

**INFORMACION I PERGJITSEM****Prezantim**

Buletini i Rrjetit Sizmologjik Shqiptar është një publikim periodik i parametrave valore, parametrave vatrore dhe madhësisë së tërmeteve brenda territorit të Shqipërisë dhe rrotull saj, përpiluar nga Departamenti i Sizmologjisë i Institutit të Gjeoshkencave, Energjisë, Ujit dhe Mjedisit pranë Universitetit Politeknik të Tiranës.

Parametrat e vlerësuar i referohen kuadrantit gjeografik të kufizuar nga koordinatat:  $39.0^{\circ}$ - $43.0^{\circ}$  V dhe  $18.5^{\circ}$ - $21.5^{\circ}$  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 Seismologic Network's 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:  $39^{\circ}$ - $43^{\circ}$ N and  $18.5^{\circ}$ - $21.5^{\circ}$  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 macroseismic 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 qëndror 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)	Sizmometri (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 i bërë 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

<i>Nr</i>	Numuri i stacioneve (station's number)	(International code of Network identification on FDSN is AC) Nr. Stacioneve te perdorur ne lokalizim (No. Of used stations)
<i>STAT</i>	Kodi i stacionit (station code)	Kodi nderkombetar qe perdoret per te identifikuar stacionin perkates sizmologjik (tre karaktere) (international stn code)
<i>SP</i>	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
<i>IPHASW</i>	Faza valore sizmike (seismic wave phase)	tipi i valës P ( $P_g / P_n$ ) ose S ( $S_g / S_n$ ) (wave phase type)
<i>D</i>	Polariteti i hyrjes së parë në komponenten vertikale (first vertical onset polarity)	Polariteti i vales renes ne statcion, ne komponenten Z (first onset polarity on Z)
<i>HRMM SECON</i>	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
<i>AZIMU</i>	Kendi azimutal (station-source azimuth angle)	Azimuti stacion- vater termeti Station-focus azimuthal angle
<i>RES</i>	Diferenca kohore (time residual)	Ndryshimi ndërmjet kohës teorike të llogaritur nga modeli dhe kohës faktike, nga regjistrimi Time residuals between calculated and observed times
<i>DIS</i>	Largesia epiqendrore (epicentral distance)	Largesia hoeizontale epiqender-stacion Distance from epicenter to the station
<i>DUR</i>	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	8	2	1319	31.45	41.52	19.66	7	ASN	3	0.1	2.2	THUMANE-ALBANIA
GAP=230					hor.err=11km			ver.err=1KM				
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
TIR	SZ	IPG		1319	36.44	139	-0.1	25	14	2.1		
TIR	SE	ISG		1319	40.32	139	0.0	25				
PUK	SZ	IPG		1319	42.53	17	0.0	60	14	2.1		



Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	4	2146	24.69	39.21	20.83	7	ASN	4	0.4	3.5	GREECE
				GAP=229			hor.err=1km			ver.err=3KM		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
LKD2	SZ	IPG		2146	33.41	199	0.0	48		
LKD2	SE	ISG		2146	41.38	199	0.2	48		
IGT	SZ	IPG		2146	33.83	310	-0.1	56		
IGT	SE	ISG		2146	41.09	310	0.0	56		
SRN	SZ	IPG		2146	44.68	317	0.2	103	54	3.4
SRN	SE	ISG		2146	58.69	317	0.1	103		
TPE	SZ	IPN		2146	48.56	330	-0.1	139	70	3.6
TPE	SE	ISN		2146	09.07	330	-0.1	139		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	4	2345	56.36	40.25	20.59	6	ASN	5	0.2	3	10KM NORTH
				GAP=201			hor.err=1km			ver.err=2KM LESKOVIK-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		2346	05.62	272	0.0	50	32	2.9
TPE	SE	ISG		2346	12.28	272	0.1	50		
SRN	SZ	IPG		2346	07.60	222	0.0	65	34	3
SRN	SE	ISG		2346	16.68	222	0.1	65		
IGT	SZ	IPG		2346	10.27	197	-0.1	85		
IGT	SE	ISG		2346	12.58	197	0.0	85		
PHP	SZ	IPN		2346	24.92	356	-0.1	159	35	3
PHP	SE	ISN		2346	44.21	356	-0.1	159		
SCTE	SZ	IPN		2346	27.86	265	0.1	182		
SCTE	SE	ISN		2346	47.88	265	0.1	182		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	5	0213	35.76	40.36	20.75	7	ASN	3	0.1	2.8	LESKOVI-ALBANIA
				GAP=208			hor.err=1km			ver.err=1KM		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0213	46.50	271	0.1	63	28	2.9
TPE	SE	ISG		0213	56.77	271	0.0	63		
SRN	SZ	IPG		0213	50.84	220	0.0	84	30	2.9
SRN	SE	ISG		0216	02.19	220	0.0	84		
IGT	SZ	IPG		0213	54.14	196	-0.1	99		
IGT	SE	ISG		0214	03.45	196	0.0	99		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	5	0611	16.46	41.17	20.06	13	ASN	3	0.1	2.6	ELBASAN-ALBANIA

GAP=290

hor.err=1km

ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0611	21.71	318	0.1	25	20	2.4
TIR	SE	ISG		0611	25.62	318	0.1	25		
PHP	SZ	IPG		0611	28.25	28	0.1	64	23	2.6
PHP	SE	ISG		0611	36.95	28	0.1	64		
PUK	SZ	IPG		0611	33.67	352	0.1	97	23	2.6
PUK	SE	ISG		0611	46.75	352	0.1	97		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	5	0613	40.39	39.75	20.53	7	ASN	5	0.1	2.6	GREECE

GAP=210  
hor.err=12km  
ver.err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPG		0613	46.29	216	0.1	30		
IGT	SE	ISG		0613	50.71	216	0.1	30		
SRN	SZ	IPG		0613	48.95	287	0.1	48	23	2.6
SRN	SE	ISG		0613	55.90	287	0.1	48		
TPE	SZ	IPG		0613	53.92	324	0.1	75	24	2.6
TPE	SE	ISG		0614	04.03	324	0.1	75		
LKD2	SZ	IPG		0613	59.56	174	0.1	108		
LKD2	SE	ISG		0614	13.88	174	0.1	108		
SCTE	SZ	IPG		0614	11.89	283	0.1	180		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	5	1621	24.04	39.8	20.41	5	ASN	4	0.1	3.1	GREECE

GAP=193  
hor.err=2km  
ver.err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
LKD2	SZ	IPG		1621	31.44	146	0.0	30		
LKD2	SE	ISG		1621	37.00	146	0.0	30		
IGT	SZ	IPG		1621	33.33	353	0.1	50		
IGT	SE	ISG		1621	40.30	353	-0.1	50		
SRN	SZ	IPG		1621	40.98	339	-0.1	95	40	3.1
SRN	SE	ISG		1621	53.88	339	0.1	95		
TPE	SZ	IPG		1621	48.71	346	0.1	138	40	3.1
TPE	SE	ISG		1622	07.02	346	0.1	138		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	6	0101	31.26	41.17	20.02	16	ASN	3	0.1	2.5	8KM N-W ELBASAN -ALBANIA

GAP=2950  
hor.err=1km  
ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0101	36.39	326	0.0	23	20	2.4
TIR	SE	ISG		0101	40.24	326	0.0	23		

PHP	SZ	IPG	0101	43.42	31	0.1	66	23	2.6
PHP	SE	ISG	0101	52.48	31	-0.1	66		
PUK	SZ	IPG	0101	48.49	354	-0.1	97	23	2.6
PUK	SE	ISG	0102	01.47	354	0.1	97		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	6	0523	37.57								TPE
GAP=			hor.err=			ver.err=						

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG	0523	37.57						
PUK	SE	ISG	0523	41.91						

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	7	0429	17.61	42.31	19.44	7	ASN	3	0.1	2.4	KOPLIK-ALBANIA
GAP=313			hor.err=2km			ver.err=1KM						

