

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

May

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.

<b>P-wave velocity (km/sec)</b>	<b>depth to top of layer (km)</b>
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:

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

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 Vp/Vs 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\*(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.

**May 1 2011 Hour: 6:43 59.0** Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		644	10.18								
DQRL	SZ			EP		644	13.17								
HWQ	BZ			EP		644	24.00								

**May 1 2011 Hour: 16:22 12.9** Lat: 33.80N Lon: 35.77E 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	16	317	EP		1622	15.75	0.01	36						1.0
BHL	BN	16	317	ES		1622	17.88	-0.00							1.0
DQRL	SZ	21	242	EP		1622	16.51	0.00							1.0
DQRL	SN	21	242	ES		1622	19.20	-0.01							1.0
RCY	SZ	34	170	EP		1622	18.43	-0.01							1.0
RCY	SN	34	170	ES		1622	22.57	0.00							1.0
HWQ	BZ	56	17	EP		1622	21.93	0.00							1.0

**May 1 2011 Hour: 16:32 49.7** Lat: 33.79N Lon: 35.77E Depth: 2 Agency: REL Local Magnitudes: 2.7MC REL Rms: 0.0 secs

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	319	EP		1632	52.51	-0.01	40						1.0
DQRL	SZ	21	244	EP		1632	53.15	-0.00							1.0
DQRL	SN	21	244	ES		1632	55.70	0.01							1.0
RCY	SZ	33	170	EP		1632	55.06	-0.00							1.0
RCY	SN	33	170	ES		1632	59.02	0.00							1.0
HWQ	BZ	57	16	EP		1632	58.97	0.10							0.2

**May 1 2011 Hour: 17:13 36.5** Lat: 33.79N Lon: 35.78E Depth: 1 Agency: REL Local Magnitudes: 2.6MC REL Rms: 0.0 secs

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	317	EP		1713	39.38	-0.04	34						1.0
BHL	BE	18	317	ES		1713	41.56	0.02							1.0
DQRL	SZ	22	245	EP		1713	40.10	0.01							1.0
RCY	SZ	33	172	EP		1713	41.84	0.00							1.0
RCY	SN	33	172	ES		1713	45.75	-0.00							1.0
HWQ	BZ	56	15	EP		1713	45.67	0.01							1.0

**May 1 2011 Hour: 21:50 50.7** Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2151	14.61								
BHL	BZ			EP		2151	17.45								
DQRL	SZ			EP		2151	19.81								
RCY	SZ			EP		2151	23.89								

**May 2 2011 Hour: 17:28 14.0** Agency: REL Regional  
**EMSC OT=17:28:14.0 36.10N 36.06E 10Km M=3.1 TURKEY-SYRIA REG**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1728	46.84								
BHL	BZ			EP		1728	52.32								
DQRL	SZ			EP		1728	54.97								
RCY	SZ			EP		1728	57.88								

**May 2 2011 Hour: 21:5 22.2** Lat: 33.32N Lon: 35.43E 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
NAQL	SZ	35	231	EP		21	5	27.80	0.02	42					1.0
NAQL	SN	35	231	ES		21	5	31.93	-0.02						1.0
RCY	SZ	43	62	EP		21	5	29.06	0.02						1.0
RCY	SE	43	62	ES		21	5	34.12	-0.02						1.0

DQRL	SZ	45	17	EP	21	5	29.34	-0.08	1.0
DQRL	SN	45	17	ES	21	5	34.80	0.00	1.0
BHL	BZ	68	18	EP	21	5	33.25	0.07	1.0
HWQ	BZ	117	24	EP	21	5	41.20	0.20	0.2

**May 3 2011 Hour: 10:57 44.7 Lat: 33.79N Lon: 35.78E Depth: 3 Agency: REL Local Magnitudes: 2.8MC REL BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	318	EP		1057	47.57	-0.02							1.0
DQRL	SZ	22	245	EP		1057	48.19	-0.05							1.0
DQRL	SN	22	245	ES		1057	50.88	0.04							1.0
RCY	SZ	33	171	EP		1057	50.06	0.02	46						1.0
RCY	SN	33	171	ES		1057	53.96	-0.02							1.0
HWQ	BZ	57	16	EP		1057	53.88	0.02							1.0

**May 3 2011 Hour: 14:03 39.4 Lat: 33.86N Lon: 35.63E Depth: 5 Agency: REL Local Magnitudes: 2.5MC REL BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	5	21	EP		14	0	40.77	-0.02	30					1.0
DQRL	SZ	18	199	EP		14	0	42.58	-0.00						1.0
DQRL	SN	18	199	ES		14	0	44.93	0.02						1.0
RCY	SZ	45	155	EP		14	0	46.66	-0.07						1.0
RCY	SN	45	155	ES		14	0	52.15	0.03						1.0
HWQ	BZ	54	32	EP		14	0	48.32	0.03						1.0
HWQ	BE	54	32	ES		14	0	54.84	0.01						1.0

**May 4 2011 Hour: 5:35 5.7 Lat: 33.52N Lon: 35.91E Depth: 11 Agency: REL Local Magnitudes: 2.6MC REL MOUNT HERMON REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	7	252	EP		535	8.07	0.03	35						1.0
RCY	SN	7	252	ES		535	9.73	-0.02							1.0
DQRL	SZ	38	304	EP		535	12.11	-0.03							1.0
DQRL	SN	38	304	ES		535	16.88	0.01							1.0
BHL	BZ	49	331	EP		535	13.89	0.00							1.0
HWQ	BZ	85	2	EP		535	19.38	-0.00							1.0

**May 4 2011 Hour: 16:13 29.0 Agency: REL Distant EMSC OT=16:13:29.0 20.38S 178.45W 588Km M=5.6 FIJI REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1632		5.53							
HWQ	BZ			EP		1632		6.01							
BHL	BZ			EP		1632		7.09							
RCY	SZ			EP		1632		7.11							
DQRL	SZ			EP		1632		7.63							

**May 4 2011 Hour: 22:38 42.9 Lat: 33.80N Lon: 35.80E Depth: 13 Agency: REL Local Magnitudes: 2.8MC REL BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	311	EP		2238	46.55	-0.00							1.0
DQRL	SZ	24	245	EP		2238	47.29	-0.02							1.0
DQRL	SN	24	245	ES		2238	50.60	0.01							1.0
BEYL	BZ	30	286	EP		2238	48.12	0.02							0.2
RCY	SZ	34	175	EP		2238	48.75	-0.00	43						1.0
RCY	SE	34	175	ES		2238	53.11	0.00							1.0
HWQ	BZ	55	14	EP		2238	52.03	0.01							1.0

**May 5 2011 Hour: 8:11 10.9 Lat: 34.36N Lon: 36.65E Depth: 3 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	26	239	EP		811	15.19	0.02	61						1.0
FKH	SN	26	239	ES		811	18.27	-0.02							1.0
HWQ	BZ	66	262	EP		811	21.54	-0.01							1.0
HWQ	BN	66	262	ES		811	29.38	-0.01							1.0
BHL	BZ	105	241	EP		811	27.97	0.05							1.0
RCY	SZ	122	218	EP		811	30.56	-0.09							1.0
RCY	SN	122	218	ES		811	45.25	0.03							1.0
DQRL	SZ	124	234	EP		811	30.86	0.03							1.0

**May 5 2011 Hour: 14:58 21.0**

**Agency: REL Distant**

**EMSC OT=14:58:21.0 38.23N 144.00E 30Km M=6.1 COAST OF HONSHU**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1510	38.33								
BHL	BZ			EP		1510	40.49								
RCY	SZ			EP		1510	41.70								
DQRL	SZ			EP		1510	41.89								

