

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

April

2018

Prepared by
The National Centre for Geophysical Research
Bhannes

*P.o.b. : 165432
Ashrafyeh Beirut 1100-2040*

*Tel : +9614-981885
Fax : +9614-981886
Email : geophys@cnrs.edu.lb*

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
Z AHL	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 2018 Hour: 2:38 26.6 Lat: 33.55N Lon: 36.23E Depth: 13 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.2 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	37	262	EP		238	32.82	-0.19	43						1.0
RCY	SN	37	262	ES		238	37.64	-0.10							1.0
ZAHL	SZ	47	318	EP		238	34.29	-0.26							1.0
ZAHL	SN	47	318	ES		238	40.65	0.24							1.0
SHBL	SZ	50	244	EP		238	35.27	0.24							1.0
BHL	BZ	66	307	EP		238	37.42	-0.00							1.0
HWQ	BZ	85	342	EP		238	40.37	0.15							1.0
BEIL	SZ	111	358	EP		238	44.01	0.12							1.0
BEIL	SN	111	358	ES		238	56.48	-0.19							1.0

April 1 2018 Hour: 4:46 45.3 Lat: 35.13N Lon: 36.57E Depth: 0 Agency: REL Regional
Magnitudes: 3.3MC 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	74	209	EP		446	57.42	0.19	92						1.0
BEIL	SN	74	209	ES		447	5.94	-0.11							1.0
FKH	SZ	99	189	EP		447	1.34	0.08							1.0
HWQ	BZ	110	212	EP		447	2.96	-0.13							1.0
HWQ	BN	110	212	ES		447	16.19	-0.05							1.0
ZAHL	SZ	154	204	EP		447	9.72	-0.20							1.0
BHL	BZ	160	212	EP		447	10.77	0.06							1.0
BHL	BN	160	212	ES		447	29.72	0.22							1.0
BEYL	SZ	171	216	EP		447	12.31	0.02							0.2
DQRL	SZ	183	211	EP		447	13.87	-0.20							1.0
RCY	SZ	193	201	EP		447	15.21	-0.25							1.0
QRWL	SZ	193	205	EP		447	15.37	-0.07							1.0
SHBL	SZ	211	201	EP		447	18.08	0.33							1.0

April 1 2018 Hour: 8:35 25.7 Agency: REL Regional
EMSC OT=08:35:25.7 34.27N 45.80E 10Km M=5.3 IRAN-IRAQ BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		837	20.36								
BEIL	SZ			EP		837	21.40								
HWQ	BZ			EP		837	25.51								
ZAHL	SZ			EP		837	27.43								
RCY	SZ			EP		837	26.84								
BHL	BZ			EP		837	29.56								
DQRL	SZ			EP		837	30.06								

April 1 2018 Hour: 9:11 46.9 Lat: 33.52N Lon: 35.72E 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	4	311	EP		911	47.41	-0.15							1.0
RCY	SZ	12	105	EP		911	48.74	-0.03	32						1.0
RCY	SN	12	105	ES		911	50.22	0.05							1.0
DQRL	SZ	24	326	EP		911	51.06	0.25							1.0
DQRL	SN	24	326	ES		911	53.76	0.05							1.0
BHL	BZ	43	352	EP		911	53.60	-0.16							1.0
HWQ	BZ	86	14	EP		912	0.63	-0.19							0.2

April 2 2018 Hour: 5:57 32.8 Agency: REL Distant
EMSC OT=05:57:32.8 24.95S 176.80W 80Km M=6.2 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		617	9.55								
BHL	BZ			EP		617	9.91								
BEIL	SZ			EP		617	10.26								
DQRL	SZ			EP		617	10.61								
RCY	SZ			EP		617	10.82								

QRWL SZ EP 617 11.04

April 2 2018 Hour: 10:50 4.7 Lat: 33.62N Lon: 36.00E Depth: 9 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	20	229	EP		1050	8.18	-0.19	55						1.0
RCY	SN	20	229	ES		1050	11.18	0.11							1.0
ZAHL	SZ	29	339	EP		1050	9.67	-0.02							1.0
QRWL	SZ	30	256	EP		1050	9.80	-0.06							1.0
SHBL	SZ	38	219	EP		1050	11.15	0.09							1.0
DQRL	SZ	41	284	EP		1050	11.59	0.07							1.0
DQRL	SN	41	284	ES		1050	16.54	-0.00							1.0
BHL	BZ	45	315	EP		1050	12.02	-0.18							1.0
BHL	BN	45	315	ES		1050	17.78	0.05							1.0
HWQ	BZ	74	356	EP		1050	16.83	0.09							1.0
FKH	SZ	80	29	EP		1050	17.70	0.01							1.0
BEIL	SZ	104	10	EP		1050	21.35	0.02							1.0

April 2 2018 Hour: 13:23 47.8 Lat: 33.95N Lon: 36.22E Depth: 11 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
ZAHL	SZ	33	252	EP		1323	53.43	-0.06							1.0
ZAHL	SN	33	252	ES		1323	57.78	0.09							1.0
FKH	SZ	37	28	EP		1323	54.13	0.01							1.0
HWQ	BZ	44	325	EP		1323	55.08	-0.17	54						1.0
HWQ	BN	44	325	ES		1324	0.77	0.01							1.0
RCY	SZ	62	216	EP		1323	57.96	-0.03							1.0
BEIL	SZ	66	357	EP		1323	58.72	0.14							1.0
QRWL	SZ	67	228	EP		1323	58.83	0.02							1.0

