

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

July

2018

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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.

<b>P-wave velocity (km/sec)</b>	<b>depth to top of layer (km)</b>
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:

$$Mc = 0.08 + 1.63 * \log_{10}(T) + 0.0009 * D.$$

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 Vp/Vs 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\*(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.

**July 1 2018 Hour: 13:58 44.0 Lat: 33.98N Lon: 36.13E 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	26	240	EP		1358	48.89	-0.02	62						1.0
ZAHL	SN	26	240	ES		1358	52.57	0.03							1.0
HWQ	BZ	37	333	EP		1358	50.44	-0.07							1.0
BHL	BZ	45	260	EP		1358	51.51	-0.05							1.0
BHL	BN	45	260	ES		1358	57.18	0.03							1.0
RCY	SZ	60	207	EP		1358	53.80	-0.03							1.0
DQRL	SZ	60	240	EP		1358	53.86	0.06							1.0
DQRL	SN	60	240	ES		1359	1.02	-0.02							1.0
BEIL	SZ	63	5	EP		1358	54.28	0.07							1.0

**July 1 2018 Hour: 16:48 2.6 Lat: 33.68N Lon: 34.95E Depth: 29 Agency: REL Local  
Magnitudes: 2.5MC REL Rms: 0.0 secs**

**OFFSHORE CENTRAL LEBANON**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	58	87	EP		1648	12.68	0.05							1.0
DQRL	SE	58	87	ES		1648	20.08	0.02							1.0
QRWL	SZ	70	102	EP		1648	14.23	-0.01							1.0
BHL	BZ	70	69	EP		1648	14.30	-0.02							1.0
RCY	SZ	85	103	EP		1648	16.41	-0.00	26						1.0
RCY	SN	85	103	ES		1648	26.64	-0.01							1.0
ZAHL	SZ	89	77	EP		1648	16.97	-0.05							1.0
HWQ	BZ	114	54	EP		1648	20.25	0.01							1.0

**July 1 2018 Hour: 19:44 4.2 Lat: 33.66N Lon: 35.84E Depth: 9 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
RCY	SZ	18	182	EP		1944	7.63	-0.04	27						1.0
RCY	SN	18	182	ES		1944	10.19	-0.03							1.0
QRWL	SZ	20	230	EP		1944	7.88	0.06							1.0
ZAHL	SZ	22	10	EP		1944	8.31	0.06							1.0
DQRL	SZ	26	281	EP		1944	8.79	0.03							0.2
DQRL	SN	26	281	ES		1944	12.11	0.00							1.0
BHL	BZ	32	327	EP		1944	9.64	-0.09							1.0
SHBL	SZ	36	195	EP		1944	10.31	0.03							1.0
HWQ	BZ	69	8	EP		1944	15.61	0.08							0.2
BEIL	SZ	103	18	EP		1944	20.43	-0.15							0.2

**July 1 2018 Hour: 20:45 42.2 Agency: REL Distant  
EMSC OT=20:45:42.2 46.99N 144.92E 383Km M=5.6 SEA OF OKHOTSK**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2056	54.32								
BHL	BZ			EP		2056	57.05								

**July 2 2018 Hour: 14:18 23.9 Lat: 33.81N Lon: 35.79E Depth: 12 Agency: REL Local  
Magnitudes: 2.7MC 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	58	EP		1418	26.62	-0.08							1.0
BHL	BZ	16	311	EP		1418	27.36	0.05	42						1.0
DQRL	SZ	23	241	EP		1418	28.15	-0.05							1.0
RCY	SZ	35	172	EP		1418	29.96	0.01							1.0
RCY	SN	35	172	ES		1418	34.45	0.05							1.0
HWQ	BZ	54	16	EP		1418	32.89	-0.05							1.0
HWQ	BN	54	16	ES		1418	39.69	0.08							1.0
BEIL	SZ	89	24	EP		1418	38.15	-0.00							1.0

**July 2 2018 Hour: 17:15 10.5** **Agency: REL Distant**

**EMSC OT=17:15:10.5 21.11S 178.45W 467Km M=5.0 FIJI REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1734		1.17							
HWQ	BZ			EP		1734		0.02							

**July 3 2018 Hour: 13:16 18.6** **Agency: REL Regional**

**EMSC OT=13:16:18.6 37.69N 37.40E 9Km M=4.1 CENTRAL TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1317		11.24							
HWQ	BZ			EP		1317		15.59							
RCY	SZ			EP		1317		26.93							

**July 3 2018 Hour: 22:40 18.6** **Lat: 33.79N Lon: 35.79E Depth: 3** **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	11	48	EP		2240	20.51-0.04								1.0
BHL	BZ	18	314	EP		2240	21.54-0.05	45							1.0
DQRL	SZ	23	246	EP		2240	22.39 0.07								1.0
QRWL	SZ	29	201	EP		2240	23.24-0.04								1.0
RCY	SZ	33	173	EP		2240	23.84-0.08								1.0
RCY	SN	33	173	ES		2240	27.92 0.05								1.0
SHBL	SZ	49	186	EP		2240	26.59 0.04								1.0
HWQ	BZ	56	14	EP		2240	27.61-0.02								1.0
HWQ	BN	56	14	ES		2240	34.40 0.08								1.0
BEIL	SZ	91	23	EP		2240	33.09-0.15								0.2

**July 4 2018 Hour: 1:50 8.1** **Lat: 32.85N Lon: 35.56E Depth: 1** **Agency: REL Regional**  
**Magnitudes: 4.2MC 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	SZ	58	17	EP		150	17.33-0.14								1.0
RCY	SZ	77	19	EP		150	20.36-0.06	319							1.0
RCY	SN	77	19	ES		150	29.61 0.05								1.0
QRWL	SZ	79	8	EP		150	20.82 0.06								1.0
DQRL	SZ	95	0	EP		150	23.58 0.12								1.0
ZAHL	SZ	116	15	EP		150	26.88 0.06								1.0
BHL	BZ	118	4	EP		150	27.03-0.03								1.0
HWQ	BZ	163	12	EP		150	33.83-0.04								1.0
HWQ	BN	163	12	ES		150	52.91-0.05								1.0
FKH	SZ	174	27	EP		150	35.47-0.04								1.0
BEIL	SZ	197	17	EP		150	38.57 0.09								1.0

**July 4 2018 Hour: 1:58 14.9** **Lat: 32.85N Lon: 35.55E Depth: 1** **Agency: REL Regional**  
**Magnitudes: 3.7MC REL**  
**Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	59	18	EP		158	24.34 0.00								1.0
RCY	SZ	77	20	EP		158	27.29-0.00	145							1.0
RCY	SN	77	20	ES		158	36.48 0.01								1.0
QRWL	SZ	79	9	EP		158	27.53-0.05								1.0
DQRL	SZ	95	1	EP		158	30.28 0.03								1.0
DQRL	SN	95	1	ES		158	41.67 0.05								1.0
ZAHL	SZ	116	16	EP		158	33.65-0.02								1.0
BHL	BZ	118	5	EP		158	33.82-0.04								1.0
HWQ	BZ	163	13	EP		158	40.68-0.02								1.0
BEIL	SZ	197	17	EP		158	45.32-0.00								1.0

**July 4 2018 Hour: 3:52 1.3**      Lat: 32.85N Lon: 35.52E Depth: 0 Agency: REL Regional  
**Magnitudes: 4.0MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	78	22	EP		352	13.78	-0.01	223						1.0
RCY	SN	78	22	ES		352	23.05	0.01							1.0
QRWL	SZ	79	11	EP		352	14.02	0.00							1.0
DQRL	SZ	95	3	EP		352	16.61	-0.02							1.0
DQRL	SN	95	3	ES		352	28.00	0.01							1.0
ZAHL	SZ	117	17	EP		352	20.10	-0.04							1.0
BHL	BZ	118	6	EP		352	20.25	-0.02							1.0
HWQ	BZ	163	14	EP		352	27.28	0.04							1.0
FKH	SZ	175	28	EP		352	29.08	0.07							1.0
BEIL	SZ	198	18	EP		352	31.89	-0.02							1.0

**July 4 2018 Hour: 4:19 19.0**      Lat: 32.88N Lon: 35.56E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.3MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	74	20	EP		419	30.80	-0.08	87						1.0
RCY	SN	74	20	ES		419	39.64	-0.01							1.0
QRWL	SZ	75	9	EP		419	31.18	-0.00							1.0
DQRL	SZ	92	1	EP		419	33.89	0.02							1.0
DQRL	SN	92	1	ES		419	44.88	0.03							1.0
ZAHL	SZ	113	15	EP		419	37.26	-0.00							1.0
BHL	BZ	114	4	EP		419	37.48	0.01							1.0
HWQ	BZ	160	13	EP		419	44.43	0.00							1.0
BEIL	SZ	194	17	EP		419	49.19	0.02							1.0

**July 4 2018 Hour: 5:22 38.6**      Lat: 32.85N Lon: 35.54E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.0MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	77	21	EP		522	50.97	-0.04	59						1.0
RCY	SN	77	21	ES		523	0.17	-0.05							1.0
DQRL	SZ	95	2	EP		522	53.91	-0.00							1.0
DQRL	SE	95	2	ES		523	5.30	0.03							1.0
HWQ	BZ	163	13	EP		523	4.52	0.04							1.0
BEIL	SZ	197	18	EP		523	9.23	0.08							1.0

**July 4 2018 Hour: 5:57 24.1**      Lat: 32.87N Lon: 35.54E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.6MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	75	21	EP		557	36.06	-0.09	123						1.0
RCY	SE	75	21	ES		557	44.97	-0.09							1.0
QRWL	SZ	76	10	EP		557	36.42	0.00							1.0
DQRL	SZ	93	1	EP		557	39.07	-0.01							1.0
DQRL	SN	93	1	ES		557	50.18	0.03							1.0
ZAHL	SZ	114	16	EP		557	42.54	0.02							1.0
BHL	BZ	115	5	EP		557	42.69	-0.00							1.0
HWQ	BZ	161	13	EP		557	49.65	-0.01							1.0
FKH	SZ	172	28	EP		557	51.58	0.19							1.0
BEIL	SZ	195	18	EP		557	54.43	0.04							1.0

**July 4 2018 Hour: 12:18 36.4**      Lat: 33.79N Lon: 35.77E Depth: 2 Agency: REL Local  
**Magnitudes: 2.6MC REL**

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	55	EP		1218	38.56	-0.00							1.0
BHL	BZ	17	318	EP		1218	39.07	-0.09							1.0
DQRL	SZ	21	243	EP		1218	39.98	0.09							1.0
RCY	SZ	33	170	EP		1218	41.78	-0.08	32						1.0

