | M1 | 5443 |
| TIR | 0.88 | 143.0 | AMd | 14:23:25.485 | | | | | | | | 0.8 | 58.93 | a | Md | 5435 |
| BEY | 0.98 | 33.0 | Pg | 14:22:28.445 | 0.2 | | | | | | | 0.9 | | a | m | 9736 |
| BEY | 0.98 | 33.0 | AMd | 14:23:26.228 | | | | | | | | 0.9 | 57.78 | a | Md | 5436 |
| PHP | 1.02 | 110.0 | Sg | 14:22:43.316 | 0.0 | | | | | | | 1.0 | | a | m | 9738 |
| PHP | 1.02 | 110.0 | Pg | 14:22:28.744 | 0.0 | | | | | | | 1.0 | | a | m | 9737 |
| PHP | 1.02 | 110.0 | AMl | 14:22:47.290 | | | | | | | | 1.0 | 0.34 | a | M1 | 5444 |
| PHP | 1.02 | 110.0 | AMd | 14:23:22.217 | | | | | | | | 1.0 | 53.47 | a | Md | 5437 |
| UPM | 1.16 | 351.0 | Pg | 14:22:31.525 | 0.0 | | | | | | | 1.1 | | a | m | 9739 |
| UPM | 1.16 | 351.0 | AMd | 14:23:39.448 | | | | | | | | 1.1 | 67.92 | a | Md | 5438 |
| SCTE | 2.05 | 196.0 | Sn | 14:23:12.437 | -1.2 | | | | | | | 2.0 | | a | m | 9741 |
| SCTE | 2.05 | 196.0 | Pn | 14:22:46.152 | 0.1 | | | | | | | 2.0 | | a | m | 9740 |
| SCTE | 2.05 | 196.0 | AMd | 14:24:12.721 | | | | | | | | 2.0 | 86.57 | a | Md | 5439 |
| NEST | 2.17 | 138.0 | Sn | 14:23:16.835 | 0.0 | | | | | | | 2.1 | | a | m | 9743 |
| NEST | 2.17 | 138.0 | Pn | 14:22:47.835 | -0.1 | | | | | | | 2.1 | | a | m | 9742 |
| NEST | 2.17 | 138.0 | AMl | 14:23:31.560 | | | | | | | | 2.1 | 0.40 | a | M1 | 5445 |
| NEST | 2.17 | 138.0 | AMd | 14:24:23.400 | | | | | | | | 2.1 | 95.57 | a | Md | 5440 |

DATA_TYPE COMMENT GSE2.1
Event 590

Official Magnitude:
M1 2.77

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 27 | 74 | 1.0800 |
| Intermediate: | 238 | 12 | 0.4400 |
| Min: | 146 | 8 | 0.2800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785743 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 591 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/13 | 17:48:42.52 | 0.03 | 41.8297 | 20.6363 | | | | | 16.0 | 0.7 | 19 | 22 | 194 | 0.21 | 2.40 | m | |
| 633 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.4 | 0.0 | 6 | 633 |
| Md | 3.2 | 0.0 | 13 | 633 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| PHP | 0.21 | 226.0 | Sg | 17:48:50.905 | 0.0 | | | | | | | | | | m | 9746 | |
| PHP | 0.21 | 226.0 | Pg | 17:48:47.301 | 0.0 | | | | | | | | | | m | 9745 | |
| PHP | 0.21 | 226.0 | AM1 | 17:48:53.220 | | | | | | | | 1.5 | 0.12 | a | Ml | 2.1 | 5459 |
| PHP | 0.21 | 226.0 | AMd | 17:49:34.227 | | | | | | | | 0.0 | 46.93 | a | Md | 2.7 | 5446 |
| PUK | 0.59 | 292.0 | Sg | 17:49:03.391 | -0.0 | | | | | | | | | | m | 9748 | |
| PUK | 0.59 | 292.0 | Pg | 17:48:54.460 | 0.0 | | | | | | | | | | m | 9747 | |
| PUK | 0.59 | 292.0 | AM1 | 17:49:08.580 | | | | | | | | 0.8 | 0.24 | a | Ml | 2.3 | 5460 |
| PUK | 0.59 | 292.0 | AMd | 17:50:01.518 | | | | | | | | 0.0 | 67.06 | a | Md | 3.1 | 5447 |
| BCI | 0.68 | 0.0 | Pg | 17:48:55.327 | 0.0 | | | | | | | | | | m | 9764 | |
| BCI | 0.68 | 322.0 | Sg | 17:49:06.363 | 0.0 | | | | | | | | | | m | 9749 | |
| BCI | 0.68 | 322.0 | AM1 | 17:49:12.270 | | | | | | | | 0.8 | 0.30 | a | Ml | 2.4 | 5461 |
| TIR | 0.75 | 231.0 | Sg | 17:49:08.768 | -0.1 | | | | | | | | | | m | 9751 | |
| TIR | 0.75 | 231.0 | Pg | 17:48:57.567 | 0.0 | | | | | | | | | | m | 9750 | |
| TIR | 0.75 | 231.0 | AM1 | 17:49:19.100 | | | | | | | | 0.4 | 0.30 | a | Ml | 2.1 | 5462 |
| TIR | 0.75 | 231.0 | AMd | 17:49:59.074 | | | | | | | | 0.0 | 61.51 | a | Md | 3.0 | 5448 |
| PVY | 0.91 | 328.0 | Pg | 17:49:00.418 | -0.0 | | | | | | | | | | m | 9752 | |
| PVY | 0.91 | 328.0 | AMd | 17:50:08.239 | | | | | | | | 0.0 | 67.82 | a | Md | 3.1 | 5449 |
| ULC | 1.04 | 278.0 | Pg | 17:49:02.862 | 0.1 | | | | | | | | | | m | 9753 | |
| ULC | 1.04 | 278.0 | AMd | 17:50:06.406 | | | | | | | | 0.0 | 63.54 | a | Md | 3.0 | 5450 |
| DRME | 1.14 | 289.0 | Pn | 17:49:04.418 | -0.0 | | | | | | | | | | m | 9754 | |
| DRME | 1.14 | 289.0 | AMd | 17:50:22.089 | | | | | | | | 0.0 | 77.67 | a | Md | 3.2 | 5451 |
| BEY | 1.17 | 333.0 | Pn | 17:49:05.104 | -0.0 | | | | | | | | | | m | 9755 | |
| BEY | 1.17 | 333.0 | AMd | 17:50:17.201 | | | | | | | | 0.0 | 72.10 | a | Md | 3.2 | 5452 |
| BUM | 1.38 | 291.0 | Pn | 17:49:08.715 | 0.0 | | | | | | | | | | m | 9756 | |
| BUM | 1.38 | 291.0 | AMd | 17:50:25.144 | | | | | | | | 0.0 | 76.43 | a | Md | 3.2 | 5453 |
| NEST | 1.45 | 167.0 | Sn | 17:49:30.512 | -0.0 | | | | | | | | | | m | 9758 | |
| NEST | 1.45 | 167.0 | Pn | 17:49:09.976 | 0.0 | | | | | | | | | | m | 9757 | |
| NEST | 1.45 | 167.0 | AM1 | 17:49:36.970 | | | | | | | | 0.3 | 0.64 | a | Ml | 2.6 | 5463 |
| NEST | 1.45 | 167.0 | AMd | 17:50:21.848 | | | | | | | | 0.0 | 71.87 | a | Md | 3.2 | 5454 |
| CEME | 1.46 | 300.0 | Pn | 17:49:10.286 | 0.0 | | | | | | | | | | m | 9759 | |
| CEME | 1.46 | 300.0 | AMd | 17:50:36.956 | | | | | | | | 0.0 | 86.67 | a | Md | 3.4 | 5455 |

| | | | | | | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|--|--|--|--|--|--|-----|---------|------|------|------|
| LSK | 1.68 | 181.0 | Sn | 17:49:37.471 | 0.0 | | | | | | | | | | | m | 9761 | | |
| LSK | 1.68 | 181.0 | Pn | 17:49:13.918 | 0.0 | | | | | | | | | | | m | 9760 | | |
| LSK | 1.68 | 181.0 | AM1 | 17:49:45.770 | | | | | | | | | | | 0.4 | 0.50 a | Ml | 2.9 | 5464 |
| LSK | 1.68 | 181.0 | AMd | 17:50:35.123 | | | | | | | | | | | 0.0 | 81.20 a | Md | 3.3 | 5456 |
| HCY | 1.71 | 292.0 | Pn | 17:49:14.633 | -0.0 | | | | | | | | | | | m | | 9762 | |
| HCY | 1.71 | 292.0 | AMd | 17:50:42.251 | | | | | | | | | | | 0.0 | 87.62 a | Md | 3.4 | 5457 |
| SCTE | 2.40 | 224.0 | Pn | 17:49:25.103 | 0.0 | | | | | | | | | | | m | | 9763 | |
| SCTE | 2.40 | 224.0 | AMd | 17:50:53.453 | | | | | | | | | | | 0.0 | 88.35 a | Md | 3.5 | 5458 |

DATA_TYPE COMMENT GSE2.1
Event 591

Official Magnitude:
Ml 2.38

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 253 | 50 | 0.8700 |
| Intermediate: | 66 | 39 | 0.4200 |
| Min: | 159 | 3 | 0.2300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785743 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 592 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 09:46:33.19 | 0.25 | 40.1672 | 20.6952 | | | | | 3.6 | 1.2 | 14 | 11 | 135 | 0.07 | 2.25 | m | |
| 635 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.1 | 0.0 | 10 | 635 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|--------|------|-----------|-------|------|
| LSK | 0.08 | 0.0 | Pg | 09:46:31.964 | 0.0 | | | | | | | | | | m | | 9798 |
| LSK | 0.08 | 257.0 | Sg | 09:46:36.248 | -0.0 | | | | | | | | | | m | | 9782 |
| LSK | 0.08 | 257.0 | AM1 | 09:46:39.500 | | | | | | | | 456.8 | 0.52 a | Ml | 4.2 | 5478 | |
| LSK | 0.08 | 257.0 | AM1 | 09:46:37.760 | | | | | | | | 413.8 | 0.70 a | Ml | 4.2 | 5477 | |
| NEST | 0.37 | 47.0 | Pg | 09:46:40.112 | -0.9 | | | | | | | | | m | | 9784 | |
| NEST | 0.37 | 47.0 | Sg | 09:46:46.754 | -0.2 | | | | | | | | | m | | 9783 | |
| NEST | 0.37 | 47.0 | AM1 | 09:46:48.740 | | | | | | | | 8.0 | 0.36 a | Ml | 3.0 | 5480 | |
| NEST | 0.37 | 47.0 | AM1 | 09:46:53.770 | | | | | | | | 6.8 | 0.54 a | Ml | 2.9 | 5479 | |
| KBN | 0.46 | 8.0 | Pg | 09:46:41.325 | -1.1 | | | | | | | | | m | | 9786 | |
| KBN | 0.46 | 8.0 | Sg | 09:46:49.035 | -0.2 | | | | | | | | | m | | 9785 | |
| KBN | 0.46 | 8.0 | AM1 | 09:46:56.150 | | | | | | | | 4.5 | 0.56 a | Ml | 2.8 | 5482 | |

| | | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|---|---|----|-----|------|
| KBN | 0.46 | 8.0 | AM1 | 09:46:55.870 | | | | | 4.5 | 0.52 | a | — | M1 | 2.8 | 5481 |
| SRN | 0.61 | 242.0 | Pg | 09:46:44.781 | -1.2 | | | | m | — | | | | | 9788 |
| SRN | 0.61 | 242.0 | Sg | 09:46:55.409 | -0.2 | | | | m | — | | | | | 9787 |
| SRN | 0.61 | 242.0 | AM1 | 09:46:59.730 | | | | | 2.4 | 0.40 | a | — | M1 | 2.8 | 5484 |
| SRN | 0.61 | 242.0 | AM1 | 09:46:56.340 | | | | | 1.7 | 0.46 | a | — | M1 | 2.6 | 5483 |
| IGT | 0.69 | 205.0 | Pg | 09:46:47.494 | 0.2 | | | | m | — | | | | | 9790 |
| IGT | 0.69 | 205.0 | Sg | 09:46:57.699 | -0.2 | | | | m | — | | | | | 9789 |
| TIR | 1.34 | 333.0 | Pn | 09:46:59.772 | 0.2 | | | | m | — | | | | | 9791 |
| TIR | 1.34 | 333.0 | AM1 | 09:47:24.730 | | | | | 0.7 | 0.94 | a | — | M1 | 2.9 | 5485 |
| LKD2 | 1.38 | 182.0 | Pn | 09:47:00.489 | 0.2 | | | | m | — | | | | | 9792 |
| LKD2 | 1.38 | 182.0 | AM1 | 09:47:29.590 | | | | | 2.2 | 0.54 | a | — | M1 | 3.4 | 5486 |
| PHP | 1.53 | 353.0 | Pn | 09:47:02.334 | -0.3 | | | | m | — | | | | | 9794 |
| PHP | 1.53 | 353.0 | Sn | 09:47:25.041 | 0.3 | | | | m | — | | | | | 9793 |
| PHP | 1.53 | 353.0 | AM1 | 09:47:34.720 | | | | | 1.2 | 0.96 | a | — | M1 | 3.3 | 5487 |
| SCTE | 1.71 | 268.0 | Pn | 09:47:05.402 | -0.8 | | | | m | — | | | | | 9795 |
| SCTE | 1.71 | 268.0 | AM1 | 09:47:32.750 | | | | | 1.4 | 0.36 | a | — | M1 | 3.4 | 5488 |
| PUK | 1.97 | 343.0 | Pn | 09:47:10.556 | -0.1 | | | | m | — | | | | | 9796 |
| PUK | 1.97 | 343.0 | AM1 | 09:47:46.380 | | | | | 0.6 | 0.62 | a | — | M1 | 3.2 | 5489 |
| BCI | 2.25 | 349.0 | Pn | 09:47:15.219 | 0.4 | | | | m | — | | | | | 9797 |
| BCI | 2.25 | 349.0 | AM1 | 09:47:53.470 | | | | | 0.9 | 0.86 | a | — | M1 | 3.5 | 5490 |

DATA_TYPE COMMENT GSE2.1
Event 592

Official Magnitude:
M1 3.09

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 277 | 67 | 1.2600 |
| Intermediate: | 123 | 20 | 0.6800 |
| Min: | 30 | 9 | 0.3400 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785743 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 593 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 10:18:08.33 | | 0.38 | 40.1942 | 20.6630 | | | | 1.3 | 0.8 | 15 | 30 | 128 | 0.06 | 1.94 | m | |
| 636 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.6 | 0.0 | 9 | 636 |
| Md | 2.3 | 0.0 | 2 | 636 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|-------|------|-----------|-------|------|
| LSK | 0.07 | 229.0 | Sg | 10:18:11.405 | 0.4 | | | | | | | | | m | | 9800 | |
| LSK | 0.07 | 229.0 | Pg | 10:18:09.550 | -0.3 | | | | | | | | | m | | 9799 | |
| LSK | 0.07 | 229.0 | AM1 | 10:18:13.150 | | | | | | | | 135.4 | 0.68 | a | M1 | 3.6 | 5493 |
| LSK | 0.07 | 229.0 | AMd | 10:18:48.852 | | | | | | | | 0.0 | 39.30 | a | Md | 2.5 | 5491 |
| NEST | 0.35 | 0.0 | Pg | 10:18:15.048 | 0.0 | | | | | | | | | m | | 9816 | |
| NEST | 0.37 | 53.0 | Sg | 10:18:21.487 | -1.0 | | | | | | | | | m | | 9801 | |
| NEST | 0.37 | 53.0 | AM1 | 10:18:28.590 | | | | | | | | 2.7 | 0.50 | a | M1 | 2.5 | 5494 |
| KBN | 0.44 | 12.0 | Sg | 10:18:24.052 | -0.0 | | | | | | | | | m | | 9803 | |
| KBN | 0.44 | 12.0 | Pg | 10:18:16.634 | -0.7 | | | | | | | | | m | | 9802 | |
| KBN | 0.44 | 12.0 | AM1 | 10:18:30.630 | | | | | | | | 1.8 | 0.94 | a | M1 | 2.4 | 5495 |
| KBN | 0.44 | 12.0 | AMd | 10:18:45.227 | | | | | | | | 0.0 | 28.59 | a | Md | 2.2 | 5492 |
| SRN | 0.60 | 239.0 | Sg | 10:18:30.302 | -0.6 | | | | | | | | | m | | 9805 | |
| SRN | 0.60 | 239.0 | Pg | 10:18:19.908 | -1.3 | | | | | | | | | m | | 9804 | |
| SRN | 0.60 | 239.0 | AM1 | 10:18:35.420 | | | | | | | | 0.6 | 0.72 | a | M1 | 2.2 | 5497 |
| SRN | 0.60 | 239.0 | AM1 | 10:18:36.910 | | | | | | | | 0.6 | 0.56 | a | M1 | 2.2 | 5496 |
| IGT | 0.71 | 202.0 | Sg | 10:18:34.232 | 0.3 | | | | | | | | | m | | 9807 | |
| IGT | 0.71 | 202.0 | Pg | 10:18:22.888 | -0.1 | | | | | | | | | m | | 9806 | |
| IGT | 0.71 | 202.0 | AM1 | 10:18:42.140 | | | | | | | | 0.7 | 0.68 | a | M1 | 2.4 | 5498 |
| LKD2 | 1.40 | 181.0 | Sn | 10:18:56.930 | -0.1 | | | | | | | | | m | | 9809 | |
| LKD2 | 1.40 | 181.0 | Pn | 10:18:36.620 | 0.5 | | | | | | | | | m | | 9808 | |
| LKD2 | 1.40 | 181.0 | AM1 | 10:19:04.470 | | | | | | | | 0.5 | 0.56 | a | M1 | 2.8 | 5499 |
| PHP | 1.50 | 354.0 | Sn | 10:18:59.797 | 0.3 | | | | | | | | | m | | 9811 | |
| PHP | 1.50 | 354.0 | Pn | 10:18:37.682 | 0.1 | | | | | | | | | m | | 9810 | |
| PHP | 1.50 | 354.0 | AM1 | 10:19:09.590 | | | | | | | | 0.4 | 1.00 | a | M1 | 2.8 | 5500 |
| SCTE | 1.69 | 267.0 | Sn | 10:19:04.269 | -1.5 | | | | | | | | | m | | 9813 | |
| SCTE | 1.69 | 267.0 | Pn | 10:18:40.862 | -0.3 | | | | | | | | | m | | 9812 | |
| SCTE | 1.69 | 267.0 | AM1 | 10:19:05.800 | | | | | | | | 0.3 | 0.70 | a | M1 | 2.8 | 5501 |
| PUK | 1.94 | 343.0 | Sn | 10:19:14.068 | 0.7 | | | | | | | | | m | | 9815 | |
| PUK | 1.94 | 343.0 | Pn | 10:18:45.598 | 0.1 | | | | | | | | | m | | 9814 | |
| PUK | 1.94 | 343.0 | AM1 | 10:19:21.230 | | | | | | | | 0.2 | 0.64 | a | M1 | 2.8 | 5502 |

DATA_TYPE COMMENT GSE2.1
Event 593

Official Magnitude:
M1 2.63

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 279 | 37 | 1.3700 |
| Intermediate: | 123 | 50 | 0.9300 |
| Min: | 18 | 12 | 0.4400 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785742 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 594 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 10:48:27.14 | 0.03 | 40.2310 | 20.6765 | | | | | 7.0 | 12.7 | 4 | 7 | 215 | 0.34 | 0.75 | m | |
| 637 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.9 | 0.0 | 2 | 637 |
| Md | 2.0 | 0.0 | 1 | 637 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LSK | 0.10 | 0.0 | Pg | 10:48:28.752 | 0.0 | | | | | | | | | | m | 9822 | |
| LSK | 0.10 | 217.0 | Sg | 10:48:30.631 | -0.8 | | | | | | | | | | m | 9817 | |
| LSK | 0.10 | 217.0 | AM1 | 10:48:32.760 | | | | | | | | 7.8 | 0.42 | a | Ml | 2.6 | 5504 |
| NEST | 0.34 | 57.0 | Sg | 10:48:39.592 | 0.0 | | | | | | | | | | m | 9819 | |
| NEST | 0.34 | 57.0 | Pg | 10:48:34.208 | -0.0 | | | | | | | | | | m | 9818 | |
| NEST | 0.34 | 57.0 | AM1 | 10:48:42.680 | | | | | | | | 0.1 | 0.28 | a | Ml | 1.1 | 5505 |
| NEST | 0.34 | 57.0 | AMd | 10:48:58.772 | | | | | | | | 0.0 | 24.56 | a | Md | 2.0 | 5503 |
| IGT | 0.75 | 202.0 | Sg | 10:48:53.255 | -0.0 | | | | | | | | | | m | 9821 | |
| IGT | 0.75 | 202.0 | Pg | 10:48:42.109 | 0.0 | | | | | | | | | | m | 9820 | |

DATA_TYPE COMMENT GSE2.1

Event 594

Official Magnitude:

Ml 1.86

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|---------|
| Max: | 121 | 85 | 12.7100 |
| Intermediate: | 309 | 4 | 3.7500 |
| Min: | 219 | 1 | 0.3300 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785742 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 595 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 10:52:22.99 | 0.03 | 40.2703 | 20.6140 | | | | | 0.8 | 0.9 | 6 | 30 | 195 | 0.12 | 0.77 | m | |
| 638 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID | | | | | | | | | | | | | |
|-----------|------|-------|--------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| M1 | 1.5 | 0.0 | 3 | 638 | | | | | | | | | | | | | |
| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
| LSK | 0.12 | 0.0 | Sg | 10:52:27.514 | 0.0 | | | | | | | | | m | | 9830 | |
| LSK | 0.12 | 186.0 | Pg | 10:52:25.817 | 0.0 | | | | | | | | | m | | 9823 | |
| LSK | 0.12 | 186.0 | AM1 | 10:52:28.090 | | | | | | | | 9.0 | 0.16 | a | M1 | 2.7 | 5506 |
| NEST | 0.36 | 66.0 | Sg | 10:52:37.134 | 0.0 | | | | | | | | | m | | 9825 | |
| NEST | 0.36 | 66.0 | Pg | 10:52:31.012 | -0.1 | | | | | | | | | m | | 9824 | |
| NEST | 0.36 | 66.0 | AM1 | 10:52:42.900 | | | | | | | | 0.2 | 0.32 | a | M1 | 1.4 | 5507 |
| SRN | 0.61 | 231.0 | Pg | 10:52:36.202 | 0.0 | | | | | | | | | m | | 9827 | |
| SRN | 0.61 | 231.0 | Sg | 10:52:46.084 | 0.0 | | | | | | | | | m | | 9826 | |
| IGT | 0.77 | 197.0 | Sg | 10:52:50.704 | -0.0 | | | | | | | | | m | | 9829 | |
| IGT | 0.77 | 197.0 | Pg | 10:52:39.071 | 0.2 | | | | | | | | | m | | 9828 | |
| IGT | 0.77 | 197.0 | AM1 | 10:52:58.830 | | | | | | | | 0.1 | 0.66 | a | M1 | 1.5 | 5508 |

DATA_TYPE COMMENT GSE2.1
Event 595

Official Magnitude:
M1 1.49

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 323 | 76 | 0.9300 |
| Intermediate: | 140 | 13 | 0.8300 |
| Min: | 230 | 1 | 0.2500 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785742 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 596 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 11:34:28.98 | 0.20 | 40.2225 | 20.6590 | | | | | 4.0 | 1.1 | 6 | 4 | 180 | 0.09 | 0.73 | m | |
| 639 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.3 | 0.0 | 3 | 639 |
| Md | 2.0 | 0.0 | 1 | 639 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| LSK | 0.09 | 0.0 | P | 11:34:31.063 | 0.0 | | | | | | | | | m | | 9838 | |
| LSK | 0.09 | 213.0 | Sg | 11:34:32.483 | 0.0 | | | | | | | | | m | | 9831 | |
| LSK | 0.09 | 213.0 | AM1 | 11:34:33.330 | | | | | | | | 5.4 | 0.12 | a | M1 | 2.3 | 5510 |

| | | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|--|-----|-------|---|------|-----|------|
| NEST | 0.35 | 57.0 | Sg | 11:34:42.399 | 0.2 | | | | | m | | | 9833 | | |
| NEST | 0.35 | 57.0 | Pg | 11:34:36.280 | -0.3 | | | | | m | | | 9832 | | |
| NEST | 0.35 | 57.0 | AM1 | 11:34:45.360 | | | | | | 0.1 | 0.20 | a | Ml | 1.1 | 5511 |
| NEST | 0.35 | 57.0 | AMd | 11:34:59.424 | | | | | | 0.0 | 23.14 | a | Md | 2.0 | 5509 |
| SRN | 0.61 | 237.0 | Sg | 11:34:51.450 | 0.0 | | | | | | | m | | | 9835 |
| SRN | 0.61 | 237.0 | Pg | 11:34:40.414 | -1.4 | | | | | | | m | | | 9834 |
| IGT | 0.73 | 201.0 | Sg | 11:34:54.832 | -0.1 | | | | | | | m | | | 9837 |
| IGT | 0.73 | 201.0 | Pg | 11:34:44.309 | 0.5 | | | | | | | m | | | 9836 |
| IGT | 0.73 | 201.0 | AM1 | 11:34:56.260 | | | | | | 0.1 | 1.02 | a | Ml | 1.3 | 5512 |

DATA_TYPE COMMENT GSE2.1

Event 596

Official Magnitude:

Ml 1.25

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 137 | 12 | 1.7800 |
| Intermediate: | 283 | 75 | 1.1000 |
| Min: | 45 | 8 | 0.4000 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785742 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 597 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 11:45:52.70 | 0.07 | 40.2690 | 20.6323 | | | | | 1.1 | 0.9 | 6 | 30 | 193 | 0.13 | 0.77 | m | |
| 641 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.9 | 0.0 | 1 | 641 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LSK | 0.12 | 193.0 | Sg | 11:45:57.183 | -0.4 | | | | | | | | | m | | 9846 | |
| LSK | 0.12 | 193.0 | Pg | 11:45:55.450 | -0.0 | | | | | | | | | m | | 9845 | |
| LSK | 0.12 | 193.0 | AM1 | 11:46:00.010 | | | | | | | | 16.5 | 0.44 | a | Ml | 2.9 | 5514 |
| NEST | 0.33 | 0.0 | P | 11:46:00.740 | 0.0 | | | | | | | | | m | | 9851 | |
| NEST | 0.35 | 65.0 | S | 11:46:06.339 | 0.0 | | | | | | | | | m | | 9847 | |
| SRN | 0.62 | 232.0 | Sg | 11:46:16.046 | -0.0 | | | | | | | | | m | | 9848 | |
| IGT | 0.77 | 198.0 | Sg | 11:46:20.483 | 0.0 | | | | | | | | | m | | 9850 | |
| IGT | 0.77 | 198.0 | P | 11:46:08.913 | 0.3 | | | | | | | | | m | | 9849 | |

DATA_TYPE COMMENT GSE2.1

Event 597

Official Magnitude:
Ml 2.92

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 143 | 49 | 1.2000 |
| Intermediate: | 319 | 40 | 0.8900 |
| Min: | 51 | 2 | 0.2600 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785742 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 598 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 12:03:21.08 | 0.45 | 40.1850 | 20.6825 | | | | | 3.7 | 1.7 | 13 | 10 | 153 | 0.07 | 1.95 | m | |
| 642 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.6 | 0.0 | 6 | 642 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LSK | 0.09 | 0.0 | Pg | 12:03:22.482 | 0.0 | | | | | | | | | | m | 9866 | |
| LSK | 0.07 | 242.0 | Sg | 12:03:24.154 | 0.1 | | | | | | | | | | m | 9852 | |
| LSK | 0.07 | 242.0 | AM1 | 12:03:26.630 | | | | | | | | 54.8 | 0.54 | a | Ml | 3.3 | 5516 |
| LSK | 0.07 | 242.0 | AM1 | 12:03:25.990 | | | | | | | | 74.4 | 0.64 | a | Ml | 3.4 | 5515 |
| NEST | 0.36 | 50.0 | Sg | 12:03:34.443 | -0.2 | | | | | | | | | | m | 9854 | |
| NEST | 0.36 | 50.0 | Pg | 12:03:27.778 | -1.1 | | | | | | | | | | m | 9853 | |
| NEST | 0.36 | 50.0 | AM1 | 12:03:41.370 | | | | | | | | 1.3 | 0.60 | a | Ml | 2.2 | 5517 |
| KBN | 0.45 | 10.0 | Sg | 12:03:36.601 | 0.0 | | | | | | | | | | m | 9856 | |
| KBN | 0.45 | 10.0 | Pg | 12:03:29.087 | -0.9 | | | | | | | | | | m | 9855 | |
| KBN | 0.45 | 10.0 | AM1 | 12:03:43.540 | | | | | | | | 0.9 | 0.46 | a | Ml | 2.1 | 5518 |
| SRN | 0.61 | 241.0 | Sg | 12:03:42.341 | -1.1 | | | | | | | | | | m | 9858 | |
| SRN | 0.61 | 241.0 | Pg | 12:03:32.234 | -1.6 | | | | | | | | | | m | 9857 | |
| SRN | 0.61 | 241.0 | AM1 | 12:03:47.360 | | | | | | | | 0.4 | 0.36 | a | Ml | 2.0 | 5519 |
| IGT | 0.71 | 203.0 | Sg | 12:03:46.661 | 0.5 | | | | | | | | | | m | 9860 | |
| IGT | 0.71 | 203.0 | Pg | 12:03:35.368 | -0.0 | | | | | | | | | | m | 9859 | |
| PHP | 1.51 | 354.0 | Sn | 12:04:12.702 | 0.7 | | | | | | | | | | m | 9862 | |
| PHP | 1.51 | 354.0 | Pn | 12:03:50.235 | 0.0 | | | | | | | | | | m | 9861 | |
| PHP | 1.51 | 354.0 | AM1 | 12:04:22.360 | | | | | | | | 0.2 | 0.98 | a | Ml | 2.6 | 5520 |
| SCTE | 1.70 | 268.0 | Sn | 12:04:17.899 | -0.6 | | | | | | | | | | m | 9864 | |
| SCTE | 1.70 | 268.0 | Pn | 12:03:54.002 | 0.1 | | | | | | | | | | m | 9863 | |
| SCTE | 1.70 | 268.0 | AM1 | 12:04:20.370 | | | | | | | | 0.2 | 0.38 | a | Ml | 2.6 | 5521 |

PUK 1.95 343.0 Pn 12:03:58.615 0.5 — m__ 9865
 DATA_TYPE COMMENT GSE2.1
 Event 598
 Official Magnitude:
 M1 2.56
 Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 234 | 79 | 1.7000 |
| Intermediate: | 126 | 3 | 1.2300 |
| Min: | 35 | 10 | 0.5600 |

 BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785742 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT
 Event 599 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 13:51:46.54 | 0.38 | 40.1797 | 20.7148 | | | | | 1.2 | 1.2 | 21 | 30 | 135 | 0.09 | 2.31 | m | |
| 643 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.5 | 0.0 | 11 | 643 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|------|
| LSK | 0.10 | 0.0 | Pg | 13:51:48.396 | 0.0 | | | | | | | | | | m__ | 9890 | |
| LSK | 0.09 | 252.0 | Sg | 13:51:50.607 | 0.3 | | | | | | | | | | m__ | 9867 | |
| LSK | 0.09 | 252.0 | AM1 | 13:51:50.730 | | | | | | | | 386.7 | 0.74 | a__ | M1 | 4.2 | 5523 |
| LSK | 0.09 | 252.0 | AM1 | 13:51:51.490 | | | | | | | | 440.6 | 0.62 | a__ | M1 | 4.3 | 5522 |
| NEST | 0.35 | 47.0 | Sg | 13:52:00.054 | 0.0 | | | | | | | | | | m__ | 9869 | |
| NEST | 0.35 | 47.0 | Pg | 13:51:53.687 | -0.6 | | | | | | | | | | m__ | 9868 | |
| NEST | 0.35 | 47.0 | AM1 | 13:52:03.580 | | | | | | | | 12.0 | 0.44 | a__ | M1 | 3.1 | 5525 |
| NEST | 0.35 | 47.0 | AM1 | 13:52:02.370 | | | | | | | | 10.5 | 0.36 | a__ | M1 | 3.1 | 5524 |
| KBN | 0.45 | 7.0 | Sg | 13:52:02.568 | 0.0 | | | | | | | | | | m__ | 9871 | |
| KBN | 0.45 | 7.0 | Pg | 13:51:55.055 | -0.6 | | | | | | | | | | m__ | 9870 | |
| KBN | 0.45 | 7.0 | AM1 | 13:52:07.700 | | | | | | | | 7.6 | 0.80 | a__ | M1 | 3.0 | 5526 |
| SRN | 0.63 | 242.0 | Sg | 13:52:09.034 | -1.0 | | | | | | | | | | m__ | 9873 | |
| SRN | 0.63 | 242.0 | Pg | 13:51:58.684 | -1.3 | | | | | | | | | | m__ | 9872 | |
| SRN | 0.63 | 242.0 | AM1 | 13:52:13.390 | | | | | | | | 2.8 | 0.72 | a__ | M1 | 2.9 | 5527 |
| IGT | 0.71 | 205.0 | Sg | 13:52:12.450 | 0.2 | | | | | | | | | | m__ | 9875 | |
| IGT | 0.71 | 205.0 | Pg | 13:52:01.228 | -0.0 | | | | | | | | | | m__ | 9874 | |
| IGT | 0.71 | 205.0 | AM1 | 13:52:16.770 | | | | | | | | 3.3 | 0.64 | a__ | M1 | 3.1 | 5528 |
| BPA2 | 1.00 | 304.0 | S | 13:52:21.478 | -0.4 | | | | | | | | | | m__ | 9876 | |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|-----|------|---|------|-----|------|
| TIR | 1.33 | 332.0 | Sn | 13:52:32.902 | -0.1 | | | | m | | 9878 | | |
| TIR | 1.33 | 332.0 | Pn | 13:52:14.240 | 1.1 | | | | m | | 9877 | | |
| TIR | 1.33 | 332.0 | AM1 | 13:52:37.240 | | | | 1.6 | 0.66 | a | Ml | 3.2 | 5529 |
| LKD2 | 1.39 | 182.0 | Sn | 13:52:35.017 | 0.2 | | | | m | | 9880 | | |
| LKD2 | 1.39 | 182.0 | Pn | 13:52:14.143 | 0.0 | | | | m | | 9879 | | |
| LKD2 | 1.39 | 182.0 | AM1 | 13:52:43.250 | | | | 2.4 | 0.52 | a | Ml | 3.5 | 5530 |
| PHP | 1.52 | 353.0 | Sn | 13:52:38.520 | 0.2 | | | | m | | 9882 | | |
| PHP | 1.52 | 353.0 | Pn | 13:52:16.611 | 0.5 | | | | m | | 9881 | | |
| PHP | 1.52 | 353.0 | AM1 | 13:52:47.310 | | | | 2.3 | 1.26 | a | Ml | 3.5 | 5531 |
| SCTE | 1.72 | 268.0 | Sn | 13:52:43.166 | -2.1 | | | | m | | 9884 | | |
| SCTE | 1.72 | 268.0 | Pn | 13:52:19.902 | -0.2 | | | | m | | 9883 | | |
| SCTE | 1.72 | 268.0 | AM1 | 13:52:44.690 | | | | 1.5 | 0.62 | a | Ml | 3.5 | 5532 |
| PUK | 1.96 | 342.0 | Sn | 13:52:52.757 | 0.4 | | | | m | | 9886 | | |
| PUK | 1.96 | 342.0 | Pn | 13:52:24.251 | 0.1 | | | | m | | 9885 | | |
| PUK | 1.96 | 342.0 | AM1 | 13:53:00.760 | | | | 1.1 | 0.82 | a | Ml | 3.5 | 5533 |
| ULC | 2.10 | 329.0 | Pn | 13:52:25.042 | -1.4 | | | | m | | 9887 | | |
| BCI | 2.24 | 348.0 | Pn | 13:52:28.821 | 0.4 | | | | m | | 9888 | | |
| BCI | 2.24 | 348.0 | AM1 | 13:53:07.110 | | | | 2.3 | 0.92 | a | Ml | 4.0 | 5534 |
| DRME | 2.31 | 331.0 | Pn | 13:52:27.706 | -1.9 | | | | m | | 9889 | | |

