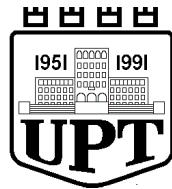


BULETINI I TËRMETEVE TË RRJETIT SIZMOLOGJIK SHQIPTAR

JANAR 2013

PARAMETRIC DATA
AND ALBANIAN'S EARTHQUAKE ANALYSIS
JANUARY 2013



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

BULETINI MUJOR I RRJETIT SIZMOLOGJIK

TË SHQIPERISË

JANAR 2013

MONTHLY BULLETIN OF THE ALBANIAN

SEISMOLOGICAL NETWORK

JANUARY 2013

Përliluar nga:

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Tiranë, 2013

INFORMACION I PERGJITSHEM**Prezantim**

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

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

Buletini përbën pjesën spjeguese të përbërë nga informacioni i përgjithshëm, simbolet e përdorura për parametrat e vlerësuar, të dhënat fazore valore për seicilin nga tërmetet e regjistruar dhe përpunuuar, katalogu mujor i tërmeteve, informacionin makrosimik, statistikor, mekanizmin vatror dhe hartën e shpërndarjes së epiqendrave. Në të përfshihen disa kategori tërmetesh, bazuar në informacionin e regjistruar dhe përpunuuar për secilen 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 te regjistruar të paktën nga një stacion lokal, por me më shumë se një fazë valore.

Të dhënët parametrike, si më siper, 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 njoitura, në menyrë

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° - 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 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 certifikuar dhe të njojur 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 (Ormeni 2007) (kryesisht atyre volumore, primare dhe sekondare, P dhe S). Vlerësimi i magnitudës realizohet duke aplikuar modele të njojur parametrik si ai Richter & Gutenberg (1956) dhe Eaton (1992).

Analiza e të dhënave të publikuara realizohet nga grapi i punes i përbere 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), te 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 perfshihen 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 Kombtar 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 (Ormeni, 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 Comunication 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)	Gjerësia gjeografike e epikendrës Veri-Jug($^{\circ}$) Geographical latitude N-S direction
<i>Lon</i>	Gjatësia gjeografike (longitude)	Gjatesia gjeografike e epikendrës Lindje-Perendim($^{\circ}$) Geographical longitude E-W direction
<i>Dep</i>	Thellësia (depth)	Thellësia vatore (focal depth)-km
<i>Hor. err</i>	Gabimi horizontal (horizontal error)	Gabimi i bërë në vlerësimin e epikendrës (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 (azimuthal gap)	Zona e sferës fokale (imaginare), e pa mbuluar me stacione regjistrues Azimuthal station gap
<i>Rms</i>	Gabimi mesatar kuadratik (Root mean square)	Gabimi i per gjithshem (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 që përdoret për të identifikuar stacionin përkatës 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 mbrritjen 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 ndërmjet kohës teorike të llogaritur nga modeli dhe kohës faktike, nga regjistrimi Time residuals between calculated and observed times
DIS	Largesia epiqendrore (epicentral distance)	Lagesia hoxizontale 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	1	2	0251	36.14	42.46	19.64	10	ASN	2	0.1	2.1	VUKEL, SHKODER
GAP=311					hor.err=10km							ver,err=1KM
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES		DIS		DUR	Md
BCI	SZ	IPG		0251	42.89	107	0.1		36		11	2.1
BCI	SE	ISG		0251	48.26	107	-0.1		36			
PUK	SZ	IPG		0251	45.66	156	-0.1		51		17	2.2
PUK	SE	ISG		0251	52.62	156	0.1		51			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 2 0327 27.97
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
BCI SZ IPG 0327 27.97					
BCI SE ISG 0327 31.02					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 2 0522 39.82
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
PHP SZ IPG 0522 39.82					
PHP SE ISG 0522 42.80					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 2 0542 31.03
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
PHP SZ IPG 0542 31.03					
PHP SE ISG 0542 34.00					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 2 1156 07.66
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
PHP SZ IPG 1156 07.66					
PHP SE ISG 1156 12.06					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 2 1706 53.23 41.46 19.70 7 ASN 2 0.1 2 FUSHE-KRUJE
GAP=295 hor,err=12km ver,err=1KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
TIR SZ IPG 1706 57.26	133	0.1	18	10	1.8
TIR SE ISG 1706 59.94	133	0.1	18		
PUK SZ IPG 1706 05.14	68	0.0	66	16	2.2

PUK	SE	ISG	1706	14.39	68	0.1	66
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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	2	1939	01.72
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GAP=	hor.err=km					ver,err=KM					
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1939	01.72					
PHP	SE	ISG		1939	05.50					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	2	2250	44.26	41.22	19.25	7	ASN	2	0.1	2.6	DETI ADRIATIK
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GAP=315	hor,err=10km					ver,err=1KM					
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2250	53.96	74	0.0	52	23	2.5
TIR	SE	ISG		2251	01.28	74	0.0	52		
PUK	SZ	IPG		2251	02.96	29	0.0	105	27	2.7
PUK	SE	ISG		2251	17.02	29	0.1	105		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	2	2342	22.88	41.28	19.28	7	ASN	2	0.1	1.9	DETI ADRIATIK
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GAP=309	hor,err=11km					ver,err=1KM					
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2342	31.95	81	0.1	49	11	1.9
TIR	SE	ISG		2342	38.87	81	0.0	49		
PUK	SZ	IPG		2342	40.53	22	0.0	98	10	1.9
PUK	SE	ISG		2342	53.65	22	0.1	98		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	4	0750	46.35	37.81	14.80	7	ASN	5	1.1	4.5	SIÇILI-ITALI
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GAP=356	hor,err=16km					ver,err=21KM					
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
NOCI	SZ	IPN		0750	59.82	17	0.7	295			
NOCI	SE	ISN		0751	42.39	17	-0.8	295			
IGT	SZ	IPN		0751	16.21	67	-0.8	400			
IGT	SE	ISN		0752	05.69	67	0.9	400			
FNA	SZ	IPN		0751	34.53	56	0.7	540			
FNA	SE	ISN		0752	36.34	56	-0.8	540			
PUK	SZ	IPN		0751	33.49	36	-0.8	534	128	4.5	

