

Republic of Lebanon  
National Council for Scientific Research

# Provisional Seismological Bulletin

from the

## NATIONAL SEISMIC NETWORK

May

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](mailto:geophys@cnrs.edu.lb)*

## GENERAL BULLETIN INFORMATION

The National Centre for Geophysical Research is a governmental agency established 1975 in Lebanon by the National Council for Scientific Research (CNRS). The mission of the Centre, among other assignments, is the monitoring of seismic activity within the national territory. Currently, the national seismic network is under deployment; it has been officially registered as GRAL, an acronym for Geophysical Research Arrays of Lebanon. Station coordinates and status are given below.

Since 1993, the Centre has been participating in a regional initiative by the UNESCO and the USGS known as RELEMR, i.e. Reducing Earthquake Losses in the Eastern Mediterranean Region.

Within this framework, the Centre routinely contributes to the database set up for this purpose and maintained by the Euro-Mediterranean Seismological Centre (EMSC). For coherence, the Centre has adopted the recommended seismic analysis system SEISAN developed by Jens Havskov and Lars Ottemoller from the University of Bergen, Norway.

The localization program currently used for locating earthquakes is Hypocenter (Lienert et al., 1986). Plane parallel layers are assumed for local and regional events, while the IASPEI travel time tables are used for distant events.

The velocity model used for all local and regional events is the one currently adopted by the RELEMR initiative.

P-wave velocity (km/sec)	depth to top of layer (km)
6.2	0.0
6.8	14.0
8.05	34.0
8.25	50.0
8.5	80.0

Magnitudes are calculated from the coda duration. The coda wave magnitude is estimated via the formula:

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

where T is the coda duration (sec) and D is the epicentral distance (km). The coefficients above were adopted at the outset of our Centre in 1980 and thus are still in use for the sake of continuity.

All available coda values are used for magnitude calculations. No station corrections are used for either travel times or magnitudes calculations. The  $V_p/V_s$  velocity ratio used in both layered models above is 1.74.

As a general policy, neither depths, nor epicenters, are fixed unless stated otherwise since this might restrict later use of the data. Consequently, some event locations might be unrealistic such as zero depth earthquakes or teleseismic locations off by 1000 km. However, the locations are based on the available data and reflect the localization procedure and the models used.

## STATIONS USED

The stations listed below are operated by the National Centre for Geophysical Research. They constitute the basic setup of the National Seismic Network of Lebanon.

However, readings from other cooperating agencies are also used in locating the events and thus more stations may appear in the event lists than in the station list; it is worth mentioning the systematic use of arrival times from the Cypriot seismic network CSS in order to constrain events corresponding to an active zone off the Lebanese shorelines.

STATION	LATITUDE	LONGITUDE	HEIGHT (m)	NAME	COMMENTS
BHL	3354.25N	3539.25E	1000	BHANNES	Opened May 1980
HWQ	3416.68N	3556.78E	1161	HAWQA	Opened Jan 2001
MATL	3329.32N	3519.78E	5	MATARIH	Nov2000-Sep2012
FKH	3414.69N	3624.61E	1152	FAKEHEH	Opened Dec 2004
RCY	3329.79N	3550.14E	1370	RACHAYA	Opened Jun 2006
BEYL	3352.30N	3529.59E	49	BEIRUT	Opened Jul 2006
NAQL	3307.02N	3508.46E	83	NAQOURA	Jul2008-Jan2012
DQRL	3342.34N	3534.21E	963	DEIR QAMAR	Opened Mar 2010
QRWL	3332.86N	3540.93E	875	QARAOUN	Opened Oct 2011
SHBL	3320.90N	3544.63E	1422	CHEBAA	Opened Oct 2011
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
CPTL	3353.47N	3528.60E	32	QRAYTEM	Opened Mar 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 ( $0.5 * (\text{peak to peak})$ ), (nm) at period PERI

PERI: Period where amplitude is measured

BAZ: Back azimuth (station to event)

ARES: Back azimuth residual

VELO: Apparent phase velocity (km/sec)

WT: Weight of phase in the location

\*: An asterisk before the phase arrival time implies a potential timing error. If an S phase is read, differential S-P times will be used in the hypocenter location.

May 1 2020 Hour: 20:28 8.8 Agency: REL Distant  
**EMSC OT=20:28:08.8 28.39N 57.02E 10Km M=4.9 SOUTHERN IRAN**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 2032 33.65  
 HWQ BZ EP 2032 31.84

May 2 2020 Hour: 8:39 56.0 Lat: 33.86N Lon: 35.64E Depth: 21 Agency: REL Local  
 Magnitudes: 3.0MC REL Rms: 0.1 secs  
**BAABDA REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	5	14	EP		839	59.49	-0.06							1.0
BHL	BN	5	14	ES		840	2.18	0.01							1.0
BEYL	SZ	14	274	EP		839	59.95	-0.01							1.0
DQRL	SZ	19	201	EP		840	0.57	0.02							1.0
ZAHL	SZ	23	92	EP		840	0.89	-0.09							1.0
QRWL	SZ	35	174	EP		840	2.56	0.05							1.0
QRWL	SN	35	174	ES		840	7.36	0.04							1.0
RCY	SZ	45	156	EP		840	3.80	-0.00							1.0
HWQ	BZ	54	31	EP		840	5.09	0.00	56						1.0
HWQ	BN	54	31	ES		840	11.93	0.13							1.0
FKH	SZ	83	59	EP		840	9.20	-0.03							1.0
BEIL	SZ	90	33	EP		840	10.27	-0.05							1.0

