

Republic of Lebanon
National Council for Scientific Research

Provisional Seismological Bulletin

from the

NATIONAL SEISMIC NETWORK

March

2006

Prepared by
The National Centre for Geophysical Research
Bhannes

P.o.b. : 165432
Ashrafyeh Beirut 1100-2040

Tel : +9614-981885
Fax : +9614-981886
Email : geophys@cnrs.edu.lb

GENERAL BULLETIN INFORMATION

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

Since 1993, the Centre has been participating in a regional initiative of 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 location 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 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 coda duration. The coda wave magnitude is estimated via the formula:

$$Mc = 0.08 + 1.63 * \log_{10}(T) + 0.009 * D.$$

where T is the coda duration (sec) and D is the epicentral distance (km). The coefficients were adopted at the beginning of operation 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 since this might restrict later use of the data. As a consequence, some event locations might be unrealistic like zero depth earthquakes or teleseismic locations off by 1000 km. However, the locations are based on the available data and reflect the location procedure and the models used.

STATIONS USED

The stations listed below are operated by the National Centre for Geophysical Research. They form 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 to mention 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 | Opened Nov 2000 |
| FKH | 3414.13N | 3624.11E | 1170 | FAKEHEH | Opened Dec 2004 |
| RCY | 3329.08N | 3549.13E | 1360 | RACHAYA | Scheduled 2003 |
| DWR | 3323.13N | 3524.08E | 420 | DWEIR | Scheduled 2003 |

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 will be available for download in pdf format on:
<http://www.cnrs.edu.lb/research/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. Geophysical Research Lebanon

MAGNITUDES: Up to 3 different magnitudes can be given followed by type and reporting agency, e.g. 3.1 MC GRL - coda magnitude calculated according to GRL standard parameters.

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(impulsive)

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.

March 1 2006 Hour: 11:14 57.5 'Rj krrkpg'''Oy'70 **Agency: REL Distant**
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 1116 12.51

March 2 2006 Hour: 11:32 1.6 Lat: 33.94N Lon: 36.91E Depth: 33 Agency: REL Local Magnitudes: 3.1MC REL Rms: 0.5 secs
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ 57 305 EPg 11 3 31.24 -0.6 64 1.0
 FKH SN 57 305 ESg 11 3 39.49 0.1 1.0
 HWQ SZ 96 293 EPg 11 3 37.82 0.7 1.0
 HWQ SN 96 293 ESg 11 3 49.12 0.4 1.0
 BHL SZ 116 268 EPg 11 3 39.33 -0.7 1.0
 BHL SN 116 268 ESg 11 3 53.03 -0.6 1.0

March 2 2006 Hour: 11:10 29.0 Lat: 34.61N Lon: 36.84E Depth: 0 Agency: REL Local Magnitudes: 3.2MC REL Rms: 1.1 secs
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ 58 224 EPg 1110 37.12 -1.1 80 1.0
 FKH SE 58 224 ESg 1110 43.04 -2.1 1.0
 HWQ SZ 90 246 EPg 1110 43.23 -0.2 1.0
 HWQ SE 90 246 ESg 1110 54.47 0.3 1.0
 BHL SZ 134 235 EPg 1110 50.65 0.0 1.0
 BHL SN 134 235 ESg 1111 7.57 1.0 1.0

March 2 2006 Hour: 22:44 46.7 **Agency: REL Regional**
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EPn 2245 30.45
 HWQ SZ EPn 2245 33.14
 FKH SZ EPn 2245 38.41
 MATL SZ EPn 2245 31.56

March 3 2006 Hour: 13:12 50.4 'Hk'''Od'76 **Agency: REL Distant**
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 1312 52.37

March 4 2006 Hour: 10:56 1.7 **Agency: REL Local**
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 HWQ SZ EPg 1056 46.54
 HWQ SN ESg 1057 1.20
 BHL SN EPg 1057 13.29

March 5 2006 Hour: 6:30 46.2 Lat: 34.81N Lon: 33.98E Depth: 34 Agency: REL Regional Magnitudes: 3.4MC REL Rms: 0.7 secs
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 CSS BZ 62 286 IPg 630 56.77 -0.1 1.0
 CSS BE 62 286 ISg 631 4.96 0.1 1.0
 BHL BZ 184 123 EP 631 11.85 -0.3 1.0
 BHL BN 184 123 ES 631 30.10 -1.2 1.0
 HWQ SZ 190 107 EP 631 13.87 0.9 82 1.0
 HWQ SN 190 107 ES 631 32.61 -0.1 1.0

March 5 2006 Hour: 8:26 59.6 'Vqpic'''Od'80 **Agency: REL Distant**
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 BHL BZ EP 827 17.05

March 5 2006 Hour: 10:1 8.5 **Agency: REL Local**
 STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT
 FKH SZ EPg 10 3 19.79
 FKH SN ESg 10 3 26.80
 HWQ SZ EPg 10 3 23.50
 HWQ SN ESg 10 3 32.24