BCI	SZ	IPN	0751	38.88	35	-1.1	572	129	4.5
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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	5	1612	53.42	39.62	20.54	7	ASN	3	0.2	2.6	VORSINA, KONISPOL
				hor.err=3km							ver.err=2KM	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPG		1612	56.60	241	0.1	20		
IGT	SE	ISG		1613	01.05	241	0.1	20		
SRN	SZ	IPG		1613	02.97	302	0.0	54	23	2.6
SRN	SE	ISG		1613	10.13	302	0.1	54		
TPE	SZ	IPG		1613	09.25	329	0.1	87	24	2.6
TPE	SE	ISG		1613	21.16	329	0.1	87		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	6	0225	41.13	340.77	21.30	4	ASN	3	0.1	2.5	GREQI
				hor.err=7km							ver.err=11KM	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		0225	42.89	86	0.1	7		
FNA	SE	ISG		0225	43.96	86	0.1	7		
KBN	SZ	IPG		0225	49.85	249	0.0	46	20	2.5
KBN	SE	ISG		0225	56.64	249	0.1	46		
IGT	SZ	IPN		0226	11.90	212	0.0	161		
IGT	SE	ISN		0226	31.21	212	0.1	161		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	6	0337	27.43								
				hor.err=km							ver.err=KM	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0337	27.43					
PHP	SE	ISG		0337	31.50					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	6	0342	25.89								
				hor.err=km							ver.err=KM	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0342	25.89					
PHP	SE	ISG		0342	30.06					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 6 0405 21.58
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
PHP SZ IPG 0405 21.58					
PHP SE ISG 0405 26.10					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 6 0424 20.09
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
PHP SZ IPG 0424 20.09					
PHP SE ISG 0424 25.04					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 6 0428 52.90
GAP= hor,err=km ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
PHP SZ IPG 0428 52.90					
PHP SE ISG 0428 57.28					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 6 1712 06.11 40.52 19.61 13 ASN 7 0.1 3.1 VLORE
GAP=251 hor,err=2km ver,err=1KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
VLO SZ IPG 1712 09.57	236	0.1	12	33	2.8
VLO SE ISG 1712 11.22	236	0.0	12		
TPE SZ IPG 1712 14.00	127	0.0	42	45	3.1
TPE SE ISG 1712 20.34	127	0.1	42		
SRN SZ IPG 1712 20.45	155	0.0	79	42	3.1
SRN SE ISG 1712 31.18	155	0.1	79		
TIR SZ IPG 1712 24.07	13	0.0	93	41	3.1
TIR SE ISG 1712 36.49	13	-0.1	93		
PHP SZ IPN 1712 32.00	28	-0.1	145	39	3.1
PHP SE ISN 1712 51.54	28	-0.1	145		
PUK SZ IPN 1712 35.05	7	0.1	161	38	3.1
PUK SE ISN 1712 55.86	7	0.1	161		
BCI SZ IPN 1712 40.18	10	0.1	207	38	3.1

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	6	1840	38.48	40.99	20.20	1	ASN	7	0.1	2.9	GJINAR-ELBASAN
GAP=199 hor,err=2km ver,err=2KM												
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
TIR	SZ	IPG		1840	47.16	326	0.0	49	36	2.9		
TIR	SE	ISG		1840	55.11	326	-0.1	49				
TPE	SZ	IPG		1840	52.21	192	0.0	78	39	3		
TPE	SE	ISG		1841	04.93	192	0.0	78				
PHP	SZ	IPG		1840	52.81	14	0.0	80	34	2.9		
PHP	SE	ISG		1841	05.36	14	-0.1	80				
VLO	SZ	IPG		1840	53.65	227	0.0	82	34	2.9		
VLO	SE	ISG		1841	06.21	227	0.0	82				
PUK	SZ	IPG		1840	59.52	348	-0.1	120	30	2.8		
PUK	SE	ISG		1841	16.21	348	-0.1	120				
SRN	SZ	IPG		1841	00.02	188	-0.1	124	41	3.1		
SRN	SE	ISG		1841	16.59	188	0.1	124				
BCI	SZ	IPN		1841	04.89	356	0.1	153	42	3.1		
BCI	SE	ISN		1841	27.12	356	0.1	153				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	6	2322	26.36	40.14	22.07	1	ASN	8	0.2	3.9	GREECE
GAP=280				hor.err=2km			ver.err=2KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
KBN	SZ	IPN		2322	48.03	297	0.0	121	83	3.7		
KBN	SE	ISN		2323	04.54	297	0.1	121				
TPE	SZ	IPN		2322	57.40	277	-0.1	176	99	3.9		
TPE	SE	ISN		2323	21.82	277	0.1	176				
SRN	SZ	IPN		2322	57.50	262	0.2	179	75	3.7		
SRN	SE	ISN		2323	21.62	262	0.1	179				
PHP	SZ	IPN		2323	04.41	322	0.1	220	112	4.1		
PHP	SE	ISN		2323	32.74	322	-0.1	220				
VLO	SZ	IPN		2323	06.08	281	0.1	222	84	3.8		
VLO	SE	ISN		2323	34.33	281	0.1	222				
TIR	SZ	IPN		2323	06.25	307	-0.1	229	91	3.9		
TIR	SE	ISN		2323	35.48	307	0.1	229				
PUK	SZ	IPN		2323	13.06	320	0.1	279	95	3.9		
PUK	SE	ISN		2323	47.57	320	0.1	279				
BCI	SZ	IPN		2323	15.08	327	0.3	299				

Y M D HM Sec Lat Long Dep Net Nr Rms Mag Epicenter
 2013 1 9 0147 31.04 41.22 20.13 10 ASN 4 0.3 2.7 ELBASAN
 GAP=187 hor,err=0km ver,err=3KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0147	53.67	301	0.1	26	23	2.5
TIR	SE	ISG		0148	00.30	301	0.1	26		
PHP	SZ	IPG		0148	00.51	26	0.1	57	27	2.7
PHP	SE	ISG		0148	09.35	26	-0.1	57		
PUK	SZ	IPG		0148	07.65	348	0.1	93	34	2.9
PUK	SE	ISG		0148	20.23	348	0.1	93		
FNA	SZ	IPN		0148	11.61	114	-0.1	115		
FNA	SE	ISN		0148	28.63	114	0.2	115		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	9	2347	08.94	41.98	20.71	15	ASN	4	0.3	2.6	KOSOVA
GAP=68					hor,err=1km			ver,err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2347	17.10	215	0.2	41	22	2.6
PHP	SE	ISG		2347	22.31	215	-0.1	41		
BCI	SZ	IPG		2347	21.41	309	0.3	68	22	2.6
BCI	SE	ISG		2347	30.34	309	0.2	68		
PUK	SZ	IPG		2347	21.24	276	-0.3	69	21	2.6
PUK	SE	ISG		2347	31.04	276	0.4	69		
FNA	SZ	IPN		2347	33.75	157	0.4	145		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	10	0337	49.51	40.69	19.62	4	ASN	6	0.2	3.2	PATOS
GAP=132					hor,err=1km			ver,err=1KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		0337	54.84	35	0.0	27	41	3.1
VLO	SE	ISG		0337	58.75	35	-0.1	27		
TPE	SZ	IPG		0337	58.18	143	0.0	55	42	3.1
TPE	SE	ISG		0338	07.03	143	0.1	55		
TIR	SZ	IPG		0338	02.63	15	0.0	75	42	3.1
TIR	SE	ISG		0338	13.23	15	0.0	75		
SRN	SZ	IPG		0338	05.29	160	-0.1	95	51	3.3
SRN	SE	ISG		0338	19.47	160	0.0	95		
SCTE	SZ	IPN		0338	10.68	236	0.0	120		
SCTE	SE	ISN		0338	26.14	236	0.1	120		
PHP	SZ	IPN		0338	10.61	31	0.1	129	47	3.3
PHP	SE	ISN		0338	29.57	31	-0.1	129		
PUK	SZ	IPN		0338	15.64	8	0.0	151	62	3.5
PUK	SE	ISN		0338	35.64	8	0.1	151		
BCI	SZ	IPN		0338	21.86	10	-0.1	189	62	3.5
BCI	SE	ISN		0338	44.22	10	0.1	189		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	10	0442	37.64	39.77	20.28	20	ASN	4	0.4	2.7	ZEMNEC, KONISPOL
GAP=125 hor,err=11km ver,err=1KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0442	43.13	296	0.2	26	27	2.7
SRN	SE	ISG		0442	48.01	296	-0.1	26		
IGT	SZ	IPG		0442	43.20	171	0.3	28		
IGT	SE	ISG		0442	48.42	171	0.4	28		
TPE	SZ	IPG		0442	49.57	336	-0.1	62	27	2.7
TPE	SE	ISG		0442	57.60	336	0.2	62		
LKD2	SZ	IPN		0442	59.91	163	0.1	114		
LKD2	SE	ISN		0443	09.78	163	0.4	114		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	11	0319	07.12	41.08	20.24	8	ASN	7	0.1	3.3	
GURSHPATE, ELBSANE GAP=125 hor,err=2km ver,err=6KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0319	14.48	313	0.0	43	43	3.3
TIR	SE	ISG		0319	22.53	313	0.0	43		
PHP	SZ	IPG		0319	18.99	113	0.0	68	43	3.3
PHP	SE	ISG		0319	29.03	113	0.1	68		
KBN	SZ	IPG		0319	18.87	318	0.0	69	43	3.3
KBN	SE	ISG		0319	29.78	318	-0.1	69		
PUK	SZ	IPG		0319	25.82	325	0.1	111	41	3.3
PUK	SE	ISG		0319	42.51	325	0.0	111		
SRN	SZ	IPN		0319	30.18	199	-0.1	135		
SRN	SE	ISN		0319	51.39	199	0.1	135		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	11	2337	31.95								
GAP= hor,err=km ver,err=KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
TIR	SZ	IPG		2337	31.95						
TIR	SE	ISG		2337	35.24						

