

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

July

2013

Prepared by
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GENERAL BULLETIN INFORMATION

The National Centre for Geophysical Research is a governmental agency established 1975 in Lebanon by the National Council for Scientific Research (CNRS). The mission of the Centre, among other assignments, is the monitoring of seismic activity within the national territory. Currently, the national seismic network is under deployment; it has been officially registered as GRAL, an acronym for Geophysical Research Arrays of Lebanon. Station coordinates and status are given below.

Since 1993, the Centre has been participating in a regional initiative by the UNESCO and the USGS known as RELEMR, i.e. Reducing Earthquake Losses in the Eastern Mediterranean Region.

Within this framework, the Centre routinely contributes to the database set up for this purpose and maintained by the Euro-Mediterranean Seismological Centre (EMSC). For coherence, the Centre has adopted the recommended seismic analysis system SEISAN developed by Jens Havskov and Lars Ottemoller from the University of Bergen, Norway.

The localization program currently used for locating earthquakes is Hypocenter (Lienert et al., 1986). Plane parallel layers are assumed for local and regional events, while the IASPEI travel time tables are used for distant events.

The velocity model used for all local and regional events is the one currently adopted by the RELEMR initiative.

P-wave velocity (km/sec)	depth to top of layer (km)
6.2	0.0
6.8	14.0
8.05	34.0
8.25	50.0
8.5	80.0

Magnitudes are calculated from the coda duration. The coda wave magnitude is estimated via the formula:

$$M_c = 0.08 + 1.63 * \log_{10}(T) + 0.0009 * D.$$

where T is the coda duration (sec) and D is the epicentral distance (km). The coefficients above were adopted at the outset of our Centre in 1980 and thus are still in use for the sake of continuity.

All available coda values are used for magnitude calculations. No station corrections are used for either travel times or magnitudes calculations. The V_p/V_s velocity ratio used in both layered models above is 1.74.

As a general policy, neither depths, nor epicenters, are fixed unless stated otherwise since this might restrict later use of the data. Consequently, some event locations might be unrealistic such as zero depth earthquakes or teleseismic locations off by 1000 km. However, the locations are based on the available data and reflect the localization procedure and the models used.

STATIONS USED

The stations listed below are operated by the National Centre for Geophysical Research. They constitute the basic setup of the National Seismic Network of Lebanon.

However, readings from other cooperating agencies are also used in locating the events and thus more stations may appear in the event lists than in the station list; it is worth mentioning the systematic use of arrival times from the Cypriot seismic network CSS in order to constrain events corresponding to an active zone off the Lebanese shorelines.

STATION	LATITUDE	LONGITUDE	HEIGHT (m)	NAME	COMMENTS
BHL	3354.25N	3539.25E	1000	BHANNES	Opened May 1980
HWQ	3416.68N	3556.78E	1161	HAWQA	Opened Jan 2001
MATL	3329.32N	3519.78E	5	MATARIH	Opened Nov 2000
FKH	3414.69N	3624.61E	1152	FAKEHEH	Opened Dec 2004
RCY	3329.79N	3550.14E	1370	RACHAYA	Opened Jun 2006
DWR	3323.13N	3524.08E	420	DWEIR	Scheduled 2003
BEYL	3352.30N	3529.59E	49	BEIRUT	Opened Jul 2006
NAQL	3307.02N	3508.46E	83	NAQOURA	Opened Jul 2008
DQRL	3342.34N	3534.21E	963	DEIR QAMAR	Opened Mar 2010
QRWL	3332.86N	3540.93E	875	QARAOUN	Opened Oct 2011
SHBL	3320.90N	3544.63E	1422	CHEBAA	Opened Oct 2011

REGIONAL AND DISTANT EARTHQUAKES

Because regional events and teleseisms are not localized, but simply identified, EMSC determination data are given along with phase arrivals (in general first arrival) at the stations of our network.

MACROSEISMIC DATA

Macroseismic data, if available, are included in the bulletin.

MONTHLY EPICENTER MAPS

Maps will be found on the last page.

ELECTRONIC PUBLICATION

This provisional bulletin is available for download in pdf format on:
<http://www.cnrs.edu.lb/grdownload.html>

REFERENCES

- Havskov, J. and Ottemoller, L. (2001). SEISAN: The Earthquake Analysis Software. -version 7.2-
Institute of Solid Earth Physics, University of Bergen.
<http://www.ifjf.uib.no/seismo/software/seisan.html>
- Lienert, B.R., Berg, E. and Frazer, L.N. (1986). Hypocenter: An earthquake location method using centered, scaled, and adaptively least squares. Bull. Seism. Soc. Am., 76., pp 771-783.

Abbreviations:

TIME: Origin time in UTC (hr. min. and sec.) or data file onset time if event is not located.

LAT: Latitude of epicenter

LON: Longitude of epicenter

DEPTH: Focal depth in kilometer (trailing F indicates fixed depth)

AGENCY: REL throughout the bulletin, aka. REsearch Lebanon

MAGNITUDES: Up to 3 different magnitudes can be given followed by type and reporting agency, e.g. 3.1 MC REL - coda magnitude calculated according to above mentioned formula.

EMSC: Euro-Mediterranean Seismological Centre.

OT: Origin Time

RMS: Root mean square value of travel time residuals

STAT: Station code

CO: Component; S:short period, L:long period, B:broadband.

DIST: Epicenter distance (km)

AZI: Azimuth from source to station

PHAS: Phase; The first letter characterizes onset E(mergent) or I(mpulsive)

P: Polarity (C for compression, D for dilatation)

HR: Hour

MN: Minute

SECON: Seconds

TRES: Residual (seconds)

CODA: Signal duration in seconds

AMPL: Ground Amplitude ($0.5 \times (\text{peak to peak})$), (nm) at period PERI

PERI: Period where amplitude is measured

BAZ: Back azimuth (station to event)

ARES: Back azimuth residual

VELO: Apparent phase velocity (km/sec)

WT: Weight of phase in the location

*: An asterisk before the phase arrival time implies a potential timing error. If an S phase is read, differential S-P times will be used in the hypocenter location.

July 1 2013 Hour: 15:30 35.6 Lat: 33.45N Lon: 35.59E Depth: 11 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	14	38	EP		1530	38.61	-0.06							1.0
QRWL	SN	14	38	ES		1530	40.95	0.02							1.0
SHBL	BZ	18	128	EP		1530	39.24	0.01							1.0
SHBL	BE	18	128	ES		1530	41.91	0.00							1.0
RCY	SZ	23	77	EP		1530	39.97	0.01	34						1.0
DQRL	SZ	29	356	EP		1530	40.71	0.02							1.0

July 1 2013 Hour: 16:39 44.0 Lat: 33.54N Lon: 35.70E Depth: 1 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	2	279	EP		1639	44.48	-0.00							1.0
RCY	SZ	14	113	EP		1639	46.22	0.02	47						1.0
RCY	SN	14	113	ES		1639	47.86	0.00							1.0
DQRL	SZ	22	326	EP		1639	47.57	0.09							1.0
DQRL	SN	22	326	ES		1639	50.06	-0.02							1.0
SHBL	BZ	22	170	EP		1639	47.57	-0.01							1.0
SHBL	BN	22	170	ES		1639	50.23	-0.02							1.0
BHL	BZ	40	354	EP		1639	50.39	-0.06							1.0

July 2 2013 Hour: 13:59 43.7 Lat: 33.50N Lon: 35.67E Depth: 2 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.1 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	6	13	EP		1359	44.80	0.00							1.0
RCY	SZ	16	90	EP		1359	46.36	0.07							1.0
SHBL	BZ	18	157	EP		1359	46.57	-0.09							1.0
SHBL	BN	18	157	ES		1359	48.86	-0.00							1.0
DQRL	SZ	25	339	EP		1359	47.76	0.02	59						1.0
DQRL	SN	25	339	ES		1359	50.79	0.05							1.0
BEYL	BZ	45	339	EP		1359	50.91	0.02							1.0
BHL	BZ	45	358	EP		1359	50.93	-0.07							1.0
BHL	BN	45	358	ES		1359	56.32	-0.09							1.0
HWQ	SZ	90	16	EP		1359	58.33	0.06							1.0