**May 5 2011 Hour: 15:34 17.2**

**Lat: 33.79N Lon: 35.78E 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	17	317	EP		1534	19.92	-0.02							1.0
BHL	BE	17	317	ES		1534	21.95	0.01							1.0
DQRL	SZ	22	243	EP		1534	20.72	0.00							1.0
DQRL	SN	22	243	ES		1534	23.29	0.00							1.0
RCY	SZ	33	171	EP		1534	22.65	0.01	42						1.0
RCY	SN	33	171	ES		1534	26.63	-0.01							1.0
HWQ	BZ	56	16	EP		1534	26.28	0.01							1.0

**May 5 2011 Hour: 16:15 22.0**

**Agency: REL Distant**

**EMSC OT=16:15:22.0 25.11S 177.43W 156Km M=5.6 FIJI ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1634	53.75								
RCY	SZ			EP		1634	54.95								
BHL	BZ			EP		1634	54.76								
DQRL	SZ			EP		1634	55.53								

**May 6 2011 Hour: 22:59 15.3**

**Lat: 33.78N Lon: 35.80E 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	19	315	EP		2259	18.31	-0.03							1.0
DQRL	SZ	23	247	EP		2259	19.01	0.01							1.0
DQRL	SN	23	247	ES		2259	21.74	0.01							1.0
RCY	SZ	32	174	EP		2259	20.49	-0.01	42						1.0
RCY	SN	32	174	ES		2259	24.35	0.00							1.0
HWQ	BZ	56	14	EP		2259	24.43	0.02							1.0

**May 7 2011 Hour: 14: 9 7.4**

**Lat: 34.39N Lon: 36.67E Depth: 6 Agency: REL Local**

**Magnitudes: 2.9MC REL**

**Rms: 0.0 secs**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	68	260	EP		14	9	18.43	0.01	51					1.0
HWQ	BE	68	260	ES		14	9	26.57	-0.01						1.0
BHL	BZ	108	240	EP		14	9	24.76	-0.07						1.0
RCY	SZ	126	218	EP		14	9	27.45	0.03						1.0
RCY	SN	126	218	ES		14	9	42.21	-0.04						1.0
DQRL	SZ	127	234	EP		14	9	27.60	0.03						1.0
DQRL	SN	127	234	ES		14	9	42.56	0.04						1.0

**May 7 2011 Hour: 18:050.0** Agency: REL Regional

**EMSC OT=18:00:50.0 36.97N 28.25E 1Km M=4.2 DODECANESE ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		18	2	29.11							
HWQ	BZ			EP		18	2	30.89							
RCY	SZ			EP		18	2	34.32							

**May 8 2011 Hour: 6:48 57.4** Agency: REL Regional

**EMSC OT=06:50:24.0 36.70N 27.24E 11Km M=5.1 DODECANESE ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		652		10.96							
DQRL	SZ			EP		652		10.59							
HWQ	BZ			EP		652		12.67							
RCY	SZ			EP		652		15.36							
FKH	SZ			EP		652		17.23							

**May 8 2011 Hour: 8:341.4** Lat: 34.26N Lon: 36.44E Depth: 0 Agency: REL Local

**Magnitudes: 2.9MC REL**

**HERMEL BAALBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	3	246	EP		8	3	41.73-0.23	56						1.0
HWQ	BZ	46	273	EP		8	3	48.83 0.05							1.0
HWQ	BN	46	273	ES		8	3	54.22-0.04							1.0
BHL	BZ	83	242	EP		8	3	54.81 0.08							1.0
RCY	SZ	101	214	EP		8	3	57.76 0.02							1.0
DQRL	SZ	101	233	EP		8	3	57.83 0.11							1.0
DQRL	SE	101	233	ES		8	4	9.89 0.08							1.0
RCY	SN	101	214	ES		8	4	9.77-0.08							1.0

**May 8 2011 Hour: 11:19 24.8** Lat: 33.86N Lon: 36.24E Depth: 92 Agency: REL Local

**Magnitudes: 3.1MC REL**

**CENTRAL BEKAA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	54	330	EP		1119	39.12-0.02	58							1.0
HWQ	BN	54	330	ES		1119	49.75 0.01								1.0
BHL	BZ	54	276	EP		1119	39.20 0.08								1.0
BHL	BN	54	276	ES		1119	49.68-0.03								1.0
RCY	SZ	54	223	EP		1119	39.17-0.03								1.0
RCY	SN	54	223	ES		1119	49.87 0.02								1.0
DQRL	SZ	64	255	EP		1119	39.78-0.02								1.0

**May 8 2011 Hour: 12:45 58.0** Lat: 33.22N Lon: 35.57E Depth: 0 Agency: REL Local

**Magnitudes: 2.6MC REL**

**NORTH GALILEE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	40	39	EP		1246	4.19-0.21	35							1.0
RCY	SN	40	39	ES		1246	9.23 0.10								1.0
DQRL	SZ	54	0	EP		1246	6.84 0.11								1.0
DQRL	SN	54	0	ES		1246	13.08-0.11								1.0
BHL	BZ	77	6	EP		1246	10.38 0.03								1.0
HWQ	BZ	123	16	EP		1246	17.86 0.07								1.0

**May 8 2011 Hour: 14:43 16.7** Lat: 33.79N Lon: 35.77E Depth: 7 Agency: REL Local

**Magnitudes: 3.0MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	319	EP		1443	19.69 0.02	57							1.0
BHL	BN	16	319	ES		1443	21.89-0.01								1.0
DQRL	SZ	21	242	EP		1443	20.37 0.02								1.0
DQRL	SN	21	242	ES		1443	23.10 0.03								1.0
BEYL	BZ	27	289	EP		1443	21.17-0.06								1.0
RCY	SZ	34	170	EP		1443	22.32 0.05	68							1.0
RCY	SE	34	170	ES		1443	26.37-0.05								1.0

HWQ BZ 56 17 EP 1443 25.85 0.01 1.0

**May 8 2011 Hour: 22:24 12.5 Lat: 33.81N Lon: 35.79E Depth: 17 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	310	EP		2224	16.39	0.00	22						1.0
BHL	BN	16	310	ES		2224	19.24	-0.01							1.0
DQRL	SZ	23	241	EP		2224	17.20	0.00							1.0
RCY	SZ	35	173	EP		2224	18.78	-0.00							1.0
RCY	SN	35	173	ES		2224	23.41	-0.01							1.0
HWQ	BZ	54	16	EP		2224	21.51	0.01							1.0

**May 9 2011 Hour: 9:9 28.3 Lat: 34.34N Lon: 36.68E Depth: 3 Agency: REL Local Magnitudes: 2.8MC 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	27	246	EP		9	9	32.58	-0.07	48					1.0
HWQ	BZ	68	264	EP		9	9	39.28	0.09						1.0
HWQ	BN	68	264	ES		9	9	47.26	-0.01						1.0
BHL	BZ	106	243	EP		9	9	45.36	-0.04						1.0
RCY	SZ	122	220	EP		9	9	47.97	0.03						1.0
RCY	SN	122	220	ES		910		2.49	-0.00						1.0
DQRL	SZ	124	236	EP		9	9	48.28	0.02						1.0

**May 9 2011 Hour: 15:12 0.0** Agency: REL Local  
**STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VEL WT**  
DQRL SZ EP 1512 34.03  
RCY SZ EP 1512 32.46

**May 9 2011 Hour: 16:21 33.2 Lat: 33.79N Lon: 35.78E 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	17	317	EP		1621	36.03	0.01	47						1.0
DQRL	SZ	22	245	EP		1621	36.75	0.03							1.0
DQRL	SN	22	245	ES		1621	39.29	-0.03							1.0
RCY	SZ	33	171	EP		1621	38.53	0.01							1.0
RCY	SN	33	171	ES		1621	42.43	-0.01							1.0
HWQ	BZ	56	16	EP		1621	42.27	-0.02							1.0

