

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

April

2015

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	Nov2000-Sep2012
FKH	3414.69N	3624.61E	1152	FAKEHEH	Opened Dec 2004
RCY	3329.79N	3550.14E	1370	RACHAYA	Opened Jun 2006
BEYL	3352.30N	3529.59E	49	BEIRUT	Opened Jul 2006
NAQL	3307.02N	3508.46E	83	NAQOURA	Jul2008-Jan2012
DQRL	3342.34N	3534.21E	963	DEIR QAMAR	Opened Mar 2010
QRWL	3332.86N	3540.93E	875	QARAOUN	Opened Oct 2011
SHBL	3320.90N	3544.63E	1422	CHEBAA	Opened Oct 2011

## REGIONAL AND DISTANT EARTHQUAKES

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

## MACROSEISMIC DATA

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

## MONTHLY EPICENTER MAPS

Maps will be found on the last page.

## ELECTRONIC PUBLICATION

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

## REFERENCES

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

## Abbreviations:

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

LAT: Latitude of epicenter

LON: Longitude of epicenter

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

AGENCY: REL throughout the bulletin, aka. REsearch Lebanon

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

EMSC: Euro-Mediterranean Seismological Centre.

OT: Origin Time

RMS: Root mean square value of travel time residuals

STAT: Station code

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

DIST: Epicenter distance (km)

AZI: Azimuth from source to station

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

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

HR: Hour

MN: Minute

SECON: Seconds

TRES: Residual (seconds)

CODA: Signal duration in seconds

AMPL: Ground Amplitude ( $0.5 * (\text{peak to peak})$ ), (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.

April 2 2015 Hour: 4: 8 26.4 Lat: 33.66N Lon: 35.52E Depth: 40 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.0 secs

CHOUF REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	7	38	EP		4 8	32.67	0.01	48						1.0
DQRL	SN	7	38	ES		4 8	37.30	0.02							1.0
QRWL	SZ	19	129	EP		4 8	33.16	-0.01							1.0
BHL	BZ	30	24	EP		4 8	33.96	-0.06							1.0
RCY	SZ	34	121	EP		4 8	34.43	0.02							1.0
RCY	SN	34	121	ES		4 8	40.31	-0.01							1.0
HWQ	SZ	79	29	EP		4 8	39.52	0.03							1.0

April 2 2015 Hour: 4:10 11.0 Agency: REL Distant

EMSC OT=04:10:11.0 17.87S 178.61W 560Km M=5.9 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		428	45.59								
RCY	SZ			EP		428	46.87								
BHL	BZ			EP		428	48.06								

April 2 2015 Hour: 14:37 46.3 Lat: 33.79N Lon: 35.78E Depth: 5 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.0 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	318	EP		1437	49.20	-0.02							1.0
DQRL	SZ	21	243	EP		1437	49.93	0.02	43						1.0
DQRL	SN	21	243	ES		1437	52.57	0.00							1.0
RCY	SZ	33	170	EP		1437	51.78	-0.03							1.0
RCY	SN	33	170	ES		1437	55.89	0.02							1.0
HWQ	SZ	56	16	EP		1437	55.47	0.02							1.0

April 2 2015 Hour: 15:13 26.4 Agency: REL Regional

EMSC OT=15:13:26.4 35.46N 29.59E 40Km M=3.5 EASTERN MEDITERRANEAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1514	40.59								
DQRL	SZ			EP		1514	41.13								
HWQ	SZ			EP		1514	43.83								
QRWL	SZ			EP		1514	43.83								
SHBL	BZ			EP		1514	45.74								
RCY	SZ			EP		1514	45.72								

April 2 2015 Hour: 23:38 27.3 Lat: 33.78N Lon: 35.77E Depth: 0 Agency: REL Local  
Magnitudes: 3.0MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	18	322	EP		2338	30.06	-0.09							1.0
DQRL	SZ	21	247	EP		2338	30.58	0.01	64						1.0
DQRL	SN	21	247	ES		2338	33.06	0.04							1.0
QRWL	SZ	27	199	EP		2338	31.61	0.02							1.0
QRWL	SN	27	199	ES		2338	34.81	0.01							1.0
BEYL	SZ	28	292	EP		2338	31.76	-0.02							1.0
RCY	SZ	32	170	EP		2338	32.29	-0.08							1.0
RCY	SN	32	170	ES		2338	36.17	0.02							1.0
HWQ	SZ	58	16	EP		2338	36.68	0.10							1.0

April 3 2015 Hour: 10:35 28.4 Lat: 33.46N Lon: 35.66E Depth: 3 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.0 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	10	14	EP		1035	30.06	-0.02							1.0
SHBL	BZ	15	148	EP		1035	30.90	-0.06							1.0
SHBL	BE	15	148	ES		1035	32.88	0.04							1.0
DQRL	SZ	28	343	EP		1035	32.99	0.02	34						1.0
DQRL	SN	28	343	ES		1035	36.35	-0.00							1.0