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	12	2238	25.87	42.33	19.88	6	ASN	3	0.3	2.2	VRANE, B.CURRI
GAP=258 hor,err=11km ver,err=1KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		2238	29.09	76	0.2	15	14	2.0
BCI	SE	ISG		2238	31.78	76	0.1	15		
PUK	SZ	IPG		2238	32.19	178	-0.1	35	19	2.4
PUK	SE	ISG		2238	36.69	178	0.3	35		
PHP	SZ	IPG		2238	40.94	197	0.2	86	19	2.4
PHP	SE	ISG		2238	55.19	197	0.1	86		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	15	0453	59.98								
GAP=					hor,err=km							ver,err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0453	59.98					
PHP	SE	ISG		0454	04.17					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	15	0455	10.66								
GAP=					hor,err=km							ver,err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0455	10.66					
PHP	SE	ISG		0454	16.02					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	16	0152	35.64								
GAP=					hor,err=km							ver,err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0152	35.64					
PHP	SE	ISG		0152	52.40					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	17	1712	53.57	41.87	20.58	6	ASN	2	0.1	2.4	MACEDONI
GAP=344					hor,err=2km							ver,err=16KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1712	59.03	210	0.0	25	17	2.3
PHP	SE	ISG		1713	02.23	210	0.1	25		
TIR	SZ	IPG		1713	08.90	226	-0.1	84	21	2.5
TIR	SE	ISG		1713	20.55	226	0.1	84		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	17	1721	50.83	43.41	16.40	24	ASN	5	1.3	4.3	KROACI
					hor.err=21km		ver.err=11KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
SGRT	SZ	IPN		1722	22.62	197	0.2	191			
SGRT	SE	ISN		1722	48.48	197	0.1	191			
NOCI	SZ	IPN		1722	36.11	169	-0.1	295			
NOCI	SE	ISN		1723	09.98	169	0.2	295			
TIR	SZ	IPN		1722	38.08	127	0.2	365	99	4.3	
TIR	SZ	ISN		1723	26.41	127	0.3	365			
PHP	SZ	IPN		1722	47.30	118	0.2	383	98	4.3	
PHP	SZ	ISN		1723	31.61	118	0.3	383			
SCTE	SZ	IPN		1722	48.01	154	-0.2	407			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	17	2326	54.41								
					hor.err=km		ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
PHP	SZ	IPG		2326	54.41						
PHP	SE	ISG		2326	58.11						

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	17	2343	52.32								
					hor.err=km		ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
PHP	SZ	IPG		2343	52.32						
PHP	SE	ISG		2343	55.41						

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	19	0421	17.73	42.01	20.29	7	ASN	3	0.1	2.5	THIRRE, PUKE
					hor.err=1km		ver.err=12KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
PUK	SZ	IPG		0421	21.55	279	-0.1	25	18	2.3	
PUK	SE	ISG		0421	26.69	279	0.0	25			
PHP	SZ	IPG		0421	25.16	150	0.0	41	23	2.6	
PHP	SZ	ISG		0421	31.43	150	0.1	41			
BCI	SZ	IPG		0421	37.22	201	0.1	78	21	2.5	

BCI	SE	ISG	0421	42.19	201	0.1	78
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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	19	2149	15.25	41.01	21.18	1	ASN	7	0.2	3.9	MACEDONIA
					hor,err=0km			ver,err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2149	32.82	321	0.1	97	139	4.0
PHP	SE	ISG		2149	46.76	321	-0.2	97		
TIR	SZ	IPG		2149	36.22	289	0.2	117	96	3.8
TIR	SE	ISG		2149	52.43	289	0.3	117		
TPE	SZ	IPN		2149	36.85	323	0.2	127	100	3.9
TPE	SE	ISN		2149	56.62	323	-0.3	127		
VLO	SZ	IPN		2149	43.46	248	0.3	155	88	3.7
VLO	SE	ISN		2150	04.60	248	0.1	155		
THE	SZ	IPN		2149	42.71	105	0.3	155		
THE	SE	ISN		2150	04.34	105	0.4	155		
PUK	SZ	IPN		2149	42.71	318	-0.2	157	128	4.0
PUK	SE	ISN		2150	04.91	318	0.1	157		
SRN	SZ	IPN		2149	43.44	220	0.3	161	121	4.0
SRN	SE	ISN		2150	04.97	220	0.1	161		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	20	0108	05.00	40.93	20.94	2	ASN	4	0.3	2.8	POGRADEC
					hor,err=2km			ver,err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0108	22.40	355	0.2	95	35	2.8
PHP	SZ	IPG		0108	35.60	355	-0.1	95		
TIR	SZ	IPG		0108	24.10	299	0.4	102	35	2.8
TIR	SE	ISG		0108	37.90	299	0.3	102		
SRN	SZ	IPN		0108	33.10	216	0.4	139	38	3.0
SRN	SE	ISN		0108	49.00	216	0.2	139		
PUK	SZ	IPN		0108	33.30	326	-0.1	153		
PUK	SE	ISN		0108	53.50	326	0.4	153		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	20	0216	33.90	40.99	21.11	6	ASN	4	0.4	2.9	MACEDONIA
					hor,err=1km			ver,err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0216	50.00	325	0.2	95	30	2.8
PHP	SE	ISG		0217	04.40	325	-0.3	95		

