

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

April

2017

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
ZAHL	3351.48N	3553.12E	1211	ZAHLE	Opened Aug 2015
BEIL	3432.50N	3611.08E	572	BEINO	Opened Jan 2017

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 1 2017 Hour: 10:55 48.7 Lat: 33.82N Lon: 35.80E Depth: 19 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.0 secs

ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	9	63	EP		1055	52.29	0.04							1.0
ZAHL	SN	9	63	ES		1055	54.86	-0.01							1.0
BHL	BZ	16	304	EP		1055	52.80	-0.05	28						1.0
BHL	BN	16	304	ES		1055	55.91	0.00							1.0
DQRL	SZ	25	239	EP		1055	53.85	0.05							1.0
RCY	SZ	36	175	EP		1055	55.26	-0.03							1.0
HWQ	SZ	52	15	EP		1055	57.52	0.00							1.0

April 1 2017 Hour: 14:20 12.6 Lat: 33.78N Lon: 35.76E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	15	53	EP		1420	14.86	-0.16	51						1.0
ZAHL	SE	15	53	ES		1420	16.81	0.01							1.0
BHL	BZ	17	326	EP		1420	15.29	-0.07							1.0
BHL	BN	17	326	ES		1420	17.40	-0.00							1.0
RCY	SZ	32	167	EP		1420	17.81	0.05							1.0
RCY	SE	32	167	ES		1420	21.57	-0.01							1.0
HWQ	SZ	58	17	EP		1420	22.16	0.15							1.0
BEIL	SZ	94	25	EP		1420	27.73	0.03							1.0

April 2 2017 Hour: 9:51 14.3 Lat: 33.15N Lon: 35.41E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

BENT JBEIL REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	51	30	EP		951	22.59	0.02	43						1.0
RCY	SZ	56	46	EP		951	23.18	-0.10							1.0
RCY	SN	56	46	ES		951	29.91	0.01							1.0
DQRL	SZ	64	14	EP		951	24.45	-0.14							1.0
DQRL	SN	64	14	ES		951	32.18	-0.01							1.0
BHL	BZ	87	15	EP		951	28.37	0.03							1.0
ZAHL	SZ	90	29	EP		951	29.00	0.10							1.0
HWQ	SZ	135	22	EP		951	36.06	-0.02							1.0
BEIL	SZ	170	25	EP		951	41.41	0.12							1.0

April 2 2017 Hour: 10: 6 13.1 Lat: 34.16N Lon: 36.36E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC 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	288	EP		10 6	19.48	-0.10	60						1.0
HWQ	SN	40	288	ES		10 6	24.35	0.00							1.0
BEIL	SZ	45	339	EP		10 6	20.32	-0.03							1.0
BEIL	SN	45	339	ES		10 6	25.75	0.05							1.0
ZAHL	SZ	55	232	EP		10 6	22.04	-0.01							1.0
BHL	BZ	71	246	EP		10 6	24.63	0.03							1.0
DQRL	SZ	89	235	EP		10 6	27.51	0.05							1.0

April 3 2017 Hour: 10:39 31.6 Lat: 33.51N Lon: 35.69E Depth: 0 Agency: REL Local
Magnitudes: 2.3MC 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	4	348	EP		1039	32.18	-0.06	23						1.0
RCY	SZ	14	99	EP		1039	33.75	-0.08							1.0
RCY	SN	14	99	ES		1039	35.54	0.07							1.0
DQRL	SZ	24	332	EP		1039	35.59	0.11							1.0
DQRL	SN	24	332	ES		1039	38.34	0.00							1.0
BHL	BZ	43	356	EP		1039	38.57	-0.04							1.0

April 3 2017 Hour: 17:40 17.9

Agency: REL Distant

EMSC OT=17:40:17.9 22.60S 25.18E 22Km M=6.5 BOTSWANA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1750	1.37								
QRWL	SZ			EP		1750	1.54								
DQRL	SZ			EP		1750	2.87								
ZAHL	SZ			EP		1750	3.79								
BHL	BZ			EP		1750	3.70								
HWQ	SZ			EP		1750	7.12								
BEIL	SZ			EP		1750	9.45								

April 4 2017 Hour: 7:52 50.7

Lat: 32.88N Lon: 34.95E Depth: 19 Agency: REL Regional

Magnitudes: 3.4MC REL

Rms: 0.1 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	91	55	EP		753	5.24	0.08							1.0
SHBL	BN	91	55	ES		753	15.67	-0.18							1.0
QRWL	SZ	101	42	EP		753	6.65	0.02							1.0
RCY	SZ	108	50	EP		753	7.62	0.01							1.0
RCY	SN	108	50	ES		753	20.13	0.01							1.0
DQRL	SZ	109	32	EP		753	7.78	0.04	95						1.0
DQRL	SN	109	32	ES		753	20.53	0.19							1.0
BEYL	SZ	122	25	EP		753	9.29	-0.26							1.0
BHL	BZ	132	30	EP		753	11.16	0.06							1.0
BHL	BN	132	30	ES		753	26.01	-0.17							1.0
ZAHL	SZ	140	38	EP		753	12.37	0.09							1.0
ZAHL	SN	140	38	ES		753	28.36	0.12							1.0
HWQ	SZ	181	31	EP		753	17.49	-0.00							1.0
BEIL	SZ	218	32	EP		753	21.95	-0.01							1.0

