

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

February

2020

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
SAIL	3334.52N	3524.09E	159	SAIDA	Opened Jan 2020

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 1 2020 Hour: 0:3 50.4 Agency: REL Regional

EMSC OT=00:03:50.4 38.42N 39.21E 2Km M=4.3 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		0	5	1.34							
ZAHL	SZ			EP		0	5	11.47							
BHL	BZ			EP		0	5	11.76							
DQRL	SZ			EP		0	5	15.50							
RCY	SZ			EP		0	5	15.87							
QRWL	SZ			EP		0	5	15.34							

February 1 2020 Hour: 14:3 55.4 Lat: 34.15N Lon: 35.24E Depth: 8 Agency: REL Local

Magnitudes: 2.8MC REL

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	47	125	EP		14	4	2.96-0.13	47						1.0
DQRL	SZ	58	148	EP		14	4	4.78-0.03							1.0
HWQ	BZ	67	77	EP		14	4	6.32 0.03							1.0
HWQ	BN	67	77	ES		14	4	14.34-0.01							1.0
ZAHL	SZ	68	118	EP		14	4	6.52 0.09							1.0
QRWL	SZ	78	148	EP		14	4	8.12 0.06							1.0
RCY	SZ	91	142	EP		14	4	10.15 0.03							1.0
RCY	SN	91	142	ES		14	4	21.00-0.00							1.0
BEIL	SZ	98	63	EP		14	4	11.09-0.00							1.0
BEIL	SN	98	63	ES		14	4	22.72 0.03							1.0
FKH	SZ	108	84	EP		14	4	12.69-0.06							1.0

February 1 2020 Hour: 16:23 38.5 Lat: 34.60N Lon: 34.06E Depth:110 Agency: REL Regional

Magnitudes: 3.2MC REL

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	166	117	EP		1624		4.40 0.05							1.0
DQRL	SZ	171	125	EP		1624		4.76-0.12							1.0
DQRL	SN	171	125	ES		1624		24.35-0.04							1.0
HWQ	BZ	177	101	EP		1624		5.59 0.05	64						1.0
HWQ	BN	177	101	ES		1624		25.64 0.10							1.0
ZAHL	SZ	187	116	EP		1624		6.45-0.19							1.0
QRWL	SZ	190	127	EP		1624		7.06 0.18							1.0
BEIL	SZ	195	91	EP		1624		7.42 0.01							1.0
BEIL	SN	195	91	ES		1624		28.72-0.06							1.0
RCY	SZ	205	126	EP		1624		8.57 0.03							1.0

February 1 2020 Hour: 18:59 58.5 Agency: REL Regional

EMSC OT=18:59:58.5 38.33N 38.80E 7Km M=3.4 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		19	1	5.52							
HWQ	BZ			EP		19	1	10.69							
ZAHL	SZ			EP		19	1	15.76							
BHL	BZ			EP		19	1	16.55							
DQRL	SZ			EP		19	1	20.81							
RCY	SZ			EP		19	1	21.34							

February 2 2020 Hour: 14:55 29.2 Agency: REL Regional

EMSC OT=14:55:29.2 35.18N 27.96E 10Km M=3.7 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1457		2.36							
BHL	BZ			EP		1457		2.60							
QRWL	SZ			EP		1457		4.42							
HWQ	BZ			EP		1457		5.24							
ZAHL	SZ			EP		1457		5.74							
RCY	SZ			EP		1457		6.31							
BEIL	SZ			EP		1457		6.07							
FKH	SZ			EP		1457		11.34							

February 2 2020 Hour: 23:44 4.8 Agency: REL Regional

EMSC OT=23:44:04.8 37.47N 37.14E 7Km M=3.6 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2344	53.48								
HWQ	BZ			EP		2344	58.31								
ZAHL	SZ			EP		2345	3.98								
BHL	BZ			EP		2345	4.60								
DQRL	SZ			EP		2345	8.22								
RCY	SZ			EP		2345	9.11								
QRWL	SZ			EP		2345	10.00								