**May 9 2011 Hour: 20:27 0.0** Agency: REL Local  
**STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VEL WT**  
RCY SZ EP 2028 16.23  
BHL BZ EP 2028 15.13  
DQRL SZ EP 2028 16.23

**May 10 2011 Hour: 15:14 44.9 Lat: 34.29N Lon: 36.49E Depth: 0 Agency: REL Local Magnitudes: 3.0MC 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	BZ	50	269	EP		1514	53.03	-0.00	60						1.0
HWQ	BN	50	269	ES		1514	59.03	-0.01							1.0
BHL	BZ	88	241	EP		1514	59.27	0.08							1.0
RCY	SZ	107	215	EP		1515	2.16	-0.02							1.0
RCY	SN	107	215	ES		1515	14.96	0.01							1.0
DQRL	SZ	107	233	EP		1515	2.14	-0.05							1.0

**May 10 2011 Hour: 15:26 5.0** Agency: REL Distant

**EMSC OT=15:26:05.0 43.38N 130.86E 550Km M=5.3 JILIN-HEILONGJIANG**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1536		25.29							
BHL	BZ			EP		1536		27.84							
RCY	SZ			EP		1536		29.00							
DQRL	SZ			EP		1536		29.18							

**May 11 2011 Hour: 8:35 42.8** Lat: 32.75N Lon: 34.95E Depth: 0 Agency: REL Regional

**Magnitudes: 3.1MC REL**

#### **NORTH GALILEE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	117	45	EP		836	1.52-0.12		59						1.0
RCY	SN	117	45	ES		836	15.57-0.03								1.0
DQRL	SZ	121	28	EP		836	2.22-0.04								1.0
DQRL	SN	121	28	ES		836	16.64-0.03								1.0
BHL	BZ	144	27	EP		836	5.83-0.02								0.2
HWQ	BZ	193	28	EP		836	12.91-0.00								1.0
FKH	SZ	214	39	EP		836	15.59 0.06								1.0
FKH	SE	214	39	ES		836	39.94 0.17								1.0

**May 11 2011 Hour: 10:14 10.9** Lat: 34.43N Lon: 36.80E Depth: 0 Agency: REL Local

**Magnitudes: 2.9MC REL**

#### **NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	41	241	EP		1014	17.45-0.10		51						1.0
FKH	SN	41	241	ES		1014	22.53 0.06								1.0
HWQ	BZ	80	258	EP		1014	23.89 0.03								1.0
HWQ	BN	80	258	ES		1014	33.42-0.03								1.0
RCY	SZ	136	221	EP		1014	32.91 0.05								1.0
RCY	SN	136	221	ES		1014	49.07-0.04								1.0
DQRL	SZ	139	235	EP		1014	33.23 0.02								1.0

**May 11 2011 Hour: 10:21 24.1** Lat: 34.33N Lon: 36.65E Depth: 3 Agency: REL Local

**Magnitudes: 2.8MC REL**

#### **NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	24	248	EP		1021	28.09 0.00		48						1.0
FKH	SN	24	248	ES		1021	31.00-0.00								1.0
HWQ	BZ	65	266	EP		1021	34.69 0.01								1.0
HWQ	BN	65	266	ES		1021	42.48-0.00								1.0
RCY	SZ	119	220	EP		1021	43.33-0.01								1.0
RCY	SN	119	220	ES		1021	57.54 0.01								1.0

**May 11 2011 Hour: 17: 2 2.6** Lat: 33.78N Lon: 35.77E Depth: 0 Agency: REL Local

**Magnitudes: 2.6MC REL**

#### **BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	322	EP		17	2 5.28-0.07		33						1.0
BHL	BE	17	322	ES		17	2 7.27-0.12								1.0
DQRL	SZ	20	245	EP		17	2 5.96 0.12								1.0
DQRL	SE	20	245	ES		17	2 8.29 0.05								1.0
RCY	SZ	32	169	EP		17	2 7.74-0.08								1.0
RCY	SN	32	169	ES		17	2 11.68-0.01								1.0
HWQ	BZ	57	17	EP		17	2 11.77-0.09								1.0
HWQ	BN	57	17	ES		17	2 18.89 0.17								1.0

**May 13 2011 Hour: 8:53 48.0** Agency: REL Regional

**EMSC OT=08:53:48.0 37.17N 35.22E 24Km M=3.2 CENTRAL TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		854	33.19								
RCY	SZ			EP		854	43.93								

**May 14 2011 Hour: 12: 5 17.7 Lat: 33.78N Lon: 35.75E Depth: 11 Agency: REL Local Magnitudes: 2.7MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	326	EP		12	5	21.08-0.01	41						1.0
DQRL	SZ	19	244	EP		12	5	21.45 0.03							1.0
DQRL	SN	19	244	ES		12	5	24.14-0.01							1.0
RCY	SZ	33	166	EP		12	5	23.36-0.04							1.0
RCY	SN	33	166	ES		12	5	27.61 0.02							1.0
HWQ	BZ	58	18	EP		12	5	27.31 0.01							1.0

**May 14 2011 Hour: 14: 8 0.4 Lat: 33.57N Lon: 35.80E Depth: 18 Agency: REL Local Magnitudes: 2.7MC REL**

**CENTRAL BEKAA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	9	160	EP		14	8	3.84 0.02	42						1.0
RCY	SN	9	160	ES		14	8	6.35-0.02							1.0
DQRL	SZ	26	304	EP		14	8	5.51 0.02							1.0
DQRL	SN	26	304	ES		14	8	9.27 0.00							1.0
BHL	BZ	39	340	EP		14	8	7.26 0.01							1.0
BHL	BN	39	340	ES		14	8	12.33 0.00							1.0
BEYL	BZ	44	319	EP		14	8	7.78-0.04							1.0
HWQ	BZ	79	10	EP		14	8	13.07 0.00							0.2

**May 14 2011 Hour: 15:45 0.0** Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1546	9.47								
RCY	SZ			EP		1546	7.52								

**May 15 2011 Hour: 3:17 21.2 Lat: 33.87N Lon: 36.79E Depth: 4 Agency: REL Local Magnitudes: 3.0MC REL**

**DAMASCUS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	54	320	EP		317	30.04	0.04	58						1.0
FKH	SN	54	320	ES		317	36.61	0.09							1.0
HWQ	BZ	90	301	EP		317	35.73	0.01							1.0
HWQ	BN	90	301	ES		317	46.36-0.11								1.0
RCY	SZ	97	245	EP		317	36.85-0.07								1.0
RCY	SN	97	245	ES		317	48.65	0.09							1.0
BHL	BZ	105	272	EP		317	38.05-0.08								1.0
DQRL	SZ	114	261	EP		317	39.66	0.04							1.0

**May 15 2011 Hour: 11:39 0.0** Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1140	5.78								
FKH	SZ			EP		1140	5.35								

**May 15 2011 Hour: 12: 0 3.4 Lat: 33.79N Lon: 35.79E Depth: 0 Agency: REL Local Magnitudes: 2.8MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	316	EP		12	0	6.28-0.03	44						1.0
BHL	BE	18	316	ES		12	0	8.47 0.01							1.0
DQRL	SZ	22	246	EP		12	0	6.99 0.00							1.0
RCY	SZ	33	172	EP		12	0	8.68 0.03							1.0
RCY	SN	33	172	ES		12	0	12.52-0.02							1.0
HWQ	BZ	56	15	EP		12	0	12.48 0.00							1.0