April 3 2018 Hour: 0:30 32.6 Lat: 35.09N Lon: 36.42E Depth: 10 Agency: REL Local
Magnitudes: 2.8MC 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	65	200	EP		030	43.37	0.09	44						1.0
BEIL	SN	65	200	ES		030	51.12	-0.03							1.0
FKH	SZ	94	181	EP		030	47.57	-0.15							1.0
FKH	SN	94	181	ES		030	58.93	0.05							1.0
HWQ	BZ	100	206	EP		030	48.72	0.08							1.0
HWQ	BN	100	206	ES		031	0.43	-0.05							1.0
ZAHL	SZ	146	200	EP		030	55.34	0.05							1.0
BHL	BZ	150	208	EP		030	55.76	-0.10							1.0
DQRL	SZ	173	207	EP		030	59.09	-0.04							1.0
DQRL	SN	173	207	ES		031	18.78	0.04							1.0
RCY	SZ	185	197	EP		031	0.79	0.07							1.0

April 3 2018 Hour: 11:55 10.5 Lat: 34.59N Lon: 36.39E Depth: 1 Agency: REL Local
Magnitudes: 2.6MC 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	255	EP		1155	13.56	-0.00	34						1.0
BEIL	SN	19	255	ES		1155	15.95	0.09							1.0
FKH	SZ	38	177	EP		1155	16.56	-0.01							1.0
HWQ	BZ	53	230	EP		1155	18.79	-0.22							1.0
HWQ	BN	53	230	ES		1155	25.27	-0.06							1.0
BHL	BZ	101	222	EP		1155	26.90	0.09							0.2
DQRL	SZ	123	218	EP		1155	30.36	0.02							0.2
RCY	SZ	131	203	EP		1155	31.80	0.20							1.0

April 5 2018 Hour: 9: 7 58.5 Agency: REL Distant

EMSC OT=09:07:58.5 18.34S 177.88W 516Km M=5.8 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		926	38.65								
BHL	BZ			EP		926	38.91								
RCY	SZ			EP		926	39.12								
QRWL	SZ			EP		926	38.60								

April 6 2018 Hour: 16:10 5.3 Lat: 33.79N Lon: 35.78E Depth: 4 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	12	51	EP		1610	7.55	0.02							1.0
BHL	BZ	18	317	EP		1610	8.21	-0.10	51						1.0
DQRL	SZ	22	245	EP		1610	8.99	0.03							1.0
DQRL	SN	22	245	ES		1610	11.73	0.09							1.0
QRWL	SZ	28	199	EP		1610	9.87	-0.11							1.0
RCY	SZ	33	171	EP		1610	10.69	-0.01							1.0
RCY	SN	33	171	ES		1610	14.62	-0.05							1.0
SHBL	SZ	49	184	EP		1610	13.35	0.07							1.0
HWQ	BZ	56	15	EP		1610	14.45	-0.03							1.0
FKH	SZ	77	49	EP		1610	17.90	0.12							1.0
BEIL	SZ	91	24	EP		1610	20.08	-0.03							1.0

April 7 2018 Hour: 17:10 50.0 Lat: 34.04N Lon: 35.95E Depth: 0 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
ZAHL	SZ	21	198	EP		1710	53.22	-0.11							1.0
ZAHL	SN	21	198	ES		1710	55.81	0.01							1.0
HWQ	BZ	27	359	EP		1710	54.33	-0.01							1.0
BHL	BZ	31	242	EP		1710	54.97	-0.06	34						1.0
BHL	BN	31	242	ES		1710	58.80	0.04							1.0
DQRL	SZ	51	224	EP		1710	58.21	0.00							1.0
BEIL	SZ	60	21	EP		1710	59.73	0.04							1.0
RCY	SZ	61	190	EP		1710	59.89	0.09							1.0

April 7 2018 Hour: 17:27 25.4 Lat: 35.97N Lon: 36.01E Depth: 6 Agency: REL Regional
Magnitudes: 3.3MC REL Rms: 0.1 secs

TURKEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	160	174	EP		1727	50.32	-0.03	80						1.0
BEIL	SN	160	174	ES		1728	8.85	0.03							1.0
HWQ	BZ	188	182	EP		1727	54.00	-0.27							1.0
HWQ	BN	188	182	ES		1728	15.57	-0.07							1.0
FKH	SZ	195	169	EP		1727	55.30	0.17							1.0
BHL	BZ	232	188	EP		1727	59.67	-0.02							1.0
ZAHL	SZ	235	183	EP		1728	0.14	0.05							1.0
DQRL	SZ	255	189	EP		1728	2.78	0.25							1.0
DQRL	SN	255	189	ES		1728	30.06	0.05							1.0
RCY	SZ	275	183	EP		1728	4.96	-0.15							1.0

April 8 2018 Hour: 9:38 59.5 Lat: 34.54N Lon: 36.35E Depth: 0 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	15	270	EP		939	1.86	-0.04	64						1.0
BEIL	SN	15	270	ES		939	3.66	-0.03							1.0
FKH	SZ	34	170	EP		939	4.48	-0.41							1.0
HWQ	BZ	47	232	EP		939	6.89	-0.20							1.0
HWQ	BN	47	232	ES		939	12.51	-0.21							1.0
ZAHL	SZ	87	209	EP		939	14.01	0.48							1.0
ZAHL	SN	87	209	ES		939	23.88	-0.05							1.0

BHL	BZ	95	222	EP		939	14.94	0.07								1.0
DQRL	SZ	117	218	EP		939	18.55	0.14								1.0
DQRL	SN	117	218	ES		939	32.47	0.06								1.0
RCY	SZ	125	202	EP		939	19.88	0.19								1.0

April 8 2018 Hour: 10:16 26.5 Lat: 33.47N Lon: 35.67E Depth: 10 Agency: REL Local
Magnitudes: 2.3MC REL Rms: 0.3 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	8	7	EP		1016	28.19	-0.59							1.0
RCY	SZ	16	80	EP		1016	29.83	0.18	23						1.0
RCY	SN	16	80	ES		1016	32.12	0.14							1.0
DQRL	SZ	28	340	EP		1016	31.61	0.31							1.0
DQRL	SN	28	340	ES		1016	35.15	0.29							1.0
ZAHL	SZ	47	25	EP		1016	34.21	-0.12							1.0
BHL	BZ	48	358	EP		1016	34.36	-0.08							1.0
BHL	BE	48	358	ES		1016	40.18	-0.14							1.0