April 4 2017 Hour: 16:56 1.9

Lat: 33.45N Lon: 35.63E Depth: 2 Agency: REL Local

Magnitudes: 2.9MC 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	12	24	EP		1656	4.01	0.08							1.0
RCY	SZ	20	74	EP		1656	5.22	0.04	53						1.0
RCY	SN	20	74	ES		1656	7.57	-0.01							1.0
DQRL	SZ	29	349	EP		1656	6.62	-0.03							1.0
DQRL	SN	29	349	ES		1656	10.16	0.03							1.0
BHL	BZ	51	3	EP		1656	10.04	-0.07							1.0
ZAHL	SZ	51	27	EP		1656	10.04	-0.17							1.0
HWQ	SZ	97	18	EP		1656	17.62	0.11							1.0
BEIL	SZ	132	23	EP		1656	23.07	0.03							1.0

April 5 2017 Hour: 6:9 11.7

Agency: REL Distant

EMSC OT=06:09:11.7 35.82N 60.47E 10Km M=6.1 NORTHEASTERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		613	42.95								
HWQ	SZ			EP		613	45.23								
RCY	SZ			EP		613	48.70								
BHL	BZ			EP		613	49.20								

April 5 2017 Hour: 13:8 34.0

Lat: 33.78N Lon: 35.78E Depth: 3 Agency: REL Local

Magnitudes: 2.6MC REL

Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	47	EP		13	8	36.29	0.05						1.0
ZAHL	SN	13	47	ES		13	8	37.90	-0.01						1.0
BHL	BZ	18	321	EP		13	8	36.93	-0.10						1.0
DQRL	SZ	21	248	EP		13	8	37.52	0.07						1.0
DQRL	SN	21	248	ES		13	8	40.01	0.01						1.0
RCY	SZ	31	171	EP		13	8	39.06	-0.06	35					1.0
HWQ	BZ	58	15	EP		13	8	43.37	0.04						1.0

April 6 2017 Hour: 15: 5 53.0 Lat: 33.81N Lon: 35.77E Depth: 8 Agency: REL Local
 Magnitudes: 2.4MC REL Rms: 0.0 secs

BAABDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	12	64	EP		15	5	55.46	-0.04						1.0
ZAHL	SN	12	64	ES		15	5	57.35	0.02						1.0
BHL	BZ	15	314	EP		15	5	55.81	-0.02	26					1.0
DQRL	SZ	22	237	EP		15	5	56.83	-0.00						1.0
DQRL	SN	22	237	ES		15	5	59.67	0.01						1.0
HWQ	BZ	54	18	EP		15	6	1.94	0.03						1.0

April 6 2017 Hour: 15:32 59.6 Lat: 34.59N Lon: 36.37E Depth: 0 Agency: REL Local
 Magnitudes: 3.1MC REL Rms: 0.1 secs

AKKAR REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	18	252	EP		1533	2.40	-0.05	73						1.0
BEIL	SN	18	252	ES		1533	4.67	0.09							1.0
HWQ	BZ	52	228	EP		1533	7.84	-0.14							1.0
HWQ	BN	52	228	ES		1533	14.14	-0.07							1.0
ZAHL	SZ	93	209	EP		1533	14.59	0.07							1.0
BHL	BZ	101	221	EP		1533	15.73	-0.08							1.0
DQRL	SZ	123	217	EP		1533	19.55	0.18							1.0

April 6 2017 Hour: 15:53 14.2 Lat: 33.79N Lon: 35.77E Depth: 8 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
ZAHL	SZ	13	57	EP		1553	16.84	-0.02							1.0
ZAHL	SN	13	57	ES		1553	18.82	0.01							1.0
BHL	BZ	16	319	EP		1553	17.29	0.01	21						1.0
BHL	BN	16	319	ES		1553	19.52	-0.01							1.0
DQRL	SZ	21	242	EP		1553	17.96	0.00							1.0
HWQ	BZ	56	17	EP		1553	23.50	0.08							0.2

April 7 2017 Hour: 16:16 0.5 Lat: 33.78N Lon: 35.76E Depth: 5 Agency: REL Local
 Magnitudes: 2.5MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	14	53	EP		1616	3.01	0.03							1.0
BHL	BZ	17	323	EP		1616	3.28	-0.13	28						1.0
DQRL	SZ	20	245	EP		1616	3.97	0.11							1.0
DQRL	SN	20	245	ES		1616	6.39	0.03							1.0
QRWL	SZ	27	196	EP		1616	4.89	-0.09							1.0
QRWL	SN	27	196	ES		1616	8.30	-0.00							1.0
HWQ	BZ	58	17	EP		1616	9.88	0.06							1.0