**May 15 2011 Hour: 19:34 38.5** Agency: REL Regional

**EMSC OT=19:34:38.5 34.50N 32.16E 10Km M=3.3 CYPRUS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ			EP		1935	20.94								
DQRL	SZ			EP		1935	21.50								
BHL	BZ			EP		1935	20.98								
HWQ	BZ			EP		1935	25.62								

**May 15 2011 Hour: 22: 0 46.5** Agency: REL Regional

**EMSC OT=22:00:46.5 36.11N 35.69E 17Km M=3.1 CENTRAL TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		22 1	19.38								
FKH	SZ			EP		22 1	22.41								

**May 15 2011 Hour: 22: 3 38.2** Lat: 33.61N Lon: 35.68E Depth: 6 Agency: REL Local  
Magnitudes: 2.7MC REL

**SAIDA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	15	315	EP		22 3	40.80-0.00								1.0
DQRL	SN	15	315	ES		22 3	42.76 0.01								1.0
RCY	SZ	19	132	EP		22 3	41.46 0.01	37							1.0
RCY	SN	19	132	ES		22 3	43.89-0.00								1.0
BHL	BZ	33	355	EP		22 3	43.52-0.02								1.0
HWQ	BZ	78	18	EP		22 3	50.79 0.02								1.0

**May 16 2011 Hour: 6:51 15.4** Lat: 33.78N Lon: 35.77E Depth: 0 Agency: REL Local  
Magnitudes: 2.7MC REL

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	320	EP		651	18.15-0.06	39							1.0
DQRL	SZ	21	246	EP		651	18.71-0.05								1.0
DQRL	SN	21	246	ES		651	21.30 0.06								1.0
RCY	SZ	32	170	EP		651	20.62-0.00								1.0
RCY	SN	32	170	ES		651	24.48-0.01								1.0
HWQ	BZ	57	16	EP		651	24.68 0.06								1.0

**May 16 2011 Hour: 13:18 23.5** Lat: 33.79N Lon: 35.77E Depth: 6 Agency: REL Local  
Magnitudes: 3.1MC REL

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	320	EP		1318	26.36 0.01								1.0
DQRL	SZ	21	243	EP		1318	26.98-0.00								1.0
DQRL	SN	21	243	ES		1318	29.56-0.02								1.0
BEYL	BZ	27	289	EP		1318	27.95 0.02								1.0
RCY	SZ	33	169	EP		1318	28.95-0.02	66							1.0
RCY	SN	33	169	ES		1318	33.06 0.02								1.0
HWQ	BZ	57	17	EP		1318	32.64-0.01								1.0
FKH	SZ	78	50	EP		1318	36.07-0.00								1.0

**May 16 2011 Hour: 15:11 52.9** Lat: 34.44N Lon: 36.82E Depth: 1 Agency: REL Local  
Magnitudes: 3.0MC REL

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	44	240	EP		1511	59.96-0.07	60							1.0
FKH	SN	44	240	ES		1512	5.28-0.00								1.0
HWQ	BZ	83	257	EP		1512	6.27-0.01								1.0
BHL	BZ	123	241	EP		1512	12.91 0.09								1.0
DQRL	SZ	142	235	EP		1512	15.58-0.01								1.0
DQRL	SN	142	235	ES		*1512	32.40 0.05								0.0

**May 16 2011 Hour: 16:49 14.3 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		1649	17.00	-0.03	42						1.0
DQRL	SZ	21	244	EP		1649	17.71	-0.00							1.0
DQRL	SN	21	244	ES		1649	20.26	0.02							1.0
RCY	SZ	33	170	EP		1649	19.61	-0.02							1.0
RCY	SN	33	170	ES		1649	23.58	0.01							1.0
HWQ	BZ	56	16	EP		1649	23.42	0.03							1.0

**May 17 2011 Hour: 0:15 0.0 Agency: REL Distant  
EMSC OT=00:15:00.0 09.24S 112.60E 55Km M=5.6 SOUTH OF JAVA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		027	27.74								
HWQ	BZ			EP		027	27.99								
BHL	BZ			EP		027	28.36								

**May 18 2011 Hour: 13:17 47.6 Lat: 33.77N Lon: 35.96E Depth: 8 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
BHL	BZ	32	297	EP		1317	53.01	-0.02							1.0
RCY	SZ	33	201	EP		1317	53.18	0.00	47						1.0
RCY	SN	33	201	ES		1317	57.30	-0.00							1.0
DQRL	SZ	37	258	EP		1317	53.84	0.01							1.0
HWQ	BZ	56	358	EP		1317	56.76	-0.01							1.0
HWQ	BN	56	358	ES		1318	3.56	0.01							1.0

**May 19 2011 Hour: 9:54 15.2 Lat: 33.90N Lon: 35.83E 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	16	270	EP		954	17.81	-0.03	48						1.0
DQRL	SZ	32	227	EP		954	20.50	0.03							1.0
DQRL	SN	32	227	ES		954	24.35	0.01							1.0
HWQ	BZ	43	15	EP		954	22.17	-0.02							1.0
HWQ	BN	43	15	ES		954	27.36	0.03							1.0
RCY	SZ	45	179	EP		954	22.51	-0.03							1.0
RCY	SE	45	179	ES		954	27.94	0.01							1.0

**May 19 2011 Hour: 13: 5 0.0 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.0 secs**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		13	6	16.65							
FKH	SZ			EP		13	6	9.20							

**May 19 2011 Hour: 20:15 22.0 Lat: 39.15N Lon: 29.10E 7Km M=5.8 WESTERN TURKEY Agency: REL Regional**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2017	11.29								
BEYL	BZ			EP		2017	11.08								
BHL	BZ			EP		2017	12.03								
DQRL	SZ			EP		2017	14.25								
NAQL	SZ			EP		2017	16.48								
RCY	SZ			EP		2017	17.91								

**May 19 2011 Hour: 20:39 4.0 Agency: REL Regional  
EMSC OT=20:39:04.0 34.36N 23.76E 30Km M=5.2 CRETE, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2041	20.82								
BHL	BZ			EP		2041	22.47								
RCY	SZ			EP		2041	22.81								
HWQ	BZ			EP		2041	23.30								

**May 20 2011 Hour: 15:45 50.3** Lat: 33.79N Lon: 35.78E Depth: 14 Agency: REL Local  
**Magnitudes: 2.8MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	317	EP		1545	54.03	0.02	43						1.0
BHL	BE	17	317	ES		1545	56.75	-0.00							1.0
DQRL	SZ	22	244	EP		1545	54.60	0.00							1.0
DQRL	SN	22	244	ES		1545	57.76	-0.01							1.0
RCY	SZ	33	171	EP		1545	56.25	0.03							1.0
RCY	SN	33	171	ES		1546	0.56	-0.02							1.0
HWQ	BZ	56	16	EP		1545	59.54	-0.02							1.0

**May 21 2011 Hour: 3:45 0.0** Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		345	58.64								
RCY	SZ			EP		345	58.79								

**May 21 2011 Hour: 4: 2 0.0** Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		4	2	50.85							
RCY	SZ			EP		4	2	49.95							

**May 21 2011 Hour: 8:45 39.5** Lat: 33.62N Lon: 35.69E Depth: 3 Agency: REL Local  
**Magnitudes: 2.5MC REL**

**SAIDA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	15	310	EP		845	42.01	0.01							1.0
DQRL	SE	15	310	ES		845	43.82	0.00							1.0
RCY	SZ	19	136	EP		845	42.71	-0.01							1.0
RCY	SN	19	136	ES		845	45.07	0.00							1.0
BHL	BZ	32	354	EP		845	44.64	-0.04	28						1.0
HWQ	BZ	77	18	EP		845	51.95	0.03							1.0