DATA_TYPE COMMENT GSE2.1
Event 599

Official Magnitude:
Ml 3.46

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 253 | 77 | 1.2400 |
| Intermediate: | 112 | 10 | 0.6900 |
| Min: | 21 | 8 | 0.4300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785741 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 600 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 14:12:46.70 | 0.21 | 40.1907 | 20.7068 | | | | | 0.9 | 0.6 | 20 | 30 | 133 | 0.09 | 2.30 | m | |
| 644 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.1 | 0.0 | 8 | 644 |
| Md | 2.7 | 0.0 | 2 | 644 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|-------|------|-----------|-------|------|
| LSK | 0.09 | 244.0 | Sg | 14:12:50.435 | 0.0 | | | | | | | | | m | | 9892 | |
| LSK | 0.09 | 244.0 | Pg | 14:12:48.886 | 0.1 | | | | | | | | | m | | 9891 | |
| LSK | 0.09 | 244.0 | AM1 | 14:12:53.980 | | | | | | | | 437.5 | 0.52 | a | Ml | 4.3 | 5537 |
| LSK | 0.09 | 244.0 | AMd | 14:13:26.850 | | | | | | | | 0.0 | 37.96 | a | Md | 2.4 | 5535 |
| NEST | 0.34 | 49.0 | Sg | 14:12:59.437 | -0.8 | | | | | | | | | m | | 9894 | |
| NEST | 0.34 | 49.0 | Pg | 14:12:54.202 | -0.2 | | | | | | | | | m | | 9893 | |
| NEST | 0.34 | 49.0 | AM1 | 14:13:06.150 | | | | | | | | 8.6 | 0.60 | a | Ml | 3.0 | 5538 |
| NEST | 0.34 | 49.0 | AMd | 14:13:56.862 | | | | | | | | 0.0 | 62.66 | a | Md | 3.0 | 5536 |
| KBN | 0.44 | 8.0 | Sg | 14:13:02.450 | -0.0 | | | | | | | | | m | | 9896 | |
| KBN | 0.44 | 8.0 | Pg | 14:12:55.440 | -0.3 | | | | | | | | | m | | 9895 | |
| KBN | 0.44 | 8.0 | AM1 | 14:13:21.220 | | | | | | | | 7.2 | 1.28 | a | Ml | 3.0 | 5540 |
| KBN | 0.44 | 8.0 | AM1 | 14:13:19.330 | | | | | | | | 8.6 | 1.46 | a | Ml | 3.1 | 5539 |
| SRN | 0.63 | 241.0 | Sg | 14:13:09.943 | -0.3 | | | | | | | | | m | | 9898 | |
| SRN | 0.63 | 241.0 | Pg | 14:12:59.307 | -0.8 | | | | | | | | | m | | 9897 | |
| SRN | 0.63 | 241.0 | AM1 | 14:13:15.300 | | | | | | | | 2.9 | 0.78 | a | Ml | 2.9 | 5541 |
| IGT | 0.72 | 204.0 | Sg | 14:13:12.778 | 0.0 | | | | | | | | | m | | 9900 | |
| IGT | 0.72 | 204.0 | Pg | 14:13:01.813 | 0.2 | | | | | | | | | m | | 9899 | |
| VLO | 0.97 | 288.0 | Pn | 14:13:06.833 | 1.2 | | | | | | | | | m | | 9901 | |
| TIR | 1.32 | 332.0 | Sn | 14:13:32.666 | -0.2 | | | | | | | | | m | | 9903 | |
| TIR | 1.32 | 332.0 | Pn | 14:13:13.136 | 0.1 | | | | | | | | | m | | 9902 | |
| TIR | 1.32 | 332.0 | AM1 | 14:13:38.870 | | | | | | | | 1.1 | 1.02 | a | Ml | 3.1 | 5542 |
| LKD2 | 1.40 | 182.0 | Sn | 14:13:35.479 | 0.1 | | | | | | | | | m | | 9905 | |
| LKD2 | 1.40 | 182.0 | Pn | 14:13:14.569 | 0.0 | | | | | | | | | m | | 9904 | |
| LKD2 | 1.40 | 182.0 | AM1 | 14:13:41.660 | | | | | | | | 2.4 | 0.78 | a | Ml | 3.5 | 5543 |
| PHP | 1.51 | 353.0 | Sn | 14:13:38.965 | 0.8 | | | | | | | | | m | | 9907 | |
| PHP | 1.51 | 353.0 | Pn | 14:13:16.374 | 0.3 | | | | | | | | | m | | 9906 | |
| PHP | 1.51 | 353.0 | AM1 | 14:13:47.830 | | | | | | | | 1.9 | 1.10 | a | Ml | 3.4 | 5544 |
| SCTE | 1.72 | 267.0 | Sn | 14:13:45.351 | 0.0 | | | | | | | | | m | | 9909 | |
| SCTE | 1.72 | 267.0 | Pn | 14:13:19.934 | -0.3 | | | | | | | | | m | | 9908 | |
| PUK | 1.95 | 342.0 | Sn | 14:13:52.790 | 0.6 | | | | | | | | | m | | 9911 | |
| PUK | 1.95 | 342.0 | Pn | 14:13:24.235 | 0.1 | | | | | | | | | m | | 9910 | |
| PUK | 1.95 | 342.0 | AM1 | 14:14:01.260 | | | | | | | | 1.0 | 0.88 | a | Ml | 3.4 | 5545 |
| BCI | 2.23 | 0.0 | Pn | 14:13:29.042 | 0.0 | | | | | | | | | m | | 9913 | |
| DRME | 2.30 | 331.0 | Pn | 14:13:28.208 | -1.4 | | | | | | | | | m | | 9912 | |

DATA_TYPE COMMENT GSE2.1

Event 600

Official Magnitude:

Ml 3.08

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 271 | 73 | 0.6600 |
| Intermediate: | 114 | 15 | 0.4900 |
| Min: | 22 | 6 | 0.2800 |

BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785741 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 601 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 14:15:34.56 | 0.28 | 40.1872 | 20.6113 | | | | | 4.1 | 0.6 | 14 | 10 | 161 | 0.04 | 1.93 | m | |
| 645 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.4 | 0.0 | 9 | 645 |
| Md | 2.1 | 0.0 | 1 | 645 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| LSK | 0.04 | 195.0 | Sg | 14:15:36.690 | 0.2 | | | | | | | | | m | | 9915 | |
| LSK | 0.04 | 195.0 | Pg | 14:15:35.300 | -0.3 | | | | | | | | | m | | 9914 | |
| LSK | 0.04 | 195.0 | AM1 | 14:15:37.598 | | | | | | | | 51.4 | 0.18 | a | Ml | 3.1 | 5547 |
| LSK | 0.04 | 195.0 | AMd | 14:16:01.196 | | | | | | | | 0.0 | 25.90 | a | Md | 2.1 | 5546 |
| NEST | 0.40 | 0.0 | Pg | 14:15:40.723 | 0.0 | | | | | | | | | m | | 9931 | |
| NEST | 0.40 | 55.0 | Sg | 14:15:47.260 | -2.2 | | | | | | | | | m | | 9916 | |
| NEST | 0.40 | 55.0 | AM1 | 14:15:51.278 | | | | | | | | 0.8 | 0.28 | a | Ml | 2.0 | 5549 |
| NEST | 0.40 | 55.0 | AM1 | 14:15:53.238 | | | | | | | | 0.8 | 0.46 | a | Ml | 2.0 | 5548 |
| KBN | 0.46 | 17.0 | Sg | 14:15:49.996 | -0.4 | | | | | | | | | m | | 9918 | |
| KBN | 0.46 | 17.0 | Pg | 14:15:42.132 | -1.5 | | | | | | | | | m | | 9917 | |
| KBN | 0.46 | 17.0 | AM1 | 14:16:00.538 | | | | | | | | 0.6 | 0.62 | a | Ml | 1.9 | 5550 |
| SRN | 0.56 | 238.0 | Sg | 14:15:55.198 | -0.2 | | | | | | | | | m | | 9920 | |
| SRN | 0.56 | 238.0 | Pg | 14:15:45.025 | -1.4 | | | | | | | | | m | | 9919 | |
| SRN | 0.56 | 238.0 | AM1 | 14:15:58.908 | | | | | | | | 0.3 | 0.56 | a | Ml | 1.9 | 5551 |
| IGT | 0.69 | 199.0 | Sg | 14:15:58.981 | -0.0 | | | | | | | | | m | | 9922 | |
| IGT | 0.69 | 199.0 | Pg | 14:15:48.221 | -0.3 | | | | | | | | | m | | 9921 | |
| IGT | 0.69 | 199.0 | AM1 | 14:16:03.708 | | | | | | | | 0.3 | 0.42 | a | Ml | 1.9 | 5552 |
| LKD2 | 1.40 | 178.0 | Sn | 14:16:22.634 | 0.2 | | | | | | | | | m | | 9924 | |
| LKD2 | 1.40 | 178.0 | Pn | 14:16:02.086 | 0.2 | | | | | | | | | m | | 9923 | |
| LKD2 | 1.40 | 178.0 | AM1 | 14:16:33.958 | | | | | | | | 0.3 | 1.12 | a | Ml | 2.5 | 5554 |
| LKD2 | 1.40 | 178.0 | AM1 | 14:16:31.448 | | | | | | | | 0.3 | 0.64 | a | Ml | 2.5 | 5553 |
| PHP | 1.50 | 356.0 | Sn | 14:16:25.204 | 0.0 | | | | | | | | | m | | 9926 | |
| PHP | 1.50 | 356.0 | Pn | 14:16:04.408 | 0.9 | | | | | | | | | m | | 9925 | |
| PHP | 1.50 | 356.0 | AM1 | 14:16:35.198 | | | | | | | | 0.2 | 0.66 | a | Ml | 2.5 | 5555 |
| SCTE | 1.65 | 267.0 | Sn | 14:16:30.001 | -0.2 | | | | | | | | | m | | 9928 | |
| SCTE | 1.65 | 267.0 | Pn | 14:16:06.725 | 0.4 | | | | | | | | | m | | 9927 | |
| SCTE | 1.65 | 267.0 | AM1 | 14:16:32.108 | | | | | | | | 0.2 | 0.50 | a | Ml | 2.6 | 5556 |
| PUK | 1.93 | 344.0 | Sn | 14:16:39.106 | 0.3 | | | | | | | | | m | | 9930 | |
| PUK | 1.93 | 344.0 | Pn | 14:16:11.276 | -0.0 | | | | | | | | | m | | 9929 | |
| PUK | 1.93 | 344.0 | AM1 | 14:16:47.628 | | | | | | | | 0.1 | 0.82 | a | Ml | 2.4 | 5557 |

DATA_TYPE COMMENT GSE2.1
 Event 601

Official Magnitude:

M1 2.44

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 106 | 29 | 0.9000 |
| Intermediate: | 251 | 55 | 0.6700 |
| Min: | 6 | 17 | 0.3600 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785741 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 602 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 14:38:41.80 | 0.49 | 40.2122 | 20.6530 | | | | | 2.8 | 2.2 | 13 | 30 | 123 | 0.07 | 1.68 | m | |
| 646 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.1 | 0.0 | 6 | 646 |
| Md | 2.4 | 0.0 | 2 | 646 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| LSK | 0.08 | 0.0 | Pg | 14:38:43.061 | 0.0 | | | | | | | | | | m | 9946 | |
| LSK | 0.07 | 214.0 | Sg | 14:38:45.002 | 0.2 | | | | | | | | | | m | 9932 | |
| LSK | 0.07 | 214.0 | AM1 | 14:38:47.750 | | | | | | | | 43.0 | 0.42 | a | M1 | 3.2 | 5560 |
| NEST | 0.36 | 56.0 | Sg | 14:38:55.283 | -0.3 | | | | | | | | | | m | 9934 | |
| NEST | 0.36 | 56.0 | Pg | 14:38:48.344 | -1.3 | | | | | | | | | | m | 9933 | |
| NEST | 0.36 | 56.0 | AM1 | 14:38:56.790 | | | | | | | | 1.1 | 0.20 | a | M1 | 2.1 | 5561 |
| NEST | 0.36 | 56.0 | AMd | 14:39:35.568 | | | | | | | | 0.0 | 47.22 | a | Md | 2.7 | 5558 |
| KBN | 0.42 | 13.0 | Sg | 14:38:56.852 | 0.1 | | | | | | | | | | m | 9936 | |
| KBN | 0.42 | 13.0 | Pg | 14:38:49.409 | -0.9 | | | | | | | | | | m | 9935 | |
| KBN | 0.42 | 13.0 | AM1 | 14:39:05.670 | | | | | | | | 0.4 | 0.50 | a | M1 | 1.7 | 5562 |
| KBN | 0.42 | 13.0 | AMd | 14:39:18.505 | | | | | | | | 0.0 | 29.10 | a | Md | 2.2 | 5559 |
| SRN | 0.60 | 237.0 | Sg | 14:39:03.547 | -0.6 | | | | | | | | | | m | 9938 | |
| SRN | 0.60 | 237.0 | Pg | 14:38:52.501 | -2.1 | | | | | | | | | | m | 9937 | |
| SRN | 0.60 | 237.0 | AM1 | 14:39:07.750 | | | | | | | | 0.1 | 0.42 | a | M1 | 1.5 | 5563 |
| IGT | 0.72 | 201.0 | Sg | 14:39:07.671 | 0.1 | | | | | | | | | | m | 9940 | |
| IGT | 0.72 | 201.0 | Pg | 14:38:56.272 | -0.3 | | | | | | | | | | m | 9939 | |
| LKD2 | 1.42 | 179.0 | Sn | 14:39:31.020 | 0.3 | | | | | | | | | | m | 9942 | |
| LKD2 | 1.42 | 179.0 | Pn | 14:39:11.019 | 1.3 | | | | | | | | | | m | 9941 | |
| LKD2 | 1.42 | 179.0 | AM1 | 14:39:34.620 | | | | | | | | 0.2 | 0.96 | a | M1 | 2.4 | 5564 |
| PHP | 1.48 | 354.0 | Sn | 14:39:32.357 | 0.3 | | | | | | | | | | m | 9944 | |
| PHP | 1.48 | 354.0 | Pn | 14:39:11.386 | 0.9 | | | | | | | | | | m | 9943 | |

| | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-----|------|----|----|-----|------|
| PHP | 1.48 | 354.0 | AM1 | 14:39:42.020 | | | 0.1 | 0.68 | a_ | M1 | 2.0 | 5565 |
| SCTE | 1.68 | 267.0 | Pn | 14:39:14.217 | -0.1 | | m_ | | | | | 9945 |

DATA_TYPE COMMENT GSE2.1
Event 602

Official Magnitude:
M1 2.06

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 257 | 80 | 2.2400 |
| Intermediate: | 116 | 7 | 1.3400 |
| Min: | 25 | 6 | 0.5800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785741 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 603 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 15:15:44.02 | 0.08 | 40.2370 | 20.6382 | | | | | 2.5 | 0.9 | 6 | 6 | 185 | 0.09 | 0.74 | m | |
| 647 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.6 | 0.0 | 3 | 647 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 15:15:51.404 | 0.0 | | | | | | | | | | m_ | 9954 | |
| NEST | 0.36 | 60.0 | Sg | 15:15:57.730 | 0.0 | | | | | | | | | | m_ | 9949 | |
| NEST | 0.36 | 60.0 | AM1 | 15:16:01.108 | | | | | | | | 0.3 | 0.26 | a_ | M1 | 1.6 | 5569 |
| NEST | 0.36 | 60.0 | AM1 | 15:15:59.738 | | | | | | | | 0.2 | 0.18 | a_ | M1 | 1.3 | 5568 |
| LSK | 0.09 | 200.0 | Sg | 15:15:47.709 | 0.1 | | | | | | | | | | m_ | 9948 | |
| LSK | 0.09 | 200.0 | Pg | 15:15:45.942 | -0.1 | | | | | | | | | | m_ | 9947 | |
| LSK | 0.09 | 200.0 | AM1 | 15:15:50.638 | | | | | | | | 5.4 | 0.52 | a_ | M1 | 2.4 | 5567 |
| LSK | 0.09 | 200.0 | AM1 | 15:15:48.008 | | | | | | | | 8.5 | 0.34 | a_ | M1 | 2.5 | 5566 |
| SRN | 0.61 | 235.0 | Sg | 15:16:06.517 | -0.0 | | | | | | | | | | m_ | 9951 | |
| SRN | 0.61 | 235.0 | Pg | 15:15:56.993 | 0.1 | | | | | | | | | | m_ | 9950 | |
| IGT | 0.74 | 199.0 | Sg | 15:16:10.505 | -0.0 | | | | | | | | | | m_ | 9953 | |
| IGT | 0.74 | 199.0 | Pg | 15:16:01.317 | 2.2 | | | | | | | | | | m_ | 9952 | |
| IGT | 0.74 | 199.0 | AM1 | 15:16:14.088 | | | | | | | | 0.1 | 0.40 | a_ | M1 | 1.3 | 5570 |

DATA_TYPE COMMENT GSE2.1
Event 603

Official Magnitude:
Ml 1.57

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 144 | 46 | 1.2000 |
| Intermediate: | 309 | 42 | 0.7800 |
| Min: | 46 | 8 | 0.3300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785741 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 604 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 16:13:26.75 | 0.11 | 40.1608 | 20.7078 | | | | | 7.9 | 1.3 | 7 | 9 | 160 | 0.08 | 0.69 | m | |
| 648 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.8 | 0.0 | 5 | 648 |
| Md | 2.1 | 0.0 | 3 | 648 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| LSK | 0.08 | 263.0 | Sg | 16:13:30.778 | 0.1 | | | | | | | | | | m | 9956 | |
| LSK | 0.08 | 263.0 | Pg | 16:13:28.822 | -0.2 | | | | | | | | | | m | 9955 | |
| LSK | 0.08 | 263.0 | AM1 | 16:13:32.400 | | | | | | | | 38.2 | 0.38 | a | Ml | 3.3 | 5574 |
| LSK | 0.08 | 263.0 | AMd | 16:13:54.875 | | | | | | | | 0.0 | 26.05 | a | Md | 2.1 | 5571 |
| NEST | 0.37 | 0.0 | Pg | 16:13:34.055 | 0.0 | | | | | | | | | | m | 9964 | |
| NEST | 0.36 | 45.0 | Sg | 16:13:40.008 | -0.0 | | | | | | | | | | m | 9957 | |
| NEST | 0.36 | 45.0 | AM1 | 16:13:46.090 | | | | | | | | 0.6 | 0.42 | a | Ml | 1.9 | 5576 |
| NEST | 0.36 | 45.0 | AM1 | 16:13:42.570 | | | | | | | | 0.5 | 0.36 | a | Ml | 1.8 | 5575 |
| KBN | 0.47 | 7.0 | Sg | 16:13:42.643 | 0.0 | | | | | | | | | | m | 9959 | |
| KBN | 0.47 | 7.0 | Pg | 16:13:36.406 | 0.6 | | | | | | | | | | m | 9958 | |
| KBN | 0.47 | 7.0 | AM1 | 16:13:47.990 | | | | | | | | 0.4 | 0.44 | a | Ml | 1.8 | 5578 |
| KBN | 0.47 | 7.0 | AM1 | 16:13:47.310 | | | | | | | | 0.3 | 0.32 | a | Ml | 1.6 | 5577 |
| KBN | 0.47 | 7.0 | AMd | 16:13:58.599 | | | | | | | | 0.0 | 22.19 | a | Md | 1.9 | 5572 |
| SRN | 0.61 | 243.0 | Sg | 16:13:48.829 | -0.1 | | | | | | | | | | m | 9961 | |
| SRN | 0.61 | 243.0 | Pg | 16:13:39.603 | 0.2 | | | | | | | | | | m | 9960 | |
| SRN | 0.61 | 243.0 | AM1 | 16:13:53.760 | | | | | | | | 0.2 | 0.40 | a | Ml | 1.7 | 5579 |
| SRN | 0.61 | 243.0 | AMd | 16:14:12.408 | | | | | | | | 0.0 | 32.81 | a | Md | 2.3 | 5573 |
| IGT | 0.69 | 205.0 | Sg | 16:13:51.026 | 0.0 | | | | | | | | | | m | 9963 | |
| IGT | 0.69 | 205.0 | Pg | 16:13:41.826 | 1.2 | | | | | | | | | | m | 9962 | |
| IGT | 0.69 | 205.0 | AM1 | 16:13:57.320 | | | | | | | | 0.2 | 0.66 | a | Ml | 1.8 | 5580 |

DATA_TYPE COMMENT GSE2.1

Event 604

Official Magnitude:
Ml 1.77

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 302 | 67 | 1.4300 |
| Intermediate: | 130 | 22 | 0.6700 |
| Min: | 39 | 3 | 0.2800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785741 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 606 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 16:27:03.48 | 0.34 | 40.2452 | 20.6492 | | | | | 1.8 | 1.8 | 12 | 30 | 119 | 0.10 | 2.23 | m | |
| 652 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.0 | 0.0 | 6 | 652 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|-------|
| LSK | 0.10 | 203.0 | Sg | 16:27:07.526 | 0.0 | | | | | | | | | | m | 10041 | |
| LSK | 0.10 | 203.0 | Pg | 16:27:05.496 | -0.3 | | | | | | | | | | m | 10040 | |
| LSK | 0.10 | 203.0 | AM1 | 16:27:09.588 | | | | | | | | | | | a | Ml | 3.5 |
| NEST | 0.35 | 60.0 | Sg | 16:27:16.330 | -0.6 | | | | | | | | | | m | | 10043 |
| NEST | 0.35 | 60.0 | Pg | 16:27:11.056 | -0.1 | | | | | | | | | | m | | 10042 |
| NEST | 0.35 | 60.0 | AM1 | 16:27:20.678 | | | | | | | | | | | a | Ml | 1.8 |
| NEST | 0.35 | 60.0 | AM1 | 16:27:20.548 | | | | | | | | | | | a | Ml | 2.0 |
| KBN | 0.39 | 0.0 | Pg | 16:27:11.565 | 0.0 | | | | | | | | | | m | | 10054 |
| KBN | 0.39 | 15.0 | Sg | 16:27:18.092 | 0.5 | | | | | | | | | | m | | 10044 |
| KBN | 0.39 | 15.0 | AM1 | 16:27:20.558 | | | | | | | | | | | a | Ml | 1.7 |
| SRN | 0.62 | 234.0 | Sg | 16:27:25.143 | -1.4 | | | | | | | | | | m | | 10046 |
| SRN | 0.62 | 234.0 | Pg | 16:27:16.729 | 0.1 | | | | | | | | | | m | | 10045 |
| SRN | 0.62 | 234.0 | AM1 | 16:27:31.228 | | | | | | | | | | | a | Ml | 1.7 |
| IGT | 0.75 | 200.0 | Sg | 16:27:28.549 | -1.9 | | | | | | | | | | m | | 10048 |
| IGT | 0.75 | 200.0 | Pg | 16:27:18.913 | 0.0 | | | | | | | | | | m | | 10047 |
| IGT | 0.75 | 200.0 | AM1 | 16:27:36.888 | | | | | | | | | | | a | Ml | 2.0 |
| LKD2 | 1.45 | 179.0 | Sn | 16:27:53.834 | 0.2 | | | | | | | | | | m | | 10050 |
| LKD2 | 1.45 | 179.0 | Pn | 16:27:32.370 | 0.2 | | | | | | | | | | m | | 10049 |
| LKD2 | 1.45 | 179.0 | AM1 | 16:28:01.288 | | | | | | | | | | | a | Ml | 2.4 |
| SCTE | 1.68 | 265.0 | Sn | 16:28:00.088 | -0.5 | | | | | | | | | | m | | 10052 |
| SCTE | 1.68 | 265.0 | Pn | 16:27:37.111 | 1.0 | | | | | | | | | | m | | 10051 |

DRME 2.23 331.0 Pn 16:27:45.277 0.1 — m_ 10053

DATA_TYPE COMMENT GSE2.1
Event 606

Official Magnitude:
M1 2.00

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 158 | 84 | 1.8300 |
| Intermediate: | 300 | 4 | 0.8700 |
| Min: | 30 | 4 | 0.4900 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785740 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 607 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 16:44:21.11 | 0.04 | 40.2803 | 20.5818 | | | | | 1.2 | 0.9 | 7 | 8 | 200 | 0.13 | 1.49 | m | |
| 653 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.3 | 0.0 | 3 | 653 |
| Md | 1.6 | 0.0 | 1 | 653 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LSK | 0.13 | 174.0 | Sg | 16:44:25.786 | -0.5 | | | | | | | | | | m_ | 10056 | |
| LSK | 0.13 | 174.0 | Pg | 16:44:24.036 | -0.1 | | | | | | | | | | m_ | 10055 | |
| LSK | 0.13 | 174.0 | AM1 | 16:44:27.160 | | | | | | | | 9.4 | 0.22 | a_ | M1 | 2.7 | 5622 |
| LSK | 0.13 | 174.0 | AMd | 16:44:40.877 | | | | | | | | 0.0 | 16.84 | a_ | Md | 1.6 | 5621 |
| NEST | 0.38 | 0.0 | Pg | 16:44:29.596 | 0.0 | | | | | | | | | | m_ | 10063 | |
| NEST | 0.38 | 69.0 | Sg | 16:44:35.768 | 0.0 | | | | | | | | | | m_ | 10057 | |
| NEST | 0.38 | 69.0 | AM1 | 16:44:37.570 | | | | | | | | 0.1 | 0.30 | a_ | M1 | 1.2 | 5623 |
| SRN | 0.60 | 229.0 | Sg | 16:44:43.658 | -0.0 | | | | | | | | | | m_ | 10059 | |
| SRN | 0.60 | 229.0 | Pg | 16:44:34.053 | 0.0 | | | | | | | | | | m_ | 10058 | |
| IGT | 0.77 | 195.0 | S | 16:44:48.892 | 0.0 | | | | | | | | | | m_ | 10061 | |
| IGT | 0.77 | 195.0 | Pg | 16:44:36.991 | 0.0 | | | | | | | | | | m_ | 10060 | |
| IGT | 0.77 | 195.0 | AM1 | 16:44:52.100 | | | | | | | | 0.1 | 0.28 | a_ | M1 | 1.3 | 5624 |
| LKD2 | 1.49 | 177.0 | Pn | 16:44:52.379 | 1.9 | | | | | | | | | | m_ | 10062 | |

DATA_TYPE COMMENT GSE2.1
Event 607

Official Magnitude:
M1 1.29

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 152 | 72 | 0.9700 |
| Intermediate: | 323 | 17 | 0.8200 |
| Min: | 54 | 3 | 0.2900 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785740 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 608 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 19:11:54.81 | 0.37 | 40.1690 | 20.6922 | | | | | 4.3 | 1.2 | 15 | 9 | 135 | 0.07 | 1.97 | m | |
| 655 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.6 | 0.0 | 8 | 655 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|-------|------|
| LSK | 0.07 | 0.0 | Pg | 19:11:56.096 | 0.0 | | | | | | | | | | m | 10097 | | |
| LSK | 0.07 | 256.0 | Sg | 19:11:57.926 | 0.0 | | | | | | | | | | m | 10081 | | |
| LSK | 0.07 | 256.0 | AM1 | 19:12:00.930 | | | | | | | | | | | a | M1 | 3.8 | 5633 |
| NEST | 0.37 | 47.0 | Pg | 19:12:01.526 | -1.1 | | | | | | | | | | m | | 10083 | |
| NEST | 0.37 | 47.0 | Sg | 19:12:08.000 | -0.4 | | | | | | | | | | m | | 10082 | |
| NEST | 0.37 | 47.0 | AM1 | 19:12:13.490 | | | | | | | | | | | a | M1 | 2.3 | 5634 |
| KBN | 0.46 | 9.0 | Pg | 19:12:02.803 | -1.1 | | | | | | | | | | m | | 10085 | |
| KBN | 0.46 | 9.0 | Sg | 19:12:10.326 | -0.4 | | | | | | | | | | m | | 10084 | |
| KBN | 0.46 | 9.0 | AM1 | 19:12:17.280 | | | | | | | | | | | a | M1 | 2.3 | 5635 |
| SRN | 0.60 | 242.0 | Pg | 19:12:06.066 | -1.4 | | | | | | | | | | m | | 10087 | |
| SRN | 0.60 | 242.0 | Sg | 19:12:16.405 | -0.6 | | | | | | | | | | m | | 10086 | |
| SRN | 0.60 | 242.0 | AM1 | 19:12:17.810 | | | | | | | | | | | a | M1 | 2.2 | 5636 |
| IGT | 0.70 | 204.0 | Pg | 19:12:09.194 | 0.3 | | | | | | | | | | m | | 10089 | |
| IGT | 0.70 | 204.0 | Sg | 19:12:19.307 | -0.1 | | | | | | | | | | m | | 10088 | |
| IGT | 0.70 | 204.0 | AM1 | 19:12:24.710 | | | | | | | | | | | a | M1 | 2.4 | 5637 |
| LKD2 | 1.38 | 182.0 | Pn | 19:12:22.188 | 0.4 | | | | | | | | | | m | | 10091 | |
| LKD2 | 1.38 | 182.0 | Sn | 19:12:42.182 | 0.1 | | | | | | | | | | m | | 10090 | |
| LKD2 | 1.38 | 182.0 | AM1 | 19:12:51.030 | | | | | | | | | | | a | M1 | 2.8 | 5638 |
| PHP | 1.53 | 353.0 | Pn | 19:12:25.001 | 0.8 | | | | | | | | | | m | | 10093 | |
| PHP | 1.53 | 353.0 | Sn | 19:12:46.429 | 0.3 | | | | | | | | | | m | | 10092 | |
| PHP | 1.53 | 353.0 | AM1 | 19:12:56.160 | | | | | | | | | | | a | M1 | 2.8 | 5639 |
| SCTE | 1.71 | 268.0 | Pn | 19:12:27.391 | -0.3 | | | | | | | | | | m | | 10094 | |
| PUK | 1.97 | 343.0 | Pn | 19:12:32.210 | 0.1 | | | | | | | | | | m | | 10096 | |

| | | | | | | | | | | | | | | | | |
|-----|------|-------|-----|--------------|-----|--|--|--|--|--|--|--|--|--|--|-------|
| PUK | 1.97 | 343.0 | Sn | 19:13:00.533 | 0.4 | | | | | | | | | | | 10095 |
| PUK | 1.97 | 343.0 | AM1 | 19:13:07.780 | | | | | | | | | | | | 5640 |

DATA_TYPE COMMENT GSE2.1
Event 608

Official Magnitude:
M1 2.57

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 274 | 63 | 1.3600 |
| Intermediate: | 117 | 25 | 0.7800 |
| Min: | 23 | 9 | 0.4300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785740 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 609 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 20:46:39.08 | 0.25 | 40.1998 | 20.6697 | | | | | 4.9 | 0.7 | 15 | 30 | 128 | 0.07 | 2.21 | m | |
| 656 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.7 | 0.0 | 6 | 656 |
| Md | 3.3 | 0.0 | 1 | 656 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|-------|------|-----------|-------|------|
| LSK | 0.07 | 228.0 | Sg | 20:46:42.358 | 0.1 | | | | | | | | | | m | 10099 | |
| LSK | 0.07 | 228.0 | Pg | 20:46:40.632 | -0.3 | | | | | | | | | | m | 10098 | |
| LSK | 0.07 | 228.0 | AM1 | 20:46:44.700 | | | | | | | | 270.7 | 0.56 | a | M1 | 4.0 | 5642 |
| LSK | 0.07 | 228.0 | AMd | 20:48:08.165 | | | | | | | | 0.0 | 87.53 | a | Md | 3.3 | 5641 |
| NEST | 0.36 | 53.0 | Sg | 20:46:52.208 | -0.2 | | | | | | | | | | m | 10101 | |
| NEST | 0.36 | 53.0 | Pg | 20:46:45.979 | -0.7 | | | | | | | | | | m | 10100 | |
| NEST | 0.36 | 53.0 | AM1 | 20:46:55.630 | | | | | | | | 3.4 | 0.30 | a | M1 | 2.6 | 5643 |
| KBN | 0.43 | 11.0 | Sg | 20:46:54.047 | 0.1 | | | | | | | | | | m | 10103 | |
| KBN | 0.43 | 11.0 | Pg | 20:46:47.201 | -0.4 | | | | | | | | | | m | 10102 | |
| KBN | 0.43 | 11.0 | AM1 | 20:47:06.320 | | | | | | | | 2.2 | 1.26 | a | M1 | 2.5 | 5644 |
| SRN | 0.61 | 239.0 | Sg | 20:47:00.776 | -0.4 | | | | | | | | | | m | 10105 | |
| SRN | 0.61 | 239.0 | Pg | 20:46:50.390 | -1.3 | | | | | | | | | | m | 10104 | |
| SRN | 0.61 | 239.0 | AM1 | 20:47:04.660 | | | | | | | | 0.7 | 0.52 | a | M1 | 2.3 | 5645 |
| IGT | 0.72 | 202.0 | Sg | 20:47:04.408 | 0.1 | | | | | | | | | | m | 10107 | |
| IGT | 0.72 | 202.0 | Pg | 20:46:53.762 | 0.3 | | | | | | | | | | m | 10106 | |
| LKD2 | 1.41 | 181.0 | Sn | 20:47:27.061 | -0.2 | | | | | | | | | | m | 10109 | |

DATA_TYPE COMMENT GSE2.1
Event 609

Official Magnitude:
M1 2.66

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 278 | 50 | 0.9200 |
| Intermediate: | 122 | 37 | 0.6700 |
| Min: | 23 | 12 | 0.3400 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785740 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 610 Region N/A