April 8 2018 Hour: 10:19 5.9 Lat: 33.54N Lon: 35.71E 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	3	282	EP		1019	6.24	-0.11							1.0
RCY	SZ	13	114	EP		1019	7.89	0.01	22						1.0
RCY	SN	13	114	ES		1019	9.43	0.05							1.0
DQRL	SZ	23	324	EP		1019	9.65	0.16							1.0
DQRL	SN	23	324	ES		1019	12.24	0.07							1.0
ZAHL	SZ	39	24	EP		1019	11.99	-0.08							1.0
BHL	BZ	41	352	EP		1019	12.30	-0.10							1.0

April 8 2018 Hour: 22:36 30.5 Lat: 34.88N Lon: 34.17E Depth: 1 Agency: REL Regional
Magnitudes: 3.0MC 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	175	128	EP		2236	57.79	-0.19							1.0
HWQ	BZ	177	112	EP		2236	58.47	0.20							1.0
DQRL	SZ	184	135	EP		2236	59.29	0.03							1.0
DQRL	SN	184	135	ES		2237	20.41	-0.14							1.0
BEIL	SZ	189	101	EP		2236	59.76	-0.08	52						1.0
BEIL	SN	189	101	ES		2237	21.58	0.01							1.0
ZAHL	SZ	195	125	EP		2237	0.52	-0.13							1.0
QRWL	SZ	204	136	EP		2237	1.69	-0.03							1.0
RCY	SZ	218	134	EP		2237	3.58	0.08							1.0
RCY	SN	218	134	ES		2237	28.06	0.13							1.0
SHBL	SZ	224	139	EP		2237	4.42	0.12							1.0

April 9 2018 Hour: 14:54 21.4 Lat: 34.20N Lon: 36.39E 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
FKH	SZ	5	19	EP		1454	22.21	-0.03							1.0
HWQ	BZ	42	281	EP		1454	28.28	0.06							1.0
HWQ	BN	42	281	ES		1454	33.19	-0.04							1.0
BEIL	SZ	42	333	EP		1454	28.24	0.00	44						1.0
BEIL	SN	42	333	ES		1454	33.28	0.02							1.0
ZAHL	SZ	61	231	EP		1454	31.08	-0.15							1.0
BHL	BZ	76	244	EP		1454	33.76	0.07							1.0
RCY	SZ	94	213	EP		1454	36.67	0.07							1.0
DQRL	SZ	94	234	EP		1454	36.76	0.14							0.2

April 9 2018 Hour: 15:257.1 Lat: 33.97N Lon: 36.17E Depth: 6 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	29	246	EP		15	3	2.00	0.09	63					1.0
FKH	SZ	38	36	EP		15	3	3.28	-0.08						1.0
FKH	SN	38	36	ES		15	3	8.01	0.01						1.0
HWQ	BZ	40	329	EP		15	3	3.69	-0.02						1.0
BHL	BZ	48	262	EP		15	3	4.90	-0.05						1.0
BHL	BN	48	262	ES		15	3	10.76	0.00						1.0
RCY	SZ	61	211	EP		15	3	7.02	0.08						1.0
RCY	SN	61	211	ES		15	3	14.18	-0.04						1.0
DQRL	SZ	63	243	EP		15	3	7.18	-0.07						1.0
BEIL	SZ	64	1	EP		15	3	7.58	0.11						1.0
BEIL	SN	64	1	ES		15	3	15.11	-0.03						1.0
QRWL	SZ	65	224	EP		15	3	7.59	-0.01						1.0

April 9 2018 Hour: 17:84.1 Lat: 34.04N Lon: 35.95E Depth: 5 Agency: REL Local
 Magnitudes: 3.1MC 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	197	EP		17	8	7.61	-0.11	67					1.0
HWQ	BZ	26	358	EP		17	8	8.48	-0.01						1.0
HWQ	BN	26	358	ES		17	8	11.76	0.05						1.0
BHL	BZ	32	241	EP		17	8	9.31	-0.02						1.0
BHL	BN	32	241	ES		17	8	13.19	0.01						1.0
FKH	SZ	48	62	EP		17	8	11.91	0.02						1.0
FKH	SN	48	62	ES		17	8	17.65	0.02						1.0
DQRL	SZ	52	224	EP		17	8	12.53	0.04						1.0
BEIL	SZ	59	21	EP		17	8	13.67	-0.08						1.0
QRWL	SZ	60	205	EP		17	8	13.91	0.01						1.0
RCY	SZ	61	190	EP		17	8	14.16	0.07						1.0
RCY	SN	61	190	ES		17	8	21.49	0.02						1.0

April 9 2018 Hour: 23:2655.4 Lat: 33.79N Lon: 35.80E Depth: 4 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	11	46	EP		2326	57.39	0.02							1.0
ZAHL	SN	11	46	ES		2326	58.87	0.01							1.0
BHL	BZ	19	313	EP		2326	58.35	-0.15	29						1.0
DQRL	SZ	23	247	EP		2326	59.38	0.15							1.0
DQRL	SN	23	247	ES		2327	2.12	0.02							1.0
QRWL	SZ	29	202	EP		2327	0.08	-0.04							1.0
RCY	SZ	33	174	EP		2327	0.67	-0.05							1.0
RCY	SN	33	174	ES		2327	4.66	-0.02							1.0
SHBL	SZ	49	186	EP		2327	3.37	0.01							1.0
HWQ	BZ	56	14	EP		2327	4.39	-0.02							1.0
BEIL	SZ	91	23	EP		2327	10.07	0.07							1.0

April 10 2018 Hour: 15:5619.2 Agency: REL Regional
 EMSC OT=15:56:19.2 36.68N 26.17E 14Km M=4.9 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1558	16.06								
DQRL	SZ			EP		1558	18.79								
HWQ	BZ			EP		1558	19.25								
ZAHL	SZ			EP		1558	20.40								
QRWL	SZ			EP		1558	20.20								
BEIL	SZ			EP		1558	20.54								
RCY	SZ			EP		1558	22.03								