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG	0429	26.44	128	-0.1	47	19	2.4	
PUK	SE	ISG	0429	32.44	128	0.0	47			
BCI	SZ	IPG	0429	27.02	82	-0.1	51	20	2.4	
BCI	SE	ISG	0429	34.38	82	0.0	51			
PHP	SZ	IPG	0429	38.02	129	-0.1	108	20	2.4	
PHP	SE	ISG	0429	51.54	129	0.0	108			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	7	0956	45.83	38.70	22.68	7	ASN	5	0.1	5.1	GREECE
GAP=327			hor.err=10km			ver.err=5KM						

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPN	0957	23.26	66	-0.1	210	276	5	
SRN	SE	ISN	0957	50.98	66	0.1	210			
TIR	SZ	IPN	0957	35.33	36	0.3	319	214	4.8	
TIR	SE	ISN	0958	11.22	36	-0.2	319			
PHP	SZ	IPN	0957	39.44	38	0.1	377	276	5	
PHP	SE	ISN	0958	25.01	38	-0.2	377			
PUK	SZ	IPN	0957	43.76	29	-0.2	400	287	5	
PUK	SE	ISN	0958	29.63	29	0.2	400			
BCI	SZ	IPN	0957	44.93	28	-0.3	400	214	4.8	
BCI	SE	ISN	0958	43.24	28	0.1	400			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	7	1344	36.67	38.73	22.65	7	ASN	7	0.1	4.8	GREECE
GAP=327			hor.err=10km			ver.err=7KM						



STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPN		1345	19.60	293	-0.2	210	229	4.7
SRN	SE	ISN		1345	46.37	293	0.1	210		
TPE	SZ	IPN		1345	22.65	303	-0.1	230	238	4.8
TPE	SE	ISN		1345	50.66	303	-0.1	230		
VLO	SZ	IPN		1345	28.71	304	0.1	277	235	4.8
VLO	SE	ISN		1346	01.73	304	-0.3	277		
PHP	SZ	IPN		1345	32.15	321	-0.2	316	236	4.9
PHP	SE	ISN		1346	10.15	321	0.1	316		
TIR	SZ	IPN		1345	37.78	332	0.2	319	199	4.7
TIR	SE	ISN		1346	08.61	332	-0.2	319		
PUK	SZ	IPN		1345	40.03	329	-0.3	377	217	4.9
PUK	SE	ISN		1346	24.83	329	0.1	377		
BCI	SZ	IPN		1345	45.82	334	0.3	400	189	4.8
BCI	SE	ISN		1346	30.10	334	0.2	400		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	8	0215	20.57	42.52	19.78	7	ASN	4	0.2	2.6	GUSINJE KOSOVE
				GAP=310	hor.err=1km				ver.err=10KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0215	26.26	127	-0.1	29	26	2.6
BCI	SE	ISG		0215	30.38	127	0.0	29		
PUK	SZ	IPG		0215	30.56	170	-0.1	55	22	2.6
PUK	SE	ISG		0215	38.38	170	0.1	55		
PHP	SZ	IPG		0215	40.07	149	0.1	108	31	2.9
PHP	SE	ISG		0215	54.20	149	-0.2	108		
TIR	SZ	IPG		0215	43.46	177	-0.2	131		
TIR	SE	ISG		0216	00.83	177	-0.1	131		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	8	1504	59.40								
				GAP=	hor.err=				ver.err=			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1504	19.63					
PUK	SE	ISG		1504	22.68					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	8	1635	32.64	38.85	22.48	6	ASN	7	0.3	3.6	GREECE
				GAP=310	hor.err=5km				ver.err=11KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		1636	13.91	299	0.1	299	54	3.5
SRN	SE	ISG		1636	43.36	299	0.1	299		

TPE	SZ	IPG	1636	16.24	308	0.2	308	55	3.5
TPE	SE	ISG	1636	49.06	308	0.1	308		
PHP	SZ	IPG	1636	28.60	332	0.1	332	68	3.5
PHP	SE	ISG	1637	10.68	332	0.3	332		
SCTE	SZ	IPG	1636	30.09	293	-0.1	293		
SCTE	SE	ISG	1637	13.27	293	0.1	293		
PUK	SZ	IPG	1636	30.09	329	0.2	329	60	3.5
PUK	SE	ISG	1637	23.38	329	0.2	329		
BCI	SZ	IPG	1636	39.15	334	0.3	334		
SGRT	SZ	IPG	1637	07.60	302	0.2	302		
SGRT	SE	ISG	1638	07.02	302	-0.3	302		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	9	0123	12.08	40.16	19.84	7	ASN	3	0.1	2.3	10KM N-E HIMARE -ALBANIA
				GAP=310	hor.err=10km				ver.err=1KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0123	16.20	48	0.1	22	19	2.3
TPE	SE	ISG		0123	19.88	48	-0.1	22		
SRN	SZ	IPG		0123	18.66	153	-0.1	35	18	2.3
SRN	SE	ISG		0123	23.50	153	0.1	35		
SCTE	SZ	IPG		0123	33.01	266	0.1	115		
SCTE	SE	ISG		0123	47.55	266	0.1	115		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	9	0419	22.48	39.20	20.29	9	ASN	8	0.2	4.1	GREECE
				GAP=301	hor.err=1km				ver.err=11KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0419	36.43	342	-0.1	79	118	4
SRN	SE	ISG		0419	47.11	342	-0.1	79		
TPE	SZ	IPG		0419	44.09	349	-0.2	123	106	4
TPE	SE	ISG		0420	01.12	349	-0.1	123		
VLO	SZ	IPG		0419	49.93	335	0.1	156	99	3.9
VLO	SE	ISG		0420	08.44	335	-0.3	156		
SCTE	SZ	IPG		0419	54.31	303	-0.1	184		
SCTE	SE	ISG		0420	17.65	303	0.1	184		
TIR	SZ	IPG		0420	02.20	352	0.2	240	120	4.2
TIR	SE	ISG		0420	31.73	352	0.1	240		
PHP	SZ	IPG		0420	06.92	2	0.1	276	129	4.2
PHP	SE	ISG		0420	40.36	2	0.2	276		
PUK	SZ	IPG		0420	12.36	354	0.2	316	129	4.3
PUK	SE	ISG		0420	49.84	354	0.1	316		
BCI	SZ	IPG		0420	16.22	311	0.2	351		
BCI	SE	ISG		0420	59.33	311	-0.3	351		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 8 10 0502 47.03 41.21 20.03 11 ASN 4 0.1 2.8 6KM EAST KRRABE  
GAP=285 hor.err=2km ver.err=1KM TIRANE-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0502	51.40	316	0.1	21	33	2.8
TIR	SE	ISG		0502	54.44	316	-0.1	21		
PHP	SZ	IPG		0502	58.24	32	0.1	61	33	2.8
PHP	SE	ISG		0503	06.81	32	-0.1	61		
PUK	SZ	IPG		0503	03.51	353	0.1	92	33	2.8
PUK	SE	ISG		0503	15.98	353	-0.1	92		
BCI	SZ	IPN		0503	09.16	1	0.1	128		
BCI	SE	ISN		0503	26.09	1	-0.1	128		

Y M D HM Sec Lat Long Dep Net Nr Rms Mag Epicenter  
2013 8 10 0503 55.69 41.20 20.10 13 ASN 4 0.1 2.8 11KM S-E KRRABE  
GAP=281 hor.err=1km ver.err=1KM TIRANE-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0504	00.83	308	-0.1	26	28	2.7
TIR	SE	ISG		0504	04.91	308	0.1	26		
PHP	SZ	IPG		0504	06.72	27	0.1	60	30	2.9
PHP	SE	ISG		0504	14.91	27	-0.1	60		
PUK	SZ	IPG		0504	12.65	350	0.1	94	30	2.9
PUK	SE	ISG		0504	25.22	350	0.1	94		
BCI	SZ	IPN		0504	17.81	360	-0.2	128		
BCI	SE	ISN		0504	34.96	360	-0.1	128		

