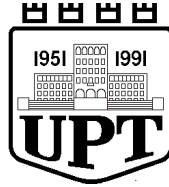


BULETINI I TËRMETEVE TË RRJETIT SIZMOLOGJIK SHQIPTAR

NËNTOR 2013

PARAMETRIC DATA
AND ALBANIAN'S EARTHQUAKE ANALYSIS
NOVEMBER 2013



UNIVERSITETI POLITEKNIK I TIRANËS
INSTITUTI I GJEOSHKENCAVE, ENERGJISË, UJIT DHE MJEDISIT
Departamenti i Sizmologjisë

BULETINI MUJOR I RRJETIT SIZMOLOGJIK
TË SHQIPERISË

NËNTOR 2013

MONTHLY BULLETIN OF THE ALBANIAN
SEISMOLOGICAL NETWORK

NOVEMBER 2013

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Tiranë, 2013

INFORMACION I PERGJITSEM**Prezantim**

The Albanian Seismological Network Bulletin is a periodic publication of earthquake wave data, source parameters and their magnitudes, for every seismic event occurring inside the Albanian territory and its surroundings. This publication is compiled in the Department of Seismology of the Institute of Geosciences, Energy, Water and Environment under the Polytechnic University of Tirana. All the estimated values, of the parameters, refer to the geographic quadrant confined by the coordinates: 39.0° - 43.0° V dhe 18.5° - 21.5° L.

Parametrat e vlerësuar i referohen kuadrantit gjeografik të kufizuar nga koordinatat: 39.0° - 43.0° V dhe 18.5° - 21.5° L.

Buletini përmban pjesën shpjeguese të përbërë nga informacioni i përgjithshëm, simbolet e përdorura për parametrat e vlerësuar, të dhënat fazore valore për secilin nga tërmetet e regjistruar dhe përpunuar, katalogu mujor i tërmeteve, informacionin makrosimik, statistikor, mekanizmin vatrore dhe hartën e shpërndarjes së epiqendrave. Në të përfshihen disa kategori tërmetesh, bazuar në informacionin e regjistruar dhe përpunuar për secilin prej tyre. Ato janë: **1-** tërmetet e lokalizuar; **2-** tërmetet e regjistruar nga më shumë se një stacion lokal, por jo të lokalizuar dhe **3-** tërmete të regjistruar të paktën nga një stacion lokal, por me më shumë se një fazë valore.

Të dhënat parametrike, si më sipër, vlerësohen në mënyrë të pandërprerë nëpërmjet monitorimit sizmologjik dhe bazohen në analizën sasiore të regjistrimit instrumental valor. Llogaritja e vlerave të tyre është produkt i aplikimit të metodave analitike të njohura, në mënyrë

GENERAL INFORMATION**Introduction**

The Albanian Seismological Network Bulletin is a periodic publication of earthquake wave data, source parameters and their magnitudes, for every seismic event occurring inside the Albanian territory and its surroundings. This publication is compiled in the Department of Seismology of the Institute of Geosciences, Energy, Water and Environment under the Polytechnic University of Tirana. All the estimated values, of the parameters, refer to the geographic quadrant confined by the coordinates: 39° - 43° N and 18.5° - 21.5° E. Bulletin comprises a description section, containing the most general information, the section of the used symbols corresponding to all the evaluated parameters, phases data for each of the recorded and located earthquakes. It contains also the event catalogue, the macro-seismic information, the statistical information, the focal mechanism solutions and an aerial epicenter distribution map.

Different earthquake information categories are included, depending on their recorded and elaborated information, for each of them. They are: **1-** localized earthquakes; **2-** earthquakes recorded from more than one local station, but not located and **3-** earthquakes recorded at least by one station, but having more than one seismic phase.

The parametric data, as above, are permanently evaluated throughout the seismological monitoring routine, based upon quantitative analyze of instrumental waveform recordings. Their computed values are the direct application

iterative dhe interaktive, të aplikuara në programe llogarites të çertifikuar dhe të njohur globalisht. Kështu, për përcaktimin e të dhënave kohore valore hyrëse përdoret programi Atlas, ndërsa lokalizimi i tërmeteve kryhet nëpërmjet programit Hypoinverse.

Në këtë analizë merret në konsideratë modeli lokal për strukturën e shpejtësisë së përhapjes së valëve sizmike (Ormëni 2007) (kryesisht atyre volumore, primare dhe sekondare, P dhe S). Vlerësimi i magnitudës realizohet duke aplikuar modele të njohur parametrik si ai Richter & Gutenberg (1956) dhe Eaton (1992).

Analiza e të dhënave të publikuara realizohet nga grupi i punës i përbërë nga punonjësit kërkues shkencor Rrapo Ormeni dhe Edmond Dushi si edhe ata ndihmës shkencor Ardian Minarolli dhe Ervin Kasa.

Informacioni instrumental valor përftohet nëpërmjet një rrjeti stacionesh lokal, ku përfshihen: stacioni sizmologjik qendror i Tiranës (TIR), B. Currit (BCI), Pukës (PUK), Peshkopisë (PHP), Vlorës (VLO), Tepelenës (TPE), Sarandës (SRN) dhe Korçës (KBN), të cilët janë të paisur me sensor me bandë të gjerë regjistrimi. Gjithashtu, rrjeti lokal përmban edhe një numër stacionesh me regjistrim me period të shkurtër, ku përfshihen: Shkodra (SDA), Laçi (LACI) dhe Leskoviku (LSK).

Në analizë përfshihen edhe të dhënat valore të regjistruara e përcaktuara nga një numër stacionesh sizmologjik të rajonit dhe Mesdheut, të cilët i përkasin rrjetit sizmologjik të Universitetit "Aristotel" të Selanikut (AUTH), rrjetit sizmologjik Italian të menaxhuar nga Instituti Kombëtar i Gjeofizikës dhe Vullkanologjisë (INGV), si edhe stacione të rrjetit sizmologjik të Observatorit Sizmologjik të Malit të Zi (MSO).

result of known analytical methods, iteratively and interactively, within certified and globally known computational programs.

Hence, for the onset time data determination, the Atlas program is used, whereas the earthquake location is done by mean of Hypoinverse program. For this analyze, a local velocity model accounting for the local and accurate seismic wave paths, is used (Ormëni, 2007). Mainly body seismic waves are concerned, primary P-phases and secondary S-phases, within computation and location process. Magnitude determination is achieved through known parametric models as the one of Richter (1956) and Eaton (1992).

Analyzes of the published data is undertaken from a dedicated working group, comprising by scientific staff Rrapo Ormeni & Edmond Dushi and technical staff Ardian Minarolli & Ervin Kasa.

Instrumental information is achieved through a network of local seismological stations, as listed: Tirana central station (TIR), B. Curri (BCI), Puka (PUK), Peshkopia (PHP), Vlora (VLO), Tepelena (TPE), Saranda (SRN) and Korça (KBN), which are equipped with broad band seismic sensors.

Also, the local network enumerates some short period recording stations, situated at Shkodra (SDA), Laçi (LACI) and Leskoviku (LSK).

In this analyze, data from a number of regional stations, are included as well. They are distributed along the Mediterranean coast and belong to the AUTH network of the "Aristotle" university of Thessaloniki, Italian National Seismological Network managed from National Institute of Geophysics and Volcanoes (INGV) as well as seismological stations of the Seismological Observatory of Montenegro (MSO).

STACIONET E RRJETIT SIZMOLOGJIK (SEISMOLOGICAL NETWORK STATION)

Kodi Stacionit (Stn. Code)	Regjistrimi (po/jo) (Registered)	Koordinatat (Coordinates)		Lartesia (Elevation)	Tipi Stacionit (Stn. Type)	Sizometri (Sensor Type)	Sistemi regjistrimit (Recording system)	Sistemi i komunikimit (Communication system)	Perioda natyrore e sensorit (Natural Sensor period)
		V-J (N-S)	L-P (E-W)						
TIR	Po (y)	41.3477	19.8650	198	3C-VBB	STS-2	Quantera	VSAT	120 s
BCI	Po	42.3666	20.0675	500	3C-BB	CMG-40T	Trident	VSAT	40 s
KKS	Po	42.0756	20.4113	300	3C-BB	SM-4 (B)	GBD-x16	Dial Up	0.2 s
PHP	Po	41.6847	20.4408	670	3C-BB	Trillium-40	Trident	VSAT	40 s
PUK	Po	42.0426	19.8926	900	3C-BB	Trillium-40	Trident	VSAT	40 s
SDA	Po	42.0519	19.4986	80	3C-SP	SM-4 (B)	GBD-x16	Dial Up	0.2 s
LACI	Po	41.6363	19.7094	40	3C-SP	SM-4 (B)	GBD-x16	Dial Up	0.2 s
KBN	Po	40.6236	20.7874	800	3C-BB	Trillium-40	Trident	VSAT	40 s
LSK	Po	40.1500	20.6000	920	3C-SP	SM-4 (B)	GBD-x16	Dial Up	0.2 s
TPE	Po	40.2952	20.0109	240	3C-BB	CMG-40T	Trident	VSAT	40 s
VLO	Po	40.4686	19.4955	80	3C-BB	Trillium-40	Trident	VSAT	40 s
SRN	Po	39.8800	20.0005	20	3C-BB	Trillium-40	Trident	VSAT	40 s

SIMBOLIKA E PERDORUR NE PERMBAJTJEN E BULETINIT SIZMOLOGJIK
SYMBOLIC USED IN SEISMOLOGICAL BULLETIN CONTAIN

Simboli (Symbol)	Parametri korrespondues (Corresponding parameter)	Pershkrimi (Description)
<i>Y</i>	Viti (year)	Viti ndodhjes se ngjarjes (year of occurrence)
<i>M</i>	Muaji (month)	Muaji i ndodhjes së ngjarjes (month of occurrence)
<i>D</i>	Dita (day)	Data e ndodhjes së ngjarjes (date of occurrence)
<i>H</i>	Ora (hour)	Ora ne origjine (UTC) (origine time universal)
<i>M</i>	Minuta (minute)	Minuta (origine time minute)
<i>Sec</i>	Sekonda (second)	Sekonda (origine time second)
<i>Lat</i>	Gjerësia gjeografike (latitude)	Gjeresia gjeografike e epiqendrës Veri-Jug(°) Geographical latitude N-S direction
<i>Lon</i>	Gjatësia gjeografike (longitude)	Gjatesia gjeografike e epiqendrës Lindje-Perendim(°) Geographical longitude E-W direction
<i>Dep</i>	Thellësia (depth)	Thellësia vatrore (focal depth)-km
<i>Hor. err</i>	Gabimi horizontal (horizontal error)	Gabimi ibërë në vlerësimin e epiqendres (km) Estimation error of epicentre
<i>Ver. err</i>	Gabimi vertikal (vertical error)	Gabimi i bërë në vlerësimin e thellësisë (km) Depth estimation error
<i>Gap</i>	Mosmbulimi me stacione minitorimi (azimutal gap)	Zona e sferës fokale (imagjinare), e pa mbuluar me stacione regjistruar Azimutal station gap
<i>Rms</i>	Gabimi mesatar kuadratik (Root mean square)	Gabimi i pergjithshem (Total estimation error-sec)
<i>Mag</i>	Magnituda (magnitude)	Madhesia e termetit sipas shkalles lokale te kalibruar (local calibrated measure of the earthquake size)
<i>Net</i>	Emërtimi i rrjetit sizmologjik (network code)	Kodi nderkombetar i identifikimit te rrjetit ne FDSN (Federation of Digital seismologies network) eshte AC

