

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

December

2011

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.

December 1 2011 Hour: 1:13 11.9

Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		113	14.92								
QRWL	SZ			EP		113	14.89								
DQRL	SZ			EP		113	21.07								

December 1 2011 Hour: 15: 8 18.3 Lat: 33.92N Lon: 36.26E Depth: 0 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
FKH	SZ	39	20	EP		15 8	24.53-0.03		51						1.0
FKH	SE	39	20	ES		15 8	29.23 0.00								1.0
HWQ	SZ	50	324	EP		15 8	26.31 0.04								1.0
BHL	BZ	56	269	EP		15 8	27.30-0.02								1.0
QRWL	SZ	67	233	EP		15 8	29.20 0.07								1.0
QRWL	SN	67	233	ES		15 8	37.14-0.04								1.0
DQRL	SZ	68	250	EP		15 8	29.23-0.01								1.0

December 2 2011 Hour: 0:22 52.0 Agency: REL Distant  
EMSC OT=00:22:52.0 33.92S 58.04E 10Km M=5.6 SOUTH INDIAN OCEAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ			EP		034	6.06								
DQRL	SZ			EP		034	8.66								
BEYL	BZ			EP		034	8.58								
BHL	BZ			EP		034	9.28								

December 2 2011 Hour: 15:18 7.3 Lat: 33.97N Lon: 35.85E Depth: 8 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.1 secs

KESROUANE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	19	249	EP		1518	10.73-0.05		39						1.0
HWQ	SZ	36	14	EP		1518	13.29 0.04								1.0
DQRL	SZ	39	222	EP		1518	13.72-0.03								1.0
DQRL	SN	39	222	ES		1518	18.58 0.06								1.0
RCY	SZ	52	182	EP		1518	15.88 0.02								1.0
RCY	SN	52	182	ES		1518	22.18-0.01								1.0
SHBL	BZ	69	188	EP		1518	18.51-0.07								1.0
SHBL	BN	69	188	ES		1518	26.96 0.03								1.0

December 2 2011 Hour: 22:52 34.1 Lat: 33.66N Lon: 35.72E Depth: 1 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	13	196	EP		2252	36.20-0.03		47						1.0
QRWL	SN	13	196	ES		2252	37.83 0.02								1.0
DQRL	SZ	15	290	EP		2252	36.57 0.05								1.0
DQRL	SN	15	290	ES		2252	38.30-0.03								1.0
RCY	SZ	21	150	EP		2252	37.52 0.00								1.0
RCY	SN	21	150	ES		2252	40.05 0.00								1.0
BHL	BZ	28	347	EP		2252	38.57-0.01								1.0
SHBL	BZ	35	177	EP		2252	39.71 0.00								1.0
SHBL	BN	35	177	ES		2252	43.85-0.01								1.0

December 3 2011 Hour: 1:30 54.0 Agency: REL Regional  
EMSC OT=01:30:54.0 38.76N 43.97E 2Km M=4.7 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		132	51.76								
BHL	BZ			EP		133	1.02								
DQRL	SZ			EP		132	59.93								
QRWL	SZ			EP		133	1.42								
SHBL	BZ			EP		133	0.95								

December 3 2011 Hour: 13:33 19.7 Lat: 33.66N Lon: 34.50E Depth: 29 Agency: REL Local  
Magnitudes: 3.0MC 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	99	87	EP		1333	35.53	0.00							1.0
BHL	BZ	110	75	EP		1333	36.92	0.02							1.0
QRWL	SZ	110	96	EP		1333	36.91	0.02	50						1.0
QRWL	SN	110	96	ES		1333	49.61	0.00							1.0
SHBL	BZ	120	106	EP		1333	38.19	-0.02							1.0
SHBL	BN	120	106	ES		1333	51.93	0.03							1.0
RCY	SZ	125	98	EP		1333	38.79	-0.00							1.0
RCY	SN	125	98	ES		1333	52.89	-0.03							1.0
HWQ	SZ	150	62	EP		1333	41.90	0.01							1.0
FKH	SZ	188	69	EP		1333	46.57	-0.02							1.0

December 3 2011 Hour: 14:29 31.7 Lat: 33.38N Lon: 35.61E Depth: 0 Agency: REL Local  
Magnitudes: 2.9MC 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	13	105	EP		1429	33.92	0.03	51						1.0
SHBL	BE	13	105	ES		1429	35.47	-0.02							1.0
QRWL	SZ	20	21	EP		1429	34.93	-0.03							1.0
QRWL	SN	20	21	ES		1429	37.37	0.04							1.0
RCY	SZ	25	59	EP		1429	35.74	-0.03							1.0
RCY	SE	25	59	ES		1429	38.75	-0.01							1.0
DQRL	SZ	36	355	EP		1429	37.59	-0.01							1.0
DQRL	SN	36	355	ES		1429	41.89	-0.04							1.0
BHL	BZ	58	4	EP		1429	41.15	0.00							1.0
HWQ	SZ	104	17	EP		1429	48.66	0.07							1.0

December 3 2011 Hour: 15:17 12.9 Lat: 33.41N Lon: 35.66E Depth: 5 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
SHBL	BZ	11	132	EP		1517	14.98	0.01	31						1.0
SHBL	BN	11	132	ES		1517	16.55	0.01							1.0
QRWL	SZ	15	9	EP		1517	15.51	-0.01							1.0
RCY	SZ	19	61	EP		1517	16.14	0.00							1.0
RCY	SN	19	61	ES		1517	18.56	-0.01							1.0

December 4 2011 Hour: 10:34 50.4 Lat: 33.46N Lon: 35.60E Depth: 18 Agency: REL Local  
Magnitudes: 2.4MC REL Rms: 0.1 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	13	40	EP		1034	53.94	-0.08							1.0
SHBL	BZ	19	132	EP		1034	54.62	-0.05							1.0
SHBL	BE	19	132	ES		1034	57.90	0.05							1.0
RCY	SZ	23	80	EP		1034	55.16	0.02	24						1.0
RCY	SE	23	80	ES		1034	58.66	-0.00							1.0
DQRL	SZ	27	355	EP		1034	55.73	0.06							1.0

