

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

June

2020

Prepared by
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GENERAL BULLETIN INFORMATION

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

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

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

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

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

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
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*(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	31 2020	Hour:	23:59	4.9	Agency: REL	Distant
EMSC OT=23:59:04.9 27.72N 53.33E 30Km M=5.0 SOUTHERN IRAN						
STAT	CO	DIST	AZI	PHASE	P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BEIL	SZ			EP	24	2 50.00
ZAHL	SZ			EP	24	2 50.62
HWQ	BZ			EP	24	2 51.10
BHL	BZ			EP	24	2 52.49
DQRL	SZ			EP	24	2 53.43
June	2 2020	Hour:	23:22	13.3	Agency: REL	Regional
EMSC OT=23:22:13.3 37.34N 36.03E 15Km M=4.0 CENTRAL TURKEY						
STAT	CO	DIST	AZI	PHASE	P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BEIL	SZ			EP	2322	58.81
HWQ	BZ			EP	2323	2.41
BHL	BZ			EP	2323	7.32
CPTL	SZ			EP	2323	7.83
ZAHL	SZ			EP	2323	8.66
DQRL	SZ			EP	2323	10.76
QRWL	SZ			EP	2323	12.80
RCY	SZ			EP	2323	13.89
June	3 2020	Hour:	5:20	8.5	Agency: REL	Regional
EMSC OT=05:20:08.5 35.13N 29.13E 49Km M=4.2 EASTERN MEDITERRANEAN SEA						
STAT	CO	DIST	AZI	PHASE	P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
CPTL	SZ			EP	521	23.85
DQRL	SZ			EP	521	25.77
BHL	BZ			EP	521	25.70
QRWL	SZ			EP	521	28.17
HWQ	BZ			EP	521	28.32
ZAHL	SZ			EP	521	29.05
RCY	SZ			EP	521	29.99
BEIL	SZ			EP	521	29.99
June	3 2020	Hour:	8:16	54.1	Agency: REL	Regional
EMSC OT=08:16:54.1 33.54N 46.13E 10Km M=4.9 IRAN-IRAQ BORDER REGION						
STAT	CO	DIST	AZI	PHASE	P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BEIL	SZ			EP	818	52.01
HWQ	BZ			EP	818	54.59
RCY	SZ			EP	818	56.12
DQRL	SZ			EP	818	59.55
June	3 2020	Hour:	9:3	28.8	Agency: REL	Regional
EMSC OT=09:03:28.8 34.31N 25.92E 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	9	5 25.55
RCY	SZ			EP	9	5 27.53
HWQ	BZ			EP	9	5 27.78
BEIL	SZ			EP	9	5 30.36
June	3 2020	Hour:	9:31	38.7	Agency: REL	Distant
EMSC OT=09:31:38.7 25.02S 176.73W 100Km M=5.9 SOUTH OF FIJI ISLANDS						
STAT	CO	DIST	AZI	PHASE	P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
HWQ	BZ			EP	951	14.26
BHL	BZ			EP	951	13.06
BEIL	SZ			EP	951	13.11
QRWL	SZ			EP	951	13.96
RCY	SZ			EP	951	13.89

June 3 2020 Hour: 15:54 4.6

Agency: REL Distant

EMSC OT=15:54:04.6 7.01S 116.88E 650Km M=5.7 BALI SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		16	5	41.50							
RCY	SZ			EP		16	5	42.26							
HWQ	BZ			EP		16	5	42.12							
ZAHL	SZ			EP		16	5	42.03							
QRWL	SZ			EP		16	5	42.69							
BHL	BZ			EP		16	5	42.84							
DQRL	SZ			EP		16	5	43.41							
CPTL	SZ			EP		16	5	43.27							

June 4 2020 Hour: 8:49 38.7

Agency: REL Distant

EMSC OT=08:49:38.7 2.96N 128.24E 105Km M=6.4 HALMAHERA, INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		9	2	26.78							
HWQ	BZ			EP		9	2	27.86							
ZAHL	SZ			EP		9	2	28.83							
BHL	BZ			EP		9	2	28.94							
DQRL	SZ			EP		9	2	29.52							
RCY	SZ			EP		9	2	29.48							