		(International code of Network identification on FDSN is AC)
Nr	Numuri i stacioneve (station's number)	Nr. Stacioneve te perdorur ne lokalizim (No. Of used stations)
STAT	Kodi i stacionit (station code)	Kodi nderkombetar qe perdoret per te identifikuar stacionin perkates sizmologjik (tre karaktere) (international stn code)
SP	Komponentja e regjistrimit (recording component)	Kodimi i komponenteve te regjistrimit ne perputhje e orientimin gjeografik 3D (Z, N ose E) Component code according to recording direction
IPHASW	Faza valore sizmike (seismic wave phase)	tipi i valës P (P_g / P_n) ose S (S_g / S_n) (wave phase type)
D	Polariteti i hyrjes së parë në komponenten vertikale (first vertical onset polarity)	Polariteti i vales renese ne statcion, ne komponenten Z (first onset polarity on Z)
HRMM SECON	Ora, minuta dhe sekonda (time onsets for each phase)	Te dhenat kohore per mbritjen e seciles faze ne regjistrim Time data for each phases on recording
AZIMU	Kendi azimutal (station-source azimuth angle)	Azimuti stacion- vater termeti Station-focus azimuthal angle
RES	Diferenca kohore (time residual)	Ndryshimi ndermjet kohës teorike të llogaritur nga modeli dhe kohës faktike, nga regjistrimi Time residuals between calculated and observed times
DIS	Largesia epiqendrore (epicentral distance)	Largesia hoeizontale epiqender-stacion Distance from epicenter to the station
DUR	Zgjatshmeria e sinjalit sizmik (signal time duration)	Shpreh zgjatshmerinë e plotë të sinjalit sizmik ne sizmogram Total Signal Duration

INFORMACIONI PARAMETRIK FAZOR DHE LOKALIZIMI (PARAMETRIC PHASES INFORMATION AND LOCATION)

TËRMETE TË AFËRTA (NEAR EARTHQUAKE)

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	2	0557	41.56	40.10	19.83	2	ASN	4	0.1	2	NORTH QEPARO
GAP=126					hor.err=2km			ver.err=0KM		- ALBANIA		
STAT SP			IPHASW D		HRMM SECON		AZIMU	RES	DIS	DUR	Md	
TPE	SZ	IPG	0557		46.96		35	0.1	26	10	1.8	
TPE	SE	ISG	0557		51.03		35	0.0	26			
SRN	SZ	IPG	0557		47.05		144	-0.2	28	12	2.1	

SRN	SE	ISG	0557	52.05	144	0.1	28
IGT	SZ	IPG	0557	55.41	145	0.1	76
IGT	SE	ISG	0558	06.87	145	-0.1	76
SCTE	SZ	IPG	0558	03.57	269	0.1	116
SCTE	SE	ISG	0558	18.37	269	0.8	116

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	2	2017	43.41	41.88	20.17	8	ASN	4	0.1	1.8	KLOS-ALBANIA GAP=174
					hor.err=2km							ver.err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG	2017	48.79	308	0.1	29	10	1.7	
PUK	SE	ISG	2017	53.62	308	0.1	29			
PHP	SZ	IPG	2017	49.04	134	-0.2	31	11	1.9	
PHP	SE	ISG	2017	54.38	134	0.2	31			
BCI	SZ	IPG	2017	53.11	351	0.1	54			
BCI	SE	ISG	2018	01.09	351	-0.1	54			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	03	0148	25.83	39.02	22.08	12	ASN	7	0.3	3.8	GREECE GAP=319
					hor.err=4km							ver.err=4KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPN	0149	00.63	299	0.2	203	62	3.6	
SRN	SE	ISN	0149	28.15	299	0.1	203			
TPE	SZ	IPN	0149	06.15	309	-0.1	227	68	3.6	
TPE	SE	ISN	0149	35.91	309	0.2	227			
VLO	SZ	IPN	0149	13.33	307	-0.1	274	101	4	
VLO	SE	ISN	0149	46.17	307	0.2	274			
TIR	SZ	IPN	0149	18.02	325	0.3	320	78	3.8	
TIR	SE	ISN	0149	55.36	325	0.3	320			
PHP	SZ	IPN	0149	17.94	336	0.1	327	73	3.9	
PHP	SE	ISN	0149	58.17	336	0.2	327			
PUK	SZ	IPN	0149	25.32	332	0.3	383	101	4.1	
PUK	SE	ISN	0150	10.26	332	-0.2	383			
BCI	SZ	IPN	0149	28.06	336	-0.3	408			
BCI	SE	ISN	0150	16.17	336	-0.1	408			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	3	0438	36.92	41.86	19.30	13	ASN	3	0.1	2.5	ADRIATIC SEA GAP=307
					hor.err=1km							ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG	0438	46.70	68	0.0	52	18	2.4	

PUK	SE	ISG	0438	54.07	68	0.0	52		
BCI	SZ	IPG	0438	52.61	48	0.3	84	20	2.5
BCI	SE	ISG	0439	03.37	48	-0.1	84		
PHP	SZ	IPG	0438	54.22	101	0.1	97	20	2.5
PHP	SE	ISG	0439	07.16	101	0.1	97		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	04	0556	34.81	40.14	21.73	17	ASN	7	0.2	3.5	GREECE
				GAP=264	hor.err=3km				ver.err=2KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		0556	48.27	337	-0.1	76		
FNA	SE	ISG		0556	58.26	337	0.2	76		
IGT	SZ	IPN		0556	57.51	241	0.2	138		
IGT	SE	ISN		0557	16.19	241	0.1	138		
TPE	SZ	IPN		0556	59.58	277	-0.1	148	52	3.5
TPE	SE	ISN		0557	19.55	277	0.2	148		
SRN	SZ	IPN		0557	01.48	261	0.3	151	52	3.5
SRN	SE	ISN		0557	19.58	261	0.3	151		
PHP	SZ	IPN		0557	07.91	328	0.1	202	53	3.5
PHP	SE	ISN		0557	29.98	328	0.2	202		
TIR	SZ	IPN		0557	09.92	311	0.3	206	53	3.6
TIR	SE	ISN		0557	34.25	311	-0.2	206		
PUK	SZ	IPN		0557	16.86	325	-0.3	261		
PUK	SE	ISN		0557	44.42	325	-0.1	261		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	04	0944	00.66	40.18	21.57	9	ASN	7	0.2	3.5	GREECE
				GAP=250	hor.err=3km				ver.err=2KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		0944	12.25	347	0.1	66		
FNA	SE	ISG		0944	21.47	347	-0.2	66		
IGT	SZ	IPN		0944	24.44	236	0.2	129		
IGT	SE	ISN		0944	41.15	236	0.3	129		
TPE	SZ	IPN		0944	24.26	275	0.1	133	66	3.5
TPE	SE	ISN		0944	41.36	275	-0.4	133		
SRN	SZ	IPN		0944	24.34	256	-0.7	138	66	3.6
SRN	SE	ISN		0944	42.52	256	-0.9	138		
VLO	SZ	IPN		0944	31.44	281	-0.1	178	56	3.4
VLO	SE	ISN		0944	55.34	281	0.3	178		
PHP	SZ	IPN		0944	31.86	331	-1.1	189		
PHP	SE	ISN		0944	57.86	331	0.1	189		
TIR	SZ	IPN		0944	34.52	313	0.8	191		
TIR	SE	ISN		0944	59.59	313	1.0	191		
PUK	SZ	IPN		0944	41.20	327	-0.6	248		

PUK	SE	ISN	0945	12.51	327	-0.4	248
BCI	SZ	IPN	0944	45.24	333	0.3	270
BCI	SE	ISN	0945	18.33	333	0.1	270

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	4	1300	43.97		ASN						
GAP=				hor.err=			ver.err=					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1300	43.97					
TIR	SE	ISG		1300	45.02					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	4	1449	57.39	41.09	20.09	7	ASN	3	0.1	2.2	ELBASAN-ALBANIA
GAP=302				hor.err=1km			ver.err=3KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1450	04.10	325	0.0	34	10	1.8
TIR	SE	ISG		1450	08.40	325	0.1	34		
PHP	SZ	IPG		1450	10.34	23	0.1	71	15	2.2
PHP	SE	ISG		1450	19.72	23	-0.2	71		
PUK	SZ	IPG		1450	16.09	351	0.2	106	18	2.2
PUK	SE	ISG		1450	30.90	351	-0.1	106		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	04	2209	09.36	38.95	23.78	10	ASN	6	0.3	3.9	GREECE
GAP=305				hor.err=4km			ver.err=5KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPN		2210	02.15	289	-0.9	341	84	4
SRN	SE	ISN		2210	45.74	289	0.1	341		
TPE	SZ	IPN		2210	05.82	296	0.2	356	80	3.9
TPE	SE	ISN		2210	48.62	296	-0.4	356		
PHP	SZ	IPN		2210	12.49	318	-0.2	415		
PHP	SE	ISN		2211	02.04	318	0.1	415		
TIR	SZ	IPN		2210	16.48	310	0.2	426		
TIR	SE	ISN		2211	03.49	310	0.1	426		
PUK	SZ	IPN		2210	20.85	318	-0.3	477		
BCI	SZ	IPN		2210	22.58	322	-0.7	493		
BCI	SE	ISN		2211	20.69	322	0.5	493		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 11 04 2329 11.57 42.08 19.18 7 ASN 4 0.4 2.7 MONTENEGRO
GAP=281 hor.err=2km ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		2329	21.94	94	-0.2	58	19	2.4
PUK	SE	ISG		2329	30.39	94	0.1	58		
BCI	SZ	IPG		2329	26.00	66	0.2	79	27	2.7
BCI	SE	ISG		2329	37.23	66	0.7	79		
TIR	SZ	IPG		2329	29.53	145	0.2	99		
TIR	SE	ISG		2329	43.53	145	0.8	99		
PHP	SZ	IPG		2329	30.79	112	-0.8	113	29	2.8
PHP	SE	ISG		2329	46.14	112	-0.6	113		

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

2013 11 07 1701 55.21 41.91 21.53 5 ASN 6 0.3 3.2 MACEDONIA
GAP=253 hor.err=4km ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1702	11.94	255	0.2	94	36	3.2
PHP	SE	ISG		1702	24.85	255	0.3	94		
FNA	SZ	IPN		1702	17.62	186	-0.1	126		
FNA	SE	ISN		1702	34.58	186	0.3	126		
BCI	SZ	IPN		1702	18.86	293	0.4	130	49	3.2
BCI	SE	ISN		1702	37.02	293	0.3	130		
PUK	SZ	IPN		1702	19.36	277	-0.1	136	43	3.2
PUK	SE	ISN		1702	37.03	277	0.4	136		
TIR	SZ	IPN		1702	23.35	247	0.3	152	43	3.2
TIR	SE	ISN		1702	43.82	247	0.1	152		
TPE	SZ	IPN		1702	34.34	216	-0.4	220		
TPE	SE	ISN		1703	02.94	216	0.3	220		

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

2013 11 08 1247 35.41 42.40 17.85 18 ASN 6 0.4 3.3 ADRIATIC SEA
GAP=201 hor.err=2km ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPN		1248	05.79	102	-0.3	173	41	3.2
PUK	SE	ISN		1248	29.30	102	0.2	173		
BCI	SZ	IPN		1248	07.21	90	-0.4	182	45	3.2
BCI	SE	ISN		1248	32.08	90	0.3	182		
SGRT	SZ	IPN		1248	07.63	249	-0.7	187		
SGRT	SE	ISN		1248	33.29	249	0.1	187		
NOCI	SZ	IPN		1248	08.52	201	-0.3	190		
NOCI	SE	ISN		1248	33.67	201	-0.2	190		
MRVN	SZ	IPN		1248	10.85	224	0.1	202		
MRVN	SE	ISN		1248	37.32	224	0.1	202		

