

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

November

2010

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

## REGIONAL AND DISTANT EARTHQUAKES

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

## MACROSEISMIC DATA

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

## MONTHLY EPICENTER MAPS

Maps will be found on the last page.

## ELECTRONIC PUBLICATION

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

## REFERENCES

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

## Abbreviations:

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

LAT: Latitude of epicenter

LON: Longitude of epicenter

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

AGENCY: REL throughout the bulletin, aka. REsearch Lebanon

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

EMSC: Euro-Mediterranean Seismological Centre.

OT: Origin Time

RMS: Root mean square value of travel time residuals

STAT: Station code

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

DIST: Epicenter distance (km)

AZI: Azimuth from source to station

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

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

HR: Hour

MN: Minute

SECON: Seconds

TRES: Residual (seconds)

CODA: Signal duration in seconds

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

PERI: Period where amplitude is measured

BAZ: Back azimuth (station to event)

ARES: Back azimuth residual

VELO: Apparent phase velocity (km/sec)

WT: Weight of phase in the location

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

November 1 2010 Hour: 8:37 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		837	53.70								
HWQ	BZ			EP		837	57.45								

November 1 2010 Hour: 11:3 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		11 3	50.89								
RCY	SZ			EP		11 3	48.94								

November 1 2010 Hour: 11:17 36.2 Lat: 33.79N Lon: 35.77E Depth: 3 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	320	EP		1117	38.97-0.02		36						1.0
DQRL	SZ	21	243	EP		1117	39.63-0.01								1.0
DQRL	SE	21	243	ES		1117	42.16 0.01								1.0
RCY	SZ	33	169	EP		1117	41.63-0.01								1.0
RCY	SN	33	169	ES		1117	45.64 0.00								1.0
HWQ	BZ	57	17	EP		1117	45.41 0.02								1.0

November 1 2010 Hour: 14:17 4.6 Lat: 33.90N Lon: 35.83E Depth: 0 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	270	EP		1417	7.16-0.15		41						1.0
DQRL	SZ	33	228	EP		1417	10.06 0.13								1.0
DQRL	SN	33	228	ES		1417	13.92 0.05								1.0
HWQ	BZ	43	14	EP		1417	11.53 0.04								1.0
HWQ	BN	43	14	ES		1417	16.58 0.00								1.0
RCY	SZ	45	180	EP		1417	11.90-0.02								1.0
RCY	SE	45	180	ES		1417	17.29-0.04								1.0

November 1 2010 Hour: 14:24 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1424	59.86								
RCY	SZ			EP		1425	3.28								

November 1 2010 Hour: 21:39 43.9 Lat: 34.06N Lon: 36.07E Depth: 30 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.1 secs

HERMEL BAALBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	27	334	EP		2139	50.31 0.06		29						1.0
HWQ	BN	27	334	ES		2139	54.90-0.07								1.0
FKH	SZ	37	57	EP		2139	51.40 0.01								1.0
BHL	BZ	42	246	EP		2139	52.10 0.09								1.0
BHL	BN	42	246	ES		2139	58.06 0.04								1.0
DQRL	SZ	61	230	EP		2139	54.27-0.14								1.0

November 2 2010 Hour: 1:10 58.9 Lat: 33.83N Lon: 35.65E Depth: 12 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	8	0	EP		111	1.46-0.04		32						1.0
BHL	BN	8	0	ES		111	3.38-0.05								1.0
DQRL	SZ	16	210	EP		111	2.24-0.02								1.0
DQRL	SN	16	210	ES		111	4.81 0.05								1.0
HWQ	BZ	57	28	EP		111	8.41 0.10								1.0
HWQ	BN	57	28	ES		111	15.32 0.04								1.0
FKH	SZ	84	56	EP		111	12.21-0.07								1.0

November 2 2010 Hour: 11: 7 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		11 8	6.17								
RCY	SZ			EP		11 8	6.49								

November 2 2010 Hour: 12:46 13.3 Lat: 33.49N Lon: 35.61E Depth: 27 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.0 secs

SAIDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	21	88	EP		1246	18.75	-0.01	31						1.0
RCY	SN	21	88	ES		1246	22.80	0.00							1.0
DQRL	SZ	24	350	EP		1246	19.07	0.03							1.0
DQRL	SN	24	350	ES		1246	23.29	0.00							1.0
BHL	BZ	46	5	EP		1246	21.54	-0.07							1.0
HWQ	BZ	93	19	EP		1246	28.15	0.04							1.0

