

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

October

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:

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

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.

October 1 2020 Hour: 1:13 33.5 Agency: REL Distant
EMSC OT=01:13:33.5 19.45S 174.22W 10Km M=6.5 TONGA
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BEIL SZ EP 133 17.86
 HWQ BZ EP 133 18.21
 BHL BZ EP 133 19.00
 QRWL SZ EP 133 19.88
 SHBL SZ EP 133 20.05

October 1 2020 Hour: 7:10 20.1 Lat: 34.40N Lon: 36.52E Depth: 15 Agency: REL Local
Magnitudes: 3.0MC REL Rms: 0.1 secs
LEBANON - SYRIA BORDER REGION
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BEIL SZ 35 296 EP 710 26.20-0.03 62 1.0
 BEIL SN 35 296 ES 710 30.78 0.04 1.0
 HWQ BZ 55 255 EP 710 29.12-0.11 1.0
 HWQ BE 55 255 ES 710 35.91-0.05 1.0
 ZAHL SZ 84 224 EP 710 33.59 0.02 1.0
 BHL BZ 98 236 EP 710 35.61 0.14 1.0
 DQRL SZ 117 229 EP 710 38.51 0.13 1.0
 RCY SZ 119 212 EP 710 38.59-0.08 1.0
 RCY SN 119 212 ES 710 52.38 0.00 1.0
 QRWL SZ 123 220 EP 710 39.20 0.02 1.0
 SHBL SZ 138 212 EP 710 41.31-0.08 1.0

October 1 2020 Hour: 11: 5 37.3 Agency: REL Regional
EMSC OT=11:05:37.3 36.65N 26.73E 154Km M=5.1 DODECANESE ISLANDS, GREECE
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 11 7 24.91
 DQRL SZ EP 11 7 25.71
 HWQ BZ EP 11 7 27.02
 QRWL SZ EP 11 7 28.33
 ZAHL SZ EP 11 7 28.33
 BEIL SZ EP 11 7 28.73
 RCY SZ EP 11 7 29.99
 SHBL SZ EP 11 7 30.09

October 1 2020 Hour: 15:15 25.0 Lat: 33.85N Lon: 36.11E Depth: 7 Agency: REL Local
Magnitudes: 2.7MC 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 21 273 EP 1515 28.68 0.05 38 1.0
 ZAHL SN 21 273 ES 1515 31.39 0.05 1.0
 BHL BZ 43 279 EP 1515 31.98-0.02 1.0
 BHL BN 43 279 ES 1515 37.16-0.05 1.0
 RCY SZ 47 213 EP 1515 32.52-0.09 1.0
 RCY SN 47 213 ES 1515 38.13-0.13 1.0
 HWQ BZ 50 342 EP 1515 33.11-0.07 1.0
 QRWL SZ 52 230 EP 1515 33.51 0.07 1.0
 DQRL SZ 53 253 EP 1515 33.58 0.03 1.0
 SHBL SZ 65 212 EP 1515 35.70 0.15 1.0
 BEIL SZ 77 5 EP 1515 37.51-0.00 1.0

October 3 2020 Hour: 9:31 34.2 Agency: REL Distant
EMSC OT=09:31:34.2 33.49N 140.96E 52Km M=5.9 IZU ISLANDS, JAPAN
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BEIL SZ EP 943 49.90
 HWQ BZ EP 943 51.41
 ZAHL SZ EP 943 54.07
 BHL BZ EP 943 53.71
 RCY SZ EP 943 55.00
 SHBL SZ EP 943 55.79

October 4 2020 Hour: 1:27 43.1 Lat: 33.60N Lon: 35.39E Depth: 7 Agency: REL Local
 Magnitudes: 2.3MC 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	20	54	EP		127	46.68	0.09	21						1.0
DQRL	SN	20	54	ES		127	49.14	-0.05							1.0
QRWL	SZ	27	102	EP		127	47.59	-0.10							1.0
QRWL	SE	27	102	ES		127	51.15	0.04							1.0
BHL	BZ	41	36	EP		127	49.84	-0.05							1.0
BHL	BN	41	36	ES		127	54.97	0.03							1.0
SHBL	SZ	43	131	EP		127	50.17	0.03							1.0

October 4 2020 Hour: 9:11 8.0 Lat: 32.76N Lon: 35.05E Depth: 21 Agency: REL Regional
 Magnitudes: 2.8MC REL Rms: 0.1 secs

