

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

February

2017

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:

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

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.

**February 2 2017 Hour: 21:18 34.3 Lat: 34.15N Lon: 35.73E Depth: 21 Agency: REL Local
Magnitudes: 3.2MC REL Rms: 0.1 secs**

JBEIL REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	25	53	EP		2118	39.50	0.02							1.0
HWQ	BN	25	53	ES		2118	43.36	0.03							1.0
BHL	BZ	28	195	EP		2118	39.78	-0.07	79						1.0
BHL	BN	28	195	ES		2118	43.98	-0.01							1.0
ZAHL	SZ	35	156	EP		2118	40.70	-0.07							1.0
BEYL	SZ	38	216	EP		2118	41.08	0.05							1.0
DQRL	SZ	51	197	EP		2118	42.98	0.02							1.0
BEIL	SZ	60	43	EP		2118	44.13	-0.12							1.0
BEIL	SN	60	43	ES		2118	51.69	0.06							1.0
QRWL	SZ	67	184	EP		2118	45.17	0.02							1.0
RCY	SZ	73	173	EP		2118	46.15	0.08							1.0
RCY	SN	73	173	ES		2118	54.80	-0.00							1.0

**February 3 2017 Hour: 3:0 59.3 Lat: 36.31N Lon: 36.00E Depth: 45 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	197	175	EP		3	1	26.91	-0.01	76					1.0
BEIL	SN	197	175	ES		3	1	47.26	-0.12						1.0
HWQ	BZ	226	181	EP		3	1	30.14	-0.38						1.0
HWQ	BN	226	181	ES		3	1	54.01	0.37						1.0
BHL	BZ	269	187	EP		3	1	35.87	0.12						1.0
BHL	BN	269	187	ES		3	2	2.50	-0.24						1.0
ZAHL	SZ	273	182	EP		3	1	36.37	0.18						1.0
ZAHL	SN	273	182	ES		3	2	3.49	-0.02						1.0
DQRL	SZ	292	188	EP		3	1	38.60	0.09						1.0

**February 3 2017 Hour: 10:20 24.5 Lat: 33.67N Lon: 35.35E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs**

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	21	79	EP		1020	27.85	-0.04	38						1.0
DQRL	SN	21	79	ES		1020	30.36	-0.01							1.0
BHL	BZ	38	47	EP		1020	30.53	-0.18							1.0
RCY	SZ	49	113	EP		1020	32.44	-0.02							1.0
RCY	SN	49	113	ES		1020	38.32	0.01							1.0
ZAHL	SZ	54	67	EP		1020	33.37	0.16							1.0
HWQ	BZ	87	39	EP		1020	38.67	0.09							1.0

**February 4 2017 Hour: 15:15 54.3 Lat: 33.98N Lon: 36.13E Depth: 16 Agency: REL Local
Magnitudes: 2.9MC 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	27	239	EP		1515	59.46	0.04	54						1.0
ZAHL	SN	27	239	ES		1516	3.19	-0.00							1.0
HWQ	BZ	37	333	EP		1516	0.82	-0.05							1.0
HWQ	BN	37	333	ES		1516	5.70	-0.01							1.0
BHL	BZ	45	259	EP		1516	2.01	0.02							1.0
DQRL	SZ	60	240	EP		1516	4.19	-0.03							1.0
RCY	SZ	60	207	EP		1516	4.17	-0.08							1.0
BEIL	SZ	62	4	EP		1516	4.52	0.03							1.0
BEIL	SN	62	4	ES		1516	12.02	0.01							1.0
QRWL	SZ	64	221	EP		1516	4.76	0.07							1.0

**February 4 2017 Hour: 17:44 31.5 Lat: 34.03N Lon: 35.75E Depth: 3 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	211	EP		1744	34.29	-0.03	45						1.0
BHL	BN	17	211	ES		1744	36.46	0.05							1.0
ZAHL	SZ	23	147	EP		1744	35.35	-0.00							1.0
ZAHL	SN	23	147	ES		1744	38.18	-0.01							1.0
HWQ	BZ	33	34	EP		1744	36.73	-0.08							1.0
DQRL	SZ	40	204	EP		1744	37.91	-0.10							1.0
QRWL	SZ	54	186	EP		1744	40.39	0.08							1.0
BEIL	SZ	69	35	EP		1744	42.76	0.09							1.0

