

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

June

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.

June 1 2010 Hour: 3:39 33.7 Lat: 34.05N Lon: 34.86E Depth: 31 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	75	102	EP		339	46.21	0.05							0.2
DQRL	SZ	76	120	EP		339	46.26	0.00							1.0
HWQ	BZ	103	75	EP		339	49.87	0.01	36						1.0
HWQ	BE	103	75	ES		340	1.82	-0.01							1.0
RCY	SZ	109	124	EP		339	50.57	-0.01							1.0
RCY	SN	109	124	ES		340	3.10	0.01							1.0

June 1 2010 Hour: 5:37 41.4 Lat: 33.26N Lon: 36.07E 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
RCY	SZ	34	321	EP		537	46.94	-0.05	39						1.0
RCY	SN	34	321	ES		537	51.18	0.03							1.0
DQRL	SZ	68	317	EP		537	52.41	0.05							1.0
DQRL	SE	68	317	ES		538	0.48	-0.03							1.0
HWQ	BZ	114	354	EP		537	59.67	0.00							1.0

June 1 2010 Hour: 21:21 41.5 Lat: 33.32N Lon: 35.37E Depth: 3 Agency: REL Local
Magnitudes: 2.4MC 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	47	24	EP		2121	48.96	-0.05							1.0
DQRL	SN	47	24	ES		2121	54.65	0.05							1.0
RCY	SZ	48	66	EP		2121	49.19	0.01							1.0
RCY	SE	48	66	ES		2121	54.90	-0.01							1.0
BHL	BZ	70	22	EP		2121	52.79	0.03							1.0
BHL	BN	70	22	ES		2122	1.08	-0.04							1.0
HWQ	BZ	119	27	EP		2122	0.66	0.01	24						1.0

June 1 2010 Hour: 21:22 9.2 Lat: 33.31N Lon: 35.42E 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	231	EP		2122	14.66	0.01							1.0
RCY	SZ	44	62	EP		2122	16.28	-0.02							1.0
RCY	SE	44	62	ES		2122	21.55	0.01							1.0
DQRL	SZ	46	18	EP		2122	16.54	-0.11							1.0
DQRL	SN	46	18	ES		2122	22.16	0.02							1.0
BHL	BZ	69	18	EP		2122	20.48	0.07	78						1.0
HWQ	BZ	118	24	EP		2122	28.25	0.01							1.0

June 1 2010 Hour: 21:23 28.4 Lat: 33.37N Lon: 35.50E Depth: 27 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	34	66	EP		2123	35.41	0.05	27						1.0
RCY	SE	34	66	ES		2123	40.48	-0.03							1.0
DQRL	SZ	38	10	EP		2123	35.65	-0.08							1.0
DQRL	SN	38	10	ES		2123	41.18	0.02							1.0
BHL	BZ	61	14	EP		2123	38.81	0.04							1.0
HWQ	BZ	109	22	EP		2123	45.52	-0.01							1.0

June 1 2010 Hour: 21:34 17.6 Lat: 33.37N Lon: 35.42E Depth: 6 Agency: REL Local
Magnitudes: 2.9MC 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	40	21	EP		2134	24.19	-0.02							1.0
DQRL	SN	40	21	ES		2134	29.11	0.00							1.0
RCY	SZ	42	69	EP		2134	24.43	0.00	50						1.0

RCY	SN	42	69	ES	2134	29.48	0.00										1.0
BHL	BZ	64	20	EP	2134	27.96	0.02										1.0
HWQ	BZ	113	26	EP	2134	35.68	0.00										1.0

June 1 2010 Hour: 22:51 56.6 Lat: 33.34N Lon: 35.42E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	43	66	EP		2252	3.53	0.01							1.0
RCY	SE	43	66	ES		2252	8.61	-0.01							1.0
DQRL	SZ	43	20	EP		2252	3.54	-0.01							1.0
DQRL	SN	43	20	ES		2252	8.69	0.02							1.0
BHL	BZ	66	19	EP		2252	7.27	-0.04	48						1.0
HWQ	BZ	115	25	EP		2252	15.21	0.04							1.0
HWQ	BE	115	25	ES		2252	28.88	-0.01							1.0