| | | | |
|----------------------------------|---|--|----------------------------|
| March 5 2006 Hour: 10:53 | 14.5 | 'Ecpfc'''Oy '78 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EP | 1054 26.90 | | |
| March 6 2006 Hour: 11:16 | 1.3 | Lat: 34.28N Lon: 36.82E Depth: 0 | Agency: REL Local |
| Magnitudes: 3.0MC REL | | Rms: 0.6 secs | |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| FKH SZ 39 263 EPg | 1116 6.79 -0.9 61 | | 1.0 |
| FKH SE 39 263 ESg | 1116 12.04 -0.3 | | 1.0 |
| HWQ SZ 81 270 EPg | 1116 14.34 0.0 | | 1.0 |
| HWQ SN 81 270 ESg | 1116 24.75 0.7 | | 1.0 |
| March 6 2006 Hour: 11:24 | 5.3 | Lat: 33.75N Lon: 37.04E Depth: 34 | Agency: REL Local |
| Magnitudes: 3.0MC REL | | Rms: 0.5 secs | |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| FKH SZ 80 313 EPg | 1124 19.03 0.4 59 | | 1.0 |
| FKH SN 80 313 ESg | 1124 28.18 -0.2 | | 1.0 |
| HWQ SZ 117 300 EPg | 1124 24.18 0.4 | | 1.0 |
| HWQ SN 117 300 ESg | 1124 37.27 -0.2 | | 1.0 |
| March 6 2006 Hour: 13:35 | 14.9 | Lat: 33.83N Lon: 36.74E Depth: 0 | Agency: REL Local |
| Magnitudes: 3.1MC REL | | Rms: 0.6 secs | |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| FKH SZ 55 325 EPg | 1335 22.89 -0.8 62 | | 1.0 |
| FKH SN 55 325 ESg | 1335 30.13 -0.1 | | 1.0 |
| HWQ SZ 89 304 EPg | 1335 30.51 1.3 | | 1.0 |
| HWQ SE 89 304 ESg | 1335 39.71 0.0 | | 1.0 |
| BHL SE 101 275 ESg | 1335 43.14 -0.1 | | 1.0 |
| March 6 2006 Hour: 18:23 | 34.8 | 'Ol' Kpf kcp'tlk fig'Oy "80 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EP | 1825 38.75 | | |
| March 7 2006 Hour: 14:28 | 0.7 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| HWQ SZ EPg | 1428 47.65 | | |
| HWQ SN ESg | 1429 4.62 | | |
| BHL SZ EPg | 1428 54.60 | | |
| BHL SE ESg | 1429 17.42 | | |
| March 7 2006 Hour: 22:48 | 1.9 | Lat: 33.41N Lon: 35.57E Depth: 31 | Agency: REL Local |
| Magnitudes: 3.2MC REL | | Rms: 0.6 secs | |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| MATL SZ 24 291 IPg | 2248 8.23 0.3 | | 1.0 |
| BHL SZ 55 8 EPg | 2248 10.81 -0.9 77 | | 1.0 |
| HWQ SZ 102 20 EPg | 2248 19.07 0.8 | | 1.0 |
| March 11 2006 Hour: 10:59 | 2.3 | Lat: 33.69N Lon: 37.05E Depth: 34 | Agency: REL Local |
| Magnitudes: 3.3MC REL | | Rms: 0.2 secs | |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| FKH SZ 85 316 EPg | 1059 16.60 0.2 87 | | 1.0 |
| FKH SN 85 316 ESg | 1059 26.68 -0.1 | | 1.0 |
| HWQ SZ 121 303 EPg | 1059 21.18 -0.3 | | 1.0 |
| HWQ SE 121 303 ESg | 1059 35.61 0.0 | | 1.0 |
| BHL SN 131 281 ESg | 1059 38.17 0.0 | | 1.0 |
| March 11 2006 Hour: 13:14 | 0.9 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P | HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| FKH SZ EPg | 1314 40.36 | | |
| HWQ SE ESg | 1314 57.37 | | |
| FKH SE ESg | 1314 46.85 | | |

March 11 2006 Hour: 15:21 36.8 Lat: 34.71N Lon: 36.36E Depth: 0 Agency: REL Local Magnitudes: 3.0MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 52 | 176 | EPg | | 1521 | 44.36 | -0.9 | 55 | | | | | | 1.0 |
| FKH | SE | 52 | 176 | ESg | | 1521 | 51.73 | 0.2 | | | | | | | 1.0 |
| HWQ | SZ | 61 | 219 | EPg | | 1521 | 46.93 | 0.3 | | | | | | | 1.0 |
| HWQ | SN | 61 | 219 | ESg | | 1521 | 52.96 | -1.0 | | | | | | | 1.0 |
| BHL | SN | 110 | 216 | ESg | | 1522 | 8.20 | 0.4 | | | | | | | 1.0 |

March 11 2006 Hour: 15:39 51.1 Lat: 34.17N Lon: 36.77E Depth: 14 Agency: REL Local Magnitudes: 2.9MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 35 | 281 | EPg | | 1539 | 56.94 | -0.3 | 51 | | | | | | 1.0 |
| FKH | SN | 35 | 281 | ESg | | 1540 | 1.86 | 0.1 | | | | | | | 1.0 |
| HWQ | SZ | 77 | 279 | EPg | | 1540 | 4.32 | 0.9 | | | | | | | 1.0 |
| HWQ | SE | 77 | 279 | ESg | | 1540 | 12.35 | -0.2 | | | | | | | 1.0 |
| BHL | SN | 107 | 254 | ESg | | 1540 | 19.94 | -0.4 | | | | | | | 1.0 |

March 11 2006 Hour: 16:57 46.2 Lat: 33.36N Lon: 35.42E Depth: 22 Agency: REL Local Magnitudes: 2.8MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| MATL | SZ | 17 | 329 | EPg | | 1657 | 50.92 | 0.4 | | | | | | | 1.0 |
| BHL | SZ | 64 | 20 | EPg | | 1657 | 56.13 | -0.6 | 41 | | | | | | 1.0 |
| BHL | SN | 64 | 20 | ESg | | 1658 | 3.78 | -0.8 | | | | | | | 1.0 |
| HWQ | SZ | 113 | 25 | EPg | | 1658 | 4.40 | 0.6 | | | | | | | 1.0 |
| HWQ | SN | 113 | 25 | ESg | | 1658 | 17.55 | 0.7 | | | | | | | 1.0 |

