

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

March

2018

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.

March 2 2018 Hour: 13:50 23.5 Lat: 34.55N Lon: 36.36E Depth: 3 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.2 secs

AKKAR REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	16	268	EP		1350	26.20	0.09	58						1.0
BEIL	SN	16	268	ES		1350	28.13	0.07							1.0
FKH	SZ	34	172	EP		1350	28.91	-0.05							1.0
FKH	SN	34	172	ES		1350	33.11	0.08							1.0
HWQ	BZ	48	232	EP		1350	30.96	-0.30							1.0
HWQ	BN	48	232	ES		1350	37.04	-0.00							1.0
ZAHL	SZ	88	210	EP		1350	38.19	0.53							0.2
BHL	BZ	96	223	EP		1350	39.05	0.03							0.2
DQRL	SZ	118	218	EP		1350	42.71	0.16							0.2
RCY	SZ	126	203	EP		1350	43.80	0.07							1.0

March 2 2018 Hour: 15:58 2.2 Lat: 34.02N Lon: 35.76E Depth: 0 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.2 secs

KESROUAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	16	215	EP		1558	4.69	-0.11	76						1.0
ZAHL	SZ	22	147	EP		1558	5.74	0.03							1.0
ZAHL	SN	22	147	ES		1558	8.37	0.04							1.0
HWQ	BZ	33	32	EP		1558	7.52	0.01							1.0
HWQ	BN	33	32	ES		1558	11.43	-0.04							1.0
DQRL	SZ	39	206	EP		1558	8.60	0.10							1.0
QRWL	SZ	53	187	EP		1558	10.82	0.06							1.0
RCY	SZ	59	173	EP		1558	11.64	-0.04							1.0
RCY	SN	59	173	ES		1558	18.64	-0.08							1.0
FKH	SZ	65	68	EP		1558	11.88	-0.78							0.2
BEIL	SZ	70	34	EP		1558	14.31	0.92							0.2

March 3 2018 Hour: 13: 7 37.2 Lat: 33.97N Lon: 36.19E 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	31	246	EP		13 7	42.28	0.07							1.0
FKH	SZ	37	34	EP		13 7	43.13	0.00	43						1.0
HWQ	BZ	41	327	EP		13 7	43.69	-0.13							1.0
HWQ	BN	41	327	ES		13 7	48.72	0.03							1.0
RCY	SZ	62	212	EP		13 7	47.24	0.01							1.0
RCY	SN	62	212	ES		13 7	54.60	-0.04							1.0
BEIL	SZ	63	360	EP		13 7	47.48	0.04							1.0
DQRL	SZ	65	243	EP		13 7	47.65	0.02							1.0

March 3 2018 Hour: 13:59 28.0 Lat: 33.47N Lon: 35.70E Depth: 0 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	350	EP		1359	29.30	-0.06							1.0
RCY	SZ	13	78	EP		1359	30.11	-0.01	29						1.0
RCY	SN	13	78	ES		1359	31.71	0.02							1.0
SHBL	SZ	15	163	EP		1359	30.35	0.01							1.0
DQRL	SZ	28	335	EP		1359	32.60	0.02							1.0
DQRL	SN	28	335	ES		1359	35.99	0.02							1.0
BHL	BZ	48	355	EP		1359	35.74	0.00							1.0

March 3 2018 Hour: 15:20 58.3 Lat: 34.59N Lon: 36.38E Depth: 1 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	19	253	EP		1521	1.49	0.12	71						1.0
BEIL	SN	19	253	ES		1521	3.66	-0.00							1.0
FKH	SZ	39	177	EP		1521	4.40	-0.09							1.0

FKH	SN	39	177	ES		1521	9.11	0.01									1.0
HWQ	BZ	53	229	EP		1521	6.68	-0.18									1.0
HWQ	BN	53	229	ES		1521	13.22	0.00									1.0
ZAHL	SZ	94	210	EP		1521	13.51	0.16									1.0
BHL	BZ	102	222	EP		1521	14.54	-0.13									1.0
DQRL	SZ	124	218	EP		1521	18.12	-0.10									1.0
RCY	SZ	132	203	EP		1521	19.69	0.19									1.0

March 4 2018 Hour: 12:31 15.4 Lat: 33.83N Lon: 36.09E Depth: 14 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
ZAHL	SZ	19	278	EP		1231	19.35	-0.01							1.0
ZAHL	SN	19	278	ES		1231	22.27	0.01							1.0
BHL	BZ	41	281	EP		1231	22.34	-0.10							1.0
BHL	BN	41	281	ES		1231	27.64	0.02							1.0
RCY	SZ	44	212	EP		1231	22.95	-0.00	56						1.0
RCY	SN	44	212	ES		1231	28.53	0.01							1.0
DQRL	SZ	50	254	EP		1231	23.82	0.03							1.0
HWQ	BZ	51	345	EP		1231	24.00	0.07							1.0
BEIL	SZ	79	6	EP		1231	27.98	-0.03							1.0