February 4 2017 Hour: 19:49 27.5

Agency: REL Regional

EMSC OT=19:49:27.5 37.68N 37.32E 4Km M=3.3 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1950	20.33								
HWQ	BZ			EP		1950	24.47								
BHL	BZ			EP		1950	29.83								
QRWL	SZ			EP		1950	36.62								

February 5 2017 Hour: 10:34 52.0

Agency: REL Regional

EMSC OT=10:34:52.0 36.18N 31.14E 40Km M=4.0 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1035	55.90								
HWQ	BZ			EP		1035	57.02								
BEIL	SZ			EP		1035	58.25								
QRWL	SZ			EP		1035	58.44								
ZAHL	SZ			EP		1035	58.13								
RCY	SZ			EP		1036	0.54								

February 5 2017 Hour: 12:18 59.4 Lat: 31.80N Lon: 35.99E Depth: 0 Agency: REL Regional

Magnitudes: 3.6MC REL

Rms: 0.4 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	189	356	EP		1219	28.15	-0.86							1.0
RCY	SN	189	356	ES		1219	50.70	-0.25							1.0
DQRL	SZ	215	350	EP		1219	32.22	-0.01	114						1.0
DQRL	SE	215	350	ES		1219	56.74	0.19							1.0
ZAHL	SZ	229	358	EP		1219	33.99	0.06							1.0
ZAHL	SE	229	358	ES		1219	59.55	0.03							1.0
BHL	BZ	236	353	EP		1219	34.81	0.03							1.0
HWQ	BZ	275	359	EP		1219	40.73	1.03							1.0
BEIL	SZ	305	3	EP		1219	43.42	0.08							1.0

February 6 2017 Hour: 3:51 40.2

Agency: REL Regional

EMSC OT=03:51:40.2 39.54N 26.11E 6Km M=5.2 NEAR THE COAST OF WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		353	56.87								
DQRL	SZ			EP		353	56.75								
HWQ	BZ			EP		353	58.31								
BEIL	SZ			EP		353	57.77								
QRWL	SZ			EP		353	59.51								
ZAHL	SZ			EP		353	59.69								
RCY	SZ			EP		354	1.19								

February 6 2017 Hour: 16:37 54.6 Lat: 33.35N Lon: 35.56E Depth: 0 Agency: REL Local

Magnitudes: 2.6MC REL

Rms: 0.0 secs

MARJAAYOUN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	25	26	EP		1637	58.56	-0.05							1.0
RCY	SZ	30	57	EP		1637	59.52	0.03	32						1.0
RCY	SN	30	57	ES		1638	3.10	-0.01							1.0

DQRL	SZ	40	1	EP	1638	1.05	0.02								1.0
DQRL	SN	40	1	ES	1638	5.80	0.01								1.0
BHL	BZ	62	8	EP	1638	4.61	-0.06								1.0
ZAHL	SZ	64	28	EP	1638	4.93	-0.01								1.0
HWQ	BZ	109	19	EP	1638	12.27	0.06								1.0
BEIL	SZ	144	23	EP	1638	17.71	-0.00								1.0

February 7 2017 Hour: 10:43 44.7 Lat: 33.79N Lon: 35.75E Depth: 7 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	15	57	EP		1043	47.42	-0.00							1.0
ZAHL	SN	15	57	ES		1043	49.47	0.01							1.0
BHL	BZ	16	325	EP		1043	47.53	-0.08	37						1.0
DQRL	SZ	19	242	EP		1043	48.07	0.01							1.0
DQRL	SN	19	242	ES		1043	50.62	0.05							1.0
RCY	SZ	33	167	EP		1043	50.15	-0.04							1.0
HWQ	BZ	57	18	EP		1043	54.02	-0.02							1.0
BEIL	SZ	93	25	EP		1043	59.78	0.08							1.0

February 7 2017 Hour: 11:21 37.3 Lat: 33.67N Lon: 35.42E Depth: 0 Agency: REL Local Magnitudes: 2.8MC REL

CHOUF REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	15	75	EP		1121	39.55	-0.11	44						1.0
DQRL	SN	15	75	ES		1121	41.49	0.06							1.0
RCY	SZ	44	116	EP		1121	44.38	0.10							1.0
RCY	SN	44	116	ES		1121	49.42	-0.06							1.0
ZAHL	SZ	48	64	EP		1121	45.06	0.02							1.0
HWQ	BZ	83	36	EP		1121	50.63	-0.07							0.2