March 11 2006 Hour: 21:37 8.7 'Kep'''Oy '60 Agency: REL Regional

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|
| BHL | BZ | | | EP | | 2138 | | 1.86 | | | | | | | |

March 11 2006 Hour: 23:57 21.7 Lat: 33.82N Lon: 35.75E Depth: 15 Agency: REL Local Magnitudes: 2.6MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| BHL | BZ | 13 | 315 | EPg | | 2357 | 24.17 | -0.8 | 32 | | | | | | 1.0 |
| BHL | BN | 13 | 315 | ESg | | 2357 | 27.72 | 0.3 | | | | | | | 1.0 |
| HWQ | SZ | 54 | 19 | EPg | | 2357 | 31.44 | 0.8 | | | | | | | 1.0 |
| FKH | SZ | 76 | 52 | EPg | | 2357 | 33.30 | -0.5 | | | | | | | 1.0 |

March 12 2006 Hour: 10:47 10.5 Lat: 34.40N Lon: 36.75E Depth: 0 Agency: REL Local Magnitudes: 3.1MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 37 | 240 | EPg | | 1047 | 14.97 | -1.4 | 69 | | | | | | 1.0 |
| FKH | SE | 37 | 240 | ESg | | 1047 | 20.37 | -0.4 | | | | | | | 1.0 |
| HWQ | SZ | 75 | 260 | EPg | | 1047 | 22.74 | 0.2 | | | | | | | 1.0 |
| HWQ | SE | 75 | 260 | ESg | | 1047 | 32.06 | 0.6 | | | | | | | 1.0 |

March 12 2006 Hour: 11: 8 54.6 Lat: 33.82N Lon: 37.13E Depth: 57 Agency: REL Local Magnitudes: 3.3MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|-------|------|------|------|-----|------|------|-----|
| FKH | SZ | 81 | 305 | EPg | | 11 | 9 | 8.58 | 0.0 | 83 | | | | | 1.0 |
| FKH | SN | 81 | 305 | ESg | | 11 | 9 | 18.76 | -0.2 | | | | | | 1.0 |
| HWQ | SZ | 120 | 295 | EPg | | 11 | 9 | 13.68 | 0.6 | | | | | | 1.0 |
| HWQ | SE | 120 | 295 | ESg | | 11 | 9 | 27.36 | 0.7 | | | | | | 1.0 |
| BHL | SZ | 137 | 274 | EPg | | 11 | 9 | 14.63 | -0.3 | | | | | | 1.0 |
| BHL | SN | 137 | 274 | ESg | | 11 | 9 | 28.99 | -1.0 | | | | | | 1.0 |

March 12 2006 Hour: 12:325.7 Lat: 33.72N Lon: 37.01E Depth: 2 Agency: REL Local Magnitudes: 3.1MC REL Rms: 0.4 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 81 | 316 | EPg | | 12 3 | 38.23 | -0.5 | 64 | | | | | | 1.0 |
| FKH | SN | 81 | 316 | ESg | | 12 3 | 48.65 | 0.3 | | | | | | | 1.0 |
| HWQ | SZ | 117 | 303 | EPg | | 12 3 | 44.32 | -0.2 | | | | | | | 1.0 |
| HWQ | SE | 117 | 303 | ESg | | 12 3 | 58.55 | 0.1 | | | | | | | 1.0 |
| BHL | SZ | 127 | 280 | EPg | | 12 3 | 46.98 | 0.7 | | | | | | | 1.0 |
| BHL | SE | 127 | 280 | ESg | | 12 4 | 1.10 | -0.4 | | | | | | | 1.0 |

March 12 2006 Hour: 12:27 52.3 Lat: 33.53N Lon: 36.53E Depth: 46 Agency: REL Local Magnitudes: 3.0MC REL Rms: 0.1 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 80 | 351 | EPg | | 1228 | 5.71 | 0.1 | 58 | | | | | | 1.0 |
| FKH | SE | 80 | 351 | ESg | | 1228 | 15.41 | 0.0 | | | | | | | 1.0 |
| BHL | SZ | 92 | 297 | EPg | | 1228 | 6.84 | -0.2 | | | | | | | 1.0 |
| BHL | SN | 92 | 297 | ESg | | 1228 | 18.00 | 0.1 | | | | | | | 1.0 |
| HWQ | SZ | 99 | 327 | EPg | | 1228 | 8.09 | 0.1 | | | | | | | 1.0 |
| HWQ | SN | 99 | 327 | ESg | | 1228 | 19.53 | -0.1 | | | | | | | 1.0 |

March 12 2006 Hour: 13:22 57.8 Lat: 34.41N Lon: 36.74E Depth: 0 Agency: REL Local Magnitudes: 2.8MC REL Rms: 0.9 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 37 | 237 | EPg | | 1323 | 2.45 | -1.3 | 45 | | | | | | 1.0 |
| FKH | SE | 37 | 237 | ESg | | 1323 | 7.38 | -0.7 | | | | | | | 1.0 |
| HWQ | SZ | 74 | 259 | EPg | | 1323 | 10.12 | 0.3 | | | | | | | 1.0 |
| HWQ | SN | 74 | 259 | ESg | | 1323 | 18.19 | -0.5 | | | | | | | 1.0 |
| BHL | SZ | 115 | 241 | EPg | | 1323 | 17.30 | 1.0 | | | | | | | 1.0 |
| BHL | SE | 115 | 241 | ESg | | 1323 | 31.12 | 1.1 | | | | | | | 1.0 |

March 13 2006 Hour: 11:10 0.7 Agency: REL Local

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|
| HWQ | SZ | | | EPg | | 1110 | 33.62 | | | | | | | | |
| HWQ | SN | | | ESg | | 1110 | 47.21 | | | | | | | | |
| BHL | SN | | | ESg | | 1110 | 50.00 | | | | | | | | |