May 2 2020 Hour: 12:51 5.4 Agency: REL Regional  
**EMSC OT=12:51:05.4 34.14N 25.70E 10Km M=6.6 CRETE, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1253	3.88								
QRWL	SZ			EP		1253	5.16								
RCY	SZ			EP		1253	5.15								
ZAHL	SZ			EP		1253	5.25								
HWQ	BZ			EP		1253	5.84								
BEIL	SZ			EP		1253	8.55								
FKH	SZ			EP		1253	11.06								

May 2 2020 Hour: 13:33 49.5 Agency: REL Regional  
**EMSC OT=13:33:49.5 34.07N 25.57E 10Km M=5.4 CRETE, GREECE**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1335	47.70								
BHL	BZ			EP		1335	49.01								
QRWL	SZ			EP		1335	49.47								
RCY	SZ			EP		1335	51.68								
ZAHL	SZ			EP		1335	51.46								
HWQ	BZ			EP		1335	52.65								
BEIL	SZ			EP		1335	55.54								
FKH	SZ			EP		1335	57.64								

May 2 2020 Hour: 13:45 20.0 Agency: REL Regional  
**EMSC OT=13:45:20.0 33.95N 25.60E 10Km M=4.7 EASTERN MEDITERRANEAN SEA**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1347	19.48								
QRWL	SZ			EP		1347	20.09								
RCY	SZ			EP		1347	22.05								
ZAHL	SZ			EP		1347	21.79								
HWQ	BZ			EP		1347	23.00								
BEIL	SZ			EP		1347	25.71								

May 2 2020 Hour: 13:52 25.9 Agency: REL Regional  
**EMSC OT=13:52:25.9 36.83N 36.31E 15Km M=2.7 TURKEY-SYRIA BORDER REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1353	3.21								
HWQ	BZ			EP		1353	8.39								
BHL	BZ			EP		1353	6.12								
ZAHL	SZ			EP		1353	19.67								

**May 2 2020 Hour: 16:13 0.1** Agency: REL Regional  
**EMSC OT=16:13:00.1 34.00N 25.55E 10Km M=4.6 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 HWQ BZ EP 1615 5.42  
 BEIL SZ EP 1615 6.14  
 BHL BZ EP 1615 6.28

**May 2 2020 Hour: 16:44 25.6** Agency: REL Regional  
**EMSC OT=16:44:25.6 34.00N 25.58E 10Km M=5.3 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 1646 23.17  
 BHL BZ EP 1646 25.85  
 QRWL SZ EP 1646 25.32  
 RCY SZ EP 1646 27.25  
 ZAHL SZ EP 1646 27.37  
 HWQ BZ EP 1646 27.66  
 BEIL SZ EP 1646 30.95

**May 3 2020 Hour: 2: 8 56.7** Agency: REL Regional  
**EMSC OT=02:08:56.7 35.80N 25.62E 67Km M=4.2 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEYL SZ EP 210 51.90  
 DQRL SZ EP 210 52.39  
 BHL BZ EP 210 52.15  
 QRWL SZ EP 210 54.43  
 HWQ BZ EP 210 55.07  
 ZAHL SZ EP 210 55.68  
 RCY SZ EP 210 56.25  
 BEIL SZ EP 210 56.65

**May 3 2020 Hour: 2:26 34.0** Agency: REL Regional  
**EMSC OT=02:26:34.0 35.85N 35.52E 20Km M=2.5 NEAR THE COAST OF SYRIA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEIL SZ EP 226 59.96  
 HWQ BZ EP 227 3.22  
 ZAHL SZ EP 227 2.89  
 BHL BZ EP 227 6.50  
 DQRL SZ EP 227 9.01

**May 3 2020 Hour: 5:54 42.1** Agency: REL Regional  
**EMSC OT=05:54:42.1 34.08N 25.93E 10Km M=4.9 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 556 37.75  
 QRWL SZ EP 556 38.76  
 ZAHL SZ EP 556 39.97  
 RCY SZ EP 556 40.13  
 HWQ BZ EP 556 41.11  
 BEIL SZ EP 556 44.09

**May 3 2020 Hour: 13:25 24.4** Agency: REL Regional  
**EMSC OT=13:25:24.4 38.35N 39.04E 7Km M=4.2 EASTERN TURKEY**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BEIL SZ EP 1326 33.29  
 FKH SZ EP 1326 35.53  
 HWQ BZ EP 1326 37.99  
 ZAHL SZ EP 1326 43.91  
 BHL BZ EP 1326 44.37  
 DQRL SZ EP 1326 47.73  
 RCY SZ EP 1326 48.39

**May 4 2020 Hour: 1:2 10.3 Agency: RE Regional**  
**EMSC OT=01:02:10.3 33.98N 25.47E 10Km M=4.4 EASTERN MEDITERRANEAN SEA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 1 4 9.19  
 Z AHL SZ EP 1 4 9.54  
 QRWL SZ EP 1 4 11.51  
 RCY SZ EP 1 4 12.41  
 HWQ BZ EP 1 4 13.13  
 BEIL SZ EP 1 4 15.89

**May 4 2020 Hour: 3:33 56.1 Agency: REL Regional**  
**EMSC OT=03:33:56.1 33.63N 32.67E 10Km M=2.6 EASTERN MEDITERRANEAN SEA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 334 35.36  
 QRWL SZ EP 334 36.12  
 BHL BZ EP 334 36.10  
 RCY SZ EP 334 38.01  
 Z AHL SZ EP 334 37.91  
 HWQ BZ EP 334 40.07  
 BEIL SZ EP 334 42.94