November 2 2010 Hour: 16:40 24.7 Lat: 35.08N Lon: 36.66E Depth: 2 Agency: REL Local  
Magnitudes: 3.1MC REL Rms: 0.1 secs

SYRIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	96	194	EP		1640	40.07	-0.08	60						1.0
FKH	SN	96	194	ES		1640	51.62	0.05							1.0
HWQ	BZ	110	216	EP		1640	42.63	0.08							1.0
HWQ	BN	110	216	ES		1640	55.69	-0.05							1.0
BHL	BZ	160	215	EP		1640	50.02	0.00							1.0
DQRL	SZ	183	214	EP		1640	53.31	0.00							1.0

November 3 2010 Hour: 16:13 53.3 Lat: 33.79N Lon: 35.75E Depth: 2 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	325	EP		1613	55.88	0.01	54						1.0
DQRL	SZ	19	242	EP		1613	56.46	0.03							1.0
DQRL	SN	19	242	ES		1613	58.75	-0.01							1.0
RCY	SZ	33	167	EP		1613	58.67	-0.02							1.0
RCY	SN	33	167	ES		1614	2.69	0.00							1.0
HWQ	BZ	57	18	EP		1614	2.49	-0.03							1.0
FKH	SZ	79	50	EP		1614	6.07	0.02							1.0

November 3 2010 Hour: 18:12 24.5 Agency: REL Distant  
EMSC OT=18:13:10.7 40.03N 13.20E 468Km mb=5.1 TYRRHENIAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1817	1.26								
DQRL	SZ			EP		1817	1.93								
HWQ	BZ			EP		1817	2.65								
FKH	SZ			EP		1817	6.45								

November 4 2010 Hour: 10:19 25.5 Lat: 34.27N Lon: 36.87E Depth: 1 Agency: REL Local  
Magnitudes: 3.1MC 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	42	266	EP		1019	32.24	-0.07	66						1.0
FKH	SN	42	266	ES		1019	37.36	0.04							1.0
HWQ	BZ	85	271	EP		1019	39.24	0.07							1.0
HWQ	BN	85	271	ES		1019	49.23	-0.04							1.0
DQRL	SZ	135	243	EP		1019	47.25	0.00							0.2

November 4 2010 Hour: 13:10 5.5

Agency: REL Regional

EMSC OT=13:11:41.7 36.12N 28.23E 40Km ML=3.8 DODECANESE ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1313	16.42								
RCY	SZ			EP		1313	18.56								
FKH	SZ			EP		1313	21.75								

November 4 2010 Hour: 15: 5 55.4 Lat: 33.78N Lon: 35.78E Depth: 0 Agency: REL Local  
Magnitudes: 3.0MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	319	EP		15 5	58.24	-0.06	57						1.0
DQRL	SZ	21	247	EP		15 5	58.84	0.02							1.0
DQRL	SN	21	247	ES		15 6	1.40	0.03							1.0
BEYL	BZ	29	291	EP		15 5	59.90	-0.09							1.0
RCY	SZ	32	171	EP		15 6	0.50	0.00							1.0
RCY	SE	32	171	ES		15 6	4.29	-0.02							1.0
HWQ	BZ	57	15	EP		15 6	4.61	0.02							1.0
FKH	SZ	78	48	EP		15 6	7.88	0.02							1.0

November 5 2010 Hour: 23:54 48.0 Lat: 33.58N Lon: 34.91E Depth: 32 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

OFFSHORE SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	56	157	EP		2354	57.82	-0.09							1.0
NAQL	SE	56	157	ES		2355	5.30	0.05							1.0
DQRL	SZ	63	78	EP		2354	58.96	0.09							1.0
DQRL	SN	63	78	ES		2355	6.86	-0.05							1.0
BHL	BZ	78	63	EP		2355	0.89	0.00	43						1.0
HWQ	BZ	123	51	EP		2355	6.54	0.00							1.0

November 6 2010 Hour: 13:56 13.3 Lat: 33.35N Lon: 35.35E Depth: 0 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
DQRL	SZ	45	28	EP		1356	20.39	-0.08	56						1.0
DQRL	SN	45	28	ES		1356	25.79	-0.02							1.0
RCY	SZ	48	70	EP		1356	21.06	-0.01	58						1.0
RCY	SN	48	70	ES		1356	26.86	0.01							1.0
BHL	BZ	68	25	EP		1356	24.30	0.09							1.0
HWQ	BZ	117	28	EP		1356	32.15	0.00							1.0
HWQ	BN	117	28	ES		1356	46.13	0.01							1.0

