

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

July

2014

Prepared by
The National Centre for Geophysical Research
Bhannes

*P.o.b. : 165432
Ashrafyeh Beirut 1100-2040*

*Tel : +9614-981885
Fax : +9614-981886
Email : geophys@cnrs.edu.lb*

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	Nov2000-Sep2012
FKH	3414.69N	3624.61E	1152	FAKEHEH	Opened Dec 2004
RCY	3329.79N	3550.14E	1370	RACHAYA	Opened Jun 2006
BEYL	3352.30N	3529.59E	49	BEIRUT	Opened Jul 2006
NAQL	3307.02N	3508.46E	83	NAQOURA	Jul2008-Jan2012
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 ($0.5 * (\text{peak to peak})$), (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 2014 Hour: 11:31 56.0 Lat: 33.49N Lon: 35.64E Depth: 14 Agency: REL Local
Magnitudes: 2.5MC 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	7	30	EP		1131	58.78	-0.01							1.0
QRWL	SN	7	30	ES		1132	0.83	0.00							1.0
RCY	SZ	18	87	EP		1131	59.90	0.01	31						1.0
RCY	SN	18	87	ES		1132	2.75	-0.01							1.0
SHBL	BZ	18	149	EP		1131	59.93	0.00							1.0

July 1 2014 Hour: 13:32 28.7 Lat: 33.56N Lon: 35.77E Depth: 12 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
RCY	SZ	9	137	EP		1332	31.31	-0.01	34						1.0
RCY	SN	9	137	ES		1332	33.26	0.01							1.0
SHBL	BZ	23	186	EP		1332	33.03	-0.00							1.0
DQRL	SZ	25	312	EP		1332	33.25	0.01							1.0
DQRL	SE	25	312	ES		1332	36.57	-0.01							1.0
BHL	BZ	40	345	EP		1332	35.51	-0.01							0.2

July 1 2014 Hour: 15:37 31.2 Lat: 34.02N Lon: 36.10E Depth: 39 Agency: REL Local
Magnitudes: 2.9MC 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	32	334	EP		1537	38.86	0.01							1.0
BHL	BZ	43	253	EP		1537	39.93	-0.02							1.0
DQRL	SZ	60	235	EP		1537	41.88	-0.00							1.0
DQRL	SN	60	235	ES		1537	49.79	0.01							1.0
RCY	SZ	63	203	EP		1537	42.28	0.00	52						1.0
RCY	SN	63	203	ES		1537	50.47	-0.00							1.0
QRWL	SZ	65	216	EP		1537	42.48	0.01							1.0

July 1 2014 Hour: 23:13 3.7 Lat: 33.79N Lon: 35.79E Depth: 8 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	314	EP		2313	7.01	0.02	38						1.0
BHL	BN	18	314	ES		2313	9.39	-0.02							1.0
DQRL	SZ	23	245	EP		2313	7.74	0.02							1.0
QRWL	SZ	29	201	EP		2313	8.57	-0.10							1.0
QRWL	SN	29	201	ES		2313	12.37	0.03							1.0
SHBL	BZ	50	185	EP		2313	11.92	0.04							1.0
HWQ	SZ	56	15	EP		2313	12.82	0.01							1.0

July 2 2014 Hour: 1:49 23.2 Agency: REL Regional
EMSC OT=01:49:23.2 35.05N 26.54E 10Km M=4.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		151	13.43								
QRWL	SZ			EP		151	13.44								
HWQ	SZ			EP		151	15.94								

July 2 2014 Hour: 5:45 55.9 Lat: 33.47N Lon: 35.71E Depth: 0 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	9	346	EP		5 4	57.27	-0.07							1.0
RCY	SZ	13	77	EP		5 4	57.97	0.01	29						1.0
SHBL	BZ	14	165	EP		5 4	58.24	0.01							1.0
SHBL	BN	14	165	ES		5 4	59.92	-0.01							1.0
DQRL	SZ	29	334	EP		5 5	0.65	0.07							1.0
DQRL	SN	29	334	ES		5 5	4.02	-0.00							1.0

July 2 2014 Hour: 10: 5 45.8 Lat: 33.59N Lon: 34.57E Depth: 21 Agency: REL Local
Magnitudes: 4.1MC REL Rms: 0.2 secs

OFFSHORE SOUTH LEBANON

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEYL	SZ	92	70	EP		10 6	0.16	-0.12							1.0
DQRL	SZ	94	82	EP		10 6	0.67	-0.04							1.0
DQRL	SN	94	82	ES		10 6	11.77	0.05							1.0
QRWL	SZ	104	92	EP		10 6	2.46	0.35							1.0
BHL	BZ	107	70	EP		10 6	2.55	-0.02	245						1.0
BHL	BN	107	70	ES		10 6	14.96	0.00							1.0
SHBL	BZ	113	103	EP		10 6	3.26	-0.19							1.0
SHBL	BN	113	103	ES		10 6	16.10	-0.39							1.0
RCY	SZ	118	95	EP		10 6	4.46	0.17							1.0
RCY	SN	118	95	ES		10 6	18.06	0.12							1.0
HWQ	SZ	149	59	EP		10 6	8.51	0.07							1.0

July 2 2014 Hour: 11:50 53.6 Lat: 33.49N Lon: 35.64E Depth: 15 Agency: REL Local
Magnitudes: 2.5MC 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	7	30	EP		1150	56.49	0.03	32						1.0
QRWL	SN	7	30	ES		1150	58.56	-0.01							1.0
RCY	SZ	18	88	EP		1150	57.54	-0.00							1.0
SHBL	BZ	18	149	EP		1150	57.59	-0.02							1.0
SHBL	BN	18	149	ES		1151	0.58	0.01							1.0
DQRL	SZ	25	344	EP		1150	58.31	-0.04							0.2