December 4 2011 Hour: 12:13 25.3 Lat: 34.26N Lon: 36.46E Depth: 0 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
FKH	SZ	5	248	EP		1213	26.04	-0.07	68						1.0
HWQ	SZ	47	272	EP		1213	32.99	0.06							1.0
HWQ	SE	47	272	ES		1213	38.54	-0.01							1.0
BHL	BZ	84	242	EP		1213	38.92	0.04							1.0
RCY	SZ	102	214	EP		1213	41.86	0.01							1.0
RCY	SN	102	214	ES		1213	54.10	0.02							1.0
DQRL	SZ	103	233	EP		1213	41.81	-0.05							1.0

**December 4 2011 Hour: 13:56 16.3 Lat: 33.84N Lon: 36.75E Depth: 9 Agency: REL Local**  
**Magnitudes: 3.0MC REL Rms: 0.1 secs**

**DAMASCUS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	55	325	EP		1356	25.34	0.01	54						1.0
FKH	SN	55	325	ES		1356	32.01	-0.02							1.0
HWQ	SZ	89	304	EP		1356	30.59	-0.04							1.0
BHL	BZ	102	275	EP		1356	32.45	-0.05							1.0
SHBL	BZ	108	240	EP		1356	33.47	0.02							1.0
SHBL	BN	108	240	ES		1356	46.06	-0.10							1.0
DQRL	SZ	110	263	EP		1356	33.86	0.10							1.0
DQRL	SN	110	263	ES		1356	46.78	0.08							1.0

**December 4 2011 Hour: 15:7 34.2 Lat: 33.79N Lon: 35.77E Depth: 9 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	319	EP		15 7	37.34	-0.04	33						1.0
DQRL	SZ	21	243	EP		15 7	37.97	-0.03							1.0
DQRL	SE	21	243	ES		15 7	40.86	0.07							1.0
QRWL	SZ	28	197	EP		15 7	38.98	-0.10							1.0
QRWL	SN	28	197	ES		15 7	42.64	-0.04							1.0
SHBL	BZ	49	183	EP		15 7	42.39	0.04							1.0
SHBL	BE	49	183	ES		15 7	48.43	0.06							1.0
HWQ	SZ	56	17	EP		15 7	43.51	0.05							1.0

**December 4 2011 Hour: 20:26 44.8 Lat: 33.28N Lon: 35.79E 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
SHBL	BZ	9	331	EP		2026	46.23	-0.04	29						1.0
SHBL	BN	9	331	ES		2026	47.33	0.00							1.0
RCY	SZ	24	10	EP		2026	48.78	-0.01							1.0
RCY	SN	24	10	ES		2026	51.71	0.00							1.0
QRWL	SZ	31	341	EP		2026	49.93	0.03							1.0
QRWL	SN	31	341	ES		2026	53.64	-0.01							1.0
DQRL	SZ	52	337	EP		2026	53.17	0.03							1.0

**December 4 2011 Hour: 20:55 22.2 Lat: 33.19N Lon: 35.60E Depth: 7 Agency: REL Local**  
**Magnitudes: 3.8MC REL Rms: 0.1 secs**

**MOUNT HERMON REGION**

**Earthquake was felt**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	23	36	EP		2055	26.14	0.03							1.0
SHBL	BN	23	36	ES		2055	28.97	-0.02							1.0
QRWL	SZ	41	11	EP		2055	28.88	-0.08							1.0
QRWL	SN	41	11	ES		2055	33.96	0.02							1.0
RCY	SZ	41	32	EP		2055	28.74	-0.23							1.0
RCY	SN	41	32	ES		2055	33.96	-0.00							1.0
DQRL	SZ	58	357	EP		2055	31.61	-0.04	241						1.0
DQRL	SN	58	357	ES		2055	38.59	-0.03							1.0
BEYL	BZ	77	353	EP		2055	34.74	0.07							1.0
BHL	BZ	80	4	EP		2055	34.96	-0.23	161						1.0
BHL	BN	80	4	ES		2055	44.78	-0.00							1.0
HWQ	SZ	125	15	EP		2055	42.14	-0.00	156						1.0
HWQ	SN	125	15	ES		2055	57.09	0.21							1.0
FKH	SZ	140	32	EP		2055	44.23	0.02							1.0

December 4 2011 Hour: 21:12 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		2113	14.53								
SHBL	BZ			EP		2113	11.67								

December 4 2011 Hour: 21:16 54.9 Lat: 33.22N Lon: 35.64E Depth: 11 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
SHBL	BZ	17	34	EP		2116	58.32	-0.00							1.0
SHBL	BN	17	34	ES		2117	0.89	0.00							1.0
RCY	SZ	35	30	EP		2117	0.93	-0.01	37						1.0
RCY	SN	35	30	ES		2117	5.44	-0.00							1.0
QRWL	SZ	36	6	EP		2117	1.09	0.03							1.0
DQRL	SZ	54	353	EP		2117	3.80	-0.02							1.0
BHL	BZ	76	1	EP		2117	7.12	0.01							1.0

December 4 2011 Hour: 21:26 47.3 Lat: 33.25N Lon: 35.67E Depth: 9 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
SHBL	BZ	13	34	EP		2126	50.08	0.02							1.0
SHBL	BN	13	34	ES		2126	52.10	-0.02							1.0
RCY	SZ	32	30	EP		2126	52.71	0.04	40						1.0
RCY	SN	32	30	ES		2126	56.66	-0.01							1.0
QRWL	SZ	33	3	EP		2126	52.86	-0.01							1.0
DQRL	SZ	51	350	EP		2126	55.72	-0.00							1.0
DQRL	SN	51	350	ES		2127	2.00	0.03							1.0
BHL	BZ	73	359	EP		2126	59.05	-0.05							1.0

December 4 2011 Hour: 22:15 3.0

Agency: REL Regional

**EMSC OT=22:15:03.0 38.46N 43.32E 24Km M=4.9 EASTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		2216	51.14								
BHL	BZ			EP		2216	59.90								
RCY	SZ			EP		2216	59.28								
DQRL	SZ			EP		2217	1.50								
QRWL	SZ			EP		2217	1.01								
SHBL	BZ			EP		2217	2.61								