February 3 2020 Hour: 17:13 54.2 Lat: 31.04N Lon: 35.61E Depth: 18 Agency: REL Regional
Magnitudes: 3.4MC REL Rms: 0.1 secs

JORDAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	274	4	EP		1714	32.68	0.06							1.0
QRWL	SZ	279	1	EP		1714	33.22	0.04	80						1.0
QRWL	SN	279	1	ES		1715	2.04	0.04							1.0
DQRL	SZ	296	359	EP		1714	35.34	-0.01							1.0
DQRL	SN	296	359	ES		1715	5.81	0.02							1.0
ZAHL	SZ	314	5	EP		1714	37.54	-0.07							1.0
BHL	BZ	318	1	EP		1714	37.98	-0.11							1.0
HWQ	BZ	361	5	EP		1714	43.53	0.10							1.0
HWQ	BN	361	5	ES		1715	19.80	-0.05							1.0
BEIL	SZ	392	8	EP		1714	47.19	-0.01							1.0

February 3 2020 Hour: 21:27 31.7 Agency: REL Regional
EMSC OT=21:27:31.7 35.04N 27.97E 2Km M=3.4 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2129	6.09								
QRWL	SZ			EP		2129	7.68								
HWQ	BZ			EP		2129	10.12								
RCY	SZ			EP		2129	11.35								
BEIL	SZ			EP		2129	11.35								

February 3 2020 Hour: 22:19 41.2 Agency: REL Regional
EMSC OT=22:19:41.2 38.37N 39.08E 5Km M=4.4 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2220	51.55								
HWQ	BZ			EP		2220	56.09								
ZAHL	SZ			EP		2221	1.57								
BHL	BZ			EP		2221	2.25								
DQRL	SZ			EP		2221	5.18								
QRWL	SZ			EP		2221	7.05								
RCY	SZ			EP		2221	6.83								

February 4 2020 Hour: 2:10 53.4 Agency: REL Regional
EMSC OT=02:10:53.4 35.13N 28.03E 10Km M=4.3 EASTERN MEDITERRANEAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		212	26.91								
BHL	BZ			EP		212	27.41								
QRWL	SZ			EP		212	28.62								
HWQ	BZ			EP		212	30.51								
ZAHL	SZ			EP		212	30.01								
RCY	SZ			EP		212	30.39								
BEIL	SZ			EP		212	30.99								

February 4 2020 Hour: 2:46 14.4 Lat: 33.85N Lon: 35.17E Depth: 16 Agency: REL Local
Magnitudes: 3.1MC REL

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEYL	SZ	30	86	EP		246	19.81	0.06							1.0
DQRL	SZ	40	114	EP		246	21.39	0.07							1.0
DQRL	SE	40	114	ES		246	26.46	-0.01							1.0
BHL	BZ	45	83	EP		246	21.84	-0.15	70						1.0
BHL	BN	45	83	ES		246	27.59	-0.05							1.0
QRWL	SZ	58	125	EP		246	23.95	0.04							1.0
ZAHL	SZ	66	89	EP		246	25.06	-0.03							1.0
RCY	SZ	73	123	EP		246	26.16	0.02							1.0
HWQ	BZ	86	56	EP		246	27.94	-0.02							1.0
HWQ	BN	86	56	ES		246	38.15	0.12							1.0
BEIL	SZ	121	50	EP		246	33.03	-0.04							1.0

February 4 2020 Hour: 3:40 45.2 Agency: REL Regional

EMSC OT=03:40:45.2 38.39N 39.09E 2Km M=3.5 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		341	55.85								
HWQ	BZ			EP		342	0.04								
BHL	BZ			EP		342	5.90								
ZAHL	SZ			EP		342	6.46								
DQRL	SZ			EP		342	8.83								

February 4 2020 Hour: 4:6 54.6 Agency: REL Regional

EMSC OT=04:06:54.6 38.38N 39.20E 6Km M=3.4 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		4	8	4.84							
HWQ	BZ			EP		4	8	9.77							
ZAHL	SZ			EP		4	8	16.39							
DQRL	SZ			EP		4	8	18.27							
QRWL	SZ			EP		4	8	19.91							