June 4 2020 Hour: 18:15 12.2

Lat: 36.91N Lon: 36.51E Depth: 7 Agency: REL Regional
Magnitudes: 3.8MC REL

TURKEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	264	187	EP		1815	50.43	0.06	133						1.0
BEIL	SN	264	187	ES		1816	18.56-0.03								1.0
HWQ	BZ	296	190	EP		1815	54.44	0.03							1.0
HWQ	BN	296	190	ES		1816	25.48-0.14								1.0
BHL	BZ	342	193	EP		1816	0.26	0.16							1.0
BHL	BN	342	193	ES		1816	35.67	0.14							1.0
ZAHL	SZ	343	190	EP		1816	0.12-0.11								1.0
CPTL	SZ	347	196	EP		1816	0.45-0.23								1.0
DQRL	SZ	365	194	EP		1816	3.10	0.12							1.0
QRWL	SZ	380	192	EP		1816	4.62-0.19								1.0
RCY	SZ	383	189	EP		1816	5.39	0.16							1.0
RCY	SN	383	189	ES		1816	44.48	0.02							1.0

June 4 2020 Hour: 21:10 30.4

Agency: REL Regional

EMSC OT=21:10:30.4 35.55N 26.72E 10Km M=4.3 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2112	19.77								
BHL	BZ			EP		2112	18.33								
QRWL	SZ			EP		2112	21.08								
HWQ	BZ			EP		2112	21.40								
ZAHL	SZ			EP		2112	22.62								
RCY	SZ			EP		2112	22.93								
BEIL	SZ			EP		2112	23.41								

June 5 2020 Hour: 5:23 1.7

Lat: 33.01N Lon: 35.29E Depth: 9 Agency: REL Regional
Magnitudes: 3.1MC REL

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	70	32	EP		523	13.21	0.11	68						1.0
RCY	SZ	74	43	EP		523	13.68-0.10								1.0
RCY	SN	74	43	ES		523	22.77	0.01							1.0
DQRL	SZ	82	19	EP		523	14.94	0.01							1.0
DQRL	SN	82	19	ES		523	24.76	0.01							1.0
BEYL	SZ	98	11	EP		523	17.21-0.00								1.0
CPTL	SZ	99	10	EP		523	17.44-0.04								1.0
BHL	BZ	105	19	EP		523	18.35-0.01								1.0
ZAHL	SZ	109	30	EP		523	19.04	0.02							1.0

HWQ	BZ	153	23	EP	523	25.45-0.05	1.0
HWQ	BN	153	23	ES	523	43.14-0.01	1.0
BEIL	SZ	189	26	EP	523	30.31 0.07	1.0

June 5 2020 Hour: 5:57 34.0 Lat: 33.01N Lon: 35.30E Depth: 4 Agency: REL Regional Magnitudes: 2.6MC REL DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	70	30	EP		557	45.26-0.03	33							1.0
RCY	SZ	74	42	EP		557	45.99 0.05								1.0
RCY	SN	74	42	ES		557	54.76-0.02								1.0
DQRL	SZ	82	18	EP		557	47.14-0.04								1.0
BHL	BZ	105	18	EP		557	51.00 0.06								1.0
HWQ	BZ	153	23	EP		557	58.14-0.04								1.0
HWQ	BN	153	23	ES		558	16.11 0.02								1.0

June 5 2020 Hour: 18:7 16.5 EMSC OT=18:06:20.3 38.24N 38.70E 5Km M=5.2 EASTERN TURKEY Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		18	7	25.76							
HWQ	BZ			EP		18	7	30.80							
ZAHL	SZ			EP		18	7	36.50							
BHL	BZ			EP		18	7	37.45							
CPTL	SZ			EP		18	7	38.49							
DQRL	SZ			EP		18	7	40.72							
RCY	SZ			EP		18	7	41.08							
QRWL	SZ			EP		18	7	41.75							

June 7 2020 Hour: 8:34 31.3 Lat: 34.62N Lon: 36.17E Depth: 6 Agency: REL Local Magnitudes: 2.8MC REL

LEBANON - SYRIA BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	9	173	EP		834	33.12-0.03	43							1.0
BEIL	SN	9	173	ES		834	34.54 0.03								1.0
HWQ	BZ	44	209	EP		834	38.54 0.09								1.0
HWQ	BN	44	209	ES		834	43.71-0.02								1.0
ZAHL	SZ	89	197	EP		834	45.66-0.06								1.0
BHL	BZ	93	211	EP		834	46.33-0.03								1.0
DQRL	SZ	116	209	EP		834	49.88-0.01								1.0
QRWL	SZ	128	201	EP		834	51.67 0.07								1.0
RCY	SZ	129	194	EP		834	51.77-0.03								1.0

