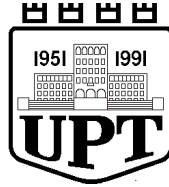


BULETINI I TËRMETEVE TË RRJETIT SIZMOLOGJIK SHQIPTAR

DHJETOR 2012

PARAMETRIC DATA
AND ALBANIAN'S EARTHQUAKE ANALYSIS
DECEMBER 2012



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

BULETINI MUJOR I RRJETIT SIZMOLOGJIK
TË SHQIPERISË

DHJETOR 2012

MONTHLY BULLETIN OF THE ALBANIAN
SEISMOLOGICAL NETWORK

DECEMBER 2012

Përliluar nga:
Compiled by:
Prof.Asoc.Dr. Rrapo ORMËNI
Dr. Edmond DUSHI

Redaktor përgjegjës
Redactor in Chief
Prof.Asoc.Dr. Rrapo ORMËNI

Drejtori i Institutit
Director of Institute
Prof. Marenglen GJONAJ

Tiranë, 2012

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° - 43.0° V dhe 18.5° - 21.5° L.

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

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

GENERAL INFORMATION**Introduction**

The Albanian 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 çertifikuar dhe të njohur globalisht. Kështu, për përcaktimin e të dhënave kohore valore hyrëse përdoret programi Atlas, ndërsa lokalizimi i tërmeteëve 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 squarre)	Gabimi i pergjithshem (Total estimation error-sec)
<i>Mag</i>	Magnituda (magnitude)	Madhesia e termetit sipas shkalles lokale te kalibruar (local calibrated measure of the earthquake size)
<i>Net</i>	Emërtimi i rrjetit sizmologjik (network code)	Kodi nderkombetar i identifikimit te rrjetit ne FDSN (Federation of Digital seismologies network) eshte AC

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

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

TËRMETE TË AFËRTA (NEAR EARTHQUAKE)

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

2012 12 1 0017 54.59

GAP=

hor.err=km

ver.err=KM

STAT SP IPHASW D HRMM SECON

AZIMU

RES

DIS

DUR

Md

BCI SZ IPG 0017 54.59

BCI SE ISG 0017 56.87

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

2012	12	1	0044	54.42								
------	----	---	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0044	54.42					
BCI	SE	ISG		0044	56.50					

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

2012	12	1	0538	05.54								
------	----	---	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		0538	05.54					
BCI	SE	ISG		0538	07.60					

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

2012	12	1	0624	59.66	41.87	19.57	7	ASN	4	0.1	2.8	GJADER- LEZHE
------	----	---	------	-------	-------	-------	---	-----	---	-----	-----	---------------

GAP=239

hor.err=1km

ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		0625	05.94	55	-0.1	32	29	2.7
PUK	SE	ISG		0625	10.46	55	0.1	32		
TIR	SZ	IPG		0625	11.27	157	0.1	63	28	2.7
TIR	SE	ISG		0625	20.03	157	-0.1	63		
BCI	SZ	IPG		0625	11.88	36	0.1	67	43	3.1
BCI	SE	ISG		0625	21.10	36	-0.1	67		
PHP	SZ	IPG		0625	13.23	106	0.1	75	28	2.7
PHP	SE	ISG		0625	23.42	106	0.1	75		

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

2012	12	1	0644	58.18	39.36	20.47	3	ASN	5	0.2	3.2	GREECE
------	----	---	------	-------	-------	-------	---	-----	---	-----	-----	--------

GAP=322

hor.err=11km

ver.err=8KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPG		0645	05.81	340	0.2	35		
IGT	SE	ISG		0645	09.65	340	0.3	35		
SRN	SZ	IPG		0645	13.31	331	0.4	82	53	3.3
SRN	SE	ISG		0645	24.91	331	-0.2	82		
TPE	SZ	IPN		0645	20.46	342	0.3	125	46	3.2
TPE	SE	ISN		0645	37.66	342	-0.6	125		
KBN	SZ	IPN		0645	27.04	9	0.5	157	46	3.2
KBN	SE	ISN		0645	47.01	9	0.4	157		

PHP	SZ	IPN	0645	41.61	3	-0.7	222
PHP	SE	ISN	0646	07.11	3	0.2	222

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

2012	12	1	1044	08.22								
------	----	---	------	-------	--	--	--	--	--	--	--	--

GAP=					hor.err=km					ver.err=KM		
------	--	--	--	--	------------	--	--	--	--	------------	--	--

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1044	08.22					
PHP	SE	ISG		1044	09.22					

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

2012	12	1	2052	53.02	45.79	26.81	65	ASN	3	0.6	4.8	RUMANIA
------	----	---	------	-------	-------	-------	----	-----	---	-----	-----	---------

GAP=					hor.err=km					ver.err=KM		
------	--	--	--	--	------------	--	--	--	--	------------	--	--

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		2053	31.36	217	0.8	295		
BCI	SE	ISN		2054	35.16	217	0.4	295		
PUK	SZ	IPN		2053	35.78	216	-0.1	353		
PUK	SE	ISN		2054	38.69	216	0.7	353		
PHP	SZ	IPN		2053	34.30	206	0.5	346		
PHP	SE	ISN		2054	37.22	206	0.4	346		

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

2012	12	2	0047	37.89	39.36	20.38	2	ASN	4	0.4	2.9	GREECE
------	----	---	------	-------	-------	-------	---	-----	---	-----	-----	--------

GAP=327					hor.err=21km					ver.err=11KM		
---------	--	--	--	--	--------------	--	--	--	--	--------------	--	--

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPG		0047	49.47	353	0.2	41		
IGT	SE	ISG		0047	51.09	353	-0.3	41		
SRN	SZ	ISG		0047	52.61	358	0.4	86	33	2.9
SRN	SE	ISN		0048	06.26	358	0.1	86		
TPE	SZ	IPN		0048	01.32	346	0.4	130	34	2.9
TPE	SE	ISN		0048	18.41	346	0.2	130		
KBN	SZ	IPN		0048	07.59	11	-0.4	165	32	2.8
KBN	SE	ISN		0048	29.64	11	0.3	165		

