

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

August

2010

Prepared by
The National Centre for Geophysical Research
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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

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.

August 2 2010 Hour: 9:51 10.1 Lat: 33.34N Lon: 35.33E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	46	28	EP		951	17.58	-0.02							1.0
DQRL	SE	46	28	ES		951	23.14	0.00							1.0
RCY	SZ	50	69	EP		951	18.15	0.00	43						1.0
RCY	SN	50	69	ES		951	24.11	0.00							1.0
BHL	BZ	70	25	EP		951	21.58	0.24							0.2
HWQ	BZ	119	28	EP		951	29.37	0.10							0.2

August 2 2010 Hour: 12:21 52.6 Lat: 34.11N Lon: 35.53E Depth: 10 Agency: REL Local
Magnitudes: 2.7MC 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	25	154	EP		1221	57.09	-0.01	41						1.0
BHL	BN	25	154	ES		1222	0.38	-0.01							1.0
HWQ	BZ	42	63	EP		1221	59.71	-0.03							1.0
HWQ	BN	42	63	ES		1222	5.00	0.02							1.0
DQRL	SZ	45	176	EP		1222	0.11	0.02							1.0
RCY	SZ	73	158	EP		1222	4.61	-0.01							1.0

August 2 2010 Hour: 13:2 0.0 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		13 2	44.75								
RCY	SZ			EP		13 2	42.02								

August 2 2010 Hour: 17:17 13.2 Lat: 33.78N Lon: 35.76E 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	16	324	EP		1717	15.88	-0.01	33						1.0
DQRL	SZ	20	243	EP		1717	16.41	0.01							1.0
DQRL	SN	20	243	ES		1717	18.73	-0.01							1.0
RCY	SZ	33	167	EP		1717	18.54	0.02							1.0
RCY	SN	33	167	ES		1717	22.41	-0.02							1.0
HWQ	BZ	57	17	EP		1717	22.49	0.00							1.0

August 3 2010 Hour: 9:9 42.1 Lat: 33.78N Lon: 35.78E Depth: 0 Agency: REL Local
Magnitudes: 2.3MC 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	319	EP		9 9	45.04	0.02	23						1.0
BHL	BN	18	319	ES		9 9	47.12	-0.04							1.0
DQRL	SZ	21	247	EP		9 9	45.60	0.03							1.0
RCY	SZ	32	171	EP		9 9	47.33	0.02							1.0
RCY	SE	32	171	ES		9 9	51.11	-0.04							1.0
HWQ	BZ	57	15	EP		9 9	51.32	0.00							1.0

August 3 2010 Hour: 12:8 28.8 Agency: REL Distant
EMSC OT=12:08:28.8 01.24N 126.39E 60Km Mw=6.5 MOLUCCA SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEYL	BZ			EP		1221	22.17								
RCY	SZ			EP		1221	20.33								
BHL	BZ			EP		1221	21.40								
HWQ	BZ			EP		1221	20.02								
FKH	SZ			EP		1221	59.79								

August 4 2010 Hour: 0:543.9 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	18	317	EP		0 5	46.71	-0.04	39						1.0
BHL	BN	18	317	ES		0 5	48.89	0.01							1.0
DQRL	SZ	22	246	EP		0 5	47.41	0.02							1.0
RCY	SZ	32	172	EP		0 5	49.11	0.00							1.0
RCY	SE	32	172	ES		0 5	52.98	-0.01							1.0
HWQ	BZ	57	15	EP		0 5	53.03	0.02							1.0

August 4 2010 Hour: 12:58 27.8 Agency: REL Distant
EMSC OT=12:58:27.8 51.45N 178.50W 54Km Mw=6.3 ANDREANOF ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1311	19.86								
HWQ	BZ			EP		1311	17.92								

August 4 2010 Hour: 16:37 11.6 Lat: 33.77N Lon: 35.75E 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	17	330	EP		1637	14.38	-0.02	33						1.0
BHL	BE	17	330	ES		1637	16.48	0.01							1.0
DQRL	SZ	18	247	EP		1637	14.52	0.01							1.0
RCY	SZ	31	165	EP		1637	16.67	-0.01							1.0
RCY	SE	31	165	ES		1637	20.45	0.01							1.0
HWQ	BZ	59	18	EP		1637	21.19	0.01							1.0