PHP	SZ	IPN	1248	14.97	109	0.1	228	47	3.3
PHP	SE	ISN	1248	44.28	109	-0.2	228		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	09	0228	17.91	41.20	19.50	10	ASN	8	0.3	2.4	N-W KAVAJE
GAP=163				hor.err=1km			ver.err=1KM		- ALBANIA			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG	0228	24.60	61	0.1	35	17	2.3	
TIR	SE	ISG	0228	29.48	61	0.0	35			
PHP	SZ	IPG	0228	33.81	55	-1.1	95	20	2.5	
PHP	SE	ISG	0228	47.88	55	0.2	95			
PUK	SZ	IPG	0228	35.40	19	-0.2	99	19	2.4	
PUK	SE	ISG	0228	48.49	19	-0.3	99			
BCI	SZ	IPN	0228	42.36	19	0.3	138			
BCI	SE	ISN	0229	00.15	19	0.0	138			
SCTE	SZ	IPN	0228	44.32	216	0.1	152			
SCTE	SE	ISN	0229	04.38	216	0.2	152			
SRN	SZ	IPN	0228	44.51	163	0.1	153			
SRN	SE	ISN	0229	04.00	163	-0.3	153			
FNA	SZ	IPN	0228	46.57	105	0.2	165			
FNA	SE	ISN	0229	07.59	105	-0.2	165			
IGT	SZ	IPN	0228	50.66	158	-1.0	198			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	10	0259	32.01	37.30	21.19	7	ASN	12	0.3	4	GREECE
GAP=303				hor.err=3km			ver.err=31KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPN	0300	15.81	344	1.4	259			
IGT	SE	ISN	0300	45.96	344	-0.3	259			
SRN	SZ	IPN	0300	21.35	341	0.9	304	93	4	
SRN	SE	ISN	0300	56.93	341	0.1	304			
TPE	SZ	IPN	0300	26.93	344	0.7	348	85	4	
TPE	SE	ISN	0301	07.08	344	0.2	348			
VLO	SZ	IPN	0300	29.87	338	-0.7	381			
VLO	SE	ISN	0301	14.50	338	0.2	381			
FNA	SZ	IPN	0300	31.39	2	-0.7	387			
FNA	SE	ISN	0301	15.71	2	-0.1	387			
SCTE	SZ	IPN	0300	31.40	324	0.1	389			
SCTE	SE	ISN	0301	16.23	324	-0.2	389			
TIR	SZ	IPN	0300	41.30	347	-0.2	463			
TIR	SE	ISN	0301	33.50	347	-0.2	463			
PHP	SZ	IPN	0300	45.17	353	0.1	491			
PHP	SE	ISN	0301	40.53	353	0.5	491			
PUK	SZ	IPN	0300	49.97	349	-1.4	538			

PUK	SE	ISN	0301	51.63	349	0.7	538
BCI	SZ	IPN	0300	54.77	351	-0.9	570
BCI	SE	ISN	0302	00.00	351	1.5	570

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	10	1450	37.52	40.94	21.49	7	ASN	6	0.2	3.2	MACEDONIA
				GAP=265			hor.err=1km		ver.err=2KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPN		1450	58.58	314	-0.4	120	42	3.1
PHP	SE	ISN		1451	15.26	314	0.2	120		
TIR	SZ	IPN		1451	02.70	284	0.0	140	34	3.1
TIR	SE	ISN		1451	21.45	284	-0.2	140		
TPE	SZ	IPN		1451	02.54	241	-0.3	144	43	3.2
TPE	SE	ISN		1451	22.27	241	0.4	144		
SRN	SZ	IPN		1451	07.70	228	0.3	173	39	3.0
SRN	SE	ISN		1451	29.62	228	-0.2	173		
PUK	SZ	IPN		1451	08.72	313	0.1	180	36	3.0
PUK	SE	ISN		1451	31.85	313	0.1	180		
BCI	SZ	IPN		1451	11.55	324	0.2	197	36	3.1
BCI	SE	ISN		1451	35.76	324	-0.8	197		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	10	2035	26.52	43.41	19.22	7	ASN	6	0.3	3.9	MONTENEGRO
				GAP=209			hor.err=6km		ver.err=3KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		2035	49.95	148	0.2	135	57	3.4
BCI	SE	ISN		2036	08.42	148	-0.4	135		
PUK	SZ	IPN		2035	53.59	159	0.4	161	48	3.4
PUK	SE	ISN		2036	16.11	159	0.6	161		
PHP	SZ	IPN		2036	02.81	151	0.2	216	98	3.9
PHP	SE	ISN		2036	31.50	151	-0.4	216		
TIR	SZ	IPN		2036	06.46	166	-0.1	235	81	3.9
TIR	SE	ISN		2036	35.40	166	0.6	235		
TPE	SZ	IPN		2036	22.15	169	-0.7	352	85	3.9
TPE	SE	ISN		2037	01.69	169	0.8	352		
SRN	SZ	IPN		2036	25.55	170	-1.7	397		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	10	2354	22.60	40.58	20.04	2	ASN	3	0.4	2.5	TERPAN-BERAT
				GAP=168			hor.err=1km		ver.err=2KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		2354	28.32	184	-0.9	33	17	2.3
TPE	SE	ISG		2354	34.58	184	0.2	33		
VLO	SZ	IPG		2354	31.22	254	-0.6	47	17	2.3
VLO	SE	ISG		2354	39.41	254	0.4	47		
SRN	SZ	IPG		2354	36.22	183	-1.0	79	17	2.3
SRN	SE	ISG		2354	48.96	183	-0.5	79		
TIR	SZ	IPG		2354	35.97	351	2.3	84	17	2.3
TIR	SE	ISG		2354	49.58	351	0.5	84		
PHP	SZ	IPN		2354	45.55	15	0.3	125	17	2.3
PHP	SE	ISN		2355	03.49	15	-1.1	125		
PUK	SZ	IPN		2354	49.73	356	1.5	161	17	2.3
PUK	SE	ISN		2355	13.41	356	0.5	161		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	11	0036	01.95	40.68	20.38	1	ASN	10	0.3	2.5	NIKOLLARE-KORCE
				GAP=99	hor.err=1km				ver.err=1KM	-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0036	10.21	216	-0.3	54	18	2.4
TPE	SE	ISG		0036	19.05	216	-1.2	54		
VLO	SZ	IPG		0036	15.70	252	0.4	79		
VLO	SE	ISG		0036	27.16	252	0.0	79		
TIR	SZ	IPG		0036	15.79	330	-0.8	84	21	2.5
TIR	SE	ISG		0036	28.59	330	0.1	84		
FNA	SZ	IPG		0036	17.04	83	0.1	86		
FNA	SE	ISG		0036	28.76	83	0.1	86		
SRN	SZ	IPG		0036	18.28	200	0.2	96	20	2.5
SRN	SE	ISG		0036	32.20	200	-0.4	96		
PHP	SZ	IPG		0036	20.20	2	0.2	110	22	2.6
PHP	SE	ISG		0036	36.43	2	-0.8	110		
IGT	SZ	IPN		0036	24.41	182	0.0	129		
IGT	SE	ISN		0036	42.09	182	0.1	129		
PUK	SZ	IPN		0036	28.62	346	-0.1	155		
PUK	SE	ISN		0036	49.41	346	-0.2	155		
SCTE	SZ	IPN		0036	31.10	248	-1.0	176		
BCI	SZ	IPN		0036	34.52	353	-0.5	187		
BCI	SE	ISN		0036	58.69	353	0.1	187		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	11	0656	10.65	40.73	19.51	6	ASN	7	0.1	2.6	RODASTIN-FIER
				GAP=137	hor.err=2km				ver.err=3KM	-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		0656	16.00	184	-0.3	29	27	2.7

VLO	SE	ISG	0656	20.16	184	0.0	29		
TPE	SZ	IPG	0656	22.59	139	0.3	64	24	2.6
TIR	SZ	IPG	0656	24.57	23	0.5	74	24	2.6
TIR	SE	ISG	0656	33.59	23	-0.5	74		
PHP	SZ	IPN	0656	33.62	35	-0.2	131	23	2.6
PHP	SE	ISN	0656	51.02	35	-0.1	131		
PUK	SZ	IPN	0656	37.21	12	0.4	149	22	2.6
PUK	SE	ISN	0656	56.39	12	0.0	149		
IGT	SZ	IPN	0656	36.91	152	0.1	150		
IGT	SE	ISN	0656	56.40	152	-0.2	150		
FNA	SZ	IPN	0656	37.20	87	-1.0	158		
FNA	SE	ISN	0656	59.18	87	0.3	158		
NOCI	SZ	IPN	0656	46.70	273	0.6	207		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	12	0620	02.05	40.36	20.53	1	ASN	6	0.1	2.7	ERSEKE-ALBANIA
GAP=137					hor.err=1km				ver.err=1KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0620	11.07	264	0.0	54	18	2.4
TPE	SE	ISG		0620	17.51	264	0.1	54		
SRN	SZ	IPG		0620	15.06	222	0.0	69		
SRN	SE	ISG		0620	25.25	222	-0.1	69		
FNA	SZ	IPG		0620	18.18	55	-0.2	86		
FNA	SE	ISG		0620	28.54	55	0.1	86		
IGT	SZ	IPG		0620	20.28	192	0.0	92	20	2.5
IGT	SE	ISG		0620	31.12	192	0.0	92		
PHP	SZ	IPN		0620	28.90	357	0.0	149	22	2.6
PHP	SE	ISN		0620	48.77	357	0.2	149		
PUK	SZ	IPN		0620	36.68	345	0.1	196		
PUK	SE	ISN		0621	02.37	345	0.2	196		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	12	1323	09.16	40.83	19.68	10	ASN	8	0.1	2.4	BUBULLIME-FIER
GAP=165					hor.err=1km				ver.err=1KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		1323	17.27	202	0.0	43	20	2.5
VLO	SE	ISG		1323	23.16	202	-0.2	43		
TIR	SZ	IPG		1323	20.62	14	0.6	59	17	2.3
TIR	SE	ISG		1323	28.05	14	-0.1	59		
TPE	SZ	IPG		1323	20.88	154	-0.2	66	19	2.4
TPE	SE	ISG		1323	29.95	154	-0.1	66		
SRN	SZ	IPG		1323	28.85	165	0.3	109	23	2.6
SRN	SE	ISG		1323	43.25	165	0.2	109		
PHP	SZ	IPG		1323	30.14	33	0.7	114		

PHP	SE	ISG	1323	44.73	33	0.1	114
PUK	SZ	IPN	1323	33.15	7	0.2	136
PUK	SE	ISN	1323	50.51	7	-0.3	136
FNA	SZ	IPN	1323	33.64	91	-0.5	144
FNA	SE	ISN	1323	53.05	91	0.1	144
IGT	SZ	IPN	1323	36.04	158	0.1	154
IGT	SE	ISN	1323	55.79	158	0.2	154

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	12	1231	27.38	39.17	18.79	48	ASN	11	0.4	4.2	SOUTHERN ITALY
GAP=248					hor.err=1km			ver.err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SCTE	SZ	IPG		1231	46.23	346	0.3	105		
SCTE	SE	ISG		1231	59.66	346	-0.2	105		
SRN	SZ	IPG		1231	49.66	52	0.2	131	70	4.1
SRN	SE	ISG		1232	04.73	52	-1.1	131		
IGT	SZ	IPN		1231	50.18	72	0.3	139		
IGT	SE	ISN		1232	08.86	72	0.9	139		
VLO	SZ	IPN		1231	52.60	22	0.2	157	77	4.2
VLO	SE	ISN		1232	12.43	22	0.4	157		
TPE	SZ	IPN		1231	53.80	39	0.1	164	76	4.2
TPE	SE	ISN		1232	12.62	39	-0.8	164		
TIR	SZ	IPN		1232	07.19	20	0.8	259		
TIR	SE	ISN		1232	35.83	20	0.2	259		
FNA	SZ	IPN		1232	10.10	50	0.2	286		
FNA	SE	ISN		1232	41.72	50	0.1	286		
PHP	SZ	IPN		1232	13.20	26	-0.3	313		
PUK	SZ	IPN		1232	15.99	15	-0.2	333		
PUK	SE	ISN		1232	52.66	15	0.1	333		
BCI	SZ	IPN		1232	21.29	16	0.1	372		
BCI	SE	ISN		1233	01.27	16	-0.4	372		
SGRT	SZ	IPN		1232	22.94	320	-0.7	385		
SGRT	SE	ISN		1233	04.87	320	0.1	385		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	12	1809	22.91	39.03	23.55	9	ASN	13	0.3	4.8	GREECE
GAP=303					hor.err=3km			ver.err=31KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
THE	SZ	IPN		1809	57.05	345	2.4	185		
THE	SE	ISN		1810	18.41	345	0.0	185		
FNA	SZ	IPN		1810	06.84	318	0.4	269		
FNA	SE	ISN		1810	39.19	318	0.1	269		
IGT	SZ	IPN		1810	08.30	283	-0.1	284		
IGT	SE	ISN		1810	42.89	283	0.3	284		

