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## H Y R J E

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

### Briefing:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

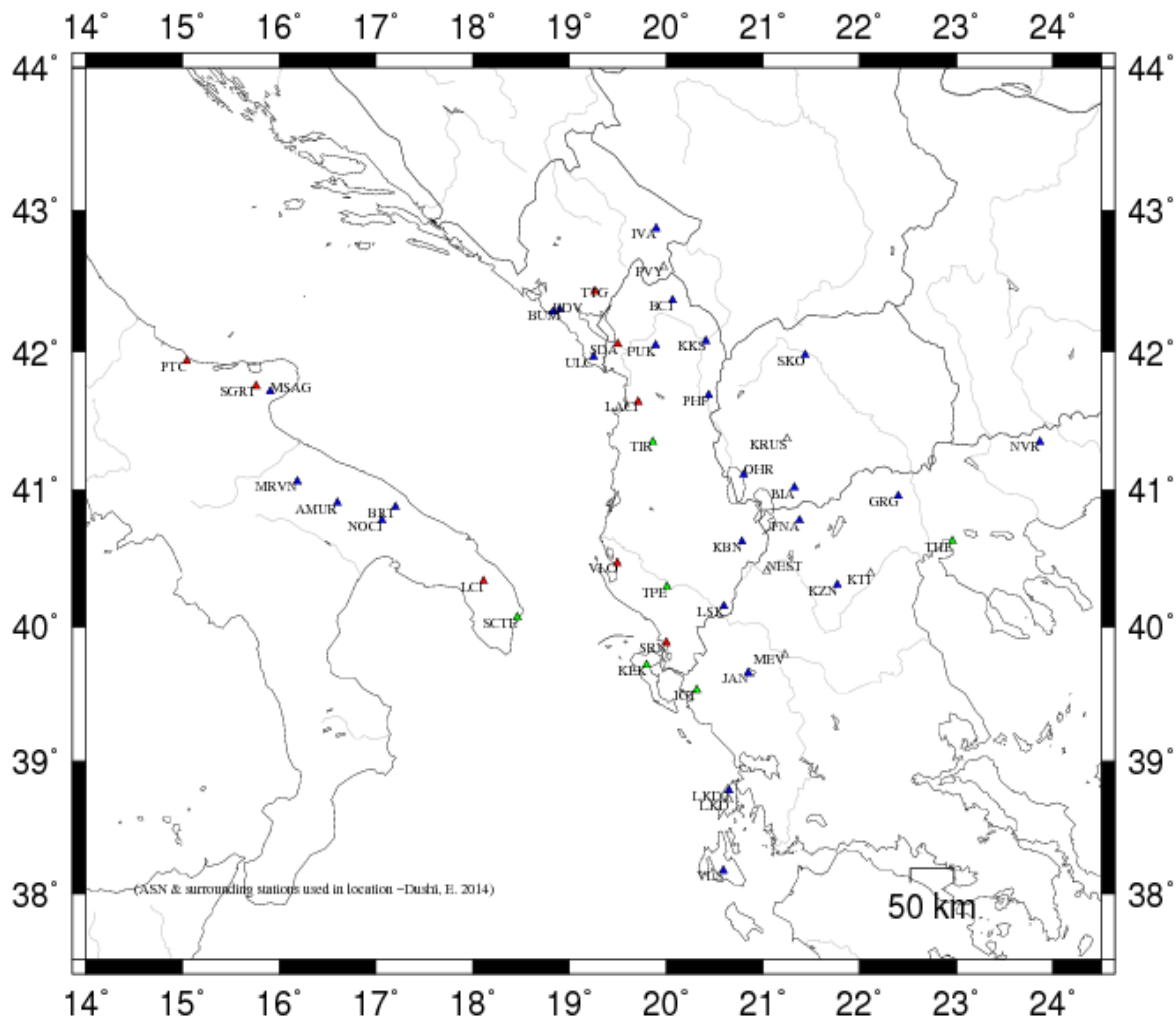
**Tab. 3 – Rrjeti Sizmologjik Ndihmës (MSO, SKO, AUTH, NAO, INGV)**

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

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

**Shënim:**

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



**-Fig. 1-**

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

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

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

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

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

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

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

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

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

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187391 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 342 Mediterranean Sea; 26 km from Moni Strofadon, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID     |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |
| 2019/02/01 | 05:01:48.97 |     | 0.39 | 37.4002  | 20.7870   |      |      |    | 5.4   | 3.5 | 17   | 16   | 300 | 1.39  | 4.99  | m    |        |
| 384        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 4.2 | 0.0  | 5      | 384    |
| Md        | 3.9 | 0.0  | 2      | 384    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|
| LKD2 | 1.39 | 356.0 | Sn    | 05:02:36.389 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 5815  |
| LKD2 | 1.39 | 356.0 | Pn    | 05:02:15.945 | -0.1 |      |       |      |      |     |     |      |        | mci  |           | 5814  |
| LKD2 | 1.39 | 356.0 | AMl   | 05:02:36.760 |      |      |       |      |      |     |     | 40.1 | 0.68   | a    | Ml        | 4.7   |
| LKD2 | 1.39 | 356.0 | AMd   | 05:05:03.515 |      |      |       |      |      |     |     | 0.0  | 167.57 | a    | Md        | 4.0   |
| IGT  | 2.16 | 351.0 | Sn    | 05:02:57.450 | -1.8 |      |       |      |      |     |     |      |        | m    |           | 5817  |
| IGT  | 2.16 | 351.0 | Pn    | 05:02:29.396 | 0.3  |      |       |      |      |     |     |      |        | mci  |           | 5816  |
| IGT  | 2.16 | 351.0 | AMl   | 05:03:05.060 |      |      |       |      |      |     |     | 4.5  | 0.70   | a    | Ml        | 4.2   |
| IGT  | 2.16 | 351.0 | AMd   | 05:05:58.468 |      |      |       |      |      |     |     | 0.0  | 209.07 | a    | Md        | 3.7   |
| SRN  | 2.55 | 347.0 | S     | 05:03:09.532 | -0.5 |      |       |      |      |     |     |      |        | m    |           | 5819  |
| SRN  | 2.55 | 347.0 | P     | 05:02:35.703 | 0.4  |      |       |      |      |     |     |      |        | m    |           | 5818  |
| SRN  | 2.55 | 347.0 | AMl   | 05:03:15.070 |      |      |       |      |      |     |     | 1.5  | 0.52   | a    | Ml        | 3.9   |
| LSK  | 2.75 | 357.0 | S     | 05:03:14.693 | 0.4  |      |       |      |      |     |     |      |        | m    |           | 5821  |
| LSK  | 2.75 | 357.0 | P     | 05:02:38.876 | 1.2  |      |       |      |      |     |     |      |        | m    |           | 5820  |
| LSK  | 2.75 | 357.0 | AMl   | 05:03:36.590 |      |      |       |      |      |     |     | 8.4  | 0.74   | a    | Ml        | 4.8   |
| NEST | 3.02 | 3.0   | P     | 05:02:41.825 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 5822  |
| KBN  | 3.22 | 0.0   | P     | 05:02:44.454 | 0.2  |      |       |      |      |     |     |      |        | m    |           | 5823  |
| VLO  | 3.22 | 343.0 | P     | 05:02:44.509 | 0.4  |      |       |      |      |     |     |      |        | m    |           | 5824  |
| SCTE | 3.23 | 327.0 | P     | 05:02:44.504 | -0.4 |      |       |      |      |     |     |      |        | m    |           | 5825  |
| FNA  | 3.41 | 7.0   | P     | 05:02:47.545 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 5826  |
| BPA1 | 3.43 | 346.0 | P     | 05:02:48.179 | 0.3  |      |       |      |      |     |     |      |        | m    |           | 5827  |
| THE  | 3.64 | 27.0  | S     | 05:03:39.056 | 1.5  |      |       |      |      |     |     |      |        | m    |           | 5829  |
| THE  | 3.64 | 27.0  | P     | 05:02:50.631 | -0.4 |      |       |      |      |     |     |      |        | m    |           | 5828  |
| TIR  | 4.10 | 0.0   | P     | 05:02:55.631 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 5834  |
| PHP  | 4.29 | 357.0 | P     | 05:02:59.023 | -1.1 |      |       |      |      |     |     |      |        | m    |           | 5830  |
| PUK  | 4.69 | 352.0 | S     | 05:04:04.141 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 5832  |





|      |      |       |     |              |      |     |     |               |      |
|------|------|-------|-----|--------------|------|-----|-----|---------------|------|
| BUM  | 1.11 | 302.0 | P   | 15:55:26.001 | 0.2  | --- | m   | ---           | 5981 |
| CEME | 1.25 | 312.0 | P   | 15:55:27.381 | -0.8 | --- | m   | ---           | 5982 |
| FNA  | 1.31 | 135.0 | S   | 15:55:47.626 | -0.2 | --- | m   | ---           | 5984 |
| FNA  | 1.31 | 135.0 | P   | 15:55:29.324 | 0.1  | --- | m   | ---           | 5983 |
| FNA  | 1.31 | 135.0 | AM1 | 15:55:50.930 |      | --- | 0.2 | 0.38 a M1 2.4 | 3344 |
| NKME | 1.38 | 320.0 | P   | 15:55:31.638 | 1.1  | --- | m   | ---           | 5985 |
| NEST | 1.46 | 153.0 | S   | 15:55:52.608 | -0.0 | --- | m   | ---           | 5987 |
| NEST | 1.46 | 153.0 | P   | 15:55:32.121 | 0.1  | --- | m   | ---           | 5986 |
| UPM  | 1.75 | 329.0 | P   | 15:55:37.083 | 0.1  | --- | m   | ---           | 5988 |

DATA\_TYPE COMMENT GSE2.1  
Event 357

Official Magnitude:  
M1 2.31

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 76   | 82  | 0.6000 |
| Intermediate: | 234  | 6   | 0.4800 |
| Min:          | 324  | 3   | 0.2800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187390 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 358 1.2 km from Krekëz, Vlorë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/03 | 21:39:26.93 |     | 0.22 | 39.9257  | 19.9977   |      |      |    | 0.8   | 1.1 | 11   | 31   | 148 | 0.04  | 1.36  | m    | 400    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 1.7 | 0.0  | 2      | 400    |
| Md        | 1.9 | 0.0  | 1      | 400    |

| Sta | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| SRN | 0.05 | 177.0 | S     | 21:39:29.929 | 0.4  |      |       |      |      | --- |     |     |       | m    |           | 5991  |      |
| SRN | 0.05 | 177.0 | P     | 21:39:27.957 | -0.5 |      |       |      |      | --- |     |     |       | m    |           | 5990  |      |
| SRN | 0.05 | 177.0 | AM1   | 21:39:30.830 |      |      |       |      |      | --- |     | 2.4 | 0.10  | a    | M1        | 1.7   | 3347 |
| SRN | 0.05 | 177.0 | AM1   | 21:39:31.360 |      |      |       |      |      | --- |     | 1.5 | 0.08  | a    | M1        | 1.5   | 3346 |
| SRN | 0.05 | 177.0 | AMd   | 21:39:50.337 |      |      |       |      |      | --- |     | 0.0 | 22.38 | a    | Md        | 1.9   | 3345 |
| IGT | 0.47 | 146.0 | S     | 21:39:44.570 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 5993  |      |
| IGT | 0.47 | 146.0 | P     | 21:39:35.705 | -1.4 |      |       |      |      | --- |     |     |       | m    |           | 5992  |      |
| LSK | 0.51 | 63.0  | S     | 21:39:45.756 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 5995  |      |
| LSK | 0.51 | 63.0  | P     | 21:39:36.768 | -1.0 |      |       |      |      | --- |     |     |       | m    |           | 5994  |      |

|      |      |       |     |              |      |     |                   |      |
|------|------|-------|-----|--------------|------|-----|-------------------|------|
| VLO  | 0.66 | 325.0 | P   | 21:39:40.128 | 0.0  | --- | m                 | 5997 |
| VLO  | 0.66 | 325.0 | S   | 21:39:49.981 | 0.0  | --- | m                 | 5996 |
| NEST | 0.94 | 58.0  | S   | 21:40:00.609 | 0.2  | --- | m                 | 5999 |
| NEST | 0.94 | 58.0  | P   | 21:39:45.049 | -1.0 | --- | m                 | 5998 |
| FNA  | 1.36 | 50.0  | S   | 21:40:14.503 | 0.0  | --- | m                 | 6001 |
| FNA  | 1.36 | 50.0  | P   | 21:39:54.123 | 0.0  | --- | m                 | 6000 |
| FNA  | 1.36 | 50.0  | AM1 | 21:40:18.790 |      | --- | 0.1 0.32 a M1 2.2 | 3348 |

DATA\_TYPE COMMENT GSE2.1  
Event 358

Official Magnitude:  
M1 1.74

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 219  | 63  | 1.1700 |
| Intermediate: | 103  | 12  | 0.4900 |
| Min:          | 8    | 24  | 0.3200 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187389 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 360 1.5 km from Patin, Dibër, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/04 | 17:17:09.27 |     | 0.05 | 41.5632  | 20.1130   |      |      |    | 19.7  | 0.5 | 16   | 16   | 82  | 0.27  | 1.50  | m    |        |
| 402        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.6 | 0.0  | 6      | 402    |
| Md        | 3.1 | 0.0  | 9      | 402    |

| Sta | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| PHP | 0.27 | 63.0  | S     | 17:17:20.141 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6028  |
| PHP | 0.27 | 63.0  | P     | 17:17:15.395 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6027  |
| PHP | 0.27 | 63.0  | AM1   | 17:17:21.560 |      |      |       |      |      | --- |     | 4.3 | 0.14  | a M1 | 2.7       | 3370  |
| PHP | 0.27 | 63.0  | AMd   | 17:18:08.728 |      |      |       |      |      | --- |     | 0.0 | 53.33 | a Md | 2.8       | 3361  |
| TIR | 0.29 | 221.0 | S     | 17:17:20.863 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6030  |
| TIR | 0.29 | 221.0 | P     | 17:17:16.020 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6029  |
| TIR | 0.29 | 221.0 | AM1   | 17:17:24.760 |      |      |       |      |      | --- |     | 0.9 | 0.26  | a M1 | 2.0       | 3371  |
| TIR | 0.29 | 221.0 | AMd   | 17:18:13.103 |      |      |       |      |      | --- |     | 0.0 | 57.08 | a Md | 2.9       | 3362  |
| PUK | 0.51 | 342.0 | S     | 17:17:27.489 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6032  |
| PUK | 0.51 | 342.0 | P     | 17:17:19.770 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6031  |
| PUK | 0.51 | 342.0 | AM1   | 17:17:31.360 |      |      |       |      |      | --- |     | 2.0 | 0.36  | a M1 | 2.6       | 3372  |

|      |      |       |     |              |      |  |  |  |  |     |       |     |    |     |      |
|------|------|-------|-----|--------------|------|--|--|--|--|-----|-------|-----|----|-----|------|
| PUK  | 0.51 | 342.0 | AMd | 17:18:20.811 |      |  |  |  |  | 0.0 | 61.04 | a__ | Md | 3.0 | 3363 |
| ULC  | 0.76 | 303.0 | P   | 17:17:24.319 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6033 |
| ULC  | 0.76 | 303.0 | AMd | 17:18:24.353 |      |  |  |  |  | 0.0 | 60.03 | a__ | Md | 3.0 | 3364 |
| BCI  | 0.80 | 0.0   | P   | 17:17:24.770 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6043 |
| BCI  | 0.80 | 358.0 | S   | 17:17:36.813 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6034 |
| BCI  | 0.80 | 358.0 | AMl | 17:17:38.880 |      |  |  |  |  | 0.8 | 0.48  | a__ | Ml | 2.5 | 3373 |
| PVY  | 1.04 | 355.0 | P   | 17:17:29.145 | -0.1 |  |  |  |  |     |       | m__ |    |     | 6035 |
| PVY  | 1.04 | 355.0 | AMd | 17:18:45.186 |      |  |  |  |  | 0.0 | 76.04 | a__ | Md | 3.2 | 3365 |
| FNA  | 1.24 | 128.0 | S   | 17:17:50.353 | -0.1 |  |  |  |  |     |       | m__ |    |     | 6037 |
| FNA  | 1.24 | 128.0 | P   | 17:17:32.838 | 0.1  |  |  |  |  |     |       | m__ |    |     | 6036 |
| FNA  | 1.24 | 128.0 | AMl | 17:17:51.690 |      |  |  |  |  | 0.4 | 0.58  | a__ | Ml | 2.6 | 3374 |
| FNA  | 1.24 | 128.0 | AMd | 17:18:46.023 |      |  |  |  |  | 0.0 | 73.18 | a__ | Md | 3.2 | 3366 |
| NEST | 1.35 | 148.0 | S   | 17:17:53.912 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6039 |
| NEST | 1.35 | 148.0 | P   | 17:17:34.796 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6038 |
| NEST | 1.35 | 148.0 | AMl | 17:18:00.290 |      |  |  |  |  | 0.3 | 0.40  | a__ | Ml | 2.5 | 3375 |
| NEST | 1.35 | 148.0 | AMd | 17:18:51.645 |      |  |  |  |  | 0.0 | 76.85 | a__ | Md | 3.2 | 3367 |
| LSK  | 1.46 | 165.0 | S   | 17:17:57.093 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6041 |
| LSK  | 1.46 | 165.0 | P   | 17:17:36.528 | -0.1 |  |  |  |  |     |       | m__ |    |     | 6040 |
| LSK  | 1.46 | 165.0 | AMd | 17:19:03.728 |      |  |  |  |  | 0.0 | 87.20 | a__ | Md | 3.4 | 3368 |
| HCY  | 1.50 | 307.0 | P   | 17:17:37.431 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6042 |
| HCY  | 1.50 | 307.0 | AMd | 17:18:42.895 |      |  |  |  |  | 0.0 | 65.46 | a__ | Md | 3.1 | 3369 |

DATA\_TYPE COMMENT GSE2.1  
Event 360

Official Magnitude:  
Ml 2.57

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 299  | 79  | 0.5100 |
| Intermediate: | 69   | 6   | 0.3400 |
| Min:          | 160  | 8   | 0.2200 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187388 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 365 1.7 km from Kasnicë, Fier, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/05 | 18:51:00.07 |     | 0.42 | 40.6158  | 19.6487   |      |      |    | 18.3  | 1.6 | 19   | 15   | 95  | 0.19  | 2.26  | m    |        |
| 407        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.6 | 0.0  | 8      | 407    |

Md 3.0 0.0 2 407

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| VLO  | 0.19 | 219.0 | Sg    | 18:51:07.722 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6137  |
| VLO  | 0.19 | 219.0 | Pg    | 18:51:04.546 | 0.2  |      |       |      |      |     |     |      |       | mdi  |           | 6136  |
| VLO  | 0.19 | 219.0 | AMl   | 18:51:11.820 |      |      |       |      |      |     |     | 43.6 | 0.20  | a    | Ml        | 3.6   |
| VLO  | 0.19 | 219.0 | AMd   | 18:52:01.523 |      |      |       |      |      |     |     | 0.0  | 56.98 | a    | Md        | 2.9   |
| TIR  | 0.75 | 0.0   | P     | 18:51:12.614 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6157  |
| TIR  | 0.75 | 12.0  | S     | 18:51:26.668 | 0.5  |      |       |      |      |     |     |      |       | m    |           | 6138  |
| SRN  | 0.78 | 159.0 | Sn    | 18:51:28.207 | 0.3  |      |       |      |      |     |     |      |       | m    |           | 6140  |
| SRN  | 0.78 | 159.0 | Pn    | 18:51:15.286 | -0.7 |      |       |      |      |     |     |      |       | mde  |           | 6139  |
| SRN  | 0.78 | 159.0 | AMl   | 18:51:31.960 |      |      |       |      |      |     |     | 0.4  | 0.34  | a    | Ml        | 2.2   |
| SRN  | 0.78 | 159.0 | AMd   | 18:52:25.236 |      |      |       |      |      |     |     | 0.0  | 69.95 | a    | Md        | 3.1   |
| LSK  | 0.86 | 122.0 | S     | 18:51:29.169 | -0.3 |      |       |      |      |     |     |      |       | m    |           | 6142  |
| LSK  | 0.86 | 122.0 | P     | 18:51:15.749 | -1.1 |      |       |      |      |     |     |      |       | m    |           | 6141  |
| LSK  | 0.86 | 122.0 | AMl   | 18:51:35.390 |      |      |       |      |      |     |     | 1.1  | 0.54  | a    | Ml        | 2.7   |
| SCTE | 1.05 | 240.0 | S     | 18:51:35.670 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6144  |
| SCTE | 1.05 | 240.0 | P     | 18:51:20.021 | -0.3 |      |       |      |      |     |     |      |       | m    |           | 6143  |
| NEST | 1.09 | 100.0 | S     | 18:51:36.755 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6146  |
| NEST | 1.09 | 100.0 | P     | 18:51:19.299 | -1.7 |      |       |      |      |     |     |      |       | m    |           | 6145  |
| NEST | 1.09 | 100.0 | AMl   | 18:51:42.430 |      |      |       |      |      |     |     | 0.5  | 0.48  | a    | Ml        | 2.5   |
| IGT  | 1.20 | 154.0 | S     | 18:51:40.457 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 6148  |
| IGT  | 1.20 | 154.0 | P     | 18:51:23.977 | 0.9  |      |       |      |      |     |     |      |       | m    |           | 6147  |
| IGT  | 1.20 | 154.0 | AMl   | 18:51:43.670 |      |      |       |      |      |     |     | 0.4  | 0.50  | a    | Ml        | 2.6   |
| PHP  | 1.22 | 29.0  | S     | 18:51:40.625 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 6150  |
| PHP  | 1.22 | 29.0  | P     | 18:51:22.345 | -0.8 |      |       |      |      |     |     |      |       | m    |           | 6149  |
| PHP  | 1.22 | 29.0  | AMl   | 18:51:44.260 |      |      |       |      |      |     |     | 0.3  | 0.70  | a    | Ml        | 2.4   |
| FNA  | 1.33 | 82.0  | S     | 18:51:44.477 | 0.3  |      |       |      |      |     |     |      |       | m    |           | 6152  |
| FNA  | 1.33 | 82.0  | P     | 18:51:23.307 | -2.0 |      |       |      |      |     |     |      |       | m    |           | 6151  |
| FNA  | 1.33 | 82.0  | AMl   | 18:51:47.200 |      |      |       |      |      |     |     | 1.6  | 0.42  | a    | Ml        | 3.3   |
| PUK  | 1.44 | 7.0   | S     | 18:51:47.488 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 6154  |
| PUK  | 1.44 | 7.0   | P     | 18:51:26.595 | -0.5 |      |       |      |      |     |     |      |       | m    |           | 6153  |
| PUK  | 1.44 | 7.0   | AMl   | 18:51:52.660 |      |      |       |      |      |     |     | 0.3  | 0.32  | a    | Ml        | 2.7   |
| HCY  | 2.03 | 335.0 | P     | 18:51:37.721 | 0.8  |      |       |      |      |     |     |      |       | m    |           | 6155  |
| BEY  | 2.26 | 4.0   | P     | 18:51:39.810 | -0.5 |      |       |      |      |     |     |      |       | m    |           | 6156  |

DATA\_TYPE COMMENT GSE2.1

Event 365

Official Magnitude:

Ml 2.62

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 247  | 72  | 1.6200 |
| Intermediate: | 109  | 12  | 0.7000 |
| Min:          | 17   | 12  | 0.5500 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187388 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 368 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/06 | 16:23:30.77 |     | 0.06 | 40.4018  | 20.0788   |      |      |    | 16.4  | 0.7 | 17   | 13   | 72  | 0.45  | 1.64  | m    |        |
| 410        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.6 | 0.0  | 9      | 410    |
| Md        | 3.0 | 0.0  | 10     | 410    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| VLO  | 0.45 | 279.0 | Sg    | 16:23:46.041 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6193  |      |
| VLO  | 0.45 | 279.0 | Pg    | 16:23:39.509 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6192  |      |
| VLO  | 0.45 | 279.0 | AMl   | 16:23:52.830 |      |      |       |      |      | --- |     | 7.0 | 0.32  | a    | Ml        | 3.0   | 3478 |
| VLO  | 0.45 | 279.0 | AMd   | 16:24:32.618 |      |      |       |      |      | --- |     | 0.0 | 53.11 | a    | Md        | 2.8   | 3468 |
| LSK  | 0.47 | 0.0   | Pg    | 16:23:39.076 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6212  |      |
| LSK  | 0.47 | 122.0 | Sg    | 16:23:47.665 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6194  |      |
| LSK  | 0.47 | 122.0 | AMl   | 16:23:54.430 |      |      |       |      |      | --- |     | 1.7 | 0.48  | a    | Ml        | 2.5   | 3479 |
| SRN  | 0.52 | 187.0 | Sg    | 16:23:50.263 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6196  |      |
| SRN  | 0.52 | 187.0 | Pg    | 16:23:41.459 | -0.5 |      |       |      |      | --- |     |     |       | m    |           | 6195  |      |
| SRN  | 0.52 | 187.0 | AMl   | 16:23:52.860 |      |      |       |      |      | --- |     | 0.6 | 0.44  | a    | Ml        | 2.1   | 3480 |
| SRN  | 0.52 | 187.0 | AMd   | 16:24:43.451 |      |      |       |      |      | --- |     | 0.0 | 61.99 | a    | Md        | 3.0   | 3469 |
| KBN  | 0.58 | 67.0  | Sg    | 16:23:50.753 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6198  |      |
| KBN  | 0.58 | 67.0  | Pg    | 16:23:42.196 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6197  |      |
| KBN  | 0.58 | 67.0  | AMl   | 16:23:52.720 |      |      |       |      |      | --- |     | 1.5 | 0.42  | a    | Ml        | 2.6   | 3481 |
| KBN  | 0.58 | 67.0  | AMd   | 16:24:38.868 |      |      |       |      |      | --- |     | 0.0 | 56.67 | a    | Md        | 2.9   | 3470 |
| NEST | 0.74 | 88.0  | Sg    | 16:23:56.671 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6200  |      |
| NEST | 0.74 | 88.0  | Pg    | 16:23:45.308 | -0.3 |      |       |      |      | --- |     |     |       | m    |           | 6199  |      |
| NEST | 0.74 | 88.0  | AMl   | 16:23:58.310 |      |      |       |      |      | --- |     | 0.5 | 0.38  | a    | Ml        | 2.3   | 3482 |
| NEST | 0.74 | 88.0  | AMd   | 16:25:04.076 |      |      |       |      |      | --- |     | 0.0 | 78.77 | a    | Md        | 3.2   | 3471 |
| IGT  | 0.89 | 167.0 | Sg    | 16:24:01.464 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6202  |      |
| IGT  | 0.89 | 167.0 | Pg    | 16:23:48.326 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6201  |      |
| IGT  | 0.89 | 167.0 | AMd   | 16:24:59.705 |      |      |       |      |      | --- |     | 0.0 | 71.38 | a    | Md        | 2.5   | 3472 |
| TIR  | 0.96 | 351.0 | Sg    | 16:24:03.645 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6204  |      |
| TIR  | 0.96 | 351.0 | Pg    | 16:23:49.360 | -0.2 |      |       |      |      | --- |     |     |       | m    |           | 6203  |      |
| TIR  | 0.96 | 351.0 | AMl   | 16:24:08.860 |      |      |       |      |      | --- |     | 0.5 | 0.38  | a    | Ml        | 2.4   | 3483 |
| TIR  | 0.96 | 351.0 | AMd   | 16:24:50.118 |      |      |       |      |      | --- |     | 0.0 | 60.76 | a    | Md        | 3.0   | 3473 |
| FNA  | 1.06 | 68.0  | Sg    | 16:24:06.878 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6206  |      |
| FNA  | 1.06 | 68.0  | Pg    | 16:23:50.809 | -0.6 |      |       |      |      | --- |     |     |       | m    |           | 6205  |      |
| FNA  | 1.06 | 68.0  | AMl   | 16:24:12.450 |      |      |       |      |      | --- |     | 1.1 | 0.34  | a    | Ml        | 2.9   | 3484 |
| FNA  | 1.06 | 68.0  | AMd   | 16:24:53.663 |      |      |       |      |      | --- |     | 0.0 | 62.85 | a    | Md        | 3.0   | 3474 |
| SCTE | 1.27 | 256.0 | Pg    | 16:23:55.162 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6207  |      |
| SCTE | 1.27 | 256.0 | AMd   | 16:25:01.785 |      |      |       |      |      | --- |     | 0.0 | 66.62 | a    | Md        | 3.1   | 3475 |
| PHP  | 1.31 | 11.0  | Sg    | 16:24:14.115 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6209  |      |

|     |      |       |     |              |      |     |  |  |  |  |  |  |  |  |  |  |  |     |       |   |      |     |      |
|-----|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|--|--|--|--|-----|-------|---|------|-----|------|
| PHP | 1.31 | 11.0  | Pg  | 16:23:55.428 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  |  | m   |       |   | 6208 |     |      |
| PHP | 1.31 | 11.0  | AM1 | 16:24:18.070 |      | --- |  |  |  |  |  |  |  |  |  |  |  | 0.5 | 1.24  | a | M1   | 2.8 | 3485 |
| PHP | 1.31 | 11.0  | AMd | 16:24:59.701 |      | --- |  |  |  |  |  |  |  |  |  |  |  | 0.0 | 64.27 | a | Md   | 3.1 | 3476 |
| PUK | 1.64 | 356.0 | Sn  | 16:24:24.528 | -0.1 | --- |  |  |  |  |  |  |  |  |  |  |  |     |       |   | m    |     | 6211 |
| PUK | 1.64 | 356.0 | Pn  | 16:24:00.993 | -0.6 | --- |  |  |  |  |  |  |  |  |  |  |  |     |       |   | m    |     | 6210 |
| PUK | 1.64 | 356.0 | AM1 | 16:24:26.390 |      | --- |  |  |  |  |  |  |  |  |  |  |  | 0.6 | 0.78  | a | M1   | 3.0 | 3486 |
| PUK | 1.64 | 356.0 | AMd | 16:25:03.868 |      | --- |  |  |  |  |  |  |  |  |  |  |  | 0.0 | 62.87 | a | Md   | 3.1 | 3477 |

DATA\_TYPE COMMENT GSE2.1  
Event 368

Official Magnitude:  
M1 2.57

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 179  | 82  | 0.7400 |
| Intermediate: | 77   | 1   | 0.2400 |
| Min:          | 347  | 8   | 0.2200 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187387 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 372 2.7 km from Psarades, West Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 15:24:56.85 |     | 0.04 | 40.8097  | 21.0147   |      |      |    | 15.2  | 0.6 | 20   | 15   | 119 | 0.25  | 2.08  | m    | 412    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 3.0 | 0.0  | 10     | 412    |
| Md        | 3.0 | 0.0  | 13     | 412    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| KBN  | 0.25 | 224.0 | Sg    | 15:25:06.223 | 0.0  |      |       |      |      | --- |     |      |       |      |           | 6214  |      |
| KBN  | 0.25 | 224.0 | Pg    | 15:25:02.222 | 0.0  |      |       |      |      | --- |     |      |       |      |           | 6213  |      |
| KBN  | 0.25 | 224.0 | AM1   | 15:25:07.520 |      |      |       |      |      | --- |     | 11.0 | 0.22  | a    | M1        | 3.0   | 3500 |
| KBN  | 0.25 | 224.0 | AMd   | 15:25:55.587 |      |      |       |      |      | --- |     | 0.0  | 53.36 | a    | Md        | 2.8   | 3487 |
| FNA  | 0.28 | 95.0  | Sg    | 15:25:07.865 | -0.0 |      |       |      |      | --- |     |      |       |      |           | 6216  |      |
| FNA  | 0.28 | 95.0  | Pg    | 15:25:03.184 | 0.0  |      |       |      |      | --- |     |      |       |      |           | 6215  |      |
| FNA  | 0.28 | 95.0  | AM1   | 15:25:09.910 |      |      |       |      |      | --- |     | 28.6 | 0.16  | a    | M1        | 3.5   | 3501 |
| FNA  | 0.28 | 95.0  | AMd   | 15:25:38.791 |      |      |       |      |      | --- |     | 0.0  | 35.61 | a    | Md        | 2.4   | 3488 |
| NEST | 0.39 | 176.0 | Sg    | 15:25:11.461 | -0.0 |      |       |      |      | --- |     |      |       |      |           | 6218  |      |
| NEST | 0.39 | 176.0 | Pg    | 15:25:05.224 | 0.0  |      |       |      |      | --- |     |      |       |      |           | 6217  |      |
| NEST | 0.39 | 176.0 | AM1   | 15:25:15.080 |      |      |       |      |      | --- |     | 7.8  | 0.18  | a    | M1        | 3.0   | 3502 |

|      |      |       |     |              |      |     |     |       |    |    |     |      |
|------|------|-------|-----|--------------|------|-----|-----|-------|----|----|-----|------|
| NEST | 0.39 | 176.0 | AMd | 15:25:55.097 |      | --- | 0.0 | 49.87 | a  | Md | 2.7 | 3489 |
| LSK  | 0.73 | 206.0 | Sg  | 15:25:22.198 | -0.0 | --- |     |       | m  |    |     | 6220 |
| LSK  | 0.73 | 206.0 | Pg  | 15:25:11.329 | -0.0 | --- |     |       | m  |    |     | 6219 |
| LSK  | 0.73 | 206.0 | AMl | 15:25:25.590 |      | --- | 4.6 | 0.50  | a  | Ml | 3.2 | 3503 |
| LSK  | 0.73 | 206.0 | AMd | 15:26:21.519 |      | --- | 0.0 | 70.19 | a  | Md | 3.1 | 3490 |
| PHP  | 0.97 | 334.0 | Sg  | 15:25:29.736 | -0.1 | --- |     |       | m  |    |     | 6222 |
| PHP  | 0.97 | 334.0 | Pg  | 15:25:15.728 | 0.1  | --- |     |       | m  |    |     | 6221 |
| PHP  | 0.97 | 334.0 | AMl | 15:25:33.780 |      | --- | 0.8 | 0.38  | a  | Ml | 2.7 | 3504 |
| PHP  | 0.97 | 334.0 | AMd | 15:26:17.441 |      | --- | 0.0 | 61.71 | a  | Md | 3.0 | 3491 |
| TIR  | 1.02 | 303.0 | Sg  | 15:25:31.727 | -0.0 | --- |     |       | m  |    |     | 6224 |
| TIR  | 1.02 | 303.0 | Pg  | 15:25:15.981 | -0.8 | --- |     |       | m  |    |     | 6223 |
| TIR  | 1.02 | 303.0 | AMl | 15:25:37.900 |      | --- | 0.7 | 0.38  | a  | Ml | 2.6 | 3505 |
| TIR  | 1.02 | 303.0 | AMd | 15:26:14.995 |      | --- | 0.0 | 59.01 | a  | Md | 3.0 | 3492 |
| VLO  | 1.21 | 255.0 | Pg  | 15:25:19.363 | 0.0  | --- |     |       | m  |    |     | 6225 |
| VLO  | 1.21 | 255.0 | AMd | 15:26:28.695 |      | --- | 0.0 | 69.33 | a  | Md | 3.1 | 3493 |
| SRN  | 1.21 | 221.0 | Sn  | 15:25:37.427 | -0.8 | --- |     |       | m  |    |     | 6227 |
| SRN  | 1.21 | 221.0 | Pn  | 15:25:20.484 | -0.0 | --- |     |       | m  |    |     | 6226 |
| SRN  | 1.21 | 221.0 | AMl | 15:25:43.020 |      | --- | 0.8 | 0.62  | a  | Ml | 2.8 | 3506 |
| SRN  | 1.21 | 221.0 | AMd | 15:26:27.064 |      | --- | 0.0 | 66.58 | a  | Md | 3.1 | 3494 |
| IGT  | 1.38 | 203.0 | Sn  | 15:25:42.836 | -0.0 | --- |     |       | m  |    |     | 6229 |
| IGT  | 1.38 | 203.0 | Pn  | 15:25:23.134 | -0.0 | --- |     |       | m  |    |     | 6228 |
| IGT  | 1.38 | 203.0 | AMd | 15:26:36.365 |      | --- | 0.0 | 73.23 | a  | Md | 2.6 | 3495 |
| THE  | 1.49 | 96.0  | Sn  | 15:25:45.256 | -1.1 | --- |     |       | m  |    |     | 6231 |
| THE  | 1.49 | 96.0  | Pn  | 15:25:25.084 | -0.0 | --- |     |       | m  |    |     | 6230 |
| THE  | 1.49 | 96.0  | AMl | 15:25:50.100 |      | --- | 0.3 | 0.58  | a  | Ml | 2.6 | 3507 |
| THE  | 1.49 | 96.0  | AMd | 15:26:25.759 |      | --- | 0.0 | 60.68 | a  | Md | 3.0 | 3496 |
| PUK  | 1.49 | 326.0 | Sn  | 15:25:46.188 | 0.0  | --- |     |       | m  |    |     | 6233 |
| PUK  | 1.49 | 326.0 | Pn  | 15:25:24.925 | -0.1 | --- |     |       | m  |    |     | 6232 |
| PUK  | 1.49 | 326.0 | AMl | 15:25:54.870 |      | --- | 0.9 | 0.44  | a  | Ml | 3.1 | 3508 |
| PUK  | 1.49 | 326.0 | AMd | 15:26:43.373 |      | --- | 0.0 | 78.45 | a  | Md | 3.3 | 3497 |
| BCI  | 1.71 | 0.0   | Pn  | 15:25:29.981 | 0.0  | --- |     |       | md |    |     | 6237 |
| BCI  | 1.71 | 336.0 | Sn  | 15:25:52.938 | 0.0  | --- |     |       | m  |    |     | 6234 |
| BCI  | 1.71 | 336.0 | AMl | 15:26:02.620 |      | --- | 1.1 | 0.84  | a  | Ml | 3.3 | 3509 |
| LKD2 | 2.04 | 188.0 | Pn  | 15:25:34.221 | 0.1  | --- |     |       | m  |    |     | 6235 |
| LKD2 | 2.04 | 188.0 | AMd | 15:27:05.554 |      | --- | 0.0 | 91.33 | a  | Md | 3.5 | 3498 |
| SCTE | 2.08 | 251.0 | Pn  | 15:25:33.161 | -1.6 | --- |     |       | m  |    |     | 6236 |
| SCTE | 2.08 | 251.0 | AMd | 15:26:54.790 |      | --- | 0.0 | 81.63 | a  | Md | 3.4 | 3499 |

DATA\_TYPE COMMENT GSE2.1  
Event 372

Official Magnitude:  
Ml 3.03

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 130  | 73  | 0.6700 |
| Intermediate: | 255  | 9   | 0.2800 |
| Min:          | 347  | 14  | 0.1900 |



BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187387 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 373 3.2 km from Psarades, West Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 16:19:56.87 |     | 0.04 | 40.8250  | 20.9935   |      |      |    | 9.1   | 0.7 | 18   | 13   | 121 | 0.25  | 2.07  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.8 | 0.0  | 8      | 413    |
| Md        | 2.9 | 0.0  | 11     | 413    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| KBN  | 0.25 | 218.0 | Sg    | 16:20:05.742 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6239  |      |
| KBN  | 0.25 | 218.0 | Pg    | 16:20:01.969 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6238  |      |
| KBN  | 0.25 | 218.0 | AMl   | 16:20:07.310 |      |      |       |      |      | --- |     | 5.6 | 0.24  | a    | Ml        | 2.7   | 3521 |
| KBN  | 0.25 | 218.0 | AMd   | 16:20:41.498 |      |      |       |      |      | --- |     | 0.0 | 39.53 | a    | Md        | 2.5   | 3510 |
| FNA  | 0.30 | 98.0  | Sg    | 16:20:08.040 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6241  |      |
| FNA  | 0.30 | 98.0  | Pg    | 16:20:03.263 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6240  |      |
| FNA  | 0.30 | 98.0  | AMl   | 16:20:09.350 |      |      |       |      |      | --- |     | 7.2 | 0.20  | a    | Ml        | 2.9   | 3522 |
| FNA  | 0.30 | 98.0  | AMd   | 16:20:37.829 |      |      |       |      |      | --- |     | 0.0 | 34.57 | a    | Md        | 2.4   | 3511 |
| NEST | 0.41 | 174.0 | Sg    | 16:20:11.808 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6243  |      |
| NEST | 0.41 | 174.0 | Pg    | 16:20:05.386 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6242  |      |
| NEST | 0.41 | 174.0 | AMl   | 16:20:13.410 |      |      |       |      |      | --- |     | 5.3 | 0.30  | a    | Ml        | 2.9   | 3523 |
| NEST | 0.41 | 174.0 | AMd   | 16:20:48.954 |      |      |       |      |      | --- |     | 0.0 | 43.57 | a    | Md        | 2.6   | 3512 |
| LSK  | 0.74 | 205.0 | Sg    | 16:20:22.490 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6245  |      |
| LSK  | 0.74 | 205.0 | Pg    | 16:20:11.506 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6244  |      |
| LSK  | 0.74 | 205.0 | AMl   | 16:20:25.370 |      |      |       |      |      | --- |     | 2.1 | 0.52  | a    | Ml        | 2.9   | 3524 |
| LSK  | 0.74 | 205.0 | AMd   | 16:21:10.390 |      |      |       |      |      | --- |     | 0.0 | 58.88 | a    | Md        | 2.9   | 3513 |
| PHP  | 0.95 | 335.0 | Sg    | 16:20:29.386 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6247  |      |
| PHP  | 0.95 | 335.0 | Pg    | 16:20:15.422 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6246  |      |
| PHP  | 0.95 | 335.0 | AMl   | 16:20:33.530 |      |      |       |      |      | --- |     | 0.4 | 0.38  | a    | Ml        | 2.4   | 3525 |
| PHP  | 0.95 | 335.0 | AMd   | 16:21:07.518 |      |      |       |      |      | --- |     | 0.0 | 52.10 | a    | Md        | 2.8   | 3514 |
| TIR  | 1.00 | 302.0 | Sg    | 16:20:31.434 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6249  |      |
| TIR  | 1.00 | 302.0 | Pg    | 16:20:16.652 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6248  |      |
| TIR  | 1.00 | 302.0 | AMl   | 16:20:41.420 |      |      |       |      |      | --- |     | 0.2 | 1.10  | a    | Ml        | 2.1   | 3526 |
| TIR  | 1.00 | 302.0 | AMd   | 16:21:13.034 |      |      |       |      |      | --- |     | 0.0 | 56.38 | a    | Md        | 2.9   | 3515 |
| SRN  | 1.21 | 220.0 | Pn    | 16:20:20.822 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6250  |      |
| SRN  | 1.21 | 220.0 | AMd   | 16:21:22.989 |      |      |       |      |      | --- |     | 0.0 | 62.17 | a    | Md        | 3.0   | 3516 |
| IGT  | 1.39 | 202.0 | Sn    | 16:20:43.823 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6252  |      |
| IGT  | 1.39 | 202.0 | Pn    | 16:20:23.673 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6251  |      |
| IGT  | 1.39 | 202.0 | AMd   | 16:21:38.260 |      |      |       |      |      | --- |     | 0.0 | 74.59 | a    | Md        | 2.6   | 3517 |
| PUK  | 1.47 | 327.0 | Sn    | 16:20:46.170 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6254  |      |
| PUK  | 1.47 | 327.0 | Pn    | 16:20:24.949 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6253  |      |

|      |      |       |     |              |      |     |       |     |     |     |      |
|------|------|-------|-----|--------------|------|-----|-------|-----|-----|-----|------|
| PUK  | 1.47 | 327.0 | AMl | 16:20:52.510 | ---  | 0.4 | 0.48  | a__ | Ml  | 2.8 | 3527 |
| PUK  | 1.47 | 327.0 | AMd | 16:21:33.595 | ---  | 0.0 | 68.65 | a__ | Md  | 3.1 | 3518 |
| THE  | 1.51 | 96.0  | Pn  | 16:20:24.106 | -1.7 | --- | ---   | m__ | --- | --- | 6255 |
| THE  | 1.51 | 96.0  | AMd | 16:21:25.559 | ---  | 0.0 | 61.45 | a__ | Md  | 3.0 | 3519 |
| BCI  | 1.69 | 0.0   | Pn  | 16:20:29.948 | 0.0  | --- | ---   | m__ | --- | --- | 6258 |
| BCI  | 1.69 | 337.0 | Sn  | 16:20:53.030 | 0.1  | --- | ---   | m__ | --- | --- | 6256 |
| BCI  | 1.69 | 337.0 | AMl | 16:21:02.360 | ---  | 0.4 | 0.86  | a__ | Ml  | 2.9 | 3528 |
| SCTE | 2.07 | 250.0 | Pn  | 16:20:33.973 | -1.3 | --- | ---   | m__ | --- | --- | 6257 |
| SCTE | 2.07 | 250.0 | AMd | 16:21:48.757 | ---  | 0.0 | 74.78 | a__ | Md  | 3.3 | 3520 |

DATA\_TYPE COMMENT GSE2.1  
Event 373

Official Magnitude:  
Ml 2.81

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 120  | 81  | 0.7400 |
| Intermediate: | 257  | 5   | 0.3000 |
| Min:          | 347  | 6   | 0.1900 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187387 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 374 1.1 km from Kozel, Korçë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 20:54:05.89 |     | 0.02 | 40.4542  | 20.7357   |      |      |    | 11.2  | 0.8 | 13   | 12   | 114 | 0.17  | 1.71  | m    | 414    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.5 | 0.0  | 6      | 414    |
| Md        | 2.8 | 0.0  | 7      | 414    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| KBN  | 0.17 | 0.0   | Pg    | 20:54:09.755 | 0.0  | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m__  | ---       | 6273  |      |
| KBN  | 0.17 | 13.0  | Sg    | 20:54:12.343 | -0.0 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m__  | ---       | 6259  |      |
| KBN  | 0.17 | 13.0  | AMl   | 20:54:15.550 | ---  | ---  | ---   | ---  | ---  | --- | --- | 3.4 | 0.14  | a__  | Ml        | 2.4   | 3536 |
| NEST | 0.24 | 99.0  | Sg    | 20:54:15.312 | -0.0 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m__  | ---       | 6261  |      |
| NEST | 0.24 | 99.0  | Pg    | 20:54:11.252 | -0.0 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m__  | ---       | 6260  |      |
| NEST | 0.24 | 99.0  | AMl   | 20:54:18.160 | ---  | ---  | ---   | ---  | ---  | --- | --- | 4.5 | 0.34  | a__  | Ml        | 2.6   | 3537 |
| NEST | 0.24 | 99.0  | AMd   | 20:54:49.035 | ---  | ---  | ---   | ---  | ---  | --- | --- | 0.0 | 37.78 | a__  | Md        | 2.5   | 3529 |
| LSK  | 0.32 | 200.0 | Sg    | 20:54:17.688 | 0.0  | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m__  | ---       | 6263  |      |
| LSK  | 0.32 | 200.0 | Pg    | 20:54:12.329 | -0.3 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m__  | ---       | 6262  |      |

|     |      |       |     |              |      |     |       |     |     |     |      |
|-----|------|-------|-----|--------------|------|-----|-------|-----|-----|-----|------|
| LSK | 0.32 | 200.0 | AMl | 20:54:27.820 | ---  | 3.0 | 0.52  | a__ | Ml  | 2.5 | 3538 |
| LSK | 0.32 | 200.0 | AMd | 20:55:05.617 | ---  | 0.0 | 53.29 | a__ | Md  | 2.8 | 3530 |
| FNA | 0.59 | 56.0  | Sg  | 20:54:26.867 | 0.0  | --- | ---   | m__ | --- | --- | 6265 |
| FNA | 0.59 | 56.0  | Pg  | 20:54:17.872 | 0.0  | --- | ---   | m__ | --- | --- | 6264 |
| FNA | 0.59 | 56.0  | AMl | 20:54:29.500 | ---  | 2.1 | 0.26  | a__ | Ml  | 2.7 | 3539 |
| FNA | 0.59 | 56.0  | AMd | 20:55:06.239 | ---  | 0.0 | 48.37 | a__ | Md  | 2.7 | 3531 |
| SRN | 0.80 | 225.0 | Sn  | 20:54:34.550 | -0.0 | --- | ---   | m__ | --- | --- | 6267 |
| SRN | 0.80 | 225.0 | Pn  | 20:54:22.300 | 0.0  | --- | ---   | m__ | --- | --- | 6266 |
| SRN | 0.80 | 225.0 | AMl | 20:54:38.480 | ---  | 0.2 | 0.50  | a__ | Ml  | 1.8 | 3540 |
| SRN | 0.80 | 225.0 | AMd | 20:55:24.900 | ---  | 0.0 | 62.60 | a__ | Md  | 3.0 | 3532 |
| IGT | 0.97 | 199.0 | Sn  | 20:54:39.527 | -0.0 | --- | ---   | m__ | --- | --- | 6269 |
| IGT | 0.97 | 199.0 | Pn  | 20:54:25.139 | 0.0  | --- | ---   | m__ | --- | --- | 6268 |
| IGT | 0.97 | 199.0 | AMd | 20:55:28.418 | ---  | 0.0 | 63.28 | a__ | Md  | 2.4 | 3533 |
| PHP | 1.25 | 350.0 | Sn  | 20:54:47.769 | 0.0  | --- | ---   | m__ | --- | --- | 6271 |
| PHP | 1.25 | 350.0 | Pn  | 20:54:29.779 | -0.0 | --- | ---   | m__ | --- | --- | 6270 |
| PHP | 1.25 | 350.0 | AMl | 20:54:50.460 | ---  | 0.1 | 0.60  | a__ | Ml  | 1.8 | 3541 |
| PHP | 1.25 | 350.0 | AMd | 20:55:34.532 | ---  | 0.0 | 64.75 | a__ | Md  | 3.1 | 3534 |
| PUK | 1.71 | 339.0 | Pn  | 20:54:38.167 | 0.0  | --- | ---   | m__ | --- | --- | 6272 |
| PUK | 1.71 | 339.0 | AMd | 20:55:46.923 | ---  | 0.0 | 68.76 | a__ | Md  | 3.2 | 3535 |

DATA\_TYPE COMMENT GSE2.1  
Event 374

Official Magnitude:  
Ml 2.47

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 114  | 71  | 0.8100 |
| Intermediate: | 300  | 18  | 0.3300 |
| Min:          | 209  | 2   | 0.2000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187387 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 375 1.4 km from Librazhd, Elbasan, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 22:06:41.71 |     | 0.03 | 41.1825  | 20.2993   |      |      |    | 16.6  | 0.6 | 18   | 16   | 130 | 0.37  | 2.16  | m    |        |
| 415        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.1 | 0.0  | 8      | 415    |
| Md        | 2.7 | 0.0  | 2      | 415    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| TIR  | 0.37 | 0.0   | Pg    | 22:06:49.245 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6294  |      |
| TIR  | 0.37 | 297.0 | Sg    | 22:06:55.548 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6274  |      |
| TIR  | 0.37 | 297.0 | AM1   | 22:06:55.480 |      |      |       |      |      | --- |     | 0.8 | 0.14  | a__  | M1        | 2.0   | 3544 |
| PHP  | 0.51 | 11.0  | Sg    | 22:06:59.764 | 0.1  |      |       |      |      | --- |     |     |       |      |           | 6276  |      |
| PHP  | 0.51 | 11.0  | Pg    | 22:06:51.962 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6275  |      |
| PHP  | 0.51 | 11.0  | AM1   | 22:07:01.000 |      |      |       |      |      | --- |     | 0.1 | 0.24  | a__  | M1        | 1.4   | 3545 |
| PHP  | 0.51 | 11.0  | AMd   | 22:07:36.091 |      |      |       |      |      | --- |     | 0.0 | 44.13 | a__  | Md        | 2.6   | 3542 |
| KBN  | 0.67 | 146.0 | Sg    | 22:07:04.476 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6278  |      |
| KBN  | 0.67 | 146.0 | Pg    | 22:06:54.709 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6277  |      |
| KBN  | 0.67 | 146.0 | AM1   | 22:07:08.090 |      |      |       |      |      | --- |     | 0.4 | 0.40  | a__  | M1        | 2.1   | 3546 |
| KBN  | 0.67 | 146.0 | AMd   | 22:07:46.382 |      |      |       |      |      | --- |     | 0.0 | 51.67 | a__  | Md        | 2.8   | 3543 |
| PUK  | 0.91 | 341.0 | Sn    | 22:07:12.831 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6280  |      |
| PUK  | 0.91 | 341.0 | Pn    | 22:06:59.286 | -0.2 |      |       |      |      | --- |     |     |       |      |           | 6279  |      |
| PUK  | 0.91 | 341.0 | AM1   | 22:07:14.800 |      |      |       |      |      | --- |     | 0.5 | 0.42  | a__  | M1        | 2.4   | 3547 |
| FNA  | 0.91 | 115.0 | Sn    | 22:07:13.117 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6282  |      |
| FNA  | 0.91 | 115.0 | Pn    | 22:06:59.360 | -0.3 |      |       |      |      | --- |     |     |       |      |           | 6281  |      |
| FNA  | 0.91 | 115.0 | AM1   | 22:07:17.040 |      |      |       |      |      | --- |     | 0.2 | 0.32  | a__  | M1        | 2.1   | 3548 |
| NEST | 0.96 | 143.0 | S     | 22:07:14.414 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6284  |      |
| NEST | 0.96 | 143.0 | P     | 22:07:00.395 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6283  |      |
| NEST | 0.96 | 143.0 | AM1   | 22:07:16.330 |      |      |       |      |      | --- |     | 0.1 | 0.36  | a__  | M1        | 1.9   | 3549 |
| LSK  | 1.06 | 167.0 | S     | 22:07:17.295 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6286  |      |
| LSK  | 1.06 | 167.0 | P     | 22:07:02.053 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6285  |      |
| LSK  | 1.06 | 167.0 | AM1   | 22:07:23.640 |      |      |       |      |      | --- |     | 0.3 | 0.64  | a__  | M1        | 2.3   | 3550 |
| BCI  | 1.20 | 352.0 | S     | 22:07:21.663 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6288  |      |
| BCI  | 1.20 | 352.0 | P     | 22:07:04.552 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6287  |      |
| BCI  | 1.20 | 352.0 | AM1   | 22:07:23.420 |      |      |       |      |      | --- |     | 0.3 | 0.64  | a__  | M1        | 2.4   | 3551 |
| PVY  | 1.43 | 351.0 | P     | 22:07:08.507 | -0.3 |      |       |      |      | --- |     |     |       |      |           | 6289  |      |
| CEME | 1.71 | 324.0 | P     | 22:07:13.728 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6290  |      |
| BEY  | 1.71 | 351.0 | P     | 22:07:13.823 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6291  |      |
| HCY  | 1.85 | 314.0 | P     | 22:07:16.201 | 0.1  |      |       |      |      | --- |     |     |       |      |           | 6292  |      |
| BRY  | 2.16 | 324.0 | P     | 22:07:20.633 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6293  |      |