December 5 2011 Hour: 1:11 0.9 Lat: 33.28N Lon: 35.65E Depth: 7 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
SHBL	BZ	11	46	EP		111	3.22	0.00							1.0
SHBL	BN	11	46	ES		111	4.96	-0.01							1.0
RCY	SZ	30	35	EP		111	5.84	-0.00	41						1.0
RCY	SN	30	35	ES		111	9.53	-0.00							1.0
QRWL	SZ	30	5	EP		111	5.90	-0.00							1.0
QRWL	SN	30	5	ES		111	9.64	0.00							1.0
DQRL	SZ	48	351	EP		111	8.74	-0.00							1.0
BHL	BZ	70	360	EP		111	12.17	0.02							1.0

December 5 2011 Hour: 5:8 27.6 Lat: 33.84N Lon: 35.87E Depth: 10 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
BHL	BZ	21	290	EP		5 8	31.43	0.02	31						1.0
BHL	BN	21	290	ES		5 8	34.20	-0.01							1.0
DQRL	SZ	31	242	EP		5 8	32.91	-0.01							1.0
QRWL	SZ	36	208	EP		5 8	33.73	-0.02							1.0
QRWL	SE	36	208	ES		5 8	38.31	0.02							1.0
RCY	SZ	38	184	EP		5 8	34.03	0.01							1.0



RCY	SN	38	184	ES		5	8	38.75	-0.01									1.0
HWQ	SZ	49	9	EP		5	8	35.77	0.00									1.0

**December 5 2011 Hour: 10:5 0.2 Lat: 34.32N Lon: 36.63E Depth: 3 Agency: REL Local**  
**Magnitudes: 2.9MC REL Rms: 0.1 secs**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	22	247	EP		10	5	3.82	-0.09	53					1.0
HWQ	SZ	64	266	EP		10	5	10.57	0.08						1.0
HWQ	SN	64	266	ES		10	5	18.07	-0.03						1.0
BHL	BZ	102	243	EP		10	5	16.71	0.07						1.0
RCY	SZ	118	219	EP		10	5	19.15	-0.08						1.0
RCY	SN	118	219	ES		10	5	33.37	0.06						1.0
DQRL	SZ	120	235	EP		10	5	19.54	0.03						1.0
DQRL	SN	120	235	ES		10	5	33.76	-0.03						1.0

**December 5 2011 Hour: 14:16 43.7 Lat: 33.49N Lon: 35.97E Depth: 2 Agency: REL Local**  
**Magnitudes: 2.8MC REL Rms: 0.0 secs**

**MOUNT HERMON REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	13	276	EP		1416	45.90	0.02	43						1.0
RCY	SN	13	276	ES		1416	47.47	-0.00							1.0
SHBL	BZ	26	235	EP		1416	48.01	0.01							1.0
SHBL	BE	26	235	ES		1416	51.13	-0.02							1.0
QRWL	SZ	28	284	EP		1416	48.28	0.02							1.0
DQRL	SZ	45	303	EP		1416	50.98	0.02							1.0
BHL	BZ	55	328	EP		1416	52.59	-0.04							1.0
HWQ	SZ	88	358	EP		1416	57.93	-0.00							1.0

**December 5 2011 Hour: 14:59 12.5 Lat: 33.41N Lon: 35.66E Depth: 12 Agency: REL Local**  
**Magnitudes: 2.7MC REL Rms: 0.1 secs**

**MOUNT HERMON REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	10	130	EP		1459	15.31	-0.04							1.0
SHBL	BN	10	130	ES		1459	17.45	0.04							1.0
QRWL	SZ	16	7	EP		1459	15.79	-0.10							1.0
QRWL	SE	16	7	ES		1459	18.41	0.04							1.0
RCY	SZ	19	59	EP		1459	16.43	0.06	39						1.0
RCY	SN	19	59	ES		1459	19.15	-0.04							1.0
DQRL	SZ	34	346	EP		1459	18.50	0.02							1.0
HWQ	SZ	100	15	EP		1459	28.39	0.02							1.0

**December 5 2011 Hour: 15:13 26.4 Lat: 33.78N Lon: 35.77E 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	18	323	EP		1513	29.21	-0.06	44						1.0
BHL	BN	18	323	ES		1513	31.43	0.02							1.0
DQRL	SZ	20	246	EP		1513	29.71	0.03							1.0
DQRL	SN	20	246	ES		1513	32.11	-0.00							1.0
RCY	SZ	32	169	EP		1513	31.49	-0.07							1.0
RCY	SN	32	169	ES		1513	35.41	0.02							1.0
SHBL	BZ	48	183	EP		1513	34.15	0.04							1.0
SHBL	BN	48	183	ES		1513	39.83	0.00							1.0
HWQ	SZ	58	16	EP		1513	35.77	0.05							1.0
FKH	SZ	79	49	EP		1513	39.07	-0.01							1.0

**December 5 2011 Hour: 17:40 56.4 Lat: 33.79N Lon: 35.77E Depth: 1 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	320	EP		1740	59.13	-0.04	43						1.0
BHL	BN	17	320	ES		1741	1.27	0.04							1.0
DQRL	SZ	21	245	EP		1740	59.72	-0.05							1.0

DQRL	SN	21	245	ES		1741	2.27-0.02										1.0
RCY	SZ	33	170	EP		1741	1.65-0.03										1.0
RCY	SN	33	170	ES		1741	5.60-0.00										1.0
SHBL	BZ	49	183	EP		1741	4.31 0.06										1.0
SHBL	BN	49	183	ES		1741	10.10 0.02										1.0
HWQ	SZ	57	16	EP		1741	5.53-0.02										1.0

**December 6 2011 Hour: 2:56 1.0 Agency: REL Regional**

**EMSC OT=02:56:01.0 38.82N 43.64E 5Km M=4.6 EASTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		257	49.63								
HWQ	SZ			EP		257	53.00								
BHL	BZ			EP		258	8.90								
DQRL	SZ			EP		258	3.85								
QRWL	SZ			EP		258	2.93								
SHBL	BZ			EP		258	4.31								