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.0 | 0.0 | 5 | 657 |
| Md | 2.2 | 0.0 | 1 | 657 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| LSK | 0.11 | 171.0 | Sg | 20:43:53.568 | -0.3 | | | | | | | | | m | | 10116 |
| LSK | 0.11 | 171.0 | Pg | 20:43:52.205 | 0.1 | | | | | | | | | m | | 10115 |
| LSK | 0.11 | 171.0 | AM1 | 20:43:54.180 | | | | | | | | 39.3 | 0.16 | a | M1 | 3.3 |
| LSK | 0.11 | 171.0 | AM1 | 20:43:55.830 | | | | | | | | 52.4 | 0.28 | a | M1 | 3.4 |
| LSK | 0.11 | 171.0 | AMd | 20:44:21.242 | | | | | | | | 0.0 | 29.04 | a | Md | 2.2 |
| NEST | 0.39 | 66.0 | Sg | 20:44:04.522 | -0.0 | | | | | | | | | m | | 10118 |
| NEST | 0.39 | 66.0 | Pg | 20:43:57.641 | -0.6 | | | | | | | | | m | | 10117 |
| NEST | 0.39 | 66.0 | AM1 | 20:44:08.090 | | | | | | | | 0.9 | 0.42 | a | M1 | 2.1 |
| KBN | 0.43 | 0.0 | Pg | 20:43:58.796 | 0.0 | | | | | | | | | m | | 10130 |
| KBN | 0.40 | 23.0 | Sg | 20:44:06.140 | 2.2 | | | | | | | | | m | | 10119 |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|-----|------|---|----|-----|-------|
| KBN | 0.40 | 23.0 | AM1 | 20:44:13.550 | | | | 0.6 | 0.62 | a | M1 | 1.9 | 5653 |
| KBN | 0.40 | 23.0 | AM1 | 20:44:13.290 | | | | 0.6 | 0.58 | a | M1 | 1.9 | 5652 |
| SRN | 0.58 | 230.0 | Sg | 20:44:11.019 | -0.5 | | | | m | | | | 10121 |
| SRN | 0.58 | 230.0 | Pg | 20:44:02.210 | 0.0 | | | | m | | | | 10120 |
| SRN | 0.58 | 230.0 | AM1 | 20:44:15.320 | | | | 0.3 | 0.46 | a | M1 | 1.9 | 5655 |
| SRN | 0.58 | 230.0 | AM1 | 20:44:16.040 | | | | 0.2 | 0.48 | a | M1 | 1.7 | 5654 |
| IGT | 0.75 | 195.0 | Sg | 20:44:16.544 | 0.1 | | | | m | | | | 10123 |
| IGT | 0.75 | 195.0 | Pg | 20:44:05.157 | 0.2 | | | | m | | | | 10122 |
| PHP | 1.43 | 356.0 | Pn | 20:44:21.327 | 3.7 | | | | m | | | | 10124 |
| LKD2 | 1.47 | 177.0 | Sg | 20:44:40.090 | -0.0 | | | | m | | | | 10126 |
| LKD2 | 1.47 | 177.0 | Pn | 20:44:18.892 | 0.4 | | | | m | | | | 10125 |
| LKD2 | 1.47 | 177.0 | AM1 | 20:44:48.310 | | | | 0.3 | 0.54 | a | M1 | 2.6 | 5656 |
| SCTE | 1.63 | 265.0 | Sn | 20:44:45.075 | -0.0 | | | | m | | | | 10128 |
| SCTE | 1.63 | 265.0 | Pn | 20:44:23.556 | 2.2 | | | | m | | | | 10127 |
| PUK | 1.86 | 345.0 | Pn | 20:44:28.350 | 3.0 | | | | m | | | | 10129 |

DATA_TYPE COMMENT GSE2.1

Event 610

Official Magnitude:

M1 1.99

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 136 | 70 | 1.6000 |
| Intermediate: | 323 | 19 | 0.7400 |
| Min: | 232 | 2 | 0.5400 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785740 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 611 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 20:51:24.17 | 0.44 | 40.2223 | 20.6188 | | | | | 4.1 | 1.7 | 9 | 30 | 161 | 0.07 | 1.65 | m | |
| 658 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.8 | 0.0 | 5 | 658 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LSK | 0.07 | 193.0 | Sg | 20:51:26.912 | -0.3 | | | | | | | | | m | | 10132 | |
| LSK | 0.07 | 193.0 | Pg | 20:51:22.755 | -3.2 | | | | | | | | | m | | 10131 | |
| LSK | 0.07 | 193.0 | AM1 | 20:51:30.980 | | | | | | | | 62.6 | 0.50 | a | M1 | 3.4 | 5657 |
| NEST | 0.38 | 59.0 | Pg | 20:51:27.775 | -4.5 | | | | | | | | | m | | 10133 | |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|----|----|-----|-------|
| NEST | 0.38 | 59.0 | AM1 | 20:51:39.440 | | | | | 0.8 | 0.24 | a_ | Ml | 2.0 | 5658 |
| KBN | 0.42 | 17.0 | Sg | 20:51:38.304 | -0.5 | | | | | m_ | | | | 10135 |
| KBN | 0.42 | 17.0 | Pg | 20:51:33.046 | 0.5 | | | | | m_ | | | | 10134 |
| KBN | 0.42 | 17.0 | AM1 | 20:51:43.510 | | | | | 0.4 | 0.32 | a_ | Ml | 1.8 | 5659 |
| SRN | 0.58 | 235.0 | Sg | 20:51:45.393 | -0.4 | | | | | m_ | | | | 10137 |
| SRN | 0.58 | 235.0 | Pg | 20:51:36.811 | 0.3 | | | | | m_ | | | | 10136 |
| SRN | 0.58 | 235.0 | AM1 | 20:51:47.940 | | | | | 0.2 | 0.50 | a_ | Ml | 1.6 | 5661 |
| SRN | 0.58 | 235.0 | AM1 | 20:51:48.440 | | | | | 0.2 | 0.64 | a_ | Ml | 1.6 | 5660 |
| IGT | 0.72 | 198.0 | Sg | 20:51:49.815 | 0.0 | | | | | m_ | | | | 10139 |
| IGT | 0.72 | 198.0 | Pg | 20:51:39.626 | 0.8 | | | | | m_ | | | | 10138 |
| IGT | 0.72 | 198.0 | AM1 | 20:51:56.170 | | | | | 0.2 | 0.30 | a_ | Ml | 1.9 | 5662 |
| LKD2 | 1.43 | 178.0 | Pn | 20:51:51.683 | -0.5 | | | | | m_ | | | | 10140 |
| PHP | 1.47 | 355.0 | Pn | 20:51:52.501 | 0.0 | | | | | m_ | | | | 10141 |
| SCTE | 1.65 | 0.0 | Pn | 20:51:57.322 | 0.0 | | | | | m_ | | | | 10142 |

DATA_TYPE COMMENT GSE2.1
Event 611

Official Magnitude:
Ml 1.84

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 115 | 37 | 2.7700 |
| Intermediate: | 278 | 51 | 1.8000 |
| Min: | 19 | 8 | 0.7200 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785740 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 612 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 22:19:12.70 | 0.11 | 40.2647 | 20.5875 | | | | | 3.9 | 0.8 | 7 | 30 | 196 | 0.12 | 1.47 | m | |
| 659 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.6 | 0.0 | 5 | 659 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LSK | 0.12 | 0.0 | Pg | 22:19:15.552 | 0.0 | | | | | | | | | m_ | | 10152 | |
| LSK | 0.12 | 175.0 | Sg | 22:19:17.156 | -0.1 | | | | | | | | | m_ | | 10143 | |
| LSK | 0.12 | 175.0 | AM1 | 22:19:17.450 | | | | | | | | 18.3 | 0.14 | a_ | Ml | 3.0 | 5663 |
| NEST | 0.38 | 66.0 | Sg | 22:19:26.782 | -0.2 | | | | | | | | | m_ | | 10145 | |
| NEST | 0.38 | 66.0 | Pg | 22:19:20.996 | 0.2 | | | | | | | | | m_ | | 10144 | |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|----|----|-----|-------|
| NEST | 0.38 | 66.0 | AM1 | 22:19:31.490 | | | | | 0.3 | 0.38 | a_ | Ml | 1.6 | 5664 |
| SRN | 0.59 | 230.0 | Sg | 22:19:34.424 | -0.1 | | | | | m_ | | | | 10147 |
| SRN | 0.59 | 230.0 | Pg | 22:19:25.253 | 0.1 | | | | | m_ | | | | 10146 |
| SRN | 0.59 | 230.0 | AM1 | 22:19:40.580 | | | | | 0.1 | 0.74 | a_ | Ml | 1.3 | 5665 |
| IGT | 0.76 | 196.0 | Sg | 22:19:39.525 | 0.0 | | | | | m_ | | | | 10149 |
| IGT | 0.76 | 196.0 | Pg | 22:19:28.551 | 0.5 | | | | | m_ | | | | 10148 |
| IGT | 0.76 | 196.0 | AM1 | 22:19:46.780 | | | | | 0.1 | 0.50 | a_ | Ml | 1.6 | 5666 |
| LKD2 | 1.47 | 177.0 | Sn | 22:20:03.109 | 0.0 | | | | | m_ | | | | 10151 |
| LKD2 | 1.47 | 177.0 | Pn | 22:19:42.168 | 0.7 | | | | | m_ | | | | 10150 |
| LKD2 | 1.47 | 177.0 | AM1 | 22:20:05.760 | | | | | 0.1 | 1.02 | a_ | Ml | 2.2 | 5667 |

DATA_TYPE COMMENT GSE2.1

Event 612

Official Magnitude:

Ml 1.60

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 137 | 60 | 0.8600 |
| Intermediate: | 311 | 29 | 0.5800 |
| Min: | 42 | 3 | 0.2900 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785739 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 613 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 02:05:53.23 | 0.37 | 40.1567 | 20.7548 | | | | | 0.0 | 1.2 | 24 | 30 | 111 | 0.12 | 2.27 | m | |
| 660 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.5 | 0.0 | 13 | 660 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|
| LSK | 0.13 | 0.0 | Pg | 02:05:55.575 | 0.0 | | | | | | | | | m_ | | 10180 |
| LSK | 0.12 | 267.0 | Sg | 02:05:57.759 | -0.4 | | | | | | | | | m_ | | 10153 |
| LSK | 0.12 | 267.0 | AM1 | 02:05:57.950 | | | | | | | | 960.7 | 0.16 | a_ | Ml | 5668 |
| NEST | 0.34 | 41.0 | Sg | 02:06:07.527 | 0.7 | | | | | | | | | m_ | | 10155 |
| NEST | 0.34 | 41.0 | Pg | 02:06:01.250 | 0.2 | | | | | | | | | m_ | | 10154 |
| NEST | 0.34 | 41.0 | AM1 | 02:06:11.160 | | | | | | | | 21.5 | 0.74 | a_ | Ml | 5669 |
| KBN | 0.47 | 3.0 | Sg | 02:06:10.433 | 0.2 | | | | | | | | | m_ | | 10157 |
| KBN | 0.47 | 3.0 | Pg | 02:06:02.471 | -0.5 | | | | | | | | | m_ | | 10156 |
| KBN | 0.47 | 3.0 | AM1 | 02:06:28.540 | | | | | | | | 14.8 | 1.12 | a_ | Ml | 5671 |

| | | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|------|------|------|---|----|-----|-------|------|
| KBN | 0.47 | 3.0 | AM1 | 02:06:27.700 | | | | 15.4 | 1.38 | a | — | M1 | 3.4 | 5670 | |
| SRN | 0.64 | 245.0 | Sg | 02:06:15.839 | -1.7 | | | | m | — | | | | 10159 | |
| SRN | 0.64 | 245.0 | Pg | 02:06:06.303 | -0.8 | | | | m | — | | | | 10158 | |
| SRN | 0.64 | 245.0 | AM1 | 02:06:21.670 | | | | | 6.6 | 0.64 | a | — | M1 | 3.3 | 5672 |
| IGT | 0.71 | 208.0 | Sg | 02:06:19.101 | 0.1 | | | | m | — | | | | 10161 | |
| IGT | 0.71 | 208.0 | Pg | 02:06:08.183 | 0.2 | | | | m | — | | | | 10160 | |
| IGT | 0.71 | 208.0 | AM1 | 02:06:26.600 | | | | | 4.7 | 0.48 | a | — | M1 | 3.2 | 5673 |
| VLO | 1.01 | 289.0 | Sn | 02:06:27.941 | -0.1 | | | | m | — | | | | 10165 | |
| VLO | 1.01 | 289.0 | Pn | 02:06:12.985 | -0.1 | | | | m | — | | | | 10164 | |
| VLO | 1.01 | 289.0 | AM1 | 02:06:35.080 | | | | | 15.7 | 0.70 | a | — | M1 | 4.0 | 5674 |
| BPA1 | 1.01 | 305.0 | Sn | 02:06:33.081 | 3.8 | | | | m | — | | | | 10163 | |
| BPA1 | 1.01 | 305.0 | Pn | 02:06:14.030 | 0.2 | | | | m | — | | | | 10162 | |
| TIR | 1.37 | 331.0 | Sn | 02:06:40.917 | -0.2 | | | | m | — | | | | 10169 | |
| TIR | 1.37 | 331.0 | Pn | 02:06:20.576 | -0.0 | | | | m | — | | | | 10168 | |
| TIR | 1.37 | 331.0 | AM1 | 02:06:46.000 | | | | | 2.3 | 0.90 | a | — | M1 | 3.4 | 5677 |
| TIR | 1.37 | 331.0 | AM1 | 02:06:50.730 | | | | | 2.4 | 0.60 | a | — | M1 | 3.4 | 5676 |
| LKD2 | 1.37 | 184.0 | Sn | 02:06:41.636 | 0.5 | | | | m | — | | | | 10167 | |
| LKD2 | 1.37 | 184.0 | Pn | 02:06:21.110 | 0.5 | | | | m | — | | | | 10166 | |
| LKD2 | 1.37 | 184.0 | AM1 | 02:06:52.200 | | | | | 6.8 | 0.78 | a | — | M1 | 3.9 | 5675 |
| PHP | 1.54 | 352.0 | Sn | 02:06:46.377 | 0.2 | | | | m | — | | | | 10171 | |
| PHP | 1.54 | 352.0 | Pn | 02:06:23.344 | -0.1 | | | | m | — | | | | 10170 | |
| PHP | 1.54 | 352.0 | AM1 | 02:06:54.890 | | | | | 4.6 | 1.36 | a | — | M1 | 3.9 | 5678 |
| THE | 1.75 | 73.0 | S | 02:06:52.323 | -0.8 | | | | m | — | | | | 10173 | |
| THE | 1.75 | 73.0 | Pn | 02:06:25.926 | -1.5 | | | | m | — | | | | 10172 | |
| THE | 1.75 | 73.0 | AM1 | 02:06:58.290 | | | | | 1.4 | 0.88 | a | — | M1 | 3.5 | 5679 |
| SCTE | 1.75 | 269.0 | Pn | 02:06:27.454 | -0.0 | | | | m | — | | | | 10174 | |
| SCTE | 1.75 | 269.0 | AM1 | 02:06:52.770 | | | | | 3.2 | 0.48 | a | — | M1 | 3.8 | 5680 |
| PUK | 1.99 | 342.0 | Sn | 02:07:00.296 | -0.0 | | | | m | — | | | | 10176 | |
| PUK | 1.99 | 342.0 | Pg | 02:06:30.975 | -0.6 | | | | m | — | | | | 10175 | |
| PUK | 1.99 | 342.0 | AM1 | 02:07:08.640 | | | | | 2.5 | 0.82 | a | — | M1 | 3.9 | 5681 |
| ULC | 2.13 | 329.0 | Pn | 02:06:32.599 | -1.3 | | | | m | — | | | | 10177 | |
| BCI | 2.27 | 348.0 | Sn | 02:07:07.659 | 0.1 | | | | m | — | | | | 10179 | |
| BCI | 2.27 | 348.0 | Pn | 02:06:35.810 | 0.1 | | | | m | — | | | | 10178 | |
| BCI | 2.27 | 348.0 | AM1 | 02:07:14.800 | | | | | 3.2 | 0.92 | a | — | M1 | 4.1 | 5682 |

DATA_TYPE COMMENT GSE2.1

Event 613

Official Magnitude:

M1 3.49

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 245 | 80 | 1.2000 |
| Intermediate: | 116 | 6 | 0.6000 |
| Min: | 25 | 8 | 0.4300 |

BEGIN GSE2.1

MSG_TYPE DATA
 MSG_ID 1556785739 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 614 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 02:09:19.88 | 0.27 | 40.1693 | 20.7235 | | | | | 0.0 | 1.0 | 21 | 30 | 109 | 0.10 | 2.32 | m | |
| 661 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.6 | 0.0 | 11 | 661 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| LSK | 0.09 | 0.0 | Pg | 02:09:22.284 | 0.0 | | | | | | | | | m | | 10205 |
| LSK | 0.10 | 259.0 | Sg | 02:09:23.872 | 0.1 | | | | | | | | | m | | 10181 |
| LSK | 0.10 | 259.0 | AM1 | 02:09:24.280 | | | | | | | | | | a | M1 | 5683 |
| NEST | 0.35 | 45.0 | Sg | 02:09:33.511 | -0.3 | | | | | | | | | m | | 10183 |
| NEST | 0.35 | 45.0 | Pg | 02:09:27.691 | -0.1 | | | | | | | | | m | | 10182 |
| NEST | 0.35 | 45.0 | AM1 | 02:09:37.900 | | | | | | | | | | a | M1 | 5684 |
| KBN | 0.46 | 6.0 | Sg | 02:09:36.447 | -0.1 | | | | | | | | | m | | 10185 |
| KBN | 0.46 | 6.0 | Pg | 02:09:28.941 | -0.5 | | | | | | | | | m | | 10184 |
| KBN | 0.46 | 6.0 | AM1 | 02:09:54.000 | | | | | | | | | | a | M1 | 5685 |
| SRN | 0.63 | 243.0 | Sg | 02:09:43.163 | -0.5 | | | | | | | | | m | | 10187 |
| SRN | 0.63 | 243.0 | Pg | 02:09:31.823 | -1.6 | | | | | | | | | m | | 10186 |
| SRN | 0.63 | 243.0 | AM1 | 02:09:46.390 | | | | | | | | | | a | M1 | 5686 |
| IGT | 0.71 | 206.0 | Sg | 02:09:45.871 | 0.2 | | | | | | | | | m | | 10189 |
| IGT | 0.71 | 206.0 | Pg | 02:09:34.695 | 0.1 | | | | | | | | | m | | 10188 |
| VLO | 0.99 | 289.0 | Pn | 02:09:39.404 | 0.2 | | | | | | | | | m | | 10190 |
| VLO | 0.99 | 289.0 | AM1 | 02:10:01.310 | | | | | | | | | | a | M1 | 5687 |
| TIR | 1.35 | 332.0 | Sn | 02:10:07.531 | 0.5 | | | | | | | | | m | | 10192 |
| TIR | 1.35 | 332.0 | Pn | 02:09:46.880 | 0.0 | | | | | | | | | m | | 10191 |
| TIR | 1.35 | 332.0 | AM1 | 02:10:12.260 | | | | | | | | | | a | M1 | 5688 |
| LKD2 | 1.38 | 183.0 | Sn | 02:10:08.374 | 0.2 | | | | | | | | | m | | 10194 |
| LKD2 | 1.38 | 183.0 | Pn | 02:09:47.470 | 0.0 | | | | | | | | | m | | 10193 |
| LKD2 | 1.38 | 183.0 | AM1 | 02:10:18.370 | | | | | | | | | | a | M1 | 5689 |
| PHP | 1.53 | 353.0 | Sn | 02:10:12.457 | 0.2 | | | | | | | | | m | | 10196 |
| PHP | 1.53 | 353.0 | Pn | 02:09:49.458 | -0.4 | | | | | | | | | m | | 10195 |
| PHP | 1.53 | 353.0 | AM1 | 02:10:21.200 | | | | | | | | | | a | M1 | 5690 |
| SCTE | 1.73 | 268.0 | Sn | 02:10:15.304 | -3.8 | | | | | | | | | m | | 10198 |
| SCTE | 1.73 | 268.0 | Pn | 02:09:52.698 | -1.0 | | | | | | | | | m | | 10197 |
| SCTE | 1.73 | 268.0 | AM1 | 02:10:19.050 | | | | | | | | | | a | M1 | 5691 |
| THE | 1.77 | 74.0 | Pn | 02:09:54.194 | -0.2 | | | | | | | | | m | | 10199 |
| PUK | 1.97 | 342.0 | Sn | 02:10:26.450 | 0.1 | | | | | | | | | m | | 10201 |
| PUK | 1.97 | 342.0 | Pn | 02:09:58.032 | 0.1 | | | | | | | | | m | | 10200 |
| PUK | 1.97 | 342.0 | AM1 | 02:10:33.970 | | | | | | | | | | a | M1 | 5692 |
| BCI | 2.25 | 348.0 | Sn | 02:10:33.609 | -0.2 | | | | | | | | | m | | 10203 |
| BCI | 2.25 | 348.0 | Pn | 02:10:02.504 | 0.4 | | | | | | | | | m | | 10202 |
| BCI | 2.25 | 348.0 | AM1 | 02:10:38.810 | | | | | | | | | | a | M1 | 5693 |

DRME 2.32 331.0 Pn 02:10:01.446 -1.9 — m__ 10204
 DATA_TYPE COMMENT GSE2.1
 Event 614
 Official Magnitude:
 M1 3.62
 Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 252 | 80 | 1.0000 |
| Intermediate: | 114 | 6 | 0.5600 |
| Min: | 23 | 7 | 0.3500 |

 BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785738 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT
 Event 615 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 02:23:31.84 | 0.24 | 40.1775 | 20.6918 | | | | | 0.0 | 0.8 | 16 | 30 | 134 | 0.08 | 2.24 | m | |
| 662 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.2 | 0.0 | 8 | 662 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| LSK | 0.08 | 249.0 | Sg | 02:23:34.925 | 0.1 | | | | | | | | | | m__ | 10207 |
| LSK | 0.08 | 249.0 | Pg | 02:23:33.460 | -0.1 | | | | | | | | | | m__ | 10206 |
| LSK | 0.08 | 249.0 | AM1 | 02:23:38.060 | | | | | | | | | | | a__ M1 | 5694 |
| NEST | 0.36 | 48.0 | Sg | 02:23:45.776 | -0.3 | | | | | | | | | | m__ | 10209 |
| NEST | 0.36 | 48.0 | Pg | 02:23:38.908 | -1.1 | | | | | | | | | | m__ | 10208 |
| NEST | 0.36 | 48.0 | AM1 | 02:23:48.670 | | | | | | | | | | | a__ M1 | 5695 |
| KBN | 0.45 | 9.0 | Sg | 02:23:48.248 | -0.1 | | | | | | | | | | m__ | 10211 |
| KBN | 0.45 | 9.0 | Pg | 02:23:40.232 | -1.0 | | | | | | | | | | m__ | 10210 |
| KBN | 0.45 | 9.0 | AM1 | 02:23:53.510 | | | | | | | | | | | a__ M1 | 5696 |
| SRN | 0.61 | 241.0 | Sg | 02:23:54.580 | -0.5 | | | | | | | | | | m__ | 10213 |
| SRN | 0.61 | 241.0 | Pg | 02:23:43.339 | -1.8 | | | | | | | | | | m__ | 10212 |
| SRN | 0.61 | 241.0 | AM1 | 02:23:58.570 | | | | | | | | | | | a__ M1 | 5697 |
| IGT | 0.70 | 204.0 | Sg | 02:23:57.540 | 0.0 | | | | | | | | | | m__ | 10215 |
| IGT | 0.70 | 204.0 | Pg | 02:23:46.625 | 0.1 | | | | | | | | | | m__ | 10214 |
| IGT | 0.70 | 204.0 | AM1 | 02:24:05.280 | | | | | | | | | | | a__ M1 | 5698 |
| VLO | 0.96 | 289.0 | Pn | 02:23:51.019 | 0.3 | | | | | | | | | | m__ | 10216 |
| TIR | 1.33 | 333.0 | Sn | 02:24:18.112 | -0.3 | | | | | | | | | | m__ | 10218 |
| TIR | 1.33 | 333.0 | Pn | 02:23:59.492 | 1.1 | | | | | | | | | | m__ | 10217 |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|----|----|-----|-------|
| TIR | 1.33 | 333.0 | AM1 | 02:24:27.620 | | | | | 0.2 | 0.58 | a_ | Ml | 2.2 | 5699 |
| LKD2 | 1.39 | 182.0 | Sn | 02:24:20.484 | 0.1 | | | | m_ | | | | | 10220 |
| LKD2 | 1.39 | 182.0 | Pn | 02:23:59.645 | 0.1 | | | | m_ | | | | | 10219 |
| PHP | 1.52 | 353.0 | Sn | 02:24:24.153 | 0.3 | | | | m_ | | | | | 10222 |
| PHP | 1.52 | 353.0 | Pn | 02:24:01.448 | -0.1 | | | | m_ | | | | | 10221 |
| PHP | 1.52 | 353.0 | AM1 | 02:24:33.480 | | | | | 0.2 | 0.94 | a_ | Ml | 2.4 | 5700 |
| SCTE | 1.71 | 268.0 | Pn | 02:24:04.859 | -0.4 | | | | m_ | | | | | 10223 |
| PUK | 1.96 | 343.0 | Pn | 02:24:09.337 | -0.2 | | | | m_ | | | | | 10224 |
| BCI | 2.24 | 0.0 | Pn | 02:24:13.688 | 0.0 | | | | m_ | | | | | 10226 |
| BCI | 2.24 | 349.0 | Sn | 02:24:45.702 | 0.3 | | | | m_ | | | | | 10225 |
| BCI | 2.24 | 349.0 | AM1 | 02:24:54.550 | | | | | 0.2 | 0.92 | a_ | Ml | 2.8 | 5701 |

DATA_TYPE COMMENT GSE2.1
Event 615

Official Magnitude:
Ml 2.22

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 268 | 64 | 0.8800 |
| Intermediate: | 119 | 22 | 0.5000 |
| Min: | 24 | 12 | 0.2800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785738 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 616 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 03:23:09.11 | 0.13 | 42.4128 | 19.3367 | | | | | 10.3 | 1.7 | 15 | 30 | 82 | 0.25 | 1.10 | m | |
| 663 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.8 | 0.0 | 3 | 663 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| DRME | 0.25 | 206.0 | Pg | 03:23:14.899 | 0.3 | | | | | | | | | | m_ | 10227 |
| CEME | 0.34 | 294.0 | Sg | 03:23:21.609 | 0.0 | | | | | | | | | | m_ | 10229 |
| CEME | 0.34 | 294.0 | Pg | 03:23:16.152 | -0.1 | | | | | | | | | | m_ | 10228 |
| BUM | 0.34 | 251.0 | Sg | 03:23:22.685 | 0.9 | | | | | | | | | | m_ | 10231 |
| BUM | 0.34 | 251.0 | Pg | 03:23:16.461 | 0.1 | | | | | | | | | | m_ | 10230 |
| ULC | 0.45 | 189.0 | Pg | 03:23:18.335 | -0.1 | | | | | | | | | | m_ | 10232 |
| KOME | 0.46 | 16.0 | Pg | 03:23:18.703 | 0.2 | | | | | | | | | | m_ | 10233 |
| PVY | 0.50 | 68.0 | Pg | 03:23:19.349 | -0.1 | | | | | | | | | | m_ | 10234 |

| | | | | | | | | | | | | | | |
|-----|------|-------|-----|--------------|------|--|--|--|-----|------|---|-------|-----|-------|
| BCI | 0.54 | 0.0 | Pg | 03:23:19.619 | 0.0 | | | | m | | | 10244 | | |
| BCI | 0.54 | 94.0 | Sg | 03:23:28.151 | -0.1 | | | | m | | | 10235 | | |
| BCI | 0.54 | 94.0 | AM1 | 03:23:30.340 | | | | | 0.5 | 0.24 | a | Ml | 2.0 | 5703 |
| BCI | 0.54 | 94.0 | AM1 | 03:23:30.650 | | | | | 0.5 | 0.18 | a | Ml | 2.0 | 5702 |
| PUK | 0.55 | 131.0 | Sg | 03:23:28.558 | -0.0 | | | | | | m | | | 10237 |
| PUK | 0.55 | 131.0 | Pg | 03:23:20.128 | -0.1 | | | | | | m | | | 10236 |
| PUK | 0.55 | 131.0 | AM1 | 03:23:31.260 | | | | | 0.3 | 0.16 | a | Ml | 1.7 | 5705 |
| PUK | 0.55 | 131.0 | AM1 | 03:23:31.260 | | | | | 0.3 | 0.18 | a | Ml | 1.8 | 5704 |
| BEY | 0.62 | 42.0 | Pg | 03:23:21.565 | 0.0 | | | | | | m | | | 10238 |
| HCY | 0.63 | 274.0 | Sg | 03:23:31.246 | -0.0 | | | | | | m | | | 10240 |
| HCY | 0.63 | 274.0 | Pg | 03:23:21.526 | -0.3 | | | | | | m | | | 10239 |
| PLE | 0.92 | 2.0 | Pg | 03:23:26.649 | -0.6 | | | | | | m | | | 10241 |
| PHP | 1.10 | 131.0 | Sn | 03:23:46.668 | 0.3 | | | | | | m | | | 10243 |
| PHP | 1.10 | 131.0 | Pn | 03:23:30.458 | 0.1 | | | | | | m | | | 10242 |
| PHP | 1.10 | 131.0 | AM1 | 03:23:54.230 | | | | | 0.1 | 0.28 | a | Ml | 1.6 | 5706 |

DATA_TYPE COMMENT GSE2.1

Event 616

Official Magnitude:

M1 1.81

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 327 | 84 | 1.6600 |
| Intermediate: | 196 | 3 | 0.4700 |
| Min: | 106 | 5 | 0.2600 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785738 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 617 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 03:51:03.15 | 0.49 | 40.1730 | 20.6160 | | | | | 5.2 | 0.9 | 14 | 30 | 162 | 0.03 | 2.23 | m | |
| 664 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.8 | 0.0 | 9 | 664 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|------|
| LSK | 0.03 | 210.0 | Sg | 03:51:05.368 | 0.3 | | | | | | | | | | m | 10246 | |
| LSK | 0.03 | 210.0 | Pg | 03:51:03.889 | -0.3 | | | | | | | | | | m | 10245 | |
| LSK | 0.03 | 210.0 | AM1 | 03:51:07.440 | | | | | | | | 117.7 | 0.50 | a | Ml | 3.5 | 5708 |
| LSK | 0.03 | 210.0 | AM1 | 03:51:08.550 | | | | | | | | 157.7 | 0.50 | a | Ml | 3.6 | 5707 |

| | | | | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|--|-----|------|---|---|----|-----|------|-------|
| NEST | 0.41 | 53.0 | Sg | 03:51:15.893 | -2.2 | | | | | m | | | | | | | 10248 |
| NEST | 0.41 | 53.0 | Pg | 03:51:09.398 | -2.3 | | | | | m | | | | | | | 10247 |
| NEST | 0.41 | 53.0 | AM1 | 03:51:19.100 | | | | | | 2.0 | 0.62 | a | — | Ml | 2.4 | 5709 | |
| KBN | 0.47 | 0.0 | Pg | 03:51:10.567 | 0.0 | | | | | m | | | | | | | 10262 |
| KBN | 0.47 | 16.0 | Sg | 03:51:18.463 | -0.8 | | | | | m | | | | | | | 10249 |
| KBN | 0.47 | 16.0 | AM1 | 03:51:27.590 | | | | | | 1.5 | 0.76 | a | — | Ml | 2.4 | 5710 | |
| SRN | 0.56 | 239.0 | Sg | 03:51:23.462 | -0.2 | | | | | m | | | | | | | 10251 |
| SRN | 0.56 | 239.0 | Pg | 03:51:13.775 | -1.1 | | | | | m | | | | | | | 10250 |
| SRN | 0.56 | 239.0 | AM1 | 03:51:30.470 | | | | | | 1.0 | 0.58 | a | — | Ml | 2.3 | 5711 | |
| IGT | 0.68 | 200.0 | Sg | 03:51:27.653 | 0.6 | | | | | m | | | | | | | 10253 |
| IGT | 0.68 | 200.0 | Pg | 03:51:16.999 | 0.2 | | | | | m | | | | | | | 10252 |
| IGT | 0.68 | 200.0 | AM1 | 03:51:35.750 | | | | | | 0.8 | 0.40 | a | — | Ml | 2.4 | 5712 | |
| LKD2 | 1.38 | 178.0 | Sn | 03:51:52.338 | 1.9 | | | | | m | | | | | | | 10255 |
| LKD2 | 1.38 | 178.0 | Pn | 03:51:29.743 | -0.4 | | | | | m | | | | | | | 10254 |
| LKD2 | 1.38 | 178.0 | AM1 | 03:52:00.160 | | | | | | 0.7 | 0.88 | a | — | Ml | 2.9 | 5713 | |
| PHP | 1.52 | 356.0 | Sn | 03:51:54.124 | 0.1 | | | | | m | | | | | | | 10257 |
| PHP | 1.52 | 356.0 | Pn | 03:51:32.994 | 0.8 | | | | | m | | | | | | | 10256 |
| PHP | 1.52 | 356.0 | AM1 | 03:52:03.900 | | | | | | 0.4 | 0.86 | a | — | Ml | 2.8 | 5714 | |
| SCTE | 1.65 | 268.0 | S | 03:51:58.376 | -0.3 | | | | | m | | | | | | | 10258 |
| SCTE | 1.65 | 268.0 | AM1 | 03:52:26.140 | | | | | | 0.5 | 1.20 | a | — | Ml | 3.0 | 5715 | |
| PUK | 1.95 | 344.0 | Sg | 03:52:08.326 | 0.7 | | | | | m | | | | | | | 10260 |
| PUK | 1.95 | 344.0 | Pn | 03:51:39.797 | -0.2 | | | | | m | | | | | | | 10259 |
| PUK | 1.95 | 344.0 | AM1 | 03:52:16.190 | | | | | | 0.2 | 0.64 | a | — | Ml | 2.8 | 5716 | |
| BCI | 2.23 | 350.0 | Pn | 03:51:44.387 | 0.1 | | | | | m | | | | | | | 10261 |