BHL BZ 49 360 EP 1035 36.34 0.02 1.0

April 3 2015 Hour: 15:39 48.7 Lat: 33.79N Lon: 35.76E Depth: 12 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	324	EP		1539	52.03	-0.09	46						1.0
BHL	BE	16	324	ES		1539	54.65	0.01							1.0
DQRL	SZ	20	242	EP		1539	52.56	-0.01							1.0
DQRL	SN	20	242	ES		1539	55.49	0.06							1.0
QRWL	SZ	28	195	EP		1539	53.59	-0.09							1.0
RCY	SZ	33	167	EP		1539	54.61	0.07							1.0
RCY	SN	33	167	ES		1539	58.83	-0.01							1.0
HWQ	SZ	57	18	EP		1539	58.24	0.05							1.0

April 3 2015 Hour: 17:44 2.8 Agency: REL Distant

EMSC OT=17:44:02.8 17.38S 177.07W 374Km M=5.3 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		18 3	0.03								
QRWL	SZ			EP		18 2	59.87								
BHL	BZ			EP		18 3	1.12								
DQRL	SZ			EP		18 3	2.06								

April 5 2015 Hour: 12:30 35.9 Lat: 33.79N Lon: 35.77E Depth: 13 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	320	EP		1230	39.35	0.01	46						1.0
DQRL	SZ	21	243	EP		1230	39.86	-0.00							1.0
DQRL	SN	21	243	ES		1230	42.82	-0.01							1.0
QRWL	SZ	28	196	EP		1230	40.78	-0.12							1.0
QRWL	SN	28	196	ES		1230	44.76	0.12							1.0
RCY	SZ	33	169	EP		1230	41.66	-0.03							1.0
HWQ	SZ	57	17	EP		1230	45.28	0.04							1.0

April 6 2015 Hour: 14:46 17.5 Lat: 33.45N Lon: 35.66E Depth: 2 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.1 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	11	13	EP		1446	19.20	-0.13							1.0
SHBL	BZ	14	144	EP		1446	19.80	0.04							1.0
RCY	SZ	18	72	EP		1446	20.30	-0.04	33						1.0
RCY	SN	18	72	ES		1446	22.53	0.05							1.0
DQRL	SZ	30	344	EP		1446	22.25	0.00							1.0
DQRL	SE	30	344	ES		1446	25.88	0.08							1.0

April 6 2015 Hour: 16:42 35.7 Agency: REL Regional

EMSC OT=16:42:35.7 35.31N 27.57E 51Km M=4.5 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1644	12.19								
DQRL	SZ			EP		1644	12.92								
HWQ	SZ			EP		1644	15.34								

April 7 2015 Hour: 0:46 18.2 Agency: REL Distant

EMSC OT=00:46:18.2 15.30S 173.31W 10Km M=6.3 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1 6	0.87								
HWQ	SZ			EP		1 6	2.46								
DQRL	SZ			EP		1 6	3.53								
QRWL	SZ			EP		1 6	2.73								

**April 7 2015 Hour: 15:19 11.3** Agency: REL Regional  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 RCY SZ EP 1519 19.14  
 DQRL SZ EP 1519 21.39  
 BHL BZ EP 1519 22.94  
 HWQ SZ EP 1519 37.12

**April 8 2015 Hour: 13:33 36.6** Agency: REL Regional  
**EMSC OT=13:33:36.6 35.35N 27.85E 55Km M=4.4 DODECANESE ISLANDS, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 1335 8.62  
 HWQ SZ EP 1335 10.90  
 RCY SZ EP 1335 12.44

**April 10 2015 Hour: 10:28 37.0** Lat: 33.40N Lon: 35.59E Depth: 0 Agency: REL Local  
 Magnitudes: 2.9MC REL Rms: 0.1 secs

**JEZZINE REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	15	110	EP		1028	39.43	-0.05							1.0
SHBL	BE	15	110	ES		1028	41.42	0.10							1.0
QRWL	SZ	19	27	EP		1028	40.02	-0.05							1.0
RCY	SZ	26	64	EP		1028	40.95	-0.18	50						1.0
DQRL	SZ	35	357	EP		1028	42.53	-0.03							1.0
DQRL	SN	35	357	ES		1028	46.67	-0.01							1.0
BHL	BZ	57	6	EP		1028	46.17	0.01							1.0
HWQ	SZ	103	19	EP		1028	53.89	0.22							1.0

**April 10 2015 Hour: 14:12 7.4** Lat: 33.87N Lon: 35.81E Depth: 10 Agency: REL Local  
 Magnitudes: 2.9MC REL Rms: 0.0 secs