**December 6 2011 Hour: 13:16 21.0 Lat: 33.75N Lon: 36.90E Depth: 4 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
FKH	SZ	71	320	EP		1316	32.50-0.02		68						1.0
RCY	SZ	103	254	EP		1316	37.59-0.03								1.0
RCY	SN	103	254	ES		1316	49.93 0.01								1.0
HWQ	SZ	106	304	EP		1316	38.15 0.04								1.0
SHBL	BZ	116	248	EP		1316	39.81 0.05								1.0
SHBL	BN	116	248	ES		1316	53.64-0.01								1.0
DQRL	SZ	124	268	EP		1316	40.74-0.04								1.0

**December 6 2011 Hour: 15:46 28.0 Agency: REL Regional**

**EMSC OT=15:46:28.0 37.30N 43.94E 2Km M=4.5 TURKEY-IRAQ BORDER**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1548	7.39								
HWQ	SZ			EP		1548	12.17								
BHL	BZ			EP		1548	18.84								
RCY	SZ			EP		1548	19.49								
DQRL	SZ			EP		1548	17.35								
SHBL	BZ			EP		1548	20.71								

**December 6 2011 Hour: 17: 0 15.5 Lat: 33.15N Lon: 35.27E Depth: 1 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
SHBL	BZ	50	63	EP		17 0	23.64 0.09								1.0
SHBL	BN	50	63	ES		17 0	29.51-0.01								1.0
RCY	SZ	66	53	EP		17 0	26.02-0.10		40						1.0
DQRL	SZ	68	24	EP		17 0	26.50-0.02								1.0
DQRL	SN	68	24	ES		17 0	34.69 0.01								1.0
BHL	BZ	92	23	EP		17 0	30.29 0.02								1.0
HWQ	SZ	141	26	EP		17 0	38.01 0.00								1.0

**December 7 2011 Hour: 0: 8 55.9 Lat: 33.78N Lon: 35.80E Depth: 4 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	19	315	EP		0 8	59.03-0.00		48						1.0
DQRL	SZ	23	247	EP		0 8	59.68 0.00								1.0
RCY	SZ	32	174	EP		0 9	1.15-0.00								1.0
RCY	SN	32	174	ES		0 9	5.05-0.00								1.0
SHBL	BZ	49	186	EP		0 9	3.81 0.02								1.0
SHBL	BN	49	186	ES		0 9	9.63-0.02								1.0
HWQ	SZ	56	14	EP		0 9	5.01 0.00								1.0

**December 7 2011 Hour: 4: 8 17.7 Lat: 33.17N Lon: 35.64E Depth: 9 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
SHBL	BZ	22	27	EP		4 8	21.61	0.02							1.0
SHBL	BN	22	27	ES		4 8	24.52	0.03							1.0
RCY	SZ	40	27	EP		4 8	24.33	-0.05	40						1.0
RCY	SN	40	27	ES		4 8	29.29	-0.05							1.0
QRWL	SZ	42	5	EP		4 8	24.60	0.01							1.0
QRWL	SN	42	5	ES		4 8	29.75	0.05							1.0
DQRL	SZ	59	354	EP		4 8	27.31	-0.07							1.0
DQRL	SN	59	354	ES		4 8	34.53	-0.03							1.0
BHL	BZ	81	1	EP		4 8	30.92	0.09							1.0

**December 8 2011 Hour: 11:37 56.1 Lat: 34.40N Lon: 36.88E Depth: 0 Agency: REL Local**  
**Magnitudes: 3.0MC REL Rms: 0.0 secs**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	46	248	EP		1138	3.56	-0.07	62						1.0
HWQ	SZ	87	261	EP		1138	10.17	0.03							1.0
HWQ	SE	87	261	ES		1138	20.48	-0.01							1.0
BHL	BZ	126	244	EP		1138	16.46	0.05							1.0
RCY	SZ	139	224	EP		1138	18.55	-0.01							1.0
RCY	SN	139	224	ES		1138	35.16	0.01							1.0

**December 8 2011 Hour: 12:40 13.5 Lat: 32.99N Lon: 35.73E Depth: 0 Agency: REL Local**  
**Magnitudes: 2.8MC 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	39	1	EP		1240	19.83	-0.01	42						1.0
SHBL	BN	39	1	ES		1240	24.56	0.01							1.0
RCY	SZ	57	10	EP		1240	22.67	0.06							1.0
RCY	SN	57	10	ES		1240	29.34	-0.04							1.0
QRWL	SZ	62	356	EP		1240	23.39	-0.03							1.0
QRWL	SN	62	356	ES		1240	30.81	0.02							1.0
BHL	BZ	101	356	EP		1240	29.80	-0.02							1.0
HWQ	SZ	144	8	EP		1240	36.52	0.00							1.0

**December 8 2011 Hour: 14: 0 0.0 Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		14 0	32.62								
RCY	SZ			EP		14 0	31.48								

**December 9 2011 Hour: 8:14 0.0 Agency: REL Regional**

**EMSC OT=08:14:00.0 34.65N 23.95E 20Km M=4.7 CRETE, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		816	18.92								
RCY	SZ			EP		816	18.32								

**December 10 2011 Hour: 12:10 0.0 Agency: REL Regional**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		1211	1.08								
RCY	SZ			EP		1211	1.55								

**December 10 2011 Hour: 14:26 36.2 Lat: 33.39N Lon: 35.64E 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
SHBL	BZ	11	114	EP		1426	37.99	-0.02							1.0
SHBL	BN	11	114	ES		1426	39.29	-0.02							1.0
QRWL	SZ	18	13	EP		1426	39.16	-0.01							1.0
QRWL	SN	18	13	ES		1426	41.28	-0.06							1.0
RCY	SZ	22	57	EP		1426	39.82	0.03	31						1.0

RCY	SN	22	57	ES		1426	42.45	0.04											1.0
DQRL	SZ	36	350	EP		1426	42.05	0.04											1.0
HWQ	SZ	103	16	EP		1426	52.91	0.10											0.2

December 11 2011 Hour: 1:22 44.0

Agency: REL Distant

EMSC OT=01:22:44.0 28.10N 129.43E 30Km M=5.8 RYUKYU ISLANDS,

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		134	35.74								
HWQ	SZ			EP		134	37.26								
BHL	BZ			EP		134	39.05								
RCY	SZ			EP		134	40.03								
DQRL	SZ			EP		134	40.24								
SHBL	BZ			EP		134	40.53								