DEAD SEA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	92	44	EP		911	22.85	0.17	43						1.0
QRWL	SZ	106	34	EP		911	24.45	-0.17							1.0
RCY	SZ	110	42	EP		911	25.09	-0.19							1.0
RCY	SN	110	42	ES		911	38.12	0.07							1.0
DQRL	SZ	116	25	EP		911	26.32	0.21							1.0
DQRL	SN	116	25	ES		911	39.41	-0.08							1.0
BHL	BZ	139	24	EP		911	29.37	-0.04							1.0
BHL	BN	139	24	ES		911	45.24	0.02							1.0
ZAHL	SZ	145	32	EP		911	30.01	-0.12							1.0
HWQ	BZ	188	26	EP		911	35.65	0.14							1.0

October 4 2020 Hour: 18:16 55.6 Agency: REL Distant
 EMSC OT=18:16:55.6 13.63N 120.79E 146Km M=5.6 MINDORO, PHILIPPINES

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1828	39.05								
HWQ	BZ			EP		1828	40.22								
ZAHL	SZ			EP		1828	41.23								
RCY	SZ			EP		1828	41.84								
BHL	BZ			EP		1828	41.74								
QRWL	SZ			EP		1828	42.19								
SHBL	SZ			EP		1828	42.34								
DQRL	SZ			EP		1828	42.75								

October 4 2020 Hour: 18:52 15.2 Lat: 34.46N Lon: 35.83E Depth: 13 Agency: REL Local
 Magnitudes: 3.1MC REL Rms: 0.1 secs

TRIPOLI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ	23	152	EP		1852	19.49	-0.13	69						1.0
HWQ	BN	23	152	ES		1852	22.97	0.07							1.0
BEIL	SZ	34	75	EP		1852	21.14	0.02							1.0
BHL	BZ	64	194	EP		1852	25.66	0.06							1.0
BHL	BN	64	194	ES		1852	33.27	-0.04							1.0
ZAHL	SZ	67	175	EP		1852	26.08	-0.02							1.0
ZAHL	SN	67	175	ES		1852	34.19	0.00							1.0
DQRL	SZ	87	196	EP		1852	29.04	0.02							1.0
QRWL	SZ	102	188	EP		1852	31.32	0.08							1.0
RCY	SZ	107	180	EP		1852	31.90	-0.08							1.0
SHBL	SZ	124	184	EP		1852	34.44	0.01							1.0

October 6 2020 Hour: 10:11 45.3 Agency: REL Distant
 EMSC OT=10:11:45.3 18.11S 178.39W 625Km M=6.0 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1030	14.55								
HWQ	BZ			EP		1030	14.91								
BHL	BZ			EP		1030	16.01								
RCY	SZ			EP		1030	16.21								
QRWL	SZ			EP		1030	16.23								

SHBL SZ EP 1030 16.49

October 7 2020 Hour: 1:17 29.6 Lat: 33.80N Lon: 35.71E Depth: 1 Agency: REL Local
Magnitudes: 2.4MC REL Rms: 0.1 secs

ALEY REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	13	336	EP		117	31.63	-0.08	26						1.0
BHL	BN	13	336	ES		117	33.24	-0.05							1.0
DQRL	SZ	17	232	EP		117	32.30	0.00							1.0
DQRL	SN	17	232	ES		117	34.41	0.10							1.0
ZAHL	SZ	17	67	EP		117	32.46	0.03							1.0
ZAHL	SN	17	67	ES		117	34.57	0.03							1.0
RCY	SZ	35	161	EP		117	35.16	-0.15							1.0
SHBL	SZ	50	177	EP		117	37.66	0.01							1.0
HWQ	BZ	58	22	EP		117	38.97	0.11							1.0

October 7 2020 Hour: 1:22 43.1 Lat: 33.80N Lon: 35.71E Depth: 4 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
BHL	BZ	13	336	EP		122	45.33	-0.07	28						1.0
BHL	BN	13	336	ES		122	47.12	0.03							1.0
DQRL	SZ	17	233	EP		122	45.93	0.02							1.0
ZAHL	SZ	17	67	EP		122	46.20	0.15							1.0
ZAHL	SN	17	67	ES		122	48.16	-0.07							1.0
QRWL	SZ	28	186	EP		122	47.68	0.03							0.2
RCY	SZ	35	161	EP		122	48.81	-0.04							1.0
SHBL	SZ	50	177	EP		122	51.16	-0.02							0.2
HWQ	BZ	58	22	EP		122	52.43	-0.02							1.0

October 8 2020 Hour: 15:44 1.1 Agency: REL Regional

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1544	21.97								
BEIL	SN			ES		1544	37.45								
HWQ	BZ			EP		1544	26.17								
BHL	BZ			EP		1544	32.30								
DQRL	SZ			EP		1544	34.98								
SHBL	SZ			EP		1544	39.60								