April 8 2017 Hour: 14:12 16.4 Lat: 33.80N Lon: 35.78E Depth: 10 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
ZAHL	SZ	12	55	EP		1412	19.16	0.02							1.0
BHL	BZ	17	315	EP		1412	19.72	-0.01	28						1.0
BHL	BN	17	315	ES		1412	22.19	0.01							1.0
DQRL	SZ	22	243	EP		1412	20.44	-0.01							1.0
RCY	SZ	34	171	EP		1412	22.30	0.10							1.0
RCY	SN	34	171	ES		1412	26.39	-0.07							1.0
HWQ	BZ	56	16	EP		1412	25.55	-0.04							1.0

April 9 2017 Hour: 11:31 48.6 Lat: 33.79N Lon: 35.78E Depth: 9 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
ZAHL	SZ	13	52	EP		1131	51.30	0.00							1.0
BHL	BZ	17	319	EP		1131	51.77	-0.07	30						1.0
BHL	BN	17	319	ES		1131	54.27	0.01							1.0
DQRL	SZ	21	244	EP		1131	52.45	0.05							1.0
RCY	SZ	33	170	EP		1131	54.12	-0.05							1.0
RCY	SN	33	170	ES		1131	58.32	0.02							1.0
HWQ	BZ	57	16	EP		1131	57.92	0.04							1.0

April 9 2017 Hour: 17:53 16.9 Lat: 32.92N Lon: 35.42E Depth: 4 Agency: REL Regional
 Magnitudes: 2.6MC REL Rms: 0.0 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	73	19	EP		1753	28.77	0.04							1.0
RCY	SZ	74	31	EP		1753	28.88	-0.01	32						1.0
RCY	SN	74	31	ES		1753	37.78	0.00							1.0
DQRL	SZ	88	9	EP		1753	31.01	-0.06							1.0
DQRL	SN	88	9	ES		1753	41.57	-0.01							1.0
BHL	BZ	111	11	EP		1753	34.86	0.08							1.0
ZAHL	SZ	112	22	EP		1753	34.94	-0.05							1.0

April 10 2017 Hour: 4:45 58.4 Lat: 34.02N Lon: 35.74E Depth: 10 Agency: REL Local
 Magnitudes: 3.1MC REL Rms: 0.1 secs

KESROUAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	211	EP		446	1.46	0.04	71						1.0
BHL	BN	15	211	ES		446	3.63	-0.01							1.0
ZAHL	SZ	22	142	EP		446	2.45	-0.04							1.0
ZAHL	SN	22	142	ES		446	5.54	0.05							1.0
BEYL	SZ	28	234	EP		446	3.19	-0.02							1.0
HWQ	BZ	35	34	EP		446	4.18	-0.14							1.0
DQRL	SZ	38	204	EP		446	4.86	0.05							1.0
QRWL	SZ	52	186	EP		446	7.09	0.02							1.0
RCY	SZ	59	171	EP		446	7.98	-0.07							1.0
RCY	SN	59	171	ES		446	15.15	-0.02							1.0
BEIL	SZ	71	35	EP		446	10.19	0.14							1.0

April 10 2017 Hour: 10: 2 52.9 Lat: 33.51N Lon: 35.69E Depth: 0 Agency: REL Local
 Magnitudes: 2.7MC 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	4	357	EP		10 2	53.49	-0.10							1.0
RCY	SZ	14	96	EP		10 2	55.17	-0.03	38						1.0
RCY	SN	14	96	ES		10 2	56.91	0.02							1.0
DQRL	SZ	24	334	EP		10 2	56.86	0.06							1.0
DQRL	SN	24	334	ES		10 2	59.70	0.02							1.0
BHL	BZ	44	356	EP		10 2	59.97	0.00							1.0
HWQ	BZ	89	16	EP		10 3	7.22	0.03							1.0

April 10 2017 Hour: 15:42 18.3 Lat: 33.99N Lon: 36.12E Depth: 18 Agency: REL Local
 Magnitudes: 2.8MC REL Rms: 0.0 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	26	237	EP		1542	23.61	0.06							1.0
ZAHL	SN	26	237	ES		1542	27.37	-0.04							1.0
HWQ	BZ	36	333	EP		1542	24.78	-0.03	42						1.0
HWQ	BN	36	333	ES		1542	29.64	0.04							1.0
BHL	BZ	44	258	EP		1542	25.88	-0.08							1.0
BHL	BN	44	258	ES		1542	31.60	-0.00							1.0
DQRL	SZ	60	239	EP		1542	28.28	0.07							1.0