RCY	SN	33	170	ES	1218	45.90	0.03									1.0
HWQ	BZ	56	17	EP	1218	45.49	-0.03									1.0
HWQ	BN	56	17	ES	1218	52.30	0.07									1.0

**July 4 2018 Hour: 19:45 41.5 Lat: 32.90N Lon: 35.57E Depth: 0 Agency: REL Regional Magnitudes: 4.1MC REL**

**DEAD SEA REGION**

**Earthquake was felt**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	52	18	EP		1945	50.01	0.07							1.0
RCY	SZ	71	21	EP		1945	52.84	-0.06	276						1.0
RCY	SN	71	21	ES		1946	1.36	0.02							1.0
QRWL	SZ	73	8	EP		1945	53.24	0.04							1.0
DQRL	SZ	89	0	EP		1945	55.94	0.04							1.0
DQRL	SN	89	0	ES		1946	6.57	-0.00							1.0
ZAHL	SZ	110	15	EP		1945	59.26	-0.02							1.0
BHL	BZ	112	4	EP		1945	59.41	-0.09							1.0
HWQ	BZ	157	13	EP		1946	6.45	-0.03							1.0
FKH	SZ	168	27	EP		1946	8.13	-0.06							1.0
BEIL	SZ	191	17	EP		1946	11.38	0.10							1.0

**July 4 2018 Hour: 20:8 30.9 Lat: 32.83N Lon: 35.54E Depth: 0 Agency: REL Regional Magnitudes: 3.3MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	60	18	EP		20	8	40.54	-0.08						1.0
RCY	SZ	79	20	EP		20	8	43.58	0.00	85					1.0
RCY	SN	79	20	ES		20	8	52.98	0.01						1.0
QRWL	SZ	80	9	EP		20	8	43.83	-0.03						1.0
DQRL	SZ	97	2	EP		20	8	46.52	0.00						1.0
DQRL	SN	97	2	ES		20	8	58.08	-0.00						1.0
ZAHL	SZ	118	16	EP		20	8	50.01	0.05						1.0
BHL	BZ	119	5	EP		20	8	50.15	0.01						1.0
HWQ	BZ	165	13	EP		20	8	57.07	0.02						1.0
BEIL	SZ	199	17	EP		20	9	1.69	0.02						1.0

**July 4 2018 Hour: 20:14 59.5 Lat: 32.91N Lon: 35.51E Depth: 0 Agency: REL Regional Magnitudes: 3.8MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	53	24	EP		2015	8.07	-0.02							1.0
RCY	SZ	72	25	EP		2015	11.03	-0.05	164						1.0
RCY	SN	72	25	ES		2015	19.67	0.01							1.0
QRWL	SZ	73	13	EP		2015	11.20	0.00							1.0
DQRL	SZ	89	4	EP		2015	13.75	-0.02							1.0
DQRL	SN	89	4	ES		2015	24.36	0.02							1.0
ZAHL	SZ	111	18	EP		2015	17.35	-0.02							1.0
BHL	BZ	111	7	EP		2015	17.39	-0.03							1.0
HWQ	BZ	157	15	EP		2015	24.55	0.02							1.0
FKH	SZ	170	29	EP		2015	26.43	0.01							1.0
BEIL	SZ	192	19	EP		2015	29.45	0.08							1.0

**July 4 2018 Hour: 21:49 29.4 Lat: 32.96N Lon: 35.58E Depth: 0 Agency: REL Regional Magnitudes: 3.3MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	64	22	EP		2149	39.66	-0.06	86						1.0
RCY	SN	64	22	ES		2149	47.39	0.02							1.0
DQRL	SZ	83	359	EP		2149	42.74	0.01							1.0
ZAHL	SZ	104	16	EP		2149	46.04	-0.05							1.0
BHL	BZ	105	4	EP		2149	46.28	-0.04							1.0
HWQ	BZ	150	13	EP		2149	53.47	0.08							1.0
HWQ	BN	150	13	ES		2150	11.16	0.01							1.0
BEIL	SZ	184	18	EP		2149	58.40	0.05							1.0

**July 5 2018 Hour: 8:47 42.5 Lat: 34.19N Lon: 36.46E Depth: 2 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
FKH	SZ	7	319	EP		847	43.84	-0.06							1.0
FKH	SE	7	319	ES		847	44.94	0.03							1.0
BEIL	SZ	46	326	EP		847	50.10	0.08	60						1.0
HWQ	BZ	49	281	EP		847	50.30	-0.09							1.0
ZAHL	SZ	65	235	EP		847	53.10	0.03							1.0
ZAHL	SE	65	235	ES		848	0.91	0.05							1.0
BHL	BZ	81	247	EP		847	55.63	-0.05							1.0
RCY	SZ	97	217	EP		847	58.19	0.03							1.0
RCY	SN	97	217	ES		848	9.71	-0.02							1.0
DQRL	SZ	99	237	EP		847	58.48	-0.00							1.0

**July 5 2018 Hour: 9: 8 32.8 Lat: 33.86N Lon: 35.83E Depth: 0 Agency: REL Local Magnitudes: 2.7MC 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	92	EP		9	8	33.48	-0.10						1.0
BHL	BZ	17	287	EP		9	8	35.49	-0.04	41					1.0
DQRL	SZ	30	235	EP		9	8	37.50	-0.04						1.0
RCY	SZ	40	179	EP		9	8	39.29	0.03						1.0
RCY	SN	40	179	ES		9	8	44.12	0.05						1.0
HWQ	BZ	48	13	EP		9	8	40.48	0.05						1.0
HWQ	BN	48	13	ES		9	8	46.15	0.04						1.0

**July 5 2018 Hour: 10: 4 31.1 Lat: 32.78N Lon: 35.77E Depth: 0 Agency: REL Regional Magnitudes: 3.2MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	79	5	EP		10	4	43.76	-0.07	71					1.0
RCY	SE	79	5	ES		10	4	53.27	-0.02						1.0
DQRL	SZ	104	350	EP		10	4	47.83	0.03						1.0
ZAHL	SZ	120	5	EP		10	4	50.30	-0.04						1.0
BHL	BZ	125	355	EP		10	4	51.18	0.03						1.0
HWQ	BZ	166	6	EP		10	4	57.42	-0.05						1.0
BEIL	SZ	199	11	EP		10	5	1.88	0.05						1.0
BEIL	SN	199	11	ES		10	5	24.66	0.06						1.0

**July 5 2018 Hour: 19:43 57.6 Lat: 32.85N Lon: 35.61E Depth: 0 Agency: REL Regional Magnitudes: 2.9MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	56	13	EP		1944	6.55	-0.09							1.0
RCY	SZ	74	16	EP		1944	9.59	0.04	51						1.0
RCY	SN	74	16	ES		1944	18.43	0.03							1.0
QRWL	SZ	77	5	EP		1944	10.02	-0.01							1.0
DQRL	SZ	94	358	EP		1944	12.90	0.08							1.0
DQRL	SN	94	358	ES		1944	24.07	-0.02							1.0
BHL	BZ	116	2	EP		1944	16.36	-0.01							1.0
HWQ	BZ	161	11	EP		1944	23.13	-0.00							1.0

**July 5 2018 Hour: 20:41 7.0 Lat: 32.78N Lon: 35.50E Depth: 0 Agency: REL Regional Magnitudes: 2.9MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	67	20	EP		2041	17.85	0.05							1.0
RCY	SZ	85	22	EP		2041	20.76	-0.01	49						1.0
RCY	SN	85	22	ES		2041	30.90	-0.04							1.0
QRWL	SZ	87	11	EP		2041	20.95	-0.04							1.0
DQRL	SZ	103	4	EP		2041	23.59	0.02							1.0
BHL	BZ	125	7	EP		2041	27.22	-0.01							1.0

HWQ	BZ	171	14	EP	2041	34.08-0.02	1.0
BEIL	SZ	205	18	EP	2041	38.59-0.02	1.0
BEIL	SN	205	18	ES	2042	2.05 0.07	1.0

**July 5 2018 Hour: 23:20 39.4 Lat: 32.84N Lon: 35.54E Depth: 0 Agency: REL Regional Magnitudes: 3.4MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	60	19	EP		2320	48.95-0.05								1.0
RCY	SZ	78	21	EP		2320	51.97 0.00	96							1.0
RCY	SN	78	21	ES		2321	1.31 0.05								1.0
QRWL	SZ	80	10	EP		2320	52.20-0.04								1.0
DQRL	SZ	96	2	EP		2320	54.88-0.00								1.0
DQRL	SN	96	2	ES		2321	6.31-0.03								1.0
ZAHL	SZ	117	16	EP		2320	58.34 0.00								1.0
BHL	BZ	118	5	EP		2320	58.54 0.03								1.0
HWQ	BZ	164	13	EP		2321	5.44 0.01								1.0
FKH	SZ	176	27	EP		2321	7.07-0.08								1.0
BEIL	SZ	198	17	EP		2321	10.19 0.11								1.0

**July 5 2018 Hour: 23:56 58.6 Lat: 32.84N Lon: 35.55E Depth: 0 Agency: REL Regional Magnitudes: 2.9MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	59	18	EP		2357	8.10 0.02								1.0
RCY	SZ	77	20	EP		2357	11.05 0.01	52							1.0
RCY	SN	77	20	ES		2357	20.27 0.01								1.0
QRWL	SZ	79	9	EP		2357	11.27-0.07								1.0
DQRL	SZ	96	1	EP		2357	14.01-0.01								1.0
DQRL	SN	96	1	ES		2357	25.45-0.00								1.0
ZAHL	SZ	117	15	EP		2357	17.39-0.03								1.0
BHL	BZ	118	5	EP		2357	17.73 0.10								1.0
HWQ	BZ	163	13	EP		2357	24.46-0.06								1.0
BEIL	SZ	197	17	EP		2357	29.20 0.04								1.0