December 11 2011 Hour: 7:11 38.8 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	317	EP		711	41.52-0.05		39						1.0
BHL	BN	17	317	ES		711	43.58-0.04								1.0
DQRL	SZ	22	244	EP		711	42.28	0.01							1.0
DQRL	SN	22	244	ES		711	44.86	0.01							1.0
RCY	SZ	33	171	EP		711	44.11	0.00							1.0
RCY	SN	33	171	ES		711	48.02-0.03								1.0
HWQ	SZ	56	16	EP		711	47.90	0.03							1.0

December 11 2011 Hour: 14:49 41.9 Lat: 33.45N Lon: 35.93E Depth: 3 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
SHBL	BZ	21	237	EP		1449	45.34	0.01							1.0
SHBL	BN	21	237	ES		1449	47.89-0.00								1.0
QRWL	SZ	25	295	EP		1449	46.00-0.02		28						1.0
QRWL	SE	25	295	ES		1449	49.11	0.00							1.0
DQRL	SZ	44	310	EP		1449	48.96	0.01							0.2
DQRL	SE	44	310	ES		1449	54.20	0.01							1.0
BHL	BZ	56	333	EP		1449	51.02	0.05							0.2

December 11 2011 Hour: 14:53 35.1 Lat: 33.46N Lon: 35.88E Depth: 4 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	18	226	EP		1453	38.11-0.05								1.0
SHBL	BN	18	226	ES		1453	40.47	0.03							1.0
QRWL	SZ	21	297	EP		1453	38.62	0.03	35						1.0
QRWL	SN	21	297	ES		1453	41.18-0.02								1.0
DQRL	SZ	40	313	EP		1453	41.57	0.01							1.0
BHL	BZ	54	336	EP		1453	43.76	0.00							1.0

December 12 2011 Hour: 5:48 52.7 Lat: 33.10N Lon: 35.86E Depth: 5 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
SHBL	BZ	29	338	EP		548	57.58	0.03							1.0
SHBL	BN	29	338	ES		549	1.11-0.03								1.0
RCY	SZ	44	357	EP		548	59.76-0.05		37						1.0
RCY	SE	44	357	ES		549	5.11	0.03							1.0
QRWL	SZ	52	341	EP		549	1.17	0.02							1.0
QRWL	SN	52	341	ES		549	7.40-0.00								1.0
DQRL	SZ	72	338	EP		549	4.58	0.21							0.2
HWQ	SZ	130	3	EP		549	13.45-0.01								1.0

**December 12 2011 Hour: 14:12 12.2 Lat: 33.46N Lon: 35.58E Depth: 13 Agency: REL Local**  
**Magnitudes: 2.4MC 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	44	EP		1412	15.45	-0.06	25						1.0
SHBL	BZ	20	127	EP		1412	16.24	0.02							1.0
SHBL	BN	20	127	ES		1412	19.16	-0.00							1.0
RCY	SZ	25	79	EP		1412	16.84	-0.04							1.0
RCY	SN	25	79	ES		1412	20.34	0.03							1.0
DQRL	SZ	28	359	EP		1412	17.34	0.04							1.0

**December 12 2011 Hour: 23:42 5.9 Lat: 34.16N Lon: 35.19E Depth: 30 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	51	123	EP		2342	15.25	0.08	53						1.0
BHL	BE	51	123	ES		2342	22.02	0.00							1.0
DQRL	SZ	61	145	EP		2342	16.43	-0.07							1.0
HWQ	SZ	71	79	EP		2342	17.80	-0.03							1.0
RCY	SZ	95	141	EP		2342	21.15	0.03							1.0
RCY	SE	95	141	ES		2342	32.34	-0.02							1.0
SHBL	BZ	104	150	EP		2342	22.22	0.00							1.0
SHBL	BN	104	150	ES		2342	34.28	0.01							1.0

**December 13 2011 Hour: 7:52 12.0 Agency: REL Distant**  
**EMSC OT=07:52:12.0 00.03N 123.13E 165Km M=6.1 MINAHASA, SULAWESI**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		8 4	40.01								
HWQ	SZ			EP		8 4	41.30								
RCY	SZ			EP		8 4	42.23								
SHBL	BZ			EP		8 4	42.54								
QRWL	SZ			EP		8 4	42.54								
BHL	BZ			EP		8 4	42.54								
DQRL	SZ			EP		8 4	43.28								

**December 13 2011 Hour: 13:57 18.8 Lat: 33.46N Lon: 35.33E Depth: 3 Agency: REL Local**  
**Magnitudes: 2.7MC 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	35	39	EP		1357	24.52	-0.04							1.0
SHBL	BZ	40	107	EP		1357	25.24	-0.11							1.0
SHBL	BN	40	107	ES		1357	30.33	0.16							1.0
RCY	SZ	47	85	EP		1357	26.40	-0.04	40						1.0
RCY	SN	47	85	ES		1357	31.98	-0.09							1.0
HWQ	SZ	107	32	EP		1357	36.26	0.12							1.0

**December 13 2011 Hour: 14:21 42.8 Lat: 33.86N Lon: 35.82E Depth: 4 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	287	EP		1421	45.42	-0.00	34						1.0
DQRL	SZ	29	233	EP		1421	47.49	0.02							1.0
DQRL	SE	29	233	ES		1421	50.94	-0.01							1.0
RCY	SZ	41	178	EP		1421	49.35	-0.03							1.0
RCY	SN	41	178	ES		1421	54.29	0.01							1.0
HWQ	SZ	48	14	EP		1421	50.47	0.00							1.0

**December 13 2011 Hour: 16:30 1.3 Lat: 34.53N Lon: 36.40E Depth: 0 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
FKH	BZ	32	178	EP		1630	6.38	-0.08	47						1.0
FKH	BN	32	178	ES		1630	10.23	-0.08							1.0
HWQ	SZ	50	236	EP		1630	9.28	-0.11							1.0
HWQ	SN	50	236	ES		1630	15.32	-0.08							1.0
BHL	BZ	98	225	EP		1630	17.09	0.03							1.0
DQRL	SZ	120	220	EP		1630	20.65	0.11							1.0
SHBL	BZ	145	205	EP		1630	24.59	0.08							1.0
SHBL	BN	145	205	ES		1630	41.84	0.13							1.0