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

2012	12	2	0754	43.26	42.04	20.57	7	ASN	3	0.1	2.6	ZAPOD, KUKES
------	----	---	------	-------	-------	-------	---	-----	---	-----	-----	--------------

GAP=246					hor.err=1km					ver.err=7KM		
---------	--	--	--	--	-------------	--	--	--	--	-------------	--	--

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
------	----	--------	---	------	-------	-------	-----	-----	-----	----

PHP	SZ	IPG		0754	51.05	197		0.0	41	21	2.5	
PHP	SE	ISG		0754	57.09	197		-0.1	41			
BCI	SZ	ISG		0754	53.59	211		0.0	56	21	2.5	
BCI	SE	ISG		0755	01.25	211		0.0	56			
PUK	SZ	IPG		0754	53.37	271		0.1	65	29	2.8	
PUK	SE	ISG		0755	01.72	271		-0.1	65			

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	4	17.37	23.72	40.14	20.03	20	ASN	6	0.1	2.9	
KARDHIQ, GJIROKA												
GAP=168				hor.err=2km				ver.err=4KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		1737	21.75	354	0.0	17	40	3
TPE	SE	ISG		1737	31.02	354	-0.1	17		
SRN	SZ	ISG		1737	23.26	186	0.0	30	36	2.9
SRN	SE	ISG		1737	34.86	186	0.0	30		
IGT	SZ	IPN		1737	35.66	159	0.1	73		
IGT	SE	ISN		1737	57.50	159	0.1	73		
TIR	SZ	IPN		1737	46.55	355	0.0	134	40	3
TIR	SE	ISN		1738	04.44	355	-0.1	134		
FNA	SZ	ISN		1737	47.33	57	0.0	135		
FNA	SE	ISN		1738	05.11	57	0.0	135		
PHP	SZ	IPN		1737	54.50	11	-0.1	174		
PHP	SE	ISN		1738	13.68	11	0.1	174		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	4	1850	51.28	42.47	20.07	8	ASN	3	0.1	2.8	BAJRAM CURRI
GAP=323				hor.err=2km				ver.err=3KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	ISG		1850	54.30	185	0.0	12	28	2.8
BCI	SE	ISG		1850	56.22	185	0.1	12		
PUK	SZ	IPG		1851	00.48	198	0.1	50	29	2.8
PUK	SE	ISG		1851	07.72	198	0.1	50		
PHP	SZ	IPG		1851	06.69	93	0.0	93	29	2.8
PHP	SE	ISG		1851	20.36	93	0.1	93		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenterr
2012	12	4	1900	06.58	37.64	22.54	7	ASN	4	1.4	4.5	GREECE
GAP=327				hor.err=13km				ver.err=12KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
IGT	SZ	IPN		1900	42.92	319	-0.5	284		
IGT	SE	ISN		1901	43.19	319	-0.9	284		

SRN	SZ	ISN	1900	45.92	320	-0.8	332	175	4.5
SRN	SE	ISN	1901	55.45	320	-0.9	332		
TPE	SZ	IPN	1900	05.75	325	0.7	366	177	4.5
TPE	SE	ISN	1902	12.35	325	0.8	366		
TIR	SZ	IPN	1901	17.12	335	-0.7	471		
TIR	SE	ISN	1902	13.56	335	0.8	471		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	7	1917	40.94	40.35	21.34	20	ASN	6	0.3	3.2	GREECE
				GAP=221			hor.err=2km	ver.err=2KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		1917	50.09	3	0.1	47		
FNA	SE	ISG		1917	57.28	3	-0.2	47		
KBN	SZ	ISG		1917	51.02	303	-0.1	56	42	3.3
KBN	SE	ISG		1917	59.10	303	0.2	56		
IGT	SZ	IPN		1918	02.05	224	-0.1	126		
IGT	SE	ISN		1918	21.88	224	-0.1	126		
SRN	SZ	ISN		1918	03.52	246	-0.2	128	30	3
SRN	SE	ISN		1918	19.25	246	-0.1	128		
PHP	SZ	IPN		1918	08.63	333	0.1	166	40	3.3
PHP	SE	ISN		1918	26.38	333	0.1	166		
PUK	SZ	IPN		1918	17.38	328	-0.2	223		
PUK	SE	ISN		1918	44.85	328	0.1	223		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	7	2010	05.93								
				GAP=			hor.err=km	ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2010	05.93					
PHP	SE	ISG		2010	07.91					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter		
2012	12	8	2257	16.50	41.30	20.52	4	ASN	6	0.2	3.7			
				STEBLEVE, ELBASAN			GAP=136			hor.err=0km			ver.err=2KM	

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2257	25.35	351	0.1	42	100	3.8
PHP	SE	ISG		2257	30.99	351	-0.1	42		
TIR	SZ	IPG		2257	26.62	275	0.1	55	88	3.7
TIR	SE	ISG		2257	34.65	275	0.2	55		
KBN	SZ	IPG		2257	30.77	163	-0.1	78	98	3.8

KBN	SE	ISG	2257	42.03	163	0.1	78					
FNA	SZ	IPG	2257	33.13	128	0.2	92					
FNA	SE	ISG	2257	45.73	128	-0.2	92					
VLO	SZ	IPN	2257	39.78	224	-0.2	127	66			3.5	
VLO	SE	ISN	2257	54.53	224	0.1	127					
SRN	SZ	IPN	2257	45.51	196	-0.2	164	71			3.6	
SRN	SE	ISN	2258	08.44	196	0.2	164					

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

2012	12	9	1611	14.71								
------	----	---	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1611	14.71					
PHP	SE	ISG		1611	16.93					

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

2012	12	12	1223	25.32	42.11	20.58	7	ASN	4	0.3	2.6	KUKES
------	----	----	------	-------	-------	-------	---	-----	---	-----	-----	-------

GAP=211

hor.err=0km

ver.err=2KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1223	34.47	194	0.2	49	19	2.4
PHP	SE	ISG		1223	41.15	194	0.3	49		
BCI	SZ	IPG		1223	34.77	304	-0.2	51	22	2.5
BCI	SE	ISG		1223	42.28	304	0.2	51		
PUK	SZ	IPG		1223	35.84	263	0.1	57	25	2.6
PUK	SE	ISG		1223	43.77	263	0.3	57		
FNA	SZ	IPN		1223	53.41	155	0.2	162		
FNA	SE	ISN		1224	14.81	155	-0.1	162		