**July 6 2018 Hour: 0:55 11.0 Lat: 32.81N Lon: 35.51E Depth: 0 Agency: REL Regional Magnitudes: 3.3MC 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	SZ	63	20	EP		055	21.08-0.06								1.0
RCY	SZ	81	22	EP		055	23.97-0.14	86							1.0
RCY	SN	81	22	ES		055	33.85 0.03								1.0
QRWL	SZ	83	11	EP		055	24.31-0.03								1.0
DQRL	SZ	99	3	EP		055	26.99 0.05								1.0
DQRL	SN	99	3	ES		055	38.77 0.01								1.0
ZAHL	SZ	121	17	EP		055	30.49 0.03								1.0
BHL	BZ	122	6	EP		055	30.49-0.10								1.0
HWQ	BZ	167	14	EP		055	37.57 0.07								1.0
FKH	SZ	179	27	EP		055	39.30 0.04								1.0
BEIL	SZ	201	18	EP		055	42.17 0.09								1.0

**July 6 2018 Hour: 1: 6 11.3 Lat: 32.83N Lon: 35.51E Depth: 0 Agency: REL Regional Magnitudes: 3.1MC 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	SZ	61	21	EP		1 6	21.15-0.05								1.0
RCY	SZ	80	22	EP		1 6	24.04-0.13	64							1.0
RCY	SN	80	22	ES		1 6	33.69 0.03								1.0
QRWL	SZ	81	11	EP		1 6	24.37 0.00								1.0
DQRL	SZ	97	3	EP		1 6	27.01 0.05								1.0
DQRL	SN	97	3	ES		1 6	38.51-0.01								1.0
BHL	BZ	119	6	EP		1 6	30.55-0.06								1.0
ZAHL	SZ	119	17	EP		1 6	30.55 0.04								1.0
HWQ	BZ	165	14	EP		1 6	37.60 0.03								1.0

FKH SZ 177 28 EP	1 6 39.43 0.06	1.0
BEIL SZ 199 18 EP	1 6 42.23 0.02	1.0

**July 6 2018 Hour: 1:40 8.0** Agency: REL Distant  
**EMSC OT=01:40:08.0 51.57N 157.87E 80Km M=6.1 NEAR'GCUV'EQUKV'QHKAMCHATKA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 152 13.48  
 HWQ BZ EP 152 10.89

**July 6 2018 Hour: 22:54 47.8** Lat: 32.85N Lon: 35.53E Depth: 0 Agency: REL Regional  
Magnitudes: 3.3MC REL  
**DEAD SEA REGION**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
SHBL SZ 59 19 EP 2254 57.26 0.00	1.0
RCY SZ 77 21 EP 2255 0.35 0.13	1.0
RCY SN 77 21 ES 2255 9.41-0.03	1.0
QRWL SZ 79 10 EP 2255 0.39-0.09	1.0
DQRL SZ 95 2 EP 2255 3.13 0.01	1.0
DQRL SN 95 2 ES 2255 14.52 0.03	1.0
ZAHL SZ 117 16 EP 2255 6.57-0.01	1.0
BHL BZ 118 5 EP 2255 6.70-0.05	1.0
HWQ BZ 163 13 EP 2255 13.71 0.04	1.0
FKH SZ 175 27 EP 2255 15.36-0.04	1.0
BEIL SZ 197 18 EP 2255 18.33 0.00	1.0

**July 7 2018 Hour: 2: 7 47.0** Lat: 32.87N Lon: 35.57E Depth: 0 Agency: REL Regional  
Magnitudes: 3.9MC REL  
**DEAD SEA REGION**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
SHBL SZ 56 17 EP 2 7 55.96-0.09	1.0
RCY SZ 74 20 EP 2 7 58.91-0.09	1.0
RCY SN 74 20 ES 2 8 7.92 0.06	1.0
QRWL SZ 76 8 EP 2 7 59.39 0.05	1.0
DQRL SZ 93 0 EP 2 8 2.09 0.04	1.0
DQRL SN 93 0 ES 2 8 13.10-0.06	1.0
ZAHL SZ 114 15 EP 2 8 5.45 0.05	1.0
BHL BZ 115 4 EP 2 8 5.70 0.05	1.0
HWQ BZ 160 13 EP 2 8 12.57 0.01	1.0
BEIL SZ 194 17 EP 2 8 17.27-0.00	1.0

**July 7 2018 Hour: 11:46 34.0** Lat: 32.88N Lon: 35.60E Depth: 0 Agency: REL Regional  
Magnitudes: 3.3MC REL  
**DEAD SEA REGION**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
RCY SZ 72 18 EP 1146 45.45-0.08	1.0
RCY SN 72 18 ES 1146 54.08 0.01	1.0
DQRL SZ 91 358 EP 1146 48.67-0.03	1.0
DQRL SN 91 358 ES 1146 59.59-0.00	1.0
ZAHL SZ 111 14 EP 1146 51.98 0.03	1.0
BHL BZ 113 3 EP 1146 52.28 0.01	1.0
HWQ BZ 158 12 EP 1146 59.25 0.09	1.0
BEIL SZ 192 16 EP 1147 3.88-0.02	1.0

**July 7 2018 Hour: 14:54 7.5** Lat: 33.28N Lon: 35.54E Depth: 0 Agency: REL Local  
Magnitudes: 2.9MC REL  
**MARJAAYOU REGION**

STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
QRWL SZ 32 24 EP 1454 12.68-0.01	1.0
RCY SZ 36 49 EP 1454 13.35 0.01	1.0
RCY SN 36 49 ES 1454 17.64-0.04	1.0
DQRL SZ 47 3 EP 1454 15.07-0.01	1.0
DQRL SN 47 3 ES 1454 20.71-0.00	1.0
BHL BZ 70 9 EP 1454 18.66-0.09	1.0
ZAHL SZ 72 26 EP 1454 18.99-0.02	1.0

ZAHL SN	72	26	ES	1454	27.57	0.03	1.0
HWQ BZ	117	19	EP	1454	26.40	0.10	1.0
BEIL SZ	152	23	EP	1454	31.73	0.02	1.0

**July 7 2018 Hour: 17:33 28.3**      Lat: 32.81N Lon: 35.64E Depth: 0 Agency: REL Regional  
**Magnitudes: 2.9MC REL**  
**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	61	9	EP		1733	38.11	-0.01							1.0
RCY	SZ	79	13	EP		1733	40.98	-0.01	50						1.0
RCY	SN	79	13	ES		1733	50.39	-0.02							1.0
DQRL	SZ	100	356	EP		1733	44.39	-0.02							1.0
DQRL	SN	100	356	ES		1733	56.42	0.06							1.0
ZAHL	SZ	119	11	EP		1733	47.41	-0.06							1.0
BHL	BZ	122	1	EP		1733	47.84	-0.09							1.0
HWQ	BZ	166	10	EP		1733	54.65	0.06							1.0
BEIL	SZ	199	15	EP		1733	59.19	0.09							1.0

**July 7 2018 Hour: 21:33 49.2**      Agency: REL Distant  
**EMSC OT=21:33:49.2 30.71S 177.94W 40Km M=6.0 KERMADEC ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2153	39.48								
HWQ	BZ			EP		2153	38.74								

**July 8 2018 Hour: 1:40 54.4**      Agency: REL Regional  
**EMSC OT=01:40:54.4 35.74N 27.97E 40Km M=3.8 DODECANESE ISLANDS.1 TGEG**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP			142	26.50							
BHL	BZ			EP			142	25.05							
HWQ	BZ			EP			142	28.87							
ZAHL	SZ			EP			142	29.82							
RCY	SZ			EP			142	29.70							
BEIL	SZ			EP			142	29.94							

**July 8 2018 Hour: 11: 4 3.1**      Lat: 32.85N Lon: 35.52E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.6MC REL**  
**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	77	23	EP		11	4	15.54	-0.03	126					1.0
RCY	SN	77	23	ES		11	4	24.80	0.02						1.0
QRWL	SZ	78	11	EP		11	4	15.82	0.05						1.0
DQRL	SZ	95	3	EP		11	4	18.40	0.03						1.0
DQRL	SN	95	3	ES		11	4	29.64	-0.01						1.0
ZAHL	SZ	116	17	EP		11	4	21.88	-0.03						1.0
BHL	BZ	117	6	EP		11	4	21.97	-0.04						1.0
HWQ	BZ	163	14	EP		11	4	28.94	-0.06						1.0
BEIL	SZ	197	18	EP		11	4	33.76	0.06						1.0

**July 8 2018 Hour: 12:39 12.5**      Lat: 32.88N Lon: 35.63E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.3MC REL**  
**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	71	15	EP		1239	23.80	-0.06	90						1.0
RCY	SN	71	15	ES		1239	32.30	0.01							1.0
QRWL	SZ	74	4	EP		1239	24.38	-0.00							1.0
DQRL	SZ	91	356	EP		1239	27.19	-0.03							1.0
DQRL	SN	91	356	ES		1239	38.14	0.01							1.0
ZAHL	SZ	111	12	EP		1239	30.31	-0.01							1.0
BHL	BZ	113	1	EP		1239	30.76	0.02							1.0
HWQ	BZ	157	11	EP		1239	37.59	0.04							1.0
BEIL	SZ	191	15	EP		1239	42.31	0.03							1.0

**July 8 2018 Hour: 12:52 20.0 Lat: 32.84N Lon: 35.66E Depth: 0 Agency: REL Regional  
Magnitudes: 3.2MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	75	13	EP		1252	31.98	-0.07	79						1.0
RCY	SN	75	13	ES		1252	41.00	0.02							1.0
DQRL	SZ	97	355	EP		1252	35.57	0.02							1.0
DQRL	SN	97	355	ES		1252	47.06	-0.01							1.0
ZAHL	SZ	115	10	EP		1252	38.52	-0.02							1.0
BHL	BZ	118	360	EP		1252	39.05	0.00							1.0
HWQ	BZ	162	9	EP		1252	45.75	0.03							1.0
BEIL	SZ	195	14	EP		1252	50.34	0.03							1.0

**July 8 2018 Hour: 13:15 56.6**

**Agency: REL Regional**

**EMSC OT=13:15:56.6 35.53N 27.82E 12Km M=4.2 DODECANESE ISLANDS.T TGEG**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1317	32.44								
BHL	BZ			EP		1317	32.17								
HWQ	BZ			EP		1317	34.71								
ZAHL	SZ			EP		1317	35.42								
RCY	SZ			EP		1317	36.80								
BEIL	SZ			EP		1317	36.42								