March 4 2018 Hour: 19:52 51.5 Agency: REL Distant

EMSC OT=19:52:51.5 45.07N 147.82E 100Km M=5.4 KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		20	4	47.74							
HWQ	BZ			EP		20	4	49.32							
ZAHL	SZ			EP		20	4	51.22							
BHL	BZ			EP		20	4	51.38							
DQRL	SZ			EP		20	4	53.04							
RCY	SZ			EP		20	4	53.04							
QRWL	SZ			EP		20	4	53.28							

March 5 2018 Hour: 17:37 35.7 Lat: 33.79N Lon: 35.77E Depth: 10 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
ZAHL	SZ	13	54	EP		1737	38.45	-0.07	46						1.0
BHL	BZ	17	321	EP		1737	38.88	-0.06							1.0
BHL	BN	17	321	ES		1737	41.40	0.06							1.0
DQRL	SZ	20	244	EP		1737	39.47	0.02							1.0
QRWL	SZ	28	197	EP		1737	40.35	-0.15							1.0
RCY	SZ	33	169	EP		1737	41.38	0.08							1.0
RCY	SN	33	169	ES		1737	45.51	0.06							1.0
HWQ	BZ	57	17	EP		1737	45.09	0.04							1.0
BEIL	SZ	92	25	EP		1737	50.49	0.02							1.0

March 5 2018 Hour: 20:16 14.8 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2016	29.37								
HWQ	BZ			EP		2016	32.95								
BHL	BZ			EP		2016	37.92								
DQRL	SZ			EP		2016	40.73								

March 6 2018 Hour: 6:19 48.6 Lat: 34.04N Lon: 35.74E Depth: 5 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	16	207	EP		619	51.38	-0.08							1.0
BHL	BN	16	207	ES		619	53.61	0.03							1.0
ZAHL	SZ	24	145	EP		619	52.55	-0.09							1.0
HWQ	BZ	33	36	EP		619	53.94	-0.11	72						1.0
HWQ	BN	33	36	ES		619	58.20	0.11							1.0
DQRL	SZ	40	203	EP		619	55.11	0.02							1.0

QRWL	SZ	54	185	EP		619	57.46	0.03											1.0
RCY	SZ	61	171	EP		619	58.53	0.10											1.0
BEIL	SZ	70	36	EP		619	59.88	-0.00											1.0

March 7 2018 Hour: 4:40 11.5 Agency: REL Distant

EMSC OT=04:40:11.5 45.83N 152.27E 30Km M=5.9 EAST OF KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		452	25.97								
FKH	SZ			EP		452	26.81								
HWQ	BZ			EP		452	27.11								
ZAHL	SZ			EP		452	29.92								
BHL	BZ			EP		452	30.30								
DQRL	SZ			EP		452	31.44								
RCY	SZ			EP		452	31.36								
QRWL	SZ			EP		452	30.60								

March 7 2018 Hour: 9:59 28.6 Lat: 34.55N Lon: 36.77E Depth: 31 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.2 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	54	269	EP		959	38.05	-0.22	40						1.0
BEIL	SN	54	269	ES		959	45.50	0.10							1.0
HWQ	BZ	82	249	EP		959	42.40	0.31							1.0
HWQ	BN	82	249	ES		959	51.93	-0.10							1.0
RCY	SZ	145	217	EP		959	50.06	0.05							1.0
DQRL	SZ	145	230	EP		959	49.80	-0.14							1.0

March 7 2018 Hour: 14:38 0.6 Lat: 33.98N Lon: 36.16E Depth: 15 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	29	243	EP		1438	5.91	-0.01							1.0
FKH	SZ	37	38	EP		1438	7.03	-0.04	43						1.0
FKH	SN	37	38	ES		1438	11.93	0.05							1.0
HWQ	BZ	39	329	EP		1438	7.26	-0.04							1.0
BHL	BZ	48	260	EP		1438	8.68	0.06							1.0
RCY	SZ	62	210	EP		1438	10.64	-0.01							1.0
RCY	SN	62	210	ES		1438	18.11	0.00							1.0

March 7 2018 Hour: 14:46 11.8 Agency: REL Distant

EMSC OT=14:46:11.8 28.04N 57.65E 30Km M=5.3 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1450	35.33								
BEIL	SZ			EP		1450	38.24								
RCY	SZ			EP		1450	38.71								
ZAHL	SZ			EP		1450	39.42								
HWQ	BZ			EP		1450	38.55								
QRWL	SZ			EP		1450	40.12								
BHL	BZ			EP		1450	41.14								
DQRL	SZ			EP		1450	41.62								

March 8 2018 Hour: 1:50 53.3 Agency: REL Regional

EMSC OT=01:50:53.3 37.24N 34.91E 60Km M=3.3 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		151	36.89								
HWQ	BZ			EP		151	39.29								
BHL	BZ			EP		151	42.98								
ZAHL	SZ			EP		151	45.03								
DQRL	SZ			EP		151	45.34								
QRWL	SZ			EP		151	48.09								
RCY	SZ			EP		151	49.47								
SHBL	SZ			EP		151	51.12								