November 7 2010 Hour: 7:53 51.6 Lat: 33.49N Lon: 35.98E Depth: 12 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
RCY	SZ	14	272	EP		753	54.83	0.01	32						1.0
RCY	SN	14	272	ES		753	57.17	-0.02							1.0
DQRL	SZ	45	302	EP		753	59.26	0.02							1.0
DQRL	SN	45	302	ES		754	4.88	0.00							1.0
BHL	BZ	55	326	EP		754	0.78	-0.01							1.0
HWQ	BZ	87	358	EP		754	5.55	0.00							1.0

November 7 2010 Hour: 8:34 20.5 Lat: 34.50N Lon: 36.75E Depth: 0 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	42	228	EP		834	27.15	-0.05	51						1.0
FKH	SN	42	228	ES		834	32.18	-0.01							1.0
HWQ	BZ	78	252	EP		834	33.00	0.01							1.0
HWQ	BN	78	252	ES		834	42.30	0.04							1.0
BHL	BZ	120	237	EP		834	39.75	-0.12							1.0

RCY	SZ	139	218	EP		834	42.97	0.08										1.0
DQRL	SZ	140	231	EP		834	42.97	0.05										1.0

**November 8 2010 Hour: 9:2 14.3 Lat: 33.84N Lon: 35.89E Depth: 10 Agency: REL Local**  
**Magnitudes: 3.1MC REL Rms: 0.0 secs**

**CENTRAL BEKAA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	23	288	EP		9	2	18.38-0.04	65						1.0
DQRL	SZ	33	243	EP		9	2	20.00 0.04	66						1.0
DQRL	SN	33	243	ES		9	2	24.20 0.03							1.0
BEYL	BZ	37	275	EP		9	2	20.45-0.02							0.2
RCY	SZ	39	188	EP		9	2	20.78-0.03							1.0
HWQ	BZ	49	6	EP		9	2	22.30-0.04							1.0
HWQ	BN	49	6	ES		9	2	28.35 0.04							1.0
FKH	SZ	66	47	EP		9	2	25.03 0.01							1.0

**November 8 2010 Hour: 10:35 33.6 Lat: 34.41N Lon: 36.85E Depth: 0 Agency: REL Local**  
**Magnitudes: 3.1MC REL Rms: 0.0 secs**

**NEBEK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	44	246	EP		1035	40.75-0.05		67						1.0
FKH	SE	44	246	ES		1035	46.11 0.01								1.0
HWQ	BZ	84	260	EP		1035	47.25 0.00								1.0
BHL	BZ	124	243	EP		1035	53.61 0.02								1.0
DQRL	SZ	142	237	EP		1035	56.38 0.02								1.0
DQRL	SN	142	237	ES		1036	13.16-0.01								1.0

**November 8 2010 Hour: 11:47 52.7 Lat: 34.69N Lon: 33.93E Depth: 32 Agency: REL Regional**  
**Magnitudes: 3.6MC REL Rms: 0.4 secs**

**EMSC OT=11:47:52.1 34.73N 33.92E 30Km ML=3.7 CYPRUS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	182	118	EP		1148	17.90-0.63		108						1.0
DQRL	SZ	187	125	EP		1148	18.56-0.64								1.0
HWQ	BZ	191	103	EP		1148	19.91 0.16								1.0
NAQL	SZ	208	147	EP		1148	21.92 0.22								1.0
RCY	SZ	221	126	EP		1148	23.70 0.28								1.0
FKH	SZ	234	102	EP		1148	25.57 0.56								1.0

**November 8 2010 Hour: 13:33 17.1 Lat: 33.88N Lon: 36.73E Depth: 27 Agency: REL Local**  
**Magnitudes: 3.1MC 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	50	324	EP		1333	26.06 0.09		63						1.0
FKH	SN	50	324	ES		1333	32.50-0.02								1.0
HWQ	BZ	85	301	EP		1333	30.68-0.14								1.0
HWQ	BN	85	301	ES		1333	40.98 0.02								1.0
RCY	SZ	94	243	EP		1333	31.98-0.11								1.0
DQRL	SZ	109	260	EP		1333	34.52 0.16								1.0

**November 9 2010 Hour: 10:16 0.0 Agency: REL Regional**

**EMSC OT=10:16:01.7 34.96N 27.59E 10Km ML=3.0 EASTERN MED SEA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1016	35.24								
RCY	SZ			EP		1016	36.00								