August 5 2010 Hour: 13:35 35.1 Lat: 33.90N Lon: 35.83E 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	16	271	EP		1335	37.75	0.02	41						1.0
DQRL	SZ	32	227	EP		1335	40.31	-0.02							1.0
DQRL	SN	32	227	ES		1335	44.17	-0.01							1.0
HWQ	BZ	43	15	EP		1335	42.09	-0.02							1.0
RCY	SZ	45	179	EP		1335	42.45	0.05							1.0
RCY	SE	45	179	ES		1335	47.75	-0.03							1.0

August 5 2010 Hour: 17:23 49.3 Lat: 33.65N Lon: 35.97E Depth: 27 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	21	215	EP		1723	54.84	0.00	33						1.0
RCY	SE	21	215	ES		1723	58.94	0.00							1.0
DQRL	SZ	37	279	EP		1723	56.53	-0.01							1.0
DQRL	SN	37	279	ES		1724	1.88	-0.01							1.0
BHL	BZ	40	314	EP		1723	56.96	0.05							1.0
HWQ	BZ	69	358	EP		1724	0.83	-0.02							1.0

August 6 2010 Hour: 2:37 45.9 Agency: REL Regional
EMSC OT=02:37:45.9 34.23N 25.03E 28Km mb=4.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		239	48.80								
BHL	BZ			EP		239	49.23								
RCY	SZ			EP		239	52.54								
HWQ	BZ			EP		239	53.13								

August 6 2010 Hour: 5:4 0.1 Agency: REL Distant
EMSC OT=05:04:00.1 21.73S 179.40W 598Km mb=5.3 FIJI REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 522 35.41
 RCY SZ EP 522 36.67
 BHL BZ EP 522 36.59
 DQRL SZ EP 522 37.10

August 8 2010 Hour: 0:24 12.9 Agency: REL Regional
EMSC OT=00:24:12.9 36.61N 27.92E 14Km ML=4.3 DODECANESE ISLANDS
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 025 50.43
 DQRL SZ EP 025 50.83
 HWQ BZ EP 025 52.05
 RCY SZ EP 025 55.05

August 8 2010 Hour: 4:6 33.0 Agency: REL Regional
EMSC OT=04:06:33.0 34.66N 24.47E 12Km mb=4.8 CRETE, GREECE
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 DQRL SZ EP 4 8 44.06
 BHL BZ EP 4 8 46.36
 RCY SZ EP 4 8 47.81
 HWQ BZ EP 4 8 48.16

August 8 2010 Hour: 10:17 28.2 Lat: 33.58N Lon: 36.95E Depth: 15 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 104 266 EP 1017 44.43-0.06 61 1.0
 RCY SN 104 266 ES 1017 56.55 0.01 1.0
 HWQ BZ 121 310 EP 1017 47.02-0.01 1.0
 BHL BZ 125 287 EP 1017 47.62-0.02 1.0
 DQRL SZ 129 277 EP 1017 48.22 0.09 1.0
 DQRL SN 129 277 ES 1018 2.87-0.01 1.0

August 9 2010 Hour: 10:26 29.6 Lat: 33.81N Lon: 35.76E Depth: 18 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 14 317 EP 1026 33.44 0.02 1.0
 DQRL SZ 21 237 EP 1026 34.11 0.00 1.0
 DQRL SN 21 237 ES 1026 37.41-0.01 1.0
 RCY SZ 35 168 EP 1026 36.03 0.02 43 1.0
 RCY SN 35 168 ES 1026 40.70-0.01 1.0
 HWQ BZ 55 18 EP 1026 38.75-0.02 1.0

August 9 2010 Hour: 10:38 28.4 Lat: 33.76N Lon: 36.78E Depth: 5 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 93 252 EP 1038 43.29-0.06 61 1.0
 RCY SN 93 252 ES 1038 54.45 0.02 1.0
 HWQ BZ 96 307 EP 1038 43.85-0.01 1.0
 HWQ BN 96 307 ES 1038 55.32 0.00 1.0
 BHL BZ 105 279 EP 1038 45.44 0.04 1.0
 DQRL SZ 112 267 EP 1038 46.46 0.04 1.0
 DQRL SN 112 267 ES 1038 59.75-0.03 1.0

August 11 2010 Hour: 19:10 22.6 Agency: REL Distant

EMSC OT=19:10:22.6 07.60S 107.08E 40Km Mw=5.4 JAVA, INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1922	22.29								
HWQ	BZ			EP		1922	22.55								
BHL	BZ			EP		1922	23.19								
DQRL	SZ			EP		1922	23.58								