March 8 2018 Hour: 4:56 10.7 Agency: REL Regional

EMSC OT=04:56:10.7 34.19N 26.66E 50Km M=4.5 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		457	54.98								
QRWL	SZ			EP		457	56.05								
RCY	SZ			EP		457	57.72								
ZAHL	SZ			EP		457	57.79								
HWQ	BZ			EP		457	58.39								
BEIL	SZ			EP		458	0.13								
FKH	SZ			EP		458	3.93								

March 9 2018 Hour: 16:23 23.2 Agency: REL Distant

EMSC OT=16:23:23.2 21.03S 178.61W 547Km M=5.7 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1642	0.79								
BHL	BZ			EP		1642	1.46								
BEIL	SZ			EP		1642	1.28								
FKH	SZ			EP		1642	1.34								
DQRL	SZ			EP		1642	1.52								
RCY	SZ			EP		1642	2.56								

March 11 2018 Hour: 16:20 25.2 Lat: 33.47N Lon: 35.68E 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	9	360	EP		1620	26.60	-0.08							1.0
QRWL	SN	9	360	ES		1620	27.81	0.05							1.0
SHBL	SZ	14	157	EP		1620	27.60	0.05							1.0
RCY	SZ	15	77	EP		1620	27.53	-0.07	51						1.0
RCY	SN	15	77	ES		1620	29.32	-0.03							1.0
DQRL	SZ	29	339	EP		1620	29.81	-0.02							1.0
DQRL	SN	29	339	ES		1620	33.16	-0.07							1.0
ZAHL	SZ	47	23	EP		1620	32.95	0.09							1.0
BHL	BZ	49	357	EP		1620	33.09	0.02							1.0
HWQ	BZ	93	15	EP		1620	40.74	0.47							0.2
BEIL	SZ	128	21	EP		1620	46.12	0.26							0.2

March 12 2018 Hour: 14:9 53.6 Lat: 33.47N Lon: 35.69E Depth: 0 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	9	357	EP		14 9	54.93	-0.06	34						1.0
QRWL	SN	9	357	ES		14 9	56.05	0.02							1.0
RCY	SZ	14	78	EP		14 9	55.88	0.00							1.0
RCY	SN	14	78	ES		14 9	57.58	0.00							1.0
SHBL	SZ	14	158	EP		14 9	55.93	0.00							1.0
DQRL	SZ	28	338	EP		14 9	58.19	0.04							1.0
DQRL	SN	28	338	ES		1410	1.53	-0.01							1.0

March 12 2018 Hour: 16:17 24.3 Lat: 33.78N Lon: 35.76E Depth: 4 Agency: REL Local
Magnitudes: 3.0MC 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	15	54	EP		1617	26.89	0.03							1.0
BHL	BZ	17	326	EP		1617	27.03	-0.09	64						1.0
BHL	BN	17	326	ES		1617	29.19	-0.01							1.0
DQRL	SZ	19	244	EP		1617	27.59	0.09							1.0
DQRL	SN	19	244	ES		1617	29.87	0.02							1.0
QRWL	SZ	27	195	EP		1617	28.65	-0.04							1.0
RCY	SZ	32	167	EP		1617	29.54	-0.07							1.0
RCY	SN	32	167	ES		1617	33.54	0.02							1.0
HWQ	BZ	58	18	EP		1617	33.72	0.01							1.0
FKH	SZ	80	49	EP		1617	37.18	0.02							1.0

BEIL SZ 93 25 EP 1617 39.41 0.03 1.0

March 12 2018 Hour: 17:12 30.7 Lat: 33.79N Lon: 35.77E Depth: 6 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	53	EP		1712	33.15	0.00							1.0
BHL	BZ	17	320	EP		1712	33.62	-0.05	33						1.0
BHL	BE	17	320	ES		1712	35.90	0.00							1.0
DQRL	SZ	21	244	EP		1712	34.25	0.03							1.0
RCY	SZ	33	169	EP		1712	36.05	-0.04							1.0
RCY	SN	33	169	ES		1712	40.13	0.02							1.0
HWQ	BZ	57	16	EP		1712	40.04	0.12							1.0
BEIL	SZ	92	24	EP		1712	45.47	-0.08							1.0

March 13 2018 Hour: 11:49 22.0 Lat: 33.47N 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	9	355	EP		1149	23.34	-0.08							1.0
RCY	SZ	14	77	EP		1149	24.29	0.04	39						1.0
RCY	SN	14	77	ES		1149	25.90	-0.01							1.0
SHBL	SZ	14	160	EP		1149	24.32	-0.01							1.0
DQRL	SZ	29	337	EP		1149	26.65	0.05							1.0
DQRL	SN	29	337	ES		1149	30.01	0.01							1.0