Y M D HM Sec Lat Long Dep Net Nr Rms Mag Epicenter  
2013 8 10 2110 07.06 42.23 20.07 11 ASN 3 0.1 2.3 10KM EAST-KRRAB  
GAP=275 hor.err=1km ver.err=3KM TIRANE-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2110	11.36	306	0.1	22	17	2.3
TIR	SE	ISG		2110	14.86	306	0.1	22		
PHP	SZ	IPG		2110	17.92	31	-0.1	59	17	2.3
PHP	SE	ISG		2110	25.80	31	0.1	59		
PUK	SZ	IPG		2110	23.27	351	-0.1	91	19	2.4
PUK	SE	ISG		2110	35.57	351	-0.1	91		

Y M D HM Sec Lat Long Dep Net Nr Rms Mag Epicenter  
2013 8 11 1331 49.40 45.81 26.68 ASN 3 4.3 ROMANIA  
GAP= hor.err= ver.err=

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		1332	32.50					

PHP SZ IPN 1332 36.33  
 PUK SZ IPN 1332 38.51

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	11	1724	44.35	33.76	27.72		ASN	6		4.4	EAST

MEDITERRANEA SEA  
 GAP=  
 hor.err=  
 ver.err=

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPN		1725	22.22					
TPE	SZ	IPN		1725	27.63					
SCTE	SZ	IPN		1725	35.89					
TIR	SZ	IPN		1725	37.21					
PHP	SZ	IPN		1725	37.96					
PUK	SZ	IPN		1725	44.67					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	12	0100	46.53	41.94	20.54	7	ASN	3	0.1	2.5	TOPOJAN

GAP=275  
 hor.err=1km  
 ver.err=3KM  
 KUKES-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0100	52.39	198	-0.1	22	20	2.4
PHP	SE	ISG		0100	56.83	198	0.0	22		
PUK	SZ	IPG		0100	56.65	282	-0.1	59	25	2.6
PUK	SE	ISG		0101	04.30	282	0.1	59		
BCI	SZ	IPG		0100	57.73	320	0.1	91	21	2.5
BCI	SE	ISG		0101	06.03	320	0.1	91		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	12	1531	04.89	41.13	20.06	15	ASN	3	0.2	2.2	4KM NORTH-WEST

GAP=298  
 hor.err=1km  
 ver.err=1KM  
 ELBASAN-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1531	10.67	325	0.2	28	12	2.1
TIR	SE	ISG		1531	15.24	325	-0.1	28		
PHP	SZ	IPG		1531	18.67	27	0.3	68		
PHP	SE	ISG		1531	26.05	27	-0.2	68		
PUK	SZ	IPG		1531	22.96	353	0.1	101	16	2.2
PUK	SE	ISG		1531	36.31	353	-0.2	101		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	12	2144	42.02	41.52	19.59	9	ASN	6	0.3	2.8	SHEN PJETER

GAP=199  
 hor.err=2km  
 ver.err=1KM  
 ISHEM-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2144	47.42	130	-0.2	30	19	2.3
TIR	SE	ISG		2144	52.03	130	0.1	30		
PUK	SZ	IPG		2144	52.75	23	-0.3	63	31	2.8
PUK	SE	ISG		2145	02.95	23	0.1	63		
PHP	SZ	IPG		2144	54.25	75	0.3	73	29	2.8
PHP	SE	ISG		2145	05.98	75	-0.4	73		
VLO	SZ	IPG		2145	03.39	184	0.3	117	30	2.8
VLO	SE	ISG		2145	18.87	184	0.1	117		
TPE	SZ	IPN		2145	05.73	165	0.2	140		
TPE	SE	ISN		2145	25.68	165	0.3	140		
SRN	SZ	IPN		2145	12.70	185	0.4	185		
SRN	SE	ISN		2145	34.97	185	-0.3	185		

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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	13	0458	02.08	40.71	19.66	12	ASN	7	0.1	3.8	9KM EAST FIERI -ALBANIA
				GAP=131	hor.err=0.36km		ver.err=0.61KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		0458	08.14	214	0.13	29.9	48	3.1
VLO	SN	ISG		0458	12.50	214	0.04	29.9		
TPE	SZ	IPG		0458	11.33	149	-0.75	54.1	56	3.3
TPE	SE	ISG		0458	19.36	149	-0.22	54.1		
TIR	SZ	IPG		0458	15.32	11	-0.04	73.3	88	3.7
TIR	SN	ISG		0458	25.37	11	0.05	73.3		
SRN	SZ	IPG		0458	19.33	164	0.11	95.9	86	3.7
SRN	SE	ISG		0458	32.09	164	0.02	95.9		
PHP	SZ	IPN		0458	23.86	29	-0.44	126.8	94	3.9
PHP	SN	ISN		0458	40.97	29	0.01	126.8		
PUK	SZ	IPN		0458	27.86	6	-0.11	149.8	107	3.8
PUK	SN	ISN		0458	47.43	6	0.04	149.8		
BCI	SZ	IPN		0458	33.70	9	-0.29	187.6		
BCI	SE	ISN		0458	57.54	9	0.38	187.6		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	13	1325	12.98	41.77	20.05	7	ASN	7	0.1	3.1	KURBNESH-ALBANI
				GAP=131	hor.err=0.36km		ver.err=0.61KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1325	19.38	337	-0.01	33	30	2.8
PUK	SN	ISG		1325	23.86	337	0.01	33		
PHP	SZ	IPG		1325	19.50	106	-0.01	34	30	2.8
PHP	SN	ISG		1325	24.28	106	-0.01	34		
TIR	SZ	IPG		1325	22.17	199	-0.01	50	32	2.9
TIR	SN	ISG		1325	28.95	199	0.01	50		
BCI	SZ	IPG		1325	24.84	1	0.01	66	29	2.8
BCI	SN	ISG		1325	33.98	1	-0.01	66		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	13	1312	04.21	43.36	19.34	6	ASN	10	0.2	3.5	MONTENEGRO
				GAP=239	hor.err=3km				ver.err=3KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		1312	25.41	146	-0.2	119	60	3.5
BCI	SE	ISG		1312	41.33	146	0.2	119		
PUK	SZ	IPN		1312	30.13	159	-0.1	145	57	3.4
PUK	SE	ISN		1312	49.31	159	0.1	145		
PHP	SZ	IPN		1312	38.87	151	0.1	200	56	3.5
PHP	SE	ISN		1313	05.08	151	0.1	200		
TIR	SZ	IPN		1312	41.44	166	0.3	218	46	3.3
TIR	SE	ISN		1313	10.29	166	0.3	218		
NOCI	SZ	IPN		1312	56.70	215	0.1	331		
SGRT	SZ	IPN		1312	57.29	241	0.1	335		
MRVN	SZ	IPN		1312	59.58	228	-0.1	353		
MRVN	SE	ISN		1313	41.11	228	-0.1	353		
SCTE	SZ	IPN		1312	59.97	192	-0.3	361		
SRN	SZ	IPN		1313	03.14	170	0.2	381		
IGT	SZ	IPN		1313	08.35	167	0.3	424		