June 1 2010 Hour: 23:32 34.9 Lat: 33.35N Lon: 35.40E Depth: 2 Agency: REL Local
Magnitudes: 2.8MC 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	43	22	EP		2332	41.72	-0.05	43						1.0
DQRL	SN	43	22	ES		2332	46.87	0.01							1.0
RCY	SZ	44	68	EP		2332	41.99	-0.02							1.0
RCY	SE	44	68	ES		2332	47.29	0.01							1.0
BHL	BZ	66	21	EP		2332	45.58	0.06							1.0
BHL	BN	66	21	ES		2332	53.39	0.00							1.0
HWQ	BZ	115	26	EP		2332	53.41	0.01							1.0
HWQ	BN	115	26	ES		2333	7.08	-0.02							1.0

June 2 2010 Hour: 9:13 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		914	18.83								
RCY	SZ			EP		914	8.71								

June 3 2010 Hour: 6:14 59.7 Lat: 33.97N Lon: 35.82E Depth: 3 Agency: REL Local
Magnitudes: 2.4MC 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	247	EP		615	2.55	0.01	27						1.0
BHL	BE	17	247	ES		615	4.64	0.00							1.0
HWQ	BZ	37	18	EP		615	5.65	-0.02							1.0
HWQ	BN	37	18	ES		615	10.08	0.01							1.0
DQRL	SZ	37	219	EP		615	5.74	0.01							1.0
DQRL	SN	37	219	ES		615	10.17	-0.01							1.0

June 3 2010 Hour: 6:47 47.0 Lat: 34.18N Lon: 35.43E Depth: 0 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	37	146	EP		647	52.92	-0.01							1.0
BHL	BN	37	146	ES		647	57.35	0.02							1.0
HWQ	BZ	49	77	EP		647	54.81	0.01	49						1.0
HWQ	BN	49	77	ES		648	0.57	-0.02							1.0
DQRL	SZ	54	166	EP		647	55.67	-0.06							1.0
RCY	SZ	85	154	EP		648	0.69	0.07							1.0
RCY	SN	85	154	ES		648	10.70	-0.02							1.0

June 3 2010 Hour: 9:24 16.0 Agency: REL Distant
EMSC OT=09:24:16.0 04.74N 95.73E 73Km mb=5.5 NORTHERN SUMATRA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		934	33.39								
HWQ	BZ			EP		934	33.63								
BHL	BZ			EP		934	34.81								
DQRL	SZ			EP		934	34.42								

June 3 2010 Hour: 16:38 30.2 Lat: 33.63N Lon: 35.98E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	20	223	EP		1638	33.33	-0.05							1.0
DQRL	SZ	39	283	EP		1638	36.59	0.08							1.0
DQRL	SN	39	283	ES		1638	41.21	0.03							1.0
BHL	BZ	43	316	EP		1638	37.11	-0.06	49						1.0
BEYL	BZ	53	301	EP	*	1638	40.35	1.64							0.0
HWQ	BZ	72	357	EP		1638	41.79	-0.08							1.0
HWQ	BN	72	357	ES		1638	50.50	-0.01							1.0
FKH	SZ	79	30	EP		1638	43.08	0.10							1.0

June 5 2010 Hour: 5:22 5.0 Agency: REL Distant
EMSC OT=05:22:05.0 43.47N 146.76E 76Km Mw=5.5 KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		534	7.57								
BHL	BZ			EP		534	10.29								
RCY	SZ			EP		534	11.59								
DQRL	SZ			EP		534	11.64								

June 5 2010 Hour: 10:22 54.7 Lat: 33.79N Lon: 35.77E 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	17	320	EP		1022	57.45	-0.01							1.0
DQRL	SZ	21	244	EP		1022	58.02	-0.02							1.0
DQRL	SN	21	244	ES		1023	0.55	0.02							1.0
RCY	SZ	33	169	EP		1022	59.99	0.01	54						1.0
RCY	SE	33	169	ES		1023	3.90	-0.01							1.0
HWQ	BZ	57	17	EP		1023	3.87	0.01							1.0

June 5 2010 Hour: 14:47 1.5 Lat: 33.78N Lon: 35.78E Depth: 5 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.0 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	320	EP		1447	4.56	0.00							1.0
DQRL	SZ	21	246	EP		1447	5.07	0.02							1.0
DQRL	SN	21	246	ES		1447	7.69	-0.01							1.0
RCY	SZ	32	170	EP		1447	6.77	-0.02	42						1.0
RCY	SN	32	170	ES		1447	10.72	0.01							1.0
HWQ	BZ	57	16	EP		1447	10.78	0.00							1.0