**July 8 2018 Hour: 13:30 48.6**

**Lat: 32.81N Lon: 35.51E Depth: 0 Agency: REL Regional**

**Magnitudes: 4.0MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	82	22	EP		1331	1.75	-0.06	230						1.0
RCY	SN	82	22	ES		1331	11.67	0.07							1.0
QRWL	SZ	83	11	EP		1331	2.03	-0.01							1.0
DQRL	SZ	100	3	EP		1331	4.67	0.03							1.0
DQRL	SN	100	3	ES		1331	16.44	-0.07							1.0
ZAHL	SZ	121	17	EP		1331	8.12	-0.05							1.0
BHL	BZ	122	6	EP		1331	8.35	0.07							1.0
HWQ	BZ	168	14	EP		1331	15.26	0.07							1.0
FKH	SZ	180	27	EP		1331	16.88	-0.08							1.0
BEIL	SZ	202	18	EP		1331	19.79	0.02							1.0

**July 8 2018 Hour: 13:53 57.4**

**Lat: 32.85N Lon: 35.55E Depth: 0 Agency: REL Regional**

**Magnitudes: 3.1MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	76	20	EP		1354	9.56	-0.08	67						1.0
RCY	SN	76	20	ES		1354	18.76	0.04							1.0
DQRL	SZ	95	1	EP		1354	12.67	0.05							1.0
DQRL	SN	95	1	ES		1354	23.87	-0.04							1.0
ZAHL	SZ	116	15	EP		1354	16.04	0.01							1.0
BHL	BZ	117	5	EP		1354	16.24	0.01							1.0
HWQ	BZ	162	13	EP		1354	23.22	0.07							1.0
BEIL	SZ	196	17	EP		1354	27.77	-0.05							1.0

**July 8 2018 Hour: 14:22 2.4**

**Lat: 32.76N Lon: 35.65E Depth: 2 Agency: REL Regional**

**Magnitudes: 3.2MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	83	12	EP		1422	15.89	0.05	73						1.0
RCY	SN	83	12	ES		1422	25.77	-0.01							1.0
QRWL	SZ	87	2	EP		1422	16.39	-0.07							1.0
DQRL	SZ	105	356	EP		1422	19.32	0.00							1.0
DQRL	SN	105	356	ES		1422	31.84	0.00							1.0
ZAHL	SZ	123	10	EP		1422	22.33	0.01							1.0
BHL	BZ	127	0	EP		1422	22.85	0.05							1.0
HWQ	BZ	170	9	EP		1422	29.24	-0.00							1.0

BEIL SZ 203 14 EP 1422 33.52-0.03 1.0

**July 8 2018 Hour: 14:51 43.3 Lat: 32.83N Lon: 35.60E Depth: 0 Agency: REL Regional Magnitudes: 3.0MC REL Rms: 0.1 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	77	16	EP		1451	55.59	-0.11	57						1.0
RCY	SN	77	16	ES		1452	4.88	0.03							1.0
DQRL	SZ	97	358	EP		1451	58.92	-0.03							1.0
DQRL	SE	97	358	ES		1452	10.47	-0.03							1.0
ZAHL	SZ	117	13	EP		1452	2.21	0.06							1.0
BHL	BZ	119	2	EP		1452	2.59	0.08							1.0
HWQ	BZ	163	11	EP		1452	9.24	-0.01							1.0
BEIL	SZ	197	16	EP		1452	13.84	0.01							1.0

**July 8 2018 Hour: 18:36 52.4 Lat: 32.84N Lon: 35.50E Depth: 0 Agency: REL Regional Magnitudes: 3.1MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	61	22	EP		1837	2.16	-0.05							1.0
RCY	SZ	79	23	EP		1837	5.10	-0.09	65						1.0
RCY	SN	79	23	ES		1837	14.71	0.04							1.0
QRWL	SZ	81	12	EP		1837	5.35	-0.01							1.0
DQRL	SZ	96	4	EP		1837	7.93	-0.00							1.0
DQRL	SN	96	4	ES		1837	19.42	-0.02							1.0
BHL	BZ	119	7	EP		1837	11.60	0.01							1.0
ZAHL	SZ	119	17	EP		1837	11.55	0.03							1.0
HWQ	BZ	165	14	EP		1837	18.59	0.02							1.0
BEIL	SZ	199	18	EP		1837	23.29	0.07							1.0

**July 8 2018 Hour: 19:0 49.9 Lat: 32.83N Lon: 35.58E Depth: 1 Agency: REL Regional Magnitudes: 3.4MC REL Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	59	15	EP		19	0	59.36	-0.11						1.0
RCY	SZ	77	18	EP		19	1	2.46	0.06	93					1.0
RCY	SN	77	18	ES		19	1	11.63	0.01						1.0
QRWL	SZ	80	7	EP		19	1	2.83	0.03						1.0
DQRL	SZ	97	359	EP		19	1	5.53	-0.01						1.0
DQRL	SN	97	359	ES		19	1	17.06	-0.02						1.0
ZAHL	SZ	117	14	EP		19	1	8.89	0.07						1.0
BHL	BZ	119	3	EP		19	1	9.10	-0.02						1.0
HWQ	BZ	164	12	EP		19	1	15.89	0.03						1.0
FKH	SZ	174	26	EP		19	1	17.37	-0.07						1.0
BEIL	SZ	197	16	EP		19	1	20.46	0.02						1.0

**July 8 2018 Hour: 19:43 32.6**

**Agency: REL Regional**

**EMSC OT=19:43:32.6 35.73N 28.20E 10Km M=4.1 GCUVGTP 'MEDITERRANEAN SEA'**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1945		3.54							
BHL	BZ			EP		1945		3.20							
HWQ	BZ			EP		1945		6.12							
BEIL	SZ			EP		1945		7.64							
RCY	SZ			EP		1945		8.53							

**July 8 2018 Hour: 20:4 56.4**

**Lat: 32.81N Lon: 35.49E Depth: 0 Agency: REL Regional**

**Magnitudes: 3.3MC REL**

**Rms: 0.0 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	64	21	EP		20	5	6.66	0.00						1.0
RCY	SZ	82	23	EP		20	5	9.59	-0.04	80					1.0
RCY	SN	82	23	ES		20	5	19.44	0.01						1.0
QRWL	SZ	83	12	EP		20	5	9.84	0.03						1.0
DQRL	SZ	99	4	EP		20	5	12.46	0.08						1.0

DQRL	SN	99	4	ES	20	5	24.19-0.01		1.0
ZAHL	SZ	121	17	EP	20	5	15.96-0.00		1.0
BHL	BZ	122	7	EP	20	5	15.95-0.08		1.0
HWQ	BZ	168	14	EP	20	5	23.01 0.04		1.0
FKH	SZ	180	28	EP	20	5	24.82 0.04		1.0
BEIL	SZ	202	18	EP	20	5	27.50-0.05		1.0

**July 8 2018 Hour: 21:42 48.1 Lat: 32.89N Lon: 35.51E Depth: 0 Agency: REL Regional Magnitudes: 3.6MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	55	24	EP		2142	56.95-0.03								1.0
RCY	SZ	74	25	EP		2142	59.88-0.08	125							1.0
RCY	SN	74	25	ES		2143	8.78 0.02								1.0
QRWL	SZ	75	13	EP		2143	0.12 0.03								1.0
DQRL	SZ	90	4	EP		2143	2.62-0.03								1.0
DQRL	SN	90	4	ES		2143	13.42-0.01								1.0
ZAHL	SZ	113	18	EP		2143	6.28 0.02								1.0
BHL	BZ	113	7	EP		2143	6.31 0.01								1.0
HWQ	BZ	159	15	EP		2143	13.41 0.02								1.0
FKH	SZ	172	29	EP		2143	15.28 0.00								1.0
BEIL	SZ	193	19	EP		2143	18.22 0.03								1.0

**July 9 2018 Hour: 0:59 31.7 Lat: 32.84N Lon: 35.52E Depth: 0 Agency: REL Regional Magnitudes: 3.2MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	60	20	EP		059	41.42 0.06								1.0
RCY	SZ	78	22	EP		059	44.28-0.05	71							1.0
RCY	SN	78	22	ES		059	53.67-0.00								1.0
QRWL	SZ	80	11	EP		059	44.57 0.02								1.0
DQRL	SZ	96	3	EP		059	47.15-0.02								1.0
DQRL	SN	96	3	ES		059	58.63 0.02								1.0
ZAHL	SZ	118	17	EP		059	50.66-0.02								1.0
BHL	BZ	118	6	EP		059	50.74-0.07								1.0
HWQ	BZ	164	14	EP		059	57.79 0.03								1.0
FKH	SZ	176	28	EP		059	59.51-0.03								1.0
BEIL	SZ	198	18	EP		1	0	2.48 0.06							1.0

**July 9 2018 Hour: 2:45 26.1 Lat: 32.85N Lon: 35.53E Depth: 0 Agency: REL Regional Magnitudes: 3.2MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	59	20	EP		245	35.49-0.03								1.0
RCY	SZ	77	22	EP		245	38.42-0.07	72							1.0
RCY	SN	77	22	ES		245	47.73 0.04								1.0
QRWL	SZ	79	10	EP		245	38.77 0.04								1.0
DQRL	SZ	95	2	EP		245	41.35-0.01								1.0
DQRL	SN	95	2	ES		245	52.68-0.01								1.0
BHL	BZ	117	6	EP		245	45.00 0.01								1.0
ZAHL	SZ	117	16	EP		245	44.79-0.06								1.0
HWQ	BZ	163	14	EP		245	51.93-0.02								1.0
FKH	SZ	175	28	EP		245	53.71 0.00								1.0
BEIL	SZ	197	18	EP		245	56.73 0.10								1.0

**July 9 2018 Hour: 15:16 6.8 Lat: 32.82N Lon: 35.63E Depth: 0 Agency: REL Regional Magnitudes: 3.3MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	78	14	EP		1516	19.28-0.08	83							1.0
RCY	SN	78	14	ES		1516	28.62-0.01								1.0
DQRL	SZ	99	357	EP		1516	22.70-0.04								1.0
DQRL	SN	99	357	ES		1516	34.52 0.00								1.0
ZAHL	SZ	118	12	EP		1516	25.93 0.10								1.0

BHL	BZ	121	1	EP	1516	26.28	0.01		1.0
HWQ	BZ	165	10	EP	1516	33.00	0.06		1.0
BEIL	SZ	198	15	EP	1516	37.42	-0.04		1.0

**July 9 2018 Hour: 15:34 1.1**      Lat: 33.78N Lon: 35.76E Depth: 2 Agency: REL Local  
**Magnitudes: 2.7MC REL**  
**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	14	55	EP		1534	3.44	-0.04							1.0
BHL	BZ	17	323	EP		1534	3.85	0.00							1.0
DQRL	SZ	20	244	EP		1534	4.35	-0.00							1.0
RCY	SZ	33	168	EP		1534	6.40	-0.04	38						1.0
RCY	SN	33	168	ES		1534	10.43	0.05							1.0
HWQ	BZ	57	17	EP		1534	10.36	-0.03							1.0
HWQ	BN	57	17	ES		1534	17.31	0.06							1.0