August 12 2010 Hour: 17:59 30.6 Lat: 33.92N Lon: 35.81E Depth: 11 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	15	262	EP		1759	33.69	0.01	28						1.0
BHL	BE	15	262	ES		1759	35.94	-0.01							1.0
BEYL	BZ	30	259	EP		1759	35.70	-0.06							0.2
DQRL	SZ	33	223	EP		1759	36.24	0.00							1.0
HWQ	BZ	41	18	EP		1759	37.59	0.00							1.0
RCY	SZ	47	177	EP		1759	38.50	0.00							1.0
RCY	SN	47	177	ES		1759	44.33	0.00							1.0

August 13 2010 Hour: 0:9 40.4 Lat: 33.79N Lon: 35.80E 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	18	313	EP		0 9	43.37	0.03	37						1.0
BHL	BN	18	313	ES		0 9	45.49	-0.04							1.0
DQRL	SZ	23	246	EP		0 9	44.15	0.03							1.0
RCY	SZ	33	174	EP		0 9	45.63	-0.04							1.0
RCY	SE	33	174	ES		0 9	49.59	0.00							1.0
HWQ	BZ	56	14	EP		0 9	49.37	0.01							1.0

August 13 2010 Hour: 0:33 31.5 Lat: 33.53N Lon: 35.53E 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
DQRL	SZ	19	12	EP		033	34.92	0.00	36						1.0
DQRL	SN	19	12	ES		033	37.43	0.00							1.0
RCY	SZ	29	98	EP		033	36.43	0.00							0.2
RCY	SE	29	98	ES		033	40.05	0.00							1.0
BHL	BZ	43	16	EP		033	38.54	0.00							1.0
HWQ	BZ	91	25	EP		033	46.31	0.01							0.2

August 13 2010 Hour: 13:4 28.8 Lat: 33.78N Lon: 35.77E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC 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	323	EP		13 4	31.58	-0.03	64						1.0
DQRL	SZ	20	246	EP		13 4	32.12	0.10							1.0
DQRL	SE	20	246	ES		13 4	34.41	-0.01							1.0
BEYL	BZ	27	292	EP		13 4	33.15	-0.06							1.0
RCY	SZ	32	169	EP		13 4	33.94	0.00							1.0
RCY	SN	32	169	ES		13 4	37.73	-0.03							1.0
HWQ	BZ	58	17	EP		13 4	38.13	0.03							1.0

August 13 2010 Hour: 14:40 57.8 Lat: 33.80N Lon: 35.78E Depth: 7 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	316	EP		1441	0.78	0.02	39						1.0
DQRL	SZ	22	242	EP		1441	1.59	0.05							1.0
DQRL	SN	22	242	ES		1441	4.29	-0.04							1.0
RCY	SZ	34	171	EP		1441	3.37	-0.04							1.0
RCY	SE	34	171	ES		1441	7.61	0.02							1.0

HWQ BZ 56 16 EP 1441 6.82-0.01 1.0

August 13 2010 Hour: 16: 6 49.9 Lat: 34.56N Lon: 36.39E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

HERMEL BAALBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	35	177	EP		16	6	55.51-0.02	53						1.0
HWQ	BZ	51	233	EP		16	6	58.01-0.16							1.0
HWQ	BN	51	233	ES		16	7	4.32 0.03							1.0
BHL	BZ	99	223	EP		16	7	6.10 0.18							1.0
DQRL	SZ	121	219	EP		16	7	9.45 0.02							1.0
DQRL	SN	121	219	ES		16	7	23.85-0.04							1.0

August 13 2010 Hour: 17:20 38.4 Lat: 33.79N Lon: 35.76E Depth: 7 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	320	EP		1720	41.33	0.02	44						1.0
BHL	BN	16	320	ES		1720	43.48-0.01								1.0
DQRL	SZ	21	242	EP		1720	41.98-0.01								1.0
RCY	SZ	34	169	EP		1720	44.01 0.00								1.0
RCY	SE	34	169	ES		1720	48.17 0.00								1.0
HWQ	BZ	56	17	EP		1720	47.55 0.00								1.0