**May 21 2011 Hour: 13:48 46.5** Lat: 33.75N Lon: 35.84E Depth: 8 Agency: REL Local  
**Magnitudes: 2.8MC REL**

**CENTRAL BEKAA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	24	314	EP		1348	50.59	-0.02							1.0
BHL	BN	24	314	ES		1348	53.69	0.01							1.0
DQRL	SZ	26	258	EP		1348	50.89	0.04							1.0
DQRL	SN	26	258	ES		1348	54.09	-0.02							1.0
RCY	SZ	29	181	EP		1348	51.33	-0.02	44						1.0
RCY	SN	29	181	ES		1348	54.98	0.01							1.0
HWQ	BZ	59	10	EP		1348	56.09	0.00							1.0

**May 21 2011 Hour: 15: 2 0.0** Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		15	2	36.78							
RCY	SZ			EP		15	2	34.76							

**May 21 2011 Hour: 17:30 26.9** Lat: 33.76N Lon: 35.86E Depth: 10 Agency: REL Local  
**Magnitudes: 2.3MC REL**

**CENTRAL BEKAA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	25	310	EP		1730	31.30	-0.00							1.0
DQRL	SZ	28	257	EP		1730	31.70	-0.01							1.0
DQRL	SN	28	257	ES		1730	35.29	0.00							1.0
RCY	SZ	29	185	EP		1730	32.01	0.01	22						1.0
RCY	SN	29	185	ES		1730	35.80	-0.00							1.0
HWQ	BZ	58	8	EP		1730	36.40	0.00							0.2

**May 21 2011 Hour: 18:41 13.4 Lat: 33.72N Lon: 36.10E Depth: 2 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
RCY	SZ	34	225	EP		1841	19.06	0.02	37						1.0
RCY	SE	34	225	ES		1841	23.16	-0.01							1.0
BHL	BZ	46	297	EP		1841	20.88	-0.03							1.0
DQRL	SZ	49	269	EP		1841	21.39	0.03							1.0
DQRL	SN	49	269	ES		1841	27.22	-0.00							1.0
HWQ	BZ	64	347	EP		1841	23.74	-0.03							1.0
HWQ	BE	64	347	ES		1841	31.43	0.02							1.0

**May 21 2011 Hour: 18:54 37.3 Lat: 33.70N Lon: 35.27E Depth: 8 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
DQRL	SZ	28	88	EP		1854	42.10	0.07	40						1.0
DQRL	SN	28	88	ES		1854	45.53	0.02							1.0
BEYL	BZ	28	46	EP		1854	42.06	-0.01							1.0
BHL	BZ	42	57	EP		1854	44.22	-0.07							1.0
RCY	SZ	57	113	EP		1854	46.61	-0.01							1.0
RCY	SE	57	113	ES		1854	53.47	-0.03							1.0
HWQ	BZ	90	44	EP		1854	51.87	0.02							1.0

**May 21 2011 Hour: 21:16 59.0 Agency: REL Distant  
EMSC OT=21:16:59.0 30.80S 178.07W 10Km M=5.8 KERMADEC ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2136	47.73								
BHL	BZ			EP		2136	47.50								

**May 22 2011 Hour: 0: 7 47.9 Lat: 33.31N Lon: 35.41E Depth: 0 Agency: REL Local  
Magnitudes: 3.2MC 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	34	229	EP		0	7	53.28	-0.01	76					1.0
NAQL	SN	34	229	ES		0	7	57.31	0.02						1.0
RCY	SZ	44	63	EP		0	7	54.99	0.00	78					1.0
RCY	SE	44	63	ES		0	8	0.26	0.01						1.0
DQRL	SZ	46	18	EP		0	7	55.18	-0.07						1.0
DQRL	SN	46	18	ES		0	8	0.72	0.01						1.0
BEYL	BZ	62	7	EP		0	7	57.89	-0.01						1.0
BHL	BZ	69	19	EP		0	7	58.99	-0.02						1.0
BHL	BE	69	19	ES		0	8	7.32	0.06						1.0
HWQ	BZ	118	25	EP		0	8	6.88	0.03						1.0
HWQ	BN	118	25	ES		0	8	20.87	-0.03						1.0
FKH	SZ	138	42	EP		0	8	10.16	0.00						1.0

**May 22 2011 Hour: 1:16 41.7 Lat: 33.32N Lon: 35.40E Depth: 3 Agency: REL Local  
Magnitudes: 3.0MC 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	33	228	EP		116	47.12	0.02	56						1.0
NAQL	SN	33	228	ES		116	51.15	0.08							1.0
RCY	SZ	45	64	EP		116	48.99	-0.01	57						1.0
RCY	SE	45	64	ES		116	54.49	0.11							1.0
DQRL	SZ	46	20	EP		116	49.05	-0.08							1.0
DQRL	SN	46	20	ES		116	54.60	-0.00							1.0
BEYL	BZ	62	8	EP		116	51.75	0.02							1.0
BHL	BZ	69	20	EP		116	52.87	-0.01							1.0
BHL	BN	69	20	ES		117	1.14	0.00							1.0
HWQ	BZ	118	25	EP		117	0.78	0.05							1.0
HWQ	BN	118	25	ES		117	14.75	-0.04							1.0
FKH	SZ	139	42	EP		117	3.82	-0.03							1.0

**May 22 2011 Hour: 9:40 9.7** Lat: 33.33N Lon: 35.42E Depth: 5 Agency: REL Local  
**Magnitudes: 2.7MC REL**

**SOUTH LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	43	65	EP		940	16.73	0.01	41						1.0
RCY	SE	43	65	ES		940	21.94	-0.01							1.0
DQRL	SZ	44	19	EP		940	16.88	0.06							1.0
DQRL	SN	44	19	ES		940	22.13	0.01							1.0
BHL	BZ	67	19	EP		940	20.48	-0.08							1.0
HWQ	BZ	116	25	EP		940	28.26	0.01							1.0

**May 22 2011 Hour: 16:42 24.0** Agency: REL Distant  
**EMSC OT=16:42:24.0 13.66N 120.82E 143Km M=5.7 MINDORO**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1654	7.66								
HWQ	BZ			EP		1654	9.26								
RCY	SZ			EP		1654	10.80								
BHL	BZ			EP		1654	11.04								
DQRL	SZ			EP		1654	11.66								

**May 22 2011 Hour: 17:33 43.9** Lat: 33.79N Lon: 35.76E Depth: 4 Agency: REL Local  
**Magnitudes: 3.0MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	322	EP		1733	46.59	-0.08							1.0
DQRL	SZ	20	243	EP		1733	47.31	0.06							1.0
DQRL	SE	20	243	ES		1733	49.74	0.02							1.0
BEYL	BZ	27	290	EP		1733	48.27	0.01							0.2
RCY	SZ	33	168	EP		1733	49.26	-0.06	61						1.0
RCY	SE	33	168	ES		1733	53.33	0.01							1.0
HWQ	BZ	57	17	EP		1733	53.14	0.01							1.0
HWQ	BN	57	17	ES		1733	59.98	0.03							1.0
FKH	SZ	78	50	EP		1733	56.57	-0.01							1.0
FKH	SN	78	50	ES		1734	5.98	0.02							1.0

**May 22 2011 Hour: 19:48 49.8** Lat: 33.81N Lon: 35.76E Depth: 16 Agency: REL Local  
**Magnitudes: 2.5MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	14	317	EP		1948	53.35	-0.00	28						1.0
DQRL	SZ	21	237	EP		1948	54.11	0.00							1.0
DQRL	SN	21	237	ES		1948	57.33	-0.00							1.0
RCY	SZ	36	169	EP		1948	56.05	-0.02							1.0
RCY	SN	36	169	ES		1949	0.75	0.01							1.0
HWQ	BZ	55	18	EP		1948	58.83	0.01							1.0