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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	15	1549	43.07	40.58	20.82	2	ASN	7	0.2	3.3	DRENOVE, KORCE
				GAP=215	hor.err=1km				ver.err=2KM		-ALBANIA	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		1549	55.68	246	0.1	16	41	3.1
TPE	SE	ISG		1550	07.37	246	-0.1	16		
SRN	SZ	IPG		1550	02.42	223	0.1	105	39	3.0
SRN	SE	ISG		1550	16.57	223	-0.1	105		
VLO	SZ	IPN		1550	02.44	264	0.1	113		
VLO	SE	ISN		1550	19.61	264	-0.1	113		
TIR	SZ	IPN		1550	03.66	317	0.2	116	55	3.4
TIR	SE	ISN		1550	21.09	317	-0.1	116		
PHP	SZ	IPN		1550	05.10	346	0.1	126	55	3.3
PHP	SE	ISN		1550	22.66	346	-0.2	126		
PUK	SZ	IPN		1550	14.69	335	0.1	179	45	3.3
PUK	SE	ISN		1550	39.16	335	-0.3	179		
BCI	SZ	IPN		1550	19.76	343	0.3	207	53	3.4
BCI	SE	ISN		1550	45.96	343	0.2	207		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	15	2042	37.98	41.49	20.20	20	ASN	3	0.2	2.3	BULQIZE-ALBANIA
				GAP=201	hor.err=2km				ver.err=2KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2042	43.42	41	0.0	28	18	2.3
PHP	SE	ISG		2042	47.96	41	0.0	28		
TIR	SZ	IPG		2042	44.07	242	0.1	33	17	2.2
TIR	SE	ISG		2042	49.26	242	0.1	33		
PUK	SZ	IPG		2042	49.58	66	-0.1	66	21	2.4
PUK	SE	ISG		2042	59.21	66	0.1	66		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	16	0521	49.07	41.14	20.06	10	ASN	3	0.1	2.1	5KM NORTH-WEST GAP=297 hor.err=1km ver.err=1KM ELBASAN -ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0521	54.33	324	0.0	28	11	1.9
TIR	SE	ISG		0521	58.66	324	0.0	28		
PHP	SZ	IPG		0522	01.46	27	0.1	33	16	2.3
PHP	SE	ISG		0522	10.56	27	-0.2	33		
PUK	SZ	IPG		0522	06.39	353	-0.1	66	13	2.1
PUK	SE	ISG		0522	20.33	353	0.2	66		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	17	2129	04.48	41.96	20.14	7	ASN	3	0.1	2.3	KLOS.KUKES GAP=151 hor.err=10km ver.err=1KM -ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		2129	12.97	292	0.0	22	17	2.2
PUK	SE	ISG		2129	16.28	292	0.0	22		
PHP	SZ	IPG		2129	16.00	141	-0.1	40	19	2.4
PHP	SE	ISG		2129	21.27	141	0.1	40		
BCI	SZ	IPG		2129	19.79	353	0.1	44	17	2.3
BCI	SE	ISG		2129	22.98	353	0.1	44		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	18	0130	46.70								
GAP= hor.err=km ver.err=KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0130	47.70					
TIR	SE	ISG		0130	49.19					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	18	1010	29.59	39.91	19.76	15	ASN	2	0.2	1.9	JONIAN SEA GAP=285 hor.err=1km ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		1010	33.71	101	0.2	21	10	1.7
SRN	SE	ISG		1010	37.08	101	0.3	21		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	18	1042	54.07	38.82	22.76	18	ASN 6	0.3	4.2		GREECE
				hor.err=5km			ver.err=6KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPN		1043	37.99	298	0.2	268	110	4.1
SRN	SE	ISN		1044	11.24	298	-0.3	268		
TPE	SZ	IPN		1043	41.04	307	0.1	291	139	4.3
TPE	SE	ISN		1044	15.04	307	0.2	291		
TIR	SZ	IPN		1043	52.46	320	0.3	377	117	4.2
TIR	SE	ISN		1044	38.07	320	-0.2	377		
PHP	SZ	IPN		1043	50.10	330	0.3	378	143	4.4
PHP	SE	ISN		1044	35.74	330	0.4	378		
PUK	SZ	IPN		1043	59.87	327	0.1	437	114	4.3
PUK	SE	ISN		1044	49.49	327	-0.4	437		
BCI	SZ	IPN		1044	02.53	331	0.2	459		
BCI	SE	ISN		1044	54.99	331	0.3	459		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	19	0123	48.00	41.58	20.14	10	ASN 4	0.3	2.5	10KM	S-E BURREL
GAP=156				hor.err=2km			ver.err=1KM			-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0123	53.15	66	0.2	27	12	2.0
PHP	SE	ISG		0123	57.50	66	0.1	27		
TIR	SZ	IPG		0123	54.47	222	-0.2	35	16	2.2
TIR	SE	ISG		0124	00.07	222	0.3	35		
PUK	SZ	IPG		0123	57.73	338	-0.3	54	26	2.6
PUK	SE	ISG		0124	06.05	338	0.2	54		
BCI	SZ	IPG		0124	02.92	356	0.1	86	30	2.8
BCI	SE	ISG		0124	15.13	356	0.2	86		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	19	0838	52.30	41.73	20.31	18	ASN 3	0.1	2.5	11KM	N-W
GAP=162				hor.err=1km			ver.err=2KM			PESHKOPI-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0838	56.09	117	0.2	11	18	2.3
PHP	SE	ISG		0838	59.08	117	0.0	11		
PUK	SZ	IPG		0839	01.60	315	0.1	49	21	2.6
PUK	SE	ISG		0839	08.60	315	-0.1	49		



TIR	SZ	IPG	0839	02.80	222	-0.1	57
TIR	SE	ISG	0839	10.08	222	0.1	57

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	19	2127	42.44	41.23	20.39	11	ASN	3	0.1	2.4	LIBRAZHD-ALBANI
				hor.err=3km			ver.err=3KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2127	50.93	286	0.1	47	22	2.3
TIR	SE	ISG		2127	57.31	286	0.1	47		
PHP	SZ	IPG		2127	51.38	2	0.1	49	21	2.5
PHP	SE	ISG		2127	57.63	2	-0.1	49		
PUK	SZ	IPG		2128	00.66	335	0.1	99		
PUK	SE	ISG		2128	12.73	335	0.1	99		
BCI	SZ	IPG		2128	04.14	348	-0.2	128		
BCI	SE	ISG		2128	22.72	348	0.1	128		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	20	0840	51.10	41.34	20.32	1	ASN	5	0.1	2.5	19KM NORTH
GAP=178				hor.err=1km			ver.err=1KM			LIBRAZHD-ALBANIA		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0840	58.09	271	-0.1	38	10	1.9
TIR	SE	ISG		0841	04.58	271	-0.2	38		
PHP	SZ	IPG		0840	58.70	15	-0.2	39	22	2.5
PHP	SE	ISG		0841	04.75	15	-0.2	39		
PUK	SZ	IPG		0841	06.90	336	-0.1	85	29	2.8
PUK	SE	ISG		0841	19.10	336	0.1	85		
BCI	SZ	IPG		0841	12.20	350	0.1	115		
BCI	SE	ISG		0841	28.01	350	0.1	115		
TPE	SZ	IPG		0841	13.05	193	0.1	120		
TPE	SE	ISG		0841	29.50	193	0.1	120		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	21	0811	47.96	40.15	19.85	8	ASN	3	0.1	2.5	HIMARE-ALBANIA
GAP=135				hor.err=1km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0811	52.20	42	-0.1	21	22	2.4
TPE	SE	ISG		0811	55.60	42	0.1	21		
SRN	SZ	IPG		0811	54.27	155	-0.1	22	23	2.5
SRN	SE	ISG		0811	59.18	155	0.2	22		
SCTE	SZ	IPG		0812	09.10	267	0.2	117		
SCTE	SE	ISG		0812	24.47	267	0.1	117		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	21										PHP
GAP=			hor.err=km			ver.err=KM						
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
PHP	SZ	IPG		1814	37.18							
PHP	SE	ISG		1814	39.99							
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	21	1849	34.99	39.92	20.57	7	ASN	3	0.1	2.5	GREECE
GAP=255			hor.err=1km			ver.err=2KM						
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
IGT	SZ	IPG		1849	46.85	206	-0.1	48				
IGT	SE	ISG		1849	54.12	206	0.1	48				
SRN	SZ	IPG		1849	46.88	264	-0.1	49	16	2.5		
SRN	SE	ISG		1849	54.66	264	0.1	49				
TPE	SZ	IPG		1849	49.27	311	0.1	62	25	2.6		
TPE	SE	ISG		1849	58.43	311	0.1	62				
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	21	2355	03.74	40.14	19.78	10	ASN	3	0.1	1.8	VUNO-
ALBANIA			hor.err=2km			ver.err=1KM						
GAP=274												
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
TPE	SZ	IPG		2355	09.50	48	0.1	25	11	1.8		
TPE	SE	ISG		2355	13.75	48	0.1	25				
SRN	SZ	IPG		2355	11.13	174	0.1	34	6	1.6		
SRN	SE	ISG		2355	15.73	174	0.2	34				
IGT	SZ	IPG		2355	19.92	145	0.1	82				
IGT	SE	ISG		2355	30.39	145	0.2	82				
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	22	0444	54.12	42.84	14.15	9	ASN	4	0.3	4.5	CENTRAL
ITALY			hor.err=38km			ver.err=34KM						
GAP=316												
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
SGRT	SZ	IPG		0645	29.07	132	0.2	180				
SGRT	SE	ISG		0646	07.20	132	0.1	180				
MRVN	SZ	IPG		0645	39.21	138	0.2	260				
MRVN	SE	ISG		0646	20.09	138	0.1	260				
NOCI	SZ	IPG		0645	48.02	122	0.2	332				
NOCI	SE	ISG		0646	21.50	122	0.1	332				