March 13 2018 Hour: 13:46 10.8 Lat: 33.88N Lon: 35.85E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC 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	4	124	EP		1346	11.41	-0.05							1.0
BHL	BZ	18	279	EP		1346	13.64	-0.05							1.0
BHL	BN	18	279	ES		1346	15.88	0.01							1.0
DQRL	SZ	32	233	EP		1346	15.96	0.01							1.0
RCY	SZ	43	182	EP		1346	17.68	0.07	49						1.0
RCY	SN	43	182	ES		1346	22.66	-0.02							1.0
HWQ	BZ	45	12	EP		1346	18.01	-0.03							1.0
BEIL	SZ	80	23	EP		1346	23.68	0.06							1.0

March 13 2018 Hour: 14:56 36.1 Lat: 33.97N Lon: 36.20E Depth: 13 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	32	246	EP		1456	41.74	-0.04							1.0
FKH	SZ	36	33	EP		1456	42.33	-0.00							1.0
FKH	SN	36	33	ES		1456	46.96	0.04							1.0
HWQ	BZ	41	325	EP		1456	43.08	-0.06	59						1.0
HWQ	BN	41	325	ES		1456	48.36	0.03							1.0
BHL	BZ	51	261	EP		1456	44.88	0.19							1.0
BHL	BN	51	261	ES		1456	50.99	-0.04							1.0
BEIL	SZ	63	359	EP		1456	46.34	-0.05							1.0
RCY	SZ	63	213	EP		1456	46.46	0.00							1.0
DQRL	SZ	66	243	EP		1456	46.73	-0.08							1.0
QRWL	SZ	68	226	EP		1456	47.06	-0.03							1.0
QRWL	SN	68	226	ES		1456	55.25	0.05							1.0

March 13 2018 Hour: 15: 3 45.1 Lat: 33.39N Lon: 35.51E Depth: 11 Agency: REL Local
Magnitudes: 2.3MC REL Rms: 0.0 secs

NABATIYE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	32	69	EP		15 3	50.70	0.01	23						1.0
RCY	SE	32	69	ES		15 3	54.82	-0.01							1.0
DQRL	SZ	35	9	EP		15 3	51.11	0.02							1.0
DQRL	SE	35	9	ES		15 3	55.55	0.01							1.0

BHL	BZ	58	13	EP	15	3	54.64	-0.04									1.0
HWQ	BZ	106	22	EP	15	4	1.82	0.01									1.0

March 14 2018 Hour: 15:12 55.1 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	0	EP		1512	56.52	-0.02							1.0
SHBL	SN	15	157	ES		1512	59.22	-0.02							1.0
RCY	SZ	15	78	EP		1512	57.51	0.01	32						1.0
SHBL	SZ	15	157	EP		1512	57.49	-0.00							1.0
DQRL	SZ	28	338	EP		1512	59.79	0.11							1.0
DQRL	SN	28	338	ES		1513	2.98	-0.07							1.0
BHL	BZ	48	357	EP		1513	2.90	-0.02							1.0

March 15 2018 Hour: 11:30 38.9 Lat: 33.46N Lon: 35.67E 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	10	5	EP		1130	40.43	-0.06							1.0
SHBL	SZ	14	152	EP		1130	41.19	-0.01							1.0
SHBL	SN	14	152	ES		1130	42.89	0.00							1.0
RCY	SZ	16	75	EP		1130	41.40	-0.04	39						1.0
DQRL	SZ	29	341	EP		1130	43.59	0.02							1.0
DQRL	SN	29	341	ES		1130	46.97	-0.04							1.0
BHL	BZ	49	358	EP		1130	46.91	0.05							1.0
HWQ	BZ	94	15	EP		1130	54.10	0.00							1.0
BEIL	SZ	129	21	EP		1130	59.78	0.08							1.0

March 17 2018 Hour: 0: 8 45.0 Lat: 33.79N Lon: 35.80E Depth: 7 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
ZAHL	SZ	11	46	EP		0	8	47.18	0.01						1.0
BHL	BZ	19	312	EP		0	8	48.22	-0.04						1.0
DQRL	SZ	24	246	EP		0	8	49.05	0.04						1.0
DQRL	SN	24	246	ES		0	8	51.99	-0.01						1.0
QRWL	SZ	29	203	EP		0	8	49.92	0.04						1.0
RCY	SZ	33	175	EP		0	8	50.40	-0.06	36					1.0
RCY	SN	33	175	ES		0	8	54.53	0.01						1.0
HWQ	BZ	56	14	EP		0	8	54.04	0.01						1.0