SRN	SZ	IPN	1810	12.96	289	-0.3	320	207	4.7
SRN	SE	ISN	1810	50.92	289	0.1	320		
TPE	SZ	IPN	1810	15.24	296	0.0	335	217	4.7
TPE	SE	ISN	1810	54.09	296	-0.4	335		
VLO	SZ	IPN	1810	21.08	297	0.2	383		
VLO	SE	ISN	1811	05.52	297	0.0	383		
PHP	SZ	IPN	1810	23.17	320	-0.1	396	206	4.8
PHP	SE	ISN	1811	09.28	320	0.7	396		
TIR	SZ	IPN	1810	24.94	311	0.3	406	231	4.9
TIR	SE	ISN	1811	11.00	311	0.1	406		
PUK	SZ	IPN	1810	31.14	319	-0.1	456	299	5.1
PUK	SE	ISN	1811	22.16	319	-0.4	456		
BCI	SZ	IPN	1810	33.25	323	-0.3	474		
BCI	SE	ISN	1811	26.21	323	-0.3	474		
NOCI	SZ	IPN	1810	45.16	292	-3.6	588		
MRVN	SZ	IPN	1810	57.73	293	-4.5	668		
SGRT	SZ	IPN	1811	03.09	298	-4.1	728		

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

2013 11 13 0147 44.48 ASN PHP
GAP= hor.err= ver.err=

STAT SP IPHASW D HRMM SECON AZIMU RES DIS DUR Md
PHP SZ IPG 0147 44.48
PHP SE ISG 0147 47.53

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

2013 11 15 1447 11.60 ASN PHP
GAP= hor.err= ver.err=

STAT SP IPHASW D HRMM SECON AZIMU RES DIS DUR Md
PHP SZ IPG 1447 11.60
PHP SE ISG 1447 13.27

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

2013 11 16 1305 28.53 43.59 19.92 8 ASN 3 0.3 3.1 BOSNIA-HERZEGO
GAP=316 hor.err=4km ver.err=8KM

STAT SP IPHASW D HRMM SECON AZIMU RES DIS DUR Md
BCI SZ IPN 1305 57.44 147 0.2 147 38 3.1
BCI SE ISN 1306 18.98 147 -0.3 147
PUK SZ IPN 1306 00.16 155 -0.2 202 40 3.1
PUK SE ISN 1306 26.36 155 -0.3 202

PHP	SZ	IPN	1306	10.30	150	0.5	177	40	3.1
PHP	SE	ISN	1360	42.36	150	0.3	177		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	16	0742	32.11	42.83	21.10	11	ASN	3	0.2	2.9	KOSOVO
			GAP=288			hor.err=2km		ver.err=4KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG	0742	49.81	234	0.2	99	33	3	
BCI	SE	ISG	0743	03.36	234	0.2	99			
PUK	SZ	IPN	0742	55.38	230	0.2	133	30	2.9	
PUK	SE	ISN	0743	13.54	230	-0.2	133			
PHP	SZ	IPN	0742	56.54	204	0.1	139	26	2.8	
PHP	SE	ISN	0743	14.42	204	-0.2	139			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	17	0814	13.71	42.72	21.07	3	ASN	5	0.2	3.6	KOSOVO
			GAP=288			hor.err=7km		ver.err=5KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG	0814	30.08	245	-0.1	91	64	3.6	
BCI	SE	ISG	0814	42.87	245	-0.1	91			
PUK	SZ	IPG	0814	35.26	233	0.1	123	66	3.6	
PUK	SE	ISG	0814	52.96	233	-0.2	123			
PHP	SZ	IPN	0814	36.60	205	0.1	126	66	3.6	
PHP	SE	ISN	0814	57.68	205	-0.1	126			
TIR	SZ	IPN	0814	46.67	204	0.1	182	77	3.7	
TIR	SE	ISN	0815	10.71	204	-0.1	182			
FNA	SZ	IPN	0814	51.94	173	0.1	217			
FNA	SE	ISN	0815	18.04	173	0.2	217			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	17	1427	49.82	42.04	20.66	1	ASN	4	0.2	2.9	KOSOVO
			GAP=245			hor.err=1km		ver.err=1KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG	1427	58.76	206	0.4	43	32	2.9	
PHP	SE	ISG	1428	04.60	206	-0.1	43			
PUK	SZ	IPG	1428	01.72	271	-0.1	64	33	2.9	
PUK	SE	ISG	1428	10.89	271	0.1	64			
TIR	SZ	IPG	1428	08.51	222	0.2	101			
FNA	SZ	IPN	1428	16.92	156	-0.1	156			
FNA	SE	ISN	1428	37.50	156	0.2	156			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	18	0412	45.65	39.95	20.06	7	ASN	11	0.2	2.9	DELVINE
GAP=159					hor.err=1km			ver.err=2KM		-ALBANIA		
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
SRN	SZ	IPG		0412	48.06	213	0.0	10	25	2.5		
SRN	SE	ISG		0412	49.78	213	0.0	10				
TPE	SZ	IPG		0412	52.88	354	0.0	38	28	2.8		
TPE	SE	ISG		0412	58.18	354	0.0	38				
IGT	SZ	IPG		0412	54.76	153	-0.5	52				
IGT	SE	ISG		0413	02.45	153	0.0	52				
VLO	SZ	IPG		0412	59.06	321	0.1	75	29	2.9		
VLO	SE	ISG		0413	09.34	321	0.0	75				
SCTE	SZ	IPN		0413	09.43	277	-0.4	137				
SCTE	SE	ISN		0413	27.60	277	-0.2	137				
LKD2	SZ	IPN		0413	09.78	158	0.4	139				
LKD2	SE	ISN		0413	28.70	158	0.2	139				
FNA	SZ	IPN		0413	11.58	50	0.5	145				
FNA	SE	ISN		0413	30.48	50	0.3	145				
TIR	SZ	IPN		0413	13.12	156	0.3	156				
TIR	SE	ISN		0413	33.52	156	0.3	156				
PHP	SZ	IPN		0413	19.26	195	0.4	195				
PHP	SE	ISN		0413	43.90	195	-0.2	195				
PUK	SZ	IPN		0413	24.80	232	0.2	232				
PUK	SE	ISN		0413	54.10	232	0.3	232				
BCI	SZ	IPN		0413	29.31	268	0.3	268				
NOCI	SZ	IPN		0413	29.58	271	0.2	271				
NOCI	SE	ISN		0414	03.44	271	0.7	271				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	18	1045	13.20	41.96	20.28	12	ASN	5	0.2	2.7	VATAJ-KLOS
GAP=158					hor.err=2km			ver.err=2KM		-ALBANIA		
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
PUK	SZ	IPG		1045	18.77	293	0.1	31	27	2.7		
PUK	SE	ISG		1045	23.95	293	-0.1	31				
PHP	SZ	IPG		1045	19.76	149	-0.1	33	27	2.7		
PHP	SE	ISG		1045	24.37	149	-0.1	33				
BCI	SZ	IPG		1045	21.95	344	0.1	50	28	2.7		
BCI	SE	ISG		1045	30.15	344	-0.2	50				
TIR	SZ	IPG		1045	27.09	206	0.1	73				
TIR	SE	ISG		1045	38.55	206	0.2	73				
FNA	SZ	IPN		1045	41.04	142	0.2	163				
FNA	SE	ISN		1046	00.29	142	0.3	163				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	18	0758	40.30	43.37	16.90	1	ASN	7	1.2	5	CROATIA
					hor.err=13km							ver.err=21KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0759	28.34	112	1.1	284	100	4.8
BCI	SE	ISG		0800	04.45	112	2.1	284		
PUK	SZ	IPG		0759	28.72	119	1.0	289	120	4.9
PUK	SE	ISG		0800	04.87	119	1.5	289		
TIR	SZ	IPN		0759	33.71	131	0.1	334	150	4.9
TIR	SE	ISN		0800	12.71	131	-1.1	334		
PHP	SZ	IPN		0759	36.18	121	0.3	348	160	5.1
PHP	SE	ISN		0800	18.29	121	1.1	348		
VLO	SZ	IPN		0759	40.96	145	-0.1	389		
TPE	SZ	IPN		0759	46.16	141	-0.3	430		
SRN	SZ	IPN		0759	50.12	145	-1.3	468		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	18	1347	35.01	40.60	19.13	24	ASN	9	1.5	2.9	ADRIATIC SEA
					hor.err=1km							ver.err=4KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		1347	40.77	115	-1.3	34	29	2.9
VLO	SE	ISG		1347	47.04	115	-0.3	34		
SCTE	SZ	IPG		1347	48.75	225	-0.9	81		
SCTE	SE	ISG		1348	01.25	225	-0.8	81		
TPE	SZ	IPG		1347	49.45	114	0.8	82	26	2.9
TPE	SE	ISG		1348	01.76	114	-0.2	82		
TIR	SZ	IPG		1347	53.12	36	1.1	103		
TIR	SE	ISG		1348	07.35	36	0.1	103		
SRN	SZ	IPG		1347	53.98	137	-0.8	109	30	3
SRN	SE	ISG		1348	08.13	137	-0.1	109		
IGT	SZ	IPN		1348	01.55	138	-0.1	157		
IGT	SE	ISN		1348	22.09	138	-0.3	157		
PHP	SZ	IPN		1348	00.55	42	-0.1	163		
PHP	SE	ISN		1348	22.37	42	0.5	163		
PUK	SZ	IPN		1348	03.08	21	-0.8	172		
PUK	SE	ISN		1348	26.10	21	-0.9	172		
NOCI	SZ	IPN		1348	03.08	278	-0.3	176		
NOCI	SE	ISN		1348	27.32	278	-0.5	176		
FNA	SZ	IPN		1348	06.36	83	-0.3	191		
FNA	SE	ISN		1348	29.95	83	-0.3	191		
BCI	SZ	IPN		1348	34.66	21	-0.3	211		
LKD2	SZ	IPN		1348	10.67	146	-2.5	240		
MRVN	SZ	IPN		1348	11.04	283	-3.8	253		
SGRT	SZ	IPN		1348	18.56	296	-3.8	310		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	18	1315	02.64	42.84	21.03	1	ASN	7	0.8	4.2	KOSOVO
					hor.err=7km				ver.err=6KM			
GAP=290												
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
BCI	SZ	IPG		1315	19.66	242	-0.7	92	133	4.1		
BCI	SE	ISG		1315	33.28	242	0.1	92				
PUK	SZ	IPG		1315	24.90	231	-1.1	124	142	4.2		
PUK	SE	ISG		1315	42.06	231	-0.9	124				
PHP	SZ	IPN		1315	25.84	203	-1.1	130	156	4.3		
PHP	SE	ISN		1315	43.04	203	-1.6	130				
TIR	SZ	IPN		1315	37.18	213	1.1	185				
TIR	SE	ISN		1316	01.82	213	1.2	185				
FNA	SZ	IPN		1315	41.26	172	-0.6	222				
FNA	SE	ISN		1316	10.53	172	-0.3	222				
TPE	SZ	IPN		1315	51.53	198	0.8	288				
TPE	SE	ISN		1316	26.26	198	0.1	288				
SRN	SZ	IPN		1315	56.96	196	0.4	332				
SRN	SE	ISN		1316	36.31	196	-0.1	332				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	18	1342	45.19	42.80	20.98	1	ASN	7	0.5	3.2	KOSOVO
					hor.err=4km				ver.err=4KM			
GAP=293												
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
BCI	SZ	IPG		1343	01.40	238	-0.3	89	45	3.2		
BCI	SE	ISG		1343	13.92	238	-0.2	89				
PUK	SZ	IPG		1343	07.64	228	0.2	123	39	3.1		
PUK	SE	ISG		1343	23.93	228	-0.3	123				
PHP	SZ	IPN		1343	08.29	201	-0.7	131	45	3.2		
PHP	SE	ISN		1343	25.98	201	-0.8	131				
TIR	SZ	IPN		1343	18.26	211	0.4	185				
TIR	SE	ISN		1343	41.79	211	-0.6	185				
FNA	SZ	IPN		1343	23.46	171	-0.8	226				
FNA	SE	ISN		1343	54.07	171	0.4	226				
TPE	SZ	IPN		1343	32.04	197	-0.6	289				
TPE	SE	ISN		1344	08.66	197	-0.4	289				
SRN	SZ	IPN		1343	39.14	195	0.6	334				
SRN	SE	ISN		1344	18.97	195	0.3	334				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	0339	48.72	42.76	21.05	1	ASN	4	0.1	2.6	KOSOVO
					hor.err=3km				ver.err=3KM			
GAP=290												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0340	05.83	242	0.0	92	23	2.6
BCI	SE	ISG		0340	18.57	242	0.0	92		
PUK	SZ	IPN		0340	10.95	231	-0.4	124	22	2.6
PUK	SE	ISN		0340	28.31	231	0.0	124		
PHP	SZ	IPN		0340	12.30	204	0.0	130	21	2.6
PHP	SE	ISN		0340	29.00	204	-0.9	130		
FNA	SZ	IPN		0340	27.13	172	0.1	221		
FNA	SE	ISN		0340	56.11	172	0.3	221		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	0816	32.72	39.55	22.02	8	ASN 8	0.3	4.1		GREECE
				GAP=202	hor.err=1km		ver.err=2KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPN		0816	57.95	270	-0.2	145		
IGT	SE	ISN		0817	17.15	270	-0.1	145		
FNA	SZ	IPN		0816	58.17	339	-0.3	147		
FNA	SE	ISN		0817	17.65	339	0.1	147		
SRN	SZ	IPN		0817	03.64	283	0.4	177	95	3.9
SRN	SE	ISN		0817	24.55	283	-1.5	177		
TPE	SZ	IPN		0817	05.76	297	0.3	191	95	3.9
TPE	SE	ISN		0817	29.80	297	0.1	191		
VLO	SZ	IPN		0817	12.81	297	0.4	238		
PHP	SZ	IPN		0817	16.88	332	0.1	272	82	3.9
PHP	SE	ISN		0817	50.13	332	0.2	272		
PUK	SZ	IPN		0817	24.20	328	-0.3	329	101	4.1
PUK	SE	ISN		0818	02.81	328	-0.5	329		
BCI	SZ	IPN		0817	26.19	333	-1.3	353	95	4
BCI	SE	ISN		0818	09.08	333	-0.3	353		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	1045	13.20	41.93	20.24	12	ASN 5	0.5	2.7	12KM	N-E KLOS
				GAP=158	hor.err=2km		ver.err=3KM		-ALBANIA			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1045	18.77	293	-0.6	31	27	2.7
PUK	SE	ISG		1045	23.95	293	-0.1	31		
PHP	SZ	IPG		1045	19.76	149	0.1	33	27	2.7
PHP	SE	ISG		1045	24.37	149	-0.1	33		
BCI	SZ	IPG		1045	21.95	344	-0.5	50		
BCI	SE	ISG		1045	30.15	344	0.7	50		
TIR	SZ	IPG		1045	27.09	206	0.7	73		
TIR	SE	ISG		1045	38.55	206	2.3	73		
FNA	SZ	IPN		1045	41.04	142	0.4	160		