**BAABDA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	286	EP		1412	10.43	-0.03	50						1.0
DQRL	SZ	28	231	EP		1412	12.38	0.02							1.0
DQRL	SE	28	231	ES		1412	16.05	0.03							1.0
QRWL	SZ	37	198	EP		1412	13.65	-0.06							1.0
QRWL	SE	37	198	ES		1412	18.36	-0.01							1.0
RCY	SZ	41	176	EP		1412	14.37	0.03							1.0
HWQ	SZ	47	16	EP		1412	15.32	0.02							1.0

**April 10 2015 Hour: 16:37 54.6** Lat: 33.68N Lon: 35.70E Depth: 11 Agency: REL Local  
 Magnitudes: 2.3MC REL Rms: 0.0 secs

**CHOUF REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	12	283	EP		1637	57.49	0.01	23						1.0
DQRL	SN	12	283	ES		1637	59.61	0.00							1.0
QRWL	SZ	15	187	EP		1637	57.72	-0.02							1.0
RCY	SZ	24	148	EP		1637	59.03	0.02							1.0
RCY	SN	24	148	ES		1638	2.25	-0.00							1.0
BHL	BZ	25	350	EP		1637	59.17	-0.01							1.0

**April 11 2015 Hour: 8:19 22.6** Lat: 33.70N Lon: 35.84E Depth: 14 Agency: REL Local  
 Magnitudes: 2.3MC REL Rms: 0.0 secs

**WEST BEKAA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	22	222	EP		819	26.83	-0.06							1.0
RCY	SZ	22	181	EP		819	26.99	0.03							1.0
RCY	SE	22	181	ES		819	30.19	0.00							1.0
DQRL	SZ	25	273	EP		819	27.36	0.06	22						1.0
DQRL	SE	25	273	ES		819	30.78	-0.00							1.0
BHL	BZ	29	324	EP		819	27.82	-0.02							1.0

April 12 2015 Hour: 5:42 0.5 Lat: 33.59N Lon: 35.85E Depth: 11 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.0 secs

**RACHAYA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	10	189	EP		542	3.09	0.01							1.0
RCY	SN	10	189	ES		542	4.99	-0.01							1.0
QRWL	SZ	17	254	EP		542	3.77	0.02	30						1.0
DQRL	SZ	29	296	EP		542	5.53	-0.04							1.0
DQRL	SN	29	296	ES		542	9.35	0.01							1.0
BHL	BZ	40	332	EP		542	7.15	0.01							1.0

April 14 2015 Hour: 8:0 7.3 Agency: REL Regional  
EMSC OT=08:00:07.3 34.54N 26.58E 60Km M=4.5 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		8	1	55.84							
RCY	SZ			EP		8	1	54.18							

April 14 2015 Hour: 14:51 18.9 Lat: 33.68N Lon: 35.62E Depth: 15 Agency: REL Local  
Magnitudes: 2.9MC REL Rms: 0.1 secs

**CHOUF REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	6	301	EP		1451	21.62	-0.02	52						1.0
DQRL	SN	6	301	ES		1451	23.65	-0.00							1.0
QRWL	SZ	16	159	EP		1451	22.47	-0.04							1.0
QRWL	SN	16	159	ES		1451	25.19	0.03							1.0
BHL	BZ	25	7	EP		1451	23.76	0.06							1.0
HWQ	SZ	73	24	EP		1451	30.34	-0.31							0.2

April 15 2015 Hour: 8:25 14.5 Lat: 34.78N Lon: 32.49E Depth: 8 Agency: REL Regional  
Magnitudes: 5.2MC REL Rms: 0.1 secs

**CYPRUS REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEYL	SZ	295	109	EP		825	56.43	0.11							1.0
BHL	BZ	307	107	EP		825	58.00	-0.01	873						1.0
BHL	BN	307	107	ES		826	30.23	0.05							1.0
DQRL	SZ	308	112	EP		825	58.07	-0.03							1.0
DQRL	SN	308	112	ES		826	30.31	-0.04							1.0
HWQ	SZ	323	99	EP		825	59.74	-0.19							1.0
HWQ	SN	323	99	ES		826	33.52	-0.00							1.0
QRWL	SZ	325	114	EP		826	0.40	0.23							1.0
RCY	SZ	340	114	EP		826	2.14	0.01							1.0

April 15 2015 Hour: 15:27 38.9 Lat: 33.51N Lon: 35.40E Depth: 16 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

**SAIDA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	27	38	EP		1527	43.99	0.02							1.0
DQRL	SN	27	38	ES		1527	47.65	-0.06							1.0
QRWL	SZ	27	82	EP		1527	44.11	0.11							1.0
RCY	SZ	41	93	EP		1527	45.83	-0.18	43						1.0
RCY	SN	41	93	ES		1527	51.31	0.06							1.0
BHL	BZ	49	29	EP		1527	47.25	0.05							1.0