DATA\_TYPE COMMENT GSE2.1  
Event 375

Official Magnitude:  
M1 2.10

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 273  | 85  | 0.6400 |
| Intermediate: | 62   | 4   | 0.4200 |
| Min:          | 152  | 3   | 0.1700 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena

DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 384 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/09 | 12:43:28.16 |     | 0.04 | 39.7972  | 20.8198   |      |      |    | 7.1   | 9.5 | 14   | 9    | 165 | 0.39  | 2.63  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.1 | 0.0  | 7      | 424    |
| Md        | 2.6 | 0.0  | 8      | 424    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| LSK  | 0.39 | 335.0 | S     | 12:43:42.125 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6387  |
| LSK  | 0.39 | 335.0 | P     | 12:43:36.158 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6386  |
| LSK  | 0.39 | 335.0 | AMl   | 12:43:46.400 |      |      |       |      |      | --- |     | 34.4 | 0.54  | a    | Ml        | 3.6   |
| LSK  | 0.39 | 335.0 | AMd   | 12:44:05.208 |      |      |       |      |      | --- |     | 0.0  | 29.05 | a    | Md        | 2.2   |
| IGT  | 0.46 | 236.0 | S     | 12:43:44.676 | -0.0 |      |       |      |      | --- |     |      |       | m    |           | 6389  |
| IGT  | 0.46 | 236.0 | P     | 12:43:37.606 | -0.0 |      |       |      |      | --- |     |      |       | m    |           | 6388  |
| IGT  | 0.46 | 236.0 | AMd   | 12:44:01.105 |      |      |       |      |      | --- |     | 0.0  | 23.50 | a    | Md        | 1.4   |
| SRN  | 0.64 | 278.0 | S     | 12:43:51.166 | -0.0 |      |       |      |      | --- |     |      |       | m    |           | 6391  |
| SRN  | 0.64 | 278.0 | P     | 12:43:40.450 | -0.9 |      |       |      |      | --- |     |      |       | m    |           | 6390  |
| SRN  | 0.64 | 278.0 | AMl   | 12:43:53.280 |      |      |       |      |      | --- |     | 3.3  | 0.56  | a    | Ml        | 3.0   |
| SRN  | 0.64 | 278.0 | AMd   | 12:44:10.222 |      |      |       |      |      | --- |     | 0.0  | 29.77 | a    | Md        | 2.2   |
| NEST | 0.64 | 0.0   | P     | 12:43:41.269 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6402  |
| NEST | 0.64 | 15.0  | S     | 12:43:50.732 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6392  |
| NEST | 0.64 | 15.0  | AMl   | 12:43:55.200 |      |      |       |      |      | --- |     | 3.0  | 0.32  | a    | Ml        | 2.9   |
| KBN  | 0.83 | 359.0 | S     | 12:43:56.068 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6394  |
| KBN  | 0.83 | 359.0 | P     | 12:43:44.104 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6393  |
| KBN  | 0.83 | 359.0 | AMl   | 12:44:12.120 |      |      |       |      |      | --- |     | 1.8  | 0.46  | a    | Ml        | 2.9   |
| KBN  | 0.83 | 359.0 | AMd   | 12:44:22.074 |      |      |       |      |      | --- |     | 0.0  | 37.97 | a    | Md        | 2.5   |
| LKD2 | 1.01 | 188.0 | S     | 12:44:03.197 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6396  |
| LKD2 | 1.01 | 188.0 | P     | 12:43:48.278 | 0.1  |      |       |      |      | --- |     |      |       | m    |           | 6395  |
| LKD2 | 1.01 | 188.0 | AMl   | 12:44:11.400 |      |      |       |      |      | --- |     | 3.0  | 0.70  | a    | Ml        | 3.3   |
| LKD2 | 1.01 | 188.0 | AMd   | 12:44:31.191 |      |      |       |      |      | --- |     | 0.0  | 42.91 | a    | Md        | 2.6   |
| FNA  | 1.07 | 23.0  | S     | 12:44:05.187 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6398  |
| FNA  | 1.07 | 23.0  | P     | 12:43:49.314 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6397  |
| FNA  | 1.07 | 23.0  | AMl   | 12:44:09.050 |      |      |       |      |      | --- |     | 1.9  | 0.50  | a    | Ml        | 3.1   |
| FNA  | 1.07 | 23.0  | AMd   | 12:44:37.572 |      |      |       |      |      | --- |     | 0.0  | 48.26 | a    | Md        | 2.8   |
| VLO  | 1.22 | 304.0 | S     | 12:44:08.704 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6400  |
| VLO  | 1.22 | 304.0 | P     | 12:43:51.337 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 6399  |
| VLO  | 1.22 | 304.0 | AMl   | 12:44:15.490 |      |      |       |      |      | --- |     | 4.2  | 0.34  | a    | Ml        | 3.6   |
| VLO  | 1.22 | 304.0 | AMd   | 12:44:36.661 |      |      |       |      |      | --- |     | 0.0  | 45.32 | a    | Md        | 2.7   |
| BCI  | 2.63 | 348.0 | P     | 12:44:14.289 | -0.6 |      |       |      |      | --- |     |      |       | m    |           | 6401  |
| BCI  | 2.63 | 348.0 | AMd   | 12:45:15.407 |      |      |       |      |      | --- |     | 0.0  | 61.12 | a    | Md        | 3.1   |

DATA\_TYPE COMMENT GSE2.1  
Event 384

Official Magnitude:  
Ml 3.11

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 284  | 89  | 9.4900 |
| Intermediate: | 110  | 0   | 0.3700 |
| Min:          | 200  | 0   | 0.2100 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 385 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/09 | 17:23:31.43 |     | 0.05 | 40.0868  | 20.3810   |      |      |    | 35.4  | 0.5 | 12   | 13   | 136 | 0.36  | 1.47  | m    |        |
| OrigID 425 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.6 | 0.0  | 4      | 425    |
| Md        | 2.8 | 0.0  | 6      | 425    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| LSK  | 0.18 | 0.0   | Pg    | 17:23:37.471 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6416  |
| LSK  | 0.18 | 69.0  | Sn    | 17:23:41.445 | -1.8 |      |       |      |      |     |     |     |       | m    |           | 6403  |
| LSK  | 0.18 | 69.0  | AMl   | 17:23:43.540 |      |      |       |      |      |     |     | 0.4 | 0.22  | a    | Ml        | 1.8   |
| SRN  | 0.36 | 235.0 | Sg    | 17:23:47.913 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6405  |
| SRN  | 0.36 | 235.0 | Pg    | 17:23:40.734 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6404  |
| SRN  | 0.36 | 235.0 | AMl   | 17:23:50.610 |      |      |       |      |      |     |     | 0.2 | 0.36  | a    | Ml        | 1.5   |
| SRN  | 0.36 | 235.0 | AMd   | 17:24:17.717 |      |      |       |      |      |     |     | 0.0 | 36.98 | a    | Md        | 2.4   |
| IGT  | 0.56 | 185.0 | Sg    | 17:23:52.490 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6407  |
| IGT  | 0.56 | 185.0 | Pg    | 17:23:43.458 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6406  |
| IGT  | 0.56 | 185.0 | AMd   | 17:24:26.422 |      |      |       |      |      |     |     | 0.0 | 42.96 | a    | Md        | 2.0   |
| NEST | 0.61 | 57.0  | Sg    | 17:23:53.863 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6409  |
| NEST | 0.61 | 57.0  | Pg    | 17:23:44.281 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6408  |
| NEST | 0.61 | 57.0  | AMl   | 17:23:55.910 |      |      |       |      |      |     |     | 0.1 | 0.50  | a    | Ml        | 1.4   |
| NEST | 0.61 | 57.0  | AMd   | 17:24:41.430 |      |      |       |      |      |     |     | 0.0 | 57.15 | a    | Md        | 2.9   |
| FNA  | 1.03 | 47.0  | Sg    | 17:24:06.396 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6411  |
| FNA  | 1.03 | 47.0  | Pg    | 17:23:51.528 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 6410  |
| FNA  | 1.03 | 47.0  | AMl   | 17:24:10.630 |      |      |       |      |      |     |     | 0.1 | 0.28  | a    | Ml        | 1.7   |
| FNA  | 1.03 | 47.0  | AMd   | 17:24:42.956 |      |      |       |      |      |     |     | 0.0 | 51.43 | a    | Md        | 2.8   |
| LKD2 | 1.31 | 170.0 | Sn    | 17:24:14.329 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6413  |
| LKD2 | 1.31 | 170.0 | Pn    | 17:23:55.992 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6412  |
| LKD2 | 1.31 | 170.0 | AMd   | 17:24:42.953 |      |      |       |      |      |     |     | 0.0 | 46.96 | a    | Md        | 2.7   |
| SCTE | 1.47 | 271.0 | Sn    | 17:24:18.596 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6415  |

SCTE 1.47 271.0 Pn 17:23:58.395 0.0 \_\_\_\_\_ m\_\_\_\_ 6414  
 SCTE 1.47 271.0 AMd 17:25:00.792 \_\_\_\_\_ 0.0 62.40 a\_\_\_\_ Md 3.0 3633

DATA\_TYPE COMMENT GSE2.1  
 Event 385

Official Magnitude:  
 Ml 1.61

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 113  | 76  | 0.5400 |
| Intermediate: | 317  | 11  | 0.4300 |
| Min:          | 226  | 6   | 0.2700 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187386 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 386 2.0 km from Ágios Pródromos, Central Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/09 | 17:46:27.20 |     | 0.06 | 40.4825  | 23.3702   |      |      |    | 23.7  | 1.5 | 14   | 13   | 296 | 0.34  | 2.69  | m    |        |
| OrigID 426 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.8 | 0.0  | 7      | 426    |
| Md        | 3.4 | 0.0  | 7      | 426    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def   | SNR | Amp | Per   | Qual  | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-------|-----|-----|-------|-------|-----------|-------|
| THE  | 0.34 | 296.0 | Sg    | 17:46:40.515 | -0.1 |      |       |      |      | _____ |     |     |       | m____ |           | 6418  |
| THE  | 0.34 | 296.0 | Pg    | 17:46:34.895 | 0.0  |      |       |      |      | _____ |     |     |       | m____ |           | 6417  |
| THE  | 0.34 | 296.0 | AMl   | 17:46:43.208 |      |      |       |      |      | _____ |     | 1.3 | 0.18  | a____ | Ml        | 2.2   |
| THE  | 0.34 | 296.0 | AMd   | 17:47:31.759 |      |      |       |      |      | _____ |     | 0.0 | 56.86 | a____ | Md        | 2.9   |
| FNA  | 1.54 | 282.0 | Sg    | 17:47:17.788 | 0.0  |      |       |      |      | _____ |     |     |       | m____ |           | 6420  |
| FNA  | 1.54 | 282.0 | Pg    | 17:46:56.196 | 0.1  |      |       |      |      | _____ |     |     |       | m____ |           | 6419  |
| FNA  | 1.54 | 282.0 | AMl   | 17:47:23.158 |      |      |       |      |      | _____ |     | 0.3 | 0.50  | a____ | Ml        | 2.6   |
| FNA  | 1.54 | 282.0 | AMd   | 17:48:10.342 |      |      |       |      |      | _____ |     | 0.0 | 74.15 | a____ | Md        | 3.2   |
| NEST | 1.77 | 269.0 | Sg    | 17:47:24.226 | 0.0  |      |       |      |      | _____ |     |     |       | m____ |           | 6422  |
| NEST | 1.77 | 269.0 | Pg    | 17:46:59.767 | 0.0  |      |       |      |      | _____ |     |     |       | m____ |           | 6421  |
| NEST | 1.77 | 269.0 | AMl   | 17:47:31.428 |      |      |       |      |      | _____ |     | 0.2 | 0.66  | a____ | Ml        | 2.7   |
| NEST | 1.77 | 269.0 | AMd   | 17:48:32.642 |      |      |       |      |      | _____ |     | 0.0 | 92.87 | a____ | Md        | 3.5   |
| KBN  | 1.97 | 0.0   | Sn    | 17:47:30.362 | 0.0  |      |       |      |      | _____ |     |     |       | m____ |           | 6431  |
| LSK  | 2.14 | 262.0 | Sn    | 17:47:33.574 | 0.0  |      |       |      |      | _____ |     |     |       | m____ |           | 6424  |
| LSK  | 2.14 | 262.0 | Pn    | 17:47:05.082 | -0.0 |      |       |      |      | _____ |     |     |       | m____ |           | 6423  |
| LSK  | 2.14 | 262.0 | AMl   | 17:47:41.968 |      |      |       |      |      | _____ |     | 0.3 | 0.50  | a____ | Ml        | 3.0   |

|      |      |       |     |              |      |     |  |  |  |  |     |       |     |     |     |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|-----|-------|-----|-----|-----|------|
| LSK  | 2.14 | 262.0 | AMd | 17:48:30.230 |      | --- |  |  |  |  | 0.0 | 85.15 | a__ | Md  | 3.4 | 3641 |
| IGT  | 2.52 | 249.0 | Sn  | 17:47:43.448 | -0.0 | --- |  |  |  |  |     |       |     | m__ |     | 6426 |
| IGT  | 2.52 | 249.0 | Pn  | 17:47:10.862 | 0.1  | --- |  |  |  |  |     |       |     | m__ |     | 6425 |
| IGT  | 2.52 | 249.0 | AM1 | 17:47:49.588 |      | --- |  |  |  |  | 0.1 | 0.54  | a__ | M1  | 2.9 | 3649 |
| IGT  | 2.52 | 249.0 | AMd | 17:48:30.436 |      | --- |  |  |  |  | 0.0 | 79.57 | a__ | Md  | 2.8 | 3642 |
| SRN  | 2.65 | 258.0 | Sn  | 17:47:47.545 | 0.1  | --- |  |  |  |  |     |       |     | m__ |     | 6428 |
| SRN  | 2.65 | 258.0 | Pn  | 17:47:13.028 | -0.0 | --- |  |  |  |  |     |       |     | m__ |     | 6427 |
| SRN  | 2.65 | 258.0 | AM1 | 17:47:48.678 |      | --- |  |  |  |  | 0.1 | 0.58  | a__ | M1  | 2.8 | 3650 |
| SRN  | 2.65 | 258.0 | AMd | 17:48:35.656 |      | --- |  |  |  |  | 0.0 | 82.63 | a__ | Md  | 3.4 | 3643 |
| LKD2 | 2.69 | 232.0 | Sn  | 17:47:47.834 | -0.1 | --- |  |  |  |  |     |       |     | m__ |     | 6430 |
| LKD2 | 2.69 | 232.0 | Pn  | 17:47:13.273 | -0.0 | --- |  |  |  |  |     |       |     | m__ |     | 6429 |
| LKD2 | 2.69 | 232.0 | AM1 | 17:47:56.798 |      | --- |  |  |  |  | 0.4 | 0.60  | a__ | M1  | 3.4 | 3651 |
| LKD2 | 2.69 | 232.0 | AMd | 17:48:36.861 |      | --- |  |  |  |  | 0.0 | 83.59 | a__ | Md  | 3.4 | 3644 |

DATA\_TYPE COMMENT GSE2.1  
Event 386

Official Magnitude:  
M1 2.83

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 27   | 43  | 2.2100 |
| Intermediate: | 277  | 19  | 0.7600 |
| Min:          | 170  | 41  | 0.5000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187387 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 374 1.1 km from Kozel, Korçë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 20:54:05.89 |     | 0.02 | 40.4542  | 20.7357   |      |      |    | 11.2  | 0.8 | 13   | 12   | 114 | 0.17  | 1.71  | m    |        |
| 414        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.5 | 0.0  | 6      | 414    |
| Md        | 2.8 | 0.0  | 7      | 414    |

| Sta  | Dist | EvAz | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per  | Qual | Magnitude | ArrID |      |
|------|------|------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| KBN  | 0.17 | 0.0  | Pg    | 20:54:09.755 | 0.0  |      |       |      |      |     |     |     |      | m__  |           | 6273  |      |
| KBN  | 0.17 | 13.0 | Sg    | 20:54:12.343 | -0.0 |      |       |      |      |     |     |     |      | m__  |           | 6259  |      |
| KBN  | 0.17 | 13.0 | AM1   | 20:54:15.550 |      |      |       |      |      |     |     | 3.4 | 0.14 | a__  | M1        | 2.4   | 3536 |
| NEST | 0.24 | 99.0 | Sg    | 20:54:15.312 | -0.0 |      |       |      |      |     |     |     |      | m__  |           | 6261  |      |
| NEST | 0.24 | 99.0 | Pg    | 20:54:11.252 | -0.0 |      |       |      |      |     |     |     |      | m__  |           | 6260  |      |



|      |      |       |     |              |      |  |  |  |  |     |       |     |    |     |      |
|------|------|-------|-----|--------------|------|--|--|--|--|-----|-------|-----|----|-----|------|
| NEST | 0.24 | 99.0  | AMl | 20:54:18.160 |      |  |  |  |  | 4.5 | 0.34  | a__ | Ml | 2.6 | 3537 |
| NEST | 0.24 | 99.0  | AMd | 20:54:49.035 |      |  |  |  |  | 0.0 | 37.78 | a__ | Md | 2.5 | 3529 |
| LSK  | 0.32 | 200.0 | Sg  | 20:54:17.688 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6263 |
| LSK  | 0.32 | 200.0 | Pg  | 20:54:12.329 | -0.3 |  |  |  |  |     |       | m__ |    |     | 6262 |
| LSK  | 0.32 | 200.0 | AMl | 20:54:27.820 |      |  |  |  |  | 3.0 | 0.52  | a__ | Ml | 2.5 | 3538 |
| LSK  | 0.32 | 200.0 | AMd | 20:55:05.617 |      |  |  |  |  | 0.0 | 53.29 | a__ | Md | 2.8 | 3530 |
| FNA  | 0.59 | 56.0  | Sg  | 20:54:26.867 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6265 |
| FNA  | 0.59 | 56.0  | Pg  | 20:54:17.872 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6264 |
| FNA  | 0.59 | 56.0  | AMl | 20:54:29.500 |      |  |  |  |  | 2.1 | 0.26  | a__ | Ml | 2.7 | 3539 |
| FNA  | 0.59 | 56.0  | AMd | 20:55:06.239 |      |  |  |  |  | 0.0 | 48.37 | a__ | Md | 2.7 | 3531 |
| SRN  | 0.80 | 225.0 | Sn  | 20:54:34.550 | -0.0 |  |  |  |  |     |       | m__ |    |     | 6267 |
| SRN  | 0.80 | 225.0 | Pn  | 20:54:22.300 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6266 |
| SRN  | 0.80 | 225.0 | AMl | 20:54:38.480 |      |  |  |  |  | 0.2 | 0.50  | a__ | Ml | 1.8 | 3540 |
| SRN  | 0.80 | 225.0 | AMd | 20:55:24.900 |      |  |  |  |  | 0.0 | 62.60 | a__ | Md | 3.0 | 3532 |
| IGT  | 0.97 | 199.0 | Sn  | 20:54:39.527 | -0.0 |  |  |  |  |     |       | m__ |    |     | 6269 |
| IGT  | 0.97 | 199.0 | Pn  | 20:54:25.139 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6268 |
| IGT  | 0.97 | 199.0 | AMd | 20:55:28.418 |      |  |  |  |  | 0.0 | 63.28 | a__ | Md | 2.4 | 3533 |
| PHP  | 1.25 | 350.0 | Sn  | 20:54:47.769 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6271 |
| PHP  | 1.25 | 350.0 | Pn  | 20:54:29.779 | -0.0 |  |  |  |  |     |       | m__ |    |     | 6270 |
| PHP  | 1.25 | 350.0 | AMl | 20:54:50.460 |      |  |  |  |  | 0.1 | 0.60  | a__ | Ml | 1.8 | 3541 |
| PHP  | 1.25 | 350.0 | AMd | 20:55:34.532 |      |  |  |  |  | 0.0 | 64.75 | a__ | Md | 3.1 | 3534 |
| PUK  | 1.71 | 339.0 | Pn  | 20:54:38.167 | 0.0  |  |  |  |  |     |       | m__ |    |     | 6272 |
| PUK  | 1.71 | 339.0 | AMd | 20:55:46.923 |      |  |  |  |  | 0.0 | 68.76 | a__ | Md | 3.2 | 3535 |

DATA\_TYPE COMMENT GSE2.1  
Event 374

Official Magnitude:  
Ml 2.47

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 114  | 71  | 0.8100 |
| Intermediate: | 300  | 18  | 0.3300 |
| Min:          | 209  | 2   | 0.2000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187387 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 375 1.4 km from Librazhd, Elbasan, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 22:06:41.71 |     | 0.03 | 41.1825  | 20.2993   |      |      |    | 16.6  | 0.6 | 18   | 16   | 130 | 0.37  | 2.16  | m    | 415    |

|           |     |      |        |        |
|-----------|-----|------|--------|--------|
| Magnitude | Err | Nsta | Author | OrigID |
| Ml        | 2.1 | 0.0  | 8      | 415    |
| Md        | 2.7 | 0.0  | 2      | 415    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual   | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|--------|-----------|-------|
| TIR  | 0.37 | 0.0   | Pg    | 22:06:49.245 | 0.0  |      |       |      |      |     |     |     |       | mde    |           | 6294  |
| TIR  | 0.37 | 297.0 | Sg    | 22:06:55.548 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6274  |
| TIR  | 0.37 | 297.0 | AM1   | 22:06:55.480 |      |      |       |      |      |     |     | 0.8 | 0.14  | a__ Ml | 2.0       | 3544  |
| PHP  | 0.51 | 11.0  | Sg    | 22:06:59.764 | 0.1  |      |       |      |      |     |     |     |       | m__    |           | 6276  |
| PHP  | 0.51 | 11.0  | Pg    | 22:06:51.962 | -0.0 |      |       |      |      |     |     |     |       | mci    |           | 6275  |
| PHP  | 0.51 | 11.0  | AM1   | 22:07:01.000 |      |      |       |      |      |     |     | 0.1 | 0.24  | a__ Ml | 1.4       | 3545  |
| PHP  | 0.51 | 11.0  | AMd   | 22:07:36.091 |      |      |       |      |      |     |     | 0.0 | 44.13 | a__ Md | 2.6       | 3542  |
| KBN  | 0.67 | 146.0 | Sg    | 22:07:04.476 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6278  |
| KBN  | 0.67 | 146.0 | Pg    | 22:06:54.709 | -0.0 |      |       |      |      |     |     |     |       | mce    |           | 6277  |
| KBN  | 0.67 | 146.0 | AM1   | 22:07:08.090 |      |      |       |      |      |     |     | 0.4 | 0.40  | a__ Ml | 2.1       | 3546  |
| KBN  | 0.67 | 146.0 | AMd   | 22:07:46.382 |      |      |       |      |      |     |     | 0.0 | 51.67 | a__ Md | 2.8       | 3543  |
| PUK  | 0.91 | 341.0 | Sn    | 22:07:12.831 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6280  |
| PUK  | 0.91 | 341.0 | Pn    | 22:06:59.286 | -0.2 |      |       |      |      |     |     |     |       | mce    |           | 6279  |
| PUK  | 0.91 | 341.0 | AM1   | 22:07:14.800 |      |      |       |      |      |     |     | 0.5 | 0.42  | a__ Ml | 2.4       | 3547  |
| FNA  | 0.91 | 115.0 | Sn    | 22:07:13.117 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6282  |
| FNA  | 0.91 | 115.0 | Pn    | 22:06:59.360 | -0.3 |      |       |      |      |     |     |     |       | mce    |           | 6281  |
| FNA  | 0.91 | 115.0 | AM1   | 22:07:17.040 |      |      |       |      |      |     |     | 0.2 | 0.32  | a__ Ml | 2.1       | 3548  |
| NEST | 0.96 | 143.0 | S     | 22:07:14.414 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6284  |
| NEST | 0.96 | 143.0 | P     | 22:07:00.395 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6283  |
| NEST | 0.96 | 143.0 | AM1   | 22:07:16.330 |      |      |       |      |      |     |     | 0.1 | 0.36  | a__ Ml | 1.9       | 3549  |
| LSK  | 1.06 | 167.0 | S     | 22:07:17.295 | -0.0 |      |       |      |      |     |     |     |       | m__    |           | 6286  |
| LSK  | 1.06 | 167.0 | P     | 22:07:02.053 | -0.0 |      |       |      |      |     |     |     |       | m__    |           | 6285  |
| LSK  | 1.06 | 167.0 | AM1   | 22:07:23.640 |      |      |       |      |      |     |     | 0.3 | 0.64  | a__ Ml | 2.3       | 3550  |
| BCI  | 1.20 | 352.0 | S     | 22:07:21.663 | -0.0 |      |       |      |      |     |     |     |       | m__    |           | 6288  |
| BCI  | 1.20 | 352.0 | P     | 22:07:04.552 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6287  |
| BCI  | 1.20 | 352.0 | AM1   | 22:07:23.420 |      |      |       |      |      |     |     | 0.3 | 0.64  | a__ Ml | 2.4       | 3551  |
| PVY  | 1.43 | 351.0 | P     | 22:07:08.507 | -0.3 |      |       |      |      |     |     |     |       | m__    |           | 6289  |
| CEME | 1.71 | 324.0 | P     | 22:07:13.728 | -0.0 |      |       |      |      |     |     |     |       | m__    |           | 6290  |
| BEY  | 1.71 | 351.0 | P     | 22:07:13.823 | 0.0  |      |       |      |      |     |     |     |       | m__    |           | 6291  |
| HCY  | 1.85 | 314.0 | P     | 22:07:16.201 | 0.1  |      |       |      |      |     |     |     |       | m__    |           | 6292  |
| BRY  | 2.16 | 324.0 | P     | 22:07:20.633 | -0.0 |      |       |      |      |     |     |     |       | m__    |           | 6293  |

DATA\_TYPE COMMENT GSE2.1  
Event 375

Official Magnitude:  
Ml 2.10

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 273  | 85  | 0.6400 |
| Intermediate: | 62   | 4   | 0.4200 |
| Min:          | 152  | 3   | 0.1700 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187386 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 377 1.8 km from Skoúmtsia, West Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err  | Ndef | Nsta | Gap | mdist | Mdist  | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|--------|------|--------|
| 2019/02/08 | 14:58:03.52 |     | 0.02 | 40.0315  | 21.7675   |      |      |    | 20.1  | 12.6 | 6    | 7    | 237 | 0.67  | 1.51 m |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.6 | 0.0  | 4      | 417    |
| Md        | 2.8 | 0.0  | 3      | 417    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| NEST | 0.67 | 0.0   | P     | 14:58:22.821 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6316  |
| NEST | 0.67 | 306.0 | S     | 14:58:27.052 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6309  |
| NEST | 0.67 | 306.0 | AM1   | 14:58:29.038 |      |      |       |      |      |     |     | 0.1 | 0.32  | a    | Ml        | 1.4   |
| FNA  | 0.80 | 339.0 | S     | 14:58:31.243 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6311  |
| FNA  | 0.80 | 339.0 | P     | 14:58:19.339 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6310  |
| FNA  | 0.80 | 339.0 | AM1   | 14:58:31.688 |      |      |       |      |      |     |     | 0.1 | 0.32  | a    | Ml        | 1.6   |
| FNA  | 0.80 | 339.0 | AMd   | 14:58:48.995 |      |      |       |      |      |     |     | 0.0 | 29.66 | a    | Md        | 2.3   |
| IGT  | 1.21 | 247.0 | S     | 14:58:43.965 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6313  |
| IGT  | 1.21 | 247.0 | P     | 14:58:26.665 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6312  |
| IGT  | 1.21 | 247.0 | AM1   | 14:58:49.248 |      |      |       |      |      |     |     | 0.0 | 0.52  | a    | Ml        | 1.7   |
| IGT  | 1.21 | 247.0 | AMd   | 14:59:58.601 |      |      |       |      |      |     |     | 0.0 | 91.94 | a    | Md        | 2.8   |
| LKD2 | 1.51 | 216.0 | S     | 14:58:53.084 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6315  |
| LKD2 | 1.51 | 216.0 | P     | 14:58:30.915 | -0.9 |      |       |      |      |     |     |     |       | m    |           | 6314  |
| LKD2 | 1.51 | 216.0 | AM1   | 14:58:53.528 |      |      |       |      |      |     |     | 0.9 | 0.28  | a    | Ml        | 3.1   |
| LKD2 | 1.51 | 216.0 | AMd   | 14:59:27.708 |      |      |       |      |      |     |     | 0.0 | 56.79 | a    | Md        | 3.0   |

DATA\_TYPE COMMENT GSE2.1  
 Event 377

Official Magnitude:  
 Ml 1.63

Error ellipse:

|               | Azim | Dip | Mag     |
|---------------|------|-----|---------|
| Max:          | 0    | 90  | 12.6000 |
| Intermediate: | 282  | 0   | 1.0100  |
| Min:          | 12   | 0   | 0.3500  |

BEGIN GSE2.1  
 MSG\_TYPE DATA

MSG\_ID 1551187386 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 385 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/09 | 17:23:31.43 |     | 0.05 | 40.0868  | 20.3810   |      |      |    | 35.4  | 0.5 | 12   | 13   | 136 | 0.36  | 1.47  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.6 | 0.0  | 4      | 425    |
| Md        | 2.8 | 0.0  | 6      | 425    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LSK  | 0.18 | 0.0   | Pg    | 17:23:37.471 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6416  |      |
| LSK  | 0.18 | 69.0  | Sn    | 17:23:41.445 | -1.8 |      |       |      |      |     |     |     |       | m    |           | 6403  |      |
| LSK  | 0.18 | 69.0  | AMl   | 17:23:43.540 |      |      |       |      |      |     |     | 0.4 | 0.22  | a    | Ml        | 1.8   | 3634 |
| SRN  | 0.36 | 235.0 | Sg    | 17:23:47.913 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6405  |      |
| SRN  | 0.36 | 235.0 | Pg    | 17:23:40.734 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6404  |      |
| SRN  | 0.36 | 235.0 | AMl   | 17:23:50.610 |      |      |       |      |      |     |     | 0.2 | 0.36  | a    | Ml        | 1.5   | 3635 |
| SRN  | 0.36 | 235.0 | AMd   | 17:24:17.717 |      |      |       |      |      |     |     | 0.0 | 36.98 | a    | Md        | 2.4   | 3628 |
| IGT  | 0.56 | 185.0 | Sg    | 17:23:52.490 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6407  |      |
| IGT  | 0.56 | 185.0 | Pg    | 17:23:43.458 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6406  |      |
| IGT  | 0.56 | 185.0 | AMd   | 17:24:26.422 |      |      |       |      |      |     |     | 0.0 | 42.96 | a    | Md        | 2.0   | 3629 |
| NEST | 0.61 | 57.0  | Sg    | 17:23:53.863 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6409  |      |
| NEST | 0.61 | 57.0  | Pg    | 17:23:44.281 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6408  |      |
| NEST | 0.61 | 57.0  | AMl   | 17:23:55.910 |      |      |       |      |      |     |     | 0.1 | 0.50  | a    | Ml        | 1.4   | 3636 |
| NEST | 0.61 | 57.0  | AMd   | 17:24:41.430 |      |      |       |      |      |     |     | 0.0 | 57.15 | a    | Md        | 2.9   | 3630 |
| FNA  | 1.03 | 47.0  | Sg    | 17:24:06.396 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6411  |      |
| FNA  | 1.03 | 47.0  | Pg    | 17:23:51.528 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 6410  |      |
| FNA  | 1.03 | 47.0  | AMl   | 17:24:10.630 |      |      |       |      |      |     |     | 0.1 | 0.28  | a    | Ml        | 1.7   | 3637 |
| FNA  | 1.03 | 47.0  | AMd   | 17:24:42.956 |      |      |       |      |      |     |     | 0.0 | 51.43 | a    | Md        | 2.8   | 3631 |
| LKD2 | 1.31 | 170.0 | Sn    | 17:24:14.329 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6413  |      |
| LKD2 | 1.31 | 170.0 | Pn    | 17:23:55.992 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6412  |      |
| LKD2 | 1.31 | 170.0 | AMd   | 17:24:42.953 |      |      |       |      |      |     |     | 0.0 | 46.96 | a    | Md        | 2.7   | 3632 |
| SCTE | 1.47 | 271.0 | Sn    | 17:24:18.596 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6415  |      |
| SCTE | 1.47 | 271.0 | Pn    | 17:23:58.395 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6414  |      |
| SCTE | 1.47 | 271.0 | AMd   | 17:25:00.792 |      |      |       |      |      |     |     | 0.0 | 62.40 | a    | Md        | 3.0   | 3633 |

DATA\_TYPE COMMENT GSE2.1  
 Event 385

Official Magnitude:  
 Ml 1.61

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 113  | 76  | 0.5400 |
| Intermediate: | 317  | 11  | 0.4300 |

Min: 226 6 0.2700

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187385 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 390 1.9 km from Duricaj, Dibër, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/11 | 16:08:20.86 |     | 0.03 | 41.4830  | 20.2550   |      |      |    | 12.8  | 0.9 | 11   | 13   | 95  | 0.24  | 1.36  | m    | 430    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.2 | 0.0  | 4      | 430    |
| Md        | 2.6 | 0.0  | 6      | 430    |

| Sta | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| PHP | 0.24 | 34.0  | Sg    | 16:08:29.992 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6492  |
| PHP | 0.24 | 34.0  | Pg    | 16:08:26.142 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6491  |
| PHP | 0.24 | 34.0  | AMl   | 16:08:30.550 |      |      |       |      |      | --- |     | 3.2 | 0.20  | a    | Ml        | 2.5   |
| PHP | 0.24 | 34.0  | AMd   | 16:09:00.288 |      |      |       |      |      | --- |     | 0.0 | 34.15 | a    | Md        | 2.3   |
| TIR | 0.32 | 246.0 | Sg    | 16:08:32.989 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6494  |
| TIR | 0.32 | 246.0 | Pg    | 16:08:27.842 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6493  |
| TIR | 0.32 | 246.0 | AMl   | 16:08:34.110 |      |      |       |      |      | --- |     | 0.6 | 0.16  | a    | Ml        | 1.8   |
| TIR | 0.32 | 246.0 | AMd   | 16:09:07.396 |      |      |       |      |      | --- |     | 0.0 | 39.55 | a    | Md        | 2.5   |
| PUK | 0.62 | 335.0 | Sg    | 16:08:42.581 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6496  |
| PUK | 0.62 | 335.0 | Pg    | 16:08:33.277 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6495  |
| PUK | 0.62 | 335.0 | AMl   | 16:08:45.720 |      |      |       |      |      | --- |     | 0.4 | 0.30  | a    | Ml        | 2.0   |
| PUK | 0.62 | 335.0 | AMd   | 16:09:24.392 |      |      |       |      |      | --- |     | 0.0 | 51.11 | a    | Md        | 2.8   |
| BCI | 0.89 | 0.0   | Pn    | 16:08:42.211 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6503  |
| BCI | 0.89 | 352.0 | Sn    | 16:08:51.659 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6497  |
| KBN | 0.95 | 154.0 | Sn    | 16:08:52.798 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6499  |
| KBN | 0.95 | 154.0 | Pn    | 16:08:39.081 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6498  |
| KBN | 0.95 | 154.0 | AMd   | 16:09:15.739 |      |      |       |      |      | --- |     | 0.0 | 36.66 | a    | Md        | 2.5   |
| FNA | 1.10 | 129.0 | Sg    | 16:08:56.703 | -1.8 |      |       |      |      | --- |     |     |       | m    |           | 6501  |
| FNA | 1.10 | 129.0 | Pg    | 16:08:42.333 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6500  |
| FNA | 1.10 | 129.0 | AMl   | 16:09:01.380 |      |      |       |      |      | --- |     | 0.3 | 0.36  | a    | Ml        | 2.3   |
| FNA | 1.10 | 129.0 | AMd   | 16:09:35.212 |      |      |       |      |      | --- |     | 0.0 | 52.88 | a    | Md        | 2.9   |
| LSK | 1.36 | 168.0 | Pn    | 16:08:46.780 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6502  |
| LSK | 1.36 | 168.0 | AMd   | 16:09:58.847 |      |      |       |      |      | --- |     | 0.0 | 72.07 | a    | Md        | 3.2   |

DATA\_TYPE COMMENT GSE2.1  
Event 390

Official Magnitude:  
Ml 2.17

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 309  | 78  | 0.9100 |
| Intermediate: | 80   | 7   | 0.3500 |
| Min:          | 171  | 9   | 0.2400 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187384 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 392 0.3 km from Charavgi, Epirus, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/11 | 19:12:41.78 |     | 0.02 | 39.6908  | 20.4743   |      |      |    | 10.6  | 0.9 | 15   | 12   | 139 | 0.20  | 1.72  | m    |        |
| OrigID     | 432         |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.7 | 0.0  | 9      | 432    |
| Md        | 2.9 | 0.0  | 8      | 432    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| IGT  | 0.19 | 216.0 | Sg    | 19:12:49.613 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6518  |
| IGT  | 0.19 | 216.0 | Pg    | 19:12:46.240 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6517  |
| IGT  | 0.19 | 216.0 | AMl   | 19:12:52.798 |      |      |       |      |      |     |     | 95.7 | 0.26  | a    | Ml        | 3.9   |
| IGT  | 0.19 | 216.0 | AMd   | 19:13:17.128 |      |      |       |      |      |     |     | 0.0  | 30.89 | a    | Md        | 1.6   |
| SRN  | 0.41 | 298.0 | Sg    | 19:12:57.373 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6520  |
| SRN  | 0.41 | 298.0 | Pg    | 19:12:50.683 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6519  |
| SRN  | 0.41 | 298.0 | AMl   | 19:13:00.738 |      |      |       |      |      |     |     | 27.9 | 0.42  | a    | Ml        | 3.6   |
| SRN  | 0.41 | 298.0 | AMd   | 19:13:30.795 |      |      |       |      |      |     |     | 0.0  | 40.11 | a    | Md        | 2.5   |
| LSK  | 0.47 | 11.0  | Sg    | 19:12:58.388 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6522  |
| LSK  | 0.47 | 11.0  | Pg    | 19:12:51.231 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6521  |
| LSK  | 0.47 | 11.0  | AMl   | 19:13:08.288 |      |      |       |      |      |     |     | 29.1 | 0.54  | a    | Ml        | 3.7   |
| LSK  | 0.47 | 11.0  | AMd   | 19:13:45.351 |      |      |       |      |      |     |     | 0.0  | 54.12 | a    | Md        | 2.8   |
| NEST | 0.85 | 31.0  | Sg    | 19:13:11.221 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6524  |
| NEST | 0.85 | 31.0  | Pg    | 19:12:58.607 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6523  |
| NEST | 0.85 | 31.0  | AMl   | 19:13:14.648 |      |      |       |      |      |     |     | 5.1  | 0.40  | a    | Ml        | 3.4   |
| NEST | 0.85 | 31.0  | AMd   | 19:13:51.732 |      |      |       |      |      |     |     | 0.0  | 53.12 | a    | Md        | 2.8   |
| LKD2 | 0.91 | 170.0 | Sn    | 19:13:13.442 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6526  |
| LKD2 | 0.91 | 170.0 | Pn    | 19:12:59.814 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6525  |
| LKD2 | 0.91 | 170.0 | AMl   | 19:13:18.838 |      |      |       |      |      |     |     | 8.6  | 0.30  | a    | Ml        | 3.7   |
| LKD2 | 0.91 | 170.0 | AMd   | 19:14:02.559 |      |      |       |      |      |     |     | 0.0  | 62.75 | a    | Md        | 3.0   |
| KBN  | 0.96 | 0.0   | Pn    | 19:13:00.983 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6533  |
| KBN  | 0.96 | 14.0  | Sn    | 19:13:14.238 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6527  |
| KBN  | 0.96 | 14.0  | AMl   | 19:13:16.308 |      |      |       |      |      |     |     | 4.6  | 0.82  | a    | Ml        | 3.4   |
| VLO  | 1.08 | 317.0 | Sn    | 19:13:17.748 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6529  |

|      |      |       |     |              |      |     |  |  |  |  |  |  |  |  |  |  |      |       |      |    |     |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|--|--|--|------|-------|------|----|-----|------|
| VLO  | 1.08 | 317.0 | Pn  | 19:13:02.364 | 0.0  | --- |  |  |  |  |  |  |  |  |  |  | m    |       | 6528 |    |     |      |
| VLO  | 1.08 | 317.0 | AM1 | 19:13:24.588 |      | --- |  |  |  |  |  |  |  |  |  |  | 31.0 | 0.48  | a    | M1 | 4.3 | 3735 |
| VLO  | 1.08 | 317.0 | AMd | 19:14:07.779 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0  | 65.42 | a    | Md | 3.1 | 3726 |
| SCTE | 1.59 | 285.0 | Pn  | 19:13:11.523 | -0.6 | --- |  |  |  |  |  |  |  |  |  |  |      |       |      | m  |     | 6530 |
| SCTE | 1.59 | 285.0 | AM1 | 19:13:35.708 |      | --- |  |  |  |  |  |  |  |  |  |  | 4.4  | 0.46  | a    | M1 | 3.9 | 3736 |
| SCTE | 1.59 | 285.0 | AMd | 19:14:11.743 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0  | 60.22 | a    | Md | 3.0 | 3727 |
| TIR  | 1.72 | 345.0 | Sn  | 19:13:38.780 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  |      |       |      | m  |     | 6532 |
| TIR  | 1.72 | 345.0 | Pn  | 19:13:14.368 | 0.0  | --- |  |  |  |  |  |  |  |  |  |  |      |       |      | m  |     | 6531 |
| TIR  | 1.72 | 345.0 | AM1 | 19:13:48.178 |      | --- |  |  |  |  |  |  |  |  |  |  | 1.5  | 0.48  | a    | M1 | 3.5 | 3737 |
| TIR  | 1.72 | 345.0 | AMd | 19:14:11.936 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0  | 57.57 | a    | Md | 3.0 | 3728 |

DATA\_TYPE COMMENT GSE2.1  
Event 392

Official Magnitude:  
M1 3.65

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 159  | 81  | 0.8900 |
| Intermediate: | 277  | 3   | 0.3400 |
| Min:          | 8    | 8   | 0.2000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187384 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 393 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/12 | 06:30:29.14 |     | 0.45 | 39.4972  | 20.7927   |      |      |    | 10.5  | 2.3 | 13   | 9    | 170 | 0.36  | 2.63  | m    | 433    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.8 | 0.0  | 5      | 433    |
| Md        | 3.0 | 0.0  | 5      | 433    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| IGT  | 0.36 | 276.0 | S     | 06:30:42.426 | 0.1  |      |       |      |      |     |     |     |       |      |           | 6535  |      |
| IGT  | 0.36 | 276.0 | Pg    | 06:30:35.314 | -1.4 |      |       |      |      |     |     |     |       |      |           | 6534  |      |
| IGT  | 0.36 | 276.0 | AMd   | 06:31:13.635 |      |      |       |      |      |     |     | 0.0 | 38.32 | a    | Md        | 1.9   | 3738 |
| LSK  | 0.67 | 348.0 | Sg    | 06:30:52.478 | 0.1  |      |       |      |      |     |     |     |       |      |           | 6537  |      |
| LSK  | 0.67 | 348.0 | P     | 06:30:41.268 | -1.2 |      |       |      |      |     |     |     |       |      |           | 6536  |      |
| LSK  | 0.67 | 348.0 | AM1   | 06:30:55.180 |      |      |       |      |      |     |     | 7.3 | 0.70  | a    | M1        | 3.4   | 3743 |
| LSK  | 0.67 | 348.0 | AMd   | 06:31:49.179 |      |      |       |      |      |     |     | 0.0 | 67.91 | a    | Md        | 3.1   | 3739 |
| LKD2 | 0.72 | 0.0   | P     | 06:30:41.809 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6547  |      |





|      |      |       |     |              |      |     |     |       |   |    |     |  |      |
|------|------|-------|-----|--------------|------|-----|-----|-------|---|----|-----|--|------|
| NEST | 0.19 | 357.0 | S   | 17:25:59.955 | -0.0 | --- |     |       | m |    |     |  | 6562 |
| NEST | 0.19 | 357.0 | AM1 | 17:26:04.250 |      | --- | 4.1 | 0.14  | a | M1 | 2.5 |  | 3767 |
| KBN  | 0.45 | 333.0 | S   | 17:26:07.893 | 0.0  | --- |     |       | m |    |     |  | 6564 |
| KBN  | 0.45 | 333.0 | P   | 17:26:01.340 | 0.0  | --- |     |       | m |    |     |  | 6563 |
| KBN  | 0.45 | 333.0 | AM1 | 17:26:12.920 |      | --- | 1.7 | 0.42  | a | M1 | 2.4 |  | 3768 |
| KBN  | 0.45 | 333.0 | AMd | 17:26:46.659 |      | --- | 0.0 | 45.32 | a | Md | 2.6 |  | 3760 |
| FNA  | 0.61 | 23.0  | S   | 17:26:13.932 | -0.0 | --- |     |       | m |    |     |  | 6566 |
| FNA  | 0.61 | 23.0  | P   | 17:26:04.732 | -0.1 | --- |     |       | m |    |     |  | 6565 |
| FNA  | 0.61 | 23.0  | AM1 | 17:26:18.740 |      | --- | 1.7 | 0.28  | a | M1 | 2.6 |  | 3769 |
| FNA  | 0.61 | 23.0  | AMd | 17:26:58.217 |      | --- | 0.0 | 53.48 | a | Md | 2.8 |  | 3761 |
| SRN  | 0.89 | 248.0 | S   | 17:26:23.933 | -0.1 | --- |     |       | m |    |     |  | 6568 |
| SRN  | 0.89 | 248.0 | P   | 17:26:10.500 | -0.0 | --- |     |       | m |    |     |  | 6567 |
| SRN  | 0.89 | 248.0 | AM1 | 17:26:26.550 |      | --- | 0.4 | 0.46  | a | M1 | 2.3 |  | 3770 |
| SRN  | 0.89 | 248.0 | AMd | 17:27:03.996 |      | --- | 0.0 | 53.50 | a | Md | 2.8 |  | 3762 |
| IGT  | 0.89 | 220.0 | S   | 17:26:23.615 | -0.0 | --- |     |       | m |    |     |  | 6570 |
| IGT  | 0.89 | 220.0 | P   | 17:26:10.328 | 0.0  | --- |     |       | m |    |     |  | 6569 |
| IGT  | 0.89 | 220.0 | AMd | 17:27:03.995 |      | --- | 0.0 | 53.67 | a | Md | 2.3 |  | 3763 |
| LKD2 | 1.47 | 193.0 | S   | 17:26:42.458 | 0.0  | --- |     |       | m |    |     |  | 6572 |
| LKD2 | 1.47 | 193.0 | P   | 17:26:21.090 | 0.0  | --- |     |       | m |    |     |  | 6571 |
| LKD2 | 1.47 | 193.0 | AM1 | 17:27:13.220 |      | --- | 0.9 | 2.26  | a | M1 | 3.1 |  | 3771 |
| LKD2 | 1.47 | 193.0 | AMd | 17:27:24.221 |      | --- | 0.0 | 63.13 | a | Md | 3.1 |  | 3764 |
| PHP  | 1.53 | 343.0 | S   | 17:26:43.841 | 0.1  | --- |     |       | m |    |     |  | 6574 |
| PHP  | 1.53 | 343.0 | P   | 17:26:21.299 | -0.5 | --- |     |       | m |    |     |  | 6573 |
| PHP  | 1.53 | 343.0 | AM1 | 17:26:52.000 |      | --- | 0.3 | 0.58  | a | M1 | 2.6 |  | 3772 |
| PHP  | 1.53 | 343.0 | AMd | 17:27:21.909 |      | --- | 0.0 | 60.61 | a | Md | 3.0 |  | 3765 |
| PUK  | 2.02 | 335.0 | S   | 17:26:58.927 | 0.0  | --- |     |       | m |    |     |  | 6576 |
| PUK  | 2.02 | 335.0 | P   | 17:26:30.501 | 0.0  | --- |     |       | m |    |     |  | 6575 |
| PUK  | 2.02 | 335.0 | AM1 | 17:27:09.020 |      | --- | 0.2 | 0.84  | a | M1 | 2.8 |  | 3773 |
| PUK  | 2.02 | 335.0 | AMd | 17:27:39.390 |      | --- | 0.0 | 68.89 | a | Md | 3.2 |  | 3766 |

DATA\_TYPE COMMENT GSE2.1  
Event 396

Official Magnitude:  
M1 2.59

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 118  | 79  | 0.9500 |
| Intermediate: | 285  | 10  | 0.4900 |
| Min:          | 15   | 2   | 0.2000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187385 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 399 0.3 km from Fshati i Ri, Fier, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/11 | 18:57:17.19 |     | 0.08 | 40.7098  | 19.6375   |      |      |    | 1.7   | 0.4 | 6    | 12   | 120 | 0.02  | 1.34  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.5 | 0.0  | 2      | 439    |
| Md        | 2.4 | 0.0  | 3      | 439    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| BPA1 | 0.02 | 46.0  | Sg    | 18:57:18.290 | 0.1  |      |       |      |      |     |     |      |       | m__  |           | 6595  |      |
| BPA1 | 0.02 | 46.0  | P1    | 18:57:17.258 | -0.5 |      |       |      |      |     |     |      |       | mce  |           | 6594  |      |
| BPA1 | 0.02 | 46.0  | AMd   | 18:57:53.963 |      |      |       |      |      |     |     | 0.0  | 36.71 | a__  | Md        | 2.4   | 3780 |
| BPA2 | 0.03 | 0.0   | P1    | 18:57:17.033 | 0.0  |      |       |      |      |     |     |      |       | mde  |           | 6602  |      |
| BPA2 | 0.03 | 325.0 | Sg    | 18:57:18.359 | -0.1 |      |       |      |      |     |     |      |       | m__  |           | 6596  |      |
| BPA2 | 0.03 | 325.0 | AMl   | 18:57:18.810 |      |      |       |      |      |     |     | 36.3 | 0.24  | a__  | Ml        | 2.7   | 3783 |
| VLO  | 0.26 | 205.0 | P1    | 18:57:22.500 | 0.1  |      |       |      |      |     |     |      |       | mce  |           | 6597  |      |
| VLO  | 0.26 | 205.0 | AMl   | 18:57:34.810 |      |      |       |      |      |     |     | 1.7  | 0.32  | a__  | Ml        | 2.2   | 3784 |
| VLO  | 0.26 | 205.0 | AMd   | 18:57:57.500 |      |      |       |      |      |     |     | 0.0  | 35.00 | a__  | Md        | 2.4   | 3781 |
| LSK  | 0.92 | 127.0 | P     | 18:57:35.579 | -0.1 |      |       |      |      |     |     |      |       | m__  |           | 6598  |      |
| SCTE | 1.09 | 236.0 | P     | 18:57:39.591 | 0.5  |      |       |      |      |     |     |      |       | m__  |           | 6599  |      |
| PHP  | 1.15 | 31.0  | P     | 18:57:39.835 | 0.0  |      |       |      |      |     |     |      |       | m__  |           | 6600  |      |
| PUK  | 1.34 | 8.0   | P     | 18:57:43.834 | 0.1  |      |       |      |      |     |     |      |       | m__  |           | 6601  |      |
| PUK  | 1.34 | 8.0   | AMd   | 18:58:30.940 |      |      |       |      |      |     |     | 0.0  | 47.11 | a__  | Md        | 2.7   | 3782 |