June 6 2010 Hour: 12:21 0.3 Agency: REL Regional
EMSC OT=12:21:00.3 35.41N 24.75E 68Km ML=4.5 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1223	5.16								
BHL	BZ			EP		1223	5.14								
HWQ	BZ			EP		1223	7.93								
RCY	SZ			EP		1223	8.98								

June 6 2010 Hour: 14:31 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1431	36.10								
DQRL	SZ			EP		1431	37.64								

June 6 2010 Hour: 14:33 12.8 Lat: 33.42N Lon: 35.63E Depth: 11 Agency: REL Local
Magnitudes: 2.4MC REL Rms: 0.0 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	21	67	EP		1433	16.79	0.01	27						1.0
RCY	SN	21	67	ES		1433	19.71	0.00							1.0
DQRL	SZ	32	350	EP		1433	18.33	0.00							1.0

DQRL	SE	32	350	ES		1433	22.41	0.00											1.0
BHL	BZ	53	2	EP		1433	21.66	0.00											1.0

June 7 2010 Hour: 17:46 23.2 Lat: 33.79N 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	321	EP		1746	25.88	-0.04	52						1.0
DQRL	SZ	21	244	EP		1746	26.56	0.03	56						1.0
DQRL	SN	21	244	ES		1746	28.98	0.00							1.0
RCY	SZ	33	169	EP		1746	28.52	-0.02							1.0
RCY	SE	33	169	ES		1746	32.47	0.00							1.0
HWQ	BZ	57	17	EP		1746	32.42	0.03							1.0

June 8 2010 Hour: 4:34 0.9 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		434	35.40								
RCY	SZ			EP		434	35.02								

June 8 2010 Hour: 10:55 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1056	12.66								
RCY	SZ			EP		1056	22.42								

June 8 2010 Hour: 15:13 5.9 Lat: 33.97N Lon: 36.15E Depth: 10 Agency: REL Local
Magnitudes: 2.8MC 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	39	330	EP		1513	12.39	0.01	47						1.0
HWQ	BN	39	330	ES		1513	17.22	0.00							1.0
BHL	BZ	47	261	EP		1513	13.59	-0.04							1.0
RCY	SZ	61	209	EP		1513	15.80	-0.02							1.0
RCY	SN	61	209	ES		1513	23.20	0.01							1.0
DQRL	SZ	62	241	EP		1513	16.02	0.05							1.0

June 8 2010 Hour: 16:0 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		16	0	48.60							
RCY	SZ			EP		16	0	48.80							

June 8 2010 Hour: 18:55 42.4 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1856	14.09								
FKH	SZ			EP		1856	11.08								

June 9 2010 Hour: 1:12 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		113	1.14								
DQRL	SZ			EP		113	2.53								

June 9 2010 Hour: 9:6 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		9	6	49.55							
HWQ	BZ			EP		9	6	56.59							

June 9 2010 Hour: 13:1 41.0 Lat: 34.06N Lon: 35.70E Depth: 1 Agency: REL Local
Magnitudes: 2.6MC 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	193	EP		13	1	43.83	-0.09	34					1.0
BHL	BN	18	193	ES		13	1	46.14	0.03						1.0
HWQ	BZ	33	44	EP		13	1	46.30	0.02						1.0
DQRL	SZ	42	197	EP		13	1	47.74	0.07						1.0
RCY	SZ	64	169	EP		13	1	51.26	-0.06						1.0

RCY SN 64 169 ES 13 1 59.01 0.03 1.0

June 9 2010 Hour: 13:56 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1357	5.59								
RCY	SZ			EP		1357	3.53								

June 9 2010 Hour: 14:40 25.8

Lat: 33.98N Lon: 36.46E 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
HWQ	BZ	58	305	EP		1440	35.16	0.00							1.0
HWQ	BN	58	305	ES		1440	42.08	-0.01							1.0
BHL	BZ	75	264	EP		1440	37.97	0.04							1.0
RCY	SZ	79	227	EP		1440	38.54	0.00	50						1.0
RCY	SN	79	227	ES		1440	47.97	0.00							1.0
DQRL	SZ	88	250	EP		1440	39.97	-0.02							1.0