**November 10 2010 Hour: 10:56 34.0 Lat: 33.78N Lon: 35.77E Depth: 0 Agency: REL Local**  
**Magnitudes: 2.9MC REL Rms: 0.0 secs**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	322	EP		1056	36.72-0.06		53						1.0
DQRL	SZ	20	245	EP		1056	37.25-0.02								1.0
DQRL	SN	20	245	ES		1056	39.72 0.03								1.0
BEYL	BZ	27	291	EP		1056	38.43 0.01								1.0
RCY	SZ	32	169	EP		1056	39.21 0.01								1.0



RCY	SN	32	169	ES		1056	43.04	-0.01										1.0
HWQ	BZ	57	17	EP		1056	43.30	0.04										1.0

November 10 2010 Hour: 12:2 0.0

Agency: REL Distant

EMSC OT=11:43:43.5 28.92S 178.24W 179Km mb=5.2 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		12	3	13.63							
BHL	BZ			EP		12	3	14.85							

November 10 2010 Hour: 12:37 55.9 Lat: 33.76N Lon: 35.93E Depth: 1 Agency: REL Local

Magnitudes: 2.8MC REL

Rms: 0.0 secs

CENTRAL BEKAA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	30	301	EP		1238		0.72-0.03							1.0
RCY	SZ	31	197	EP		1238		0.88-0.02	46						1.0
RCY	SE	31	197	ES		1238		4.63 0.01							1.0
DQRL	SZ	34	259	EP		1238		1.44 0.03							1.0
HWQ	BZ	57	1	EP		1238		5.08 0.01							1.0
HWQ	BN	57	1	ES		1238		11.89 0.01							1.0

November 10 2010 Hour: 13:19 12.6 Lat: 34.57N Lon: 36.37E Depth: 3 Agency: REL Local

Magnitudes: 3.1MC REL

Rms: 0.2 secs

HERMEL BAALBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	36	174	EP		1319		18.28-0.17	64						1.0
FKH	SE	36	174	ES		1319		22.87 0.06							1.0
HWQ	BZ	51	230	EP		1319		20.55-0.23							1.0
HWQ	BN	51	230	ES		1319		26.98 0.11							1.0
BHL	BZ	99	222	EP		1319		28.66 0.10							1.0
DQRL	SZ	121	218	EP		1319		32.22 0.15							1.0
DQRL	SN	121	218	ES		1319		46.32-0.19							1.0
RCY	SZ	129	203	EP		1319		33.43 0.17							1.0

November 10 2010 Hour: 15:46 8.6 Lat: 33.79N Lon: 35.79E Depth: 6 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	315	EP		1546		11.75-0.01	41						1.0
BHL	BE	18	315	ES		1546		14.07 0.01							1.0
DQRL	SZ	22	245	EP		1546		12.45 0.00							1.0
RCY	SZ	33	173	EP		1546		14.08 0.00							1.0
RCY	SE	33	173	ES		1546		18.09-0.01							1.0
HWQ	BZ	56	15	EP		1546		17.76 0.00							1.0

November 12 2010 Hour: 14:21 20.1 Lat: 34.60N Lon: 36.38E 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	SZ	39	175	EP		1421		26.27-0.13	52						1.0
FKH	SE	39	175	ES		1421		31.13 0.05							1.0
HWQ	BZ	53	228	EP		1421		28.54-0.07							1.0
HWQ	BN	53	228	ES		1421		34.87-0.07							1.0
BHL	BZ	102	221	EP		1421		36.41-0.04							1.0
DQRL	SZ	124	217	EP		1421		40.29 0.29							1.0
DQRL	SN	124	217	ES		1421		54.75-0.01							1.0
RCY	SZ	132	202	EP		1421		41.26-0.02							1.0

November 13 2010 Hour: 12:30 40.1 Lat: 33.78N Lon: 35.77E Depth: 1 Agency: REL Local

Magnitudes: 2.9MC REL

Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	321	EP		1230		42.85 0.01							1.0
DQRL	SZ	21	245	EP		1230		43.43 0.02	54						1.0
DQRL	SN	21	245	ES		1230		45.86-0.02							1.0

RCY	SZ	33	169	EP		1230	45.33	-0.02									1.0
RCY	SE	33	169	ES		1230	49.27	0.01									1.0
HWQ	BZ	57	17	EP		1230	49.27	-0.01									1.0

**November 13 2010 Hour: 13:7 41.2 Lat: 33.93N Lon: 35.76E 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	11	255	EP		13	7	43.24	0.00	33					1.0
BHL	BN	11	255	ES		13	7	44.78	0.00						1.0
DQRL	SZ	31	216	EP		13	7	46.22	-0.01						1.0
HWQ	BZ	42	23	EP		13	7	48.11	0.02						1.0
HWQ	BE	42	23	ES		13	7	53.20	-0.02						1.0
RCY	SZ	48	172	EP		13	7	49.07	0.00						1.0