August 15 2010 Hour: 10:58 8.9 Lat: 33.55N Lon: 35.85E 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
RCY	SZ	6	188	EP		1058	9.93-0.02		37						1.0
DQRL	SZ	31	304	EP		1058	14.04 0.14								1.0
DQRL	SE	31	304	ES		1058	17.53-0.04								1.0
BHL	BZ	43	336	EP		1058	15.72-0.15								1.0
BHL	BN	43	336	ES		1058	21.02 0.02								1.0
HWQ	BZ	81	7	EP		1058	22.09 0.06								1.0

August 15 2010 Hour: 22:18 17.0 Agency: REL Regional
EMSC OT=22:18:17.0 36.57N 37.01E 21Km MD=3.2 TURKEY-SYRIA REG

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2218	25.44								
BHL	BZ			EP		2218	33.02								
DQRL	SZ			EP		2218	37.62								

August 16 2010 Hour: 5:46 41.4 Lat: 33.65N Lon: 35.87E Depth: 6 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	18	190	EP		546	44.47-0.04		43						1.0
RCY	SN	18	190	ES		546	46.83 0.02								1.0
DQRL	SZ	28	282	EP		546	46.15 0.04								1.0
DQRL	SN	28	282	ES		546	49.57-0.01								1.0
BHL	BZ	34	325	EP		546	47.02-0.03								1.0
HWQ	BZ	70	6	EP		546	52.74 0.02								1.0

August 16 2010 Hour: 13:59 57.0 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	319	EP		1359	59.79 0.00		39						1.0
DQRL	SZ	21	244	EP		14	0	0.46 0.01							1.0
DQRL	SN	21	244	ES		14	0	2.96-0.01							1.0
RCY	SZ	33	170	EP		14	0	2.33 0.00							1.0
RCY	SN	33	170	ES		14	0	6.26 0.00							1.0
HWQ	BZ	57	16	EP		14	0	6.15 0.00							1.0

August 16 2010 Hour: 19:35 49.8 Agency: REL Distant
EMSC OT=19:35:49.8 20.76S 178.76W 611Km Mw=6.2 FIJI REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 1954 20.94
 FKH SZ EP 1954 21.72
 BHL BZ EP 1954 21.95
 BEYL BZ EP 1954 21.48
 DQRL SZ EP 1954 22.81
 RCY SZ EP 1954 22.19

August 17 2010 Hour: 11:41 23.3 Lat: 33.79N Lon: 35.72E 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 14 335 EP 1141 25.57 0.00 1.0
 DQRL SZ 17 234 EP 1141 26.03-0.04 1.0
 DQRL SN 17 234 ES 1141 28.11 0.02 1.0
 RCY SZ 35 161 EP 1141 29.00 0.03 34 1.0
 RCY SN 35 161 ES 1141 33.12-0.02 1.0
 HWQ BZ 58 22 EP 1141 32.68 0.01 1.0

August 18 2010 Hour: 9:42 0.0 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 DQRL SZ EP 942 52.57
 RCY SZ EP 942 53.25

August 18 2010 Hour: 13: 4 48.8 Lat: 33.78N Lon: 35.77E 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 17 322 EP 13 4 51.55-0.04 38 1.0
 DQRL SZ 20 245 EP 13 4 52.14 0.04 1.0
 DQRL SN 20 245 ES 13 4 54.52 0.00 1.0
 RCY SZ 32 169 EP 13 4 54.05 0.00 1.0
 RCY SE 32 169 ES 13 4 57.90-0.02 1.0
 HWQ BZ 57 17 EP 13 4 58.09 0.02 1.0

August 20 2010 Hour: 2:39 35.7 Lat: 33.15N Lon: 35.84E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.0 secs
NORTH GALILEE
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 RCY SZ 39 360 EP 239 41.87-0.08 62 1.0
 RCY SN 39 360 ES 239 46.56 0.00 1.0
 NAQL SZ 65 267 EP 239 46.23 0.00 1.0
 NAQL SE 65 267 ES 239 54.02 0.00 1.0
 DQRL SZ 67 338 EP 239 46.49 0.02 1.0
 BHL BZ 86 348 EP 239 49.51-0.01 1.0
 HWQ BZ 126 5 EP 239 56.06 0.07 1.0

August 20 2010 Hour: 6:45 30.0 Agency: REL Regional
EMSC OT=06:45:30.0 37.17N 31.27E 70Km ML=3.8 WESTERN TURKEY
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 646 39.08
 DQRL SZ EP 646 41.57
 RCY SZ EP 646 45.32