DATA_TYPE COMMENT GSE2.1
Event 617

Official Magnitude:
M1 2.78

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 110 | 18 | 1.7100 |
| Intermediate: | 237 | 59 | 1.0000 |
| Min: | 12 | 23 | 0.6300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785739 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 618 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 22:28:11.22 | 0.18 | 40.2485 | 20.6218 | | | | | 3.6 | 1.2 | 8 | 8 | 145 | 0.10 | 0.75 | m | |
| 665 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.1 | 0.0 | 4 | 665 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|
| LSK | 0.10 | 0.0 | Pg | 22:28:13.347 | | 0.0 | | | | | | | | m | | 10272 |
| LSK | 0.10 | 191.0 | Sg | 22:28:15.183 | | 0.0 | | | | | | | | m | | 10263 |
| LSK | 0.10 | 191.0 | AM1 | 22:28:15.400 | | | | | | | | 5.6 | 0.14 | a | M1 | 2.4 |
| LSK | 0.10 | 191.0 | AM1 | 22:28:16.940 | | | | | | | | 6.9 | 0.58 | a | M1 | 2.5 |
| NEST | 0.37 | 62.0 | Sg | 22:28:24.791 | -0.2 | | | | | | | | | m | | 10265 |
| NEST | 0.37 | 62.0 | Pg | 22:28:18.461 | -0.6 | | | | | | | | | m | | 10264 |
| NEST | 0.37 | 62.0 | AM1 | 22:28:28.260 | | | | | | | | 0.1 | 0.36 | a | M1 | 1.2 |
| KBN | 0.40 | 18.0 | Sg | 22:28:25.071 | -0.0 | | | | | | | | | m | | 10267 |
| KBN | 0.40 | 18.0 | Pg | 22:28:19.428 | 0.3 | | | | | | | | | m | | 10266 |
| KBN | 0.40 | 18.0 | AM1 | 22:28:32.330 | | | | | | | | 0.1 | 0.40 | a | M1 | 1.1 |
| KBN | 0.40 | 18.0 | AM1 | 22:28:27.820 | | | | | | | | 0.1 | 0.34 | a | M1 | 1.1 |
| SRN | 0.60 | 233.0 | Sg | 22:28:33.443 | -0.0 | | | | | | | | | m | | 10269 |
| SRN | 0.60 | 233.0 | Pg | 22:28:23.643 | -0.3 | | | | | | | | | m | | 10268 |
| SRN | 0.60 | 233.0 | AM1 | 22:28:34.380 | | | | | | | | 0.0 | 0.54 | a | M1 | 1.0 |
| SRN | 0.60 | 233.0 | AM1 | 22:28:37.720 | | | | | | | | 0.0 | 0.54 | a | M1 | 1.0 |
| IGT | 0.75 | 198.0 | Sg | 22:28:37.948 | 0.2 | | | | | | | | | m | | 10271 |
| IGT | 0.75 | 198.0 | Pg | 22:28:27.174 | 0.8 | | | | | | | | | m | | 10270 |

DATA_TYPE COMMENT GSE2.1
Event 618

Official Magnitude:
M1 1.10

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 136 | 64 | 1.2800 |
| Intermediate: | 298 | 24 | 0.8000 |
| Min: | 31 | 7 | 0.3200 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785739 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 619 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 22:31:27.61 | 0.36 | 40.2208 | 20.6390 | | | | | 5.8 | 1.1 | 8 | 10 | 142 | 0.08 | 1.43 | m | |
| 666 | | | | | | | | | | | | | | | | | |

Magnitude Err Nsta Author OrigID

M1 1.4 0.0 5 666

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 22:31:34.826 | 0.0 | | | | | | | | m | | | 10283 | |
| NEST | 0.37 | 58.0 | Sg | 22:31:40.702 | -0.4 | | | | | | | | m | | | 10275 | |
| NEST | 0.37 | 58.0 | AM1 | 22:31:43.910 | | | | | | | | 0.2 | 0.22 | a | M1 | 1.4 | 5726 |
| NEST | 0.37 | 58.0 | AM1 | 22:31:45.400 | | | | | | | | 0.2 | 0.38 | a | M1 | 1.4 | 5725 |
| LSK | 0.08 | 204.0 | Sg | 22:31:31.059 | 0.0 | | | | | | | | m | | | 10274 | |
| LSK | 0.08 | 204.0 | Pg | 22:31:29.449 | -0.1 | | | | | | | | m | | | 10273 | |
| LSK | 0.08 | 204.0 | AM1 | 22:31:31.360 | | | | | | | | 11.9 | 0.14 | a | M1 | 2.7 | 5724 |
| KBN | 0.42 | 15.0 | Sg | 22:31:44.097 | 2.2 | | | | | | | | m | | | 10277 | |
| KBN | 0.42 | 15.0 | Pg | 22:31:36.323 | 0.6 | | | | | | | | m | | | 10276 | |
| KBN | 0.42 | 15.0 | AM1 | 22:31:47.890 | | | | | | | | 0.1 | 0.26 | a | M1 | 1.1 | 5727 |
| SRN | 0.60 | 236.0 | Sg | 22:31:49.278 | -0.1 | | | | | | | | m | | | 10279 | |
| SRN | 0.60 | 236.0 | Pg | 22:31:39.391 | -0.6 | | | | | | | | m | | | 10278 | |
| SRN | 0.60 | 236.0 | AM1 | 22:31:53.560 | | | | | | | | 0.1 | 0.58 | a | M1 | 1.1 | 5728 |
| IGT | 0.73 | 200.0 | Sg | 22:31:53.277 | 0.2 | | | | | | | | m | | | 10281 | |
| IGT | 0.73 | 200.0 | Pg | 22:31:42.547 | 0.4 | | | | | | | | m | | | 10280 | |
| IGT | 0.73 | 200.0 | AM1 | 22:32:02.330 | | | | | | | | 0.1 | 0.50 | a | M1 | 1.4 | 5729 |
| LKD2 | 1.43 | 179.0 | Pn | 22:31:57.018 | 1.6 | | | | | | | | m | | | 10282 | |

DATA_TYPE COMMENT GSE2.1
Event 619

Official Magnitude:

M1 1.38

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 132 | 14 | 2.0000 |
| Intermediate: | 266 | 69 | 1.2200 |
| Min: | 38 | 14 | 0.6600 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785739 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 620 Region N/A

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.6 | 0.0 | 5 | 667 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| KBN | 0.00 | 0.0 | Pg | 22:57:06.393 | 0.0 | | | | | | | | | m | | 10295 | |
| KBN | 0.42 | 14.0 | Sg | 22:57:13.078 | 0.4 | | | | | | | | | m | | 10288 | |
| KBN | 0.42 | 14.0 | AM1 | 22:57:20.410 | | | | | | | | 0.2 | 0.54 | a | M1 | 1.4 | 5733 |
| LSK | 0.07 | 211.0 | Sg | 22:57:01.501 | 0.1 | | | | | | | | | m | | 10285 | |
| LSK | 0.07 | 211.0 | Pg | 22:56:59.898 | -0.1 | | | | | | | | | m | | 10284 | |
| LSK | 0.07 | 211.0 | Sg | 22:57:01.790 | | | | | | | | 20.6 | 0.14 | a | M1 | 2.9 | 5731 |
| LSK | 0.07 | 211.0 | AM1 | 22:57:01.820 | | | | | | | | 18.4 | 0.12 | a | M1 | 2.9 | 5730 |
| NEST | 0.37 | 56.0 | Sg | 22:57:11.528 | -0.1 | | | | | | | | | m | | 10287 | |
| NEST | 0.37 | 56.0 | Pg | 22:57:05.345 | -0.5 | | | | | | | | | m | | 10286 | |
| NEST | 0.37 | 56.0 | AM1 | 22:57:15.230 | | | | | | | | 0.4 | 0.30 | a | M1 | 1.6 | 5732 |
| SRN | 0.60 | 237.0 | Sg | 22:57:19.917 | -0.2 | | | | | | | | | m | | 10290 | |
| SRN | 0.60 | 237.0 | Pg | 22:57:10.056 | -0.6 | | | | | | | | | m | | 10289 | |
| SRN | 0.60 | 237.0 | AM1 | 22:57:23.400 | | | | | | | | 0.1 | 0.48 | a | M1 | 1.4 | 5734 |
| IGT | 0.72 | 200.0 | Sg | 22:57:23.681 | 0.0 | | | | | | | | | m | | 10292 | |
| IGT | 0.72 | 200.0 | Pg | 22:57:12.815 | 0.1 | | | | | | | | | m | | 10291 | |
| IGT | 0.72 | 200.0 | AM1 | 22:57:29.280 | | | | | | | | 0.1 | 0.34 | a | M1 | 1.6 | 5735 |
| LKD2 | 1.42 | 179.0 | Pn | 22:57:26.444 | 0.5 | | | | | | | | | m | | 10293 | |
| PUK | 1.91 | 343.0 | Pn | 22:57:35.983 | 1.5 | | | | | | | | | m | | 10294 | |

DATA_TYPE COMMENT GSE2.1

Event 620

Official Magnitude:

M1 1.59

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 128 | 11 | 1.3300 |
| Intermediate: | 256 | 71 | 1.0200 |
| Min: | 35 | 15 | 0.4400 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785739 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 621 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 00:10:50.80 | 0.24 | 40.1998 | 20.6790 | | | | | 3.6 | 0.9 | 8 | 10 | 151 | 0.08 | 0.72 | m | |
| 668 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.3 | 0.0 | 5 | 668 |

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

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|------|------|---|----|-------|------|
| NEST | 0.00 | 0.0 | Pg | 00:10:58.068 | 0.0 | | | | | m | | | 10305 | |
| NEST | 0.36 | 52.0 | Sg | 00:11:04.429 | 0.3 | | | | | m | | | 10298 | |
| NEST | 0.36 | 52.0 | AM1 | 00:11:07.210 | | | | | 0.2 | 0.24 | a | Ml | 1.2 | 5737 |
| LSK | 0.08 | 232.0 | Sg | 00:10:54.372 | 0.4 | | | | | m | | | 10297 | |
| LSK | 0.08 | 232.0 | Pg | 00:10:52.415 | -0.2 | | | | | m | | | 10296 | |
| LSK | 0.08 | 232.0 | AM1 | 00:10:57.030 | | | | | 14.4 | 0.48 | a | Ml | 2.7 | 5736 |
| KBN | 0.43 | 11.0 | Sg | 00:11:05.909 | 0.0 | | | | | m | | | 10300 | |
| KBN | 0.43 | 11.0 | Pg | 00:10:58.985 | -0.4 | | | | | m | | | 10299 | |
| KBN | 0.43 | 11.0 | AM1 | 00:11:09.440 | | | | | 0.1 | 0.34 | a | Ml | 1.1 | 5738 |
| SRN | 0.61 | 239.0 | Sg | 00:11:13.449 | 0.1 | | | | | m | | | 10302 | |
| SRN | 0.61 | 239.0 | Pg | 00:11:02.859 | -0.8 | | | | | m | | | 10301 | |
| SRN | 0.61 | 239.0 | AM1 | 00:11:18.970 | | | | | 0.1 | 0.56 | a | Ml | 1.3 | 5739 |
| IGT | 0.72 | 203.0 | Sg | 00:11:16.332 | 0.0 | | | | | m | | | 10304 | |
| IGT | 0.72 | 203.0 | Pg | 00:11:05.143 | -0.3 | | | | | m | | | 10303 | |
| IGT | 0.72 | 203.0 | AM1 | 00:11:23.100 | | | | | 0.1 | 0.44 | a | Ml | 1.3 | 5740 |

DATA_TYPE COMMENT GSE2.1

Event 621

Official Magnitude:

Ml 1.27

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 298 | 40 | 1.3800 |
| Intermediate: | 139 | 48 | 1.0700 |
| Min: | 37 | 11 | 0.4000 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785739 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 622 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 00:12:55.20 | 0.31 | 40.2170 | 20.6930 | | | | | 1.2 | 2.1 | 11 | 30 | 129 | 0.10 | 1.92 | m | |
| 669 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.8 | 0.0 | 6 | 669 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LSK | 0.10 | 228.0 | Sg | 00:12:58.856 | -0.3 | | | | | | | | | | m | 10307 | |
| LSK | 0.10 | 228.0 | Pg | 00:12:57.070 | -0.4 | | | | | | | | | | m | 10306 | |
| LSK | 0.10 | 228.0 | AM1 | 00:13:00.598 | | | | | | | | 27.8 | 0.54 | a | Ml | 3.1 | 5742 |
| LSK | 0.10 | 228.0 | AM1 | 00:13:01.708 | | | | | | | | 24.5 | 0.38 | a | Ml | 3.0 | 5741 |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|---|----|-----|-------|
| NEST | 0.34 | 53.0 | Sg | 00:13:08.205 | -0.2 | | | | | m | | | | 10309 |
| NEST | 0.34 | 53.0 | Pg | 00:13:02.339 | -0.4 | | | | | m | | | | 10308 |
| NEST | 0.34 | 53.0 | AM1 | 00:13:11.938 | | | | | 0.5 | 0.34 | a | Ml | 1.7 | 5743 |
| KBN | 0.41 | 0.0 | Pg | 00:13:03.260 | 0.0 | | | | | m | | | | 10319 |
| KBN | 0.41 | 10.0 | Sg | 00:13:09.841 | -0.2 | | | | | m | | | | 10310 |
| KBN | 0.41 | 10.0 | AM1 | 00:13:18.318 | | | | | 0.4 | 0.48 | a | Ml | 1.7 | 5744 |
| SRN | 0.63 | 238.0 | Sg | 00:13:17.155 | -1.6 | | | | | m | | | | 10312 |
| SRN | 0.63 | 238.0 | Pg | 00:13:07.323 | -1.4 | | | | | m | | | | 10311 |
| SRN | 0.63 | 238.0 | AM1 | 00:13:20.668 | | | | | 0.1 | 0.38 | a | Ml | 1.6 | 5745 |
| IGT | 0.74 | 203.0 | S | 00:13:21.899 | 0.1 | | | | | m | | | | 10314 |
| IGT | 0.74 | 203.0 | Pg | 00:13:10.471 | 0.1 | | | | | m | | | | 10313 |
| IGT | 0.74 | 203.0 | AM1 | 00:13:27.438 | | | | | 0.2 | 0.56 | a | Ml | 1.8 | 5746 |
| LKD2 | 1.43 | 182.0 | Sn | 00:13:44.752 | 0.1 | | | | | m | | | | 10316 |
| LKD2 | 1.43 | 182.0 | Pn | 00:13:23.835 | 0.4 | | | | | m | | | | 10315 |
| LKD2 | 1.43 | 182.0 | AM1 | 00:13:47.078 | | | | | 0.1 | 1.08 | a | Ml | 2.3 | 5747 |
| PHP | 1.48 | 353.0 | Pn | 00:13:24.520 | 0.4 | | | | | m | | | | 10317 |
| PUK | 1.92 | 342.0 | Pn | 00:13:32.551 | 0.5 | | | | | m | | | | 10318 |

DATA_TYPE COMMENT GSE2.1
Event 622

Official Magnitude:
M1 1.81

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 294 | 73 | 2.2100 |
| Intermediate: | 117 | 16 | 1.1200 |
| Min: | 27 | 1 | 0.4700 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785738 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 623 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 05:26:34.79 | 0.26 | 40.1812 | 20.7193 | | | | | 0.0 | 0.9 | 19 | 30 | 135 | 0.10 | 2.31 | m | |
| 670 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.5 | 0.0 | 9 | 670 |
| Md | 2.6 | 0.0 | 1 | 670 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| LSK | 0.10 | 252.0 | Sg | 05:26:38.692 | -0.0 | | | | | | | | | | m | 10321 |

| | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-------|-------|---|-------|
| LSK | 0.10 | 252.0 | Pg | 05:26:36.631 | -0.4 | | | m | | 10320 |
| LSK | 0.10 | 252.0 | AM1 | 05:26:41.830 | | | 424.6 | 0.46 | a | M1 |
| LSK | 0.10 | 252.0 | AMd | 05:27:19.693 | | | 0.0 | 43.06 | a | Md |
| NEST | 0.34 | 47.0 | Sg | 05:26:48.481 | 0.0 | | | | m | |
| NEST | 0.34 | 47.0 | Pg | 05:26:42.080 | -0.5 | | | | m | |
| NEST | 0.34 | 47.0 | AM1 | 05:26:51.900 | | | 19.9 | 0.32 | a | M1 |
| NEST | 0.34 | 47.0 | AM1 | 05:26:54.900 | | | 18.6 | 0.60 | a | M1 |
| KBN | 0.45 | 6.0 | Pg | 05:26:43.421 | 0.0 | | | | m | |
| KBN | 0.45 | 6.0 | Sg | 05:26:51.123 | 0.1 | | | | m | |
| KBN | 0.45 | 6.0 | AM1 | 05:27:09.020 | | | 12.8 | 1.26 | a | M1 |
| SRN | 0.63 | 242.0 | Sg | 05:26:58.144 | -0.5 | | | | m | |
| SRN | 0.63 | 242.0 | Pg | 05:26:46.853 | -1.6 | | | | m | |
| SRN | 0.63 | 242.0 | AM1 | 05:27:01.610 | | | 5.4 | 0.78 | a | M1 |
| IGT | 0.71 | 205.0 | Sg | 05:27:00.865 | -0.0 | | | | m | |
| IGT | 0.71 | 205.0 | Pg | 05:26:49.607 | -0.1 | | | | m | |
| VLO | 0.98 | 288.0 | S | 05:27:08.854 | 0.4 | | | | m | |
| VLO | 0.98 | 288.0 | Pn | 05:26:54.620 | 0.6 | | | | m | |
| TIR | 1.33 | 332.0 | Sn | 05:27:21.313 | -0.3 | | | | m | |
| TIR | 1.33 | 332.0 | Pn | 05:27:01.532 | 0.0 | | | | m | |
| TIR | 1.33 | 332.0 | AM1 | 05:27:25.550 | | | 2.5 | 0.58 | a | M1 |
| LKD2 | 1.39 | 182.0 | Sn | 05:27:23.871 | 0.4 | | | | m | |
| LKD2 | 1.39 | 182.0 | Pn | 05:27:02.530 | -0.1 | | | | m | |
| LKD2 | 1.39 | 182.0 | AM1 | 05:27:31.540 | | | 4.2 | 0.58 | a | M1 |
| PHP | 1.52 | 353.0 | Sg | 05:27:26.701 | -0.1 | | | | m | |
| PHP | 1.52 | 353.0 | Pg | 05:27:04.275 | -0.2 | | | | m | |
| PHP | 1.52 | 353.0 | AM1 | 05:27:32.620 | | | 2.7 | 1.28 | a | M1 |
| PUK | 1.96 | 342.0 | Sn | 05:27:41.212 | 0.3 | | | | m | |
| PUK | 1.96 | 342.0 | Pn | 05:27:12.285 | -0.3 | | | | m | |
| PUK | 1.96 | 342.0 | AM1 | 05:27:53.160 | | | 1.7 | 0.80 | a | M1 |
| BCI | 2.24 | 348.0 | Sn | 05:27:48.312 | -0.1 | | | | m | |
| BCI | 2.24 | 348.0 | AM1 | 05:27:55.440 | | | 3.3 | 0.80 | a | M1 |
| DRME | 2.31 | 331.0 | Pn | 05:27:16.132 | -1.9 | | | | m | |