**May 22 2011 Hour: 19:49 16.6** Lat: 33.79N Lon: 35.69E Depth: 20 Agency: REL Local  
**Magnitudes: 2.5MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	13	343	EP		1949	20.54	-0.02	29						1.0
DQRL	SZ	15	230	EP		1949	20.71	-0.01							1.0
DQRL	SN	15	230	ES		1949	23.75	0.02							1.0
RCY	SZ	35	158	EP		1949	23.13	-0.00							1.0
RCY	SN	35	158	ES		1949	27.93	-0.00							1.0
HWQ	BZ	59	23	EP		1949	26.41	0.02							1.0

**May 23 2011 Hour: 0:53 39.0** Lat: 33.86N Lon: 35.81E Depth: 11 Agency: REL Local  
**Magnitudes: 3.2MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	289	EP		053	42.10	-0.02	75						1.0
BHL	BN	15	289	ES		053	44.36	-0.05							1.0
DQRL	SZ	28	232	EP		053	43.87	-0.05							1.0
DQRL	SN	28	232	ES		053	47.69	0.14							1.0
RCY	SZ	41	176	EP		053	45.83	-0.06							1.0
RCY	SE	41	176	ES		053	50.95	-0.01							1.0
HWQ	BZ	48	16	EP		053	46.97	-0.05	74						1.0
HWQ	BN	48	16	ES		053	52.97	0.03							1.0
FKH	SZ	70	53	EP		053	50.51	-0.02							1.0
FKH	SN	70	53	ES		053	59.13	0.09							1.0

**May 23 2011 Hour: 7:42 0.0** Agency: REL Regional  
**EMSC OT=07:41:13.0 36.08N 31.20E 10Km M=3.6 WESTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP			742	20.85							
RCY	SZ			EP			742	24.95							

**May 23 2011 Hour: 9: 1 0.0** Agency: REL Local  
**STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VEL WT**

DQRL	SZ			EP		9	1	46.43							
RCY	SZ			EP		9	1	39.15							

**May 23 2011 Hour: 10:29 36.2** Lat: 34.59N Lon: 36.38E Depth: 1 Agency: REL Local  
**Magnitudes: 2.9MC REL**

**HERMEL BAALBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	38	175	EP		1029	42.33	-0.03	50						1.0
FKH	SN	38	175	ES		1029	46.98	0.02							1.0
HWQ	BZ	52	229	EP		1029	44.57	-0.05							1.0
HWQ	BN	52	229	ES		1029	50.92	0.03							1.0
BHL	BZ	101	221	EP		1029	52.45	0.01							1.0
DQRL	SZ	123	217	EP		1029	55.99	-0.00							1.0
RCY	SZ	131	202	EP		1029	57.34	0.09							1.0
RCY	SN	131	202	ES		1030	12.82	-0.05							1.0

**May 23 2011 Hour: 11:43 16.2** Lat: 34.41N Lon: 36.68E Depth: 0 Agency: REL Local  
**Magnitudes: 2.8MC REL**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	31	233	EP		1143	21.01	-0.12	47						1.0
HWQ	BZ	69	258	EP		1143	27.41	0.13							1.0
HWQ	BN	69	258	ES		1143	35.44	-0.05							1.0
BHL	BZ	110	240	EP		1143	33.81	-0.07							0.2
RCY	SZ	128	218	EP		1143	36.75	-0.03							1.0
RCY	SN	128	218	ES		1143	52.08	0.06							1.0
DQRL	SZ	129	233	EP		1143	37.20	0.27							0.2

**May 24 2011 Hour: 1:44 4.3** Lat: 34.22N Lon: 35.08E Depth: 11 Agency: REL Local  
**Magnitudes: 3.1MC REL**

**OFFSHORE CENTRAL LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	63	123	EP		144	14.73	0.01							1.0
BHL	BN	63	123	ES		144	22.39	-0.01							1.0
DQRL	SZ	73	141	EP		144	16.19	0.00							1.0
DQRL	SN	73	141	ES		144	24.97	0.02							1.0
HWQ	BZ	80	85	EP		144	17.30	0.00	62						1.0
RCY	SZ	106	139	EP		144	21.14	-0.02							1.0
RCY	SN	106	139	ES		144	33.59	-0.01							1.0

**May 24 2011 Hour: 7:40 0.0** Agency: REL Local  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 HWQ BZ EP 741 16.27  
 FKH SZ EP 741 9.57

**May 25 2011 Hour: 22:40 36.0** Lat: 33.38N Lon: 35.61E Depth: 13 Agency: REL Local  
**Magnitudes: 2.8MC REL**  
**SOUTH LEBANON**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 RCY SZ 25 58 EP 2240 40.67 0.01 44 1.0  
 RCY SN 25 58 ES 2240 44.11-0.01 1.0  
 DQRL SZ 37 354 EP 2240 42.33-0.01 1.0  
 DQRL SN 37 354 ES 2240 47.05 0.01 1.0  
 BHL BZ 59 4 EP 2240 45.65 0.00 1.0  
 HWQ BZ 105 17 EP 2240 52.43-0.01 0.2

**May 25 2011 Hour: 22:42 48.1** Lat: 33.37N Lon: 35.60E Depth: 12 Agency: REL Local  
**Magnitudes: 2.7MC REL**  
**SOUTH LEBANON**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 RCY SZ 26 58 EP 2242 52.94 0.02 38 1.0  
 RCY SN 26 58 ES 2242 56.46-0.01 1.0  
 DQRL SZ 37 356 EP 2242 54.52-0.02 1.0  
 DQRL SE 37 356 ES 2242 59.29 0.01 1.0  
 BHL BZ 59 5 EP 2242 57.92-0.00 1.0  
 HWQ BZ 106 18 EP 2243 4.77 0.03 0.2

**May 26 2011 Hour: 8:24 38.0** Lat: 34.31N Lon: 36.56E Depth: 0 Agency: REL Local  
**Magnitudes: 2.8MC REL**  
**HERMEL BAALBEK REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 FKH SZ 16 244 EP 824 40.51-0.04 46 1.0  
 FKH SE 16 244 ES 824 42.45 0.02 1.0  
 HWQ BZ 57 267 EP 824 47.25 0.07 1.0  
 HWQ BN 57 267 ES 824 53.95-0.02 1.0  
 RCY SZ 112 217 EP 824 56.17 0.05 1.0  
 RCY SN 112 217 ES 825 9.54 0.01 1.0  
 DQRL SZ 113 234 EP 824 56.21-0.09 1.0

**May 26 2011 Hour: 9:20 15.8** Lat: 33.81N Lon: 35.76E Depth: 24 Agency: REL Local  
**Magnitudes: 2.6MC REL**  
**BEIRUT REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ 14 318 EP 920 20.32 0.00 35 1.0  
 DQRL SZ 21 236 EP 920 20.87-0.02 1.0  
 DQRL SE 21 236 ES 920 24.69 0.01 1.0  
 RCY SZ 36 168 EP 920 22.64 0.02 1.0  
 RCY SN 36 168 ES 920 27.68-0.01 1.0  
 HWQ BZ 55 19 EP 920 25.10-0.04 0.2

**May 26 2011 Hour: 10:47 47.6** Lat: 33.82N Lon: 35.73E Depth: 28 Agency: REL Local  
**Magnitudes: 2.7MC REL**  
**BEIRUT REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ 12 324 EP 1047 52.50-0.02 35 1.0  
 BHL BE 12 324 ES 1047 56.17 0.01 1.0  
 DQRL SZ 19 230 EP 1047 53.05 0.01 1.0  
 RCY SZ 37 164 EP 1047 54.93 0.00 39 1.0  
 RCY SN 37 164 ES 1048 0.35-0.00 1.0  
 HWQ BZ 55 21 EP 1047 57.30 0.10 0.2