**November 13 2010 Hour: 13:22 47.5 Lat: 33.79N Lon: 35.75E Depth: 4 Agency: REL Local**  
**Magnitudes: 2.5MC REL Rms: 0.0 secs**

**BEIRUT REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	326	EP		1322	50.19	-0.02	32						1.0
BHL	BE	16	326	ES		1322	52.23	0.01							1.0
DQRL	SZ	19	242	EP		1322	50.68	0.01							1.0
RCY	SZ	33	166	EP		1322	52.90	-0.01							1.0
RCY	SE	33	166	ES		1322	56.93	0.01							1.0
HWQ	BZ	58	18	EP		1322	56.84	0.01							1.0

**November 13 2010 Hour: 21:50 25.3 Agency: REL Regional**  
**EMSC OT=21:53:33.4 36.86N 31.30E 100Km ML=3.8 WESTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2154	41.50								
BHL	BZ			EP		2154	41.16								
DQRL	SZ			EP		2154	42.67								
NAQL	SZ			EP		2154	44.82								

**November 14 2010 Hour: 18:48 13.2 Lat: 33.13N Lon: 35.44E Depth: 0 Agency: REL Local**  
**Magnitudes: 3.5MC REL Rms: 0.1 secs**

**SOUTH LEBANON**

**Earthquake was felt**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	65	10	EP		1848	23.79	0.05	111						1.0
DQRL	SN	65	10	ES		1848	31.43	-0.08							1.0
BEYL	BZ	83	3	EP		1848	26.48	-0.08							1.0
BHL	BZ	88	13	EP		1848	27.44	-0.04	114						1.0
BHL	BN	88	13	ES		1848	37.99	-0.02							1.0
HWQ	BZ	136	20	EP		1848	35.12	-0.02							1.0
FKH	SZ	153	36	EP		1848	37.71	0.05							1.0

**November 14 2010 Hour: 23:6 0.9 Agency: REL Regional**  
**EMSC OT=23:08:26.4 36.58N 36.02E 1Km ML=4.9 TURKEY-SYRIA BORDER**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		23	9	5.45							
FKH	SZ			EP		23	9	7.51							
BHL	BZ			EP		23	9	10.69							
BEYL	BZ			EP		23	9	13.35							
DQRL	SZ			EP		23	9	13.57							

**November 15 2010 Hour: 8:56 0.0 Agency: REL Local**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		856	44.62								
HWQ	BZ			EP		856	51.79								

November 15 2010 Hour: 8:58 13.1 Lat: 34.37N Lon: 36.77E Depth: 0 Agency: REL Local  
Magnitudes: 3.2MC 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	35	247	EP		858	18.70	-0.15							1.0
HWQ	BZ	76	263	EP		858	25.49	0.09	71						1.0
HWQ	BE	76	263	ES		858	34.49	0.01							1.0
BHL	BZ	115	244	EP		858	31.59	-0.04							1.0
RCY	SZ	129	222	EP		858	34.07	0.07							1.0
RCY	SE	129	222	ES		858	49.42	-0.01							1.0
DQRL	SZ	133	237	EP		858	34.54	0.02							1.0
DQRL	SN	133	237	ES		858	50.36	0.02							1.0

November 15 2010 Hour: 10:7 21.9 Lat: 34.06N Lon: 35.67E Depth: 12 Agency: REL Local  
Magnitudes: 3.0MC REL Rms: 0.0 secs

KESROUANE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	186	EP		107	25.38	-0.05	62						1.0
BHL	BN	17	186	ES		107	28.04	0.02							1.0
HWQ	BZ	35	46	EP		107	27.96	-0.01	55						1.0
HWQ	BN	35	46	ES		107	32.42	-0.02							1.0
DQRL	SZ	40	194	EP		107	28.82	0.05							1.0
RCY	SZ	64	166	EP		107	32.43	-0.06							1.0
FKH	SZ	71	73	EP		107	33.54	0.06							1.0

November 15 2010 Hour: 11:59 10.5 Lat: 34.05N Lon: 35.72E Depth: 15 Agency: REL Local  
Magnitudes: 2.4MC REL Rms: 0.1 secs

KESROUANE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	200	EP		1159	14.41	0.07	26						1.0
BHL	BN	18	200	ES		1159	17.18	-0.01							1.0
HWQ	BZ	33	40	EP		1159	16.30	-0.04							1.0
DQRL	SZ	41	200	EP		1159	17.56	0.04							1.0
DQRL	SE	41	200	ES		1159	22.63	-0.08							1.0
RCY	SZ	63	170	EP		1159	20.75	0.03							1.0