DATA_TYPE COMMENT GSE2.1
Event 623

Official Magnitude:
M1 3.52

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 231 | 78 | 0.8700 |
| Intermediate: | 114 | 5 | 0.5500 |
| Min: | 23 | 11 | 0.3300 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785738 athena
```

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 624 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 05:33:18.48 | 0.04 | 40.2053 | 20.6615 | | | | | 11.0 | 0.6 | 5 | 30 | 176 | 0.07 | 0.72 | m | |
| 671 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.6 | 0.0 | 3 | 671 |
| Md | 2.1 | 0.0 | 1 | 671 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| LSK | 0.07 | 221.0 | Sg | 05:33:22.791 | 0.0 | | | | | | | | | | m | 10343 | |
| LSK | 0.07 | 221.0 | Pg | 05:33:20.851 | -0.1 | | | | | | | | | | m | 10342 | |
| LSK | 0.07 | 221.0 | AM1 | 05:33:24.350 | | | | | | | | 16.5 | 0.38 | a | Ml | 2.9 | 5761 |
| LSK | 0.07 | 221.0 | AM1 | 05:33:25.490 | | | | | | | | 21.0 | 0.46 | a | Ml | 3.1 | 5760 |
| LSK | 0.07 | 221.0 | AMd | 05:33:48.365 | | | | | | | | 0.0 | 27.51 | a | Md | 2.1 | 5759 |
| NEST | 0.36 | 0.0 | Pg | 05:33:26.059 | 0.0 | | | | | | | | | | m | 10349 | |
| NEST | 0.36 | 54.0 | Sg | 05:33:31.844 | 0.0 | | | | | | | | | | m | 10344 | |
| NEST | 0.36 | 54.0 | AM1 | 05:33:34.500 | | | | | | | | 0.3 | 0.46 | a | Ml | 1.6 | 5763 |
| NEST | 0.36 | 54.0 | AM1 | 05:33:38.030 | | | | | | | | 0.3 | 0.42 | a | Ml | 1.6 | 5762 |
| SRN | 0.60 | 238.0 | Sg | 05:33:40.448 | 0.0 | | | | | | | | | | m | 10346 | |
| SRN | 0.60 | 238.0 | Pg | 05:33:32.046 | 1.0 | | | | | | | | | | m | 10345 | |
| SRN | 0.60 | 238.0 | AM1 | 05:33:45.800 | | | | | | | | 0.1 | 0.32 | a | Ml | 1.3 | 5764 |
| IGT | 0.72 | 201.0 | Sg | 05:33:43.695 | 0.0 | | | | | | | | | | m | 10348 | |
| IGT | 0.72 | 201.0 | Pg | 05:33:33.961 | 1.1 | | | | | | | | | | m | 10347 | |

DATA_TYPE COMMENT GSE2.1

Event 624

Official Magnitude:

Ml 1.61

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 317 | 14 | 0.8500 |
| Intermediate: | 144 | 75 | 0.6200 |
| Min: | 47 | 2 | 0.2300 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785738 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 625 2.8 km from Gërmenj, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 05:56:41.83 | 0.06 | 40.2032 | 20.6913 | | | | | 0.0 | 0.7 | 6 | 4 | 151 | 0.09 | 0.73 | m | |
| 672 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.1 | 0.0 | 3 | 672 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|
| LSK | 0.09 | 234.0 | Sg | 05:56:45.350 | -0.0 | | | | | | | | | | m | 10351 |
| LSK | 0.09 | 234.0 | Pg | 05:56:43.538 | -0.3 | | | | | | | | | | m | 10350 |
| LSK | 0.09 | 234.0 | AM1 | 05:56:47.620 | | | | | | | | 115.6 | 0.46 | a | M1 | 3.7 |
| NEST | 0.35 | 0.0 | Pg | 05:56:48.916 | 0.0 | | | | | | | | | | m | 10357 |
| NEST | 0.35 | 52.0 | Sg | 05:56:55.568 | 0.0 | | | | | | | | | | m | 10352 |
| NEST | 0.35 | 52.0 | AM1 | 05:56:55.830 | | | | | | | | 1.2 | 0.40 | a | M1 | 2.1 |
| KBN | 0.43 | 9.0 | Sg | 05:56:57.550 | 0.1 | | | | | | | | | | m | 10354 |
| KBN | 0.43 | 9.0 | Pg | 05:56:50.517 | -0.2 | | | | | | | | | | m | 10353 |
| KBN | 0.43 | 9.0 | AM1 | 05:56:59.200 | | | | | | | | 0.7 | 0.28 | a | M1 | 2.0 |
| IGT | 0.73 | 203.0 | Sg | 05:57:08.328 | 0.0 | | | | | | | | | | m | 10356 |
| IGT | 0.73 | 203.0 | Pg | 05:56:56.926 | -0.0 | | | | | | | | | | m | 10355 |

DATA_TYPE COMMENT GSE2.1
Event 625

Official Magnitude:
M1 2.12

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 289 | 61 | 0.8300 |
| Intermediate: | 133 | 26 | 0.5200 |
| Min: | 38 | 10 | 0.1900 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785738 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 626 1.6 km from Gërmenj, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 07:03:28.16 | 0.62 | 40.2180 | 20.6895 | | | | | 0.1 | 18.5 | 5 | 4 | 188 | 0.10 | 0.74 | m | |
| 674 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.4 | 0.0 | 1 | 674 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 07:03:35.143 | 0.0 | | | | | | | | | m | | 10371 | |
| NEST | 0.34 | 54.0 | Sg | 07:03:40.845 | -0.8 | | | | | | | | | m | | 10367 | |
| NEST | 0.34 | 54.0 | AM1 | 07:03:43.610 | | | | | | | | 0.2 | 0.22 | a | Ml | 1.4 | 5769 |
| LSK | 0.10 | 226.0 | Sg | 07:03:31.331 | -0.8 | | | | | | | | | m | | 10366 | |
| LSK | 0.10 | 226.0 | Pg | 07:03:29.672 | -0.7 | | | | | | | | | m | | 10365 | |
| KBN | 0.41 | 10.0 | P | 07:03:40.497 | 3.7 | | | | | | | | | m | | 10368 | |
| IGT | 0.74 | 203.0 | Sg | 07:03:55.441 | 0.4 | | | | | | | | | m | | 10370 | |
| IGT | 0.74 | 203.0 | Pg | 07:03:43.253 | -0.3 | | | | | | | | | m | | 10369 | |

DATA_TYPE COMMENT GSE2.1

Event 626

Official Magnitude:

Ml 1.35

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|---------|
| Max: | 312 | 26 | 41.5100 |
| Intermediate: | 158 | 61 | 2.9100 |
| Min: | 47 | 11 | 1.1200 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785737 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 627 1.2 km from Arrëz, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 07:10:18.54 | 0.54 | 40.2370 | 20.6945 | | | | | 0.0 | 17.0 | 5 | 3 | 195 | 0.12 | 0.76 | m | |
| 675 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.6 | 0.0 | 2 | 675 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 07:10:25.653 | 0.0 | | | | | | | | | m | | 10377 | |
| NEST | 0.32 | 56.0 | Sg | 07:10:31.126 | -0.3 | | | | | | | | | m | | 10374 | |
| NEST | 0.32 | 56.0 | AM1 | 07:10:34.460 | | | | | | | | 0.1 | 0.32 | a | Ml | 1.1 | 5771 |
| LSK | 0.11 | 221.0 | Sg | 07:10:22.003 | -1.2 | | | | | | | | | m | | 10373 | |
| LSK | 0.11 | 221.0 | Pg | 07:10:20.071 | -1.1 | | | | | | | | | m | | 10372 | |
| LSK | 0.11 | 221.0 | AM1 | 07:10:22.170 | | | | | | | | 3.2 | 0.14 | a | Ml | 2.2 | 5770 |
| IGT | 0.76 | 202.0 | Sg | 07:10:45.877 | -0.2 | | | | | | | | | m | | 10376 | |
| IGT | 0.76 | 202.0 | Pg | 07:10:34.283 | 0.0 | | | | | | | | | m | | 10375 | |

DATA_TYPE COMMENT GSE2.1

Event 627

Official Magnitude:
Ml 1.62

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|---------|
| Max: | 312 | 22 | 44.9900 |
| Intermediate: | 145 | 67 | 2.8000 |
| Min: | 44 | 5 | 0.9300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785737 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 628 2.0 km from Vrëpckë, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 10:26:37.84 | 0.09 | 40.1888 | 20.6275 | | | | | 16.3 | 0.7 | 5 | 4 | 165 | 0.04 | 0.70 | m | |
| 676 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.7 | 0.0 | 3 | 676 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 10:26:46.427 | 0.0 | | | | | | | | | | m | 10384 | |
| NEST | 0.39 | 54.0 | Sg | 10:26:52.474 | -0.0 | | | | | | | | | | m | 10380 | |
| NEST | 0.39 | 54.0 | AM1 | 10:26:55.590 | | | | | | | | 0.3 | 0.38 | a | Ml | 1.7 | 5773 |
| LSK | 0.04 | 210.0 | Sg | 10:26:42.991 | -0.1 | | | | | | | | | | m | 10379 | |
| LSK | 0.04 | 210.0 | Pg | 10:26:41.219 | 0.4 | | | | | | | | | | m | 10378 | |
| LSK | 0.04 | 210.0 | AM1 | 10:26:43.360 | | | | | | | | 12.5 | 0.34 | a | Ml | 2.9 | 5772 |
| KBN | 0.45 | 15.0 | Sg | 10:26:53.497 | 0.0 | | | | | | | | | | m | 10382 | |
| KBN | 0.45 | 15.0 | Pg | 10:26:46.242 | -0.6 | | | | | | | | | | m | 10381 | |
| KBN | 0.45 | 15.0 | AM1 | 10:27:03.530 | | | | | | | | 0.2 | 0.54 | a | Ml | 1.6 | 5774 |
| IGT | 0.70 | 200.0 | Pg | 10:26:51.773 | -0.0 | | | | | | | | | | m | 10383 | |

DATA_TYPE COMMENT GSE2.1
Event 628

Official Magnitude:
Ml 1.66

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 298 | 8 | 0.9700 |
| Intermediate: | 172 | 75 | 0.6700 |

Min: 30 12 0.3200

BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785736 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 630 1.7 km from Amarantos, Epirus, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 21:08:36.90 | 0.26 | 40.1688 | 20.7098 | | | | | 5.4 | 0.7 | 14 | 12 | 159 | 0.09 | 2.25 | m | |
| 678 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.7 | 0.0 | 7 | 678 |
| Md | 2.9 | 0.0 | 5 | 678 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|-------|
| LSK | 0.09 | 258.0 | Sg | 21:08:40.438 | -0.2 | | | | | | | | | | m | 10398 | |
| LSK | 0.09 | 258.0 | Pg | 21:08:38.948 | -0.1 | | | | | | | | | | m | 10397 | |
| LSK | 0.09 | 258.0 | AM1 | 21:08:41.150 | | | | | | | | | | a | Ml | 4.1 | 5788 |
| LSK | 0.09 | 258.0 | AMd | 21:09:50.892 | | | | | | | | | | a | Md | 3.1 | 5783 |
| NEST | 0.36 | 46.0 | S | 21:08:49.870 | -0.2 | | | | | | | | | | m | | 10400 |
| NEST | 0.36 | 46.0 | Pg | 21:08:44.391 | -0.0 | | | | | | | | | | m | | 10399 |
| NEST | 0.36 | 46.0 | AM1 | 21:08:54.950 | | | | | | | | | | a | Ml | 2.6 | 5789 |
| NEST | 0.36 | 46.0 | AMd | 21:09:46.806 | | | | | | | | | | a | Md | 3.0 | 5784 |
| KBN | 0.46 | 7.0 | Sg | 21:08:52.404 | -0.2 | | | | | | | | | | m | | 10402 |
| KBN | 0.46 | 7.0 | Pg | 21:08:45.682 | -0.2 | | | | | | | | | | m | | 10401 |
| KBN | 0.46 | 7.0 | AM1 | 21:09:02.680 | | | | | | | | | | a | Ml | 2.6 | 5790 |
| KBN | 0.46 | 7.0 | AMd | 21:09:44.544 | | | | | | | | | | a | Md | 2.9 | 5785 |
| SRN | 0.62 | 243.0 | Sg | 21:08:59.257 | -0.1 | | | | | | | | | | m | | 10404 |
| SRN | 0.62 | 243.0 | Pg | 21:08:48.688 | -1.0 | | | | | | | | | | m | | 10403 |
| SRN | 0.62 | 243.0 | AM1 | 21:09:05.230 | | | | | | | | | | a | Ml | 2.5 | 5791 |
| SRN | 0.62 | 243.0 | AMd | 21:09:39.440 | | | | | | | | | | a | Md | 2.8 | 5786 |
| IGT | 0.70 | 205.0 | Sg | 21:09:01.260 | -0.3 | | | | | | | | | | m | | 10406 |
| IGT | 0.70 | 205.0 | Pg | 21:08:51.512 | 0.6 | | | | | | | | | | m | | 10405 |
| IGT | 0.70 | 205.0 | AMd | 21:09:42.232 | | | | | | | | | | a | Md | 2.2 | 5787 |
| TIR | 1.34 | 0.0 | Pn | 21:09:06.979 | 0.0 | | | | | | | | | | m | | 10414 |
| TIR | 1.34 | 332.0 | Sn | 21:09:23.068 | 0.3 | | | | | | | | | | m | | 10407 |
| TIR | 1.34 | 332.0 | AM1 | 21:09:29.030 | | | | | | | | | | a | Ml | 2.7 | 5792 |
| PHP | 1.53 | 353.0 | Sg | 21:09:29.237 | 1.1 | | | | | | | | | | m | | 10409 |
| PHP | 1.53 | 353.0 | Pg | 21:09:06.824 | 0.7 | | | | | | | | | | m | | 10408 |
| PHP | 1.53 | 353.0 | AM1 | 21:09:37.870 | | | | | | | | | | a | Ml | 3.1 | 5793 |
| PUK | 1.97 | 343.0 | Sn | 21:09:41.852 | -0.2 | | | | | | | | | | m | | 10411 |
| PUK | 1.97 | 343.0 | Pn | 21:09:14.588 | 0.5 | | | | | | | | | | m | | 10410 |
| PUK | 1.97 | 343.0 | AM1 | 21:09:50.690 | | | | | | | | | | a | Ml | 3.0 | 5794 |
| BCI | 2.25 | 348.0 | Sn | 21:09:49.132 | -0.2 | | | | | | | | | | m | | 10413 |

BCI 2.25 348.0 Pn 21:09:19.273 1.0

m_ 10412

DATA_TYPE COMMENT GSE2.1
Event 630

Official Magnitude:
M1 2.71

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 261 | 64 | 0.7600 |
| Intermediate: | 130 | 17 | 0.7000 |
| Min: | 34 | 18 | 0.3400 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785736 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 631 1.5 km from Vilan, Elbasan, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 23:22:16.96 | 0.27 | 41.0792 | 20.2937 | | | | | 0.0 | 1.4 | 18 | 13 | 128 | 0.42 | 1.71 | m | |
| 679 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.0 | 0.0 | 7 | 679 |
| Md | 2.5 | 0.0 | 3 | 679 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|-------|
| TIR | 0.42 | 0.0 | Pg | 23:22:25.492 | 0.0 | | | | | | | | | | m | 10433 | |
| TIR | 0.42 | 310.0 | Sg | 23:22:32.693 | -0.5 | | | | | | | | | | m | 10415 | |
| TIR | 0.42 | 310.0 | AM1 | 23:22:34.190 | | | | | | | | 0.5 | 0.18 | a | M1 | 1.8 | 5798 |
| KBN | 0.59 | 140.0 | Sg | 23:22:38.413 | 0.4 | | | | | | | | | | m | | 10417 |
| KBN | 0.59 | 140.0 | Pg | 23:22:28.897 | -0.1 | | | | | | | | | | m | | 10416 |
| KBN | 0.59 | 140.0 | AM1 | 23:22:42.730 | | | | | | | | 0.4 | 0.48 | a | M1 | 2.0 | 5799 |
| KBN | 0.59 | 140.0 | AMd | 23:23:02.124 | | | | | | | | 0.0 | 33.23 | a | Md | 2.3 | 5795 |
| PHP | 0.62 | 10.0 | S | 23:22:39.139 | -0.1 | | | | | | | | | | m | | 10419 |
| PHP | 0.62 | 10.0 | Pg | 23:22:29.677 | 0.0 | | | | | | | | | | m | | 10418 |
| PHP | 0.62 | 10.0 | AM1 | 23:22:40.750 | | | | | | | | 0.6 | 0.38 | a | M1 | 2.2 | 5800 |
| PHP | 0.62 | 10.0 | AMd | 23:23:09.047 | | | | | | | | 0.0 | 39.37 | a | Md | 2.5 | 5796 |
| VLO | 0.86 | 226.0 | Sg | 23:22:46.945 | 0.3 | | | | | | | | | | m | | 10421 |
| VLO | 0.86 | 226.0 | Pg | 23:22:33.740 | -0.2 | | | | | | | | | | m | | 10420 |
| NEST | 0.88 | 138.0 | Sg | 23:22:48.262 | -0.2 | | | | | | | | | | m | | 10423 |
| NEST | 0.88 | 138.0 | Pg | 23:22:34.573 | -0.4 | | | | | | | | | | m | | 10422 |
| NEST | 0.88 | 138.0 | AM1 | 23:22:51.790 | | | | | | | | 0.1 | 0.36 | a | M1 | 1.8 | 5801 |
| NEST | 0.88 | 138.0 | AMd | 23:23:13.206 | | | | | | | | 0.0 | 38.63 | a | Md | 2.5 | 5797 |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|-----|------|---|----|-------|------|
| LSK | 0.96 | 165.0 | Sg | 23:22:50.528 | -0.4 | | | | | m | | | 10425 | |
| LSK | 0.96 | 165.0 | Pg | 23:22:36.022 | -0.3 | | | | | m | | | 10424 | |
| LSK | 0.96 | 165.0 | AM1 | 23:22:55.820 | | | | | 0.2 | 0.44 | a | Ml | 2.2 | 5802 |
| PUK | 1.01 | 343.0 | Sg | 23:22:52.666 | 0.0 | | | | | m | | | 10427 | |
| PUK | 1.01 | 343.0 | Pg | 23:22:36.768 | -0.6 | | | | | m | | | 10426 | |
| PUK | 1.01 | 343.0 | AM1 | 23:22:56.780 | | | | | 0.3 | 0.16 | a | Ml | 2.3 | 5803 |
| SRN | 1.22 | 191.0 | Sn | 23:23:00.645 | 0.1 | | | | | m | | | 10429 | |
| SRN | 1.22 | 191.0 | Pn | 23:22:42.051 | 0.2 | | | | | m | | | 10428 | |
| SRN | 1.22 | 191.0 | AM1 | 23:23:03.200 | | | | | 0.1 | 0.58 | a | Ml | 1.9 | 5804 |
| BCI | 1.30 | 353.0 | Sg | 23:23:02.086 | -0.3 | | | | | m | | | 10431 | |
| BCI | 1.30 | 353.0 | Pg | 23:22:43.325 | 0.4 | | | | | m | | | 10430 | |
| SCTE | 1.71 | 235.0 | Pn | 23:22:50.105 | -0.4 | | | | | m | | | 10432 | |

DATA_TYPE COMMENT GSE2.1

Event 631

Official Magnitude:

M1 1.95

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 210 | 88 | 1.4100 |
| Intermediate: | 81 | 0 | 0.6200 |
| Min: | 351 | 2 | 0.3300 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785736 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 634 0.6 km from Gozhdarazhdë, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/16 | 20:21:15.73 | 0.09 | 40.2552 | 20.6230 | | | | | 2.2 | 0.9 | 12 | 8 | 115 | 0.11 | 1.66 | m | |
| 682 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.4 | 0.0 | 6 | 682 |
| Md | 2.3 | 0.0 | 4 | 682 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| LSK | 0.11 | 191.0 | Sg | 20:21:19.613 | -0.3 | | | | | | | | | m | | 10453 | |
| LSK | 0.11 | 191.0 | Pg | 20:21:18.138 | 0.0 | | | | | | | | | mdi | | 10452 | |
| LSK | 0.11 | 191.0 | AM1 | 20:21:22.770 | | | | | | | | 98.9 | 0.44 | a | Ml | 3.7 | 5817 |
| LSK | 0.11 | 191.0 | AMd | 20:21:51.033 | | | | | | | | 0.0 | 32.89 | a | Md | 2.3 | 5813 |
| NEST | 0.36 | 63.0 | Sg | 20:21:29.463 | -0.1 | | | | | | | | | m | | 10455 | |
| NEST | 0.36 | 63.0 | Pg | 20:21:23.286 | -0.3 | | | | | | | | | mci | | 10454 | |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-----|-------|-------|----|-----|-------|------|
| NEST | 0.36 | 63.0 | AM1 | 20:21:35.740 | | | 1.2 | 0.44 | a_ | Ml | 2.1 | 5818 | |
| NEST | 0.36 | 63.0 | AMd | 20:22:19.891 | | | 0.0 | 56.61 | a_ | Md | 2.9 | 5814 | |
| KBN | 0.39 | 18.0 | Sg | 20:21:29.597 | 0.0 | | | | m_ | | | 10457 | |
| KBN | 0.39 | 18.0 | Pg | 20:21:23.734 | 0.1 | | | | mce | | | 10456 | |
| KBN | 0.39 | 18.0 | AM1 | 20:21:39.110 | | | | 0.8 | 0.46 | a_ | Ml | 2.0 | 5819 |
| KBN | 0.39 | 18.0 | AMd | 20:21:50.232 | | | | 0.0 | 26.50 | a_ | Md | 2.1 | 5815 |
| SRN | 0.61 | 233.0 | Sn | 20:21:38.253 | -0.1 | | | | m_ | | | 10459 | |
| SRN | 0.61 | 233.0 | Pn | 20:21:28.482 | -0.2 | | | | mce | | | 10458 | |
| SRN | 0.61 | 233.0 | AMd | 20:22:01.247 | | | | 0.0 | 32.76 | a_ | Md | 2.3 | 5816 |
| IGT | 0.76 | 198.0 | Sg | 20:21:42.777 | 0.1 | | | | m_ | | | 10461 | |
| IGT | 0.76 | 198.0 | Pg | 20:21:31.215 | 0.1 | | | | mci | | | 10460 | |
| IGT | 0.76 | 198.0 | AM1 | 20:21:46.550 | | | | 0.5 | 0.62 | a_ | Ml | 2.3 | 5820 |
| LKD2 | 1.46 | 178.0 | Sn | 20:22:06.331 | 0.2 | | | | m_ | | | 10463 | |
| LKD2 | 1.46 | 178.0 | Pn | 20:21:44.479 | -0.0 | | | | mdi | | | 10462 | |
| LKD2 | 1.46 | 178.0 | AM1 | 20:22:10.860 | | | | 0.3 | 0.90 | a_ | Ml | 2.6 | 5821 |
| SCTE | 1.66 | 0.0 | Pn | 20:21:49.545 | 0.0 | | | | mce | | | 10465 | |
| SCTE | 1.66 | 265.0 | Sn | 20:22:12.254 | 0.1 | | | | m | | | 10464 | |
| SCTE | 1.66 | 265.0 | AM1 | 20:22:18.100 | | | | 0.3 | 0.50 | a_ | Ml | 2.7 | 5822 |

DATA_TYPE COMMENT GSE2.1
Event 634

Official Magnitude:
M1 2.44

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 132 | 77 | 0.8800 |
| Intermediate: | 306 | 12 | 0.4000 |
| Min: | 36 | 1 | 0.2100 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785737 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 636 1.0 km from Podë, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 09:06:41.79 | 0.09 | 40.2410 | 20.6020 | | | | | 1.2 | 1.1 | 8 | 6 | 120 | 0.09 | 1.64 | m | |
| 684 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.5 | 0.0 | 3 | 684 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| LSK | 0.09 | 182.0 | Sg | 09:06:45.445 | -0.0 | | | | | | | | | | m | 10481 |

| | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|------|------|---|-------|-------|------|
| LSK | 0.09 | 182.0 | Pg | 09:06:43.875 | -0.0 | | | | m | | 10480 | | |
| LSK | 0.09 | 182.0 | AMl | 09:06:45.758 | | | | 21.4 | 0.14 | a | Ml | 2.9 | 5827 |
| LSK | 0.09 | 182.0 | AMl | 09:06:46.008 | | | | 18.9 | 0.30 | a | Ml | 2.9 | 5826 |
| NEST | 0.38 | 0.0 | Pg | 09:06:49.374 | 0.0 | | | | m | | | 10490 | |
| NEST | 0.38 | 62.0 | Sg | 09:06:56.422 | -0.1 | | | | m | | | 10482 | |
| NEST | 0.38 | 62.0 | AMl | 09:06:59.218 | | | | 0.3 | 0.46 | a | Ml | 1.5 | 5829 |
| NEST | 0.38 | 62.0 | AMl | 09:06:59.128 | | | | 0.2 | 0.18 | a | Ml | 1.4 | 5828 |
| KBN | 0.41 | 20.0 | Sg | 09:06:56.613 | 0.1 | | | | m | | | 10483 | |
| SRN | 0.59 | 233.0 | Sg | 09:07:03.999 | 0.1 | | | | m | | | 10485 | |
| SRN | 0.59 | 233.0 | Pg | 09:06:54.355 | -0.1 | | | | m | | | 10484 | |
| SRN | 0.59 | 233.0 | AMl | 09:07:07.358 | | | | 0.1 | 0.62 | a | Ml | 1.5 | 5830 |
| IGT | 0.74 | 197.0 | Sg | 09:07:08.825 | 0.4 | | | | m | | | 10487 | |
| IGT | 0.74 | 197.0 | Pg | 09:06:57.149 | 0.1 | | | | m | | | 10486 | |
| SCTE | 1.64 | 265.0 | S | 09:07:37.869 | -0.1 | | | | m | | | 10489 | |
| SCTE | 1.64 | 265.0 | Pn | 09:07:13.351 | -0.5 | | | | m | | | 10488 | |

DATA_TYPE COMMENT GSE2.1
Event 636

Official Magnitude:
M1 1.53

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 145 | 53 | 1.3400 |
| Intermediate: | 286 | 30 | 0.3900 |
| Min: | 28 | 19 | 0.2600 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785737 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 638 Region N/A

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.6 | 0.0 | 5 | 686 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 12:06:16.380 | 0.0 | | | | | | | | | m | | 10508 | |
| NEST | 0.38 | 65.0 | Sg | 12:06:22.748 | -0.0 | | | | | | | | | m | | 10501 | |
| NEST | 0.38 | 65.0 | AM1 | 12:06:25.528 | | | | | | | | 0.3 | 0.24 | a | M1 | 1.5 | 5838 |
| NEST | 0.38 | 65.0 | AM1 | 12:06:24.518 | | | | | | | | 0.3 | 0.24 | a | M1 | 1.5 | 5837 |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|-----|------|------|----|-------|-------|------|
| LSK | 0.11 | 181.0 | Sg | 12:06:12.679 | -0.1 | | | | | m | | 10500 | | |
| LSK | 0.11 | 181.0 | Pg | 12:06:10.964 | 0.1 | | | | | m | | 10499 | | |
| LSK | 0.11 | 181.0 | AM1 | 12:06:12.918 | | | | | 13.7 | 0.16 | a | Ml | 2.8 | 5836 |
| LSK | 0.11 | 181.0 | AM1 | 12:06:13.228 | | | | | 17.1 | 0.18 | a | Ml | 2.9 | 5835 |
| SRN | 0.60 | 231.0 | Sg | 12:06:30.884 | 0.1 | | | | | m | | | 10503 | |
| SRN | 0.60 | 231.0 | Pg | 12:06:20.995 | -0.2 | | | | | m | | | 10502 | |
| SRN | 0.60 | 231.0 | AM1 | 12:06:34.088 | | | | 0.1 | 0.24 | a | Ml | 1.4 | 5839 | |
| IGT | 0.76 | 196.0 | Sg | 12:06:34.814 | -0.7 | | | | | m | | | 10505 | |
| IGT | 0.76 | 196.0 | Pg | 12:06:24.000 | 0.1 | | | | | m | | | 10504 | |
| IGT | 0.76 | 196.0 | AM1 | 12:06:41.558 | | | | 0.1 | 0.56 | a | Ml | 1.6 | 5840 | |
| LKD2 | 1.47 | 178.0 | Sn | 12:06:59.698 | 0.6 | | | | | m | | | 10507 | |
| LKD2 | 1.47 | 178.0 | Pn | 12:06:37.420 | 0.1 | | | | | m | | | 10506 | |
| LKD2 | 1.47 | 178.0 | AM1 | 12:07:07.048 | | | | 0.2 | 0.86 | a | Ml | 2.4 | 5841 | |

DATA_TYPE COMMENT GSE2.1
Event 638

Official Magnitude:
M1 1.58

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 163 | 77 | 1.5400 |
| Intermediate: | 319 | 11 | 0.8100 |
| Min: | 50 | 5 | 0.3900 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785737 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 639 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 14:49:12.41 | 0.22 | 40.2745 | 20.6173 | | | | | 2.9 | 1.1 | 8 | 27 | 195 | 0.13 | 1.48 | m | |
| 687 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.6 | 0.0 | 4 | 687 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | Pg | 14:49:20.536 | 0.0 | | | | | | | | m | | | 10518 | |
| NEST | 0.36 | 66.0 | Sg | 14:49:26.062 | 0.1 | | | | | | | | m | | | 10511 | |
| NEST | 0.36 | 66.0 | AM1 | 14:49:30.350 | | | | | | | | 0.3 | 0.34 | a | Ml | 1.5 | 5844 |
| LSK | 0.13 | 187.0 | Sg | 14:49:17.247 | -0.0 | | | | | | | | m | | | 10510 | |
| LSK | 0.13 | 187.0 | Pg | 14:49:15.429 | 0.2 | | | | | | | | m | | | 10509 | |
| LSK | 0.13 | 187.0 | AM1 | 14:49:17.440 | | | | | | | | 9.8 | 0.14 | a | Ml | 2.7 | 5843 |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|------|------|----|----|-----|-------|
| LSK | 0.13 | 187.0 | AM1 | 14:49:17.740 | | | | | 13.3 | 0.16 | a_ | Ml | 2.9 | 5842 |
| SRN | 0.62 | 231.0 | Sg | 14:49:35.513 | 0.3 | | | | | m_ | | | | 10513 |
| SRN | 0.62 | 231.0 | Pg | 14:49:25.129 | -0.3 | | | | | m_ | | | | 10512 |
| SRN | 0.62 | 231.0 | AM1 | 14:49:39.030 | | | | | 0.1 | 0.42 | a_ | Ml | 1.4 | 5846 |
| SRN | 0.62 | 231.0 | AM1 | 14:49:37.320 | | | | | 0.1 | 0.26 | a_ | Ml | 1.3 | 5845 |
| IGT | 0.77 | 197.0 | Sg | 14:49:38.815 | -1.1 | | | | | m_ | | | | 10515 |
| IGT | 0.77 | 197.0 | Pg | 14:49:30.085 | 2.0 | | | | | m_ | | | | 10514 |
| IGT | 0.77 | 197.0 | AM1 | 14:49:45.760 | | | | | 0.1 | 0.76 | a_ | Ml | 1.7 | 5847 |
| LKD2 | 1.48 | 178.0 | Sn | 14:50:03.255 | 0.0 | | | | | m_ | | | | 10517 |
| LKD2 | 1.48 | 178.0 | Pn | 14:49:41.189 | -0.3 | | | | | m_ | | | | 10516 |

DATA_TYPE COMMENT GSE2.1

Event 639

Official Magnitude:

Ml 1.64

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 151 | 56 | 1.2900 |
| Intermediate: | 311 | 32 | 0.9300 |
| Min: | 47 | 9 | 0.4900 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785737 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 640 0.7 km from Sanjollas, Korçë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 15:40:13.14 | 0.26 | 40.2578 | 20.6045 | | | | | 2.0 | 1.9 | 9 | 28 | 148 | 0.11 | 1.47 | m | |
| 688 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.1 | 0.0 | 4 | 688 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|------|------|-----|------|-----------|-------|
| LSK | 0.10 | 0.0 | Pg | 15:40:15.015 | 0.0 | | | | | | | | | m_ | | 10529 |
| LSK | 0.11 | 183.0 | Sg | 15:40:16.956 | -0.4 | | | | | | | | | m_ | | 10519 |
| LSK | 0.11 | 183.0 | AM1 | 15:40:19.830 | | | | | | | 49.1 | 0.50 | a_ | Ml | 3.4 | 5849 |
| LSK | 0.11 | 183.0 | AM1 | 15:40:18.670 | | | | | | | 34.6 | 0.32 | a_ | Ml | 3.2 | 5848 |
| NEST | 0.37 | 65.0 | Sg | 15:40:27.151 | -0.2 | | | | | | | | | m_ | | 10521 |
| NEST | 0.37 | 65.0 | Pg | 15:40:20.516 | -0.8 | | | | | | | | | m_ | | 10520 |
| NEST | 0.37 | 65.0 | AM1 | 15:40:29.110 | | | | | | | 0.5 | 0.30 | a_ | Ml | 1.8 | 5851 |
| NEST | 0.37 | 65.0 | AM1 | 15:40:30.080 | | | | | | | 0.6 | 0.32 | a_ | Ml | 1.8 | 5850 |
| KBN | 0.39 | 20.0 | Sg | 15:40:27.254 | 0.1 | | | | | | | | | m_ | | 10522 |

| | | | | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|--|--|--|--|-----|------|-------|----|-----|-------|
| SRN | 0.60 | 232.0 | Sg | 15:40:35.202 | -0.3 | | | | | | | m | | 10524 | | | |
| SRN | 0.60 | 232.0 | Pg | 15:40:24.679 | -1.2 | | | | | | | m | | 10523 | | | |
| SRN | 0.60 | 232.0 | AM1 | 15:40:36.810 | | | | | | | | 0.1 | 0.56 | a | Ml | 1.4 | 5852 |
| IGT | 0.76 | 197.0 | Sg | 15:40:40.369 | 0.2 | | | | | | | m | | | | | 10526 |
| IGT | 0.76 | 197.0 | Pg | 15:40:28.565 | 0.0 | | | | | | | m | | | | | 10525 |
| LKD2 | 1.47 | 178.0 | Sg | 15:41:03.811 | 0.2 | | | | | | | m | | | | | 10528 |
| LKD2 | 1.47 | 178.0 | Pg | 15:40:42.342 | 0.4 | | | | | | | m | | | | | 10527 |
| LKD2 | 1.47 | 178.0 | AM1 | 15:41:04.950 | | | | | | | | 0.1 | 1.44 | a | Ml | 2.3 | 5853 |

DATA_TYPE COMMENT GSE2.1
Event 640

Official Magnitude:
Ml 2.06

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 140 | 78 | 1.8900 |
| Intermediate: | 299 | 11 | 1.0100 |
| Min: | 30 | 4 | 0.4300 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785737 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 641 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 17:52:44.15 | 0.36 | 40.2242 | 20.6747 | | | | | 0.0 | 1.2 | 12 | 30 | 125 | 0.09 | 1.70 | m | |
| 689 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.6 | 0.0 | 5 | 689 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|-------|
| LSK | 0.09 | 219.0 | Sg | 17:52:47.963 | 0.0 | | | | | | | | | | m | | 10531 |