<b>May 26 2011 Hour: 11:53 0.0</b>	<b>Agency: REL Local</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
DQRL SZ EP 1153 55.66	
RCY SZ EP 1153 53.22	
<b>May 26 2011 Hour: 17:22 21.2 Lat: 33.83N Lon: 35.76E Depth: 27 Agency: REL Local Magnitudes: 2.6MC REL BEIRUT REGION</b>	<b>Rms: 0.0 secs</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
BHL BZ 13 309 EP 1722 25.99 0.01 35 1.0	
DQRL SZ 23 231 EP 1722 26.79 0.01 1.0	
DQRL SN 23 231 ES 1722 30.94-0.01 1.0	
RCY SZ 38 169 EP 1722 28.54-0.00 1.0	
RCY SN 38 169 ES 1722 34.01 0.00 1.0	
HWQ BZ 52 19 EP 1722 30.27-0.07 0.2	
<b>May 27 2011 Hour: 17:24 30.0 EMSC OT=17:24:30.0 35.68N 23.47E 10Km M=4.7 CRETE, GREECE</b>	<b>Agency: REL Regional</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
HWQ BZ EP 1726 56.83	
RCY SZ EP 1726 57.14	
<b>May 27 2011 Hour: 19:11 48.5 Lat: 33.86N Lon: 35.83E Depth: 1 Agency: REL Local Magnitudes: 2.9MC REL BEIRUT REGION</b>	<b>Rms: 0.0 secs</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
BHL BZ 17 286 EP 1911 51.25-0.01 50 1.0	
BHL BE 17 286 ES 1911 53.32 0.01 1.0	
DQRL SZ 30 234 EP 1911 53.32 0.01 1.0	
DQRL SN 30 234 ES 1911 56.86-0.02 1.0	
RCY SZ 41 180 EP 1911 55.06 0.02 1.0	
RCY SN 41 180 ES 1911 59.89-0.01 1.0	
HWQ BZ 47 13 EP 1911 56.10-0.01 1.0	
<b>May 28 2011 Hour: 5:47 17.0 EMSC OT=05:47:17.0 39.12N 29.04E 26Km M=4.7 WESTERN TURKEY</b>	<b>Agency: REL Regional</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
HWQ BZ EP 549 6.28	
RCY SZ EP 549 12.33	
<b>May 28 2011 Hour: 12:12 26.1 Lat: 33.87N Lon: 35.83E Depth: 4 Agency: REL Local Magnitudes: 2.9MC REL BEIRUT REGION</b>	<b>Rms: 0.0 secs</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
BHL BZ 17 284 EP 1212 28.85-0.02 1.0	
BHL BN 17 284 ES 1212 30.95 0.01 1.0	
DQRL SZ 30 233 EP 1212 30.95-0.01 1.0	
DQRL SN 30 233 ES 1212 34.58 0.01 1.0	
RCY SZ 41 179 EP 1212 32.79 0.02 49 1.0	
RCY SE 41 179 ES 1212 37.71-0.01 1.0	
HWQ BZ 47 13 EP 1212 33.67 0.00 1.0	
<b>May 28 2011 Hour: 13:1 20.6 Lat: 34.41N Lon: 36.78E Depth: 4 Agency: REL Local Magnitudes: 2.9MC REL NEBEK REGION</b>	<b>Rms: 0.0 secs</b>
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
FKH SZ 39 241 EP 13 1 26.86-0.00 54 1.0	
HWQ BZ 78 259 EP 13 1 33.19 0.03 1.0	
HWQ BN 78 259 ES 13 1 42.46-0.02 1.0	
BHL BZ 118 242 EP 13 1 39.45-0.09 1.0	
RCY SZ 134 221 EP 13 1 41.92 0.02 1.0	
RCY SN 134 221 ES 13 1 57.66-0.03 1.0	
DQRL SZ 136 235 EP 13 1 42.28 0.05 1.0	

DQRL SN 136 235 ES 13 1 58.31 0.05 1.0

**May 28 2011 Hour: 17: 7 40.0 Agency: REL Distant**

**EMSC OT=17:07:40.0 05.75S 103.45E 26Km M=5.5 SOUTHERN SUMATRA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1719		20.56							
HWQ	BZ			EP		1719		20.96							
BHL	BZ			EP		1719		21.93							
DQRL	SZ			EP		1719		22.15							

**May 28 2011 Hour: 22:14 21.6 Lat: 33.80N Lon: 35.80E Depth: 10 Agency: REL Local Magnitudes: 2.8MC REL**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	311	EP		2214	24.99-0.01		47						1.0
DQRL	SZ	24	245	EP		2214	25.80	0.00							1.0
DQRL	SN	24	245	ES		2214	28.93	0.01							1.0
RCY	SZ	34	174	EP		2214	27.29-0.01								1.0
RCY	SN	34	174	ES		2214	31.54	0.01							1.0
HWQ	BZ	55	14	EP		2214	30.65	0.01							1.0

**May 28 2011 Hour: 22:18 0.8 Lat: 33.31N Lon: 35.38E Depth: 1 Agency: REL Local Magnitudes: 3.0MC REL**

**SOUTH LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	32	226	EP		2218	5.88-0.04		57						1.0
NAQL	SN	32	226	ES		2218	9.72	0.03							1.0
RCY	SZ	47	64	EP		2218	8.38	0.03							1.0
RCY	SE	47	64	ES		2218	13.90-0.02								1.0
DQRL	SZ	47	22	EP		2218	8.31-0.07								1.0
DQRL	SN	47	22	ES		2218	14.05	0.08							1.0
BHL	BZ	70	21	EP		2218	12.06-0.08								1.0
HWQ	BZ	119	26	EP		2218	20.06	0.05							1.0
HWQ	BN	119	26	ES		2218	34.21-0.00								1.0
FKH	SZ	140	42	EP		2218	23.29	0.01							1.0

**May 28 2011 Hour: 22:34 12.3 Lat: 33.35N Lon: 35.42E Depth: 7 Agency: REL Local Magnitudes: 2.8MC REL**

**SOUTH LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	42	20	EP		2234	19.18-0.05								1.0
DQRL	SN	42	20	ES		2234	24.26-0.06								1.0
RCY	SZ	42	67	EP		2234	19.31	0.02	44						1.0
RCY	SN	42	67	ES		2234	24.43-0.01								1.0
BHL	BZ	65	20	EP		2234	23.00	0.05							1.0
BHL	BN	65	20	ES		2234	30.86	0.06							1.0
HWQ	BZ	114	25	EP		2234	30.55-0.02								1.0

**May 29 2011 Hour: 11: 2 6.0 Agency: REL Regional**

**EMSC OT=11:02:06.0 37.35N 42.55E 5Km M=4.5 TURKEY-SYRIA-IRAQ**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		11	3	38.51							
BHL	BZ			EP		11	3	44.64							
RCY	SZ			EP		11	3	46.31							
DQRL	SZ			EP		11	3	47.41							

**May 29 2011 Hour: 11:17 11.3 Lat: 34.49N Lon: 36.75E Depth: 3 Agency: REL Local Magnitudes: 3.1MC REL**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	78	253	EP		1117	23.85	0.01	65						1.0
HWQ	BN	78	253	ES		1117	33.13-0.02								1.0
BHL	BZ	120	238	EP		1117	30.70	0.02							1.0
RCY	SZ	139	218	EP		1117	33.40-0.04								1.0