February 4 2020 Hour: 20:37 13.0 Agency: REL Regional

EMSC OT=20:37:13.0 38.35N 39.07E 2Km M=3.7 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2038	22.27								
HWQ	BZ			EP		2038	27.36								
ZAHL	SZ			EP		2038	32.38								
BHL	BZ			EP		2038	33.79								
DQRL	SZ			EP		2038	36.68								
QRWL	SZ			EP		2038	38.35								

February 4 2020 Hour: 21:48 40.5 Agency: REL Regional

EMSC OT=21:48:40.5 35.01N 27.88E 10Km M=3.5 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2150	18.61								
QRWL	SZ			EP		2150	18.27								
HWQ	BZ			EP		2150	19.36								
RCY	SZ			EP		2150	19.93								
ZAHL	SZ			EP		2150	20.49								
BEIL	SZ			EP		2150	20.96								

February 5 2020 Hour: 18:12 37.7 Agency: REL Distant

EMSC OT=18:12:37.7 6.09S 113.11E 600Km M=6.2 JAVA INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1824	2.53								
HWQ	BZ			EP		1824	1.71								

February 6 2020 Hour: 4:53 50.6 Lat: 32.67N Lon: 34.67E Depth: 7 Agency: REL Regional
 Magnitudes: 4.3MC REL

DEAD SEA REGION

Earthquake was felt

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	136	44	EP		454	12.00	0.00	318						1.0
RCY	SZ	142	50	EP		454	13.00	-0.02							1.0
DQRL	SZ	142	36	EP		454	13.03	0.06							1.0
DQRL	SN	142	36	ES		454	29.42	-0.10							1.0
BEYL	SZ	154	30	EP		454	14.66	0.07							1.0
BHL	BZ	165	34	EP		454	16.16	-0.11							1.0
BHL	BN	165	34	ES		454	35.38	0.11							1.0
ZAHL	SZ	174	41	EP		454	17.75	0.14							1.0
HWQ	BZ	214	33	EP		454	22.53	-0.10							1.0
BEIL	SZ	251	34	EP		454	27.07	-0.03							1.0

February 6 2020 Hour: 22: 2 39.7 Agency: REL Regional

EMSC OT=22:02:39.7 38.30N 38.81E 5Km M=3.4 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		22	3	45.95							
HWQ	BZ			EP		22	3	50.76							
ZAHL	SZ			EP		22	3	56.09							
BHL	BZ			EP		22	3	57.37							
RCY	SZ			EP		22	4	1.22							
QRWL	SZ			EP		22	4	1.34							

February 7 2020 Hour: 2:16 2.3 Agency: REL Regional

EMSC OT=02:16:02.3 34.97N 26.58E 10Km M=4.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		217	52.26								
RCY	SZ			EP		217	53.73								
HWQ	BZ			EP		217	54.37								
BEIL	SZ			EP		217	55.46								

February 7 2020 Hour: 3:11 47.7 Agency: REL Regional

EMSC OT=03:11:47.7 34.88N 26.46E 10Km M=4.7 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		313	36.80								
RCY	SZ			EP		313	38.40								
ZAHL	SZ			EP		313	37.93								
HWQ	BZ			EP		313	38.80								
BEIL	SZ			EP		313	38.79								

February 7 2020 Hour: 9:56 34.8 Lat: 34.04N Lon: 35.72E Depth: 0 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	16	204	EP		956	37.46	-0.01	47						1.0
BHL	BN	16	204	ES		956	39.41	-0.01							1.0
ZAHL	SZ	25	144	EP		956	38.85	-0.01							1.0
ZAHL	SN	25	144	ES		956	41.86	0.02							1.0
HWQ	BZ	34	37	EP		956	40.22	-0.02							1.0
DQRL	SZ	40	201	EP		956	41.26	0.03							1.0
QRWL	SZ	55	184	EP		956	43.67	0.02							1.0
RCY	SZ	61	170	EP		956	44.63	-0.05							1.0
FKH	SZ	67	70	EP		956	45.65	-0.02							1.0
BEIL	SZ	70	37	EP		956	46.17	0.04							1.0