July 2 2013 Hour: 16:23 3.4 Lat: 33.79N Lon: 35.78E Depth: 0 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	317	EP		1623	6.13	-0.02	31						1.0
DQRL	SZ	22	244	EP		1623	6.85	-0.01							1.0
DQRL	SN	22	244	ES		1623	9.45	0.02							1.0
RCY	SZ	33	171	EP		1623	8.77	0.06							1.0
RCY	SE	33	171	ES		1623	12.61	-0.05							1.0
HWQ	SZ	56	16	EP		1623	12.46	0.00							1.0

July 3 2013 Hour: 9:22 59.7 Lat: 33.91N Lon: 35.83E Depth: 2 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	268	EP		923	2.34	-0.09	40						1.0
BHL	BN	17	268	ES		923	4.50	0.04							1.0
DQRL	SZ	33	228	EP		923	5.12	0.04							1.0
HWQ	SZ	42	14	EP		923	6.55	0.02							1.0
RCY	SZ	46	180	EP		923	7.07	-0.01							1.0
RCY	SN	46	180	ES		923	12.55	0.00							1.0

July 3 2013 Hour: 23:11 58.9 Lat: 34.89N Lon: 34.44E Depth: 18 Agency: REL Regional
Magnitudes: 3.4MC REL Rms: 0.1 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	154	116	EP		2312	22.49	0.05	94						1.0
HWQ	SE	154	116	ES		2312	39.86	-0.00							1.0
BHL	BZ	156	134	EP		2312	22.63	-0.07							1.0
BHL	BE	156	134	ES		2312	40.39	0.07							1.0
DQRL	SZ	168	141	EP		2312	24.10	0.01							1.0
RCY	SZ	201	140	EP		2312	28.27	-0.03							1.0
RCY	SE	201	140	ES		2312	50.11	0.04							1.0
SHBL	BZ	209	144	EP		2312	29.19	-0.10							1.0

July 3 2013 Hour: 23:16 44.1 Lat: 34.78N Lon: 34.46E Depth: 18 Agency: REL Regional
Magnitudes: 3.4MC REL Rms: 0.1 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SE	147	112	ES		2317	23.64	0.09							1.0
BHL	BZ	147	131	EP		2317	6.65	0.00							1.0
BHL	BE	147	131	ES		2317	23.43	0.06							1.0
HWQ	SZ	147	112	EP		2317	6.65	-0.10	87						1.0
DQRL	SZ	157	139	EP		2317	7.87	-0.06							1.0
RCY	SZ	191	138	EP		2317	12.16	0.00							1.0
RCY	SE	191	138	ES		2317	32.94	-0.01							1.0
SHBL	BZ	198	143	EP		2317	13.07	-0.02							1.0

July 4 2013 Hour: 10:11 46.2 Lat: 33.49N Lon: 35.70E Depth: 9 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	7	344	EP		1011	48.14	-0.03	29						1.0
QRWL	SE	7	344	ES		1011	49.63	-0.00							1.0
RCY	SZ	12	85	EP		1011	48.84	0.02							1.0
DQRL	SZ	27	333	EP		1011	50.88	0.02							1.0
DQRL	SN	27	333	ES		1011	54.33	0.01							1.0
HWQ	SZ	91	14	EP		1012	0.80	-0.01							1.0

July 4 2013 Hour: 15:19 8.0 Lat: 33.47N Lon: 35.69E Depth: 1 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.1 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	8	356	EP		1519	9.32	-0.08							1.0
RCY	SZ	14	78	EP		1519	10.23	-0.04							1.0
RCY	SN	14	78	ES		1519	12.05	0.07							1.0
SHBL	BZ	15	159	EP		1519	10.34	-0.03							1.0
DQRL	SZ	28	337	EP		1519	12.53	-0.01	62						1.0
DQRL	SN	28	337	ES		1519	16.00	0.08							1.0
BHL	BZ	48	356	EP		1519	15.79	0.05							1.0
BHL	BN	48	356	ES		1519	21.45	-0.04							1.0
HWQ	SZ	93	15	EP		1519	22.88	-0.03							1.0

July 4 2013 Hour: 16:30 7.5 Lat: 33.78N Lon: 35.76E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	324	EP		1630	10.11	-0.12	45						1.0
BHL	BE	17	324	ES		1630	12.29	0.04							1.0
DQRL	SZ	20	245	EP		1630	10.72	0.05							1.0
DQRL	SE	20	245	ES		1630	13.02	-0.00							1.0
QRWL	SZ	27	196	EP		1630	11.82	-0.03							1.0
QRWL	SN	27	196	ES		1630	15.06	-0.01							1.0
RCY	SZ	32	168	EP		1630	12.74	0.02							1.0
HWQ	SZ	58	17	EP		1630	16.83	0.03							1.0

July 5 2013 Hour: 15:10 19.1 Lat: 33.62N Lon: 36.03E Depth: 7 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	23	233	EP		1510	23.01	-0.05	44						1.0
RCY	SN	23	233	ES		1510	25.99	0.02							1.0
DQRL	SZ	44	283	EP		1510	26.41	0.08							1.0
DQRL	SN	44	283	ES		1510	31.64	-0.03							1.0
BHL	BZ	47	312	EP		1510	26.81	-0.06							1.0
BHL	BN	47	312	ES		1510	32.61	0.01							1.0
HWQ	SZ	74	354	EP		1510	31.11	0.02							1.0

July 5 2013 Hour: 15:12 22.3 Lat: 33.45N Lon: 35.65E Depth: 2 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	11	18	EP		1512	24.06	-0.05							1.0
SHBL	BZ	15	142	EP		1512	24.69	-0.03							1.0
SHBL	BN	15	142	ES		1512	26.56	0.02							1.0
RCY	SZ	18	75	EP		1512	25.29	0.02	29						1.0
DQRL	SZ	29	346	EP		1512	26.95	0.00							1.0
DQRL	SN	29	346	ES		1512	30.44	0.03							1.0

July 5 2013 Hour: 15:42 43.7 Lat: 33.79N Lon: 35.78E Depth: 1 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	318	EP		1542	46.50	-0.09	41						1.0
BHL	BN	18	318	ES		1542	48.72	0.02							1.0
DQRL	SZ	21	245	EP		1542	47.20	-0.01							1.0
DQRL	SN	21	245	ES		1542	49.81	0.03							1.0
RCY	SZ	33	171	EP		1542	49.02	0.01							1.0
RCY	SN	33	171	ES		1542	52.91	-0.01							1.0
HWQ	SZ	57	16	EP		1542	52.93	0.04							1.0

July 5 2013 Hour: 15:56 46.6 Lat: 33.79N Lon: 35.81E Depth: 2 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	19	310	EP		1556	49.74	0.05	64						1.0
BHL	BN	19	310	ES		1556	52.03	0.03							1.0
DQRL	SZ	25	246	EP		1556	50.42	-0.15							1.0
RCY	SZ	33	176	EP		1556	51.97	0.02							1.0
RCY	SN	33	176	ES		1556	55.92	-0.01							1.0
HWQ	SZ	55	13	EP		1556	55.43	-0.04							1.0

July 5 2013 Hour: 16:9 35.0 Lat: 33.78N Lon: 35.75E Depth: 0 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	327	EP		16 9	37.74	-0.02	35						1.0
DQRL	SZ	19	245	EP		16 9	38.09	0.02							1.0
DQRL	SN	19	245	ES		16 9	40.31	-0.00							1.0
RCY	SZ	32	166	EP		16 9	40.19	-0.03							1.0
RCY	SN	32	166	ES		16 9	44.06	0.01							1.0
HWQ	SZ	58	18	EP		16 9	44.47	0.02							1.0