DATA\_TYPE COMMENT GSE2.1  
Event 399

Official Magnitude:  
Ml 2.47

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 353  | 44  | 0.5700 |
| Intermediate: | 265  | 0   | 0.4400 |
| Min:          | 175  | 46  | 0.2800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187383 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 400 3.3 km from Souli, Epirus, Greece

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

2019/02/15 01:18:28.63      0.50 39.3853 20.6262      25.8 0.9 27 32 123 0.27 3.60 m  
 440

Magnitude Err Nsta Author      OrigID  
 M1 3.7 0.0 12      440

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per  | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|
| IGT  | 0.27 | 303.0 | S     | 01:18:41.086 | 0.3  |      |       |      |      |     |     |      |      | m    |           | 6604  |
| IGT  | 0.27 | 303.0 | P     | 01:18:35.455 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 6603  |
| IGT  | 0.27 | 303.0 | AM1   | 01:18:43.940 |      |      |       |      |      |     |     | 57.8 | 0.28 | a    | M1 3.9    | 3785  |
| LKD2 | 0.60 | 177.0 | S     | 01:18:50.664 | 0.6  |      |       |      |      |     |     |      |      | m    |           | 6606  |
| LKD2 | 0.60 | 177.0 | P     | 01:18:40.828 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 6605  |
| LKD2 | 0.60 | 177.0 | AM1   | 01:18:53.010 |      |      |       |      |      |     |     | 10.1 | 0.56 | a    | M1 3.4    | 3786  |
| SRN  | 0.69 | 316.0 | S     | 01:18:53.788 | 0.2  |      |       |      |      |     |     |      |      | m    |           | 6608  |
| SRN  | 0.69 | 316.0 | P     | 01:18:42.370 | -0.5 |      |       |      |      |     |     |      |      | m    |           | 6607  |
| SRN  | 0.69 | 316.0 | AM1   | 01:19:03.520 |      |      |       |      |      |     |     | 2.7  | 0.48 | a    | M1 3.0    | 3787  |
| LSK  | 0.76 | 359.0 | S     | 01:18:55.273 | 0.3  |      |       |      |      |     |     |      |      | m    |           | 6610  |
| LSK  | 0.76 | 359.0 | P     | 01:18:43.075 | -0.6 |      |       |      |      |     |     |      |      | m    |           | 6609  |
| LSK  | 0.76 | 359.0 | AM1   | 01:19:00.460 |      |      |       |      |      |     |     | 27.3 | 0.66 | a    | M1 4.1    | 3788  |
| NEST | 1.08 | 17.0  | S     | 01:19:04.802 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 6612  |
| NEST | 1.08 | 17.0  | P     | 01:18:48.126 | -1.2 |      |       |      |      |     |     |      |      | m    |           | 6611  |
| NEST | 1.08 | 17.0  | AM1   | 01:19:11.330 |      |      |       |      |      |     |     | 7.8  | 0.54 | a    | M1 3.8    | 3789  |
| KBN  | 1.24 | 5.0   | S     | 01:19:09.303 | 0.1  |      |       |      |      |     |     |      |      | m    |           | 6614  |
| KBN  | 1.24 | 5.0   | P     | 01:18:52.186 | 0.4  |      |       |      |      |     |     |      |      | m    |           | 6613  |
| KBN  | 1.24 | 5.0   | AM1   | 01:19:14.950 |      |      |       |      |      |     |     | 4.1  | 1.06 | a    | M1 3.6    | 3790  |
| VLO  | 1.39 | 322.0 | Sn    | 01:19:14.629 | 1.4  |      |       |      |      |     |     |      |      | m    |           | 6616  |
| VLO  | 1.39 | 322.0 | Pn    | 01:18:56.282 | 2.2  |      |       |      |      |     |     |      |      | m    |           | 6615  |
| FNA  | 1.51 | 22.0  | S     | 01:19:19.132 | 1.0  |      |       |      |      |     |     |      |      | m    |           | 6618  |
| FNA  | 1.51 | 22.0  | P     | 01:18:56.195 | -0.7 |      |       |      |      |     |     |      |      | m    |           | 6617  |
| FNA  | 1.51 | 22.0  | AM1   | 01:19:21.050 |      |      |       |      |      |     |     | 3.9  | 0.78 | a    | M1 3.8    | 3791  |
| BPA1 | 1.53 | 332.0 | S     | 01:19:18.600 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 6620  |
| BPA1 | 1.53 | 332.0 | Pn    | 01:18:57.075 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 6619  |
| SCTE | 1.80 | 294.0 | P     | 01:19:01.309 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 6621  |
| TIR  | 2.04 | 344.0 | S     | 01:19:33.271 | 1.0  |      |       |      |      |     |     |      |      | m    |           | 6623  |
| TIR  | 2.04 | 344.0 | Pn    | 01:19:05.062 | 0.1  |      |       |      |      |     |     |      |      | m    |           | 6622  |
| TIR  | 2.04 | 344.0 | AM1   | 01:19:52.540 |      |      |       |      |      |     |     | 1.2  | 0.52 | a    | M1 3.6    | 3792  |
| THE  | 2.18 | 54.0  | Pn    | 01:19:05.982 | -1.1 |      |       |      |      |     |     |      |      | m    |           | 6624  |
| THE  | 2.18 | 54.0  | AM1   | 01:19:36.540 |      |      |       |      |      |     |     | 0.5  | 0.66 | a    | M1 3.3    | 3793  |
| PHP  | 2.30 | 357.0 | Sn    | 01:19:38.798 | 0.4  |      |       |      |      |     |     |      |      | m    |           | 6626  |
| PHP  | 2.30 | 357.0 | P     | 01:19:08.884 | 0.4  |      |       |      |      |     |     |      |      | m    |           | 6625  |
| PHP  | 2.30 | 357.0 | AM1   | 01:19:56.330 |      |      |       |      |      |     |     | 1.2  | 0.90 | a    | M1 3.7    | 3794  |
| PUK  | 2.71 | 349.0 | Sn    | 01:19:48.789 | -0.5 |      |       |      |      |     |     |      |      | m    |           | 6628  |
| PUK  | 2.71 | 349.0 | Pn    | 01:19:13.976 | -0.7 |      |       |      |      |     |     |      |      | m    |           | 6627  |
| PUK  | 2.71 | 349.0 | AM1   | 01:20:04.660 |      |      |       |      |      |     |     | 0.9  | 0.62 | a    | M1 3.8    | 3795  |
| ULC  | 2.78 | 339.0 | Pn    | 01:19:13.925 | -1.9 |      |       |      |      |     |     |      |      | m    |           | 6629  |
| DRME | 3.00 | 340.0 | Pn    | 01:19:17.644 | -1.5 |      |       |      |      |     |     |      |      | m    |           | 6630  |
| BCI  | 3.02 | 0.0   | Pn    | 01:19:18.938 | 0.0  |      |       |      |      |     |     |      |      | m    |           | 6634  |
| BCI  | 3.01 | 353.0 | Sn    | 01:19:57.451 | 0.6  |      |       |      |      |     |     |      |      | m    |           | 6631  |
| BCI  | 3.01 | 353.0 | AM1   | 01:20:20.690 |      |      |       |      |      |     |     | 1.1  | 0.88 | a    | M1 4.0    | 3796  |
| HCY  | 3.46 | 333.0 | Pn    | 01:19:22.679 | -3.2 |      |       |      |      |     |     |      |      | m    |           | 6632  |

NKME 3.60 341.0 Pn 01:19:25.257 -2.7 \_\_\_\_\_ m\_\_ 6633

DATA\_TYPE COMMENT GSE2.1  
Event 400

Official Magnitude:  
Ml 3.73

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 260  | 37  | 1.4100 |
| Intermediate: | 117  | 46  | 1.0400 |
| Min:          | 6    | 20  | 0.6900 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187384 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 401 1.0 km from Kleidonia, Epirus, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/15 | 00:34:10.99 |     | 0.33 | 39.9682  | 20.6883   |      |      |    | 2.0   | 1.6 | 16   | 32   | 150 | 0.20  | 2.44  | m    |        |
| OrigID 441 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.3 | 0.0  | 6      | 441    |
| Md        | 2.5 | 0.0  | 2      | 441    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual   | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|--------|-----------|-------|
| LSK  | 0.18 | 0.0   | P     | 00:34:14.338 | 0.0  |      |       |      |      | --- |     |      |       | m__    |           | 6654  |
| LSK  | 0.19 | 340.0 | S     | 00:34:18.031 | -0.4 |      |       |      |      | --- |     |      |       | m__    |           | 6635  |
| LSK  | 0.19 | 340.0 | AMl   | 00:34:22.790 |      |      |       |      |      | --- |     | 10.9 | 0.60  | a__ Ml | 2.9       | 3800  |
| LSK  | 0.19 | 340.0 | AMl   | 00:34:20.560 |      |      |       |      |      | --- |     | 16.2 | 0.32  | a__ Ml | 3.1       | 3799  |
| IGT  | 0.52 | 213.0 | S     | 00:34:30.255 | 0.3  |      |       |      |      | --- |     |      |       | m__    |           | 6637  |
| IGT  | 0.52 | 213.0 | P     | 00:34:20.531 | -1.3 |      |       |      |      | --- |     |      |       | m__    |           | 6636  |
| NEST | 0.52 | 31.0  | S     | 00:34:30.292 | 0.1  |      |       |      |      | --- |     |      |       | m__    |           | 6639  |
| NEST | 0.52 | 31.0  | P     | 00:34:21.104 | -0.9 |      |       |      |      | --- |     |      |       | m__    |           | 6638  |
| NEST | 0.52 | 31.0  | AMl   | 00:34:31.990 |      |      |       |      |      | --- |     | 0.9  | 0.26  | a__ Ml | 2.2       | 3801  |
| SRN  | 0.54 | 261.0 | S     | 00:34:31.078 | -0.2 |      |       |      |      | --- |     |      |       | m__    |           | 6641  |
| SRN  | 0.54 | 261.0 | P     | 00:34:21.233 | -1.4 |      |       |      |      | --- |     |      |       | m__    |           | 6640  |
| SRN  | 0.54 | 261.0 | AMl   | 00:34:33.150 |      |      |       |      |      | --- |     | 0.7  | 0.64  | a__ Ml | 2.2       | 3802  |
| SRN  | 0.54 | 261.0 | AMd   | 00:35:06.382 |      |      |       |      |      | --- |     | 0.0  | 45.15 | a__ Md | 2.6       | 3797  |
| KBN  | 0.66 | 6.0   | S     | 00:34:33.833 | -0.1 |      |       |      |      | --- |     |      |       | m__    |           | 6643  |
| KBN  | 0.66 | 6.0   | P     | 00:34:23.432 | -0.7 |      |       |      |      | --- |     |      |       | m__    |           | 6642  |
| KBN  | 0.66 | 6.0   | AMl   | 00:34:36.220 |      |      |       |      |      | --- |     | 0.7  | 0.80  | a__ Ml | 2.3       | 3803  |
| KBN  | 0.66 | 6.0   | AMd   | 00:34:59.448 |      |      |       |      |      | --- |     | 0.0  | 36.02 | a__ Md | 2.4       | 3798  |

|      |      |       |     |              |      |     |                   |      |
|------|------|-------|-----|--------------|------|-----|-------------------|------|
| FNA  | 0.97 | 32.0  | S   | 00:34:45.390 | 0.2  | --- | m                 | 6645 |
| FNA  | 0.97 | 32.0  | P   | 00:34:30.526 | 0.0  | --- | m                 | 6644 |
| FNA  | 0.97 | 32.0  | AM1 | 00:34:58.330 |      | --- | 0.2 0.56 a M1 2.1 | 3804 |
| VLO  | 1.04 | 300.0 | P   | 00:34:31.556 | 0.4  | --- | m                 | 6646 |
| LKD2 | 1.18 | 182.0 | S   | 00:34:51.599 | -0.5 | --- | m                 | 6648 |
| LKD2 | 1.18 | 182.0 | Pn  | 00:34:34.753 | 0.3  | --- | m                 | 6647 |
| LKD2 | 1.18 | 182.0 | AM1 | 00:35:08.380 |      | --- | 0.8 1.02 a M1 2.8 | 3805 |
| PHP  | 1.72 | 354.0 | S   | 00:35:09.138 | 0.2  | --- | m                 | 6650 |
| PHP  | 1.72 | 354.0 | P   | 00:34:44.548 | 0.4  | --- | m                 | 6649 |
| PUK  | 2.16 | 345.0 | P   | 00:34:49.958 | -1.5 | --- | m                 | 6651 |
| BCI  | 2.44 | 350.0 | Sn  | 00:35:29.319 | 0.1  | --- | m                 | 6653 |
| BCI  | 2.44 | 350.0 | P   | 00:34:55.735 | 0.1  | --- | m                 | 6652 |

DATA\_TYPE COMMENT GSE2.1  
Event 401

Official Magnitude:  
M1 2.33

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 295  | 83  | 1.5600 |
| Intermediate: | 107  | 6   | 0.7600 |
| Min:          | 197  | 1   | 0.3900 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187383 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 402 1.3 km from Vatatades, Epirus, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/15 | 02:14:07.13 |     | 0.46 | 39.8208  | 20.6635   |      |      |    | 23.4  | 2.2 | 22   | 32   | 152 | 0.33  | 2.58  | m    | 442    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.5 | 0.0  | 8      | 442    |
| Md        | 2.7 | 0.0  | 1      | 442    |

| Sta | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per  | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|
| LSK | 0.33 | 0.0   | P     | 02:14:14.404 | 0.0  |      |       |      |      |     |     |     |      | md   |           | 6679  |
| LSK | 0.33 | 352.0 | S     | 02:14:19.938 | -0.0 |      |       |      |      |     |     |     |      | m    |           | 6655  |
| LSK | 0.33 | 352.0 | AM1   | 02:14:24.340 |      |      |       |      |      |     |     | 4.5 | 0.44 | a M1 | 2.8       | 3807  |
| IGT | 0.39 | 222.0 | S     | 02:14:21.881 | 0.0  |      |       |      |      |     |     |     |      | m    |           | 6657  |
| IGT | 0.39 | 222.0 | P     | 02:14:15.198 | -0.4 |      |       |      |      |     |     |     |      | m    |           | 6656  |
| SRN | 0.51 | 277.0 | S     | 02:14:26.500 | 0.0  |      |       |      |      |     |     |     |      | m    |           | 6659  |

|      |      |       |     |              |       |     |     |       |   |    |     |      |
|------|------|-------|-----|--------------|-------|-----|-----|-------|---|----|-----|------|
| SRN  | 0.51 | 277.0 | P   | 02:14:17.311 | -0.9  | --- |     |       | m |    |     | 6658 |
| SRN  | 0.51 | 277.0 | AM1 | 02:14:27.850 |       | --- | 0.9 | 0.32  | a | M1 | 2.3 | 3808 |
| SRN  | 0.51 | 277.0 | AMd | 02:15:03.215 |       | --- | 0.0 | 45.90 | a | Md | 2.7 | 3806 |
| NEST | 0.66 | 26.0  | S   | 02:14:30.371 | -0.1  | --- |     |       | m |    |     | 6661 |
| NEST | 0.66 | 26.0  | P   | 02:14:20.473 | 0.0   | --- |     |       | m |    |     | 6660 |
| NEST | 0.66 | 26.0  | AM1 | 02:14:32.730 |       | --- | 0.4 | 0.38  | a | M1 | 2.1 | 3809 |
| KBN  | 0.81 | 6.0   | S   | 02:14:34.108 | 0.0   | --- |     |       | m |    |     | 6663 |
| KBN  | 0.81 | 6.0   | P   | 02:14:02.191 | -10.0 | --- |     |       | m |    |     | 6662 |
| KBN  | 0.81 | 6.0   | AM1 | 02:14:47.210 |       | --- | 0.3 | 0.86  | a | M1 | 2.2 | 3810 |
| LKD2 | 1.03 | 181.0 | S   | 02:14:42.415 | 0.6   | --- |     |       | m |    |     | 6665 |
| LKD2 | 1.03 | 181.0 | P   | 02:14:26.898 | -0.1  | --- |     |       | m |    |     | 6664 |
| LKD2 | 1.03 | 181.0 | AM1 | 02:14:44.520 |       | --- | 0.5 | 0.38  | a | M1 | 2.5 | 3811 |
| VLO  | 1.10 | 307.0 | S   | 02:14:43.517 | 0.6   | --- |     |       | m |    |     | 6667 |
| VLO  | 1.10 | 307.0 | P   | 02:14:29.671 | 2.1   | --- |     |       | m |    |     | 6666 |
| VLO  | 1.10 | 307.0 | AM1 | 02:14:48.710 |       | --- | 1.3 | 0.22  | a | M1 | 3.0 | 3812 |
| FNA  | 1.11 | 29.0  | S   | 02:14:44.081 | -0.1  | --- |     |       | m |    |     | 6669 |
| FNA  | 1.11 | 29.0  | P   | 02:14:28.449 | 0.1   | --- |     |       | m |    |     | 6668 |
| FNA  | 1.11 | 29.0  | AM1 | 02:14:47.630 |       | --- | 0.5 | 0.52  | a | M1 | 2.6 | 3813 |
| TIR  | 1.64 | 339.0 | Sn  | 02:15:00.642 | 0.1   | --- |     |       | m |    |     | 6671 |
| TIR  | 1.64 | 339.0 | Pn  | 02:14:38.258 | 0.6   | --- |     |       | m |    |     | 6670 |
| SCTE | 1.71 | 280.0 | S   | 02:14:59.824 | -2.5  | --- |     |       | m |    |     | 6673 |
| SCTE | 1.71 | 280.0 | P   | 02:14:36.363 | -2.3  | --- |     |       | m |    |     | 6672 |
| PHP  | 1.87 | 355.0 | Sn  | 02:15:06.597 | 0.4   | --- |     |       | m |    |     | 6675 |
| PHP  | 1.87 | 355.0 | Pn  | 02:14:40.959 | 0.1   | --- |     |       | m |    |     | 6674 |
| PHP  | 1.87 | 355.0 | AM1 | 02:15:12.750 |       | --- | 0.1 | 0.50  | a | M1 | 2.4 | 3814 |
| PUK  | 2.29 | 346.0 | P   | 02:14:46.307 | -1.0  | --- |     |       | m |    |     | 6676 |
| BCI  | 2.58 | 351.0 | Sn  | 02:15:25.353 | 0.5   | --- |     |       | m |    |     | 6678 |
| BCI  | 2.58 | 351.0 | Pn  | 02:14:51.883 | 0.4   | --- |     |       | m |    |     | 6677 |

DATA\_TYPE COMMENT GSE2.1  
Event 402

Official Magnitude:  
M1 2.47

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 148  | 83  | 2.1600 |
| Intermediate: | 290  | 5   | 0.9300 |
| Min:          | 20   | 4   | 0.5400 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187382 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 407 1.4 km from Katarraktis, Epirus, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/16 | 12:40:03.90 |     | 0.04 | 39.7912  | 20.6227   |      |      |    | 22.2  | 2.1 | 9    | 8    | 151 | 0.34  | 1.68  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.4 | 0.0  | 4      | 447    |
| Md        | 2.5 | 0.0  | 5      | 447    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| IGT  | 0.34 | 222.0 | Sg    | 12:40:17.337 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6763  |
| IGT  | 0.34 | 222.0 | Pg    | 12:40:11.586 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6762  |
| IGT  | 0.34 | 222.0 | AMd   | 12:40:52.559 |      |      |       |      |      |     |     | 0.0 | 40.97 | a    | Md        | 1.9   |
| LSK  | 0.36 | 0.0   | Pg    | 12:40:12.040 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6772  |
| LSK  | 0.36 | 358.0 | Sg    | 12:40:17.510 | -0.0 |      |       |      |      |     |     |     |       |      |           | 6764  |
| LSK  | 0.36 | 358.0 | AMl   | 12:40:22.918 |      |      |       |      |      |     |     | 3.0 | 0.64  | a    | Ml        | 2.6   |
| SRN  | 0.49 | 281.0 | Sg    | 12:40:22.408 | -0.0 |      |       |      |      |     |     |     |       |      |           | 6766  |
| SRN  | 0.49 | 281.0 | Pg    | 12:40:14.477 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6765  |
| SRN  | 0.49 | 281.0 | AMl   | 12:40:25.748 |      |      |       |      |      |     |     | 1.1 | 0.34  | a    | Ml        | 2.3   |
| SRN  | 0.49 | 281.0 | AMd   | 12:40:53.426 |      |      |       |      |      |     |     | 0.0 | 38.95 | a    | Md        | 2.5   |
| NEST | 0.70 | 27.0  | Sg    | 12:40:28.506 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6768  |
| NEST | 0.70 | 27.0  | Pg    | 12:40:17.675 | -0.3 |      |       |      |      |     |     |     |       |      |           | 6767  |
| NEST | 0.70 | 27.0  | AMl   | 12:40:34.568 |      |      |       |      |      |     |     | 0.4 | 0.38  | a    | Ml        | 2.2   |
| NEST | 0.70 | 27.0  | AMd   | 12:40:32.734 |      |      |       |      |      |     |     | 0.0 | 15.06 | a    | Md        | 1.5   |
| LKD2 | 1.00 | 178.0 | Sn    | 12:40:37.753 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6770  |
| LKD2 | 1.00 | 178.0 | Pn    | 12:40:23.133 | -0.1 |      |       |      |      |     |     |     |       |      |           | 6769  |
| LKD2 | 1.00 | 178.0 | AMl   | 12:40:42.848 |      |      |       |      |      |     |     | 0.5 | 0.44  | a    | Ml        | 2.5   |
| LKD2 | 1.00 | 178.0 | AMd   | 12:41:25.991 |      |      |       |      |      |     |     | 0.0 | 62.86 | a    | Md        | 3.0   |
| SCTE | 1.68 | 281.0 | Pn    | 12:40:35.141 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6771  |
| SCTE | 1.68 | 281.0 | AMd   | 12:41:28.414 |      |      |       |      |      |     |     | 0.0 | 53.27 | a    | Md        | 2.9   |

DATA\_TYPE COMMENT GSE2.1  
Event 407

Official Magnitude:  
Ml 2.42

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 111  | 87  | 2.0500 |
| Intermediate: | 282  | 2   | 0.4200 |
| Min:          | 12   | 0   | 0.2500 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187382 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 409 1.4 km from Fushë-Krujë, Durrës, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| OrigID     |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |
| 2019/02/16 | 16:20:23.99 |     | 0.18 | 41.4893  | 19.7578   |      |      |    | 2.0   | 0.9 | 8    | 17   | 174 | 0.17  | 1.46  | m    |        |
| 449        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.4 | 0.0  | 2      | 449    |
| Md        | 1.8 | 0.0  | 1      | 449    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| TIR  | 0.17 | 0.0   | P     | 16:20:27.321 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6796  |      |
| TIR  | 0.17 | 143.0 | S     | 16:20:30.549 | -0.4 |      |       |      |      | --- |     |     |       | m    |           | 6787  |      |
| TIR  | 0.17 | 143.0 | AMl   | 16:20:29.820 |      |      |       |      |      | --- |     | 1.3 | 0.16  | a    | Ml        | 1.9   | 3879 |
| PHP  | 0.57 | 69.0  | P     | 16:20:34.591 | -1.2 |      |       |      |      | --- |     |     |       | m    |           | 6788  |      |
| PUK  | 0.57 | 12.0  | S     | 16:20:44.718 | -0.3 |      |       |      |      | --- |     |     |       | m    |           | 6790  |      |
| PUK  | 0.57 | 12.0  | P     | 16:20:35.219 | -0.8 |      |       |      |      | --- |     |     |       | m    |           | 6789  |      |
| PUK  | 0.57 | 12.0  | AMl   | 16:20:46.970 |      |      |       |      |      | --- |     | 0.1 | 0.18  | a    | Ml        | 1.3   | 3881 |
| PUK  | 0.57 | 12.0  | AMl   | 16:20:47.500 |      |      |       |      |      | --- |     | 0.1 | 0.18  | a    | Ml        | 1.4   | 3880 |
| PUK  | 0.57 | 12.0  | AMd   | 16:20:54.739 |      |      |       |      |      | --- |     | 0.0 | 19.52 | a    | Md        | 1.8   | 3878 |
| ULC  | 0.60 | 324.0 | P     | 16:20:35.430 | -1.2 |      |       |      |      | --- |     |     |       | m    |           | 6791  |      |
| CEME | 1.22 | 331.0 | P     | 16:20:48.665 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6792  |      |
| HCY  | 1.34 | 317.0 | P     | 16:20:50.358 | -0.4 |      |       |      |      | --- |     |     |       | m    |           | 6793  |      |
| NEST | 1.46 | 136.0 | Sn    | 16:21:14.679 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6795  |      |
| NEST | 1.46 | 136.0 | P     | 16:20:52.897 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 6794  |      |

DATA\_TYPE COMMENT GSE2.1  
Event 409

Official Magnitude:  
Ml 1.39

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 247  | 64  | 4.8000 |
| Intermediate: | 64   | 25  | 1.3900 |
| Min:          | 155  | 1   | 0.5400 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187382 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 410 2.3 km from Bencia, Gjirokastër, Albania

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



2019/02/17 01:59:14.32 0.02 40.2340 20.0067 0.2 1.0 11 9 82 0.35 1.19 m  
450

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.8 | 0.0  | 3      | 450    |
| Md        | 2.9 | 0.0  | 6      | 450    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| SRN  | 0.35 | 181.0 | Sg    | 01:59:28.979 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6798  |
| SRN  | 0.35 | 181.0 | Pg    | 01:59:22.684 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6797  |
| SRN  | 0.35 | 181.0 | AMl   | 01:59:30.570 |      |      |       |      |      |     |     | 0.1 | 0.30  | a    | Ml        | 1.1   |
| SRN  | 0.35 | 181.0 | AMd   | 02:00:16.500 |      |      |       |      |      |     |     | 0.0 | 53.82 | a    | Md        | 2.8   |
| VLO  | 0.46 | 302.0 | Pg    | 01:59:23.587 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6799  |
| VLO  | 0.46 | 302.0 | AMd   | 02:00:28.225 |      |      |       |      |      |     |     | 0.0 | 64.64 | a    | Md        | 3.0   |
| LSK  | 0.46 | 0.0   | Pg    | 01:59:23.333 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6808  |
| LSK  | 0.46 | 100.0 | Sg    | 01:59:31.661 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6800  |
| LSK  | 0.46 | 100.0 | AMl   | 01:59:39.820 |      |      |       |      |      |     |     | 0.4 | 0.76  | a    | Ml        | 1.8   |
| IGT  | 0.74 | 160.0 | Sg    | 01:59:41.378 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6802  |
| IGT  | 0.74 | 160.0 | Pg    | 01:59:29.772 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6801  |
| IGT  | 0.74 | 160.0 | AMd   | 02:00:35.907 |      |      |       |      |      |     |     | 0.0 | 66.14 | a    | Md        | 2.5   |
| NEST | 0.82 | 76.0  | Sg    | 01:59:43.804 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6804  |
| NEST | 0.82 | 76.0  | Pg    | 01:59:30.961 | -0.2 |      |       |      |      |     |     |     |       | m    |           | 6803  |
| NEST | 0.82 | 76.0  | AMd   | 02:00:40.556 |      |      |       |      |      |     |     | 0.0 | 69.60 | a    | Md        | 3.1   |
| TIR  | 1.12 | 355.0 | Pn    | 01:59:36.907 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6805  |
| TIR  | 1.12 | 355.0 | AMd   | 02:00:28.023 |      |      |       |      |      |     |     | 0.0 | 51.12 | a    | Md        | 2.8   |
| SCTE | 1.19 | 263.0 | Sn    | 01:59:56.220 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6807  |
| SCTE | 1.19 | 263.0 | Pn    | 01:59:38.263 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6806  |
| SCTE | 1.19 | 263.0 | AMl   | 02:00:04.770 |      |      |       |      |      |     |     | 0.3 | 1.16  | a    | Ml        | 2.4   |
| SCTE | 1.19 | 263.0 | AMd   | 02:00:35.705 |      |      |       |      |      |     |     | 0.0 | 57.44 | a    | Md        | 2.9   |

DATA\_TYPE COMMENT GSE2.1  
Event 410

Official Magnitude:  
Ml 1.77

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 318  | 81  | 0.9800 |
| Intermediate: | 194  | 4   | 0.2900 |
| Min:          | 103  | 7   | 0.2400 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187381 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 413 5 km from Bishtkamzë, Durrës, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/17 | 21:21:33.68 |     | 0.29 | 41.3962  | 19.3698   |      |      |    | 25.9  | 2.0 | 14   | 12   | 180 | 0.38  | 1.59  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.0 | 0.0  | 7      | 453    |
| Md        | 2.7 | 0.0  | 5      | 453    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| TIR  | 0.38 | 0.0   | Pg    | 21:21:42.718 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6858  |      |
| TIR  | 0.38 | 97.0  | Sg    | 21:21:48.828 | 0.2  |      |       |      |      |     |     |     |       | m    |           | 6841  |      |
| TIR  | 0.38 | 97.0  | AMl   | 21:21:48.200 |      |      |       |      |      |     |     | 4.6 | 0.14  | a    | Ml        | 2.8   | 3920 |
| PUK  | 0.76 | 31.0  | S     | 21:21:59.864 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 6843  |      |
| PUK  | 0.76 | 31.0  | Pg    | 21:21:48.865 | 0.3  |      |       |      |      |     |     |     |       | m    |           | 6842  |      |
| PUK  | 0.76 | 31.0  | AMl   | 21:22:03.470 |      |      |       |      |      |     |     | 2.5 | 0.18  | a    | Ml        | 3.0   | 3921 |
| PUK  | 0.76 | 31.0  | AMd   | 21:22:37.797 |      |      |       |      |      |     |     | 0.0 | 48.93 | a    | Md        | 2.7   | 3915 |
| PHP  | 0.85 | 69.0  | Sg    | 21:22:02.367 | -0.2 |      |       |      |      |     |     |     |       | m    |           | 6845  |      |
| PHP  | 0.85 | 69.0  | P     | 21:21:49.814 | -0.4 |      |       |      |      |     |     |     |       | m    |           | 6844  |      |
| PHP  | 0.85 | 69.0  | AMl   | 21:22:05.500 |      |      |       |      |      |     |     | 1.7 | 0.40  | a    | Ml        | 2.9   | 3922 |
| PHP  | 0.85 | 69.0  | AMd   | 21:22:42.936 |      |      |       |      |      |     |     | 0.0 | 53.12 | a    | Md        | 2.8   | 3916 |
| VLO  | 0.93 | 174.0 | Sg    | 21:22:05.954 | 1.8  |      |       |      |      |     |     |     |       | m    |           | 6847  |      |
| VLO  | 0.93 | 174.0 | Pg    | 21:21:52.886 | 1.8  |      |       |      |      |     |     |     |       | m    |           | 6846  |      |
| VLO  | 0.93 | 174.0 | AMl   | 21:22:14.060 |      |      |       |      |      |     |     | 2.0 | 0.16  | a    | Ml        | 3.1   | 3923 |
| VLO  | 0.93 | 174.0 | AMd   | 21:22:36.783 |      |      |       |      |      |     |     | 0.0 | 43.90 | a    | Md        | 2.7   | 3917 |
| BCI  | 1.10 | 28.0  | Sg    | 21:22:10.500 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 6849  |      |
| BCI  | 1.10 | 28.0  | Pg    | 21:21:54.567 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6848  |      |
| BCI  | 1.10 | 28.0  | AMl   | 21:22:14.580 |      |      |       |      |      |     |     | 1.3 | 0.46  | a    | Ml        | 3.0   | 3924 |
| BCI  | 1.10 | 28.0  | AMd   | 21:22:10.829 |      |      |       |      |      |     |     | 0.0 | 16.26 | a    | Md        | 1.6   | 3918 |
| KBN  | 1.32 | 125.0 | Sg    | 21:22:16.484 | -0.2 |      |       |      |      |     |     |     |       | m    |           | 6851  |      |
| KBN  | 1.32 | 125.0 | P     | 21:21:59.622 | 1.4  |      |       |      |      |     |     |     |       | m    |           | 6850  |      |
| KBN  | 1.32 | 125.0 | AMl   | 21:22:19.700 |      |      |       |      |      |     |     | 0.4 | 0.48  | a    | Ml        | 2.6   | 3925 |
| KBN  | 1.32 | 125.0 | AMd   | 21:22:55.684 |      |      |       |      |      |     |     | 0.0 | 56.06 | a    | Md        | 2.9   | 3919 |
| SCTE | 1.48 | 208.0 | Sg    | 21:22:22.403 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6853  |      |
| SCTE | 1.48 | 208.0 | Pg    | 21:22:00.629 | -0.9 |      |       |      |      |     |     |     |       | m    |           | 6852  |      |
| SCTE | 1.48 | 208.0 | AMl   | 21:22:24.310 |      |      |       |      |      |     |     | 0.9 | 0.40  | a    | Ml        | 3.1   | 3926 |
| LSK  | 1.56 | 142.0 | S     | 21:22:24.262 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 6855  |      |
| LSK  | 1.56 | 142.0 | Pn    | 21:22:02.105 | -0.4 |      |       |      |      |     |     |     |       | m    |           | 6854  |      |
| SRN  | 1.59 | 162.0 | Sn    | 21:22:26.203 | 0.2  |      |       |      |      |     |     |     |       | m    |           | 6857  |      |
| SRN  | 1.59 | 162.0 | P     | 21:22:04.211 | 0.7  |      |       |      |      |     |     |     |       | m    |           | 6856  |      |

DATA\_TYPE COMMENT GSE2.1  
Event 413

Official Magnitude:  
Ml 3.00

Error ellipse:  
Azim Dip Mag

Max: 60 63 2.2700  
 Intermediate: 292 16 0.8500  
 Min: 196 20 0.4500

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187380 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 420 4.0 km from Selitë, Dibër, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/19 | 00:10:22.86 |     | 0.03 | 41.6743  | 20.2142   |      |      |    | 25.4  | 1.6 | 7    | 4    | 133 | 0.17  | 0.70  | m    |        |
| 459        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.3 | 0.0  | 3      | 459    |
| Md        | 2.4 | 0.0  | 2      | 459    |

| Sta | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| PHP | 0.17 | 86.0  | Sg    | 00:10:32.024 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6903  |
| PHP | 0.17 | 86.0  | Pg    | 00:10:28.141 | 0.0  |      |       |      |      |     |     |     |       | mci  |           | 6902  |
| PHP | 0.17 | 86.0  | AMl   | 00:10:33.420 |      |      |       |      |      |     |     | 0.5 | 0.14  | a    | Ml        | 1.7   |
| PHP | 0.17 | 86.0  | AMd   | 00:11:03.809 |      |      |       |      |      |     |     | 0.0 | 35.67 | a    | Md        | 2.4   |
| TIR | 0.42 | 0.0   | Pg    | 00:10:29.465 | 0.0  |      |       |      |      |     |     |     |       | mde  |           | 6909  |
| TIR | 0.42 | 219.0 | Sg    | 00:10:38.976 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6904  |
| PUK | 0.44 | 327.0 | Sg    | 00:10:39.355 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6906  |
| PUK | 0.44 | 327.0 | Pg    | 00:10:32.241 | -0.0 |      |       |      |      |     |     |     |       | mci  |           | 6905  |
| PUK | 0.44 | 327.0 | AMl   | 00:10:42.650 |      |      |       |      |      |     |     | 0.1 | 0.18  | a    | Ml        | 1.3   |
| PUK | 0.44 | 327.0 | AMd   | 00:11:11.287 |      |      |       |      |      |     |     | 0.0 | 39.05 | a    | Md        | 2.5   |
| BCI | 0.70 | 352.0 | Sg    | 00:10:47.292 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6908  |
| BCI | 0.70 | 352.0 | Pg    | 00:10:36.789 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6907  |
| BCI | 0.70 | 352.0 | AMl   | 00:10:50.780 |      |      |       |      |      |     |     | 0.0 | 0.30  | a    | Ml        | 1.2   |

DATA\_TYPE COMMENT GSE2.1  
 Event 420

Official Magnitude:  
 Ml 1.30

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 116  | 69  | 1.7000 |
| Intermediate: | 255  | 15  | 0.4600 |
| Min:          | 349  | 13  | 0.3700 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187380 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 423 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/19 | 06:32:40.16 |     | 0.35 | 41.6957  | 20.1157   |      |      |    | 9.3   | 1.5 | 25   | 22   | 95  | 0.24  | 3.02  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.6 | 0.0  | 8      | 462    |
| Md        | 3.1 | 0.0  | 5      | 462    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| PHP  | 0.24 | 92.0  | Sg    | 06:32:48.739 | -0.3 |      |       |      |      |     |     |      |       | m__  |           | 6935  |      |
| PHP  | 0.24 | 92.0  | Pg    | 06:32:45.282 | 0.1  |      |       |      |      |     |     |      |       | mci  |           | 6934  |      |
| PHP  | 0.24 | 92.0  | AMl   | 06:32:50.540 |      |      |       |      |      |     |     | 22.5 | 0.40  | a__  | Ml        | 3.3   | 3988 |
| PUK  | 0.38 | 335.0 | Sg    | 06:32:54.365 | 0.4  |      |       |      |      |     |     |      |       | m__  |           | 6937  |      |
| PUK  | 0.38 | 335.0 | Pg    | 06:32:48.061 | 0.0  |      |       |      |      |     |     |      |       | mce  |           | 6936  |      |
| PUK  | 0.38 | 335.0 | AMl   | 06:32:59.340 |      |      |       |      |      |     |     | 2.7  | 0.34  | a__  | Ml        | 2.5   | 3989 |
| PUK  | 0.38 | 335.0 | AMd   | 06:33:53.736 |      |      |       |      |      |     |     | 0.0  | 65.67 | a__  | Md        | 3.0   | 3983 |
| TIR  | 0.39 | 0.0   | Pg    | 06:32:48.457 | 0.0  |      |       |      |      |     |     |      |       | mdi  |           | 6961  |      |
| TIR  | 0.39 | 209.0 | Sg    | 06:32:54.230 | -0.3 |      |       |      |      |     |     |      |       | m_i  |           | 6938  |      |
| TIR  | 0.39 | 209.0 | AMl   | 06:32:54.820 |      |      |       |      |      |     |     | 1.3  | 0.58  | a__  | Ml        | 2.2   | 3990 |
| BCI  | 0.67 | 357.0 | Sg    | 06:33:03.519 | -0.0 |      |       |      |      |     |     |      |       | m__  |           | 6940  |      |
| BCI  | 0.67 | 357.0 | Pg    | 06:32:53.629 | 0.1  |      |       |      |      |     |     |      |       | mci  |           | 6939  |      |
| BCI  | 0.67 | 357.0 | AMl   | 06:33:08.800 |      |      |       |      |      |     |     | 1.4  | 0.50  | a__  | Ml        | 2.7   | 3991 |
| BCI  | 0.67 | 357.0 | AMd   | 06:34:19.871 |      |      |       |      |      |     |     | 0.0  | 86.24 | a__  | Md        | 3.3   | 3984 |
| ULC  | 0.70 | 293.0 | Pg    | 06:32:53.394 | -0.8 |      |       |      |      |     |     |      |       | m__  |           | 6941  |      |
| ULC  | 0.70 | 293.0 | AMd   | 06:34:04.426 |      |      |       |      |      |     |     | 0.0  | 71.03 | a__  | Md        | 3.1   | 3985 |
| DRME | 0.85 | 306.0 | Pn    | 06:32:57.459 | 0.5  |      |       |      |      |     |     |      |       | m__  |           | 6942  |      |
| PVY  | 0.90 | 354.0 | Pg    | 06:32:57.397 | -0.7 |      |       |      |      |     |     |      |       | m__  |           | 6943  |      |
| PVY  | 0.90 | 354.0 | AMd   | 06:34:18.366 |      |      |       |      |      |     |     | 0.0  | 80.97 | a__  | Md        | 3.3   | 3986 |
| BPA1 | 1.03 | 200.0 | Sg    | 06:33:15.820 | 0.1  |      |       |      |      |     |     |      |       | m__  |           | 6945  |      |
| BPA1 | 1.03 | 200.0 | Pg    | 06:32:59.286 | -1.2 |      |       |      |      |     |     |      |       | m__  |           | 6944  |      |
| BPA1 | 1.03 | 200.0 | AMl   | 06:33:29.060 |      |      |       |      |      |     |     | 0.4  | 0.52  | a__  | Ml        | 2.4   | 3992 |
| BUM  | 1.09 | 305.0 | Pn    | 06:33:02.014 | 0.4  |      |       |      |      |     |     |      |       | m__  |           | 6946  |      |
| KBN  | 1.18 | 154.0 | Sn    | 06:33:20.060 | 0.1  |      |       |      |      |     |     |      |       | m__  |           | 6949  |      |
| KBN  | 1.18 | 154.0 | Pn    | 06:33:02.921 | 0.0  |      |       |      |      |     |     |      |       | m__  |           | 6948  |      |
| KBN  | 1.18 | 154.0 | AMl   | 06:33:27.070 |      |      |       |      |      |     |     | 1.6  | 0.40  | a__  | Ml        | 3.1   | 3993 |
| BEY  | 1.18 | 353.0 | Pn    | 06:33:03.407 | 0.1  |      |       |      |      |     |     |      |       | m__  |           | 6947  |      |
| CEME | 1.23 | 315.0 | Pn    | 06:33:04.157 | -0.0 |      |       |      |      |     |     |      |       | m__  |           | 6950  |      |
| KOME | 1.24 | 340.0 | Pn    | 06:33:03.869 | -0.4 |      |       |      |      |     |     |      |       | m__  |           | 6951  |      |
| NKME | 1.37 | 322.0 | Pn    | 06:33:06.574 | -0.1 |      |       |      |      |     |     |      |       | m__  |           | 6952  |      |
| HCY  | 1.43 | 303.0 | Pn    | 06:33:07.289 | -0.3 |      |       |      |      |     |     |      |       | m__  |           | 6953  |      |
| LSK  | 1.59 | 166.0 | Sn    | 06:33:33.419 | 0.4  |      |       |      |      |     |     |      |       | m__  |           | 6955  |      |

|      |      |       |     |              |      |     |  |  |  |  |  |  |  |  |  |  |   |    |      |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|--|--|--|---|----|------|------|
| LSK  | 1.59 | 166.0 | Pn  | 06:33:10.368 | 0.0  | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6954 |      |
| LSK  | 1.59 | 166.0 | AM1 | 06:33:46.660 |      | --- |  |  |  |  |  |  |  |  |  |  | a | M1 | 3.3  | 3994 |
| BRY  | 1.68 | 317.0 | Pn  | 06:33:11.472 | -0.6 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6956 |      |
| UPM  | 1.75 | 330.0 | Pg  | 06:33:13.934 | 0.6  | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6957 |      |
| UPM  | 1.75 | 330.0 | AMd | 06:34:19.114 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Md | 3.1  | 3987 |
| SRN  | 1.82 | 183.0 | Sn  | 06:33:40.498 | -0.5 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6959 |      |
| SRN  | 1.82 | 183.0 | Pn  | 06:33:15.519 | 0.6  | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6958 |      |
| SRN  | 1.82 | 183.0 | AM1 | 06:33:45.710 |      | --- |  |  |  |  |  |  |  |  |  |  | a | M1 | 2.5  | 3995 |
| MRVN | 3.02 | 260.0 | P   | 06:33:29.086 | -3.4 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6960 |      |

DATA\_TYPE COMMENT GSE2.1  
Event 423

Official Magnitude:  
M1 2.59

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 31   | 82  | 1.5500 |
| Intermediate: | 256  | 5   | 0.7000 |
| Min:          | 165  | 6   | 0.3800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187380 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 431 1.5 km from Castagna, Basilicate, Italy

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/20 | 16:32:37.80 |     | 0.05 | 40.4738  | 16.0907   |      |      |    | 49.9  | 0.8 | 8    | 11   | 249 | 0.59  | 3.91  | m    |        |
| 470        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.5 | 0.0  | 5      | 470    |
| Md        | 3.2 | 0.0  | 4      | 470    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| MRVN | 0.59 | 7.0   | Sg    | 16:33:01.135 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 7031  |      |
| MRVN | 0.59 | 7.0   | Pg    | 16:32:51.211 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 7030  |      |
| MRVN | 0.59 | 7.0   | AM1   | 16:33:02.690 |      |      |       |      |      | --- |     | 0.4 | 0.18  | a    | M1        | 2.2   | 4038 |
| MRVN | 0.59 | 7.0   | AMd   | 16:33:57.228 |      |      |       |      |      | --- |     | 0.0 | 66.02 | a    | Md        | 3.0   | 4034 |
| NOCI | 0.80 | 66.0  | Sg    | 16:33:06.657 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 7033  |      |
| NOCI | 0.80 | 66.0  | Pg    | 16:32:54.249 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 7032  |      |
| NOCI | 0.80 | 66.0  | AM1   | 16:33:14.480 |      |      |       |      |      | --- |     | 0.6 | 0.18  | a    | M1        | 2.5   | 4039 |
| NOCI | 0.80 | 66.0  | AMd   | 16:34:03.091 |      |      |       |      |      | --- |     | 0.0 | 68.84 | a    | Md        | 3.1   | 4035 |
| SGRT | 1.30 | 350.0 | Sg    | 16:33:19.300 | -0.1 |      |       |      |      | --- |     |     |       | m    |           | 7035  |      |

|      |      |       |     |              |       |     |  |  |  |  |  |  |  |  |  |  |     |       |      |    |     |      |
|------|------|-------|-----|--------------|-------|-----|--|--|--|--|--|--|--|--|--|--|-----|-------|------|----|-----|------|
| SGRT | 1.30 | 350.0 | Pg  | 16:33:01.617 | 0.1   | --- |  |  |  |  |  |  |  |  |  |  | m   |       | 7034 |    |     |      |
| SGRT | 1.30 | 350.0 | AMl | 16:33:29.260 |       | --- |  |  |  |  |  |  |  |  |  |  | 0.2 | 0.16  | a    | Ml | 2.4 | 4040 |
| SGRT | 1.30 | 350.0 | AMd | 16:34:23.711 |       | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 82.09 | a    | Md | 3.3 | 4036 |
| SCTE | 1.86 | 101.0 | Sg  | 16:33:33.843 | 0.0   | --- |  |  |  |  |  |  |  |  |  |  |     |       |      | m  |     | 7037 |
| SCTE | 1.86 | 101.0 | Pg  | 16:33:09.750 | -0.1  | --- |  |  |  |  |  |  |  |  |  |  |     |       |      | m  |     | 7036 |
| SCTE | 1.86 | 101.0 | AMl | 16:33:51.500 |       | --- |  |  |  |  |  |  |  |  |  |  | 0.1 | 0.54  | a    | Ml | 2.6 | 4041 |
| SCTE | 1.86 | 101.0 | AMd | 16:34:48.374 |       | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 98.62 | a    | Md | 3.5 | 4037 |
| LKD2 | 3.90 | 0.0   | Pg  | 16:32:28.886 | 0.0   | --- |  |  |  |  |  |  |  |  |  |  |     |       |      | m  |     | 7039 |
| LKD2 | 3.91 | 114.0 | Sg  | 16:32:54.965 | -10.0 | --- |  |  |  |  |  |  |  |  |  |  |     |       |      | m  |     | 7038 |
| LKD2 | 3.91 | 114.0 | AMl | 16:33:00.120 |       | --- |  |  |  |  |  |  |  |  |  |  | 0.1 | 0.68  | a    | Ml | 3.2 | 4042 |

DATA\_TYPE COMMENT GSE2.1  
Event 431

Official Magnitude:  
Ml 2.50

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 43   | 4   | 1.2300 |
| Intermediate: | 300  | 70  | 0.8900 |
| Min:          | 134  | 19  | 0.4200 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187379 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 433 0.6 km from Lumëbardhë, Shkodër, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/21 | 03:55:27.35 |     | 0.05 | 42.0555  | 20.0557   |      |      |    | 18.0  | 0.7 | 9    | 30   | 141 | 0.13  | 0.89  | m    | 472    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.4 | 0.0  | 3      | 472    |
| Md        | 2.0 | 0.0  | 1      | 472    |

| Sta | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|-----|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| PUK | 0.12 | 265.0 | S     | 03:55:34.243 | -0.0 |      |       |      |      | --- |     |     |       |      |           | m     | 7056 |
| PUK | 0.12 | 265.0 | P     | 03:55:31.319 | 0.0  |      |       |      |      | --- |     |     |       |      |           | md    | 7055 |
| PUK | 0.12 | 265.0 | AMl   | 03:55:34.720 |      |      |       |      |      | --- |     | 2.2 | 0.08  | a    | Ml        | 2.3   | 4059 |
| PUK | 0.12 | 265.0 | AMl   | 03:55:34.710 |      |      |       |      |      | --- |     | 1.5 | 0.10  | a    | Ml        | 2.1   | 4058 |
| PUK | 0.12 | 265.0 | AMd   | 03:55:54.837 |      |      |       |      |      | --- |     | 0.0 | 23.52 | a    | Md        | 2.0   | 4057 |
| BCI | 0.31 | 0.0   | P     | 03:55:34.262 | 0.0  |      |       |      |      | --- |     |     |       |      |           | m     | 7064 |
| BCI | 0.31 | 1.0   | S     | 03:55:39.361 | -0.0 |      |       |      |      | --- |     |     |       |      |           | m     | 7057 |
| BCI | 0.31 | 1.0   | AMl   | 03:55:40.200 |      |      |       |      |      | --- |     | 0.2 | 0.24  | a    | Ml        | 1.3   | 4061 |

|      |      |       |     |              |      |     |      |   |     |     |      |
|------|------|-------|-----|--------------|------|-----|------|---|-----|-----|------|
| BCI  | 0.31 | 1.0   | AM1 | 03:55:40.750 | ---  | 0.2 | 0.18 | a | M1  | 1.4 | 4060 |
| PHP  | 0.47 | 142.0 | S   | 03:55:43.982 | -0.0 | --- | ---  | m | --- | --- | 7059 |
| PHP  | 0.47 | 142.0 | P   | 03:55:36.940 | 0.1  | --- | ---  | m | --- | --- | 7058 |
| PHP  | 0.47 | 142.0 | AM1 | 03:55:46.910 | ---  | 0.0 | 0.18 | a | M1  | 0.8 | 4062 |
| PVY  | 0.54 | 354.0 | P   | 03:55:38.558 | 0.1  | --- | ---  | m | --- | --- | 7060 |
| ULC  | 0.61 | 262.0 | P   | 03:55:39.748 | 0.0  | --- | ---  | m | --- | --- | 7061 |
| DRME | 0.66 | 282.0 | P   | 03:55:40.524 | -0.1 | --- | ---  | m | --- | --- | 7062 |
| BUM  | 0.89 | 287.0 | P   | 03:55:44.843 | -0.0 | --- | ---  | m | --- | --- | 7063 |