October 10 2020 Hour: 23: 2 15.0 Lat: 33.67N Lon: 35.87E Depth: 0 Agency: REL Local
Magnitudes: 2.2MC REL Rms: 0.1 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	20	190	EP		23	2	18.10	-0.05	19					1.0
RCY	SN	20	190	ES		23	2	20.38	-0.10						1.0
ZAHL	SZ	21	3	EP		23	2	18.34	-0.04						1.0
QRWL	SZ	22	233	EP		23	2	18.59	0.01						1.0
DQRL	SZ	28	278	EP		23	2	19.52	-0.04						1.0
BHL	BZ	33	322	EP		23	2	20.29	-0.03						1.0
BHL	BN	33	322	ES		23	2	24.27	0.02						1.0
SHBL	SZ	38	199	EP		23	2	21.20	0.14						1.0
SHBL	SN	38	199	ES		23	2	25.59	0.05						1.0
HWQ	BZ	68	6	EP		23	2	25.99	0.04						1.0

October 10 2020 Hour: 23:49 24.8 Lat: 35.26N Lon: 36.34E Depth: 3 Agency: REL Regional
Magnitudes: 3.0MC 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	81	190	EP		2349	37.82	-0.03	59						1.0
BEIL	SN	81	190	ES		2349	47.54	0.05							1.0
HWQ	BZ	115	199	EP		2349	43.31	0.00							1.0
HWQ	BN	115	199	ES		2349	56.94	-0.05							1.0
ZAHL	SZ	161	195	EP		2349	50.25	0.05							1.0
BHL	BZ	163	203	EP		2349	50.56	0.07							1.0

DQRL	SZ	186	203	EP		2349	53.77	0.00											1.0
RCY	SZ	201	194	EP		2349	55.59	-0.03											1.0
SHBL	SZ	219	195	EP		2349	57.82	-0.05											1.0

October 12 2020 Hour: 0:30 41.0 Agency: REL Regional

EMSC OT=00:30:41.0 35.69N 26.31E 5Km M=5.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		032	33.42								
BHL	BZ			EP		032	33.26								
QRWL	SZ			EP		032	34.87								
HWQ	BZ			EP		032	36.10								
SHBL	SZ			EP		032	36.10								
ZAHL	SZ			EP		032	36.10								
RCY	SZ			EP		032	36.74								
BEIL	SZ			EP		032	37.39								

October 12 2020 Hour: 0:44 26.2 Agency: REL Regional

EMSC OT=00:44:26.2 35.63N 26.31E 14Km M=4.2 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		046	20.27								
SHBL	SZ			EP		046	21.45								
RCY	SZ			EP		046	21.84								
BEIL	SZ			EP		046	22.73								

October 12 2020 Hour: 2:38 53.6 Agency: REL Regional

EMSC OT=02:38:53.6 35.62N 26.27E 10Km M=4.0 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		240	49.90								
RCY	SZ			EP		240	49.75								
SHBL	SZ			EP		240	51.43								
BEIL	SZ			EP		240	51.33								

October 12 2020 Hour: 4:11 27.8 Agency: REL Regional

EMSC OT=04:11:27.8 35.61N 26.28E 11Km M=5.2 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		413	22.20								
BHL	BZ			EP		413	22.63								
QRWL	SZ			EP		413	23.42								
HWQ	BZ			EP		413	24.32								
ZAHL	SZ			EP		413	25.23								
RCY	SZ			EP		413	24.92								
BEIL	SZ			EP		413	25.93								

October 13 2020 Hour: 19:16 46.8 Lat: 33.14N Lon: 35.30E Depth: 0 Agency: REL Local
Magnitudes: 2.5MC REL Rms: 0.1 secs

BENT JBEIL REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	47	60	EP		1916	54.46	0.06	28						1.0
SHBL	SN	47	60	ES		1917	0.01	-0.02							1.0
QRWL	SZ	57	38	EP		1916	56.08	0.03							1.0
RCY	SZ	64	51	EP		1916	56.95	-0.08							1.0
DQRL	SZ	68	22	EP		1916	57.70	0.01							1.0
DQRL	SN	68	22	ES		1917	5.77	0.02							1.0
BHL	BZ	91	21	EP		1917	1.32	-0.13							1.0
ZAHL	SZ	96	34	EP		1917	2.42	0.09							1.0
HWQ	BZ	140	25	EP		1917	9.28	0.02							1.0

October 14 2020 Hour: 22:22 49.6 Agency: REL Regional

EMSC OT=22:22:49.6 35.62N 26.36E 12Km M=4.1 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ			EP		2224	44.37								
SHBL	SZ			EP		2224	45.96								
HWQ	BZ			EP		2224	46.20								
ZAHL	SZ			EP		2224	46.50								