June 10 2020 Hour: 9:16 35.0 Lat: 33.67N Lon: 35.46E Depth: 7 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	11	68	EP		916	37.33 0.05	49							1.0
QRWL	SZ	25	123	EP		916	39.14-0.08								1.0
QRWL	SN	25	123	ES		916	42.26-0.05								1.0
CPTL	SZ	25	3	EP		916	39.12-0.10								1.0
BHL	BZ	32	34	EP		916	40.43 0.10								1.0
BHL	BN	32	34	ES		916	44.29 0.05								1.0
RCY	SZ	40	119	EP		916	41.60 0.00								1.0
SHBL	SZ	44	144	EP		916	42.41 0.10								1.0
ZAHL	SZ	45	62	EP		916	42.30-0.06								0.2
HWQ	BZ	81	33	EP		916	48.16-0.04								1.0
HWQ	BN	81	33	ES		916	57.89-0.04								1.0
BEIL	SZ	118	34	EP		916	53.90 0.17								0.2

June 11 2020 Hour: 22:10 52.4 Lat: 33.79N Lon: 35.82E Depth: 12 Agency: REL Local
 Magnitudes: 2.5MC REL

ZAHLE REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL	SZ	9	41	EP		2210	55.10	0.02							1.0
ZAHL	SN	9	41	ES		2210	57.10	0.01							1.0
BHL	BZ	20	308	EP		2210	56.20	-0.03	30						1.0
BHL	BN	20	308	ES		2210	59.04	-0.05							1.0
DQRL	SZ	25	247	EP		2210	57.10	0.09							1.0
QRWL	SZ	30	205	EP		2210	57.80	0.06							1.0
BEYL	SZ	31	286	EP		2210	57.93	0.08							0.2
RCY	SZ	33	177	EP		2210	58.12	-0.08							1.0
RCY	SN	33	177	ES		2211	2.54	0.04							1.0
CPTL	SZ	34	289	EP		2210	58.31	0.15							0.2
SHBL	SZ	50	188	EP		2211	0.68	-0.09							1.0
HWQ	BZ	55	12	EP		2211	1.51	0.01							1.0
BEIL	SZ	89	22	EP		2211	6.74	0.18							0.2

June 13 2020 Hour: 15:51 22.6

Agency: REL Distant

EMSC OT=15:51:22.6 28.88N 128.25E 155Km M=6.7 RYUKYU ISLANDS, JAPAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		16	2	51.64							
HWQ	BZ			EP		16	2	52.97							
ZAHL	SZ			EP		16	2	54.62							
BHL	BZ			EP		16	2	54.83							
RCY	SZ			EP		16	2	55.58							
DQRL	SZ			EP		16	2	55.90							

June 13 2020 Hour: 20:18 59.6

Agency: REL Distant

EMSC OT=20:18:59.6 24.33N 122.52E 56Km M=5.4 TAIWAN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2030	28.85								
HWQ	BZ			EP		2030	30.26								
ZAHL	SZ			EP		2030	31.84								
BHL	BZ			EP		2030	32.07								
RCY	SZ			EP		2030	32.78								
DQRL	SZ			EP		2030	32.95								
QRWL	SZ			EP		2030	33.01								

June 13 2020 Hour: 21: 8 31.1

Agency: REL Distant

EMSC OT=21:08:31.1 18.93N 145.04E 639Km M=6.2 PAGAN REG.N. MARIANA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2120	41.88								
HWQ	BZ			EP		2120	43.09								
BHL	BZ			EP		2120	44.02								
ZAHL	SZ			EP		2120	44.87								
DQRL	SZ			EP		2120	46.08								

June 13 2020 Hour: 23:15 4.6

Agency: REL Distant

EMSC OT=23:15:04.6 27.65N 53.35E 10Km M=4.8 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2318	52.88								
HWQ	BZ			EP		2318	52.96								
BHL	BZ			EP		2318	54.89								

June 14 2020 Hour: 14:24 28.4

Agency: REL Regional

EMSC OT=14:24:28.4 39.35N 40.73E 5Km M=5.9 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1425	59.72								
HWQ	BZ			EP		1426	3.64								
ZAHL	SZ			EP		1426	9.31								
BHL	BZ			EP		1426	8.96								
CPTL	SZ			EP		1426	12.26								

DQRL SZ	EP	1426	13.52
RCY SZ	EP	1426	13.80
QRWL SZ	EP	1426	15.20

June 14 2020 Hour: 15:33 35.7 Lat: 34.09N Lon: 36.17E Depth: 16 Agency: REL Local Magnitudes: 2.8MC REL BAALBECK REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	30	315	EP		1533	41.17	0.01	43						1.0
HWQ	BN	30	315	ES		1533	45.22	-0.02							1.0
ZAHL	SZ	37	226	EP		1533	42.25	0.05							1.0
ZAHL	SN	37	226	ES		1533	47.04	0.00							1.0
BEIL	SZ	50	1	EP		1533	44.03	-0.00							1.0
BEIL	SN	50	1	ES		1533	50.23	0.01							1.0
BHL	BZ	52	247	EP		1533	44.32	-0.06							1.0
CPTL	SZ	68	251	EP		1533	46.78	0.15							0.2
DQRL	SZ	70	233	EP		1533	47.07	0.06							1.0
RCY	SZ	73	206	EP		1533	47.29	-0.13							1.0
QRWL	SZ	76	217	EP		1533	47.76	-0.00							1.0
SHBL	SZ	91	206	EP		1533	50.21	0.07							1.0