March 14 2006 Hour: 7:556.2 'Kpf qpguk'''Oy '80 Agency: REL Distant

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|
| BHL | BZ | | | EP | | 710 | 46.11 | | | | | | | | |

March 15 2006 Hour: 3:18 1.0 'Fqf geepgug'Krepf u'''ON50 Agency: REL Regional

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|
| HWQ | SZ | | | EPn | | 318 | 46.46 | | | | | | | | |
| BHL | SZ | | | EPn | | 318 | 44.83 | | | | | | | | |

March 15 2006 Hour: 21:642.8 Lat: 37.40N Lon: 38.44E Depth: 15 Agency: REL Regional Magnitudes: 4.4MC REL Rms: 0.3 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 396 | 208 | EPn | | 21 7 | 36.56 | -0.1 | | | | | | | 1.0 |
| FKH | SN | 396 | 208 | Sn | | 21 8 | 16.54 | 0.0 | | | | | | | 1.0 |
| HWQ | SZ | 413 | 214 | EPn | | 21 7 | 38.27 | -0.4 | | | | | | | 1.0 |
| HWQ | SE | 413 | 214 | Sn | | 21 8 | 20.05 | 0.0 | | | | | | | 1.0 |
| BHL | BZ | 462 | 214 | EPn | | 21 7 | 45.33 | 0.5 | 233 | | | | | | 1.0 |

March 16 2006 Hour: 12:352.6 Lat: 34.43N Lon: 36.86E Depth: 0 Agency: REL Local Magnitudes: 3.0MC REL Rms: 0.7 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 47 | 243 | EPg | | 12 3 | 59.56 | -0.7 | 62 | | | | | | 1.0 |
| FKH | SN | 47 | 243 | ESg | | 12 4 | 4.75 | -1.1 | | | | | | | 1.0 |
| HWQ | SZ | 86 | 259 | EPg | | 12 4 | 6.55 | 0.2 | | | | | | | 1.0 |
| HWQ | SE | 86 | 259 | ESg | | 12 4 | 16.52 | -0.1 | | | | | | | 1.0 |
| BHL | SZ | 125 | 243 | EPg | | 12 4 | 13.32 | 0.5 | | | | | | | 1.0 |
| BHL | SN | 125 | 243 | ESg | | 12 4 | 28.98 | 1.2 | | | | | | | 1.0 |

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| March 16 2006 Hour: 13:21 0.2 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1321 55.13 | |
| FKH SN ESG 1322 1.13 | |
| HWQ SZ EPg 1322 2.61 | |
| HWQ SE ESG 1322 13.00 | |
| March 17 2006 Hour: 20:42 1.2 'Vqpic'''Od'76 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EP 20 5 54.33 | |
| March 18 2006 Hour: 0:49 1.2 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EPg 049 39.51 | |
| HWQ SZ EPg 049 37.41 | |
| HWQ SN ESG 049 41.59 | |
| BHL BN ESG 049 45.36 | |
| March 18 2006 Hour: 10:2 0.4 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| HWQ SZ EPg 10 2 20.87 | |
| HWQ SE ESG 10 2 25.25 | |
| BHL SN ESG 10 2 29.37 | |
| March 18 2006 Hour: 10:8 1.7 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL SZ IPg 10 9 14.95 | |
| BHL SN ISg 10 9 20.39 | |
| HWQ SZ EPg 10 9 22.29 | |
| HWQ SN ESG 10 9 31.59 | |
| March 18 2006 Hour: 11:6 1.2 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| HWQ SZ EPg 11 6 47.08 | |
| HWQ SE ESG 11 6 53.18 | |
| FKH SZ EPg 11 6 45.07 | |
| FKH SN ESG 11 6 51.11 | |
| March 18 2006 Hour: 11:41 0.5 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1142 1.89 | |
| FKH SE ESG 1142 7.16 | |
| HWQ SZ EPg 1142 9.71 | |
| HWQ SE ESG 1142 19.11 | |
| March 18 2006 Hour: 12:5 12.9 Lat: 34.45N Lon: 36.80E Depth: 0 Agency: REL Local Magnitudes: 3.0MC REL Rms: 0.4 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ 44 237 EPg 12 5 19.83 -0.1 55 1.0 | |
| FKH SE 44 237 ESG 12 5 24.51 -0.7 1.0 | |
| HWQ SZ 81 256 EPg 12 5 25.75 -0.2 1.0 | |
| HWQ SN 81 256 ESG 12 5 35.52 0.0 1.0 | |
| BHL SZ 122 240 EPg 12 5 32.91 0.4 1.0 | |
| BHL SN 122 240 ESG 12 5 47.76 0.7 1.0 | |
| March 19 2006 Hour: 4:44 28.3 Lat: 33.10N Lon: 35.50E Depth: 16 Agency: REL Local Magnitudes: 3.4MC REL Rms: 0.1 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| MATL SZ 47 340 IPg 444 36.15 0.1 1.0 | |
| BHL BZ 91 9 IPg 444 42.34 -0.3 1.0 | |
| BHL BE 91 9 ISg 444 53.18 -0.1 1.0 | |
| HWQ SZ 137 17 EPg 444 49.67 0.2 90 1.0 | |
| HWQ SE 137 17 ISg 445 5.26 0.1 1.0 | |