November 15 2010 Hour: 14:31 3.1 Lat: 33.91N Lon: 35.82E Depth: 0 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	269	EP		1431	5.62	0.00	37						1.0
DQRL	SZ	32	226	EP		1431	8.37	0.04							1.0
DQRL	SN	32	226	ES		1431	12.18	-0.02							1.0
HWQ	BZ	43	15	EP		1431	9.95	-0.01							1.0
RCY	SZ	46	179	EP		1431	10.48	0.02							1.0
RCY	SE	46	179	ES		1431	15.89	-0.02							1.0

November 16 2010 Hour: 2:32 2.2 Lat: 33.12N Lon: 35.45E Depth: 2 Agency: REL Local  
Magnitudes: 4.0MC REL Rms: 0.4 secs

SOUTH LEBANON

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	29	270	EP		232	6.77	-0.05							1.0
DQRL	SZ	66	10	EP		232	12.63	-0.25							1.0
DQRL	SN	66	10	ES		232	20.74	-0.03							1.0
BEYL	BZ	84	3	EP		232	16.41	0.71							1.0
BHL	BZ	89	12	EP		232	16.35	-0.25	232						1.0
BHL	BN	89	12	ES		232	27.08	-0.18							1.0
HWQ	BZ	137	20	EP		232	24.34	0.24							1.0
HWQ	BE	137	20	ES		232	40.16	-0.14							1.0
FKH	SZ	154	35	EP		232	26.71	0.12							1.0

November 16 2010 Hour: 6:2 0.0

Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		6 2	23.36								
FKH	SZ			EP		6 2	20.51								

November 16 2010 Hour: 10:12 27.0

Agency: REL Distant

EMSC OT=10:10:44.8 51.76N 159.22E 10Km mb=5.8 EAST KAMCHATKA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1022	58.80								
HWQ	BZ			EP		1022	59.02								
BHL	BZ			EP		1023	1.66								
BEYL	BZ			EP		1023	2.15								
DQRL	SZ			EP		1023	3.09								
RCY	SZ			EP		1023	3.36								

November 16 2010 Hour: 10:48 12.7

Agency: REL Regional

EMSC OT=10:50:34.5 37.35N 36.37E 10Km mb=4.5 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1051	23.05								
FKH	SZ			EP		1051	23.37								
BHL	BZ			EP		1051	28.27								
DQRL	SZ			EP		1051	31.39								
RCY	SZ			EP		1051	34.62								

November 20 2010 Hour: 11:32 43.1 Lat: 33.96N Lon: 35.74E Depth: 10 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	10	229	EP		1132	45.61	0.04	38						1.0
DQRL	SZ	33	208	EP		1132	48.51	-0.13							1.0
DQRL	SN	33	208	ES		1132	52.80	0.03							1.0
HWQ	BZ	40	29	EP		1132	49.73	-0.03							1.0
RCY	SZ	53	170	EP		1132	51.96	0.19							1.0
RCY	SN	53	170	ES		1132	58.12	-0.10							1.0

November 20 2010 Hour: 13:50 25.1 Lat: 33.79N Lon: 35.78E Depth: 0 Agency: REL Local

Magnitudes: 2.9MC REL

Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	316	EP		1350	27.79	-0.03	53						1.0
BHL	BE	17	316	ES		1350	29.85	0.01							1.0
DQRL	SZ	22	243	EP		1350	28.64	0.01							1.0
BEYL	BZ	28	288	EP		*1350	29.57	-0.03							0.0
RCY	SZ	34	171	EP		1350	30.49	-0.01							1.0
RCY	SE	34	171	ES		1350	34.50	0.00							1.0
HWQ	BZ	56	16	EP		1350	34.09	0.01							1.0

November 20 2010 Hour: 14:29 53.6 Lat: 33.81N Lon: 35.78E Depth: 19 Agency: REL Local

Magnitudes: 2.8MC REL

Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	313	EP		1429	57.62	0.00	48						1.0
DQRL	SZ	22	239	EP		1429	58.34	-0.01							1.0
DQRL	SN	22	239	ES		1430	1.89	0.01							1.0
RCY	SZ	35	171	EP		1430	0.04	0.01							1.0
RCY	SE	35	171	ES		1430	4.80	-0.01							1.0
HWQ	BZ	54	17	EP		1430	2.68	0.02							0.2

November 21 2010 Hour: 9:42 43.3

Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		942	53.54								
DQRL	SZ			EP		942	58.10								
HWQ	BZ			EP		943	8.76								