June 14 2020 Hour: 18:6 1.5 Agency: REL Distant EMSC OT=18:06:01.5 27.76N 53.47E 10Km M=5.1 SOUTHERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		18	9	47.38							
RCY	SZ			EP		18	9	50.07							
ZAHL	SZ			EP		18	9	48.68							
HWQ	BZ			EP		18	9	49.90							
QRWL	SZ			EP		18	9	50.76							
BHL	BZ			EP		18	9	52.85							
DQRL	SZ			EP		18	9	52.93							

June 15 2020 Hour: 2:54 9.1 Lat: 33.71N Lon: 35.72E Depth: 4 Agency: REL Local Magnitudes: 3.0MC REL CHOUF REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ	14	269	EP		254	11.57	0.07	63						1.0
DQRL	SN	14	269	ES		254	13.26	0.00							1.0
QRWL	SZ	18	191	EP		254	12.11	-0.05							1.0
BHL	BZ	23	345	EP		254	12.71	-0.17							1.0
ZAHL	SZ	23	43	EP		254	13.02	0.09							1.0
RCY	SZ	26	155	EP		254	13.34	-0.06							1.0
CPTL	SZ	30	312	EP		254	14.16	0.10							1.0
CPTL	SN	30	312	ES		254	17.68	-0.03							1.0
SHBL	SZ	40	176	EP		254	15.71	0.07							1.0
HWQ	BZ	67	18	EP		254	19.89	-0.05							1.0
HWQ	BN	67	18	ES		254	27.99	0.06							1.0
BEIL	SZ	102	25	EP		254	25.59	-0.03							1.0

June 15 2020 Hour: 6:51 30.2 Agency: REL Regional EMSC OT=06:51:30.2 39.35N 40.75E 5Km M=5.5 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		653	1.02								
HWQ	BZ			EP		653	5.59								
ZAHL	SZ			EP		653	10.46								
BHL	BZ			EP		653	11.66								
CPTL	SZ			EP		653	13.71								
DQRL	SZ			EP		653	15.16								
RCY	SZ			EP		653	15.61								
QRWL	SZ			EP		653	16.35								

June 15 2020 Hour: 20:12 58.1 Agency: REL Regional

EMSC OT=20:12:58.1 34.25N 25.76E 10Km M=4.2 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2014	54.32								
QRWL	SZ			EP		2014	54.63								
RCY	SZ			EP		2014	56.96								
ZAHL	SZ			EP		2014	57.51								
HWQ	BZ			EP		2014	57.73								
BEIL	SZ			EP		2014	59.51								

June 16 2020 Hour: 1:30 46.8

Agency: REL Distant

EMSC OT=01:30:46.8 37.85N 72.37E 112Km M=5.7 TAJIKISTAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		136	40.47								
HWQ	BZ			EP		136	42.53								
ZAHL	SZ			EP		136	45.02								
BHL	BZ			EP		136	45.49								
RCY	SZ			EP		136	46.25								
CPTL	SZ			EP		136	47.01								
QRWL	SZ			EP		136	46.70								
DQRL	SZ			EP		136	46.74								

June 16 2020 Hour: 14:30 27.2

Agency: REL Regional

EMSC OT=14:30:27.2 27.30N 34.70E 10Km M=5.4 RED SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1432	0.07								
RCY	SZ			EP		1431	58.00								
DQRL	SZ			EP		1431	59.96								
BHL	BZ			EP		1432	3.57								
ZAHL	SZ			EP		1432	4.98								
HWQ	BZ			EP		1432	10.23								
BEIL	SZ			EP		1432	14.59								

June 17 2020 Hour: 2:20 13.8 Lat: 35.20N Lon: 36.52E Depth: 3 Agency: REL Regional
Magnitudes: 3.1MC REL Rms: 0.1 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	79	203	EP		220	26.77	0.12	68						1.0
BEIL	SN	79	203	ES		220	36.10	-0.04							1.0
HWQ	BZ	115	207	EP		220	32.33	-0.09							1.0
HWQ	BN	115	207	ES		220	46.23	0.05							1.0
ZAHL	SZ	160	202	EP		220	39.01	-0.07							1.0
BHL	BZ	164	209	EP		220	39.63	-0.08							1.0
CPTL	SZ	174	214	EP		220	41.15	0.08							0.2
DQRL	SZ	188	208	EP		220	42.97	0.06							1.0
QRWL	SZ	199	203	EP		220	44.37	0.04							1.0
RCY	SZ	199	199	EP		220	44.24	-0.19							1.0
SHBL	SZ	218	199	EP		220	46.90	0.20							1.0