July 2 2014 Hour: 16:27 22.3 Lat: 33.79N Lon: 35.74E Depth: 13 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	15	327	EP		1627	25.51	-0.05	41						1.0
BHL	BN	15	327	ES		1627	28.03	0.02							1.0
DQRL	SZ	18	239	EP		1627	26.02	0.03							1.0
RCY	SZ	34	165	EP		1627	28.06	-0.12							1.0
RCY	SN	34	165	ES		1627	32.64	0.08							1.0
HWQ	SZ	57	19	EP		1627	31.80	0.04							1.0

July 2 2014 Hour: 16:49 32.1 Lat: 33.80N Lon: 35.76E 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	319	EP		1649	35.65	-0.03	30						1.0
BHL	BN	15	319	ES		1649	38.32	0.01							1.0
DQRL	SZ	21	238	EP		1649	36.38	0.02							1.0
RCY	SZ	35	168	EP		1649	38.25	-0.05							1.0
RCY	SN	35	168	ES		1649	42.91	0.03							1.0
HWQ	SZ	55	18	EP		1649	41.30	0.02							1.0

July 3 2014 Hour: 1:25 32.3 Agency: REL Distant
EMSC OT=01:25:32.3 32.39S 178.00W 2Km M=5.0 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		145	29.18								
SHBL	BZ			EP		145	29.09								

July 3 2014 Hour: 9:35 49.7 Agency: REL Distant
EMSC OT=09:35:49.7 22.20S 179.40W 607Km M=5.6 FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		954	26.11								
SHBL	BZ			EP		954	26.68								

July 3 2014 Hour: 16: 8 19.9 Lat: 33.78N Lon: 35.78E Depth: 8 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	320	EP		16	8	23.01-0.09	33						1.0
BHL	BN	17	320	ES		16	8	25.47	0.03						1.0
DQRL	SZ	21	245	EP		16	8	23.67	0.04						1.0
RCY	SZ	33	170	EP		16	8	25.36-0.03							1.0
RCY	SN	33	170	ES		16	8	29.45	0.01						1.0
HWQ	SZ	57	16	EP		16	8	29.27	0.04						1.0

July 3 2014 Hour: 19:50 2.2 Agency: REL Distant
EMSC OT=19:50:02.2 30.56S 176.36W 2Km M=6.3 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		20	9	53.43							
BHL	BZ			EP		20	9	53.16							
SHBL	BZ			EP		20	9	53.16							
QRWL	SZ			EP		20	9	53.96							
DQRL	SZ			EP		20	9	54.22							

July 4 2014 Hour: 2:11 20.3 Lat: 33.64N Lon: 35.69E Depth: 1 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
QRWL	SZ	11	183	EP		211	21.99-0.04	47							1.0
DQRL	SZ	13	303	EP		211	22.38-0.03								1.0
DQRL	SN	13	303	ES		211	24.01	0.03							1.0
RCY	SZ	21	140	EP		211	23.79	0.04							1.0
RCY	SN	21	140	ES		211	26.31	0.01							1.0
BHL	BZ	29	354	EP		211	25.00-0.02								1.0
SHBL	BZ	33	171	EP		211	25.60-0.04								1.0
HWQ	SZ	74	19	EP		211	32.38	0.07							0.2

July 4 2014 Hour: 14:59 8.4 Lat: 33.39N Lon: 35.53E Depth: 29 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	21	104	EP		1459	14.16-0.01								1.0
SHBL	BN	21	104	ES		1459	18.41	0.01							1.0
RCY	SZ	31	68	EP		1459	15.15-0.01	38							1.0
DQRL	SZ	35	7	EP		1459	15.56	0.00							1.0
DQRL	SN	35	7	ES		1459	20.82-0.00								1.0
BHL	BZ	58	12	EP		1459	18.60	0.12							0.2

July 4 2014 Hour: 22:42 4.9 Agency: REL Distant
EMSC OT=22:42:04.9 39.72N 142.04E 46Km M=5.7 HONSHU, JAPAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2254	9.64								
HWQ	BZ			EP		2254	7.25								

July 5 2014 Hour: 15:46 0.0 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1546	45.16								
RCY	SZ			EP		1546	44.65								

July 5 2014 Hour: 16:44 4.2 Lat: 32.36N Lon: 35.84E Depth: 0 Agency: REL Regional
Magnitudes: 3.1MC REL Rms: 0.0 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	110	355	EP		1644	21.83-0.08								1.0
RCY	SZ	126	360	EP		1644	24.51	0.01	58						1.0
RCY	SN	126	360	ES		1644	39.55	0.01							1.0
DQRL	SZ	151	351	EP		1644	28.38	0.04							1.0

DQRL SN 151 351 ES 1644 46.21-0.01 1.0
 BHL BZ 172 354 EP 1644 31.42 0.02 1.0

July 5 2014 Hour: 21:41 35.0 Lat: 33.56N Lon: 35.53E Depth: 8 Agency: REL Local
Magnitudes: 4.3MC REL Rms: 0.1 secs

SAIDA REGION

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	14	97	EP		2141	37.63	-0.14							1.0
QRWL	SN	14	97	ES		2141	39.79	0.00							1.0
DQRL	SZ	16	13	EP		2141	38.06	0.03							1.0
DQRL	SN	16	13	ES		2141	40.26	0.01							1.0
RCY	SZ	29	105	EP		2141	40.11	0.09							1.0
SHBL	BZ	31	140	EP		2141	40.26	-0.03							1.0
SHBL	BN	31	140	ES		2141	44.22	0.03							1.0
BEYL	SZ	34	354	EP		2141	40.82	0.10							1.0
BHL	BZ	39	17	EP		2141	41.41	-0.15	368						1.0
HWQ	SZ	88	26	EP		2141	49.90	0.59							0.2