| LSK | 0.09 | 219.0 | Pg | 17:52:46.124 | -0.2 | | | | | | | | | | m | | 10530 |
| LSK | 0.09 | 219.0 | AM1 | 17:52:50.800 | | | | | | | | 240.9 | 0.50 | a | Ml | 4.0 | 5855 |
| LSK | 0.09 | 219.0 | AM1 | 17:52:50.230 | | | | | | | | 176.1 | 0.44 | a | Ml | 3.9 | 5854 |
| NEST | 0.34 | 0.0 | Pg | 17:52:51.196 | 0.0 | | | | | | | | | | m | | 10543 |
| NEST | 0.34 | 56.0 | Sg | 17:52:56.937 | -0.9 | | | | | | | | | | m | | 10532 |
| NEST | 0.34 | 56.0 | AM1 | 17:53:04.980 | | | | | | | | 2.3 | 0.60 | a | Ml | 2.4 | 5856 |
| KBN | 0.41 | 12.0 | Pg | 17:52:52.390 | -0.4 | | | | | | | | | | m | | 10534 |
| KBN | 0.41 | 12.0 | Sg | 17:53:00.481 | 1.3 | | | | | | | | | | m | | 10533 |
| KBN | 0.41 | 12.0 | AM1 | 17:53:09.710 | | | | | | | | 2.0 | 0.88 | a | Ml | 2.4 | 5857 |
| SRN | 0.62 | 237.0 | Pg | 17:52:56.644 | -1.0 | | | | | | | | | | m | | 10536 |

| | | | | | | | | | | |
|------|------|-------|-----|--------------|------|---|-----|---|----|-------|
| SRN | 0.62 | 237.0 | Sg | 17:53:05.702 | -2.1 | | | m | | 10535 |
| SRN | 0.62 | 237.0 | AM1 | 17:53:11.880 | | — | 0.7 | a | M1 | 5858 |
| IGT | 0.74 | 202.0 | Sg | 17:53:11.179 | 0.1 | — | | m | | 10538 |
| IGT | 0.74 | 202.0 | Pg | 17:52:59.439 | -0.1 | — | | m | | 10537 |
| LKD2 | 1.43 | 181.0 | Sn | 17:53:34.194 | 0.1 | — | | m | | 10540 |
| LKD2 | 1.43 | 181.0 | Pn | 17:53:12.906 | 0.2 | — | | m | | 10539 |
| LKD2 | 1.43 | 181.0 | AM1 | 17:53:37.780 | | — | 0.6 | a | M1 | 5859 |
| SCTE | 1.70 | 266.0 | Sn | 17:53:42.084 | -0.2 | — | | m | | 10542 |
| SCTE | 1.70 | 266.0 | Pn | 17:53:17.869 | 0.5 | — | | m | | 10541 |

DATA TYPE COMMENT GSE2.1

Event 641

Official Magnitude:

M1 2.64

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 277 | 76 | 1.2400 |
| Intermediate: | 126 | 11 | 1.0000 |
| Min: | 35 | 7 | 0.6100 |

BEGIN GSE2.1

MSG TYPE DATA

MSG TD 1556785736 athena

~~DATA TYPE BULLETIN GSE2 1:SHORT~~

Event: 642 1.5 km from Radimisht, Korçë, Albania

| Magnitude | Err | Nsta | Author | OrigID | | |
|-----------|-----|------|--------|--------|---|-----|
| M1 | 1 | 9 | 0 | 0 | 2 | 690 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| LSK | 0.00 | 0.0 | Pg | 18:41:27.370 | 0.0 | | | | | | | | | m | | 10549 | |
| LSK | 0.12 | 161.0 | Sg | 18:41:29.016 | 0.0 | | | | | | | | | m | | 10544 | |
| LSK | 0.12 | 161.0 | AM1 | 18:41:30.950 | | | | | | | | 8.4 | 0.40 | a | M1 | 2.6 | 5861 |
| LSK | 0.12 | 161.0 | AM1 | 18:41:29.310 | | | | | | | | 6.6 | 0.14 | a | M1 | 2.5 | 5860 |
| NEST | 0.41 | 67.0 | Sg | 18:41:39.226 | 0.0 | | | | | | | | | m | | 10546 | |
| NEST | 0.41 | 67.0 | Pg | 18:41:32.828 | 0.0 | | | | | | | | | m | | 10545 | |
| NEST | 0.41 | 67.0 | AM1 | 18:41:44.690 | | | | | | | | 0.1 | 0.24 | a | M1 | 1.2 | 5863 |
| NEST | 0.41 | 67.0 | AM1 | 18:41:43.280 | | | | | | | | 0.1 | 0.22 | a | M1 | 1.3 | 5862 |
| IGT | 0.75 | 194.0 | Sg | 18:41:50.555 | 0.0 | | | | | | | | | m | | 10548 | |
| IGT | 0.75 | 194.0 | Pg | 18:41:41.413 | 2.1 | | | | | | | | | m | | 10547 | |

DATA_TYPE COMMENT GSE2.1
Event 642

Official Magnitude:
Ml 1.90

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 126 | 30 | 2.2600 |
| Intermediate: | 279 | 56 | 0.6800 |
| Min: | 29 | 13 | 0.3300 |

BEGIN GSE2.1

MSG_TYPE DATA
MSG_ID 1556785735 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 650 3.1 km from Mullini i Danit, Durrës, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/22 | 14:07:28.64 | 0.21 | 41.4888 | 19.4998 | | | | | 25.6 | 1.2 | 23 | 21 | 113 | 0.31 | 2.05 | m | |
| 698 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.2 | 0.0 | 9 | 698 |
| Md | 3.0 | 0.0 | 16 | 698 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| TIR | 0.31 | 117.0 | Sg | 14:07:39.186 | -2.5 | | | | | | | | | | m | 10655 | |
| TIR | 0.31 | 117.0 | Pg | 14:07:35.727 | -0.4 | | | | | | | | | | m | 10654 | |
| TIR | 0.31 | 117.0 | AM1 | 14:07:39.800 | | | | | | | | 13.4 | 0.24 | a | Ml | 3.2 | 5924 |
| TIR | 0.31 | 117.0 | AMd | 14:08:15.263 | | | | | | | | 0.0 | 39.54 | a | Md | 2.5 | 5908 |
| ULC | 0.51 | 339.0 | Pg | 14:07:39.486 | 0.1 | | | | | | | | | | m | 10656 | |
| ULC | 0.51 | 339.0 | AMd | 14:08:45.303 | | | | | | | | 0.0 | 65.82 | a | Md | 3.0 | 5909 |
| PUK | 0.63 | 27.0 | Sg | 14:07:51.022 | 0.3 | | | | | | | | | | m | 10658 | |
| PUK | 0.63 | 27.0 | Pg | 14:07:40.797 | -0.5 | | | | | | | | | | m | 10657 | |
| PUK | 0.63 | 27.0 | AM1 | 14:07:55.640 | | | | | | | | 3.2 | 0.34 | a | Ml | 3.0 | 5925 |
| PUK | 0.63 | 27.0 | AMd | 14:08:34.416 | | | | | | | | 0.0 | 53.62 | a | Md | 2.8 | 5910 |
| PHP | 0.73 | 74.0 | Sg | 14:07:54.025 | 0.3 | | | | | | | | | | m | 10660 | |
| PHP | 0.73 | 74.0 | Pg | 14:07:42.370 | -0.6 | | | | | | | | | | m | 10659 | |
| PHP | 0.73 | 74.0 | AM1 | 14:07:59.030 | | | | | | | | 5.6 | 0.76 | a | Ml | 3.3 | 5926 |
| PHP | 0.73 | 74.0 | AMd | 14:08:53.771 | | | | | | | | 0.0 | 71.40 | a | Md | 3.1 | 5911 |
| DRME | 0.73 | 342.0 | Pg | 14:07:43.391 | 0.1 | | | | | | | | | | m | 10661 | |
| DRME | 0.73 | 342.0 | AMd | 14:08:52.561 | | | | | | | | 0.0 | 69.17 | a | Md | 3.1 | 5912 |
| BUM | 0.93 | 332.0 | Pg | 14:07:46.760 | 0.1 | | | | | | | | | | m | 10662 | |
| BUM | 0.93 | 332.0 | AMd | 14:08:49.335 | | | | | | | | 0.0 | 62.58 | a | Md | 3.0 | 5913 |

| | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-----|-------|---|-------|-----|------|
| BCI | 0.97 | 0.0 | Pg | 14:07:46.432 | 0.0 | | | m | | 10680 | | |
| BCI | 0.97 | 25.0 | Sg | 14:08:01.094 | -0.4 | | | m | | 10663 | | |
| BCI | 0.97 | 25.0 | AM1 | 14:08:09.450 | | | 2.6 | 0.42 | a | Ml | 3.2 | 5927 |
| VLO | 1.02 | 181.0 | Sn | 14:08:01.815 | -0.0 | | | m | | 10665 | | |
| VLO | 1.02 | 181.0 | Pn | 14:07:47.755 | 0.2 | | | m | | 10664 | | |
| VLO | 1.02 | 181.0 | AM1 | 14:08:08.600 | | | 4.1 | 0.30 | a | Ml | 3.4 | 5928 |
| VLO | 1.02 | 181.0 | AMd | 14:08:47.924 | | | 0.0 | 60.17 | a | Md | 3.0 | 5914 |
| CEME | 1.14 | 338.0 | Pg | 14:07:50.550 | 0.1 | | | m | | 10666 | | |
| CEME | 1.14 | 338.0 | AMd | 14:08:57.601 | | | 0.0 | 67.05 | a | Md | 3.1 | 5915 |
| PVY | 1.16 | 17.0 | Pg | 14:07:50.945 | 0.1 | | | m | | 10667 | | |
| PVY | 1.16 | 17.0 | AMd | 14:08:42.279 | | | 0.0 | 51.33 | a | Md | 2.8 | 5916 |
| HCY | 1.22 | 323.0 | Pg | 14:07:51.889 | 0.0 | | | m | | 10668 | | |
| HCY | 1.22 | 323.0 | AMd | 14:09:04.658 | | | 0.0 | 72.77 | a | Md | 3.2 | 5917 |
| KBN | 1.30 | 131.0 | Sg | 14:08:11.151 | 0.1 | | | m | | 10670 | | |
| KBN | 1.30 | 131.0 | Pg | 14:07:52.973 | 0.1 | | | m | | 10669 | | |
| KBN | 1.30 | 131.0 | AM1 | 14:08:15.860 | | | 1.4 | 0.68 | a | Ml | 3.2 | 5929 |
| KBN | 1.30 | 131.0 | AMd | 14:08:53.972 | | | 0.0 | 61.00 | a | Md | 3.0 | 5918 |
| BEY | 1.41 | 12.0 | Pg | 14:07:55.284 | 0.0 | | | m | | 10671 | | |
| BEY | 1.41 | 12.0 | AMd | 14:09:11.916 | | | 0.0 | 76.63 | a | Md | 3.3 | 5919 |
| LSK | 1.58 | 147.0 | S | 14:08:19.734 | 0.0 | | | m | | 10673 | | |
| LSK | 1.58 | 147.0 | Pn | 14:07:57.833 | -0.0 | | | m | | 10672 | | |
| LSK | 1.58 | 147.0 | AM1 | 14:08:34.120 | | | 1.6 | 0.62 | a | Ml | 3.4 | 5930 |
| LSK | 1.58 | 147.0 | AMd | 14:09:31.069 | | | 0.0 | 93.24 | a | Md | 3.5 | 5920 |
| SCTE | 1.61 | 210.0 | Sn | 14:08:20.140 | -0.8 | | | m | | 10675 | | |
| SCTE | 1.61 | 210.0 | Pn | 14:07:58.448 | -0.1 | | | m | | 10674 | | |
| SCTE | 1.61 | 210.0 | AM1 | 14:08:22.530 | | | 1.7 | 0.78 | a | Ml | 3.5 | 5931 |
| SCTE | 1.61 | 210.0 | AMd | 14:08:57.803 | | | 0.0 | 59.35 | a | Md | 3.0 | 5921 |
| SRN | 1.65 | 166.0 | Sn | 14:08:21.410 | -1.3 | | | m | | 10677 | | |
| SRN | 1.65 | 166.0 | Pn | 14:07:59.493 | -0.0 | | | m | | 10676 | | |
| SRN | 1.65 | 166.0 | AM1 | 14:08:32.570 | | | 0.4 | 0.44 | a | Ml | 2.9 | 5932 |
| SRN | 1.65 | 166.0 | AMd | 14:09:31.069 | | | 0.0 | 91.58 | a | Md | 3.5 | 5922 |
| IGT | 2.05 | 161.0 | Sn | 14:08:31.177 | -1.4 | | | m | | 10679 | | |
| IGT | 2.05 | 161.0 | Pn | 14:08:05.186 | 0.0 | | | m | | 10678 | | |
| IGT | 2.05 | 161.0 | AMd | 14:09:38.332 | | | 0.0 | 93.15 | a | Md | 2.9 | 5923 |

DATA_TYPE COMMENT GSE2.1

Event 650

Official Magnitude:

Ml 3.24

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 32 | 77 | 1.2500 |
| Intermediate: | 265 | 7 | 0.5600 |
| Min: | 174 | 10 | 0.3200 |

BEGIN GSE2.1

MSG_TYPE DATA
 MSG_ID 1556785735 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 651 0.7 km from Gramëz, Durrës, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/23 | 06:43:52.50 | 0.23 | 41.5295 | 19.6515 | | | | | 15.6 | 2.3 | 13 | 16 | 179 | 0.24 | 1.60 | m | |
| 699 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.6 | 0.0 | 2 | 699 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| TIR | 0.24 | 0.0 | Pg | 06:43:58.259 | 0.0 | | | | | | | | | | mdi | 10696 |
| TIR | 0.24 | 138.0 | Sg | 06:44:02.430 | 0.1 | | | | | | | | | | m | 10681 |
| TIR | 0.24 | 138.0 | AM1 | 06:44:02.500 | | | | | | | | | | | a | 5933 |
| ULC | 0.53 | 326.0 | Pg | 06:44:03.185 | -0.1 | | | | | | | | | | mce | 10682 |
| PUK | 0.54 | 19.0 | Sg | 06:44:11.895 | 0.2 | | | | | | | | | | m | 10684 |
| PUK | 0.54 | 19.0 | Pg | 06:44:03.495 | 0.0 | | | | | | | | | | mci | 10683 |
| PUK | 0.54 | 19.0 | AM1 | 06:44:16.400 | | | | | | | | | | | a | 5934 |
| PHP | 0.61 | 75.0 | Sg | 06:44:13.675 | 0.0 | | | | | | | | | | m | 10686 |
| PHP | 0.61 | 75.0 | Pg | 06:44:04.521 | -0.1 | | | | | | | | | | mce | 10685 |
| DRME | 0.74 | 333.0 | Pn | 06:44:07.151 | -0.2 | | | | | | | | | | mde | 10687 |
| BCI | 0.89 | 20.0 | P | 06:44:08.183 | -1.8 | | | | | | | | | | m | 10688 |
| BUM | 0.95 | 325.0 | P | 06:44:11.420 | 0.2 | | | | | | | | | | m | 10689 |
| CEME | 1.15 | 332.0 | Pn | 06:44:14.429 | -0.3 | | | | | | | | | | mde | 10690 |
| HCY | 1.26 | 317.0 | Pn | 06:44:17.068 | 0.4 | | | | | | | | | | mde | 10691 |
| KOME | 1.32 | 356.0 | Pn | 06:44:18.780 | 1.0 | | | | | | | | | | mce | 10692 |
| NKME | 1.34 | 338.0 | Pn | 06:44:18.371 | 0.3 | | | | | | | | | | mde | 10693 |
| BEY | 1.35 | 7.0 | P | 06:44:18.065 | -0.2 | | | | | | | | | | m | 10694 |
| BRY | 1.60 | 330.0 | P | 06:44:22.064 | -0.6 | | | | | | | | | | m | 10695 |

DATA_TYPE COMMENT GSE2.1
 Event 651

Official Magnitude:
 Ml 2.62

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 136 | 74 | 2.4000 |
| Intermediate: | 36 | 2 | 0.9000 |
| Min: | 305 | 16 | 0.5300 |

BEGIN GSE2.1
 MSG_TYPE DATA

MSG_ID 1556785735 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 652 1.0 km from Kullas, Durres, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/23 | 08:58:14.06 | 0.33 | 41.5075 | 19.6017 | | | | | 25.0 | 1.8 | 16 | 17 | 134 | 0.25 | 2.89 | m | |
| 700 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.8 | 0.0 | 4 | 700 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| TIR | 0.25 | 0.0 | Pg | 08:58:20.321 | 0.0 | | | | | | | | | | mdi | 10715 |
| TIR | 0.25 | 128.0 | Sg | 08:58:25.235 | -0.4 | | | | | | | | | | m | 10697 |
| TIR | 0.25 | 128.0 | AM1 | 08:58:24.710 | | | | | | | | | | a | Ml | 5935 |
| ULC | 0.53 | 331.0 | Pg | 08:58:24.496 | -0.5 | | | | | | | | | | mdi | 10698 |
| PUK | 0.58 | 22.0 | Sg | 08:58:34.497 | 0.0 | | | | | | | | | | m | 10700 |
| PUK | 0.58 | 22.0 | Pg | 08:58:25.430 | -0.3 | | | | | | | | | | mdi | 10699 |
| PUK | 0.58 | 22.0 | AM1 | 08:58:41.180 | | | | | | | | | | a | Ml | 5936 |
| DRME | 0.74 | 336.0 | Pn | 08:58:28.456 | -0.4 | | | | | | | | | | mde | 10701 |
| BCI | 0.93 | 21.0 | Sn | 08:58:45.399 | 0.1 | | | | | | | | | | m | 10703 |
| BCI | 0.93 | 21.0 | Pn | 08:58:31.410 | -0.5 | | | | | | | | | | mdi | 10702 |
| BCI | 0.93 | 21.0 | AM1 | 08:58:57.940 | | | | | | | | | | a | Ml | 5937 |
| BUM | 0.95 | 327.0 | Pn | 08:58:32.539 | 0.1 | | | | | | | | | | mde | 10704 |
| VLO | 1.04 | 185.0 | Sg | 08:58:47.661 | -0.2 | | | | | | | | | | m | 10706 |
| VLO | 1.04 | 185.0 | Pg | 08:58:35.296 | 1.9 | | | | | | | | | | mci | 10705 |
| PVY | 1.12 | 14.0 | Pn | 08:58:35.663 | 0.2 | | | | | | | | | | mde | 10707 |
| CEME | 1.16 | 335.0 | Pn | 08:58:36.056 | -0.1 | | | | | | | | | | mce | 10708 |
| HCY | 1.25 | 319.0 | Pn | 08:58:38.424 | 0.6 | | | | | | | | | | mde | 10709 |
| KOME | 1.34 | 358.0 | Pn | 08:58:39.756 | 0.3 | | | | | | | | | | mde | 10710 |
| NKME | 1.35 | 340.0 | Pn | 08:58:40.016 | 0.5 | | | | | | | | | | mde | 10711 |
| SRN | 1.65 | 169.0 | Sn | 08:59:08.266 | 0.0 | | | | | | | | | | m | 10713 |
| SRN | 1.65 | 169.0 | Pn | 08:58:43.611 | -1.4 | | | | | | | | | | mci | 10712 |
| SRN | 1.65 | 169.0 | AM1 | 08:59:17.890 | | | | | | | | | | a | Ml | 5938 |
| SGRT | 2.89 | 277.0 | P | 08:58:59.274 | -3.7 | | | | | | | | | | m | 10714 |

DATA_TYPE COMMENT GSE2.1
 Event 652

Official Magnitude:
 M1 3.78

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 84 | 69 | 1.8600 |
| Intermediate: | 266 | 20 | 1.0600 |
| Min: | 176 | 1 | 0.5500 |

BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785735 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 653 0.6 km from Mallkuç, Durrës, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/23 | 16:46:37.87 | 0.09 | 41.4980 | 19.6243 | | | | | 25.0 | 0.9 | 16 | 18 | 144 | 0.23 | 1.64 | m | |
| 701 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.3 | 0.0 | 5 | 701 |
| Md | 3.0 | 0.0 | 12 | 701 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| TIR | 0.23 | 129.0 | Sg | 16:46:48.173 | -0.8 | | | | | | | | | m | | 10717 | |
| TIR | 0.23 | 129.0 | Pg | 16:46:44.126 | -0.1 | | | | | | | | | m | | 10716 | |
| TIR | 0.23 | 129.0 | AMl | 16:46:48.680 | | | | | | | | 31.9 | 0.24 | a | Ml | 3.6 | 5951 |
| TIR | 0.23 | 129.0 | AMd | 16:47:20.752 | | | | | | | | 0.0 | 36.63 | a | Md | 2.4 | 5939 |
| ULC | 0.54 | 330.0 | Pg | 16:46:48.831 | -0.3 | | | | | | | | | m | | 10718 | |
| ULC | 0.54 | 330.0 | AMd | 16:47:48.443 | | | | | | | | 0.0 | 59.61 | a | Md | 2.9 | 5940 |
| PUK | 0.58 | 20.0 | Sg | 16:46:58.447 | -0.1 | | | | | | | | | m | | 10720 | |
| PUK | 0.58 | 20.0 | Pg | 16:46:49.634 | -0.1 | | | | | | | | | m | | 10719 | |
| PUK | 0.58 | 20.0 | AMl | 16:47:03.430 | | | | | | | | 4.8 | 0.30 | a | Ml | 3.1 | 5952 |
| PUK | 0.58 | 20.0 | AMd | 16:47:45.350 | | | | | | | | 0.0 | 55.72 | a | Md | 2.9 | 5941 |
| PHP | 0.64 | 72.0 | Pg | 16:46:50.486 | -0.1 | | | | | | | | | m | | 10721 | |
| DRME | 0.76 | 335.0 | Pg | 16:46:53.006 | 0.0 | | | | | | | | | m | | 10722 | |
| DRME | 0.76 | 335.0 | AMd | 16:47:51.260 | | | | | | | | 0.0 | 58.25 | a | Md | 2.9 | 5942 |
| BCI | 0.93 | 0.0 | Pg | 16:46:55.872 | 0.0 | | | | | | | | | m | | 10734 | |
| BCI | 0.93 | 20.0 | Sg | 16:47:09.226 | -0.1 | | | | | | | | | m | | 10723 | |
| BCI | 0.93 | 20.0 | AMl | 16:47:19.250 | | | | | | | | 3.9 | 0.60 | a | Ml | 3.3 | 5953 |
| VLO | 1.03 | 186.0 | Sg | 16:47:11.507 | 0.0 | | | | | | | | | m | | 10725 | |
| VLO | 1.03 | 186.0 | Pg | 16:46:57.097 | 0.0 | | | | | | | | | m | | 10724 | |
| VLO | 1.03 | 186.0 | AMl | 16:47:22.150 | | | | | | | | 6.6 | 0.18 | a | Ml | 3.7 | 5954 |
| VLO | 1.03 | 186.0 | AMd | 16:48:05.170 | | | | | | | | 0.0 | 68.07 | a | Md | 3.1 | 5943 |
| PVY | 1.13 | 13.0 | Pg | 16:46:57.952 | -1.5 | | | | | | | | | m | | 10726 | |
| PVY | 1.13 | 13.0 | AMd | 16:47:50.552 | | | | | | | | 0.0 | 52.60 | a | Md | 2.9 | 5944 |
| CEME | 1.17 | 334.0 | Pg | 16:47:00.227 | 0.0 | | | | | | | | | m | | 10727 | |
| CEME | 1.17 | 334.0 | AMd | 16:47:52.665 | | | | | | | | 0.0 | 52.44 | a | Md | 2.8 | 5945 |
| KOME | 1.35 | 357.0 | Pn | 16:47:03.417 | -0.0 | | | | | | | | | m | | 10728 | |
| KOME | 1.35 | 357.0 | AMd | 16:48:14.735 | | | | | | | | 0.0 | 71.32 | a | Md | 3.2 | 5946 |
| NKME | 1.36 | 339.0 | Pn | 16:47:03.601 | 0.0 | | | | | | | | | m | | 10729 | |
| NKME | 1.36 | 339.0 | AMd | 16:48:07.847 | | | | | | | | 0.0 | 64.25 | a | Md | 3.1 | 5947 |
| BEY | 1.39 | 8.0 | Pn | 16:47:04.169 | 0.2 | | | | | | | | | m | | 10730 | |
| BEY | 1.39 | 8.0 | AMd | 16:48:10.518 | | | | | | | | 0.0 | 66.35 | a | Md | 3.1 | 5948 |
| BRY | 1.62 | 331.0 | Pn | 16:47:07.860 | -0.0 | | | | | | | | | m | | 10731 | |

| | | | | | | | | | | | | | |
|-----|------|-------|-----|--------------|------|--|--|-----|-------|---|----|-----|-------|
| BRY | 1.62 | 331.0 | AMd | 16:48:14.876 | | | | 0.0 | 67.02 | a | Md | 3.1 | 5949 |
| SRN | 1.64 | 169.0 | Sn | 16:47:31.673 | -0.1 | | | | m | | | | 10733 |
| SRN | 1.64 | 169.0 | Pn | 16:47:08.185 | -0.5 | | | | m | | | | 10732 |
| SRN | 1.64 | 169.0 | AMl | 16:47:37.950 | | | | 0.5 | 0.36 | a | Ml | 2.9 | 5955 |
| SRN | 1.64 | 169.0 | AMd | 16:48:17.259 | | | | 0.0 | 69.07 | a | Md | 3.2 | 5950 |

DATA_TYPE COMMENT GSE2.1
Event 653

Official Magnitude:
M1 3.33

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 78 | 68 | 0.9600 |
| Intermediate: | 273 | 20 | 0.5800 |
| Min: | 182 | 5 | 0.2500 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785735 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 657 1.3 km from Damaj, Durres, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/23 | 11:37:06.75 | 0.13 | 41.5068 | 19.5750 | | | | | 12.3 | 1.3 | 9 | 31 | 207 | 0.27 | 1.83 | m | |
| 705 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.4 | 0.0 | 3 | 705 |

| | | | | | | | | | | | | | | | | | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
| TIR | 0.27 | 0.0 | Pg | 11:37:13.090 | 0.0 | | | | | | | | | m | | 10795 | |
| TIR | 0.27 | 126.0 | Sg | 11:37:17.149 | -0.0 | | | | | | | | | m | | 10784 | |
| TIR | 0.27 | 126.0 | AMl | 11:37:16.980 | | | | | | | | 2.8 | 0.48 | a | Ml | 2.4 | 5978 |
| ULC | 0.52 | 333.0 | Pg | 11:37:17.435 | 0.1 | | | | | | | | | m | | 10785 | |
| PUK | 0.59 | 23.0 | Sg | 11:37:27.383 | 0.1 | | | | | | | | | m | | 10787 | |
| PUK | 0.59 | 23.0 | Pg | 11:37:17.917 | -0.6 | | | | | | | | | m | | 10786 | |
| PUK | 0.59 | 23.0 | AMl | 11:37:29.980 | | | | | | | | 0.9 | 0.24 | a | Ml | 2.3 | 5980 |
| PUK | 0.59 | 23.0 | AMl | 11:37:31.940 | | | | | | | | 1.1 | 0.22 | a | Ml | 2.4 | 5979 |
| DRME | 0.74 | 338.0 | Pg | 11:37:21.412 | -0.1 | | | | | | | | | m | | 10788 | |
| BCI | 0.93 | 22.0 | Sg | 11:37:38.776 | -0.1 | | | | | | | | | m | | 10790 | |
| BCI | 0.93 | 22.0 | Pg | 11:37:24.444 | -0.7 | | | | | | | | | m | | 10789 | |
| BCI | 0.93 | 22.0 | AMl | 11:37:47.080 | | | | | | | | 0.7 | 0.38 | a | Ml | 2.6 | 5981 |
| BUM | 0.94 | 328.0 | Pn | 11:37:26.178 | 0.9 | | | | | | | | | m | | 10791 | |
| CEME | 1.15 | 335.0 | Pn | 11:37:29.033 | -0.1 | | | | | | | | | m | | 10792 | |

| | | | | | | | | | |
|-----|------|-------|----|--------------|------|--|--|---|-------|
| BEY | 1.38 | 9.0 | Pn | 11:37:33.500 | 0.2 | | | m | 10793 |
| PLE | 1.83 | 356.0 | Pn | 11:37:41.088 | -0.0 | | | m | 10794 |

DATA_TYPE COMMENT GSE2.1
Event 657

Official Magnitude:
M1 2.44

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 142 | 75 | 1.3600 |
| Intermediate: | 238 | 1 | 0.6700 |
| Min: | 328 | 15 | 0.4000 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785734 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 661 1.1 km from Bejkollat, Berat, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/28 | 20:20:42.82 | 0.18 | 40.6615 | 19.9948 | | | | | 16.9 | 0.9 | 22 | 31 | 75 | 0.26 | 1.70 | m | |
| 709 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.0 | 0.0 | 10 | 709 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| BPA1 | 0.27 | 284.0 | Sg | 20:20:53.583 | 0.1 | | | | | | | | | | m | 10854 | |
| BPA1 | 0.27 | 284.0 | Pg | 20:20:49.034 | 0.1 | | | | | | | | | | m | 10853 | |
| BPA1 | 0.27 | 284.0 | AM1 | 20:20:57.060 | | | | | | | | 14.6 | 0.78 | a | M1 | 3.2 | 6015 |
| BPA2 | 0.29 | 0.0 | Pg | 20:20:49.297 | 0.0 | | | | | | | | | | m | 10877 | |
| BPA2 | 0.29 | 284.0 | Sg | 20:20:54.425 | 0.0 | | | | | | | | | | m | 10855 | |
| BPA2 | 0.29 | 284.0 | AM1 | 20:20:55.180 | | | | | | | | 22.2 | 0.14 | a | M1 | 3.4 | 6016 |
| VLO | 0.43 | 244.0 | Sg | 20:20:57.285 | -0.0 | | | | | | | | | | m | 10857 | |
| VLO | 0.43 | 244.0 | Pg | 20:20:51.258 | 0.2 | | | | | | | | | | m | 10856 | |
| VLO | 0.43 | 244.0 | AM1 | 20:21:01.720 | | | | | | | | 18.4 | 0.22 | a | M1 | 3.4 | 6017 |
| KBN | 0.60 | 93.0 | Sg | 20:21:03.333 | -0.1 | | | | | | | | | | m | 10859 | |
| KBN | 0.60 | 93.0 | Pg | 20:20:54.870 | 0.3 | | | | | | | | | | m | 10858 | |
| KBN | 0.60 | 93.0 | AM1 | 20:21:09.060 | | | | | | | | 2.2 | 0.78 | a | M1 | 2.8 | 6018 |
| LSK | 0.69 | 137.0 | Sg | 20:21:06.975 | 0.2 | | | | | | | | | | m | 10861 | |
| LSK | 0.69 | 137.0 | Pg | 20:20:55.526 | -1.0 | | | | | | | | | | m | 10860 | |
| LSK | 0.69 | 137.0 | AM1 | 20:21:17.810 | | | | | | | | 2.6 | 0.46 | a | M1 | 2.9 | 6019 |
| TIR | 0.69 | 352.0 | Sg | 20:21:07.183 | 0.0 | | | | | | | | | | m | 10863 | |
| TIR | 0.69 | 352.0 | Pg | 20:20:56.573 | -0.2 | | | | | | | | | | m | 10862 | |

| | | | | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|--|-----|------|------|----|-----|-------|------|
| TIR | 0.69 | 352.0 | AM1 | 20:21:14.720 | | | | 1.2 | 0.56 | a_ | M1 | 2.6 | 6020 | |
| SRN | 0.78 | 179.0 | Sg | 20:21:10.383 | -0.3 | | | | m_ | | | | 10865 | |
| SRN | 0.78 | 179.0 | Pg | 20:20:58.259 | -0.5 | | | | m_ | | | | 10864 | |
| SRN | 0.78 | 179.0 | AM1 | 20:21:16.070 | | | | | 1.1 | 0.54 | a_ | M1 | 2.7 | 6021 |
| NEST | 0.84 | 106.0 | Sn | 20:21:12.032 | 0.1 | | | | m_ | | | | 10867 | |
| NEST | 0.84 | 106.0 | Pn | 20:20:59.129 | -0.3 | | | | m_ | | | | 10866 | |
| PHP | 1.08 | 18.0 | Pn | 20:21:03.026 | -0.3 | | | | m_ | | | | 10868 | |
| IGT | 1.16 | 167.0 | Sn | 20:21:21.946 | 0.2 | | | | m_ | | | | 10870 | |
| IGT | 1.16 | 167.0 | Pn | 20:21:05.985 | 0.9 | | | | m_ | | | | 10869 | |
| SCTE | 1.30 | 244.0 | Pn | 20:21:07.555 | -0.1 | | | | m_ | | | | 10871 | |
| SCTE | 1.30 | 244.0 | AM1 | 20:21:28.830 | | | | 0.9 | 0.30 | a_ | M1 | 3.0 | 6022 | |
| PUK | 1.38 | 357.0 | Sn | 20:21:28.485 | -0.0 | | | | m_ | | | | 10873 | |
| PUK | 1.38 | 357.0 | Pn | 20:21:09.131 | 0.2 | | | | m_ | | | | 10872 | |
| PUK | 1.38 | 357.0 | AM1 | 20:21:39.720 | | | | 0.8 | 0.58 | a_ | M1 | 3.0 | 6023 | |
| ULC | 1.42 | 337.0 | Pn | 20:21:09.665 | 0.0 | | | | m_ | | | | 10874 | |
| DRME | 1.64 | 339.0 | Pn | 20:21:13.209 | -0.4 | | | | m_ | | | | 10875 | |
| BCI | 1.70 | 1.0 | Pn | 20:21:14.973 | 0.3 | | | | m_ | | | | 10876 | |
| BCI | 1.70 | 1.0 | AM1 | 20:21:47.460 | | | | 1.1 | 0.92 | a_ | M1 | 3.3 | 6024 | |

DATA_TYPE COMMENT GSE2.1
Event 661

Official Magnitude:
M1 2.97

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 251 | 76 | 0.9300 |
| Intermediate: | 39 | 12 | 0.3300 |
| Min: | 131 | 7 | 0.2800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785734 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 662 2.1 km from Fterë, Vlorë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/28 | 20:42:06.11 | 0.26 | 40.1050 | 19.9143 | | | | | 28.7 | 0.9 | 16 | 31 | 114 | 0.49 | 1.94 | m | |
| 710 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.2 | 0.0 | 10 | 710 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| SRN | 0.23 | 163.0 | Sg | 20:42:16.032 | -2.5 | | | | — | | | | | | m_ | 10879 |

| | | | | | | | | | | | |
|------|------|-------|-----|--------------|------|--|-----|------|---|-------|-----|
| SRN | 0.23 | 163.0 | Pg | 20:42:11.045 | -2.1 | | | m | | 10878 | |
| SRN | 0.23 | 163.0 | AM1 | 20:42:17.250 | | | 3.5 | 0.42 | a | M1 | 2.7 |
| VLO | 0.48 | 319.0 | Sg | 20:42:23.623 | 0.4 | | | m | | 10881 | |
| VLO | 0.48 | 319.0 | Pg | 20:42:15.806 | -0.1 | | | m | | 10880 | |
| VLO | 0.48 | 319.0 | AM1 | 20:42:29.660 | | | 2.3 | 0.32 | a | M1 | 2.6 |
| LSK | 0.52 | 0.0 | Pg | 20:42:16.243 | 0.0 | | | m | | 10897 | |
| LSK | 0.53 | 84.0 | Sg | 20:42:25.352 | -0.1 | | | m | | 10882 | |
| LSK | 0.53 | 84.0 | AM1 | 20:42:29.110 | | | 0.7 | 0.46 | a | M1 | 2.2 |
| IGT | 0.66 | 150.0 | Sg | 20:42:29.699 | 0.2 | | | m | | 10884 | |
| IGT | 0.66 | 150.0 | Pg | 20:42:19.253 | -0.3 | | | m | | 10883 | |
| IGT | 0.66 | 150.0 | AM1 | 20:42:35.760 | | | 0.4 | 0.24 | a | M1 | 2.1 |
| KBN | 0.84 | 51.0 | Sg | 20:42:35.637 | 1.2 | | | m | | 10886 | |
| KBN | 0.84 | 51.0 | Pg | 20:42:21.758 | -0.5 | | | m | | 10885 | |
| KBN | 0.84 | 51.0 | AM1 | 20:42:40.340 | | | 0.3 | 0.50 | a | M1 | 2.2 |
| KBN | 0.84 | 51.0 | AM1 | 20:42:40.710 | | | 0.3 | 0.74 | a | M1 | 2.2 |
| NEST | 0.92 | 70.0 | Sg | 20:42:37.818 | 0.2 | | | m | | 10888 | |
| NEST | 0.92 | 70.0 | Pg | 20:42:24.063 | -0.1 | | | m | | 10887 | |
| NEST | 0.92 | 70.0 | AM1 | 20:42:47.140 | | | 0.2 | 0.62 | a | M1 | 2.0 |
| SCTE | 1.11 | 270.0 | Sn | 20:42:43.107 | -0.3 | | | m | | 10890 | |
| SCTE | 1.11 | 270.0 | Pn | 20:42:27.407 | 0.0 | | | m | | 10889 | |
| SCTE | 1.11 | 270.0 | AM1 | 20:42:44.930 | | | 0.7 | 0.24 | a | M1 | 2.8 |
| TIR | 1.24 | 359.0 | Sg | 20:42:48.290 | 0.9 | | | m | | 10892 | |
| TIR | 1.24 | 359.0 | Pg | 20:42:29.994 | 0.3 | | | m | | 10891 | |
| TIR | 1.24 | 359.0 | AM1 | 20:42:56.300 | | | 0.2 | 0.38 | a | M1 | 2.2 |
| LKD2 | 1.43 | 156.0 | Sn | 20:42:53.343 | 0.2 | | | m | | 10894 | |
| LKD2 | 1.43 | 156.0 | Pn | 20:42:33.213 | 0.2 | | | m | | 10893 | |
| LKD2 | 1.43 | 156.0 | AM1 | 20:42:59.270 | | | 0.3 | 0.26 | a | M1 | 2.6 |
| PUK | 1.94 | 0.0 | Sn | 20:43:06.299 | 0.0 | | | m | | 10896 | |
| PUK | 1.94 | 0.0 | Pn | 20:42:40.213 | -0.3 | | | m | | 10895 | |
| PUK | 1.94 | 0.0 | AM1 | 20:43:15.520 | | | 0.1 | 0.64 | a | M1 | 2.5 |

DATA_TYPE COMMENT GSE2.1
Event 662

Official Magnitude:
M1 2.19

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 69 | 78 | 0.9400 |
| Intermediate: | 218 | 9 | 0.5500 |
| Min: | 309 | 6 | 0.4300 |