July 5 2013 Hour: 22:59 2.5 Lat: 33.79N Lon: 35.80E Depth: 3 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	19	314	EP		2259	5.54	-0.03	56						1.0
BHL	BN	19	314	ES		2259	7.87	0.02							1.0
DQRL	SZ	23	247	EP		2259	6.24	-0.02							1.0
RCY	SZ	32	174	EP		2259	7.79	0.02							1.0
RCY	SN	32	174	ES		2259	11.66	-0.01							1.0
SHBL	BZ	49	186	EP		2259	10.42	0.00							1.0

July 6 2013 Hour: 11:40 58.3 Lat: 33.83N Lon: 36.74E Depth: 13 Agency: REL Local
Magnitudes: 3.3MC REL Rms: 0.0 secs

DAMASCUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	92	247	EP		1141	12.82	-0.03							1.0
RCY	SE	92	247	ES		1141	23.60	-0.01							1.0
BHL	BZ	101	275	EP		1141	14.20	-0.01	79						1.0
SHBL	BZ	107	241	EP		1141	15.07	0.00							1.0
SHBL	BN	107	241	ES		1141	27.48	0.01							1.0
DQRL	SZ	109	263	EP		1141	15.47	0.04							1.0
DQRL	SE	109	263	ES		1141	28.09	-0.01							1.0

July 6 2013 Hour: 11:47 13.9 Lat: 33.76N Lon: 36.77E Depth: 54 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.0 secs

DAMASCUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	92	251	EP		1147	28.98	0.02	61						1.0
RCY	SE	92	251	ES		1147	40.10	-0.01							1.0
BHL	BZ	105	279	EP		1147	30.40	0.00							1.0
BHL	BE	105	279	ES		1147	42.62	-0.00							1.0
DQRL	SZ	112	267	EP		1147	31.18	-0.03							1.0
DQRL	SE	112	267	ES		1147	44.05	0.02							1.0

July 7 2013 Hour: 15:56 50.3 Lat: 33.54N Lon: 35.71E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	3	286	EP		1556	50.65	-0.07							1.0
RCY	SZ	13	113	EP		1556	52.25	-0.07							1.0
RCY	SN	13	113	ES		1556	53.84	0.00							1.0
SHBL	BZ	22	172	EP		1556	53.83	0.08							1.0
DQRL	SZ	22	325	EP		1556	53.89	0.01	53						1.0
DQRL	SN	22	325	ES		1556	56.56	0.00							1.0
BHL	BZ	41	353	EP		1556	56.86	0.05							1.0

July 7 2013 Hour: 18:35 31.0 Agency: REL Distant
EMSC OT=18:35:31.0 03.91S 153.92E 388Km M=7.3 NEW IRELAND REG

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1853	26.98								
DQRL	SZ			EP		1853	26.38								
QRWL	SZ			EP		1853	28.33								
RCY	SZ			EP		1853	27.84								

July 8 2013 Hour: 1:28 38.0 Lat: 33.52N Lon: 35.54E Depth: 4 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	13	78	EP		128	40.28	0.01							1.0
QRWL	SN	13	78	ES		128	41.97	0.00							1.0
DQRL	SZ	20	7	EP		128	41.40	0.03	32						1.0
DQRL	SN	20	7	ES		128	43.87	-0.02							1.0
SHBL	BZ	27	136	EP		128	42.41	-0.01							1.0

BHL BZ 43 14 EP 128 45.03-0.01 1.0

July 8 2013 Hour: 9:19 9.2 Lat: 33.38N Lon: 35.63E Depth: 11 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	11	105	EP		919	11.99	-0.02							1.0
SHBL	BN	11	105	ES		919	14.06	0.00							1.0
QRWL	SZ	20	15	EP		919	13.09	0.07	33						1.0
QRWL	SN	20	15	ES		919	15.79	-0.02							1.0
RCY	SZ	24	55	EP		919	13.59	0.01							1.0
DQRL	SZ	37	352	EP		919	15.56	0.00							1.0
BHL	BZ	59	2	EP		919	18.89	-0.04							1.0

July 8 2013 Hour: 9:40 13.2 Lat: 34.05N Lon: 35.73E Depth: 1 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.1 secs

KESROUANE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	204	EP		940	15.98	-0.07	65						1.0
BHL	BN	18	204	ES		940	18.16	0.01							1.0
HWQ	SZ	32	38	EP		940	18.45	0.03							1.0
HWQ	SN	32	38	ES		940	22.29	0.02							1.0
DQRL	SZ	41	202	EP		940	19.75	-0.05							1.0
DQRL	SN	41	202	ES		940	24.73	0.06							1.0
RCY	SZ	62	171	EP		940	23.06	-0.14							1.0
RCY	SN	62	171	ES		940	30.56	-0.03							1.0
SHBL	BZ	78	179	EP		940	25.74	0.01							1.0
SHBL	BN	78	179	ES		940	35.09	0.10							1.0

July 8 2013 Hour: 12:24 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		1224	42.18								
RCY	SZ			EP		1224	51.06								

July 8 2013 Hour: 15:30 28.0 Agency: REL Distant

EMSC OT=15:30:28.0 16.63N 40.84E 10Km M=5.5 RED SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1534	31.32								
BHL	BZ			EP		1534	36.17								

July 9 2013 Hour: 10:11 57.4 Lat: 33.80N Lon: 35.79E Depth: 4 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	313	EP		1012	0.32	-0.02	31						1.0
DQRL	SZ	23	244	EP		1012	1.16	-0.02							1.0
DQRL	SN	23	244	ES		1012	4.00	0.03							1.0
RCY	SZ	34	173	EP		1012	2.89	-0.00							1.0
RCY	SN	34	173	ES		1012	6.94	-0.00							1.0
HWQ	SZ	55	15	EP		1012	6.40	0.02							1.0

July 9 2013 Hour: 15:26 32.2 Lat: 33.79N Lon: 35.79E Depth: 12 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	314	EP		1526	35.68	-0.07	32						1.0
DQRL	SZ	23	244	EP		1526	36.37	-0.07							1.0
DQRL	SN	23	244	ES		1526	39.67	0.08							1.0
RCY	SZ	33	173	EP		1526	38.06	0.03							1.0
RCY	SN	33	173	ES		1526	42.33	-0.03							1.0
HWQ	SZ	56	15	EP		1526	41.46	0.06							1.0

July 9 2013 Hour: 17:24 46.7 Lat: 33.78N Lon: 35.71E Depth: 15 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	338	EP		1724	50.20	-0.00	28						1.0
DQRL	SZ	16	237	EP		1724	50.36	0.03							1.0
DQRL	SN	16	237	ES		1724	52.99	-0.02							1.0
RCY	SZ	34	160	EP		1724	52.69	-0.04							1.0
RCY	SN	34	160	ES		1724	57.20	0.02							1.0
HWQ	SZ	59	21	EP		1724	56.41	0.01							1.0

July 9 2013 Hour: 18:47 43.3 Lat: 34.60N Lon: 36.00E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.1 secs

NORTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	36	188	EP		1847	49.04	-0.07	58						1.0
HWQ	SE	36	188	ES		1847	53.43	0.03							1.0
BHL	BZ	83	203	EP		1847	56.74	-0.03							1.0
BHL	BE	83	203	ES		1848	6.87	0.14							1.0
DQRL	SZ	107	202	EP		1848	0.44	-0.09							1.0
DQRL	SN	107	202	ES		1848	13.16	-0.12							1.0

July 9 2013 Hour: 22:27 18.1 Lat: 34.27N Lon: 36.54E Depth: 2 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.0 secs