June 17 2020 Hour: 6:24 19.0

Agency: REL Distant

EMSC OT=06:24:19.0 16.12S 175.01W 292Km M=5.6 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		643	25.29								
HWQ	BZ			EP		643	25.75								
BHL	BZ			EP		643	26.60								

June 17 2020 Hour: 8:47 14.4

Agency: REL Regional

EMSC OT=08:47:14.4 7.51N 38.61E 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		848	11.43								
HWQ	BZ			EP		848	15.56								
BHL	BZ			EP		848	22.60								
DQRL	SZ			EP		848	26.55								

QRWL SZ	EP	848	28.02
RCY SZ	EP	848	27.98

June 17 2020 Hour: 12:24 30.7 Agency: REL Regional
EMSC OT=12:24:30.7 36.16N 35.71E 8Km M=3.2 CENTRAL TURKEY
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
BEIL SZ EP 1224 58.33
HWQ BZ EP 1225 1.21
DQRL SZ EP 1225 9.77

June 17 2020 Hour: 17: 0 54.1 Lat: 33.63N Lon: 37.19E Depth: 33 Agency: REL Regional
Magnitudes: 3.2MC REL
SYRIA REGION

STAT CO DIST AZI PHASE P	HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
ZAHL SZ 124 282 EP	17 1 12.67 0.01 1.0
RCY SZ 127 264 EP	17 1 13.15 0.08 1.0
RCY SN 127 264 ES	17 1 27.01-0.09 1.0
HWQ BZ 136 302 EP	17 1 13.91-0.23 1.0
BEIL SZ 137 318 EP	17 1 14.23-0.04 71 1.0
BEIL SN 137 318 ES	17 1 29.26 0.09 1.0
SHBL SZ 138 257 EP	17 1 14.36-0.13 1.0
QRWL SZ 141 267 EP	17 1 14.90 0.18 1.0
DQRL SZ 151 274 EP	17 1 16.11 0.12 1.0

June 17 2020 Hour: 23:50 1.8 Agency: REL Regional
EMSC OT=23:50:01.8 33.72N 24.50E 33Km M=4.3 CENTRAL MEDITERRANEAN SEA
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT

CPTL SZ	EP	2352	8.57
DQRL SZ	EP	2352	9.01
BHL BZ	EP	2352	10.98
QRWL SZ	EP	2352	11.14
RCY SZ	EP	2352	13.27
ZAHL SZ	EP	2352	13.67
HWQ BZ	EP	2352	14.16
BEIL SZ	EP	2352	17.34

June 18 2020 Hour: 9: 8 54.1 Agency: REL Regional
EMSC OT=09:08:54.1 36.04N 35.84E 7Km M=2.9 CENTRAL TURKEY
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT

BEIL SZ	EP	9	9	20.49
HWQ BZ	EP	9	9	24.60
BHL BZ	EP	9	9	28.91
DQRL SZ	EP	9	9	39.19
RCY SZ	EP	9	9	38.21

June 18 2020 Hour: 12:49 53.4 Agency: REL Distant
EMSC OT=12:49:53.4 33.41S 177.81W 8Km M=7.4 SOUTH OF KERMADEC REGION
STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT

BEIL SZ	EP	13	9	42.82
HWQ BZ	EP	13	9	42.34
ZAHL SZ	EP	13	9	42.87
BHL BZ	EP	13	9	43.66
CPTL SZ	EP	13	9	42.40
RCY SZ	EP	13	9	42.87
DQRL SZ	EP	13	9	43.93
QRWL SZ	EP	13	9	43.68
SHBL SZ	EP	13	9	43.85

June 18 2020 Hour: 16:144.5 Lat: 32.44N Lon: 35.28E Depth: 4 Agency: REL Regional
 Magnitudes: 3.0MC REL

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	110	23	EP		16	2	2.15-0.11	51						1.0
SHBL	SN	110	23	ES		16	2	15.48 0.07							1.0
RCY	SZ	128	24	EP		16	2	5.10 0.03							1.0
RCY	SN	128	24	ES		16	2	20.23-0.06							1.0
QRWL	SZ	129	17	EP		16	2	5.12 0.03							1.0
DQRL	SZ	143	11	EP		16	2	7.27 0.04							1.0
DQRL	SN	143	11	ES		16	2	24.03-0.01							1.0
BHL	BZ	166	12	EP		16	2	10.56-0.07							1.0
ZAHL	SZ	167	19	EP		16	2	10.84 0.05							1.0
HWQ	BZ	213	17	EP		16	2	17.06 0.32							0.2