June 9 2010 Hour: 16:43 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1643	58.41								
FKH	SZ			EP		1643	55.17								

June 9 2010 Hour: 21:16 0.2

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		2116	15.96								
HWQ	BZ			EP		2116	18.62								
DQRL	SZ			EP		2116	13.04								

June 10 2010 Hour: 6:19 16.8

Lat: 34.70N Lon: 36.46E 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
HWQ	BZ	66	226	EP		619	27.41	-0.06	61						1.0
HWQ	BN	66	226	ES		619	35.40	0.02							1.0
BHL	BZ	115	220	EP		619	35.34	0.01							1.0
DQRL	SZ	137	217	EP		619	38.64	0.05							1.0
DQRL	SN	137	217	ES		619	54.71	-0.03							1.0
RCY	SZ	145	204	EP		619	39.78	-0.01							1.0

June 10 2010 Hour: 8:34 48.4

Lat: 34.33N Lon: 36.68E 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	27	248	EP		834	52.76	-0.03	59						1.0
FKH	SN	27	248	ES		834	55.97	-0.04							1.0
HWQ	BZ	68	265	EP		834	59.38	-0.03							1.0
HWQ	BN	68	265	ES		835	7.58	0.05							1.0
RCY	SZ	122	220	EP		835	8.06	0.01							1.0
DQRL	SZ	124	236	EP		835	8.52	0.05							1.0

June 10 2010 Hour: 13:33 47.5

Lat: 33.90N Lon: 35.83E 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	16	270	EP		1333	50.07	-0.02	43						1.0
DQRL	SZ	32	227	EP		1333	52.77	0.03							1.0
DQRL	SE	32	227	ES		1333	56.60	0.01							1.0
HWQ	BZ	43	15	EP		1333	54.48	0.00							1.0
HWQ	BN	43	15	ES		1333	59.62	0.01							1.0
RCY	SZ	45	179	EP		1333	54.82	-0.01							1.0

June 12 2010 Hour: 19:26 46.6 Agency: REL Distant
EMSC OT=19:26:46.6 07.78N 91.89E 10Km Mw=7.5 NICOBAR ISLANDS
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ EP 1936 35.97
 RCY SZ EP 1936 38.32
 HWQ BZ EP 1936 38.89
 BHL BZ EP 1936 39.78
 DQRL SZ EP 1936 40.10
 NAQL SZ EP 1936 40.88

June 13 2010 Hour: 3:32 58.1 Agency: REL Distant
EMSC OT=03:32:58.1 37.45N 141.66E 30Km Mw=6.1 COAST OF HONSHU
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 345 8.86
 BHL BZ EP 345 10.86
 DQRL SZ EP 345 12.38
 RCY SZ EP 345 12.19

June 13 2010 Hour: 9:40 39.3 Lat: 34.27N Lon: 36.74E Depth: 0 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 30 265 EP 940 44.14-0.07 44 1.0
 FKH SN 30 265 ES 940 47.81-0.04 1.0
 HWQ BZ 73 271 EP 940 51.12 0.04 1.0
 HWQ BN 73 271 ES 940 59.85 0.04 1.0
 BHL BZ 108 248 EP 940 56.76 0.04 1.0
 DQRL SZ 125 240 EP 940 59.42 0.00 1.0

June 13 2010 Hour: 9:41 44.9 Lat: 34.31N Lon: 36.65E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC 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 23 251 EP 941 48.61-0.08 48 1.0
 FKH SN 23 251 ES 941 51.48 0.02 1.0
 HWQ BZ 65 267 EP 941 55.46 0.07 1.0
 HWQ BN 65 267 ES 942 3.08-0.03 1.0
 BHL BZ 102 244 EP 942 1.21-0.23 0.2
 DQRL SZ 120 236 EP 942 4.36 0.03 1.0

June 13 2010 Hour: 10:45 0.0 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ EP 1045 45.81
 HWQ BZ EP 1045 52.66

June 15 2010 Hour: 1:23 1.2 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 123 34.35
 DQRL SZ EP 123 37.75

June 15 2010 Hour: 10:40 3.1 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 RCY SZ EP 1040 48.49
 HWQ BZ EP 1040 39.46

June 16 2010 Hour: 3:16 27.4 Agency: REL Distant
EMSC OT=03:16:27.4 02.13S 136.53E 10Km Mw=7.0 COAST OF PAPUA
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 330 13.53
 HWQ BZ EP 330 16.77