RCY SZ EP 2224 46.43
 BEIL SZ EP 2224 47.32

October 15 2020 Hour: 17:26 51.1 Lat: 33.90N Lon: 35.76E Depth: 2 Agency: REL Local
Magnitudes: 2.6MC REL Rms: 0.0 secs

METN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	10	270	EP		1726	52.72	-0.04	33						1.0
BHL	BN	10	270	ES		1726	54.01	0.02							1.0
ZAHL	SZ	13	114	EP		1726	53.27	0.04							1.0
ZAHL	SN	13	114	ES		1726	54.79	-0.02							1.0
DQRL	SZ	28	218	EP		1726	55.70	0.03							1.0
QRWL	SZ	40	190	EP		1726	57.58	-0.03							1.0
HWQ	BZ	45	23	EP		1726	58.27	-0.07							1.0
HWQ	BN	45	23	ES		1727	3.75	0.04							1.0
RCY	SZ	46	171	EP		1726	58.49	-0.02							1.0
SHBL	SZ	62	181	EP		1727	1.10	0.03							1.0
BEIL	SZ	81	29	EP		1727	4.14	0.02							1.0

October 15 2020 Hour: 17:40 38.0 Lat: 33.91N Lon: 35.76E Depth: 0 Agency: REL Local
Magnitudes: 2.4MC REL Rms: 0.1 secs

METN REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	10	266	EP		1740	39.49	-0.09	26						1.0
BHL	BN	10	266	ES		1740	40.82	0.05							1.0
ZAHL	SZ	13	117	EP		1740	40.03	-0.03							1.0
ZAHL	SN	13	117	ES		1740	41.59	-0.02							1.0
DQRL	SZ	29	218	EP		1740	42.56	-0.06							1.0
HWQ	BZ	44	23	EP		1740	45.15	0.04							1.0
RCY	SZ	46	171	EP		1740	45.53	0.06							1.0
SHBL	SZ	62	181	EP		1740	48.09	0.05							1.0

October 16 2020 Hour: 19: 5 0.6 Agency: REL Distant
EMSC OT=19:05:00.6 23.33S 179.22E 567Km M=4.7 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1923	38.61								
HWQ	BZ			EP		1923	38.91								
BHL	BZ			EP		1923	40.13								
DQRL	SZ			EP		1923	40.58								
QRWL	SZ			EP		1923	40.48								
SHBL	SZ			EP		1923	40.58								

October 16 2020 Hour: 20: 6 27.3 Agency: REL Distant
EMSC OT=20:06:27.3 13.65N 120.33E 60Km M=5.4 MINDORO, PHILIPPINES

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2018	18.30								
HWQ	BZ			EP		2018	19.59								
ZAHL	SZ			EP		2018	20.64								
RCY	SZ			EP		2018	21.35								
BHL	BZ			EP		2018	21.11								
SHBL	SZ			EP		2018	21.40								
DQRL	SZ			EP		2018	21.83								

October 17 2020 Hour: 14:10 13.5 Lat: 34.66N Lon: 36.13E Depth: 0 Agency: REL Local
Magnitudes: 2.8MC REL Rms: 0.1 secs

LEBANON - SYRIA BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	14	158	EP		1410	15.76	0.01	43						1.0
BEIL	SN	14	158	ES		1410	17.37	-0.02							1.0
HWQ	BZ	45	202	EP		1410	20.76	-0.07							1.0
HWQ	BN	45	202	ES		1410	26.24	0.01							1.0
ZAHL	SZ	91	194	EP		1410	28.44	0.17							1.0
BHL	BZ	94	208	EP		1410	28.73	-0.00							1.0
DQRL	SZ	117	206	EP		1410	32.42	-0.05							1.0

RCY	SZ	131	192	EP		1410	34.70	-0.04										1.0
SHBL	SZ	149	194	EP		1410	37.44	-0.00										1.0

October 18 2020 Hour: 8:39 51.1 Lat: 35.32N Lon: 35.05E Depth: 17 Agency: REL Regional
Magnitudes: 3.1MC REL Rms: 0.1 secs

OFFSHORE SYRIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	135	129	EP		840	11.81	-0.05	60						1.0
BEIL	SN	135	129	ES		840	27.21	-0.04							1.0
HWQ	BZ	142	144	EP		840	12.96	0.06							1.0
HWQ	BN	142	144	ES		840	29.08	0.02							1.0
BHL	BZ	166	160	EP		840	16.11	-0.05							1.0
ZAHL	SZ	179	154	EP		840	17.88	0.11							1.0
DQRL	SZ	185	165	EP		840	18.42	-0.07							1.0
QRWL	SZ	205	163	EP		840	20.80	-0.12							1.0
RCY	SZ	215	160	EP		840	22.48	0.29							1.0
SHBL	SZ	228	164	EP		840	23.64	-0.17							1.0