August 20 2010 Hour: 15:19 1.9 Lat: 33.78N Lon: 35.79E 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 18 318 EP 1519 4.94-0.02 38 1.0
 BHL BN 18 318 ES 1519 7.20 0.00 1.0
 DQRL SZ 22 247 EP 1519 5.55 0.02 1.0

RCY	SZ	32	172	EP		1519	7.16	-0.03									1.0
RCY	SN	32	172	ES		1519	11.11	0.02									1.0
HWQ	BZ	57	15	EP		1519	11.14	0.02									1.0

August 20 2010 Hour: 19:54 26.3 Lat: 33.79N Lon: 35.80E Depth: 5 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	313	EP		1954	29.47	0.03							1.0
BHL	BN	18	313	ES		1954	31.76	-0.01							1.0
DQRL	SZ	23	246	EP		1954	30.24	0.02							1.0
BEYL	BZ	30	287	EP		1954	31.16	-0.02							1.0
RCY	SZ	33	174	EP		1954	31.74	-0.01	45						1.0
RCY	SN	33	174	ES		1954	35.79	0.00							1.0
HWQ	BZ	56	14	EP		1954	35.32	0.00							1.0

August 22 2010 Hour: 0:38 8.0 Lat: 33.77N Lon: 35.96E 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
BHL	BZ	32	297	EP		038	13.09	-0.06							1.0
BHL	BN	32	297	ES		038	16.97	-0.01							1.0
RCY	SZ	33	201	EP		038	13.25	-0.04	38						1.0
RCY	SE	33	201	ES		038	17.24	0.01							1.0
DQRL	SZ	37	258	EP		038	14.05	0.07							1.0
HWQ	BZ	56	358	EP		038	17.02	0.02							1.0

August 22 2010 Hour: 7:57 1.5 Lat: 33.73N Lon: 36.89E Depth: 14 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.1 secs

DAMASCUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	101	255	EP		757	17.24	-0.09							1.0
RCY	SN	101	255	ES		757	29.05	-0.03							1.0
HWQ	BZ	106	305	EP		757	17.96	-0.08	75						1.0
HWQ	BN	106	305	ES		757	30.31	0.01							1.0
BHL	BZ	116	280	EP		757	19.50	0.03							1.0
DQRL	SZ	122	269	EP		757	20.57	0.16							1.0

August 22 2010 Hour: 10:23 1.3 Agency: REL Regional

EMSC OT=10:23:01.3 37.42N 20.21E 10Km mb=5.4 IONIAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1026	4.14								
DQRL	SZ			EP		1026	3.46								
HWQ	BZ			EP		1026	4.30								
RCY	SZ			EP		1026	6.50								

August 22 2010 Hour: 17:52 11.6 Lat: 33.79N Lon: 35.77E 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	320	EP		1752	14.32	-0.01	37						1.0
DQRL	SZ	21	243	EP		1752	15.03	0.04							1.0
DQRL	SE	21	243	ES		1752	17.44	-0.02							1.0
RCY	SZ	33	169	EP		1752	16.97	-0.01							1.0
RCY	SE	33	169	ES		1752	20.93	0.00							1.0
HWQ	BZ	57	17	EP		1752	20.78	0.00							1.0

August 22 2010 Hour: 22:25 1.3 Lat: 33.14N Lon: 35.45E Depth: 0 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.1 secs

SOUTH LEBANON

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	29	265	EP		2225	5.87	-0.19							1.0
NAQL	SN	29	265	ES		2225	9.51	-0.03							1.0

RCY	SZ	53	42	EP		2225	9.82-0.11									1.0
RCY	SN	53	42	ES		2225	16.22-0.06									1.0
DQRL	SZ	64	10	EP		2225	11.68 0.07	80								1.0
DQRL	SN	64	10	ES		2225	19.17-0.03									1.0
BEYL	BZ	81	3	EP		2225	14.54 0.10									1.0
BHL	BZ	87	12	EP		2225	15.25-0.08									1.0
BHL	BN	87	12	ES		2225	25.64-0.04									1.0
HWQ	BZ	134	20	EP		2225	23.11 0.12									1.0