**May 4 2020 Hour: 22:55 19.8 Lat: 32.51N Lon: 33.61E Depth: 3 Agency: REL Regional**  
**Magnitudes: 3.5MC 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 225 59 EP 2255 53.64 0.02 1.0  
 QRWL SN 225 59 ES 2256 18.55-0.09 1.0  
 DQRL SZ 226 54 EP 2255 53.61-0.11 99 1.0  
 DQRL SN 226 54 ES 2256 18.86 0.05 1.0  
 RCY SZ 235 62 EP 2255 54.96 0.07 1.0  
 BHL BZ 246 50 EP 2255 56.15 0.01 1.0  
 Z AHL SZ 260 54 EP 2255 58.00 0.08 1.0  
 HWQ BZ 293 47 EP 2256 1.96-0.07 1.0  
 HWQ BN 293 47 ES 2256 33.30 0.03 1.0  
 BEIL SZ 329 46 EP 2256 6.41-0.01 1.0

**May 4 2020 Hour: 23:45 19.6 Lat: 34.60N Lon: 36.34E Depth: 24 Agency: REL Local**  
**Magnitudes: 3.2MC 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 15 245 EP 2345 24.16 0.01 76 1.0  
 BEIL SN 15 245 ES 2345 27.54 0.02 1.0  
 HWQ BZ 51 225 EP 2345 28.30-0.07 1.0  
 HWQ BN 51 225 ES 2345 34.82-0.04 1.0  
 Z AHL SZ 92 207 EP 2345 34.22-0.07 1.0  
 Z AHL SN 92 207 ES 2345 45.19 0.03 1.0  
 BHL BZ 99 219 EP 2345 35.45 0.11 1.0  
 DQRL SZ 122 216 EP 2345 38.61 0.03 1.0  
 RCY SZ 131 201 EP 2345 39.72-0.03 1.0  
 QRWL SZ 131 208 EP 2345 39.78 0.01 1.0

**May 5 2020 Hour: 0:43 36.9 Agency: REL Regional**  
**EMSC OT=00:43:36.9 35.58N 29.41E 8Km M=3.6 EASTERN MEDITERRANEAN SEA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 044 59.91  
 HWQ BZ EP 044 59.97  
 BEIL SZ EP 045 0.74  
 Z AHL SZ EP 044 59.97  
 RCY SZ EP 045 2.18

**May 5 2020 Hour: 17:20 32.7 Agency: REL Regional**  
**EMSC OT=17:20:32.7 34.12N 25.55E 10Km M=4.9 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 QRWL SZ EP 1722 31.22  
 RCY SZ EP 1722 33.68  
 ZAHL SZ EP 1722 35.95  
 HWQ BZ EP 1722 35.53  
 BEIL SZ EP 1722 37.66

**May 6 2020 Hour: 0:56 23.0 Lat: 30.63N Lon: 35.13E 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 325 12 EP 057 9.53 0.06 1.0  
 RCY SN 325 12 ES 057 44.11 0.23 1.0  
 QRWL SZ 328 9 EP 057 9.91 0.12 95 1.0  
 DQRL SZ 344 7 EP 057 11.85 0.08 1.0  
 DQRL SN 344 7 ES 057 48.17 0.29 1.0  
 ZAHL SZ 365 11 EP 057 14.59 0.14 1.0  
 BHL BZ 366 8 EP 057 14.76 0.15 1.0

**May 6 2020 Hour: 13:53 55.3 Agency: REL Distant**  
**EMSC OT=13:53:55.3 6.85S 129.83E 99Km M=6.8 BANDA SEA**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 14 7 17.54  
 HWQ BZ EP 14 7 16.43

**May 7 2020 Hour: 13:45 4.5 Lat: 33.87N Lon: 35.35E Depth: 25 Agency: REL Local**  
**Magnitudes: 3.2MC REL Rms: 0.1 secs**  
**OFFSHORE CENTRAL LEBANON**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 CPTL SZ 12 79 EP 1345 9.03 0.09 1.0  
 BEYL SZ 14 90 EP 1345 8.98-0.05 1.0  
 DQRL SZ 28 132 EP 1345 10.36-0.12 83 1.0  
 DQRL SN 28 132 ES 1345 14.89 0.02 1.0  
 BHL BZ 29 83 EP 1345 10.15-0.45 81 0.2  
 BHL BN 29 83 ES \*1345 14.43-0.65 0.0  
 QRWL SZ 47 139 EP 1345 12.96 0.02 1.0  
 QRWL SN 47 139 ES 1345 19.14-0.01 1.0  
 ZAHL SZ 50 92 EP 1345 13.33 0.05 1.0  
 ZAHL SN 50 92 ES 1345 19.75-0.00 1.0  
 RCY SZ 61 132 EP 1345 14.95 0.05 1.0  
 HWQ BZ 71 51 EP 1345 16.33 0.05 1.0  
 BEIL SZ 107 46 EP 1345 20.92-0.48 0.2  
 FKH SZ 107 67 EP 1345 21.30-0.04 1.0

**May 7 2020 Hour: 14:23 57.6 Lat: 33.87N Lon: 35.41E Depth: 20 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  
 CPTL SZ 7 70 EP 1424 1.08 0.11 1.0  
 BHL BZ 23 81 EP 1424 2.41-0.12 1.0  
 DQRL SZ 24 141 EP 1424 2.48-0.11 39 1.0  
 DQRL SN 24 141 ES 1424 6.27-0.02 1.0  
 QRWL SZ 44 145 EP 1424 5.25 0.03 1.0  
 QRWL SE 44 145 ES 1424 10.92 0.06 1.0  
 ZAHL SZ 44 92 EP 1424 5.37 0.08 1.0  
 RCY SZ 57 136 EP 1424 7.15-0.02 1.0  
 HWQ BZ 67 48 EP 1424 8.56-0.00 1.0