June 19 2020 Hour: 7:43 20.7 Agency: REL Regional

EMSC OT=07:43:20.7 34.21N 25.53E 10Km M=5.0 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ			EP			745	19.37							
DQRL	SZ			EP			745	20.35							
BHL	BZ			EP			745	20.82							
QRWL	SZ			EP			745	22.40							
HWQ	BZ			EP			745	21.87							
SHBL	SZ			EP			745	23.86							
RCY	SZ			EP			745	23.34							
BEIL	SZ			EP			745	26.36							

June 19 2020 Hour: 20:34 7.5 Agency: REL Regional

EMSC OT=20:34:07.5 34.38N 25.46E 10Km M=4.5 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2036		9.72							
BHL	BZ			EP		2036		8.89							
QRWL	SZ			EP		2036		10.48							
SHBL	SZ			EP		2036		11.65							
ZAHL	SZ			EP		2036		11.93							
RCY	SZ			EP		2036		12.21							
HWQ	BZ			EP		2036		12.41							
BEIL	SZ			EP		2036		14.77							

June 19 2020 Hour: 21:17 12.4 Agency: REL Regional

EMSC OT=21:17:12.4 34.43N 25.49E 10Km M=4.5 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		2119		13.98							
BHL	BZ			EP		2119		12.39							
QRWL	SZ			EP		2119		14.42							
SHBL	SZ			EP		2119		15.02							
RCY	SZ			EP		2119		15.84							
ZAHL	SZ			EP		2119		15.51							
HWQ	BZ			EP		2119		16.66							
BEIL	SZ			EP		2119		18.58							

June 20 2020 Hour: 19:52 33.8 Lat: 34.83N Lon: 34.33E Depth: 13 Agency: REL Regional

Magnitudes: 3.3MC REL

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	160	130	EP		1952	58.11-0.19								1.0
HWQ	BZ	161	112	EP		1952	58.61 0.15	75							1.0
HWQ	BN	161	112	ES		1953	16.73 0.02								1.0
DQRL	SZ	169	137	EP		1952	59.56-0.03								1.0
BEIL	SZ	173	100	EP		1952	59.92-0.07								1.0
BEIL	SN	173	100	ES		1953	19.34-0.03								1.0
ZAHL	SZ	179	127	EP		1953	0.92 0.06								1.0
RCY	SZ	203	136	EP		1953	3.81-0.01								1.0

SHBL SZ 210 141 EP 1953 4.80 0.10 1.0

June 21 2020 Hour: 12:31 5.8 Lat: 33.82N Lon: 36.64E Depth: 28 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
ZAHL	SZ	70	273	EP		12	3	27.57	0.00						1.0
HWQ	BZ	82	308	EP		12	3	29.27	0.08	61					1.0
HWQ	BN	82	308	ES		12	3	39.10	0.02						1.0
RCY	SZ	83	245	EP		12	3	29.33	-0.06						1.0
BEIL	SZ	90	332	EP		12	3	30.32	-0.03						1.0
BEIL	SN	90	332	ES		12	3	41.10	-0.00						1.0
BHL	BZ	92	276	EP		12	3	30.53	-0.09						1.0
QRWL	SZ	94	251	EP		12	3	30.92	-0.01						1.0
SHBL	SZ	99	238	EP		12	3	31.70	0.09						1.0
DQRL	SZ	100	263	EP		12	3	31.82	0.01						1.0

June 21 2020 Hour: 22:40 52.6 Agency: REL Distant

EMSC OT=22:40:52.6 23.18N 93.35E 10Km M=5.6 MYANMAR-INDIA BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2249	53.71								
HWQ	BZ			EP		2249	54.91								
ZAHL	SZ			EP		2249	55.75								
SHBL	SZ			EP		2249	56.47								
QRWL	SZ			EP		2249	57.37								
BHL	BZ			EP		2249	57.01								
DQRL	SZ			EP		2249	58.21								