February 7 2017 Hour: 22: 3 55.6 Agency: REL Distant
EMSC OT=22:03:55.6 25.29N 63.31E 20Km M=6.2 SOUTHWESTERN PAKISTAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		22	9	21.20							
RCY	SZ			EP		22	9	21.80							
ZAHL	SZ			EP		22	9	23.52							
HWQ	BZ			EP		22	9	22.61							
QRWL	SZ			EP		22	9	22.41							
BHL	BZ			EP		22	9	23.92							
DQRL	SZ			EP		22	9	25.13							

February 7 2017 Hour: 22:12 51.0 Lat: 34.31N Lon: 36.04E Depth: 24 Agency: REL Local Magnitudes: 2.9MC REL

MINIEH-DINNIEH REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	9	250	EP		2212	55.34	0.05	55						1.0
HWQ	BN	9	250	ES		2212	58.42	-0.02							1.0
BEIL	SZ	29	27	EP		2212	56.96	-0.04							1.0
BEIL	SN	29	27	ES		2213	1.44	0.03							1.0
ZAHL	SZ	52	196	EP		2212	59.98	-0.03							1.0
ZAHL	SN	52	196	ES		2213	6.65	0.01							1.0
BHL	BZ	57	219	EP		2213	0.66	-0.08							1.0
DQRL	SZ	80	213	EP		2213	4.02	0.09							1.0

February 7 2017 Hour: 22:43 24.0 Lat: 34.30N Lon: 36.06E Depth: 23 Agency: REL Local Magnitudes: 2.7MC REL

MINIEH-DINNIEH REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	11	257	EP		2243	28.14	-0.02	41						1.0
HWQ	BN	11	257	ES		2243	31.27	0.00							1.0
BEIL	SZ	29	23	EP		2243	29.81	-0.04							1.0
BEIL	SE	29	23	ES		2243	34.24	0.04							1.0
ZAHL	SZ	52	198	EP		2243	32.83	-0.01							1.0

BHL BZ	58 220 EP	2243 33.64-0.03	1.0
DQRL SZ	80 215 EP	2243 36.91 0.06	1.0

February 7 2017 Hour: 22:47 50.7 Lat: 34.32N Lon: 36.02E Depth: 23 Agency: REL Local Magnitudes: 2.6MC REL Rms: 0.0 secs

MINIEH-DINNIEH REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	8	235	EP	2247	54.71-0.00		32							1.0
HWQ	BN	8	235	ES	2247	57.67 0.00									1.0
BEIL	SZ	29	32	EP	2247	56.50-0.01									1.0
BEIL	SE	29	32	ES	2248	0.81 0.01									1.0
ZAHL	SZ	53	194	EP	2247	59.73-0.01									1.0
BHL	BZ	57	216	EP	2248	0.29-0.06									1.0
DQRL	SZ	80	211	EP	2248	3.66 0.07									1.0

February 9 2017 Hour: 22:34 30.7 Lat: 33.78N Lon: 35.11E Depth: 15 Agency: REL Local Magnitudes: 3.4MC 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	37	74	EP	2234	37.63 0.60									0.2
BHL	BZ	52	75	EP	2234	39.28-0.06	100								1.0
BHL	BN	52	75	ES	2234	45.68-0.05									1.0
QRWL	SZ	59	116	EP	2234	40.21-0.14									1.0
ZAHL	SZ	72	83	EP	2234	42.49 0.18									1.0
ZAHL	SN	72	83	ES	2234	50.90 0.00									1.0
RCY	SZ	74	115	EP	2234	42.73 0.10									1.0
HWQ	BZ	95	54	EP	2234	45.68 0.05									1.0
BEIL	SZ	130	49	EP	2234	50.68-0.10									1.0

February 10 2017 Hour: 13:44 53.1 Lat: 33.83N Lon: 35.79E Depth: 19 Agency: REL Local Magnitudes: 2.3MC REL Rms: 0.0 secs

BAABDA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	9	67	EP	1344	56.78 0.03									1.0
ZAHL	SN	9	67	ES	1344	59.39-0.04									1.0
BHL	BZ	16	305	EP	1344	57.21 0.01	22								1.0
BHL	BN	16	305	ES	1345	0.26 0.04									1.0
DQRL	SZ	24	237	EP	1344	58.08-0.08									1.0
RCY	SZ	37	174	EP	1344	59.81 0.05									1.0
HWQ	BZ	52	16	EP	1345	1.91-0.01									1.0

February 10 2017 Hour: 14:34 25.5 Lat: 9.83N 125.50E 10Km M=6.5 MINDANAO PHILIPPINES Agency: REL Distant