May 7 2020 Hour: 19:55 6.4 Agency: REL Regional

EMSC OT=19:55:06.4 33.97N 25.56E 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		1957	6.17								
BHL	BZ			EP		1957	6.43								
QRWL	SZ			EP		1957	7.14								
ZAHL	SZ			EP		1957	8.94								
RCY	SZ			EP		1957	8.66								
HWQ	BZ			EP		1957	9.09								
BEIL	SZ			EP		1957	12.16								

May 8 2020 Hour: 03:14 22.3 Agency: REL Regional

EMSC OT=03:14:22.3 34.02N 25.52E 10Km M=4.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		316	21.35								
QRWL	SZ			EP		316	22.12								
BHL	BZ			EP		316	22.96								
RCY	SZ			EP		316	24.12								
ZAHL	SZ			EP		316	24.31								
HWQ	BZ			EP		316	23.96								
BEIL	SZ			EP		316	27.60								

May 9 2020 Hour: 15:41 20.9 Agency: REL Regional

EMSC OT=15:41:20.9 39.33N 38.38E 4Km M=4.0 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1542	39.03								
FKH	SZ			EP		1542	41.89								
HWQ	BZ			EP		1542	43.45								
ZAHL	SZ			EP		1542	49.01								
BHL	BZ			EP		1542	49.97								
DQRL	SZ			EP		1542	51.55								
RCY	SZ			EP		1542	49.75								
QRWL	SZ			EP		1542	51.46								

May 10 2020 Hour: 10:26 35.1 Lat: 32.92N Lon: 35.70E Depth: 5 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	65	11	EP		1026	45.69	-0.04	47						1.0
RCY	SN	65	11	ES		1026	53.65	0.08							1.0
QRWL	SZ	70	358	EP		1026	46.40	-0.05							1.0
QRWL	SN	70	358	ES		1026	54.75	-0.07							1.0
DQRL	SZ	88	352	EP		1026	49.50	0.10							1.0
ZAHL	SZ	106	9	EP		1026	52.16	-0.05							1.0
ZAHL	SN	106	9	ES		1027	4.84	-0.00							1.0
BHL	BZ	110	358	EP		1026	52.86	0.04							1.0

May 10 2020 Hour: 12: 8 19.7 Agency: REL Regional

EMSC OT=12:08:19.7 36.56N 26.86E 121Km M=4.3 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1210	3.52								
HWQ	BZ			EP		1210	6.83								
QRWL	SZ			EP		1210	7.26								
ZAHL	SZ			EP		1210	7.26								
BEIL	SZ			EP		1210	7.84								
RCY	SZ			EP		1210	9.28								

May 11 2020 Hour: 2:38 21.8 Lat: 32.56N Lon: 35.58E Depth: 5 Agency: REL Regional  
Magnitudes: 3.6MC REL Rms: 0.3 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	107	13	EP		238	39.86	0.80							1.0
RCY	SN	107	13	ES		238	51.91	0.08							1.0
QRWL	SZ	110	5	EP		238	39.04	-0.47	122						1.0
DQRL	SZ	127	360	EP		238	41.70	-0.33							1.0
DQRL	SN	127	360	ES		238	57.09	0.08							1.0
ZAHL	SZ	147	11	EP		238	44.78	-0.17							1.0
BHL	BZ	149	3	EP		238	45.18	-0.12							1.0
HWQ	BZ	194	10	EP		238	51.45	0.04							1.0
BEIL	SZ	227	14	EP		238	55.63	0.14							1.0

May 11 2020 Hour: 3:53 52.6 Lat: 33.29N Lon: 34.61E Depth: 19 Agency: REL Local  
Magnitudes: 3.2MC REL Rms: 0.1 secs

OFFSHORE SOUTH LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	100	62	EP		354	8.39	0.02	75						1.0
DQRL	SN	100	62	ES		354	20.11	0.05							1.0
QRWL	SZ	104	74	EP		354	8.77	-0.08							1.0
QRWL	SN	104	74	ES		354	20.87	-0.02							1.0
RCY	SZ	116	78	EP		354	10.62	-0.11							1.0
BHL	BZ	119	55	EP		354	10.98	-0.04							1.0
ZAHL	SZ	134	62	EP		354	13.45	0.11							1.0
HWQ	BZ	165	48	EP		354	17.31	-0.12							1.0
BEIL	SZ	201	46	EP		354	21.95	0.12							1.0

May 11 2020 Hour: 10:5 19.1 Agency: REL Regional  
EMSC OT=10:05:19.1 36.16N 35.95E 8Km M=2.8 CENTRAL TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		10	5	50.78							
BEIL	SZ			EP		10	5	46.89							
BHL	BZ			EP		10	5	46.20							
FKH	SZ			EP		10	5	51.72							
RCY	SZ			EP		10	6	1.72							

May 12 2020 Hour: 17:23 26.5 Lat: 35.89N Lon: 35.81E Depth: 16 Agency: REL Regional  
Magnitudes: 3.1MC REL Rms: 0.0 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	154	167	EP		1723	50.15	0.03	60						1.0
BEIL	SN	154	167	ES		1724	7.59	0.03							1.0
HWQ	BZ	180	176	EP		1723	53.33	-0.06							1.0
HWQ	BN	180	176	ES		1724	13.23	-0.03							1.0
BHL	BZ	221	184	EP		1723	58.57	0.04							1.0
ZAHL	SZ	226	178	EP		1723	59.12	-0.02							1.0
DQRL	SZ	244	185	EP		1724	1.39	0.06							1.0
RCY	SZ	266	179	EP		1724	4.08	-0.05							1.0