April 15 2015 Hour: 16:58 47.0 Lat: 34.17N Lon: 36.04E Depth: 53 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

**BAALBECK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	15	324	EP		1658	55.01	-0.11	42						1.0
HWQ	SN	15	324	ES		1659	1.18	0.06							1.0
BHL	BZ	46	231	EP		1658	57.18	0.01							1.0
DQRL	SZ	67	221	EP		1658	59.24	-0.01							1.0
RCY	SZ	77	195	EP		1659	0.44	0.11							1.0
RCY	SN	77	195	ES		1659	10.11	-0.06							1.0

April 16 2015 Hour: 18: 7 44.3 Agency: REL Regional

EMSC OT=18:07:44.3 35.03N 26.81E 30Km M=6.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		18 9	28.22								
QRWL	SZ			EP		18 9	29.52								
RCY	SZ			EP		18 9	31.88								
BHL	BZ			EP		18 9	34.47								
HWQ	SZ			EP		18 9	31.50								

April 16 2015 Hour: 18:50 21.3 Agency: REL Regional

EMSC OT=18:50:21.3 34.91N 26.77E 25Km M=4.4 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1852	6.38								
QRWL	SZ			EP		1852	8.19								
HWQ	SZ			EP		1852	9.64								
RCY	SZ			EP		1852	10.13								

April 16 2015 Hour: 19: 2 15.1 Agency: REL Regional

EMSC OT=19:02:15.1 34.97N 26.84E 30Km M=5.0 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		19 4	0.46								
DQRL	SZ			EP		19 3	59.19								
RCY	SZ			EP		19 4	2.36								
BHL	BZ			EP		19 4	5.10								
HWQ	SZ			EP		19 4	2.22								

April 16 2015 Hour: 20:15 49.2 Agency: REL Regional

EMSC OT=20:15:49.2 34.94N 26.82E 20Km M=4.5 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		2017	37.36								
QRWL	SZ			EP		2017	35.53								
HWQ	SZ			EP		2017	36.28								
BHL	BZ			EP		2017	39.41								
DQRL	SZ			EP		2017	33.70								

April 16 2015 Hour: 21:52 22.1 Agency: REL Regional

EMSC OT=21:52:22.1 35.00N 26.97E 10Km M=4.3 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2154	7.98								
QRWL	SZ			EP		2154	8.25								
HWQ	SZ			EP		2154	9.50								

April 17 2015 Hour: 2: 5 43.7 Agency: REL Regional

EMSC OT=02:05:43.7 34.99N 26.75E 46Km M=5.3 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2 7	26.65								
QRWL	SZ			EP		2 7	28.87								
BHL	BZ			EP		2 7	32.23								
RCY	SZ			EP		2 7	30.64								
HWQ	SZ			EP		2 7	30.90								

April 17 2015 Hour: 8:51 51.1 Lat: 33.75N Lon: 35.63E Depth: 31 Agency: REL Local

Magnitudes: 2.8MC REL

Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	8	228	EP		851	56.25	0.00	48						1.0
DQRL	SN	8	228	ES		852	0.05	0.02							1.0
QRWL	SZ	23	168	EP		851	57.14	-0.09							1.0
RCY	SZ	34	146	EP		851	58.50	0.11							1.0
RCY	SE	34	146	ES		852	3.73	-0.03							1.0
HWQ	SZ	65	26	EP		852	2.30	-0.01							1.0

April 17 2015 Hour: 16:39 43.0 Agency: REL Regional  
**EMSC OT=16:39:43.0 34.86N 26.72E 30Km M=4.5 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 1641 28.46  
 RCY SZ EP 1641 31.40  
 HWQ SZ EP 1641 31.67

April 17 2015 Hour: 23:25 18.5 Lat: 33.73N Lon: 35.67E Depth: 33 Agency: REL Local  
 Magnitudes: 2.9MC REL Rms: 0.1 secs  
**CHOUF REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	10	253	EP		2325	23.96	-0.03	48						1.0
DQRL	SN	10	253	ES		2325	28.04	-0.00							1.0
QRWL	SZ	20	177	EP		2325	24.71	0.09							1.0
RCY	SZ	30	150	EP		2325	25.49	-0.08							1.0
RCY	SE	30	150	ES		2325	30.80	0.02							1.0
HWQ	SZ	66	23	EP		2325	30.09	0.22							0.2