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP	1416	14.30									
BEIL	SZ			EP	1416	14.81									
BHL	BZ			EP	1416	15.93									

February 10 2017 Hour: 16:15 47.7 EMSC OT=16:15:47.7 37.49N 35.69E 8Km M=3.9 CENTRAL TURKEY Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP	1616	34.69									
HWQ	BZ			EP	1616	39.10									
BHL	BZ			EP	1616	44.10									
QRWL	SZ			EP	1616	48.49									

February 10 2017 Hour: 20:25 50.2 EMSC OT=20:25:50.2 37.00N 30.42E 52Km M=3.2 WESTERN TURKEY Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP	2027	2.19									
BHL	BZ			EP	2027	1.38									
BEIL	SZ			EP	2027	2.25									
DQRL	SZ			EP	2027	2.19									
ZAHL	SZ			EP	2027	4.50									

RCY SZ EP 2027 7.21

February 12 2017 Hour: 1:50 20.4 Lat: 34.60N Lon: 36.10E Depth: 4 Agency: REL Local Magnitudes: 2.5MC 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	10	127	EP		150	22.27	0.01	29						1.0
BEIL	SN	10	127	ES		150	23.60	-0.00							1.0
HWQ	BZ	38	202	EP		150	26.63	-0.01							1.0
HWQ	BN	38	202	ES		150	31.23	0.01							1.0
ZAHL	SZ	84	194	EP		150	33.98	-0.07							1.0
BHL	BZ	87	208	EP		150	34.45	-0.05							1.0
DQRL	SZ	110	206	EP		150	38.33	0.11							1.0

February 12 2017 Hour: 12: 5 5.1 Lat: 32.50N Lon: 35.65E Depth: 0 Agency: REL Regional Magnitudes: 3.2MC REL Rms: 0.3 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	134	357	EP		12	5	26.97	0.19	74					1.0
DQRL	SN	134	357	ES		12	5	42.82	0.01						1.0
ZAHL	SZ	153	8	EP		12	5	28.89	-0.60	70					1.0
ZAHL	SN	153	8	ES		12	5	47.60	0.06						1.0
BHL	BZ	156	0	EP		12	5	29.86	-0.13						1.0
HWQ	BZ	200	8	EP		12	5	36.05	0.00						1.0
BEIL	SZ	232	12	EP		12	5	40.52	0.47						1.0

February 12 2017 Hour: 15:37 16.9 Lat: 33.07N Lon: 37.15E Depth: 11 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
RCY	SZ	131	292	EP		1537	37.17	-0.19							1.0
RCY	SN	131	292	ES		1537	52.43	-0.08							1.0
QRWL	SZ	146	292	EP		1537	39.63	0.04							1.0
QRWL	SN	146	292	ES		1537	56.33	-0.05							1.0
ZAHL	SZ	146	307	EP		1537	39.61	-0.00	55						1.0
DQRL	SZ	163	296	EP		1537	42.09	0.08							1.0
DQRL	SN	163	296	ES		1538	0.72	0.12							1.0
BHL	BZ	167	304	EP		1537	42.81	0.20							1.0
HWQ	BZ	174	321	EP		1537	43.56	-0.00							1.0
BEIL	SZ	186	332	EP		1537	44.86	-0.11							1.0

February 13 2017 Hour: 11:54 5.6 Lat: 33.52N Lon: 35.69E 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	3	342	EP		1154	6.02	-0.08							1.0
RCY	SZ	14	101	EP		1154	7.68	-0.07	28						1.0
RCY	SN	14	101	ES		1154	9.47	0.10							1.0
DQRL	SZ	24	331	EP		1154	9.46	0.10							1.0
DQRL	SN	24	331	ES		1154	12.23	0.05							1.0
ZAHL	SZ	42	25	EP		1154	12.14	-0.12							1.0
HWQ	BZ	87	16	EP		1154	20.00	0.36							0.2

February 14 2017 Hour: 8:30 16.1 Lat: 33.65N Lon: 35.35E Depth: 0 Agency: REL Local Magnitudes: 2.8MC REL Rms: 0.1 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	21	74	EP		830	19.40	-0.06	46						1.0
DQRL	SN	21	74	ES		830	21.89	-0.09							1.0
QRWL	SZ	33	111	EP		830	21.34	-0.03							1.0
QRWL	SN	33	111	ES		830	25.32	0.02							1.0
BHL	BZ	39	45	EP		830	22.41	-0.00							1.0
RCY	SZ	48	111	EP		830	23.89	0.04							1.0
ZAHL	SZ	54	65	EP		830	24.86	0.03							1.0