**February 8 2020 Hour: 15:45 55.1 Lat: 33.80N Lon: 35.75E Depth: 14 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	63	EP		1545	58.46	-0.06	42						1.0
ZAHL	SN	14	63	ES		1546	1.07	0.02							1.0
BHL	BZ	14	323	EP		1545	58.60	0.07							1.0
BHL	BN	14	323	ES		1546	1.07	0.00							1.0
DQRL	SZ	20	238	EP		1545	59.03	-0.11							1.0
QRWL	SZ	29	192	EP		1546	0.41	0.06							1.0
QRWL	SN	29	192	ES		1546	4.26	0.03							1.0
RCY	SZ	35	167	EP		1546	1.23	-0.01							1.0
BEIL	SZ	92	26	EP		1546	9.53	0.01							1.0

February 10 2020 Hour: 22: 4 10.5

Agency: REL Regional

EMSC OT=22:04:10.5 38.25N 38.85E 5Km M=3.9 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		22	5	18.20							
ZAHL	SZ			EP		22	5	28.64							
BHL	BZ			EP		22	5	29.26							
DQRL	SZ			EP		22	5	32.88							
RCY	SZ			EP		22	5	33.66							
QRWL	SZ			EP		22	5	32.70							

February 10 2020 Hour: 22:46 50.5

Agency: REL Regional

EMSC OT=22:46:50.5 35.04N 27.91E 10Km M=5.0 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2248	23.16								
DQRL	SZ			EP		2248	24.27								
QRWL	SZ			EP		2248	26.89								
ZAHL	SZ			EP		2248	28.09								
RCY	SZ			EP		2248	28.72								
BEIL	SZ			EP		2248	29.88								

February 11 2020 Hour: 20: 2 38.8

Agency: REL Regional

EMSC OT=20:02:38.8 34.91N 27.93E 60Km M=3.5 EASTERN MEDITERRANEAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		20	4	10.83							
RCY	SZ			EP		20	4	12.85							
ZAHL	SZ			EP		20	4	12.68							
BEIL	SZ			EP		20	4	14.84							

February 12 2020 Hour: 14:57 50.7

Agency: REL Distant

EMSC OT=14:57:50.7 17.69S 178.61W 542Km M=5.0 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ			EP		1516	28.51								
BHL	BZ			EP		1516	28.98								
RCY	SZ			EP		1516	29.22								
QRWL	SZ			EP		1516	29.53								
DQRL	SZ			EP		1516	29.61								

February 13 2020 Hour: 10:33 44.5

Agency: REL Distant

EMSC OT=10:33:44.5 45.74N 148.71E 150Km M=6.9 KURIL ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1045	37.87								
ZAHL	SZ			EP		1045	40.71								
BHL	BZ			EP		1045	41.08								
DQRL	SZ			EP		1045	42.35								
RCY	SZ			EP		1045	42.43								
QRWL	SZ			EP		1045	42.73								

February 14 2020 Hour: 16: 3 18.4 Agency: REL Regional

EMSC OT=16:02:18.4 35.77N 26.95E 13Km M=4.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		16	4	2.24							
DQRL	SZ			EP		16	4	3.40							
QRWL	SZ			EP		16	4	5.37							
ZAHL	SZ			EP		16	4	5.68							
BEIL	SZ			EP		16	4	5.99							
RCY	SZ			EP		16	4	6.72							

February 16 2020 Hour: 12:30 47.2

Agency: REL Distant

EMSC OT=12:30:47.2 27.14N 55.80E 10Km M=5.2 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ			EP		1234		58.93							
BEIL	SZ			EP		1235		1.88							
RCY	SZ			EP		1235		2.19							
ZAHL	SZ			EP		1235		3.40							
BHL	BZ			EP		1235		6.12							
DQRL	SZ			EP		1235		5.79							