July 5 2014 Hour: 22:25 15.9 Lat: 33.58N Lon: 35.53E Depth: 8 Agency: REL Local
Magnitudes: 3.5MC REL Rms: 0.2 secs

SAIDA REGION

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	14	104	EP		2225	18.57	-0.08							1.0
QRWL	SN	14	104	ES		2225	20.67	0.02							1.0
DQRL	SZ	15	14	EP		2225	18.69	-0.01	120						1.0
DQRL	SN	15	14	ES		2225	20.77	0.03							1.0
RCY	SZ	30	108	EP		2225	20.98	0.04							1.0
RCY	SN	30	108	ES		2225	24.69	0.05							1.0
SHBL	BZ	32	142	EP		2225	21.19	-0.15							1.0
BEYL	SZ	33	354	EP		2225	21.36	-0.02							1.0
BHL	BZ	38	17	EP		2225	22.16	-0.06	125						1.0
HWQ	SZ	87	26	EP		2225	31.08	1.10							0.2

July 5 2014 Hour: 22:48 23.1 Lat: 33.58N Lon: 35.54E Depth: 5 Agency: REL Local
Magnitudes: 2.8MC 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	106	EP		2248	25.47	-0.01							1.0
DQRL	SZ	14	11	EP		2248	25.54	-0.00	47						1.0
DQRL	SN	14	11	ES		2248	27.37	0.00							1.0
RCY	SZ	29	109	EP		2248	27.92	0.05							1.0
SHBL	BZ	32	144	EP		2248	28.27	-0.08							1.0
SHBL	BN	32	144	ES		2248	32.26	0.01							1.0
BHL	BZ	37	16	EP		2248	29.17	-0.01							1.0

July 6 2014 Hour: 1:39 21.0 Lat: 33.57N Lon: 35.53E Depth: 3 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	16	15	EP		139	23.71	0.03	79						1.0
DQRL	SN	16	15	ES		139	25.63	-0.01							1.0
RCY	SZ	30	106	EP		139	25.96	0.04							1.0
RCY	SN	30	106	ES		139	29.56	0.02							1.0
SHBL	BZ	32	140	EP		139	26.14	-0.09							1.0
BEYL	SZ	34	355	EP		139	26.53	0.02							0.2
BHL	BZ	39	18	EP		139	27.32	-0.05							1.0
HWQ	SZ	88	26	EP		139	35.23	0.03							1.0

July 6 2014 Hour: 9: 8 24.2 Lat: 33.47N Lon: 35.68E Depth: 0 Agency: REL Local
 Magnitudes: 2.7MC 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	8	4	EP		9 8	25.51	-0.02	40						1.0
QRWL	SN	8	4	ES		9 8	26.54	0.00							1.0
RCY	SZ	15	80	EP		9 8	26.54	-0.07							1.0
SHBL	BZ	15	155	EP		9 8	26.61	-0.00							1.0
RCY	SN	15	80	ES		9 8	28.46	0.04							1.0
DQRL	SZ	28	339	EP		9 8	28.72	0.09							1.0
DQRL	SN	28	339	ES		9 8	31.89	-0.05							1.0
BHL	BZ	48	358	EP		9 8	31.91	0.01							1.0

July 6 2014 Hour: 13:25 52.6 Lat: 33.80N Lon: 35.78E Depth: 12 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	16	315	EP		1325	55.91	-0.01	34						1.0
BHL	BN	16	315	ES		1325	58.40	0.01							1.0
DQRL	SZ	22	241	EP		1325	56.71	0.02							1.0
DQRL	SN	22	241	ES		1325	59.72	-0.01							1.0
RCY	SZ	34	171	EP		1325	58.55	0.00							1.0
HWQ	SZ	55	17	EP		1326	1.72	-0.01							1.0

July 6 2014 Hour: 16:15 59.1 Lat: 33.79N Lon: 35.78E Depth: 12 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	317	EP		1616	2.66	0.00	41						1.0
BHL	BN	17	317	ES		1616	5.26	-0.01							1.0
DQRL	SZ	22	244	EP		1616	3.26	0.01							1.0
RCY	SZ	33	171	EP		1616	4.87	-0.02							1.0
RCY	SN	33	171	ES		1616	9.17	0.01							1.0
HWQ	SZ	56	16	EP		1616	8.46	0.01							1.0

July 6 2014 Hour: 17: 1 32.0 Agency: REL Regional
EMSC OT=17:01:32.0 34.29N 26.12E 52Km M=4.4 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		17 3	24.11								
RCY	SZ			EP		17 3	24.40								
HWQ	SZ			EP		17 3	25.26								

July 6 2014 Hour: 18:30 36.5 Lat: 33.52N Lon: 35.46E Depth: 0 Agency: REL Local
 Magnitudes: 2.5MC 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	21	82	EP		1830	39.81	-0.01							1.0
QRWL	SN	21	82	ES		1830	42.27	0.01							1.0
DQRL	SZ	23	26	EP		1830	40.09	-0.08	29						1.0
DQRL	SN	23	26	ES		1830	42.87	-0.00							1.0
BHL	BZ	46	23	EP		1830	44.00	0.08							1.0

July 6 2014 Hour: 23: 1 5.9 Lat: 34.03N Lon: 35.76E Depth: 3 Agency: REL Local
 Magnitudes: 2.9MC REL Rms: 0.1 secs

KESROUANE

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	216	EP		23 1	8.51	-0.22	56						1.0
BHL	BN	17	216	ES		23 1	10.85	0.02							1.0
BEYL	SZ	30	235	EP		23 1	10.79	-0.04							1.0
HWQ	SZ	33	31	EP		23 1	11.29	0.10							1.0
DQRL	SZ	40	207	EP		23 1	12.35	-0.03							1.0
DQRL	SE	40	207	ES		23 1	17.43	0.25							1.0