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

2012	12	12	2138	10.16								
------	----	----	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2138	10.16					
PHP	SE	ISG		2138	11.94					

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

2012	12	13	0800	26.63	41.44	20.23	7	ASN	3	0.1	2.5	BULQIZE
------	----	----	------	-------	-------	-------	---	-----	---	-----	-----	---------

GAP=212

hor.err=0km

ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0800	23.79	32	0.1	32	17	2.3
PHP	SE	ISG		0800	27.43	32	0.0	32		
PUK	SZ	IPG		0800	26.66	338	0.0	72	24	2.6
PUK	SE	ISG		0800	39.68	338	0.0	72		
FNA	SZ	IPG		0800	38.11	126	0.1	122		
FNA	SE	ISG		0800	54.16	126	0.0	122		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenterr
2012	12	13	2139	27.12	41.05	19.87	10	ASN	7	0.2	4.3	GRYKESH, PEQIN
				GAP=183	hor.err=1km				ver.err=2KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2139	33.37	0	0.1	31	166	4.2
TIR	SE	ISG		2139	38.12	0	0.0	31		
PHP	SZ	IPG		2139	41.14	34	0.0	83	171	4.3
PHP	SE	ISG		2139	53.79	34	-0.1	83		
PUK	SZ	IPG		2139	45.12	1	0.0	108	180	4.4
PUK	SE	ISG		2140	00.17	1	0.0	108		
FNA	SZ	IPG		2139	50.69	103	0.0	131		
FNA	SE	ISG		2140	07.38	103	-0.1	131		
SRN	SZ	IPN		2139	50.71	175	0.0	132	171	4.3
SRN	SE	ISN		2140	08.32	175	0.0	132		
BCI	SZ	IPN		2139	52.31	6	-0.1	145	173	4.3
BCI	SE	ISN		2140	18.26	6	0.0	145		
IGT	SZ	IPN		2139	57.35	166	-0.1	175		
IGT	SE	ISN		2140	19.79	166	-0.2	175		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	13	2143	27.32	41.07	19.92	7	ASN	4	0.1	2.8	PAPER, pEQIN
				GAP=264	hor.err=1km				ver.err=15KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2143	32.84	350	0.1	31	23	2.5
TIR	SE	ISG		2143	37.17	350	0.1	31		
PHP	SZ	IPG		2143	41.46	31	0.0	80	27	2.8
PHP	SE	ISG		2143	52.07	31	0.0	80		
PUK	SZ	IPG		2143	44.82	359	0.0	107	31	2.9
PUK	SE	ISG		2143	59.64	359	0.1	107		
FNA	SZ	IPG		2143	48.77	104	0.0	126		
FNA	SE	ISG		2144	04.64	104	0.1	126		

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

2012 12 13 2144 12.89

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2144	12.89					
TIR	SE	ISG		2144	19.42					

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

2012 12 13 2157 34.01

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2157	34.01					
TIR	SE	ISG		2157	39.36					

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

2012 12 13 2158 14.54

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2158	14.54					
TIR	SE	ISG		2158	17.81					

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

2012 12 13 2203

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2203	15.12					
TIR	SE	ISG		2203	16.83					

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

2012 12 14 0032 02.74

(PASGODITJET)

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0032	02.74					
TIR	SE	ISG		0032	09.37					

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

2012 12 14 0046 06.70

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0046	06.70					
TIR	SE	ISG		0046	11.29					

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

2012	12	14	0121	39.61	41.05	19.88	22	ASN 4	0.1	2.7		GRYKESH, PEQIN
GAP=256				hor.err=2km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0121	46.71	358	0.1	33	24	2.7
TIR	SE	ISG		0121	51.80	358	0.0	33		
PHP	SZ	IPG		0121	54.53	33	0.1	85	24	2.7
PHP	SE	ISG		0122	05.98	33	0.1	85		
PUK	SZ	IPG		0121	58.55	0	0.1	111	25	2.7
PUK	SE	ISG		0122	13.79	0	0.0	111		
FNA	SZ	IPG		0122	04.64	122	0.1	130		
FNA	SE	ISG		0122	18.82	122	0.1	130		

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

2012 12 14 0332 11.50

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

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		0332	11.50					
TIR	SE	ISG		0332	16.59					

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

2012	12	14	1438	32.00	41.41	19.98	8	ASN 5	0.2	3.2		TIRANA
GAP=180				hor.err=11km			ver.err=4KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		1438	34.50	232	0.1	13	50	3.1
TIR	SE	ISG		1438	36.10	232	-0.1	13		
PHP	SZ	IPG		1438	41.30	52	0.1	48	49	3.2
PHP	SE	ISG		1438	48.00	52	0.2	48		
PUK	SZ	IPG		1438	44.80	354	-0.1	70	39	3.0
PUK	SE	ISG		1438	55.60	354	0.1	70		
FNA	SZ	IPN		1438	53.60	120	-0.2	137		
FNA	SE	ISN		1439	14.72	120	0.1	137		
SRN	SZ	IPN		1439	02.40	179	0.1	171	52	3.3

SRN	SE	ISN											
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2012	12	15	0711	19.69	41.31	20.34	7	ASN	4	0.3	2.3	ZDRAJSH, LIBRAZHD	
				GAP=136	hor.err=1km			ver.err=5KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md			
TIR	SZ	IPG		0711	27.07	276	0.1	40	12	1.9			
TIR	SE	ISG		0711	33.08	276	-0.1	40					
PHP	SZ	IPG		0711	27.17	10	0.1	41	16	2.2			
PHP	SE	ISG		0711	33.52	10	-0.1	41					
PUK	SZ	IPG		0711	34.90	335	0.1	89	24	2.5			
PUK	SE	ISG		0711	47.59	335	0.2	89					
FNA	SZ	IPG		0711	38.68	123	0.1	105					
FNA	SE	ISG		0711	52.40	123	0.2	105					
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2012	12	15	1230	04.85	41.48	19.65	11	ASN	2	0.2	2.0	TIRANA	
				GAP=300	hor.err=1km			ver.err=15KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md			
TIR	SZ	IPG		1230	09.79	131	0.1	23	10	1.8			
TIR	SE	ISG		1230	13.02	131	-0.1	23					
PHP	SZ	IPG		1230	17.22	71	0.1	69	15	2.2			
PHP	SE	ISG		1230	26.97	71	0.5	69					
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2012	12	15	2331	43.83									
				GAP=	hor.err=km			ver.err=KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md			
PHP	SZ	IPG		2331	43.83								
PHP	SE	ISG		2331	49.05								
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter	
2012	12	16	0343	01.89									
				GAP=	hor.err=km			ver.err=KM					
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md			
PHP	SZ	IPG		0343	01.89								
PHP	SE	ISG		0343	06.57								