FNA SE ISN 1046 00.29 142 -0.8 160

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	1219	29.90	41.89	20.14	7	ASN	2	0.1	1.9	KLOS-ALBANIA
				hor.err=10km			ver.err=12KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1219	35.01	293	-0.1	27	9	1.7
PUK	SE	ISG		1219	39.18	293	0.1	27		
PHP	SZ	IPG		1219	36.19	149	-0.1	34	13	2
PHP	SE	ISG		1219	41.27	149	0.1	34		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	1627	10.82	40.66	19.17	19	ASN	8	0.3	2.9	ADRIATIC SEA
				hor.err=1km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		1627	17.05	128	-1.0	36	29	2.9
VLO	SE	ISG		1627	23.36	128	-0.1	36		
TPE	SZ	IPG		1627	25.95	119	0.4	83	27	2.9
TPE	SE	ISG		1627	36.79	119	0.1	83		
TIR	SZ	IPG		1627	28.01	37	0.2	96	23	2.7
TIR	SE	ISG		1627	40.52	37	0.3	96		
SRN	SZ	IPG		1627	30.36	140	0.0	113	26	2.9
SRN	SE	ISG		1627	44.81	140	0.3	113		
PHP	SZ	IPN		1627	37.23	43	0.0	155	24	2.8
PHP	SE	ISN		1627	56.67	43	0.2	155		
PUK	SZ	IPN		1627	38.33	21	-0.3	164		
PUK	SE	ISN		1627	59.25	21	-0.2	164		
NOCI	SZ	IPN		1627	40.52	276	-0.3	178		
NOCI	SE	ISN		1628	03.49	276	0.2	178		
FNA	SZ	IPN		1627	41.79	85	-0.6	188		
FNA	SE	ISN		1628	05.88	85	-0.1	188		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	1752	07.12	40.62	20.63	1	ASN	6	0.2	2.3	VOSKOPOJE-KORCE
				hor.err=1km			ver.err=2KM			-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		1752	18.63	236	-0.8	64	17	2.3
TPE	SE	ISG		1752	28.40	236	-0.2	64		
FNA	SZ	IPG		1752	19.61	74	0.1	66		
FNA	SE	ISG		1752	29.13	74	0.1	66		
SRN	SZ	IPG		1752	25.36	214	0.0	98	17	2.3

SRN	SE	ISG	1752	39.97	214	0.2	98		
PHP	SZ	IPG	1752	28.95	353	0.2	120	18	2.3
PHP	SE	ISG	1752	45.35	353	0.3	120		
IGT	SZ	IPG	1752	29.50	193	0.2	124	18	2.3
IGT	SE	ISG	1752	46.59	193	0.8	124		
PUK	SZ	IPN	1752	38.19	329	-0.1	170		
PUK	SE	ISN	1752	59.86	329	-0.6	170		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	1915	04.71	40.60	20.70	8	ASN	6	0.2	2.5	POLENE-KORCE
					hor.err=2km				ver.err=1KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		1915	15.89	70	0.0	61		
FNA	SE	ISG		1915	24.30	70	0.0	61		
TPE	SZ	IPG		1915	16.51	241	-0.4	68	19	2.4
TPE	SE	ISG		1915	26.22	241	0.1	68		
SRN	SZ	IPG		1915	22.63	217	0.2	100	21	2.6
SRN	SE	ISG		1915	35.64	217	0.2	100		
PHP	SZ	IPG		1915	25.73	350	-0.1	122	25	2.7
PHP	SE	ISG		1915	42.65	350	-0.7	122		
IGT	SZ	IPG		1915	26.44	195	0.0	123		
IGT	SE	ISG		1915	50.72	195	0.0	123		
PUK	SZ	IPN		1915	36.42	338	-0.1	174		
PUK	SE	ISN		1915	57.30	338	0.1	174		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	19	2232	51.29	40.16	20.71	11	ASN	6	0.1	2.5	LESKOVIK
					hor.err=1km				ver.err=2KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		2233	02.47	284	0.1	61	19	2.4
TPE	SE	ISG		2233	10.93	284	0.2	61		
SRN	SZ	IPG		2233	03.60	243	0.1	68	19	2.4
SRN	SE	ISG		2233	13.38	243	0.1	68		
IGT	SZ	IPG		2233	05.51	206	0.2	77		
IGT	SE	ISG		2233	15.60	206	0.1	77		
FNA	SZ	IPG		2233	07.07	39	0.1	89		
FNA	SE	ISG		2233	19.41	39	-0.1	89		
PHP	SZ	IPN		2233	20.51	353	-0.2	170	22	2.6
PHP	SE	ISN		2233	42.48	353	-0.1	170		
PUK	SZ	IPN		2233	28.88	343	0.1	220	22	2.6
PUK	SE	ISN		2233	55.64	343	-0.2	220		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 11 20 0108 04.62 41.13 20.45 5 ASN 7 0.2 2.7 S-E LIBRAZHD
GAP=115 hor.err=1km ver.err=2KM -ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0108	14.54	297	-0.1	56	24	2.6
TIR	SE	ISG		0108	22.27	297	0.2	56		
PHP	SZ	IPG		0108	16.32	116	-0.2	62	28	2.7
PHP	SE	ISG		0108	24.50	116	0.1	62		
FNA	SZ	IPG		0108	22.60	115	0.1	88		
FNA	SE	ISG		0108	33.14	116	-0.2	88		
PUK	SZ	IPG		0108	24.30	336	0.1	111	26	2.7
PUK	SE	ISG		0108	39.20	336	0.2	111		
BCI	SZ	IPN		0108	29.71	348	0.1	141	26	2.7
BCI	SE	ISN		0108	48.39	348	-0.2	141		
SRN	SZ	IPN		0108	30.24	196	-0.2	144		
SRN	SE	ISN		0108	49.35	196	0.1	144		
IGT	SZ	IPN		0108	35.56	184	-0.1	178		
IGT	SE	ISN		0108	47.32	184	0.2	178		

Y M D HM Sec Lat Long Dep Net Nr Rms Mag Epicenter
2013 11 20 0430 16.70 40.16 20.68 5 ASN 7 0.1 2.4 EAST LESKOVIK
GAP=141 hor.err=1km ver.err=2KMD -ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0430	27.63	285	0.0	60	20	2.4
TPE	SE	ISG		0430	36.00	285	0.1	60		
SRN	SZ	IPG		0430	28.66	243	-0.1	66	18	2.4
SRN	SE	ISG		0430	37.82	243	0.1	66		
IGT	SZ	IPG		0430	30.64	204	0.2	76		
IGT	SE	ISG		0430	40.60	204	-0.2	76		
FNA	SZ	IPG		0430	32.01	40	-1.0	91		
FNA	SE	ISG		0430	45.24	40	0.0	91		
LKD2	SZ	IPN		0430	44.79	181	1.4	152		
LKD2	SE	ISN		0431	03.58	181	0.1	152		
PHP	SZ	IPN		0430	46.29	354	0.1	171		
PHP	SE	ISN		0431	08.63	354	-0.1	171		
PUK	SZ	IPN		0430	54.43	343	0.3	220		

Y M D HM Sec Lat Long Dep Net Nr Rms Mag Epicenter
2013 11 19 0450 48.20 40.64 21.16 6 ASN 4 0.0 2.4 GREECE
GAP=161 hor.err=1km ver.err=3KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		0450	52.59	50	0.0	24		
FNA	SE	ISG		0450	56.61	50	0.0	24		