June 22 2020 Hour: 21:25 17.5 Lat: 33.93N Lon: 35.56E Depth: 7 Agency: REL Local Magnitudes: 2.5MC 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	9	243	EP		2125	19.50	0.11							1.0
BHL	BZ	9	106	EP		2125	19.50	-0.02	29						1.0
BHL	BN	9	106	ES		2125	20.95	-0.04							1.0
DQRL	SZ	25	178	EP		2125	21.31	-0.41							1.0
DQRL	SE	25	178	ES		2125	24.96	0.14							1.0
ZAHL	SZ	31	104	EP		2125	22.70	-0.01							1.0
ZAHL	SN	31	104	ES		2125	26.59	0.04							1.0
QRWL	SZ	44	165	EP		2125	24.70	0.02							1.0
HWQ	BZ	53	42	EP		2125	26.20	0.06							1.0
RCY	SZ	54	152	EP		2125	26.49	0.12							1.0
SHBL	SZ	66	165	EP		2125	28.36	0.03							1.0
BEIL	SZ	89	40	EP		2125	31.94	-0.03							1.0

June 23 2020 Hour: 7:43 27.4 Agency: REL Distant

EMSC OT=07:43:27.4 0.17N 123.74E 100Km M=5.9 MINAHASA, SULAWESI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		756	6.07								
HWQ	BZ			EP		756	6.65								
RCY	SZ			EP		756	7.57								
SHBL	SZ			EP		756	7.91								
QRWL	SZ			EP		756	7.62								
BHL	BZ			EP		756	7.77								
DQRL	SZ			EP		756	8.45								

June 24 2020 Hour: 19:47 46.5 Agency: REL Distant

EMSC OT=19:47:46.5 35.49N 141.01E 40Km M=5.9 NEAR EAST COAST OF HONSHU

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1959	58.18								
HWQ	BZ			EP		1959	59.16								
ZAHL	SZ			EP		20	0	1.36							
BHL	BZ			EP		20	0	1.93							
DQRL	SZ			EP		20	0	3.40							

RCY SZ		EP	20 0	3.23
QRWL SZ		EP	20 0	3.40
SHBL SZ		EP	20 0	4.13

June 25 2020 Hour: 10:329.6 Agency: REL Regional
EMSC OT=10:03:29.6 38.49N 44.06E 10Km M=5.4 TURKEY-IRAN BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL SZ				EP		10 5	20.06								
HWQ BZ				EP		10 5	24.02								
ZAHL SZ				EP		10 5	29.96								
BHL BZ				EP		10 5	30.30								
RCY SZ				EP		10 5	32.36								
DQRL SZ				EP		10 5	33.44								
QRWL SZ				EP		10 5	33.23								
SHBL SZ				EP		10 5	34.59								

June 25 2020 Hour: 21:518.4 Agency: REL Distant
EMSC OT=21:05:18.4 35.60N 82.49E 10Km M=6.3 XINJIANG-XIZANG BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL SZ				EP		2112	34.17								
HWQ BZ				EP		2112	36.58								
ZAHL SZ				EP		2112	38.46								
RCY SZ				EP		2112	39.80								
BHL BZ				EP		2112	39.20								
QRWL SZ				EP		2112	40.41								
SHBL SZ				EP		2112	40.07								
DQRL SZ				EP		2112	41.01								

June 26 2020 Hour: 19:3411.6 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL SZ				EP		1938	26.56								
BHL BZ				EP		1938	26.35								
QRWL SZ				EP		1938	27.49								
HWQ BZ				EP		1938	28.42								
ZAHL SZ				EP		1938	29.34								
SHBL SZ				EP		1938	28.94								
RCY SZ				EP		1938	29.34								
BEIL SZ				EP		1938	29.74								

June 26 2020 Hour: 19:5147.4 Lat: 34.00N Lon: 35.88E Depth: 5 Agency: REL Local
 Magnitudes: 3.1MC REL Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZAHL SZ		16	179	EP		1951	50.17-0.05								1.0
ZAHL SN		16	179	ES		1951	52.20-0.09								1.0
BHL BZ		24	243	EP		1951	50.99-0.41								1.0
BHL BN		24	243	ES		1951	54.78 0.44								1.0
HWQ BZ		31	11	EP		1951	52.51-0.04								1.0
HWQ BN		31	11	ES		1951	56.33-0.02								1.0
CPTL SZ		40	252	EP		1951	53.68-0.18								1.0
DQRL SZ		44	221	EP		1951	54.51-0.06								1.0
DQRL SN		44	221	ES		1951	59.76-0.09								1.0
QRWL SZ		54	200	EP		1951	56.20 0.05								1.0
RCY SZ		56	184	EP		1951	56.76 0.19								1.0
BEIL SZ		66	25	EP		1951	58.26 0.16								1.0
SHBL SZ		74	190	EP		1951	59.44 0.08								1.0