April 18 2015 Hour: 10:10 50.2 Lat: 33.47N Lon: 35.68E Depth: 4 Agency: REL Local  
 Magnitudes: 2.5MC REL Rms: 0.0 secs  
**WEST BEKAA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	8	2	EP		1010	51.72	-0.08							1.0
RCY	SZ	15	79	EP		1010	52.79	0.03	32						1.0
RCY	SE	15	79	ES		1010	54.64	-0.00							1.0
SHBL	BZ	15	156	EP		1010	52.76	-0.04							1.0
SHBL	BN	15	156	ES		1010	54.75	0.04							1.0
DQRL	SZ	28	339	EP		1010	54.76	-0.02							1.0
DQRL	SE	28	339	ES		1010	58.23	0.07							1.0

April 18 2015 Hour: 11:38 18.4 Lat: 33.31N Lon: 35.56E Depth: 21 Agency: REL Local  
 Magnitudes: 2.7MC REL Rms: 0.0 secs  
**MARJAAYOUN REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	18	74	EP		1138	22.88	-0.01							1.0
SHBL	BE	18	74	ES		1138	26.25	0.02							1.0
QRWL	SZ	29	23	EP		1138	24.04	-0.07							1.0
RCY	SZ	33	50	EP		1138	24.68	0.01	39						1.0
DQRL	SZ	45	1	EP		1138	26.19	0.05							1.0
DQRL	SN	45	1	ES		1138	31.88	-0.00							1.0

April 18 2015 Hour: 16:46 49.8 Agency: REL Regional  
**EMSC OT=16:46:49.8 36.48N 23.19E 14Km M=4.7 SOUTHERN GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1649	17.98								
QRWL	SZ			EP		1649	19.19								
HWQ	SZ			EP		1649	20.49								
RCY	SZ			EP		1649	21.25								

April 19 2015 Hour: 11:17 8.5 Lat: 33.70N Lon: 35.65E Depth: 29 Agency: REL Local  
 Magnitudes: 3.0MC REL Rms: 0.1 secs  
**CHOUF REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	7	271	EP		1117	13.25	-0.04	58						1.0
DQRL	SE	7	271	ES		1117	16.85	-0.01							1.0
QRWL	SZ	18	169	EP		1117	13.99	0.11							1.0
RCY	SZ	29	143	EP		1117	14.88	-0.10							1.0
RCY	SN	29	143	ES		1117	19.83	0.02							1.0
HWQ	SZ	69	23	EP		1117	20.11	0.02							1.0

April 19 2015 Hour: 22: 9 43.0 Agency: REL Regional  
**EMSC OT=22:09:43.0 33.44N 23.72E 40Km M=4.2 CENTRAL MEDITERRANEAN SEA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 2212 0.16  
 QRWL SZ EP 2212 1.16  
 RCY SZ EP 2212 2.84

April 19 2015 Hour: 23:36 48.4 Agency: REL Regional  
**EMSC OT=23:36:48.4 35.02N 26.88E 10Km M=4.4 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 RCY SZ EP 2338 37.04  
 HWQ SZ EP 2338 36.32

April 20 2015 Hour: 1:42 55.5 Agency: REL Distant  
**EMSC OT=01:42:55.5 24.21N 122.52E 7Km M=6.4 TAIWAN REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 HWQ SZ EP 154 32.13  
 RCY SZ EP 154 33.21  
 QRWL SZ EP 154 33.63  
 DQRL SZ EP 154 33.96

April 20 2015 Hour: 8:16 46.0 Lat: 33.87N Lon: 35.83E Depth: 5 Agency: REL Local  
**Magnitudes: 2.7MC REL Rms: 0.0 secs**  
**ZAHLE REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ 17 284 EP 816 48.91-0.04 40 1.0  
 BHL BN 17 284 ES 816 51.14 0.02 1.0  
 DQRL SZ 30 234 EP 816 51.02 0.01 1.0  
 RCY SZ 41 180 EP 816 52.76 0.01 1.0  
 RCY SE 41 180 ES 816 57.73-0.01 1.0  
 HWQ SZ 47 13 EP 816 53.62 0.01 1.0

April 20 2015 Hour: 10: 6 14.9 Lat: 33.78N Lon: 35.78E Depth: 5 Agency: REL Local  
**Magnitudes: 2.5MC REL Rms: 0.0 secs**  
**ALEY REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ 18 320 EP 10 6 17.86-0.07 29 1.0  
 BHL BE 18 320 ES 10 6 20.22 0.02 1.0  
 DQRL SZ 21 247 EP 10 6 18.40-0.03 1.0  
 DQRL SN 21 247 ES 10 6 21.09 0.03 1.0  
 RCY SZ 32 171 EP 10 6 20.17 0.03 1.0  
 RCY SN 32 171 ES 10 6 24.01-0.02 1.0  
 HWQ SZ 57 16 EP 10 6 24.19 0.03 1.0

April 20 2015 Hour: 11:59 59.6 Agency: REL Distant  
**EMSC OT=11:59:59.6 24.06N 122.64E 20Km M=5.9 TAIWAN REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 1211 36.81  
 RCY SZ EP 1211 37.50  
 DQRL SZ EP 1211 37.84