TIR	SZ	IPG	0216	53.80	292	0.2	111	30	2.8
TIR	SE	ISG	0217	08.60	292	0.1	111		
PUK	SZ	IPN	0217	00.70	320	0.3	154	24	3.0
PUK	SE	ISN	0217	21.60	320	0.1	154		
SRN	SZ	IPN	0217	01.90	218	0.4	155	26	3.0
SRN	SE	ISN	0217	21.90	218	-0.3	155		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	20	2003	22.88								PHP
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GAP=					hor.err=km							ver,err=KM
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
PHP	SZ	IPG		2003	22.88						
PHP	SE	ISG		2003	24.21						

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	20	2009	40.30	40.02	20.42	11	ASN	4	0.4	2.6	KAKAVI
GAP=221					hor,err=2km							ver,err=5KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
SRN	SZ	IPG		2009	47.19	246	-0.2	40	23	2.6	
SRN	SE	ISG		2009	53.32	246	0.1	40			
TPE	SZ	IPG		2009	48.37	310	0.1	46	27	2.7	
TPE	SE	ISG		2009	55.19	310	-0.3	46			
IGT	SZ	IPG		2009	50.29	189	0.4	55			
IGT	SE	ISG		2009	59.10	189	0.3	55			
VLO	SZ	IPG		2009	57.46	202	0.1	93	24	2.6	
VLO	SE	ISG		2010	10.30	202	0.2	93			
LKD2	SZ	IPN		2010	04.85	171	-0.3	139			
LKD2	SE	ISN		2010	22.25	171	0.1	139			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	21	2003	56.50	39.30	20.36	6	ASN	4	0.5	2.9	GREECE
GAP=178					hor,err=9km							ver,err=11KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md	
IGT	SZ	IPG		2004	00.92	88	0.1	25			
IGT	SE	ISG		2004	05.12	88	0.1	25			
LKD2	SZ	IPG		2004	06.22	156	-0.1	62			
LKD2	SE	ISG		2004	17.51	156	-0.1	62			
SRN	SZ	IPG		2004	08.36	334	0.1	70	33	2.9	
SRN	SE	ISG		2004	19.55	334	0.1	70			
TPE	SZ	IPG		2004	17.83	345	0.2	113	34	2.9	
TPE	SE	ISG		2004	32.45	345	0.2	113			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	21	2252	37.11	42.01	19.96	3	ASN	2	0.1	1.9	SHKOZE, PUKE
GAP=281 hor.err=21km ver,err=11KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		2252	36.33	310	0.0	7	17	2.1
PUK	SE	ISG		2252	42.32	310	0.0	7		
PHP	SZ	IPG		2252	41.45	131	0.0	53	9	1.7
PHP	SE	ISG		2252	52.34	131	-0.1	53		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	22	0813	57.12	41.60	20.15	6	ASN	2	0.1	2.1	VINJOLL, BURREL
GAP=209 hor,err=22km ver,err=7KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0814	02.32	70	0.0	25	18	2.1
PHP	SE	ISG		0814	06.41	70	0.1	25		
TIR	SZ	IPG		0814	05.09	221	0.0	38	17	2.1
TIR	SE	ISG		0814	10.03	221	0.1	38		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	22	0843	43.12	40.68	19.76	4	ASN	7	0.1	2.8	KURJAN, ROSKOVEC
GAP=143 hor,err=1km ver,err=0KM												

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		0843	49.62	223	0.0	33	32	2.8
VLO	SE	ISG		0843	54.49	223	0.0	33		
TPE	SZ	IPG		0843	59.06	154	0.1	48	30	2.8
TPE	SE	ISG		0843	52.22	154	0.0	48		
TIR	SZ	IPG		0843	55.92	6	0.1	74	42	3.1
TIR	SE	ISG		0844	06.69	6	0.0	74		
SRN	SZ	IPG		0843	59.60	167	0.0	92		
SRN	SE	ISG		0844	12.23	167	0.0	92		
PHP	SZ	IPG		0844	05.21	26	0.1	124		
PHP	SE	ISG		0844	20.99	26	0.1	124		
IGT	SZ	IPN		0844	07.72	159	0.1	137		
IGT	SE	ISN		0844	25.63	159	0.1	137		
MVRN	SZ	IPN		0844	08.40	279	0.1	304		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	22	0922	05.39	40.68	19.68	15	ASN	5	0.1	2.9	DUKAS, PATOS

GAP=133

hor,err=1km

ver,err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
VLO	SZ	IPG		0922	10.07	214	0.3	28	36	2.9
VLO	SE	ISG		0922	15.92	214	0.1	28		
TPE	SZ	IPG		0922	15.14	147	0.2	51	35	2.9
TPE	SE	ISG		0922	21.75	147	0.1	51		
TIR	SZ	IPG		0922	18.55	11	0.3	75	42	3.1
TIR	SE	ISG		0922	29.16	11	0.1	75		
PHP	SZ	IPG		0922	28.01	238	0.2	127		
PHP	SE	ISG		0922	44.56	238	0.4	127		
SCTE	SZ	IPN		0922	42.65	29	0.1	128		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	22	1704	46.68								PUK
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GAP=					hor,err=km			ver,err=KM				
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		1704	46.68					
PUK	SE	ISG		1704	50.56					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	23	0002	55.84	41.18	20.09	7	ASN	3	0.1	2.2	ELBASAN
GAP=287					hor,err=11km			ver,err=6KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0003	00.99	314	0.1	26	15	2.2
TIR	SE	ISG		0003	04.95	314	0.2	26		
PHP	SZ	IPG		0003	07.32	27	0.0	62	15	2.2
PHP	SE	ISG		0003	15.70	27	0.1	62		
PUK	SZ	IPG		0003	12.69	350	0.0	96	16	2.2
PUK	SE	ISG		0003	26.22	350	0.1	96		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	23	0346	05.29								PHP
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GAP=					hor,err=km			ver,err=KM				
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STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0346	05.29					
PHP	SE	ISG		0346	08.62					