April 11 2018 Hour: 2:31 1.4 Lat: 33.83N Lon: 35.28E Depth: 27 Agency: REL Local
Magnitudes: 3.1MC REL Rms: 0.1 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEYL	SZ	21	78	EP		231	6.78	0.03							1.0
DQRL	SZ	31	117	EP		231	7.88	-0.03	68						1.0
DQRL	SN	31	117	ES		231	12.70	-0.00							1.0
BHL	BZ	36	77	EP		231	8.50	-0.02							1.0
BHL	BN	36	77	ES		231	13.81	0.05							1.0
ZAHL	SZ	56	87	EP		231	11.17	-0.03							1.0
RCY	SZ	64	126	EP		231	12.32	0.09							1.0
RCY	SN	64	126	ES		231	20.21	-0.01							1.0
SHBL	SZ	69	141	EP		231	12.80	-0.16							1.0
HWQ	BZ	79	51	EP		231	14.34	-0.02							1.0
HWQ	BN	79	51	ES		231	23.88	-0.04							1.0
FKH	SZ	114	66	EP		231	19.41	0.15							1.0
BEIL	SZ	115	47	EP		231	19.19	-0.09							1.0

April 11 2018 Hour: 16:47 19.9 Lat: 33.78N Lon: 35.77E Depth: 3 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	14	50	EP		1647	22.18	0.02							1.0
BHL	BZ	18	321	EP		1647	22.68	-0.12	52						1.0
BHL	BN	18	321	ES		1647	24.98	0.00							1.0
DQRL	SZ	21	246	EP		1647	23.36	0.10							1.0
DQRL	SN	21	246	ES		1647	25.82	0.04							1.0
QRWL	SZ	27	198	EP		1647	24.15	-0.14							1.0
RCY	SZ	32	170	EP		1647	25.07	-0.01							1.0
RCY	SN	32	170	ES		1647	28.96	0.02							1.0
SHBL	SZ	48	183	EP		1647	27.66	0.02							1.0
HWQ	BZ	58	16	EP		1647	29.16	0.00							1.0
BEIL	SZ	93	24	EP		1647	34.87	0.07							1.0

April 12 2018 Hour: 3:17 7.5 Lat: 35.03N Lon: 35.61E Depth: 14 Agency: REL Local
Magnitudes: 2.8MC 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	76	135	EP		317	19.55	-0.06	44						1.0
BEIL	SN	76	135	ES		317	28.65	0.11							1.0
HWQ	BZ	89	159	EP		317	21.54	-0.06							1.0
HWQ	BN	89	159	ES		317	31.83	-0.18							1.0
FKH	SZ	114	139	EP		317	25.17	-0.12							1.0
FKH	SN	114	139	ES		317	38.53	0.11							1.0
BHL	BZ	125	178	EP		317	26.98	0.10							1.0
ZAHL	SZ	132	169	EP		317	27.97	-0.03							1.0
DQRL	SZ	147	181	EP		317	30.24	0.13							1.0
RCY	SZ	171	173	EP		317	33.50	-0.00							1.0

April 12 2018 Hour: 14:27 39.0 Lat: 34.03N Lon: 35.75E Depth: 3 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	17	213	EP		1427	41.71	-0.09	70						1.0
BHL	BN	17	213	ES		1427	43.76	-0.08							1.0
ZAHL	SZ	23	147	EP		1427	42.71	-0.05							1.0
BEYL	SZ	30	234	EP		1427	43.73	-0.13							1.0
HWQ	BZ	33	33	EP		1427	44.31	-0.09							1.0
HWQ	BN	33	33	ES		1427	48.52	0.16							1.0
DQRL	SZ	40	205	EP		1427	45.52	0.04							1.0
DQRL	SN	40	205	ES		1427	50.56	0.33							1.0
RCY	SZ	60	173	EP		1427	48.65	-0.03							1.0
FKH	SZ	65	68	EP		1427	49.49	-0.10							1.0

BEIL	SZ	69	35	EP		1427	50.33	0.07										1.0
SHBL	SZ	76	181	EP		1427	51.22	-0.03										1.0

April 12 2018 Hour: 21:41 15.1 Lat: 34.07N Lon: 36.27E Depth: 0 Agency: REL Local
Magnitudes: 3.1MC 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	24	33	EP		2141	18.82	-0.10							1.0
FKH	SN	24	33	ES		2141	21.78	0.02							1.0
HWQ	BZ	38	308	EP		2141	21.14	-0.06	67						1.0
ZAHL	SZ	42	237	EP		2141	21.94	0.03							1.0
BEIL	SZ	53	352	EP		2141	23.80	0.11							1.0
BHL	BZ	60	253	EP		2141	24.63	-0.06							1.0
RCY	SZ	75	212	EP		2141	27.16	0.00							1.0
RCY	SN	75	212	ES		2141	36.05	-0.04							1.0
DQRL	SZ	76	238	EP		2141	27.33	-0.01							1.0
QRWL	SZ	79	223	EP		2141	27.89	0.05							1.0
SHBL	SZ	93	212	EP		2141	30.19	0.05							1.0

April 13 2018 Hour: 15:12 8.2 Lat: 33.52N Lon: 35.72E Depth: 2 Agency: REL Local
Magnitudes: 2.8MC 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	5	308	EP		1512	9.09	-0.12	45						1.0
RCY	SZ	11	104	EP		1512	10.01	-0.06							1.0
RCY	SN	11	104	ES		1512	11.53	0.10							1.0
DQRL	SZ	25	325	EP		1512	12.47	0.14							1.0
DQRL	SN	25	325	ES		1512	15.42	0.06							1.0
ZAHL	SZ	40	22	EP		1512	14.77	-0.02							1.0
BHL	BZ	43	351	EP		1512	15.27	0.04							1.0
HWQ	BZ	87	14	EP		1512	22.08	-0.14							1.0