SRN	SZ	IPG	0451	11.22	230	0.0	130	19	2.5
SRN	SE	ISG	0451	28.46	230	0.0	130		
PHP	SZ	IPG	0451	11.22	333	0.0	130	17	2.4
PHP	SE	ISG	0451	28.53	333	0.0	130		
IGT	SZ	IPG	0451	13.40	211	0.1	142		
IGT	SE	ISG	0451	32.03	211	-0.1	142		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	20	0431	31.50	42.68	21.01	2	ASN	4	0.1	2.7	KOSOVO
GAP=285					hor.err=2km		ver.err=3KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0431	46.70	246	-0.3	85	24	2.7
BCI	SE	ISG		0431	58.61	246	0.0	85		
PUK	SZ	IPN		0431	52.51	233	0.1	116	23	2.7
PUK	SE	ISN		0432	08.08	233	0.0	116		
PHP	SZ	IPN		0431	53.17	204	0.1	120	26	2.8
PHP	SE	ISN		0432	09.22	204	-0.1	120		
FNA	SZ	IPN		0432	08.24	171	0.1	213		
FNA	SE	ISN		0432	36.02	171	0.1	213		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	20	0813	17.20	41.56	20.16	20	ASN	8	0.1	3.2	9KM N-W BULQIZE
GAP=111					hor.err=1km		ver.err=1KM -ALBANIA					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0813	23.55	59	0.4	27	41	3.1
PHP	SE	ISG		0813	27.55	59	0.0	27		
TIR	SZ	IPG		0813	24.46	227	0.1	35	46	3.3
TIR	SE	ISG		0813	29.56	227	0.1	35		
PUK	SZ	IPG		0813	28.15	338	-0.1	58	38	3.1
PUK	SE	ISG		0813	36.06	338	0.2	58		
BCI	SZ	IPG		0813	32.91	355	0.1	90	40	3.2
BCI	SE	ISG		0813	45.04	355	0.1	90		
FNA	SZ	IPN		0813	40.23	129	-0.1	134		
FNA	SE	ISN		0813	57.35	129	1.4	134		
TPE	SZ	IPN		0813	42.47	186	-0.2	142		
SRN	SZ	IPN		0813	45.52	185	-0.2	187		
SRN	SE	ISN		0814	11.97	185	-0.3	187		
IGT	SZ	IPN		0813	53.50	176	-0.5	226		
IGT	SE	ISN		0814	21.83	176	-0.3	226		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	20	1653	54.03	40.14	19.84	14	ASN	4	0.0	2.2	9KM N-E HIMARE

LKD2 SZ IPN	1946 07.97	157	-0.4	234
LKD2 SE ISN	1946 36.66	157	-0.5	234

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	22	0208	21.15				ASN		VLO		
GAP=			hor.err=			ver.err=						

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		0208	21.15					
VLO	SE	ISG		0208	24.60					

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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	22	0219	18.75				ASN		SRN		
GAP=			hor.err=			ver.err=						

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0219	18.75					
SRN	SE	ISG		0219	23.97					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	22	0313	22.33	41.56	20.17	18	ASN	4	0.1	2.5	N-W BULQIZE
GAP=111			hor.err=1km			ver.err=1KM			-ALBANIA			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0313	22.33	62	0.2	26	18	2.4
PHP	SE	ISG		0313	26.39	60	-0.1	26		
TIR	SZ	IPG		0313	23.54	227	0.0	35	20	2.5
TIR	SE	ISG		0313	28.87	227	0.0	35		
PUK	SZ	IPG		0313	27.10	337	0.1	58	18	2.5
PUK	SE	ISG		0313	35.22	337	0.0	58		
FNA	SZ	IPN		0313	39.48	130	0.0	134		
FNA	SE	ISN		0313	56.80	130	0.0	134		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	22	0709	17.10	39.47	20.53	15	ASN	6	0.3	2.7	GREECE
GAP=196			hor.err=3km			ver.err=2KM						

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPG		0709	21.40	291	0.0	18		
IGT	SE	ISG		0709	24.46	291	0.0	18		
SRN	SZ	IPG		0709	28.78	315	0.0	64	22	2.7
SRN	SE	ISG		0709	37.56	315	-1.0	64		

LKD2	SZ	IPG	0709	30.00	171	0.1	77						
LKD2	SE	ISG	0709	41.43	171	0.1	77						
TPE	SZ	IPG	0709	35.16	335	0.1	101	28	2.8				
TPE	SE	ISG	0709	48.67	335	0.1	101						
FNA	SZ	IPN	0709	44.95	26	0.1	162						
FNA	SE	ISN	0710	05.76	26	0.3	162						
SCTE	SZ	IPN	0709	47.67	292	-1.3	189						
SCTE	SE	ISN	0710	12.86	292	0.2	189						

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	23	1934	23.32	41.47	20.30	25	ASN	5	0.2	2.2	S-W BULQIZE
						hor.err=1km						-ALBANIA
								ver.err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG	1934	29.87	26	0.1	27	13	2.2	
PHP	SE	ISG	1934	34.40	26	-0.2	27			
TIR	SZ	IPG	1934	31.43	250	0.1	38	13	2.3	
TIR	SE	ISG	1934	37.09	250	-0.2	38			
PUK	SZ	IPG	1934	36.67	333	0.2	72			
PUK	SE	ISG	1934	46.55	333	0.2	72			
BCI	SZ	IPN	1934	40.77	350	-0.3	101			
FNA	SZ	IPN	1934	44.17	129	0.3	119			
FNA	SE	ISN	1934	59.16	129	-0.1	119			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	23	2227	48.12	41.28	20.41	13	ASN	6	0.1	2.8	N-E LIBRAZH
						hor.err=1km						-ALBANIA
								ver.err=1KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG	2227	57.63	2	0.2	45	30	2.8	
PHP	SE	ISG	2228	03.67	2	-0.1	45			
TIR	SZ	IPG	2228	57.80	280	0.1	47	28	2.8	
TIR	SE	ISG	2228	04.30	280	0.1	47			
PUK	SZ	IPG	2228	05.80	333	-0.1	96	29	2.8	
PUK	SE	ISG	2228	18.74	333	0.0	96			
FNA	SZ	IPG	2228	06.39	123	0.0	98			
FNA	SE	ISG	2228	19.38	123	-0.1	98			
BCI	SZ	IPN	2228	10.63	347	0.0	124	35	3	
BCI	SE	ISN	2228	27.02	347	0.0	124			
IGT	SZ	IPN	2228	22.53	183	0.7	194			
IGT	SE	ISN	2228	46.45	183	0.3	194			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	23	2253	14.64	41.28	20.42	6	ASN	7	0.2	3	N-E LIBRAZH

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	23	2342	54.11	41.28	20.45	19	ASN	4	0.3	2.4	N-E LIBRAZHD
					hor.err=1km				ver.err=1KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2343	02.75	0	0.2	45	17	2.4
PHP	SE	ISG		2343	09.29	0	-0.3	45		
TIR	SZ	IPG		2343	03.47	279	0.4	49		
TIR	SE	ISG		2343	09.33	279	0.5	49		
FNA	SZ	IPG		2343	12.20	124	-0.3	96		
FNA	SE	ISG		2343	23.93	124	0.4	96		
PUK	SZ	IPG		2343	12.32	332	0.3	96		
PUK	SE	ISG		2343	33.89	332	-0.2	96		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	23	2352	32.31	41.27	20.42	6	ASN	5	0.3	2.5	N-E LIBRAZHD
					hor.err=1km				ver.err=1KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2352	40.83	1	0.2	46	20	2.5
PHP	SE	ISG		2352	46.99	1	-0.2	46		
TIR	SZ	IPG		2352	41.32	281	0.3	47	20	2.5
TIR	SE	ISG		2352	47.10	281	-0.2	47		
PUK	SZ	IPG		2352	49.10	333	0.3	96		
PUK	SE	ISG		2353	02.43	333	0.2	96		
FNA	SZ	IPG		2352	49.12	123	-0.5	98		
FNA	SE	ISG		2353	02.70	123	0.1	98		
BCI	SZ	IPN		2352	54.81	347	0.2	125		
BCI	SE	ISN		2353	11.31	347	0.3	125		
SRN	SZ	IPN		2353	00.33	194	0.2	156		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	24	0124	21.19	41.30	20.44	11	ASN	7	0.2	2.7	N-E LIBRAZHD
					hor.err=1km				ver.err=1KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0124	30.07	0	0.6	43	29	2.7
PHP	SE	ISG		0124	35.44	0	0.1	43		
TIR	SZ	IPG		0124	30.25	278	-0.1	48	29	2.7
TIR	SE	ISG		0124	37.04	278	0.0	48		
PUK	SZ	IPG		0124	38.04	332	0.0	95	29	2.7
PUK	SE	ISG		0124	51.01	332	0.1	95		
FNA	SZ	IPG		0124	38.70	332	0.0	99		
FNA	SE	ISG		0124	51.92	332	0.1	99		
TPE	SZ	IPN		0124	41.91	125	-0.1	177		

TPE	SE	ISN	0124	57.70	125	0.1	177
BCI	SZ	IPN	0124	42.55	346	-0.4	123
BCI	SE	ISN	0124	59.25	346	0.0	123
SRN	SZ	IPN	0124	48.99	194	0.2	162
SRN	SE	ISN	0125	10.04	194	0.1	162

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	24	0517	51.85	41.27	20.42	5	ASN	7	0.2	3.1	N-E LIBRAZHD
GAP=121					hor.err=1km			ver.err=2KM		-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0518	30.07	2	0.1	46	43	3.1
PHP	SE	ISG		0518	35.44	2	-0.1	46		
TIR	SZ	IPG		0518	30.25	282	0.3	47	51	3.2
TIR	SE	ISG		0518	37.04	282	0.2	47		
PUK	SZ	IPG		0518	38.04	334	-0.1	96	42	3.1
PUK	SE	ISG		0518	51.01	334	0.2	96		
FNA	SZ	IPG		0518	48.99	123	0.1	98		
FNA	SE	ISG		0518	10.04	123	0.1	98		
TPE	SZ	IPG		0518	41.91	198	0.0	113	42	3.1
TPE	SE	ISG		0518	57.70	198	-0.1	113		
BCI	SZ	IPG		0518	42.55	347	0.2	125	37	3
BCI	SE	ISG		0518	59.25	347	-0.5	125		
SRN	SZ	IPN		0518	48.99	194	0.2	158		
SRN	SE	ISN		0518	10.04	194	0.1	158		
IGT	SZ	IPN		0518	48.99	183	0.4	193		
IGT	SE	ISN		0518	10.04	183	-0.1	193		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	25	0155	03.52	40.65	20.60	5	ASN	7	0.2	2.9	VOSKOPOJ-KORCE
GAP=121					hor.err=1km			ver.err=2KM		-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0155	14.40	233	0.1	64	33	2.9
TPE	SE	ISG		0155	23.12	233	-0.1	64		
FNA	SZ	IPG		0155	15.46	77	0.1	67		
FNA	SE	ISG		0155	25.07	77	0.2	67		
VLO	SZ	IPG		0155	21.91	259	0.1	95	34	2.9
VLO	SE	ISG		0155	32.67	259	-0.1	95		
TIR	SZ	IPG		0155	21.85	322	0.2	99	33	2.9
TIR	SE	ISG		0155	35.61	322	0.1	99		
PHP	SZ	IPG		0155	21.58	354	0.1	115	37	3
PHP	SE	ISG		0155	35.76	354	-0.2	115		
IGT	SZ	IPN		0155	23.28	191	0.1	126		
IGT	SE	ISN		0155	38.91	191	-0.2	126		
PUK	SZ	IPN		0155	32.17	340	-0.2	165	37	3