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Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 23 2030 52.25 40.86 20.75 3 ASN 7 0.1 3.5 ÇERRAVE, POGRADEC
GAP=113 hor,err=2km ver,err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		2031	07.45	127	0.1	90	72	3.5
TPE	SE	ISG		2031	21.01	127	0.0	90		
TIR	SZ	IPG		2031	08.93	306	0.1	93	67	3.5
TIR	SE	ISG		2031	22.75	306	0.0	93		
PHP	SZ	IPG		2031	09.26	344	0.1	96	71	3.5
PHP	SE	ISG		2031	22.85	344	0.1	96		
VLO	SZ	IPG		2031	13.22	348	0.0	116	67	3.5
VLO	SE	ISG		2031	28.90	348	0.0	116		
SRN	SZ	IPN		2031	14.36	212	0.1	127	67	3.5
SRN	SE	ISN		2031	33.40	212	0.0	127		
PUK	SZ	IPN		2031	19.11	331	0.1	150		
PUK	SE	ISN		2031	40.22	331	0.1	150		
BCI	SZ	IPN		2031	23.24	341	-0.1	177	76	3.6
BCI	SE	ISN		2031	47.64	341	-0.1	177		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	23	2143	39.28	40.98	21.19	7	ASN	5	0.1	3.0	MACEDONI
GAP=236						hor,err=4km	ver,err=2KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2143	56.11	322	0.1	100	41	3.0
PHP	SE	ISG		2144	09.87	322	0.0	100		
TIR	SZ	IPG		2144	00.88	291	0.1	118	40	3.0
TIR	SE	ISG		2144	16.65	291	0.0	118		
PUK	SZ	IPN		2144	07.14	318	-0.1	160		
PUK	SE	ISN		2144	27.14	318	-0.1	160		
IGT	SZ	IPN		2144	10.32	205	0.1	177		
IGT	SE	ISN		2144	32.31	205	-0.2	177		
BCI	SZ	IPN		2144	11.20	329	0.1	179		
BCI	SE	ISN		2144	33.88	329	0.1	179		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	24	0038	27.21	41.45	19.65	3	ASN	3	0.2	2.1	BUDULL, FUSHE-
GAP=252						hor,err=11km	ver,err=5KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0038	33.79	124	0.0	21	10	2.0
TIR	SE	ISG		0038	39.02	124	0.0	21		
PUK	SZ	IPG		0038	40.06	16	0.0	68	11	2.0

PUK	SE	ISG	0038	49.66	16	0.1	68				
PHP	SZ	IPG	0038	40.48	68	0.0	71	10	2.0		
PHP	SE	ISG	0038	50.11	68	0.2	71				

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	24	0130	27.72								SRN	
					hor,err=km								ver,err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0130	27.72					
SRN	SE	ISG		0130	30.26					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	23	0834	08.31	41.50	20.16	6	ASN	5	0.2	2.8	KLOS,BULQIZE	
					hor,err=20km								ver,err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0834	14.02	48	0.1	31	29	2.8
PHP	SE	ISG		0834	18.65	48	0.1	31		
TIR	SZ	IPG		0834	14.28	236	0.1	32	29	2.8
TIR	SE	ISG		0834	18.50	236	0.1	32		
PUK	SZ	IPG		0834	20.30	340	0.1	64	29	2.8
PUK	SE	ISG		0834	28.65	340	0.2	64		
BCI	SZ	IPG		0834	25.36	356	0.1	96	31	2.9
BCI	SE	ISG		0834	38.12	356	0.2	96		
TPE	SZ	IPN		0834	31.77	186	0.1	135		
TPE	SE	ISN		0834	50.35	186	0.1	135		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	24	1748	33.47	41.71	19.84	7	ASN	2	0.1	2.1	LURTH,RRESHEN	
					hor,err=1km								ver,err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1748	41.18	127	0.0	40	13	2.1
TIR	SE	ISG		1748	46.80	127	0.1	40		
PHP	SZ	IPG		1748	42.55	93	0.0	49	12	2.1
PHP	SE	ISG		1748	49.49	93	0.1	49		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013	1	25	0139	57.24	41.94	20.29	7	ASN	2	0.1	2.3	VRIN,KUKES	
					hor,err=2km								ver,err=3KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0140	02.91	156	0.0	31	16	2.3
PHP	SE	ISG		0140	08.02	156	0.1	31		
BCI	SZ	IPG		0140	06.09	339	0.1	50	17	2.3
BCI	SE	ISG		0140	14.10	339	0.1	50		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2013	1	24	0302	41.34	41.23	20.33	7	ASN	3	0.1	2.8	ALLAJ, LIBRAZHD	
GAP=280												hor.err=1km	ver.err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0302	49.21	287	0.1	41	26	2.7
TIR	SE	ISG		0302	55.16	287	0.0	41		
PHP	SZ	IPG		0302	50.66	9	0.1	49	29	2.9
PHP	SE	ISG		0302	57.47	9	0.0	49		
BCI	SZ	IPG		0303	04.21	350	0.1	127	36	3.0
BCI	SE	ISG		0303	20.83	350	0.1	127		

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		1852	50.91	158	-0.2	158	96	3.8
BCI	SE	ISN		1853	11.92	158	0.3	158		
PUK	SZ	IPN		1852	53.89	176	0.2	176	96	3.9
PUK	SE	ISN		1853	17.06	176	0.2	176		
PHP	SZ	IPN		1853	02.36	235	0.4	235	115	4.1
PHP	SE	ISN		1853	32.06	235	-0.3	235		
TIR	SZ	IPN		1853	04.36	242	0.2	242	117	4.1
TIR	SE	ISN		1853	36.89	242	0.2	242		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	26	1156	44.27								GAP= hor.err=km ver,err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1156	44.27					
PHP	SE	ISG		1156	47.58					

GAP=

hor,err=km

ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
TIR SZ IPG 2340 36.27					
TIR SE ISG 2340 39.67					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 27 0204 16.86												TIR
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GAP=

hor,err=km

ver,err=KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
TIR SZ IPG 0204 16.86					
TIR SE ISG 0204 22.01					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 28 0414 01.61	38.15	22.29	7	ASN	7	0.4	4					GREECE
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GAP=318

hor,err=2km

ver,err=11KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
LKD2 SZ IPN 0414 30.38	297	0.2	159		
LKD2 SE ISN 0414 49.88	297	0.1	159		
IGT SZ IPN 0414 42.20	313	0.2	229		
IGT SE ISN 0415 11.20	313	0.1	229		
SRN SZ IPN 0415 47.36	315	0.2	276	101	4
TPE SZ IPN 0414 53.12	321	0.2	309	79	3.9
VLO SZ IPN 0414 57.41	318	0.3	353	103	4
TIR SZ IPN 0415 05.19	331	0.2	411		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 28 2050 43.33	41.15	20.08	8	ASN	3	0.1	2.5					V-P ELBASAN
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GAP=293

hor,err=10km

ver,err=2KM

STAT SP IPHASW D HRMM SECON	AZIMU	RES	DIS	DUR	Md
TIR SZ IPG 2050 48.98	319	0.0	28	21	2.4
TIR SE ISG 2050 52.86	319	0.0	28		
PHP SZ IPG 2050 55.10	26	0.1	65	21	2.5
PHP SE ISG 2051 04.21	26	0.0	65		
PUK SZ IPG 2051 00.88	359	0.1	99	21	2.5
PUK SE ISG 2051 14.28	359	0.0	99		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
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2013 1 29 0110 44.42	40.41	19.80	4	ASN	7	0.1	3.5	KALIVAÇ, TEPELEN			
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GAP=124

hor,err=1km

ver,err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0110	48.60	126	0.0	22	61	3.3
TPE	SE	ISG		0110	52.30	126	0.1	22		
VLO	SZ	IPG		0110	49.38	284	0.1	26	67	3.4
VLO	SE	ISG		0110	54.05	284	0.0	26		
SRN	SZ	IPG		0110	55.54	163	0.1	61	67	3.4
SRN	SE	ISG		0111	05.15	163	0.0	61		
TIR	SZ	IPG		0111	03.42	2	0.1	103	68	3.4
TIR	SE	ISG		0111	17.62	2	0.0	103		
PHP	SZ	IPN		0111	12.62	20	0.1	151	71	3.5
PHP	SE	ISN		0111	33.27	20	0.0	151		
PUK	SZ	IPN		0111	16.51	4	0.1	181	72	3.5
PUK	SE	ISN		0111	39.41	4	0.1	181		
BCI	SZ	IPN		0111	21.42	5	0.1	218	106	3.9
BCI	SE	ISN		0111	58.37	5	0.1	218		