QRWL	SZ	54	188	EP	23	1	14.57-0.04										1.0
RCY	SZ	59	173	EP	23	1	15.49-0.01										1.0
RCY	SN	59	173	ES	23	1	22.57-0.04										1.0

July 7 2014 Hour: 5:13 19.7 Lat: 33.47N Lon: 35.67E Depth: 7 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	9	9	EP		513	21.63	0.00	29						1.0
QRWL	SN	9	9	ES		513	23.08	-0.00							1.0
SHBL	BZ	15	152	EP		513	22.51	-0.01							1.0
SHBL	BN	15	152	ES		513	24.64	0.00							1.0
RCY	SZ	16	79	EP		513	22.61	0.00							1.0
DQRL	SZ	28	341	EP		513	24.33	0.00							1.0

July 9 2014 Hour: 12:23 39.8 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	4	256	EP		1223	40.33	-0.04	35						1.0
RCY	SZ	13	121	EP		1223	41.88	0.03							1.0
RCY	SN	13	121	ES		1223	43.33	-0.04							1.0
DQRL	SZ	22	320	EP		1223	43.30	0.02							1.0
SHBL	BZ	23	174	EP		1223	43.54	0.02							1.0
SHBL	BN	23	174	ES		1223	46.30	0.02							1.0

July 9 2014 Hour: 16:36 54.8 Lat: 33.56N Lon: 35.73E Depth: 3 Agency: REL Local
Magnitudes: 2.4MC 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	5	260	EP		1636	55.76	-0.15	27						1.0
QRWL	SN	5	260	ES		1636	56.77	0.07							1.0
RCY	SZ	12	124	EP		1636	56.86	-0.04							1.0
RCY	SE	12	124	ES		1636	58.45	0.03							1.0
DQRL	SZ	23	318	EP		1636	58.61	0.06							1.0
SHBL	BZ	23	177	EP		1636	58.68	0.04							1.0

July 9 2014 Hour: 22:52 49.6 Lat: 33.80N Lon: 35.80E Depth: 12 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	311	EP		2252	53.25	-0.01	42						1.0
BHL	BN	18	311	ES		2252	55.95	0.00							1.0
DQRL	SZ	24	244	EP		2252	54.05	0.03							1.0
QRWL	SZ	30	201	EP		2252	54.83	-0.08							1.0
QRWL	SN	30	201	ES		2252	58.83	0.01							1.0
RCY	SZ	34	174	EP		2252	55.52	0.02							1.0
SHBL	BZ	50	186	EP		2252	58.05	0.02							1.0
HWQ	SZ	55	14	EP		2252	58.77	0.00							1.0

July 10 2014 Hour: 9:20 29.1 Lat: 33.47N Lon: 35.69E Depth: 4 Agency: REL Local
Magnitudes: 2.4MC 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	8	358	EP		920	30.57	-0.09	28						1.0
QRWL	SN	8	358	ES		920	31.87	0.03							1.0
RCY	SZ	14	79	EP		920	31.55	0.01							1.0
SHBL	BZ	15	158	EP		920	31.60	-0.01							1.0
SHBL	BN	15	158	ES		920	33.52	0.02							1.0
DQRL	SZ	28	338	EP		920	33.70	0.04							1.0

July 10 2014 Hour: 9:51 1.8 Lat: 33.78N Lon: 35.77E Depth: 4 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	320	EP		951	4.65	-0.02	41						1.0
BHL	BE	17	320	ES		951	6.81	-0.01							1.0
DQRL	SZ	21	245	EP		951	5.28	0.07							1.0
QRWL	SZ	28	198	EP		951	6.19	-0.09							1.0
RCY	SZ	32	170	EP		951	7.09	0.03							1.0
RCY	SN	32	170	ES		951	11.00	0.01							1.0
HWQ	SZ	57	16	EP		951	11.00	0.01							1.0

July 10 2014 Hour: 15:28 48.1 Lat: 33.80N Lon: 35.78E Depth: 6 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	314	EP		1528	51.13	0.01	36						1.0
BHL	BE	17	314	ES		1528	53.31	-0.01							1.0
DQRL	SZ	22	243	EP		1528	51.92	-0.02							1.0
DQRL	SN	22	243	ES		1528	54.75	0.01							1.0
RCY	SZ	34	172	EP		1528	53.72	-0.00							1.0
RCY	SN	34	172	ES		1528	57.85	-0.00							1.0
HWQ	SZ	55	16	EP		1528	57.16	0.01							1.0

July 11 2014 Hour: 11:17 34.6 Lat: 33.47N Lon: 35.68E Depth: 0 Agency: REL Local
Magnitudes: 2.5MC 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	8	360	EP		1117	35.89	-0.05	30						1.0
QRWL	SN	8	360	ES		1117	36.95	0.01							1.0
RCY	SZ	14	80	EP		1117	36.96	0.01							1.0
SHBL	BZ	15	158	EP		1117	37.01	-0.04							1.0
SHBL	BN	15	158	ES		1117	38.90	0.03							1.0
DQRL	SZ	28	338	EP		1117	39.11	0.04							1.0

July 11 2014 Hour: 14:32 22.5 Lat: 33.83N Lon: 35.75E Depth: 33 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	12	311	EP		1432	28.09	0.01	37						1.0
BHL	BN	12	311	ES		1432	32.20	-0.02							1.0
DQRL	SZ	22	230	EP		1432	28.81	0.07							1.0
QRWL	SZ	32	191	EP		1432	29.61	-0.11							1.0
RCY	SZ	38	168	EP		1432	30.45	0.03							1.0
RCY	SN	38	168	ES		1432	36.30	0.01							1.0
HWQ	SZ	53	20	EP		1432	32.11	-0.00							1.0