ZAHL SN 54 65 ES 830 31.40 0.08 1.0

February 15 2017 Hour: 23: 1 21.3 Agency: REL Regional

EMSC OT=23:01:21.3 34.57N 24.90E 10Km M=4.6 CRETE, GREECE
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BHL BZ EP 23 3 29.17
QRWL SZ EP 23 3 28.67
RCY SZ EP 23 3 30.54
ZAHL SZ EP 23 3 30.61
HWQ SZ EP 23 3 31.37
BEIL SZ EP 23 3 33.24

February 17 2017 Hour: 3:15 19.6 Lat: 33.73N Lon: 35.84E Depth: 11 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
ZAHL SZ 15 17 EP 315 22.81 0.09 1.0
ZAHL SN 15 17 ES 315 25.04-0.00 1.0
QRWL SZ 25 216 EP 315 23.98-0.02 1.0
DQRL SZ 25 265 EP 315 24.16 0.11 1.0
DQRL SN 25 265 ES 315 27.39 0.04 1.0
RCY SZ 26 181 EP 315 24.12-0.05 27 1.0
BHL BZ 26 319 EP 315 24.00-0.20 1.0
BEIL SZ 96 19 EP 315 35.38 0.55 0.2

February 17 2017 Hour: 23: 0 59.2 Agency: REL Regional

EMSC OT=23:00:59.2 36.31N 41.29E 2Km M=4.1 SYRIA-IRAQ BORDER REGION
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BEIL SZ EP 23 2 9.65
HWQ BZ EP 23 2 14.21
ZAHL SZ EP 23 2 17.66
BHL BZ EP 23 2 19.85
DQRL SZ EP 23 2 22.85
QRWL SZ EP 23 2 22.62

February 18 2017 Hour: 16:26 18.2 Agency: REL Regional

EMSC OT=16:26:18.2 38.10N 38.40E 5Km M=3.5 EASTERN TURKEY
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BEIL SZ EP 1627 18.67
HWQ BZ EP 1627 23.54
ZAHL SZ EP 1627 29.39
BHL BZ EP 1627 30.05
DQRL SZ EP 1627 33.35

February 18 2017 Hour: 18:51 19.8 Lat: 33.89N Lon: 35.71E Depth: 12 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

METN REGION
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BHL BZ 6 290 EP 1851 22.08-0.03 45 1.0
BHL BN 6 290 ES 1851 23.80-0.04 1.0
ZAHL SZ 16 101 EP 1851 23.17-0.04 1.0
ZAHL SN 16 101 ES 1851 25.79 0.04 1.0
DQRL SZ 24 213 EP 1851 24.28 0.09 1.0
DQRL SE 24 213 ES 1851 27.53 0.06 1.0
QRWL SZ 38 184 EP 1851 26.07-0.15 1.0
RCY SZ 45 165 EP 1851 27.35 0.02 1.0
HWQ BZ 49 27 EP 1851 27.95 0.06 1.0
BEIL SZ 85 31 EP 1851 33.28-0.02 1.0

**February 19 2017 Hour: 11:10 3.7 Lat: 34.23N Lon: 36.33E Depth: 12 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.1 secs**

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	36	278	EP		1110	9.73	-0.09	56						1.0
HWQ	BN	36	278	ES		1110	14.36	-0.00							1.0
BEIL	SZ	37	339	EP		1110	9.95	0.01							1.0
BEIL	SN	37	339	ES		1110	14.57	0.00							1.0
ZAHL	SZ	59	225	EP		1110	13.46	0.10							1.0
ZAHL	SN	59	225	ES		1110	20.51	-0.01							1.0
BHL	BZ	72	240	EP		1110	15.56	0.13							1.0
DQRL	SZ	91	230	EP		1110	18.19	-0.05							1.0
RCY	SZ	94	209	EP		1110	18.51	-0.09							1.0

**February 19 2017 Hour: 12:42 10.9 Lat: 33.67N Lon: 35.58E Depth: 10 Agency: REL Local
Magnitudes: 2.5MC 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	4	345	EP		1242	12.78	-0.07	29						1.0
DQRL	SN	4	345	ES		1242	14.32	0.02							1.0
QRWL	SZ	17	146	EP		1242	14.20	0.01							1.0
QRWL	SN	17	146	ES		1242	16.66	0.02							1.0
BHL	BZ	26	15	EP		1242	15.61	0.07							1.0
ZAHL	SZ	35	54	EP		1242	16.77	-0.05							1.0