HERMEL BAALBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	55	271	EP		2227	26.89	-0.03	68						1.0
HWQ	SE	55	271	ES		2227	33.43	-0.01							1.0
BHL	BZ	91	244	EP		2227	32.89	0.04							1.0
BHL	BN	91	244	ES		2227	43.80	0.04							1.0
RCY	SZ	108	217	EP		2227	35.50	-0.03							1.0
DQRL	SZ	109	235	EP		2227	35.76	-0.00							1.0
DQRL	SN	109	235	ES		2227	48.81	-0.02							1.0
SHBL	BZ	126	216	EP		2227	38.40	-0.04							1.0
SHBL	BN	126	216	ES		2227	53.47	-0.02							1.0

July 10 2013 Hour: 9:52 30.7 Lat: 33.28N Lon: 35.69E Depth: 20 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	9	37	EP		952	34.35	0.01							1.0
SHBL	BE	9	37	ES		952	37.04	-0.01							1.0
RCY	SZ	28	30	EP		952	36.14	-0.01	33						1.0
RCY	SN	28	30	ES		952	40.22	0.01							1.0
DQRL	SZ	48	347	EP		952	38.89	-0.00							1.0

July 10 2013 Hour: 12:41 0.0 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		1241	36.62								
RCY	SZ			EP		1241	40.97								

July 10 2013 Hour: 14:25 39.0 Agency: REL Distant

EMSC OT=14:25:39.0 30.17S 177.36W 8Km M=5.5 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1445	35.26								
RCY	SZ			EP		1445	35.89								
DQRL	SZ			EP		1445	36.36								

July 10 2013 Hour: 14:44 0.0 Agency: REL Distant
EMSC OT=14:44:00.0 30.44S 177.37W 2Km M=5.4 KERMADEC ISLANDS
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 RCY SZ EP 15 3 57.25
 BHL BZ EP 15 3 57.25
 DQRL SZ EP 15 3 57.82

July 10 2013 Hour: 15: 6 25.8 Lat: 33.56N Lon: 35.72E Depth: 0 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs
CENTRAL BEKAA
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 QRWL SZ 3 253 EP 15 6 26.28-0.05 1.0
 RCY SZ 13 120 EP 15 6 27.88-0.03 36 1.0
 RCY SN 13 120 ES 15 6 29.48 0.00 1.0
 DQRL SZ 21 321 EP 15 6 29.28 0.03 1.0
 DQRL SN 21 321 ES 15 6 31.82 0.02 1.0
 SHBL BZ 23 173 EP 15 6 29.57 0.02 1.0
 SHBL BN 23 173 ES 15 6 32.34 0.02 1.0
 BHL BZ 39 352 EP 15 6 32.09-0.01 1.0

July 10 2013 Hour: 16:24 14.3 Lat: 33.79N Lon: 35.78E Depth: 2 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs
BEIRUT REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ 17 318 EP 1624 17.05-0.07 38 1.0
 DQRL SZ 21 244 EP 1624 17.86 0.08 1.0
 DQRL SN 21 244 ES 1624 20.36 0.00 1.0
 RCY SZ 33 171 EP 1624 19.68 0.05 1.0
 RCY SN 33 171 ES 1624 23.58 0.00 1.0
 SHBL BZ 49 184 EP 1624 22.11-0.10 1.0
 HWQ SZ 56 16 EP 1624 23.46 0.04 1.0

July 10 2013 Hour: 21:22 41.2 Lat: 34.72N Lon: 34.40E Depth: 2 Agency: REL Regional
Magnitudes: 3.5MC REL Rms: 0.2 secs
CYPRUS REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ 146 128 EP 2123 4.46-0.04 1.0
 HWQ SZ 150 109 EP 2123 5.11 0.07 106 1.0
 HWQ SE 150 109 ES 2123 22.67 0.02 1.0
 DQRL SZ 155 136 EP 2123 5.91 0.06 0.2
 RCY SZ 189 135 EP 2123 10.66 0.00 1.0
 RCY SN 189 135 ES 2123 32.56 0.13 1.0
 SHBL BZ 196 140 EP 2123 11.52 0.02 1.0
 SHBL BE 196 140 ES 2123 33.70-0.19 1.0

July 11 2013 Hour: 7:14 0.0 Agency: REL Regional
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 RCY SZ EP 714 28.78

July 11 2013 Hour: 13:29 7.2 Lat: 33.96N Lon: 36.28E Depth: 0 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.1 secs
CENTRAL BEKAA
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ SZ 47 319 EP 1329 14.80 0.04 31 1.0
 HWQ SN 47 319 ES 1329 20.33-0.04 1.0
 RCY SZ 66 219 EP 1329 17.72-0.07 1.0
 RCY SN 66 219 ES 1329 25.64-0.00 1.0
 DQRL SZ 72 247 EP 1329 18.79 0.08 1.0

July 11 2013 Hour: 15:37 42.8 Lat: 33.80N Lon: 35.77E Depth: 16 Agency: REL Local
 Magnitudes: 2.5MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	319	EP		1537	46.58	0.00	31						1.0
BHL	BN	16	319	ES		1537	49.37	-0.00							1.0
DQRL	SZ	21	241	EP		1537	47.17	0.00							1.0
RCY	SZ	34	169	EP		1537	48.92	-0.02							1.0
RCY	SE	34	169	ES		1537	53.49	0.01							1.0
HWQ	SZ	56	17	EP		1537	52.03	0.00							1.0

July 11 2013 Hour: 22:30 10.4 Lat: 33.90N Lon: 35.88E Depth: 3 Agency: REL Local
 Magnitudes: 2.6MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	21	271	EP		2230	13.84	-0.03	34						1.0
BHL	BN	21	271	ES		2230	16.42	0.01							1.0
DQRL	SZ	36	233	EP		2230	16.35	0.06							1.0
DQRL	SN	36	233	ES		2230	20.59	-0.02							1.0
HWQ	SZ	42	8	EP		2230	17.29	0.00							1.0
QRWL	SZ	43	205	EP		2230	17.42	-0.05							1.0
RCY	SZ	45	185	EP		2230	17.78	0.01							1.0
RCY	SN	45	185	ES		2230	23.19	0.01							1.0

July 12 2013 Hour: 8:57 32.0 Agency: REL Regional

EMSC OT=08:57:32.0 34.76N 34.37E 20Km M=3.1 CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		857	56.74								
RCY	SZ			EP		858	0.19								

July 12 2013 Hour: 8:58 41.2 Agency: REL Regional

EMSC OT=08:58:41.2 34.70N 34.28E 10Km M=3.3 CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		859	6.78								
RCY	SZ			EP		859	10.82								

July 13 2013 Hour: 13:17 41.1 Lat: 33.55N Lon: 35.71E Depth: 0 Agency: REL Local
 Magnitudes: 2.6MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	2	272	EP		1317	41.42	-0.08							1.0
RCY	SZ	13	115	EP		1317	43.25	-0.05	36						1.0
RCY	SN	13	115	ES		1317	44.91	0.00							1.0
DQRL	SZ	22	325	EP		1317	44.66	0.04							1.0
DQRL	SN	22	325	ES		1317	47.22	0.02							1.0
SHBL	BZ	22	171	EP		1317	44.73	-0.01							1.0
SHBL	BN	22	171	ES		1317	47.47	0.06							1.0
BHL	BZ	40	353	EP		1317	47.58	0.01							1.0

July 13 2013 Hour: 13:57 21.7 Lat: 33.80N Lon: 35.77E Depth: 12 Agency: REL Local
 Magnitudes: 2.8MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	317	EP		1357	25.04	-0.02	43						1.0
DQRL	SZ	21	242	EP		1357	25.74	-0.01							1.0
DQRL	SN	21	242	ES		1357	28.77	0.02							1.0
RCY	SZ	34	170	EP		1357	27.59	0.00							1.0
RCY	SE	34	170	ES		1357	31.95	-0.00							1.0
HWQ	SZ	56	17	EP		1357	30.93	0.01							1.0