July 11 2014 Hour: 16: 7 10.9 Lat: 33.80N Lon: 35.76E Depth: 15 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	321	EP		16 7	14.42	-0.01	32						1.0
DQRL	SZ	20	239	EP		16 7	15.01	-0.01							1.0
DQRL	SN	20	239	ES		16 7	18.08	0.01							1.0
RCY	SZ	34	167	EP		16 7	16.99	-0.01							1.0
RCY	SN	34	167	ES		16 7	21.53	0.01							1.0
HWQ	SZ	56	18	EP		16 7	20.14	0.01							1.0

July 11 2014 Hour: 16:11 19.4 Lat: 33.81N Lon: 35.78E Depth: 15 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	16	313	EP		1611	22.97	-0.01	33						1.0
BHL	BN	16	313	ES		1611	25.67	0.00							1.0
DQRL	SZ	22	240	EP		1611	23.78	0.01							1.0
RCY	SZ	35	171	EP		1611	25.48	-0.03							1.0
RCY	SN	35	171	ES		1611	30.09	0.02							1.0
HWQ	SZ	55	16	EP		1611	28.40	0.01							1.0

July 11 2014 Hour: 19:21 59.7 Agency: REL Distant
EMSC OT=19:21:59.7 37.06N 142.54E 10Km M=6.5 HONSHU, JAPAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1934	20.04								
RCY	SZ			EP		1934	20.41								
DQRL	SZ			EP		1934	20.51								
QRWL	SZ			EP		1934	20.70								
SHBL	BZ			EP		1934	21.07								

July 12 2014 Hour: 11:28 56.9 Lat: 33.48N Lon: 35.64E Depth: 14 Agency: REL Local
Magnitudes: 2.5MC 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	9	27	EP		1128	59.80	-0.01	30						1.0
QRWL	SN	9	27	ES		1129	1.97	0.04							1.0
SHBL	BZ	17	146	EP		1129	0.89	0.14							1.0
SHBL	BN	17	146	ES		1129	3.46	-0.10							1.0
RCY	SZ	18	83	EP		1129	0.85	-0.01							1.0
DQRL	SZ	26	346	EP		1129	1.78	-0.05							1.0

July 12 2014 Hour: 21:58 23.1 Lat: 36.71N Lon: 35.70E Depth: 9 Agency: REL Regional
Magnitudes: 4.0MC 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	270	175	EP		2159	2.14	0.31							1.0
HWQ	SN	270	175	ES		2159	30.19	-0.31							1.0
BHL	BZ	311	181	EP		2159	6.81	-0.05	174						1.0
BHL	BN	311	181	ES		2159	39.55	0.31							1.0
BEYL	SZ	315	184	EP		2159	6.91	-0.37							1.0
DQRL	SZ	333	182	EP		2159	9.52	-0.09							1.0
QRWL	SZ	350	180	EP		2159	11.90	0.15							1.0
RCY	SZ	356	178	EP		2159	12.53	-0.00							1.0
SHBL	BZ	373	179	EP		2159	14.62	0.06							1.0

July 13 2014 Hour: 8:43 22.0 Lat: 33.47N Lon: 35.69E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC 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	9	354	EP		843	23.33	-0.10	25						1.0
QRWL	SN	9	354	ES		843	24.53	0.00							1.0
RCY	SZ	14	76	EP		843	24.22	0.03							1.0
SHBL	BZ	14	160	EP		843	24.26	0.05							1.0
SHBL	BN	14	160	ES		843	25.87	-0.01							1.0
DQRL	SZ	29	337	EP		843	26.56	-0.06							1.0
DQRL	SN	29	337	ES		843	30.17	0.10							1.0

July 13 2014 Hour: 13:15 53.7 Lat: 33.83N Lon: 35.73E Depth: 26 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	11	320	EP		1315	58.38	0.04							1.0
DQRL	SZ	20	229	EP		1315	59.01	0.00	42						1.0
DQRL	SN	20	229	ES		1316	2.87	-0.03							1.0
RCY	SZ	38	165	EP		1316	1.00	0.01							1.0
RCY	SN	38	165	ES		1316	6.35	-0.00							1.0
HWQ	SZ	54	21	EP		1316	3.05	-0.03							1.0

July 14 2014 Hour: 15:15 57.9 Lat: 33.80N Lon: 35.78E Depth: 13 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	316	EP		1516	1.41	-0.01	25						1.0
DQRL	SZ	22	242	EP		1516	2.07	-0.04							1.0
DQRL	SE	22	242	ES		1516	5.24	0.03							1.0
RCY	SZ	34	171	EP		1516	3.85	-0.04							1.0
RCY	SE	34	171	ES		1516	8.33	0.03							1.0
HWQ	SZ	55	16	EP		1516	7.17	0.02							1.0

July 15 2014 Hour: 12:23 40.4 Lat: 34.04N Lon: 36.29E Depth: 45 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

HERMEL BAALBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	41	310	EP		1223	49.44	0.01	46						1.0
HWQ	SE	41	310	ES		1223	56.12	0.01							1.0
BHL	BZ	60	256	EP		1223	51.31	-0.10							1.0
RCY	SZ	73	215	EP		1223	52.91	-0.02							1.0
RCY	SE	73	215	ES		1224	2.21	0.01							1.0
DQRL	SZ	76	241	EP		1223	53.29	0.09							1.0

July 16 2014 Hour: 8:43 55.2 Lat: 33.47N Lon: 35.63E Depth: 11 Agency: REL Local
Magnitudes: 2.2MC 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	10	28	EP		843	57.87	-0.00	19						1.0
QRWL	SN	10	28	ES		843	59.82	-0.00							1.0
SHBL	BZ	17	141	EP		843	58.68	-0.00							1.0
SHBL	BN	17	141	ES		844	1.23	0.00							1.0
RCY	SZ	19	80	EP		843	59.01	0.00							1.0