**December 13 2011 Hour: 20:42 6.5 Lat: 33.69N Lon: 35.88E Depth: 14 Agency: REL Local**  
**Magnitudes: 2.3MC 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	22	190	EP		2042	10.88	-0.02	21						1.0
RCY	SN	22	190	ES		2042	14.13	0.01							1.0
DQRL	SZ	28	273	EP		2042	11.66	-0.05							1.0
DQRL	SN	28	273	ES		2042	15.54	0.00							1.0
BHL	BZ	31	319	EP		2042	12.16	0.05							1.0
SHBL	BZ	40	198	EP		2042	13.45	-0.02							1.0
SHBL	BN	40	198	ES		2042	18.63	0.03							1.0

**December 13 2011 Hour: 21: 9 34.0 Agency: REL Distant**  
**EMSC OT=21:09:34.0 29.32S 178.38W 183Km M=4.9 KERMADEC ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		2129	4.20								
RCY	SZ			EP		2129	4.84								
SHBL	BZ			EP		2129	5.32								
BHL	BZ			EP		2129	5.11								
DQRL	SZ			EP		2129	5.69								

**December 14 2011 Hour: 12:27 0.0 Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1228	16.70								
RCY	SZ			EP		1228	13.81								

**December 14 2011 Hour: 14:22 0.0 Agency: REL Regional**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1422	29.17								

**December 14 2011 Hour: 15:13 50.1 Lat: 34.55N Lon: 36.40E Depth: 1 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	BZ	34	178	EP		1513	55.51	-0.06	53						1.0
HWQ	SZ	51	234	EP		1513	58.34	-0.02							1.0
HWQ	SE	51	234	ES		1514	4.48	-0.00							1.0
BHL	BZ	99	224	EP		1514	6.02	-0.05							1.0
RCY	SZ	128	204	EP		1514	10.68	-0.03							1.0
RCY	SN	128	204	ES		1514	26.07	0.09							1.0
SHBL	BZ	146	205	EP		1514	13.65	0.17							1.0
SHBL	BN	146	205	ES		1514	30.69	-0.10							1.0

**December 15 2011 Hour: 0: 5 33.3 Lat: 33.80N Lon: 35.80E Depth: 10 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	18	311	EP		0 5	36.79	0.04	41						1.0
BHL	BN	18	311	ES		0 5	39.29	0.01							1.0
DQRL	SZ	24	245	EP		0 5	37.49	-0.05							1.0

DQRL	SN	24	245	ES	0	5	40.64	-0.02									1.0
RCY	SZ	34	174	EP	0	5	38.95	-0.10									1.0
SHBL	BZ	50	186	EP	0	5	41.69	0.07									1.0
SHBL	BN	50	186	ES	0	5	47.80	0.05									1.0
HWQ	SZ	55	14	EP	0	5	42.39	-0.01									1.0

**December 15 2011 Hour: 6:37 59.0**

**Agency: REL Regional**

**EMSC OT=06:37:59.0 37.00N 30.32E 82Km M=4.0 WESTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		639	16.73								
DQRL	SZ			EP		639	17.19								
HWQ	SZ			EP		639	17.80								
RCY	SZ			EP		639	21.97								

**December 15 2011 Hour: 11:25 53.7 Lat: 34.38N Lon: 36.70E Depth: 2**

**Agency: REL Local**

**Magnitudes: 3.0MC REL**

**Rms: 0.1 secs**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	BZ	31	240	EP		1125	58.68	-0.10	56						1.0
HWQ	SZ	71	261	EP		1126	5.19	0.05							1.0
HWQ	SN	71	261	ES		1126	13.57	-0.02							1.0
RCY	SZ	127	219	EP		1126	14.16	-0.00							1.0
RCY	SN	127	219	ES		1126	29.31	0.01							1.0
DQRL	SZ	129	235	EP		1126	14.48	0.07							1.0

**December 15 2011 Hour: 15:18 5.6 Lat: 33.79N Lon: 35.79E 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	18	316	EP		1518	8.57	-0.02	42						1.0
BHL	BN	18	316	ES		1518	10.79	0.01							1.0
DQRL	SZ	22	246	EP		1518	9.28	0.02							1.0
DQRL	SN	22	246	ES		1518	11.95	-0.01							1.0
RCY	SZ	33	173	EP		1518	10.91	0.00							1.0
RCY	SN	33	173	ES		1518	14.82	-0.00							1.0
HWQ	SZ	56	15	EP		1518	14.72	0.00							1.0

**December 15 2011 Hour: 19:20 29.4 Lat: 33.68N Lon: 35.86E Depth: 19**

**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	20	186	EP		1920	33.92	0.03	39						1.0
RCY	SN	20	186	ES		1920	37.28	0.04							1.0
QRWL	SZ	22	229	EP		1920	34.01	-0.01							1.0
QRWL	SN	22	229	ES		1920	37.35	-0.12							1.0
DQRL	SZ	27	277	EP		1920	34.70	0.04							1.0
DQRL	SN	27	277	ES		1920	38.67	0.09							1.0
BHL	BZ	32	323	EP		1920	35.17	-0.09							1.0
HWQ	SZ	67	7	EP		1920	40.31	0.01							1.0

**December 16 2011 Hour: 14:56 8.8 Lat: 33.42N Lon: 35.66E Depth: 1**

**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	15	7	EP		1456	11.18	-0.07							1.0
QRWL	SN	15	7	ES		1456	13.08	0.04							1.0
RCY	SZ	18	60	EP		1456	11.82	-0.01	37						1.0
RCY	SN	18	60	ES		1456	14.06	0.01							1.0
DQRL	SZ	33	345	EP		1456	14.27	0.05							1.0
DQRL	SN	33	345	ES		1456	18.18	-0.04							1.0
BHL	BZ	54	359	EP		1456	17.64	0.06							1.0
HWQ	SZ	99	15	EP		1456	24.80	-0.03							1.0



**December 17 2011 Hour: 1:43 46.1 Lat: 34.10N Lon: 35.80E Depth: 16 Agency: REL Local**  
**Magnitudes: 2.6MC REL Rms: 0.0 secs**