June 16 2010 Hour: 5:21 47.0 Agency: REL Regional

EMSC OT=05:21:47.0 33.84N 32.59E 10Km ML=3.6 EASTERN MED SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		522	26.13								
RCY	SZ			EP		522	29.73								
HWQ	BZ			EP		522	30.93								

June 16 2010 Hour: 10:53 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1054	4.35								
RCY	SZ			EP		1054	3.64								

June 16 2010 Hour: 12: 2 32.4 Lat: 34.45N Lon: 36.82E Depth: 0 Agency: REL Local

Magnitudes: 2.8MC 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	44	239	EP		12 2	39.49	-0.03	46						1.0
FKH	SN	44	239	ES		12 2	44.78	0.02							1.0
HWQ	BZ	82	257	EP		12 2	45.76	0.03							1.0
HWQ	BN	82	257	ES		12 2	55.55	-0.02							1.0
BHL	BZ	123	241	EP		12 2	52.42	0.11							0.2
RCY	SZ	139	221	EP		12 2	54.84	-0.02							1.0
DQRL	SZ	142	235	EP		12 2	55.44	0.27							0.2

June 17 2010 Hour: 7:15 0.4 Lat: 33.78N 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	18	319	EP		715	3.15	-0.05							1.0
DQRL	SZ	21	245	EP		715	3.81	0.00	56						1.0
DQRL	SN	21	245	ES		715	6.37	0.03							1.0
RCY	SZ	33	171	EP		715	5.62	0.00							1.0
RCY	SN	33	171	ES		715	9.49	-0.01							1.0
HWQ	BZ	57	16	EP		715	9.58	0.04							1.0

June 17 2010 Hour: 8:48 29.7 Lat: 33.39N Lon: 35.61E Depth: 3 Agency: REL Local

Magnitudes: 2.7MC REL Rms: 0.0 secs

SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	24	60	EP		848	33.62	-0.06	41						1.0
RCY	SN	24	60	ES		848	36.66	0.04							1.0
DQRL	SZ	36	354	EP		848	35.55	0.06							1.0
DQRL	SN	36	354	ES		848	39.72	-0.04							1.0
HWQ	BZ	104	17	EP		848	46.44	0.00							1.0

June 17 2010 Hour: 13: 6 46.7 Agency: REL Distant

EMSC OT=13:06:46.7 33.16S 179.88E 170Km Mw=6.0 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1326	11.84								
BHL	BZ			EP		1326	12.14								
RCY	SZ			EP		1326	12.55								

June 17 2010 Hour: 13:44 20.2 Lat: 33.55N Lon: 35.92E 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
RCY	SZ	10	234	EP		1344	21.77	-0.02	30						1.0
RCY	SN	10	234	ES		1344	23.00	0.01							1.0
DQRL	SZ	37	298	EP		1344	26.17	0.03							1.0
DQRL	SN	37	298	ES		1344	30.56	0.00							1.0
BHL	BZ	47	328	EP		1344	27.63	-0.05							1.0
HWQ	BZ	81	2	EP		1344	33.23	0.02							1.0

June 17 2010 Hour: 20:20 7.1 Lat: 33.40N Lon: 35.46E Depth: 4 Agency: REL Local
Magnitudes: 2.5MC 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	35	17	EP		2020	12.75	-0.03							1.0
DQRL	SN	35	17	ES		2020	17.02	0.00							1.0
RCY	SZ	36	73	EP		2020	12.98	0.01	29						1.0
RCY	SE	36	73	ES		2020	17.35	0.00							1.0
BHL	BZ	58	18	EP		2020	16.56	0.04							1.0
HWQ	BZ	107	25	EP		2020	24.30	-0.02							1.0

June 18 2010 Hour: 2:23 8.5 Agency: REL Distant
EMSC OT=02:23:08.5 44.57N 148.63E 47Km Mw=6.1 KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		235	17.12								
BHL	BZ			EP		235	18.06								
DQRL	SZ			EP		235	20.24								
RCY	SZ			EP		235	19.49								