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

2012	12	16	0428	16.20								
------	----	----	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0428	16.20					
PHP	SE	ISG		0428	20.40					

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

2012	12	16	0711	40.36								
------	----	----	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0711	40.36					
PHP	SE	ISG		0711	50.98					

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

2012	12	17	0737	21.51								
------	----	----	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PUK	SZ	IPG		0737	21.51					
PUK	SE	ISG		0737	22.59					

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

2012	12	17	1120	26.41	42.20	20.23	7	ASN	3	0.3	2.4	DARDHE, KUKES
------	----	----	------	-------	-------	-------	---	-----	---	-----	-----	---------------

GAP=199

hor.err=21km

ver.err=1KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPG		1120	31.25	324	0.1	22	21	2.4
BCI	SE	ISG		1120	34.01	324	-0.1	22		
PUK	SZ	IPG		1120	32.84	238	-0.2	33	21	2.4
PUK	SE	ISG		1120	37.42	238	-0.1	33		
PHP	SZ	IPG		1120	37.59	163	-0.1	60	24	2.5
PHP	SE	ISG		1120	45.24	163	0.1	60		

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

2012	12	19	2141	45.61								
------	----	----	------	-------	--	--	--	--	--	--	--	--

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2141	45.61					
PHP	SE	ISG		2141	46.82					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	19	2228	11.47								
GAP=					hor.err=km			ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2228	11.47					
PHP	SE	ISG		2228	14.73					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	20	1732	54.12	42.34	20.14	5	ASN	10	0.1	3.1	LLUGAJ,B,CURRI
GAP=161					hor.err=1km			ver.err=1KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		1732	57.02	326	0.1	5	48	3.1
BCI	SE	ISN		1732	58.41	326	0.1	5		
PUK	SZ	IPG		1733	01.64	208	0.0	36	49	3.1
PUK	SE	ISG		1733	07.36	208	0.1	36		
PHP	SZ	IPG		1733	04.16	158	0.1	79	49	3.1
PHP	SE	ISG		1733	19.25	158	0.1	79		
TIR	SZ	IPG		1733	15.16	190	0.1	111		
TIR	SE	ISG		1733	30.15	190	-0.1	111		
FNA	SZ	IPN		1733	28.41	189	-0.1	200		
FNA	SE	ISN		1733	52.63	189	-0.1	200		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	21	1610	05.10	41.66	20.12	2	ASN	6	0.1	3.5	BURREL
GAP=123					hor.err=2km			ver.err=1KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1610	11.26	86	0.1	26	39	2.9
PHP	SE	ISG		1610	15.57	86	0.1	26		
TIR	SZ	IPG		1610	13.59	212	0.1	41	74	3.5
TIR	SE	ISG		1610	20.05	212	0.2	41		
PUK	SZ	IPG		1610	14.04	335	0.1	45	60	3.4
PUK	SE	ISG		1610	21.91	335	0.1	45		
FNA	SZ	IPN		1610	30.03	132	0.1	144		
FNA	SE	ISN		1610	49.39	132	-0.1	144		
TPE	SZ	IPN		1610	32.19	184	-0.1	183	93	3.8
TPE	SE	ISN		1610	55.14	184	0.1	183		

SRN	SZ	IPN	1610	41.12	184	0.2	199
SRN	SE	ISN	1611	06.83	184	0.1	199

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	21	1612	35.98	41.67	20.15	3	ASN	4	0.2	2.6	BURREL
				hor.err=3km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		1612	41.27	88	0.1	24	19	2.5
PHP	SE	ISG		1612	45.63	88	0.0	24		
TIR	SZ	IPG		1612	44.06	212	0.1	42	19	2.5
TIR	SE	ISG		1612	51.43	212	0.0	42		
PUK	SZ	IPG		1612	44.44	332	0.1	45	24	2.7
PUK	SE	ISG		1612	51.90	332	0.1	45		
FNA	SZ	IPN		1612	57.68	131	0.1	143		
FNA	SE	ISN		1613	13.78	131	0.1	143		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	22	0504	22.02	40.18	20.33	7	ASN	8	0.1	3.1	SHEPER, PERMET
GAP=141				hor.err=2km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TPE	SZ	IPG		0504	26.45	295	0.1	29	42	3
TPE	SE	ISG		0504	32.79	295	0.0	29		
SRN	SZ	IPG		0504	37.62	220	0.0	43	52	3.3
SRN	SE	ISG		0504	33.17	220	0.0	43		
KBN	SZ	IPG		0504	42.46	38	-0.1	62	41	3
KBN	SE	ISG		0504	34.19	38	0.0	62		
IGT	SZ	IPG		0504	46.36	179	0.1	72	52	3.3
IGT	SE	ISG		0504	35.12	179	0.1	72		
VLO	SZ	IPG		0504	47.25	295	-0.2	77		
VLO	SE	ISG		0504	59.38	295	0.1	77		
TIR	SZ	IPN		0504	48.51	344	0.1	134	53	3.3
TIR	SE	ISN		0505	06.15	344	0.2	134		
PHP	SZ	IPN		0504	51.88	3	0.1	166		
PHP	SE	ISN		0505	13.66	3	0.2	166		
PUK	SZ	IPN		0504	58.25	351	0.1	209		
PUK	SE	ISN		0505	25.14	351	0.2	209		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	23	0015	12.45	41.89	20.30	7	ASN	3	0.1	2.4	ARREN, PESHKOPI
GAP=174				hor.err=11km			ver.err=1KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
------	----	--------	---	------	-------	-------	-----	-----	-----	----