October 18 2020 Hour: 16: 6 24.7 Lat: 33.96N Lon: 36.18E Depth: 8 Agency: REL Local
Magnitudes: 2.6MC 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	29	246	EP		16 6	29.63	-0.03	32						1.0
ZAHL	SN	29	246	ES		16 6	33.38	0.02							1.0
HWQ	BZ	41	329	EP		16 6	31.26	-0.16							1.0
HWQ	BN	41	329	ES		16 6	36.48	0.05							1.0
BHL	BZ	49	262	EP		16 6	32.66	-0.01							1.0
RCY	SZ	61	211	EP		16 6	34.54	-0.05							1.0
DQRL	SZ	63	243	EP		16 6	34.96	0.02							1.0
BEIL	SZ	64	1	EP		16 6	35.18	0.08							1.0
QRWL	SZ	65	225	EP		16 6	35.34	0.08							1.0
SHBL	SZ	79	211	EP		16 6	37.55	0.01							1.0

October 18 2020 Hour: 16:46 10.0 Lat: 34.13N Lon: 34.65E Depth: 21 Agency: REL Local
Magnitudes: 2.9MC REL Rms: 0.1 secs

OFFSHORE CENTRAL LEBANON

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	96	105	EP		1646	25.16	0.00							1.0
QRWL	SZ	115	124	EP		1646	27.81	-0.15							1.0
ZAHL	SZ	118	104	EP		1646	28.46	0.07							1.0
HWQ	BZ	121	82	EP		1646	28.83	0.07	43						1.0
HWQ	BN	121	82	ES		1646	42.60	-0.08							1.0
RCY	SZ	130	122	EP		1646	30.28	0.09							1.0
RCY	SN	130	122	ES		1646	45.31	0.14							1.0
SHBL	SZ	133	130	EP		1646	30.45	-0.19							1.0
BEIL	SZ	149	72	EP		1646	32.58	0.14							1.0
BEIL	SN	149	72	ES		1646	49.01	-0.08							1.0

October 19 2020 Hour: 20:54 40.7 Agency: REL Distant
EMSC OT=20:54:40.7 54.70N 159.76W 40Km M=7.5 SOUTH OF ALASKA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		21 7	34.78								
HWQ	BZ			EP		21 7	37.41								
ZAHL	SZ			EP		21 7	39.64								
BHL	BZ			EP		21 7	39.09								
DQRL	SZ			EP		21 7	40.75								
RCY	SZ			EP		21 7	41.57								
SHBL	SZ			EP		21 7	41.76								

October 19 2020 Hour: 22:12 49.0 Agency: REL Regional

EMSC OT=22:12:49.0 36.04N 31.14E 10Km M=3.3 WESTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2213	56.63								
HWQ	BZ			EP		2213	57.32								
ZAHL	SZ			EP		2213	58.41								
RCY	SZ			EP		2214	0.30								
SHBL	SZ			EP		2214	1.11								

October 20 2020 Hour: 0:32 56.6 Lat: 33.67N Lon: 35.82E Depth: 7 Agency: REL Local

Magnitudes: 2.4MC REL

Rms: 0.1 secs

WEST BEKAA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
QRWL	SZ	19	222	EP		032	59.91-0.01								1.0
RCY	SZ	19	175	EP		032	59.99-0.10	26							1.0
RCY	SN	19	175	ES		033	2.67 0.01								1.0
ZAHL	SZ	22	17	EP		033	0.42 0.02								1.0
ZAHL	SN	22	17	ES		033	3.23 0.02								1.0
DQRL	SZ	23	280	EP		033	0.66 0.05								1.0
BHL	BZ	30	330	EP		033	1.55-0.09								1.0
SHBL	SZ	36	191	EP		033	2.75 0.07								1.0
HWQ	BZ	68	10	EP		033	7.75 0.02								1.0

October 20 2020 Hour: 22: 0 38.1

Agency: REL Regional

EMSC OT=22:00:38.1 34.32N 25.24E 22Km M=3.8 CRETE, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ			EP		22 2	41.49								
ZAHL	SZ			EP		22 2	40.83								
RCY	SZ			EP		22 2	41.85								
HWQ	BZ			EP		22 2	42.74								
BEIL	SZ			EP		22 2	44.12								

October 21 2020 Hour: 0:22 34.4

Agency: REL Distant

EMSC OT=00:22:34.4 19.32S 172.39W 10Km M=5.9 TONGA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		042	26.82								
HWQ	BZ			EP		042	27.03								
ZAHL	SZ			EP		042	27.83								
BHL	BZ			EP		042	27.94								
DQRL	SZ			EP		042	28.32								
RCY	SZ			EP		042	28.21								
QRWL	SZ			EP		042	28.45								
SHBL	SZ			EP		042	28.64								