DATA\_TYPE COMMENT GSE2.1  
Event 433

Official Magnitude:  
M1 1.38

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 247  | 82  | 0.6800 |
| Intermediate: | 57   | 7   | 0.4900 |
| Min:          | 147  | 1   | 0.3500 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187379 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 436 1.4 km from Lubonjë, Vlorë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/22 | 23:47:25.45 |     | 0.39 | 40.4960  | 19.5675   |      |      |    | 19.0  | 1.0 | 21   | 31   | 93  | 0.06  | 1.93  | m    |        |
| 475        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.2 | 0.0  | 8      | 475    |
| Md        | 2.5 | 0.0  | 2      | 475    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| VLO  | 0.06 | 244.0 | S     | 23:47:31.494 | 0.9  |      |       |      |      | --- |     |      |       | m    |           | 7093  |      |
| VLO  | 0.06 | 244.0 | P     | 23:47:28.945 | 0.6  |      |       |      |      | --- |     |      |       | m    |           | 7092  |      |
| VLO  | 0.06 | 244.0 | AM1   | 23:47:34.860 |      |      |       |      |      | --- |     | 23.8 | 0.16  | a    | M1        | 3.3   | 4086 |
| VLO  | 0.06 | 244.0 | AMd   | 23:48:02.560 |      |      |       |      |      | --- |     | 0.0  | 33.61 | a    | Md        | 2.3   | 4084 |
| BPA1 | 0.24 | 16.0  | P     | 23:47:30.869 | -0.4 |      |       |      |      | --- |     |      |       | m    |           | 7094  |      |
| BPA2 | 0.24 | 9.0   | S     | 23:47:35.816 | 0.2  |      |       |      |      | --- |     |      |       | m    |           | 7096  |      |
| BPA2 | 0.24 | 9.0   | P     | 23:47:31.172 | -0.1 |      |       |      |      | --- |     |      |       | m    |           | 7095  |      |
| SRN  | 0.70 | 151.0 | S     | 23:47:50.185 | -0.4 |      |       |      |      | --- |     |      |       | m    |           | 7098  |      |
| SRN  | 0.70 | 151.0 | P     | 23:47:39.837 | 0.0  |      |       |      |      | --- |     |      |       | m    |           | 7097  |      |
| SRN  | 0.70 | 151.0 | AM1   | 23:47:53.890 |      |      |       |      |      | --- |     | 0.1  | 0.18  | a    | M1        | 1.7   | 4087 |

|      |      |       |     |              |      |     |       |   |     |     |      |
|------|------|-------|-----|--------------|------|-----|-------|---|-----|-----|------|
| SRN  | 0.70 | 151.0 | AMd | 23:48:22.246 | ---  | 0.0 | 42.41 | a | Md  | 2.6 | 4085 |
| LSK  | 0.86 | 113.0 | S   | 23:47:53.523 | -1.2 | --- | ---   | m | --- | --- | 7100 |
| LSK  | 0.86 | 113.0 | P   | 23:47:41.591 | -0.6 | --- | ---   | m | --- | --- | 7099 |
| LSK  | 0.86 | 113.0 | AM1 | 23:48:03.950 | ---  | 0.3 | 0.66  | a | M1  | 2.2 | 4088 |
| TIR  | 0.89 | 0.0   | P   | 23:47:43.640 | 0.0  | --- | ---   | m | --- | --- | 7114 |
| TIR  | 0.88 | 14.0  | S   | 23:47:58.338 | 2.7  | --- | ---   | m | --- | --- | 7101 |
| TIR  | 0.88 | 14.0  | AM1 | 23:48:00.210 | ---  | 0.2 | 0.38  | a | M1  | 1.9 | 4089 |
| KBN  | 0.94 | 81.0  | S   | 23:47:56.597 | 0.0  | --- | ---   | m | --- | --- | 7103 |
| KBN  | 0.94 | 81.0  | P   | 23:47:43.012 | -0.2 | --- | ---   | m | --- | --- | 7102 |
| KBN  | 0.94 | 81.0  | AM1 | 23:48:00.680 | ---  | 0.4 | 0.60  | a | M1  | 2.3 | 4090 |
| SCTE | 0.94 | 244.0 | Sn  | 23:47:57.233 | -0.2 | --- | ---   | m | --- | --- | 7105 |
| SCTE | 0.94 | 244.0 | Pn  | 23:47:43.685 | -0.0 | --- | ---   | m | --- | --- | 7104 |
| SCTE | 0.94 | 244.0 | AM1 | 23:48:00.690 | ---  | 0.7 | 0.32  | a | M1  | 2.6 | 4091 |
| IGT  | 1.13 | 148.0 | Sn  | 23:48:02.966 | -0.3 | --- | ---   | m | --- | --- | 7107 |
| IGT  | 1.13 | 148.0 | Pn  | 23:47:47.792 | 0.7  | --- | ---   | m | --- | --- | 7106 |
| NEST | 1.13 | 93.0  | Sn  | 23:48:03.950 | 0.5  | --- | ---   | m | --- | --- | 7109 |
| NEST | 1.13 | 93.0  | Pn  | 23:47:47.081 | -0.1 | --- | ---   | m | --- | --- | 7108 |
| NEST | 1.13 | 93.0  | AM1 | 23:48:09.170 | ---  | 0.1 | 0.60  | a | M1  | 2.1 | 4092 |
| PHP  | 1.36 | 28.0  | P   | 23:47:51.850 | 1.0  | --- | ---   | m | --- | --- | 7110 |
| PUK  | 1.56 | 8.0   | Sn  | 23:48:16.526 | -0.1 | --- | ---   | m | --- | --- | 7112 |
| PUK  | 1.56 | 8.0   | Pn  | 23:47:54.143 | -0.5 | --- | ---   | m | --- | --- | 7111 |
| PUK  | 1.56 | 8.0   | AM1 | 23:48:22.640 | ---  | 0.1 | 0.44  | a | M1  | 2.4 | 4093 |
| NOCI | 1.93 | 280.0 | Pn  | 23:48:01.120 | 0.4  | --- | ---   | m | --- | --- | 7113 |

DATA\_TYPE COMMENT GSE2.1  
Event 436

Official Magnitude:  
M1 2.24

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 320  | 65  | 1.0800 |
| Intermediate: | 66   | 6   | 0.6300 |
| Min:          | 159  | 24  | 0.5600 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187379 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 437 1.8 km from Çorraj, Vlorë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/22 | 01:24:36.41 |     | 0.10 | 40.1253  | 19.8503   |      |      |    | 0.6   | 0.9 | 13   | 30   | 168 | 0.27  | 1.92  | m    |        |
| 476        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |



|           |     |      |        |        |
|-----------|-----|------|--------|--------|
| Magnitude | Err | Nsta | Author | OrigID |
| Ml        | 2.1 | 0.0  | 6      | 476    |
| Md        | 2.4 | 0.0  | 3      | 476    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| SRN  | 0.27 | 154.0 | S     | 01:24:47.884 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 7116  |
| SRN  | 0.27 | 154.0 | P     | 01:24:42.939 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 7115  |
| SRN  | 0.27 | 154.0 | AMl   | 01:24:49.558 |      |      |       |      |      |     |     | 0.6 | 0.40  | a    | Ml        | 4097  |
| SRN  | 0.27 | 154.0 | AMd   | 01:25:17.192 |      |      |       |      |      |     |     | 0.0 | 34.25 | a    | Md        | 4094  |
| VLO  | 0.44 | 322.0 | S     | 01:24:51.866 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 7118  |
| VLO  | 0.44 | 322.0 | P     | 01:24:45.255 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 7117  |
| VLO  | 0.44 | 322.0 | AMl   | 01:24:58.128 |      |      |       |      |      |     |     | 1.6 | 0.42  | a    | Ml        | 4098  |
| VLO  | 0.44 | 322.0 | AMd   | 01:25:22.455 |      |      |       |      |      |     |     | 0.0 | 37.20 | a    | Md        | 4095  |
| LSK  | 0.57 | 87.0  | S     | 01:24:57.494 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 7120  |
| LSK  | 0.57 | 87.0  | Pn    | 01:24:46.631 | -1.8 |      |       |      |      |     |     |     |       | m    |           | 7119  |
| LSK  | 0.57 | 87.0  | AMl   | 01:25:02.168 |      |      |       |      |      |     |     | 0.3 | 0.48  | a    | Ml        | 4099  |
| LSK  | 0.57 | 87.0  | AMd   | 01:25:34.265 |      |      |       |      |      |     |     | 0.0 | 47.63 | a    | Md        | 4096  |
| IGT  | 0.70 | 147.0 | S     | 01:25:01.883 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 7122  |
| IGT  | 0.70 | 147.0 | P     | 01:24:50.943 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 7121  |
| NEST | 0.96 | 72.0  | S     | 01:25:10.619 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 7124  |
| NEST | 0.96 | 72.0  | P     | 01:24:55.679 | -0.3 |      |       |      |      |     |     |     |       | m    |           | 7123  |
| NEST | 0.96 | 72.0  | AMl   | 01:25:15.388 |      |      |       |      |      |     |     | 0.1 | 0.42  | a    | Ml        | 4100  |
| SCTE | 1.06 | 0.0   | Pn    | 01:24:56.975 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 7131  |
| SCTE | 1.06 | 268.0 | Sn    | 01:25:13.184 | -0.8 |      |       |      |      |     |     |     |       | m    |           | 7125  |
| SCTE | 1.06 | 268.0 | AMl   | 01:25:15.258 |      |      |       |      |      |     |     | 0.6 | 0.42  | a    | Ml        | 4101  |
| LKD2 | 1.47 | 154.0 | Sn    | 01:25:27.320 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 7127  |
| LKD2 | 1.47 | 154.0 | Pn    | 01:25:05.666 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 7126  |
| LKD2 | 1.47 | 154.0 | AMl   | 01:25:30.088 |      |      |       |      |      |     |     | 0.1 | 0.44  | a    | Ml        | 4102  |
| PHP  | 1.62 | 15.0  | Pn    | 01:25:07.969 | 0.1  |      |       |      |      |     |     |     |       | m    |           | 7128  |
| PUK  | 1.92 | 0.0   | Sn    | 01:25:40.911 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 7130  |
| PUK  | 1.92 | 0.0   | Pn    | 01:25:11.098 | -2.2 |      |       |      |      |     |     |     |       | m    |           | 7129  |

DATA\_TYPE COMMENT GSE2.1  
Event 437

Official Magnitude:  
Ml 2.07

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 243  | 80  | 0.9300 |
| Intermediate: | 63   | 9   | 0.4100 |
| Min:          | 153  | 0   | 0.2500 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187378 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 442 5.0 km from Shëngjin, Vlorë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/26 | 03:58:13.70 |     | 0.23 | 40.3918  | 19.3650   |      |      |    | 16.9  | 1.0 | 14   | 20   | 147 | 0.13  | 1.89  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.3 | 0.0  | 4      | 481    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per  | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| VLO  | 0.13 | 0.0   | P     | 03:58:16.741 | 0.0  |      |       |      |      |     |     |      |      | m    |           | 7208  |      |
| VLO  | 0.13 | 52.0  | S     | 03:58:19.588 | 0.2  |      |       |      |      |     |     |      |      | m    |           | 7192  |      |
| VLO  | 0.13 | 52.0  | AMl   | 03:58:20.200 |      |      |       |      |      |     |     | 16.3 | 0.08 | a    | Ml        | 3.1   | 4138 |
| VLO  | 0.13 | 52.0  | AMl   | 03:58:21.310 |      |      |       |      |      |     |     | 11.3 | 0.16 | a    | Ml        | 3.0   | 4137 |
| BPA1 | 0.40 | 33.0  | P     | 03:58:21.969 | -0.2 |      |       |      |      |     |     |      |      | m    |           | 7193  |      |
| SRN  | 0.71 | 136.0 | S     | 03:58:39.126 | -0.0 |      |       |      |      |     |     |      |      | m    |           | 7195  |      |
| SRN  | 0.71 | 136.0 | P     | 03:58:27.947 | -0.3 |      |       |      |      |     |     |      |      | m    |           | 7194  |      |
| SRN  | 0.71 | 136.0 | AMl   | 03:58:45.280 |      |      |       |      |      |     |     | 0.1  | 0.34 | a    | Ml        | 1.5   | 4139 |
| SCTE | 0.75 | 246.0 | Sn    | 03:58:40.015 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 7197  |      |
| SCTE | 0.75 | 246.0 | Pn    | 03:58:29.105 | 0.3  |      |       |      |      |     |     |      |      | m    |           | 7196  |      |
| SCTE | 0.75 | 246.0 | AMl   | 03:58:42.130 |      |      |       |      |      |     |     | 0.4  | 0.58 | a    | Ml        | 2.2   | 4140 |
| LSK  | 0.97 | 103.0 | S     | 03:58:49.186 | 2.5  |      |       |      |      |     |     |      |      | m    |           | 7199  |      |
| LSK  | 0.97 | 103.0 | P     | 03:58:32.452 | -0.1 |      |       |      |      |     |     |      |      | m    |           | 7198  |      |
| KBN  | 1.11 | 77.0  | S     | 03:58:50.108 | -0.2 |      |       |      |      |     |     |      |      | m    |           | 7200  |      |
| IGT  | 1.13 | 138.0 | S     | 03:58:52.187 | 0.3  |      |       |      |      |     |     |      |      | m    |           | 7202  |      |
| IGT  | 1.13 | 138.0 | P     | 03:58:35.151 | -0.4 |      |       |      |      |     |     |      |      | m    |           | 7201  |      |
| NEST | 1.29 | 88.0  | S     | 03:58:56.963 | 0.3  |      |       |      |      |     |     |      |      | m    |           | 7204  |      |
| NEST | 1.29 | 88.0  | P     | 03:58:38.396 | 0.2  |      |       |      |      |     |     |      |      | m    |           | 7203  |      |
| FNA  | 1.59 | 75.0  | Sn    | 03:59:06.126 | 0.2  |      |       |      |      |     |     |      |      | m    |           | 7206  |      |
| FNA  | 1.59 | 75.0  | Pn    | 03:58:43.352 | -0.2 |      |       |      |      |     |     |      |      | m    |           | 7205  |      |
| FNA  | 1.59 | 75.0  | AMl   | 03:59:09.880 |      |      |       |      |      |     |     | 0.1  | 0.66 | a    | Ml        | 2.3   | 4141 |
| LKD2 | 1.89 | 147.0 | Pn    | 03:58:49.603 | 1.0  |      |       |      |      |     |     |      |      | m    |           | 7207  |      |

DATA\_TYPE COMMENT GSE2.1  
Event 442

Official Magnitude:  
Ml 2.26

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 322  | 62  | 1.1100 |
| Intermediate: | 168  | 25  | 0.6800 |
| Min:          | 73   | 11  | 0.4700 |

BEGIN GSE2.1

MSG\_TYPE DATA  
 MSG\_ID 1551187378 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 443 5 km from Llëngë, Korçë, Albania

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/26 | 04:51:35.77 |     | 0.23 | 40.8392  | 20.4957   |      |      |    | 2.9   | 1.6 | 22   | 20   | 96  | 0.31  | 2.05  | m    |        |
| 482        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.8 | 0.0  | 10     | 482    |
| Md        | 2.7 | 0.0  | 4      | 482    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| KBN  | 0.31 | 134.0 | S     | 04:51:47.025 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 7210  |
| KBN  | 0.31 | 134.0 | P     | 04:51:42.514 | 0.4  |      |       |      |      |     |     |      |       | m    |           | 7209  |
| KBN  | 0.31 | 134.0 | AMl   | 04:51:48.760 |      |      |       |      |      |     |     | 20.1 | 0.34  | a    | Ml        | 3.3   |
| KBN  | 0.31 | 134.0 | AMd   | 04:52:15.519 |      |      |       |      |      |     |     | 0.0  | 33.00 | a    | Md        | 2.3   |
| NEST | 0.60 | 135.0 | S     | 04:51:57.444 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 7212  |
| NEST | 0.60 | 135.0 | P     | 04:51:47.543 | -0.6 |      |       |      |      |     |     |      |       | m    |           | 7211  |
| NEST | 0.60 | 135.0 | AMl   | 04:52:00.090 |      |      |       |      |      |     |     | 1.6  | 0.40  | a    | Ml        | 2.6   |
| BPA1 | 0.65 | 260.0 | S     | 04:51:58.694 | -0.3 |      |       |      |      |     |     |      |       | m    |           | 7214  |
| BPA1 | 0.65 | 260.0 | P     | 04:51:49.379 | 0.3  |      |       |      |      |     |     |      |       | m    |           | 7213  |
| BPA1 | 0.65 | 260.0 | AMl   | 04:52:07.730 |      |      |       |      |      |     |     | 2.3  | 0.58  | a    | Ml        | 2.8   |
| FNA  | 0.68 | 94.0  | S     | 04:51:59.802 | -0.2 |      |       |      |      |     |     |      |       | m    |           | 7216  |
| FNA  | 0.68 | 94.0  | P     | 04:51:48.904 | -0.7 |      |       |      |      |     |     |      |       | m    |           | 7215  |
| FNA  | 0.68 | 94.0  | AMl   | 04:52:02.380 |      |      |       |      |      |     |     | 1.9  | 0.44  | a    | Ml        | 2.8   |
| LSK  | 0.69 | 173.0 | S     | 04:52:00.319 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 7218  |
| LSK  | 0.69 | 173.0 | P     | 04:51:49.430 | -0.4 |      |       |      |      |     |     |      |       | m    |           | 7217  |
| LSK  | 0.69 | 173.0 | AMl   | 04:52:07.410 |      |      |       |      |      |     |     | 3.1  | 0.50  | a    | Ml        | 3.0   |
| LSK  | 0.69 | 173.0 | AMd   | 04:52:46.426 |      |      |       |      |      |     |     | 0.0  | 57.00 | a    | Md        | 2.9   |
| TIR  | 0.70 | 318.0 | S     | 04:52:00.810 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 7220  |
| TIR  | 0.70 | 318.0 | P     | 04:51:50.130 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 7219  |
| TIR  | 0.70 | 318.0 | AMl   | 04:52:06.300 |      |      |       |      |      |     |     | 0.6  | 0.68  | a    | Ml        | 2.3   |
| TIR  | 0.70 | 318.0 | AMl   | 04:52:03.380 |      |      |       |      |      |     |     | 0.6  | 0.60  | a    | Ml        | 2.3   |
| TIR  | 0.70 | 318.0 | AMd   | 04:52:41.288 |      |      |       |      |      |     |     | 0.0  | 51.16 | a    | Md        | 2.8   |
| PHP  | 0.85 | 358.0 | S     | 04:52:04.987 | -0.1 |      |       |      |      |     |     |      |       | m    |           | 7222  |
| PHP  | 0.85 | 358.0 | P     | 04:51:52.314 | -0.2 |      |       |      |      |     |     |      |       | m    |           | 7221  |
| PHP  | 0.85 | 358.0 | AMl   | 04:52:12.640 |      |      |       |      |      |     |     | 1.0  | 0.44  | a    | Ml        | 2.6   |
| PHP  | 0.85 | 358.0 | AMd   | 04:52:38.196 |      |      |       |      |      |     |     | 0.0  | 45.88 | a    | Md        | 2.7   |
| VLO  | 0.85 | 245.0 | P     | 04:51:52.218 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 7223  |
| SRN  | 1.03 | 202.0 | S     | 04:52:12.336 | -0.1 |      |       |      |      |     |     |      |       | m    |           | 7225  |
| SRN  | 1.03 | 202.0 | P     | 04:51:56.088 | -0.6 |      |       |      |      |     |     |      |       | m    |           | 7224  |
| SRN  | 1.03 | 202.0 | AMl   | 04:52:17.810 |      |      |       |      |      |     |     | 0.7  | 0.60  | a    | Ml        | 2.7   |
| PUK  | 1.29 | 340.0 | S     | 04:52:20.379 | 0.3  |      |       |      |      |     |     |      |       | m    |           | 7227  |
| PUK  | 1.29 | 340.0 | P     | 04:52:00.988 | -0.1 |      |       |      |      |     |     |      |       | m    |           | 7226  |
| PUK  | 1.29 | 340.0 | AMl   | 04:52:26.470 |      |      |       |      |      |     |     | 1.0  | 0.50  | a    | Ml        | 3.0   |
| IGT  | 1.31 | 186.0 | S     | 04:52:21.318 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 7229  |

|      |      |       |     |              |      |     |  |  |  |   |     |      |    |     |  |  |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|---|-----|------|----|-----|--|--|------|
| IGT  | 1.31 | 186.0 | P   | 04:52:01.752 | 0.0  | --- |  |  |  | m |     |      |    |     |  |  | 7228 |
| BCI  | 1.56 | 0.0   | P   | 04:52:06.910 | 0.0  | --- |  |  |  | m |     |      |    |     |  |  | 7233 |
| BCI  | 1.56 | 349.0 | S   | 04:52:28.630 | -0.1 | --- |  |  |  | m |     |      |    |     |  |  | 7230 |
| BCI  | 1.56 | 349.0 | AM1 | 04:52:35.300 |      | --- |  |  |  | a | 1.0 | 0.84 | M1 | 3.2 |  |  | 4156 |
| SCTE | 1.72 | 245.0 | P   | 04:52:06.042 | -3.0 | --- |  |  |  | m |     |      |    |     |  |  | 7231 |
| LKD2 | 2.05 | 176.0 | P   | 04:52:12.617 | -2.1 | --- |  |  |  | m |     |      |    |     |  |  | 7232 |

DATA\_TYPE COMMENT GSE2.1  
Event 443

Official Magnitude:  
M1 2.79

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 242  | 87  | 1.6300 |
| Intermediate: | 68   | 2   | 0.4300 |
| Min:          | 158  | 0   | 0.2800 |

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

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187391 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 342 Mediterranean Sea; 26 km from Moni Strofadon, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/01 | 05:01:48.97 |     | 0.39 | 37.4002  | 20.7870   |      |      |    | 5.4   | 3.5 | 17   | 16   | 300 | 1.39  | 4.99  | m    |        |
| 384        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

|           |     |      |        |        |
|-----------|-----|------|--------|--------|
| Magnitude | Err | Nsta | Author | OrigID |
| M1        | 4.2 | 0.0  | 5      | 384    |

Md 3.9 0.0 2 384

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|------|
| LKD2 | 1.39 | 356.0 | Sn    | 05:02:36.389 | -0.0 |      |       |      |      |     |     |      |        |      |           | 5815  |      |
| LKD2 | 1.39 | 356.0 | Pn    | 05:02:15.945 | -0.1 |      |       |      |      |     |     |      |        |      |           | 5814  |      |
| LKD2 | 1.39 | 356.0 | AMl   | 05:02:36.760 |      |      |       |      |      |     |     | 40.1 | 0.68   | a__  | Ml        | 4.7   | 3280 |
| LKD2 | 1.39 | 356.0 | AMd   | 05:05:03.515 |      |      |       |      |      |     |     | 0.0  | 167.57 | a__  | Md        | 4.0   | 3278 |
| IGT  | 2.16 | 351.0 | Sn    | 05:02:57.450 | -1.8 |      |       |      |      |     |     |      |        |      |           | 5817  |      |
| IGT  | 2.16 | 351.0 | Pn    | 05:02:29.396 | 0.3  |      |       |      |      |     |     |      |        |      |           | 5816  |      |
| IGT  | 2.16 | 351.0 | AMl   | 05:03:05.060 |      |      |       |      |      |     |     | 4.5  | 0.70   | a__  | Ml        | 4.2   | 3281 |
| IGT  | 2.16 | 351.0 | AMd   | 05:05:58.468 |      |      |       |      |      |     |     | 0.0  | 209.07 | a__  | Md        | 3.7   | 3279 |
| SRN  | 2.55 | 347.0 | S     | 05:03:09.532 | -0.5 |      |       |      |      |     |     |      |        |      |           | 5819  |      |
| SRN  | 2.55 | 347.0 | P     | 05:02:35.703 | 0.4  |      |       |      |      |     |     |      |        |      |           | 5818  |      |
| SRN  | 2.55 | 347.0 | AMl   | 05:03:15.070 |      |      |       |      |      |     |     | 1.5  | 0.52   | a__  | Ml        | 3.9   | 3282 |
| LSK  | 2.75 | 357.0 | S     | 05:03:14.693 | 0.4  |      |       |      |      |     |     |      |        |      |           | 5821  |      |
| LSK  | 2.75 | 357.0 | P     | 05:02:38.876 | 1.2  |      |       |      |      |     |     |      |        |      |           | 5820  |      |
| LSK  | 2.75 | 357.0 | AMl   | 05:03:36.590 |      |      |       |      |      |     |     | 8.4  | 0.74   | a__  | Ml        | 4.8   | 3283 |
| NEST | 3.02 | 3.0   | P     | 05:02:41.825 | 0.1  |      |       |      |      |     |     |      |        |      |           | 5822  |      |
| KBN  | 3.22 | 0.0   | P     | 05:02:44.454 | 0.2  |      |       |      |      |     |     |      |        |      |           | 5823  |      |
| VLO  | 3.22 | 343.0 | P     | 05:02:44.509 | 0.4  |      |       |      |      |     |     |      |        |      |           | 5824  |      |
| SCTE | 3.23 | 327.0 | P     | 05:02:44.504 | -0.4 |      |       |      |      |     |     |      |        |      |           | 5825  |      |
| FNA  | 3.41 | 7.0   | P     | 05:02:47.545 | 0.0  |      |       |      |      |     |     |      |        |      |           | 5826  |      |
| BPA1 | 3.43 | 346.0 | P     | 05:02:48.179 | 0.3  |      |       |      |      |     |     |      |        |      |           | 5827  |      |
| THE  | 3.64 | 27.0  | S     | 05:03:39.056 | 1.5  |      |       |      |      |     |     |      |        |      |           | 5829  |      |
| THE  | 3.64 | 27.0  | P     | 05:02:50.631 | -0.4 |      |       |      |      |     |     |      |        |      |           | 5828  |      |
| TIR  | 4.10 | 0.0   | P     | 05:02:55.631 | 0.0  |      |       |      |      |     |     |      |        |      |           | 5834  |      |
| PHP  | 4.29 | 357.0 | P     | 05:02:59.023 | -1.1 |      |       |      |      |     |     |      |        |      |           | 5830  |      |
| PUK  | 4.69 | 352.0 | S     | 05:04:04.141 | 0.0  |      |       |      |      |     |     |      |        |      |           | 5832  |      |
| PUK  | 4.69 | 352.0 | P     | 05:03:04.466 | -1.7 |      |       |      |      |     |     |      |        |      |           | 5831  |      |
| PUK  | 4.69 | 352.0 | AMl   | 05:04:31.920 |      |      |       |      |      |     |     | 0.6  | 0.58   | a__  | Ml        | 4.2   | 3284 |
| BCI  | 4.99 | 354.0 | P     | 05:03:09.855 | -0.8 |      |       |      |      |     |     |      |        |      |           | 5833  |      |

DATA\_TYPE COMMENT GSE2.1  
Event 342

Official Magnitude:  
Ml 4.21

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 163  | 49  | 4.5100 |
| Intermediate: | 258  | 3   | 3.1000 |
| Min:          | 350  | 41  | 1.3800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187390 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 359 Mediterranean Sea; 48 km from Anafonitria, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/04 | 05:52:10.42 |     | 1.10 | 37.6737  | 20.1540   |      |      |    | 27.7  | 4.7 | 22   | 31   | 301 | 1.18  | 4.69  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 4.0 | 0.0  | 10     | 401    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per  | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LKD2 | 1.18 | 19.0  | S     | 05:52:50.775 | 0.8  |      |       |      |      |     |     |      |      | m    |           | 6003  |      |
| LKD2 | 1.18 | 19.0  | P     | 05:52:32.359 | -0.7 |      |       |      |      |     |     |      |      | m    |           | 6002  |      |
| LKD2 | 1.18 | 19.0  | AM1   | 05:53:01.040 |      |      |       |      |      |     |     | 15.2 | 0.54 | a    | M1        | 4.1   | 3349 |
| IGT  | 1.86 | 4.0   | S     | 05:53:09.658 | 0.6  |      |       |      |      |     |     |      |      | m    |           | 6005  |      |
| IGT  | 1.86 | 4.0   | P     | 05:52:44.231 | 0.3  |      |       |      |      |     |     |      |      | m    |           | 6004  |      |
| IGT  | 1.86 | 4.0   | AM1   | 05:53:26.330 |      |      |       |      |      |     |     | 2.9  | 0.60 | a    | M1        | 3.9   | 3350 |
| SRN  | 2.21 | 357.0 | S     | 05:53:25.182 | 6.6  |      |       |      |      |     |     |      |      | m    |           | 6007  |      |
| SRN  | 2.21 | 357.0 | P     | 05:52:49.493 | 0.1  |      |       |      |      |     |     |      |      | m    |           | 6006  |      |
| SRN  | 2.21 | 357.0 | AM1   | 05:53:41.660 |      |      |       |      |      |     |     | 1.2  | 0.88 | a    | M1        | 3.7   | 3351 |
| LSK  | 2.50 | 7.0   | S     | 05:53:26.884 | 1.7  |      |       |      |      |     |     |      |      | m    |           | 6009  |      |
| LSK  | 2.50 | 7.0   | P     | 05:52:53.567 | 0.4  |      |       |      |      |     |     |      |      | m    |           | 6008  |      |
| LSK  | 2.50 | 7.0   | AM1   | 05:54:00.710 |      |      |       |      |      |     |     | 4.2  | 1.22 | a    | M1        | 4.3   | 3352 |
| SCTE | 2.74 | 332.0 | S     | 05:53:32.371 | 0.8  |      |       |      |      |     |     |      |      | m    |           | 6011  |      |
| SCTE | 2.74 | 332.0 | P     | 05:52:57.214 | 0.4  |      |       |      |      |     |     |      |      | m    |           | 6010  |      |
| SCTE | 2.74 | 332.0 | AM1   | 05:53:33.090 |      |      |       |      |      |     |     | 2.1  | 0.60 | a    | M1        | 4.1   | 3353 |
| NEST | 2.82 | 13.0  | S     | 05:53:36.058 | 2.2  |      |       |      |      |     |     |      |      | m    |           | 6013  |      |
| NEST | 2.82 | 13.0  | P     | 05:52:59.064 | 1.0  |      |       |      |      |     |     |      |      | m    |           | 6012  |      |
| NEST | 2.82 | 13.0  | AM1   | 05:54:01.110 |      |      |       |      |      |     |     | 0.8  | 0.52 | a    | M1        | 3.8   | 3354 |
| KBN  | 2.99 | 9.0   | P     | 05:53:02.092 | 2.1  |      |       |      |      |     |     |      |      | m    |           | 6014  |      |
| FNA  | 3.25 | 16.0  | S     | 05:53:44.451 | -0.3 |      |       |      |      |     |     |      |      | m    |           | 6016  |      |
| FNA  | 3.25 | 16.0  | P     | 05:53:03.861 | -0.5 |      |       |      |      |     |     |      |      | m    |           | 6015  |      |
| FNA  | 3.25 | 16.0  | AM1   | 05:54:23.600 |      |      |       |      |      |     |     | 0.5  | 0.96 | a    | M1        | 3.8   | 3355 |
| THE  | 3.67 | 35.0  | P     | 05:53:06.808 | -3.8 |      |       |      |      |     |     |      |      | m    |           | 6017  |      |
| TIR  | 3.69 | 0.0   | P     | 05:53:10.356 | 0.0  |      |       |      |      |     |     |      |      | m    |           | 6026  |      |
| TIR  | 3.68 | 357.0 | S     | 05:53:54.840 | -0.9 |      |       |      |      |     |     |      |      | m    |           | 6018  |      |
| TIR  | 3.68 | 357.0 | AM1   | 05:54:00.180 |      |      |       |      |      |     |     | 0.4  | 0.76 | a    | M1        | 3.7   | 3357 |
| TIR  | 3.68 | 357.0 | AM1   | 05:54:02.820 |      |      |       |      |      |     |     | 0.3  | 0.60 | a    | M1        | 3.7   | 3356 |
| PHP  | 4.01 | 3.0   | P     | 05:53:14.515 | -0.8 |      |       |      |      |     |     |      |      | m    |           | 6019  |      |
| ULC  | 4.34 | 352.0 | P     | 05:53:18.522 | -1.9 |      |       |      |      |     |     |      |      | m    |           | 6020  |      |
| PUK  | 4.37 | 358.0 | S     | 05:54:11.632 | -1.7 |      |       |      |      |     |     |      |      | m    |           | 6022  |      |
| PUK  | 4.37 | 358.0 | P     | 05:53:19.030 | -1.6 |      |       |      |      |     |     |      |      | m    |           | 6021  |      |
| PUK  | 4.37 | 358.0 | AM1   | 05:54:13.830 |      |      |       |      |      |     |     | 0.5  | 0.36 | a    | M1        | 4.0   | 3359 |
| PUK  | 4.37 | 358.0 | AM1   | 05:54:18.820 |      |      |       |      |      |     |     | 0.5  | 0.62 | a    | M1        | 4.0   | 3358 |
| MRVN | 4.57 | 320.0 | P     | 05:53:25.169 | 1.4  |      |       |      |      |     |     |      |      | m    |           | 6023  |      |
| BCI  | 4.69 | 0.0   | S     | 05:54:20.101 | -1.5 |      |       |      |      |     |     |      |      | m    |           | 6025  |      |
| BCI  | 4.69 | 0.0   | P     | 05:53:24.676 | -0.7 |      |       |      |      |     |     |      |      | m    |           | 6024  |      |
| BCI  | 4.69 | 0.0   | AM1   | 05:54:21.140 |      |      |       |      |      |     |     | 1.1  | 0.80 | a    | M1        | 4.5   | 3360 |

DATA\_TYPE COMMENT GSE2.1  
 Event 359

Official Magnitude:  
 Ml 3.95

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 129  | 33  | 8.3800 |
| Intermediate: | 238  | 24  | 4.2600 |
| Min:          | 355  | 46  | 3.9800 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187389 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 361 Mediterranean Sea; 10 km from Moni Strofadon, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/04 | 17:41:00.45 |     | 0.07 | 37.3335  | 20.9583   |      |      |    | 18.0  | 2.0 | 14   | 10   | 293 | 1.47  | 5.25  | m    |        |
| OrigID 403 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 4.6 | 0.0  | 7      | 403    |
| Md        | 3.9 | 0.0  | 9      | 403    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|
| LKD2 | 1.47 | 351.0 | S     | 17:41:47.593 | -1.5 |      |       |      |      |     |     |      |        | m    |           | 6045  |
| LKD2 | 1.47 | 351.0 | P     | 17:41:28.204 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 6044  |
| LKD2 | 1.47 | 351.0 | AMl   | 17:42:02.730 |      |      |       |      |      |     |     | 30.0 | 0.86   | a    | Ml        | 4.6   |
| LKD2 | 1.47 | 351.0 | AMd   | 17:43:02.998 |      |      |       |      |      |     |     | 0.0  | 94.79  | a    | Md        | 3.5   |
| IGT  | 2.25 | 348.0 | S     | 17:42:10.716 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6047  |
| IGT  | 2.25 | 348.0 | P     | 17:41:40.632 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6046  |
| IGT  | 2.25 | 348.0 | AMd   | 17:43:43.211 |      |      |       |      |      |     |     | 0.0  | 122.58 | a    | Md        | 3.2   |
| SRN  | 2.65 | 344.0 | S     | 17:42:21.736 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6049  |
| SRN  | 2.65 | 344.0 | P     | 17:41:46.957 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6048  |
| SRN  | 2.65 | 344.0 | AMl   | 17:42:50.980 |      |      |       |      |      |     |     | 1.7  | 1.34   | a    | Ml        | 4.0   |
| SRN  | 2.65 | 344.0 | AMd   | 17:44:04.248 |      |      |       |      |      |     |     | 0.0  | 137.29 | a    | Md        | 3.9   |
| LSK  | 2.84 | 0.0   | P     | 17:41:50.915 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6060  |
| LSK  | 2.83 | 355.0 | S     | 17:42:25.386 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6050  |
| LSK  | 2.83 | 355.0 | AMl   | 17:42:55.470 |      |      |       |      |      |     |     | 11.5 | 0.90   | a    | Ml        | 4.9   |
| NEST | 3.08 | 1.0   | S     | 17:42:32.012 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6052  |
| NEST | 3.08 | 1.0   | P     | 17:41:52.165 | -0.6 |      |       |      |      |     |     |      |        | m    |           | 6051  |
| NEST | 3.08 | 1.0   | AMl   | 17:42:58.100 |      |      |       |      |      |     |     | 4.2  | 1.50   | a    | Ml        | 4.6   |
| NEST | 3.08 | 1.0   | AMd   | 17:44:03.206 |      |      |       |      |      |     |     | 0.0  | 131.04 | a    | Md        | 3.9   |
| SCTE | 3.36 | 326.0 | S     | 17:42:39.248 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 6054  |

|      |      |       |     |              |      |     |  |  |  |  |  |  |  |  |  |  |   |    |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|--|--|--|---|----|------|
| SCTE | 3.36 | 326.0 | P   | 17:41:56.818 | -0.1 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6053 |
| SCTE | 3.36 | 326.0 | AMl | 17:42:47.120 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Ml | 3389 |
| SCTE | 3.36 | 326.0 | AMd | 17:44:02.581 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Md | 3380 |
| FNA  | 3.46 | 5.0   | S   | 17:42:41.848 | 0.1  | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6056 |
| FNA  | 3.46 | 5.0   | P   | 17:41:58.324 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6055 |
| FNA  | 3.46 | 5.0   | AMl | 17:42:56.850 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Ml | 3390 |
| FNA  | 3.46 | 5.0   | AMd | 17:44:20.296 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Md | 3381 |
| THE  | 3.64 | 24.0  | P   | 17:42:01.041 | -0.1 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6057 |
| THE  | 3.64 | 24.0  | AMl | 17:42:57.480 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Ml | 3391 |
| THE  | 3.64 | 24.0  | AMd | 17:43:45.498 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Md | 3382 |
| NOCI | 4.59 | 320.0 | P   | 17:42:15.034 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6058 |
| NOCI | 4.59 | 320.0 | AMd | 17:45:02.373 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Md | 3383 |
| MRVN | 5.25 | 317.0 | P   | 17:42:24.762 | 0.1  | --- |  |  |  |  |  |  |  |  |  |  | m |    | 6059 |
| MRVN | 5.25 | 317.0 | AMd | 17:44:56.540 |      | --- |  |  |  |  |  |  |  |  |  |  | a | Md | 3384 |

DATA\_TYPE COMMENT GSE2.1  
Event 361

Official Magnitude:  
Ml 4.57

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 164  | 49  | 2.6600 |
| Intermediate: | 268  | 11  | 0.9200 |
| Min:          | 7    | 39  | 0.6700 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187389 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 362 Mediterranean Sea; 14 km from Moni Strofadon, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err  | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| 2019/02/04 | 16:51:02.68 |     | 0.22 | 37.1818  | 20.8863   |      |      |    | 18.0  | 31.6 | 13   | 10   | 314 | 1.62  | 5.32  | m    |        |
| 404        |             |     |      |          |           |      |      |    |       |      |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.6 | 0.0  | 6      | 404    |
| Md        | 3.8 | 0.0  | 8      | 404    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|
| LKD2 | 1.61 | 354.0 | S     | 16:51:55.646 | -0.1 |      |       |      |      |     |     |     |        |      | m         | 6062  |
| LKD2 | 1.61 | 354.0 | P     | 16:51:32.896 | -0.1 |      |       |      |      |     |     |     |        |      | m         | 6061  |
| LKD2 | 1.61 | 354.0 | AMl   | 16:52:32.510 |      |      |       |      |      |     |     | 2.5 | 1.32   | a    | Ml        | 3400  |
| LKD2 | 1.61 | 354.0 | AMd   | 16:53:39.456 |      |      |       |      |      |     |     | 0.0 | 126.56 | a    | Md        | 3392  |



|      |      |       |     |              |      |     |     |        |     |     |     |     |     |     |     |     |     |      |
|------|------|-------|-----|--------------|------|-----|-----|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| IGT  | 2.39 | 350.0 | S   | 16:52:16.597 | 0.2  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6064 |
| IGT  | 2.39 | 350.0 | P   | 16:51:44.593 | -0.2 | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6063 |
| IGT  | 2.39 | 350.0 | AMl | 16:52:29.020 |      | --- | 0.5 | 0.50   | a   | Ml  | 3.4 | --- | --- | --- | --- | --- | --- | 3401 |
| IGT  | 2.39 | 350.0 | AMd | 16:53:54.878 |      | --- | 0.0 | 130.29 | a   | Md  | 3.3 | --- | --- | --- | --- | --- | --- | 3393 |
| SRN  | 2.78 | 346.0 | S   | 16:52:27.396 | 0.1  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6066 |
| SRN  | 2.78 | 346.0 | P   | 16:51:50.849 | -0.2 | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6065 |
| SRN  | 2.78 | 346.0 | AMl | 16:52:39.000 |      | --- | 0.2 | 0.28   | a   | Ml  | 3.2 | --- | --- | --- | --- | --- | --- | 3402 |
| SRN  | 2.78 | 346.0 | AMd | 16:53:48.415 |      | --- | 0.0 | 117.57 | a   | Md  | 3.8 | --- | --- | --- | --- | --- | --- | 3394 |
| LSK  | 2.98 | 0.0   | P   | 16:51:52.373 | 0.0  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6075 |
| LSK  | 2.97 | 356.0 | S   | 16:52:31.385 | 0.1  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6067 |
| LSK  | 2.97 | 356.0 | AMl | 16:53:11.680 |      | --- | 1.0 | 0.92   | a   | Ml  | 3.9 | --- | --- | --- | --- | --- | --- | 3403 |
| NEST | 3.23 | 2.0   | S   | 16:52:38.237 | 0.1  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6069 |
| NEST | 3.23 | 2.0   | P   | 16:51:56.649 | -0.6 | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6068 |
| NEST | 3.23 | 2.0   | AMl | 16:52:49.790 |      | --- | 0.3 | 0.52   | a   | Ml  | 3.5 | --- | --- | --- | --- | --- | --- | 3404 |
| NEST | 3.23 | 2.0   | AMd | 16:53:57.998 |      | --- | 0.0 | 121.35 | a   | Md  | 3.8 | --- | --- | --- | --- | --- | --- | 3395 |
| SCTE | 3.46 | 328.0 | P   | 16:52:01.033 | 0.5  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6070 |
| SCTE | 3.46 | 328.0 | AMd | 16:53:36.956 |      | --- | 0.0 | 95.92  | a   | Md  | 3.6 | --- | --- | --- | --- | --- | --- | 3396 |
| FNA  | 3.62 | 5.0   | S   | 16:52:48.096 | 0.1  | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6072 |
| FNA  | 3.62 | 5.0   | P   | 16:52:00.701 | -2.2 | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6071 |
| FNA  | 3.62 | 5.0   | AMl | 16:52:50.120 |      | --- | 0.4 | 0.82   | a   | Ml  | 3.7 | --- | --- | --- | --- | --- | --- | 3405 |
| FNA  | 3.62 | 5.0   | AMd | 16:54:04.672 |      | --- | 0.0 | 123.97 | a   | Md  | 3.9 | --- | --- | --- | --- | --- | --- | 3397 |
| NOCI | 4.67 | 322.0 | P   | 16:52:18.256 | -0.2 | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6073 |
| NOCI | 4.67 | 322.0 | AMd | 16:54:31.540 |      | --- | 0.0 | 133.28 | a   | Md  | 4.0 | --- | --- | --- | --- | --- | --- | 3398 |
| MRVN | 5.32 | 319.0 | P   | 16:52:27.189 | -0.8 | --- | m   | ---    | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6074 |
| MRVN | 5.32 | 319.0 | AMd | 16:54:48.623 |      | --- | 0.0 | 141.43 | a   | Md  | 4.2 | --- | --- | --- | --- | --- | --- | 3399 |

DATA\_TYPE COMMENT GSE2.1  
Event 362

Official Magnitude:  
Ml 3.58

Error ellipse:

|               | Azim | Dip | Mag     |
|---------------|------|-----|---------|
| Max:          | 0    | 90  | 31.6100 |
| Intermediate: | 286  | 0   | 2.8100  |
| Min:          | 16   | 0   | 1.2100  |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187389 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 363 Mediterranean Sea; 17 km from Kalamitsi, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/05 | 02:26:05.26 |     | 0.27 | 38.7888  | 20.4180   |      |      |    | 30.8  | 0.7 | 35   | 31   | 218 | 0.19  | 4.60  | m    |        |

405

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 5.6 | 0.0  | 14     | 405    |
| Md        | 4.4 | 0.0  | 3      | 405    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp    | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|--------|--------|------|-----------|-------|------|
| LKD2 | 0.19 | 89.0  | S     | 02:26:16.672 | 0.2  |      |       |      |      |     |     |        |        |      |           | 6077  |      |
| LKD2 | 0.19 | 89.0  | P     | 02:26:11.938 | 0.3  |      |       |      |      |     |     |        |        |      |           | 6076  |      |
| LKD2 | 0.19 | 89.0  | AM1   | 02:26:18.350 |      |      |       |      |      |     |     | 5428.8 | 0.58   | a__  | M1        | 5.9   | 3409 |
| LKD2 | 0.19 | 89.0  | AMd   | 02:28:25.283 |      |      |       |      |      |     |     | 0.0    | 133.35 | a__  | Md        | 3.7   | 3406 |
| IGT  | 0.74 | 355.0 | S     | 02:26:31.308 | -0.2 |      |       |      |      |     |     |        |        |      |           | 6079  |      |
| IGT  | 0.74 | 355.0 | P     | 02:26:19.974 | -0.3 |      |       |      |      |     |     |        |        |      |           | 6078  |      |
| IGT  | 0.74 | 355.0 | AM1   | 02:26:40.150 |      |      |       |      |      |     |     | 363.6  | 0.66   | a__  | M1        | 5.2   | 3410 |
| SRN  | 1.14 | 344.0 | S     | 02:26:43.949 | 0.0  |      |       |      |      |     |     |        |        |      |           | 6081  |      |
| SRN  | 1.14 | 344.0 | P     | 02:26:27.246 | -0.1 |      |       |      |      |     |     |        |        |      |           | 6080  |      |
| SRN  | 1.14 | 344.0 | AM1   | 02:27:04.230 |      |      |       |      |      |     |     | 109.9  | 0.86   | a__  | M1        | 5.0   | 3411 |
| SRN  | 1.14 | 344.0 | AMd   | 02:30:24.707 |      |      |       |      |      |     |     | 0.0    | 237.46 | a__  | Md        | 4.4   | 3407 |
| LSK  | 1.37 | 5.0   | S     | 02:26:50.133 | 0.2  |      |       |      |      |     |     |        |        |      |           | 6083  |      |
| LSK  | 1.37 | 5.0   | P     | 02:26:30.442 | -0.3 |      |       |      |      |     |     |        |        |      |           | 6082  |      |
| LSK  | 1.37 | 5.0   | AM1   | 02:26:54.820 |      |      |       |      |      |     |     | 517.4  | 0.70   | a__  | M1        | 5.8   | 3412 |
| NEST | 1.70 | 16.0  | S     | 02:26:59.225 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6085  |      |
| NEST | 1.70 | 16.0  | P     | 02:26:36.485 | 0.4  |      |       |      |      |     |     |        |        |      |           | 6084  |      |
| NEST | 1.70 | 16.0  | AM1   | 02:27:03.810 |      |      |       |      |      |     |     | 142.0  | 0.96   | a__  | M1        | 5.5   | 3413 |
| NEST | 1.70 | 16.0  | AMd   | 02:30:41.249 |      |      |       |      |      |     |     | 0.0    | 244.76 | a__  | Md        | 4.4   | 3408 |
| VLO  | 1.82 | 338.0 | S     | 02:27:01.470 | 0.2  |      |       |      |      |     |     |        |        |      |           | 6087  |      |
| VLO  | 1.82 | 338.0 | P     | 02:26:37.144 | -0.1 |      |       |      |      |     |     |        |        |      |           | 6086  |      |
| VLO  | 1.82 | 338.0 | AM1   | 02:27:14.850 |      |      |       |      |      |     |     | 291.3  | 0.56   | a__  | M1        | 5.9   | 3414 |
| KBN  | 1.85 | 8.0   | S     | 02:27:02.506 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6089  |      |
| KBN  | 1.85 | 8.0   | P     | 02:26:38.133 | 0.2  |      |       |      |      |     |     |        |        |      |           | 6088  |      |
| KBN  | 1.85 | 8.0   | AM1   | 02:27:09.860 |      |      |       |      |      |     |     | 364.3  | 0.76   | a__  | M1        | 6.0   | 3415 |
| SCTE | 1.98 | 312.0 | S     | 02:27:06.665 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6091  |      |
| SCTE | 1.98 | 312.0 | P     | 02:26:40.531 | 0.2  |      |       |      |      |     |     |        |        |      |           | 6090  |      |
| SCTE | 1.98 | 312.0 | AM1   | 02:27:22.600 |      |      |       |      |      |     |     | 139.8  | 0.70   | a__  | M1        | 5.6   | 3416 |
| BPA1 | 2.02 | 344.0 | S     | 02:27:07.610 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6093  |      |
| BPA1 | 2.02 | 344.0 | P     | 02:26:40.973 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6092  |      |
| BPA1 | 2.02 | 344.0 | AM1   | 02:27:50.350 |      |      |       |      |      |     |     | 218.7  | 1.68   | a__  | M1        | 5.8   | 3417 |
| FNA  | 2.12 | 20.0  | S     | 02:27:10.367 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6095  |      |
| FNA  | 2.12 | 20.0  | P     | 02:26:43.006 | 0.6  |      |       |      |      |     |     |        |        |      |           | 6094  |      |
| FNA  | 2.12 | 20.0  | AM1   | 02:27:18.530 |      |      |       |      |      |     |     | 143.4  | 0.54   | a__  | M1        | 5.7   | 3418 |
| TIR  | 2.59 | 0.0   | P     | 02:26:50.127 | 0.0  |      |       |      |      |     |     |        |        |      |           | 6119  |      |
| TIR  | 2.59 | 351.0 | S     | 02:27:22.440 | 0.2  |      |       |      |      |     |     |        |        |      |           | 6096  |      |
| TIR  | 2.59 | 351.0 | AM1   | 02:27:46.000 |      |      |       |      |      |     |     | 48.5   | 1.74   | a__  | M1        | 5.5   | 3419 |
| THE  | 2.69 | 46.0  | S     | 02:27:24.744 | -0.1 |      |       |      |      |     |     |        |        |      |           | 6098  |      |
| THE  | 2.69 | 46.0  | P     | 02:26:50.107 | -0.6 |      |       |      |      |     |     |        |        |      |           | 6097  |      |
| THE  | 2.69 | 46.0  | AM1   | 02:27:41.270 |      |      |       |      |      |     |     | 33.7   | 1.52   | a__  | M1        | 5.3   | 3420 |
| PHP  | 2.89 | 0.0   | S     | 02:27:29.519 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6100  |      |
| PHP  | 2.89 | 0.0   | P     | 02:26:53.446 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6099  |      |
| PHP  | 2.89 | 0.0   | AM1   | 02:27:43.040 |      |      |       |      |      |     |     | 39.6   | 0.86   | a__  | M1        | 5.5   | 3421 |
| NOCI | 3.27 | 309.0 | P     | 02:26:59.286 | 0.1  |      |       |      |      |     |     |        |        |      |           | 6101  |      |

|      |      |       |     |              |      |     |  |  |  |      |      |   |    |     |  |   |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|------|------|---|----|-----|--|---|------|
| PUK  | 3.27 | 354.0 | S   | 02:27:39.605 | 0.0  | --- |  |  |  |      |      |   |    |     |  | m | 6103 |
| PUK  | 3.27 | 354.0 | P   | 02:26:58.971 | -0.2 | --- |  |  |  |      |      |   |    |     |  | m | 6102 |
| PUK  | 3.27 | 354.0 | AMl | 02:28:19.470 |      | --- |  |  |  | 39.3 | 1.28 | a | Ml | 5.6 |  |   | 3422 |
| ULC  | 3.29 | 345.0 | P   | 02:26:58.396 | -1.2 | --- |  |  |  |      |      |   |    |     |  | m | 6104 |
| DRME | 3.52 | 345.0 | P   | 02:27:02.045 | -0.9 | --- |  |  |  |      |      |   |    |     |  | m | 6105 |
| BCI  | 3.58 | 356.0 | S   | 02:27:47.485 | -0.1 | --- |  |  |  |      |      |   |    |     |  | m | 6107 |
| BCI  | 3.58 | 356.0 | P   | 02:27:03.657 | -0.1 | --- |  |  |  |      |      |   |    |     |  | m | 6106 |
| BUM  | 3.69 | 343.0 | P   | 02:27:04.312 | -1.1 | --- |  |  |  |      |      |   |    |     |  | m | 6108 |
| PVY  | 3.82 | 356.0 | P   | 02:27:06.765 | -0.5 | --- |  |  |  |      |      |   |    |     |  | m | 6109 |
| CEME | 3.92 | 344.0 | P   | 02:27:07.057 | -1.8 | --- |  |  |  |      |      |   |    |     |  | m | 6110 |
| HCV  | 3.94 | 339.0 | P   | 02:27:07.266 | -1.8 | --- |  |  |  |      |      |   |    |     |  | m | 6111 |
| MRVN | 3.96 | 307.0 | P   | 02:27:09.555 | 0.2  | --- |  |  |  |      |      |   |    |     |  | m | 6112 |
| BEY  | 4.09 | 355.0 | P   | 02:27:10.667 | -0.7 | --- |  |  |  |      |      |   |    |     |  | m | 6113 |
| KOME | 4.11 | 351.0 | P   | 02:27:11.085 | -0.6 | --- |  |  |  |      |      |   |    |     |  | m | 6114 |
| NKME | 4.12 | 345.0 | P   | 02:27:10.323 | -1.5 | --- |  |  |  |      |      |   |    |     |  | m | 6115 |
| BRY  | 4.35 | 342.0 | P   | 02:27:13.240 | -1.8 | --- |  |  |  |      |      |   |    |     |  | m | 6116 |
| UPM  | 4.55 | 346.0 | P   | 02:27:16.257 | -1.9 | --- |  |  |  |      |      |   |    |     |  | m | 6117 |
| PLE  | 4.60 | 351.0 | P   | 02:27:17.104 | -1.7 | --- |  |  |  |      |      |   |    |     |  | m | 6118 |