**February 19 2017 Hour: 17:36 42.8 Agency: REL Regional
EMSC OT=17:36:42.8 37.53N 42.69E 2Km M=3.8 TURKEY-SYRIA-IRAQ BORDER REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1738	13.02								
HWQ	BZ			EP		1738	17.69								
ZAHL	SZ			EP		1738	22.78								
BHL	BZ			EP		1738	24.25								
DQRL	SZ			EP		1738	27.04								
SHBL	BZ			EP		1738	27.45								

**February 20 2017 Hour: 16:33 0.7 Lat: 33.40N Lon: 35.60E Depth: 4 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.1 secs**

JEZZINE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	14	112	EP		1633	3.18	-0.08	29						1.0
SHBL	BN	14	112	ES		1633	5.25	0.12							1.0
QRWL	SZ	18	24	EP		1633	3.70	-0.12							1.0
RCY	SZ	25	63	EP		1633	4.70	-0.10							1.0
RCY	SN	25	63	ES		1633	7.75	-0.06							1.0
DQRL	SZ	34	355	EP		1633	6.38	0.03							1.0
BHL	BZ	56	5	EP		1633	9.81	-0.08							1.0
BHL	BN	56	5	ES		1633	16.70	0.05							1.0
ZAHL	SZ	58	27	EP		1633	10.37	0.31							1.0
HWQ	BZ	103	18	EP		1633	17.28	-0.06							1.0

**February 20 2017 Hour: 23:44 47.3 Lat: 33.79N Lon: 35.79E Depth: 6 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.0 secs**

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	12	47	EP		2344	49.50	-0.00							1.0
ZAHL	SE	12	47	ES		2344	51.16	0.01							1.0
BHL	BZ	18	315	EP		2344	50.46	-0.00	58						1.0
BHL	BE	18	315	ES		2344	52.79	-0.04							1.0
DQRL	SZ	23	246	EP		2344	51.21	0.09							1.0
QRWL	SZ	29	201	EP		2344	51.97	-0.06							1.0
BEYL	SZ	29	289	EP		2344	52.20	0.07							0.2
RCY	SZ	33	173	EP		2344	52.58	-0.08							1.0
RCY	SN	33	173	ES		2344	56.71	0.05							1.0

HWQ	BZ	56	14	EP	2344	56.44	0.03			1.0
BEIL	SZ	91	23	EP	2345	2.00	0.00			1.0

February 22 2017 Hour: 1:7 21.2 Lat: 33.69N Lon: 35.87E Depth: 5 Agency: REL Local Magnitudes: 3.0MC REL

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	18	4	EP		1	7	24.47	0.10						1.0
ZAHL	SN	18	4	ES		1	7	26.69	0.00						1.0
RCY	SZ	22	188	EP		1	7	24.86	-0.13						1.0
QRWL	SZ	24	227	EP		1	7	25.33	0.10						1.0
DQRL	SZ	28	273	EP		1	7	26.04	0.19						1.0
DQRL	SN	28	273	ES		1	7	29.23	-0.03						1.0
BHL	BZ	31	319	EP		1	7	26.04	-0.26	63					1.0
HWQ	BZ	65	6	EP		1	7	31.82	0.02						1.0
BEIL	SZ	98	17	EP		1	7	37.16	0.02						1.0

February 22 2017 Hour: 13:9 30.3 Lat: 33.78N Lon: 35.77E Depth: 0 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	14	53	EP		13	9	32.50	0.00						1.0
ZAHL	SN	14	53	ES		13	9	34.14	0.01						1.0
BHL	BZ	17	322	EP		13	9	32.92	-0.11	36					1.0
DQRL	SZ	20	245	EP		13	9	33.59	0.04						1.0
DQRL	SE	20	245	ES		13	9	36.01	0.04						1.0
RCY	SZ	33	169	EP		13	9	35.48	-0.05						1.0
HWQ	BZ	57	17	EP		13	9	39.59	0.07						1.0

February 22 2017 Hour: 15:28 49.8 Lat: 34.60N Lon: 36.14E Depth: 5 Agency: REL Local Magnitudes: 3.3MC REL