July 16 2014 Hour: 15:16 43.6 Lat: 33.82N Lon: 35.84E Depth: 27 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
BHL	BZ	20	299	EP		1516	48.98	-0.00	33						1.0
DQRL	SZ	28	244	EP		1516	49.69	-0.09							1.0
DQRL	SN	28	244	ES		1516	54.40	0.05							1.0
QRWL	SZ	33	206	EP		1516	50.47	0.09							1.0
QRWL	SN	33	206	ES		1516	55.32	-0.05							1.0

July 16 2014 Hour: 17:56 4.1 Lat: 33.66N Lon: 35.70E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.3 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	13	187	EP		1756	5.92	-0.20							1.0
QRWL	SN	13	187	ES		1756	7.68	0.04							1.0
DQRL	SZ	13	292	EP		1756	6.19	0.03	46						1.0
DQRL	SN	13	292	ES		1756	7.73	0.02							1.0
RCY	SZ	22	145	EP		1756	7.12	-0.54							1.0
BHL	BZ	27	351	EP		1756	8.38	-0.09							1.0

BHL	BN	27	351	ES		1756	11.70	-0.02											1.0
SHBL	BZ	35	173	EP		1756	9.70	-0.01											1.0
HWQ	SZ	72	18	EP		1756	15.67	-0.03											0.2

July 17 2014 Hour: 11:45 28.7 Lat: 33.47N Lon: 35.69E Depth: 3 Agency: REL Local
Magnitudes: 2.4MC 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	9	354	EP		1145	30.28	-0.01	26						1.0
QRWL	SN	9	354	ES		1145	31.44	-0.00							1.0
RCY	SZ	14	78	EP		1145	31.04	-0.03							1.0
RCY	SN	14	78	ES		1145	32.83	0.02							1.0
SHBL	BZ	14	160	EP		1145	31.19	0.01							1.0
DQRL	SZ	28	337	EP		1145	33.38	0.02							1.0

July 17 2014 Hour: 12:1 59.0 Lat: 33.81N Lon: 35.75E Depth: 14 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	13	320	EP		12 2	2.31	0.04							1.0
DQRL	SZ	20	234	EP		12 2	3.01	-0.08							1.0
DQRL	SE	20	234	ES		12 2	6.14	0.02							1.0
RCY	SZ	36	167	EP		12 2	5.27	-0.07	38						1.0
SHBL	BZ	52	180	EP		12 2	7.65	0.05							1.0
SHBL	BE	52	180	ES		12 2	14.02	0.04							1.0
HWQ	SZ	55	20	EP		12 2	8.04	0.00							1.0

July 17 2014 Hour: 15:26 38.3 Lat: 33.83N Lon: 35.73E Depth: 31 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	11	316	EP		1526	43.57	0.04	39						1.0
BHL	BN	11	316	ES		1526	47.40	-0.03							1.0
DQRL	SZ	21	227	EP		1526	44.23	0.02							1.0
QRWL	SZ	32	189	EP		1526	45.25	-0.04							1.0
RCY	SZ	39	166	EP		1526	46.05	-0.02							1.0
RCY	SE	39	166	ES		1526	51.88	0.03							1.0

July 17 2014 Hour: 22:35 36.9 Agency: REL Regional

EMSC OT=22:35:36.9 37.19N 30.53E 50Km M=3.5 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		2236	55.32								
RCY	SZ			EP		2236	57.08								
SHBL	BZ			EP		2236	57.94								

July 18 2014 Hour: 18:23 4.4 Agency: REL Distant

EMSC OT=18:23:04.4 34.77S 179.48W 20Km M=5.6 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1842	55.55								
BHL	BZ			EP		1842	55.48								
QRWL	SZ			EP		1842	56.00								
DQRL	SZ			EP		1842	56.38								

July 18 2014 Hour: 20:1 28.5 Agency: REL Regional

EMSC OT=20:01:28.5 30.08N 32.26E 10Km M=4.2 EGYPT

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		20 2	37.34								
QRWL	SZ			EP		20 2	37.61								
RCY	SZ			EP		20 2	38.45								
DQRL	SZ			EP		20 2	38.83								

July 19 2014 Hour: 11:18 14.4 Lat: 33.47N Lon: 35.70E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC 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	9	349	EP		1118	15.61	-0.24	27						1.0
RCY	SZ	13	76	EP		1118	16.56	0.06							1.0
SHBL	BZ	14	163	EP		1118	16.64	-0.00							1.0
SHBL	BN	14	163	ES		1118	18.30	-0.01							1.0
DQRL	SZ	29	335	EP		1118	19.20	0.13							1.0
DQRL	SN	29	335	ES		1118	22.60	0.07							1.0

July 19 2014 Hour: 12:27 10.0 Agency: REL Regional

EMSC OT=12:27:10.0 15.81S 174.49W 220Km M=6.2 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1246	28.30								
SHBL	BZ			EP		1246	28.10								

July 19 2014 Hour: 14:14 2.3 Agency: REL Distant

EMSC OT=14:14:02.3 11.61N 57.78E 10Km M=6.0 OWEN FRACTURE ZONE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		1420	8.52								
RCY	SZ			EP		1420	8.60								
BHL	BZ			EP		1420	13.12								

July 20 2014 Hour: 4:18 48.8 Agency: REL Distant

EMSC OT=04:18:48.8 29.90S 177.37W 10Km M=5.6 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		438	43.91								
RCY	SZ			EP		438	43.84								