DATA\_TYPE COMMENT GSE2.1  
Event 363

Official Magnitude:  
Ml 5.62

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 170  | 39  | 1.0500 |
| Intermediate: | 68   | 15  | 0.7600 |
| Min:          | 321  | 47  | 0.5100 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187388 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 364 Mediterranean Sea; 25 km from Agios Nikitas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/05 | 05:14:36.49 |     | 0.16 | 38.9527  | 20.4232   |      |      |    | 13.8  | 1.2 | 14   | 9    | 177 | 0.24  | 2.58  | m    | 406    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.6 | 0.0  | 7      | 406    |
| Md        | 3.8 | 0.0  | 5      | 406    |

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

|      |      |       |     |              |      |     |      |        |   |    |     |      |
|------|------|-------|-----|--------------|------|-----|------|--------|---|----|-----|------|
| LKD2 | 0.24 | 0.0   | P   | 05:14:41.798 | 0.0  | --- |      |        | m |    |     | 6135 |
| LKD2 | 0.25 | 131.0 | S   | 05:14:46.248 | -0.0 | --- |      |        | m |    |     | 6120 |
| LKD2 | 0.25 | 131.0 | AM1 | 05:14:49.520 |      | --- | 31.4 | 0.40   | a | M1 | 3.5 | 3428 |
| IGT  | 0.58 | 353.0 | S   | 05:14:57.037 | -0.2 | --- |      |        | m |    |     | 6122 |
| IGT  | 0.58 | 353.0 | P   | 05:14:48.268 | -0.1 | --- |      |        | m |    |     | 6121 |
| IGT  | 0.58 | 353.0 | AM1 | 05:15:00.920 |      | --- | 6.1  | 0.32   | a | M1 | 3.2 | 3429 |
| IGT  | 0.58 | 353.0 | AMd | 05:17:53.061 |      | --- | 0.0  | 184.79 | a | Md | 3.5 | 3423 |
| SRN  | 0.98 | 341.0 | S   | 05:15:11.036 | 0.1  | --- |      |        | m |    |     | 6124 |
| SRN  | 0.98 | 341.0 | P   | 05:14:55.853 | -0.3 | --- |      |        | m |    |     | 6123 |
| SRN  | 0.98 | 341.0 | AM1 | 05:15:17.850 |      | --- | 1.5  | 0.52   | a | M1 | 2.9 | 3430 |
| SRN  | 0.98 | 341.0 | AMd | 05:17:12.195 |      | --- | 0.0  | 136.34 | a | Md | 3.8 | 3424 |
| LSK  | 1.20 | 6.0   | S   | 05:15:17.011 | 0.1  | --- |      |        | m |    |     | 6126 |
| LSK  | 1.20 | 6.0   | P   | 05:15:00.023 | 0.4  | --- |      |        | m |    |     | 6125 |
| LSK  | 1.20 | 6.0   | AM1 | 05:15:24.010 |      | --- | 8.3  | 0.82   | a | M1 | 3.9 | 3431 |
| LSK  | 1.20 | 6.0   | AMd | 05:17:20.050 |      | --- | 0.0  | 140.03 | a | Md | 3.8 | 3425 |
| NEST | 1.54 | 18.0  | S   | 05:15:27.601 | 0.1  | --- |      |        | m |    |     | 6128 |
| NEST | 1.54 | 18.0  | P   | 05:15:05.731 | 0.1  | --- |      |        | m |    |     | 6127 |
| NEST | 1.54 | 18.0  | AM1 | 05:15:33.000 |      | --- | 2.3  | 0.48   | a | M1 | 3.6 | 3432 |
| NEST | 1.54 | 18.0  | AMd | 05:18:20.617 |      | --- | 0.0  | 194.89 | a | Md | 4.2 | 3426 |
| KBN  | 1.69 | 9.0   | S   | 05:15:31.604 | 0.1  | --- |      |        | m |    |     | 6130 |
| KBN  | 1.69 | 9.0   | P   | 05:15:09.839 | 1.9  | --- |      |        | m |    |     | 6129 |
| KBN  | 1.69 | 9.0   | AM1 | 05:15:36.720 |      | --- | 2.0  | 0.88   | a | M1 | 3.6 | 3433 |
| KBN  | 1.69 | 9.0   | AMd | 05:17:30.184 |      | --- | 0.0  | 140.34 | a | Md | 3.9 | 3427 |
| SCTE | 1.88 | 308.0 | P   | 05:15:11.730 | 0.1  | --- |      |        | m |    |     | 6131 |
| FNA  | 1.97 | 21.0  | S   | 05:15:40.084 | -0.2 | --- |      |        | m |    |     | 6133 |
| FNA  | 1.97 | 21.0  | P   | 05:15:13.031 | 0.1  | --- |      |        | m |    |     | 6132 |
| FNA  | 1.97 | 21.0  | AM1 | 05:15:42.890 |      | --- | 1.7  | 0.50   | a | M1 | 3.7 | 3434 |
| THE  | 2.58 | 48.0  | P   | 05:15:21.280 | -0.6 | --- |      |        | m |    |     | 6134 |

DATA\_TYPE COMMENT GSE2.1  
Event 364

Official Magnitude:  
M1 3.55

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 201  | 61  | 1.3300 |
| Intermediate: | 75   | 18  | 0.7900 |
| Min:          | 337  | 22  | 0.3900 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187388 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 366 Mediterranean Sea; 17 km from Agios Nikitas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/06 | 05:30:04.88 |     | 0.57 | 38.8315  | 20.4240   |      |      |    | 30.5  | 1.8 | 20   | 11   | 317 | 0.70  | 3.54  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| ML        | 4.0 | 0.0  | 7      | 408    |
| Md        | 3.3 | 0.0  | 6      | 408    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|------|
| IGT  | 0.70 | 355.0 | Sg    | 05:30:29.832 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6159  |      |
| IGT  | 0.70 | 355.0 | Pg    | 05:30:18.205 | -0.9 |      |       |      |      |     |     |      |       | m    |           | 6158  |      |
| IGT  | 0.70 | 355.0 | AMd   | 05:31:06.922 |      |      |       |      |      |     |     | 0.0  | 48.72 | a    | Md        | 2.1   | 3445 |
| SRN  | 1.10 | 343.0 | S     | 05:30:42.448 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6161  |      |
| SRN  | 1.10 | 343.0 | Pg    | 05:30:26.417 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6160  |      |
| SRN  | 1.10 | 343.0 | AMl   | 05:30:48.490 |      |      |       |      |      |     |     | 2.1  | 0.50  | a    | Ml        | 3.2   | 3451 |
| SRN  | 1.10 | 343.0 | AMd   | 05:31:56.579 |      |      |       |      |      |     |     | 0.0  | 90.16 | a    | Md        | 3.4   | 3446 |
| LSK  | 1.32 | 5.0   | Sg    | 05:30:48.753 | 0.5  |      |       |      |      |     |     |      |       | m    |           | 6163  |      |
| LSK  | 1.32 | 5.0   | Pg    | 05:30:29.760 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6162  |      |
| LSK  | 1.32 | 5.0   | AMl   | 05:30:57.450 |      |      |       |      |      |     |     | 11.2 | 0.76  | a    | Ml        | 4.1   | 3452 |
| LSK  | 1.32 | 5.0   | AMd   | 05:31:51.815 |      |      |       |      |      |     |     | 0.0  | 82.06 | a    | Md        | 3.3   | 3447 |
| NEST | 1.65 | 16.0  | Sg    | 05:30:57.958 | 0.3  |      |       |      |      |     |     |      |       | m    |           | 6165  |      |
| NEST | 1.65 | 16.0  | Pg    | 05:30:35.422 | 0.4  |      |       |      |      |     |     |      |       | m    |           | 6164  |      |
| VLO  | 1.79 | 337.0 | Sn    | 05:31:00.849 | 0.9  |      |       |      |      |     |     |      |       | m    |           | 6167  |      |
| VLO  | 1.79 | 337.0 | Pn    | 05:30:36.722 | 0.4  |      |       |      |      |     |     |      |       | m    |           | 6166  |      |
| VLO  | 1.79 | 337.0 | AMl   | 05:31:22.970 |      |      |       |      |      |     |     | 5.9  | 0.40  | a    | Ml        | 4.1   | 3453 |
| VLO  | 1.79 | 337.0 | AMd   | 05:31:58.605 |      |      |       |      |      |     |     | 0.0  | 81.88 | a    | Md        | 3.3   | 3448 |
| KBN  | 1.81 | 8.0   | Sg    | 05:31:01.637 | 0.6  |      |       |      |      |     |     |      |       | m    |           | 6169  |      |
| KBN  | 1.81 | 8.0   | P     | 05:30:38.652 | 1.7  |      |       |      |      |     |     |      |       | m    |           | 6168  |      |
| KBN  | 1.81 | 8.0   | AMl   | 05:31:17.950 |      |      |       |      |      |     |     | 3.7  | 0.98  | a    | Ml        | 4.0   | 3454 |
| KBN  | 1.81 | 8.0   | AMd   | 05:31:57.226 |      |      |       |      |      |     |     | 0.0  | 78.57 | a    | Md        | 3.3   | 3449 |
| FNA  | 2.08 | 20.0  | Sn    | 05:31:08.441 | -0.4 |      |       |      |      |     |     |      |       | m    |           | 6171  |      |
| FNA  | 2.08 | 20.0  | Pn    | 05:30:42.319 | 0.9  |      |       |      |      |     |     |      |       | m    |           | 6170  |      |
| FNA  | 2.08 | 20.0  | AMl   | 05:31:14.580 |      |      |       |      |      |     |     | 3.6  | 0.54  | a    | Ml        | 4.1   | 3455 |
| TIR  | 2.55 | 0.0   | Pn    | 05:30:48.229 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6179  |      |
| TIR  | 2.55 | 351.0 | Sn    | 05:31:20.413 | -0.4 |      |       |      |      |     |     |      |       | m    |           | 6172  |      |
| TIR  | 2.55 | 351.0 | AMl   | 05:31:43.290 |      |      |       |      |      |     |     | 0.7  | 0.72  | a    | Ml        | 3.6   | 3456 |
| PHP  | 2.85 | 0.0   | Sn    | 05:31:27.292 | -0.8 |      |       |      |      |     |     |      |       | m    |           | 6174  |      |
| PHP  | 2.85 | 0.0   | P     | 05:30:52.178 | -0.2 |      |       |      |      |     |     |      |       | m    |           | 6173  |      |
| PHP  | 2.85 | 0.0   | AMl   | 05:31:57.530 |      |      |       |      |      |     |     | 0.9  | 1.30  | a    | Ml        | 3.8   | 3457 |
| PHP  | 2.85 | 0.0   | AMd   | 05:32:16.859 |      |      |       |      |      |     |     | 0.0  | 84.68 | a    | Md        | 3.5   | 3450 |
| PUK  | 3.23 | 353.0 | Sn    | 05:31:36.879 | -1.3 |      |       |      |      |     |     |      |       | m    |           | 6176  |      |
| PUK  | 3.23 | 353.0 | Pn    | 05:30:57.182 | -1.0 |      |       |      |      |     |     |      |       | m    |           | 6175  |      |
| BCI  | 3.54 | 356.0 | Sn    | 05:31:44.993 | -1.2 |      |       |      |      |     |     |      |       | m    |           | 6178  |      |
| BCI  | 3.54 | 356.0 | Pn    | 05:31:01.956 | -0.8 |      |       |      |      |     |     |      |       | m    |           | 6177  |      |

DATA\_TYPE COMMENT GSE2.1  
Event 366

Official Magnitude:

M1 3.95

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 268  | 19  | 2.8900 |
| Intermediate: | 177  | 3   | 2.2900 |
| Min:          | 78   | 71  | 1.9500 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187388 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 367 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/06 | 15:36:09.71 |     | 0.15 | 38.9103  | 20.6872   |      |      |    | 6.4   | 2.1 | 10   | 9    | 176 | 0.13  | 1.94  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 3.2 | 0.0  | 5      | 409    |
| Md        | 3.5 | 0.0  | 5      | 409    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|------|
| LKD2 | 0.12 | 191.0 | Sg    | 15:36:14.746 | -0.2 |      |       |      |      | ___ |     |      |        | m    |           | 6181  |      |
| LKD2 | 0.12 | 191.0 | Pg    | 15:36:12.773 | 0.1  |      |       |      |      | ___ |     |      |        | mc   |           | 6180  |      |
| LKD2 | 0.12 | 191.0 | AM1   | 15:36:19.200 |      |      |       |      |      | ___ |     | 36.8 | 0.68   | a    | M1        | 3.3   | 3463 |
| LKD2 | 0.12 | 191.0 | AMd   | 15:36:57.749 |      |      |       |      |      | ___ |     | 0.0  | 44.98  | a    | Md        | 2.6   | 3458 |
| IGT  | 0.68 | 337.0 | Sg    | 15:36:33.469 | -0.1 |      |       |      |      | ___ |     |      |        | m    |           | 6183  |      |
| IGT  | 0.68 | 337.0 | Pg    | 15:36:22.544 | -0.8 |      |       |      |      | ___ |     |      |        | md   |           | 6182  |      |
| IGT  | 0.68 | 337.0 | AMd   | 15:38:03.790 |      |      |       |      |      | ___ |     | 0.0  | 101.25 | a    | Md        | 2.9   | 3459 |
| SRN  | 1.10 | 332.0 | Sg    | 15:36:48.397 | 0.0  |      |       |      |      | ___ |     |      |        | m    |           | 6185  |      |
| SRN  | 1.10 | 332.0 | P     | 15:36:32.064 | 0.3  |      |       |      |      | ___ |     |      |        | m    |           | 6184  |      |
| SRN  | 1.10 | 332.0 | AM1   | 15:36:57.760 |      |      |       |      |      | ___ |     | 0.5  | 0.58   | a    | M1        | 2.5   | 3464 |
| SRN  | 1.10 | 332.0 | AMd   | 15:38:11.759 |      |      |       |      |      | ___ |     | 0.0  | 99.69  | a    | Md        | 3.5   | 3460 |
| LSK  | 1.22 | 0.0   | Pg    | 15:36:34.085 | 0.0  |      |       |      |      | ___ |     |      |        | md   |           | 6191  |      |
| LSK  | 1.24 | 357.0 | Sg    | 15:36:51.883 | -0.2 |      |       |      |      | ___ |     |      |        | m    |           | 6186  |      |
| LSK  | 1.24 | 357.0 | AM1   | 15:37:08.170 |      |      |       |      |      | ___ |     | 2.1  | 0.64   | a    | M1        | 3.3   | 3465 |
| NEST | 1.53 | 10.0  | Sn    | 15:37:01.135 | -0.1 |      |       |      |      | ___ |     |      |        | m    |           | 6188  |      |
| NEST | 1.53 | 10.0  | Pg    | 15:36:39.493 | 0.3  |      |       |      |      | ___ |     |      |        | md   |           | 6187  |      |
| NEST | 1.53 | 10.0  | AM1   | 15:37:09.850 |      |      |       |      |      | ___ |     | 0.6  | 0.70   | a    | M1        | 2.9   | 3466 |
| NEST | 1.53 | 10.0  | AMd   | 15:38:29.635 |      |      |       |      |      | ___ |     | 0.0  | 110.14 | a    | Md        | 3.6   | 3461 |
| FNA  | 1.94 | 15.0  | Sn    | 15:37:14.090 | -0.1 |      |       |      |      | ___ |     |      |        | m    |           | 6190  |      |
| FNA  | 1.94 | 15.0  | P     | 15:36:46.732 | 0.2  |      |       |      |      | ___ |     |      |        | m    |           | 6189  |      |
| FNA  | 1.94 | 15.0  | AM1   | 15:37:28.710 |      |      |       |      |      | ___ |     | 0.6  | 0.54   | a    | M1        | 3.2   | 3467 |
| FNA  | 1.94 | 15.0  | AMd   | 15:38:31.499 |      |      |       |      |      | ___ |     | 0.0  | 104.77 | a    | Md        | 3.6   | 3462 |

DATA\_TYPE COMMENT GSE2.1  
Event 367

Official Magnitude:  
Ml 3.23

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 262  | 49  | 2.7700 |
| Intermediate: | 99   | 38  | 0.7700 |
| Min:          | 3    | 9   | 0.3300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187387 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 376 Mediterranean Sea; 10 km from Glóssa, Thessaly, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 23:22:10.20 |     | 0.20 | 39.2585  | 23.5902   |      |      |    | 16.8  | 6.2 | 11   | 7    | 279 | 1.46  | 2.55  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.7 | 0.0  | 7      | 416    |
| Md        | 3.6 | 0.0  | 3      | 416    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|------|
| THE  | 1.46 | 0.0   | Pn    | 23:22:38.046 | 0.0  |      |       |      |      |     |     |     |        | mdi  |           | 6308  |      |
| THE  | 1.45 | 341.0 | Sn    | 23:22:58.342 | -0.0 |      |       |      |      |     |     |     |        | m__  |           | 6295  |      |
| THE  | 1.45 | 341.0 | AMl   | 23:22:59.470 |      |      |       |      |      |     |     | 1.6 | 0.34   | a__  | Ml        | 3.3   | 3555 |
| NEST | 2.27 | 302.0 | Sn    | 23:23:21.798 | 0.6  |      |       |      |      |     |     |     |        | m__  |           | 6297  |      |
| NEST | 2.27 | 302.0 | Pn    | 23:22:50.385 | -0.4 |      |       |      |      |     |     |     |        | mdi  |           | 6296  |      |
| NEST | 2.27 | 302.0 | AMl   | 23:23:34.170 |      |      |       |      |      |     |     | 1.0 | 0.66   | a__  | Ml        | 3.6   | 3556 |
| NEST | 2.27 | 302.0 | AMd   | 23:24:24.193 |      |      |       |      |      |     |     | 0.0 | 93.81  | a__  | Md        | 3.5   | 3552 |
| FNA  | 2.28 | 313.0 | Sn    | 23:23:21.246 | -0.1 |      |       |      |      |     |     |     |        | m__  |           | 6299  |      |
| FNA  | 2.28 | 313.0 | P     | 23:22:50.909 | 0.1  |      |       |      |      |     |     |     |        | mci  |           | 6298  |      |
| FNA  | 2.28 | 313.0 | AMl   | 23:23:31.130 |      |      |       |      |      |     |     | 1.1 | 0.52   | a__  | Ml        | 3.7   | 3557 |
| FNA  | 2.28 | 313.0 | AMd   | 23:24:29.460 |      |      |       |      |      |     |     | 0.0 | 98.55  | a__  | Md        | 3.6   | 3553 |
| LKD2 | 2.33 | 260.0 | Sn    | 23:23:22.720 | -0.1 |      |       |      |      |     |     |     |        | m__  |           | 6301  |      |
| LKD2 | 2.33 | 260.0 | Pn    | 23:22:51.719 | 0.1  |      |       |      |      |     |     |     |        | mci  |           | 6300  |      |
| LKD2 | 2.33 | 260.0 | AMl   | 23:23:34.110 |      |      |       |      |      |     |     | 1.1 | 0.96   | a__  | Ml        | 3.7   | 3558 |
| LSK  | 2.47 | 293.0 | Sn    | 23:23:26.087 | -0.1 |      |       |      |      |     |     |     |        | m__  |           | 6303  |      |
| LSK  | 2.47 | 293.0 | Pn    | 23:22:53.657 | 0.0  |      |       |      |      |     |     |     |        | mci  |           | 6302  |      |
| LSK  | 2.47 | 293.0 | AMl   | 23:23:31.770 |      |      |       |      |      |     |     | 1.7 | 0.78   | a__  | Ml        | 3.9   | 3559 |
| LSK  | 2.47 | 293.0 | AMd   | 23:24:35.223 |      |      |       |      |      |     |     | 0.0 | 101.57 | a__  | Md        | 3.6   | 3554 |
| IGT  | 2.54 | 278.0 | Sn    | 23:23:26.996 | -1.2 |      |       |      |      |     |     |     |        | m__  |           | 6305  |      |

|     |      |       |     |              |      |     |  |  |  |     |      |     |    |  |     |  |      |
|-----|------|-------|-----|--------------|------|-----|--|--|--|-----|------|-----|----|--|-----|--|------|
| IGT | 2.54 | 278.0 | Pn  | 23:22:54.813 | 0.1  | --- |  |  |  |     |      |     |    |  | mci |  | 6304 |
| IGT | 2.54 | 278.0 | AM1 | 23:23:43.890 |      | --- |  |  |  | 0.5 | 1.00 | a__ | M1 |  | 3.4 |  | 3560 |
| KBN | 2.55 | 304.0 | Sn  | 23:23:24.757 | -2.8 | --- |  |  |  |     |      |     |    |  | m__ |  | 6307 |
| KBN | 2.55 | 304.0 | Pn  | 23:22:54.424 | 0.0  | --- |  |  |  |     |      |     |    |  | mdi |  | 6306 |
| KBN | 2.55 | 304.0 | AM1 | 23:23:43.250 |      | --- |  |  |  | 1.1 | 1.58 | a__ | M1 |  | 3.8 |  | 3561 |

DATA\_TYPE COMMENT GSE2.1  
Event 376

Official Magnitude:  
M1 3.67

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 98   | 48  | 8.2500 |
| Intermediate: | 290  | 40  | 1.1900 |
| Min:          | 195  | 6   | 0.7700 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 377 1.8 km from Skoúmtsia, West Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err  | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 14:58:03.52 |     | 0.02 | 40.0315  | 21.7675   |      |      |    | 20.1  | 12.6 | 6    | 7    | 237 | 0.67  | 1.51  | m    | 417    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 1.6 | 0.0  | 4      | 417    |
| Md        | 2.8 | 0.0  | 3      | 417    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| NEST | 0.67 | 0.0   | P     | 14:58:22.821 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6316  |
| NEST | 0.67 | 306.0 | S     | 14:58:27.052 | -0.0 |      |       |      |      | --- |     |     |       | m__  |           | 6309  |
| NEST | 0.67 | 306.0 | AM1   | 14:58:29.038 |      |      |       |      |      | --- |     | 0.1 | 0.32  | a__  | M1        | 1.4   |
| FNA  | 0.80 | 339.0 | S     | 14:58:31.243 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6311  |
| FNA  | 0.80 | 339.0 | P     | 14:58:19.339 | -0.0 |      |       |      |      | --- |     |     |       | m__  |           | 6310  |
| FNA  | 0.80 | 339.0 | AM1   | 14:58:31.688 |      |      |       |      |      | --- |     | 0.1 | 0.32  | a__  | M1        | 1.6   |
| FNA  | 0.80 | 339.0 | AMd   | 14:58:48.995 |      |      |       |      |      | --- |     | 0.0 | 29.66 | a__  | Md        | 2.3   |
| IGT  | 1.21 | 247.0 | S     | 14:58:43.965 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6313  |
| IGT  | 1.21 | 247.0 | P     | 14:58:26.665 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6312  |
| IGT  | 1.21 | 247.0 | AM1   | 14:58:49.248 |      |      |       |      |      | --- |     | 0.0 | 0.52  | a__  | M1        | 1.7   |
| IGT  | 1.21 | 247.0 | AMd   | 14:59:58.601 |      |      |       |      |      | --- |     | 0.0 | 91.94 | a__  | Md        | 2.8   |
| LKD2 | 1.51 | 216.0 | S     | 14:58:53.084 | -0.0 |      |       |      |      | --- |     |     |       | m__  |           | 6315  |
| LKD2 | 1.51 | 216.0 | P     | 14:58:30.915 | -0.9 |      |       |      |      | --- |     |     |       | m__  |           | 6314  |



|      |      |       |     |              |     |     |       |     |    |     |      |
|------|------|-------|-----|--------------|-----|-----|-------|-----|----|-----|------|
| LKD2 | 1.51 | 216.0 | AMl | 14:58:53.528 | --- | 0.9 | 0.28  | a__ | Ml | 3.1 | 3568 |
| LKD2 | 1.51 | 216.0 | AMd | 14:59:27.708 | --- | 0.0 | 56.79 | a__ | Md | 3.0 | 3564 |

DATA\_TYPE COMMENT GSE2.1  
Event 377

Official Magnitude:  
Ml 1.63

Error ellipse:

|               |      |     |         |
|---------------|------|-----|---------|
|               | Azim | Dip | Mag     |
| Max:          | 0    | 90  | 12.6000 |
| Intermediate: | 282  | 0   | 1.0100  |
| Min:          | 12   | 0   | 0.3500  |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 378 3.2 km from Athanásios Diákos, Central Greece, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 15:08:42.51 |     | 0.07 | 38.6757  | 22.1507   |      |      |    | 10.6  | 2.8 | 6    | 12   | 292 | 1.17  | 2.18  | m    |        |
| OrigID 418 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.9 | 0.0  | 3      | 418    |
| Md        | 3.2 | 0.0  | 3      | 418    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LKD2 | 1.13 | 0.0   | P     | 15:08:59.016 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6324  |      |
| LKD2 | 1.17 | 277.0 | S     | 15:09:22.590 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6317  |      |
| LKD2 | 1.17 | 277.0 | AMl   | 15:09:27.600 |      |      |       |      |      | --- |     | 1.0 | 0.46  | a__  | Ml        | 2.9   | 3572 |
| IGT  | 1.65 | 302.0 | S     | 15:09:37.561 | 0.0  |      |       |      |      | --- |     |     |       | m__  |           | 6319  |      |
| IGT  | 1.65 | 302.0 | P     | 15:09:13.927 | -0.0 |      |       |      |      | --- |     |     |       | m__  |           | 6318  |      |
| IGT  | 1.65 | 302.0 | AMd   | 15:10:31.493 |      |      |       |      |      | --- |     | 0.0 | 77.57 | a__  | Md        | 2.7   | 3569 |
| LSK  | 1.90 | 322.0 | S     | 15:09:44.775 | -0.0 |      |       |      |      | --- |     |     |       | m__  |           | 6321  |      |
| LSK  | 1.90 | 322.0 | P     | 15:09:18.059 | -0.1 |      |       |      |      | --- |     |     |       | m__  |           | 6320  |      |
| LSK  | 1.90 | 322.0 | AMl   | 15:09:24.920 |      |      |       |      |      | --- |     | 0.3 | 0.72  | a__  | Ml        | 2.9   | 3573 |
| LSK  | 1.90 | 322.0 | AMd   | 15:10:37.454 |      |      |       |      |      | --- |     | 0.0 | 79.39 | a__  | Md        | 3.3   | 3570 |
| FNA  | 2.18 | 345.0 | S     | 15:09:53.321 | 0.9  |      |       |      |      | --- |     |     |       | m__  |           | 6323  |      |
| FNA  | 2.18 | 345.0 | P     | 15:09:22.934 | 0.5  |      |       |      |      | --- |     |     |       | m__  |           | 6322  |      |
| FNA  | 2.18 | 345.0 | AMl   | 15:09:56.750 |      |      |       |      |      | --- |     | 0.1 | 0.42  | a__  | Ml        | 2.5   | 3574 |
| FNA  | 2.18 | 345.0 | AMd   | 15:10:32.842 |      |      |       |      |      | --- |     | 0.0 | 69.91 | a__  | Md        | 3.2   | 3571 |

DATA\_TYPE COMMENT GSE2.1

Event 378

Official Magnitude:

Ml 2.88

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 157  | 57  | 3.3500 |
| Intermediate: | 332  | 32  | 1.1500 |
| Min:          | 63   | 2   | 0.8500 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187386 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 379 Mediterranean Sea; 48 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 14:33:24.76 |     | 0.02 | 37.4397  | 20.3280   |      |      |    | 17.7  | 1.1 | 11   | 6    | 342 | 1.38  | 3.44  | m    |        |
| OrigID 419 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.7 | 0.0  | 6      | 419    |
| Md        | 3.3 | 0.0  | 5      | 419    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| LKD2 | 1.37 | 10.0  | S     | 14:34:10.296 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6326  |
| LKD2 | 1.37 | 10.0  | P     | 14:33:50.589 | -0.2 |      |       |      |      |     |     |      |       | m    |           | 6325  |
| LKD2 | 1.37 | 10.0  | AMl   | 14:34:12.510 |      |      |       |      |      |     |     | 28.1 | 0.72  | a    | Ml        | 4.5   |
| LKD2 | 1.37 | 10.0  | AMd   | 14:34:36.667 |      |      |       |      |      |     |     | 0.0  | 46.08 | a    | Md        | 2.7   |
| IGT  | 2.09 | 0.0   | S     | 14:34:30.874 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6328  |
| IGT  | 2.09 | 0.0   | P     | 14:34:02.523 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6327  |
| IGT  | 2.09 | 0.0   | AMl   | 14:34:35.590 |      |      |       |      |      |     |     | 1.0  | 0.88  | a    | Ml        | 3.5   |
| IGT  | 2.09 | 0.0   | AMd   | 14:35:12.919 |      |      |       |      |      |     |     | 0.0  | 70.40 | a    | Md        | 2.6   |
| SRN  | 2.45 | 355.0 | S     | 14:34:40.868 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6330  |
| SRN  | 2.45 | 355.0 | P     | 14:34:08.233 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6329  |
| SRN  | 2.45 | 355.0 | AMl   | 14:34:43.860 |      |      |       |      |      |     |     | 0.3  | 0.62  | a    | Ml        | 3.1   |
| SRN  | 2.45 | 355.0 | AMd   | 14:35:25.321 |      |      |       |      |      |     |     | 0.0  | 77.09 | a    | Md        | 3.3   |
| LSK  | 2.71 | 4.0   | S     | 14:34:46.750 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6332  |
| LSK  | 2.71 | 4.0   | P     | 14:34:11.621 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6331  |
| LSK  | 2.71 | 4.0   | AMl   | 14:34:54.960 |      |      |       |      |      |     |     | 2.0  | 0.68  | a    | Ml        | 4.1   |
| LSK  | 2.71 | 4.0   | AMd   | 14:35:27.604 |      |      |       |      |      |     |     | 0.0  | 75.98 | a    | Md        | 3.3   |
| NEST | 3.03 | 0.0   | P     | 14:34:15.583 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6336  |
| NEST | 3.02 | 10.0  | S     | 14:34:54.915 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6333  |
| NEST | 3.02 | 10.0  | AMl   | 14:35:04.160 |      |      |       |      |      |     |     | 0.7  | 0.76  | a    | Ml        | 3.8   |
| FNA  | 3.44 | 13.0  | S     | 14:35:05.599 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6335  |



NEST 2.82 346.0 AM1 13:40:00.248 \_\_\_\_\_ 0.1 0.60 a\_\_ M1 2.6 3592

DATA\_TYPE COMMENT GSE2.1  
Event 380

Official Magnitude:  
M1 2.64

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 210  | 39  | 3.1400 |
| Intermediate: | 75   | 39  | 1.3300 |
| Min:          | 322  | 25  | 0.9800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 381 Mediterranean Sea; 25 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 19:57:20.76 |     | 0.00 | 37.5752  | 20.5168   |      |      |    | 17.5  | 1.8 | 4    | 5    | 348 | 1.21  | 2.87  | m    |        |
| OrigID 421 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.8 | 0.0  | 2      | 421    |
| Md        | 2.6 | 0.0  | 2      | 421    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual   | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|--------|-----------|-------|
| LKD2 | 1.22 | 5.0   | S     | 19:58:01.505 | 0.0  |      |       |      |      | ___ |     |     |       | m__    |           | 6347  |
| LKD2 | 1.22 | 5.0   | P     | 19:57:42.987 | -1.1 |      |       |      |      | ___ |     |     |       | m__    |           | 6346  |
| LKD2 | 1.22 | 5.0   | AM1   | 19:58:08.240 |      |      |       |      |      | ___ |     | 1.0 | 0.44  | a__ M1 | 3.0       | 3595  |
| LKD2 | 1.22 | 5.0   | AMd   | 19:58:28.658 |      |      |       |      |      | ___ |     | 0.0 | 45.67 | a__ Md | 2.7       | 3593  |
| IGT  | 1.96 | 356.0 | S     | 19:58:23.598 | 0.0  |      |       |      |      | ___ |     |     |       | m__    |           | 6349  |
| IGT  | 1.96 | 356.0 | P     | 19:57:56.668 | 0.0  |      |       |      |      | ___ |     |     |       | m__    |           | 6348  |
| IGT  | 1.96 | 356.0 | AMd   | 19:58:55.377 |      |      |       |      |      | ___ |     | 0.0 | 58.71 | a__ Md | 2.4       | 3594  |
| NEST | 2.87 | 0.0   | P     | 19:58:08.613 | 0.0  |      |       |      |      | ___ |     |     |       | m__    |           | 6351  |
| NEST | 2.87 | 8.0   | S     | 19:58:46.927 | 0.0  |      |       |      |      | ___ |     |     |       | m__    |           | 6350  |
| NEST | 2.87 | 8.0   | AM1   | 19:58:59.400 |      |      |       |      |      | ___ |     | 0.1 | 0.90  | a__ M1 | 2.7       | 3596  |

DATA\_TYPE COMMENT GSE2.1  
Event 381

Official Magnitude:  
M1 2.80

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 103  | 4   | 4.2200 |
| Intermediate: | 211  | 75  | 1.8100 |
| Min:          | 12   | 14  | 1.3500 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187387 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 376 Mediterranean Sea; 10 km from Glóssa, Thessaly, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/07 | 23:22:10.20 |     | 0.20 | 39.2585  | 23.5902   |      |      |    | 16.8  | 6.2 | 11   | 7    | 279 | 1.46  | 2.55  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.7 | 0.0  | 7      | 416    |
| Md        | 3.6 | 0.0  | 3      | 416    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|
| THE  | 1.46 | 0.0   | Pn    | 23:22:38.046 | 0.0  |      |       |      |      |     |     |     |        | mdi  |           | 6308  |
| THE  | 1.45 | 341.0 | Sn    | 23:22:58.342 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6295  |
| THE  | 1.45 | 341.0 | AMl   | 23:22:59.470 |      |      |       |      |      |     |     | 1.6 | 0.34   | a    | Ml        | 3.3   |
| NEST | 2.27 | 302.0 | Sn    | 23:23:21.798 | 0.6  |      |       |      |      |     |     |     |        | m    |           | 6297  |
| NEST | 2.27 | 302.0 | Pn    | 23:22:50.385 | -0.4 |      |       |      |      |     |     |     |        | mdi  |           | 6296  |
| NEST | 2.27 | 302.0 | AMl   | 23:23:34.170 |      |      |       |      |      |     |     | 1.0 | 0.66   | a    | Ml        | 3.6   |
| NEST | 2.27 | 302.0 | AMd   | 23:24:24.193 |      |      |       |      |      |     |     | 0.0 | 93.81  | a    | Md        | 3.5   |
| FNA  | 2.28 | 313.0 | Sn    | 23:23:21.246 | -0.1 |      |       |      |      |     |     |     |        | m    |           | 6299  |
| FNA  | 2.28 | 313.0 | P     | 23:22:50.909 | 0.1  |      |       |      |      |     |     |     |        | mci  |           | 6298  |
| FNA  | 2.28 | 313.0 | AMl   | 23:23:31.130 |      |      |       |      |      |     |     | 1.1 | 0.52   | a    | Ml        | 3.7   |
| FNA  | 2.28 | 313.0 | AMd   | 23:24:29.460 |      |      |       |      |      |     |     | 0.0 | 98.55  | a    | Md        | 3.6   |
| LKD2 | 2.33 | 260.0 | Sn    | 23:23:22.720 | -0.1 |      |       |      |      |     |     |     |        | m    |           | 6301  |
| LKD2 | 2.33 | 260.0 | Pn    | 23:22:51.719 | 0.1  |      |       |      |      |     |     |     |        | mci  |           | 6300  |
| LKD2 | 2.33 | 260.0 | AMl   | 23:23:34.110 |      |      |       |      |      |     |     | 1.1 | 0.96   | a    | Ml        | 3.7   |
| LSK  | 2.47 | 293.0 | Sn    | 23:23:26.087 | -0.1 |      |       |      |      |     |     |     |        | m    |           | 6303  |
| LSK  | 2.47 | 293.0 | Pn    | 23:22:53.657 | 0.0  |      |       |      |      |     |     |     |        | mci  |           | 6302  |
| LSK  | 2.47 | 293.0 | AMl   | 23:23:31.770 |      |      |       |      |      |     |     | 1.7 | 0.78   | a    | Ml        | 3.9   |
| LSK  | 2.47 | 293.0 | AMd   | 23:24:35.223 |      |      |       |      |      |     |     | 0.0 | 101.57 | a    | Md        | 3.6   |
| IGT  | 2.54 | 278.0 | Sn    | 23:23:26.996 | -1.2 |      |       |      |      |     |     |     |        | m    |           | 6305  |
| IGT  | 2.54 | 278.0 | Pn    | 23:22:54.813 | 0.1  |      |       |      |      |     |     |     |        | mci  |           | 6304  |
| IGT  | 2.54 | 278.0 | AMl   | 23:23:43.890 |      |      |       |      |      |     |     | 0.5 | 1.00   | a    | Ml        | 3.4   |
| KBN  | 2.55 | 304.0 | Sn    | 23:23:24.757 | -2.8 |      |       |      |      |     |     |     |        | m    |           | 6307  |
| KBN  | 2.55 | 304.0 | Pn    | 23:22:54.424 | 0.0  |      |       |      |      |     |     |     |        | mdi  |           | 6306  |
| KBN  | 2.55 | 304.0 | AMl   | 23:23:43.250 |      |      |       |      |      |     |     | 1.1 | 1.58   | a    | Ml        | 3.8   |

DATA\_TYPE COMMENT GSE2.1  
Event 376

Official Magnitude:  
Ml 3.67

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 98   | 48  | 8.2500 |
| Intermediate: | 290  | 40  | 1.1900 |
| Min:          | 195  | 6   | 0.7700 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 378 3.2 km from Athanásios Diákos, Central Greece, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 15:08:42.51 |     | 0.07 | 38.6757  | 22.1507   |      |      |    | 10.6  | 2.8 | 6    | 12   | 292 | 1.17  | 2.18  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.9 | 0.0  | 3      | 418    |
| Md        | 3.2 | 0.0  | 3      | 418    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LKD2 | 1.13 | 0.0   | P     | 15:08:59.016 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6324  |      |
| LKD2 | 1.17 | 277.0 | S     | 15:09:22.590 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6317  |      |
| LKD2 | 1.17 | 277.0 | AMl   | 15:09:27.600 |      |      |       |      |      |     |     | 1.0 | 0.46  | a    | Ml        | 2.9   | 3572 |
| IGT  | 1.65 | 302.0 | S     | 15:09:37.561 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6319  |      |
| IGT  | 1.65 | 302.0 | P     | 15:09:13.927 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6318  |      |
| IGT  | 1.65 | 302.0 | AMd   | 15:10:31.493 |      |      |       |      |      |     |     | 0.0 | 77.57 | a    | Md        | 2.7   | 3569 |
| LSK  | 1.90 | 322.0 | S     | 15:09:44.775 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6321  |      |
| LSK  | 1.90 | 322.0 | P     | 15:09:18.059 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6320  |      |
| LSK  | 1.90 | 322.0 | AMl   | 15:09:24.920 |      |      |       |      |      |     |     | 0.3 | 0.72  | a    | Ml        | 2.9   | 3573 |
| LSK  | 1.90 | 322.0 | AMd   | 15:10:37.454 |      |      |       |      |      |     |     | 0.0 | 79.39 | a    | Md        | 3.3   | 3570 |
| FNA  | 2.18 | 345.0 | S     | 15:09:53.321 | 0.9  |      |       |      |      |     |     |     |       | m    |           | 6323  |      |
| FNA  | 2.18 | 345.0 | P     | 15:09:22.934 | 0.5  |      |       |      |      |     |     |     |       | m    |           | 6322  |      |
| FNA  | 2.18 | 345.0 | AMl   | 15:09:56.750 |      |      |       |      |      |     |     | 0.1 | 0.42  | a    | Ml        | 2.5   | 3574 |
| FNA  | 2.18 | 345.0 | AMd   | 15:10:32.842 |      |      |       |      |      |     |     | 0.0 | 69.91 | a    | Md        | 3.2   | 3571 |

DATA\_TYPE COMMENT GSE2.1  
Event 378

Official Magnitude:

M1 2.88

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 157  | 57  | 3.3500 |
| Intermediate: | 332  | 32  | 1.1500 |
| Min:          | 63   | 2   | 0.8500 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187386 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 379 Mediterranean Sea; 48 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 14:33:24.76 |     | 0.02 | 37.4397  | 20.3280   |      |      |    | 17.7  | 1.1 | 11   | 6    | 342 | 1.38  | 3.44  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 3.7 | 0.0  | 6      | 419    |
| Md        | 3.3 | 0.0  | 5      | 419    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| LKD2 | 1.37 | 10.0  | S     | 14:34:10.296 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6326  |
| LKD2 | 1.37 | 10.0  | P     | 14:33:50.589 | -0.2 |      |       |      |      |     |     |      |       | m    |           | 6325  |
| LKD2 | 1.37 | 10.0  | AM1   | 14:34:12.510 |      |      |       |      |      |     |     | 28.1 | 0.72  | a    | M1        | 4.5   |
| LKD2 | 1.37 | 10.0  | AMd   | 14:34:36.667 |      |      |       |      |      |     |     | 0.0  | 46.08 | a    | Md        | 2.7   |
| IGT  | 2.09 | 0.0   | S     | 14:34:30.874 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6328  |
| IGT  | 2.09 | 0.0   | P     | 14:34:02.523 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6327  |
| IGT  | 2.09 | 0.0   | AM1   | 14:34:35.590 |      |      |       |      |      |     |     | 1.0  | 0.88  | a    | M1        | 3.5   |
| IGT  | 2.09 | 0.0   | AMd   | 14:35:12.919 |      |      |       |      |      |     |     | 0.0  | 70.40 | a    | Md        | 2.6   |
| SRN  | 2.45 | 355.0 | S     | 14:34:40.868 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6330  |
| SRN  | 2.45 | 355.0 | P     | 14:34:08.233 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6329  |
| SRN  | 2.45 | 355.0 | AM1   | 14:34:43.860 |      |      |       |      |      |     |     | 0.3  | 0.62  | a    | M1        | 3.1   |
| SRN  | 2.45 | 355.0 | AMd   | 14:35:25.321 |      |      |       |      |      |     |     | 0.0  | 77.09 | a    | Md        | 3.3   |
| LSK  | 2.71 | 4.0   | S     | 14:34:46.750 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6332  |
| LSK  | 2.71 | 4.0   | P     | 14:34:11.621 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6331  |
| LSK  | 2.71 | 4.0   | AM1   | 14:34:54.960 |      |      |       |      |      |     |     | 2.0  | 0.68  | a    | M1        | 4.1   |
| LSK  | 2.71 | 4.0   | AMd   | 14:35:27.604 |      |      |       |      |      |     |     | 0.0  | 75.98 | a    | Md        | 3.3   |
| NEST | 3.03 | 0.0   | P     | 14:34:15.583 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6336  |
| NEST | 3.02 | 10.0  | S     | 14:34:54.915 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6333  |
| NEST | 3.02 | 10.0  | AM1   | 14:35:04.160 |      |      |       |      |      |     |     | 0.7  | 0.76  | a    | M1        | 3.8   |
| FNA  | 3.44 | 13.0  | S     | 14:35:05.599 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6335  |
| FNA  | 3.44 | 13.0  | P     | 14:34:22.407 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6334  |
| FNA  | 3.44 | 13.0  | AM1   | 14:35:12.760 |      |      |       |      |      |     |     | 0.4  | 0.56  | a    | M1        | 3.6   |
| FNA  | 3.44 | 13.0  | AMd   | 14:35:34.946 |      |      |       |      |      |     |     | 0.0  | 72.54 | a    | Md        | 3.3   |

DATA\_TYPE COMMENT GSE2.1  
Event 379

Official Magnitude:  
Ml 3.71

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 111  | 20  | 2.2300 |
| Intermediate: | 230  | 51  | 1.4100 |
| Min:          | 8    | 31  | 0.7300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 380 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 13:38:08.50 |     | 0.04 | 37.6902  | 21.9870   |      |      |    | 18.0  | 2.0 | 7    | 6    | 331 | 1.52  | 2.82  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.6 | 0.0  | 4      | 420    |
| Md        | 3.2 | 0.0  | 3      | 420    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|------|
| LKD2 | 1.52 | 317.0 | S     | 13:38:58.460 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6338  |      |
| LKD2 | 1.52 | 317.0 | P     | 13:38:36.208 | -0.9 |      |       |      |      |     |     |     |        | m    |           | 6337  |      |
| LKD2 | 1.52 | 317.0 | AMl   | 13:39:05.368 |      |      |       |      |      |     |     | 1.2 | 0.56   | a    | Ml        | 3.3   | 3589 |
| LKD2 | 1.52 | 317.0 | AMd   | 13:39:46.522 |      |      |       |      |      |     |     | 0.0 | 70.31  | a    | Md        | 3.2   | 3586 |
| IGT  | 2.25 | 326.0 | S     | 13:39:18.755 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6340  |      |
| IGT  | 2.25 | 326.0 | P     | 13:38:48.653 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6339  |      |
| IGT  | 2.25 | 326.0 | AMl   | 13:39:24.438 |      |      |       |      |      |     |     | 0.1 | 0.36   | a    | Ml        | 2.6   | 3590 |
| IGT  | 2.25 | 326.0 | AMd   | 13:40:07.172 |      |      |       |      |      |     |     | 0.0 | 78.52  | a    | Md        | 2.7   | 3587 |
| SRN  | 2.68 | 326.0 | S     | 13:39:30.477 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6342  |      |
| SRN  | 2.68 | 326.0 | P     | 13:38:55.245 | -0.1 |      |       |      |      |     |     |     |        | m    |           | 6341  |      |
| SRN  | 2.68 | 326.0 | AMl   | 13:39:49.248 |      |      |       |      |      |     |     | 0.1 | 0.58   | a    | Ml        | 2.7   | 3591 |
| LSK  | 2.68 | 337.0 | P     | 13:38:54.866 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6343  |      |
| LSK  | 2.68 | 337.0 | AMd   | 13:40:46.522 |      |      |       |      |      |     |     | 0.0 | 111.66 | a    | Md        | 3.7   | 3588 |
| NEST | 2.82 | 0.0   | P     | 13:38:59.556 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6345  |      |
| NEST | 2.82 | 346.0 | S     | 13:39:33.356 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6344  |      |
| NEST | 2.82 | 346.0 | AMl   | 13:40:00.248 |      |      |       |      |      |     |     | 0.1 | 0.60   | a    | Ml        | 2.6   | 3592 |

DATA\_TYPE COMMENT GSE2.1



Event 380

Official Magnitude:

Ml 2.64

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 210  | 39  | 3.1400 |
| Intermediate: | 75   | 39  | 1.3300 |
| Min:          | 322  | 25  | 0.9800 |

BEGIN GSE2.1

MSG\_TYPE DATA

MSG\_ID 1551187386 athena

DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 381 Mediterranean Sea; 25 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/08 | 19:57:20.76 |     | 0.00 | 37.5752  | 20.5168   |      |      |    | 17.5  | 1.8 | 4    | 5    | 348 | 1.21  | 2.87  | m    | 421    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.8 | 0.0  | 2      | 421    |
| Md        | 2.6 | 0.0  | 2      | 421    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| LKD2 | 1.22 | 5.0   | S     | 19:58:01.505 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6347  |
| LKD2 | 1.22 | 5.0   | P     | 19:57:42.987 | -1.1 |      |       |      |      |     |     |     |       |      |           | 6346  |
| LKD2 | 1.22 | 5.0   | AMl   | 19:58:08.240 |      |      |       |      |      |     |     | 1.0 | 0.44  | a__  | Ml        | 3.0   |
| LKD2 | 1.22 | 5.0   | AMd   | 19:58:28.658 |      |      |       |      |      |     |     | 0.0 | 45.67 | a__  | Md        | 2.7   |
| IGT  | 1.96 | 356.0 | S     | 19:58:23.598 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6349  |
| IGT  | 1.96 | 356.0 | P     | 19:57:56.668 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6348  |
| IGT  | 1.96 | 356.0 | AMd   | 19:58:55.377 |      |      |       |      |      |     |     | 0.0 | 58.71 | a__  | Md        | 2.4   |
| NEST | 2.87 | 0.0   | P     | 19:58:08.613 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6351  |
| NEST | 2.87 | 8.0   | S     | 19:58:46.927 | 0.0  |      |       |      |      |     |     |     |       |      |           | 6350  |
| NEST | 2.87 | 8.0   | AMl   | 19:58:59.400 |      |      |       |      |      |     |     | 0.1 | 0.90  | a__  | Ml        | 2.7   |

DATA\_TYPE COMMENT GSE2.1

Event 381

Official Magnitude:

Ml 2.80

Error ellipse:

|      | Azim | Dip | Mag    |
|------|------|-----|--------|
| Max: | 103  | 4   | 4.2200 |