April 13 2018 Hour: 17:14 0.7 Agency: REL Regional
EMSC OT=17:14:00.7 37.08N 31.96E 5Km M=4.8 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1715	7.47								
BEIL	SZ			EP		1715	7.38								
BHL	BZ			EP		1715	7.73								
DQRL	SZ			EP		1715	9.24								
ZAHL	SZ			EP		1715	11.14								
FKH	SZ			EP		1715	12.19								
QRWL	SZ			EP		1715	12.45								
RCY	SZ			EP		1715	14.27								
SHBL	SZ			EP		1715	15.34								

April 13 2018 Hour: 17:55 48.6 Agency: REL Regional
EMSC OT=17:55:48.6 37.07N 31.95E 11Km M=4.5 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1756	55.01								
HWQ	BZ			EP		1756	54.49								
BHL	BZ			EP		1756	56.33								
DQRL	SZ			EP		1756	57.13								
ZAHL	SZ			EP		1756	57.76								
FKH	SZ			EP		1756	59.42								
QRWL	SZ			EP		1757	1.02								
RCY	SZ			EP		1757	1.88								
SHBL	SZ			EP		1757	2.96								

April 14 2018 Hour: 9:51 28.5 Lat: 33.78N Lon: 35.77E Depth: 1 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	14	49	EP		951	30.77	0.01							1.0
BHL	BZ	18	322	EP		951	31.34	-0.05	54						1.0
BHL	BE	18	322	ES		951	33.55	0.01							1.0
DQRL	SZ	20	247	EP		951	31.84	0.05							1.0
RCY	SZ	32	169	EP		951	33.56	-0.06							1.0
RCY	SN	32	169	ES		951	37.44	0.02							1.0
HWQ	BZ	58	16	EP		951	37.78	-0.05							1.0
BEIL	SZ	93	24	EP		951	43.57	0.08							1.0

April 14 2018 Hour: 22:49 49.1 Lat: 33.82N Lon: 35.84E Depth: 20 Agency: REL Local
Magnitudes: 2.4MC 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	6	47	EP		2249	52.68	-0.04							1.0
BHL	BZ	19	299	EP		2249	53.64	-0.06	26						1.0
BHL	BN	19	299	ES		2249	57.13	0.05							1.0
DQRL	SZ	28	243	EP		2249	54.67	-0.00							1.0
QRWL	SZ	34	205	EP		2249	55.35	-0.04							1.0
RCY	SZ	36	180	EP		2249	55.79	0.04							1.0
RCY	SN	36	180	ES		2250	0.67	0.02							1.0
HWQ	BZ	52	11	EP		2249	57.93	0.04							1.0

April 15 2018 Hour: 10: 7 53.4 Lat: 32.39N Lon: 36.38E Depth: 0 Agency: REL Regional
Magnitudes: 3.2MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	133	338	EP		10 8	14.57	-0.20	70						1.0
RCY	SN	133	338	ES		10 8	30.47	-0.13							1.0
DQRL	SZ	164	333	EP		10 8	19.42	-0.01							1.0
DQRL	SN	164	333	ES		10 8	38.94	0.23							1.0
ZAHL	SZ	169	344	EP		10 8	20.13	-0.04							1.0
BHL	BZ	181	338	EP		10 8	21.89	-0.01							1.0
HWQ	BZ	213	349	EP		10 8	26.06	0.07							1.0
BEIL	SZ	239	356	EP		10 8	29.27	0.10							1.0

April 15 2018 Hour: 19:30 44.3 Agency: REL Distant
EMSC OT=19:30:44.3 1.41N 126.91E 49Km M=5.9 MOLUCCA SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1943	38.09								
HWQ	BZ			EP		1943	39.06								
ZAHL	SZ			EP		1943	40.20								
RCY	SZ			EP		1943	39.92								
SHBL	SZ			EP		1943	40.37								
BHL	BZ			EP		1943	40.03								
DQRL	SZ			EP		1943	40.60								

April 16 2018 Hour: 7:54 34.8 Lat: 33.87N Lon: 35.85E 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	4	113	EP		754	35.36	-0.09							1.0
BHL	BZ	19	282	EP		754	37.72	-0.11	62						1.0
DQRL	SZ	32	235	EP		754	39.96	-0.00							1.0
DQRL	SN	32	235	ES		754	43.81	0.06							1.0
RCY	SZ	42	182	EP		754	41.61	0.06							1.0
HWQ	BZ	46	11	EP		754	42.20	-0.07							1.0
HWQ	BN	46	11	ES		754	47.80	0.03							1.0
BEIL	SZ	81	22	EP		754	47.97	0.13							1.0

April 16 2018 Hour: 10:23 26.3 Lat: 34.16N Lon: 36.42E Depth: 4 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
FKH	SZ	9	356	EP		1023	28.09	0.00	49						1.0
HWQ	BZ	45	287	EP		1023	33.69	0.03							1.0
HWQ	BN	45	287	ES		1023	39.13	0.01							1.0
BEIL	SZ	47	333	EP		1023	34.04	0.06							1.0
BEIL	SN	47	333	ES		1023	39.61	-0.06							1.0
RCY	SZ	91	216	EP		1023	41.00	-0.04							1.0

April 16 2018 Hour: 15:18 55.0 Lat: 33.37N Lon: 35.63E Depth: 7 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs

MARJAAYOUN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	21	14	EP		1518	58.48	-0.09							1.0
RCY	SZ	24	53	EP		1518	59.24	0.14	41						1.0
RCY	SN	24	53	ES		1519	2.10	-0.06							1.0
DQRL	SZ	38	352	EP		1519	1.20	-0.06							1.0
DQRL	SN	38	352	ES		1519	5.97	0.07							1.0
ZAHL	SZ	60	24	EP		1519	4.69	0.01							1.0
BHL	BZ	60	2	EP		1519	4.71	0.00							1.0
HWQ	BZ	105	16	EP		1519	11.92	-0.01							1.0