March 17 2018 Hour: 1:16 0.1 Lat: 33.69N Lon: 35.86E Depth: 5 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
ZAHL	SZ	18	6	EP		116	3.28	0.07	49						1.0
RCY	SZ	22	187	EP		116	3.67	-0.10							1.0
RCY	SN	22	187	ES		116	6.52	-0.00							1.0
QRWL	SZ	23	226	EP		116	3.97	0.01							1.0
DQRL	SZ	27	273	EP		116	4.58	0.00							1.0
DQRL	SN	27	273	ES		116	7.94	0.02							1.0
BHL	BZ	30	320	EP		116	4.98	-0.09							1.0
SHBL	SZ	40	196	EP		116	6.68	0.10							1.0
HWQ	BZ	65	7	EP		116	10.64	-0.00							1.0

March 18 2018 Hour: 12:44 38.0 Lat: 33.84N Lon: 36.08E Depth: 10 Agency: REL Local
Magnitudes: 3.1MC 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	19	276	EP		1244	41.64	0.02	70						1.0
ZAHL	SN	19	276	ES		1244	44.22	-0.04							1.0
BHL	BZ	41	280	EP		1244	44.80	-0.05							1.0
BHL	BN	41	280	ES		1244	49.94	0.06							1.0

RCY	SZ	45	211	EP		1244	45.46	-0.05									1.0
RCY	SN	45	211	ES		1244	51.04	-0.00									1.0
QRWL	SZ	50	229	EP		1244	46.29	0.04									1.0
DQRL	SZ	50	253	EP		1244	46.37	0.04									1.0
HWQ	BZ	50	345	EP		1244	46.31	-0.05									1.0
FKH	SZ	54	34	EP		1244	47.01	0.06									1.0
BEIL	SZ	78	7	EP		1244	50.70	-0.02									1.0

March 18 2018 Hour: 13:31 50.2

Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		1332	12.13								
DQRL	SZ			EP		1332	14.00								

March 18 2018 Hour: 14:45 47.1 Lat: 33.87N Lon: 35.85E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC 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	4	116	EP		1445	47.76	-0.02							1.0
BHL	BZ	18	281	EP		1445	49.95	-0.09	56						1.0
BHL	BN	18	281	ES		1445	52.30	0.10							1.0
DQRL	SZ	32	234	EP		1445	52.26	0.04							1.0
DQRL	SN	32	234	ES		1445	55.94	-0.06							1.0
QRWL	SZ	39	203	EP		1445	53.38	-0.06							1.0
RCY	SZ	42	181	EP		1445	53.89	0.03							1.0
RCY	SN	42	181	ES		1445	58.92	0.06							1.0
HWQ	BZ	46	12	EP		1445	54.53	0.03							1.0
FKH	SZ	66	51	EP		1445	57.86	0.05							1.0
BEIL	SZ	80	23	EP		1446	0.01	-0.06							1.0

March 19 2018 Hour: 13:12 58.8 Lat: 34.41N Lon: 36.74E Depth: 3 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
FKH	SZ	35	240	EP		1313	4.49	-0.08							1.0
BEIL	SZ	53	286	EP		1313	7.42	-0.01	55						1.0
BEIL	SN	53	286	ES		1313	13.81	0.00							1.0
HWQ	BZ	75	259	EP		1313	10.90	0.04							1.0
HWQ	BN	75	259	ES	*	1313	19.78	0.01							0.0
BHL	BZ	115	241	EP		1313	17.39	0.06							1.0
RCY	SZ	131	220	EP		1313	19.85	0.05							1.0
DQRL	SZ	133	235	EP		1313	20.00	-0.07							1.0

March 19 2018 Hour: 16:38 38.8 Lat: 34.70N Lon: 36.12E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC 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	19	161	EP		1638	41.86	0.00	37						1.0
BEIL	SN	19	161	ES		1638	44.10	0.01							1.0
HWQ	BZ	49	199	EP		1638	46.73	-0.08							1.0
HWQ	BN	49	199	ES		1638	52.71	-0.00							1.0
BHL	BZ	98	206	EP		1638	54.80	0.14							1.0
DQRL	SZ	121	205	EP		1638	58.34	-0.07							1.0
RCY	SZ	136	191	EP		1639	0.76	-0.00							1.0

March 19 2018 Hour: 17:10 24.0 Lat: 33.79N 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	13	56	EP		1710	26.45	0.04							1.0
BHL	BZ	16	321	EP		1710	26.87	0.05	30						1.0
BHL	BN	16	321	ES		1710	28.88	-0.04							1.0
DQRL	SZ	20	243	EP		1710	27.48	0.05							1.0
QRWL	SZ	28	196	EP		1710	28.48	-0.13							1.0
RCY	SZ	33	169	EP		1710	29.40	-0.06							1.0

RCY	SN	33	169	ES	1710	33.51-0.00										1.0
SHBL	SZ	49	182	EP	1710	32.10	0.13									1.0
HWQ	BZ	57	17	EP	1710	33.13-0.05										1.0