**KESROUANE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	24	33	EP		143	50.82	0.00	32						1.0
HWQ	SE	24	33	ES		143	54.27	-0.01							1.0
BHL	BZ	26	213	EP		143	51.08	0.02							1.0
DQRL	SZ	49	206	EP		143	54.27	-0.05							1.0
DQRL	SN	49	206	ES		144	0.38	0.01							1.0
RCY	SZ	67	178	EP		143	57.06	0.05							1.0
RCY	SE	67	178	ES		144	5.03	-0.02							1.0

**December 18 2011 Hour: 12:34 21.8 Lat: 33.78N Lon: 35.77E 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	17	321	EP		1234	24.65	-0.02	42						1.0
DQRL	SZ	21	246	EP		1234	25.16	-0.01							1.0
DQRL	SN	21	246	ES		1234	27.66	0.02							1.0
RCY	SZ	32	169	EP		1234	27.05	-0.00							1.0
RCY	SN	32	169	ES		1234	30.91	-0.00							1.0
HWQ	SZ	57	16	EP		1234	31.10	0.02							1.0

**December 18 2011 Hour: 13:44 36.0 Lat: 33.80N Lon: 35.77E Depth: 16 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	16	316	EP		1344	39.72	0.00	21						1.0
DQRL	SZ	22	240	EP		1344	40.41	-0.01							1.0
DQRL	SE	22	240	ES		1344	43.67	0.00							1.0
RCY	SZ	35	170	EP		1344	42.20	0.01							1.0
RCY	SN	35	170	ES		1344	46.74	-0.01							1.0

**December 18 2011 Hour: 14:25 24.8 Lat: 33.40N Lon: 35.65E Depth: 13 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	17	12	EP		1425	28.22	-0.05							1.0
QRWL	SN	17	12	ES		1425	30.91	0.03							1.0
RCY	SZ	21	59	EP		1425	28.89	0.05	30						1.0
RCY	SN	21	59	ES		1425	31.83	-0.03							1.0
DQRL	SZ	35	348	EP		1425	30.77	0.00							1.0

**December 18 2011 Hour: 16:24 1.2 Lat: 33.81N Lon: 35.77E Depth: 15 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	15	314	EP		1624	4.73	0.04							1.0
BHL	BE	15	314	ES		1624	7.27	-0.02							1.0
DQRL	SZ	22	237	EP		1624	5.52	-0.00							1.0
DQRL	SN	22	237	ES		1624	8.75	0.00							1.0
RCY	SZ	36	170	EP		1624	7.41	-0.04	25						1.0
RCY	SE	36	170	ES		1624	12.12	0.02							1.0

**December 20 2011 Hour: 8:24 0.0**

**Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		825	15.30								
RCY	SZ			EP		825	17.69								



December 20 2011 Hour: 9:57 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		958	8.38								
BHL	BZ			EP		958	6.24								

December 20 2011 Hour: 11:32 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	BZ			EP		1133	25.19								
RCY	SZ			EP		1133	31.24								

December 21 2011 Hour: 13:36 13.4 Lat: 33.78N Lon: 35.76E Depth: 4 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	324	EP		1336	16.21	-0.02	60						1.0
DQRL	SZ	20	244	EP		1336	16.69	0.03							1.0
DQRL	SN	20	244	ES		1336	19.07	0.01							1.0
QRWL	SZ	27	196	EP		1336	17.74	-0.09							1.0
QRWL	SN	27	196	ES		1336	21.11	0.02							1.0
RCY	SZ	32	167	EP		1336	18.77	0.06							1.0
RCY	SE	32	167	ES		1336	22.61	-0.02							1.0
HWQ	SZ	58	17	EP		1336	22.75	-0.01							1.0
FKH	BZ	79	49	EP		1336	26.21	0.02							1.0

December 21 2011 Hour: 14:48 36.3 Lat: 33.38N Lon: 35.63E Depth: 9 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	19	15	EP		1448	39.76	-0.07							1.0
QRWL	SN	19	15	ES		1448	42.44	0.00							1.0
RCY	SZ	23	56	EP		1448	40.45	0.02	34						1.0
RCY	SN	23	56	ES		1448	43.50	0.01							1.0
DQRL	SZ	37	352	EP		1448	42.48	0.05							1.0
BHL	BZ	58	2	EP		1448	45.94	0.09							0.2
HWQ	SZ	104	16	EP		1448	52.74	-0.16							0.2

December 21 2011 Hour: 15:36 45.2 Lat: 33.79N Lon: 35.77E Depth: 5 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	321	EP		1536	48.08	-0.06	42						1.0
BHL	BE	17	321	ES		1536	50.32	0.00							1.0
DQRL	SZ	21	244	EP		1536	48.68	-0.01							1.0
DQRL	SN	21	244	ES		1536	51.34	0.06							1.0
QRWL	SZ	28	197	EP		1536	49.75	-0.04							1.0
QRWL	SN	28	197	ES		1536	53.15	-0.05							1.0
RCY	SZ	33	169	EP		1536	50.66	0.06							1.0
HWQ	SZ	57	17	EP		1536	54.46	0.02							1.0

December 22 2011 Hour: 15:37 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1537	32.19								
RCY	SZ			EP		1537	34.66								

December 22 2011 Hour: 22:28 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		2229	11.35								
RCY	SZ			EP		2229	11.21								

December 23 2011 Hour: 15:21 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1522	2.05								
RCY	SZ			EP		1522	2.61								

December 24 2011 Hour: 8:38 47.7 Lat: 33.88N Lon: 35.78E Depth: 17 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	284	EP		838	51.19	0.00	27						1.0
BHL	BE	12	284	ES		838	53.77	0.00							1.0
RCY	SZ	43	172	EP		838	55.11	0.01							1.0
RCY	SE	43	172	ES		839	0.56	-0.01							1.0
HWQ	SZ	47	20	EP		838	55.68	-0.00							1.0

December 26 2011 Hour: 4:48 7.0

Agency: REL Distant

EMSC OT=04:48:07.0 16.16S 173.80W 69Km M=6.1 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		5 7	44.68								
BHL	BZ			EP		5 7	44.98								
RCY	SZ			EP		5 7	46.23								
DQRL	SZ			EP		5 7	46.49								