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| March 20 2006 Hour: 17:55 58.2 | 'ERK'''O d'701 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EP 1756 52.36 | | |
| FKH SZ EP 1756 51.05 | | |
| March 20 2006 Hour: 19:47 6.7 | 'Cn gtk'''Oy '76 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EP 1949 47.18 | | |
| HWQ SZ EP 1949 50.72 | | |
| March 20 2006 Hour: 20:36 0.5 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| HWQ SZ EPg 2036 45.77 | | |
| HWQ SN ESg 2036 52.07 | | |
| BHL SE ESg 2036 49.67 | | |
| March 21 2006 Hour: 1:35 1.7 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EPg 135 59.95 | | |
| BHL BN ESg 136 5.02 | | |
| HWQ SZ EPg 136 0.20 | | |
| HWQ SE ESg 136 8.18 | | |
| March 21 2006 Hour: 3:44 19.4 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EPg 344 55.79 | | |
| BHL BN ESg 345 2.12 | | |
| HWQ SZ EPg 344 57.54 | | |
| HWQ SN ESg 345 4.37 | | |
| March 21 2006 Hour: 4:10 43.8 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| HWQ SZ EPg 411 40.00 | | |
| BHL BZ EPg 411 38.29 | | |
| BHL BN ESg 411 44.20 | | |
| HWQ SN ESg 411 46.76 | | |
| March 22 2006 Hour: 3:23 0.2 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EPg 324 0.31 | | |
| BHL BN ESg 324 3.79 | | |
| HWQ SZ EPg 324 6.59 | | |
| HWQ SN ESg 324 12.98 | | |
| March 22 2006 Hour: 3:38 1.6 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EPg 338 36.56 | | |
| BHL BN ESg 338 42.43 | | |
| HWQ SZ EPg 338 38.16 | | |
| HWQ SN ESg 338 45.18 | | |
| March 22 2006 Hour: 9: 8 0.1 | | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | | |
| BHL BZ EPg 9 9 1.72 | | |
| BHL BN ESg 9 9 5.02 | | |
| HWQ SZ EPg 9 9 8.10 | | |
| HWQ SN ESg 9 9 18.88 | | |

March 22 2006 Hour: 11:10 0.7 Agency: REL Local

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| FKH | SZ | | | EPg | | 1110 | 20.28 | | | | | | | | | 1.0 |
| FKH | SN | | | ESg | | 1110 | 30.63 | | | | | | | | | 1.0 |
| HWQ | SZ | | | EPg | | 1110 | 25.52 | | | | | | | | | 1.0 |
| HWQ | SN | | | ESg | | 1110 | 39.66 | | | | | | | | | 1.0 |

March 22 2006 Hour: 13:10 0.1 Agency: REL Local

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| FKH | SZ | | | EPg | | 1311 | 40.37 | | | | | | | | | 1.0 |
| FKH | SE | | | ESg | | 1311 | 45.56 | | | | | | | | | 1.0 |
| HWQ | SZ | | | EPg | | 1311 | 47.64 | | | | | | | | | 1.0 |
| HWQ | SE | | | ESg | | 1311 | 57.66 | | | | | | | | | 1.0 |

March 22 2006 Hour: 14:57 0.7 Agency: REL Local

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| BHL | BZ | | | EPg | | 1457 | 45.45 | | | | | | | | | 1.0 |
| BHL | BN | | | ESg | | 1457 | 48.35 | | | | | | | | | 1.0 |
| HWQ | SZ | | | EPg | | 1457 | 48.89 | | | | | | | | | 1.0 |
| HWQ | SN | | | ESg | | 1457 | 54.73 | | | | | | | | | 1.0 |

March 22 2006 Hour: 16:45 5.5 Lat: 33.35N Lon: 35.46E Depth: 34 Agency: REL Local Magnitudes: 3.0MC REL Rms: 0.6 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| MATL | SZ | 20 | 320 | EPg | | 1645 | 11.78 | 0.3 | | | | | | | | 1.0 |
| BHL | BZ | 64 | 16 | EPg | | 1645 | 15.39 | -1.2 | 54 | | | | | | | 1.0 |
| BHL | BN | 64 | 16 | ESg | | 1645 | 24.91 | 0.2 | | | | | | | | 1.0 |
| HWQ | SZ | 112 | 23 | EPg | | 1645 | 23.99 | 0.7 | | | | | | | | 1.0 |

March 23 2006 Hour: 1:57 10.7 Lat: 34.00N Lon: 35.72E Depth: 47 Agency: REL Local Magnitudes: 2.8MC REL Rms: 0.1 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| BHL | BZ | 12 | 209 | EPg | | 157 | 17.95 | 0.1 | | | | | | | | 1.0 |
| BHL | BN | 12 | 209 | ESg | | 157 | 23.21 | 0.0 | | | | | | | | 1.0 |
| HWQ | SZ | 37 | 34 | EPg | | 157 | 19.67 | 0.2 | 45 | | | | | | | 1.0 |
| HWQ | SE | 37 | 34 | ESg | | 157 | 25.85 | -0.2 | | | | | | | | 1.0 |
| MATL | SZ | 67 | 213 | EPg | | 157 | 22.28 | -0.1 | | | | | | | | 1.0 |

March 23 2006 Hour: 3:45 6.4 Agency: REL Distant

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|--|
| BHL | BZ | | | EP | | 345 | 15.23 | | | | | | | | | |

March 23 2006 Hour: 6:38 15.6 Lat: 34.24N Lon: 35.33E Depth: 0 Agency: REL Local Oci plwf gk'"56OE'TGN""""HGNV Rms: 0.3 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| BHL | BZ | 48 | 142 | IPg | | 638 | 23.72 | 0.4 | 106 | | | | | | | 1.0 |
| BHL | BE | 48 | 142 | ISg | | 638 | 29.09 | 0.0 | | | | | | | | 1.0 |
| HWQ | SZ | 57 | 86 | IPg | | 638 | 24.71 | 0.0 | | | | | | | | 1.0 |
| HWQ | SN | 57 | 86 | ISg | | 638 | 30.82 | -0.7 | | | | | | | | 1.0 |
| MATL | SZ | 84 | 180 | IPg | | 638 | 29.09 | -0.1 | | | | | | | | 1.0 |
| FKH | SZ | 98 | 90 | IPg | | 638 | 31.50 | 0.0 | | | | | | | | 1.0 |
| FKH | SN | 98 | 90 | ISg | | 638 | 43.86 | 0.6 | | | | | | | | 1.0 |