```
BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785733 athena
DATA_TYPE BULLETIN GSE2.1:SHORT
```

Event 668 2.9 km from Ndërshenë, Lezhë, Albania

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/30 | 14:52:59.28 | 0.03 | 41.8053 | 20.0990 | | | | | 19.8 | 0.7 | 8 | 31 | 147 | 0.28 | 1.36 | m | |
| 717 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.5 | 0.0 | 3 | 717 |
| Md | 1.8 | 0.0 | 2 | 717 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| PHP | 0.28 | 115.0 | Pg | 14:53:05.631 | 0.0 | | | | | | | | | m | | 10972 | |
| PHP | 0.28 | 115.0 | AM1 | 14:53:12.710 | | | | | | | | 0.3 | 0.32 | a | Ml | 1.5 | 6080 |
| PHP | 0.28 | 115.0 | AMd | 14:53:25.312 | | | | | | | | 0.0 | 19.68 | a | Md | 1.8 | 6077 |
| PUK | 0.28 | 328.0 | Sg | 14:53:10.661 | 0.0 | | | | | | | | | m | | 10971 | |
| PUK | 0.28 | 328.0 | Pg | 14:53:05.806 | 0.0 | | | | | | | | | m | | 10970 | |
| PUK | 0.28 | 328.0 | AM1 | 14:53:12.340 | | | | | | | | 0.6 | 0.12 | a | Ml | 1.9 | 6079 |
| PUK | 0.28 | 328.0 | AM1 | 14:53:11.220 | | | | | | | | 0.6 | 0.20 | a | Ml | 1.8 | 6078 |
| PUK | 0.28 | 328.0 | AMd | 14:53:24.348 | | | | | | | | 0.0 | 18.54 | a | Md | 1.8 | 6076 |
| TIR | 0.49 | 202.0 | Pg | 14:53:09.333 | -0.2 | | | | | | | | | m | | 10974 | |
| TIR | 0.49 | 202.0 | Sg | 14:53:17.235 | 0.0 | | | | | | | | | m | | 10973 | |
| TIR | 0.49 | 202.0 | AM1 | 14:53:22.320 | | | | | | | | 0.1 | 0.28 | a | Ml | 1.2 | 6082 |
| TIR | 0.49 | 202.0 | AM1 | 14:53:19.450 | | | | | | | | 0.1 | 0.36 | a | Ml | 1.2 | 6081 |
| ULC | 0.65 | 0.0 | Pg | 14:53:12.353 | 0.0 | | | | | | | | | m | | 10979 | |
| DRME | 0.78 | 300.0 | Pg | 14:53:14.638 | -0.0 | | | | | | | | | m | | 10975 | |
| BUM | 1.02 | 300.0 | Pg | 14:53:18.990 | 0.0 | | | | | | | | | m | | 10976 | |
| CEME | 1.15 | 311.0 | Pg | 14:53:21.194 | -0.0 | | | | | | | | | m | | 10977 | |
| HCY | 1.36 | 299.0 | Pg | 14:53:24.299 | -0.7 | | | | | | | | | m | | 10978 | |

DATA_TYPE COMMENT GSE2.1
Event 668

Official Magnitude:
Ml 1.45

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 81 | 55 | 0.8100 |
| Intermediate: | 248 | 33 | 0.5700 |
| Min: | 342 | 6 | 0.3400 |

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

BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785745 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 578 2.1 km from Debelldeh, Gjilan, Kosovo

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/08 | 22:44:49.12 | 0.26 | 42.2657 | 21.3740 | | | | | 11.1 | 2.0 | 16 | 15 | 291 | 0.91 | 2.15 | m | |
| 619 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.1 | 0.0 | 4 | 619 |
| Md | 3.3 | 0.0 | 4 | 619 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| PHP | 0.91 | 231.0 | Sg | 22:45:19.831 | -0.2 | | | | | | | | | | m | 9518 | |
| PHP | 0.91 | 231.0 | Pg | 22:45:06.826 | 0.0 | | | | | | | | | | mci | 9517 | |
| PHP | 0.91 | 231.0 | AM1 | 22:45:22.020 | | | | | | | | 3.3 | 0.32 | a | Ml | 3.2 | 5330 |
| PHP | 0.91 | 231.0 | AMd | 22:46:27.913 | | | | | | | | 0.0 | 81.09 | a | Md | 3.3 | 5326 |
| BCI | 0.97 | 277.0 | Sg | 22:45:22.640 | 0.0 | | | | | | | | | | m | 9520 | |
| BCI | 0.97 | 277.0 | Pg | 22:45:08.344 | 0.1 | | | | | | | | | | mce | 9519 | |
| BCI | 0.97 | 277.0 | AM1 | 22:45:27.370 | | | | | | | | 3.0 | 0.40 | a | Ml | 3.3 | 5331 |
| BCI | 0.97 | 277.0 | AMd | 22:46:36.041 | | | | | | | | 0.0 | 87.70 | a | Md | 3.4 | 5327 |
| PVY | 1.09 | 289.0 | Pg | 22:45:10.296 | -0.2 | | | | | | | | | | mde | 9521 | |
| PVY | 1.09 | 289.0 | AMd | 22:46:21.894 | | | | | | | | 0.0 | 71.60 | a | Md | 3.2 | 5328 |
| PUK | 1.12 | 260.0 | Sg | 22:45:27.382 | 0.0 | | | | | | | | | | m | 9523 | |
| PUK | 1.12 | 260.0 | Pg | 22:45:11.083 | 0.1 | | | | | | | | | | mce | 9522 | |
| PUK | 1.12 | 260.0 | AM1 | 22:45:32.340 | | | | | | | | 1.5 | 0.36 | a | Ml | 3.1 | 5332 |
| PUK | 1.12 | 260.0 | AMd | 22:46:31.956 | | | | | | | | 0.0 | 80.87 | a | Md | 3.3 | 5329 |
| BEY | 1.24 | 300.0 | Pg | 22:45:13.148 | -0.1 | | | | | | | | | | mce | 9524 | |
| TIR | 1.45 | 0.0 | Pn | 22:45:17.924 | 0.0 | | | | | | | | | | mde | 9535 | |
| TIR | 1.45 | 232.0 | Sn | 22:45:37.857 | 0.0 | | | | | | | | | | m | 9525 | |
| TIR | 1.45 | 232.0 | AM1 | 22:45:44.420 | | | | | | | | 0.3 | 0.54 | a | Ml | 2.6 | 5333 |
| KOME | 1.49 | 294.0 | Pn | 22:45:17.335 | -0.3 | | | | | | | | | | mce | 9526 | |
| ULC | 1.61 | 260.0 | Pn | 22:45:19.817 | 0.1 | | | | | | | | | | mce | 9527 | |
| DRME | 1.62 | 268.0 | Pn | 22:45:20.672 | 0.7 | | | | | | | | | | mde | 9528 | |
| PLE | 1.80 | 307.0 | Pn | 22:45:22.046 | -1.1 | | | | | | | | | | mce | 9529 | |
| BUM | 1.84 | 272.0 | Pn | 22:45:24.218 | 0.5 | | | | | | | | | | mde | 9530 | |
| CEME | 1.84 | 280.0 | Pn | 22:45:23.190 | -0.6 | | | | | | | | | | mde | 9531 | |
| NKME | 1.85 | 287.0 | Pn | 22:45:24.567 | 0.5 | | | | | | | | | | mce | 9532 | |

| | | | | | | | | | |
|-----|------|-------|----|--------------|------|--|--|-----|------|
| UPM | 2.04 | 299.0 | Pn | 22:45:25.196 | -1.7 | | | mce | 9533 |
| HCY | 2.15 | 276.0 | Pn | 22:45:28.196 | -0.3 | | | mci | 9534 |

DATA_TYPE COMMENT GSE2.1
Event 578

Official Magnitude:
M1 3.14

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 126 | 64 | 2.2100 |
| Intermediate: | 285 | 23 | 1.5200 |
| Min: | 19 | 8 | 0.8700 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785745 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 580 9 km from PodoriÃ³nes, Ionian Islands, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/09 | 07:53:07.22 | 0.07 | 39.3123 | 20.0287 | | | | | 4.0 | 2.3 | 7 | 6 | 222 | 0.32 | 1.35 | m | 621 |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.7 | 0.0 | 5 | 621 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| IGT | 0.32 | 46.0 | Sg | 07:53:19.292 | -0.0 | | | | | | | | | | m | 9551 |
| IGT | 0.32 | 46.0 | Pg | 07:53:15.396 | 1.3 | | | | | | | | | | mde | 9550 |
| IGT | 0.32 | 46.0 | AM1 | 07:53:21.978 | | | | | | | | | | | a_ M1 | 5339 |
| SRN | 0.57 | 358.0 | Sg | 07:53:28.157 | -0.1 | | | | | | | | | | m | 9553 |
| SRN | 0.57 | 358.0 | Pg | 07:53:19.305 | 0.1 | | | | | | | | | | mce | 9552 |
| SRN | 0.57 | 358.0 | AM1 | 07:53:28.878 | | | | | | | | | | | a_ M1 | 5340 |
| LKD2 | 0.72 | 136.0 | Sg | 07:53:32.550 | -0.0 | | | | | | | | | | m | 9555 |
| LKD2 | 0.72 | 136.0 | Pg | 07:53:21.712 | 0.0 | | | | | | | | | | mde | 9554 |
| LKD2 | 0.72 | 136.0 | AM1 | 07:53:33.148 | | | | | | | | | | | a_ M1 | 5341 |
| LSK | 0.94 | 27.0 | Sn | 07:53:39.938 | -0.1 | | | | | | | | | | m | 9557 |
| LSK | 0.94 | 27.0 | Pn | 07:53:25.456 | -0.5 | | | | | | | | | | mde | 9556 |
| LSK | 0.94 | 27.0 | AM1 | 07:53:44.638 | | | | | | | | | | | a_ M1 | 5342 |
| NEST | 1.35 | 0.0 | Pg | 07:53:32.846 | 0.0 | | | | | | | | | | mc_ | 9559 |
| NEST | 1.35 | 35.0 | Sg | 07:53:53.888 | 0.1 | | | | | | | | | | m | 9558 |
| NEST | 1.35 | 35.0 | AM1 | 07:53:57.618 | | | | | | | | | | | a_ M1 | 5343 |

DATA_TYPE COMMENT GSE2.1

Event 580

Official Magnitude:
Ml 2.70

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 249 | 71 | 2.3900 |
| Intermediate: | 79 | 18 | 0.6800 |
| Min: | 348 | 3 | 0.2900 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785744 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 586 2.3 km from Mesalongos, West Macedonia, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/12 | 05:51:22.63 | 0.75 | 40.3507 | 21.2448 | | | | | 24.4 | 2.6 | 30 | 25 | 184 | 0.16 | 4.38 | m | |
| 628 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 3.4 | 0.0 | 9 | 628 |
| Md | 3.5 | 0.0 | 5 | 628 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|------|
| NEST | 0.16 | 294.0 | Sg | 05:51:31.205 | 0.8 | | | | | | | | | | m | 9656 | |
| NEST | 0.16 | 294.0 | Pg | 05:51:27.949 | 0.9 | | | | | | | | | | mdi | 9655 | |
| NEST | 0.16 | 294.0 | AM1 | 05:51:31.360 | | | | | | | | 49.4 | 0.24 | a | Ml | 3.7 | 5401 |
| NEST | 0.16 | 294.0 | AMd | 05:53:31.330 | | | | | | | | 0.0 | 123.38 | a | Md | 3.6 | 5396 |
| KBN | 0.44 | 309.0 | Sg | 05:51:39.115 | 0.8 | | | | | | | | | | m | 9658 | |
| KBN | 0.44 | 309.0 | Pg | 05:51:32.118 | 0.5 | | | | | | | | | | mci | 9657 | |
| KBN | 0.44 | 309.0 | AM1 | 05:51:42.500 | | | | | | | | 13.3 | 0.54 | a | Ml | 3.3 | 5402 |
| KBN | 0.44 | 309.0 | AMd | 05:53:02.185 | | | | | | | | 0.0 | 90.07 | a | Md | 3.3 | 5397 |
| FNA | 0.44 | 13.0 | Sg | 05:51:38.595 | -0.5 | | | | | | | | | | m | 9660 | |
| FNA | 0.44 | 13.0 | Pg | 05:51:32.824 | 0.8 | | | | | | | | | | mci | 9659 | |
| FNA | 0.44 | 13.0 | AM1 | 05:51:41.360 | | | | | | | | 15.5 | 0.32 | a | Ml | 3.4 | 5403 |
| FNA | 0.44 | 13.0 | AMd | 05:53:16.873 | | | | | | | | 0.0 | 104.05 | a | Md | 3.5 | 5398 |
| LSK | 0.53 | 249.0 | Sg | 05:51:41.373 | -0.3 | | | | | | | | | | m | 9662 | |
| LSK | 0.53 | 249.0 | Pg | 05:51:33.210 | -0.3 | | | | | | | | | | mce | 9661 | |
| LSK | 0.53 | 249.0 | AM1 | 05:51:44.990 | | | | | | | | 28.6 | 0.52 | a | Ml | 3.8 | 5404 |
| LSK | 0.53 | 249.0 | AMd | 05:53:47.953 | | | | | | | | 0.0 | 134.74 | a | Md | 3.8 | 5399 |
| SRN | 1.06 | 245.0 | Sn | 05:51:59.756 | 0.7 | | | | | | | | | | m | 9664 | |
| SRN | 1.06 | 245.0 | Pn | 05:51:43.947 | 0.5 | | | | | | | | | | mci | 9663 | |
| SRN | 1.06 | 245.0 | AM1 | 05:52:03.880 | | | | | | | | 3.3 | 0.60 | a | Ml | 3.4 | 5405 |
| IGT | 1.08 | 221.0 | Sg | 05:51:58.493 | -0.4 | | | | | | | | | | m | 9666 | |

| | | | | | | | | | |
|------|------|-------|-----|--------------|------|-----|--------|--------|------|
| IGT | 1.08 | 221.0 | Pg | 05:51:43.215 | -0.1 | | | mde | 9665 |
| IGT | 1.08 | 221.0 | AM1 | 05:52:04.510 | | 2.2 | 0.62 | a__ Ml | 5406 |
| IGT | 1.08 | 221.0 | AMd | 05:53:48.475 | | 0.0 | 125.26 | a__ Md | 5400 |
| VLO | 1.34 | 276.0 | P | 05:51:51.045 | 3.8 | | | m__ | 9667 |
| PHP | 1.46 | 336.0 | Pn | 05:51:49.774 | -0.1 | | | mce | 9669 |
| TIR | 1.50 | 0.0 | Pn | 05:51:51.401 | 0.0 | | | mdi | 9689 |
| TIR | 1.44 | 315.0 | Sn | 05:52:13.751 | 3.6 | | | m__ | 9668 |
| TIR | 1.44 | 315.0 | AM1 | 05:52:19.060 | | 1.0 | 0.62 | a__ Ml | 5407 |
| LKD2 | 1.62 | 197.0 | Sg | 05:52:14.592 | -0.9 | | | m__ | 9671 |
| LKD2 | 1.62 | 197.0 | Pg | 05:51:54.397 | 1.6 | | | mci | 9670 |
| LKD2 | 1.62 | 197.0 | AM1 | 05:52:20.440 | | 1.9 | 0.70 | a__ Ml | 5408 |
| PUK | 1.97 | 330.0 | Sn | 05:52:23.990 | -0.5 | | | m__ | 9673 |
| PUK | 1.97 | 330.0 | Pn | 05:51:58.222 | 0.2 | | | mce | 9672 |
| PUK | 1.97 | 330.0 | AM1 | 05:52:30.670 | | 1.5 | 0.58 | a__ Ml | 5409 |
| SCTE | 2.14 | 264.0 | Sn | 05:52:30.886 | 1.8 | | | m__ | 9675 |
| SCTE | 2.14 | 264.0 | Pn | 05:51:59.988 | -0.6 | | | mce | 9674 |
| BCI | 2.20 | 337.0 | Pn | 05:52:00.928 | -0.4 | | | m_e | 9676 |
| ULC | 2.21 | 318.0 | Pn | 05:52:01.570 | 0.1 | | | mde | 9677 |
| DRME | 2.40 | 321.0 | Pn | 05:52:04.195 | -0.2 | | | mce | 9678 |
| PVY | 2.44 | 338.0 | Pn | 05:52:04.529 | -0.4 | | | mde | 9679 |
| BUM | 2.63 | 319.0 | Pn | 05:52:07.023 | -0.7 | | | mce | 9680 |
| BEY | 2.71 | 339.0 | Pn | 05:52:08.302 | -0.7 | | | mce | 9681 |
| CEME | 2.80 | 323.0 | Pn | 05:52:09.630 | -0.7 | | | mde | 9682 |
| KOME | 2.81 | 334.0 | Pn | 05:52:11.893 | 1.4 | | | mde | 9683 |
| HCY | 2.95 | 317.0 | P | 05:52:12.582 | 0.2 | | | m__ | 9684 |
| NKME | 2.96 | 326.0 | Pn | 05:52:15.066 | 2.4 | | | m_i | 9685 |
| UPM | 3.34 | 330.0 | Pn | 05:52:19.619 | 1.4 | | | mdi | 9686 |
| SGRT | 4.38 | 291.0 | Sn | 05:53:18.280 | -8.3 | | | m__ | 9688 |
| SGRT | 4.38 | 291.0 | Pn | 05:52:30.390 | -3.1 | | | mci | 9687 |

DATA_TYPE COMMENT GSE2.1
Event 586

Official Magnitude:
M1 3.41

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 277 | 71 | 2.7800 |
| Intermediate: | 113 | 18 | 1.9500 |
| Min: | 21 | 5 | 1.0100 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785741 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 605 0.4 km from Loutra, Epirus, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-------|---------|--------------|-----------|------|-------|------|-------|-----|------|------|-----|-------|-----------|-------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/14 | 16:23:43.51 | 0.30 | 40.1743 | 20.7312 | | | | | 1.8 | 1.3 | 22 | 14 | 138 | 0.11 | 2.25 | m | |
| 651 | | | | | | | | | | | | | | | | | |
| Magnitude | Err | Nsta | Author | OrigID | | | | | | | | | | | | | |
| Ml | 3.7 | 0.0 | 10 | 651 | | | | | | | | | | | | | |
| Md | 2.9 | 0.0 | 1 | 651 | | | | | | | | | | | | | |
| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
| LSK | 0.10 | 257.0 | Pg | 16:23:45.791 | -0.1 | | | | | | | | | m | | 10016 | |
| LSK | 0.10 | 257.0 | Sg | 16:23:47.672 | 0.1 | | | | | | | | | m | | 10015 | |
| LSK | 0.10 | 257.0 | AM1 | 16:23:48.070 | | | | | | | | | | a | Ml | 5604 | |
| NEST | 0.34 | 45.0 | Pg | 16:23:51.076 | 0.0 | | | | | | | | | m | | 10018 | |
| NEST | 0.34 | 45.0 | Sg | 16:23:56.870 | 0.2 | | | | | | | | | m | | 10017 | |
| NEST | 0.34 | 45.0 | AM1 | 16:24:00.890 | | | | | | | | | | a | Ml | 5605 | |
| KBN | 0.45 | 5.0 | Pg | 16:23:52.155 | -0.5 | | | | | | | | | m | | 10020 | |
| KBN | 0.45 | 5.0 | Sg | 16:23:59.477 | -0.1 | | | | | | | | | m | | 10019 | |
| KBN | 0.45 | 5.0 | AM1 | 16:24:11.010 | | | | | | | | | | a | Ml | 5606 | |
| SRN | 0.63 | 243.0 | Pg | 16:23:55.471 | -1.5 | | | | | | | | | m | | 10022 | |
| SRN | 0.63 | 243.0 | Sg | 16:24:05.889 | -1.2 | | | | | | | | | m | | 10021 | |
| SRN | 0.63 | 243.0 | AM1 | 16:24:10.270 | | | | | | | | | | a | Ml | 5607 | |
| SRN | 0.63 | 243.0 | AMd | 16:24:52.787 | | | | | | | | | | a | Md | 5603 | |
| IGT | 0.71 | 206.0 | Pg | 16:23:58.399 | 0.3 | | | | | | | | | m | | 10024 | |
| IGT | 0.71 | 206.0 | Sg | 16:24:09.251 | 0.1 | | | | | | | | | m | | 10023 | |
| VLO | 0.99 | 288.0 | Pn | 16:24:02.845 | 0.1 | | | | | | | | | m | | 10026 | |
| VLO | 0.99 | 288.0 | Sn | 16:24:20.218 | 3.1 | | | | | | | | | m | | 10025 | |
| BPA2 | 1.01 | 304.0 | Pg | 16:24:03.848 | -0.1 | | | | | | | | | m | | 10028 | |
| BPA2 | 1.01 | 304.0 | Sg | 16:24:19.414 | 0.2 | | | | | | | | | m | | 10027 | |
| TIR | 1.34 | 0.0 | Pn | 16:24:10.605 | 0.0 | | | | | | | | | m | | 10039 | |
| TIR | 1.34 | 331.0 | Sn | 16:24:30.323 | 0.1 | | | | | | | | | m | | 10029 | |
| TIR | 1.34 | 331.0 | AM1 | 16:24:35.730 | | | | | | | | | | a | Ml | 5608 | |
| LKD2 | 1.38 | 183.0 | Pn | 16:24:11.356 | 0.4 | | | | | | | | | m | | 10031 | |
| LKD2 | 1.38 | 183.0 | Sn | 16:24:30.999 | -0.5 | | | | | | | | | m | | 10030 | |
| LKD2 | 1.38 | 183.0 | AM1 | 16:24:38.630 | | | | | | | | | | a | Ml | 5609 | |
| PHP | 1.52 | 352.0 | Pn | 16:24:13.286 | 0.2 | | | | | | | | | m | | 10033 | |
| PHP | 1.52 | 352.0 | Sn | 16:24:35.318 | -0.0 | | | | | | | | | m | | 10032 | |
| PHP | 1.52 | 352.0 | AM1 | 16:24:44.630 | | | | | | | | | | a | Ml | 5610 | |
| SCTE | 1.74 | 268.0 | Pn | 16:24:16.691 | -0.5 | | | | | | | | | m | | 10034 | |
| SCTE | 1.74 | 268.0 | AM1 | 16:24:42.620 | | | | | | | | | | a | Ml | 5611 | |
| PUK | 1.97 | 342.0 | Pn | 16:24:20.829 | -0.4 | | | | | | | | | m | | 10036 | |
| PUK | 1.97 | 342.0 | Sn | 16:24:49.385 | -0.1 | | | | | | | | | m | | 10035 | |
| PUK | 1.97 | 342.0 | AM1 | 16:24:58.180 | | | | | | | | | | a | Ml | 5612 | |
| ULC | 2.11 | 329.0 | Pn | 16:24:22.303 | -1.2 | | | | | | | | | m | | 10037 | |
| BCI | 2.25 | 348.0 | Pn | 16:24:26.129 | 0.8 | | | | | | | | | m | | 10038 | |
| BCI | 2.25 | 348.0 | AM1 | 16:25:04.420 | | | | | | | | | | a | Ml | 5613 | |

DATA TYPE COMMENT GSE2.1
Event 605

Official Magnitude:

M1 3.73

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 202 | 86 | 1.3000 |
| Intermediate: | 287 | 0 | 0.5900 |
| Min: | 17 | 4 | 0.3800 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785737 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 629 1.3 km from Loutra, Epirus, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 18:19:33.18 | 0.17 | 40.1807 | 20.7152 | | | | | 3.4 | 1.0 | 9 | 8 | 158 | 0.09 | 1.52 | m | |
| 677 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.1 | 0.0 | 5 | 677 |
| Md | 2.5 | 0.0 | 3 | 677 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| LSK | 0.09 | 252.0 | Sg | 18:19:36.835 | -0.1 | | | | | | | | | | m | 10386 | |
| LSK | 0.09 | 252.0 | Pg | 18:19:35.372 | 0.1 | | | | | | | | | | m | 10385 | |
| LSK | 0.09 | 252.0 | AM1 | 18:19:38.930 | | | | | | | | 76.0 | 0.66 | a | M1 | 3.5 | 5778 |
| LSK | 0.09 | 252.0 | AMd | 18:20:27.570 | | | | | | | | 0.0 | 52.20 | a | Md | 2.8 | 5775 |
| NEST | 0.35 | 0.0 | Pg | 18:19:40.775 | 0.0 | | | | | | | | | | m | 10396 | |
| NEST | 0.35 | 47.0 | Sg | 18:19:46.071 | -0.2 | | | | | | | | | | m | 10387 | |
| NEST | 0.35 | 47.0 | AM1 | 18:19:54.340 | | | | | | | | 1.2 | 0.54 | a | M1 | 2.1 | 5779 |
| KBN | 0.45 | 7.0 | Sg | 18:19:48.565 | -0.2 | | | | | | | | | | m | 10389 | |
| KBN | 0.45 | 7.0 | Pg | 18:19:42.264 | 0.2 | | | | | | | | | | m | 10388 | |
| KBN | 0.45 | 7.0 | AM1 | 18:19:56.460 | | | | | | | | 0.7 | 0.54 | a | M1 | 2.0 | 5780 |
| KBN | 0.45 | 7.0 | AMd | 18:20:17.968 | | | | | | | | 0.0 | 35.70 | a | Md | 2.4 | 5776 |
| SRN | 0.63 | 242.0 | S | 18:19:55.997 | -0.2 | | | | | | | | | | m | 10391 | |
| SRN | 0.63 | 242.0 | Pg | 18:19:45.645 | -0.7 | | | | | | | | | | m | 10390 | |
| SRN | 0.63 | 242.0 | AM1 | 18:19:56.950 | | | | | | | | 0.3 | 0.44 | a | M1 | 2.0 | 5781 |
| SRN | 0.63 | 242.0 | AMd | 18:20:22.575 | | | | | | | | 0.0 | 36.93 | a | Md | 2.5 | 5777 |
| IGT | 0.71 | 205.0 | S | 18:19:58.683 | 0.2 | | | | | | | | | | m | 10393 | |
| IGT | 0.71 | 205.0 | Pg | 18:19:47.694 | 0.0 | | | | | | | | | | m | 10392 | |
| PHP | 1.52 | 353.0 | S | 18:20:24.722 | 0.3 | | | | | | | | | | m | 10395 | |
| PHP | 1.52 | 353.0 | P | 18:20:03.222 | 0.8 | | | | | | | | | | m | 10394 | |
| PHP | 1.52 | 353.0 | AM1 | 18:20:34.460 | | | | | | | | 0.2 | 0.76 | a | M1 | 2.5 | 5782 |

DATA_TYPE COMMENT GSE2.1
Event 629

Official Magnitude:
M1 2.11

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 286 | 60 | 1.1500 |
| Intermediate: | 132 | 27 | 0.7400 |
| Min: | 36 | 11 | 0.3200 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785736 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 632 1.3 km from Skiadás, Epirus, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/16 | 12:05:40.91 | 0.03 | 39.3210 | 20.7217 | | | | | 34.7 | 3.2 | 7 | 6 | 174 | 0.37 | 1.12 | m | |
| 680 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.7 | 0.0 | 3 | 680 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| IGT | 0.37 | 305.0 | Sg | 12:05:55.499 | -1.4 | | | | | | | | | | m | 10435 | |
| IGT | 0.37 | 305.0 | Pg | 12:05:50.033 | 0.0 | | | | | | | | | | mde | 10434 | |
| LKD2 | 0.53 | 186.0 | Sg | 12:06:01.206 | -0.0 | | | | | | | | | | m | 10437 | |
| LKD2 | 0.53 | 186.0 | Pg | 12:05:52.569 | 0.1 | | | | | | | | | | mci | 10436 | |
| LKD2 | 0.53 | 186.0 | AM1 | 12:06:04.778 | | | | | | | | 2.1 | 0.34 | a | M1 | 2.7 | 5805 |
| SRN | 0.79 | 316.0 | S | 12:06:09.256 | 0.0 | | | | | | | | | | m | 10439 | |
| SRN | 0.79 | 316.0 | P | 12:05:57.071 | -0.0 | | | | | | | | | | m | 10438 | |
| LSK | 0.83 | 354.0 | S | 12:06:09.697 | 0.0 | | | | | | | | | | m | 10440 | |
| LSK | 0.83 | 354.0 | AM1 | 12:06:16.688 | | | | | | | | 1.2 | 0.68 | a | M1 | 2.8 | 5806 |
| NEST | 1.09 | 0.0 | Pn | 12:06:02.206 | 0.0 | | | | | | | | | | mce | 10442 | |
| NEST | 1.12 | 12.0 | Sn | 12:06:18.488 | -0.0 | | | | | | | | | | m | 10441 | |
| NEST | 1.12 | 12.0 | AM1 | 12:06:25.438 | | | | | | | | 0.5 | 0.84 | a | M1 | 2.6 | 5807 |

DATA_TYPE COMMENT GSE2.1
Event 632

Official Magnitude:
M1 2.71

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 221 | 82 | 3.2400 |
| Intermediate: | 88 | 5 | 0.7900 |
| Min: | 357 | 6 | 0.3100 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785737 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 637 3.5 km from Prosalion, Epirus, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/15 | 11:45:04.40 | 0.17 | 40.1647 | 20.6860 | | | | | 6.6 | 2.0 | 6 | 6 | 157 | 0.07 | 0.69 | m | |
| 685 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 1.8 | 0.0 | 2 | 685 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.00 | 0.0 | P | 11:45:11.406 | 0.0 | | | | | | — | | | | m | 10498 | |
| NEST | 0.37 | 47.0 | S | 11:45:18.043 | 0.0 | | | | | | — | | | | m | 10493 | |
| NEST | 0.37 | 47.0 | AM1 | 11:45:19.330 | | | | | | | — | 0.2 | 0.16 | a | M1 | 1.3 | 5834 |
| NEST | 0.37 | 47.0 | AM1 | 11:45:21.270 | | | | | | | — | 0.2 | 0.14 | a | M1 | 1.3 | 5833 |
| LSK | 0.07 | 258.0 | Sg | 11:45:07.789 | 0.1 | | | | | | — | | | | m | 10492 | |
| LSK | 0.07 | 258.0 | Pg | 11:45:06.053 | -0.2 | | | | | | — | | | | m | 10491 | |
| LSK | 0.07 | 258.0 | AM1 | 11:45:09.860 | | | | | | | — | 3.8 | 0.26 | a | M1 | 2.2 | 5832 |
| LSK | 0.07 | 258.0 | AM1 | 11:45:10.050 | | | | | | | — | 3.9 | 0.28 | a | M1 | 2.2 | 5831 |
| SRN | 0.60 | 242.0 | Sg | 11:45:26.204 | 0.1 | | | | | | — | | | | m | 10495 | |
| SRN | 0.60 | 242.0 | Pg | 11:45:15.166 | -1.7 | | | | | | — | | | | m | 10494 | |
| IGT | 0.69 | 204.0 | Sg | 11:45:28.560 | 0.0 | | | | | | — | | | | m | 10497 | |
| IGT | 0.69 | 204.0 | Pg | 11:45:20.475 | 2.3 | | | | | | — | | | | m | 10496 | |

DATA_TYPE COMMENT GSE2.1

Event 637

Official Magnitude:
M1 1.75

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 313 | 59 | 2.3200 |
| Intermediate: | 142 | 30 | 0.9000 |
| Min: | 50 | 4 | 0.4000 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785736 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 647 0.5 km from Achladia, Epirus, Greece

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/18 | 18:54:03.91 | 0.11 | 39.5917 | 20.3947 | | | | | 35.3 | 1.0 | 8 | 10 | 134 | 0.42 | 1.56 | m | |
| 695 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 1.9 | 0.0 | 6 | 695 |
| Md | 2.8 | 0.0 | 4 | 695 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|-------|-----------|-------|------|
| IGT | 0.08 | 220.0 | Sg | 18:54:10.664 | -4.1 | | | | | | | | | | m | 10625 | |
| IGT | 0.08 | 220.0 | Pg | 18:54:07.956 | -2.1 | | | | | | | | | | m | 10624 | |
| IGT | 0.08 | 220.0 | AM1 | 18:54:11.418 | | | | | | | | | 2.1 | 0.14 | a Ml | 2.5 | 5893 |
| IGT | 0.08 | 220.0 | AMd | 18:54:38.198 | | | | | | | | | 0.0 | 30.24 | a Md | 1.6 | 5889 |
| SRN | 0.42 | 314.0 | Sg | 18:54:21.844 | -0.0 | | | | | | | | | | m | 10627 | |
| SRN | 0.42 | 314.0 | Pg | 18:54:14.120 | -0.1 | | | | | | | | | | m | 10626 | |
| SRN | 0.42 | 314.0 | AM1 | 18:54:26.808 | | | | | | | | | 0.1 | 0.42 | a Ml | 1.3 | 5894 |
| SRN | 0.42 | 314.0 | AMd | 18:55:01.340 | | | | | | | | | 0.0 | 47.22 | a Md | 2.7 | 5890 |
| LSK | 0.58 | 0.0 | Pg | 18:54:15.881 | 0.0 | | | | | | | | | | m | 10634 | |
| LSK | 0.58 | 15.0 | Sg | 18:54:25.406 | 0.1 | | | | | | | | | | m | 10628 | |
| LSK | 0.58 | 15.0 | AM1 | 18:54:31.398 | | | | | | | | | 0.3 | 0.52 | a Ml | 1.9 | 5895 |
| LKD2 | 0.83 | 165.0 | Sg | 18:54:32.953 | 0.2 | | | | | | | | | | m | 10630 | |
| LKD2 | 0.83 | 165.0 | Pg | 18:54:20.174 | -0.2 | | | | | | | | | | m | 10629 | |
| LKD2 | 0.83 | 165.0 | AM1 | 18:54:41.688 | | | | | | | | | 0.2 | 0.64 | a Ml | 1.9 | 5896 |
| LKD2 | 0.83 | 165.0 | AMd | 18:55:14.369 | | | | | | | | | 0.0 | 54.19 | a Md | 2.9 | 5891 |
| NEST | 0.96 | 31.0 | Sg | 18:54:36.847 | 0.0 | | | | | | | | | | m | 10632 | |
| NEST | 0.96 | 31.0 | Pg | 18:54:22.643 | -0.1 | | | | | | | | | | m | 10631 | |
| NEST | 0.96 | 31.0 | AM1 | 18:54:45.048 | | | | | | | | | 0.1 | 0.50 | a Ml | 1.9 | 5897 |
| NEST | 0.96 | 31.0 | AMd | 18:55:23.850 | | | | | | | | | 0.0 | 61.21 | a Md | 3.0 | 5892 |