May 12 2020 Hour: 22:41 14.1 Agency: REL Distant  
EMSC OT=22:41:14.1 12.03S 166.59E 127Km M=6.6 SANTA CRUZ ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		23	0	10.78							
HWQ	BZ			EP		23	0	9.56							

May 13 2020 Hour: 17:16 8.4 Lat: 34.03N Lon: 35.96E Depth: 3 Agency: REL Local  
Magnitudes: 2.8MC REL Rms: 0.1 secs

BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	21	199	EP		1716	11.80	0.02							1.0
ZAHL	SN	21	199	ES		1716	14.34	0.03							1.0
HWQ	BZ	27	358	EP		1716	12.66	-0.14	44						1.0

HWQ	BN	27	358	ES		1716	16.09	-0.00									1.0
BHL	BZ	32	243	EP		1716	13.54	0.03									1.0
CPTL	SZ	47	251	EP		1716	16.18	0.18									0.2
DQRL	SZ	51	225	EP		1716	16.67	0.03									1.0
QRWL	SZ	60	206	EP		1716	17.98	-0.03									1.0
BEIL	SZ	60	20	EP		1716	18.20	0.14									1.0
RCY	SZ	61	191	EP		1716	18.08	-0.09									1.0

May 13 2020 Hour: 20:10 36.9 Agency: REL Distant

EMSC OT=20:10:36.9 20.73S 176.58W 250Km M=5.2 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2029	51.14								
HWQ	BZ			EP		2029	49.18								

May 14 2020 Hour: 22:33 36.4 Agency: REL Regional

EMSC OT=22:33:36.4 34.21N 25.73E 10Km M=4.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2235	32.28								
BHL	BZ			EP		2235	32.97								
RCY	SZ			EP		2235	35.07								
ZAHL	SZ			EP		2235	36.75								
HWQ	BZ			EP		2235	38.71								
BEIL	SZ			EP		2235	38.30								

May 15 2020 Hour: 14:49 21.3 Agency: REL Distant

EMSC OT=14:49:21.3 15.52S 173.05W 10Km M=5.8 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		15 9	8.41								
HWQ	BZ			EP		15 9	7.43								

May 15 2020 Hour: 15: 5 55.0 Agency: REL Distant

EMSC OT=15:05:55.0 15.17S 172.63W 26Km M=5.2 SAMOA ISLANDS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1525	42.04								
HWQ	BZ			EP		1525	41.21								

May 16 2020 Hour: 2:30 23.5 Agency: REL Regional

EMSC OT=02:30:23.5 34.01N 25.75E 10Km M=4.6 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		232	23.33								
RCY	SZ			EP		232	23.49								
BHL	BZ			EP		232	23.40								
ZAHL	SZ			EP		232	23.98								
HWQ	BZ			EP		232	24.77								
BEIL	SZ			EP		232	27.06								

May 16 2020 Hour: 18:53 16.0 Lat: 34.77N Lon: 32.33E Depth: 34 Agency: REL Regional

Magnitudes: 3.3MC REL

Rms: 0.1 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	320	107	EP		1853	58.82	-0.11							1.0
HWQ	BZ	336	98	EP		1854	1.00	0.08	66						1.0
HWQ	BN	336	98	ES		1854	34.18	0.05							1.0
QRWL	SZ	337	113	EP		1854	1.10	0.08							1.0
ZAHL	SZ	342	106	EP		1854	1.57	-0.09							1.0
RCY	SZ	352	113	EP		1854	2.94	0.01							1.0
BEIL	SZ	354	93	EP		1854	3.05	0.04							1.0
BEIL	SN	354	93	ES		1854	37.71	-0.06							1.0

May 16 2020 Hour: 18:55 10.8 Lat: 34.75N Lon: 32.68E Depth: 0 Agency: REL Regional  
Magnitudes: 3.5MC REL Rms: 0.0 secs

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ	275	110	EP		1855	50.91	0.03							1.0
BHL	BZ	289	108	EP		1855	52.76	-0.07							1.0
DQRL	SZ	290	113	EP		1855	52.97	0.01							1.0
HWQ	BZ	305	99	EP		1855	54.79	0.07	88						1.0
HWQ	BN	305	99	ES		1856	27.26	-0.00							1.0
QRWL	SZ	307	115	EP		1855	55.05	-0.00							1.0
ZAHL	SZ	311	108	EP		1855	55.53	-0.04							1.0
BEIL	SZ	322	93	EP		1855	56.85	-0.01							1.0
BEIL	SN	322	93	ES		1856	30.97	-0.01							1.0
RCY	SZ	323	115	EP		1855	57.02	0.02							1.0
RCY	SN	323	115	ES		1856	31.24	0.01							1.0

May 17 2020 Hour: 19: 7 44.1 Agency: REL Distant  
EMSC OT=19:07:44.1 25.54S 179.97E 487Km M=5.4 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1926	34.28								
BHL	BZ			EP		1926	34.94								

May 18 2020 Hour: 4:18 17.7 Agency: REL Regional  
EMSC OT=04:18:17.7 34.08N 25.60E 10Km M=5.3 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		420	18.59								
RCY	SZ			EP		420	19.80								
ZAHL	SZ			EP		420	20.28								
HWQ	BZ			EP		420	19.40								
BEIL	SZ			EP		420	23.79								

May 18 2020 Hour: 11:48 7.3 Agency: REL Regional  
EMSC OT=11:48:07.3 34.13N 25.53E 10Km M=5.0 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		1150	7.45								
QRWL	SZ			EP		1150	6.88								
BHL	BZ			EP		1150	7.30								
RCY	SZ			EP		1150	8.37								
ZAHL	SZ			EP		1150	9.22								
HWQ	BZ			EP		1150	9.27								
BEIL	SZ			EP		1150	13.27								