March 21 2018 Hour: 8:38 1.6 Lat: 34.19N Lon: 36.42E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.2 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	6	350	EP		838	2.34-0.29								1.0
HWQ	BZ	45	283	EP		838	8.74-0.09								1.0
HWQ	BN	45	283	ES		838	14.19-0.02								1.0
BEIL	SZ	45	331	EP		838	9.27	0.45	40						1.0
BEIL	SN	45	331	ES		838	14.13-0.06								1.0
ZAHL	SZ	62	234	EP		838	11.42-0.09								1.0
RCY	SZ	94	216	EP		838	16.73	0.01							1.0
DQRL	SZ	95	236	EP		838	17.00	0.08							1.0

March 21 2018 Hour: 21:40 19.9 Lat: 34.05N Lon: 36.26E Depth: 5 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.0 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	26	33	EP		2140	24.16-0.05								1.0
FKH	SN	26	33	ES		2140	27.44	0.03							1.0
HWQ	BZ	38	312	EP		2140	26.20	0.04	75						1.0
HWQ	BN	38	312	ES		2140	30.76-0.04								1.0
ZAHL	SZ	40	239	EP		2140	26.43-0.03								1.0
BEIL	SZ	55	353	EP		2140	28.85	0.02	72						1.0
BHL	BZ	58	254	EP		2140	29.23-0.05								1.0
BHL	BN	58	254	ES		2140	36.30	0.06							1.0
RCY	SZ	73	213	EP		2140	31.66	0.03							1.0
RCY	SN	73	213	ES		2140	40.31-0.02								1.0
DQRL	SZ	74	239	EP		2140	31.85-0.01								1.0
QRWL	SZ	77	224	EP		2140	32.34	0.02							1.0
SHBL	SZ	91	212	EP		2140	34.59-0.01								1.0

March 22 2018 Hour: 2:17 29.9 Lat: 34.58N Lon: 33.99E Depth: 22 Agency: REL Regional
Magnitudes: 3.3MC REL Rms: 0.1 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	171	116	EP		217	55.15-0.04								1.0
DQRL	SZ	175	123	EP		217	55.80	0.06							1.0
HWQ	BZ	183	100	EP		217	56.73	0.00							1.0
HWQ	BN	183	100	ES		218	16.50-0.09								1.0
ZAHL	SZ	192	114	EP		217	57.76-0.12								1.0
QRWL	SZ	194	126	EP		217	57.99-0.05								1.0
BEIL	SZ	202	91	EP		217	59.11	0.15	72						1.0
BEIL	SN	202	91	ES		218	20.49	0.01							1.0
RCY	SZ	209	125	EP		218	0.05	0.11	66						1.0

March 22 2018 Hour: 13:43 21.8 Lat: 33.88N Lon: 35.85E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC 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	4	128	EP		1343	22.40-0.06								1.0
BHL	BZ	18	278	EP		1343	24.66-0.06								1.0
DQRL	SZ	32	233	EP		1343	26.97-0.02								1.0
DQRL	SN	32	233	ES		1343	30.88	0.02							1.0
QRWL	SZ	40	203	EP		1343	28.20-0.03								1.0
RCY	SZ	43	182	EP		1343	28.75	0.11	54						1.0
RCY	SN	43	182	ES		1343	33.73-0.01								1.0
HWQ	BZ	45	11	EP		1343	29.09	0.07							1.0
FKH	SZ	66	52	EP		1343	32.32-0.03								1.0
BEIL	SZ	80	23	EP		1343	34.59-0.00								1.0

March 22 2018 Hour: 17:13 35.5 Lat: 33.78N Lon: 35.76E Depth: 0 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
ZAHL	SZ	15	51	EP		1713	37.74	-0.10							1.0
BHL	BZ	17	325	EP		1713	38.18	-0.12	45						1.0
DQRL	SZ	20	247	EP		1713	38.77	0.14							1.0
DQRL	SN	20	247	ES		1713	40.91	-0.05							1.0
QRWL	SZ	26	197	EP		1713	39.70	-0.04							1.0
RCY	SZ	32	168	EP		1713	40.65	0.05							1.0
RCY	SN	32	168	ES		1713	44.36	-0.03							1.0
HWQ	BZ	58	17	EP		1713	44.96	0.09							1.0
BEIL	SZ	93	24	EP		1713	50.61	0.06							1.0

March 22 2018 Hour: 17:47 13.6 Lat: 34.56N Lon: 36.38E Depth: 2 Agency: REL Local
Magnitudes: 2.9MC 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	264	EP		1747	16.51	-0.04	50						1.0
FKH	SZ	35	176	EP		1747	19.22	-0.00							1.0
HWQ	BZ	51	232	EP		1747	21.72	-0.06							1.0
HWQ	BN	51	232	ES		1747	27.91	0.06							1.0
BHL	BZ	99	223	EP		1747	29.38	-0.14							0.2
DQRL	SZ	121	219	EP		1747	33.10	0.06							0.2
RCY	SZ	128	203	EP		1747	34.17	-0.04							1.0
RCY	SN	128	203	ES		1747	49.40	-0.08							1.0
QRWL	SZ	129	210	EP		1747	34.53	0.17							1.0