April 17 2018 Hour: 15:45 34.0 Lat: 34.03N Lon: 36.78E Depth: 0 Agency: REL Local
Magnitudes: 3.5MC REL Rms: 0.2 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	42	305	EP		1545	40.35	-0.37							1.0
BEIL	SZ	79	316	EP		1545	46.99	0.27	106						1.0
HWQ	BZ	82	290	EP		1545	47.18	-0.00							1.0
HWQ	BN	82	290	ES		1545	56.95	0.02							1.0
ZAHL	SZ	85	257	EP		1545	47.98	0.26							1.0
BHL	BZ	105	263	EP		1545	50.97	0.01							1.0
BHL	BN	105	263	ES		1546	3.43	-0.07							1.0
RCY	SZ	106	236	EP		1545	51.05	-0.02							1.0
QRWL	SZ	115	242	EP		1545	52.45	-0.12							1.0
DQRL	SZ	118	252	EP		1545	52.95	-0.05							1.0
DQRL	SN	118	252	ES		1546	7.11	0.06							1.0

April 17 2018 Hour: 16:24 36.0 Lat: 33.79N Lon: 35.77E Depth: 10 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	55	EP		1624	38.82	-0.02	35						1.0
BHL	BZ	17	320	EP		1624	39.26	0.00							1.0
DQRL	SZ	21	243	EP		1624	39.90	0.08							1.0
DQRL	SN	21	243	ES		1624	42.64	-0.01							1.0
QRWL	SZ	28	197	EP		1624	40.73	-0.16							1.0
RCY	SZ	33	169	EP		1624	41.76	0.09							1.0
RCY	SN	33	169	ES		1624	45.89	0.02							1.0

April 17 2018 Hour: 16:47 47.5 Lat: 33.78N Lon: 35.76E 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	15	55	EP		1647	50.02	-0.04							1.0
BHL	BZ	16	325	EP		1647	50.30	-0.05	72						1.0
DQRL	SZ	19	244	EP		1647	50.88	0.09							1.0
DQRL	SN	19	244	ES		1647	53.23	0.02							1.0
QRWL	SZ	27	195	EP		1647	51.88	-0.11							1.0
RCY	SZ	33	167	EP		1647	52.97	0.08							1.0
RCY	SN	33	167	ES		1647	56.88	0.02							1.0

SHBL	SZ	48	181	EP	1647	55.34	-0.04										1.0
HWQ	BZ	58	18	EP	1647	56.73	-0.13										1.0
BEIL	SZ	93	25	EP	1648	2.57	0.04										1.0
BEIL	SN	93	25	ES	1648	13.76	0.12										1.0

April 19 2018 Hour: 6:34 46.4 Agency: REL Distant

EMSC OT=06:34:46.4 28.31N 51.61E 10Km M=5.8 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		638	9.08								
BEIL	SZ			EP		638	9.99								
HWQ	BZ			EP		638	13.73								
RCY	SZ			EP		638	14.06								
QRWL	SZ			EP		638	14.23								
BHL	BZ			EP		638	14.64								
DQRL	SZ			EP		638	15.47								

April 19 2018 Hour: 15:17 22.6 Lat: 34.04N Lon: 35.74E Depth: 4 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
BHL	BZ	17	209	EP		1517	25.43	-0.10	48						1.0
BHL	BN	17	209	ES		1517	27.71	0.02							1.0
ZAHL	SZ	24	147	EP		1517	26.44	-0.16							1.0
ZAHL	SN	24	147	ES		1517	29.59	0.05							1.0
HWQ	BZ	32	35	EP		1517	28.02	0.11							1.0
DQRL	SZ	40	204	EP		1517	29.27	0.08							1.0
RCY	SZ	61	172	EP		1517	32.44	-0.03							1.0
RCY	SN	61	172	ES		1517	39.83	0.07							1.0
BEIL	SZ	69	36	EP		1517	33.71	-0.04							1.0

April 19 2018 Hour: 17:43 27.0 Lat: 33.76N Lon: 36.94E Depth: 24 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
ZAHL	SZ	99	277	EP		1743	42.53	-0.12							1.0
RCY	SZ	107	255	EP		1743	43.95	0.09							1.0
HWQ	BZ	109	302	EP		1743	44.07	-0.03							1.0
HWQ	BN	109	302	ES		1743	56.73	-0.02							1.0
BEIL	SZ	112	321	EP		1743	44.48	-0.00	53						1.0
BEIL	SN	112	321	ES		1743	57.45	0.04							1.0
BHL	BZ	120	278	EP		1743	45.88	0.07							1.0
SHBL	SZ	120	248	EP		1743	45.80	-0.03							1.0
DQRL	SZ	127	268	EP		1743	46.71	-0.00							1.0

April 20 2018 Hour: 16:26 11.0 Lat: 34.03N Lon: 35.74E Depth: 0 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
BHL	BZ	17	209	EP		1626	13.68	-0.03	43						1.0
BHL	BN	17	209	ES		1626	15.59	-0.10							1.0
ZAHL	SZ	24	146	EP		1626	14.78	-0.06							1.0
HWQ	BZ	33	35	EP		1626	16.26	-0.07							1.0
HWQ	BN	33	35	ES		1626	20.21	-0.05							1.0
DQRL	SZ	40	204	EP		1626	17.57	0.12							1.0
RCY	SZ	60	172	EP		1626	20.81	0.06							1.0
BEIL	SZ	69	36	EP		1626	22.35	0.13							1.0

April 22 2018 Hour: 13:40 58.0 Lat: 34.21N Lon: 36.42E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC 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	4	343	EP		1340	58.58	-0.10							1.0
BEIL	SZ	43	329	EP		1341	5.09	0.18	36						1.0
HWQ	BZ	45	280	EP		1341	5.03	-0.17							1.0

HWQ	BN	45	280	ES		1341	10.55	0.04									1.0
ZAHL	SZ	63	232	EP		1341	8.28	0.06									1.0
ZAHL	SN	63	232	ES		1341	15.81	0.04									1.0
BHL	BZ	79	245	EP		1341	10.62	-0.10									1.0
RCY	SZ	96	215	EP		1341	13.57	0.05									1.0