**July 10 2018 Hour: 13: 9 23.3**      Lat: 33.78N Lon: 35.78E Depth: 1 Agency: REL Local  
**Magnitudes: 2.8MC REL**  
**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	47	EP		13	9	25.47	0.01						1.0
BHL	BZ	18	320	EP		13	9	26.18	-0.08	48					1.0
DQRL	SZ	21	248	EP		13	9	26.81	0.10						1.0
QRWL	SZ	27	200	EP		13	9	27.60	-0.07						1.0
RCY	SZ	32	171	EP		13	9	28.40	0.01						1.0
HWQ	BZ	58	15	EP		13	9	32.58	0.00						1.0
HWQ	BN	58	15	ES		13	9	39.48	0.02						1.0
BEIL	SZ	93	24	EP		13	9	38.22	0.01						1.0
BEIL	SN	93	24	ES		13	9	49.26	-0.01						1.0

**July 10 2018 Hour: 19:25 22.1**      Lat: 32.84N Lon: 35.49E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.1MC REL**  
**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	61	23	EP		1925	31.89	-0.02							1.0
RCY	SZ	79	24	EP		1925	34.81	-0.08							1.0
RCY	SN	79	24	ES		1925	44.46	0.09							1.0
QRWL	SZ	80	13	EP		1925	35.03	0.00	65						1.0
QRWL	SN	80	13	ES		1925	44.55	-0.07							1.0
DQRL	SZ	96	4	EP		1925	37.65	0.07							1.0
DQRL	SN	96	4	ES		1925	49.06	-0.00							1.0
BHL	BZ	119	7	EP		1925	41.25	0.01							1.0
ZAHL	SZ	119	18	EP		1925	41.12	-0.08							1.0
HWQ	BZ	165	15	EP		1925	48.28	0.03							1.0
BEIL	SZ	199	19	EP		1925	52.95	0.04							1.0

**July 10 2018 Hour: 23: 4 17.4**      Lat: 32.83N Lon: 35.61E Depth: 0 Agency: REL Regional  
**Magnitudes: 2.9MC REL**  
**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	59	12	EP		23	4	26.91	-0.07						1.0
SHBL	SN	59	12	ES		23	4	34.15	0.10						1.0
RCY	SZ	77	16	EP		23	4	29.82	-0.06	52					1.0
RCY	SN	77	16	ES		23	4	39.08	-0.03						1.0
QRWL	SZ	80	5	EP		23	4	30.28	0.09						1.0
DQRL	SZ	98	358	EP		23	4	33.25	0.09						1.0
DQRL	SN	98	358	ES		23	4	44.74	-0.07						1.0
ZAHL	SZ	117	13	EP		23	4	36.36	0.02						1.0
BHL	BZ	120	2	EP		23	4	36.79	0.08						1.0
HWQ	BZ	164	11	EP		23	4	43.52	0.05						1.0
BEIL	SZ	198	15	EP		23	4	48.04	-0.01						1.0

<b>July 11 2018 Hour: 16:3 4.6</b>	<b>Lat: 33.85N Lon: 35.80E Depth: 27 Agency: REL Local Magnitudes: 2.8MC REL</b>	<b>Rms: 0.0 secs</b>
<b>BAABDA REGION</b>		
STAT CO DIST AZI PHASE P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
ZAHL SZ 8 86 EP	16 3 9.25-0.01	1.0
BHL BZ 15 293 EP	16 3 9.61 0.02	1.0
DQRL SZ 27 232 EP	16 3 10.72 0.05	1.0
DQRL SN 27 232 ES	16 3 15.12-0.03	1.0
QRWL SZ 36 198 EP	16 3 11.63-0.03	1.0
RCY SZ 40 175 EP	16 3 12.18-0.03	1.0
RCY SN 40 175 ES	16 3 17.87 0.04	1.0
	41	
<b>July 11 2018 Hour: 20:1 5.7</b>	<b>Lat: 32.87N Lon: 35.49E Depth: 0 Agency: REL Regional Magnitudes: 3.0MC REL</b>	<b>Rms: 0.0 secs</b>
<b>DEAD SEA REGION</b>		
STAT CO DIST AZI PHASE P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
SHBL SZ 58 24 EP	20 1 15.16 0.01	1.0
RCY SZ 77 25 EP	20 1 18.07-0.06	1.0
RCY SN 77 25 ES	20 1 27.32 0.02	1.0
QRWL SZ 77 14 EP	20 1 18.24 0.01	1.0
DQRL SZ 93 5 EP	20 1 20.75-0.00	1.0
DQRL SE 93 5 ES	20 1 31.84-0.02	1.0
BHL BZ 116 8 EP	20 1 24.45 0.03	1.0
ZAHL SZ 116 19 EP	20 1 24.42 0.01	1.0
HWQ BZ 162 15 EP	20 1 31.46-0.00	1.0
<b>July 12 2018 Hour: 7:0 36.4</b>	<b>Lat: 32.89N Lon: 35.49E Depth: 0 Agency: REL Regional Magnitudes: 3.2MC REL</b>	<b>Rms: 0.1 secs</b>
<b>DEAD SEA REGION</b>		
STAT CO DIST AZI PHASE P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
RCY SZ 74 26 EP	7 0 48.41-0.03	1.0
RCY SN 74 26 ES	7 0 57.30-0.02	1.0
QRWL SZ 75 14 EP	7 0 48.54 0.02	1.0
DQRL SZ 91 5 EP	7 0 51.03-0.01	1.0
DQRL SN 91 5 ES	7 1 1.86 0.02	1.0
ZAHL SZ 113 19 EP	7 0 55.23 0.52	0.2
BHL BZ 113 8 EP	7 0 54.70-0.01	1.0
HWQ BZ 159 15 EP	7 1 1.78-0.03	1.0
FKH SZ 173 29 EP	7 1 3.81 0.05	1.0
BEIL SZ 194 19 EP	7 1 6.60-0.01	1.0
<b>July 12 2018 Hour: 6:51 20.9</b>	<b>Agency: REL Distant</b>	
<b>EMSC OT=06:51:20.9 23.42S 179.92W 545Km M=5.5 SOUTH OF FIJI ISLAPFU</b>		
STAT CO DIST AZI PHASE P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
BHL BZ EP	710 3.86	
HWQ BZ EP	710 2.75	
<b>July 14 2018 Hour: 14:21 39.5</b>	<b>Lat: 33.63N Lon: 35.59E Depth: 8 Agency: REL Local Magnitudes: 2.8MC REL</b>	<b>Rms: 0.1 secs</b>
<b>CHOUF REGION</b>		
STAT CO DIST AZI PHASE P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT	
DQRL SZ 9 350 EP	1421 41.50-0.00	1.0
DQRL SN 9 350 ES	1421 43.00-0.00	1.0
QRWL SZ 13 136 EP	1421 41.92-0.06	1.0
RCY SZ 27 122 EP	1421 44.19 0.04	1.0
RCY SN 27 122 ES	1421 47.64 0.03	1.0
BHL BZ 31 11 EP	1421 44.79 0.07	1.0
ZAHL SZ 38 47 EP	1421 45.66-0.06	1.0
HWQ BZ 79 25 EP	1421 52.13-0.23	0.2

**July 14 2018 Hour: 14:25 44.2** Agency: REL Regional

**EMSC OT=14:25:44.2 36.70N 26.95E 151Km M=4.1 DODECANESE ISLANDS, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1427	31.19								
HWQ	BZ			EP		1427	32.49								
QRWL	SZ			EP		1427	33.31								
BEIL	SZ			EP		1427	33.25								
ZAHL	SZ			EP		1427	32.68								
RCY	SZ			EP		1427	34.76								

**July 14 2018 Hour: 14:59 0.2** Lat: 33.78N Lon: 35.78E Depth: 1 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	49	EP		1459	2.37-0.02								1.0
BHL	BZ	18	321	EP		1459	3.08-0.04								1.0
DQRL	SZ	21	247	EP		1459	3.50-0.08								1.0
DQRL	SN	21	247	ES		1459	6.18 0.09								1.0
QRWL	SZ	27	199	EP		1459	4.52-0.06								1.0
BEYL	SZ	28	291	EP		1459	4.75-0.00								1.0
RCY	SZ	32	170	EP		1459	5.35 0.01	48							1.0
RCY	SN	32	170	ES		1459	9.17 0.02								1.0
HWQ	BZ	58	16	EP		1459	9.44-0.04								1.0
BEIL	SZ	93	24	EP		1459	15.23 0.11								1.0

**July 14 2018 Hour: 15:1 10.2** Lat: 33.79N Lon: 35.78E Depth: 6 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	12	51	EP		15	1	12.60 0.05							1.0
BHL	BZ	18	318	EP		15	1	13.22-0.08							1.0
DQRL	SZ	22	245	EP		15	1	13.99 0.08							1.0
RCY	SZ	33	171	EP		15	1	15.62-0.02	40						1.0
RCY	SN	33	171	ES		15	1	19.61-0.03							1.0
HWQ	BZ	57	16	EP		15	1	19.47 0.04							1.0
HWQ	BN	57	16	ES		15	1	26.20-0.03							1.0

**July 15 2018 Hour: 9:33 4.7** Lat: 33.78N Lon: 35.77E Depth: 1 Agency: REL Local

Magnitudes: 3.1MC 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	48	EP		933	6.99 0.02								1.0
BHL	BZ	18	323	EP		933	7.54-0.09								1.0
DQRL	SZ	20	248	EP		933	8.05 0.07								1.0
DQRL	SN	20	248	ES		933	10.47 0.05								1.0
QRWL	SZ	27	199	EP		933	8.97-0.02								1.0
BEYL	SZ	28	293	EP		933	9.18-0.04								1.0
RCY	SZ	31	169	EP		933	9.77-0.01	65							1.0
RCY	SN	31	169	ES		933	13.50-0.04								1.0
HWQ	BZ	58	16	EP		933	14.04-0.03								1.0
FKH	SZ	79	48	EP		933	17.41 0.03								1.0
BEIL	SZ	93	24	EP		933	19.78 0.06								1.0