SCTE	SZ	IPG	0646	00.02	129	0.2	474
PUK	SZ	IPG	0647	29.07	98	0.2	474
PUK	SE	ISG	0647	07.20	98	0.1	480
BCI	SZ	IPG	0646	06.09	94	0.2	480
BCI	SE	ISG	0646	58.18	94	0.1	502
TIR	SZ	IPG	0646	07.04	107	0.2	502
TIR	SE	ISG	0647	05.07	107	0.1	517
VLO	SZ	IPG	0646	11.09	118	0.2	517
PHP	SZ	IPG	0646	13.17	101	0.2	534
TPE	SZ	IPG	0646	18.03	118	0.2	565
SRN	SZ	IPG	0646	18.13	122	0.2	590
SRN	SE	ISG	0647	24.23	122	0.1	590
IGT	SZ	IPG	0646	24.16	123	0.2	636
LKD2	SZ	IPG	0646	33.48	127	0.2	710
THE	SZ	IPG	0646	40.67	105	0.2	774

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	22	1650	10.92	41.87	20.72	7	ASN	3	0.1	2.9	32KM S-E KUKES -ALBANIA
				GAP=273		hor.err=10km			ver.err=1KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1650	16.91	229	-0.1	31	25	2.6
PHP	SE	ISG		1650	21.47	229	0.1	31		
PUK	SZ	IPG		1650	23.80	286	-0.1	71	34	2.9
PUK	SE	ISG		1650	33.46	286	-0.1	71		
BCI	SZ	IPG		1650	24.83	316	0.1	77	32	2.9
BCI	SE	ISG		1650	35.77	316	0.2	77		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	22	2125	16.10	40.64	19.73	18	ASN	12	0.1	2.9	VISOKE, BALLESH-ALBANIA
				GAP=124		hor.err=1km			ver.err=1KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		2125	23.03	226	0.1	28	27	3.4
VLO	SE	ISG		2125	27.47	226	0.1	28		
TPE	SZ	IPG		2125	25.58	149	-0.1	46	27	2.6
TPE	SE	ISG		2125	32.12	149	-0.1	46		
TIR	SZ	IPG		2125	30.69	8	-0.1	78	32	2.3
TIR	SE	ISG		2125	41.92	8	0.3	78		
SRN	SZ	IPG		2125	33.54	164	0.1	88		
SRN	SE	ISG		2125	44.54	164	0.1	88		
SCTE	SZ	IPN		2125	38.41	240	0.2	125		
SCTE	SE	ISN		2125	54.48	240	0.1	125		
PHP	SZ	IPN		2125	39.16	27	-0.2	129		
PHP	SE	ISN		2125	56.02	27	0.1	129		
IGT	SZ	IPN		2125	40.63	157	-0.1	134		
IGT	SE	ISN		2125	58.08	157	0.2	134		
PUK	SZ	IPN		2125	43.03	4	-0.2	155		

PUK	SE	ISN	2126	03.02	4	-0.1	155
BCI	SZ	IPN	2125	49.33	8	0.2	192
BCI	SE	ISN	2126	12.95	8	-0.1	192
LKD2	SZ	IPN	2125	53.12	258	0.2	221
NOCI	SZ	IPN	2125	53.31	275	0.2	226
MRVN	SZ	IPN	2126	04.03	280	0.2	302

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	23	0253	16.57	40.92	19.87	13	ASN	8	0.1	3.0	24KM EAST
GAP=137					hor.err=1km							LUSHNJE-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0253	25.52	359	0.1	47	32	2.9
TIR	SE	ISG		0253	31.89	359	-0.1	47		
VLO	SZ	IPG		0253	28.17	213	0.2	60	37	3
VLO	SE	ISG		0253	36.15	213	0.2	60		
TPE	SZ	IPG		0253	29.39	171	-0.1	71	33	3
TPE	SE	ISG		0253	39.01	171	-0.1	71		
PHP	SZ	IPG		0253	33.49	28	-0.2	96	35	3
PHP	SE	ISG		0253	46.75	28	-0.1	96		
SRN	SZ	IPG		0253	37.19	174	0.1	116	34	3
SRN	SE	ISG		0253	52.58	174	0.1	116		
PUK	SZ	IPG		0253	38.42	0	0.1	124	33	3
PUK	SE	ISG		0253	54.46	0	-0.1	124		
SCTE	SZ	IPN		0253	42.53	233	-0.1	152		
SCTE	SE	ISN		0254	02.37	233	0.1	152		
BCI	SZ	IPN		0253	44.14	5	0.1	161	46	3.3
BCI	SE	ISN		0254	04.96	5	0.1	161		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	23	0758	26.89	39.17	18.84	5	ASN	7	0.1	3.2	SOUTHER ITALY
GAP=209					hor.err=1km							

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SCTE	SZ	IPG		0758	45.80	342	0.1	105		
SCTE	SE	ISG		0758	59.68	342	-0.1	105		
SRN	SZ	IPN		0758	49.21	51	-0.1	126	44	3.2
SRN	SE	ISN		0759	06.19	51	0.2	126		
IGT	SZ	IPN		0758	50.83	72	0.2	133	42	3.2
IGT	SE	ISN		0759	08.21	72	-0.1	133		
TPE	SZ	IPN		0758	54.64	38	-0.2	158		
TPE	SE	ISN		0759	16.31	38	0.3	158		
LKD2	SZ	IPN		0758	55.40	105	-0.1	163		
LKD2	SE	ISN		0759	16.81	105	0.1	163		
NOCI	SZ	IPN		0759	07.01	321	0.3	234		
MVRN	SZ	IPN		0759	16.22	314	0.2	308		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	23	0825	13.91	41.46	20.05	7	ASN	3	0.2	2	GURE BARDHE TIRANE-ALBANIA
				hor.err=14km			ver.err=1KM			GAP=177		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0825	18.39	230	0.1	21	12	1.9
TIR	SE	ISG		0825	21.22	230	-0.1	21		
PHP	SZ	IPG		0825	21.74	53	0.1	40		
PHP	SE	ISG		0825	26.69	53	-0.1	40		
PUK	SZ	IPG		0825	25.71	349	-0.1	65		
PUK	SE	ISG		0825	34.74	349	0.1	65		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	24	1316	05.53	42.52	19.07	20	ASN	3	0.2	2.6	MONTENEGRO
				hor.err=13km			ver.err=1KM			GAP=332		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		1316	20.40	101	0.1	21	22	2.7
BCI	SE	ISG		1316	31.64	101	-0.1	21		
PUK	SZ	IPG		1316	20.94	128	0.1	40	19	2.6
PUK	SE	ISG		1316	32.31	128	-0.1	40		
PHP	SZ	IPG		1316	30.43	129	-0.1	65	19	2.6
PHP	SE	ISG		1316	49.21	129	0.1	65		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	24	1401	01.26	40.12	19.93	9	ASN	11	0.2	3.1	16KM EAST HIMARE-ALBANIA
				hor.err=2km			ver.err=1KM			GAP=148		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		1401	05.32	18	-0.1	20	30	2.7
TPE	SE	ISG		1401	08.41	18	0.1	20		
SRN	SZ	IPG		1401	06.60	168	-0.1	28	37	2.9
SRN	SE	ISG		1401	10.95	168	0.1	28		
VLO	SZ	IPG		1401	11.15	316	0.1	53	40	3
VLO	SE	ISG		1401	18.40	316	-0.1	53		
IGT	SZ	IPG		1401	14.66	152	0.0	74		
IGT	SE	ISG		1401	24.77	152	-0.1	74		
SCTE	SZ	IPG		1401	23.59	268	0.2	125		
SCTE	SE	ISG		1401	37.15	268	0.3	125		
TIR	SZ	IPN		1401	25.72	358	0.3	136	44	3.2
TIR	SE	ISN		1401	43.12	358	0.2	136		
LKD2	SZ	IPN		1401	28.82	157	-0.3	161		
LKD2	SE	ISN		1401	50.16	157	-0.1	161		
PHP	SZ	IPN		1401	32.04	13	0.2	178		
PHP	SE	ISN		1401	55.58	13	-0.1	178		
PUK	SZ	IPN		1401	36.77	0	0.1	213		
PUK	SE	ISN		1402	04.31	0	-0.2	213		