October 21 2020 Hour: 23: 0 54.6

Agency: REL Regional

EMSC OT=23:00:54.6 37.22N 20.45E 10Km M=5.2 IONIAN SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
DQRL	SZ			EP		23 3	55.58								
HWQ	BZ			EP		23 3	55.74								
BEIL	SZ			EP		23 3	55.91								
QRWL	SZ			EP		23 3	56.19								
ZAHL	SZ			EP		23 3	56.37								
RCY	SZ			EP		23 3	57.06								
SHBL	SZ			EP		23 3	57.39								

October 22 2020 Hour: 8:24 6.4

Agency: REL Distant

EMSC OT=08:24:06.4 20.92S 176.62W 238Km M=5.7 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		843	20.51								
HWQ	BZ			EP		843	21.40								
BEIL	SZ			EP		843	20.57								
QRWL	SZ			EP		843	20.90								
RCY	SZ			EP		843	21.67								

October 22 2020 Hour: 20:20 18.4 Lat: 33.80N Lon: 35.07E Depth: 29 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
DQRL	SZ	48	103	EP		2020	27.10	0.07							1.0
DQRL	SN	48	103	ES		2020	33.49	0.04							1.0
BHL	BZ	55	78	EP		2020	27.89	-0.14							1.0
QRWL	SZ	63	117	EP		2020	29.10	-0.04							1.0
ZAHL	SZ	76	85	EP		2020	30.87	0.01							1.0
RCY	SZ	79	116	EP		2020	31.30	-0.01	26						1.0
RCY	SN	79	116	ES		2020	40.87	-0.02							1.0
SHBL	SZ	80	129	EP		2020	31.58	0.03							1.0
HWQ	BZ	96	57	EP		2020	33.87	0.06							1.0
BEIL	SZ	131	51	EP		2020	38.11	0.03							0.2

October 23 2020 Hour: 7: 4 31.4 Agency: REL Distant

EMSC OT=07:04:31.4 25.69S 179.91W 464Km M=6.1 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		723	23.02								
HWQ	BZ			EP		723	23.42								
ZAHL	SZ			EP		723	24.17								
BHL	BZ			EP		723	24.36								
RCY	SZ			EP		723	24.20								

October 24 2020 Hour: 11:34 17.9 Agency: REL Distant

EMSC OT=11:34:17.9 35.61N 49.00E 10Km M=5.0 WESTERN IRAN

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1136	48.09								
HWQ	BZ			EP		1136	51.42								
RCY	SZ			EP		1136	55.08								
BHL	BZ			EP		1136	56.66								
QRWL	SZ			EP		1136	57.58								
SHBL	SZ			EP		1136	56.41								
DQRL	SZ			EP		1136	58.91								

October 25 2020 Hour: 0:48 43.9 Lat: 32.78N Lon: 34.76E Depth: 19 Agency: REL Regional
Magnitudes: 2.8MC REL Rms: 0.1 secs

OFFSHORE DEAD SEA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHBL	SZ	112	55	EP		049	1.42	0.08							1.0
SHBL	SN	112	55	ES		049	14.18	-0.07							1.0
QRWL	SZ	121	45	EP		049	2.62	-0.11	39						1.0
DQRL	SZ	128	36	EP		049	3.60	-0.08							1.0
DQRL	SN	128	36	ES		049	18.39	0.07							1.0
RCY	SZ	128	51	EP		049	3.89	0.11							1.0
BHL	BZ	150	33	EP		049	6.80	-0.04							1.0
ZAHL	SZ	159	41	EP		049	8.02	0.03							1.0
HWQ	BZ	200	33	EP		049	13.01	0.01							1.0

October 25 2020 Hour: 0:56 48.6 Agency: REL Distant

EMSC OT=00:56:48.6 7.92S 108.00E 66Km M=5.4 JAVA, INDONESIA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1 8	50.37								
RCY	SZ			EP		1 8	50.75								
ZAHL	SZ			EP		1 8	50.97								
SHBL	SZ			EP		1 8	50.92								
HWQ	BZ			EP		1 8	50.97								
BHL	BZ			EP		1 8	51.57								
DQRL	SZ			EP		1 8	52.07								

October 25 2020 Hour: 9:37 29.5 Agency: REL Regional

EMSC OT=09:37:29.5 38.97N 40.44E 7Km M=4.0 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		938	54.85								
HWQ	BZ			EP		938	59.10								

October 25 2020 Hour: 11:47 37.7 Agency: REL Distant

EMSC OT=11:47:37.7 15.32S 173.55W 40Km M=5.9 TONGA

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		12 7	14.67								
HWQ	BZ			EP		12 7	14.84								
BHL	BZ			EP		12 7	15.41								