November 21 2010 Hour: 23:53 34.7 Lat: 33.23N Lon: 35.32E Depth: 1 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.1 secs

**SOUTH LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	21	234	EP		2353	38.10	-0.01	33						1.0
NAQL	SE	21	234	ES		2353	40.65	0.03							1.0
DQRL	SZ	58	23	EP		2353	43.98	-0.04							1.0
DQRL	SN	58	23	ES		2353	50.90	-0.01							1.0
BHL	BZ	81	22	EP		2353	47.71	-0.07							1.0
BHL	BN	81	22	ES		2353	57.39	-0.06							1.0
HWQ	BZ	130	26	EP		2353	55.66	0.00							1.0
HWQ	BN	130	26	ES		2354	11.32	0.17							1.0

November 22 2010 Hour: 10:22 10.7 Lat: 33.68N Lon: 35.89E Depth: 7 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

**CENTRAL BEKAA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	21	194	EP		1022	14.24	-0.12							1.0
RCY	SN	21	194	ES		1022	17.13	0.05							1.0
DQRL	SZ	30	275	EP		1022	15.69	-0.01							1.0
DQRL	SN	30	275	ES		1022	19.47	0.06							1.0
BHL	BZ	33	318	EP		1022	16.13	-0.07	45						1.0
HWQ	BZ	66	4	EP		1022	21.46	-0.03							1.0
FKH	SZ	79	37	EP		1022	23.66	0.19							1.0
FKH	SN	79	37	ES		1022	32.85	-0.08							1.0

November 22 2010 Hour: 15:43 55.9 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	319	EP		1543	58.64	-0.07	43						1.0
BHL	BN	17	319	ES		1544	0.76	0.01							1.0
DQRL	SZ	21	244	EP		1543	59.40	0.03							1.0
BEYL	BZ	28	289	EP		1544	0.43	0.01							1.0
RCY	SZ	33	170	EP		1544	1.18	-0.08							1.0
RCY	SN	33	170	ES		1544	5.23	0.04							1.0
HWQ	BZ	57	16	EP		1544	5.11	0.04							1.0

November 22 2010 Hour: 16:38 0.0 Agency: REL Distant  
EMSC OT=16:18:41.0 33.48S 178.29W 2Km mb=5.7 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1638	30.36								
HWQ	BZ			EP		1638	29.96								

November 23 2010 Hour: 14:1 58.4 Lat: 33.94N Lon: 35.72E Depth: 9 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.0 secs

**KESROUANE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	7	239	EP		14 2	0.42	-0.02	31						1.0
BHL	BN	7	239	ES		14 2	1.94	0.01							1.0
DQRL	SZ	29	208	EP		14 2	3.44	0.03							1.0
HWQ	BZ	43	29	EP		14 2	5.62	0.01							1.0
RCY	SZ	50	167	EP		14 2	6.64	-0.05							1.0
RCY	SN	50	167	ES		14 2	12.82	0.02							1.0

November 24 2010 Hour: 1:33 0.0

Agency: REL Regional

EMSC OT=01:33:18.0 35.92N 31.08E 20Km ML=3.6 CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ			EP		134	21.89								
HWQ	BZ			EP		134	22.13								

November 24 2010 Hour: 9:48 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		948	39.18								
FKH	SZ			EP		948	31.26								

November 24 2010 Hour: 11:38 35.4 Lat: 34.39N Lon: 36.74E 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	SZ	35	242	EP		1138	40.75	-0.21	59						1.0
FKH	SN	35	242	ES		1138	45.12	0.01							1.0
HWQ	BZ	74	260	EP		1138	47.38	0.03							1.0
HWQ	BN	74	260	ES		1138	56.22	-0.01							1.0
BHL	BZ	114	242	EP		1138	53.86	0.10							1.0
RCY	SZ	130	220	EP		1138	56.35	0.01							1.0
DQRL	SZ	132	235	EP		1138	56.78	0.07							1.0

November 24 2010 Hour: 15:37 45.8 Lat: 33.80N Lon: 35.78E Depth: 12 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	313	EP		1537	49.23	0.00	42						1.0
BHL	BN	17	313	ES		1537	51.77	0.00							1.0
DQRL	SZ	23	242	EP		1537	50.03	0.00							1.0
RCY	SZ	34	172	EP		1537	51.76	0.00							1.0
RCY	SN	34	172	ES		1537	56.18	0.00							1.0
HWQ	BZ	55	16	EP		1537	54.89	0.00							1.0