May 18 2020 Hour: 17:24 24.1 Agency: REL Regional  
EMSC OT=17:24:24.1 34.23N 45.72E 10Km M=4.3 IRAN-IRAQ BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1726	17.03								
HWQ	BZ			EP		1726	21.01								
ZAHL	SZ			EP		1726	22.15								
RCY	SZ			EP		1726	22.37								
BHL	BZ			EP		1726	24.88								
QRWL	SZ			EP		1726	24.04								
DQRL	SZ			EP		1726	26.30								

May 18 2020 Hour: 23:22 34.5 Agency: REL Regional  
EMSC OT=23:22:34.5 34.11N 25.54E 10Km M=5.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ			EP		2324	29.64								
DQRL	SZ			EP		2324	31.84								
BHL	BZ			EP		2324	34.74								
QRWL	SZ			EP		2324	34.41								
RCY	SZ			EP		2324	36.45								
ZAHL	SZ			EP		2324	36.26								
HWQ	BZ			EP		2324	36.38								

BEIL SZ EP 2324 39.89

May 19 2020 Hour: 9:24 44.4 Agency: REL Regional

EMSC OT=09:24:44.4 34.02N 25.65E 10Km M=4.9 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		926	45.20								
RCY	SZ			EP		926	45.11								
HWQ	BZ			EP		926	46.44								
BEIL	SZ			EP		926	49.12								
FKH	SZ			EP		926	51.78								

May 19 2020 Hour: 17:55 28.1 Agency: REL Regional

EMSC OT=17:55:28.1 34.05N 25.54E 40Km M=4.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ			EP		1757	25.65								
QRWL	SZ			EP		1757	25.83								
HWQ	BZ			EP		1757	27.59								
RCY	SZ			EP		1757	27.78								
BEIL	SZ			EP		1757	31.34								

May 19 2020 Hour: 19:9 14.5 Agency: REL Regional

EMSC OT=19:09:14.5 34.07N 25.63E 10Km M=4.6 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1911	14.80								
RCY	SZ			EP		1911	15.43								
ZAHL	SZ			EP		1911	14.89								
HWQ	BZ			EP		1911	16.35								
BEIL	SZ			EP		1911	18.19								

May 20 2020 Hour: 2:12 19.0 Agency: REL Regional

EMSC OT=02:12:19.0 34.25N 25.77E 10Km M=4.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		214	15.35								
RCY	SZ			EP		214	17.86								
ZAHL	SZ			EP		214	18.07								
HWQ	BZ			EP		214	18.67								
BEIL	SZ			EP		214	19.62								

May 20 2020 Hour: 2:54 31.5 Lat: 35.89N Lon: 36.45E Depth: 9 Agency: REL Regional

Magnitudes: 3.7MC REL

Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	151	189	EP		254	54.99-0.00		132						1.0
HWQ	BZ	184	195	EP		254	59.69 0.11								1.0
HWQ	BN	184	195	ES		255	20.27-0.10								1.0
ZAHL	SZ	231	193	EP		255	5.42 0.05								1.0
BHL	BZ	232	199	EP		255	5.36-0.09								1.0
DQRL	SZ	255	199	EP		255	8.27-0.07								1.0
DQRL	SN	255	199	ES		255	35.72 0.10								1.0

May 20 2020 Hour: 15:44 50.6 Agency: REL Regional

EMSC OT=15:44:50.6 35.15N 27.92E 10Km M=4.1 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ			EP		1546	22.60								
DQRL	SZ			EP		1546	24.93								
BHL	BZ			EP		1546	25.60								
QRWL	SZ			EP		1546	27.20								
HWQ	BZ			EP		1546	27.73								
ZAHL	SZ			EP		1546	28.47								
RCY	SZ			EP		1546	28.84								
BEIL	SZ			EP		1546	29.87								

May 20 2020 Hour: 18:0 31.5 Agency: REL Regional

EMSC OT=18:00:31.5 34.06N 25.57E 10Km M=4.4 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		18 2	29.78								
QRWL	SZ			EP		18 2	32.46								
RCY	SZ			EP		18 2	33.56								
ZAHL	SZ			EP		18 2	32.80								
HWQ	BZ			EP		18 2	35.16								
BEIL	SZ			EP		18 2	36.25								

May 20 2020 Hour: 18:53 26.2 Agency: REL Regional

EMSC OT=18:53:26.2 36.65N 30.57E 92Km M=3.5 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1854	36.41								
HWQ	BZ			EP		1854	37.75								
BEIL	SZ			EP		1854	37.50								
DQRL	SZ			EP		1854	37.64								
ZAHL	SZ			EP		1854	40.03								
QRWL	SZ			EP		1854	40.17								
RCY	SZ			EP		1854	42.23								

May 20 2020 Hour: 23:43 15.9 Agency: REL Regional

EMSC OT=23:43:15.9 35.20N 20.22E 10Km M=5.8 CENTRAL MEDITERRANEAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ			EP		2346	8.26								
DQRL	SZ			EP		2346	9.97								
BHL	BZ			EP		2346	12.03								
QRWL	SZ			EP		2346	12.42								
HWQ	BZ			EP		2346	14.41								
ZAHL	SZ			EP		2346	13.70								
RCY	SZ			EP		2346	14.22								
BEIL	SZ			EP		2346	15.75								

May 21 2020 Hour: 6:44 32.7 Lat: 35.24N Lon: 36.54E Depth: 0 Agency: REL Regional