**July 15 2018 Hour: 13:10 47.1** Lat: 34.59N Lon: 36.39E Depth: 1 Agency: REL Local

Magnitudes: 3.1MC REL Rms: 0.0 secs

### AKKAR REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	19	254	EP		1310	50.29 0.04	70							1.0
BEIL	SN	19	254	ES		1310	52.53-0.04								1.0
FKH	SZ	38	177	EP		1310	53.30-0.01								1.0
HWQ	BZ	53	230	EP		1310	55.70-0.01								1.0
HWQ	BN	53	230	ES		1311	2.10 0.03								1.0
ZAHL	SZ	93	210	EP		1311	2.18-0.00								1.0

BHL	BZ	102	222	EP	1311	3.49-0.02	1.0
DQRL	SZ	124	218	EP	1311	7.07 0.01	1.0
RCY	SZ	131	203	EP	1311	8.28 0.01	1.0
QRWL	SZ	133	210	EP	1311	8.39-0.01	1.0

**July 15 2018 Hour: 13: 9 16.3** **Agency: REL Distant**  
**EMSC OT=13:09:16.3 13.87N 51.73E 10Km M=5.9 GULF OF ADEN**  
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
BHL BZ EP 1314 38.78  
HWQ BZ EP 1314 40.81

**July 15 2018 Hour: 17:58 34.3** **Lat: 32.91N Lon: 35.43E Depth: 4 Agency: REL Regional Magnitudes: 3.1MC REL DEAD SEA REGION**  
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
SHBL SZ 57 31 EP 1758 43.51-0.02 1.0  
QRWL SZ 75 18 EP 1758 46.39 0.00 1.0  
RCY SZ 75 30 EP 1758 46.48-0.02 68 1.0  
RCY SN 75 30 ES 1758 55.51 0.02 1.0  
DQRL SZ 89 8 EP 1758 48.76-0.00 1.0  
DQRL SN 89 8 ES 1758 59.40-0.03 1.0  
BHL BZ 112 10 EP 1758 52.51 0.06 1.0  
ZAHL SZ 113 22 EP 1758 52.67 0.05 1.0  
HWQ BZ 159 17 EP 1758 59.40 0.05 1.0  
FKH SZ 174 31 EP 1759 1.49-0.00 1.0  
BEIL SZ 194 21 EP 1759 3.93-0.10 1.0

**July 16 2018 Hour: 17:25 21.0** **Lat: 33.78N Lon: 35.76E Depth: 3 Agency: REL Local Magnitudes: 2.8MC REL ALEY REGION**  
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT

ZAHL	SZ	14	53	EP	1725	23.43-0.01	1.0
BHL	BZ	17	324	EP	1725	23.84-0.02	1.0
DQRL	SZ	20	245	EP	1725	24.29 0.02	43 1.0
RCY	SZ	32	168	EP	1725	26.21-0.06	1.0
RCY	SN	32	168	ES	1725	30.19 0.04	1.0
HWQ	BZ	58	17	EP	1725	30.41 0.03	1.0
HWQ	BN	58	17	ES	1725	37.29-0.00	1.0

**July 16 2018 Hour: 18: 0 7.2** **Agency: REL Regional**  
**EMSC OT=18:00:07.2 36.57N 34.92E 7Km M=3.1 CENTRAL TURKEY**  
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT

BEIL	SZ			EP	18	0 46.50	
HWQ	BZ			EP	18	0 49.10	
FKH	SZ			EP	18	0 51.87	
BHL	BZ			EP	18	0 52.72	
DQRL	SZ			EP	18	0 54.49	
QRWL	SZ			EP	18	0 57.42	
RCY	SZ			EP	18	0 58.81	
SHBL	SZ			EP	18	1 0.61	

**July 16 2018 Hour: 23:28 22.4** **Lat: 33.81N Lon: 35.80E Depth: 10 Agency: REL Local Magnitudes: 2.3MC REL ZAHLE REGION**  
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT

ZAHL	SZ	10	55	EP	2328	24.87-0.03	1.0
BHL	BZ	17	308	EP	2328	25.83 0.03	23 1.0
BHL	BN	17	308	ES	2328	28.31 0.02	1.0
DQRL	SZ	24	242	EP	2328	26.71-0.07	1.0
RCY	SZ	35	175	EP	2328	28.42 0.05	1.0
RCY	SN	35	175	ES	2328	32.76 0.00	1.0

**July 17 2018 Hour: 14:11 45.8 Lat: 34.23N Lon: 36.42E 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
FKH	SZ	2	329	EP		1411	46.18	-0.07							1.0
BEIL	SZ	41	328	EP		1411	52.53	0.05							1.0
HWQ	BZ	44	277	EP		1411	53.00	0.02	62						1.0
HWQ	BN	44	277	ES		1411	58.25	-0.01							1.0
BHL	BZ	80	243	EP		1411	58.68	0.02							1.0
RCY	SZ	98	214	EP		1412	1.63	0.05							1.0
RCY	SN	98	214	ES		1412	13.22	-0.01							1.0
DQRL	SZ	98	234	EP		1412	1.57	-0.04							1.0
QRWL	SZ	102	222	EP		1412	2.24	-0.03							1.0

**July 18 2018 Hour: 15:24 11.4 Lat: 32.86N Lon: 35.63E Depth: 0 Agency: REL Regional Magnitudes: 2.9MC REL Rms: 0.1 secs**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	73	15	EP		1524	23.23	0.01	47						1.0
RCY	SN	73	15	ES		1524	31.93	-0.03							1.0
QRWL	SZ	77	3	EP		1524	23.74	-0.03							1.0
DQRL	SZ	94	356	EP		1524	26.51	-0.09							1.0
DQRL	SN	94	356	ES		1524	37.87	0.03							1.0
BHL	BZ	116	1	EP		1524	30.18	0.05							1.0
HWQ	BZ	160	10	EP		1524	36.95	0.06							1.0
BEIL	SZ	193	15	EP		1524	41.42	-0.12							0.2

**July 18 2018 Hour: 15:47 35.9 Lat: 33.78N Lon: 35.77E 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	14	50	EP		1547	38.20	-0.01							1.0
BHL	BZ	18	323	EP		1547	38.72	-0.07	28						1.0
DQRL	SZ	20	247	EP		1547	39.12	-0.05							1.0
DQRL	SN	20	247	ES		1547	41.60	0.04							1.0
QRWL	SZ	27	198	EP		1547	40.28	0.05							1.0
QRWL	SN	27	198	ES		1547	43.44	0.02							1.0
RCY	SZ	32	169	EP		1547	40.97	-0.08							1.0
HWQ	BZ	58	16	EP		1547	45.37	0.08							1.0
BEIL	SZ	93	24	EP		1547	50.98	0.03							1.0

**July 20 2018 Hour: 6: 7 15.0 Lat: 33.34N Lon: 35.52E Depth: 0 Agency: REL Local Magnitudes: 2.7MC REL Rms: 0.1 secs**

**NABATIYE REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	27	34	EP		6	7	19.50	0.05						1.0
QRWL	SN	27	34	ES		6	7	22.69	-0.03						1.0
RCY	SZ	34	60	EP		6	7	20.50	-0.05	38					1.0
RCY	SN	34	60	ES		6	7	24.67	0.03						1.0
DQRL	SZ	41	7	EP		6	7	21.64	0.08						1.0
BHL	BZ	64	12	EP		6	7	25.21	-0.06						1.0
HWQ	BZ	111	21	EP		6	7	32.92	-0.02						1.0
BEIL	SZ	147	25	EP		6	7	38.55	0.07						0.2

**July 20 2018 Hour: 15: 6 7.7 Lat: 33.78N Lon: 35.78E Depth: 1 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	49	EP		15	6	9.83	0.00						1.0
BHL	BZ	18	320	EP		15	6	10.54	-0.08	36					1.0
DQRL	SZ	21	247	EP		15	6	11.22	0.08						1.0
DQRL	SN	21	247	ES		15	6	13.70	0.02						1.0
QRWL	SZ	27	199	EP		15	6	12.05	-0.09						1.0

RCY	SZ	32	171	EP	15	6	12.84	-0.03	1.0
RCY	SN	32	171	ES	15	6	16.74	0.04	1.0
HWQ	BZ	57	16	EP	15	6	16.97	0.03	1.0
BEIL	SZ	92	24	EP	15	6	22.62	0.03	1.0

**July 20 2018 Hour: 17:7 48.5 Lat: 33.90N Lon: 35.65E Depth: 12 Agency: REL Local Magnitudes: 2.3MC REL**

**METN REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	1	83	EP		17	7	50.58	-0.09	24					1.0
BHL	BN	1	83	ES		17	7	52.29	0.04						1.0
ZAHL	SZ	23	103	EP		17	7	52.80	0.02						1.0
DQRL	SZ	23	198	EP		17	7	52.88	0.06						1.0
QRWL	SZ	40	175	EP		17	7	55.20	-0.07						1.0
RCY	SZ	48	159	EP		17	7	56.72	0.07						1.0
RCY	SN	48	159	ES		17	8	2.62	-0.03						1.0
HWQ	BZ	50	34	EP		17	7	56.88	0.01						1.0

**July 22 2018 Hour: 5:7 2.7 Lat: 34.21N Lon: 36.40E Depth: 0 Agency: REL Distant EMSC OT=05:07:02.7 27.68N 54.94E 10Km M=5.4 SOUTHERN IRAN**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		511		8.03							
BHL	BZ			EP		511		9.46							

**July 22 2018 Hour: 8:17 12.2 Lat: 34.21N Lon: 36.40E Depth: 0 Agency: REL Local Magnitudes: 3.0MC REL**

**BAALBECK REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	4	7	EP		817	12.80	-0.06							1.0
BEIL	SZ	42	331	EP		817	19.01	0.03	59						1.0
BEIL	SN	42	331	ES		817	24.05	0.04							1.0
HWQ	BZ	43	280	EP		817	19.10	-0.01							1.0
HWQ	BN	43	280	ES		817	24.18	-0.05							1.0
ZAHL	SZ	62	231	EP		817	22.21	0.07							1.0
BHL	BZ	77	244	EP		817	24.65	0.03							1.0
RCY	SZ	95	214	EP		817	27.52	0.03							1.0
DQRL	SZ	95	234	EP		817	27.50	-0.04							1.0
QRWL	SZ	99	223	EP		817	28.14	-0.04							1.0