July 20 2014 Hour: 18:32 47.6 Agency: REL Distant

EMSC OT=18:32:47.6 44.66N 148.80E 60Km M=6.2 KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1844	56.66								
DQRL	SZ			EP		1844	57.94								
RCY	SZ			EP		1844	58.27								
QRWL	SZ			EP		1844	58.31								
SHBL	BZ			EP		1844	58.92								

July 21 2014 Hour: 11:38 54.9 Lat: 33.47N Lon: 35.69E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC 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	9	356	EP		1138	56.27	-0.06	26						1.0
QRWL	SN	9	356	ES		1138	57.39	0.01							1.0
RCY	SZ	14	77	EP		1138	57.19	0.01							1.0
SHBL	BZ	14	159	EP		1138	57.21	-0.03							1.0
SHBL	BN	14	159	ES		1138	58.99	0.02							1.0
DQRL	SZ	28	337	EP		1138	59.55	0.04							1.0

July 21 2014 Hour: 14:17 32.3 Lat: 33.54N Lon: 35.71E 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
QRWL	SZ	2	292	EP		1417	32.63	-0.05							1.0
RCY	SZ	13	112	EP		1417	34.27	-0.10							1.0
RCY	SN	13	112	ES		1417	35.97	0.05							1.0
SHBL	BZ	22	171	EP		1417	35.78	0.04							1.0
DQRL	SZ	22	326	EP		1417	35.91	0.04	36						1.0
DQRL	SN	22	326	ES		1417	38.55	0.01							1.0

July 21 2014 Hour: 14:54 41.4 Agency: REL Distant
EMSC OT=14:54:41.4 19.83S 178.47W 620Km M=6.9 FIJI REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 RCY SZ EP 1513 12.56
 BHL BZ EP 1513 12.36
 QRWL SZ EP 1513 13.07
 SHBL BZ EP 1513 12.97
 DQRL SZ EP 1513 13.38

July 21 2014 Hour: 17: 5 28.8 Lat: 33.80N Lon: 35.79E Depth: 11 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 17 5 32.23-0.01 29 1.0
 DQRL SN 23 243 EP 17 5 33.05 0.04 1.0
 DQRL SE 23 243 ES 17 5 36.14-0.00 1.0
 QRWL SZ 30 200 EP 17 5 33.92-0.06 1.0
 RCY SZ 34 173 EP 17 5 34.66 0.03 1.0
 RCY SN 34 173 ES 17 5 38.96 0.00 1.0
 SHBL BZ 50 185 EP 17 5 37.15 0.00 1.0

July 22 2014 Hour: 3: 3 44.1 Agency: REL Regional
EMSC OT=03:03:44.1 29.82N 32.61E 2Km M=4.7 EGYPT
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 SHBL BZ EP 3 4 52.50
 QRWL SZ EP 3 4 54.32
 RCY SZ EP 3 4 55.07
 DQRL SZ EP 3 4 55.50
 BHL BZ EP 3 4 57.99
 HWQ SZ EP 3 5 3.97

July 22 2014 Hour: 8: 4 20.0 Agency: REL Regional
EMSC OT=08:04:20.0 34.20N 26.17E 45Km M=4.6 CRETE, GREECE
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ SZ EP 8 6 13.04
 RCY SZ EP 8 6 11.60

July 23 2014 Hour: 0:27 1.3 Agency: REL Distant
EMSC OT=00:27:01.3 20.67S 177.70W 468Km M=5.1 FIJI REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 045 52.45
 SHBL BZ EP 045 52.91

July 23 2014 Hour: 15:53 11.9 Lat: 33.79N Lon: 35.78E Depth: 9 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 17 316 EP 1553 15.18 0.00 27 1.0
 DQRL SZ 22 244 EP 1553 15.87 0.02 1.0
 DQRL SN 22 244 ES 1553 18.74-0.01 1.0
 RCY SZ 33 172 EP 1553 17.55-0.02 1.0
 RCY SN 33 172 ES 1553 21.74 0.01 1.0

July 24 2014 Hour: 12: 3 31.2 Lat: 33.82N Lon: 35.74E Depth: 21 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 12 319 EP 12 3 35.16-0.01 27 1.0
 DQRL SZ 20 231 EP 12 3 35.89-0.01 1.0
 DQRL SN 20 231 ES 12 3 39.40 0.01 1.0
 RCY SZ 37 166 EP 12 3 37.96 0.00 1.0
 RCY SN 37 166 ES 12 3 42.97-0.00 1.0

July 24 2014 Hour: 13:23 12.6 Lat: 33.97N Lon: 36.10E Depth: 2 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	37	338	EP		1323	18.59	-0.01	56						1.0
HWQ	SN	37	338	ES		1323	23.07	0.01							1.0
BHL	BZ	42	260	EP		1323	19.26	-0.07							1.0
DQRL	SZ	57	239	EP		1323	21.85	0.08							1.0
RCY	SZ	58	205	EP		1323	21.88	-0.02							1.0
RCY	SN	58	205	ES		1323	28.81	0.01							1.0

July 24 2014 Hour: 14:30 54.0 Lat: 34.10N Lon: 35.58E Depth: 13 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	23	162	EP		1430	58.35	-0.06	49						1.0
BHL	BN	23	162	ES		1431	1.66	0.01							1.0
HWQ	SZ	39	60	EP		1431	0.81	0.01							1.0
DQRL	SZ	44	181	EP		1431	1.51	0.04							1.0
RCY	SZ	71	160	EP		1431	5.50	-0.02							1.0
RCY	SE	71	160	ES		1431	14.03	0.01							1.0