Intermediate: 211 75 1.8100  
 Min: 12 14 1.3500

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187386 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 384 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err  | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| 2019/02/09 | 12:43:28.16 |     | 0.04 | 39.6826  | 20.7993   |      |      |    | 11.1  | 1.05 | 14   | 9    | 165 | 0.39  | 2.63  | m    |        |
| OrigID 424 |             |     |      |          |           |      |      |    |       |      |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.1 | 0.0  | 7      | 424    |
| Md        | 2.6 | 0.0  | 8      | 424    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| LSK  | 0.39 | 335.0 | S     | 12:43:42.125 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6387  |
| LSK  | 0.39 | 335.0 | P     | 12:43:36.158 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6386  |
| LSK  | 0.39 | 335.0 | AMl   | 12:43:46.400 |      |      |       |      |      |     |     | 34.4 | 0.54  | a    | Ml        | 3.6   |
| LSK  | 0.39 | 335.0 | AMd   | 12:44:05.208 |      |      |       |      |      |     |     | 0.0  | 29.05 | a    | Md        | 2.2   |
| IGT  | 0.46 | 236.0 | S     | 12:43:44.676 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6389  |
| IGT  | 0.46 | 236.0 | P     | 12:43:37.606 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6388  |
| IGT  | 0.46 | 236.0 | AMd   | 12:44:01.105 |      |      |       |      |      |     |     | 0.0  | 23.50 | a    | Md        | 1.4   |
| SRN  | 0.64 | 278.0 | S     | 12:43:51.166 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6391  |
| SRN  | 0.64 | 278.0 | P     | 12:43:40.450 | -0.9 |      |       |      |      |     |     |      |       | m    |           | 6390  |
| SRN  | 0.64 | 278.0 | AMl   | 12:43:53.280 |      |      |       |      |      |     |     | 3.3  | 0.56  | a    | Ml        | 3.0   |
| SRN  | 0.64 | 278.0 | AMd   | 12:44:10.222 |      |      |       |      |      |     |     | 0.0  | 29.77 | a    | Md        | 2.2   |
| NEST | 0.64 | 0.0   | P     | 12:43:41.269 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6402  |
| NEST | 0.64 | 15.0  | S     | 12:43:50.732 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6392  |
| NEST | 0.64 | 15.0  | AMl   | 12:43:55.200 |      |      |       |      |      |     |     | 3.0  | 0.32  | a    | Ml        | 2.9   |
| KBN  | 0.83 | 359.0 | S     | 12:43:56.068 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6394  |
| KBN  | 0.83 | 359.0 | P     | 12:43:44.104 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6393  |
| KBN  | 0.83 | 359.0 | AMl   | 12:44:12.120 |      |      |       |      |      |     |     | 1.8  | 0.46  | a    | Ml        | 2.9   |
| KBN  | 0.83 | 359.0 | AMd   | 12:44:22.074 |      |      |       |      |      |     |     | 0.0  | 37.97 | a    | Md        | 2.5   |
| LKD2 | 1.01 | 188.0 | S     | 12:44:03.197 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6396  |
| LKD2 | 1.01 | 188.0 | P     | 12:43:48.278 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6395  |
| LKD2 | 1.01 | 188.0 | AMl   | 12:44:11.400 |      |      |       |      |      |     |     | 3.0  | 0.70  | a    | Ml        | 3.3   |
| LKD2 | 1.01 | 188.0 | AMd   | 12:44:31.191 |      |      |       |      |      |     |     | 0.0  | 42.91 | a    | Md        | 2.6   |
| FNA  | 1.07 | 23.0  | S     | 12:44:05.187 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6398  |
| FNA  | 1.07 | 23.0  | P     | 12:43:49.314 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6397  |
| FNA  | 1.07 | 23.0  | AMl   | 12:44:09.050 |      |      |       |      |      |     |     | 1.9  | 0.50  | a    | Ml        | 3.1   |
| FNA  | 1.07 | 23.0  | AMd   | 12:44:37.572 |      |      |       |      |      |     |     | 0.0  | 48.26 | a    | Md        | 2.8   |
| VLO  | 1.22 | 304.0 | S     | 12:44:08.704 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6400  |
| VLO  | 1.22 | 304.0 | P     | 12:43:51.337 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6399  |

|     |      |       |     |              |      |     |       |     |    |     |      |
|-----|------|-------|-----|--------------|------|-----|-------|-----|----|-----|------|
| VLO | 1.22 | 304.0 | AMl | 12:44:15.490 | ---  | 4.2 | 0.34  | a__ | Ml | 3.6 | 3627 |
| VLO | 1.22 | 304.0 | AMd | 12:44:36.661 | ---  | 0.0 | 45.32 | a__ | Md | 2.7 | 3619 |
| BCI | 2.63 | 348.0 | P   | 12:44:14.289 | -0.6 |     |       | m__ |    |     | 6401 |
| BCI | 2.63 | 348.0 | AMd | 12:45:15.407 |      | 0.0 | 61.12 | a__ | Md | 3.1 | 3620 |

DATA\_TYPE COMMENT GSE2.1  
Event 384

Official Magnitude:  
Ml 3.11

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 284  | 89  | 9.4900 |
| Intermediate: | 110  | 0   | 0.3700 |
| Min:          | 200  | 0   | 0.2100 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187386 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 386 2.0 km from Ágios Pródromos, Central Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/09 | 17:46:27.20 |     | 0.06 | 40.4825  | 23.3702   |      |      |    | 23.7  | 1.5 | 14   | 13   | 296 | 0.34  | 2.69  | m    | 426    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.8 | 0.0  | 7      | 426    |
| Md        | 3.4 | 0.0  | 7      | 426    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| THE  | 0.34 | 296.0 | Sg    | 17:46:40.515 | -0.1 |      |       |      |      |     |     |     |       | m__  |           | 6418  |      |
| THE  | 0.34 | 296.0 | Pg    | 17:46:34.895 | 0.0  |      |       |      |      |     |     |     |       | m__  |           | 6417  |      |
| THE  | 0.34 | 296.0 | AMl   | 17:46:43.208 |      |      |       |      |      |     |     | 1.3 | 0.18  | a__  | Ml        | 2.2   | 3645 |
| THE  | 0.34 | 296.0 | AMd   | 17:47:31.759 |      |      |       |      |      |     |     | 0.0 | 56.86 | a__  | Md        | 2.9   | 3638 |
| FNA  | 1.54 | 282.0 | Sg    | 17:47:17.788 | 0.0  |      |       |      |      |     |     |     |       | m__  |           | 6420  |      |
| FNA  | 1.54 | 282.0 | Pg    | 17:46:56.196 | 0.1  |      |       |      |      |     |     |     |       | m__  |           | 6419  |      |
| FNA  | 1.54 | 282.0 | AMl   | 17:47:23.158 |      |      |       |      |      |     |     | 0.3 | 0.50  | a__  | Ml        | 2.6   | 3646 |
| FNA  | 1.54 | 282.0 | AMd   | 17:48:10.342 |      |      |       |      |      |     |     | 0.0 | 74.15 | a__  | Md        | 3.2   | 3639 |
| NEST | 1.77 | 269.0 | Sg    | 17:47:24.226 | 0.0  |      |       |      |      |     |     |     |       | m__  |           | 6422  |      |
| NEST | 1.77 | 269.0 | Pg    | 17:46:59.767 | 0.0  |      |       |      |      |     |     |     |       | m__  |           | 6421  |      |
| NEST | 1.77 | 269.0 | AMl   | 17:47:31.428 |      |      |       |      |      |     |     | 0.2 | 0.66  | a__  | Ml        | 2.7   | 3647 |
| NEST | 1.77 | 269.0 | AMd   | 17:48:32.642 |      |      |       |      |      |     |     | 0.0 | 92.87 | a__  | Md        | 3.5   | 3640 |
| KBN  | 1.97 | 0.0   | Sn    | 17:47:30.362 | 0.0  |      |       |      |      |     |     |     |       | m__  |           | 6431  |      |
| LSK  | 2.14 | 262.0 | Sn    | 17:47:33.574 | 0.0  |      |       |      |      |     |     |     |       | m__  |           | 6424  |      |

|      |      |       |     |              |      |     |  |  |  |  |  |  |  |  |  |  |     |       |      |    |     |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|--|--|--|-----|-------|------|----|-----|------|
| LSK  | 2.14 | 262.0 | Pn  | 17:47:05.082 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  | m   |       | 6423 |    |     |      |
| LSK  | 2.14 | 262.0 | AMl | 17:47:41.968 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.3 | 0.50  | a    | Ml | 3.0 | 3648 |
| LSK  | 2.14 | 262.0 | AMd | 17:48:30.230 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 85.15 | a    | Md | 3.4 | 3641 |
| IGT  | 2.52 | 249.0 | Sn  | 17:47:43.448 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6426 |
| IGT  | 2.52 | 249.0 | Pn  | 17:47:10.862 | 0.1  | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6425 |
| IGT  | 2.52 | 249.0 | AMl | 17:47:49.588 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.1 | 0.54  | a    | Ml | 2.9 | 3649 |
| IGT  | 2.52 | 249.0 | AMd | 17:48:30.436 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 79.57 | a    | Md | 2.8 | 3642 |
| SRN  | 2.65 | 258.0 | Sn  | 17:47:47.545 | 0.1  | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6428 |
| SRN  | 2.65 | 258.0 | Pn  | 17:47:13.028 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6427 |
| SRN  | 2.65 | 258.0 | AMl | 17:47:48.678 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.1 | 0.58  | a    | Ml | 2.8 | 3650 |
| SRN  | 2.65 | 258.0 | AMd | 17:48:35.656 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 82.63 | a    | Md | 3.4 | 3643 |
| LKD2 | 2.69 | 232.0 | Sn  | 17:47:47.834 | -0.1 | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6430 |
| LKD2 | 2.69 | 232.0 | Pn  | 17:47:13.273 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6429 |
| LKD2 | 2.69 | 232.0 | AMl | 17:47:56.798 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.4 | 0.60  | a    | Ml | 3.4 | 3651 |
| LKD2 | 2.69 | 232.0 | AMd | 17:48:36.861 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 83.59 | a    | Md | 3.4 | 3644 |

DATA\_TYPE COMMENT GSE2.1  
Event 386

Official Magnitude:  
Ml 2.83

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 27   | 43  | 2.2100 |
| Intermediate: | 277  | 19  | 0.7600 |
| Min:          | 170  | 41  | 0.5000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187385 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 387 0.8 km from Miliá, West Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/10 | 02:07:00.40 |     | 0.32 | 40.2247  | 21.8123   |      |      |    | 23.5  | 1.7 | 16   | 10   | 287 | 0.61  | 2.51  | m    | 427    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.4 | 0.0  | 8      | 427    |
| Md        | 3.2 | 0.0  | 6      | 427    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per  | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| NEST | 0.61 | 289.0 | Sg    | 02:07:21.842 | -0.4 |      |       |      |      |     |     |     |      | m    |           | 6433  |      |
| NEST | 0.61 | 289.0 | Pg    | 02:07:12.766 | -0.1 |      |       |      |      |     |     |     |      | m    |           | 6432  |      |
| NEST | 0.61 | 289.0 | AMl   | 02:07:25.330 |      |      |       |      |      |     |     | 9.2 | 0.28 | a    | Ml        | 3.4   | 3658 |

|     |      |       |     |              |      |     |      |       |     |     |     |      |
|-----|------|-------|-----|--------------|------|-----|------|-------|-----|-----|-----|------|
| FNA | 0.65 | 330.0 | Sg  | 02:07:22.867 | -0.3 | --- | m    | ---   | --- | --- | --- | 6435 |
| FNA | 0.65 | 330.0 | P   | 02:07:13.773 | 0.4  | --- | m    | ---   | --- | --- | --- | 6434 |
| FNA | 0.65 | 330.0 | AMl | 02:07:24.380 |      | --- | 7.8  | 0.18  | a   | Ml  | 3.4 | 3659 |
| FNA | 0.65 | 330.0 | AMd | 02:08:24.703 |      | --- | 0.0  | 70.93 | a   | Md  | 3.1 | 3652 |
| KBN | 0.88 | 298.0 | Sg  | 02:07:29.948 | 0.4  | --- |      |       | m   | --- | --- | 6437 |
| KBN | 0.88 | 298.0 | Pg  | 02:07:17.385 | 0.3  | --- |      |       | m   | --- | --- | 6436 |
| KBN | 0.88 | 298.0 | AMl | 02:07:32.960 |      | --- | 15.2 | 1.08  | a   | Ml  | 3.9 | 3660 |
| KBN | 0.88 | 298.0 | AMd | 02:08:18.302 |      | --- | 0.0  | 60.92 | a   | Md  | 3.0 | 3653 |
| LSK | 0.93 | 266.0 | S   | 02:07:31.619 | -0.2 | --- |      |       | m   | --- | --- | 6439 |
| LSK | 0.93 | 266.0 | P   | 02:07:18.058 | -0.3 | --- |      |       | m   | --- | --- | 6438 |
| LSK | 0.93 | 266.0 | AMl | 02:07:40.160 |      | --- | 4.1  | 0.76  | a   | Ml  | 3.4 | 3661 |
| LSK | 0.93 | 266.0 | AMd | 02:08:52.355 |      | --- | 0.0  | 94.30 | a   | Md  | 3.4 | 3654 |
| SRN | 1.43 | 257.0 | Sg  | 02:07:48.320 | 0.1  | --- |      |       | m   | --- | --- | 6441 |
| SRN | 1.43 | 257.0 | Pg  | 02:07:28.259 | 0.5  | --- |      |       | m   | --- | --- | 6440 |
| SRN | 1.43 | 257.0 | AMl | 02:07:50.500 |      | --- | 1.0  | 0.52  | a   | Ml  | 3.1 | 3662 |
| SRN | 1.43 | 257.0 | AMd | 02:08:43.730 |      | --- | 0.0  | 75.47 | a   | Md  | 3.2 | 3655 |
| VLO | 1.79 | 279.0 | Sn  | 02:07:58.318 | 1.7  | --- |      |       | m   | --- | --- | 6443 |
| VLO | 1.79 | 279.0 | Pn  | 02:07:34.676 | 2.2  | --- |      |       | m   | --- | --- | 6442 |
| VLO | 1.79 | 279.0 | AMd | 02:08:46.033 |      | --- | 0.0  | 71.36 | a   | Md  | 3.2 | 3656 |
| PHP | 1.79 | 325.0 | S   | 02:07:57.784 | 0.4  | --- |      |       | m   | --- | --- | 6445 |
| PHP | 1.79 | 325.0 | Pn  | 02:07:32.701 | -0.3 | --- |      |       | m   | --- | --- | 6444 |
| PHP | 1.79 | 325.0 | AMl | 02:08:07.940 |      | --- | 0.9  | 1.10  | a   | Ml  | 3.3 | 3663 |
| PHP | 1.79 | 325.0 | AMd | 02:08:38.570 |      | --- | 0.0  | 65.87 | a   | Md  | 3.1 | 3657 |
| TIR | 1.86 | 0.0   | P   | 02:07:35.984 | 0.0  | --- |      |       | m   | --- | --- | 6450 |
| TIR | 1.86 | 308.0 | Sn  | 02:07:59.557 | -0.0 | --- |      |       | m   | --- | --- | 6446 |
| TIR | 1.86 | 308.0 | AMl | 02:08:14.610 |      | --- | 0.6  | 0.74  | a   | Ml  | 3.2 | 3664 |
| PUK | 2.32 | 323.0 | S   | 02:08:12.445 | 1.1  | --- |      |       | m   | --- | --- | 6448 |
| PUK | 2.32 | 323.0 | P   | 02:07:40.928 | -0.0 | --- |      |       | m   | --- | --- | 6447 |
| PUK | 2.32 | 323.0 | AMl | 02:08:29.790 |      | --- | 0.4  | 0.44  | a   | Ml  | 3.3 | 3665 |
| BCI | 2.51 | 330.0 | P   | 02:07:43.170 | -0.6 | --- |      |       | m   | --- | --- | 6449 |

DATA\_TYPE COMMENT GSE2.1  
Event 387

Official Magnitude:  
Ml 3.36

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 227  | 66  | 1.8300 |
| Intermediate: | 126  | 4   | 1.5300 |
| Min:          | 34   | 23  | 0.8700 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187385 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 388 Mediterranean Sea; 29 km from Agios Nikitas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/10 | 14:53:13.59 |     | 0.05 | 38.8772  | 20.3045   |      |      |    | 7.5   | 1.4 | 9    | 6    | 240 | 0.29  | 1.64  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.7 | 0.0  | 3      | 428    |
| Md        | 2.8 | 0.0  | 4      | 428    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LKD2 | 0.28 | 0.0   | P     | 14:53:20.595 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6460  |      |
| LKD2 | 0.29 | 107.0 | S     | 14:53:24.384 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6451  |      |
| LKD2 | 0.29 | 107.0 | AMl   | 14:53:28.150 |      |      |       |      |      |     |     | 1.3 | 0.26  | a    | Ml        | 2.1   | 3670 |
| IGT  | 0.65 | 1.0   | S     | 14:53:36.402 | -0.2 |      |       |      |      |     |     |     |       | m    |           | 6453  |      |
| IGT  | 0.65 | 1.0   | P     | 14:53:26.649 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6452  |      |
| IGT  | 0.65 | 1.0   | AMl   | 14:53:41.080 |      |      |       |      |      |     |     | 0.2 | 0.24  | a    | Ml        | 1.7   | 3671 |
| IGT  | 0.65 | 1.0   | AMd   | 14:54:08.021 |      |      |       |      |      |     |     | 0.0 | 41.37 | a    | Md        | 2.0   | 3666 |
| SRN  | 1.03 | 347.0 | S     | 14:53:49.832 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6455  |      |
| SRN  | 1.03 | 347.0 | P     | 14:53:34.307 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6454  |      |
| SRN  | 1.03 | 347.0 | AMl   | 14:53:56.520 |      |      |       |      |      |     |     | 0.0 | 0.36  | a    | Ml        | 1.5   | 3672 |
| SRN  | 1.03 | 347.0 | AMd   | 14:54:34.066 |      |      |       |      |      |     |     | 0.0 | 59.76 | a    | Md        | 3.0   | 3667 |
| LSK  | 1.29 | 10.0  | S     | 14:53:57.407 | -0.1 |      |       |      |      |     |     |     |       | m    |           | 6457  |      |
| LSK  | 1.29 | 10.0  | P     | 14:53:38.637 | -0.0 |      |       |      |      |     |     |     |       | m    |           | 6456  |      |
| LSK  | 1.29 | 10.0  | AMd   | 14:54:41.947 |      |      |       |      |      |     |     | 0.0 | 63.31 | a    | Md        | 3.0   | 3668 |
| NEST | 1.64 | 20.0  | S     | 14:54:08.526 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6459  |      |
| NEST | 1.64 | 20.0  | P     | 14:53:44.977 | 0.0  |      |       |      |      |     |     |     |       | m    |           | 6458  |      |
| NEST | 1.64 | 20.0  | AMd   | 14:54:23.683 |      |      |       |      |      |     |     | 0.0 | 38.71 | a    | Md        | 2.6   | 3669 |

DATA\_TYPE COMMENT GSE2.1  
Event 388

Official Magnitude:  
Ml 1.71

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 223  | 46  | 1.9800 |
| Intermediate: | 57   | 43  | 0.7900 |
| Min:          | 320  | 7   | 0.3600 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187385 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 389 Adriatic Sea; 47 km from Pugnochiuso, Apulia, Italy

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/10 | 19:00:23.15 |     | 0.06 | 41.8020  | 16.7440   |      |      |    | 18.6  | 1.2 | 25   | 25   | 199 | 0.85  | 4.24  | m    |        |

OrigID  
429

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.4 | 0.0  | 9      | 429    |
| Md        | 3.4 | 0.0  | 19     | 429    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|------|
| MRVN | 0.85 | 210.0 | S     | 19:00:52.376 | 0.1  |      |       |      |      |     |     |     |        | m    |           | 6462  |      |
| MRVN | 0.85 | 210.0 | P     | 19:00:39.718 | -0.1 |      |       |      |      |     |     |     |        | m    |           | 6461  |      |
| MRVN | 0.85 | 210.0 | AMl   | 19:00:57.550 |      |      |       |      |      |     |     | 4.9 | 0.18   | a    | Ml        | 3.4   | 3692 |
| MRVN | 0.85 | 210.0 | AMd   | 19:01:15.386 |      |      |       |      |      |     |     | 0.0 | 35.67  | a    | Md        | 2.4   | 3673 |
| NOCI | 1.04 | 166.0 | S     | 19:00:58.329 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6464  |      |
| NOCI | 1.04 | 166.0 | P     | 19:00:45.380 | 2.1  |      |       |      |      |     |     |     |        | m    |           | 6463  |      |
| NOCI | 1.04 | 166.0 | AMl   | 19:01:06.630 |      |      |       |      |      |     |     | 7.6 | 0.30   | a    | Ml        | 3.7   | 3693 |
| NOCI | 1.04 | 166.0 | AMd   | 19:01:35.218 |      |      |       |      |      |     |     | 0.0 | 49.84  | a    | Md        | 2.8   | 3674 |
| HCY  | 1.45 | 62.0  | P     | 19:00:50.491 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6465  |      |
| HCY  | 1.45 | 62.0  | AMd   | 19:02:07.091 |      |      |       |      |      |     |     | 0.0 | 76.60  | a    | Md        | 3.3   | 3675 |
| BUM  | 1.68 | 72.0  | P     | 19:00:54.610 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6466  |      |
| BUM  | 1.68 | 72.0  | AMd   | 19:02:17.451 |      |      |       |      |      |     |     | 0.0 | 82.84  | a    | Md        | 3.3   | 3676 |
| BRY  | 1.72 | 49.0  | P     | 19:00:55.381 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6467  |      |
| BRY  | 1.72 | 49.0  | AMd   | 19:02:21.634 |      |      |       |      |      |     |     | 0.0 | 86.25  | a    | Md        | 3.4   | 3677 |
| CEME | 1.78 | 64.0  | P     | 19:00:55.753 | -0.5 |      |       |      |      |     |     |     |        | m    |           | 6468  |      |
| CEME | 1.78 | 64.0  | AMd   | 19:02:19.961 |      |      |       |      |      |     |     | 0.0 | 84.21  | a    | Md        | 3.4   | 3678 |
| DRME | 1.86 | 77.0  | P     | 19:00:57.531 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6469  |      |
| DRME | 1.86 | 77.0  | AMd   | 19:02:19.961 |      |      |       |      |      |     |     | 0.0 | 82.43  | a    | Md        | 3.3   | 3679 |
| NKME | 1.90 | 58.0  | P     | 19:00:56.982 | -1.2 |      |       |      |      |     |     |     |        | m    |           | 6470  |      |
| NKME | 1.90 | 58.0  | AMd   | 19:02:21.634 |      |      |       |      |      |     |     | 0.0 | 84.65  | a    | Md        | 3.4   | 3680 |
| SCTE | 2.16 | 0.0   | P     | 19:01:02.222 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6490  |      |
| SCTE | 2.16 | 142.0 | S     | 19:01:31.017 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6471  |      |
| SCTE | 2.16 | 142.0 | AMl   | 19:01:51.160 |      |      |       |      |      |     |     | 1.2 | 0.64   | a    | Ml        | 3.7   | 3694 |
| KOME | 2.31 | 62.0  | P     | 19:01:04.073 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6472  |      |
| KOME | 2.31 | 62.0  | AMd   | 19:02:46.633 |      |      |       |      |      |     |     | 0.0 | 102.56 | a    | Md        | 3.6   | 3681 |
| PUK  | 2.36 | 83.0  | S     | 19:01:35.921 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6474  |      |
| PUK  | 2.36 | 83.0  | P     | 19:01:04.770 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6473  |      |
| PUK  | 2.36 | 83.0  | AMl   | 19:01:40.080 |      |      |       |      |      |     |     | 0.4 | 0.44   | a    | Ml        | 3.3   | 3695 |
| PUK  | 2.36 | 83.0  | AMd   | 19:02:43.942 |      |      |       |      |      |     |     | 0.0 | 99.17  | a    | Md        | 3.6   | 3682 |
| BCI  | 2.54 | 76.0  | P     | 19:01:07.344 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6475  |      |
| BCI  | 2.54 | 76.0  | AMd   | 19:02:44.219 |      |      |       |      |      |     |     | 0.0 | 96.88  | a    | Md        | 3.6   | 3683 |
| BEY  | 2.57 | 64.0  | P     | 19:01:07.971 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6476  |      |
| BEY  | 2.57 | 64.0  | AMd   | 19:02:25.816 |      |      |       |      |      |     |     | 0.0 | 77.85  | a    | Md        | 3.4   | 3684 |
| PHP  | 2.77 | 91.0  | S     | 19:01:46.123 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6478  |      |
| PHP  | 2.77 | 91.0  | P     | 19:01:11.123 | 0.6  |      |       |      |      |     |     |     |        | m    |           | 6477  |      |
| PHP  | 2.77 | 91.0  | AMl   | 19:01:50.020 |      |      |       |      |      |     |     | 0.4 | 0.28   | a    | Ml        | 3.4   | 3696 |
| PHP  | 2.77 | 91.0  | AMd   | 19:02:36.691 |      |      |       |      |      |     |     | 0.0 | 85.57  | a    | Md        | 3.5   | 3685 |
| SRN  | 3.13 | 126.0 | S     | 19:01:56.546 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6480  |      |
| SRN  | 3.13 | 126.0 | P     | 19:01:16.119 | -0.4 |      |       |      |      |     |     |     |        | m    |           | 6479  |      |

|      |      |       |     |              |      |     |        |     |     |     |      |
|------|------|-------|-----|--------------|------|-----|--------|-----|-----|-----|------|
| SRN  | 3.13 | 126.0 | AMl | 19:01:57.280 | ---  | 0.1 | 0.30   | a__ | Ml  | 2.9 | 3697 |
| SRN  | 3.13 | 126.0 | AMd | 19:02:52.418 | ---  | 0.0 | 96.30  | a__ | Md  | 3.6 | 3686 |
| LSK  | 3.35 | 118.0 | S   | 19:02:01.434 | -0.0 | --- | ---    | m__ | --- | --- | 6482 |
| LSK  | 3.35 | 118.0 | P   | 19:01:19.353 | 0.0  | --- | ---    | m__ | --- | --- | 6481 |
| LSK  | 3.35 | 118.0 | AMl | 19:02:05.410 | ---  | 0.2 | 0.50   | a__ | Ml  | 3.4 | 3698 |
| LSK  | 3.35 | 118.0 | AMd | 19:03:20.188 | ---  | 0.0 | 120.84 | a__ | Md  | 3.9 | 3687 |
| NEST | 3.54 | 111.0 | S   | 19:02:06.391 | -0.0 | --- | ---    | m__ | --- | --- | 6484 |
| NEST | 3.54 | 111.0 | P   | 19:01:22.167 | 0.0  | --- | ---    | m__ | --- | --- | 6483 |
| NEST | 3.54 | 111.0 | AMl | 19:02:12.490 | ---  | 0.1 | 0.48   | a__ | Ml  | 3.1 | 3699 |
| NEST | 3.54 | 111.0 | AMd | 19:03:26.044 | ---  | 0.0 | 123.88 | a__ | Md  | 3.9 | 3688 |
| IGT  | 3.55 | 128.0 | S   | 19:02:06.673 | -0.0 | --- | ---    | m__ | --- | --- | 6486 |
| IGT  | 3.55 | 128.0 | P   | 19:01:22.315 | 0.0  | --- | ---    | m__ | --- | --- | 6485 |
| IGT  | 3.55 | 128.0 | AMd | 19:03:07.641 | ---  | 0.0 | 105.33 | a__ | Md  | 3.1 | 3689 |
| FNA  | 3.64 | 104.0 | S   | 19:02:09.114 | -0.0 | --- | ---    | m__ | --- | --- | 6488 |
| FNA  | 3.64 | 104.0 | P   | 19:01:23.722 | 0.0  | --- | ---    | m__ | --- | --- | 6487 |
| FNA  | 3.64 | 104.0 | AMl | 19:02:14.040 | ---  | 0.2 | 0.26   | a__ | Ml  | 3.3 | 3700 |
| FNA  | 3.64 | 104.0 | AMd | 19:03:20.010 | ---  | 0.0 | 116.29 | a__ | Md  | 3.8 | 3690 |
| LKD2 | 4.24 | 133.0 | P   | 19:01:31.855 | -0.7 | --- | ---    | m__ | --- | --- | 6489 |
| LKD2 | 4.24 | 133.0 | AMd | 19:03:31.063 | ---  | 0.0 | 119.21 | a__ | Md  | 3.9 | 3691 |

DATA\_TYPE COMMENT GSE2.1  
Event 389

Official Magnitude:  
Ml 3.36

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 300  | 59  | 1.4300 |
| Intermediate: | 127  | 30  | 0.3800 |
| Min:          | 35   | 3   | 0.2800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187384 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 394 Mediterranean Sea; 23 km from Keri, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/13 | 08:39:45.85 |     | 0.03 | 37.4958  | 20.6508   |      |      |    | 16.0  | 1.3 | 6    | 5    | 349 | 1.30  | 2.93  | m    |        |
| 434        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.3 | 0.0  | 2      | 434    |
| Md        | 3.1 | 0.0  | 3      | 434    |



| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| LKD2 | 1.29 | 0.0   | S     | 08:40:29.039 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6549  |
| LKD2 | 1.29 | 0.0   | P     | 08:40:10.487 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6548  |
| LKD2 | 1.29 | 0.0   | AMl   | 08:40:32.110 |      |      |       |      |      | --- |     | 3.4 | 0.76  | a    | Ml        | 3.5   |
| LKD2 | 1.29 | 0.0   | AMd   | 08:41:15.283 |      |      |       |      |      | --- |     | 0.0 | 64.80 | a    | Md        | 3.1   |
| IGT  | 2.05 | 354.0 | S     | 08:40:51.247 | 0.0  |      |       |      |      | --- |     |     |       | m    |           | 6551  |
| IGT  | 2.05 | 354.0 | P     | 08:40:23.188 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6550  |
| IGT  | 2.05 | 354.0 | AMd   | 08:41:30.358 |      |      |       |      |      | --- |     | 0.0 | 67.17 | a    | Md        | 2.6   |
| NEST | 2.93 | 5.0   | S     | 08:41:13.926 | -0.0 |      |       |      |      | --- |     |     |       | m    |           | 6553  |
| NEST | 2.93 | 5.0   | P     | 08:40:36.247 | 0.1  |      |       |      |      | --- |     |     |       | m    |           | 6552  |
| NEST | 2.93 | 5.0   | AMl   | 08:41:56.550 |      |      |       |      |      | --- |     | 0.2 | 1.84  | a    | Ml        | 3.1   |
| NEST | 2.93 | 5.0   | AMd   | 08:42:10.402 |      |      |       |      |      | --- |     | 0.0 | 94.16 | a    | Md        | 3.6   |

DATA\_TYPE COMMENT GSE2.1  
Event 394

Official Magnitude:  
Ml 3.34

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 90   | 1   | 4.0200 |
| Intermediate: | 182  | 56  | 1.6000 |
| Min:          | 359  | 34  | 1.0000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187384 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 395 2.2 km from Tolofón, Central Greece, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/13 | 16:18:40.78 |     | 0.01 | 38.3873  | 22.1910   |      |      |    | 14.6  | 6.6 | 7    | 4    | 303 | 1.27  | 2.47  | m    |        |
| 435        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.9 | 0.0  | 3      | 435    |
| Md        | 3.3 | 0.0  | 3      | 435    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per  | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|
| LKD2 | 1.27 | 0.0   | P     | 16:18:58.924 | 0.0  |      |       |      |      | --- |     |     |      | m    |           | 6561  |
| LKD2 | 1.27 | 289.0 | S     | 16:19:23.330 | 0.0  |      |       |      |      | --- |     |     |      | m    |           | 6554  |
| LKD2 | 1.27 | 289.0 | AMl   | 16:19:24.338 |      |      |       |      |      | --- |     | 1.6 | 0.60 | a    | Ml        | 3.2   |
| IGT  | 1.85 | 309.0 | S     | 16:19:41.149 | 0.0  |      |       |      |      | --- |     |     |      | m    |           | 6556  |
| IGT  | 1.85 | 309.0 | P     | 16:19:15.277 | 0.0  |      |       |      |      | --- |     |     |      | m    |           | 6555  |
| IGT  | 1.85 | 309.0 | AMl   | 16:20:31.828 |      |      |       |      |      | --- |     | 0.3 | 2.18 | a    | Ml        | 2.9   |

|      |      |       |     |              |      |     |       |        |     |     |      |      |
|------|------|-------|-----|--------------|------|-----|-------|--------|-----|-----|------|------|
| IGT  | 1.85 | 309.0 | AMd | 16:20:37.635 | ___  | 0.0 | 82.36 | a__    | Md  | 2.8 | 3754 |      |
| NEST | 2.21 | 337.0 | S   | 16:19:50.576 | -0.0 | ___ |       | m__    |     |     | 6558 |      |
| NEST | 2.21 | 337.0 | P   | 16:19:20.670 | 0.0  | ___ |       | m__    |     |     | 6557 |      |
| NEST | 2.21 | 337.0 | AMl | 16:20:02.138 |      | ___ | 0.2   | 0.66   | a__ | Ml  | 2.9  | 3759 |
| NEST | 2.21 | 337.0 | AMd | 16:21:15.670 |      | ___ | 0.0   | 115.00 | a__ | Md  | 3.7  | 3755 |
| FNA  | 2.47 | 346.0 | S   | 16:19:57.332 | 0.0  | ___ |       |        | m__ |     | 6560 |      |
| FNA  | 2.47 | 346.0 | P   | 16:19:24.520 | 0.0  | ___ |       |        | m__ |     | 6559 |      |
| FNA  | 2.47 | 346.0 | AMd | 16:20:42.549 |      | ___ | 0.0   | 78.03  | a__ | Md  | 3.3  | 3756 |

DATA\_TYPE COMMENT GSE2.1  
Event 395

Official Magnitude:  
Ml 2.93

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 172  | 50  | 8.4600 |
| Intermediate: | 327  | 36  | 0.9900 |
| Min:          | 66   | 13  | 0.6800 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187384 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 397 Mediterranean Sea; 24 km from Anafonitria, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/13 | 16:59:28.52 |     | 0.01 | 37.8762  | 20.3772   |      |      |    | 17.8  | 1.2 | 4    | 5    | 346 | 0.94  | 2.59  | m    |        |
| 437        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 2.8 | 0.0  | 3      | 437    |
| Md        | 2.8 | 0.0  | 2      | 437    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LKD2 | 0.94 | 13.0  | S     | 17:00:00.563 | 0.0  |      |       |      |      | ___ |     |     |       | m__  |           | 6579  |      |
| LKD2 | 0.94 | 13.0  | P     | 16:59:44.246 | -2.6 |      |       |      |      | ___ |     |     |       | m__  |           | 6578  |      |
| LKD2 | 0.94 | 13.0  | AMl   | 17:00:10.960 |      |      |       |      |      | ___ |     | 1.3 | 0.66  | a__  | Ml        | 2.9   | 3776 |
| LKD2 | 0.94 | 13.0  | AMd   | 17:00:39.136 |      |      |       |      |      | ___ |     | 0.0 | 54.89 | a__  | Md        | 2.9   | 3774 |
| IGT  | 1.65 | 359.0 | S     | 17:00:22.768 | 0.0  |      |       |      |      | ___ |     |     |       | m__  |           | 6581  |      |
| IGT  | 1.65 | 359.0 | P     | 16:59:59.521 | 0.0  |      |       |      |      | ___ |     |     |       | m__  |           | 6580  |      |
| IGT  | 1.65 | 359.0 | AMl   | 17:00:28.780 |      |      |       |      |      | ___ |     | 0.3 | 1.50  | a__  | Ml        | 2.8   | 3777 |
| IGT  | 1.65 | 359.0 | AMd   | 17:01:19.729 |      |      |       |      |      | ___ |     | 0.0 | 80.21 | a__  | Md        | 2.7   | 3775 |
| NEST | 2.59 | 0.0   | P     | 17:00:12.222 | 0.0  |      |       |      |      | ___ |     |     |       | m__  |           | 6583  |      |
| NEST | 2.59 | 11.0  | S     | 17:00:47.484 | 0.0  |      |       |      |      | ___ |     |     |       | m__  |           | 6582  |      |

NEST 2.59 11.0 AM1 17:00:52.340 \_\_\_\_\_ 0.1 0.52 a\_\_ M1 2.7 3778

DATA\_TYPE COMMENT GSE2.1  
Event 397

Official Magnitude:  
M1 2.75

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 279  | 19  | 3.1600 |
| Intermediate: | 172  | 41  | 1.8200 |
| Min:          | 28   | 43  | 1.3300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187383 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 403 1.2 km from Samári, Central Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/15 | 05:25:11.12 |     | 0.22 | 40.8110  | 22.0838   |      |      |    | 13.3  | 1.0 | 22   | 32   | 146 | 0.53  | 2.81  | m    |        |
| OrigID 443 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 3.1 | 0.0  | 9      | 443    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per  | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|------|------|-----------|-------|------|
| FNA  | 0.53 | 268.0 | S     | 05:25:29.842 | -0.3 |      |       |      |      | --- |     |     |      | m__  |           | 6681  |      |
| FNA  | 0.53 | 268.0 | P     | 05:25:22.307 | 0.3  |      |       |      |      | --- |     |     |      | m__  |           | 6680  |      |
| FNA  | 0.53 | 268.0 | AM1   | 05:25:33.498 |      |      |       |      |      | --- |     | 3.2 | 0.40 | a__  | M1        | 2.8   | 3816 |
| FNA  | 0.53 | 268.0 | AM1   | 05:25:34.728 |      |      |       |      |      | --- |     | 5.4 | 0.30 | a__  | M1        | 3.0   | 3815 |
| THE  | 0.69 | 104.0 | S     | 05:25:35.572 | 0.1  |      |       |      |      | --- |     |     |      | m__  |           | 6683  |      |
| THE  | 0.69 | 104.0 | P     | 05:25:24.972 | -0.1 |      |       |      |      | --- |     |     |      | m__  |           | 6682  |      |
| THE  | 0.69 | 104.0 | AM1   | 05:25:39.148 |      |      |       |      |      | --- |     | 1.3 | 0.34 | a__  | M1        | 2.6   | 3817 |
| NEST | 0.88 | 244.0 | S     | 05:25:41.686 | 0.0  |      |       |      |      | --- |     |     |      | m__  |           | 6685  |      |
| NEST | 0.88 | 244.0 | P     | 05:25:28.615 | 0.1  |      |       |      |      | --- |     |     |      | m__  |           | 6684  |      |
| NEST | 0.88 | 244.0 | AM1   | 05:25:45.158 |      |      |       |      |      | --- |     | 2.6 | 0.62 | a__  | M1        | 3.1   | 3818 |
| KBN  | 1.00 | 260.0 | S     | 05:25:45.101 | 0.3  |      |       |      |      | --- |     |     |      | m__  |           | 6687  |      |
| KBN  | 1.00 | 260.0 | P     | 05:25:30.881 | 0.5  |      |       |      |      | --- |     |     |      | m__  |           | 6686  |      |
| KBN  | 1.00 | 260.0 | AM1   | 05:25:50.738 |      |      |       |      |      | --- |     | 2.2 | 0.74 | a__  | M1        | 3.1   | 3819 |
| LSK  | 1.31 | 241.0 | S     | 05:25:54.962 | 0.0  |      |       |      |      | --- |     |     |      | m__  |           | 6689  |      |
| LSK  | 1.31 | 241.0 | Pn    | 05:25:35.915 | -0.3 |      |       |      |      | --- |     |     |      | m__  |           | 6688  |      |
| LSK  | 1.31 | 241.0 | AM1   | 05:25:59.508 |      |      |       |      |      | --- |     | 3.0 | 0.72 | a__  | M1        | 3.5   | 3820 |
| PHP  | 1.52 | 306.0 | Sn    | 05:26:00.810 | -0.2 |      |       |      |      | --- |     |     |      | m__  |           | 6691  |      |
| PHP  | 1.52 | 306.0 | Pn    | 05:25:39.794 | 0.2  |      |       |      |      | --- |     |     |      | m__  |           | 6690  |      |

|      |      |       |     |              |      |     |      |   |     |     |      |
|------|------|-------|-----|--------------|------|-----|------|---|-----|-----|------|
| PHP  | 1.52 | 306.0 | AM1 | 05:26:07.608 | ---  | 1.0 | 0.72 | a | M1  | 3.2 | 3821 |
| TIR  | 1.76 | 0.0   | Pn  | 05:25:44.183 | 0.0  | --- | ---  | m | --- | --- | 6705 |
| TIR  | 1.76 | 289.0 | Sn  | 05:26:09.283 | 0.2  | --- | ---  | m | --- | --- | 6692 |
| TIR  | 1.76 | 289.0 | AM1 | 05:26:20.078 | ---  | 0.4 | 1.02 | a | M1  | 2.9 | 3822 |
| SRN  | 1.84 | 241.0 | Sn  | 05:26:10.579 | -1.7 | --- | ---  | m | --- | --- | 6694 |
| SRN  | 1.84 | 241.0 | Pn  | 05:25:45.836 | -0.2 | --- | ---  | m | --- | --- | 6693 |
| SRN  | 1.84 | 241.0 | AM1 | 05:26:16.548 | ---  | 0.5 | 0.86 | a | M1  | 3.1 | 3823 |
| IGT  | 1.85 | 228.0 | Sn  | 05:26:11.685 | -0.2 | --- | ---  | m | --- | --- | 6696 |
| IGT  | 1.85 | 228.0 | Pn  | 05:25:46.157 | 0.3  | --- | ---  | m | --- | --- | 6695 |
| PUK  | 2.06 | 308.0 | Sn  | 05:26:17.232 | 0.2  | --- | ---  | m | --- | --- | 6698 |
| PUK  | 2.06 | 308.0 | Pn  | 05:25:48.777 | 0.0  | --- | ---  | m | --- | --- | 6697 |
| BCI  | 2.17 | 317.0 | Sn  | 05:26:20.063 | 0.1  | --- | ---  | m | --- | --- | 6700 |
| BCI  | 2.17 | 317.0 | P   | 05:25:50.169 | -0.3 | --- | ---  | m | --- | --- | 6699 |
| BCI  | 2.17 | 317.0 | AM1 | 05:26:32.678 | ---  | 0.6 | 0.58 | a | M1  | 3.4 | 3824 |
| LKD2 | 2.30 | 209.0 | Pn  | 05:25:50.509 | -2.0 | --- | ---  | m | --- | --- | 6701 |
| BEY  | 2.63 | 323.0 | Pn  | 05:25:56.080 | -1.2 | --- | ---  | m | --- | --- | 6702 |
| KOME | 2.80 | 318.0 | Pn  | 05:25:59.470 | -0.4 | --- | ---  | m | --- | --- | 6703 |
| BUM  | 2.81 | 303.0 | Pn  | 05:25:59.943 | -0.1 | --- | ---  | m | --- | --- | 6704 |

DATA\_TYPE COMMENT GSE2.1  
Event 403

Official Magnitude:  
M1 3.11

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 170  | 76  | 1.0600 |
| Intermediate: | 9    | 12  | 0.5400 |
| Min:          | 278  | 4   | 0.4200 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187383 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 404 0.7 km from Samári, Central Macedonia, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/15 | 04:24:19.91 |     | 0.32 | 40.8208  | 22.1013   |      |      |    | 12.7  | 1.4 | 18   | 32   | 148 | 0.55  | 2.17  | m    | 444    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.9 | 0.0  | 7      | 444    |

| Sta | Dist | EvAz | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per | Qual | Magnitude | ArrID |
|-----|------|------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-----|------|-----------|-------|
| BCI | 0.00 | 0.0  | Pn    | 04:24:59.058 | 0.0  |      |       |      |      | --- |     |     |     | m    |           | 6726  |

|      |      |       |     |              |      |     |     |      |   |    |     |  |      |
|------|------|-------|-----|--------------|------|-----|-----|------|---|----|-----|--|------|
| BCI  | 2.17 | 317.0 | Sn  | 04:25:28.532 | -0.4 | --- |     |      | m |    |     |  | 6725 |
| BCI  | 2.17 | 317.0 | AM1 | 04:25:39.320 |      | --- | 0.2 | 0.50 | a | M1 | 2.9 |  | 3833 |
| FNA  | 0.55 | 267.0 | S   | 04:24:39.129 | -0.3 | --- |     |      | m |    |     |  | 6707 |
| FNA  | 0.55 | 267.0 | P   | 04:24:31.177 | 0.1  | --- |     |      | m |    |     |  | 6706 |
| FNA  | 0.55 | 267.0 | AM1 | 04:24:41.800 |      | --- | 2.8 | 0.20 | a | M1 | 2.8 |  | 3825 |
| THE  | 0.68 | 105.0 | S   | 04:24:43.600 | -0.3 | --- |     |      | m |    |     |  | 6709 |
| THE  | 0.68 | 105.0 | P   | 04:24:33.962 | 0.4  | --- |     |      | m |    |     |  | 6708 |
| THE  | 0.68 | 105.0 | AM1 | 04:24:48.010 |      | --- | 0.5 | 0.32 | a | M1 | 2.2 |  | 3826 |
| NEST | 0.90 | 244.0 | S   | 04:24:51.305 | 0.3  | --- |     |      | m |    |     |  | 6711 |
| NEST | 0.90 | 244.0 | P   | 04:24:36.966 | -0.7 | --- |     |      | m |    |     |  | 6710 |
| NEST | 0.90 | 244.0 | AM1 | 04:24:54.060 |      | --- | 0.9 | 0.64 | a | M1 | 2.7 |  | 3827 |
| KBN  | 1.02 | 260.0 | S   | 04:24:54.121 | 0.0  | --- |     |      | m |    |     |  | 6713 |
| KBN  | 1.02 | 260.0 | P   | 04:24:39.967 | 0.5  | --- |     |      | m |    |     |  | 6712 |
| KBN  | 1.02 | 260.0 | AM1 | 04:24:59.640 |      | --- | 1.0 | 0.72 | a | M1 | 2.8 |  | 3829 |
| KBN  | 1.02 | 260.0 | AM1 | 04:24:57.410 |      | --- | 1.2 | 0.72 | a | M1 | 2.9 |  | 3828 |
| LSK  | 1.33 | 241.0 | S   | 04:25:04.104 | -0.2 | --- |     |      | m |    |     |  | 6715 |
| LSK  | 1.33 | 241.0 | P   | 04:24:45.452 | 0.2  | --- |     |      | m |    |     |  | 6714 |
| LSK  | 1.33 | 241.0 | AM1 | 04:25:08.410 |      | --- | 1.4 | 0.72 | a | M1 | 3.2 |  | 3831 |
| LSK  | 1.33 | 241.0 | AM1 | 04:25:11.270 |      | --- | 1.0 | 0.86 | a | M1 | 3.0 |  | 3830 |
| PHP  | 1.52 | 306.0 | S   | 04:25:09.844 | -0.2 | --- |     |      | m |    |     |  | 6717 |
| PHP  | 1.52 | 306.0 | P   | 04:24:48.706 | 0.2  | --- |     |      | m |    |     |  | 6716 |
| TIR  | 1.77 | 289.0 | S   | 04:25:20.681 | 2.4  | --- |     |      | m |    |     |  | 6719 |
| TIR  | 1.77 | 289.0 | P   | 04:24:54.226 | 1.0  | --- |     |      | m |    |     |  | 6718 |
| SRN  | 1.86 | 241.0 | S   | 04:25:18.485 | -3.1 | --- |     |      | m |    |     |  | 6721 |
| SRN  | 1.86 | 241.0 | P   | 04:24:54.618 | -0.6 | --- |     |      | m |    |     |  | 6720 |
| IGT  | 1.87 | 228.0 | P   | 04:24:55.120 | 0.2  | --- |     |      | m |    |     |  | 6722 |
| PUK  | 2.06 | 308.0 | S   | 04:25:26.426 | 0.4  | --- |     |      | m |    |     |  | 6724 |
| PUK  | 2.06 | 308.0 | P   | 04:24:57.622 | -0.1 | --- |     |      | m |    |     |  | 6723 |
| PUK  | 2.06 | 308.0 | AM1 | 04:25:31.950 |      | --- | 0.2 | 0.44 | a | M1 | 2.9 |  | 3832 |

DATA\_TYPE COMMENT GSE2.1  
Event 404

Official Magnitude:  
M1 2.89

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 161  | 64  | 1.5700 |
| Intermediate: | 15   | 21  | 0.7800 |
| Min:          | 280  | 13  | 0.5300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187383 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 405 Mediterranean Sea; 54 km from Moni Strofadon, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/16 | 01:57:08.32 |     | 0.40 | 37.2593  | 20.4002   |      |      |    | 8.0   | 2.8 | 14   | 9    | 322 | 1.54  | 5.80  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 4.5 | 0.0  | 4      | 445    |
| Md        | 4.1 | 0.0  | 3      | 445    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|
| LKD2 | 1.54 | 7.0   | Sn    | 01:58:00.366 | 0.3  |      |       |      |      |     |     |      |        | m__  |           | 6728  |
| LKD2 | 1.54 | 7.0   | Pn    | 01:57:37.050 | -0.9 |      |       |      |      |     |     |      |        | mde  |           | 6727  |
| LKD2 | 1.54 | 7.0   | AMl   | 01:58:03.370 |      |      |       |      |      |     |     | 21.3 | 0.66   | a__  | Ml        | 4.5   |
| LKD2 | 1.54 | 7.0   | AMd   | 02:00:29.932 |      |      |       |      |      |     |     | 0.0  | 172.88 | a__  | Md        | 4.1   |
| IGT  | 2.27 | 359.0 | Sn    | 01:58:20.486 | -0.4 |      |       |      |      |     |     |      |        | m__  |           | 6730  |
| IGT  | 2.27 | 359.0 | Pn    | 01:57:50.700 | 0.9  |      |       |      |      |     |     |      |        | mde  |           | 6729  |
| IGT  | 2.27 | 359.0 | AMd   | 02:00:53.154 |      |      |       |      |      |     |     | 0.0  | 182.45 | a__  | Md        | 3.6   |
| SRN  | 2.64 | 354.0 | S     | 01:58:31.394 | 0.4  |      |       |      |      |     |     |      |        | m__  |           | 6732  |
| SRN  | 2.64 | 354.0 | P     | 01:57:54.950 | -0.6 |      |       |      |      |     |     |      |        | m__  |           | 6731  |
| SRN  | 2.64 | 354.0 | AMl   | 01:58:41.060 |      |      |       |      |      |     |     | 2.6  | 0.68   | a__  | Ml        | 4.2   |
| LSK  | 2.89 | 3.0   | S     | 01:58:37.438 | 0.8  |      |       |      |      |     |     |      |        | m__  |           | 6734  |
| LSK  | 2.89 | 3.0   | P     | 01:57:58.906 | 0.1  |      |       |      |      |     |     |      |        | mce  |           | 6733  |
| LSK  | 2.89 | 3.0   | AMl   | 01:58:51.150 |      |      |       |      |      |     |     | 6.3  | 0.76   | a__  | Ml        | 4.7   |
| NEST | 3.19 | 8.0   | S     | 01:58:41.665 | -3.0 |      |       |      |      |     |     |      |        | m__  |           | 6736  |
| NEST | 3.19 | 8.0   | P     | 01:58:03.559 | 0.2  |      |       |      |      |     |     |      |        | m__  |           | 6735  |
| NEST | 3.19 | 8.0   | AMd   | 02:00:55.823 |      |      |       |      |      |     |     | 0.0  | 172.26 | a__  | Md        | 4.2   |
| SCTE | 3.19 | 333.0 | P     | 01:58:03.276 | -0.1 |      |       |      |      |     |     |      |        | m__  |           | 6737  |
| KBN  | 3.37 | 5.0   | S     | 01:58:48.489 | -0.0 |      |       |      |      |     |     |      |        | m__  |           | 6739  |
| KBN  | 3.37 | 5.0   | P     | 01:58:05.922 | 0.4  |      |       |      |      |     |     |      |        | m__  |           | 6738  |
| KBN  | 3.37 | 5.0   | AMl   | 01:59:12.770 |      |      |       |      |      |     |     | 2.2  | 1.00   | a__  | Ml        | 4.4   |
| FNA  | 3.60 | 11.0  | S     | 01:58:55.171 | 0.0  |      |       |      |      |     |     |      |        | m__  |           | 6741  |
| FNA  | 3.60 | 11.0  | Pn    | 01:58:09.080 | -0.3 |      |       |      |      |     |     |      |        | mde  |           | 6740  |
| SGRT | 5.80 | 0.0   | P     | 01:58:39.223 | 0.0  |      |       |      |      |     |     |      |        | m__  |           | 6742  |

DATA\_TYPE COMMENT GSE2.1  
Event 405

Official Magnitude:  
Ml 4.45

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 122  | 31  | 5.3600 |
| Intermediate: | 245  | 41  | 3.8100 |
| Min:          | 9    | 33  | 1.7600 |