December 26 2011 Hour: 12:21 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1221	37.14								
QRWL	SZ			EP		1221	35.91								

December 27 2011 Hour: 10:26 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1027	18.42								
DQRL	SZ			EP		1027	16.67								

December 27 2011 Hour: 14:39 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1439	55.26								
RCY	SZ			EP		1439	55.76								

December 27 2011 Hour: 14:57 36.1 Lat: 33.80N Lon: 35.76E Depth: 16 Agency: REL Local  
Magnitudes: 2.5MC 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	319	EP		1457	39.75	-0.05	30						1.0
BHL	BN	15	319	ES		1457	42.57	0.04							1.0
DQRL	SZ	21	240	EP		1457	40.47	0.07							1.0
DQRL	SN	21	240	ES		1457	43.53	-0.05							1.0
RCY	SZ	34	169	EP		1457	42.27	0.02							1.0
RCY	SN	34	169	ES		1457	46.78	-0.02							1.0
HWQ	SZ	56	18	EP		1457	45.09	-0.23							0.2

December 27 2011 Hour: 15:21 57.0

Agency: REL Distant

EMSC OT=15:21:57.0 51.84N 95.85E 10Km M=6.5 SOUTH SIBERIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		1530	19.09								
BHL	BZ			EP		1530	22.07								
RCY	SZ			EP		1530	23.65								
DQRL	SZ			EP		1530	24.35								
QRWL	SZ			EP		1530	24.16								

**December 28 2011 Hour: 12:127.8 Lat: 33.92N Lon: 35.83E Depth: 7 Agency: REL Local**  
**Magnitudes: 2.7MC REL Rms: 0.0 secs**

**KESROUANE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	262	EP		12	1	30.79	0.02		41				1.0
DQRL	SZ	34	225	EP		12	1	33.53	0.06						1.0
DQRL	SN	34	225	ES		12	1	37.61	-0.05						1.0
HWQ	SZ	41	15	EP		12	1	34.46	-0.06						1.0
HWQ	SE	41	15	ES		12	1	39.51	0.03						1.0
RCY	SZ	47	179	EP		12	1	35.60	0.01						1.0
RCY	SE	47	179	ES		12	1	41.34	-0.00						1.0

**December 29 2011 Hour: 5:24 24.1 Lat: 33.94N Lon: 36.12E Depth: 0 Agency: REL Local**  
**Magnitudes: 2.7MC 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	40	336	EP		524	30.58	0.00							1.0
HWQ	SN	40	336	ES		524	35.40	-0.00							1.0
BHL	BZ	43	264	EP		524	31.03	-0.04	40						1.0
BHL	BN	43	264	ES		524	36.27	0.01							1.0
RCY	SZ	56	208	EP		524	33.16	0.02							1.0
RCY	SN	56	208	ES		524	39.83	-0.03							1.0
DQRL	SZ	58	243	EP		524	33.38	0.04							1.0

**December 29 2011 Hour: 12:21 43.5 Lat: 34.34N Lon: 36.73E Depth: 0 Agency: REL Local**  
**Magnitudes: 3.0MC REL Rms: 0.1 secs**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	BZ	32	251	EP		1221	48.45	-0.10	58						1.0
HWQ	SZ	73	265	EP		1221	55.26	0.07							1.0
HWQ	SE	73	265	ES		1222	3.84	-0.03							1.0
BHL	BZ	111	244	EP		1222	1.41	0.10							1.0
RCY	SZ	125	222	EP		1222	3.67	0.04							1.0
RCY	SN	125	222	ES		1222	18.52	-0.03							1.0
DQRL	SZ	128	237	EP		1222	4.07	-0.10							1.0
DQRL	SN	128	237	ES		1222	19.55	0.06							1.0

**December 29 2011 Hour: 12:59 0.0**

**Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1259	40.61								
RCY	SZ			EP		1259	38.42								
HWQ	SZ			EP		1259	29.79								

**December 29 2011 Hour: 15:1 0.0**

**Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		15	1	40.28							
RCY	SZ			EP		15	1	40.93							

**December 29 2011 Hour: 16:20 37.2 Lat: 33.83N Lon: 35.70E Depth: 34 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	10	334	EP		1620	42.73	-0.04	38						1.0
DQRL	SZ	18	222	EP		1620	43.27	0.06							1.0
DQRL	SN	18	222	ES		1620	47.68	-0.00							1.0
QRWL	SZ	31	183	EP		1620	44.27	-0.04							1.0
RCY	SZ	39	161	EP		1620	45.15	-0.04							1.0
RCY	SE	39	161	ES		1620	51.16	0.03							1.0
HWQ	SZ	55	24	EP		1620	47.18	0.02							1.0

**December 30 2011 Hour: 18:26 9.4 Lat: 34.99N Lon: 36.29E Depth: 10 Agency: REL Local**  
**Magnitudes: 3.0MC REL Rms: 0.1 secs**

**HOMS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	BZ	84	173	EP		1826	22.94	0.02	53						1.0
HWQ	SZ	86	202	EP		1826	23.24	0.07							1.0
HWQ	SE	86	202	ES		1826	33.28	-0.11							1.0
BHL	BZ	134	206	EP		1826	30.36	0.02							1.0
BHL	BN	134	206	ES		1826	45.98	0.11							1.0
DQRL	SZ	158	205	EP		1826	33.66	-0.10							1.0
QRWL	SZ	170	199	EP		1826	35.51	-0.01							1.0
QRWL	SN	170	199	ES		1826	54.87	0.00							1.0

**December 31 2011 Hour: 22: 2 58.7 Lat: 33.86N Lon: 35.84E Depth: 0 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	287	EP		22 3	1.52	-0.00	43						1.0
BHL	BN	18	287	ES		22 3	3.63	-0.00							1.0
DQRL	SZ	30	236	EP		22 3	3.49	0.01							1.0
QRWL	SZ	37	203	EP		22 3	4.64	-0.02							1.0
QRWL	SN	37	203	ES		22 3	9.09	0.00							1.0
HWQ	SZ	48	12	EP		22 3	6.39	0.00							1.0

# Epicentral Map of Lebanon

## DECEMBER 2012