PUK SE ISN 0155 54.07 340 0.1 165

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	25	1027	07.70	41.88	20.16	7	ASN	2	0.1	1.9	KLOS-ALBANIA
					hor.err=9km		ver.err=9KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1027	13.20	308	0.0	28	11	1.9
PUK	SE	ISG		1027	17.31	308	0.0	28		
PHP	SZ	IPG		1027	13.88	104	0.0	32		
PHP	SE	ISG		1027	18.49	104	0.0	32		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	25	1521	19.65	40.17	20.77	5	ASN	5	0.2	2.8	LESKOVIK-KORCE
					hor.err=2km		ver.err=4KM		-ALBANIA			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		1521	30.61	282	0.1	66	30	2.8
TPE	SE	ISG		1521	41.13	282	-0.1	66		
SRN	SZ	IPG		1521	32.38	245	-0.2	73	30	2.8
SRN	SE	ISG		1521	44.37	245	0.2	73		
IGT	SZ	IPG		1521	34.42	209	0.1	80		
IGT	SE	ISG		1521	46.65	209	-0.2	80		
FNA	SZ	IPG		1521	34.66	37	0.3	85		
FNA	SE	ISG		1521	46.58	37	0.1	85		
PHP	SZ	IPN		1521	51.07	351	-0.2	170	35	2.9
PHP	SE	ISN		1522	13.55	351	-0.1	170		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	25	1759	15.36	41.27	20.46	7	ASN	4	0.2	2.4	STEBLEVE-
ALBANIA					hor.err=1km		ver.err=12KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1759	23.48	358	-0.3	45	18	2.4
PHP	SE	ISG		1759	30.02	358	0.2	45		
TIR	SZ	IPG		1759	24.47	280	-0.2	50	18	2.4
TIR	SE	ISG		1759	31.85	280	0.1	50		
FNA	SZ	IPG		1759	32.04	124	-0.2	94		
FNA	SE	ISG		1759	45.20	124	0.3	94		
BCI	SZ	IPG		1759	38.00	346	0.3	125		
BCI	SE	ISG		1759	54.63	346	0.3	125		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	27	1421	18.59	37.71	22.55	7	ASN	8	0.8	4.7	SOUTHERN GREECE
GAP=302					hor.err=4km		ver.err=20KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPN		1422	05.13	318	0.1	283		
IGT	SE	ISN		1422	38.03	318	1.4	283		
THE	SZ	IPN		1422	08.28	319	-0.2	330		
THE	SE	ISN		1422	48.11	319	1.4	330		
SRN	SZ	IPN		1422	11.50	6	-2.0	331	159	4.6
SRN	SE	ISN		1422	48.78	6	-1.1	331		
FNA	SZ	IPN		1422	12.99	345	1.0	360		
FNA	SE	ISN		1422	56.91	345	-1.0	360		
TPE	SZ	IPN		1422	15.37	324	0.1	365	129	4.3
TPE	SE	ISN		1422	57.11	324	0.7	365		
VLO	SZ	IPN		1422	19.69	321	-0.6	407		
VLO	SE	ISN		1423	07.04	321	0.1	407		
SCTE	SZ	IPN		1422	23.93	309	0.1	443		
SCTE	SE	ISN		1423	15.29	309	-1.1	443		
PHP	SZ	IPN		1422	28.66	339	0.1	481	170	4.7
PHP	SE	ISN		1423	23.93	339	-1.3	481		
PUK	SZ	IPN		1422	36.32	336	0.1	536	142	4.6
PUK	SE	ISN		1423	36.78	336	-0.9	536		
BCI	SZ	IPN		1422	42.93	339	0.1	563	146	4.6
BCI	SE	ISN		1423	40.08	339	-0.7	563		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	27	2257	06.81	40.94	20.03	6	ASN	9	0.2	2.4	SHKEMB-CERRIK
GAP=231					hor.err=2km		ver.err=4KM		-ALBANIA			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2257	15.60	344	0.0	47	19	2.4
TIR	SE	ISG		2257	22.25	344	0.0	47		
VLO	SZ	IPG		2257	19.14	221	-0.1	69	19	2.4
VLO	SE	ISG		2257	25.56	221	-0.1	69		
TPE	SZ	IPG		2257	20.06	182	0.0	72	19	2.4
TPE	SE	ISG		2257	29.51	182	0.3	72		
PHP	SZ	IPG		2257	22.77	22	-0.5	89		
PHP	SE	ISG		2257	34.43	22	-0.1	89		
FNA	SZ	IPG		2257	27.33	98	0.1	116		
FNA	SE	ISG		2257	42.93	98	-0.2	116		
SRN	SZ	IPG		2257	28.07	182	0.1	118		
SRN	SE	ISG		2257	43.43	182	0.4	118		
PUK	SZ	IPN		2257	28.43	355	0.1	123		
PUK	SE	ISN		2257	45.05	355	-0.2	123		
IGT	SZ	IPN		2257	34.43	170	-0.2	158		
IGT	SE	ISN		2257	55.12	170	-0.2	158		

BCI	SZ	IPN	2257	34.83	1	0.2	159
BCI	SE	ISN	2257	55.54	1	0.3	159

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	28	1014	12.59	41.44	20.38	4	ASN	4	0.1	2.3	SMOLLIK-BULQIZE
GAP=156					hor.err=1km		ver.err=1KM		-ALBANIA			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1014	18.14	10	0.0	27	19	2.4
PHP	SE	ISG		1014	22.29	10	0.0	27		
TIR	SZ	IPG		1014	21.12	257	0.0	45	17	2.3
TIR	SE	ISG		1014	27.41	257	0.0	45		
BCI	SZ	IPG		1014	34.44	346	2.3	106		
BCI	SE	ISG		1014	45.96	346	0.0	106		
FNA	SZ	IPG		1014	32.50	130	-0.1	111		
FNA	SE	ISG		1014	47.58	130	0.1	111		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	29	0310	46.92								SRN
GAP=					hor.err=km		ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0310	46.92					
SRN	SE	ISG		0310	48.12					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	29	0650	30.95	40.78	21.52	3	ASN	7	0.9	3.3	GREECE
GAP=267					hor.err=2km		ver.err=2KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		0650	33.92	269	0.4	12		
FNA	SE	ISG		0650	34.94	269	-0.4	12		
PHP	SZ	IPN		0650	53.79	319	-0.6	135	44	3.2
PHP	SE	ISN		0651	11.45	319	-0.6	135		
TPE	SZ	IPN		0650	54.84	248	-0.8	139	62	3.5
TPE	SE	ISN		0651	13.41	248	-1.0	139		
TIR	SZ	IPN		0650	57.27	295	-0.7	153	52	3.3
TIR	SE	ISN		0651	18.72	295	0.3	153		
SRN	SZ	IPN		0651	00.63	233	0.8	163	38	3.1
SRN	SE	ISN		0651	20.47	233	-0.9	163		
VLO	SZ	IPN		0651	03.16	260	-1.3	175	50	3.3
VLO	SE	ISN		0651	25.38	260	0.8	175		
BCI	SZ	IPN		0651	09.96	326	-0.7	213		
BCI	SE	ISN		0651	36.65	326	1.1	213		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	30	0143	30.16	41.98	20.02	13	ASN	4	0.4	2.7	FUSHE-ARREZ -ALBANIA
				hor.err=2km				ver.err=3KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0143	38.01	5	-0.3	42	26	2.7
BCI	SE	ISG		0143	44.98	5	0.5	42		
PHP	SZ	IPG		0143	38.63	133	-0.7	48	26	2.7
PHP	SE	ISG		0143	46.33	133	0.2	48		
TIR	SZ	IPG		0143	43.11	181	-0.2	71	27	2.7
TIR	SE	ISG		0143	53.54	181	0.4	71		
FNA	SZ	IPN		0143	59.68	135	-0.5	175		
FNA	SE	ISN		0144	23.17	135	0.5	175		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	30	1400	56.40	41.29	19.97	9	ASN	3	0.0	2.2	SELBE-TIRANE -ALBANIA
				hor.err=2km				ver.err=3KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1400	59.09	305	0.0	11	18	2.2
TIR	SE	ISG		1401	01.16	305	0.0	11		
PHP	SZ	IPG		1401	07.14	41	0.0	58		
PHP	SE	ISG		1401	15.16	41	0.0	58		
FNA	SZ	IPN		1401	19.56	115	0.0	132		
FNA	SE	ISN		1401	37.01	115	0.0	132		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	11	30	2013	37.08	42.64	13.56	11	ASN	7	0.8	4.3	CENTRAL ITALY
				hor.err=5km				ver.err=4KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		2014	56.72	98	0.9	540	97	4.3
BCI	SE	ISN		2015	55.60	98	0.1	540		
TIR	SZ	IPN		2014	56.77	102	0.1	545	110	4.3
TIR	SE	ISN		2015	56.33	102	-0.3	545		
VLO	SZ	IPN		2014	57.58	113	0.1	553		
PHP	SZ	IPN		2015	01.87	97	0.4	582	115	4.4
PHP	SE	ISN		2016	05.26	97	0.1	582		
TPE	SZ	IPN		2015	03.45	113	-0.4	600		
TPE	SE	ISN		2016	09.98	113	0.5	600		
SRN	SZ	IPN		2015	06.37	117	-0.4	623		
SRN	SE	ISN		2016	13.81	117	-0.8	623		
IGT	SZ	IPN		2015	12.08	118	-0.7	667		
IGT	SE	ISN		2016	24.23	118	-0.7	667		

**PËRSHKRIM MAKROSIZMIK I
TËRMEVEVE TË NDJESHME NË
VENDIN TONË**

Intensiteti i tërmetit në epiqendër I_0 është përcaktuar me formulën $I_0 = \frac{M-1}{6}$. Intensiteti I në qytete është

përcaktuar nga informacioni i marrëmbi ndjeshmerinë e tërmetit nga emergjencat civile si dhe burime të tjera.

**MACROSEISMIC DESCRIPTION OF
EARTHQUAKES FELT IN OUR
COUNTRY**

The epicentral Intensity of earthquake I_0 is determined by the formula $I_0 = \frac{M-1}{6}$. The felt

informacion of earthquakes in inhabitation zones provide by civil emergencies and other source is used to determine the Intensity I.

Nr	D a t a (D a t e)	Kohëndodhja (Origin time)	Epiqendra dhe të dhëna makrosizmike EMS-98 (Epicenter and macroseismic data EMS-98)
1	21.11.2013	19:45:30.5	Epiqendra: 40.69V; 19.72L, 13 km në Lindje të qytetit Fierit. Intensiteti i tërmetit në epiqendër $I_0 = V$ balle Ndjerë: IV-V ballë ne qytetin e Fierit, Patosit, Rroskovecit. IV balle ne qytetet Kucope, Berat, Ballesh. III-IV balle ne qytetet Lushnje dhe Vlore. (Epicentre: 40.69N; 19.72E, 13 km East of Fierit town. Epicentral Intensity $I_0 = IV-V$. Felt: IV-V at Fierit, Patosit, Rroskovecit towns. IV at Kucope, Berat, Ballesh towns. III-IV at Lushnje and Vlore towns

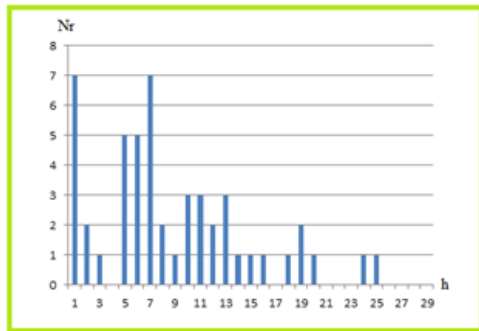
KATALOGU I TËRMETEVE MUJORE (THE MONTHLY EARTHQUAKE CATALOG)