AKKAR REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	8	145	EP		1528	51.52	0.09	89						1.0
BEIL	SN	8	145	ES		1528	52.64	0.02							1.0
HWQ	BZ	40	206	EP		1528	56.38	0.05							1.0
HWQ	BN	40	206	ES		1529	1.18	0.04							1.0
ZAHL	SZ	86	196	EP		1529	3.20	-0.46							1.0
BHL	BZ	89	210	EP		1529	4.37	0.14							1.0
DQRL	SZ	112	208	EP		1529	7.96	0.09							1.0
DQRL	SN	112	208	ES		1529	21.21	-0.01							1.0
QRWL	SZ	124	200	EP		1529	9.79	0.17							1.0
QRWL	SN	124	200	ES		1529	24.23	-0.04							1.0
RCY	SZ	126	193	EP		1529	9.68	-0.19							1.0
RCY	SN	126	193	ES		1529	24.81	0.10							1.0

February 22 2017 Hour: 16:15 46.2 Lat: 33.38N Lon: 35.59E Depth: 8 Agency: REL Local Magnitudes: 2.8MC REL

JEZZINE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	BZ	15	104	EP		1615	49.05	0.04	45						1.0
SHBL	BN	15	104	ES		1615	51.16	0.05							1.0
QRWL	SZ	20	25	EP		1615	49.64	-0.10							1.0
RCY	SZ	26	61	EP		1615	50.56	-0.10							1.0
RCY	SN	26	61	ES		1615	53.94	-0.04							1.0
DQRL	SZ	36	357	EP		1615	52.04	-0.10							1.0
DQRL	SN	36	357	ES		1615	56.65	0.09							1.0
BHL	BZ	58	6	EP		1615	55.65	-0.02							1.0
ZAHL	SZ	60	27	EP		1615	56.05	0.17							1.0
HWQ	BZ	105	18	EP		1616	2.98	0.01							1.0

February 23 2017 Hour: 1:23 29.5 Lat: 33.89N Lon: 35.71E Depth: 12 Agency: REL Local
 Magnitudes: 2.6MC REL

METN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	5	284	EP		123	31.97	0.06	35						1.0
BHL	BN	5	284	ES		123	33.62	-0.05							1.0
ZAHL	SZ	17	103	EP		123	33.03	-0.03							1.0
ZAHL	SE	17	103	ES		123	35.67	-0.00							1.0
DQRL	SZ	24	212	EP		123	34.07	0.01							1.0
QRWL	SZ	38	184	EP		123	36.08	-0.03							1.0
RCY	SZ	46	165	EP		123	37.21	-0.02							1.0
RCY	SN	46	165	ES		123	42.96	0.04							1.0
HWQ	BZ	48	27	EP		123	37.68	0.08							1.0
BEIL	SZ	84	31	EP		123	42.93	-0.05							1.0

February 23 2017 Hour: 10:59 7.3 Lat: 33.53N Lon: 35.71E Depth: 2 Agency: REL Local
 Magnitudes: 2.4MC REL

RACHAYA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	3	300	EP		1059	7.95	-0.12							1.0
QRWL	SN	3	300	ES		1059	8.69	0.06							1.0
RCY	SZ	12	110	EP		1059	9.45	0.04	26						1.0
RCY	SN	12	110	ES		1059	10.95	-0.01							1.0
DQRL	SZ	23	326	EP		1059	11.15	0.07							1.0
ZAHL	SZ	39	24	EP		1059	13.66	-0.04							1.0
BHL	BZ	41	353	EP		1059	13.98	-0.04							1.0
HWQ	BZ	85	15	EP		1059	21.14	0.04							1.0

February 23 2017 Hour: 14:49 54.8 Lat: 34.01N Lon: 35.96E Depth: 15 Agency: REL Local
 Magnitudes: 2.5MC REL

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	18	202	EP		1449	58.73	-0.01							1.0
HWQ	BZ	30	358	EP		1450	0.15	-0.06	31						1.0
HWQ	BN	30	358	ES		1450	4.30	0.07							1.0
BHL	BZ	31	247	EP		1450	0.30	-0.03							1.0
QRWL	SZ	57	207	EP		1450	4.27	0.05							1.0
BEIL	SZ	62	19	EP		1450	4.94	0.02							1.0
BEIL	SN	62	19	ES		1450	12.41	-0.02							1.0

February 24 2017 Hour: 0:32 17.1 Agency: REL Distant
EMSC OT=00:32:17.1 8.37S 30.05E 30Km M=5.9 LAKE TANGANYIKA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		040	6.25								
QRWL	SZ			EP		040	6.15								
DQRL	SZ			EP		040	7.49								
BHL	BZ			EP		040	8.64								
ZAHL	SZ			EP		040	9.31								
HWQ	BZ			EP		040	12.46								
BEIL	SZ			EP		040	14.66								