BEGIN GSE2.1

MSG\_TYPE DATA  
 MSG\_ID 1551187382 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 406 1.0 km from Sakellariko, Epirus, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/16 | 11:25:18.74 |     | 0.03 | 39.7653  | 20.6317   |      |      |    | 25.8  | 0.5 | 17   | 11   | 115 | 0.33  | 1.98  | m    |        |
| 446        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.1 | 0.0  | 9      | 446    |
| Md        | 3.1 | 0.0  | 9      | 446    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| IGT  | 0.33 | 226.0 | Sg    | 11:25:32.376 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6744  |
| IGT  | 0.33 | 226.0 | Pg    | 11:25:26.542 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6743  |
| IGT  | 0.33 | 226.0 | AMd   | 11:26:17.160 |      |      |       |      |      |     |     | 0.0  | 50.62 | a    | Md        | 2.2   |
| LSK  | 0.38 | 357.0 | Sg    | 11:25:33.706 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6746  |
| LSK  | 0.38 | 357.0 | Pg    | 11:25:27.326 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6745  |
| LSK  | 0.38 | 357.0 | AMl   | 11:25:40.508 |      |      |       |      |      |     |     | 15.8 | 0.50  | a    | Ml        | 3.4   |
| LSK  | 0.38 | 357.0 | AMd   | 11:26:28.603 |      |      |       |      |      |     |     | 0.0  | 61.28 | a    | Md        | 2.9   |
| SRN  | 0.50 | 284.0 | Sg    | 11:25:37.893 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6748  |
| SRN  | 0.50 | 284.0 | Pg    | 11:25:29.696 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6747  |
| SRN  | 0.50 | 284.0 | AMl   | 11:25:41.888 |      |      |       |      |      |     |     | 6.1  | 0.36  | a    | Ml        | 3.1   |
| SRN  | 0.50 | 284.0 | AMd   | 11:26:26.741 |      |      |       |      |      |     |     | 0.0  | 57.04 | a    | Md        | 2.9   |
| NEST | 0.72 | 26.0  | Sg    | 11:25:43.821 | -0.2 |      |       |      |      |     |     |      |       | m    |           | 6750  |
| NEST | 0.72 | 26.0  | Pg    | 11:25:33.163 | -0.1 |      |       |      |      |     |     |      |       | m    |           | 6749  |
| NEST | 0.72 | 26.0  | AMl   | 11:25:52.538 |      |      |       |      |      |     |     | 2.0  | 0.40  | a    | Ml        | 2.9   |
| NEST | 0.72 | 26.0  | AMd   | 11:26:37.613 |      |      |       |      |      |     |     | 0.0  | 64.45 | a    | Md        | 3.0   |
| KBN  | 0.87 | 0.0   | Pg    | 11:25:36.670 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6761  |
| KBN  | 0.87 | 7.0   | Sg    | 11:25:47.591 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6751  |
| KBN  | 0.87 | 7.0   | AMl   | 11:26:04.168 |      |      |       |      |      |     |     | 1.5  | 0.52  | a    | Ml        | 2.9   |
| LKD2 | 0.97 | 178.0 | Sg    | 11:25:51.795 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6753  |
| LKD2 | 0.97 | 178.0 | Pg    | 11:25:37.667 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6752  |
| LKD2 | 0.97 | 178.0 | AMl   | 11:25:56.078 |      |      |       |      |      |     |     | 3.5  | 0.26  | a    | Ml        | 3.3   |
| LKD2 | 0.97 | 178.0 | AMd   | 11:26:48.057 |      |      |       |      |      |     |     | 0.0  | 70.39 | a    | Md        | 3.1   |
| VLO  | 1.12 | 310.0 | Sn    | 11:25:55.111 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6755  |
| VLO  | 1.12 | 310.0 | Pn    | 11:25:39.449 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6754  |
| VLO  | 1.12 | 310.0 | AMl   | 11:26:08.468 |      |      |       |      |      |     |     | 6.8  | 0.56  | a    | Ml        | 3.7   |
| VLO  | 1.12 | 310.0 | AMd   | 11:26:47.771 |      |      |       |      |      |     |     | 0.0  | 68.32 | a    | Md        | 3.1   |
| TIR  | 1.68 | 340.0 | Sn    | 11:26:13.033 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6757  |
| TIR  | 1.68 | 340.0 | Pn    | 11:25:49.788 | 0.0  |      |       |      |      |     |     |      |       | m    |           | 6756  |
| TIR  | 1.68 | 340.0 | AMl   | 11:26:22.798 |      |      |       |      |      |     |     | 0.5  | 0.50  | a    | Ml        | 3.0   |
| TIR  | 1.68 | 340.0 | AMd   | 11:27:10.660 |      |      |       |      |      |     |     | 0.0  | 80.87 | a    | Md        | 3.3   |
| SCTE | 1.69 | 282.0 | Sn    | 11:26:13.233 | -0.0 |      |       |      |      |     |     |      |       | m    |           | 6759  |
| SCTE | 1.69 | 282.0 | Pn    | 11:25:49.938 | 0.1  |      |       |      |      |     |     |      |       | m    |           | 6758  |
| SCTE | 1.69 | 282.0 | AMl   | 11:26:18.538 |      |      |       |      |      |     |     | 2.5  | 0.32  | a    | Ml        | 3.7   |
| SCTE | 1.69 | 282.0 | AMd   | 11:27:06.798 |      |      |       |      |      |     |     | 0.0  | 76.86 | a    | Md        | 3.3   |

|     |      |      |     |              |     |     |  |  |  |  |  |  |  |  |  |  |  |     |       |      |    |     |      |
|-----|------|------|-----|--------------|-----|-----|--|--|--|--|--|--|--|--|--|--|--|-----|-------|------|----|-----|------|
| THE | 1.98 | 63.0 | Pn  | 11:25:54.256 | 0.0 | --- |  |  |  |  |  |  |  |  |  |  |  | m   |       | 6760 |    |     |      |
| THE | 1.98 | 63.0 | AM1 | 11:26:22.008 |     | --- |  |  |  |  |  |  |  |  |  |  |  | 0.2 | 0.44  | a    | M1 | 2.9 | 3858 |
| THE | 1.98 | 63.0 | AMd | 11:26:55.639 |     | --- |  |  |  |  |  |  |  |  |  |  |  | 0.0 | 61.38 | a    | Md | 3.1 | 3849 |

DATA\_TYPE COMMENT GSE2.1  
Event 406

Official Magnitude:  
M1 3.07

Error ellipse:

|               |      |     |        |
|---------------|------|-----|--------|
|               | Azim | Dip | Mag    |
| Max:          | 198  | 82  | 0.4700 |
| Intermediate: | 96   | 1   | 0.3300 |
| Min:          | 6    | 8   | 0.2300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187382 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 408 1.3 km from Katarraktis, Epirus, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/16 | 16:09:29.02 |     | 0.17 | 39.7898  | 20.6215   |      |      |    | 23.1  | 1.9 | 11   | 31   | 151 | 0.34  | 2.32  | m    | 448    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.4 | 0.0  | 5      | 448    |
| Md        | 2.4 | 0.0  | 3      | 448    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| IGT  | 0.34 | 222.0 | S     | 16:09:42.414 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6774  |
| IGT  | 0.34 | 222.0 | P     | 16:09:36.637 | -0.0 |      |       |      |      | --- |     |     |       |      |           | 6773  |
| IGT  | 0.34 | 222.0 | AM1   | 16:09:45.490 |      |      |       |      |      | --- |     | 2.3 | 0.32  | a    | M1        | 3871  |
| IGT  | 0.34 | 222.0 | AMd   | 16:10:15.932 |      |      |       |      |      | --- |     | 0.0 | 39.29 | a    | Md        | 3868  |
| LSK  | 0.36 | 358.0 | S     | 16:09:44.241 | 1.5  |      |       |      |      | --- |     |     |       |      |           | 6776  |
| LSK  | 0.36 | 358.0 | P     | 16:09:37.135 | 0.3  |      |       |      |      | --- |     |     |       |      |           | 6775  |
| LSK  | 0.36 | 358.0 | AM1   | 16:09:49.990 |      |      |       |      |      | --- |     | 2.6 | 0.42  | a    | M1        | 3872  |
| LSK  | 0.36 | 358.0 | AMd   | 16:10:28.474 |      |      |       |      |      | --- |     | 0.0 | 51.34 | a    | Md        | 3869  |
| SRN  | 0.49 | 281.0 | S     | 16:09:47.287 | -0.2 |      |       |      |      | --- |     |     |       |      |           | 6778  |
| SRN  | 0.49 | 281.0 | P     | 16:09:39.710 | 0.1  |      |       |      |      | --- |     |     |       |      |           | 6777  |
| SRN  | 0.49 | 281.0 | AM1   | 16:09:51.320 |      |      |       |      |      | --- |     | 0.9 | 0.28  | a    | M1        | 3874  |
| SRN  | 0.49 | 281.0 | AM1   | 16:09:50.970 |      |      |       |      |      | --- |     | 1.2 | 0.54  | a    | M1        | 3873  |
| SRN  | 0.49 | 281.0 | AMd   | 16:10:15.867 |      |      |       |      |      | --- |     | 0.0 | 36.16 | a    | Md        | 3870  |
| NEST | 0.71 | 0.0   | P     | 16:09:43.554 | 0.0  |      |       |      |      | --- |     |     |       |      |           | 6786  |
| NEST | 0.71 | 27.0  | S     | 16:09:53.353 | -0.3 |      |       |      |      | --- |     |     |       |      |           | 6779  |



|      |      |       |     |              |      |     |      |   |     |     |      |
|------|------|-------|-----|--------------|------|-----|------|---|-----|-----|------|
| NEST | 0.71 | 27.0  | AM1 | 16:09:57.160 | ---  | 0.4 | 0.34 | a | M1  | 2.2 | 3876 |
| NEST | 0.71 | 27.0  | AM1 | 16:09:59.810 | ---  | 0.4 | 0.34 | a | M1  | 2.2 | 3875 |
| KBN  | 0.84 | 8.0   | P   | 16:09:45.177 | 0.1  | --- | ---  | m | --- | --- | 6780 |
| LKD2 | 1.00 | 178.0 | Sn  | 16:10:04.179 | 1.4  | --- | ---  | m | --- | --- | 6782 |
| LKD2 | 1.00 | 178.0 | Pn  | 16:09:48.257 | -0.1 | --- | ---  | m | --- | --- | 6781 |
| LKD2 | 1.00 | 178.0 | AM1 | 16:10:06.690 | ---  | 0.5 | 0.26 | a | M1  | 2.5 | 3877 |
| SCTE | 1.68 | 281.0 | Sn  | 16:10:23.775 | 0.2  | --- | ---  | m | --- | --- | 6784 |
| SCTE | 1.68 | 281.0 | Pn  | 16:10:00.327 | 0.2  | --- | ---  | m | --- | --- | 6783 |
| PUK  | 2.32 | 347.0 | Pn  | 16:10:09.411 | -0.1 | --- | ---  | m | --- | --- | 6785 |

DATA\_TYPE COMMENT GSE2.1  
Event 408

Official Magnitude:  
M1 2.35

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 152  | 84  | 1.9100 |
| Intermediate: | 298  | 4   | 0.6800 |
| Min:          | 28   | 3   | 0.4300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187381 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 411 1.9 km from Arápis, Thessaly, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/17 | 13:31:49.80 |     | 0.02 | 39.1742  | 21.8570   |      |      |    | 10.2  | 3.6 | 8    | 11   | 275 | 1.01  | 2.77  | m    | 451    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.6 | 0.0  | 4      | 451    |
| Md        | 3.4 | 0.0  | 5      | 451    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| LKD2 | 1.01 | 249.0 | Sg    | 13:32:24.719 | -0.0 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m    | ---       | 6810  |      |
| LKD2 | 1.01 | 249.0 | Pg    | 13:32:09.748 | -0.0 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m    | ---       | 6809  |      |
| LKD2 | 1.01 | 249.0 | AM1   | 13:32:28.440 | ---  | ---  | ---   | ---  | ---  | --- | --- | 0.9 | 0.22  | a    | M1        | 2.7   | 3896 |
| LKD2 | 1.01 | 249.0 | AMd   | 13:33:32.912 | ---  | ---  | ---   | ---  | ---  | --- | --- | 0.0 | 83.16 | a    | Md        | 3.3   | 3891 |
| IGT  | 1.24 | 288.0 | Sg    | 13:32:31.875 | -0.0 | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m    | ---       | 6812  |      |
| IGT  | 1.24 | 288.0 | Pg    | 13:32:13.856 | 0.0  | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m    | ---       | 6811  |      |
| IGT  | 1.24 | 288.0 | AM1   | 13:32:38.660 | ---  | ---  | ---   | ---  | ---  | --- | --- | 0.2 | 0.32  | a    | M1        | 2.3   | 3897 |
| IGT  | 1.24 | 288.0 | AMd   | 13:33:37.158 | ---  | ---  | ---   | ---  | ---  | --- | --- | 0.0 | 83.30 | a    | Md        | 2.7   | 3892 |
| LSK  | 1.38 | 316.0 | Sg    | 13:32:36.010 | 0.0  | ---  | ---   | ---  | ---  | --- | --- | --- | ---   | m    | ---       | 6814  |      |

|      |      |       |     |              |      |     |  |  |  |  |  |  |  |  |  |  |     |       |      |    |     |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|--|--|--|-----|-------|------|----|-----|------|
| LSK  | 1.38 | 316.0 | Pg  | 13:32:16.207 | 0.0  | --- |  |  |  |  |  |  |  |  |  |  | m   |       | 6813 |    |     |      |
| LSK  | 1.38 | 316.0 | AMl | 13:32:46.520 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.6 | 0.52  | a    | Ml | 2.9 | 3898 |
| LSK  | 1.38 | 316.0 | AMd | 13:33:42.010 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 85.80 | a    | Md | 3.4 | 3893 |
| NEST | 1.39 | 334.0 | Sg  | 13:32:36.530 | -0.0 | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6816 |
| NEST | 1.39 | 334.0 | Pg  | 13:32:16.505 | 0.0  | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6815 |
| NEST | 1.39 | 334.0 | AMl | 13:32:42.510 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.2 | 0.64  | a    | Ml | 2.5 | 3899 |
| NEST | 1.39 | 334.0 | AMd | 13:33:41.201 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 84.70 | a    | Md | 3.4 | 3894 |
| KBN  | 1.67 | 0.0   | Pg  | 13:32:18.519 | 0.0  | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6818 |
| SCTE | 2.77 | 291.0 | Pn  | 13:32:33.895 | -4.5 | --- |  |  |  |  |  |  |  |  |  |  |     |       | m    |    |     | 6817 |
| SCTE | 2.77 | 291.0 | AMd | 13:34:06.875 |      | --- |  |  |  |  |  |  |  |  |  |  | 0.0 | 92.98 | a    | Md | 3.5 | 3895 |

DATA\_TYPE COMMENT GSE2.1  
Event 411

Official Magnitude:  
Ml 2.60

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 148  | 61  | 4.0400 |
| Intermediate: | 282  | 20  | 0.8800 |
| Min:          | 19   | 19  | 0.4200 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187381 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 412 2.2 km from Throfari, Peloponnese, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err  | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|------|------|------|-----|-------|-------|------|--------|
| 2019/02/17 | 19:08:01.51 |     | 0.90 | 38.0065  | 22.5990   |      |      |    | 8.0   | 31.6 | 20   | 11   | 292 | 1.72  | 4.77  | m    | 452    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 4.5 | 0.0  | 11     | 452    |
| Md        | 4.3 | 0.0  | 4      | 452    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per  | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|------|------|-----------|-------|------|
| LKD2 | 1.71 | 298.0 | Sn    | 19:09:01.481 | 2.8  |      |       |      |      |     |     |      |      |      |           | 6820  |      |
| LKD2 | 1.71 | 298.0 | Pn    | 19:08:33.435 | -0.7 |      |       |      |      |     |     |      |      |      |           | 6819  |      |
| LKD2 | 1.71 | 298.0 | AMl   | 19:09:32.690 |      |      |       |      |      |     |     | 18.5 | 0.74 | a    | Ml        | 4.6   | 3904 |
| IGT  | 2.34 | 312.0 | Sn    | 19:09:18.286 | 2.4  |      |       |      |      |     |     |      |      |      |           | 6822  |      |
| IGT  | 2.34 | 312.0 | Pn    | 19:08:42.805 | -1.2 |      |       |      |      |     |     |      |      |      |           | 6821  |      |
| IGT  | 2.34 | 312.0 | AMl   | 19:10:02.900 |      |      |       |      |      |     |     | 3.1  | 1.48 | a    | Ml        | 4.1   | 3905 |
| THE  | 2.64 | 6.0   | Sn    | 19:09:21.157 | -2.4 |      |       |      |      |     |     |      |      |      |           | 6824  |      |
| THE  | 2.64 | 6.0   | P     | 19:08:47.232 | -1.2 |      |       |      |      |     |     |      |      |      |           | 6823  |      |

|     |      |       |     |              |      |     |     |        |     |    |     |      |
|-----|------|-------|-----|--------------|------|-----|-----|--------|-----|----|-----|------|
| THE | 2.64 | 6.0   | AM1 | 19:09:48.550 |      | --- | 1.0 | 1.00   | a__ | M1 | 3.8 | 3906 |
| LSK | 2.65 | 325.0 | Sn  | 19:09:24.627 | 1.0  | --- |     |        | m__ |    |     | 6826 |
| LSK | 2.65 | 325.0 | P   | 19:08:49.301 | 0.9  | --- |     |        | m__ |    |     | 6825 |
| LSK | 2.65 | 325.0 | AM1 | 19:10:20.080 |      | --- | 9.4 | 1.52   | a__ | M1 | 4.8 | 3907 |
| LSK | 2.65 | 325.0 | AMd | 19:12:06.441 |      | --- | 0.0 | 197.14 | a__ | Md | 4.3 | 3900 |
| SRN | 2.76 | 314.0 | Sn  | 19:09:28.232 | 0.9  | --- |     |        | m__ |    |     | 6828 |
| SRN | 2.76 | 314.0 | Pn  | 19:08:45.769 | -4.8 | --- |     |        | m__ |    |     | 6827 |
| SRN | 2.76 | 314.0 | AM1 | 19:09:42.750 |      | --- | 1.6 | 0.76   | a__ | M1 | 4.0 | 3908 |
| SRN | 2.76 | 314.0 | AMd | 19:11:52.341 |      | --- | 0.0 | 186.57 | a__ | Md | 4.2 | 3901 |
| KBN | 2.97 | 333.0 | Sn  | 19:09:31.954 | 0.7  | --- |     |        | m__ |    |     | 6830 |
| KBN | 2.97 | 333.0 | Pn  | 19:08:53.921 | 1.1  | --- |     |        | m__ |    |     | 6829 |
| KBN | 2.97 | 333.0 | AM1 | 19:09:49.550 |      | --- | 4.1 | 1.04   | a__ | M1 | 4.5 | 3909 |
| KBN | 2.97 | 333.0 | AMd | 19:11:41.262 |      | --- | 0.0 | 167.34 | a__ | Md | 4.2 | 3902 |
| VLO | 3.44 | 317.0 | S   | 19:09:43.120 | 0.0  | --- |     |        | m__ |    |     | 6832 |
| VLO | 3.44 | 317.0 | Pn  | 19:09:00.318 | 0.8  | --- |     |        | m__ |    |     | 6831 |
| VLO | 3.44 | 317.0 | AM1 | 19:10:05.210 |      | --- | 4.2 | 0.70   | a__ | M1 | 4.7 | 3910 |
| TIR | 3.90 | 0.0   | Pn  | 19:09:09.565 | 0.0  | --- |     |        | m__ |    |     | 6840 |
| TIR | 3.95 | 329.0 | Sn  | 19:09:57.474 | 0.2  | --- |     |        | m__ |    |     | 6833 |
| TIR | 3.95 | 329.0 | AM1 | 19:11:18.400 |      | --- | 1.2 | 1.30   | a__ | M1 | 4.3 | 3911 |
| PHP | 4.03 | 337.0 | Sn  | 19:09:58.065 | -0.9 | --- |     |        | m__ |    |     | 6835 |
| PHP | 4.03 | 337.0 | Pn  | 19:09:08.966 | 0.3  | --- |     |        | m__ |    |     | 6834 |
| PHP | 4.03 | 337.0 | AM1 | 19:10:22.350 |      | --- | 1.4 | 1.08   | a__ | M1 | 4.4 | 3912 |
| PUK | 4.53 | 334.0 | S   | 19:10:12.339 | 0.1  | --- |     |        | m__ |    |     | 6837 |
| PUK | 4.53 | 334.0 | Pn  | 19:09:13.118 | -3.1 | --- |     |        | m__ |    |     | 6836 |
| PUK | 4.53 | 334.0 | AM1 | 19:10:36.150 |      | --- | 1.5 | 0.82   | a__ | M1 | 4.6 | 3913 |
| PUK | 4.53 | 334.0 | AMd | 19:12:24.905 |      | --- | 0.0 | 191.79 | a__ | Md | 4.4 | 3903 |
| BCI | 4.77 | 337.0 | Sn  | 19:10:17.664 | -0.5 | --- |     |        | m__ |    |     | 6839 |
| BCI | 4.77 | 337.0 | P   | 19:09:18.781 | -0.8 | --- |     |        | m__ |    |     | 6838 |
| BCI | 4.77 | 337.0 | AM1 | 19:09:49.200 |      | --- | 1.5 | 0.82   | a__ | M1 | 4.6 | 3914 |

DATA\_TYPE COMMENT GSE2.1  
Event 412

Official Magnitude:  
M1 4.53

Error ellipse:

|               | Azim | Dip | Mag     |
|---------------|------|-----|---------|
| Max:          | 0    | 90  | 31.6100 |
| Intermediate: | 227  | 0   | 4.4800  |
| Min:          | 317  | 0   | 3.8300  |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187381 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 416 Mediterranean Sea; 22 km from Agios Nikitas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/18 | 15:46:33.01 |     | 0.04 | 38.9335  | 20.4412   |      |      |    | 25.0  | 0.9 | 10   | 9    | 178 | 0.22  | 1.91  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.1 | 0.0  | 6      | 455    |
| Md        | 3.3 | 0.0  | 5      | 455    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|------|
| LKD2 | 0.22 | 130.0 | Sg    | 15:46:42.721 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6860  |      |
| LKD2 | 0.22 | 130.0 | Pg    | 15:46:38.575 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6859  |      |
| LKD2 | 0.22 | 130.0 | AMl   | 15:46:45.580 |      |      |       |      |      |     |     | 23.3 | 0.16   | a    | Ml        | 3.4   | 3932 |
| LKD2 | 0.22 | 130.0 | AMd   | 15:47:33.825 |      |      |       |      |      |     |     | 0.0  | 55.25  | a    | Md        | 2.8   | 3927 |
| IGT  | 0.60 | 352.0 | Sg    | 15:46:53.415 | -1.1 |      |       |      |      |     |     |      |        | m    |           | 6862  |      |
| IGT  | 0.60 | 352.0 | Pg    | 15:46:45.310 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6861  |      |
| IGT  | 0.60 | 352.0 | AMl   | 15:46:59.800 |      |      |       |      |      |     |     | 2.6  | 0.28   | a    | Ml        | 2.9   | 3933 |
| IGT  | 0.60 | 352.0 | AMd   | 15:47:59.995 |      |      |       |      |      |     |     | 0.0  | 74.69  | a    | Md        | 2.6   | 3928 |
| SRN  | 1.00 | 341.0 | Sg    | 15:47:07.555 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 6864  |      |
| SRN  | 1.00 | 341.0 | Pg    | 15:46:52.807 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6863  |      |
| SRN  | 1.00 | 341.0 | AMl   | 15:47:21.400 |      |      |       |      |      |     |     | 0.6  | 0.78   | a    | Ml        | 2.6   | 3934 |
| SRN  | 1.00 | 341.0 | AMd   | 15:48:17.436 |      |      |       |      |      |     |     | 0.0  | 84.63  | a    | Md        | 3.3   | 3929 |
| LSK  | 1.23 | 0.0   | Pg    | 15:46:56.706 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6870  |      |
| LSK  | 1.22 | 5.0   | Sg    | 15:47:13.434 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6865  |      |
| LSK  | 1.22 | 5.0   | AMl   | 15:47:29.380 |      |      |       |      |      |     |     | 2.8  | 0.74   | a    | Ml        | 3.4   | 3935 |
| NEST | 1.55 | 17.0  | Sn    | 15:47:23.714 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 6867  |      |
| NEST | 1.55 | 17.0  | Pn    | 15:47:02.061 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 6866  |      |
| NEST | 1.55 | 17.0  | AMl   | 15:47:29.670 |      |      |       |      |      |     |     | 0.6  | 0.38   | a    | Ml        | 3.0   | 3936 |
| NEST | 1.55 | 17.0  | AMd   | 15:48:31.838 |      |      |       |      |      |     |     | 0.0  | 89.78  | a    | Md        | 3.4   | 3930 |
| SCTE | 1.91 | 308.0 | Sn    | 15:47:33.231 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 6869  |      |
| SCTE | 1.91 | 308.0 | Pn    | 15:47:07.461 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 6868  |      |
| SCTE | 1.91 | 308.0 | AMl   | 15:47:54.430 |      |      |       |      |      |     |     | 0.5  | 0.50   | a    | Ml        | 3.1   | 3937 |
| SCTE | 1.91 | 308.0 | AMd   | 15:48:50.093 |      |      |       |      |      |     |     | 0.0  | 102.63 | a    | Md        | 3.6   | 3931 |

DATA\_TYPE COMMENT GSE2.1  
Event 416

Official Magnitude:  
Ml 3.05

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 77   | 69  | 0.9600 |
| Intermediate: | 234  | 18  | 0.6100 |
| Min:          | 326  | 8   | 0.3000 |

BEGIN GSE2.1

MSG\_TYPE DATA  
 MSG\_ID 1551187381 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 417 Mediterranean Sea; 24 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/18 | 18:39:38.00 |     | 0.05 | 37.6055  | 20.5003   |      |      |    | 7.6   | 0.7 | 9    | 8    | 343 | 1.19  | 2.93  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.1 | 0.0  | 4      | 456    |
| Md        | 3.6 | 0.0  | 5      | 456    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|
| LKD2 | 1.19 | 5.0   | Sg    | 18:40:18.803 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6872  |
| LKD2 | 1.19 | 5.0   | Pg    | 18:40:01.400 | 0.1  |      |       |      |      |     |     |     |        | m    |           | 6871  |
| LKD2 | 1.19 | 5.0   | AMl   | 18:40:28.130 |      |      |       |      |      |     |     | 1.6 | 0.80   | a    | Ml        | 3.1   |
| LKD2 | 1.19 | 5.0   | AMd   | 18:41:23.575 |      |      |       |      |      |     |     | 0.0 | 82.17  | a    | Md        | 3.3   |
| IGT  | 1.93 | 357.0 | Sg    | 18:40:41.745 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6874  |
| IGT  | 1.93 | 357.0 | Pg    | 18:40:14.461 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6873  |
| IGT  | 1.93 | 357.0 | AMd   | 18:41:53.599 |      |      |       |      |      |     |     | 0.0 | 99.14  | a    | Md        | 2.9   |
| SRN  | 2.30 | 351.0 | Sn    | 18:40:52.238 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6876  |
| SRN  | 2.30 | 351.0 | Pn    | 18:40:20.408 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6875  |
| SRN  | 2.30 | 351.0 | AMl   | 18:41:02.890 |      |      |       |      |      |     |     | 0.1 | 0.70   | a    | Ml        | 2.8   |
| SRN  | 2.30 | 351.0 | AMd   | 18:41:58.869 |      |      |       |      |      |     |     | 0.0 | 98.46  | a    | Md        | 3.6   |
| LSK  | 2.55 | 0.0   | Pn    | 18:40:24.346 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6881  |
| LSK  | 2.54 | 1.0   | Sn    | 18:40:57.427 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6877  |
| NEST | 2.84 | 8.0   | Sn    | 18:41:05.351 | 0.1  |      |       |      |      |     |     |     |        | m    |           | 6879  |
| NEST | 2.84 | 8.0   | Pn    | 18:40:27.794 | -0.1 |      |       |      |      |     |     |     |        | m    |           | 6878  |
| NEST | 2.84 | 8.0   | AMl   | 18:41:34.510 |      |      |       |      |      |     |     | 0.1 | 0.92   | a    | Ml        | 3.0   |
| NEST | 2.84 | 8.0   | AMd   | 18:42:28.281 |      |      |       |      |      |     |     | 0.0 | 120.49 | a    | Md        | 3.8   |
| SCTE | 2.93 | 328.0 | Pn    | 18:40:26.780 | -2.5 |      |       |      |      |     |     |     |        | m    |           | 6880  |
| SCTE | 2.93 | 328.0 | AMl   | 18:41:29.630 |      |      |       |      |      |     |     | 0.3 | 0.82   | a    | Ml        | 3.3   |
| SCTE | 2.93 | 328.0 | AMd   | 18:42:32.135 |      |      |       |      |      |     |     | 0.0 | 125.35 | a    | Md        | 3.9   |

DATA\_TYPE COMMENT GSE2.1  
 Event 417

Official Magnitude:  
 Ml 3.06

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 95   | 7   | 2.6700 |
| Intermediate: | 186  | 7   | 0.9300 |
| Min:          | 320  | 80  | 0.7100 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187381 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 418 Mediterranean Sea; 51 km from Kounopetra, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/18 | 19:42:40.47 |     | 0.03 | 37.8215  | 19.9828   |      |      |    | 2.1   | 1.2 | 11   | 8    | 305 | 1.11  | 2.72  | m    |        |

OrigID  
457

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.2 | 0.0  | 6      | 457    |
| Md        | 3.7 | 0.0  | 5      | 457    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|------|
| LKD2 | 1.10 | 28.0  | Sg    | 19:43:18.985 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6883  |      |
| LKD2 | 1.10 | 28.0  | Pg    | 19:43:02.521 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6882  |      |
| LKD2 | 1.10 | 28.0  | AMl   | 19:43:28.660 |      |      |       |      |      |     |     | 4.2 | 0.32   | a    | Ml        | 3.5   | 3952 |
| LKD2 | 1.10 | 28.0  | AMd   | 19:44:36.065 |      |      |       |      |      |     |     | 0.0 | 93.54  | a    | Md        | 3.4   | 3947 |
| IGT  | 1.73 | 8.0   | Sg    | 19:43:39.104 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6885  |      |
| IGT  | 1.73 | 8.0   | Pg    | 19:43:13.911 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6884  |      |
| IGT  | 1.73 | 8.0   | AMl   | 19:43:57.520 |      |      |       |      |      |     |     | 0.5 | 0.74   | a    | Ml        | 3.1   | 3953 |
| IGT  | 1.73 | 8.0   | AMd   | 19:45:01.137 |      |      |       |      |      |     |     | 0.0 | 107.23 | a    | Md        | 3.0   | 3948 |
| SRN  | 2.05 | 0.0   | Sg    | 19:43:49.607 | 0.1  |      |       |      |      |     |     |     |        | m    |           | 6887  |      |
| SRN  | 2.05 | 0.0   | Pg    | 19:43:19.979 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6886  |      |
| SRN  | 2.05 | 0.0   | AMl   | 19:44:09.180 |      |      |       |      |      |     |     | 0.3 | 0.66   | a    | Ml        | 3.0   | 3954 |
| SRN  | 2.05 | 0.0   | AMd   | 19:45:17.103 |      |      |       |      |      |     |     | 0.0 | 117.12 | a    | Md        | 3.7   | 3949 |
| LSK  | 2.38 | 0.0   | Pn    | 19:43:24.299 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6893  |      |
| LSK  | 2.37 | 11.0  | Sn    | 19:43:56.881 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6888  |      |
| LSK  | 2.37 | 11.0  | AMl   | 19:44:13.730 |      |      |       |      |      |     |     | 0.8 | 0.90   | a    | Ml        | 3.6   | 3955 |
| SCTE | 2.54 | 333.0 | Sn    | 19:44:01.458 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6890  |      |
| SCTE | 2.54 | 333.0 | Pn    | 19:43:26.725 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6889  |      |
| SCTE | 2.54 | 333.0 | AMl   | 19:44:23.390 |      |      |       |      |      |     |     | 0.4 | 0.52   | a    | Ml        | 3.3   | 3956 |
| SCTE | 2.54 | 333.0 | AMd   | 19:45:36.105 |      |      |       |      |      |     |     | 0.0 | 129.38 | a    | Md        | 3.9   | 3950 |
| NEST | 2.72 | 17.0  | Sn    | 19:44:05.964 | -0.0 |      |       |      |      |     |     |     |        | m    |           | 6892  |      |
| NEST | 2.72 | 17.0  | Pn    | 19:43:29.382 | 0.0  |      |       |      |      |     |     |     |        | m    |           | 6891  |      |
| NEST | 2.72 | 17.0  | AMl   | 19:44:21.490 |      |      |       |      |      |     |     | 0.2 | 0.74   | a    | Ml        | 3.1   | 3957 |
| NEST | 2.72 | 17.0  | AMd   | 19:45:28.828 |      |      |       |      |      |     |     | 0.0 | 119.45 | a    | Md        | 3.8   | 3951 |

DATA\_TYPE COMMENT GSE2.1  
 Event 418

Official Magnitude:  
 Ml 3.24

Error ellipse:  
 Azim Dip Mag

Max: 149 37 1.9400  
 Intermediate: 266 30 0.6800  
 Min: 23 38 0.6500

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187381 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 419 3.0 km from Lago della Contessa, Apulia, Italy

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/18 | 22:22:02.18 |     | 0.06 | 41.4772  | 15.7852   |      |      |    | 1.4   | 1.6 | 6    | 11   | 214 | 0.27  | 2.47  | m    |        |
| 458        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 1.9 | 0.0  | 3      | 458    |
| Md        | 2.5 | 0.0  | 2      | 458    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|
| SGRT | 0.27 | 0.0   | Pg    | 22:22:08.535 | 0.0  |      |       |      |      |     |     |     |       | mdi  |           | 6901  |
| SGRT | 0.27 | 357.0 | Sg    | 22:22:12.983 | -0.0 |      |       |      |      |     |     |     |       | m_i  |           | 6894  |
| SGRT | 0.27 | 357.0 | AMl   | 22:22:12.910 |      |      |       |      |      |     |     | 0.8 | 0.26  | a__  | Ml        | 1.9   |
| MRVN | 0.52 | 143.0 | Sn    | 22:22:21.413 | 0.0  |      |       |      |      |     |     |     |       | m_i  |           | 6896  |
| MRVN | 0.52 | 143.0 | Pn    | 22:22:13.084 | -0.1 |      |       |      |      |     |     |     |       | mci  |           | 6895  |
| MRVN | 0.52 | 143.0 | AMl   | 22:22:25.030 |      |      |       |      |      |     |     | 0.2 | 0.10  | a__  | Ml        | 1.6   |
| MRVN | 0.52 | 143.0 | AMd   | 22:22:43.692 |      |      |       |      |      |     |     | 0.0 | 30.61 | a__  | Md        | 2.3   |
| NOCI | 1.19 | 125.0 | Sg    | 22:22:42.296 | -1.4 |      |       |      |      |     |     |     |       | m_i  |           | 6898  |
| NOCI | 1.19 | 125.0 | Pg    | 22:22:25.896 | -0.0 |      |       |      |      |     |     |     |       | mci  |           | 6897  |
| NOCI | 1.19 | 125.0 | AMl   | 22:22:45.890 |      |      |       |      |      |     |     | 0.2 | 0.18  | a__  | Ml        | 2.3   |
| NOCI | 1.19 | 125.0 | AMd   | 22:23:15.758 |      |      |       |      |      |     |     | 0.0 | 49.86 | a__  | Md        | 2.8   |
| SCTE | 2.47 | 123.0 | Sn    | 22:23:21.529 | -0.0 |      |       |      |      |     |     |     |       | m_i  |           | 6900  |
| SCTE | 2.47 | 123.0 | Pn    | 22:22:47.645 | 0.1  |      |       |      |      |     |     |     |       | mci  |           | 6899  |

DATA\_TYPE COMMENT GSE2.1  
 Event 419

Official Magnitude:  
 Ml 1.88

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 252  | 21  | 4.1800 |
| Intermediate: | 60   | 67  | 1.0100 |
| Min:          | 160  | 4   | 0.3300 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187380 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 421 Mediterranean Sea; 9 km from Moni Strofadon, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/19 | 02:59:35.15 |     | 0.42 | 37.3200  | 21.0710   |      |      |    | 8.0   | 3.2 | 9    | 6    | 325 | 1.50  | 3.42  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.9 | 0.0  | 5      | 460    |
| Md        | 3.7 | 0.0  | 2      | 460    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|------|
| LKD2 | 1.50 | 348.0 | Sg    | 03:00:25.935 | 0.2  |      |       |      |      | --- |     |     |        |      | m__       | 6911  |      |
| LKD2 | 1.50 | 348.0 | Pg    | 03:00:04.944 | 0.9  |      |       |      |      | --- |     |     |        |      | mci       | 6910  |      |
| LKD2 | 1.50 | 348.0 | AMl   | 03:00:41.720 |      |      |       |      |      | --- |     | 5.7 | 0.72   | a__  | Ml        | 3.9   | 3970 |
| LKD2 | 1.50 | 348.0 | AMd   | 03:02:27.240 |      |      |       |      |      | --- |     | 0.0 | 142.30 | a__  | Md        | 3.9   | 3968 |
| IGT  | 2.28 | 346.0 | Sg    | 03:00:47.385 | -0.7 |      |       |      |      | --- |     |     |        |      | m__       | 6913  |      |
| IGT  | 2.28 | 346.0 | Pg    | 03:00:16.783 | -0.1 |      |       |      |      | --- |     |     |        |      | mdi       | 6912  |      |
| IGT  | 2.28 | 346.0 | AMl   | 03:01:03.900 |      |      |       |      |      | --- |     | 0.7 | 0.94   | a__  | Ml        | 3.5   | 3971 |
| IGT  | 2.28 | 346.0 | AMd   | 03:03:21.380 |      |      |       |      |      | --- |     | 0.0 | 184.60 | a__  | Md        | 3.6   | 3969 |
| SRN  | 2.69 | 343.0 | S     | 03:00:59.453 | 0.2  |      |       |      |      | --- |     |     |        |      | m__       | 6915  |      |
| SRN  | 2.69 | 343.0 | P     | 03:00:23.317 | 0.1  |      |       |      |      | --- |     |     |        |      | m__       | 6914  |      |
| LSK  | 2.85 | 353.0 | Sn    | 03:01:04.361 | 1.9  |      |       |      |      | --- |     |     |        |      | m__       | 6917  |      |
| LSK  | 2.85 | 353.0 | Pn    | 03:00:23.591 | -1.5 |      |       |      |      | --- |     |     |        |      | mde       | 6916  |      |
| LSK  | 2.85 | 353.0 | AMl   | 03:01:36.730 |      |      |       |      |      | --- |     | 1.5 | 1.14   | a__  | Ml        | 4.0   | 3972 |
| NEST | 3.09 | 0.0   | Sn    | 03:01:09.252 | 0.4  |      |       |      |      | --- |     |     |        |      | m__       | 6919  |      |
| NEST | 3.09 | 0.0   | Pn    | 03:00:28.209 | -0.5 |      |       |      |      | --- |     |     |        |      | mdi       | 6918  |      |
| NEST | 3.09 | 0.0   | AMl   | 03:01:38.310 |      |      |       |      |      | --- |     | 0.5 | 0.84   | a__  | Ml        | 3.6   | 3973 |
| SCTE | 3.41 | 0.0   | Pn    | 03:00:30.071 | 0.0  |      |       |      |      | --- |     |     |        |      | m__       | 6921  |      |
| SCTE | 3.42 | 325.0 | Sn    | 03:01:17.575 | 0.1  |      |       |      |      | --- |     |     |        |      | m__       | 6920  |      |
| SCTE | 3.42 | 325.0 | AMl   | 03:01:39.350 |      |      |       |      |      | --- |     | 0.6 | 0.94   | a__  | Ml        | 3.9   | 3974 |

DATA\_TYPE COMMENT GSE2.1  
 Event 421

Official Magnitude:  
 Ml 3.86

Error ellipse:  

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 119  | 46  | 4.4000 |
| Intermediate: | 231  | 18  | 3.6200 |
| Min:          | 336  | 38  | 2.1600 |



BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187380 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 422 Mediterranean Sea; 94 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/19 | 05:31:20.58 |     | 0.15 | 37.4542  | 19.7022   |      |      |    | 0.1   | 3.8 | 9    | 6    | 312 | 1.53  | 3.14  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.7 | 0.0  | 6      | 461    |
| Md        | 3.5 | 0.0  | 2      | 461    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|
| LKD2 | 1.53 | 29.0  | S1    | 05:32:13.426 | -0.1 |      |       |      |      | --- |     |     |        |      |           | 6923  |
| LKD2 | 1.53 | 29.0  | P1    | 05:31:50.479 | -0.4 |      |       |      |      | --- |     |     |        |      |           | 6922  |
| LKD2 | 1.53 | 29.0  | AM1   | 05:32:13.820 |      |      |       |      |      | --- |     | 8.0 | 0.54   | a__  | Ml        | 4.1   |
| LKD2 | 1.53 | 29.0  | AMd   | 05:33:47.582 |      |      |       |      |      | --- |     | 0.0 | 117.10 | a__  | Md        | 3.7   |
| IGT  | 2.13 | 13.0  | S1    | 05:32:29.511 | -2.1 |      |       |      |      | --- |     |     |        |      |           | 6925  |
| IGT  | 2.13 | 13.0  | P1    | 05:32:01.234 | 0.1  |      |       |      |      | --- |     |     |        |      |           | 6924  |
| IGT  | 2.13 | 13.0  | AM1   | 05:32:48.320 |      |      |       |      |      | --- |     | 1.1 | 0.66   | a__  | Ml        | 3.6   |
| IGT  | 2.13 | 13.0  | AMd   | 05:34:24.239 |      |      |       |      |      | --- |     | 0.0 | 143.01 | a__  | Md        | 3.3   |
| SRN  | 2.43 | 5.0   | Sn    | 05:32:35.648 | -4.4 |      |       |      |      | --- |     |     |        |      |           | 6927  |
| SRN  | 2.43 | 5.0   | P1    | 05:32:05.726 | -0.3 |      |       |      |      | --- |     |     |        |      |           | 6926  |
| SRN  | 2.43 | 5.0   | AM1   | 05:33:00.980 |      |      |       |      |      | --- |     | 0.5 | 0.56   | a__  | Ml        | 3.4   |
| SCTE | 2.78 | 0.0   | Pn    | 05:32:13.193 | 0.0  |      |       |      |      | --- |     |     |        |      |           | 6933  |
| SCTE | 2.79 | 341.0 | Sn    | 05:32:48.525 | -0.1 |      |       |      |      | --- |     |     |        |      |           | 6930  |
| SCTE | 2.79 | 341.0 | AM1   | 05:33:20.730 |      |      |       |      |      | --- |     | 0.7 | 0.78   | a__  | Ml        | 3.7   |
| LSK  | 2.78 | 14.0  | Sn    | 05:32:48.013 | -0.1 |      |       |      |      | --- |     |     |        |      |           | 6929  |
| LSK  | 2.78 | 14.0  | Pn    | 05:32:10.531 | -0.1 |      |       |      |      | --- |     |     |        |      |           | 6928  |
| LSK  | 2.78 | 14.0  | AM1   | 05:33:10.210 |      |      |       |      |      | --- |     | 1.5 | 0.86   | a__  | Ml        | 4.0   |
| NEST | 3.14 | 19.0  | Sn    | 05:32:57.551 | 0.1  |      |       |      |      | --- |     |     |        |      |           | 6932  |
| NEST | 3.14 | 19.0  | Pn    | 05:32:16.094 | 0.1  |      |       |      |      | --- |     |     |        |      |           | 6931  |
| NEST | 3.14 | 19.0  | AM1   | 05:33:10.620 |      |      |       |      |      | --- |     | 0.3 | 0.46   | a__  | Ml        | 3.4   |

DATA\_TYPE COMMENT GSE2.1  
 Event 422

Official Magnitude:  
 Ml 3.65

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 166  | 35  | 6.4200 |
| Intermediate: | 264  | 10  | 1.2900 |

Min: 8 53 0.9100

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187380 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 427 Mediterranean Sea; 61 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/20 | 14:49:07.23 |     | 0.03 | 37.5672  | 20.0475   |      |      |    | 0.8   | 1.3 | 9    | 9    | 314 | 1.31  | 2.95  | m    | 466    |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.2 | 0.0  | 5      | 466    |
| Md        | 3.6 | 0.0  | 5      | 466    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per    | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|--------|------|-----------|-------|------|
| LKD2 | 1.31 | 21.0  | Sg    | 14:49:53.057 | -0.0 |      |       |      |      | ___ |     |     |        | m    |           | 6991  |      |
| LKD2 | 1.31 | 21.0  | Pg    | 14:49:33.445 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6990  |      |
| LKD2 | 1.31 | 21.0  | AMl   | 14:49:58.900 |      |      |       |      |      | ___ |     | 3.9 | 0.54   | a    | Ml        | 3.6   | 4017 |
| LKD2 | 1.31 | 21.0  | AMd   | 14:51:11.419 |      |      |       |      |      | ___ |     | 0.0 | 97.97  | a    | Md        | 3.5   | 4012 |
| IGT  | 1.97 | 6.0   | Sg    | 14:50:13.806 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6993  |      |
| IGT  | 1.97 | 6.0   | Pg    | 14:49:45.264 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6992  |      |
| IGT  | 1.97 | 6.0   | AMl   | 14:50:21.390 |      |      |       |      |      | ___ |     | 0.4 | 0.40   | a    | Ml        | 3.1   | 4018 |
| IGT  | 1.97 | 6.0   | AMd   | 14:51:20.254 |      |      |       |      |      | ___ |     | 0.0 | 94.99  | a    | Md        | 2.9   | 4013 |
| SRN  | 2.31 | 0.0   | Sn    | 14:50:23.287 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6995  |      |
| SRN  | 2.31 | 0.0   | Pn    | 14:49:50.725 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6994  |      |
| SRN  | 2.31 | 0.0   | AMl   | 14:50:34.700 |      |      |       |      |      | ___ |     | 0.1 | 0.60   | a    | Ml        | 2.8   | 4019 |
| SRN  | 2.31 | 0.0   | AMd   | 14:51:31.837 |      |      |       |      |      | ___ |     | 0.0 | 101.11 | a    | Md        | 3.6   | 4014 |
| LSK  | 2.62 | 0.0   | Pn    | 14:50:00.866 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6999  |      |
| LSK  | 2.61 | 9.0   | Sn    | 14:50:30.252 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6996  |      |
| LSK  | 2.61 | 9.0   | AMl   | 14:50:54.350 |      |      |       |      |      | ___ |     | 0.4 | 0.60   | a    | Ml        | 3.4   | 4020 |
| SCTE | 2.79 | 335.0 | Pn    | 14:49:57.387 | -0.0 |      |       |      |      | ___ |     |     |        | m    |           | 6997  |      |
| SCTE | 2.79 | 335.0 | AMl   | 14:50:42.880 |      |      |       |      |      | ___ |     | 0.2 | 0.34   | a    | Ml        | 3.2   | 4021 |
| SCTE | 2.79 | 335.0 | AMd   | 14:51:48.818 |      |      |       |      |      | ___ |     | 0.0 | 111.43 | a    | Md        | 3.7   | 4015 |
| NEST | 2.95 | 15.0  | Pn    | 14:49:59.719 | 0.0  |      |       |      |      | ___ |     |     |        | m    |           | 6998  |      |
| NEST | 2.95 | 15.0  | AMd   | 14:52:00.745 |      |      |       |      |      | ___ |     | 0.0 | 121.03 | a    | Md        | 3.8   | 4016 |

DATA\_TYPE COMMENT GSE2.1  
Event 427

Official Magnitude:  
Ml 3.15

Error ellipse:  
Azim Dip Mag

Max: 139 29 2.7200  
 Intermediate: 252 33 1.1100  
 Min: 19 42 0.6100

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187379 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 432 Mediterranean Sea

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/20 | 20:20:37.34 |     | 0.10 | 37.7352  | 20.2473   |      |      |    | 18.1  | 1.8 | 13   | 10   | 306 | 1.10  | 3.92  | m    |        |
| OrigID 471 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.8 | 0.0  | 7      | 471    |
| Md        | 3.9 | 0.0  | 7      | 471    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per    | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|--------|------|-----------|-------|
| LKD2 | 1.10 | 16.0  | Sg    | 20:21:14.426 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 7041  |
| LKD2 | 1.10 | 16.0  | Pg    | 20:20:58.390 | -0.1 |      |       |      |      |     |     |      |        | m    |           | 7040  |
| LKD2 | 1.10 | 16.0  | AMl   | 20:21:22.460 |      |      |       |      |      |     |     | 12.7 | 0.72   | a    | Ml        | 4.0   |
| LKD2 | 1.10 | 16.0  | AMd   | 20:22:46.621 |      |      |       |      |      |     |     | 0.0  | 108.23 | a    | Md        | 3.6   |
| IGT  | 1.79 | 2.0   | Sn    | 20:21:36.136 | 0.4  |      |       |      |      |     |     |      |        | m    |           | 7043  |
| IGT  | 1.79 | 2.0   | Pn    | 20:21:10.860 | 0.2  |      |       |      |      |     |     |      |        | m    |           | 7042  |
| IGT  | 1.79 | 2.0   | AMl   | 20:21:48.800 |      |      |       |      |      |     |     | 1.1  | 0.50   | a    | Ml        | 3.4   |
| IGT  | 1.79 | 2.0   | AMd   | 20:23:21.397 |      |      |       |      |      |     |     | 0.0  | 130.54 | a    | Md        | 3.2   |
| SRN  | 2.15 | 355.0 | Sn    | 20:21:45.772 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 7045  |
| SRN  | 2.15 | 355.0 | Pn    | 20:21:16.467 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 7044  |
| SRN  | 2.15 | 355.0 | AMl   | 20:22:05.910 |      |      |       |      |      |     |     | 0.8  | 0.92   | a    | Ml        | 3.5   |
| SRN  | 2.15 | 355.0 | AMd   | 20:23:28.063 |      |      |       |      |      |     |     | 0.0  | 131.60 | a    | Md        | 3.9   |
| LSK  | 2.43 | 0.0   | Pn    | 20:21:17.672 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 7054  |
| LSK  | 2.43 | 6.0   | Sn    | 20:21:51.837 | -0.0 |      |       |      |      |     |     |      |        | m    |           | 7046  |
| LSK  | 2.43 | 6.0   | AMl   | 20:22:28.930 |      |      |       |      |      |     |     | 1.7  | 0.96   | a    | Ml        | 3.9   |
| SCTE | 2.72 | 330.0 | Sn    | 20:21:59.701 | 0.1  |      |       |      |      |     |     |      |        | m    |           | 7048  |
| SCTE | 2.72 | 330.0 | Pn    | 20:21:24.395 | 0.0  |      |       |      |      |     |     |      |        | m    |           | 7047  |
| SCTE | 2.72 | 330.0 | AMl   | 20:22:36.480 |      |      |       |      |      |     |     | 1.0  | 0.62   | a    | Ml        | 3.8   |
| SCTE | 2.72 | 330.0 | AMd   | 20:23:44.033 |      |      |       |      |      |     |     | 0.0  | 139.64 | a    | Md        | 4.0   |
| NEST | 2.75 | 12.0  | Sn    | 20:22:00.279 | -0.1 |      |       |      |      |     |     |      |        | m    |           | 7050  |
| NEST | 2.75 | 12.0  | Pn    | 20:21:24.722 | -0.1 |      |       |      |      |     |     |      |        | m    |           | 7049  |
| NEST | 2.75 | 12.0  | AMl   | 20:22:16.140 |      |      |       |      |      |     |     | 0.6  | 0.54   | a    | Ml        | 3.6   |
| NEST | 2.75 | 12.0  | AMd   | 20:23:46.055 |      |      |       |      |      |     |     | 0.0  | 141.33 | a    | Md        | 4.0   |
| VLO  | 2.79 | 349.0 | Pn    | 20:21:24.877 | 0.2  |      |       |      |      |     |     |      |        | m    |           | 7051  |
| VLO  | 2.79 | 349.0 | AMd   | 20:23:33.926 |      |      |       |      |      |     |     | 0.0  | 129.05 | a    | Md        | 3.9   |
| NOCI | 3.92 | 322.0 | Sn    | 20:22:30.557 | -0.1 |      |       |      |      |     |     |      |        | m    |           | 7053  |
| NOCI | 3.92 | 322.0 | Pn    | 20:21:41.960 | -0.1 |      |       |      |      |     |     |      |        | m    |           | 7052  |

NOCI 3.92 322.0 AMl 20:23:19.340 \_\_\_\_\_ 0.7 0.60 a\_\_ Ml 4.0 4056  
 NOCI 3.92 322.0 AMd 20:24:28.912 \_\_\_\_\_ 0.0 166.95 a\_\_ Md 4.2 4049