PHP	SZ	IPG	0015	17.42	154	0.1	25	20	2.3
PHP	SE	ISG	0015	21.42	154	0.0	25		
PUK	SZ	IPG	0015	19.62	296	0.1	38	20	2.3
PUK	SE	ISG	0015	25.01	296	0.0	38		
BCI	SZ	IPG	0015	22.57	340	0.1	56	21	2.3
BCI	SE	ISG	0015	30.58	340	0.1	56		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	24	0123	48.78	41.91	20.51	24	ASN	2	0.1	2.1	CAJ, KUKES
				GAP=265	hor.err=2km		ver.err=11KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0123	55.21	192	0.1	25	7	1.8
PHP	SE	ISG		0123	59.12	192	0.0	25		
PUK	SZ	IPG		0123	59.06	187	0.0	52	17	2.5
PUK	SE	ISG		0123	06.77	187	0.1	52		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	24	2207	12.26								
				GAP=	hor.err=km		ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
TIR	SZ	IPG		2207	12.26					
TIR	SE	ISG		2207	15.49					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	25	0100	57.88								
				GAP=	hor.err=km		ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0100	57.88					
SRN	SE	ISG		0101	01.88					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	25	0107	48.94								
				GAP=	hor.err=km		ver.err=KM					

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0107	48.94					
SRN	SE	ISG		0107	52.77					

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

2012 12 25 0118 09.49

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0118	09.49					
SRN	SE	ISG		0118	12.38					

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

2012 12 25 0118 33.18

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IPG		0118	33.18					
SRN	SE	ISG		0118	36.28					

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

2012 12 26 0338 03.11 41.75 20.26 6 ASN 3 0.1 2.3 ÇIDHNA,PESHKOPI

GAP=208

hor.err=5km

ver.err=11KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0338	06.49	111	0.0	14	18	2.3
PHP	SE	ISG		0338	08.54	111	0.0	14		
PUK	SZ	IPG		0338	11.59	319	0.1	45	19	2.3
PUK	SE	ISG		0338	17.89	319	0.0	45		
BCI	SZ	IPG		0338	16.31	348	0.0	72	19	2.3
BCI	SE	ISG		0338	25.74	348	0.1	72		

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

2012 12 26 0511 48.41

GAP=

hor.err=km

ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0511	48.41					
PHP	SE	ISG		0511	51.34					

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

2012 12 27 1926 59.31 41.49 20.50 20 ASN 4 0.4 2.8 DIBER

GAP=268

hor.err=2km

ver.err=11KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
------	----	--------	---	------	-------	-------	-----	-----	-----	----

PHP	SZ	IPG	1927	04.06	346	0.2	22	25	2.7
PHP	SE	ISG	1927	08.46	346	0.1	22		
TIR	SZ	IPG	1927	10.03	254	0.3	56	25	2.8
TIR	SE	ISG	1927	17.65	254	0.2	56		
PUK	SZ	IPG	1927	13.00	321	-0.2	79	27	2.9
PUK	SE	ISG	1927	24.11	321	0.2	79		
BCI	SZ	IPG	1927	17.65	340	0.3	103		
BCI	SE	ISG	1927	31.11	340	0.1	103		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	28	0550	36.90	40.81	21.36	10	ASN	9	0.4	3.7	
FOLLORINE, GREECE												
				GAP=251	hor.err=7km			ver.err=6KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
FNA	SZ	IPG		0550	39.01	139	-0.2	3		
FNA	SE	ISG		0550	40.09	139	0.1	3		
KBN	SZ	IPG		0550	46.33	248	0.1	52	147	4.1
KBN	SE	ISG		0550	53.91	248	-0.2	52		
PHP	SZ	IPG		0550	57.99	323	0.1	124	84	3.7
PHP	SE	ISG		0551	15.99	323	0.1	124		
TPE	SZ	IPN		0550	59.72	245	0.1	127	87	3.8
TPE	SE	ISN		0551	17.31	245	0.1	127		
TIR	SZ	IPN		0551	02.23	297	-0.1	139	84	3.7
TIR	SE	ISN		0551	20.33	297	0.2	139		
SRN	SZ	IPN		0551	04.06	229	-0.1	154	76	3.7
SRN	SE	ISN		0551	23.64	229	-0.2	154		
VLO	SZ	IPN		0551	06.08	258	-0.1	162	77	3.7
VLO	SE	ISN		0551	25.91	258	0.1	162		
PUK	SZ	IPN		0551	08.67	319	0.1	184	77	3.7
PUK	SE	ISN		0551	32.44	319	0.3	184		
BCI	SZ	IPN		0551	11.57	329	-0.3	204		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	29	0228	58.63	41.47	20.25	7	ASN	3	0.2	2.3	BULQIZ
				GAP=303	hor.err=1km			ver.err=1KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		0229	04.02	32	0.1	28	18	2.3
PHP	SE	ISG		0229	08.25	32	-0.1	28		
PUK	SZ	IPG		0229	11.50	335	0.1	70	17	2.4
PUK	SE	ISG		0229	20.69	335	0.1	70		
BCI	SZ	IPG		0229	16.44	352	-0.1	100	17	2.3
BCI	SE	ISG		0229	32.08	352	0.1	100		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	29	2350	3243	41.33	20.99	10	ASN	3	0.2	2.1	MAQEDONI
				GAP=201		hor.err=1km			ver.err=10KM			
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
PHP	SZ	IPG		2350	43.39	311	-0.1	60	13	2.1		
PHP	SE	ISG		2350	51.88	311	0.1	60				
FNA	SZ	IPG		2350	44.98	152	-0.1	69				
FNA	SE	ISG		2350	53.87	152	0.1	69				
KBN	SZ	IPG		2350	47.85	193	0.2	80	13	2.1		
KBN	SE	ISG		2350	57.81	193	0.2	80				
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	30	0024	38.86	41.81	20.46	26	ASN	2	0.4	2.1	
RADOMIR, PESHKOPI				GAP=248		hor.err=11km			ver.err=5KM			
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
PHP	SZ	IPG		0024	44.08	187	0.2	14	10	1.9		
PHP	SE	ISG		0024	47.95	187	-0.3	14				
PUK	SZ	IPG		0024	49.17	299	0.1	53	16	2.3		
PUK	SE	ISG		0024	56.92	299	0.2	53				
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	30	0309	59.24	42.48	20.08	5	ASN	3	0.4	2.7	B.CURRI
GAP=322				hor.err=5km				ver.err=1KM				
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
BCI	SZ	IPG		0310	02.26	187	0.2	13	27	2.5		
BCI	SE	ISG		0310	04.28	187	-0.3	13				
PUK	SZ	IPG		0310	08.78	199	0.1	52	26	2.6		
PUK	SE	ISG		0310	16.18	199	0.2	52				
PHP	SZ	IPG		0310	15.34	161	0.1	93	31	2.8		
PHP	SE	ISG		0310	28.73	161	0.2	93				
Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	30	0816	51.40	40.96	20.24	1	ASN	7	0.4	3.0	
ZAVALINE, ELBASAN				GAP=179		hor.err=1km			ver.err=1KM			
STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md		
TIR	SZ	IPG		0817	00.79	324	0.2	52	34	2.9		
TIR	SE	ISG		0817	08.52	324	0.1	52				