RCY	SZ	61	206	EP		1542	28.35	0.00										1.0
BEIL	SZ	62	5	EP		1542	28.38	-0.03										1.0

April 10 2017 Hour: 18:42 46.9 Lat: 34.04N Lon: 35.95E 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
ZAHL	SZ	21	197	EP		1842	50.19	-0.12							1.0
ZAHL	SN	21	197	ES		1842	52.84	0.02							1.0
HWQ	BZ	27	359	EP		1842	51.21	0.02							1.0
BHL	BZ	31	242	EP		1842	52.00	0.03	42						1.0
BHL	BN	31	242	ES		1842	55.69	-0.03							1.0
DQRL	SZ	51	224	EP		1842	55.17	0.00							1.0
BEIL	SZ	60	21	EP		1842	56.52	-0.03							1.0
QRWL	SZ	60	205	EP		1842	56.65	0.06							1.0
RCY	SZ	61	190	EP		1842	56.85	0.07							1.0
RCY	SN	61	190	ES		1843	4.05	-0.03							1.0

April 11 2017 Hour: 22:49 8.5 Lat: 33.79N Lon: 35.80E Depth: 6 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
ZAHL	SZ	11	47	EP		2249	10.64	-0.01							1.0
ZAHL	SN	11	47	ES		2249	12.26	0.01							1.0
BHL	BZ	18	314	EP		2249	11.60	-0.05	29						1.0
BHL	BN	18	314	ES		2249	14.00	-0.00							1.0
DQRL	SZ	23	246	EP		2249	12.39	0.05							1.0
RCY	SZ	33	174	EP		2249	13.84	-0.03							1.0
HWQ	BZ	56	14	EP		2249	17.62	0.02							1.0

April 12 2017 Hour: 17:39 41.2 Lat: 33.65N Lon: 35.60E Depth: 4 Agency: REL Local
Magnitudes: 2.8MC 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	337	EP		1739	42.64	0.04							1.0
DQRL	SN	7	337	ES		1739	43.62	0.01							1.0
QRWL	SZ	14	146	EP		1739	43.53	-0.07							1.0
QRWL	SN	14	146	ES		1739	45.33	-0.02							1.0
BEYL	SZ	26	338	EP		1739	45.62	0.07							1.0
RCY	SZ	28	128	EP		1739	45.89	0.07							1.0
BHL	BZ	29	10	EP		1739	45.80	-0.13	46						1.0
BHL	BN	29	10	ES		1739	49.35	-0.06							1.0
ZAHL	SZ	35	49	EP		1739	47.02	0.04							1.0
ZAHL	SN	35	49	ES		1739	51.26	0.03							1.0
HWQ	BZ	77	25	EP		1739	53.68	0.04							1.0
BEIL	SZ	113	29	EP		1739	59.41	-0.02							1.0

April 12 2017 Hour: 21:11 31.9 Lat: 34.52N Lon: 36.48E Depth: 16 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
BEIL	SZ	27	275	EP		2111	37.11	0.06	62						1.0
BEIL	SN	27	275	ES		2111	40.82	-0.02							1.0
HWQ	BZ	56	241	EP		2111	41.12	-0.07							1.0
HWQ	BN	56	241	ES		2111	48.04	-0.00							1.0
ZAHL	SZ	92	217	EP		2111	46.29	-0.14							1.0
BHL	BZ	102	228	EP		2111	48.02	0.05							1.0
DQRL	SZ	123	223	EP		2111	51.17	0.11							1.0
RCY	SZ	128	208	EP		2111	51.79	-0.02							1.0
RCY	SN	128	208	ES		2112	6.56	0.03							1.0

April 13 2017 Hour: 10:27 3.1

Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1027	33.90								
DQRL	SZ			EP		1027	38.54								

April 13 2017 Hour: 11: 2 16.6

Lat: 33.49N Lon: 35.67E Depth: 0 Agency: REL Local

Magnitudes: 2.9MC 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	7	9	EP		11 2	17.61	-0.10							1.0
QRWL	SE	7	9	ES		11 2	18.55	-0.01							1.0
RCY	SZ	15	86	EP		11 2	19.09	0.01	54						1.0
RCY	SN	15	86	ES		11 2	20.99	0.05							1.0
DQRL	SZ	26	339	EP		11 2	20.84	0.07							1.0
DQRL	SN	26	339	ES		11 2	23.99	0.10							1.0
ZAHL	SZ	46	26	EP		11 2	24.01	0.05							1.0
BHL	BZ	46	358	EP		11 2	23.94	-0.11							1.0
HWQ	BZ	92	16	EP		11 2	31.29	-0.03							1.0
BEIL	SZ	126	22	EP		11 2	36.91	-0.03							1.0