July 24 2014 Hour: 15:41 52.4 Lat: 33.79N Lon: 35.73E Depth: 19 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	14	329	EP		1541	56.29	-0.03	44						1.0
DQRL	SZ	18	237	EP		1541	56.80	0.10							1.0
DQRL	SN	18	237	ES		1541	59.85	-0.01							1.0
QRWL	SZ	28	190	EP		1541	57.69	-0.14							1.0
RCY	SZ	34	164	EP		1541	58.80	0.07							1.0
RCY	SE	34	164	ES		1542	3.41	0.01							1.0
HWQ	SZ	57	20	EP		1542	1.91	0.01							0.2

July 25 2014 Hour: 14:49 49.8 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	298	EP		1449	50.23	-0.04	38						1.0
RCY	SZ	13	110	EP		1449	51.84	-0.06							1.0
RCY	SN	13	110	ES		1449	53.46	0.03							1.0
SHBL	BZ	21	171	EP		1449	53.27	0.03							1.0
DQRL	SZ	23	326	EP		1449	53.51	0.03							1.0
DQRL	SN	23	326	ES		1449	56.20	0.01							1.0

July 26 2014 Hour: 14:39 19.1 Lat: 33.80N Lon: 35.80E Depth: 9 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	18	312	EP		1439	22.45	0.07	44						1.0
DQRL	SZ	23	244	EP		1439	23.16	-0.04							1.0
DQRL	SN	23	244	ES		1439	26.21	-0.02							1.0
RCY	SZ	34	174	EP		1439	24.78	0.00							1.0
RCY	SN	34	174	ES		1439	28.99	0.01							1.0
HWQ	SZ	55	15	EP		1439	28.08	-0.04							1.0

July 26 2014 Hour: 16:39 35.6 Lat: 33.79N Lon: 35.78E Depth: 6 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	317	EP		1639	38.65	-0.06	52						1.0
DQRL	SZ	22	245	EP		1639	39.30	-0.05							1.0
DQRL	SN	22	245	ES		1639	42.18	0.07							1.0

QRWL	SZ	28	200	EP		1639	40.26	-0.08									1.0
RCY	SZ	33	172	EP		1639	41.06	0.02									1.0
RCY	SN	33	172	ES		1639	45.07	0.01									1.0
HWQ	SZ	56	15	EP		1639	44.84	0.06									1.0

July 26 2014 Hour: 23:37 0.9 Lat: 33.78N Lon: 35.80E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.2 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	19	316	EP		2337	3.82	-0.16	38						1.0
DQRL	SZ	23	248	EP		2337	4.57	-0.01							1.0
DQRL	SN	23	248	ES		2337	7.31	0.02							1.0
QRWL	SZ	28	203	EP		2337	5.34	-0.10							1.0
BEYL	SZ	30	290	EP		2337	5.89	0.16							1.0
RCY	SZ	32	174	EP		2337	6.00	-0.04							1.0
RCY	SN	32	174	ES		2337	9.93	0.09							1.0
SHBL	BZ	48	186	EP		2337	8.63	-0.07							1.0
HWQ	SZ	57	14	EP		2337	11.13	1.07							0.2

July 27 2014 Hour: 17: 3 54.2 Lat: 34.04N Lon: 35.71E Depth: 9 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	16	199	EP		17 3	57.12	-0.09	68						1.0
BHL	BN	16	199	ES		17 3	59.52	0.05							1.0
BEYL	SZ	28	227	EP		17 3	58.81	-0.02							1.0
HWQ	BZ	34	39	EP		17 3	59.93	0.03							1.0
HWQ	SN	34	39	ES		17 4	4.18	0.02							1.0
DQRL	SZ	39	199	EP		17 4	0.68	-0.03							1.0
DQRL	SN	39	199	ES		17 4	5.64	0.08							1.0
QRWL	SZ	55	183	EP		17 4	3.07	-0.05							1.0
RCY	SZ	61	169	EP		17 4	4.16	-0.04							1.0

July 29 2014 Hour: 16:50 13.0 Agency: REL Distant
EMSC OT=16:50:13.0 23.67S 176.41W 30Km M=5.5 FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1710	1.49								
SHBL	BZ			EP		1710	1.92								

July 30 2014 Hour: 1:32 36.5 Agency: REL Distant
EMSC OT=01:32:10.6 26.42N 53.58E 10Km M=5.3 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		136	6.48								
QRWL	SZ			EP		136	9.80								
DQRL	SZ			EP		136	10.61								
BHL	BZ			EP		136	10.85								

July 30 2014 Hour: 15:54 26.4 Lat: 33.81N Lon: 35.77E Depth: 24 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	15	314	EP		1554	30.86	-0.04	41						1.0
BHL	BE	15	314	ES		1554	34.27	0.01							1.0
DQRL	SZ	22	237	EP		1554	31.59	0.04							1.0
QRWL	SZ	31	195	EP		1554	32.45	-0.04							1.0
RCY	SZ	36	170	EP		1554	33.20	0.03							1.0
RCY	SE	36	170	ES		1554	38.21	-0.00							1.0
HWQ	SZ	54	18	EP		1554	35.62	0.01							1.0

July 31 2014 Hour: 0:17 53.8

Agency: REL Distant

EMSC OT=00:17:53.8 23.57S 176.26W 20Km M=5.4 FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		037	42.60								
SHBL	BZ			EP		037	43.87								

July 31 2014 Hour: 15:38 37.8

Lat: 33.79N Lon: 35.78E 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	318	EP		1538	40.50	-0.05	37						1.0
DQRL	SZ	21	245	EP		1538	41.21	0.01							1.0
DQRL	SN	21	245	ES		1538	43.76	0.02							1.0
RCY	SZ	33	171	EP		1538	42.99	-0.06							1.0
RCY	SE	33	171	ES		1538	46.99	0.03							1.0
HWQ	SZ	57	16	EP		1538	46.93	0.05							1.0

Epicentral Map of Lebanon

JULY 2014