Magnitudes: 3.5MC 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	84	203	EP		644	46.22	-0.02	107						1.0
BEIL	SE	84	203	ES		644	56.30	0.05							1.0
FKH	SZ	111	186	EP		644	50.48	-0.10							1.0
FKH	SN	111	186	ES		645	3.83	0.02							1.0
HWQ	BZ	120	207	EP		644	51.90	-0.11							1.0
ZAHL	SZ	165	202	EP		644	58.83	-0.00							1.0
BHL	BZ	169	209	EP		644	59.42	-0.05							1.0
CPTL	SZ	179	214	EP		645	0.76	-0.06							1.0
DQRL	SZ	192	208	EP		645	2.88	0.20							1.0
QRWL	SZ	204	203	EP		645	4.04	-0.06							1.0
RCY	SZ	204	199	EP		645	4.33	0.14							1.0

May 21 2020 Hour: 13:45 53.3 Lat: 33.84N Lon: 35.88E Depth: 3 Agency: REL Local

Magnitudes: 2.8MC 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	2	17	EP		1345	54.11	0.01							1.0
BHL	BZ	22	289	EP		1345	56.77	-0.11							1.0
BHL	BN	22	289	ES		1345	59.60	0.04							1.0
DQRL	SZ	32	242	EP		1345	58.60	0.07							1.0
QRWL	SZ	37	209	EP		1345	59.31	-0.02							1.0
CPTL	SZ	38	279	EP		1345	59.31	-0.06							0.2
RCY	SZ	38	186	EP		1345	59.51	-0.01							1.0
RCY	SN	38	186	ES		1346	4.13	-0.01							1.0
HWQ	BZ	49	7	EP		1346	1.25	0.07	44						1.0
HWQ	BN	49	7	ES		1346	7.00	-0.04							1.0

BEIL SZ 83 20 EP 1346 6.63 0.01 1.0

May 21 2020 Hour: 15:41 14.5 Lat: 34.37N Lon: 36.23E Depth: 32 Agency: REL Local  
Magnitudes: 3.0MC REL Rms: 0.1 secs

HERMEL REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	20	349	EP		1541	20.29	-0.05	60						1.0
BEIL	SN	20	349	ES		1541	24.72	0.03							1.0
HWQ	BZ	28	250	EP		1541	21.12	0.04							1.0
HWQ	BN	28	250	ES		1541	25.99	0.00							1.0
ZAHL	SZ	64	209	EP		1541	25.50	-0.05							1.0
ZAHL	SN	64	209	ES		1541	33.76	-0.00							1.0
BHL	BZ	73	226	EP		1541	26.78	0.01							1.0
DQRL	SZ	95	220	EP		1541	29.48	-0.03							1.0
RCY	SZ	103	201	EP		1541	30.66	0.13							1.0
QRWL	SZ	104	209	EP		1541	30.50	-0.08							1.0

May 22 2020 Hour: 0:6 20.2 Lat: 31.03N Lon: 32.50E Depth: 49 Agency: REL Regional  
Magnitudes: 4.1MC REL Rms: 0.1 secs

EGYPT REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	410	46	EP		0 7	13.56	0.08							1.0
DQRL	SZ	414	43	EP		0 7	14.05	0.01							1.0
DQRL	SN	414	43	ES		0 7	53.93	0.01							1.0
RCY	SZ	417	48	EP		0 7	14.36	-0.03							1.0
RCY	SN	417	48	ES		0 7	54.51	-0.01							1.0
CPTL	SZ	423	41	EP		0 7	15.13	0.11							1.0
BHL	BZ	435	42	EP		0 7	16.73	0.12	166						1.0
ZAHL	SZ	447	45	EP		0 7	17.96	-0.07							1.0
HWQ	BZ	484	41	EP		0 7	22.38	-0.14							1.0
BEIL	SZ	520	41	EP		0 7	26.79	-0.08							1.0

May 22 2020 Hour: 3:21 10.4 Agency: REL Regional  
EMSC OT=03:21:10.4 39.40N 40.01E 5Km M=4.3 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		322	38.94								
HWQ	BZ			EP		322	41.81								
ZAHL	SZ			EP		322	49.22								
BHL	BZ			EP		322	49.78								
DQRL	SZ			EP		322	53.55								
QRWL	SZ			EP		322	53.10								

May 22 2020 Hour: 3:40 30.0 Agency: REL Regional  
EMSC OT=03:40:30.0 34.40N 25.85E 10Km M=5.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ			EP		342	22.70								
DQRL	SZ			EP		342	22.59								
BHL	BZ			EP		342	25.69								
QRWL	SZ			EP		342	25.61								
HWQ	BZ			EP		342	28.71								
ZAHL	SZ			EP		342	28.13								
RCY	SZ			EP		342	28.54								
BEIL	SZ			EP		342	28.90								

May 23 2020 Hour: 22:50 11.2 Agency: REL Regional  
EMSC OT=22:50:11.2 34.11N 25.45E 10Km M=5.3 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ			EP		2252	14.65								
QRWL	SZ			EP		2252	11.21								
ZAHL	SZ			EP		2252	14.04								
DQRL	SZ			EP		2252	15.96								
HWQ	BZ			EP		2252	15.49								
BEIL	SZ			EP		2252	17.33								

May 26 2020 Hour: 23:32 10.0 Lat: 33.28N Lon: 35.61E Depth: 0 Agency: REL Local  
 Magnitudes: 3.2MC REL Rms: 0.1 secs