October 27 2020 Hour: 8:30 46.4 Agency: REL Regional

EMSC OT=08:32:55.1 35.89N 31.33E 18Km M=3.5 CYPRUS REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		833	57.26								
BEIL	SZ			EP		833	58.00								
QRWL	SZ			EP		833	59.81								
RCY	SZ			EP		834	1.60								
SHBL	SZ			EP		834	1.85								

October 28 2020 Hour: 1:40 2.6 Lat: 35.76N Lon: 36.25E Depth: 10 Agency: REL Regional

Magnitudes: 3.3MC 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	136	183	EP		140	23.77	0.05	78						1.0
BEIL	SN	136	183	ES		140	39.32	-0.04							1.0
HWQ	BZ	167	190	EP		140	28.34	-0.04							1.0
HWQ	BN	167	190	ES		140	47.53	0.05							1.0
ZAHL	SZ	214	189	EP		140	34.47	0.26							1.0
BHL	BZ	214	195	EP		140	34.17	0.06							1.0
DQRL	SZ	237	196	EP		140	36.97	-0.03							1.0
QRWL	SZ	251	192	EP		140	38.66	-0.15							1.0
RCY	SZ	254	189	EP		140	39.03	-0.21							1.0
SHBL	SZ	272	190	EP		140	41.49	0.06							1.0

October 28 2020 Hour: 2: 5 24.4 Lat: 34.11N Lon: 35.74E Depth: 20 Agency: REL Local

Magnitudes: 2.2MC REL

Rms: 0.1 secs

JBEIL REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ	25	199	EP		2 5	29.50	-0.06							1.0
BHL	BN	25	199	ES		2 5	33.39	0.02							1.0
HWQ	BZ	26	46	EP		2 5	29.87	0.08	18						1.0
ZAHL	SZ	32	154	EP		2 5	30.39	-0.04							1.0
DQRL	SZ	48	199	EP		2 5	32.67	0.05							1.0
DQRL	SN	48	199	ES		2 5	38.67	-0.03							1.0
BEIL	SZ	63	41	EP		2 5	34.64	-0.07							1.0
RCY	SZ	69	172	EP		2 5	35.79	0.11							0.2
SHBL	SZ	85	180	EP		2 5	38.04	0.05							1.0

October 28 2020 Hour: 5:52 5.6 Lat: 35.78N Lon: 37.00E Depth: 0 Agency: REL Regional

Magnitudes: 3.8MC REL

Rms: 0.2 secs

SYRIA REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ	156	209	EP		552	30.50	0.00	163						1.0
BEIL	SN	156	209	ES		552	48.91	-0.00							1.0
HWQ	BZ	193	210	EP		552	35.45	-0.21							1.0
HWQ	BN	193	210	ES		552	57.90	0.00							1.0
BHL	BZ	242	211	EP		552	42.15	0.37							1.0
DQRL	SZ	265	210	EP		552	44.44	-0.19							1.0
RCY	SZ	275	203	EP		552	45.94	0.01							1.0
QRWL	SZ	276	206	EP		552	45.93	-0.03							1.0

SHBL SZ 294 203 EP 552 48.29 0.06 1.0

October 28 2020 Hour: 10:29 38.2 Lat: 35.45N Lon: 37.18E Depth: 18 Agency: REL Regional
Magnitudes: 3.2MC 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	136	222	EP		1029	59.08	-0.04	72						1.0
BEIL	SN	136	222	ES		1030	14.62	0.02							1.0
HWQ	BZ	172	221	EP		1030	3.85	-0.04							1.0
HWQ	BN	172	221	ES		1030	22.89	-0.02							1.0
BHL	BZ	221	220	EP		1030	10.08	0.10							1.0
DQRL	SZ	243	218	EP		1030	12.73	0.00							1.0
RCY	SZ	249	210	EP		1030	13.40	-0.11							1.0
QRWL	SZ	252	214	EP		1030	13.73	-0.04							1.0
SHBL	SZ	268	210	EP		1030	15.93	0.12							1.0

October 28 2020 Hour: 14:1 29.4 Lat: 34.11N Lon: 36.02E Depth: 0 Agency: REL Local
Magnitudes: 2.7MC 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	20	340	EP		14	1	32.55	-0.16	39					1.0
HWQ	BN	20	340	ES		14	1	35.19	0.06						1.0
ZAHL	SZ	30	204	EP		14	1	34.14	-0.18						1.0
ZAHL	SN	30	204	ES		14	1	38.00	0.07						1.0
BHL	BZ	41	237	EP		14	1	36.06	0.07						1.0
BEIL	SZ	51	17	EP		14	1	37.70	0.09						1.0
QRWL	SZ	69	207	EP		14	1	40.64	0.00						1.0
RCY	SZ	70	194	EP		14	1	40.76	0.06						1.0
SHBL	SZ	88	197	EP		14	1	43.61	-0.01						1.0