June 28 2020 Hour: 11:18 35.8

Agency: REL Regional

EMSC OT=11:18:35.8 35.45N 26.66E 10Km M=4.4 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		1120	27.05								
HWQ	BZ			EP		1120	27.19								
SHBL	SZ			EP		1120	27.75								
RCY	SZ			EP		1120	27.68								
BEIL	SZ			EP		1120	28.44								

June 28 2020 Hour: 17:43 29.0

Agency: REL Regional

EMSC OT=17:43:29.0 36.64N 28.25E 64Km M=5.5 DODECANESE-TURKEY BORDER REG

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ			EP		1744	58.96								
BHL	BZ			EP		1745	0.20								
DQRL	SZ			EP		1745	1.47								
HWQ	BZ			EP		1745	2.69								
ZAHL	SZ			EP		1745	4.37								
BEIL	SZ			EP		1745	3.73								
QRWL	SZ			EP		1745	4.43								
RCY	SZ			EP		1745	6.25								
SHBL	SZ			EP		1745	6.43								

June 28 2020 Hour: 19:24 21.6 Lat: 34.53N Lon: 32.45E Depth: 29 Agency: REL Regional
Magnitudes: 3.5MC REL

CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
CPTL	SZ	288	103	EP		1925	1.14	0.35							1.0
DQRL	SZ	302	107	EP		1925	2.92	0.27							1.0
BHL	BZ	304	102	EP		1925	2.94	0.12							1.0
QRWL	SZ	318	109	EP		1925	4.61	0.01							1.0
QRWL	SN	318	109	ES		1925	36.34	-0.05							1.0
HWQ	BZ	323	94	EP		1925	5.02	-0.21	84						1.0
HWQ	BN	323	94	ES		1925	37.30	-0.20							1.0
ZAHL	SZ	326	102	EP		1925	5.58	0.01							1.0
SHBL	SZ	332	112	EP		1925	6.32	-0.05							1.0
RCY	SZ	333	109	EP		1925	6.37	-0.18							1.0
RCY	SN	333	109	ES		1925	39.72	-0.07							1.0
BEIL	SZ	343	89	EP		1925	7.35	-0.33							1.0
BEIL	SN	343	89	ES		1925	42.07	0.32							1.0

June 29 2020 Hour: 4: 6 24.3

Agency: REL Regional

EMSC OT=04:06:24.3 36.68N 28.21E 75Km M=4.8 DODECANESE-TURKEY BORDER REG

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		4	7	57.69							1.0
DQRL	SZ			EP		4	7	54.16							1.0
HWQ	BZ			EP		4	7	59.02							1.0
QRWL	SZ			EP		4	8	0.62							1.0
BEIL	SZ			EP		4	7	59.61							1.0
ZAHL	SZ			EP		4	8	0.68							1.0
RCY	SZ			EP		4	8	2.36							1.0
SHBL	SZ			EP		4	8	2.47							1.0

June 30 2020 Hour: 22:55 42.2 Lat: 34.82N Lon: 36.61E Depth: 1 Agency: REL Regional
Magnitudes: 2.9MC REL

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	50	232	EP		2255	50.20	-0.07	48						1.0
BEIL	SN	50	232	ES		2255	56.22	0.00							1.0
HWQ	BZ	86	226	EP		2255	56.14	0.09							1.0
HWQ	BN	86	226	ES		2256	6.28	-0.00							1.0
ZAHL	SZ	126	212	EP		2256	2.53	-0.02							1.0
BHL	BZ	134	221	EP		2256	3.89	0.05							1.0
DQRL	SZ	156	218	EP		2256	7.06	-0.01							1.0

RCY SZ 163 206 EP	2256 8.06-0.05	1.0
QRWL SZ 165 211 EP	2256 8.25-0.09	1.0
SHBL SZ 182 206 EP	2256 10.94 0.10	1.0

**June 30 2020 Hour: 23:454.0 Lat: 33.64N Lon: 34.90E Depth: 30 Agency: REL Local
Magnitudes: 2.5MC 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	63	83	EP		23	5	4.77	0.03	28					1.0
DQRL	SN	63	83	ES		23	5	12.68	-0.01						1.0
QRWL	SZ	74	98	EP		23	5	6.25	0.03						1.0
QRWL	SN	74	98	ES		23	5	15.26	-0.00						1.0
BHL	BZ	76	67	EP		23	5	6.29	-0.27						0.2
SHBL	SZ	85	112	EP		23	5	7.84	-0.04						1.0
RCY	SZ	89	100	EP		23	5	8.39	0.01						1.0
ZAHL	SZ	95	75	EP		23	5	9.24	0.02						1.0
HWQ	BZ	120	54	EP		23	5	12.34	-0.02						1.0

Epicentral Map of Lebanon

JUNE 2020