June 18 2010 Hour: 13:52 21.9 Lat: 33.90N Lon: 35.82E 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	15	270	EP		1352	24.43	0.00							1.0
DQRL	SZ	32	227	EP		1352	27.11	0.02							1.0
DQRL	SN	32	227	ES		1352	30.88	-0.01							1.0
HWQ	BZ	43	16	EP		1352	28.91	-0.01							1.0
RCY	SZ	45	178	EP		1352	29.24	0.01	47						1.0
RCY	SN	45	178	ES		1352	34.61	-0.01							1.0

June 19 2010 Hour: 9:58 7.7 Lat: 34.38N Lon: 36.71E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC 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	32	241	EP		958	12.71	-0.12	42						1.0
FKH	SN	32	241	ES		958	16.69	0.08							1.0
HWQ	BZ	71	261	EP		958	19.18	-0.04							1.0
HWQ	BE	71	261	ES		958	27.72	0.00							1.0
BHL	BZ	111	242	EP		958	25.62	0.00							1.0
RCY	SZ	127	220	EP		958	28.38	0.11							1.0
RCY	SN	127	220	ES		958	43.39	-0.09							1.0
DQRL	SZ	129	235	EP		958	28.66	0.07							1.0

June 19 2010 Hour: 10:28 0.3 Lat: 34.37N Lon: 36.67E Depth: 5 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
HWQ	BZ	68	261	EP		1028	11.29	0.00	57						1.0
HWQ	BN	68	261	ES		1028	19.38	-0.02							1.0
BHL	BZ	107	241	EP		1028	17.73	0.06							1.0
RCY	SZ	124	219	EP		1028	20.10	-0.08							1.0
RCY	SN	124	219	ES		1028	34.89	0.02							1.0
DQRL	SZ	126	234	EP		1028	20.41	0.02							1.0

June 19 2010 Hour: 10:34 27.3 Lat: 33.79N Lon: 35.78E 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	319	EP		1034	30.20	0.02	47						1.0
DQRL	SZ	21	245	EP		1034	30.79	0.01							1.0
DQRL	SN	21	245	ES		1034	33.32	-0.01							1.0
RCY	SZ	33	171	EP		1034	32.62	0.01							1.0
RCY	SE	33	171	ES		1034	36.50	-0.01							1.0

HWQ BZ 57 16 EP 1034 36.49-0.02 1.0

June 19 2010 Hour: 13:11 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1312	23.82								
DQRL	SZ			EP		1312	25.35								

June 19 2010 Hour: 13:31 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1334	33.53								
FKH	SZ			EP		1334	28.00								

June 19 2010 Hour: 14: 1 42.1

Lat: 34.09N Lon: 35.63E Depth: 10 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
BHL	BZ	20	173	EP		14	1	45.81-0.04	34						1.0
BHL	BE	20	173	ES		14	1	48.66 0.02							1.0
HWQ	BZ	36	54	EP		14	1	48.26 0.02							1.0
HWQ	BN	36	54	ES		14	1	52.78-0.01							1.0
DQRL	SZ	43	187	EP		14	1	49.20 0.02							1.0
DQRL	SN	43	187	ES		14	1	54.43-0.01							1.0

June 19 2010 Hour: 17:31 0.0

Lat: 33.70N Lon: 36.03E Depth: 0 Agency: REL Local

Magnitudes: 2.7MC REL Rms: 0.0 secs

MOUNT HERMON REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	29	218	EP		1731	4.72	0.01	40						1.0
RCY	SN	29	218	ES		1731	8.13-0.04								1.0
BHL	BZ	41	303	EP		1731	6.64-0.06								1.0
DQRL	SZ	43	271	EP		1731	6.97 0.08								1.0
DQRL	SN	43	271	ES		1731	11.96 0.00								1.0
HWQ	BZ	64	353	EP		1731	10.42 0.00								1.0

June 19 2010 Hour: 23: 6 11.5

Lat: 33.27N Lon: 35.61E 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
RCY	SZ	33	39	EP		23	6	16.83-0.01	44						1.0
RCY	SE	33	39	ES		23	6	20.80 0.00							1.0
DQRL	SZ	49	356	EP		23	6	19.42 0.04							1.0
DQRL	SN	49	356	ES		23	6	25.23 0.00							1.0
BHL	BZ	71	3	EP		23	6	22.84-0.09							1.0
HWQ	BZ	117	15	EP		23	6	30.36 0.07							1.0

June 19 2010 Hour: 23:14 0.0

Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2314	56.29								
FKH	SZ			EP		2314	52.93								