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

2013 1 29 0153 34.14 40.41 19.81 4 ASN 6 0.1 2.9 KALIVAÇ, TEPELEN
GAP=126 hor,err=1km ver,err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0153	38.65	128	0.0	21	28	2.6
TPE	SE	ISG		0153	42.12	128	-0.1	21		
VLO	SZ	IPG		0153	39.75	284	0.0	27	29	2.7
VLO	SE	ISG		0153	44.56	284	0.0	27		
SRN	SZ	IPG		0153	45.83	165	0.1	60	37	3
SRN	SE	ISG		0153	54.69	165	0.0	60		
TIR	SZ	IPG		0153	53.89	2	0.1	104	37	3
TIR	SE	ISG		0154	07.69	2	0.1	104		
PHP	SZ	IPN		0154	02.68	20	-0.1	150	38	3
PHP	SE	ISN		0154	24.16	20	0.1	150		
PUK	SZ	IPN		0154	06.58	1	0.1	180		

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

2013 1 30 0210 58.03 40.49 19.92 15 ASN 5 0.1 2.8 GLLAVE, BERAT
GAP=135 hor,err=1km ver,err=0KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0211	01.90	161	0.0	23	30	2.8
TPE	SE	ISG		0211	05.41	161	0.0	23		
VLO	SZ	IPG		0211	03.58	267	0.1	36	30	2.8
VLO	SE	ISG		0211	09.91	267	0.0	36		
SRN	SZ	IPG		0211	10.22	127	-0.1	68	35	3
SRN	SE	ISG		0211	18.31	127	-0.1	68		

IGT	SZ	IPG	0211	16.74	163	0.1	122		
IGT	SE	ISG	0211	31.21	163	0.1	122		
PHP	SZ	IPN	0211	23.08	18	0.1	140	35	3
PHP	SE	ISN	0211	41.05	18	-0.1	140		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	30	0427	20.31	38.81	23.93	22	ASN	7	0.2	4	GREECE
GAP=307					hor.err=21km			ver.err=14KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
THE	SZ	IPN		0427	57.23	314	0.2	198		
THE	SE	ISN		0428	20.16	314	0.3	198		
IGT	SZ	IPN		0428	08.69	284	-0.5	301		
IGT	SE	ISN		0428	47.16	284	-0.3	301		
SRN	SZ	IPN		0428	13.26	289	0.4	333	101	4
SRN	SE	ISN		0429	06.15	289	0.5	333		
PHP	SZ	IPN		0428	23.29	297	-0.4	413	102	4
PHP	SE	ISN		0429	21.06	297	-0.4	413		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	31	0108	52.93								PHP
GAP=					hor.err=km			ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0108	52.93					
PHP	SE	ISG		0108	59.88					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	31	0242	27.15	39.84	19.81	1	ASN	8	0.1	3.0	KORFUZ, SARANDE
GAP=212					hor.err=3km			ver.err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0242	30.36	74	0.1	16	35	2.9
SRN	SE	ISG		0242	33.49	74	0.0	16		
TPE	SZ	IPG		0242	36.25	18	0.0	53	33	2.9
TPE	SE	ISG		0242	44.82	18	0.0	53		
IGT	SZ	IPG		0242	36.62	127	0.1	56	41	3.2
IGT	SE	ISG		0242	47.15	127	0.0	56		
VLO	SZ	IPG		0242	41.53	139	0.0	74		
VLO	SE	ISG		0242	53.62	139	0.0	74		
SCTE	SZ	IPG		0242	46.86	284	0.1	117		
SCTE	SE	ISG		0243	01.12	284	0.0	117		
LKD2	SZ	IPN		0242	50.94	142	-0.1	137		
LKD2	SE	ISN		0243	09.31	142	-0.1	137		

TIR	SZ	IPN	0242	56.28	1	-0.1	167	44	3.2
TIR	SE	ISN	0243	18.31	1	-0.1	167		
PHP	SZ	IPN	0243	03.38	14	0.1	211	44	3.2
PHP	SE	ISN	0243	28.12	14	0.1	211		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2013	1	31	0804	09.15	39.84	19.79	12	ASN	8	0.1	4.1	KORFUZ, SARANDE	
GAP=211												hor.err=2km	ver.err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0804	13.37	77	0.0	16	130	4.1
SRN	SE	ISG		0804	16.19	77	0.0	16		
TPE	SZ	IPG		0804	18.91	20	0.0	53	129	4.1
TPE	SE	ISG		0804	26.51	20	0.1	53		
IGT	SZ	IPG		0804	19.45	128	0.1	57	129	4.1
IGT	SE	ISG		0804	27.95	128	0.1	57		
VLO	SZ	IPG		0804	23.40	341	0.0	74	130	4.1
VLO	SE	ISG		0804	34.63	341	0.1	74		
TIR	SZ	IPN		0804	37.83	2	-0.1	167	136	4.2
TIR	SE	ISN		0804	59.11	2	0.1	167		
PHP	SZ	IPN		0804	43.58	14	0.1	211	135	4.2
PHP	SE	ISN		0805	10.22	14	0.2	211		
PUK	SZ	IPN		0804	47.36	1	-0.1	244	135	4.2
PUK	SE	ISN		0805	15.36	1	-0.1	244		
BCI	SZ	IPN		0804	51.36	4	-0.1	281	136	4.2
BCI	SE	ISN		0805	24.36	4	-0.2	281		

TERMETE TE LARGETA (LONG DISTANT EARTHQUAKE)

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2013	1	5	0910	21.74	55.28	134.67W10		ASN	9	0.8	7.5	ALSAKA	
GAP=												hor.err=km	ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IP		0910	47.99					
PHP	SZ	IP		0910	35.57					
PUK	SZ	IP		0910	38.22					
BCI	SZ	IP		0910	36.66					
TPE	SZ	IP		0910	48.12					
FNA	SZ	IP		0910	44.98					
SRN	SZ	IP		0910	51.23					
SCTE	SZ	IP		0910	52.98					