RCY	SE	139	218	ES	1117	49.88	0.02		1.0
DQRL	SZ	140	232	EP	1117	33.52	0.01		1.0
DQRL	SN	140	232	ES	1117	49.97	-0.00		1.0

**May 29 2011 Hour: 16:33 0.5 Lat: 33.79N Lon: 35.76E Depth: 6 Agency: REL Local Magnitudes: 2.8MC REL BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	323	EP		16	3	33.36	-0.05						1.0
DQRL	SZ	20	243	EP		16	3	33.89	-0.03						1.0
DQRL	SN	20	243	ES		16	3	36.51	0.05						1.0
RCY	SZ	33	168	EP		16	3	35.97	-0.01	43					1.0
RCY	SN	33	168	ES		16	3	40.04	-0.00						1.0
HWQ	BZ	57	18	EP		16	3	39.84	0.05						1.0
HWQ	BN	57	18	ES		16	3	46.68	0.00						1.0

**May 29 2011 Hour: 19:17 34.2 Lat: 33.03N Lon: 35.92E Depth: 4 Agency: REL Local Magnitudes: 3.4MC REL NORTH GALILEE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	53	351	EP		1917	42.62	-0.11							1.0
RCY	SN	53	351	ES		1917	49.15	0.07							1.0
DQRL	SZ	82	337	EP		1917	47.43	-0.01	96						1.0
DQRL	SN	82	337	ES		1917	57.36	0.09							1.0
BHL	BZ	101	346	EP		1917	50.20	-0.20							1.0
BHL	BN	101	346	ES		1918	2.50	0.08							1.0
BEYL	BZ	102	337	EP		1917	50.61	0.00							1.0
HWQ	BZ	139	1	EP		1917	56.45	0.22							1.0
HWQ	BE	139	1	ES		1918	12.54	-0.02							1.0
FKH	SZ	143	18	EP		1917	56.71	-0.06							1.0
FKH	SN	143	18	ES		1918	13.57	0.06							1.0

**May 29 2011 Hour: 19:19 35.8 Lat: 33.08N Lon: 35.85E Depth: 0 Agency: REL Local Magnitudes: 3.1MC REL NORTH GALILEE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	46	358	EP		1919	43.06	-0.08	67						1.0
RCY	SE	46	358	ES		1919	48.65	0.06							1.0
DQRL	SZ	74	339	EP		1919	47.64	-0.00							1.0
DQRL	SN	74	339	ES		1919	56.41	-0.01							1.0
BHL	BZ	93	349	EP		1919	50.62	-0.10							1.0
BHL	BN	93	349	ES		1920	1.82	0.05							1.0
BEYL	BZ	93	339	EP		1919	50.77	-0.05							1.0
HWQ	BZ	133	4	EP		1919	57.19	0.03							1.0
HWQ	BN	133	4	ES		1920	12.98	-0.01							1.0
FKH	SZ	139	22	EP		1919	58.16	0.06							1.0

**May 29 2011 Hour: 19:49 0.0** Agency: REL Local  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 1949 47.85  
 RCY SZ EP 1949 42.57

**May 29 2011 Hour: 21:20 25.0 Lat: 33.28N Lon: 35.96E Depth: 1 Agency: REL Local Magnitudes: 2.8MC REL NORTH GALILEE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	26	334	EP		2120	29.22	0.01	40						1.0
RCY	SN	26	334	ES		2120	32.34	-0.00							1.0
DQRL	SZ	59	322	EP		2120	34.47	-0.03	44						1.0
DQRL	SN	59	322	ES		2120	41.56	0.02							1.0
BHL	BZ	74	338	EP		2120	36.98	0.02							1.0
BHL	BN	74	338	ES		2120	45.81	-0.02							1.0
HWQ	BZ	110	359	EP		2120	42.76	0.01							1.0

**May 30 2011 Hour: 9: 5 51.6** Lat: 34.48N Lon: 36.85E Depth: 0 Agency: REL Local  
**Magnitudes: 3.0MC REL**  
**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	48	237	EP		9 5	59.26	-0.11	62						1.0
HWQ	BZ	86	255	EP		9 6	5.58	0.08							1.0
HWQ	BN	86	255	ES		9 6	15.73	-0.02							1.0
BHL	BZ	127	240	EP		9 6	12.10	-0.06							0.2
RCY	SZ	144	221	EP		9 6	14.72	0.02							1.0
RCY	SN	144	221	ES		9 6	31.79	0.02							1.0
DQRL	SZ	146	234	EP		9 6	15.08	0.08							0.2
DQRL	SN	146	234	ES		9 6	32.44	0.15							0.2

**May 30 2011 Hour: 15: 0 3.4** Lat: 34.36N Lon: 36.72E Depth: 1 Agency: REL Local  
**Magnitudes: 2.8MC REL**  
**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	32	246	EP		15 0	8.44	-0.06	48						1.0
FKH	SN	32	246	ES		15 0	12.31	0.01							1.0
HWQ	BZ	72	263	EP		15 0	15.05	0.04							1.0
HWQ	BN	72	263	ES		15 0	23.62	-0.01							1.0
RCY	SZ	126	221	EP		C 15 0	23.78	0.02							1.0
DQRL	SZ	129	236	EP		15 0	24.11	-0.06							0.2

**May 31 2011 Hour: 1:19 26.0** Lat: 33.86N Lon: 35.35E Depth: 23 Agency: REL Local  
**Magnitudes: 3.0MC REL**  
**OFFSHORE CENTRAL LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	27	130	EP		119	31.56	-0.02							1.0
DQRL	SN	27	130	ES		119	35.73	0.03							1.0
BHL	BZ	28	80	EP		119	31.79	-0.02							1.0
BHL	BE	28	80	ES		119	36.10	-0.01							1.0
RCY	SZ	60	132	EP		119	36.10	0.01	54						1.0
RCY	SN	60	132	ES		119	43.55	-0.01							1.0
HWQ	BZ	72	50	EP		119	37.75	0.02							1.0

**May 31 2011 Hour: 9:13 0.0** Agency: REL Local  
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
FKH SZ EP 913 56.53  
HWQ BZ EP 913 59.60

**May 31 2011 Hour: 12:15 40.7** Lat: 34.47N Lon: 36.84E Depth: 0 Agency: REL Local  
**Magnitudes: 3.0MC REL**  
**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	47	238	EP		1215	48.18	-0.09	58						1.0
FKH	SN	47	238	ES		1215	53.84	-0.01							1.0
HWQ	BZ	85	256	EP		1215	54.44	0.02							1.0
HWQ	BE	85	256	ES		1216	4.58	0.02							1.0
RCY	SZ	142	221	EP		1216	3.66	0.06							1.0

**May 31 2011 Hour: 14:32 47.5** Lat: 33.79N Lon: 35.77E Depth: 0 Agency: REL Local  
**Magnitudes: 2.8MC REL**  
**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	320	EP		1432	50.21	-0.03	46						1.0
BHL	BN	17	320	ES		1432	52.26	-0.01							1.0
DQRL	SZ	21	244	EP		1432	50.89	0.02							1.0
RCY	SZ	33	170	EP		1432	52.76	-0.03							1.0
RCY	SN	33	170	ES		1432	56.72	0.01							1.0
HWQ	BZ	57	16	EP		1432	56.66	0.03							1.0

**May 31 2011 Hour: 15:18 0.0**

**Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1519	28.59								
RCY	SZ			EP		1519	26.58								

**May 31 2011 Hour: 15:34 58.7 Lat: 33.80N Lon: 35.79E 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	314	EP		1535	1.50-0.01	42							1.0
BHL	BN	17	314	ES		1535	3.54-0.03								1.0
DQRL	SZ	23	244	EP		1535	2.33-0.05								1.0
DQRL	SN	23	244	ES		1535	5.14 0.06								1.0
RCY	SZ	34	172	EP		1535	4.15 0.00								1.0
RCY	SN	34	172	ES		1535	8.14-0.02								1.0
HWQ	BZ	55	15	EP		1535	7.70 0.04								1.0



# Epicentral Map of Lebanon MAY 2011