April 20 2015 Hour: 15:27 57.7 Lat: 33.97N Lon: 36.16E Depth: 0 Agency: REL Local  
**Magnitudes: 2.7MC REL Rms: 0.0 secs**  
**BAALBECK REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 HWQ SZ 40 330 EP 1528 4.14 0.03 1.0  
 HWQ SN 40 330 ES 1528 8.85-0.03 1.0  
 BHL BZ 48 262 EP 1528 5.33-0.01 40 1.0  
 BHL BN 48 262 ES 1528 11.03 0.00 1.0  
 RCY SZ 60 210 EP 1528 7.36-0.04 1.0  
 DQRL SZ 62 242 EP 1528 7.72 0.04 1.0

April 21 2015 Hour: 0:58 0.0 Agency: REL Regional  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 RCY SZ EP 059 10.20  
 QRWL SZ EP 059 11.76

April 21 2015 Hour: 15:1 20.8 Lat: 33.79N Lon: 35.78E Depth: 5 Agency: REL Local  
 Magnitudes: 2.3MC REL Rms: 0.0 secs  
**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	318	EP		15	1	23.66	-0.02	24					1.0
BHL	BE	17	318	ES		15	1	25.81	0.01						1.0
DQRL	SZ	21	243	EP		15	1	24.36	0.00						1.0
RCY	SZ	33	170	EP		15	1	26.26	0.00						1.0
RCY	SN	33	170	ES		15	1	30.29	-0.00						1.0
HWQ	SZ	56	16	EP		15	1	29.99	0.06						0.2

April 24 2015 Hour: 12:3 0.0 Agency: REL Local  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 HWQ SZ EP 12 3 59.20  
 RCY SZ EP 12 3 59.67

April 24 2015 Hour: 15:25 0.9 Lat: 33.80N Lon: 35.74E Depth: 18 Agency: REL Local  
 Magnitudes: 2.7MC REL Rms: 0.0 secs  
**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	326	EP		1525	4.69	-0.07	39						1.0
BHL	BE	15	326	ES		1525	7.65	0.02							1.0
DQRL	SZ	19	238	EP		1525	5.23	0.03							1.0
RCY	SZ	34	165	EP		1525	7.13	-0.02							1.0
RCY	SN	34	165	ES		1525	11.80	0.01							1.0
HWQ	SZ	57	19	EP		1525	10.33	0.03							1.0

April 24 2015 Hour: 15:36 0.0 Lat: 33.79N Lon: 35.77E Depth: 12 Agency: REL Local  
 Magnitudes: 2.5MC REL Rms: 0.0 secs  
**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	320	EP		1536	3.38	-0.09	29						1.0
BHL	BE	16	320	ES		1536	6.06	0.05							1.0
DQRL	SZ	21	242	EP		1536	4.05	0.01							1.0
RCY	SZ	33	169	EP		1536	5.88	-0.00							1.0
RCY	SE	33	169	ES		1536	10.23	0.01							1.0
HWQ	SZ	56	17	EP		1536	9.40	0.02							1.0

April 25 2015 Hour: 6:11 26.9 Agency: REL Distant  
**EMSC OT=06:11:26.9 28.24N 84.74E 15Km M=7.8 NEPAL**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		619	18.02								
RCY	SZ			EP		619	19.83								
SHBL	BZ			EP		619	20.50								
BHL	BZ			EP		619	20.24								
DQRL	SZ			EP		619	21.80								

April 25 2015 Hour: 6:45 22.2 Agency: REL Distant  
**EMSC OT=06:45:22.2 28.29N 84.90E 15Km M=6.7 NEPAL**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		653	13.83								
RCY	SZ			EP		653	15.31								
DQRL	SZ			EP		653	16.86								

April 25 2015 Hour: 10:20 11.6 Lat: 33.47N Lon: 35.68E Depth: 0 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.1 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	9	359	EP		1020	12.84	-0.10							1.0
RCY	SZ	14	79	EP		1020	13.85	-0.05	31						1.0
RCY	SN	14	79	ES		1020	15.67	0.05							1.0
SHBL	BZ	15	158	EP		1020	13.91	-0.04							1.0
SHBL	BN	15	158	ES		1020	15.75	0.04							1.0
DQRL	SZ	28	338	EP		1020	16.18	0.08							1.0
DQRL	SN	28	338	ES		1020	19.47	0.02							1.0