April 23 2018 Hour: 1:34 59.1 Lat: 35.80N Lon: 35.32E Depth: 0 Agency: REL Regional
Magnitudes: 3.2MC 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	160	150	EP		135	24.36	-0.21	65						1.0
BEIL	SN	160	150	ES		135	43.46	0.07							1.0
HWQ	BZ	178	161	EP		135	27.02	-0.22							1.0
HWQ	BN	178	161	ES		135	48.04	0.00							1.0
FKH	SZ	199	150	EP		135	30.20	0.21							1.0
BHL	BZ	212	172	EP		135	31.68	0.05							1.0
RCY	SZ	260	169	EP		135	37.64	0.09							1.0

April 23 2018 Hour: 12:51 23.5 Lat: 34.55N Lon: 34.17E Depth: 16 Agency: REL Regional
Magnitudes: 3.0MC 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	155	117	EP		1251	47.35	0.07	50						1.0
DQRL	SZ	160	126	EP		1251	47.95	0.03							1.0
HWQ	BZ	166	100	EP		1251	48.80	0.05							1.0
HWQ	BN	166	100	ES		1252	7.39	-0.02							1.0
ZAHL	SZ	176	115	EP		1251	49.82	-0.14							1.0
BEIL	SZ	185	90	EP		1251	51.01	-0.02							1.0
BEIL	SN	185	90	ES		1252	11.40	0.02							1.0
RCY	SZ	193	127	EP		1251	52.16	0.02							1.0
RCY	SN	193	127	ES		1252	13.30	-0.00							1.0

April 23 2018 Hour: 12:58 2.5 Lat: 34.57N Lon: 34.01E Depth: 25 Agency: REL Regional
Magnitudes: 3.7MC 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	168	115	EP		1258	26.50	-0.69	126						1.0
DQRL	SZ	173	123	EP		1258	27.25	-0.48							1.0
HWQ	BZ	181	100	EP		1258	28.65	-0.11							1.0
HWQ	BN	181	100	ES		1258	47.40	-0.78							1.0
ZAHL	SZ	190	114	EP		1258	29.81	-0.07							1.0
QRWL	SZ	191	126	EP		1258	30.32	0.29							1.0
BEIL	SZ	200	90	EP		1258	31.26	0.23							1.0
BEIL	SN	200	90	ES		1258	52.42	0.30							1.0
RCY	SZ	206	125	EP		1258	32.26	0.33							1.0
RCY	SN	206	125	ES		1258	54.00	0.31							1.0
FKH	SZ	224	99	EP		1258	34.83	0.77							1.0

April 24 2018 Hour: 0:34 28.7 Agency: REL Regional
EMSC OT=00:34:28.7 37.60N 38.51E 10Km M=5.2 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		035	26.14								
FKH	SZ			EP		035	28.54								
ZAHL	SZ			EP		035	36.60								
BHL	BZ			EP		035	36.60								
DQRL	SZ			EP		035	40.77								
RCY	SZ			EP		035	41.85								
QRWL	SZ			EP		035	41.45								
SHBL	SZ			EP		035	43.68								

April 24 2018 Hour: 18:53 35.6

Agency: REL Regional

EMSC OT=18:53:35.6 35.79N 27.93E 65Km M=4.3 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1855	8.22								
DQRL	SZ			EP		1855	9.33								
QRWL	SZ			EP		1855	11.73								
ZAHL	SZ			EP		1855	11.73								
BEIL	SZ			EP		1855	12.51								
RCY	SZ			EP		1855	13.23								
FKH	SZ			EP		1855	16.35								

April 25 2018 Hour: 12:17 13.3

Lat: 33.95N

Lon: 36.16E

Depth: 9

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
ZAHL	SZ	27	248	EP		1217	18.10	0.06							1.0
ZAHL	SN	27	248	ES		1217	21.55	0.02							1.0
FKH	SZ	40	35	EP		1217	19.98	-0.08							1.0
BHL	BZ	47	264	EP		1217	20.97	-0.11							1.0
RCY	SZ	58	211	EP		1217	22.95	0.04	51						1.0
RCY	SN	58	211	ES		1217	29.97	-0.02							1.0
DQRL	SZ	61	244	EP		1217	23.26	-0.01							1.0
BEIL	SZ	66	2	EP		1217	24.22	0.14							1.0
BEIL	SN	66	2	ES		1217	32.01	-0.03							1.0

April 25 2018 Hour: 21:53 58.2

Lat: 35.10N

Lon: 35.19E

Depth: 18

Agency: REL

Regional

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	110	124	EP		2154	15.24	-0.05	57						1.0
BEIL	SE	110	124	ES		2154	27.92	-0.04							1.0
BHL	BZ	139	162	EP		2154	19.65	0.03							1.0
FKH	SZ	146	130	EP		2154	20.69	-0.01							1.0
FKH	SN	146	130	ES		2154	37.46	0.09							1.0
ZAHL	SZ	151	155	EP		2154	21.40	0.05							1.0
ZAHL	SN	151	155	ES		2154	38.45	-0.06							1.0
DQRL	SZ	158	167	EP		2154	22.11	-0.05							1.0
RCY	SZ	187	161	EP		2154	25.83	0.03							1.0

April 26 2018 Hour: 1:57 17.1

Lat: 33.81N

Lon: 35.79E

Depth: 19

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
ZAHL	SZ	10	57	EP		157	20.78	0.00							1.0
BHL	BZ	17	310	EP		157	21.28	-0.01	40						1.0
BHL	BN	17	310	ES		157	24.38	0.00							1.0
DQRL	SZ	24	241	EP		157	22.04	0.01							1.0
QRWL	SZ	31	199	EP		157	22.87	-0.04							1.0
RCY	SZ	35	173	EP		157	23.55	0.05							1.0
RCY	SN	35	173	ES		157	28.21	-0.02							1.0
BEIL	SZ	89	24	EP		157	31.21	-0.01							1.0