LKD2 SZ IP 0910 53.32

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	11	0030	59.06							4.3	DETI EGJE
GAP=					hor.err=km			ver.err=KM				
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
PHP	SZ	IP		0031	28.65							
TPE	SZ	IP		0031	30.32							
TIR	SZ	IP		0031	33.63							
SRN	SZ	IP		0031	30.04							
VLO	SZ	IP		0031	36.26							
PUK	SZ	IP		0031	36.72							

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	28	1646	15.75	42.63	79.81	10		7		6.1	KAZAKISTAN
GAP= hor,err=km ver,err=KM												
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
PHP	SZ	IP		1646	55.78							
PUK	SZ	IP		1646	56.75							
BCI	SZ	IP		1646	55.81							
TPE	SZ	IP		1647	00.22							
TIR	SZ	IP		1647	00.01							
SRN	SZ	IP		1647	00.87							
VLO	SZ	IP		1647	03.69							

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2013	1	30	2023	22.99	28.06S	70.83W	46		6		6.8	ATACAMA, CHILI
GAP=					hor.err=km			ver.err=KM				
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
SRN	SZ	IP		2033	46.63							
TPE	SZ	IP		2034	34.38							
TIR	SZ	IP		2034	35.27							
PHP	SZ	IP		2033	50.62							
PUK	SZ	IP		2034	11.76							
BCI	SZ	IP		2034	33.96							

**PËRSHKRIM MAKROSIZMIK I
TËRMETEVE 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 inhebitance 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	19.01.2013	21:49:12.4	<p>Epiqendra: 41.09V; 21.18L në fshatin Rumna te Maqedonise 45 km në Lindje të qytetit Pogradecit. Intensiteti i tërmetit në epiqendër $I_0=IV-V$ balle Ndjerë: II-III ballë ne qytetin e Pogradecit dhe në qytetin e Korces. (Epicentre: 41.09N; 21.18E in Rumna village of Macedonia. Epicentral Intensity $I_0=IV-V$ Felt: II-III at Pogradeci and Korca towns)</p>
2	23.01.2013	20:30:11.2	<p>Epiqendra: 40.86V; 20.75L në fshatin Cerrav, 6km në J-L te qytetit te Pogradecit. Intensiteti i tërmetit në epiqender $I_0=IV$ ballë Ndjerë: III-IV në qytetin e Pogradecit dhe III në qytetin e Maliqit (Epicentre: 40.86N; 20.75E in Kurjan Cerrav, 6 km in S-E of Pogradeci town. Epicentral Intensity $I_0= IV$ Felt: III-IV at Pogradeci town and III at Maliqi town)</p>
3	23.01.2013	21:43:13.10	<p>Epiqendra: 40.98V; 21.19 L, ne fshatin Nizhelope, Macedoni. Intensiteti i tërmetit në epiqender $I_0=IV-V$ ballë Ndjerë: III Pogradeci town.</p>

			(Epicentre: 40. 98N; 21.19E in Nizhelope village, Macedonia. Epicentral Intensity I ₀ = IV-V Felt: III at Pogradeci town)
4	31.01.2013	08:04:29.70	Epiqendra: 39.84V; 19.79 L, ne ishullin e Korfuzit, 16km ne Perendim te qytetit te Sarandes. Intensiteti i tërmëtit në epiqender I ₀ =V ballë Ndjerë: IV ne qytetin e Sarandes dhe Butrintit. (Epicentre: 39. 84N; 19.79E in Korfuz, 16km West of Saranda town. Epicentral Intensity I ₀ = V Felt: IV at Saranda town)

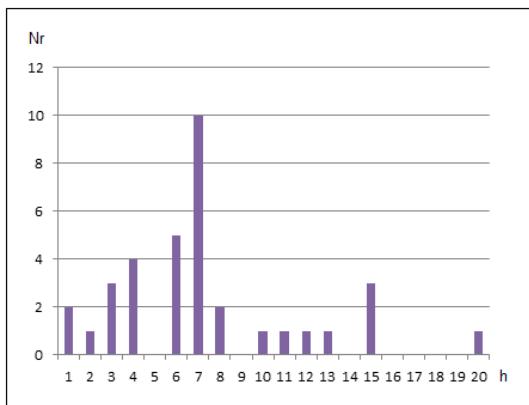
KATALOGU I TËRMETEVE MUJORE (THE MONTHLY EARTHQUAKE CATALOG)

Data Date	Koha Time	Gjer. Lat	Gjat Long.	Thell. Depth	Nr. St N ₀ . St	Gab Rms	Mag. (M _D)	Vendndodhja Location
vvvv/mm/dd	hh:mm:ss			(km)				
2013 1 2 0251	36. 14	42. 46	19. 64	10	ASN 2	0. 1	2. 1	VUKEL-SHKODER
2013 1 2 1706	53. 23	41. 46	19. 70	7	ASN 2	0. 1	2	FUSHE-KRUJE
2013 1 2 2250	44. 26	41. 22	19. 25	7	ASN 2	0. 1	2. 6	DETI ADRIATIK- DURRES
2013 1 2 2342	22. 88	41. 28	19. 28	7	ASN 2	0. 1	1. 9	DETI ADRIATIK-DURRES
2013 1 5 1612	53. 42	39. 62	20. 54	7	ASN 3	0. 2	2. 6	VORSINA- KONISPOL
2013 1 6 0225	41. 13	340. 7	21. 30	4	ASN 3	0. 1	2. 5	GREECE
2013 1 6 1712	06. 11	40. 52	19. 61	13	ASN 7	0. 1	3. 1	12KM V-L VLORE
2013 1 6 1840	38. 48	40. 99	20. 20	1	ASN 7	0. 1	2. 9	GJINAR- ELBASAN
2013 1 6 2322	26. 36	40. 14	22. 07	1	ASN 8	0. 2	3. 9	GREECE
2013 1 9 0147	31. 04	41. 22	20. 13	10	ASN 4	0. 3	2. 7	12KM VERI ELBASAN
2013 1 9 2347	08. 94	41. 98	20. 71	15	ASN 4	0. 3	2. 6	KOSOVA
2013 1 10 0337	49. 51	40. 69	19. 62	4	ASN 6	0. 2	3. 2	PATOS
2013 1 10 0442	37. 64	39. 77	20. 28	20	ASN 4	0. 4	2. 7	ZEMNEC- KONISPOL
2013 1 11 0319	07. 12	41. 08	20. 24	8	ASN 7	0. 1	3. 3	GURSHPATE, ELBSANE
2013 1 12 2238	25. 87	42. 33	19. 88	6	ASN 3	0. 3	2. 2	VRANE- B. CURRI
2013 1 17 1712	53. 57	41. 87	20. 58	6	ASN 2	0. 1	2. 4	MACEDONI
2013 1 19 0421	17. 73	42. 01	20. 29	7	ASN 3	0. 1	2. 5	THIRRE- PUKE
2013 1 19 2149	15. 25	41. 01	21. 18	1	ASN 7	0. 2	3. 9	MACEDONIA
2013 1 20 0108	05. 00	40. 93	20. 94	2	ASN 4	0. 3	2. 8	MACEDONIA
2013 1 20 0216	33. 90	40. 99	21. 11	6	ASN 4	0. 4	2. 9	MACEDONIA
2013 1 20 2009	40. 30	40. 02	20. 42	11	ASN 4	0. 4	2. 6	13KM VERI KAKAVI
2013 1 21 2003	56. 50	39. 30	20. 36	6	ASN 4	0. 5	2. 9	GREECE
2013 1 21 2252	37. 11	42. 01	19. 96	3	ASN 2	0. 1	1. 9	SHKOZE-PUKE
2013 1 22 0813	57. 12	41. 60	20. 15	6	ASN 2	0. 1	2. 1	VINJOLL, BURREL