April 25 2015 Hour: 11: 7 56.2 Lat: 33.79N Lon: 35.78E Depth: 10 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	317	EP		11 7	59.46	-0.02	40						1.0
DQRL	SZ	22	243	EP		11 8	0.15	0.00							1.0
DQRL	SE	22	243	ES		11 8	3.10	0.01							1.0
RCY	SZ	34	171	EP		11 8	1.91	-0.02							1.0
RCY	SE	34	171	ES		11 8	6.19	0.01							1.0
HWQ	SZ	56	16	EP		11 8	5.42	0.02							1.0

April 25 2015 Hour: 14:26 10.2 Lat: 33.80N Lon: 35.74E Depth: 20 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.1 secs

BAABDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	14	326	EP		1426	14.16	-0.03	35						1.0
DQRL	SZ	19	237	EP		1426	14.67	0.05							1.0
DQRL	SE	19	237	ES		1426	17.90	0.01							1.0
QRWL	SZ	28	191	EP		1426	15.63	-0.09							1.0
RCY	SZ	35	165	EP		1426	16.63	0.04							1.0
RCY	SE	35	165	ES		1426	21.31	0.00							1.0
HWQ	SZ	57	20	EP		1426	19.85	0.21							0.2

April 25 2015 Hour: 15:25 24.2 Lat: 33.98N Lon: 36.31E Depth: 0 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	47	315	EP		1525	31.76	-0.05	42						1.0
HWQ	SE	47	315	ES		1525	37.44	0.02							1.0
BHL	BZ	61	262	EP		1525	34.18	0.09							1.0
BHL	BE	61	262	ES		1525	41.33	-0.06							1.0
RCY	SZ	69	219	EP		1525	35.34	-0.08							1.0
RCY	SE	69	219	ES		1525	43.71	0.01							1.0
DQRL	SZ	75	246	EP		1525	36.39	0.08							1.0

April 26 2015 Hour: 7: 9 10.3 Agency: REL Distant  
EMSC OT=07:09:10.3 27.86N 86.08E 15Km M=6.7 NEPAL

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		717	10.48								
RCY	SZ			EP		717	12.27								
SHBL	BZ			EP		717	13.17								
BHL	BZ			EP		717	13.24								
QRWL	SZ			EP		717	13.24								
DQRL	SZ			EP		717	14.07								

April 26 2015 Hour: 23:340.6 Lat: 33.81N Lon: 35.79E Depth: 23 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

BAABDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	310	EP		23	3	45.13-0.01	38						1.0
BHL	BE	16	310	ES		23	3	48.50	0.00						1.0
DQRL	SZ	23	240	EP		23	3	45.89	0.04						1.0
QRWL	SZ	31	198	EP		23	3	46.64-0.07							1.0
RCY	SZ	35	173	EP		23	3	47.35	0.05						1.0
RCY	SE	35	173	ES		23	3	52.26-0.00							1.0
HWQ	SZ	54	16	EP		23	3	49.73-0.03							0.2

April 27 2015 Hour: 7:4843.0 Lat: 33.15N Lon: 35.77E Depth: 6 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.0 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	22	353	EP		748		46.82-0.04	33						1.0
SHBL	BE	22	353	ES		748		49.66-0.04							1.0
RCY	SZ	39	9	EP		748		49.46-0.00							1.0
RCY	SN	39	9	ES		748		54.27	0.05						1.0
QRWL	SZ	45	349	EP		748		50.38-0.01							1.0
DQRL	SZ	65	343	EP		748		53.62	0.11						1.0
DQRL	SE	65	343	ES		749		1.26-0.01							1.0
HWQ	SZ	126	7	EP		749		3.03-0.04							1.0

April 27 2015 Hour: 10:1622.7 Lat: 34.42N Lon: 36.71E Depth: 15 Agency: REL Local  
Magnitudes: 3.0MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	72	258	EP		1016		34.19-0.10	58						1.0
HWQ	SN	72	258	ES		1016		42.83-0.03							1.0
BHL	BZ	113	240	EP		1016		40.46	0.19						1.0
RCY	SZ	130	219	EP		1016		42.66-0.19							1.0
RCY	SN	130	219	ES		1016		57.77	0.01						1.0
DQRL	SZ	131	234	EP		1016		43.16	0.13						1.0

April 27 2015 Hour: 10:3422.9 Lat: 34.47N Lon: 36.80E Depth: 2 Agency: REL Local  
Magnitudes: 3.0MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ	81	255	EP		1034		36.05	0.04	55					1.0
HWQ	SE	81	255	ES		1034		45.68-0.02							1.0
BHL	BZ	123	239	EP		1034		42.82	0.09						1.0
RCY	SZ	140	220	EP		1034		45.30-0.01							1.0
RCY	SE	140	220	ES		1035		1.90	0.02						1.0
DQRL	SZ	142	233	EP		1034		45.38-0.12							1.0

April 27 2015 Hour: 14:1631.4 Agency: REL Regional  
EMSC OT=14:16:31.4 35.00N 26.89E 10Km M=4.2 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1418		20.06							
HWQ	SZ			EP		1418		20.43							