July 13 2013 Hour: 15:43 57.9 Lat: 33.45N Lon: 35.64E Depth: 0 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	11	19	EP		1543	59.72	-0.04							1.0
SHBL	BZ	15	140	EP		1544	0.34	0.00							1.0
SHBL	BE	15	140	ES		1544	2.11	-0.01							1.0
RCY	SZ	19	74	EP		1544	0.97	0.02	32						1.0
DQRL	SZ	29	347	EP		1544	2.61	0.00							1.0
DQRL	SE	29	347	ES		1544	6.08	0.01							1.0

July 14 2013 Hour: 11: 5 42.5 Lat: 33.70N Lon: 35.40E Depth: 19 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	16	89	EP		11 5	46.47	-0.05	45						1.0
DQRL	SE	16	89	ES		11 5	49.51	-0.02							1.0
BHL	BZ	33	46	EP		11 5	48.63	0.14							1.0
RCY	SZ	47	119	EP		11 5	50.46	0.02							1.0
RCY	SE	47	119	ES		11 5	56.35	0.00							1.0
HWQ	SZ	81	38	EP		11 5	55.38	-0.10							1.0

July 15 2013 Hour: 3: 6 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		3 7	29.50								
SHBL	BZ			EP		3 7	28.47								

July 15 2013 Hour: 15:53 18.0 Lat: 33.80N Lon: 35.79E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	314	EP		1553	20.73	-0.04	43						1.0
BHL	BN	17	314	ES		1553	22.82	0.02							1.0
DQRL	SZ	22	243	EP		1553	21.64	-0.01							1.0
DQRL	SN	22	243	ES		1553	24.32	-0.01							1.0
RCY	SZ	34	172	EP		1553	23.39	-0.08							1.0
RCY	SN	34	172	ES		1553	27.49	-0.00							1.0
SHBL	BZ	50	185	EP		1553	25.98	-0.11							1.0
SHBL	BN	50	185	ES		1553	32.18	0.12							1.0
HWQ	SZ	55	15	EP		1553	27.00	0.06							1.0

July 16 2013 Hour: 3:27 39.0 Lat: 33.79N Lon: 35.78E Depth: 11 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	318	EP		327	42.49	0.04	46						1.0
BHL	BE	18	318	ES		327	44.98	-0.02							1.0
DQRL	SZ	22	246	EP		327	42.97	-0.01							1.0
DQRL	SN	22	246	ES		327	45.94	0.01							1.0
RCY	SZ	33	171	EP		327	44.58	-0.03							1.0
RCY	SE	33	171	ES		327	48.78	0.02							1.0

July 16 2013 Hour: 14: 9 27.0 Agency: REL Distant

EMSC OT=14:09:27.0 43.06N 145.45E 40Km M=5.5 HOKKAIDO

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1421	33.50								
SHBL	BZ			EP		1421	35.57								

July 16 2013 Hour: 16:04.2 Lat: 33.54N Lon: 35.71E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	3	286	EP		16	0	41.66	-0.03						1.0
RCY	SZ	13	113	EP		16	0	43.27	-0.02						1.0
RCY	SN	13	113	ES		16	0	44.82	0.01						1.0
SHBL	BZ	22	172	EP		16	0	44.73	0.00						1.0
SHBL	BN	22	172	ES		16	0	47.33	0.02						1.0
DQRL	SZ	22	325	EP		16	0	44.86	0.01	44					1.0
DQRL	SN	22	325	ES		16	0	47.55	0.03						1.0
BHL	BZ	41	353	EP		16	0	47.76	-0.02						1.0

July 17 2013 Hour: 9:40 16.7 Lat: 34.06N Lon: 35.60E Depth: 0 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

KESROUANE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	166	EP		940	19.60	-0.07	32						1.0
BHL	BN	18	166	ES		940	21.85	0.00							1.0
HWQ	SZ	40	53	EP		940	23.09	-0.01							1.0
HWQ	SN	40	53	ES		940	27.83	0.01							1.0
DQRL	SZ	40	185	EP		940	23.18	0.03							1.0
RCY	SZ	66	161	EP		940	27.49	0.05							1.0

July 17 2013 Hour: 10:47 57.9 Lat: 33.91N Lon: 35.84E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	267	EP		1048	0.67	-0.03	37						1.0
BHL	BE	17	267	ES		1048	2.77	0.00							1.0
DQRL	SZ	34	228	EP		1048	3.43	0.03							1.0
HWQ	SZ	42	14	EP		1048	4.64	0.01							1.0
RCY	SZ	46	181	EP		1048	5.36	-0.01							1.0
RCY	SN	46	181	ES		1048	10.88	-0.00							1.0

July 17 2013 Hour: 11:33 1.2 Lat: 34.13N Lon: 35.78E Depth: 26 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

KESROUANE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	23	42	EP		1133	6.74	0.01	50						1.0
HWQ	SN	23	42	ES		1133	10.79	-0.00							1.0
BHL	BZ	27	205	EP		1133	7.21	-0.01							1.0
BHL	BE	27	205	ES		1133	11.64	-0.01							1.0
DQRL	SZ	51	203	EP		1133	10.12	-0.00							1.0
DQRL	SE	51	203	ES		1133	16.71	0.02							1.0
RCY	SZ	70	176	EP		1133	12.86	0.01							1.0
RCY	SN	70	176	ES		1133	21.45	0.00							1.0
SHBL	BZ	87	182	EP		1133	15.17	-0.01							1.0

July 17 2013 Hour: 11:44 19.0 Agency: REL Regional
EMSC OT=11:44:19.0 36.09N 31.15E 10Km M=3.9 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		1145	25.36								
RCY	SZ			EP		1145	29.27								

July 17 2013 Hour: 12:15 47.6 Lat: 33.36N Lon: 35.43E Depth: 0 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	31	48	EP		1215	52.60	-0.07	30						1.0
QRWL	SN	31	48	ES		1215	56.41	-0.01							1.0
DQRL	SZ	41	19	EP		1215	54.15	0.00							1.0
DQRL	SN	41	19	ES		1215	59.01	0.02							1.0

RCY SZ 41 68 EP 1215 54.22 0.05 1.0

July 17 2013 Hour: 15:22 13.8 Lat: 33.54N Lon: 35.71E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	3	285	EP		1522	14.18	-0.06							1.0
RCY	SZ	13	113	EP		1522	15.75	-0.05	39						1.0
RCY	SN	13	113	ES		1522	17.31	0.01							1.0
SHBL	BZ	22	172	EP		1522	17.30	0.05							1.0
DQRL	SZ	23	324	EP		1522	17.43	0.04							1.0
DQRL	SN	23	324	ES		1522	20.10	0.02							1.0
BHL	BZ	41	352	EP		1522	20.31	-0.01							1.0

July 17 2013 Hour: 15:43 58.2 Lat: 33.79N Lon: 35.78E Depth: 2 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	315	EP		1544	1.06	0.02	47						1.0
BHL	BN	17	315	ES		1544	3.12	-0.01							1.0
DQRL	SZ	22	244	EP		1544	1.84	-0.00							1.0
DQRL	SN	22	244	ES		1544	4.53	0.00							1.0
RCY	SZ	33	172	EP		1544	3.64	0.00							1.0
RCY	SN	33	172	ES		1544	7.65	-0.00							1.0
HWQ	SZ	56	15	EP		1544	7.20	-0.01							1.0

July 18 2013 Hour: 9: 4 34.3 Lat: 33.20N Lon: 35.60E Depth: 5 Agency: REL Local
Magnitudes: 3.4MC REL Rms: 0.1 secs