| SCTE | 1.56 | 289.0 | Sn | 18:54:53.710 | 0.1 | | | | | | | | | | m | 10633 | |
| SCTE | 1.56 | 289.0 | AM1 | 18:55:07.838 | | | | | | | | | 0.2 | 0.84 | a Ml | 2.6 | 5898 |

DATA_TYPE COMMENT GSE2.1

Event 647

Official Magnitude:
Ml 1.94

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 66 | 77 | 1.0300 |
| Intermediate: | 265 | 11 | 0.5200 |
| Min: | 174 | 4 | 0.3900 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785734 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 655 1.0 km from Bračani, Danilovgrad, Montenegro

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/24 | 13:06:13.15 | 0.22 | 42.4917 | 19.1078 | | | | | 14.8 | 2.3 | 14 | 31 | 96 | 0.24 | 1.28 | m | |
| 703 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.4 | 0.0 | 4 | 703 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| CEME | 0.15 | 292.0 | Pg | 13:06:18.013 | 0.8 | | | | | | | | | | m | 10750 | |
| BUM | 0.25 | 219.0 | Pg | 13:06:18.879 | 0.1 | | | | | | | | | | m | 10751 | |
| NKME | 0.30 | 339.0 | Pg | 13:06:19.888 | 0.2 | | | | | | | | | | m | 10752 | |
| DRME | 0.31 | 168.0 | Pg | 13:06:20.041 | 0.1 | | | | | | | | | | m | 10753 | |
| KOME | 0.47 | 39.0 | Pg | 13:06:23.007 | 0.2 | | | | | | | | | | m | 10754 | |
| ULC | 0.54 | 168.0 | Pg | 13:06:23.706 | -0.5 | | | | | | | | | | m | 10755 | |
| BRY | 0.58 | 315.0 | Pg | 13:06:24.845 | -0.2 | | | | | | | | | | m | 10756 | |
| PVY | 0.65 | 80.0 | Pg | 13:06:26.326 | 0.1 | | | | | | | | | | m | 10757 | |
| BEY | 0.70 | 56.0 | P | 13:06:27.009 | -0.1 | | | | | | | | | | m | 10758 | |
| BCI | 0.72 | 99.0 | Pg | 13:06:27.179 | -0.3 | | | | | | | | | | m | 10760 | |
| BCI | 0.72 | 99.0 | Sg | 13:06:38.068 | -0.2 | | | | | | | | | | m | 10759 | |
| BCI | 0.72 | 99.0 | AM1 | 13:06:40.510 | | | | | | | | 1.2 | 0.28 | a | M1 | 2.6 | 5969 |
| BCI | 0.72 | 99.0 | AM1 | 13:06:40.760 | | | | | | | | 1.2 | 0.36 | a | M1 | 2.6 | 5968 |
| UPM | 0.73 | 0.0 | Pg | 13:06:27.035 | 0.0 | | | | | | | | | | m | 10766 | |
| PUK | 0.73 | 127.0 | Sg | 13:06:38.980 | 0.3 | | | | | | | | | | m | 10762 | |
| PUK | 0.73 | 127.0 | Pg | 13:06:27.342 | -0.4 | | | | | | | | | | m | 10761 | |
| PUK | 0.73 | 127.0 | AM1 | 13:06:41.710 | | | | | | | | 0.6 | 0.18 | a | M1 | 2.3 | 5970 |
| TIR | 1.27 | 153.0 | Pn | 13:06:37.661 | 0.1 | | | | | | | | | | m | 10763 | |
| TIR | 1.27 | 153.0 | AM1 | 13:06:56.130 | | | | | | | | 0.2 | 0.42 | a | M1 | 2.4 | 5971 |
| PHP | 1.28 | 128.0 | Sn | 13:06:56.753 | 1.2 | | | | | | | | | | m | 10765 | |
| PHP | 1.28 | 128.0 | Pn | 13:06:37.603 | 0.2 | | | | | | | | | | m | 10764 | |
| PHP | 1.28 | 128.0 | AM1 | 13:07:02.270 | | | | | | | | 0.2 | 0.16 | a | M1 | 2.3 | 5972 |

DATA_TYPE COMMENT GSE2.1
Event 655

Official Magnitude:
M1 2.36

Error ellipse:
Azim Dip Mag

Max: 285 83 2.3000
 Intermediate: 41 2 0.6400
 Min: 131 6 0.5100

BEGIN GSE2.1
 MSG_TYPE DATA
 MSG_ID 1556785734 athena
 DATA_TYPE BULLETIN GSE2.1:SHORT

Event 659 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/27 | 17:11:30.91 | 0.10 | 39.4452 | 20.2775 | | | | | 11.0 | 0.9 | 9 | 31 | 140 | 0.10 | 2.61 | m | |
| 707 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml | 2.7 | 0.0 | 6 | 707 |
| Md | 1.5 | 0.0 | 1 | 707 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|-------|-----------|-------|-----|------|
| IGT | 0.10 | 25.0 | Sg | 17:11:34.855 | -1.1 | | | | | | | | | | m | 10820 | | |
| IGT | 0.10 | 25.0 | Pg | 17:11:33.600 | -0.2 | | | | | | | | | | m | 10819 | | |
| IGT | 0.10 | 25.0 | AMl | 17:11:36.100 | | | | | | | | | 27.5 | 0.22 | a | Ml | 3.2 | 5996 |
| IGT | 0.10 | 25.0 | AMd | 17:11:59.476 | | | | | | | | | 0.0 | 25.88 | a | Md | 1.5 | 5995 |
| SRN | 0.48 | 334.0 | Sg | 17:11:49.080 | 0.2 | | | | | | | | | | m | 10822 | | |
| SRN | 0.48 | 334.0 | Pg | 17:11:41.159 | -0.0 | | | | | | | | | | m | 10821 | | |
| SRN | 0.48 | 334.0 | AMl | 17:11:55.850 | | | | | | | | | 0.9 | 0.32 | a | Ml | 2.2 | 5997 |
| LKD2 | 0.72 | 155.0 | Sg | 17:11:57.000 | 0.9 | | | | | | | | | | m | 10824 | | |
| LKD2 | 0.72 | 155.0 | Pg | 17:11:45.409 | 0.1 | | | | | | | | | | m | 10823 | | |
| LKD2 | 0.72 | 155.0 | AMl | 17:12:03.880 | | | | | | | | | 1.1 | 0.34 | a | Ml | 2.6 | 5999 |
| LKD2 | 0.72 | 155.0 | AMl | 17:12:08.540 | | | | | | | | | 1.0 | 0.56 | a | Ml | 2.5 | 5998 |
| LSK | 0.75 | 19.0 | Sg | 17:11:56.849 | 0.1 | | | | | | | | | | m | 10826 | | |
| LSK | 0.75 | 19.0 | Pg | 17:11:45.628 | -0.1 | | | | | | | | | | m | 10825 | | |
| LSK | 0.75 | 19.0 | AMl | 17:12:00.550 | | | | | | | | | 2.4 | 0.58 | a | Ml | 3.0 | 6001 |
| LSK | 0.75 | 19.0 | AMl | 17:12:02.560 | | | | | | | | | 1.5 | 0.68 | a | Ml | 2.7 | 6000 |
| NEST | 1.13 | 31.0 | Sn | 17:12:09.721 | -0.1 | | | | | | | | | | m | 10828 | | |
| NEST | 1.13 | 31.0 | Pg | 17:11:53.149 | 0.0 | | | | | | | | | | m | 10827 | | |
| NEST | 1.13 | 31.0 | AMl | 17:12:16.220 | | | | | | | | | 0.7 | 0.70 | a | Ml | 2.7 | 6002 |
| SCTE | 1.53 | 0.0 | Pn | 17:11:59.509 | 0.0 | | | | | | | | | | m | 10831 | | |
| SCTE | 1.53 | 295.0 | Sn | 17:12:21.964 | -0.1 | | | | | | | | | | m | 10829 | | |
| SCTE | 1.53 | 295.0 | AMl | 17:12:34.370 | | | | | | | | | 0.4 | 0.50 | a | Ml | 2.8 | 6003 |
| PUK | 2.61 | 354.0 | Pn | 17:12:16.027 | -0.9 | | | | | | | | | | m | 10830 | | |

DATA_TYPE COMMENT GSE2.1
 Event 659

Official Magnitude:

M1 2.74

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 117 | 82 | 0.8800 |
| Intermediate: | 224 | 2 | 0.5000 |
| Min: | 314 | 8 | 0.4800 |

BEGIN GSE2.1
MSG_TYPE DATA
MSG_ID 1556785734 athena
DATA_TYPE BULLETIN GSE2.1:SHORT

Event 665 Region N/A

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/30 | 01:12:28.56 | 0.35 | 39.3097 | 19.8938 | | | | | 33.1 | 1.4 | 15 | 31 | 176 | 0.40 | 3.06 | m | |
| 714 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 3.2 | 0.0 | 7 | 714 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| IGT | 0.40 | 56.0 | Sg | 01:12:44.713 | -0.5 | | | | | | | | | | m | 10930 | |
| IGT | 0.40 | 56.0 | Pg | 01:12:38.463 | 0.4 | | | | | | | | | | m | 10929 | |
| IGT | 0.40 | 56.0 | AM1 | 01:12:47.800 | | | | | | | | 4.5 | 0.20 | a | M1 | 2.9 | 6047 |
| SRN | 0.58 | 8.0 | Sg | 01:12:50.609 | 0.0 | | | | | | | | | | m | 10932 | |
| SRN | 0.58 | 8.0 | Pn | 01:12:42.299 | 1.2 | | | | | | | | | | mc | 10931 | |
| SRN | 0.58 | 8.0 | AM1 | 01:12:52.020 | | | | | | | | 1.9 | 0.30 | a | M1 | 2.7 | 6048 |
| LKD2 | 0.79 | 130.0 | Sg | 01:12:55.902 | -0.3 | | | | | | | | | | m | 10934 | |
| LKD2 | 0.79 | 130.0 | Pg | 01:12:44.725 | 0.4 | | | | | | | | | | m | 10933 | |
| LKD2 | 0.79 | 130.0 | AM1 | 01:12:56.230 | | | | | | | | 5.1 | 0.28 | a | M1 | 3.4 | 6050 |
| LKD2 | 0.79 | 130.0 | AM1 | 01:12:56.240 | | | | | | | | 4.4 | 0.28 | a | M1 | 3.3 | 6049 |
| LSK | 1.00 | 32.0 | Sn | 01:13:02.368 | 0.1 | | | | | | | | | | m | 10936 | |
| LSK | 1.00 | 32.0 | Pn | 01:12:47.899 | 0.1 | | | | | | | | | | m | 10935 | |
| LSK | 1.00 | 32.0 | AM1 | 01:13:07.780 | | | | | | | | 4.5 | 0.60 | a | M1 | 3.5 | 6051 |
| SCTE | 1.34 | 306.0 | Sn | 01:13:12.162 | -0.3 | | | | | | | | | | m | 10938 | |
| SCTE | 1.34 | 306.0 | Pn | 01:12:54.183 | 0.5 | | | | | | | | | | m | 10937 | |
| SCTE | 1.34 | 306.0 | AM1 | 01:13:21.850 | | | | | | | | 1.3 | 0.30 | a | M1 | 3.2 | 6052 |
| NEST | 1.42 | 38.0 | Sn | 01:13:14.951 | 0.4 | | | | | | | | | | m | 10940 | |
| NEST | 1.42 | 38.0 | Pn | 01:12:54.902 | 0.0 | | | | | | | | | | m | 10939 | |
| NEST | 1.42 | 38.0 | AM1 | 01:13:23.410 | | | | | | | | 1.2 | 0.36 | a | M1 | 3.2 | 6054 |
| NEST | 1.42 | 38.0 | AM1 | 01:13:17.770 | | | | | | | | 0.9 | 0.42 | a | M1 | 3.1 | 6053 |
| KBN | 1.48 | 27.0 | Sn | 01:13:17.017 | 1.5 | | | | | | | | | | m | 10942 | |
| KBN | 1.48 | 27.0 | Pn | 01:12:55.202 | -0.2 | | | | | | | | | | m | 10941 | |
| KBN | 1.48 | 27.0 | AM1 | 01:13:20.810 | | | | | | | | 0.5 | 0.40 | a | M1 | 2.9 | 6055 |
| TIR | 2.04 | 0.0 | Pn | 01:13:03.796 | -0.4 | | | | | | | | | | m | 10943 | |

| | | | | | | | | | |
|-----|------|-----|----|--------------|------|---|---|---|-------|
| PHP | 2.41 | 9.0 | Pn | 01:13:08.455 | -0.9 | — | — | m | 10944 |
| PUK | 2.73 | 0.0 | Pn | 01:13:12.435 | -1.8 | — | — | m | 10945 |
| BCI | 3.06 | 0.0 | Pn | 01:13:17.299 | 0.0 | — | — | m | 10946 |

DATA_TYPE COMMENT GSE2.1

Event 665

Official Magnitude:

M1 3.19

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 86 | 61 | 1.5700 |
| Intermediate: | 212 | 18 | 0.8900 |
| Min: | 310 | 22 | 0.6800 |

BEGIN GSE2.1

MSG_TYPE DATA

MSG_ID 1556785733 athena

DATA_TYPE BULLETIN GSE2.1:SHORT

Event 667 1.5 km from Gornji Vukovci, Podgorica, Montenegro

| Date | Time | Err | RMS | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|------|---------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID | | | | | | | | | | | | | | | | | |
| 2019/04/30 | 05:56:17.29 | 0.59 | 42.3477 | 19.1965 | | | | | 0.1 | 6.0 | 12 | 15 | 76 | 0.16 | 1.12 | m | |
| 716 | | | | | | | | | | | | | | | | | |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1 | 2.0 | 0.0 | 3 | 716 |
| Md | 3.1 | 0.0 | 11 | 716 |

| Sta | Dist | EvAz | Phase | Time | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID | |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|-------|
| DRME | 0.16 | 182.0 | Pg | 05:56:20.604 | -0.6 | — | — | — | — | — | — | 0.0 | 61.65 | a | Md | 2.9 | 10955 |
| DRME | 0.16 | 182.0 | AMd | 05:57:22.258 | — | — | — | — | — | — | — | 0.0 | 68.48 | a | Md | 3.0 | 6062 |
| BUM | 0.22 | 258.0 | Pg | 05:56:22.353 | -0.2 | — | — | — | — | — | — | 0.0 | 74.74 | a | Md | 3.1 | 10957 |
| BUM | 0.22 | 258.0 | AMd | 05:57:30.836 | — | — | — | — | — | — | — | 0.0 | 52.34 | a | Md | 2.8 | 6064 |
| CEME | 0.29 | 315.0 | Pg | 05:56:24.017 | 0.2 | — | — | — | — | — | — | 0.0 | 73.57 | a | Md | 3.1 | 10959 |
| CEME | 0.29 | 315.0 | AMd | 05:57:38.754 | — | — | — | — | — | — | — | 0.0 | 78.44 | a | Md | 3.2 | 6066 |
| ULC | 0.39 | 174.0 | Pg | 05:56:22.438 | -3.5 | — | — | — | — | — | — | 0.0 | 80.18 | a | Md | 3.2 | 10960 |
| ULC | 0.39 | 174.0 | AMd | 05:57:14.780 | — | — | — | — | — | — | — | 0.0 | 77.44 | a | Md | 3.2 | 6067 |
| NKME | 0.45 | 338.0 | Pg | 05:56:27.601 | 0.4 | — | — | — | — | — | — | 0.0 | 80.18 | a | Md | 3.2 | 10961 |
| NKME | 0.45 | 338.0 | AMd | 05:57:41.173 | — | — | — | — | — | — | — | 0.0 | 78.44 | a | Md | 3.2 | 6068 |
| HCY | 0.53 | 282.0 | Pg | 05:56:28.667 | -0.1 | — | — | — | — | — | — | 0.0 | 77.44 | a | Md | 3.2 | 10963 |
| HCY | 0.53 | 282.0 | AMd | 05:57:47.111 | — | — | — | — | — | — | — | 0.0 | 80.18 | a | Md | 3.2 | 6069 |
| KOME | 0.55 | 24.0 | Pg | 05:56:29.350 | 0.2 | — | — | — | — | — | — | 0.0 | 77.44 | a | Md | 3.2 | 10970 |
| KOME | 0.55 | 24.0 | AMd | 05:57:49.531 | — | — | — | — | — | — | — | 0.0 | 80.18 | a | Md | 3.2 | 6070 |
| PUK | 0.60 | 120.0 | Sg | 05:56:40.059 | 0.7 | — | — | — | — | — | — | 0.0 | 77.44 | a | Md | 3.2 | 10971 |

| | | | | | | | | | | | |
|-----|------|-------|-----|--------------|------|--|-----|-------|---|-------|-----|
| PUK | 0.60 | 120.0 | Pg | 05:56:26.590 | -3.3 | | | m | | 10962 | |
| PUK | 0.60 | 120.0 | AM1 | 05:56:47.830 | | | 0.3 | 0.14 | a | Ml | 1.9 |
| PUK | 0.60 | 120.0 | AMd | 05:57:41.613 | | | 0.0 | 75.02 | a | Md | 3.2 |
| PVY | 0.63 | 66.0 | Pg | 05:56:28.966 | -1.5 | | | m | | 10964 | |
| PVY | 0.63 | 66.0 | AMd | 05:57:38.754 | | | 0.0 | 69.79 | a | Md | 3.1 |
| BCI | 0.66 | 0.0 | Pg | 05:56:23.534 | 0.0 | | | m | | 10969 | |
| BCI | 0.65 | 88.0 | Sg | 05:56:41.936 | 1.1 | | | m | | 10965 | |
| BCI | 0.65 | 88.0 | AM1 | 05:56:52.570 | | | 0.6 | 0.40 | a | Ml | 2.3 |
| BRY | 0.73 | 319.0 | Pg | 05:56:32.721 | 0.2 | | | m | | 10966 | |
| BRY | 0.73 | 319.0 | AMd | 05:57:51.070 | | | 0.0 | 78.35 | a | Md | 3.2 |
| BEY | 0.74 | 44.0 | Pg | 05:56:31.611 | -1.0 | | | m | | 10967 | |
| BEY | 0.74 | 44.0 | AMd | 05:57:35.675 | | | 0.0 | 64.06 | a | Md | 3.0 |
| TIR | 1.12 | 153.0 | Sg | 05:56:57.295 | 0.5 | | | m | | 10968 | |
| TIR | 1.12 | 153.0 | AM1 | 05:57:04.460 | | | 0.1 | 0.34 | a | Ml | 2.0 |

DATA_TYPE COMMENT GSE2.1
Event 667

Official Magnitude:
M1 1.96

Error ellipse:

| | Azim | Dip | Mag |
|---------------|------|-----|--------|
| Max: | 288 | 75 | 6.2300 |
| Intermediate: | 35 | 4 | 1.4000 |
| Min: | 126 | 14 | 0.9400 |

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

2019-04-10 1516 08.40 LSK
GAP= hor,err= ver,err=

STAT SP IPHASW D HRMM SECON AZIMU RES DIS DUR Md
LSK SZ IPG 1516 08.40
LSK SE ISG 1516 10.20

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

2019-04-10 1707 54.01 LSK
GAP= hor,err= ver,err=

STAT SP IPHASW D HRMM SECON AZIMU RES DIS DUR Md
LSK SZ IPG 1707 54.01
LSK SE ISG 1707 55.70

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

2019-04-14 0549 35.19 LSK
GAP= hor,err= ver,err=

STAT SP IPHASW D HRMM SECON AZIMU RES DIS DUR Md
LSK SZ IPG 1707 54.01
LSK SE ISG 1707 55.70

Katalogu i termeteve

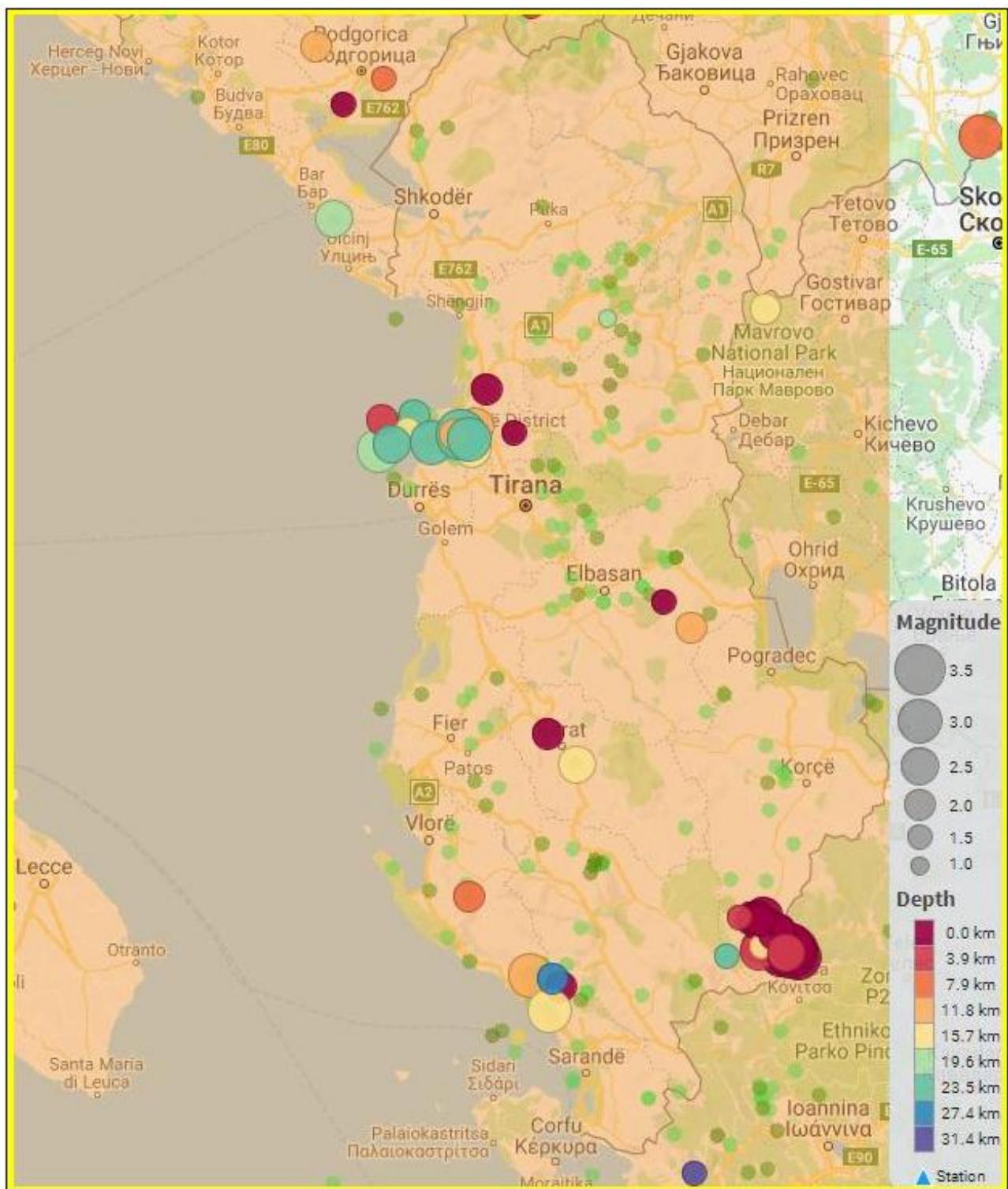
| Data | Origin Time | Rms | Latitude | Longitude | Mag | depth (km) | Depth error | No. Stations | Num. Phases | Azimuth Gap |
|------------|-------------|------|----------|-----------|-----|------------|-------------|--------------|-------------|-------------|
| 2019-04-01 | 11:57:28Z | 0.59 | 41.468 | 19.320 | 3.2 | 21 | 2.4 | 28 | 32 | 50 |
| 2019-04-02 | 12:50:33Z | 0.16 | 41.622 | 19.687 | 2 | 3 | 3.2 | 16 | 14 | 161 |
| 2019-04-02 | 19:32:57Z | 0.19 | 41.514 | 19.779 | 1.5 | 5 | 2.2 | 13 | 11 | 161 |
| 2019-04-02 | 23:47:34Z | 0.27 | 41.545 | 19.330 | 2.3 | 6 | 2.7 | 11 | 11 | 188 |
| 2019-04-03 | 09:35:00Z | 0.49 | 40.112 | 19.834 | 3.1 | 13 | 1.4 | 16 | 24 | 116 |
| 2019-04-04 | 05:33:00Z | 0.17 | 41.473 | 19.638 | 2.5 | 19 | 0.9 | 20 | 13 | 204 |
| 2019-04-04 | 16:28:03Z | 0.09 | 40.082 | 19.938 | 2.1 | 2 | 1 | 12 | 14 | 105 |
| 2019-04-04 | 18:15:46Z | 0.03 | 41.558 | 19.439 | 2.1 | 24 | 1.1 | 22 | 18 | 75 |
| 2019-04-05 | 05:54:31Z | 0.27 | 40.018 | 19.903 | 3.2 | 20 | 0.8 | 11 | 16 | 120 |
| 2019-04-05 | 20:21:55Z | 0.11 | 42.593 | 19.839 | 1.8 | 6 | 1.1 | 31 | 10 | 79 |
| 2019-04-06 | 01:22:25Z | 0.21 | 40.316 | 19.628 | 2.2 | 9 | 2.2 | 31 | 11 | 181 |
| 2019-04-07 | 11:15:57Z | 0.29 | 40.741 | 19.895 | 2.1 | 3 | 1.3 | 31 | 22 | 90 |
| 2019-04-08 | 02:37:24Z | 0.31 | 41.519 | 19.420 | 1.7 | 17 | 1.6 | 31 | 19 | 117 |
| 2019-04-08 | 04:17:28Z | 0.39 | 41.013 | 20.384 | 2.3 | 12 | 2 | 31 | 21 | 116 |
| 2019-04-08 | 22:44:49Z | 0.26 | 42.266 | 21.374 | 3.1 | 11 | 2 | 15 | 16 | 291 |
| 2019-04-09 | 07:53:07Z | 0.07 | 39.312 | 20.029 | 2.7 | 4 | 2.3 | 6 | 7 | 222 |
| 2019-04-10 | 13:49:24Z | 0.23 | 40.203 | 20.682 | 2.7 | 4 | 1.2 | 31 | 16 | 129 |

| | | | | | | | | | |
|----------------------|------|--------|--------|-----|----|------|----|----|-----|
| 2019-04-11 14:19:03Z | 0.41 | 41.485 | 19.362 | 2.7 | 24 | 2.5 | 27 | 28 | 78 |
| 2019-04-12 00:44:59Z | 0.11 | 40.164 | 20.506 | 1.8 | 26 | 1.3 | 31 | 13 | 116 |
| 2019-04-12 05:51:22Z | 0.75 | 40.351 | 21.245 | 3.4 | 24 | 2.6 | 25 | 30 | 184 |
| 2019-04-12 18:04:50Z | 0.03 | 39.047 | 20.370 | 1.9 | 20 | 1.4 | 10 | 6 | 204 |
| 2019-04-13 14:22:09Z | 0.07 | 42.056 | 19.166 | 2.8 | 22 | 1.1 | 22 | 16 | 113 |
| 2019-04-13 17:48:42Z | 0.03 | 41.830 | 20.636 | 2.4 | 16 | 0.7 | 22 | 19 | 194 |
| 2019-04-14 09:46:33Z | 0.25 | 40.167 | 20.695 | 3.1 | 4 | 1.2 | 11 | 14 | 135 |
| 2019-04-14 10:18:08Z | 0.38 | 40.194 | 20.663 | 2.6 | 1 | 0.8 | 30 | 15 | 128 |
| 2019-04-14 10:48:27Z | 0.03 | 40.231 | 20.677 | 1.9 | 7 | 12.7 | 7 | 4 | 215 |
| 2019-04-14 10:52:22Z | 0.03 | 40.270 | 20.614 | 1.5 | 1 | 0.9 | 30 | 6 | 195 |
| 2019-04-14 11:34:28Z | 0.2 | 40.223 | 20.659 | 1.3 | 4 | 1.1 | 4 | 6 | 180 |
| 2019-04-14 11:45:52Z | 0.07 | 40.269 | 20.632 | 2.9 | 1 | 0.9 | 30 | 6 | 193 |
| 2019-04-14 12:03:21Z | 0.45 | 40.185 | 20.683 | 2.6 | 4 | 1.7 | 10 | 13 | 153 |
| 2019-04-14 13:51:46Z | 0.38 | 40.180 | 20.715 | 3.5 | 1 | 1.2 | 30 | 21 | 135 |
| 2019-04-14 14:12:46Z | 0.21 | 40.191 | 20.707 | 3.1 | 1 | 0.6 | 30 | 20 | 133 |
| 2019-04-14 14:15:34Z | 0.28 | 40.187 | 20.611 | 2.4 | 4 | 0.6 | 10 | 14 | 161 |
| 2019-04-14 14:38:41Z | 0.49 | 40.212 | 20.653 | 2.1 | 3 | 2.2 | 30 | 13 | 123 |
| 2019-04-14 15:15:44Z | 0.08 | 40.237 | 20.638 | 1.6 | 3 | 0.9 | 6 | 6 | 185 |
| 2019-04-14 16:13:26Z | 0.11 | 40.161 | 20.708 | 1.8 | 8 | 1.3 | 9 | 7 | 160 |

| | | | | | | | | | |
|----------------------|------|--------|--------|-----|----|-----|----|----|-----|
| 2019-04-14 16:23:43Z | 0.3 | 40.174 | 20.731 | 3.7 | 2 | 1.3 | 14 | 22 | 138 |
| 2019-04-14 16:27:03Z | 0.34 | 40.245 | 20.649 | 2 | 2 | 1.8 | 30 | 12 | 119 |
| 2019-04-14 16:44:21Z | 0.04 | 40.280 | 20.582 | 1.3 | 1 | 0.9 | 8 | 7 | 200 |
| 2019-04-14 19:11:54Z | 0.37 | 40.169 | 20.692 | 2.6 | 4 | 1.2 | 9 | 15 | 135 |
| 2019-04-14 20:43:49Z | 0.32 | 40.256 | 20.579 | 2 | 2 | 1.5 | 30 | 13 | 118 |
| 2019-04-14 20:46:39Z | 0.25 | 40.200 | 20.670 | 2.7 | 5 | 0.7 | 30 | 15 | 128 |
| 2019-04-14 20:51:24Z | 0.44 | 40.222 | 20.619 | 1.8 | 4 | 1.7 | 30 | 9 | 161 |
| 2019-04-14 22:19:12Z | 0.11 | 40.265 | 20.588 | 1.6 | 4 | 0.8 | 30 | 7 | 196 |
| 2019-04-14 22:28:11Z | 0.18 | 40.249 | 20.622 | 1.1 | 4 | 1.2 | 8 | 8 | 145 |
| 2019-04-14 22:31:27Z | 0.36 | 40.221 | 20.639 | 1.4 | 6 | 1.1 | 10 | 8 | 142 |
| 2019-04-14 22:56:58Z | 0.29 | 40.214 | 20.649 | 1.6 | 5 | 1 | 30 | 10 | 137 |
| 2019-04-15 00:10:50Z | 0.24 | 40.200 | 20.679 | 1.3 | 4 | 0.9 | 10 | 8 | 151 |
| 2019-04-15 00:12:55Z | 0.31 | 40.217 | 20.693 | 1.8 | 1 | 2.1 | 30 | 11 | 129 |
| 2019-04-15 02:05:53Z | 0.37 | 40.157 | 20.755 | 3.5 | 2 | 1.2 | 30 | 24 | 111 |
| 2019-04-15 02:09:19Z | 0.27 | 40.169 | 20.724 | 3.6 | 2 | 1 | 30 | 21 | 109 |
| 2019-04-15 02:23:31Z | 0.24 | 40.178 | 20.692 | 2.2 | 3 | 0.8 | 30 | 16 | 134 |
| 2019-04-15 03:23:09Z | 0.13 | 42.413 | 19.337 | 1.8 | 10 | 1.7 | 30 | 15 | 82 |
| 2019-04-15 03:51:03Z | 0.49 | 40.173 | 20.616 | 2.8 | 5 | 0.9 | 30 | 14 | 162 |
| 2019-04-15 05:26:34Z | 0.26 | 40.181 | 20.719 | 3.5 | 0 | 0.9 | 30 | 19 | 135 |

| | | | | | | | | | |
|----------------------|------|--------|--------|-----|----|------|----|----|-----|
| 2019-04-15 05:33:18Z | 0.04 | 40.205 | 20.662 | 1.6 | 11 | 0.6 | 30 | 5 | 176 |
| 2019-04-15 05:56:41Z | 0.06 | 40.203 | 20.691 | 2.1 | 0 | 0.7 | 4 | 6 | 151 |
| 2019-04-15 07:03:28Z | 0.62 | 40.218 | 20.690 | 1.4 | 0 | 18.5 | 4 | 5 | 188 |
| 2019-04-15 07:10:18Z | 0.54 | 40.237 | 20.695 | 1.6 | 0 | 17 | 3 | 5 | 195 |
| 2019-04-15 09:06:41Z | 0.09 | 40.241 | 20.602 | 1.5 | 1 | 1.1 | 6 | 8 | 120 |
| 2019-04-15 10:26:37Z | 0.09 | 40.189 | 20.628 | 1.7 | 16 | 0.7 | 4 | 5 | 165 |
| 2019-04-15 11:45:04Z | 0.17 | 40.165 | 20.686 | 1.8 | 7 | 2 | 6 | 6 | 157 |
| 2019-04-15 12:06:08Z | 0.1 | 40.262 | 20.600 | 1.6 | 2 | 1.5 | 6 | 7 | 194 |
| 2019-04-15 14:49:12Z | 0.22 | 40.275 | 20.617 | 1.6 | 3 | 1.1 | 27 | 8 | 195 |
| 2019-04-15 15:40:13Z | 0.26 | 40.258 | 20.605 | 2.1 | 2 | 1.9 | 28 | 9 | 148 |
| 2019-04-15 17:52:44Z | 0.36 | 40.224 | 20.675 | 2.6 | 0 | 1.2 | 30 | 12 | 125 |
| 2019-04-15 18:19:33Z | 0.17 | 40.181 | 20.715 | 2.1 | 3 | 1 | 8 | 9 | 158 |
| 2019-04-15 21:08:36Z | 0.26 | 40.169 | 20.710 | 2.7 | 5 | 0.7 | 12 | 14 | 159 |
| 2019-04-15 23:22:16Z | 0.27 | 41.079 | 20.294 | 2 | 0 | 1.4 | 13 | 18 | 128 |
| 2019-04-16 12:05:40Z | 0.03 | 39.321 | 20.722 | 2.7 | 35 | 3.2 | 6 | 7 | 174 |
| 2019-04-16 20:21:15Z | 0.09 | 40.255 | 20.623 | 2.4 | 2 | 0.9 | 8 | 12 | 115 |
| 2019-04-17 18:41:24Z | 0.01 | 40.262 | 20.551 | 1.9 | 5 | 1.2 | 31 | 4 | 233 |
| 2019-04-18 18:54:03Z | 0.11 | 39.592 | 20.395 | 1.9 | 35 | 1 | 10 | 8 | 134 |
| 2019-04-22 14:07:28Z | 0.21 | 41.489 | 19.500 | 3.2 | 26 | 1.2 | 21 | 23 | 113 |

| | | | | | | | | | | |
|------------|-----------|------|--------|--------|-----|----|-----|----|----|-----|
| 2019-04-23 | 06:43:52Z | 0.23 | 41.530 | 19.652 | 2.6 | 16 | 2.3 | 16 | 13 | 179 |
| 2019-04-23 | 08:58:14Z | 0.33 | 41.508 | 19.602 | 3.8 | 25 | 1.8 | 17 | 16 | 134 |
| 2019-04-23 | 11:37:06Z | 0.13 | 41.507 | 19.575 | 2.4 | 12 | 1.3 | 31 | 9 | 207 |
| 2019-04-23 | 16:46:37Z | 0.09 | 41.498 | 19.624 | 3.3 | 25 | 0.9 | 18 | 16 | 144 |
| 2019-04-24 | 13:06:13Z | 0.22 | 42.492 | 19.108 | 2.4 | 15 | 2.3 | 31 | 14 | 96 |
| 2019-04-27 | 17:11:30Z | 0.1 | 39.445 | 20.278 | 2.7 | 11 | 0.9 | 31 | 9 | 140 |
| 2019-04-28 | 20:20:42Z | 0.18 | 40.662 | 19.995 | 3 | 17 | 0.9 | 31 | 22 | 75 |
| 2019-04-28 | 20:42:06Z | 0.26 | 40.105 | 19.914 | 2.2 | 29 | 0.9 | 31 | 16 | 114 |
| 2019-04-30 | 01:12:28Z | 0.35 | 39.310 | 19.894 | 3.2 | 33 | 1.4 | 31 | 15 | 176 |
| 2019-04-30 | 05:56:17Z | 0.59 | 42.348 | 19.197 | 2 | 0 | 6 | 15 | 12 | 76 |
| 2019-04-30 | 14:52:59Z | 0.03 | 41.805 | 20.099 | 1.5 | 20 | 0.7 | 31 | 8 | 147 |



-Fig. 2 -

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

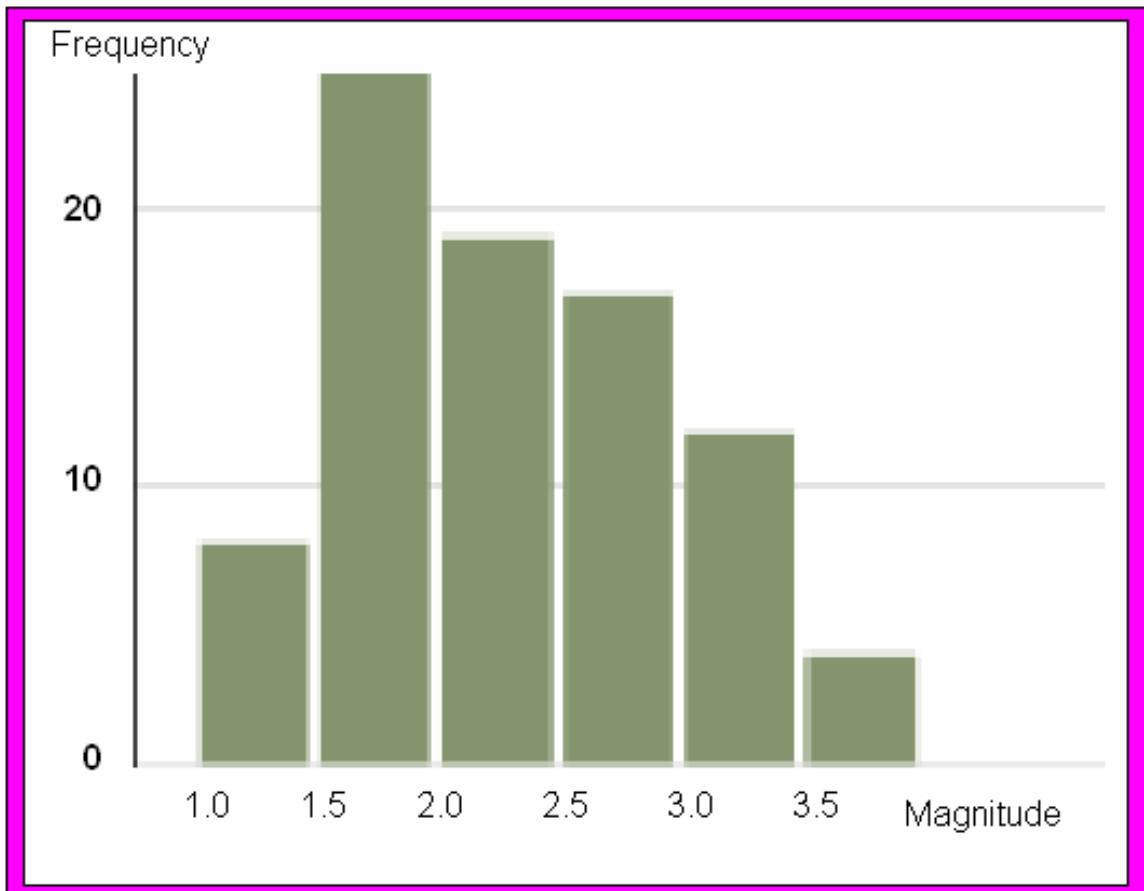
1. Statistika e ngjarjeve (Events Statistics)

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

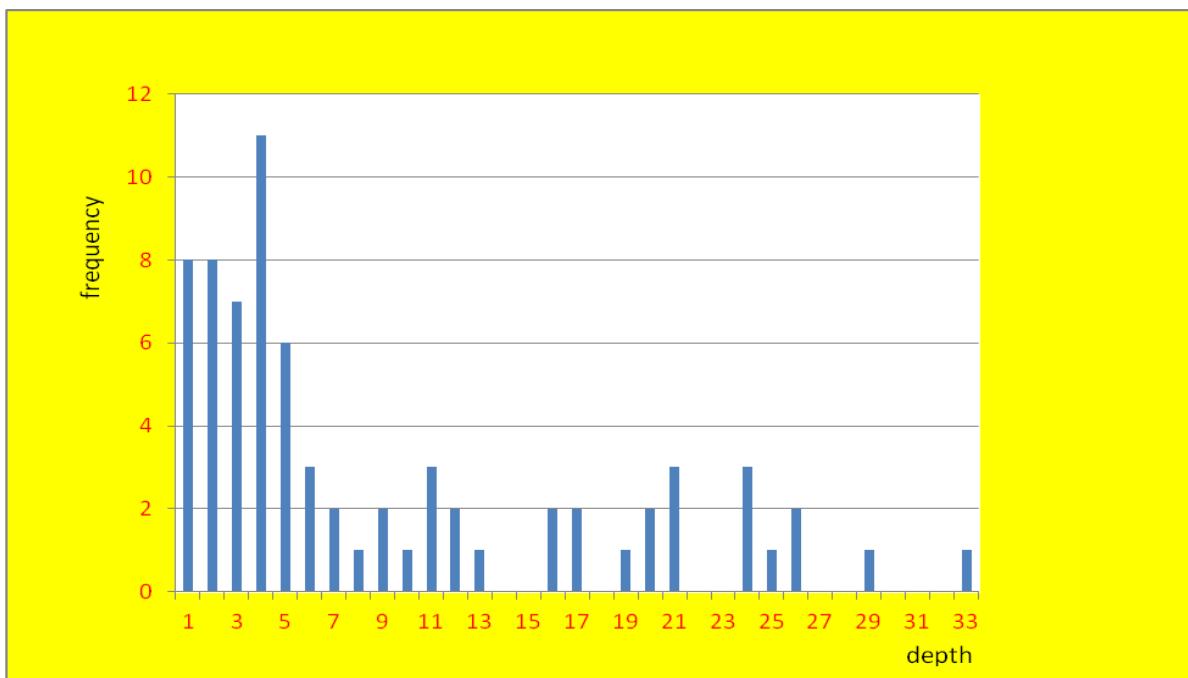
| Të dhënat përfaqësuese | Representative Parameters | Vlerat (observed values) |
|--|--|--------------------------|
| Numuri i përgjithshëm i ngjarjeve të regjistruara (kuandradi 39°-43°V; 18.5°-21.5°L) | [total recorded number of seismic events] | 85 |
| Numuri i ngjarjeve sizmike brenda kufirit shtetëror | [earthquakes occurred within state border] | 71 |
| Thellësia mesatare e vrojtuar (km) | [mean observed depth] | 9 |
| Thellësia maksimale e vrojtuar (km) | [maximum observed depth] | 35 |
| Magnituda lokale minimale e vrojtuar ($M_{L/d}$) | [minimum observed local magnitude] | 1.0 |
| Magnituda lokale maksimale e vrojtuar ($M_{L/d}$) | [maximum observed local magnitude] | 3.8 |
| Intensiteti maksimal i vrojtuar (MSK-64) | [maximum observed intensity] | IV-V |

2. Karakteristikat kryesore të sizmicitetit për muajin

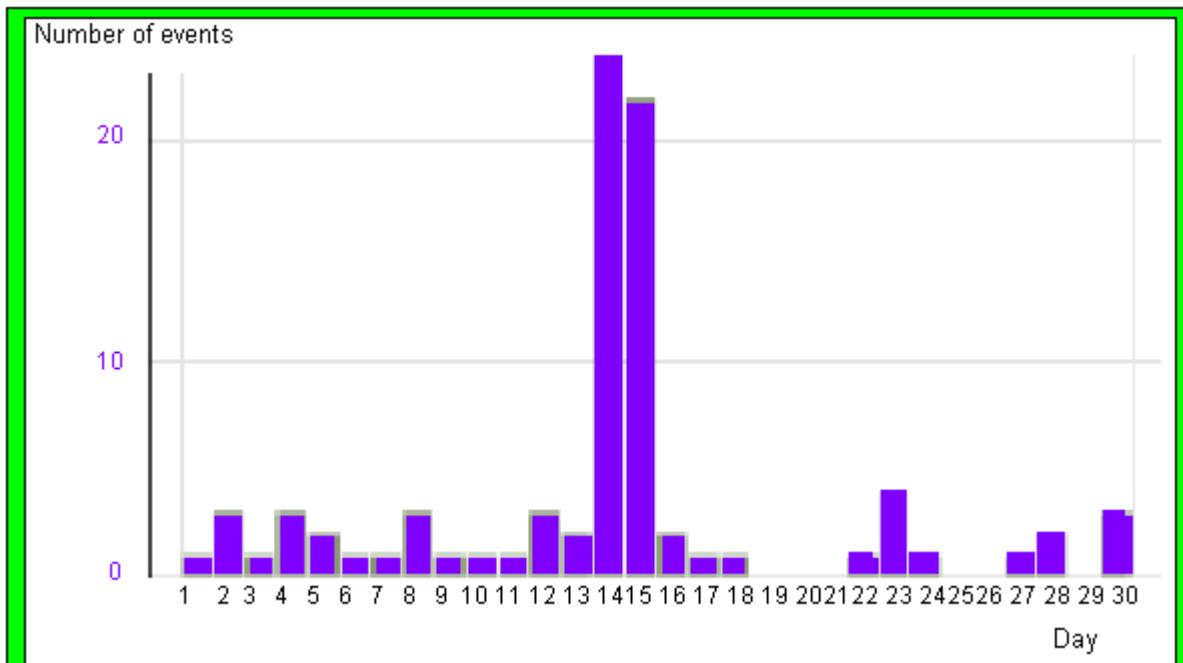
Sizmiciteti i muajit Prill 2019 është percaktuar si aktivitet sizmik ne dy zona active te vendit ne zonen Durrësit dhe ne zonen e Leskovikut. Ne Durrës kemi regjistrimin e ngjarjes së dates 23 Prill 2019, ora 08:58:14 (UTM), me $M_L = 3.8$ (Rihter). Ne kete zone kemi një grumbull termetesh nga te cilat jane lokalizuar 13 ngjarje me magnitudë që varion nga 1.5 - 3.8 Rihter. Thellesia mesatare eshte 17 km dhe thellesia max 26 km. Epiqendrat shperndahen kryesisht ne det me shtrirje P- L. Nje aktivitet i dallueshem gjate ketij muaji eshte grumbulli i termeteve nga te cilat jane lokalizuar 28 ngjarje me magnitudë që varjon nga 1.1 - 3.7 Rihter. Thellesia mesatare eshte 4 km dhe thellesia max 26 km. Epiqendrat shperndahen kryesisht ne det me shtrirje VP- JL.



Grafiku i numurit te ngjarjeve per nivelin e magnitudave



Grafiku i frekuences se termeteve ne lidhje me thellesin.



Grafiku ishperndarje se numurit te ngjarjeve per dite

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

Ngjarja 1:

Datë 24.04.2019, në orën 08:58:14.06(UTC); (10:58: 14.06 ora lokale); termeti i lokalizuar 41.51V; 19.60L, ne Hamallaj 21km ne VL te qytetit te Durresit; Intensiteti i tërmetit në epiqendrë $Io = IV-V$ ballë (EMS-98); Ndjerë: III-IV ballë në qytetet e Durresit, Vores, Fushkrujes dhe Mamuras; III ballë ne qytetet e Tiranes, Krujes Lacit dhe Kavajes; II-III ballë ne Lezhe, Klosi dhe Rrogzhin,

(Event 1):

(Intensity $Io = IV-V$ degree EMS-98, felt III-IV degree at Durresi, Vora, Fushkruje and Mamuras towns; III at Tirana, Kruja Laci and Kavaja; II-III at Lezha, Klosi and Rrogzhina, towns).

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