**July 22 2018 Hour: 10:7 26.4 Lat: 34.45N Lon: 46.13E Depth: 10Km M=5.8 WESTERN IRAN**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		10	9	26.97							
HWQ	BZ			EP		10	9	30.65							
ZAHL	SZ			EP		10	9	32.42							
RCY	SZ			EP		10	9	33.24							
BHL	BZ			EP		10	9	34.48							
QRWL	SZ			EP		10	9	34.93							

**July 22 2018 Hour: 17:17 28.7 Lat: 33.78N Lon: 35.78E Depth: 3 Agency: REL Local Magnitudes: 2.6MC REL**

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	50	EP		1717	30.97	0.01							1.0
BHL	BZ	18	320	EP		1717	31.61	-0.04							1.0
DQRL	SZ	21	246	EP		1717	32.16	0.02							1.0
DQRL	SN	21	246	ES		1717	34.67	-0.01							1.0
QRWL	SZ	27	199	EP		1717	33.17	0.01	36						1.0
QRWL	SN	27	199	ES		1717	36.50	0.04							1.0
RCY	SZ	32	170	EP		1717	33.86	-0.06							1.0
HWQ	BZ	57	16	EP		1717	38.00	0.03							1.0

**July 22 2018 Hour: 20:39 16.4** Agency: REL Distant

**EMSC OT=20:39:16.4 30.29N 57.53E 10Km M=5.5 EASTERN IRAN**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2043	38.96								
HWQ	BZ			EP		2043	36.65								

**July 22 2018 Hour: 23: 0 29.5** Lat: 33.79N Lon: 35.79E Depth: 1 Agency: REL Local  
Magnitudes: 2.4MC 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	47	EP		23	0	31.43-0.03							1.0
ZAHL	SN	12	47	ES		23	0	32.90 0.02							1.0
BHL	BZ	18	316	EP		23	0	32.46-0.03	26						1.0
DQRL	SZ	22	247	EP		23	0	33.18 0.02							1.0
DQRL	SN	22	247	ES		23	0	35.86 0.01							1.0
QRWL	SZ	28	201	EP		23	0	34.09-0.03							1.0
RCY	SZ	32	173	EP		23	0	34.78 0.01							1.0
HWQ	BZ	56	15	EP		23	0	38.66 0.03							1.0

**July 23 2018 Hour: 2:40 24.1** Agency: REL Regional  
**EMSC OT=02:40:24.1 37.55N 29.81E 10Km M=4.7 WESTERN TURKEY**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		241	54.57								
HWQ	BZ			EP		241	54.72								
BHL	BZ			EP		241	56.09								
ZAHL	SZ			EP		241	57.24								
QRWL	SZ			EP		241	58.21								
RCY	SZ			EP		242	0.33								

**July 23 2018 Hour: 12:36 21.9** Lat: 34.11N Lon: 35.92E Depth: 3 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.0 secs

#### **JBEIL REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	19	8	EP		1236	25.16 0.05	43							1.0
HWQ	BN	19	8	ES		1236	27.47-0.01								1.0
ZAHL	SZ	28	186	EP		1236	26.43-0.04								1.0
BHL	BZ	33	228	EP		1236	27.34 0.00								1.0
BHL	BN	33	228	ES		1236	31.34-0.01								1.0
BEIL	SZ	54	27	EP		1236	30.63-0.04								1.0
DQRL	SZ	55	216	EP		1236	30.80-0.02								1.0
RCY	SZ	68	187	EP		1236	33.00 0.06								1.0

**July 23 2018 Hour: 13:13 56.9** Lat: 34.03N Lon: 35.72E Depth: 13 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.0 secs

#### **KESROUAN REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	15	206	EP		1314	0.33 0.00								1.0
BHL	BN	15	206	ES		1314	2.87 0.02								1.0
ZAHL	SZ	24	141	EP		1314	1.47-0.00								1.0
ZAHL	SN	24	141	ES		1314	4.84-0.00								1.0
HWQ	BZ	35	36	EP		1314	2.98-0.02	42							1.0
DQRL	SZ	38	202	EP		1314	3.53-0.02								1.0
QRWL	SZ	53	184	EP		1314	5.71-0.04								1.0
RCY	SZ	60	170	EP		1314	6.76 0.03								1.0
BEIL	SZ	71	36	EP		1314	8.39 0.03								1.0

**July 23 2018 Hour: 17:51 40.7** Lat: 33.80N Lon: 35.76E Depth: 7 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.0 secs

#### **ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	60	EP		1751	43.19 0.02								1.0
BHL	BZ	15	319	EP		1751	43.49 0.01	45							1.0
DQRL	SZ	21	240	EP		1751	44.23-0.04								1.0

DQRL	SN	21	240	ES		1751	46.95	0.02		1.0
RCY	SZ	34	169	EP		1751	46.33	-0.05		1.0
RCY	SN	34	169	ES		1751	50.59	-0.02		1.0
SHBL	SZ	50	182	EP		1751	48.95	0.08		1.0
HWQ	BZ	56	18	EP		1751	49.70	-0.04		1.0
BEIL	SZ	91	25	EP		1751	55.42	0.03		1.0

July 25 2018 Hour: 15:15 28.3 Lat: 33.78N Lon: 35.78E Depth: 7 Agency: REL Local Magnitudes: 2.6MC REL

#### ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	13	50	EP		1515	30.77	-0.04							1.0
BHL	BZ	18	319	EP		1515	31.44	-0.05	32						1.0
DQRL	SZ	21	246	EP		1515	32.03	0.03							1.0
RCY	SZ	32	171	EP		1515	33.65	-0.05							1.0
RCY	SN	32	171	ES		1515	37.74	0.06							1.0
HWQ	BZ	57	16	EP		1515	37.66	0.03							1.0
HWQ	BN	57	16	ES		1515	44.59	0.08							1.0
BEIL	SZ	92	24	EP		1515	43.17	-0.06							1.0

July 25 2018 Hour: 15:27 37.2 Lat: 33.78N Lon: 35.76E Depth: 0 Agency: REL Local Magnitudes: 2.3MC REL

#### ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	15	52	EP		1527	39.54	-0.05							1.0
BHL	BZ	17	325	EP		1527	40.02	-0.01	22						1.0
DQRL	SZ	19	246	EP		1527	40.39	0.00							1.0
RCY	SZ	32	168	EP		1527	42.33	-0.07							1.0
RCY	SN	32	168	ES		1527	46.28	0.07							1.0
HWQ	BZ	58	17	EP		1527	46.59	-0.02							1.0
HWQ	BN	58	17	ES		1527	53.62	0.07							1.0

July 27 2018 Hour: 6:37 24.9 Lat: 33.86N Lon: 35.83E Depth: 0 Agency: REL Local Magnitudes: 2.9MC REL

#### ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	5	91	EP		637	25.65	-0.06							1.0
BHL	BZ	18	287	EP		637	27.68	-0.08	52						1.0
DQRL	SZ	30	235	EP		637	29.68	-0.07							1.0
DQRL	SN	30	235	ES		637	33.42	0.10							1.0
QRWL	SZ	37	202	EP		637	30.95	0.00							1.0
RCY	SZ	40	180	EP		637	31.46	0.04	50						1.0
RCY	SN	40	180	ES		637	36.19	-0.03							1.0
HWQ	BZ	48	12	EP		637	32.63	0.02							1.0
FKH	SZ	68	51	EP		637	36.03	0.10							1.0
BEIL	SZ	82	23	EP		637	38.19	-0.02							1.0

July 27 2018 Hour: 8:51 19.8 Lat: 32.88N Lon: 35.52E Depth: 0 Agency: REL Regional Magnitudes: 3.6MC REL

#### DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	74	23	EP		851	31.72	-0.03							1.0
RCY	SN	74	23	ES		851	40.62	0.00							1.0
QRWL	SZ	75	12	EP		851	31.84	-0.09	137						1.0
QRWL	SN	75	12	ES		851	40.93	0.01							1.0
DQRL	SZ	91	3	EP		851	34.56	0.04							1.0
DQRL	SN	91	3	ES		851	45.43	-0.01							1.0
ZAHL	SZ	113	17	EP		851	38.06	-0.02							1.0
BHL	BZ	114	6	EP		851	38.18	0.02							1.0
HWQ	BZ	160	14	EP		851	45.27	0.06							1.0
FKH	SZ	172	28	EP		851	47.10	0.06							1.0
BEIL	SZ	194	18	EP		851	49.93	-0.04							1.0

**July 27 2018 Hour: 15:29 7.2** Lat: 33.78N Lon: 35.77E Depth: 0 Agency: REL Local  
**Magnitudes: 2.3MC 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	52	EP		1529	9.49	0.01	23						1.0
BHL	BZ	17	323	EP		1529	9.93	-0.07							1.0
DQRL	SZ	20	245	EP		1529	10.50	0.03							1.0
DQRL	SN	20	245	ES		1529	12.91	0.04							1.0
QRWL	SZ	27	197	EP		1529	11.51	-0.09							1.0
RCY	SZ	32	169	EP		1529	12.51	0.08							1.0
RCY	SN	32	169	ES		1529	16.26	-0.03							1.0
HWQ	BZ	58	17	EP		1529	16.53	0.03							1.0

**July 27 2018 Hour: 15:29 56.2** Lat: 34.71N Lon: 36.08E Depth: 0 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
BEIL	SZ	20	153	EP		1529	59.57	0.06	51						1.0
BEIL	SN	20	153	ES		1530	1.91	-0.03							1.0
HWQ	BZ	49	195	EP		1530	4.08	-0.06							1.0
HWQ	BN	49	195	ES		1530	10.03	0.03							1.0
ZAHL	SZ	96	191	EP		1530	11.61	-0.06							1.0
BHL	BZ	97	204	EP		1530	11.92	0.00							1.0
DQRL	SZ	121	203	EP		1530	15.73	0.06							1.0
QRWL	SZ	134	196	EP		1530	17.65	-0.12							1.0
RCY	SZ	136	190	EP		1530	18.28	0.12							1.0

**July 27 2018 Hour: 22:57 20.1** Lat: 33.78N Lon: 35.79E 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	12	46	EP		2257	22.19	-0.06							1.0
ZAHL	SN	12	46	ES		2257	23.90	0.04							1.0
BHL	BZ	19	316	EP		2257	23.19	-0.05	30						1.0
BHL	BN	19	316	ES		2257	25.59	-0.01							1.0
DQRL	SZ	23	247	EP		2257	23.95	0.09							1.0
QRWL	SZ	28	202	EP		2257	24.67	-0.07							1.0
RCY	SZ	32	173	EP		2257	25.40	0.03							1.0
HWQ	BZ	57	14	EP		2257	29.27	0.03							1.0