April 13 2017 Hour: 11: 6 53.1

Lat: 33.48N Lon: 35.68E Depth: 1 Agency: REL Local

Magnitudes: 2.8MC REL

Rms: 0.1 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	15	81	EP		11 6	55.48	0.01	48						1.0
RCY	SN	15	81	ES		11 6	57.25	0.01							1.0
DQRL	SZ	27	338	EP		11 6	57.49	-0.03							1.0
DQRL	SN	27	338	ES		11 7	0.83	0.03							1.0
ZAHL	SZ	46	24	EP		11 7	0.46	-0.11							1.0
BHL	BZ	48	357	EP		11 7	0.79	0.04							1.0
HWQ	BZ	92	15	EP		11 7	7.91	-0.05							1.0
BEIL	SZ	127	21	EP		11 7	13.66	0.09							1.0

April 13 2017 Hour: 16:22 15.7

Agency: REL Regional

EMSC OT=16:22:15.7 37.14N 28.66E 5Km M=4.8 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1623	51.35								
DQRL	SZ			EP		1623	52.18								
HWQ	BZ			EP		1623	53.40								
BEIL	SZ			EP		1623	54.23								
QRWL	SZ			EP		1623	55.21								
ZAHL	SZ			EP		1623	55.14								
RCY	SZ			EP		1623	56.98								

April 16 2017 Hour: 4:46 19.8

Lat: 33.79N Lon: 35.78E Depth: 7 Agency: REL Local

Magnitudes: 2.9MC REL

Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	53	EP		446	22.21	-0.07	53						1.0
ZAHL	SN	13	53	ES		446	24.15	0.03							1.0
BHL	BZ	17	319	EP		446	22.73	-0.11							1.0
DQRL	SZ	21	244	EP		446	23.41	-0.04							1.0
DQRL	SN	21	244	ES		446	26.29	0.12							1.0
QRWL	SZ	28	198	EP		446	24.46	-0.06							1.0
RCY	SZ	33	170	EP		446	25.26	-0.03							1.0
RCY	SN	33	170	ES		446	29.41	0.04							1.0
HWQ	BZ	56	16	EP		446	28.95	-0.04							1.0
BEIL	SZ	92	24	EP		446	34.78	0.17							1.0

April 16 2017 Hour: 12:11 4.9

Agency: REL Regional

EMSC OT=12:11:04.9 36.27N 27.46E 88Km M=4.2 DODECANESE-TURKEY BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1212	42.81								
DQRL	SZ			EP		1212	43.55								
HWQ	BZ			EP		1212	45.49								
QRWL	SZ			EP		1212	46.38								
ZAHL	SZ			EP		1212	45.78								
BEIL	SZ			EP		1212	46.83								
RCY	SZ			EP		1212	48.01								

April 16 2017 Hour: 15:26 2.0

Lat: 33.98N

Lon: 36.12E

Depth: 12

Agency: REL

Local

Magnitudes: 3.0MC REL

Rms: 0.1 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	25	238	EP		1526	6.66	0.09							1.0
ZAHL	SN	25	238	ES		1526	10.02	0.05							1.0
HWQ	BZ	37	335	EP		1526	8.18	-0.09	59						1.0
HWQ	BN	37	335	ES		1526	12.90	-0.03							1.0
BHL	BZ	44	259	EP		1526	9.23	-0.07							1.0
DQRL	SZ	59	239	EP		1526	11.77	0.06							1.0
RCY	SZ	59	206	EP		1526	11.71	-0.10							1.0
BEIL	SZ	63	6	EP		1526	12.34	0.03							1.0
BEIL	SN	63	6	ES		1526	20.02	0.07							1.0

April 16 2017 Hour: 15:26 2.8

Lat: 34.01N

Lon: 36.01E

Depth: 12

Agency: REL

Local

Magnitudes: 3.0MC REL

Rms: 0.1 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	21	215	EP		1526	6.76	-0.03							1.0
ZAHL	SN	21	215	ES		1526	9.73	0.01							1.0
HWQ	BZ	30	348	EP		1526	8.24	0.04	60						1.0
BHL	BZ	35	251	EP		1526	8.80	-0.10							1.0
BHL	BN	35	251	ES		1526	13.40	0.01							1.0
DQRL	SZ	53	231	EP		1526	11.75	0.09							1.0
BEIL	SZ	61	15	EP		1526	12.89	-0.02							1.0

April 17 2017 Hour: 10:25 9.2

Lat: 33.53N

Lon: 35.70E

Depth: 0

Agency: REL

Local

Magnitudes: 2.5MC REL

Rms: 0.1 secs

RACHAYA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	3	319	EP		1025	9.65	-0.08	31						1.0
RCY	SZ	13	107	EP		1025	11.36	-0.02							1.0
RCY	SN	13	107	ES		1025	13.07	0.10							1.0
DQRL	SZ	23	328	EP		1025	12.93	-0.00							1.0
DQRL	SN	23	328	ES		1025	15.84	0.17							1.0
BHL	BZ	42	354	EP		1025	15.90	-0.06							1.0
HWQ	BZ	86	15	EP		1025	23.00	-0.11							1.0