**MARJAAYOUN REGION**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	31	13	EP		2332	14.93	-0.04							1.0
QRWL	SN	31	13	ES		2332	18.71	0.09							1.0
RCY	SZ	32	42	EP		2332	15.30	0.07	77						1.0
RCY	SN	32	42	ES		2332	19.00	-0.08							1.0
DQRL	SZ	47	356	EP		2332	17.68	0.00							1.0
BEYL	SZ	67	351	EP		2332	20.74	-0.02							1.0
CPTL	SZ	69	350	EP		2332	21.20	0.05							1.0
ZAHL	SZ	69	22	EP		2332	21.20	-0.00							1.0
BHL	BZ	69	4	EP		2332	21.09	-0.15							1.0
HWQ	BZ	115	16	EP		2332	28.55	-0.06							1.0
HWQ	BN	115	16	ES		2332	42.30	-0.05							1.0
BEIL	SZ	150	21	EP		2332	34.10	0.13							1.0
BEIL	SN	150	21	ES		2332	51.74	0.06							1.0

May 27 2020 Hour: 0:17 35.9 Lat: 34.07N Lon: 36.21E Depth: 12 Agency: REL Local  
 Magnitudes: 2.3MC 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	33	314	EP		017	41.63	-0.08							1.0
ZAHL	SZ	38	232	EP		017	42.41	0.04	23						1.0
ZAHL	SN	38	232	ES		017	47.17	-0.01							1.0
BEIL	SZ	53	358	EP		017	44.67	0.05							1.0
BEIL	SN	53	358	ES		017	51.08	-0.01							1.0
BHL	BZ	54	251	EP		017	44.92	0.02							1.0
DQRL	SZ	71	236	EP		017	47.54	0.10							1.0
RCY	SZ	72	209	EP		017	47.54	-0.05							1.0
QRWL	SZ	76	220	EP		017	47.99	-0.06							1.0

May 27 2020 Hour: 1:9 52.8 Agency: REL Regional  
 EMSC OT=01:09:52.8 34.11N 25.67E 10Km M=5.0 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		111	51.05								
QRWL	SZ			EP		111	51.84								
BHL	BZ			EP		111	52.63								
RCY	SZ			EP		111	52.90								
ZAHL	SZ			EP		111	53.96								
HWQ	BZ			EP		111	53.43								
BEIL	SZ			EP		111	55.76								

May 27 2020 Hour: 2:58 38.4 Lat: 35.83N Lon: 35.78E Depth: 17 Agency: REL Regional  
 Magnitudes: 3.5MC 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	148	165	EP		259	1.16	0.09	97						1.0
BEIL	SN	148	165	ES		259	17.82	-0.03							1.0
HWQ	BZ	173	175	EP		259	4.13	-0.14							1.0
HWQ	BN	173	175	ES		259	23.44	0.03							1.0
BHL	BZ	214	183	EP		259	9.37	0.01							1.0
ZAHL	SZ	219	177	EP		259	9.97	-0.03							1.0
DQRL	SZ	236	185	EP		259	12.18	0.03							1.0
RCY	SZ	259	179	EP		259	15.01	0.03							1.0



May 28 2020 Hour: 7:18 44.6 Agency: REL Distant  
**EMSC OT=07:18:44.6 22.34S 174.36W 10Km M=5.9 TONGA REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 738 31.90  
 HWQ BZ EP 738 31.37

May 28 2020 Hour: 9:46 48.1 Agency: REL Distant  
**EMSC OT=09:46:48.1 27.68S 174.90W 10Km M=5.8 KERMADEC ISLANDS REGION**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 BHL BZ EP 10 6 41.87  
 HWQ BZ EP 10 6 40.41

May 30 2020 Hour: 7:22 58.0 Agency: REL Regional  
**EMSC OT=07:22:58.0 35.63N 26.76E 10Km M=4.2 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 QRWL SZ EP 724 48.59  
 HWQ BZ EP 724 48.65  
 ZAHL SZ EP 724 50.04  
 RCY SZ EP 724 49.18  
 BEIL SZ EP 724 51.02

May 30 2020 Hour: 15:58 37.6 Agency: REL Regional  
**EMSC OT=15:58:37.6 35.54N 26.67E 15Km M=4.2 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 16 0 27.32  
 ZAHL SZ EP 16 0 27.12  
 QRWL SZ EP 16 0 25.75  
 HWQ BZ EP 16 0 26.68  
 RCY SZ EP 16 0 27.73  
 BEIL SZ EP 16 0 28.12

May 30 2020 Hour: 18:21 57.8 Agency: REL Regional  
**EMSC OT=18:21:57.8 35.51N 26.74E 20Km M=4.6 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 DQRL SZ EP 1823 45.72  
 QRWL SZ EP 1823 47.32  
 HWQ BZ EP 1823 48.65  
 ZAHL SZ EP 1823 48.65  
 RCY SZ EP 1823 49.71  
 BEIL SZ EP 1823 49.71

May 30 2020 Hour: 23:50 12.8 Agency: REL Regional  
**EMSC OT=23:50:12.8 35.62N 26.72E 7Km M=4.0 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 QRWL SZ EP 2352 4.33  
 HWQ BZ EP 2352 4.59  
 ZAHL SZ EP 2352 4.86  
 BEIL SZ EP 2352 5.92

May 31 2020 Hour: 1:13 56.7 Agency: REL Regional  
**EMSC OT=01:13:56.7 35.53N 26.75E 20Km M=3.9 CRETE, GREECE**  
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT  
 QRWL SZ EP 115 44.66  
 HWQ BZ EP 115 46.48  
 ZAHL SZ EP 115 46.60  
 RCY SZ EP 115 47.32  
 BEIL SZ EP 115 46.26

May 31 2020 Hour: 23:25 39.6

Agency: REL Distant

**EMSC OT=23:25:39.6 23.90S 176.70W 100Km M=5.7 SOUTH OF FIJI ISLANDS**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		2345	19.47								
HWQ	BZ			EP		2345	18.47								

# Epicentral Map of Lebanon

May 2020