TPE	SZ	IPG	0817	05.07	195	0.1	77	35	2.9
TPE	SE	ISG	0817	17.76	195	-0.1	77		
PHP	SZ	IPG	0817	06.41	11	0.2	81	36	2.9
PHP	SE	ISG	0817	18.96	11	0.3	81		
VLO	SZ	IPG	0817	06.75	229	0.4	83		
VLO	SE	ISG	0817	19.52	229	-0.3	83		
SRN	SZ	IPG	0817	13.13	190	0.1	122	50	3.3
SRN	SE	ISG	0817	29.69	190	0.3	122		
PUK	SZ	IPN	0817	12.85	347	0.5	130	40	3.1
PUK	SE	ISN	0817	30.47	347	0.4	130		
BCI	SZ	IPN	0817	18.22	355	0.4	156	57	3.4
BCI	SE	ISN	0817	41.26	355	0.2	156		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	30	1308	46.72	43.31	21.04	1	ASN	3	0.4	3.7	SERBI
				GAP=338			hor.err=5km		ver.err=2KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IPN		1308	10.62	220	0.4	132	61	3.4
BCI	SE	ISN		1308	27.68	220	0.3	132		
PUK	SZ	IPN		1308	17.23	216	-0.3	163	44	3.2
PUK	SE	ISN		1308	39.93	216	0.1	163		
PHP	SZ	IPN		1308	19.26	197	0.4	185	40	3.1
PHP	SE	ISN		1608	44.13	197	-0.3	185		

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	31	2304	00.00	41.85	20.21	7	ASN	2	0.2	1.9	LURE,PESHKOPI
				GAP=184			hor.err=2km		ver.err=3KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IPG		2304	04.91	133	0.0	26	11	1.9
PHP	SE	ISG		2304	09.46	133	0.1	26		
PUK	SZ	IPG		2304	06.27	309	0.0	33	11	1.9
PUK	SE	ISG		2304	11.46	309	0.1	33		

Termetet e Larget (Long distance earthquake)

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	7	0830	39.15	37.92	144.02	30	ASN	4	1.4	7.4	JAPONI
				GAP=			hor.err=km		ver.err=KM			

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IP		1830	58.59					
TIR	SZ	IS		1830	59.40					
PHP	SZ	IP		1830	59.50					
PUK	SZ	IP		1830	59.52					
VLO	SZ	IP		1831	08.52					
SRN	SZ	IP		1831	10.01					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	10	1706	36.66	6.58S	198.58	161				7.1	BANDA SEA
GAP=					hor.err=km			ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
SRN	SZ	IP		1707	05.50					
PHP	SZ	IP		1707	14.33					
TIR	SZ	IP		1707	18.26					
PUK	SZ	IP		1707	14.33					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	10	2312	20.17	80.77	121.49	10		5		5.7	EAST SEVERNAYA
GAP=					hor.err=km			ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
BCI	SZ	IP		2312	31.34					
PUK	SZ	IP		2312	38.59					
PHP	SZ	IP		2312	40.56					
TIR	SZ	IP		2312	52.55					
SRN	SZ	IP		2312	54.29					

Y	M	D	HM	Sec	Lat	Long	Dep	Net	Nr	Rms	Mag	Epicenter
2012	12	23	1334	42.64	45.58	40.98	10		5		5.5	BLACK SEA
GAP=					hor.err=km			ver.err=KM				

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IP		1335	18.89					
BCI	SZ	IP		1335	21.18					
PUK	SZ	IP		1335	26.16					
TIR	SZ	IP		1335	24.10					
TPE	SZ	IP		1335	29.91					

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

2012 12 25 2247 32.89 41.51 41.03 10 5 5.2 BLACK SEA
 GAP= hor.err=km ver.err=KM

STAT	SP	IPHASW	D	HRMM	SECON	AZIMU	RES	DIS	DUR	Md
PHP	SZ	IP		2248	10.49					
BCI	SZ	IP		2248	13.14					
PUK	SZ	IP		2248	16.91					
TIR	SZ	IP		2248	22.90					
TPE	SZ	IP		2248	22.26					

PËRSHKRIM MAKROSIZMIK I TËRMEVE TË NDJESHME NË VENDIN TONË

Intensiteti i tërmetit në epiqendër I_0 është përcaktuar me formulën $I_0 = \dots$. Intensiteti I në qytete është përcaktuar nga informacioni i marrë mbi ndjeshmerinë e tërmetit nga emergjencat civile si dhe burime të tjera.

MACROSEISMIC DESCRIPTION OF EARTHQUAKES FELT IN OUR COUNTRY

The epicentral Intensity of earthquake I_0 is determined by the formula $I_0 = \dots$. The felt information of earthquakes in inhabitation zones provide by civil emergencies and other source is used to determine the Intensity I .