March 23 2018 Hour: 15:27 6.6 Lat: 33.78N Lon: 35.77E 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	53	EP		1527	8.77	-0.13							1.0
ZAHL	SN	13	53	ES		1527	10.67	0.08							1.0
BHL	BZ	17	321	EP		1527	9.32	-0.12	35						1.0
DQRL	SZ	21	245	EP		1527	9.97	-0.01							1.0
DQRL	SN	21	245	ES		1527	12.57	0.09							1.0
QRWL	SZ	28	197	EP		1527	11.11	0.01							1.0
RCY	SZ	33	169	EP		1527	11.87	-0.04							1.0
HWQ	BZ	57	17	EP		1527	15.78	-0.06							1.0
BEIL	SZ	92	24	EP		1527	21.69	0.19							1.0

March 24 2018 Hour: 2:18 17.3 Lat: 34.32N Lon: 36.46E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	9	207	EP		218	18.49	-0.32							1.0
BEIL	SZ	35	315	EP		218	23.07	0.11	48						1.0
BEIL	SN	35	315	ES		218	27.08	-0.06							1.0
HWQ	BZ	47	265	EP		218	24.84	-0.06							1.0
HWQ	BN	47	265	ES		218	30.53	0.00							1.0
ZAHL	SZ	73	226	EP		218	29.30	0.16							1.0
ZAHL	SN	73	226	ES		218	37.94	0.03							1.0
BHL	BZ	87	238	EP		218	31.23	-0.12							1.0
DQRL	SZ	106	230	EP		218	34.51	0.04							1.0
RCY	SZ	108	212	EP		218	34.90	0.21							1.0

March 25 2018 Hour: 17:17 50.0 Lat: 34.04N Lon: 35.94E Depth: 4 Agency: REL Local
 Magnitudes: 3.0MC REL Rms: 0.0 secs

KESROUAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	21	194	EP		1717	53.45	-0.07							1.0
ZAHL	SN	21	194	ES		1717	56.18	0.04							1.0
HWQ	BZ	26	1	EP		1717	54.25	0.01	56						1.0
HWQ	BN	26	1	ES		1717	57.40	-0.01							1.0
BHL	BZ	31	240	EP		1717	55.00	0.02							1.0
BHL	BN	31	240	ES		1717	58.68	-0.01							1.0
FKH	SZ	49	63	EP		1717	57.87	-0.02							1.0
DQRL	SZ	51	222	EP		1717	58.22	0.01							1.0
BEIL	SZ	60	22	EP		1717	59.64	0.03							1.0
QRWL	SZ	60	203	EP		1717	59.65	-0.04							1.0
RCY	SZ	62	189	EP		1717	59.98	0.04							1.0
SHBL	SZ	79	193	EP		1718	2.79	-0.00							1.0

March 25 2018 Hour: 20:14 47.8 Agency: REL Distant

EMSC OT=20:14:47.8 6.7IS 129.74E 176Km M=6.6 BANDA SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		2027	57.73								
HWQ	BZ			EP		2027	56.43								
BEIL	SZ			EP		2027	58.46								
ZAHL	SZ			EP		2027	59.24								
BHL	BZ			EP		2027	59.24								
DQRL	SZ			EP		2028	0.41								
RCY	SZ			EP		2027	59.35								

March 25 2018 Hour: 23:4 18.5 Lat: 33.79N Lon: 35.79E Depth: 0 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	12	47	EP		23 4	20.40	0.04	36						1.0
BHL	BZ	18	315	EP		23 4	21.44	-0.01							1.0
BHL	BN	18	315	ES		23 4	23.57	-0.06							1.0
DQRL	SZ	23	246	EP		23 4	22.25	0.10							1.0
RCY	SZ	33	173	EP		23 4	23.66	-0.08							1.0
RCY	SN	33	173	ES		23 4	27.63	0.00							1.0
HWQ	BZ	56	14	EP		23 4	27.56	0.00							1.0

March 26 2018 Hour: 15:12 2.6 Lat: 33.87N Lon: 35.84E Depth: 0 Agency: REL Local
 Magnitudes: 3.0MC 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	5	113	EP		1512	3.21	-0.15							1.0
BHL	BZ	18	281	EP		1512	5.45	0.00	58						1.0
DQRL	SZ	31	233	EP		1512	7.65	-0.00							1.0
DQRL	SN	31	233	ES		1512	11.28	-0.10							1.0
BEYL	SZ	32	270	EP		1512	7.75	-0.05							1.0
QRWL	SZ	39	202	EP		1512	9.06	0.15							1.0
RCY	SZ	42	181	EP		1512	9.45	0.08							1.0
RCY	SN	42	181	ES		1512	14.37	0.00							1.0
HWQ	BZ	46	12	EP		1512	9.96	-0.05							1.0
HWQ	BN	46	12	ES		1512	15.54	0.05							1.0
SHBL	SZ	59	189	EP		1512	12.16	0.03							1.0
FKH	SZ	67	52	EP		1512	13.34	-0.04							1.0
BEIL	SZ	81	23	EP		1512	15.68	0.08							1.0