August 22 2010 Hour: 23:15 49.3 Lat: 33.10N Lon: 35.50E Depth: 0 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.1 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	54	36	EP		2315	57.94-0.03		32						1.0
RCY	SN	54	36	ES		2316	4.41 0.01								1.0
DQRL	SZ	67	6	EP		2316	0.21 0.10								1.0
DQRL	SN	67	6	ES		2316	8.11 0.00								1.0
BHL	BZ	90	9	EP		2316	3.64-0.16								1.0
HWQ	BZ	137	18	EP		2316	11.41 0.08								1.0

August 22 2010 Hour: 23:59 37.3 Lat: 33.14N Lon: 35.46E Depth: 2 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	30	266	EP		2359	42.21 0.03		39						1.0
NAQL	SN	30	266	ES		2359	45.77-0.03								1.0
RCY	SZ	53	41	EP		2359	45.81-0.01								1.0
RCY	SN	53	41	ES		2359	52.11-0.03								1.0
DQRL	SZ	64	9	EP		2359	47.59-0.01								1.0
BHL	BZ	87	12	EP		2359	51.37 0.06								1.0
HWQ	BZ	134	19	EP		2359	58.66-0.15								0.2

August 24 2010 Hour: 12:44 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1245	16.09								
RCY	SZ			EP		1245	14.45								

August 24 2010 Hour: 13:53 58.1 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		1354	0.79-0.02		37						1.0
DQRL	SZ	34	227	EP		1354	3.48-0.03								1.0
DQRL	SE	34	227	ES		1354	7.58 0.04								1.0
HWQ	BZ	42	14	EP		1354	4.81 0.02								1.0
RCY	SZ	46	180	EP		1354	5.51 0.01								1.0
RCY	SN	46	180	ES		1354	11.01-0.01								1.0

August 25 2010 Hour: 10: 2 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		10 2	42.60								
HWQ	BZ			EP		10 2	42.79								

August 25 2010 Hour: 16: 2 8.0 Lat: 33.79N Lon: 35.78E Depth: 3 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	316	EP		16 2	10.93 0.01		31						1.0
DQRL	SZ	22	244	EP		16 2	11.67 0.00								1.0
DQRL	SN	22	244	ES		16 2	14.33-0.01								1.0
RCY	SZ	33	172	EP		16 2	13.44 0.01								1.0
RCY	SE	33	172	ES		16 2	17.41-0.01								1.0
HWQ	BZ	56	15	EP		16 2	17.10 0.00								1.0

August 26 2010 Hour: 8:9 44.5 Lat: 33.53N Lon: 35.86E Depth: 6 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	5	210	EP		8 9	45.98	-0.02	33						1.0
RCY	SN	5	210	ES		8 9	47.10	0.01							1.0
DQRL	SZ	33	305	EP		8 9	50.04	0.05							1.0
DQRL	SE	33	305	ES		8 9	54.04	0.00							1.0
BHL	BZ	45	335	EP		8 9	51.85	-0.09							1.0
HWQ	BZ	83	5	EP		8 9	58.01	0.05							1.0

August 26 2010 Hour: 16:10 18.2 Lat: 33.80N Lon: 35.78E Depth: 11 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	315	EP		1610	21.62	0.01	36						1.0
DQRL	SZ	22	243	EP		1610	22.34	0.02							1.0
DQRL	SN	22	243	ES		1610	25.36	-0.02							1.0
RCY	SZ	34	172	EP		1610	24.03	-0.01							1.0
RCY	SE	34	172	ES		1610	28.36	0.01							1.0
HWQ	BZ	55	16	EP		1610	27.37	-0.01							1.0

August 26 2010 Hour: 20:10 22.2 Lat: 33.11N Lon: 35.49E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	54	37	EP		2010	30.80	0.00	36						1.0
RCY	SN	54	37	ES		2010	37.18	-0.01							1.0
DQRL	SZ	66	7	EP		2010	32.75	-0.11							1.0
DQRL	SN	66	7	ES		2010	40.80	0.02							1.0
BHL	BZ	89	10	EP		2010	36.62	0.06							1.0
HWQ	BZ	136	18	EP		2010	44.16	0.04							1.0

August 27 2010 Hour: 19:23 48.3 Agency: REL Distant
EMSC OT=19:23:48.3 35.49N 54.55E 10Km Mw=5.7 NORTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1927	25.37								
RCY	SZ			EP		1927	29.23								
BHL	BZ			EP		1927	30.24								
DQRL	SZ			EP		1927	32.33								
BEYL	BZ			EP		1927	32.42								