NORTH GALILEE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	21	39	EP		9 4	37.94	0.03							1.0
SHBL	BN	21	39	ES		9 4	40.56	-0.04							1.0
QRWL	SZ	39	11	EP		9 4	40.77	0.04							1.0
RCY	SZ	40	34	EP		9 4	40.56	-0.21							1.0
RCY	SN	40	34	ES		9 4	45.62	0.04							1.0
DQRL	SZ	56	357	EP		9 4	43.50	0.08							1.0
DQRL	SN	56	357	ES		9 4	50.18	-0.01							1.0
BEYL	BZ	75	352	EP		9 4	46.38	-0.07							1.0
BHL	BZ	78	4	EP		9 4	46.97	0.00							1.0
BHL	BN	78	4	ES		9 4	56.41	0.05							1.0
HWQ	SZ	124	15	EP		9 4	54.10	0.06	94						1.0
HWQ	SN	124	15	ES		9 5	8.65	-0.02							1.0

July 18 2013 Hour: 12:16 27.9 Lat: 34.58N Lon: 36.18E Depth: 4 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.0 secs

NORTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	39	213	EP		1216	34.24	-0.05	66						1.0
HWQ	SN	39	213	ES		1216	39.01	-0.01							1.0
BHL	BZ	89	213	EP		1216	42.28	0.06							1.0
DQRL	SZ	112	210	EP		1216	45.89	-0.01							1.0
DQRL	SN	112	210	ES		1216	59.24	0.01							1.0
RCY	SZ	124	195	EP		1216	47.73	0.00							1.0

July 19 2013 Hour: 2:10 8.5 Lat: 33.68N Lon: 35.81E Depth: 1 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	19	220	EP		210	11.55	0.05							1.0
QRWL	SN	19	220	ES		210	13.76	0.03							1.0
RCY	SZ	20	173	EP		210	11.74	-0.03							1.0
RCY	SN	20	173	ES		210	14.18	-0.01							1.0
DQRL	SZ	22	278	EP		210	12.14	0.01	72						1.0
DQRL	SN	22	278	ES		210	14.81	-0.01							1.0

BHL	BZ	29	330	EP		210	13.08	-0.12								1.0
BHL	BN	29	330	ES		210	16.69	0.01								1.0
BEYL	BZ	36	307	EP		210	14.39	0.01								1.0
SHBL	BZ	37	189	EP		210	14.44	-0.02								1.0
HWQ	SZ	68	11	EP		210	19.56	0.10								1.0

July 19 2013 Hour: 2:14 24.4 Lat: 33.49N Lon: 35.65E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC REL Rms: 0.1 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	8	27	EP		214	25.59	-0.09	26						1.0
QRWL	SN	8	27	ES		214	26.64	0.02							1.0
SHBL	BZ	18	149	EP		214	27.25	-0.04							1.0
SHBL	BN	18	149	ES		214	29.45	0.02							1.0
RCY	SZ	18	86	EP		214	27.35	0.06							1.0
DQRL	SZ	25	344	EP		214	28.57	0.06							1.0
DQRL	SE	25	344	ES		214	31.57	0.03							1.0
BHL	BZ	47	1	EP		214	31.84	-0.06							1.0

July 20 2013 Hour: 12:30 0.5 Lat: 33.79N Lon: 35.77E Depth: 3 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	321	EP		1230	3.16	-0.05	48						1.0
BHL	BN	17	321	ES		1230	5.25	-0.00							1.0
DQRL	SZ	21	243	EP		1230	3.84	0.01							1.0
DQRL	SN	21	243	ES		1230	6.37	0.05							1.0
BEYL	BZ	27	290	EP		1230	4.81	-0.03							1.0
RCY	SZ	33	169	EP		1230	5.82	-0.02							1.0
RCY	SN	33	169	ES		1230	9.81	-0.01							1.0
HWQ	SZ	57	17	EP		1230	9.70	0.07							1.0

July 20 2013 Hour: 15:29 43.4 Lat: 33.80N Lon: 35.77E Depth: 15 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	316	EP		1529	47.02	0.00	35						1.0
BHL	BN	16	316	ES		1529	49.69	0.02							1.0
DQRL	SZ	22	240	EP		1529	47.73	-0.01							1.0
RCY	SZ	35	170	EP		1529	49.47	-0.08							1.0
RCY	SN	35	170	ES		1529	54.15	0.07							1.0
HWQ	SZ	55	17	EP		1529	52.66	0.13							0.2

July 21 2013 Hour: 1:32 24.0 Agency: REL Distant
EMSC OT=01:32:24.0 43.53N 13.74E 5Km M=5.0 CENTRAL ITALY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		136	52.85								
SHBL	BZ			EP		136	57.63								

July 21 2013 Hour: 5: 9 30.0 Agency: REL Distant
EMSC OT=05:09:30.0 41.74S 174.52E 10Km M=6.5 COOK STRAIT

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		529	12.63								
RCY	SZ			EP		529	12.33								

July 21 2013 Hour: 15:18 48.3 Lat: 33.83N Lon: 35.76E Depth: 32 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	13	308	EP		1518	53.80	0.04	36						1.0
BHL	BE	13	308	ES		1518	57.79	-0.03							1.0
DQRL	SZ	23	232	EP		1518	54.47	-0.01							1.0
DQRL	SN	23	232	ES		1518	59.09	0.03							1.0
QRWL	SZ	33	193	EP		1518	55.35	-0.06							1.0

RCY	SZ	38	170	EP		1518	56.10	0.03										1.0
RCY	SN	38	170	ES		1519	1.83	0.00										1.0
HWQ	SZ	52	19	EP		1518	57.77	0.00										1.0

July 21 2013 Hour: 18:1 18.6 Lat: 33.81N Lon: 35.79E Depth: 19 Agency: REL Local
Magnitudes: 2.4MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	312	EP		18	1	22.66	0.02	26					1.0
BHL	BE	16	312	ES		18	1	25.65	-0.01						1.0
DQRL	SZ	23	241	EP		18	1	23.34	-0.02						1.0
DQRL	SN	23	241	ES		18	1	26.91	0.01						1.0
RCY	SZ	35	172	EP		18	1	24.89	-0.00						1.0

July 21 2013 Hour: 23:45 57.0 Agency: REL Distant
EMSC OT=23:45:57.0 34.55N 104.25E 10Km M=6.0 GANSU, CHINA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2355	33.77								
RCY	SZ			EP		2355	34.23								
SHBL	BZ			EP		2355	35.10								

July 22 2013 Hour: 1:12 35.0 Agency: REL Distant
EMSC OT=01:12:35.0 34.60N 104.12E 10Km M=5.6 GANSU, CHINA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		122	11.01								
RCY	SZ			EP		122	12.38								
SHBL	BZ			EP		122	13.38								

July 23 2013 Hour: 6:49 36.1 Lat: 33.85N Lon: 35.82E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	290	EP		649	38.77	-0.02	40						1.0
BHL	BN	16	290	ES		649	40.72	-0.02							1.0
DQRL	SZ	29	235	EP		649	40.82	0.07							1.0
RCY	SZ	40	178	EP		649	42.53	-0.04							1.0
RCY	SN	40	178	ES		649	47.31	-0.01							1.0
HWQ	SZ	48	14	EP		649	43.96	0.01							1.0

July 23 2013 Hour: 8:23 15.8 Lat: 33.87N Lon: 35.83E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	284	EP		823	18.41	-0.05	54						1.0
BHL	BN	16	284	ES		823	20.42	-0.01							1.0
DQRL	SZ	30	233	EP		823	20.62	-0.02							1.0
DQRL	SN	30	233	ES		823	24.25	0.04							1.0
BEYL	BZ	31	271	EP		823	20.80	0.01							1.0
RCY	SZ	41	179	EP		823	22.44	-0.05							1.0
RCY	SN	41	179	ES		823	27.45	0.02							1.0
HWQ	SZ	47	14	EP		823	23.37	0.04							1.0