**July 29 2018 Hour: 0:7 56.3** Lat: 32.83N Lon: 35.57E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.3MC 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	SZ	59	16	EP		0	8	5.76	-0.07						1.0
RCY	SZ	78	18	EP		0	8	8.80	0.03	83					1.0
RCY	SN	78	18	ES		0	8	18.11	0.07						1.0
QRWL	SZ	80	7	EP		0	8	9.06	-0.09						1.0
DQRL	SZ	97	360	EP		0	8	11.85	-0.02						1.0
DQRL	SN	97	360	ES		0	8	23.40	-0.03						1.0
BEYL	SZ	115	356	EP		0	8	14.93	0.05						0.2
ZAHL	SZ	117	14	EP		0	8	15.23	0.04						1.0
BHL	BZ	119	4	EP		0	8	15.43	-0.03						1.0
BHL	BN	119	4	ES		0	8	29.64	-0.03						1.0
HWQ	BZ	164	12	EP		0	8	22.32	0.01						1.0
BEIL	SZ	198	16	EP		0	8	26.92	-0.00						1.0

**July 29 2018 Hour: 0:27 1.1**      Lat: 32.85N Lon: 35.61E Depth: 0 Agency: REL Regional  
**Magnitudes: 3.1MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	57	12	EP		027	10.30	-0.03							1.0
RCY	SZ	75	16	EP		027	13.17	-0.07	64						1.0
RCY	SN	75	16	ES		027	22.25	0.04							1.0
QRWL	SZ	78	5	EP		027	13.78	0.05							1.0
DQRL	SZ	96	358	EP		027	16.54	0.02							1.0
DQRL	SN	96	358	ES		027	27.90	-0.02							1.0
ZAHL	SZ	115	13	EP		027	19.61	-0.08							1.0
BHL	BZ	117	2	EP		027	20.08	0.01							1.0
HWQ	BZ	162	11	EP		027	26.86	0.00							1.0
BEIL	SZ	195	16	EP		027	31.56	0.07							1.0

**July 29 2018 Hour: 6:17 36.2**      Lat: 32.95N Lon: 36.23E Depth: 7 Agency: REL Regional  
**Magnitudes: 3.2MC REL**

**SYRIA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	71	329	EP		617	47.64	-0.10	73						1.0
RCY	SE	71	329	ES		617	56.34	0.05							1.0
QRWL	SZ	84	323	EP		617	49.79	0.01							1.0
DQRL	SZ	104	324	EP		617	52.98	0.03							1.0
ZAHL	SZ	106	342	EP		617	53.14	-0.08							1.0
BHL	BZ	119	333	EP		617	55.18	0.07							1.0
BHL	BE	119	333	ES		618	9.06	-0.05							1.0
HWQ	BZ	150	350	EP		617	59.75	0.07							1.0
BEIL	SZ	177	359	EP		618	3.49	-0.01							1.0

**July 29 2018 Hour: 13:59 5.5**      Lat: 33.79N Lon: 35.79E Depth: 8 Agency: REL Local  
**Magnitudes: 2.7MC REL**

**ALEY REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	12	48	EP		1359	7.91	-0.05	41						1.0
BHL	BZ	18	316	EP		1359	8.77	-0.02							1.0
DQRL	SZ	22	246	EP		1359	9.34	-0.07							1.0
DQRL	SN	22	246	ES		1359	12.39	0.07							1.0
QRWL	SZ	28	201	EP		1359	10.24	-0.07							1.0
RCY	SZ	33	173	EP		1359	10.95	-0.02							1.0
RCY	SN	33	173	ES		1359	15.11	0.07							1.0
HWQ	BZ	56	15	EP		1359	14.78	0.09							1.0

**July 30 2018 Hour: 2:59 52.1**      Lat: 32.84N Lon: 35.80E Depth: 0 Agency: REL Regional  
**Magnitudes: 2.8MC REL**

**DEAD SEA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	73	2	EP		3 0	3.83	-0.04	43						1.0
RCY	SN	73	2	ES		3 0	12.61	-0.01							1.0
QRWL	SZ	80	352	EP		3 0	4.59	-0.32							1.0
DQRL	SZ	99	347	EP		3 0	8.12	0.12							1.0
DQRL	SN	99	347	ES		3 0	19.82	0.03							1.0
ZAHL	SZ	114	4	EP		3 0	10.40	0.03							1.0
BHL	BZ	119	353	EP		3 0	11.42	0.13							1.0
HWQ	BZ	160	5	EP		3 0	17.61	0.03							1.0
BEIL	SZ	192	10	EP		3 0	22.08	0.04							1.0

**July 30 2018 Hour: 7:9 37.2**      Lat: 33.86N Lon: 35.84E Depth: 0 Agency: REL Local  
**Magnitudes: 2.8MC REL**

**ZAHLE REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	5	96	EP		7 9	38.00	-0.01							1.0
BHL	BZ	18	285	EP		7 9	40.02	-0.02	43						1.0
BHL	BN	18	285	ES		7 9	42.17	0.03							1.0

DQRL	SZ	30	235	EP	7	9	42.06	-0.02		1.0
QRWL	SZ	38	202	EP	7	9	43.28	-0.02		1.0
RCY	SZ	41	180	EP	7	9	43.78	0.02		1.0
RCY	SN	41	180	ES	7	9	48.62	0.01		1.0
HWQ	BZ	47	12	EP	7	9	44.80	-0.02		1.0
BEIL	SZ	82	23	EP	7	9	50.43	0.02		1.0

**July 30 2018 Hour: 12:32 48.5 Lat: 33.46N Lon: 35.67E Depth: 1 Agency: REL Local Magnitudes: 2.7MC 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	10	5	EP		1232	50.21	-0.03	42						1.0
RCY	SZ	16	73	EP		1232	51.18	0.05							1.0
RCY	SN	16	73	ES		1232	53.04	-0.01							1.0
DQRL	SZ	29	341	EP		1232	53.39	0.10							1.0
BHL	BZ	50	358	EP		1232	56.49	-0.08							1.0
HWQ	BZ	95	15	EP		1233	3.72	-0.09							1.0
HWQ	BN	95	15	ES		1233	15.16	0.05							1.0
BEIL	SZ	129	21	EP		1233	9.34	0.01							1.0

**July 31 2018 Hour: 0:42 58.0 Lat: 32.79N Lon: 35.67E Depth: 2 Agency: REL Regional Magnitudes: 2.8MC 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	SZ	63	7	EP		043	8.12	0.07							1.0
RCY	SZ	80	11	EP		043	10.80	-0.08	44						1.0
RCY	SN	80	11	ES		043	20.43	-0.01							1.0
QRWL	SZ	84	1	EP		043	11.54	0.00							1.0
DQRL	SZ	102	355	EP		043	14.33	-0.09							1.0
DQRL	SN	102	355	ES		043	26.61	0.01							1.0
ZAHL	SZ	120	10	EP		043	17.39	0.02							1.0
BHL	BZ	124	360	EP		043	17.96	0.05							1.0
HWQ	BZ	167	9	EP		043	24.41	0.08							1.0
BEIL	SZ	200	14	EP		043	28.65	-0.05							1.0

**July 31 2018 Hour: 1:51 47.5 Lat: 33.67N Lon: 35.78E 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	16	214	EP		151	50.12	-0.02	30						1.0
DQRL	SZ	20	281	EP		151	50.76	0.06							1.0
DQRL	SN	20	281	ES		151	53.04	-0.02							1.0
RCY	SZ	20	165	EP		151	50.74	0.01							1.0
RCY	SN	20	165	ES		151	53.06	-0.07							1.0
ZAHL	SZ	23	25	EP		151	51.24	0.03							1.0
BHL	BZ	28	336	EP		151	51.99	-0.09							1.0
SHBL	SZ	36	185	EP		151	53.39	0.09							1.0
HWQ	BZ	69	13	EP		151	58.73	0.09							0.2

**July 31 2018 Hour: 14:36 14.9 Lat: 36.54N Lon: 36.99E Depth: 33 Agency: REL Regional Magnitudes: 4.1MC 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	233	198	EP		1436	46.90	-0.04	225						1.0
BEIL	SN	233	198	ES		1437	10.68	0.02							1.0
HWQ	BZ	268	201	EP		1436	51.39	0.07							1.0
ZAHL	SZ	314	199	EP		1436	57.06	0.04							1.0
BHL	BZ	316	203	EP		1436	57.22	-0.10							1.0
DQRL	SZ	339	203	EP		1437	0.25	0.04							1.0
QRWL	SZ	352	200	EP		1437	1.82	0.07							1.0
QRWL	SN	352	200	ES		1437	36.40	-0.02							1.0
RCY	SZ	353	198	EP		1437	1.84	-0.07							1.0

**July 31 2018 Hour: 15:28 6.2 Lat: 33.77N Lon: 35.76E Depth: 0 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	15	51	EP		1528	8.56	-0.02							1.0
BHL	BZ	18	325	EP		1528	8.98	-0.06							1.0
DQRL	SZ	19	247	EP		1528	9.38	0.05	42						1.0
QRWL	SZ	26	197	EP		1528	10.44	0.01							1.0
RCY	SZ	32	168	EP		1528	11.25	-0.04							1.0
RCY	SN	32	168	ES		1528	15.07	0.02							1.0
HWQ	BZ	58	17	EP		1528	15.60	-0.03							1.0
HWQ	BN	58	17	ES		1528	22.67	0.07							1.0

**July 31 2018 Hour: 16:33 46.7 Lat: 33.00N Lon: 34.88E Depth: 19 Agency: REL Regional  
Magnitudes: 3.0MC 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	96	51	EP		1634	1.78	-0.02	54						1.0
DQRL	SZ	101	39	EP		1634	2.54	0.01							1.0
DQRL	SE	101	39	ES		1634	14.27	0.02							1.0
RCY	SZ	104	58	EP		1634	3.10	0.03							1.0
RCY	SE	104	58	ES		1634	15.18	-0.02							1.0
BHL	BZ	123	35	EP		1634	5.74	-0.04							1.0
ZAHL	SZ	133	44	EP		1634	7.29	0.03							1.0



# Epicentral Map of Lebanon

## JULY 2018