April 17 2017 Hour: 13:42 24.1

Lat: 33.80N

Lon: 35.78E

Depth: 11

Agency: REL

Local

Magnitudes: 2.8MC REL

Rms: 0.1 secs

ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	11	56	EP		1342	26.79	-0.05							1.0
BHL	BZ	17	314	EP		1342	27.46	0.04	48						1.0
DQRL	SZ	22	242	EP		1342	28.26	0.05							1.0
DQRL	SN	22	242	ES		1342	31.23	-0.02							1.0
QRWL	SZ	30	198	EP		1342	29.14	-0.11							1.0
RCY	SZ	34	172	EP		1342	29.94	-0.02							1.0
RCY	SN	34	172	ES		1342	34.40	0.09							1.0
HWQ	BZ	55	16	EP		1342	33.22	0.02							1.0
BEIL	SZ	90	24	EP		1342	38.49	0.00							1.0

April 17 2017 Hour: 15:28 47.6 Lat: 34.68N Lon: 36.15E Depth: 6 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	15	169	EP		1528	50.41	0.09	65						1.0
BEIL	SN	15	169	ES		1528	52.28	-0.07							1.0
HWQ	BZ	48	203	EP		1528	55.35	-0.11							1.0
HWQ	BN	48	203	ES		1529	1.36	0.06							1.0
ZAHL	SZ	94	195	EP		1529	2.91	0.09							1.0
BHL	BZ	97	208	EP		1529	3.28	-0.04							1.0
DQRL	SZ	121	207	EP		1529	6.73	-0.03							1.0

April 17 2017 Hour: 16:27 45.0 Lat: 33.28N Lon: 35.49E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.0 secs

MARJAAYOUN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	35	30	EP		1627	50.53	-0.07							1.0
RCY	SZ	40	53	EP		1627	51.44	-0.02							1.0
RCY	SN	40	53	ES		1627	56.25	0.01							1.0
DQRL	SZ	48	9	EP		1627	52.75	0.02	59						1.0
DQRL	SN	48	9	ES		1627	58.46	0.01							1.0
BHL	BZ	71	12	EP		1627	56.41	-0.05							1.0
BHL	BN	71	12	ES		1628	4.92	-0.01							1.0
ZAHL	SZ	74	29	EP		1627	56.99	0.07							1.0
HWQ	BZ	119	21	EP		1628	4.13	0.00							1.0
BEIL	SZ	154	24	EP		1628	9.58	0.04							1.0

April 18 2017 Hour: 12:32 48.1 Lat: 33.78N Lon: 35.76E Depth: 6 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	14	53	EP		1232	50.80	0.06							1.0
BHL	BZ	17	324	EP		1232	51.03	-0.08	70						1.0
BHL	BN	17	324	ES		1232	53.28	-0.06							1.0
DQRL	SZ	20	245	EP		1232	51.62	0.11							1.0
DQRL	SN	20	245	ES		1232	54.08	0.05							1.0
BEYL	SZ	27	292	EP		1232	52.48	-0.10							0.2
QRWL	SZ	27	196	EP		1232	52.52	-0.10							1.0
RCY	SZ	32	168	EP		1232	53.48	0.00							1.0
RCY	SN	32	168	ES		1232	57.42	-0.02							1.0
HWQ	BZ	58	17	EP		1232	57.70	0.19							1.0
BEIL	SZ	93	25	EP		1233	3.01	-0.14							1.0

April 18 2017 Hour: 14: 9 27.6 Lat: 33.78N Lon: 35.78E Depth: 7 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.0 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	48	EP		14 9	30.12	0.02							1.0
BHL	BZ	18	318	EP		14 9	30.78	-0.08	53						1.0
DQRL	SZ	22	247	EP		14 9	31.41	0.03							1.0
DQRL	SN	22	247	ES		14 9	34.18	0.03							1.0
RCY	SZ	32	171	EP		14 9	32.96	-0.04							1.0
RCY	SN	32	171	ES		14 9	36.98	0.00							1.0
HWQ	SZ	57	15	EP		14 9	36.95	0.03							1.0
BEIL	SZ	92	24	EP		14 9	42.53	0.02							1.0

April 19 2017 Hour: 14:16 40.3 Lat: 34.20N Lon: 36.35E Depth: 41 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	BZ	38	283	EP		1416	48.74	0.02							1.0
HWQ	BN	38	283	ES		1416	55.00	0.03							1.0
BEIL	SZ	41	338	EP		1416	49.01	0.11	41						1.0

BEIL	SN	41	338	ES	1416	55.17	-0.11										1.0
BHL	BZ	72	243	EP	1416	52.62	0.12										1.0
DQRL	SZ	91	233	EP	1416	54.56	-0.17										1.0