March 23 2006 Hour: 13:30 22.3 Lat: 34.40N Lon: 36.90E Depth: 0 Agency: REL Local Magnitudes: 2.9MC REL Rms: 0.5 secs

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT | |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|----|-----|
| FKH | SZ | 50 | 249 | EPg | | 1330 | 29.62 | -0.6 | 54 | | | | | | | 1.0 |
| FKH | SE | 50 | 249 | ESg | | 1330 | 35.67 | -0.5 | | | | | | | | 1.0 |
| HWQ | SZ | 89 | 262 | EPg | | 1330 | 37.13 | 0.5 | | | | | | | | 1.0 |
| HWQ | SN | 89 | 262 | ESg | | 1330 | 47.18 | -0.1 | | | | | | | | 1.0 |
| BHL | SZ | 127 | 245 | EPg | | 1330 | 42.95 | 0.1 | | | | | | | | 1.0 |
| BHL | SE | 127 | 245 | ESg | | 1330 | 58.63 | 0.6 | | | | | | | | 1.0 |

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| March 23 2006 Hour: 13:58 1.6 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1358 44.29 | |
| FKH SN ESG 1358 50.38 | |
| HWQ SZ EPg 1358 53.48 | |
| HWQ SE ESG 1359 1.55 | |
| March 24 2006 Hour: 11:56 0.7 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1157 2.00 | |
| FKH SN ESG 1157 7.46 | |
| HWQ SZ EPg 1157 4.22 | |
| HWQ SE ESG 1157 11.01 | |
| March 24 2006 Hour: 13:30 32.5 | Lat: 34.25N Lon: 35.31E Depth: 0 Agency: REL Local |
| Magnitudes: 3.5MC REL FELT Rms: 0.3 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ 50 140 IPg 1330 40.65 0.1 118 1.0 | |
| BHL BE 50 140 ISg 1330 46.18 -0.3 1.0 | |
| HWQ SZ 59 87 IPg 1330 41.61 -0.4 1.0 | |
| HWQ SN 59 87 ISg 1330 49.00 -0.1 1.0 | |
| MATL SZ 84 179 IPg 1330 46.40 0.3 1.0 | |
| FKH SZ 101 90 IPg 1330 48.62 -0.2 1.0 | |
| FKH SE 101 90 ISg 1331 1.35 0.5 1.0 | |
| March 24 2006 Hour: 21:26 1.2 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL SZ EPg 2126 33.77 | |
| HWQ SZ EPg 2126 35.55 | |
| BHL SN ESG 2126 40.11 | |
| HWQ SN ESG 2126 42.48 | |
| March 25 2006 Hour: 7:32 0.0 'Kcp'''Oy '70 | Agency: REL Regional |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EPn 733 10.93 | |
| March 25 2006 Hour: 9:57 52.6 'Kcp'''Oy '70 | Agency: REL Regional |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EPn 959 27.89 | |
| March 27 2006 Hour: 13:2 30.5 | Lat: 34.34N Lon: 36.80E Depth: 0 Agency: REL Local |
| Magnitudes: 3.0MC REL | Rms: 0.6 secs |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ 38 252 EPg 13 2 35.78 -0.9 60 1.0 | |
| FKH SE 38 252 ESG 13 2 41.07 -0.1 1.0 | |
| HWQ SZ 79 265 EPg 13 2 43.98 0.8 1.0 | |
| HWQ SN 79 265 ESG 13 2 52.26 -0.3 1.0 | |
| BHL SE 116 246 ESG 13 3 3.46 0.4 1.0 | |
| March 27 2006 Hour: 13:19 0.8 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1319 45.20 | |
| HWQ SZ EPg 1319 48.27 | |
| HWQ SN ESG 1319 54.01 | |
| FKH SE ESG 1319 51.83 | |
| March 27 2006 Hour: 20:26 52.9 'Hk'''O d'70 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EP 2027 5.42 | |