July 23 2013 Hour: 13:59 52.2 Lat: 33.46N Lon: 35.62E Depth: 7 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	12	29	EP		1359	54.53	0.00							1.0
QRWL	SN	12	29	ES		1359	56.23	-0.01							1.0
SHBL	BZ	17	136	EP		1359	55.21	-0.03							1.0
SHBL	BN	17	136	ES		1359	57.51	0.02							1.0
RCY	SZ	20	77	EP		1359	55.82	0.02	33						1.0
RCY	SN	20	77	ES		1359	58.45	-0.01							1.0
DQRL	SZ	28	350	EP		1359	56.95	0.01							1.0

July 24 2013 Hour: 3:32 35.0 Agency: REL Distant

EMSC OT=03:32:35.0 23.23S 177.07W 170Km M=6.0 SOUTH OF FIJI

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		351	59.94								
SHBL	BZ			EP		352	0.15								

July 24 2013 Hour: 8:28 54.2 Lat: 33.81N Lon: 35.72E Depth: 31 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	12	332	EP		828	59.41-0.09		49						1.0
BHL	BN	12	332	ES		829	3.44 0.04								1.0
DQRL	SZ	18	230	EP		828	59.94 0.09								1.0
QRWL	SZ	29	186	EP		829	0.84-0.03								1.0
QRWL	SN	29	186	ES		829	5.72-0.06								1.0
RCY	SZ	36	162	EP		829	1.75 0.03								1.0
RCY	SN	36	162	ES		829	7.28 0.02								1.0

July 24 2013 Hour: 14:40 1.4 Lat: 33.79N Lon: 35.78E Depth: 1 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	318	EP		1440	4.15-0.09		36						1.0
BHL	BE	18	318	ES		1440	6.40 0.04								1.0
DQRL	SZ	22	246	EP		1440	4.87 0.02								1.0
RCY	SZ	33	171	EP		1440	6.65 0.03								1.0
RCY	SN	33	171	ES		1440	10.49-0.02								1.0
HWQ	SZ	57	16	EP		1440	10.54 0.02								1.0

July 24 2013 Hour: 20:17 18.6 Lat: 34.53N Lon: 36.23E Depth: 33 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

NORTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	38	223	EP		2017	26.45 0.00		51						1.0
BHL	BZ	87	218	EP		2017	32.67 0.05								1.0
BHL	BN	87	218	ES		2017	43.02 0.05								1.0
DQRL	SZ	109	214	EP		2017	35.31-0.09								1.0
DQRL	SN	109	214	ES		2017	47.77-0.05								1.0
SHBL	BZ	138	199	EP		2017	39.05 0.04								1.0

July 25 2013 Hour: 10:54 25.3 Lat: 33.78N Lon: 35.76E Depth: 4 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	325	EP		1054	28.08-0.07		43						1.0
DQRL	SZ	19	245	EP		1054	28.58 0.09								1.0
QRWL	SZ	27	195	EP		1054	29.58-0.06								1.0
RCY	SZ	32	167	EP		1054	30.58 0.05								1.0
RCY	SN	32	167	ES		1054	34.40-0.02								1.0
HWQ	SZ	58	17	EP		1054	34.63-0.06								1.0
HWQ	SE	58	17	ES		1054	41.73 0.07								1.0

July 25 2013 Hour: 15:27 19.8 Lat: 33.78N Lon: 35.79E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	19	318	EP		1527	22.66-0.09		38						1.0
BHL	BN	19	318	ES		1527	24.94-0.02								1.0
DQRL	SZ	22	248	EP		1527	23.36 0.07								1.0
DQRL	SE	22	248	ES		1527	25.92 0.02								1.0
QRWL	SZ	28	201	EP		1527	24.14-0.08								1.0
QRWL	SN	28	201	ES		1527	27.48-0.04								1.0
BEYL	BZ	29	290	EP		1527	24.52 0.06								1.0

RCY	SZ	32	172	EP		1527	24.95	0.05									1.0
RCY	SN	32	172	ES		1527	28.70	0.00									1.0
HWQ	SZ	57	15	EP		1527	29.00	0.03									1.0

July 25 2013 Hour: 16:11 51.6 Lat: 33.82N Lon: 35.74E Depth: 22 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	13	320	EP		1611	55.84	0.00	35						1.0
DQRL	SZ	20	232	EP		1611	56.48	-0.01							1.0
DQRL	SN	20	232	ES		1612	0.09	0.00							1.0
RCY	SZ	37	166	EP		1611	58.48	0.01							1.0
RCY	SN	37	166	ES		1612	3.53	-0.01							1.0

July 26 2013 Hour: 0:22 54.8 Lat: 36.30N Lon: 36.00E Depth: 20 Agency: REL Regional
Magnitudes: 4.2MC REL Rms: 0.2 secs

TURKEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	225	181	EP		023	26.97	0.04							1.0
HWQ	SN	225	181	ES		023	50.47	-0.22							1.0
BHL	BZ	268	187	EP		023	32.12	-0.17							1.0
BEYL	BZ	274	190	EP		023	33.03	0.14							1.0
DQRL	SZ	291	188	EP		023	35.28	0.16	245						1.0
DQRL	SN	291	188	ES		024	5.06	0.12							1.0
QRWL	SZ	307	186	EP		023	37.06	-0.06							1.0
RCY	SZ	312	183	EP		023	37.74	-0.01							1.0
SHBL	BZ	329	184	EP		023	39.85	-0.01							1.0
SHBL	BN	329	184	ES		024	13.30	0.11							1.0

July 26 2013 Hour: 1:0 8.8 Lat: 36.03N Lon: 35.82E Depth: 0 Agency: REL Regional
Magnitudes: 3.5MC REL Rms: 0.1 secs

TURKEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	194	177	EP		1 0	39.13	0.05	96						1.0
HWQ	SN	194	177	ES		1 1	1.49	0.02							1.0
BHL	BZ	236	184	EP		1 0	44.18	-0.05							1.0
BHL	BN	236	184	ES		1 1	10.31	-0.12							1.0
DQRL	SZ	258	185	EP		1 0	47.10	0.08							1.0
DQRL	SN	258	185	ES		1 1	15.17	-0.13							1.0
RCY	SN	281	180	ES		1 1	20.36	0.19							1.0
SHBL	BZ	297	181	EP		1 0	51.87	-0.01							1.0

July 26 2013 Hour: 3:31 37.5 Lat: 34.43N Lon: 36.61E Depth: 25 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.0 secs

NEBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	64	255	EP		331	48.13	0.01	61						1.0
HWQ	SN	64	255	ES		331	56.02	0.02							1.0
BHL	BZ	106	237	EP		331	54.13	-0.05							1.0
DQRL	SZ	125	230	EP		331	56.79	-0.03							1.0
DQRL	SN	125	230	ES		332	11.12	-0.01							1.0
RCY	SZ	126	215	EP		331	57.00	0.06							1.0

July 26 2013 Hour: 13:2 44.9 Lat: 33.74N Lon: 34.63E Depth: 26 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

OFFSHORE SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	87	92	EP		13 2	58.81	-0.06	50						1.0
DQRL	SN	87	92	ES		13 3	9.27	0.04							1.0
QRWL	SZ	100	102	EP		13 3	0.76	0.06							1.0
QRWL	SE	100	102	ES		13 3	12.36	-0.04							1.0
RCY	SZ	115	103	EP		13 3	2.88	0.00							1.0
HWQ	SZ	135	63	EP		13 3	5.38	-0.00							1.0