April 19 2017 Hour: 15:53 20.8 Lat: 33.79N Lon: 35.77E Depth: 5 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	54	EP		1553	23.31	0.03							1.0
BHL	BZ	17	321	EP		1553	23.75	0.01	73						1.0
BHL	BN	17	321	ES		1553	25.81	-0.07							1.0
DQRL	SZ	20	244	EP		1553	24.40	0.09							1.0
DQRL	SN	20	244	ES		1553	26.91	0.04							1.0
QRWL	SZ	28	197	EP		1553	25.33	-0.12							1.0
RCY	SZ	33	169	EP		1553	26.23	-0.04							1.0
RCY	SN	33	169	ES		1553	30.32	0.03							1.0
HWQ	BZ	57	17	EP		1553	30.04	-0.04							1.0
BEIL	SZ	92	25	EP		1553	35.78	0.06							1.0

April 20 2017 Hour: 12:22 16.2 Lat: 33.53N Lon: 35.71E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC 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	3	319	EP		1222	16.63	-0.08							1.0
RCY	SZ	13	105	EP		1222	18.20	-0.02	26						1.0
RCY	SN	13	105	ES		1222	19.79	0.06							1.0
DQRL	SZ	24	328	EP		1222	20.03	0.06							1.0
DQRL	SN	24	328	ES		1222	22.85	0.07							1.0
HWQ	BZ	86	15	EP		1222	30.11	0.00							1.0
BEIL	SZ	121	21	EP		1222	35.62	-0.08							1.0

April 20 2017 Hour: 22:59 53.3 Lat: 33.79N Lon: 35.79E Depth: 0 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	12	50	EP		2259	55.28	0.00							1.0
BHL	BZ	18	316	EP		2259	56.26	0.05	28						1.0
BHL	BN	18	316	ES		2259	58.23	-0.10							1.0
DQRL	SZ	22	245	EP		2259	57.05	0.14							1.0
QRWL	SZ	28	200	EP		2259	57.84	-0.09							1.0
RCY	SZ	33	172	EP		2259	58.54	-0.08							1.0
RCY	SN	33	172	ES		23 0	2.57	0.04							1.0
HWQ	BZ	56	15	EP		23 0	2.43	0.02							1.0
BEIL	SZ	91	24	EP		23 0	8.07	0.02							1.0

April 20 2017 Hour: 22:59 23.0 Agency: REL Distant

EMSC OT=22:59:23.0 20.59S 173.81W 10Km M=5.4 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2319	11.57								
BHL	BZ			EP		2319	10.96								
BEIL	SZ			EP		2319	10.81								
ZAHL	SZ			EP		2319	11.95								
QRWL	SZ			EP		2319	12.33								

April 21 2017 Hour: 12:41 30.1 Lat: 33.78N Lon: 35.77E Depth: 3 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
ZAHL	SZ	14	51	EP		1241	32.45	-0.01							1.0
BHL	BZ	17	322	EP		1241	32.93	-0.08	37						1.0
DQRL	SZ	20	246	EP		1241	33.52	0.06							1.0
DQRL	SN	20	246	ES		1241	35.98	0.03							1.0
QRWL	SZ	27	198	EP		1241	34.42	-0.10							1.0
RCY	SZ	32	169	EP		1241	35.31	-0.02							1.0

RCY	SN	32	169	ES		1241	39.25	0.04										1.0
HWQ	BZ	58	16	EP		1241	39.46	0.05										1.0
BEIL	SZ	93	24	EP		1241	45.09	0.03										1.0

April 21 2017 Hour: 13:9 21.4 Agency: REL Regional
EMSC OT=13:09:21.4 38.79N 29.05E 6Km M=5.0 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1311	6.24								
BEIL	SZ			EP		1311	7.32								
RCY	SZ			EP		1311	12.61								

April 21 2017 Hour: 15:46 11.2 Lat: 33.81N Lon: 35.80E Depth: 21 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
ZAHL	SZ	9	58	EP		1546	15.08	0.01							1.0
BHL	BZ	17	307	EP		1546	15.62	0.01	31						1.0
DQRL	SZ	24	241	EP		1546	16.38	-0.01							1.0
DQRL	SN	24	241	ES		1546	20.26	0.01							1.0
QRWL	SZ	31	200	EP		1546	17.28	0.05							1.0
QRWL	SN	31	200	ES		1546	21.66	-0.05							1.0
HWQ	BZ	53	15	EP		1546	20.17	-0.03							1.0

April 22 2017 Hour: 0:13 54.2 Lat: 34.61N Lon: 34.55E Depth: 10 Agency: REL Regional
Magnitudes: 3.5MC REL Rms: 0.2 secs