February 16 2020 Hour: 15:13 35.1 Lat: 33.46N Lon: 37.20E Depth: 23 Magnitudes: 3.3MC REL Agency: REL Regional
Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	127	272	EP		1513	54.81	0.01	83						1.0
ZAHL	SZ	129	290	EP		1513	55.03	-0.12							1.0
QRWL	SZ	141	274	EP		1513	56.56	-0.00							1.0
QRWL	SN	141	274	ES		1514	12.55	0.11							1.0
BEIL	SZ	152	322	EP		1513	57.99	0.07							1.0
DQRL	SZ	153	281	EP		1513	58.14	0.03							1.0
DQRL	SN	153	281	ES		1514	15.05	-0.09							1.0

February 16 2020 Hour: 16:40 33.3

Agency: REL Regional

EMSC OT=16:40:33.3 38.29N 38.74E 12Km M=3.7 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1641		39.37							
ZAHL	SZ			EP		1641		48.54							
BHL	BZ			EP		1641		50.11							
DQRL	SZ			EP		1641		53.95							

February 16 2020 Hour: 18: 2 13.0

Agency: REL Regional

EMSC OT=18:02:13.0 38.44N 44.52E 2Km M=4.7 TURKEY-IRAN BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		18	4	9.51							
ZAHL	SZ			EP		18	4	19.42							
BHL	BZ			EP		18	4	20.20							
RCY	SZ			EP		18	4	21.09							
DQRL	SZ			EP		18	4	24.36							
QRWL	SZ			EP		18	4	22.92							

February 17 2020 Hour: 0:28 12.3

Agency: REL Distant

EMSC OT=00:28:12.3 33.08S 179.99W 129Km M=5.5 SOUTH OF KERMADEC REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ			EP		047		46.10							
BHL	BZ			EP		047		46.28							
DQRL	SZ			EP		047		46.71							

February 17 2020 Hour: 11:42 14.1 Agency: REL Regional

EMSC OT=11:42:14.1 38.34N 39.12E 4Km M=4.4 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1143	23.52								
FKH	SZ			EP		1143	26.02								
ZAHL	SZ			EP		1143	33.76								
BHL	BZ			EP		1143	34.64								
DQRL	SZ			EP		1143	38.33								
RCY	SZ			EP		1143	39.04								
QRWL	SZ			EP		1143	39.34								

February 18 2020 Hour: 13:57 48.7 Lat: 33.59N Lon: 37.19E Depth: 11 Agency: REL Regional
Magnitudes: 3.4MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	103	315	EP		1358	4.26-0.73								0.2
ZAHL	SZ	125	284	EP		1358	8.15-0.11								1.0
RCY	SZ	127	266	EP		1358	8.60 0.08								1.0
RCY	SN	127	266	ES		1358	23.08-0.09								1.0
HWQ	BZ	138	304	EP		1358	10.26 0.02								1.0
QRWL	SZ	140	269	EP		1358	10.56 0.03								1.0
BEIL	SZ	141	319	EP		1358	10.60 0.03	88							1.0
BEIL	SN	141	319	ES		1358	26.74 0.01								1.0
DQRL	SZ	151	275	EP		1358	12.11-0.00								1.0
DQRL	SN	151	275	ES		1358	29.50 0.08								1.0

February 18 2020 Hour: 16:9 23.1 Agency: REL Regional
EMSC OT=16:09:23.1 39.09N 27.84E 7Km M=4.8 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1611	17.17								
HWQ	BZ			EP		1611	20.38								
DQRL	SZ			EP		1611	22.30								
FKH	SZ			EP		1611	25.20								
ZAHL	SZ			EP		1611	23.59								
QRWL	SZ			EP		1611	24.63								
RCY	SZ			EP		1611	25.72								

February 20 2020 Hour: 0:13 55.3 Agency: REL Regional
EMSC OT=00:13:55.3 38.28N 38.75E 7Km M=3.8 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		015	0.43								
HWQ	BZ			EP		015	5.43								
ZAHL	SZ			EP		015	12.09								
BHL	BZ			EP		015	12.23								
DQRL	SZ			EP		015	15.30								
QRWL	SZ			EP		015	16.82								
RCY	SZ			EP		015	17.02								