Data Koha	Gjer.	Gjat	Thell.	Nr. St.	Gab	Mag.	Vendndodhja			
Date	Time	Lat	Long.	Depth	N ₀ .	St	Rms	Location		
vvvv/mm/dd	hh:mm:ss	(km)	(km)	(M _D)						
2013 11 2	0557	41.56	40.10	19.83	2	4	0.1	2	QEPARO-ALBANIA	
2013 11 2	2017	43.41	41.88	20.17	8	4	0.1	1.8	KLOS -ALBANIA	
2013 11 03	0148	25.83	39.02	22.08	12	7	0.3	3.8	GREECE	
2013 11 3	0438	36.92	41.86	19.30	13	3	0.1	2.5	ADRIATIC SEA	
2013 11 04	0556	34.81	40.14	21.73	17	7	0.2	3.5	GREECE	
2013 11 04	0944	00.66	40.18	21.57	9	7	0.2	3.5	GREECE	
2013 11 4	1449	57.39	41.09	20.09	7	3	0.1	2.2	ELBASAN-ALBANIA	
2013 11 04	2209	09.36	38.95	23.78	10	6	0.3	3.9	GREECE	
2013 11 04	2329	11.57	42.08	19.18	7	4	0.4	2.7	MONTENEGRO	
2013 11 07	1701	55.21	41.91	21.53	5	6	0.3	3.2	FYR OF MACEDONIATIRANE	
2013 11 08	1247	35.41	42.40	17.85	18	6	0.4	3.3	ADRIATIC SEAN	
2013 11 09	0228	17.91	41.20	19.50	10	8	0.3	2.4	5 KM NORTH-WEST ELBASAN	
2013 11 10	0259	32.01	37.30	21.19	7	12	0.3	4	GREECBASAN	
2013 11 10	1450	37.52	40.94	21.49	7	6	0.2	3.2	FYR OF MACEDONIA	
2013 11 10	2035	26.52	43.41	19.22	7	6	0.3	3.9	MONTENEGRO	
2013 11 10	2354	22.60	40.58	20.04	2	3	0.4	2.5	TERPAN-BERAT	
2013 11 11	0036	01.95	40.68	20.38	1	10	0.3	2.5	NIKOLLARE-KORCE	
2013 11 11	0656	10.65	40.73	19.51	6	7	0.1	2.6	RODASTIN 5KM WEST FIER	
2013 11 12	0620	02.05	40.36	20.53	1	6	0.1	2.7	ERSEKE-ALBANIA	
2013 11 12	1323	09.16	40.83	19.68	10	8	0.1	2.4	BUBULLIME	
2013 11 12	1231	27.38	39.17	18.79	48	11	0.4	4.2	SOUTHERN ITALY	
2013 11 12	1809	22.91	39.03	23.55	9	13	0.3	4.8	GREECE	
2013 11 16	0742	32.11	42.83	21.10	11	3	0.2	2.9	KOSOVON	
2013 11 17	0814	13.71	42.72	21.07	3	5	0.2	3.6	KOSOVO	
2013 11 17	1427	49.82	42.04	20.66	1	4	0.2	2.9	KOSOVO	
2013 11 18	0412	45.65	39.95	20.06	7	11	0.22	9	3KM WEST DELVINE	
2013 11 18	1045	13.20	41.96	20.28	12	5	0.2	2.7	VATAJ 12KM NORTH-EAST KLOS	
2013 11 18	0758	40.30	43.37	16.90	1	7	1.2	5	CROATIA	
2013 11 18	1347	35.01	40.60	19.13	24	9	1.5	2.9	ADRIATIC SEA	
2013 11 18	1315	02.64	42.84	21.03	1	7	0.8	4.2	KOSOVO	
2013 11 18	1342	45.19	42.80	20.98	1	7	0.5	3.2	KOSOVO	
2013 11 19	0339	48.72	42.76	21.05	1	4	0.1	2.6	KOSOVO	
2013 11 19	0816	32.72	39.55	22.02	8	8	0.3	4.1	GREECE	
2013 11 19	1045	13.20	41.93	20.24	12	5	0.52	7	NORTH-EAST KLOS	
2013 11 19	1219	29.90	41.89	20.14	7	2	0.1	1.9	KLOS-ALBANIA	

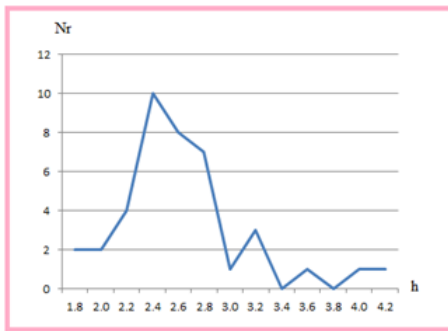
2013	11	19	1627	10.82	40.66	19.17	19	8	0.3	2.9	ADRIATIC SEA
2013	11	19	1752	07.12	40.62	20.63	1	6	0.22	3	VOSKOPOJE 12KM WEST KORCE
2013	11	19	1915	04.71	40.60	20.70	8	6	0.2	2.5	POLENE 7KM WEST KORCE
2013	11	19	2232	51.29	40.16	20.71	11	6	0.1	2.5	10KM EAST LESKOVIK
2013	11	20	0108	04.62	41.13	20.45	5	7	0.2	2.7	12KM SOUTH-EAST LIBRAZHD
2013	11	20	0430	16.70	40.16	20.68	5	7	0.1	2.4	7KM EAST LESKOVIK
2013	11	19	0450	48.20	40.64	21.16	6	4	0.0	2.4	GREECE
2013	11	20	0431	31.50	42.68	21.01	2	4	0.1	2.7	KOSOVO
2013	11	20	0813	17.20	41.56	20.16	20	8	0.1	3.2	9 KM NORTH-WEST BULQIZE
2013	11	20	1653	54.03	40.14	19.84	14	4	0.0	2.2	9 KM NORTH-EAST HIMARE
2013	11	21	1654	03.58	41.72	20.40	16	2	0.1	2	5 KM NORTH-EAST PESHKOPI
2013	11	21	1945	30.49	40.69	19.72	9	11	0.3	4.1	13 KM EAST FIER-ALBANIA
2013	11	22	0313	22.33	41.56	20.17	18	4	0.1	2.5	9 KM NORTH-WEST BULQIZE
2013	11	22	0709	17.10	39.47	20.53	15	6	0.3	2.7	GREECE
2013	11	23	1934	23.32	41.47	20.30	25	5	0.2	2.2	7 KM SOUTH-WEST BULQIZE
2013	11	23	2227	48.12	41.28	20.41	13	6	0.1	2.8	15 KM NORTH-EAST LIBRAZHD
2013	11	23	2253	14.64	41.28	20.42	6	7	0.2	3	14 KM NORTH-EAST LIBRAZHD
2013	11	23	2322	21.21	41.28	20.44	10	7	0.2	2.8	15 KM NORTH-EAST LIBRAZHD
2013	11	23	2342	54.11	41.28	20.45	19	4	0.3	2.4	16KM N-E LIBRAZHD
2013	11	23	2352	32.31	41.27	20.42	6	5	0.3	2.5	13KM N-E LIBRAZHD
2013	11	24	0124	21.19	41.30	20.44	11	7	0.2	2.7	17KM N-E LIBRAZHD
2013	11	24	0517	51.85	41.27	20.42	5	7	0.2	3.1	13KM N-E LIBRAZHD
2013	11	25	0155	03.52	40.65	20.60	5	7	0.2	2.9	VOSKOPOJE, KORCE
2013	11	25	1027	07.70	41.88	20.16	7	2	0.1	1.9	KLOS -ALBANIA
2013	11	25	1521	19.65	40.17	20.77	5	5	0.2	2.8	LESKOVIK-KORCE-ALBANIA
2013	11	25	1759	15.36	41.27	20.46	7	4	0.2	2.4	SOUTH STEBLEVE-ALBANIA
2013	11	27	1421	18.59	37.71	22.55	7	8	0.8	4.7	SOUTHERN GREECE
2013	11	27	2257	06.81	40.94	20.03	6	9	0.2	2.4	SHKEMB 11 KM SOUTH CERRIK
2013	11	28	1014	12.59	41.44	20.38	4	4	0.1	2.3	SMOLLIK-BULQIZE
2013	11	29	0650	30.95	40.78	21.52	3	7	0.9	3.3	GREECE
2013	11	30	0143	30.16	41.98	20.02	13	4	0.4	2.7	SOUTH FUSHE-ARREZ
2013	11	30	1400	56.40	41.29	19.97	9	3	0.0	2.2	SELBE 13 KM EAST TIRANE
2013	11	30	2013	37.08	42.64	13.56	11	7	0.8	4.3	CENTRAL ITALY

STATISTIKA E NGJARJEVE SIZMIKE (STATISTICS OF SEISMIC EVENTS)

Karakteristikat e pergjithshme (General Characteristics)	Vlerat (Data values)
➤ Ngjarje sizmike të ndodhura në kuadratin (39-43 V; 18.5-21.5 L)	54
Events occured within quadrant	
➤ Ngjarje sizmike të ndodhura brenda kufijve shtetërore	44
Events occured inside state boundaries	
➤ Thellësia mesatare e ngjarjeve sizmike	9
Mean hypocenter depth	
➤ Thellësia maksimale	48
Maximum hypocenter depth	
➤ Magnituda lokale minimale e regjistruar	1.8
Minimum recorded local magnitude	
➤ Magnituda lokale maksimale e regjistruar	4.2
Maximum recorded local magnitude	
➤ Intensiteti sizmik maksimal ne epiqendër	V-VI
Maximum seismic intensity	



Grafiku i shpërndarjes së numurit të ngjarjeve sizmike mujore në vartesi të thellësisë (djathtas) magnitudës (majtas)




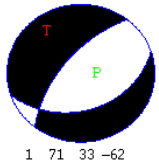
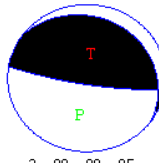
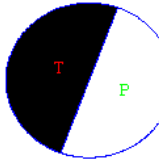
Distribution graphic of monthly seismic event number according to depth (right) magnitude (left)

Zgjidhja e mekanizmit vatror (ZMV)

Për zgjidhjen e mekanizmit të vates janë përdorur polaritetet e hyrjeve të para P (Pg/Pn), të përcaktuara mbi format valore që shprehin funksionin kohor të burimit sizmik perkatës, në fushën e shpejtësisë. Janë përdorur regjistrimet në bandë të gjere frekuenciale (0.2 – 30 Hz), të cilat janë modeluar nëpërmjet filtrave band-pass: 1.0-5.0 Hz, 2.0-10 Hz dhe 0.1-3.0 Hz. Për të arritur zgjidhjen optimale janë përdorur edhe raporti i amplitudave të valëve volumore AMPSg/AMPPg, (AMPSn/AMPPn), të cilat janë lexuar mbi komponentet e transformuara nga sistemi koordinativ gjeografik në atë sferik (vertikal, radial dhe transversal). Eshtë realizuar një kerkim në rrjetin koordinativ me interval 5.0 – 10 grad, duke vendosur kriteret për gabimin në polaritetet e përdorura. Për zgjidhjen përfundimtare është përdorur programi FOCMEC (Snoke. et al., 1984), ndërsa për të optimizuar zgjidhjen është përdorur programi HASH (Hardebeck & Shearer, 2003).

Focal Mechanism Solution (FMS)

For focal mechanism solution, the first onset polarity of P (Pg/Pn) are used, picked on the source time function respective waveforms. This is done for the velocity field recordings. Broadband recordings are used within the frequency range 0.2-30 Hz, witch are modeled by band-pass filtering in the ranges: 1.0-5.0 Hz, To achieve the optimum solution also the amplitude ratio of the type AMPSg/AMPPg, (AMPSn/AMPPn), are used. These amplitudes are read on rotated and corrected components, from the geographic system to the spherical one (vertical, radial and transversal). A grid search at the 5.0-10 degree cells interval has been applied, setting first the allowed error threshold for polarity readings. For final solution the FOCMEC program has been used (Snoke. et al., 1984). Whereas, to optimize the solution HASH routine (Hardebeck & Shearer, 2003), has been applied as well.

Identifikimi ngjarjes (Event ID)	Parametrat burimit (Source parameters)	Magnituda (Magnitude)	Parametrat e Mekanizmit (Focal parameters)	Tipi (Focal Type)
2013.11.21.19:45	40.69 (N) 19.72 (E) 9 (km)	4.1	P1: 220, 60, -89 P2: 38, 30, -92 T: 309, 15 P: 133, 75	
2013.11.20.08:13:17	41.58 (N) 20.16 (E) 20 (km)	3.2	P1: 71, 33, -62 P2: 219, 61, -107 T: 321, 15 P: 94, 69	 1 71 33 -62
2013.11.23.22:53:14	41.28 (N) 20.42 (E) 6 (km)	3.0	P1: 99, 80, 85 P2: 306, 11, 116 T: 193, 35 P: 3, 55	 2 99 80 85
2013.11.24.05:17:51	41.27 (N) 20.42 (E) 5(km)	3.1	P1: 20, 90, 90 P2: 110, 0, -0 T: 290, 45 P: 110, 45	 3 20 90 90

Harta e epiqendrave të tërmeteve



Legjenda e Hartes

● Shenja ● ● ● ● ●
Magnituda 1-3 3-4 4-5 >5