March 27 2018 Hour: 1:17 41.5 Lat: 34.73N Lon: 33.07E Depth: 0 Agency: REL Regional
Magnitudes: 3.4MC REL Rms: 0.4 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	255	110	EP		118	18.41	-0.82							1.0
DQRL	SZ	257	116	EP		118	18.91	-0.57	81						1.0
DQRL	SN	257	116	ES		118	47.57	-0.05							1.0
HWQ	BZ	269	100	EP		118	21.09	0.11							1.0
QRWL	SZ	274	118	EP		118	22.09	0.45							1.0
ZAHL	SZ	277	110	EP		118	22.01	0.05							1.0
ZAHL	SE	277	110	ES		118	51.98	0.05							1.0
BEIL	SZ	286	93	EP		118	23.23	0.15							1.0
BEIL	SE	286	93	ES		118	53.90	0.01							1.0
RCY	SZ	289	118	EP		118	24.19	0.61							1.0
SHBL	SZ	291	121	EP		118	23.72	-0.00							1.0

March 28 2018 Hour: 16: 8 21.9 Lat: 33.86N Lon: 35.84E Depth: 0 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.2 secs

ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	4	100	EP		16 8	22.45	-0.11							1.0
BHL	BZ	18	284	EP		16 8	24.71	-0.02	62						1.0
BHL	BN	18	284	ES		16 8	26.88	0.01							1.0
DQRL	SZ	31	235	EP		16 8	26.82	0.02							1.0
QRWL	SZ	38	203	EP		16 8	28.03	0.03							1.0
RCY	SZ	41	181	EP		16 8	28.46	0.02							1.0
RCY	SN	41	181	ES		16 8	33.29	-0.02							1.0
HWQ	BZ	47	12	EP		16 8	29.30	-0.13							1.0
FKH	SZ	67	51	EP		16 8	32.86	0.13							1.0
BEIL	SZ	82	23	EP		16 8	36.04	1.03							0.2

March 29 2018 Hour: 8: 3 38.9 Lat: 34.02N Lon: 35.75E Depth: 0 Agency: REL Local
Magnitudes: 2.9MC 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	215	EP		8 3	41.26	-0.13	50						1.0
BHL	BN	15	215	ES		8 3	43.29	0.05							1.0
ZAHL	SZ	22	144	EP		8 3	42.31	-0.12							1.0
HWQ	BZ	34	32	EP		8 3	44.42	0.01							1.0
HWQ	BN	34	32	ES		8 3	48.57	0.08							1.0
DQRL	SZ	38	206	EP		8 3	45.14	0.04							1.0
QRWL	SZ	53	187	EP		8 3	47.41	0.03							1.0
RCY	SZ	58	172	EP		8 3	48.34	0.01							1.0
RCY	SN	58	172	ES		8 3	55.38	0.08							1.0
BEIL	SZ	71	35	EP		8 3	50.24	-0.05							1.0

March 30 2018 Hour: 21: 5 37.9 Agency: REL Regional
EMSC OT=21:05:37.9 38.46N 39.14E 3Km M=3.9 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		21 6	48.51								
FKH	SZ			EP		21 6	50.39								
HWQ	BZ			EP		21 6	52.92								

March 31 2018 Hour: 16:41 58.5 Lat: 34.04N Lon: 35.95E Depth: 1 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

KESROUAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	21	198	EP		1642	1.78	-0.09							1.0
HWQ	BZ	27	359	EP		1642	2.81	0.04							1.0
BHL	BZ	31	242	EP		1642	3.40	-0.15	43						1.0
BHL	BN	31	242	ES		1642	7.39	0.08							1.0
FKH	SZ	48	61	EP		1642	6.22	0.01							1.0
DQRL	SZ	51	224	EP		1642	6.78	0.05							1.0

BEIL	SZ	60	21	EP	1642	8.12	0.01								1.0
RCY	SZ	61	190	EP	1642	8.40	0.07								1.0
RCY	SN	61	190	ES	1642	15.70	0.07								1.0
SHBL	SZ	79	194	EP	1642	11.14	-0.08								1.0

March 31 2018 Hour: 23:17 12.0 Lat: 33.79N Lon: 35.79E Depth: 2 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	12	49	EP		2317	13.93	-0.05							1.0
ZAHL	SN	12	49	ES		2317	15.49	0.02							1.0
BHL	BZ	18	316	EP		2317	14.88	-0.03	31						1.0
BHL	BN	18	316	ES		2317	17.11	0.02							1.0
RCY	SZ	33	172	EP		2317	17.26	0.02							1.0
HWQ	BZ	56	15	EP		2317	21.12	0.03							1.0
BEIL	SZ	91	23	EP		2317	26.71	-0.01							1.0

Epicentral Map of Lebanon

MARCH 2018