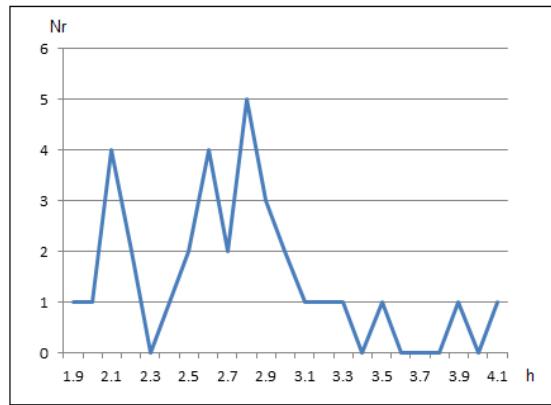
2013	1	22	0843	43.12	40.68	19.76	4	ASN	7	0.1	2.8	KURJAN, ROSKOVEC
2013	1	22	0922	05.39	40.68	19.68	15	ASN	5	0.1	2.9	LINDJE DUKAS, PATOS
2013	1	23	0002	55.84	41.18	20.09	7	ASN	3	0.1	2.2	5KM VERI ELBASAN
2013	1	23	2030	52.25	40.86	20.75	3	ASN	7	0.1	3.5	ÇERRAVE, J-L POGRADEC
2013	1	23	2143	39.28	40.98	21.19	7	ASN	5	0.1	3.0	MACEDONI
2013	1	23	0834	08.31	41.50	20.16	6	ASN	5	0.2	2.8	KLOS-BULQIZE
2013	1	24	0038	27.21	41.45	19.65	3	ASN	3	0.2	2.1	BUDULL, FUSHE-KRUJE
2013	1	24	1748	33.47	41.71	19.84	7	ASN	2	0.1	2.1	LURTH, RRESHEN
2013	1	25	0139	57.24	41.94	20.29	7	ASN	2	0.1	2.3	VRIN, KUKES
2013	1	24	0302	41.34	41.23	20.33	7	ASN	3	0.1	2.8	ALLAJ, LIBRAZHD
2013	1	25	1852	52.22	43.31	18.64	3	ASN	4	0.3	4	BOSNJE-HERCEGOVINA
2013	1	28	0414	01.61	38.15	22.29	7	ASN	7	0.4	4	GREECE
2013	1	28	2050	43.33	41.15	20.08	8	ASN	3	0.1	2.5	V-P ELBASAN
2013	1	29	0110	44.42	40.41	19.80	4	ASN	7	0.1	3.5	KALIVAC, TEPELEN
2013	1	29	0153	34.14	40.41	19.81	4	ASN	6	0.1	2.9	KALIVAC, TEPELEN
2013	1	30	0210	58.03	40.49	19.92	15	ASN	5	0.1	2.8	GLLAVE, BERAT
2013	1	30	0427	20.31	38.81	23.93	22	ASN	7	0.2	4	GREECE
2013	1	31	0242	27.15	39.84	19.81	1	ASN	8	0.1	3.0	KORFUZ, SARANDES
2013	1	31	0804	09.15	39.84	19.79	12	ASN	8	0.1	4.1	KORFUZ, SARANDES

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)	38
Events occurred within quadrant	
➤ Ngjarje sizmike të ndodhura brenda kufijve shtetërore	31
Events occurred inside state boundaries	
➤ Thellësia mesatare e ngjarjeve sizmike	7
Mean hypocenter depth	
➤ Thellësia maksimale	20
Maximum hypocenter depth	
➤ Magnituda lokale minimale e regjistruar	1.9
Minimum recorded local magnitude	
➤ Magnituda lokale maksimale e regjistruar	4.1
Maximum recorded local magnitude	
➤ Intensiteti sizmik maksimal ne epiqendër	
Maximum seismic intensity	V



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 vatrор (ZMV)

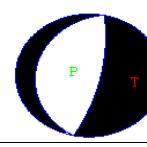
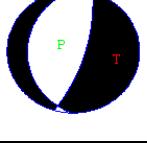
Për zgjidhjen e mekanizmit të vatrор janë përdorur polaritetet e hyrjeve të para P (Pg/Pn), të përcaktuara mbi format valore që shprehin funksionin kohor të burimit sizmik perkatës, në fushën e shpejtësisë. Janë përdorur regjistimet në bandë të gjere frekuenciale (0.2 – 30 Hz), të cilat janë modeluar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

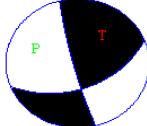
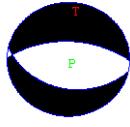
pass: 1.0-5.0 Hz, 2.0-10 Hz dhe 0.1-3.0 Hz. Për të arritur zgjidhjen optimale janë përdorur edhe raporti i amplitudave të valëve volumore AMPSg/AMPPg, (AMPSn/AMPPn), të cilat janë lexuar mbi komponentet e transformuara nga sistemi koordinativ gjeografik në atë sferik (vertikal, radial dhe transversal). 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, which are modeled by band-pass filtering in the ranges: 1.0-5.0 Hz,

2.0-10 Hz and 0.1-3.0Hz. 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 i ngjarjes (Event ID)	Parametrat e burimit (Source parameters)	Magnituda (Magnitude)	Parametrat e Mekanizmit (Focal Mechanism parameters)	Tipi (Focal Type)
2013 1 6 1712 5.6	40.50 (N) 19.60 (E) 19 (km)	3.3	P1: 192, 18, -90 P2: 12, 72, -90 T: 282, 63 P: 101.9, 26.9	
2013 111 0319 6.6	41.09 (N) 20.28 (E) 19 (km)	3.0	P1: 17, 70, -85 P2: 182.7, 20.6, -103.5 T: 295.3, 64.7 P: 1'3.1, 24.8	

2013 123 2030 52.3	40.89 (N) 20.75 (E) 17 (km)	2.3	P1: 166, 83, 44 P2: 69.3, 46.4, 170.3 T: 289.7, 23.7 P: 37.6, 35.1	
2013 131 0804 9.1	39.89 (N) 19.84 (E) 23 (km)	4.0	P1: 102, 35, -81 P2: 271.1, 55.5, -96.3 T: 158.4, 78.5 P: 5.5, 10.3	

Harta e epikendrave të tërmeteve