June 21 2010 Hour: 19:17 48.8

Lat: 35.34N Lon: 36.85E Depth: 4 Agency: REL Local

Magnitudes: 3.6MC REL Rms: 0.0 secs

SYRIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	128	199	EP		1918	9.38	0.05	126						1.0
FKH	SE	128	199	ES		1918	24.49-0.02								1.0
HWQ	BZ	144	215	EP		1918	11.68-0.01								1.0
BHL	BZ	194	215	EP		1918	18.61 0.03								1.0
DQRL	SZ	216	213	EP		1918	21.39 0.00								1.0
RCY	SZ	225	205	EP		1918	22.45-0.06								1.0
RCY	SE	225	205	ES		1918	47.46 0.02								1.0

June 22 2010 Hour: 1:17 54.0 Agency: REL Regional
EMSC OT=01:17:54.0 35.81N 29.66E 10Km ML=3.4 EASTERN MED SEA
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 119 14.26

June 22 2010 Hour: 22:16 21.5 Agency: REL Distant
EMSC OT=22:16:21.5 19.17S 177.54W 571Km Mw=5.8 FIJI REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 2235 0.11
 RCY SZ EP 2235 1.45
 BHL BZ EP 2235 1.21
 DQRL SZ EP 2235 1.91

June 23 2010 Hour: 10:15 0.1 Agency: REL Local
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 1016 2.02
 RCY SZ EP 1015 59.78

June 23 2010 Hour: 15:43 15.1 Lat: 33.91N Lon: 35.49E Depth: 23 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs
BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	92	EP		1543	19.52	0.00	30						1.0
BHL	BN	15	92	ES		1543	22.82	0.00							1.0
DQRL	SZ	24	161	EP		1543	20.41	0.09							1.0
RCY	SZ	56	145	EP		1543	24.47	-0.05							1.0
RCY	SN	56	145	ES		1543	31.51	-0.01							1.0
HWQ	BZ	59	46	EP		1543	24.94	0.01							1.0

June 23 2010 Hour: 23:44 40.9 Lat: 33.76N Lon: 35.94E Depth: 0 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	31	199	EP		2344	45.86	0.01	45						1.0
RCY	SN	31	199	ES		2344	49.49	-0.04							1.0
BHL	BZ	31	301	EP		2344	45.86	-0.07							1.0
DQRL	SZ	35	260	EP		2344	46.71	0.15							1.0
DQRL	SN	35	260	ES		2344	50.77	0.00							1.0
BEYL	BZ	44	287	EP		2344	47.84	-0.07							1.0
HWQ	BZ	58	0	EP		2344	50.18	0.03							1.0

June 24 2010 Hour: 17:27 12.9 Lat: 33.79N Lon: 35.76E 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	322	EP		1727	15.52	-0.03							1.0
DQRL	SZ	20	243	EP		1727	16.21	0.03	40						1.0
DQRL	SN	20	243	ES		1727	18.58	0.00							1.0
RCY	SZ	33	168	EP		1727	18.22	-0.06							1.0
RCY	SE	33	168	ES		1727	22.28	0.03							1.0
HWQ	BZ	57	17	EP		1727	22.11	0.03							1.0

June 25 2010 Hour: 20:12 3.6 Agency: REL Regional
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ BZ EP 2012 55.82
 RCY SZ EP 2012 53.93

June 26 2010 Hour: 9:50 44.5 Agency: REL Distant
EMSC OT=09:50:44.5 08.20S 107.99E 78Km Mw=5.9 JAVA, INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		10	2	46.63							
RCY	SZ			EP		10	2	46.59							
BHL	BZ			EP		10	2	47.56							
DQRL	SZ			EP		10	2	48.10							

June 26 2010 Hour: 12: 4 1.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		12	4	27.35							
BHL	BZ			EP		12	4	24.79							

June 26 2010 Hour: 21:41 24.6 Agency: REL Regional
EMSC OT=21:43:27.2 34.37N 24.70E 60Km mb=4.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2145	33.19								
RCY	SZ			EP		2145	36.14								
HWQ	BZ			EP		2145	36.76								

June 27 2010 Hour: 10: 8 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		10	8	46.86							
RCY	SZ			EP		10	8	44.55							