August 28 2010 Hour: 9:51 25.7 Lat: 33.79N Lon: 35.74E 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	15	330	EP		951	28.99	0.01	47						1.0
DQRL	SZ	18	240	EP		951	29.38	0.07							1.0
DQRL	SE	18	240	ES		951	32.00	0.00							1.0
BEYL	BZ	25	293	EP		951	30.07	-0.07							1.0
RCY	SZ	33	164	EP		951	31.52	0.00							1.0
RCY	SN	33	164	ES		951	35.83	-0.02							1.0
HWQ	BZ	58	19	EP		951	35.29	0.01							1.0

August 29 2010 Hour: 15:37 34.3 Lat: 33.13N Lon: 35.61E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs

NORTH GALILEE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	44	269	EP		1537	41.38	-0.02	37						1.0
RCY	SZ	46	27	EP		1537	41.69	-0.06							1.0
RCY	SE	46	27	ES		1537	47.25	-0.01							1.0
DQRL	SZ	65	357	EP		1537	44.65	-0.06							1.0
DQRL	SN	65	357	ES		1537	52.41	-0.01							1.0

BHL	BZ	87	3	EP		1537	48.32	0.06										1.0
HWQ	BZ	132	14	EP		1537	55.62	0.09										1.0

August 30 2010 Hour: 0:12 57.1 Lat: 33.79N Lon: 35.80E 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	19	313	EP		013	0.09-0.03		40						1.0
DQRL	SZ	23	247	EP		013	0.91 0.05								1.0
DQRL	SN	23	247	ES		013	3.66 0.01								1.0
BEYL	BZ	30	288	EP		013	1.89-0.04								1.0
RCY	SZ	33	174	EP		013	2.37 0.01								1.0
RCY	SN	33	174	ES		013	6.22-0.03								1.0
HWQ	BZ	56	14	EP		013	6.14 0.02								1.0

August 30 2010 Hour: 10:23 39.0 Lat: 33.59N Lon: 36.01E Depth: 15 Agency: REL Local
Magnitudes: 2.7MC 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	19	238	EP		1023	43.02-0.04		37						1.0
RCY	SN	19	238	ES		1023	46.06 0.02								1.0
DQRL	SZ	43	288	EP		1023	46.38 0.07								1.0
DQRL	SN	43	288	ES		1023	51.70 0.00								1.0
BHL	BZ	48	317	EP		1023	47.00-0.09								1.0
HWQ	BZ	77	356	EP		1023	51.36 0.04								1.0

August 30 2010 Hour: 13:20 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1320	54.32								
RCY	SZ			EP		1321	3.30								

August 31 2010 Hour: 14:14 1.4 Lat: 34.37N Lon: 35.87E Depth: 9 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

NORTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	13	147	EP		14 1	44.07-0.03		34						1.0
HWQ	BN	13	147	ES		14 1	46.09 0.02								1.0
BHL	BZ	56	201	EP		14 1	50.61 0.01								1.0
DQRL	SZ	79	201	EP		14 1	54.31-0.01								1.0
RCY	SZ	97	182	EP		14 1	57.12 0.03								1.0
RCY	SN	97	182	ES		14 2	8.64-0.02								1.0

August 31 2010 Hour: 15:17 52.0 Lat: 33.78N Lon: 35.75E Depth: 3 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	16	328	EP		1517	54.68-0.06								1.0
DQRL	SZ	19	244	EP		1517	55.01-0.06		45						1.0
DQRL	SN	19	244	ES		1517	57.41 0.07								1.0
RCY	SZ	32	166	EP		1517	57.28 0.00								1.0
RCY	SE	32	166	ES		1518	1.19-0.01								1.0
HWQ	BZ	58	18	EP		1518	1.48 0.06								1.0

August 31 2010 Hour: 15:18 54.0 Lat: 33.79N Lon: 35.75E Depth: 9 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	325	EP		1518	57.06 0.01								1.0
DQRL	SZ	19	241	EP		1518	57.54 0.01		48						1.0
DQRL	SN	19	241	ES		1519	0.12-0.01								1.0
RCY	SZ	33	166	EP		1518	59.67 0.00								1.0
RCY	SE	33	166	ES		1519	3.87 0.00								1.0
HWQ	BZ	57	18	EP		1519	3.38-0.01								1.0

Epicentral Map of Lebanon

August 2010