BCI	SZ	IPN	1401	41.60	2	-0.1	249
NOCI	SZ	IPN	1401	42.56	254	-0.3	254
NOCI	SE	ISN	1402	14.01	254	-0.1	254

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	24	1727	03.26	39.93	20.10	3	ASN	5	0.1	3	FINIQ, SARANDE -ALBANIA
GAP=167				hor.err=3km			ver.err=2KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		1727	05.59	238	-0.1	10	28	2.6
SRN	SE	ISG		1727	08.10	238	0.1	10		
TPE	SZ	IPG		1727	05.59	349	-0.1	41	29	2.7
TPE	SE	ISG		1727	08.10	349	0.1	41		
TIR	SZ	IPG		1727	05.59	353	-0.1	158		
TIR	SE	ISG		1727	08.10	353	0.1	158		
PHP	SZ	IPG		1727	05.59	8	-0.1	196	48	3.3
PHP	SE	ISG		1727	08.10	8	0.1	196		
PUK	SZ	IPG		1727	05.59	356	-0.1	356	51	3.4
PUK	SE	ISG		1727	08.10	356	0.1	356		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	25	0031	55.22				ASN				T
GAP=				hor.err=			ver.err=					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0031	55.22					
TIR	SE	ISG		0031	59.15					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	25	0307	44.50	40.95	20.86	1	ASN	6	0.1	2.8	MACEDONIA
GAP=219				hor.err=1km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0308	00.56	337	-0.1	88	28	2.8
PHP	SE	ISG		0308	12.87	337	-0.1	88		
TIR	SZ	IPG		0308	01.83	298	0.1	94	26	2.6
TIR	SE	ISG		0308	14.76	298	0.1	94		
SRN	SZ	IPG		0308	09.55	212	-0.1	140	27	2.8
SRN	SE	ISG		0308	28.50	212	-0.1	140		
PUK	SZ	IPG		0308	10.58	327	0.1	145	30	2.9
PUK	SE	ISG		0308	30.10	327	0.1	145		
IGT	SZ	IPG		0308	13.89	197	0.3	165		
IGT	SE	ISG		0308	36.48	197	0.2	165		
BCI	SZ	IPG		0308	15.47	338	-0.1	170		
BCI	SE	ISG		0308	37.04	338	0.3	170		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	26	0035	21.01	41.10	19.92	6	ASN 4	0.3	2.6		6KM N-E BORSH -ALBANIA
				hor.err=2km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0035	27.19	18	-0.2	22	28	2.7
TPE	SE	ISG		0035	31.74	18	0.3	22		
SRN	SZ	IPG		0035	27.93	166	0.1	26	21	2.5
SRN	SE	ISG		0035	32.18	166	0.2	26		
VLO	SZ	IPG		0035	33.27	318	-0.3	54		
VLO	SE	ISG		0035	40.46	318	0.1	54		
PUK	SZ	IPN		0035	58.35	0	0.3	214		
PUK	SE	ISN		0036	24.32	0	0.2	214		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	26	0259	57.40	40.41	21.49	21	ASN 8	0.1	3.1		GREECE
				hor.err=1km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0300	19.06	265	0.1	127	31	3.1
TPE	SE	ISG		0300	35.66	265	-0.2	127		
IGT	SZ	IPG		0300	21.36	226	0.1	140		
IGT	SE	ISG		0300	39.44	226	0.1	140		
SRN	SZ	IPG		0300	21.49	246	0.1	141	31	3.1
SRN	SE	ISG		0300	38.43	246	0.1	141		
PHP	SZ	IPG		0300	25.50	329	0.1	167	35	3.2
PHP	SE	ISG		0300	46.43	329	0.1	167		
TIR	SZ	IPG		0300	26.07	308	-0.2	172		
TIR	SE	ISG		0300	48.00	308	0.1	172		
LKD2	SZ	IPG		0300	29.85	202	-0.1	194		
LKD2	SE	ISG		0300	53.56	202	0.3	194		
PUK	SZ	IPG		0300	33.65	324	-0.1	225		
PUK	SE	ISG		0301	00.47	324	0.1	225		
BCI	SZ	IPG		0300	36.46	332	0.1	248		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	28	0721	40.50	41.83	18.98	6	ASN 3	0.6	2.8		ADRIATIC SEA
				hor.err=3km			ver.err=15KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		0721	54.49	72	0.1	79	29	2.8
PUK	SE	ISG		0722	04.24	72	-0.3	79		
BCI	SZ	IPN		0722	00.05	55	0.2	107		
BCI	SE	ISN		0722	14.15	55	0.3	107		
PHP	SZ	IPN		0722	01.43	97	-0.3	122		
PHP	SE	ISN		0722	18.98	97	0.2	122		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	28	1213	20.96	40.10	19.96	2	ASN	8	0.1	2.7	FTERR, SARANDE -ALBANIA
				hor.err=1km			ver.err=1KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
TPE	SZ	IPG		1213	25.41	10	0.1	21	27	2.6		
TPE	SE	ISG		1213	28.38	10	-0.1	21				
VLO	SZ	IPG		1213	31.55	316	-0.1	56	27	2.6		
VLO	SE	ISG		1213	39.74	316	0.1	56				
IGT	SZ	IPG		1213	34.17	153	-0.1	71				
IGT	SE	ISG		1213	44.20	153	0.1	71				
SCTE	SZ	IPG		1214	00.70	269	-0.3	127				
TIR	SZ	IPG		1213	46.30	357	0.3	138				
TIR	SE	ISG		1214	04.01	357	-0.2	138				
LKD2	SZ	IPG		1213	49.49	157	0.1	158				
PHP	SZ	IPG		1213	52.50	12	0.1	180				
PUK	SZ	IPG		1213	57.89	359	-0.2	214				
NOCI	SZ	IPG		1214	04.00	289	0.1	257				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	28	1413	00.17	39.77	20.83	6	ASN	5	0.1	2.7	GREECE
GAP=239				hor.err=1km			ver.err=1KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
IGT	SZ	IPG		1413	09.54	239	-0.1	51				
IGT	SE	ISG		1413	16.54	239	-0.1	51				
SRN	SZ	IPG		1413	13.32	280	0.1	72	26	2.7		
SRN	SE	ISG		1413	22.97	280	-0.1	72				
TPE	SZ	IPG		1413	16.48	310	0.1	91	26	2.7		
TPE	SE	ISG		1413	28.60	310	-0.1	91				
LKD2	SZ	IPG		1413	19.61	189	0.1	110				
LKD2	SE	ISG		1413	34.36	189	0.1	110				
SCTE	SZ	IPG		1413	35.29	281	0.1	205				
SCTE	SE	ISG		1414	02.11	281	0.3	205				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	28	2305	58.11	40.13	19.82	6	ASN	5	0.1	2.6	7KM N-E HIMARE -ALBANIA
GAP=133				hor.err=1km			ver.err=13KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
TPE	SZ	IPG		2306	02.71	41	-0.1	23	27	2.6		
TPE	SE	ISG		2306	06.30	41	0.1	23				
SRN	SZ	IPG		2306	04.15	152	-0.1	32	23	2.5		
SRN	SE	ISG		2306	08.84	152	0.1	32				
IGT	SZ	IPG		2306	12.47	147	-0.1	80				