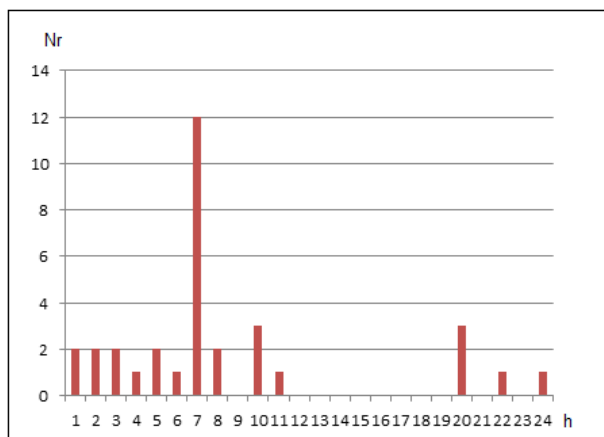
Nr	Data (Date)	Kohëndodhja (Origin time)	Epiqendra dhe të dhëna makrosizmike EMS-98 (Epicenter and macroseismic data EMS-98)
1	13.12.2012	21:39:37.4	Epiqendra: 41.05 V; 19.87 L në fshatin Grykesh 10 km në V-L të qytetit Peqinit. Intensiteti i tërmetit në epiqendër $I_0 = V-VI$ balle Ndjerë: V ballë ne qytetin e Peqinit, IV ballë në qytetin e Elbasanit dhe III-IV ne qytetin e Tiranës. (Epicentre: 40.73N; 19.62E in Verbas Grykesh 10 km N-E of Peqinit town. Epicentral Intensity $I_0 = V-VI$ Felt: IV at Peqini town, IV at Elbasani town and III-IV at Tirana city)

KATALOGU I TËRMETEVE MUJORE (THE MONTHLY EARTHQUAKE CATALOG)

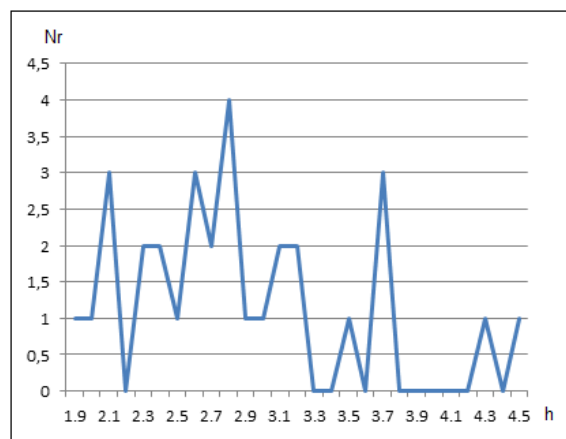
Data Date vvvv/mm/dd	Koha Time hh:mm:ss	Gjer. Lat	Gjat. Long.	Thell. Depth (km)	Nr. St. N₀.	Gab. St. Rms	Mag. (M_D)	Vendndodhja Location
2012 12 1	0624 59.66	41.87	19.57	7	4	0.1	2.8	GJADER- LEZHE
2012 12 1	0644 58.18	39.36	20.47	3	5	0.2	3.2	GREECE
2012 12 2	0047 37.89	39.36	20.38	2	4	0.4	2.9	GREECE
2012 12 2	0754 43.26	42.04	20.57	7	3	0.1	2.6	ZAPOD, KUKES
2012 12 4	1737 23.72	40.14	20.03	20	6	0.1	2.9	KARDHIQ, GJIROKA
2012 12 4	1850 51.28	42.47	20.07	8	3	0.1	2.8	BAJRAM CURRI
2012 12 4	1900 06.58	37.64	22.54	7	4	1.4	4.5	GREECE
2012 12 7	1917 40.94	40.35	21.34	20	6	0.3	3.2	GREECE
2012 12 8	2257 16.50	41.30	20.52	4	6	0.2	3.7	STEBLEVE, ELBASAN
2012 12 12	1223 25.32	42.11	20.58	7	4	0.3	2.6	KUKES
2012 12 13	0800 26.63	41.44	20.23	7	3	0.1	2.5	BULQIZE
2012 12 13	2139 27.12	41.05	19.87	10	7	0.2	4.3	GRYKESH, PEQIN
2012 12 13	2143 27.32	41.07	19.92	7	4	0.1	2.8	PAPER, PEQIN
2012 12 14	0121 39.61	41.05	19.88	22	4	0.1	2.7	GRYKESH, PEQIN
2012 12 14	1438 32.00	41.41	19.98	8	5	0.2	3.2	N-E TIRANA
2012 12 15	0711 19.69	41.31	20.34	7	4	0.3	2.3	ZDRAJSH, LIBRAZHD
2012 12 15	1230 04.85	41.48	19.65	11	2	0.2	2.0	N-W TIRANA
2012 12 17	1120 26.41	42.20	20.23	7	3	0.3	2.4	DARDHE, KUKES
2012 12 20	1732 54.12	42.34	20.14	5	10	0.1	3.1	LLUGAJ, B, CURRI
2012 12 21	1610 05.10	41.66	20.12	2	6	0.1	3.5	BURREL
2012 12 21	1612 35.98	41.67	20.15	3	4	0.2	2.6	BURREL
2012 12 22	0504 22.02	40.18	20.33	7	8	0.1	3.1	SHEPER, PERMET
2012 12 23	0015 12.45	41.89	20.30	7	3	0.1	2.4	ARREN, PESHKOPI
2012 12 24	0123 48.78	41.91	20.51	24	2	0.1	2.1	CAJ, KUKES
2012 12 26	0338 03.11	41.75	20.26	6	3	0.1	2.3	ÇIDHNA, PESHKOPI
2012 12 27	1926 59.31	41.49	20.50	20	4	0.4	2.8	DIBER
2012 12 28	0550 36.90	40.81	21.36	10	9	0.4	3.7	FOLLORINE, GREECE
2012 12 29	0228 58.63	41.47	20.25	7	3	0.2	2.3	BULQIZ
2012 12 29	2350 3243	41.33	20.99	10	3	0.2	2.1	MAQEDONI
2012 12 30	0024 38.86	41.81	20.46	26	2	0.4	2.1	RADOMIR, PESHKOPI
2012 12 30	0309 59.24	42.48	20.08	5	3	0.4	2.7	B. CURRI
2012 12 30	0816 51.40	40.96	20.24	1	7	0.4	3.0	ZAVALINE, ELBASAN
2012 12 30	1308 46.72	43.31	21.04	1	3	0.4	3.7	SERBI
2012 12 31	2304 00.00	41.85	20.21	7	2	0.2	1.9	LURE, PESHKOPI