February 20 2020 Hour: 18:57 36.6 Agency: REL Distant
EMSC OT=18:57:36.6 53.66N 160.60E 40Km M=5.9 NEAR EAST COAST OF KAMCHATKA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		19	9	43.93							
HWQ	BZ			EP		19	9	42.10							

February 22 2020 Hour: 8:51 24.9 Lat: 34.33N Lon: 36.14E Depth: 0 Agency: REL Local
Magnitudes: 3.4MC REL Rms: 0.1 secs

MINIEH-DINNIEH REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	19	251	EP		851	27.87-0.10	102							1.0
HWQ	BN	19	251	ES		851	30.25 0.04								1.0
BEIL	SZ	23	11	EP		851	28.76 0.03								1.0
FKH	SZ	27	111	EP		851	29.23-0.06								1.0
FKH	SN	27	111	ES		851	32.55 0.04								1.0

ZAHL SZ	58	204	EP	851	34.18	-0.07	1.0
ZAHL SN	58	204	ES	851	41.13	-0.01	1.0
BHL BZ	65	223	EP	851	35.49	0.01	1.0
DQRL SZ	87	217	EP	851	39.06	0.05	1.0
DQRL SN	87	217	ES	851	49.43	0.01	1.0
QRWL SZ	97	206	EP	851	40.55	-0.02	1.0
RCY SZ	97	197	EP	851	40.68	0.09	1.0

February 22 2020 Hour: 22:26 40.7

Agency: REL Regional

EMSC OT=22:26:40.7 37.39N 31.48E 5Km M=4.7 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		2227		54.47							
BEIL	SZ			EP		2227		54.51							
BHL	BZ			EP		2227		54.58							
DQRL	SZ			EP		2227		56.27							
ZAHL	SZ			EP		2227		57.93							
QRWL	SZ			EP		2227		59.81							
RCY	SZ			EP		2228		1.21							

February 23 2020 Hour: 5:53 0.3

Agency: REL Regional

EMSC OT=05:53:00.3 38.44N 44.49E 10Km M=5.7 TURKEY-IRAN BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		554		54.59							
HWQ	BZ			EP		554		59.39							
ZAHL	SZ			EP		555		4.03							
BHL	BZ			EP		555		6.50							
RCY	SZ			EP		555		6.70							
DQRL	SZ			EP		555		8.85							
QRWL	SZ			EP		555		8.15							

February 23 2020 Hour: 16:0 29.4

Agency: REL Regional

EMSC OT=16:00:29.4 38.42N 44.55E 10Km M=6.0 TURKEY-IRAN BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		16	2	24.50							
HWQ	BZ			EP		16	2	29.40							
ZAHL	SZ			EP		16	2	33.57							
BHL	BZ			EP		16	2	34.21							
RCY	SZ			EP		16	2	37.15							
DQRL	SZ			EP		16	2	38.80							
QRWL	SZ			EP		16	2	38.59							

February 24 2020 Hour: 3:35 16.9 Lat: 33.62N Lon: 35.57E Depth: 10 Agency: REL Local Magnitudes: 2.4MC REL

Rms: 0.1 secs

CHOUF REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	9	2	EP		335	19.35	0.06	27						1.0
DQRL	SN	9	2	ES		335	21.02	-0.01							1.0
QRWL	SZ	14	128	EP		335	19.72	-0.10							1.0
RCY	SZ	29	119	EP		335	21.98	0.02							1.0
RCY	SN	29	119	ES		335	25.75	0.07							1.0
BHL	BZ	32	15	EP		335	22.50	0.06							1.0
ZAHL	SZ	39	49	EP		335	23.46	-0.11							1.0
HWQ	BZ	81	26	EP		335	30.30	0.26							0.2

February 25 2020 Hour: 2:7 28.0

Agency: REL Distant

EMSC OT=02:07:28.0 17.71S 178.85W 536Km M=5.2 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		226		6.19							
HWQ	BZ			EP		226		5.05							

February 25 2020 Hour: 14:14 2.8 Agency: REL Regional

EMSC OT=14:14:02.8 38.44N 44.53E 2Km M=4.5 TURKEY-IRAN BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1415		59.94							
HWQ	BZ			EP		1416		3.05							
QRWL	SZ			EP		1416		8.32							
RCY	SZ			EP		1416		8.85							