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| March 27 2006 Hour: 23:55 26.2 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EP 2355 46.86 | |
| March 28 2006 Hour: 9:12 33.1 Lat: 34.24N Lon: 35.33E Depth: 0 Agency: REL Local Magnitudes: 2.8MC REL Rms: 0.6 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL SZ 48 141 EPg 912 39.51 -1.3 1.0 | |
| BHL SN 48 141 ESG 912 46.75 0.2 1.0 | |
| HWQ SZ 57 85 EPg 912 42.72 0.4 46 1.0 | |
| HWQ SE 57 85 ESG 912 49.12 0.0 1.0 | |
| March 28 2006 Hour: 11:13 0.7 Agency: REL Local | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| HWQ SZ EPg 1114 34.13 | |
| HWQ SE ESG 1114 44.35 | |
| BHL SZ EPg 1114 41.44 | |
| BHL SN ESG 1114 59.11 | |
| March 28 2006 Hour: 13: 2 6.0 Lat: 34.22N Lon: 35.32E Depth: 0 Agency: REL Local Magnitudes: 3.6MC REL FELT Rms: 0.8 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ 47 139 IPg 13 2 13.55 0.0 129 1.0 | |
| BHL SE 47 139 ISg 13 2 19.09 0.0 1.0 | |
| HWQ SZ 58 84 IPg 13 2 14.44 -0.9 1.0 | |
| HWQ SE 58 84 ISg 13 2 21.93 -0.3 1.0 | |
| MATL SZ 82 179 IPg 13 2 19.28 0.2 1.0 | |
| FKH SZ 100 89 IPg 13 2 21.52 -0.5 1.0 | |
| FKH SE 100 89 ISg 13 2 34.24 0.3 1.0 | |
| March 28 2006 Hour: 13:43 52.6 'J qpuj w'''Oy '80 Agency: REL Distant | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EP 1344 20.23 | |
| BHL BZ EP 1344 23.65 | |
| March 28 2006 Hour: 18:39 0.0 Agency: REL Local | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EPg 1839 26.19 | |
| BHL BN ESG 1839 29.85 | |
| HWQ SZ EPg 1839 31.06 | |
| HWQ SE ESG 1839 36.11 | |
| March 28 2006 Hour: 18:40 23.8 'E{rtwtgi kqp'''OF'58 Agency: REL Regional | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| HWQ SZ EPn 1840 41.78 | |
| HWQ SE Sn 1841 27.92 | |
| FKH SE Sn 1841 36.82 | |
| BHL SE Sn 1841 24.67 | |
| March 29 2006 Hour: 9: 5 3.9 Lat: 33.83N Lon: 37.17E Depth: 20 Agency: REL Local Magnitudes: 3.3MC REL Rms: 0.2 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ 84 303 EPg 9 5 17.51 0.2 86 1.0 | |
| FKH SN 84 303 ESG 9 5 27.10 -0.1 1.0 | |
| HWQ SZ 123 294 EPg 9 5 23.09 0.0 1.0 | |
| HWQ SE 123 294 ESG 9 5 37.24 0.0 1.0 | |
| BHL SZ 140 274 EPg 9 5 25.30 -0.3 1.0 | |
| BHL SN 140 274 ESG 9 5 41.74 0.1 1.0 | |

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| March 29 2006 Hour: 11:35 0.8 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1135 32.35 | |
| FKH SN ESG 1135 41.61 | |
| HWQ SZ EPg 1135 37.50 | |
| HWQ SN ESG 1135 51.60 | |
| March 29 2006 Hour: 13:55 44.9 | Agency: REL Local |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| FKH SZ EPg 1356 12.54 | |
| HWQ SZ EPg 1356 20.51 | |
| FKH SE ESG 1356 18.66 | |
| HWQ SE ESG 1356 30.13 | |
| March 29 2006 Hour: 14:17 31.1 Lat: 33.85N Lon: 35.56E Depth: 19 Agency: REL Local | |
| Magnitudes: 3.1MC REL | |
| Rms: 0.7 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL SZ 11 58 IPg 1417 33.97 -0.8 68 | 1.0 |
| BHL SE 11 58 ISg 1417 37.63 0.2 | 1.0 |
| MATL SZ 46 208 IPg 1417 39.86 1.0 | 1.0 |
| HWQ SZ 59 37 IPg 1417 40.38 -0.5 | 1.0 |
| HWQ SN 59 37 ISg 1417 49.04 0.9 | 1.0 |
| FKH SZ 89 61 IPg 1417 44.30 -0.9 | 1.0 |
| FKH SE 89 61 ISg 1417 56.21 0.6 | 1.0 |
| March 29 2006 Hour: 16:17 49.8 'Vqpi c''''Od'70 | Agency: REL Distant |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL BZ EP 1618 14.11 | |
| March 29 2006 Hour: 16:50 41.6 Lat: 33.26N Lon: 35.58E Depth: 0 Agency: REL Local | |
| Magnitudes: 2.9MC REL | |
| Rms: 0.8 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| MATL SZ 34 318 EPg 1650 47.62 0.5 | 1.0 |
| BHL BZ 72 6 EPg 1650 52.58 -0.6 46 | 1.0 |
| BHL BN 72 6 ESG 1651 0.73 -1.0 | 1.0 |
| HWQ SZ 118 17 EPg 1651 0.40 -0.2 | 1.0 |
| HWQ SN 118 17 ESG 1651 15.91 1.2 | 1.0 |
| March 29 2006 Hour: 18:17 29.0 Lat: 34.23N Lon: 35.38E Depth: 14 Agency: REL Local | |
| Magnitudes: 2.9MC REL | |
| Rms: 0.2 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| BHL SZ 45 145 EPg 1817 36.40 -0.2 | 1.0 |
| BHL SE 45 145 ESG 1817 42.00 -0.2 | 1.0 |
| HWQ SZ 52 85 EPg 1817 37.90 0.1 53 | 1.0 |
| HWQ SN 52 85 ESG 1817 44.66 0.3 | 1.0 |
| FKH SZ 94 90 EPg 1817 44.39 0.0 | 1.0 |
| FKH SN 94 90 ESG 1817 55.49 -0.3 | 1.0 |
| March 29 2006 Hour: 22: 5 14.2 Lat: 35.41N Lon: 35.51E Depth: 15 Agency: REL Local | |
| Magnitudes: 4.3MC REL | |
| FELT | |
| Rms: 1.1 secs | |
| STAT CO DIST AZI PHASE P HRMN SECON TRES CODA AMPL PERI BAZ ARES VELO WT | |
| HWQ SZ 132 162 IPg 22 5 34.36 -0.2 | 1.0 |
| PHNC SZ 141 252 EP 22 5 36.3 0.4 | 1.0 |
| FKH SZ 154 148 IPg 22 5 38.02 0.2 319 | 1.0 |
| FKH SN 154 148 ISg 22 5 57.33 2.0 | 1.0 |
| BHL BZ 167 175 IPg 22 5 38.77 -1.1 | 1.0 |
| BHL BN 167 175 ISg 22 6 0.11 1.3 | 1.0 |
| CSS SZ 204 257 EP 22 5 44.0 -0.1 | 1.0 |
| MATL SZ 214 184 IPg 22 5 43.44 -3.1 | 1.0 |