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)	70
Events occurred within quadrant	
➤ Ngjarje sizmike të ndodhura brenda kufijve shtetërore	37
Events occurred inside state boundaries	
➤ Thellësia mesatare e ngjarjeve sizmike	10
Mean hypocenter depth	
➤ Thellësia maksimale	36
Maximum hypocenter depth	
➤ Magnituda lokale minimale e regjistruar	1.5
Minimum recorded local magnitude	
➤ Magnituda lokale maksimale e regjistruar	4.5
Maximum recorded local magnitude	
➤ Intensiteti sizmik maksimal ne epiqendër	V-VI
Maximum seismic intensity	



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



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

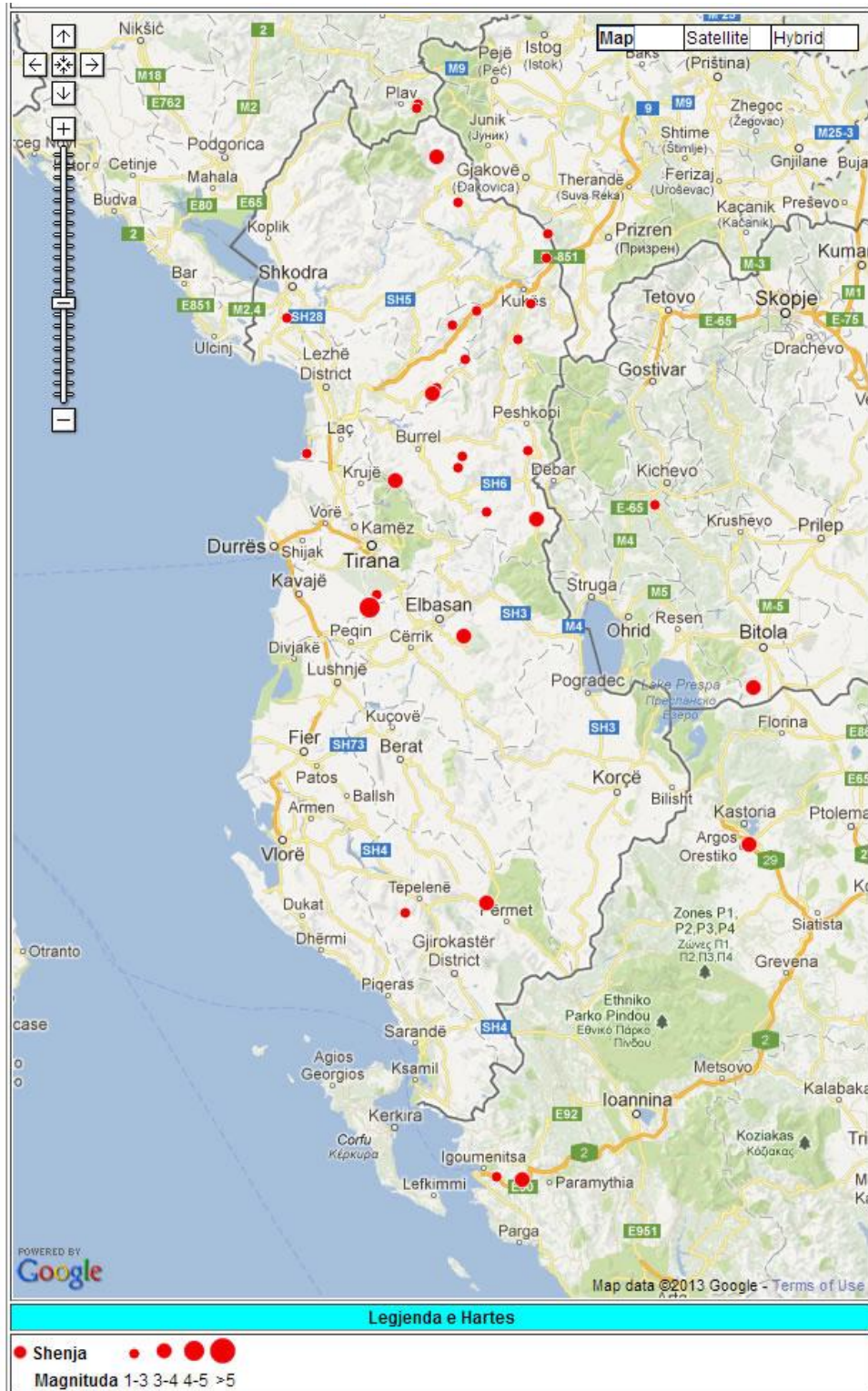
Zgjidhja e mekanizmit vatror (ZMV)

Për zgjidhjen e mekanizmit të vates janë përdorur polaritetet e hyrjeve të para P (Pg/Pn), të përcaktuara mbi format valore që shprehin funksionin kohor të burimit sizmik perkatës, në fushën e shpejtësisë. Janë përdorur regjistrimet në bandë të gjere frekuenciale (0.2 – 30 Hz), të cilat janë modeluar 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 (Snook 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 (Snook et al., 1984). Whereas, to optimize the solution HASH routine (Hardebeck & Shearer, 2003), has been applied as well.

Harta e epiqendrave të tërmeteve



Identifikimi i ngjarjes (Event ID)	Parametrat e burimit (Source parameters)	Magnituda (Magnitude)	Parametrat e Mekanizmit (Focal Mechanism parameters)	Tipi (Focal Type)
201212082257	41.33 (V) 20.54 (L) 20 (km)	3.5	P1: 11, 62, -66 P2: 147, 36, -127 T: 84, 14 P: 323, 64	
201212132139	41.09 (V) 19.73 (L) 24 (km)	3.8	P1: 219, 14, -44 P2: 352, 80, -100 T: 91, 35 P: 250, 54	