February 25 2020 Hour: 23: 3 38.8 Agency: REL Regional

EMSC OT=23:03:38.8 38.33N 38.77E 10Km M=5.0 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		23	4	42.66							
HWQ	BZ			EP		23	4	46.82							
ZAHL	SZ			EP		23	4	52.87							
BHL	BZ			EP		23	4	53.53							
DQRL	SZ			EP		23	4	57.18							
RCY	SZ			EP		23	4	57.79							
QRWL	SZ			EP		23	4	58.01							

February 26 2020 Hour: 11:37 25.7 Lat: 34.26N Lon: 36.44E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC REL

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
FKH	SZ	3	234	EP		1137	25.67	-0.48	28						0.2
BEIL	SZ	39	324	EP		1137	31.82	-0.10							1.0
BEIL	SN	39	324	ES		1137	36.65	0.09							1.0
HWQ	BZ	45	273	EP		1137	32.92	-0.01							1.0
HWQ	BN	45	273	ES		1137	38.29	-0.02							1.0
BHL	BZ	82	242	EP		1137	38.88	-0.03							1.0
DQRL	SZ	101	233	EP		1137	41.91	-0.01							1.0
RCY	SZ	101	213	EP		1137	42.05	0.07							1.0
QRWL	SZ	105	222	EP		1137	42.67	0.03							1.0

February 26 2020 Hour: 14:20 12.0 Agency: REL Regional

EMSC OT=14:20:12.0 35.06N 27.86E 10Km M=4.5 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1421	44.07								
QRWL	SZ			EP		1421	47.00								
HWQ	BZ			EP		1421	47.86								
RCY	SZ			EP		1421	48.83								
BEIL	SZ			EP		1421	49.60								
FKH	SZ			EP		1421	50.96								

February 27 2020 Hour: 1:11 0.0 Agency: REL Regional

EMSC OT=01:11:00.0 38.25N 38.69E 5Km M=2.9 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		112		5.46							
HWQ	BZ			EP		112		10.32							
ZAHL	SZ			EP		112		16.40							
BHL	BZ			EP		112		16.49							

February 27 2020 Hour: 2: 8 45.1 Agency: REL Regional

EMSC OT=02:08:45.1 38.27N 38.67E 10Km M=4.6 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2	9	49.84							
HWQ	BZ			EP		2	9	54.46							
ZAHL	SZ			EP		210		0.48							
BHL	BZ			EP		210		1.23							
DQRL	SZ			EP		210		3.89							
RCY	SZ			EP		210		5.57							
QRWL	SZ			EP		210		5.56							

February 27 2020 Hour: 12:20 19.0 Agency: REL Regional

EMSC OT=12:20:19.0 35.13N 27.99E 10Km M=4.0 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1221	51.50								
QRWL	SZ			EP		1221	54.56								
HWQ	BZ			EP		1221	55.25								
RCY	SZ			EP		1221	56.19								
BEIL	SZ			EP		1221	56.97								
FKH	SZ			EP		1222	0.26								

February 27 2020 Hour: 14:36 15.1

Agency: REL Regional

EMSC OT=14:36:15.1 35.12N 27.95E 10Km M=4.7 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1437	48.89								
QRWL	SZ			EP		1437	50.39								
HWQ	BZ			EP		1437	50.60								
ZAHL	SZ			EP		1437	51.31								
RCY	SZ			EP		1437	52.31								
BEIL	SZ			EP		1437	52.67								
FKH	SZ			EP		1437	56.12								

February 27 2020 Hour: 19:13 2.2

Agency: REL Distant

EMSC OT=19:13:02.2 3.86N 125.78E 119Km M=5.6 KEPULAUAN SANGIHE, INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1925	37.62								
BHL	BZ			EP		1925	38.43								

February 27 2020 Hour: 21:15 46.6 Lat: 34.29N Lon: 35.97E Depth: 6 Agency: REL Local
Magnitudes: 3.1MC REL