DATA\_TYPE COMMENT GSE2.1  
 Event 432

Official Magnitude:  
 Ml 3.81

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 147  | 46  | 2.4400 |
| Intermediate: | 346  | 42  | 0.8400 |
| Min:          | 247  | 10  | 0.7100 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187379 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 434 Mediterranean Sea; 47 km from Limnionas, Ionian Islands, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/21 | 18:40:36.30 |     | 0.03 | 37.4842  | 20.2770   |      |      |    | 8.1   | 8.6 | 8    | 9    | 321 | 2.04  | 2.99  | m    |        |
| OrigID 473 |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.9 | 0.0  | 5      | 473    |
| Md        | 3.8 | 0.0  | 5      | 473    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def   | SNR | Amp | Per    | Qual   | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-------|-----|-----|--------|--------|-----------|-------|
| LKD2 | 1.34 | 12.0  | Sg    | 18:41:19.820 | -1.9 |      |       |      |      | _____ |     |     |        | m__    |           | 7066  |
| LKD2 | 1.34 | 12.0  | Pg    | 18:41:01.289 | -1.0 |      |       |      |      | _____ |     |     |        | m__    |           | 7065  |
| LKD2 | 1.34 | 12.0  | AMl   | 18:41:26.770 |      |      |       |      |      | _____ |     | 7.1 | 0.76   | a__ Ml | 3.9       | 4068  |
| LKD2 | 1.34 | 12.0  | AMd   | 18:42:45.711 |      |      |       |      |      | _____ |     | 0.0 | 104.42 | a__ Md | 3.6       | 4063  |
| IGT  | 2.04 | 1.0   | Sg    | 18:41:43.029 | -0.1 |      |       |      |      | _____ |     |     |        | m__    |           | 7068  |
| IGT  | 2.04 | 1.0   | Pg    | 18:41:14.458 | -0.0 |      |       |      |      | _____ |     |     |        | m__    |           | 7067  |
| IGT  | 2.04 | 1.0   | AMd   | 18:43:08.357 |      |      |       |      |      | _____ |     | 0.0 | 113.90 | a__ Md | 3.1       | 4064  |
| SRN  | 2.40 | 355.0 | Sn    | 18:41:52.974 | 0.0  |      |       |      |      | _____ |     |     |        | m__    |           | 7070  |
| SRN  | 2.40 | 355.0 | Pn    | 18:41:20.096 | 0.0  |      |       |      |      | _____ |     |     |        | m__    |           | 7069  |
| SRN  | 2.40 | 355.0 | AMl   | 18:42:09.100 |      |      |       |      |      | _____ |     | 0.9 | 0.78   | a__ Ml | 3.6       | 4069  |
| SRN  | 2.40 | 355.0 | AMd   | 18:43:17.652 |      |      |       |      |      | _____ |     | 0.0 | 117.56 | a__ Md | 3.8       | 4065  |
| LSK  | 2.67 | 0.0   | Pn    | 18:41:22.018 | 0.0  |      |       |      |      | _____ |     |     |        | m__    |           | 7075  |
| LSK  | 2.67 | 5.0   | Sn    | 18:41:59.025 | -0.0 |      |       |      |      | _____ |     |     |        | m__    |           | 7071  |
| LSK  | 2.67 | 5.0   | AMl   | 18:42:22.650 |      |      |       |      |      | _____ |     | 1.9 | 0.92   | a__ Ml | 4.1       | 4070  |
| SCTE | 2.95 | 332.0 | Pn    | 18:41:27.796 | 0.0  |      |       |      |      | _____ |     |     |        | m__    |           | 7072  |
| SCTE | 2.95 | 332.0 | AMl   | 18:42:22.960 |      |      |       |      |      | _____ |     | 1.1 | 0.58   | a__ Ml | 3.9       | 4071  |

|      |      |       |     |              |      |     |  |  |  |  |  |  |  |     |        |     |    |     |      |
|------|------|-------|-----|--------------|------|-----|--|--|--|--|--|--|--|-----|--------|-----|----|-----|------|
| SCTE | 2.95 | 332.0 | AMd | 18:43:34.228 |      | --- |  |  |  |  |  |  |  | 0.0 | 126.43 | a__ | Md | 3.9 | 4066 |
| NEST | 2.99 | 11.0  | Sn  | 18:42:07.415 | 0.1  | --- |  |  |  |  |  |  |  |     |        | m__ |    |     | 7074 |
| NEST | 2.99 | 11.0  | Pn  | 18:41:28.319 | -0.0 | --- |  |  |  |  |  |  |  |     |        | m__ |    |     | 7073 |
| NEST | 2.99 | 11.0  | AMl | 18:42:33.660 |      | --- |  |  |  |  |  |  |  | 0.5 | 0.94   | a__ | Ml | 3.6 | 4072 |
| NEST | 2.99 | 11.0  | AMd | 18:43:46.964 |      | --- |  |  |  |  |  |  |  | 0.0 | 138.65 | a__ | Md | 4.0 | 4067 |

DATA\_TYPE COMMENT GSE2.1  
Event 434

Official Magnitude:  
Ml 3.89

Error ellipse:

|               |  |      |     |         |
|---------------|--|------|-----|---------|
|               |  | Azim | Dip | Mag     |
| Max:          |  | 174  | 50  | 11.1000 |
| Intermediate: |  | 278  | 10  | 1.9800  |
| Min:          |  | 16   | 38  | 0.8100  |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187379 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 435 1.6 km from Hamzići, Federation of B&H, Bosnia and Herzegovina

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/22 | 13:56:42.87 |     | 0.10 | 43.6987  | 18.5735   |      |      |    | 9.0   | 0.8 | 12   | 17   | 279 | 0.70  | 3.12  | m    |        |
| 474        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| Ml        | 3.0 | 0.0  | 2      | 474    |
| Md        | 3.2 | 0.0  | 9      | 474    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| PLE  | 0.70 | 121.0 | Pn    | 13:56:57.005 | 0.1  |      |       |      |      | --- |     |     |       | mci  |           | 7076  |      |
| PLE  | 0.70 | 121.0 | AMd   | 13:57:40.547 |      |      |       |      |      | --- |     | 0.0 | 43.54 | a__  | Md        | 2.6   | 4073 |
| BRY  | 0.80 | 182.0 | Pn    | 13:56:58.791 | 0.0  |      |       |      |      | --- |     |     |       | mdi  |           | 7077  |      |
| BRY  | 0.80 | 182.0 | AMd   | 13:58:19.513 |      |      |       |      |      | --- |     | 0.0 | 80.72 | a__  | Md        | 3.3   | 4074 |
| NKME | 0.97 | 163.0 | Pn    | 13:57:01.485 | -0.6 |      |       |      |      | --- |     |     |       | mde  |           | 7078  |      |
| NKME | 0.97 | 163.0 | AMd   | 13:58:08.215 |      |      |       |      |      | --- |     | 0.0 | 66.73 | a__  | Md        | 3.1   | 4075 |
| KOME | 1.09 | 140.0 | Pn    | 13:57:04.181 | -0.2 |      |       |      |      | --- |     |     |       | mde  |           | 7079  |      |
| KOME | 1.09 | 140.0 | AMd   | 13:58:12.025 |      |      |       |      |      | --- |     | 0.0 | 67.84 | a__  | Md        | 3.1   | 4076 |
| CEME | 1.18 | 167.0 | Pn    | 13:57:05.182 | -0.8 |      |       |      |      | --- |     |     |       | mde  |           | 7080  |      |
| CEME | 1.18 | 167.0 | AMd   | 13:58:17.094 |      |      |       |      |      | --- |     | 0.0 | 71.91 | a__  | Md        | 3.2   | 4077 |
| HCY  | 1.25 | 183.0 | Pn    | 13:57:07.315 | 0.1  |      |       |      |      | --- |     |     |       | mdi  |           | 7081  |      |
| HCY  | 1.25 | 183.0 | AMd   | 13:58:24.112 |      |      |       |      |      | --- |     | 0.0 | 76.80 | a__  | Md        | 3.2   | 4078 |
| BEY  | 1.27 | 130.0 | Pn    | 13:57:07.202 | -0.5 |      |       |      |      | --- |     |     |       | mdi  |           | 7082  |      |

|      |      |       |     |              |      |     |       |     |     |     |      |
|------|------|-------|-----|--------------|------|-----|-------|-----|-----|-----|------|
| BEY  | 1.27 | 130.0 | AMd | 13:58:19.168 | ___  | 0.0 | 71.97 | a__ | Md  | 3.2 | 4079 |
| BUM  | 1.42 | 170.0 | Pn  | 13:57:09.635 | -0.6 | ___ | ___   | ___ | mde | ___ | 7083 |
| BUM  | 1.42 | 170.0 | AMd | 13:58:35.692 | ___  | 0.0 | 86.06 | a__ | Md  | 3.4 | 4080 |
| PVY  | 1.50 | 136.0 | Pn  | 13:57:11.735 | -0.0 | ___ | ___   | ___ | mce | ___ | 7084 |
| DRME | 1.58 | 163.0 | Pn  | 13:57:13.129 | 0.1  | ___ | ___   | ___ | mde | ___ | 7085 |
| DRME | 1.58 | 163.0 | AMd | 13:58:33.076 | ___  | 0.0 | 79.95 | a__ | Md  | 3.3 | 4081 |
| BCI  | 1.72 | 140.0 | Sn  | 13:57:40.102 | 0.1  | ___ | ___   | ___ | m__ | ___ | 7087 |
| BCI  | 1.72 | 140.0 | Pn  | 13:57:15.462 | -0.1 | ___ | ___   | ___ | mce | ___ | 7086 |
| ULC  | 1.80 | 0.0   | Pn  | 13:57:16.197 | 0.0  | ___ | ___   | ___ | mce | ___ | 7091 |
| PUK  | 1.92 | 149.0 | Sn  | 13:57:45.889 | -0.0 | ___ | ___   | ___ | m__ | ___ | 7089 |
| PUK  | 1.92 | 149.0 | Pn  | 13:57:18.990 | 0.1  | ___ | ___   | ___ | mde | ___ | 7088 |
| PUK  | 1.92 | 149.0 | AM1 | 13:58:01.310 | ___  | 0.4 | 0.46  | a__ | M1  | 3.0 | 4082 |
| NOCI | 3.12 | 202.0 | S   | 13:58:17.015 | -0.1 | ___ | ___   | ___ | m__ | ___ | 7090 |
| NOCI | 3.12 | 202.0 | AM1 | 13:58:25.510 | ___  | 0.1 | 0.42  | a__ | M1  | 3.0 | 4083 |

DATA\_TYPE COMMENT GSE2.1  
Event 435

Official Magnitude:  
M1 2.98

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 355  | 28  | 1.6300 |
| Intermediate: | 119  | 44  | 0.6900 |
| Min:          | 246  | 32  | 0.5300 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187379 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 438 Mediterranean Sea

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/24 | 06:47:27.04 |     | 0.04 | 39.5663  | 19.1637   |      |      |    | 1.4   | 1.5 | 10   | 24   | 249 | 0.72  | 2.53  | m    |        |
| 477        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 2.2 | 0.0  | 3      | 477    |
| Md        | 2.5 | 0.0  | 1      | 477    |

| Sta | Dist | EvAz | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp | Per   | Qual | Magnitude | ArrID |      |
|-----|------|------|-------|--------------|------|------|-------|------|------|-----|-----|-----|-------|------|-----------|-------|------|
| SRN | 0.72 | 63.0 | S     | 06:47:53.555 | 0.0  |      |       |      |      | ___ |     |     |       | m__  |           | 7133  |      |
| SRN | 0.72 | 63.0 | P     | 06:47:42.129 | -0.1 |      |       |      |      | ___ |     |     |       | m__  |           | 7132  |      |
| SRN | 0.72 | 63.0 | AM1   | 06:47:56.678 |      |      |       |      |      | ___ |     | 0.3 | 0.46  | a__  | M1        | 2.0   | 4104 |
| SRN | 0.72 | 63.0 | AMd   | 06:48:20.948 |      |      |       |      |      | ___ |     | 0.0 | 38.82 | a__  | Md        | 2.5   | 4103 |

|      |      |       |     |              |      |     |                   |      |
|------|------|-------|-----|--------------|------|-----|-------------------|------|
| IGT  | 0.90 | 91.0  | S   | 06:47:59.073 | -0.0 | --- | m                 | 7135 |
| IGT  | 0.90 | 91.0  | P   | 06:47:45.414 | 0.1  | --- | m                 | 7134 |
| IGT  | 0.90 | 91.0  | AM1 | 06:48:05.068 |      | --- | 0.3 0.66 a M1 2.2 | 4105 |
| VLO  | 0.94 | 15.0  | P   | 06:47:45.265 | -0.0 | --- | m                 | 7137 |
| VLO  | 0.94 | 15.0  | S   | 06:47:59.035 | 0.0  | --- | m                 | 7136 |
| LSK  | 1.25 | 61.0  | S   | 06:48:10.448 | 0.0  | --- | m                 | 7139 |
| LSK  | 1.25 | 61.0  | P   | 06:47:51.864 | 0.0  | --- | m                 | 7138 |
| LKD2 | 1.40 | 123.0 | S   | 06:48:15.779 | 0.3  | --- | m                 | 7141 |
| LKD2 | 1.40 | 123.0 | P   | 06:47:54.753 | 0.0  | --- | m                 | 7140 |
| LKD2 | 1.40 | 123.0 | AM1 | 06:48:24.278 |      | --- | 0.4 0.70 a M1 2.7 | 4106 |
| NEST | 1.67 | 0.0   | P   | 06:47:58.520 | 0.0  | --- | m                 | 7144 |
| NEST | 1.68 | 59.0  | S   | 06:48:24.749 | 0.5  | --- | m                 | 7142 |
| PUK  | 2.53 | 12.0  | P   | 06:48:13.112 | -0.1 | --- | m                 | 7143 |

DATA\_TYPE COMMENT GSE2.1  
Event 438

Official Magnitude:  
M1 2.18

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 235  | 59  | 1.7400 |
| Intermediate: | 80   | 27  | 0.5200 |
| Min:          | 344  | 11  | 0.3900 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187378 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 439 1.0 km from Matarágka, West Greece, Greece

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/24 | 10:41:31.14 |     | 0.10 | 38.0308  | 21.4668   |      |      |    | 11.6  | 1.3 | 9    | 7    | 298 | 0.99  | 2.88  | m    |        |
| 478        |             |     |      |          |           |      |      |    |       |     |      |      |     |       |       |      |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 3.9 | 0.0  | 5      | 478    |
| Md        | 3.6 | 0.0  | 6      | 478    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp  | Per   | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|------|-------|------|-----------|-------|
| LKD2 | 0.99 | 321.0 | Sg    | 10:42:05.181 | -0.1 |      |       |      |      |     |     |      |       | m    |           | 7146  |
| LKD2 | 0.99 | 321.0 | Pg    | 10:41:48.811 | -1.8 |      |       |      |      |     |     |      |       | m    |           | 7145  |
| LKD2 | 0.99 | 321.0 | AM1   | 10:42:21.190 |      |      |       |      |      |     |     | 18.6 | 0.58  | a M1 | 4.1       | 4113  |
| LKD2 | 0.99 | 321.0 | AMd   | 10:43:17.448 |      |      |       |      |      |     |     | 0.0  | 88.64 | a Md | 3.4       | 4107  |
| IGT  | 1.74 | 330.0 | Sn    | 10:42:28.959 | 0.2  |      |       |      |      |     |     |      |       | m    |           | 7148  |





|      |      |       |     |              |      |     |     |         |             |
|------|------|-------|-----|--------------|------|-----|-----|---------|-------------|
| SRN  | 0.17 | 100.0 | S   | 01:29:06.125 | 0.2  | --- | m   | ---     | 7158        |
| SRN  | 0.17 | 100.0 | P   | 01:29:02.527 | -0.2 | --- | m   | ---     | 7157        |
| SRN  | 0.17 | 100.0 | AMl | 01:29:06.818 |      | --- | 0.5 | 0.22 a  | Ml 1.5 4120 |
| SRN  | 0.17 | 100.0 | AMl | 01:29:07.828 |      | --- | 0.3 | 0.20 a  | Ml 1.3 4119 |
| SRN  | 0.17 | 100.0 | AMd | 01:29:40.192 |      | --- | 0.0 | 37.67 a | Md 2.4 4118 |
| IGT  | 0.57 | 131.0 | S   | 01:29:18.333 | -0.7 | --- | m   | ---     | 7160        |
| IGT  | 0.57 | 131.0 | P   | 01:29:10.043 | -0.2 | --- | m   | ---     | 7159        |
| IGT  | 0.57 | 131.0 | AMl | 01:29:27.848 |      | --- | 0.1 | 0.22 a  | Ml 1.4 4121 |
| VLO  | 0.60 | 339.0 | S   | 01:29:18.964 | 0.0  | --- | m   | ---     | 7162        |
| VLO  | 0.60 | 339.0 | P   | 01:29:08.977 | -1.2 | --- | m   | ---     | 7161        |
| LSK  | 0.67 | 68.0  | S   | 01:29:22.243 | -0.0 | --- | m   | ---     | 7164        |
| LSK  | 0.67 | 68.0  | P   | 01:29:11.762 | -0.3 | --- | m   | ---     | 7163        |
| LSK  | 0.67 | 68.0  | AMl | 01:29:29.398 |      | --- | 0.4 | 0.60 a  | Ml 2.1 4123 |
| LSK  | 0.67 | 68.0  | AMl | 01:29:24.208 |      | --- | 0.4 | 0.52 a  | Ml 2.1 4122 |
| KBN  | 1.05 | 46.0  | S   | 01:29:35.599 | 1.3  | --- | m   | ---     | 7166        |
| KBN  | 1.05 | 46.0  | P   | 01:29:19.058 | 0.1  | --- | m   | ---     | 7165        |
| KBN  | 1.05 | 46.0  | AMl | 01:29:37.218 |      | --- | 0.1 | 0.92 a  | Ml 1.9 4124 |
| NEST | 1.10 | 0.0   | P   | 01:29:19.217 | 0.0  | --- | m   | ---     | 7171        |
| NEST | 1.09 | 62.0  | S   | 01:29:36.724 | 0.1  | --- | m   | ---     | 7167        |
| NEST | 1.09 | 62.0  | AMl | 01:29:41.228 |      | --- | 0.2 | 0.90 a  | Ml 2.1 4125 |
| LKD2 | 1.31 | 148.0 | P   | 01:29:24.567 | 0.2  | --- | m   | ---     | 7169        |
| LKD2 | 1.31 | 148.0 | S   | 01:29:44.295 | 0.4  | --- | m   | ---     | 7168        |
| PHP  | 1.84 | 15.0  | P   | 01:29:31.851 | -1.7 | --- | m   | ---     | 7170        |

DATA\_TYPE COMMENT GSE2.1  
Event 440

Official Magnitude:  
Ml 1.90

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 99   | 78  | 1.3900 |
| Intermediate: | 247  | 9   | 0.7800 |
| Min:          | 338  | 6   | 0.5000 |

BEGIN GSE2.1  
MSG\_TYPE DATA  
MSG\_ID 1551187378 athena  
DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 441 Region N/A

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/24 | 21:57:00.55 |     | 0.61 | 38.7260  | 20.6345   |      |      |    | 19.9  | 1.5 | 17   | 25   | 292 | 0.06  | 3.66  | m    | 480    |

Magnitude Err Nsta Author  
M1 3.8 0.0 8

OrigID  
480

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp   | Per  | Qual | Magnitude | ArrID |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|
| LKD2 | 0.07 | 16.0  | S     | 21:57:08.753 | 1.5  |      |       |      |      |     |     |       |      | m    |           | 7173  |
| LKD2 | 0.07 | 16.0  | P     | 21:57:06.015 | 1.7  |      |       |      |      |     |     |       |      | m    |           | 7172  |
| LKD2 | 0.07 | 16.0  | AM1   | 21:57:08.830 |      |      |       |      |      |     |     | 268.9 | 0.54 | a    | M1        | 4.3   |
| LKD2 | 0.07 | 16.0  | AM1   | 21:57:11.120 |      |      |       |      |      |     |     | 182.0 | 0.68 | a    | M1        | 4.2   |
| IGT  | 0.84 | 344.0 | S     | 21:57:29.353 | 0.0  |      |       |      |      |     |     |       |      | m    |           | 7175  |
| IGT  | 0.84 | 344.0 | P     | 21:57:16.515 | -0.5 |      |       |      |      |     |     |       |      | m    |           | 7174  |
| SRN  | 1.25 | 338.0 | S     | 21:57:42.959 | 0.1  |      |       |      |      |     |     |       |      | m    |           | 7177  |
| SRN  | 1.25 | 338.0 | P     | 21:57:23.820 | -0.9 |      |       |      |      |     |     |       |      | m    |           | 7176  |
| SRN  | 1.25 | 338.0 | AM1   | 21:57:51.080 |      |      |       |      |      |     |     | 1.8   | 0.64 | a    | M1        | 3.3   |
| LSK  | 1.42 | 359.0 | S     | 21:57:47.059 | -0.2 |      |       |      |      |     |     |       |      | m    |           | 7179  |
| LSK  | 1.42 | 359.0 | P     | 21:57:27.313 | 0.1  |      |       |      |      |     |     |       |      | m    |           | 7178  |
| LSK  | 1.42 | 359.0 | AM1   | 21:58:02.510 |      |      |       |      |      |     |     | 11.2  | 0.66 | a    | M1        | 4.2   |
| NEST | 1.72 | 10.0  | S     | 21:57:56.462 | -0.0 |      |       |      |      |     |     |       |      | m    |           | 7181  |
| NEST | 1.72 | 10.0  | P     | 21:57:33.466 | 1.0  |      |       |      |      |     |     |       |      | m    |           | 7180  |
| NEST | 1.72 | 10.0  | AM1   | 21:58:05.460 |      |      |       |      |      |     |     | 4.2   | 0.74 | a    | M1        | 3.9   |
| NEST | 1.72 | 10.0  | AM1   | 21:58:04.410 |      |      |       |      |      |     |     | 2.5   | 0.56 | a    | M1        | 3.7   |
| KBN  | 1.90 | 3.0   | S     | 21:58:01.015 | 0.5  |      |       |      |      |     |     |       |      | m    |           | 7183  |
| KBN  | 1.90 | 3.0   | P     | 21:57:38.223 | 3.4  |      |       |      |      |     |     |       |      | m    |           | 7182  |
| KBN  | 1.90 | 3.0   | AM1   | 21:58:08.970 |      |      |       |      |      |     |     | 2.3   | 0.82 | a    | M1        | 3.8   |
| KBN  | 1.90 | 3.0   | AM1   | 21:58:13.890 |      |      |       |      |      |     |     | 2.3   | 0.66 | a    | M1        | 3.8   |
| VLO  | 1.95 | 334.0 | P     | 21:57:37.089 | 1.7  |      |       |      |      |     |     |       |      | m    |           | 7184  |
| THE  | 2.62 | 42.0  | S     | 21:58:19.374 | -0.5 |      |       |      |      |     |     |       |      | m    |           | 7186  |
| THE  | 2.62 | 42.0  | P     | 21:57:46.349 | 0.5  |      |       |      |      |     |     |       |      | m    |           | 7185  |
| THE  | 2.62 | 42.0  | AM1   | 21:58:37.030 |      |      |       |      |      |     |     | 0.3   | 0.80 | a    | M1        | 3.3   |
| PHP  | 2.96 | 358.0 | S     | 21:58:27.946 | -0.2 |      |       |      |      |     |     |       |      | m    |           | 7188  |
| PHP  | 2.96 | 358.0 | P     | 21:57:50.280 | -0.3 |      |       |      |      |     |     |       |      | m    |           | 7187  |
| PHP  | 2.96 | 358.0 | AM1   | 21:58:46.830 |      |      |       |      |      |     |     | 0.9   | 0.98 | a    | M1        | 3.8   |
| ULC  | 3.33 | 0.0   | Pn    | 21:57:54.886 | 0.0  |      |       |      |      |     |     |       |      | m    |           | 7191  |
| DRME | 3.63 | 343.0 | P     | 21:57:58.347 | -2.4 |      |       |      |      |     |     |       |      | m    |           | 7189  |
| BCI  | 3.66 | 354.0 | P     | 21:58:00.374 | -0.8 |      |       |      |      |     |     |       |      | m    |           | 7190  |
| BCI  | 3.66 | 354.0 | AM1   | 21:59:15.880 |      |      |       |      |      |     |     | 1.1   | 0.92 | a    | M1        | 4.2   |

DATA\_TYPE COMMENT GSE2.1  
Event 441

Official Magnitude:  
M1 3.84

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 218  | 24  | 3.6400 |
| Intermediate: | 124  | 8   | 1.9800 |
| Min:          | 17   | 64  | 1.5800 |

BEGIN GSE2.1  
 MSG\_TYPE DATA  
 MSG\_ID 1551187377 athena  
 DATA\_TYPE BULLETIN GSE2.1:SHORT

Event 444 Mediterranean Sea

| Date       | Time        | Err | RMS  | Latitude | Longitude | Smaj | Smin | Az | Depth | Err | Ndef | Nsta | Gap | mdist | Mdist | Qual | Author |
|------------|-------------|-----|------|----------|-----------|------|------|----|-------|-----|------|------|-----|-------|-------|------|--------|
| 2019/02/26 | 10:05:54.90 |     | 0.82 | 38.7090  | 20.4210   |      |      |    | 5.0   | 5.3 | 18   | 31   | 247 | 0.20  | 3.66  | m    |        |

| Magnitude | Err | Nsta | Author | OrigID |
|-----------|-----|------|--------|--------|
| M1        | 4.5 | 0.0  | 6      | 483    |

| Sta  | Dist | EvAz  | Phase | Time         | Tres | Azim | AzRes | Slow | SRes | Def | SNR | Amp   | Per  | Qual | Magnitude | ArrID |      |
|------|------|-------|-------|--------------|------|------|-------|------|------|-----|-----|-------|------|------|-----------|-------|------|
| LKD2 | 0.00 | 0.0   | Pg    | 10:06:01.637 | 0.0  |      |       |      |      |     |     |       |      | mc   |           | 7255  |      |
| LKD2 | 0.20 | 66.0  | Sg    | 10:06:03.129 | 0.2  |      |       |      |      |     |     |       |      | m    |           | 7234  |      |
| LKD2 | 0.20 | 66.0  | AM1   | 10:06:04.070 |      |      |       |      |      |     |     | 778.8 | 0.46 | a    | M1        | 4.8   | 4158 |
| LKD2 | 0.20 | 66.0  | AM1   | 10:06:06.480 |      |      |       |      |      |     |     | 574.1 | 0.52 | a    | M1        | 4.6   | 4157 |
| IGT  | 0.82 | 356.0 | Sg    | 10:06:23.685 | -0.0 |      |       |      |      |     |     |       |      | m    |           | 7236  |      |
| IGT  | 0.82 | 356.0 | Pg    | 10:06:12.348 | 1.0  |      |       |      |      |     |     |       |      | mc   |           | 7235  |      |
| SRN  | 1.21 | 345.0 | Sg    | 10:06:36.508 | -0.9 |      |       |      |      |     |     |       |      | m    |           | 7238  |      |
| SRN  | 1.21 | 345.0 | Pg    | 10:06:19.439 | 0.3  |      |       |      |      |     |     |       |      | m    |           | 7237  |      |
| SRN  | 1.21 | 345.0 | AM1   | 10:06:48.490 |      |      |       |      |      |     |     | 9.2   | 0.94 | a    | M1        | 3.9   | 4159 |
| LSK  | 1.45 | 5.0   | Sg    | 10:06:43.827 | -0.1 |      |       |      |      |     |     |       |      | m    |           | 7240  |      |
| LSK  | 1.45 | 5.0   | Pg    | 10:06:23.004 | 0.1  |      |       |      |      |     |     |       |      | m    |           | 7239  |      |
| LSK  | 1.45 | 5.0   | AM1   | 10:06:47.540 |      |      |       |      |      |     |     | 28.9  | 0.62 | a    | M1        | 4.6   | 4160 |
| NEST | 1.77 | 15.0  | S     | 10:06:53.955 | -0.3 |      |       |      |      |     |     |       |      | m    |           | 7242  |      |
| NEST | 1.77 | 15.0  | Pn    | 10:06:29.530 | 0.7  |      |       |      |      |     |     |       |      | m    |           | 7241  |      |
| NEST | 1.77 | 15.0  | AM1   | 10:07:01.490 |      |      |       |      |      |     |     | 12.9  | 0.72 | a    | M1        | 4.5   | 4161 |
| VLO  | 1.90 | 339.0 | S     | 10:07:02.412 | 5.5  |      |       |      |      |     |     |       |      | m    |           | 7244  |      |
| VLO  | 1.90 | 339.0 | P     | 10:06:32.421 | 2.1  |      |       |      |      |     |     |       |      | m    |           | 7243  |      |
| KBN  | 1.93 | 8.0   | Sn    | 10:06:58.837 | 0.4  |      |       |      |      |     |     |       |      | m    |           | 7246  |      |
| KBN  | 1.93 | 8.0   | Pn    | 10:06:34.068 | 2.9  |      |       |      |      |     |     |       |      | m    |           | 7245  |      |
| KBN  | 1.93 | 8.0   | AM1   | 10:07:06.450 |      |      |       |      |      |     |     | 12.0  | 0.70 | a    | M1        | 4.5   | 4162 |
| SCTE | 2.04 | 313.0 | Pn    | 10:06:34.299 | 0.9  |      |       |      |      |     |     |       |      | m    |           | 7247  |      |
| BPA1 | 2.10 | 344.0 | Pn    | 10:06:37.459 | 3.3  |      |       |      |      |     |     |       |      | m    |           | 7248  |      |
| TIR  | 2.67 | 351.0 | Sn    | 10:07:19.600 | 1.2  |      |       |      |      |     |     |       |      | m    |           | 7250  |      |
| TIR  | 2.67 | 351.0 | Pn    | 10:06:42.513 | -0.1 |      |       |      |      |     |     |       |      | m    |           | 7249  |      |
| TIR  | 2.67 | 351.0 | AM1   | 10:07:41.080 |      |      |       |      |      |     |     | 2.8   | 0.80 | a    | M1        | 4.2   | 4163 |
| PHP  | 2.97 | 0.0   | Sn    | 10:07:18.119 | -7.6 |      |       |      |      |     |     |       |      | m    |           | 7252  |      |
| PHP  | 2.97 | 0.0   | Pn    | 10:06:46.023 | -0.8 |      |       |      |      |     |     |       |      | m    |           | 7251  |      |
| PUK  | 3.35 | 354.0 | P     | 10:06:51.012 | -1.6 |      |       |      |      |     |     |       |      | m    |           | 7253  |      |
| BCI  | 3.66 | 356.0 | Pn    | 10:06:55.584 | -1.6 |      |       |      |      |     |     |       |      | m    |           | 7254  |      |

DATA\_TYPE COMMENT GSE2.1  
 Event 444

Official Magnitude:

M1 4.52

Error ellipse:

|               | Azim | Dip | Mag    |
|---------------|------|-----|--------|
| Max:          | 195  | 67  | 5.6800 |
| Intermediate: | 12   | 22  | 2.4600 |
| Min:          | 102  | 1   | 2.1900 |

STOP

Ngjerje te largeta (Long distance seismic event)

| Y          | M | D | HM   | Sec  | Lat      | Long | Dep | Net | Nr | Rms      | Mag | Epicenter                  |
|------------|---|---|------|------|----------|------|-----|-----|----|----------|-----|----------------------------|
| 2018-02-22 |   |   | 1017 | 22.4 |          |      |     |     |    | 7.5      |     | PERU-ECUADOR BORDER REGION |
| GAP=       |   |   |      |      | hor.err= |      |     |     |    | ver.err= |     |                            |

| STAT | SP | IPHASW | D | HRMM | SECON | AZIMU | RES | DIS | DUR | Md |
|------|----|--------|---|------|-------|-------|-----|-----|-----|----|
| NOCI | AC | iP     |   | 1030 | 21.11 |       |     |     |     |    |
| SCTE | AC | iP     |   | 1030 | 26.13 |       |     |     |     |    |
| MRVN | AC | iP     |   | 1030 | 31.33 |       |     |     |     |    |
| PUK  | AC | iP     |   | 1030 | 35.49 |       |     |     |     |    |
| TIR  | AC | iP     |   | 1030 | 37.16 |       |     |     |     |    |
| BCI  | AC | iP     |   | 1030 | 40.27 |       |     |     |     |    |
| LSK  | AC | iP     |   | 1030 | 73.73 |       |     |     |     |    |
| IGT  | AC | iP     |   | 1030 | 46.71 |       |     |     |     |    |
| NEST | AC | iP     |   | 1030 | 46.97 |       |     |     |     |    |
| LKD2 | AC | iP     |   | 1030 | 79.76 |       |     |     |     |    |
| THE  | AC | iP     |   | 1030 | 56.80 |       |     |     |     |    |

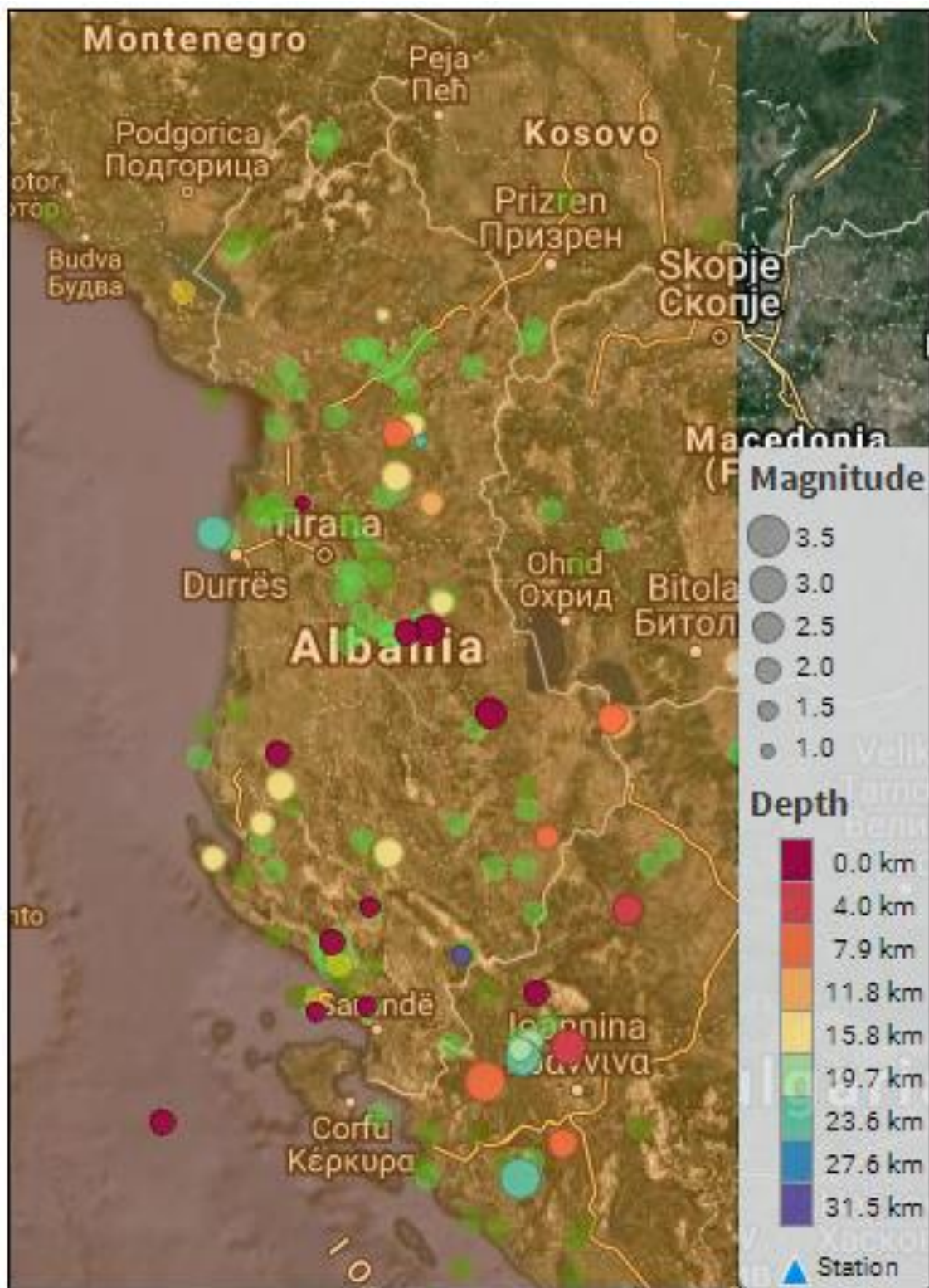
Tërmete të pa-lokalizueshëm, me më pak se tre stacione (un-locatable earthquakes with less than three stations)

| Y          | M  | D      | HM   | Sec      | Lat   | Long     | Dep | Net | Nr  | Rms | Mag | Epicenter |
|------------|----|--------|------|----------|-------|----------|-----|-----|-----|-----|-----|-----------|
| 2019-02-14 |    |        | 2159 | 30       |       |          |     |     |     |     |     | PHP-PUK   |
| GAP=       |    |        |      | hor.err= |       | ver.err= |     |     |     |     |     |           |
| STAT       | SP | IPHASW | D    | HRMM     | SECON | AZIMU    | RES | DIS | DUR | Md  |     |           |
| PHP        | SZ | IPG    |      | 2000     | 06.09 |          |     |     |     |     |     |           |
| PHP        | SE | ISG    |      | 2000     | 09.23 |          |     |     |     |     |     |           |
| PUK        | SZ | IPG    |      | 2000     | 12.16 |          |     |     |     |     |     |           |
| PUK        | SE | ISG    |      | 2000     | 19.73 |          |     |     |     |     |     |           |

### Katalogu i termeteve

| Date       | Time      | Rms  | Latitude | Longitude | Mag | Depth (km) | Depth Error | No. Stat | No. Phases | Azimuth Gap |
|------------|-----------|------|----------|-----------|-----|------------|-------------|----------|------------|-------------|
| 2019-02-03 | 15:55:04Z | 0.12 | 41.723   | 20.179    | 2.3 | 19.4       | 0.6         | 30       | 14         | 108         |
| 2019-02-03 | 21:39:26Z | 0.22 | 39.926   | 19.998    | 1.7 | 0.8        | 1.1         | 31       | 11         | 148         |
| 2019-02-04 | 17:17:09Z | 0.05 | 41.563   | 20.113    | 2.6 | 19.7       | 0.5         | 16       | 16         | 82          |
| 2019-02-05 | 18:51:00Z | 0.42 | 40.616   | 19.649    | 2.6 | 18.3       | 1.6         | 15       | 19         | 95          |
| 2019-02-06 | 16:23:30Z | 0.06 | 40.402   | 20.079    | 2.6 | 16.4       | 0.7         | 13       | 17         | 72          |
| 2019-02-07 | 15:24:56Z | 0.04 | 40.810   | 21.015    | 3   | 15.2       | 0.6         | 15       | 20         | 119         |
| 2019-02-07 | 16:19:56Z | 0.04 | 40.825   | 20.994    | 2.8 | 9.1        | 0.7         | 13       | 18         | 121         |
| 2019-02-07 | 20:54:05Z | 0.02 | 40.454   | 20.736    | 2.5 | 11.2       | 0.8         | 12       | 13         | 114         |
| 2019-02-07 | 22:06:41Z | 0.03 | 41.183   | 20.299    | 2.1 | 16.6       | 0.6         | 16       | 18         | 130         |
| 2019-02-09 | 12:43:28Z | 0.04 | 39.797   | 20.820    | 3.1 | 7.1        | 9.5         | 9        | 14         | 165         |
| 2019-02-09 | 17:23:31Z | 0.05 | 40.087   | 20.381    | 1.6 | 35.4       | 0.5         | 13       | 12         | 136         |
| 2019-02-11 | 16:08:20Z | 0.03 | 41.483   | 20.255    | 2.2 | 12.8       | 0.9         | 13       | 11         | 95          |
| 2019-02-11 | 18:57:17Z | 0.08 | 40.710   | 19.638    | 2.5 | 1.7        | 0.4         | 12       | 6          | 120         |
| 2019-02-11 | 19:12:41Z | 0.02 | 39.691   | 20.474    | 3.7 | 10.6       | 0.9         | 12       | 15         | 139         |
| 2019-02-12 | 06:30:29Z | 0.45 | 39.497   | 20.793    | 2.8 | 10.5       | 2.3         | 9        | 13         | 170         |
| 2019-02-13 | 17:25:52Z | 0.03 | 40.227   | 21.063    | 2.6 | 5.6        | 0.9         | 8        | 14         | 170         |
| 2019-02-15 | 00:34:10Z | 0.33 | 39.968   | 20.688    | 2.3 | 2          | 1.6         | 32       | 16         | 150         |
| 2019-02-15 | 01:18:28Z | 0.5  | 39.385   | 20.626    | 3.7 | 25.8       | 0.9         | 32       | 27         | 123         |
| 2019-02-15 | 02:14:07Z | 0.46 | 39.821   | 20.664    | 2.5 | 23.4       | 2.2         | 32       | 22         | 152         |
| 2019-02-16 | 11:25:18Z | 0.03 | 39.765   | 20.632    | 3.1 | 25.8       | 0.5         | 11       | 17         | 115         |
| 2019-02-16 | 12:40:03Z | 0.04 | 39.791   | 20.623    | 2.4 | 22.2       | 2.1         | 8        | 9          | 151         |
| 2019-02-16 | 16:09:29Z | 0.17 | 39.790   | 20.622    | 2.4 | 23.1       | 1.9         | 31       | 11         | 151         |
| 2019-02-16 | 16:20:23Z | 0.37 | 41.483   | 19.733    | 1.4 | 4.0        | 4.3         | 17       | 8          | 174         |
| 2019-02-17 | 01:59:14Z | 0.02 | 40.234   | 20.007    | 1.8 | 0.2        | 1           | 9        | 11         | 82          |

|            |           |      |        |        |     |      |     |    |    |     |
|------------|-----------|------|--------|--------|-----|------|-----|----|----|-----|
| 2019-02-17 | 21:21:33Z | 0.29 | 41.396 | 19.370 | 3   | 25.9 | 2   | 12 | 14 | 180 |
| 2019-02-19 | 00:10:22Z | 0.03 | 41.674 | 20.214 | 1.3 | 25.4 | 1.6 | 4  | 7  | 133 |
| 2019-02-19 | 06:32:40Z | 0.35 | 41.696 | 20.116 | 2.6 | 9.3  | 1.5 | 22 | 25 | 95  |
| 2019-02-21 | 03:55:27Z | 0.05 | 42.056 | 20.056 | 1.4 | 18   | 0.7 | 30 | 9  | 141 |
| 2019-02-22 | 01:24:36Z | 0.1  | 40.125 | 19.850 | 2.1 | 0.6  | 0.9 | 30 | 13 | 168 |
| 2019-02-22 | 23:47:25Z | 0.39 | 40.496 | 19.568 | 2.2 | 19   | 1   | 31 | 21 | 93  |
| 2019-02-24 | 06:47:27Z | 0.04 | 39.566 | 19.164 | 2.2 | 1.4  | 1.5 | 24 | 10 | 249 |
| 2019-02-25 | 01:28:58Z | 0.28 | 39.911 | 19.785 | 1.9 | 2.8  | 1.4 | 25 | 11 | 191 |
| 2019-02-26 | 03:58:13Z | 0.23 | 40.392 | 19.365 | 2.3 | 16.9 | 1   | 20 | 14 | 147 |
| 2019-02-26 | 04:51:35Z | 0.23 | 40.839 | 20.496 | 2.8 | 2.9  | 1.6 | 20 | 22 | 96  |
| 2019-02-26 | 19:51:53Z | 0.11 | 41.098 | 20.246 | 2.8 | 0.4  | 0.9 | 11 | 16 | 123 |
| 2019-02-26 | 20:05:44Z | 0.36 | 41.086 | 20.160 | 2.1 | 3.0  | 1.7 | 30 | 20 | 114 |



**-Fig. 2 -**

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



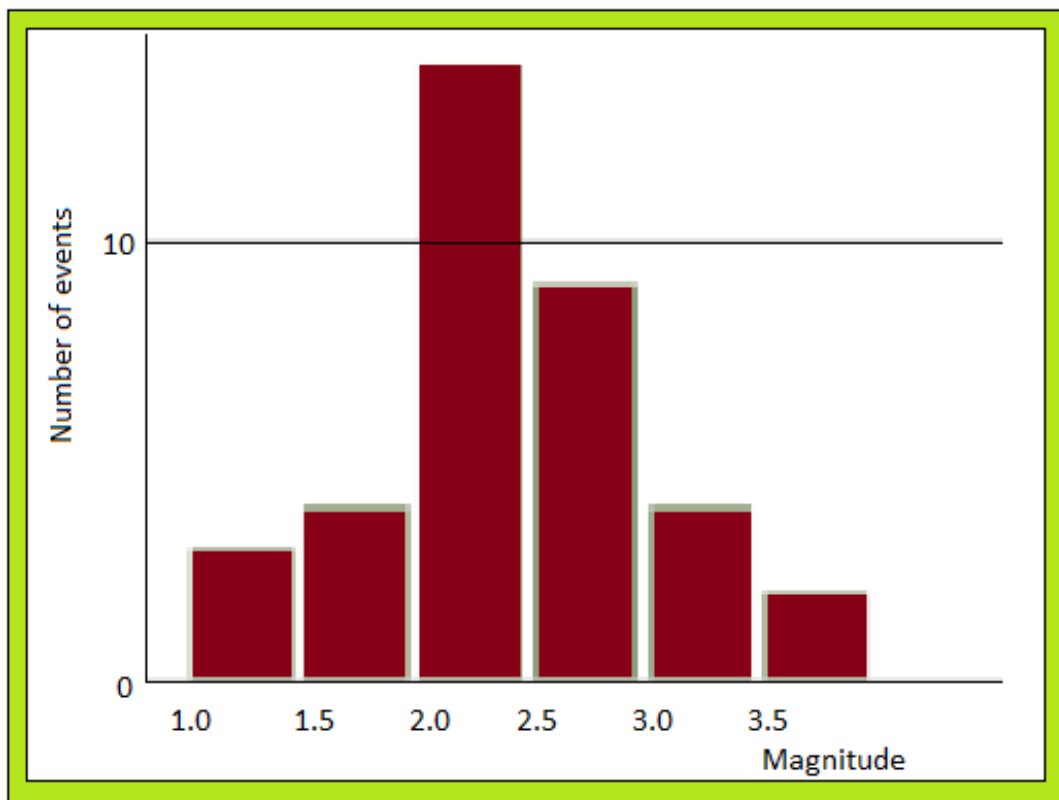
## 1. Statistika e ngjarjeve (Events Statistics)

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

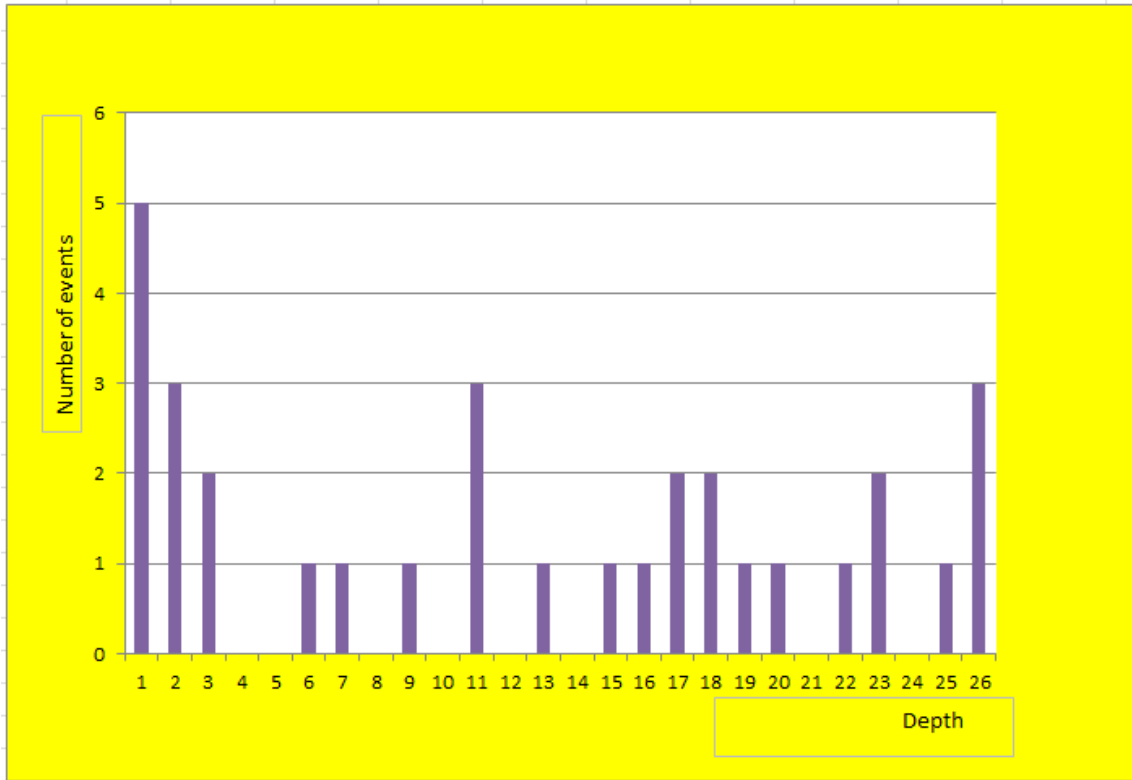
| Të dhënat përfaqësuese   | Representative Parameters                  | Vlerat (observed values) |
|--|--|--------------------------|
| Numuri i përgjithshëm i ngjarjeve të regjistruara<br>(kuandrat 39 <sub>0</sub> -43 <sub>0</sub> V; 18.5 <sub>0</sub> -21.5 <sub>0</sub> L) | [total recorded number of seismic events]  | 36                       |
| Numuri i ngjarjeve sizmike brenda kufirit shtetëror  | [earthquakes occurred within state border] | 24                       |
| Thellësia mesatare e vrojtuar (km)   | [mean observed depth]                      | 14                       |
| Thellësia maksimale e vrojtuar (km)  | [maximum observed depth]                   | 35                       |
| Magnituda lokale minimale e vrojtuar ( $M_{L/d}$ )   | [minimum observed local magnitude]         | 1.3                      |
| Magnituda lokale maksimale e vrojtuar ( $M_{L/d}$ )  | [maximum observed local magnitude]         | 3.7                      |
| Intensiteti maksimal i vrojtuar (MSK-64)   | [maximum observed intensity]               | IV-V                     |

## 2. Karakteristikat kryesore të sizmicitetit për muajin

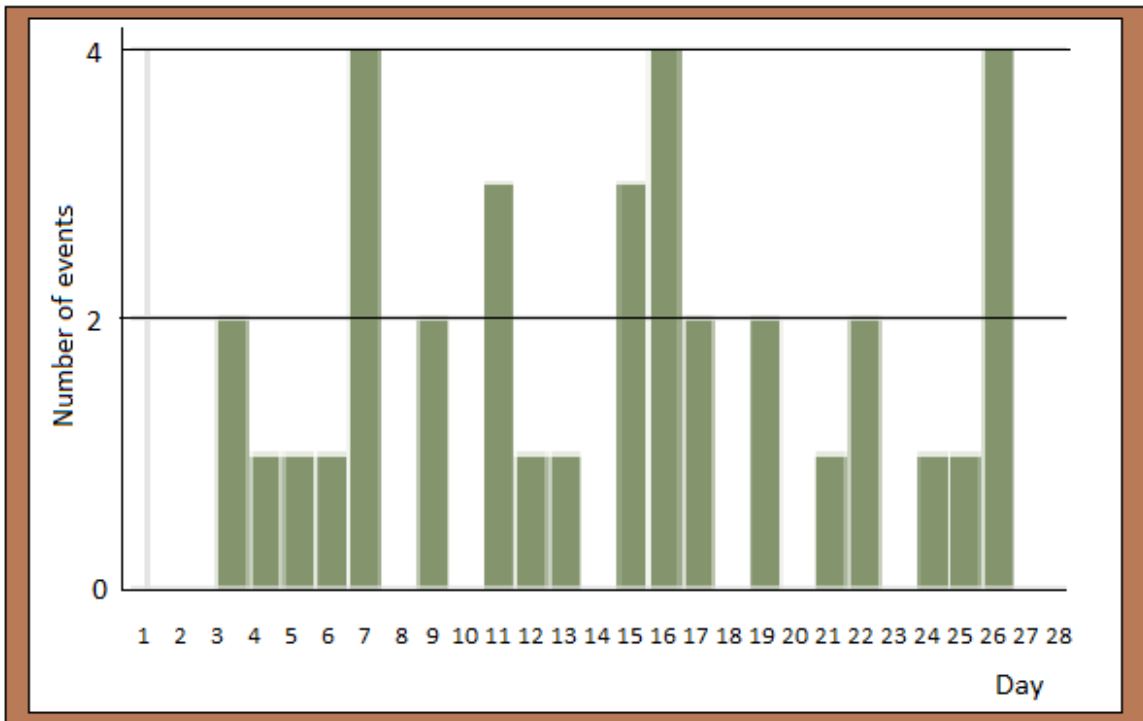
Sizmiciteti i muajit Shkurt 2019 është percaktuar si aktivitet sizmik i ulet, me dallueshem kemi regjistrimin e ngjarjes së dates 11 Shkurt 2019, ora 19:12(UTM), me  $M_L = 3.7$  (Rihter) prane me kufirin Shqiperi-Greqi.



Grafiku i numurit te ngjarjeve per nivelin e magnitudave



Grafiku i frekuences se termeteve ne lidhje me thellesin.



Grafiku ishperndarjes se numurit te ngjarjeve per dite

## REFERENCA (References)

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