July 26 2013 Hour: 13:46 35.9 Lat: 33.47N Lon: 35.69E Depth: 1 Agency: REL Local
 Magnitudes: 3.0MC REL Rms: 0.1 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	8	353	EP		1346	37.26	-0.06							1.0
RCY	SZ	14	79	EP		1346	38.17	0.02							1.0
RCY	SN	14	79	ES		1346	39.75	-0.04							1.0
SHBL	BZ	15	161	EP		1346	38.26	-0.08							1.0
SHBL	BN	15	161	ES		1346	40.20	0.08							1.0
DQRL	SZ	28	336	EP		1346	40.53	0.04	64						1.0
DQRL	SN	28	336	ES		1346	43.90	0.03							1.0
BHL	BZ	48	356	EP		1346	43.65	-0.02							1.0
BHL	BN	48	356	ES		1346	49.41	0.01							1.0
BEYL	BZ	48	337	EP		1346	43.23	-0.43							0.2
HWQ	SZ	92	15	EP		1346	50.89	0.07							1.0
HWQ	SE	92	15	ES		1347	1.84	0.00							1.0

July 26 2013 Hour: 15:12 18.6 Lat: 33.78N Lon: 35.77E Depth: 2 Agency: REL Local
 Magnitudes: 2.9MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	323	EP		1512	21.46	-0.05	49						1.0
BHL	BN	18	323	ES		1512	23.66	-0.01							1.0
DQRL	SZ	20	247	EP		1512	21.80	-0.08							1.0
DQRL	SN	20	247	ES		1512	24.40	0.09							1.0
BEYL	BZ	28	293	EP		1512	23.02	-0.05							1.0
RCY	SZ	32	169	EP		1512	23.62	-0.14							1.0
RCY	SN	32	169	ES		1512	27.62	0.05							1.0
HWQ	SZ	58	16	EP		1512	28.09	0.11							1.0

July 26 2013 Hour: 15:43 49.1 Lat: 33.45N Lon: 35.65E Depth: 0 Agency: REL Local
 Magnitudes: 2.6MC REL Rms: 0.1 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	11	13	EP		1543	50.74	-0.13							1.0
SHBL	BZ	14	144	EP		1543	51.37	0.03							1.0
RCY	SZ	18	73	EP		1543	51.89	-0.03	35						1.0
RCY	SN	18	73	ES		1543	54.08	0.04							1.0
DQRL	SZ	29	345	EP		1543	53.81	0.00							1.0
DQRL	SN	29	345	ES		1543	57.41	0.08							1.0

July 27 2013 Hour: 10:24 31.5 Lat: 33.42N Lon: 35.66E Depth: 0 Agency: REL Local
 Magnitudes: 2.6MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	14	9	EP		1024	33.81	-0.05	34						1.0
QRWL	SN	14	9	ES		1024	35.60	0.03							1.0
RCY	SZ	19	63	EP		1024	34.56	0.01							1.0
RCY	SN	19	63	ES		1024	36.77	-0.02							1.0
DQRL	SZ	33	346	EP		1024	36.81	-0.00							1.0
DQRL	SN	33	346	ES		1024	40.68	-0.03							1.0
BHL	BZ	54	360	EP		1024	40.25	0.05							1.0
HWQ	SZ	99	16	EP		1024	47.49	0.01							1.0

July 27 2013 Hour: 12:22 0.8 Lat: 33.47N Lon: 35.55E Depth: 10 Agency: REL Local
 Magnitudes: 2.6MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	15	57	EP		1222	3.88	-0.00	34						1.0
DQRL	SZ	26	5	EP		1222	5.38	-0.00							1.0
DQRL	SN	26	5	ES		1222	8.74	-0.01							1.0
RCY	SZ	27	85	EP		1222	5.60	0.01							1.0
RCY	SN	27	85	ES		1222	9.11	-0.01							1.0

HWQ SZ 96 22 EP 1222 16.25 0.02 1.0

July 27 2013 Hour: 12:45 25.3 Lat: 33.80N Lon: 35.78E Depth: 6 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	317	EP		1245	28.22	0.00	28						1.0
DQRL	SZ	21	242	EP		1245	28.96	-0.01							1.0
DQRL	SN	21	242	ES		1245	31.68	0.00							1.0
RCY	SZ	34	170	EP		1245	30.89	0.01							1.0
RCY	SN	34	170	ES		1245	35.01	-0.00							1.0
HWQ	SZ	56	16	EP		1245	34.39	0.00							1.0

July 27 2013 Hour: 13:21 41.9 Lat: 33.80N Lon: 35.78E Depth: 2 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	315	EP		1321	44.62	-0.00	35						1.0
BHL	BN	17	315	ES		1321	46.72	0.06							1.0
DQRL	SZ	22	243	EP		1321	45.36	-0.09							1.0
DQRL	SN	22	243	ES		1321	48.07	-0.03							1.0
RCY	SZ	34	171	EP		1321	47.30	-0.01							1.0
RCY	SN	34	171	ES		1321	51.35	0.01							1.0
HWQ	SZ	56	16	EP		1321	50.80	-0.04							1.0

July 27 2013 Hour: 20:13 52.0 Agency: REL Regional
EMSC OT=20:13:52.0 36.95N 35.63E 30Km M=3.7 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2014	41.47								
DQRL	SZ			EP		2014	44.10								
RCY	SZ			EP		2014	47.77								
SHBL	BZ			EP		2014	49.30								

July 29 2013 Hour: 21:33 0.0 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		2133	48.65								

July 30 2013 Hour: 15:54 48.1 Lat: 33.82N Lon: 35.78E Depth: 23 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	308	EP		1554	52.50	-0.00	32						1.0
BHL	BE	15	308	ES		1554	55.77	-0.00							1.0
DQRL	SZ	23	236	EP		1554	53.31	-0.01							1.0
DQRL	SN	23	236	ES		1554	57.20	0.01							1.0
RCY	SZ	37	172	EP		1554	54.95	0.01							1.0
RCY	SN	37	172	ES		1555	0.02	-0.01							1.0
HWQ	SZ	53	17	EP		1554	57.11	0.00							1.0

July 30 2013 Hour: 16:22 33.1 Lat: 33.71N Lon: 35.95E Depth: 19 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	26	203	EP		1622	38.27	-0.00	44						1.0
RCY	SN	26	203	ES		1622	42.12	0.00							1.0
BHL	BZ	34	308	EP		1622	39.31	-0.03							1.0
DQRL	SZ	35	269	EP		1622	39.39	-0.00							1.0
DQRL	SN	35	269	ES		1622	44.08	0.02							1.0
HWQ	SZ	63	0	EP		1622	43.70	0.31							0.2

July 30 2013 Hour: 20:48 51.6 Lat: 32.69N Lon: 35.21E Depth: 2 Agency: REL Local
 Magnitudes: 3.1MC REL Rms: 0.0 secs

NORTH GALILEE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	88	34	EP		2049	5.86	0.02							1.0
SHBL	BN	88	34	ES		2049	16.37	-0.01							1.0
DQRL	SZ	117	17	EP		2049	10.49	-0.04	61						1.0
DQRL	SN	117	17	ES		2049	24.54	0.00							1.0
BHL	BZ	141	17	EP		2049	14.12	0.06							1.0
HWQ	SZ	189	21	EP		2049	20.92	-0.04							1.0

July 31 2013 Hour: 13:18 14.0 Agency: REL Regional

EMSC OT=13:18:14.0 36.13N 31.25E 15Km M=3.8 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1319	24.20								
HWQ	SZ			EP		1319	21.14								

July 31 2013 Hour: 15:16 56.5 Lat: 33.79N Lon: 35.78E Depth: 2 Agency: REL Local
 Magnitudes: 2.5MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	318	EP		1516	59.39	-0.04	29						1.0
BHL	BE	18	318	ES		1517	1.59	0.01							1.0
DQRL	SZ	22	246	EP		1517	0.07	0.01							1.0
DQRL	SN	22	246	ES		1517	2.67	0.00							1.0
RCY	SZ	33	171	EP		1517	1.81	-0.00							1.0
HWQ	SZ	57	15	EP		1517	5.70	0.02							1.0

Epicentral Map of Lebanon

JULY 2013