IGT	SE	ISG	2306	23.31	147	0.1	80
SCTE	SZ	IPG	2306	18.74	268	-0.1	116
LKD2	SZ	IPN	2306	27.22	154	-0.1	166
LKD2	SE	ISN	2306	48.63	154	0.1	166

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	29	0344	56.30	40.13	19.78	4	ASN	5	0.1	2.6	6KM N-E HIMARE -ALBANIA
GAP=141				hor.err=1km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0345	04.46	48	0.1	25	24	2.5
TPE	SE	ISG		0345	08.20	48	-0.1	25		
SRN	SZ	IPG		0345	05.79	148	-0.2	34	24	2.6
SRN	SE	ISG		0345	10.93	148	-0.1	34		
IGT	SZ	IPG		0345	14.35	145	0.1	82		
IGT	SE	ISG		0345	25.47	145	0.1	82		
SCTE	SZ	IPG		0345	19.43	267	-0.1	113		
SCTE	SE	ISG		0345	34.59	267	0.1	113		
LKD2	SZ	IPN		0345	28.36	153	-0.2	168		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	30	1235	09.63	41.31	19.82	18	ASN	3	0.3	2.4	TIRANE-ALBANIA
GAP=313				hor.err=1km			ver.err=0KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1235	13.17	42	0.2	5	13	2.0
TIR	SE	ISG		1235	15.47	42	0.3	5		
PHP	SZ	IPG		1235	21.59	51	-0.3	66	19	2.5
PHP	SE	ISG		1235	30.95	51	0.4	66		
PUK	SZ	IPG		1235	24.15	4	0.1	81	17	2.4
PUK	SE	ISG		1235	35.35	4	-0.4	81		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	30	1302	57.07								
GAP=				hor.err=km			ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		1302	57.07					
TPE	SE	ISG		1303	01.42					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	31	1332	14.11								
GAP=				hor.err=km			ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1332	14.11					
PUK	SE	ISG		1332	15.16					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	31	1747	26.39	40.78	19.72	8	ASN	3	0.3	2.3	13KM N-E FIER
GAP=313					hor.err=1km			ver.err=2KM				-ALBANIA

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		1747	34.07	210	0.2	40	13	2.1
VLO	SE	ISG		1747	39.87	210	0.3	40		
TPE	SZ	IPG		1747	37.10	156	-0.3	59	18	2.3
TPE	SE	ISG		1747	45.60	156	0.1	59		
SRN	SZ	IPG		1747	44.88	167	-0.4	103	16	2.3
SRN	SE	ISG		1747	58.98	167	0.1	103		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	8	31	2307	29.15								
GAP=					hor.err=km			ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		2307	29.15					
TPE	SE	ISG		2307	30.27					

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

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

Intensiteti i tërmetit në epiqendër  $I_0$  është përcaktuar me formulën  $I_0 = \text{---}$ . Intensiteti I në qytete është

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

The epicentral Intensity of earthquake  $I_0$  is determined by the formula  $I_0 = \text{---}$ . The felt

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

<b>Nr</b>	<b>D a t a (D a t e)</b>	<b>Kohëndodhja (Origin time)</b>	<b>Epiqendra dhe të dhëna makrosizmike EMS-98 (Epicenter and macroseismic data EMS-98)</b>
1	13.08.2013	04:58:02.08	Epiqendra: 40.71V; 19.66L, 9 km në Lindje të qytetit Fierit. Intensiteti i tërmetit në epiqendër $I_0=IV-V$ balle Ndjerë: IV ballë ne qytetet e Fierit, Patosit. (Epicentre: 40.71N; 19.66E, 9 km East of Fieri town. Epicentral Intensity $I_0=IV-V$ . Felt: IV at Fieri, Patosi towns
2	15.08.2013	15:49:43.1	Epiqendra: 40.85V; 20.82L, në Drenov te Korces. Intensiteti i tërmetit në epiqendër $I_0=IV$ balle Ndjerë: IV ballë ne qytetin e Korces, (Epicentre: 40.85N; 20.82E, 6 km Drenov, Korca district. Epicentral Intensity $I_0=IV$ . Felt: IV at Korca town.

## KATALOGU I TËRMETEVE MUJORE (THE MONTHLY EARTHQUAKE CATALOG)

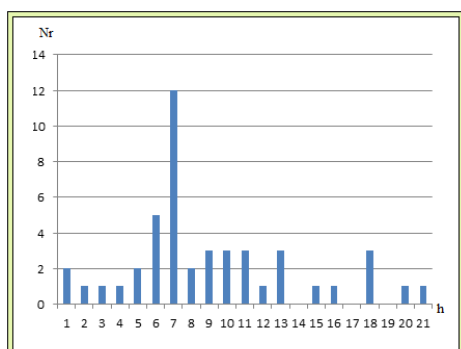
Data Date	Koha Time	Gjer. Lat	Gjat Long.	Thell. Depth (km)	Nr. St N <sub>0</sub> .	St Rms	Mag. (M <sub>D</sub> )	Vendndodhja Location
2013 8 2	1319	31.45	41.52	19.66	7	3	0.1 2.2	THUMANE-ALBANIA
2013 8 2	2127	19.29	41.19	20.54	10	5	0.1 2.7	LESKOVIK-ALBANIA
2013 8 4	2146	24.69	39.21	20.83	7	4	0.4 3.5	GREECE
2013 8 4	2345	56.36	40.25	20.59	6	5	0.2 3	SANJOLLAS, LESKOVIK-ALBANIA
2013 8 5	0213	35.76	40.36	20.75	7	3	0.1 2.8	5 KM EAST LESKOVIK-ALBANIA
2013 8 5	0611	16.46	41.17	20.06	13	3	0.1 2.6	7 KM NORD ELBASAN-ALBANIA
2013 8 5	0613	40.39	39.75	20.53	7	5	0.1 2.6	GREECE
2013 8 5	1621	24.04	39.8	20.41	5	4	0.1 3.1	GREECE
2013 8 6	0101	31.26	41.17	20.02	16	3	0.1 2.5	8KM NORTH-WEST ELBASAN-ALBANIA
2013 8 7	0429	17.61	42.31	19.44	7	3	0.1 2.4	VUKPALAJ, KOPLIK-ALBANIA
2013 8 7	0956	45.83	38.70	22.68	7	5	0.1 5.1	GREECE
2013 8 7	1344	36.67	38.73	22.65	7	7	0.1 4.8	GREECE
2013 8 8	0215	20.57	42.52	19.78	7	4	0.2 2.6	GUSINJE KOSOVE
2013 8 8	1635	32.64	38.85	22.48	6	7	0.3 3.6	GREECE
2013 8 9	0123	12.08	40.16	19.84	7	3	0.1 2.3	10 NORTH-EAST HIMARE-ALBANIA
2013 8 9	0419	22.48	39.20	20.29	9	8	0.2 4.1	GREECE
2013 8 10	0502	47.03	41.21	20.03	11	4	0.1 2.8	KRRABE, TIRANE-ALBANIA
2013 8 10	0503	55.69	41.20	20.10	13	4	0.1 2.8	KRRABE, TIRANE-ALBANIA
2013 8 10	2110	07.06	42.23	20.07	11	3	0.1 2.3	KRRABE, TIRANE-ALBANIA
2013 8 12	0100	46.53	41.94	20.54	7	3	0.1 2.5	TOPOJAN, KUKES-ALBANIA
2013 8 12	1531	04.89	41.13	20.06	15	3	0.2 2.2	4KM WEST-NORTH ELBASAN-ALBANIA
2013 8 12	2144	42.02	41.52	19.59	9	6	0.3 2.8	SHEN PJETER ISHEM-ALBANIA
2013 8 13	0458	02.08	40.71	19.66	12	7	0.1 3.8	9KM EAST FIERI-ALBANIA
2013 8 13	1325	12.98	41.77	20.05	7	7	0.1 3.1	KURBNESH-ALBANIA
2013 8 13	1312	04.21	43.36	19.34	6	10	0.2 3.5	MONTENEGRO
2013 8 15	1549	43.07	40.58	20.82	2	7	0.2 3.3	DRENOVE, KORCE-ALBANIA
2013 8 15	2042	37.98	41.49	20.20	20	3	0.2 2.3	BULQIZE-ALBANIA
2013 8 16	0521	49.07	41.14	20.06	10	3	0.1 2.1	ELBASAN-ALBANIA
2013 8 17	2129	04.48	41.96	20.14	7	3	0.1 2.3	KLOS, KUKES-ALBANIA
2013 8 18	1042	54.07	38.82	22.76	18	6	0.3 4.2	GREQI
2013 8 19	0123	48.00	41.58	20.14	10	4	0.3 2.5	BURREL-ALBANIA
2013 8 19	0838	52.30	41.73	20.31	18	3	0.1 2.5	PESHKOPI-ALBANIA
2013 8 19	2127	42.44	41.23	20.39	11	3	0.1 2.4	LIBRAZHD-ALBANIA
2013 8 20	0840	51.10	41.34	20.32	1	5	0.1 2.5	LIBRAZHD-ALBANIA