February 24 2017 Hour: 16:39 40.9 Agency: REL Distant

EMSC OT=16:39:40.9 30.04S 176.96W 10Km M=5.1 KERMADEC ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1659	36.73								
BHL	BZ			EP		1659	37.59								
QRWL	SZ			EP		1659	38.02								
DQRL	SZ			EP		1659	38.45								

February 24 2017 Hour: 17:28 44.3 Agency: REL Distant

EMSC OT=17:28:44.3 23.36S 178.81W 410Km M=6.9 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1747	41.32								
HWQ	BZ			EP		1747	41.59								
ZAHL	SZ			EP		1747	42.26								
BHL	BZ			EP		1747	42.69								
RCY	SZ			EP		1747	42.61								
DQRL	SZ			EP		1747	43.25								
QRWL	SZ			EP		1747	42.96								

February 25 2017 Hour: 23:46 44.6 Agency: REL Distant

EMSC OT=23:46:44.6 17.99S 178.46W 580Km M=5.9 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		0	5	17.06							
BEIL	SZ			EP		0	5	16.95							
BHL	BZ			EP		0	5	17.11							
DQRL	SZ			EP		0	5	17.98							
ZAHL	SZ			EP		0	5	19.06							
QRWL	SZ			EP		0	5	18.25							
RCY	SZ			EP		0	5	18.14							

February 25 2017 Hour: 15:14 26.9 Lat: 33.83N Lon: 35.88E Depth: 2 Agency: REL Local
Magnitudes: 2.9MC REL

ZAHLER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	3	360	EP		1514	27.57-0.00	55							1.0
BHL	BZ	23	290	EP		1514	30.46-0.14								1.0
BHL	BN	23	290	ES		1514	33.39 0.05								1.0
DQRL	SZ	33	244	EP		1514	32.22 0.06								1.0
QRWL	SZ	37	211	EP		1514	32.91 0.03								1.0
RCY	SZ	38	187	EP		1514	32.95-0.06								1.0
RCY	SN	38	187	ES		1514	37.55 0.02								1.0
HWQ	BZ	50	7	EP		1514	34.96 0.05								1.0

February 25 2017 Hour: 21:6 3.8 Agency: REL Regional

EMSC OT=21:06:03.8 37.01N 36.10E 2Km M=4.5 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		21	6	54.35							
HWQ	BZ			EP		21	6	49.78							
ZAHL	SZ			EP		21	6	56.12							
DQRL	SZ			EP		21	6	56.91							
BEIL	SZ			EP		21	7	3.73							
QRWL	SZ			EP		21	6	59.30							
RCY	SZ			EP		21	7	0.45							

February 27 2017 Hour: 9:46 57.7 Lat: 33.78N Lon: 35.77E Depth: 3 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	52	EP		947	0.18 0.12								1.0
ZAHL	SN	14	52	ES		947	1.78-0.05								1.0
BHL	BZ	17	323	EP		947	0.42-0.11	40							1.0
DQRL	SZ	20	245	EP		947	1.00 0.04								1.0
DQRL	SN	20	245	ES		947	3.45 0.05								1.0
QRWL	SZ	27	197	EP		947	2.04-0.03								1.0
RCY	SZ	32	168	EP		947	2.86-0.05								1.0
HWQ	BZ	58	17	EP		947	7.04 0.04								1.0
BEIL	SZ	93	24	EP		947	12.65-0.01								1.0

**February 27 2017 Hour: 15: 5 8.3 Lat: 33.79N Lon: 35.77E Depth: 10 Agency: REL Local
Magnitudes: 2.6MC 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	56	EP		15	5	11.08-0.02							1.0
BHL	BZ	16	319	EP		15	5	11.49-0.02	34						1.0
DQRL	SZ	21	242	EP		15	5	12.09-0.04							1.0
DQRL	SN	21	242	ES		15	5	15.02 0.03							1.0
RCY	SZ	34	169	EP		15	5	13.97-0.04							1.0
RCY	SN	34	169	ES		15	5	18.29 0.03							1.0
HWQ	BZ	56	17	EP		15	5	17.59 0.05							1.0

February 28 2017 Hour: 20:29 12.8

Agency: REL Regional

EMSC OT=20:29:12.8 36.38N 35.58E 10Km M=3.0 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2029	44.85								
HWQ	BZ			EP		2029	47.67								
ZAHL	SZ			EP		2029	54.12								

Epicentral Map of Lebanon

FEBRUARY 2017