June 27 2010 Hour: 14: 5 36.6 Lat: 33.97N Lon: 36.17E 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
HWQ	BZ	40	329	EP		14	5	42.94	0.01	54					1.0
HWQ	BN	40	329	ES		14	5	47.65	0.00						1.0
BHL	BZ	48	261	EP		14	5	44.27	-0.05						1.0
BHL	BN	48	261	ES		14	5	50.05	-0.01						1.0
RCY	SZ	61	210	EP		14	5	46.40	-0.03						1.0
RCY	SN	61	210	ES		14	5	53.75	0.01						1.0
DQRL	SZ	63	242	EP		14	5	46.75	0.06						1.0

June 28 2010 Hour: 19: 2 20.0 Lat: 33.67N Lon: 35.75E Depth: 0 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
DQRL	SZ	17	282	EP		19	2	22.80	0.07	43					1.0
DQRL	SN	17	282	ES		19	2	24.71	-0.01						1.0
RCY	SZ	21	157	EP		19	2	23.54	0.04						1.0
RCY	SE	21	157	ES		19	2	25.99	-0.07						1.0
BHL	BZ	27	342	EP		19	2	24.31	-0.06						1.0
BHL	BN	27	342	ES		19	2	27.54	-0.04						1.0
HWQ	BZ	69	15	EP		19	2	31.31	0.07						1.0

June 29 2010 Hour: 9:33 33.4 Lat: 34.38N Lon: 36.69E Depth: 0 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
FKH	SZ	30	240	EP		933	38.20	-0.02	49						1.0
FKH	SN	30	240	ES		933	41.82	0.01							1.0
HWQ	BZ	70	261	EP		933	44.63	0.02							1.0
HWQ	BN	70	261	ES		933	52.91	-0.02							1.0
RCY	SZ	126	219	EP		933	53.68	-0.01							1.0
DQRL	SZ	128	235	EP		933	54.00	0.01							1.0

June 29 2010 Hour: 12:23 35.1 Lat: 34.10N Lon: 35.48E Depth: 4 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.0 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	27	144	EP		12	2	39.51-0.02	40						1.0
BHL	BN	27	144	ES		12	2	42.81	0.00						1.0
DQRL	SZ	45	169	EP		12	2	42.31-0.03							1.0
DQRL	SE	45	169	ES		12	2	47.71	0.03						1.0
HWQ	BZ	47	65	EP		12	2	42.80	0.04						1.0
HWQ	BE	47	65	ES		12	2	48.40-0.02							1.0
RCY	SZ	75	154	EP		12	2	47.16	0.00						1.0

June 30 2010 Hour: 4:31 0.6 Agency: REL Distant

EMSC OT=04:31:00.6 23.24S 179.24E 556Km Mw=6.3 SOUTH OF FIJI ISLS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		449	36.41								
FKH	SZ			EP		449	37.20								
BHL	BZ			EP		449	37.64								
RCY	SZ			EP		449	38.12								

June 30 2010 Hour: 15:12 37.8 Lat: 33.92N Lon: 35.83E Depth: 1 Agency: REL Local

Magnitudes: 2.8MC REL Rms: 0.1 secs

BEIRUT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	266	EP		1512	40.30-0.03	49							1.0
BHL	BN	16	266	ES		1512	42.24	0.01							1.0
DQRL	SZ	33	225	EP		1512	43.20	0.10							1.0
DQRL	SN	33	225	ES		1512	47.00-0.05								1.0
HWQ	BZ	42	16	EP		1512	44.51	0.00							1.0
RCY	SZ	46	179	EP		1512	45.17-0.08								1.0
RCY	SN	46	179	ES		1512	50.85	0.05							1.0

June 30 2010 Hour: 17:41 4.2 Lat: 33.79N 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	16	321	EP		1741	6.87	0.00	56						1.0
DQRL	SZ	21	243	EP		1741	7.52	0.00							1.0
RCY	SZ	33	169	EP		1741	9.56-0.01								1.0
RCY	SN	33	169	ES		1741	13.53	0.00							1.0
HWQ	BZ	57	17	EP		1741	13.38	0.03							1.0
HWQ	BN	57	17	ES		1741	20.09-0.02								1.0

June 30 2010 Hour: 22:51 0.0 Agency: REL Local

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2252	13.58								
RCY	SZ			EP		2252	14.38								

Epicentral Map of Lebanon

JUNE 2010