April 27 2015 Hour: 15:14.5 Lat: 34.09N Lon: 35.50E Depth: 7 Agency: REL Local  
Magnitudes: 2.6MC 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	26	145	EP		15	1	8.84	0.05	33					1.0
BHL	BN	26	145	ES		15	1	11.98-0.02							1.0
DQRL	SZ	43	171	EP		15	1	11.59-0.01							1.0
HWQ	SZ	46	63	EP		15	1	12.05-0.00							1.0
QRWL	SZ	63	164	EP		15	1	14.65-0.03							1.0
QRWL	SE	63	164	ES		15	1	22.27	0.02						1.0

April 27 2015 Hour: 15:23 57.3 Lat: 33.78N Lon: 35.76E Depth: 12 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	323	EP		1524	0.74	-0.02	40						1.0
DQRL	SZ	20	244	EP		1524	1.15	-0.03							1.0
DQRL	SN	20	244	ES		1524	4.06	0.03							1.0
QRWL	SZ	27	196	EP		1524	2.25	0.02							1.0
QRWL	SE	27	196	ES		1524	5.84	-0.02							1.0
HWQ	SZ	57	17	EP		1524	6.85	0.02							1.0

April 28 2015 Hour: 8:47 40.4 Lat: 33.86N Lon: 35.83E Depth: 0 Agency: REL Local  
Magnitudes: 2.6MC REL Rms: 0.0 secs

**ZAHLE REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	288	EP		847	43.11	-0.00	36						1.0
BHL	BN	17	288	ES		847	45.11	-0.04							1.0
DQRL	SZ	29	235	EP		847	45.17	0.10							1.0
QRWL	SZ	37	202	EP		847	46.28	-0.02							1.0
RCY	SZ	40	179	EP		847	46.82	0.02							1.0
RCY	SN	40	179	ES		847	51.50	-0.06							1.0
HWQ	SZ	48	13	EP		847	48.11	-0.00							1.0

April 28 2015 Hour: 16:39 37.8 Agency: REL Distant

**EMSC OT=16:39:37.8 20.92S 178.68W 566Km M=6.2 FIJI REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	SZ			EP		1658	14.09								
BHL	BZ			EP		1658	14.48								
RCY	SZ			EP		1658	15.16								
QRWL	SZ			EP		1658	15.01								
DQRL	SZ			EP		1658	15.70								

April 29 2015 Hour: 2:37 46.9 Agency: REL Distant

**EMSC OT=02:37:46.9 27.50N 53.47E 10Km M=4.9 SOUTHERN IRAN**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		241	37.53								
HWQ	SZ			EP		241	38.21								
DQRL	SZ			EP		241	39.48								
BHL	BZ			EP		241	38.79								

April 29 2015 Hour: 15:51 13.9 Lat: 33.79N Lon: 35.75E Depth: 17 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.1 secs

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	326	EP		1551	17.65	-0.06	38						1.0
DQRL	SZ	19	240	EP		1551	18.16	0.05							1.0
DQRL	SN	19	240	ES		1551	21.23	0.04							1.0
QRWL	SZ	28	193	EP		1551	19.05	-0.14							1.0
RCY	SZ	34	166	EP		1551	20.12	0.08							1.0
RCY	SN	34	166	ES		1551	24.56	-0.00							1.0
HWQ	SZ	57	19	EP		1551	23.40	0.03							1.0

April 30 2015 Hour: 9:22 11.7 Lat: 33.80N Lon: 35.77E Depth: 13 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	317	EP		922	15.06	-0.02	41						1.0
DQRL	SZ	21	240	EP		922	15.75	-0.04							1.0
DQRL	SN	21	240	ES		922	18.87	0.03							1.0
RCY	SZ	34	170	EP		922	17.70	0.02							1.0
RCY	SE	34	170	ES		922	22.10	-0.02							1.0
HWQ	SZ	55	17	EP		922	20.93	0.03							1.0

April 30 2015 Hour: 14:22 51.4 Lat: 33.78N Lon: 35.77E Depth: 9 Agency: REL Local  
Magnitudes: 2.7MC REL Rms: 0.0 secs

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	17	322	EP		1422	54.52	-0.08	39						1.0
BHL	BE	17	322	ES		1422	56.99	0.02							1.0
DQRL	SZ	20	245	EP		1422	55.08	0.03							1.0
QRWL	SZ	27	197	EP		1422	56.11	0.02							1.0
RCY	SZ	32	169	EP		1422	56.84	-0.06							1.0
RCY	SN	32	169	ES		1423	0.99	0.02							1.0
HWQ	SZ	57	17	EP		1423	0.84	0.04							1.0

# Epicentral Map of Lebanon

APRIL 2015