April 27 2018 Hour: 8:21 43.3

Lat: 33.78N

Lon: 35.78E

Depth: 0

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	13	48	EP		821	45.45	0.05							1.0
BHL	BZ	18	320	EP		821	46.05	-0.16	41						1.0
BHL	BN	18	320	ES		821	48.40	0.01							1.0
DQRL	SZ	21	248	EP		821	46.82	0.15							1.0
QRWL	SZ	27	200	EP		821	47.64	-0.01							1.0
RCY	SZ	32	171	EP		821	48.32	-0.06							1.0
RCY	SE	32	171	ES		821	52.15	-0.01							1.0

HWQ	BZ	58	15	EP		821	52.55	-0.00										1.0
BEIL	SZ	93	24	EP		821	58.91	0.71										0.2

April 28 2018 Hour: 4:45 1.5 Lat: 31.13N Lon: 35.52E Depth: 34 Agency: REL Regional
Magnitudes: 3.5MC REL Rms: 0.3 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	264	6	EP		445	37.80	0.29	87						1.0
RCY	SN	264	6	ES		446	4.12	-0.03							1.0
DQRL	SZ	286	1	EP		445	40.01	-0.14							1.0
ZAHL	SZ	305	6	EP		445	42.72	0.21							1.0
BHL	BZ	308	2	EP		445	42.60	-0.31							1.0
HWQ	BZ	352	6	EP		445	48.47	0.18							1.0
HWQ	BN	352	6	ES		446	22.87	-0.03							1.0
FKH	SZ	356	13	EP		445	48.83	0.05							1.0
BEIL	SZ	384	9	EP		445	52.63	0.51							1.0

April 28 2018 Hour: 6:50 29.4 Lat: 31.82N Lon: 35.81E Depth: 0 Agency: REL Regional
Magnitudes: 3.6MC REL Rms: 0.3 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	186	1	EP		650	58.48	-0.14	121						1.0
RCY	SN	186	1	ES		651	20.42	0.16							1.0
QRWL	SZ	192	356	EP		650	59.44	0.12							1.0
DQRL	SZ	210	354	EP		651	1.32	-0.29							1.0
ZAHL	SZ	226	2	EP		651	4.25	0.65							1.0
BHL	BZ	231	356	EP		651	4.26	0.00							1.0
BHL	BN	231	356	ES		651	29.87	-0.20							1.0
HWQ	BZ	273	3	EP		651	9.53	0.13							1.0
BEIL	SZ	304	6	EP		651	13.09	-0.10							1.0

April 28 2018 Hour: 18:1 45.0 Lat: 33.67N Lon: 35.49E Depth: 4 Agency: REL Local
Magnitudes: 2.4MC 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	9	62	EP		18	1	46.65	0.00	26					1.0
DQRL	SN	9	62	ES		18	1	47.91	0.01						1.0
QRWL	SZ	23	126	EP		18	1	48.68	-0.03						1.0
BHL	BZ	30	31	EP		18	1	49.97	0.02						1.0
BHL	BN	30	31	ES		18	1	53.59	-0.05						1.0
RCY	SZ	38	120	EP		18	1	51.10	-0.01						1.0
ZAHL	SZ	43	60	EP		18	1	51.93	0.05						1.0

April 29 2018 Hour: 11:13 54.4 Lat: 32.24N Lon: 36.16E Depth: 3 Agency: REL Regional
Magnitudes: 3.2MC REL Rms: 0.1 secs

JORDAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	143	348	EP		1114	17.09	-0.03	66						1.0
RCY	SN	143	348	ES		1114	33.94	0.01							1.0
DQRL	SZ	172	341	EP		1114	21.39	0.03							1.0
DQRL	SN	172	341	ES		1114	41.29	-0.02							1.0
ZAHL	SZ	181	352	EP		1114	22.81	0.07							1.0
BHL	BZ	191	346	EP		1114	23.78	-0.08							1.0
HWQ	BZ	227	355	EP		1114	28.51	0.11							1.0
BEIL	SZ	256	1	EP		1114	31.77	-0.10							1.0

April 29 2018 Hour: 19:40 8.8 Lat: 35.18N Lon: 36.66E Depth: 4 Agency: REL Regional
Magnitudes: 3.1MC 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	83	212	EP		1940	22.26	0.14	65						1.0
BEIL	SN	83	212	ES		1940	32.06	0.05							1.0
HWQ	BZ	119	213	EP		1940	27.81	-0.09							1.0
ZAHL	SZ	163	206	EP		1940	33.91	-0.39							1.0

BHL	BZ	169	213	EP	1940	35.08	-0.09								1.0
DQRL	SZ	191	212	EP	1940	38.33	0.14								1.0
DQRL	SN	191	212	ES	1940	59.98	0.01								1.0
RCY	SZ	201	202	EP	1940	39.69	0.24								1.0

April 29 2018 Hour: 23: 6 48.5 Lat: 33.79N Lon: 35.80E Depth: 7 Agency: REL Local
Magnitudes: 2.6MC 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	49	EP		23	6	50.74	-0.01						1.0
BHL	BZ	18	313	EP		23	6	51.73	-0.00	32					1.0
BHL	BN	18	313	ES		23	6	54.14	0.03						1.0
DQRL	SZ	23	245	EP		23	6	52.43	-0.08						1.0
QRWL	SZ	29	201	EP		23	6	53.48	0.04						1.0
RCY	SZ	33	174	EP		23	6	53.96	-0.10						1.0
RCY	SN	33	174	ES		23	6	58.19	0.02						1.0
SHBL	SZ	50	186	EP		23	6	56.76	0.10						1.0
HWQ	BZ	55	14	EP		23	6	57.52	-0.04						1.0
BEIL	SZ	90	23	EP		23	7	3.18	0.04						1.0

Epicentral Map of Lebanon

APRIL 2018