October 28 2020 Hour: 15: 8 40.8 Lat: 33.61N Lon: 36.04E Depth: 13 Agency: REL Local
Magnitudes: 2.7MC REL Rms: 0.1 secs

LEBANON - SYRIA BORDER REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
RCY	SZ	23	237	EP		15	8	45.16	-0.07	42					1.0
RCY	SN	23	237	ES		15	8	48.53	0.05						1.0
ZAHL	SZ	31	333	EP		15	8	46.42	-0.01						1.0
QRWL	SZ	34	259	EP		15	8	46.81	0.01						1.0
QRWL	SN	34	259	ES		15	8	51.18	-0.03						1.0
SHBL	SZ	40	224	EP		15	8	47.76	0.05						1.0
DQRL	SZ	45	284	EP		15	8	48.38	-0.07						1.0
BHL	BZ	49	313	EP		15	8	49.02	0.02						1.0
BHL	BN	49	313	ES		15	8	55.07	0.03						1.0
HWQ	BZ	75	353	EP		15	8	53.05	0.18						0.2

October 29 2020 Hour: 18:25 56.3 Agency: REL Regional
EMSC OT=18:25:56.3 38.12N 38.57E 5Km M=3.3 EASTERN TURKEY

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		1827	0.96								
HWQ	BZ			EP		1827	5.90								
DQRL	SZ			EP		1827	15.01								
RCY	SZ			EP		1827	16.25								
QRWL	SZ			EP		1827	16.70								
SHBL	SZ			EP		1827	18.73								

October 30 2020 Hour: 2:34 22.5 Agency: REL Distant
EMSC OT=02:34:22.5 20.83S 178.51W 588Km M=5.3 FIJI REGION

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		252	59.17								
HWQ	BZ			EP		252	59.17								
ZAHL	SZ			EP		253	0.29								
BHL	BZ			EP		253	0.23								
RCY	SZ			EP		253	0.40								
DQRL	SZ			EP		253	1.24								

QRWL	SZ		EP	253	0.96
SHBL	SZ		EP	253	1.13

October 30 2020 Hour: 11:51 25.7

Agency: REL Regional

EMSC OT=11:51:25.7 37.91N 26.84E 10Km M=7.0 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BHL	BZ			EP		1153	21.84								
DQRL	SZ			EP		1153	24.30								
HWQ	BZ			EP		1153	24.47								
BEIL	SZ			EP		1153	25.70								
QRWL	SZ			EP		1153	25.87								
RCY	SZ			EP		1153	27.26								
SHBL	SZ			EP		1153	28.41								

October 30 2020 Hour: 13:00 44.0

Agency: REL Regional

EMSC OT=13:00:44.0 37.87N 26.93E 5Km M=4.9 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		13 2	41.59								
QRWL	SZ			EP		13 2	43.79								
BEIL	SZ			EP		13 2	44.17								
RCY	SZ			EP		13 2	44.64								
SHBL	SZ			EP		13 2	45.10								

October 30 2020 Hour: 15:14 56.3

Agency: REL Regional

EMSC OT=15:14:56.3 37.80N 26.80E 5Km M=5.2 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		1516	55.03								
BEIL	SZ			EP		1516	56.04								
QRWL	SZ			EP		1516	57.63								
RCY	SZ			EP		1516	59.81								
SHBL	SZ			EP		1516	59.01								

October 31 2020 Hour: 1:44 26.2

Agency: REL Distant

EMSC OT=01:44:26.2 23.87S 179.73W 516Km M=4.7 SOUTH OF FIJI ISLANDS

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BEIL	SZ			EP		2 3	11.81								
HWQ	BZ			EP		2 3	11.71								
BHL	BZ			EP		2 3	13.09								
DQRL	SZ			EP		2 3	13.60								
SHBL	SZ			EP		2 3	13.54								

October 31 2020 Hour: 5:31 29.9

Agency: REL Regional

EMSC OT=05:31:29.9 37.83N 26.81E 7Km M=4.9 DODECANESE ISLANDS, GREECE

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
HWQ	BZ			EP		533	29.19								
BEIL	SZ			EP		533	30.13								
ZAHL	SZ			EP		533	30.40								
QRWL	SZ			EP		533	31.47								
RCY	SZ			EP		533	32.88								
SHBL	SZ			EP		533	32.81								

Epicentral Map of Lebanon

OCTOBER 2020