Rms: 0.1 secs

ZGHARTA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	3	233	EP		2115	47.77-0.09	72							1.0
HWQ	BN	3	233	ES		2115	48.86 0.05								1.0
BEIL	SZ	34	35	EP		2115	52.15 0.01	64							1.0
BEIL	SN	34	35	ES		2115	56.27 0.01								1.0
ZAHL	SZ	49	189	EP		2115	54.44-0.11								1.0
BHL	BZ	52	214	EP		2115	55.01-0.05								1.0
DQRL	SZ	75	210	EP		2115	58.79 0.07								1.0
QRWL	SZ	87	198	EP		2116	0.71 0.08								1.0
RCY	SZ	89	188	EP		2116	1.01-0.01								1.0
RCY	SN	89	188	ES		2116	11.74 0.03								1.0

February 28 2020 Hour: 4:17 22.5 Lat: 33.78N Lon: 35.77E Depth: 1 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		417	24.70-0.05								1.0
ZAHL	SN	14	50	ES		417	26.43 0.04								1.0
BHL	BZ	18	321	EP		417	25.31-0.10	29							1.0
DQRL	SZ	21	247	EP		417	25.96 0.10								1.0
DQRL	SN	21	247	ES		417	28.33 0.00								1.0
QRWL	SZ	27	198	EP		417	26.88-0.02								1.0
RCY	SZ	32	170	EP		417	27.66-0.03								1.0
HWQ	BZ	58	16	EP		417	31.88 0.06								1.0
BEIL	SZ	93	24	EP		417	37.55 0.07								0.2

February 28 2020 Hour: 6:37 35.2 Lat: 32.71N Lon: 35.29E 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
QRWL	SZ	100	21	EP		637	51.39 0.04								1.0
RCY	SZ	101	30	EP		637	51.39-0.15	45							1.0
RCY	SN	101	30	ES		638	3.67 0.02								1.0

DQRL	SZ	114	13	EP	637	53.57	0.02	1.0
BHL	BZ	137	14	EP	637	57.15	-0.12	1.0
BHL	BN	137	14	ES	638	13.63	0.01	1.0
HWQ	BZ	185	19	EP	638	4.38	0.11	1.0

February 28 2020 Hour: 7:41 52.0 Agency: REL Distant

EMSC OT=07:41:52.0 19.11S 172.99W 10Km M=5.8 TONGA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP				8	1	42.53					
HWQ	BZ			EP				8	1	37.22					

February 28 2020 Hour: 15:39 24.3 Agency: REL Regional

EMSC OT=15:39:24.3 36.15N 36.02E 10Km M=2.6 TURKEY-SYRIA BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP				1539		55.53					
FKH	SZ			EP				1539		56.80					
BHL	BZ			EP				1540		1.02					
ZAHL	SZ			EP				1540		1.93					
RCY	SZ			EP				1540		6.76					

February 29 2020 Hour: 4:23 57.2 Lat: 34.72N Lon: 36.24E Depth: 22 Agency: REL Regional
Magnitudes: 3.1MC REL

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	20	193	EP		424		1.91-0.04	65						1.0
BEIL	SE	20	193	ES		424		5.52	0.05						1.0
HWQ	BZ	55	209	EP		424		6.43	-0.11						1.0
HWQ	BN	55	209	ES		424		13.41	-0.04						1.0
BHL	BZ	105	211	EP		424		13.71	0.05						1.0
DQRL	SZ	128	209	EP		424		17.14	0.12						1.0
RCY	SZ	140	195	EP		424		18.63	-0.02						1.0

February 29 2020 Hour: 12:29 47.3 Agency: REL Regional

EMSC OT=12:29:47.3 38.43N 39.24E 4Km M=4.4 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1230		58.32							
FKH	SZ			EP		1230		58.54							
HWQ	BZ			EP		1231		2.81							
ZAHL	SZ			EP		1231		8.61							
BHL	BZ			EP		1231		9.05							
DQRL	SZ			EP		1231		12.67							
RCY	SZ			EP		1231		13.54							
QRWL	SZ			EP		1231		13.21							

Epicentral Map of Lebanon

FEBRUARY 2020