OFFSHORE NORTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEYL	SZ	119	133	EP		014	13.18	0.30							0.2
BHL	BZ	128	127	EP		014	14.12	-0.15	111						1.0
HWQ	BZ	134	105	EP		014	15.55	0.49							1.0
HWQ	BN	134	105	ES		014	30.78	0.25							1.0
DQRL	SZ	138	136	EP		014	15.39	-0.21							1.0
ZAHL	SZ	149	124	EP		014	17.21	-0.06							1.0
BEIL	SZ	151	92	EP		014	17.39	-0.10							1.0
BEIL	SN	151	92	ES		014	34.45	-0.30							1.0
RCY	SZ	171	136	EP		014	20.59	0.06							1.0
RCY	SN	171	136	ES		014	40.05	0.01							1.0

April 24 2017 Hour: 11:44 47.7 Lat: 34.65N Lon: 36.25E Depth: 14 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	14	207	EP		1144	51.06	0.03	32						1.0
BEIL	SN	14	207	ES		1144	53.48	-0.01							1.0
HWQ	BZ	50	214	EP		1144	55.88	-0.23							1.0
HWQ	BN	50	214	ES		1145	2.35	0.02							1.0
BHL	BZ	100	214	EP		1145	3.62	0.25							1.0
DQRL	SZ	123	211	EP		1145	6.67	-0.05							1.0

April 25 2017 Hour: 22:24 34.4 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2224	37.64								
HWQ	BZ			EP		2224	41.82								
BHL	BZ			EP		2224	50.71								

April 26 2017 Hour: 15:26 56.5 Lat: 33.78N Lon: 35.77E Depth: 7 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
ZAHL	SZ	14	53	EP		1526	59.04	-0.01							1.0
BHL	BZ	17	322	EP		1526	59.49	-0.01	39						1.0
DQRL	SZ	20	244	EP		1527	0.05	0.04							1.0
DQRL	SN	20	244	ES		1527	2.61	-0.00							1.0
QRWL	SZ	28	197	EP		1527	1.03	-0.07							1.0

RCY	SZ	33	169	EP		1527	1.93	0.02											1.0
RCY	SN	33	169	ES		1527	5.95	0.02											1.0
HWQ	BZ	57	17	EP		1527	5.80	0.01											1.0

April 27 2017 Hour: 9:51 0.9 Agency: REL Regional

EMSC OT=09:51:00.9 37.57N 38.49E 2Km M=3.7 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		951	58.09								
HWQ	BZ			EP		952	0.07								

April 27 2017 Hour: 15: 6 5.9 Lat: 34.01N Lon: 35.75E Depth: 3 Agency: REL Local

Magnitudes: 2.6MC REL

Rms: 0.1 secs

KESROUAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	216	EP		15 6	8.53	0.04	34						1.0
ZAHL	SZ	21	144	EP		15 6	9.48	-0.01							1.0
HWQ	BZ	35	32	EP		15 6	11.41	-0.16							1.0
HWQ	BN	35	32	ES		15 6	15.73	0.00							1.0
DQRL	SZ	38	206	EP		15 6	12.12	-0.00							1.0
BEIL	SZ	71	34	EP		15 6	17.45	0.04							1.0
BEIL	SN	71	34	ES		15 6	25.99	0.09							1.0

April 28 2017 Hour: 20:23 18.8 Agency: REL Distant

EMSC OT=20:23:18.8 5.48N 125.08E 42Km M=6.8 MINDANAO, PHILIPPINES

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2035	55.32								
HWQ	BZ			EP		2035	55.65								
BHL	BZ			EP		2035	57.00								
RCY	SZ			EP		2035	56.83								
QRWL	SZ			EP		2035	57.00								

April 28 2017 Hour: 23:12 23.0 Lat: 33.78N Lon: 35.79E Depth: 1 Agency: REL Local

Magnitudes: 2.4MC REL

Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	12	45	EP		2312	24.98	-0.02							1.0
ZAHL	SE	12	45	ES		2312	26.52	0.02							1.0
BHL	BZ	19	317	EP		2312	25.94	-0.08	27						1.0
BHL	BN	19	317	ES		2312	28.26	-0.01							1.0
DQRL	SZ	22	248	EP		2312	26.67	0.11							1.0
QRWL	SZ	28	201	EP		2312	27.40	-0.06							1.0
HWQ	BZ	57	15	EP		2312	32.26	0.07							1.0
BEIL	SZ	92	23	EP		2312	37.78	-0.03							1.0

April 30 2017 Hour: 1:56 54.7 Lat: 33.51N Lon: 35.64E Depth: 8 Agency: REL Local

Magnitudes: 2.4MC 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	5	43	EP		156	56.37	-0.05	28						1.0
RCY	SZ	18	96	EP		156	58.00	0.02							1.0
RCY	SN	18	96	ES		157	0.46	0.01							1.0
DQRL	SZ	23	343	EP		156	58.67	0.07							1.0
DQRL	SN	23	343	ES		157	1.53	0.02							1.0
BHL	BZ	44	1	EP		157	1.73	-0.11							1.0
ZAHL	SZ	45	30	EP		157	2.04	0.04							1.0

Epicentral Map of Lebanon

APRIL 2017