2013	8	21	0811	47.96	40.15	19.85	8	3	0.1	2.5	HIMARE-ALBANIA
2013	8	21	1849	34.99	39.92	20.57	7	3	0.1	2.5	GREECE
2013	8	21	2355	03.74	40.14	19.78	10	3	0.1	1.8	VUNO-ALBANIA
2013	8	22	0444	54.12	42.84	14.15	9	4	0.3	4.5	CENTRAL ITALY
2013	8	22	1650	10.92	41.87	20.72	7	3	0.1	2.9	32KM SOUTH-EAST KUKES-ALBANIA
2013	8	22	2125	16.10	40.64	19.73	18	12	0.1	2.9	VISOKE, BALLESH-ALBANIA
2013	8	23	0253	16.57	40.92	19.87	13	8	0.1	3.0	24KM EAST LUSHNJE-ALBANIA
2013	8	23	0758	26.89	39.17	18.84	5	7	0.1	3.2	SOUTHER ITALY
2013	8	23	0825	13.91	41.46	20.05	7	3	0.2	2	GURE BARDHE, TIRANE-ALBANIA
2013	8	24	1316	05.53	42.52	19.07	20	3	0.2	2.6	MONTENEGRO
2013	8	24	1401	01.26	40.12	19.93	9	11	0.2	3.1	16 KM EAST HIMARE-ALBANIA
2013	8	24	1727	03.26	39.93	20.10	3	5	0.1	3	FINIQ, SARANDE-ALBANIA
2013	8	25	0307	44.50	40.95	20.86	1	6	0.1	2.8	FYR OF MACEDONIA
2013	8	26	0035	21.01	41.10	19.92	6	4	0.3	2.6	6KM NORTH-EAST BORSH-ALBANIA
2013	8	26	0259	57.40	40.41	21.49	21	8	0.1	3.1	GREECE
2013	8	28	0721	40.50	41.83	18.98	6	3	0.6	2.8	ADRIATIC SEA
2013	8	28	1213	20.96	40.10	19.96	2	8	0.1	2.7	FTERR, SARANDE-ALBANIA
2013	8	28	1413	00.17	39.77	20.83	6	5	0.1	2.7	GREECE
2013	8	28	2305	58.11	40.13	19.82	6	5	0.1	2.6	7KM NORTH-EAST HIMARE-ALBANIA
2013	8	29	0344	56.30	40.13	19.78	4	5	0.1	2.6	6KM NORTH-EAST HIMARE-ALBANIA
2013	8	30	1235	09.63	41.31	19.82	18	3	0.3	2.4	TIRANE-ALBANIA
2013	8	31	1747	26.39	40.78	19.72	8	3	0.3	2.3	13KM NORTH-EAST FIER-ALBANIA

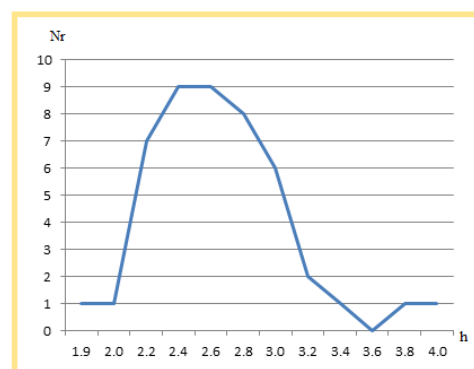
## STATISTIKA E NGJARJEVE SIZMIKE (STATISTICS OF SEISMIC EVENTS)

Karakteristikat e pergjithshme (General Characteristics)	Vlerat (Data values)
➤ Ngjarje sizmike të ndodhura në kuadrantin (39-43 V; 18.5-21.5 L) <b>Events occurred within quadrant</b>	50
➤ Ngjarje sizmike të ndodhura brenda kufijve shtetërore <b>Events occurred inside state boundaries</b>	35
➤ Thellësia mesatare e ngjarjeve sizmike	9

<b>Mean hypocenter depth</b>	21
➤ <i>Thellësia maksimale</i>	
<b>Maximum hypocenter depth</b>	1.8
➤ <i>Magnituda lokale minimale e regjistruar</i>	
<b>Minimum recorded local magnitude</b>	4.1
➤ <i>Magnituda lokale maksimale e regjistruar</i>	
<b>Maximum recorded local magnitude</b>	V
➤ <i>Intensiteti sizmik maksimal ne epiqendër</i>	
<b>Maximum seismic intensity</b>	



*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 vatorr (ZMV)

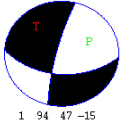
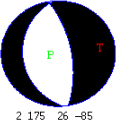
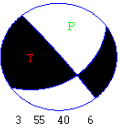
Për zgjidhjen e mekanizmit të vates janë përdorur polaritetet e hyrjeve të para P (Pg/Pn), të përcaktuara mbi format valore që shprehin funksionin kohor të burimit sizmik perkatës, në fushën e shpejtësisë. Janë përdorur regjistrimet në bandë të gjere frekuenciale (0.2 – 30 Hz), të cilat janë modeluar 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

### 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, which 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,

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).

( AMPSn/AMPPn), areused. These amplitudes are red 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 i ngjarjes (Event ID)	Parametrat e burimit (Source parameters)	Magnituda (Magnitude)	Parametrat e Mekanizmit (Focal Mechanism parameters)	Tipi (Focal Type)
2013.08.04.23:45	40.25 (N) 20.59 (E) 6 (km)	3.0	P1: 94, 47, -15 P2: 194, 80, -136 T: 317, 21 P: 64, 38	
2013.08.13.04:58	40.71 (N) 19.67 (E) 12 (km)	3.8	P1: 175, 26, -85 P2: 350, 64, -92 T: 82, 19 P: 255, 71	
2013.08.15.15:49	40.62 (N) 20.72 (E) 15 (km)	3.3	P1: 55, 40, 6 P2: 321, 86, 130 T: 265, 36 P: 19, 29	

Harta e epiqendrave të tërmeteve