November 24 2010 Hour: 16:20 9.1 Lat: 33.80N Lon: 35.75E Depth: 0 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	14	323	EP		1620	11.47	0.04	53						1.0
BHL	BN	14	323	ES		1620	13.01	-0.11							1.0
DQRL	SZ	20	237	EP		1620	12.26	-0.04							1.0
BEYL	BZ	25	288	EP		1620	13.26	0.14							1.0
HWQ	BZ	56	19	EP		1620	18.04	-0.12							1.0
HWQ	BN	56	19	ES		1620	24.95	0.12							1.0
FKH	SZ	79	51	EP		1620	21.82	0.01							1.0
FKH	SN	79	51	ES		1620	31.15	-0.03							1.0

November 25 2010 Hour: 10:17 37.7 Lat: 33.14N Lon: 35.44E Depth: 0 Agency: REL Local  
Magnitudes: 3.4MC REL Rms: 0.1 secs

SOUTH LEBANON

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NAQL	SZ	28	264	EP		1017	42.22	-0.04							1.0
RCY	SZ	54	43	EP		1017	46.31	-0.08							1.0
RCY	SN	54	43	ES		1017	52.90	0.09							1.0
DQRL	SZ	64	11	EP		1017	48.01	0.03							1.0
DQRL	SN	64	11	ES		1017	55.55	-0.02							1.0
BEYL	BZ	81	3	EP		1017	50.95	0.16							0.2
BHL	BZ	87	13	EP		1017	51.66	-0.05	98						1.0
HWQ	BZ	134	20	EP		1017	59.48	0.09							1.0
HWQ	BN	134	20	ES		1018	15.34	-0.09							1.0
FKH	SZ	152	36	EP		1018	2.08	0.12							1.0

November 25 2010 Hour: 18:57 47.6 Lat: 34.52N Lon: 36.40E Depth: 0 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.1 secs

HERMEL BAALBEK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	31	178	EP		1857	52.43	-0.07	54						1.0
FKH	SE	31	178	ES		1857	56.16	0.00							1.0
HWQ	BZ	50	237	EP		1857	55.59	0.01							1.0
HWQ	BN	50	237	ES		1858	1.45	-0.07							1.0
BHL	BZ	97	225	EP		1858	3.04	-0.17							1.0
DQRL	SZ	119	221	EP		1858	6.93	0.26							1.0
DQRL	SN	119	221	ES		1858	20.86	0.04							1.0

November 26 2010 Hour: 12:36 0.0 Agency: REL Distant

EMSC OT=12:33:43.0 28.09N 52.51E 10Km Mw=5.6 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1237	22.85								
HWQ	BZ			EP		1237	21.19								

November 27 2010 Hour: 11:35 49.1 Lat: 33.79N Lon: 35.78E Depth: 0 Agency: REL Local

Magnitudes: 3.2MC 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		1135	51.82	0.02							1.0
DQRL	SZ	21	244	EP		1135	52.40	-0.07	78						1.0
DQRL	SN	21	244	ES		1135	54.94	-0.06							1.0
BEYL	BZ	28	289	EP		1135	53.60	0.08							1.0
RCY	SZ	33	170	EP		1135	54.45	0.06							1.0
RCY	SN	33	170	ES		1135	58.32	0.00							1.0
HWQ	BZ	57	16	EP		1135	58.08	-0.09							1.0
HWQ	BN	57	16	ES		1136	4.92	0.01							1.0

November 28 2010 Hour: 15:14 19.6 Lat: 33.80N Lon: 35.76E Depth: 7 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	16	319	EP		1514	22.42	-0.02	37						1.0
BHL	BE	16	319	ES		1514	24.48	-0.04							1.0
DQRL	SZ	21	240	EP		1514	23.13	-0.08							1.0
BEYL	BZ	26	288	EP		1514	24.18	0.15							1.0
RCY	SZ	34	169	EP		1514	25.04	-0.27							1.0
RCY	SN	34	169	ES		1514	29.71	0.20							1.0
HWQ	BZ	56	18	EP		1514	28.76	0.05							1.0

November 29 2010 Hour: 10:32 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1032	56.33								
HWQ	BZ			EP		1033	3.41								

November 29 2010 Hour: 10:48 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1048	56.04								
HWQ	BZ			EP		1049	3.19								

November 30 2010 Hour: 3:35 0.0 Agency: REL Distant

EMSC OT=03:24:42.0 28.45N 139.11E 493Km Mw=6.8 BONIN ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		336	20.88								
HWQ	BZ			EP		336	21.82								





# Epicentral Map of Lebanon

## November 2010