March 30 2006 Hour: 11:47 23.1 Lat: 33.48N Lon: 36.56E Depth: 0 Agency: REL Local Magnitudes: 2.9MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 85 | 350 | EPg | | 1147 | 36.40 | -0.5 | 49 | | | | | | 1.0 |
| FKH | SN | 85 | 350 | ESg | | 1147 | 47.26 | 0.2 | | | | | | | 1.0 |
| BHL | SN | 96 | 300 | ESg | | 1147 | 50.07 | -0.1 | | | | | | | 1.0 |
| HWQ | SZ | 105 | 328 | EPg | | 1147 | 40.67 | 0.5 | | | | | | | 1.0 |
| HWQ | SE | 105 | 328 | ESg | | 1147 | 52.57 | -0.1 | | | | | | | 1.0 |

March 30 2006 Hour: 13:50 53.4 Lat: 34.44N Lon: 36.82E Depth: 0 Agency: REL Local Magnitudes: 3.1MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| FKH | SZ | 45 | 239 | EPg | | 1350 | 59.09 | -1.5 | 69 | | | | | | 1.0 |
| FKH | SN | 45 | 239 | ESg | | 1351 | 5.15 | -0.7 | | | | | | | 1.0 |
| HWQ | SZ | 82 | 258 | EPg | | 1351 | 7.30 | 0.7 | | | | | | | 1.0 |
| HWQ | SE | 82 | 258 | ESg | | 1351 | 15.74 | -0.7 | | | | | | | 1.0 |
| BHL | SZ | 123 | 241 | EPg | | 1351 | 14.03 | 0.9 | | | | | | | 1.0 |
| BHL | SN | 123 | 241 | ESg | | 1351 | 29.17 | 1.4 | | | | | | | 1.0 |
| MATL | SZ | 173 | 233 | EPg | | 1351 | 21.46 | 0.1 | | | | | | | 1.0 |

March 30 2006 Hour: 16:18 48.3 'Kcp'''Od'60 Agency: REL Regional

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|-----|------|-------|-------|------|------|------|-----|------|------|----|
| BHL | BZ | | | | EPn | | 1619 | 46.17 | | | | | | | |

March 30 2006 Hour: 19:37 36.8 'Kcp'''Od'70 Agency: REL Regional

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|-----|------|-------|-------|------|------|------|-----|------|------|----|
| BHL | BZ | | | | EPn | | 1938 | 58.92 | | | | | | | |

March 31 2006 Hour: 1:16 40.0 'Kcp'''Od'70 Agency: REL Regional

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|-----|------|-------|-------|------|------|------|-----|------|------|----|
| BHL | BZ | | | | EPn | | 119 | 40.26 | | | | | | | |
| FKH | SZ | | | | EPn | | 119 | 30.61 | | | | | | | |
| HWQ | SZ | | | | EPn | | 119 | 37.48 | | | | | | | |
| MATL | SZ | | | | EPn | | 119 | 45.12 | | | | | | | |

March 31 2006 Hour: 11:55 56.1 'Kcp'''Od'60 Agency: REL Regional

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|-----|------|-------|-------|------|------|------|-----|------|------|----|
| BHL | BZ | | | | EPn | | 1156 | 43.00 | | | | | | | |

March 31 2006 Hour: 13:40 0.8 'Mgto cf ge'''Od'86 Agency: REL Distant

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|----|------|-------|-------|------|------|------|-----|------|------|----|
| BHL | BZ | | | | EP | | 1340 | 52.91 | | | | | | | |
| FKH | SZ | | | | EP | | 1340 | 53.35 | | | | | | | |

March 31 2006 Hour: 19: 9 1.2 Agency: REL Local

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|-----|------|-------|------|-------|------|------|-----|------|------|----|
| HWQ | SZ | | | | EPg | | 19 | 9 | 15.06 | | | | | | |
| HWQ | SN | | | | ESg | | 19 | 9 | 22.44 | | | | | | |
| BHL | SE | | | | ESg | | 19 | 9 | 18.67 | | | | | | |

March 31 2006 Hour: 21:26 1.5 'Vcnewf 'knpf u'''Oy '80 Agency: REL Distant

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|----|------|-------|-------|------|------|------|-----|------|------|----|
| FKH | SZ | | | | EP | | 2127 | 32.06 | | | | | | | |
| BHL | BZ | | | | EP | | 2127 | 34.32 | | | | | | | |

March 31 2006 Hour: 21:46 10.3 Lat: 34.26N Lon: 26.52E Depth: 14 Agency: REL Regional Magnitudes: 4.6MC REL

| STAT | CO | DIST | AZI | PHASE | P | HRMN | SECON | TRES | CODA | AMPL | PERI | BAZ | ARES | VELO | WT |
|------|----|------|-----|-------|---|------|-------|------|------|------|------|-----|------|------|-----|
| BHL | BZ | 843 | 90 | EPn | | 2147 | 59.56 | -0.1 | | | | | | | 1.0 |
| BHL | BE | 843 | 90 | Sn | | 2149 | 20.70 | 0.1 | | | | | | | 1.0 |
| HWQ | SZ | 867 | 87 | EPn | | 2148 | 2.49 | -0.2 | 186 | | | | | | 1.0 |
| HWQ | SE | 867 | 87 | Sn | | 2149 | 26.40 | 0.5 | | | | | | | 1.0 |
| FKH | SZ | 910 | 87 | EPn | | 2148 | 8.22 | 0.3 | | | | | | | 1.0 |

FKH SN 910 87 Sn 2149 34.32 -0.6 1.0

Epicentral Map of Lebanon

March 2006

