

Seismological Bulletin

*Broadband Iranian National Seismic Network Center
(BIN)*

April to June

2010

*Seismology Department
International Institute of Earthquake Engineering and Seismology (IIEES)
No. 21, Arghavan St., North Dibajee, Farmanieh
Tehran
Islamic Republic of Iran*

*Tel: +98-21-22830830
Fax: +98-21-22299479*

GENERAL BULLETIN INFORMATION

LOCATION PROGRAM AND VELOCITY MODEL

The location program used for locating earthquakes is Hypocenter (Lienert et al.,1986). As a general policy, neither depths nor epicenters are fixed unless stated. No station corrections are used for travel time calculations.

Plane parallel layers are assumed for local and regional events, while the IASPEI travel time tables are used for distant events (Epicentral distance larger than 15 degrees).The model used for all local and regional events, is:
(Doloei and Roberts, 2003; Kaviani, 2004;Tatar, 2001):

P-wave velocity (km/sec)	depth to top of layer (km)
5.4	0.0
5.9	6.0
6.3	14.0
6.5	18.0
8.05	46.0 (Moho)
8.1	80.0

The Vp/Vs velocity ratio used in layered models above is 1.73 (Tatar, 2001).

MAGNITUDE RELATION

After instrumental correction the maximum ground amplitudes A(nm) is used to calculate local magnitude Ml applying the following formula (Hutton and Boore, 1987):

$$Ml = \log(A) + 1.1 \cdot \log(D) + 0.00189 \cdot D - 2.09$$

where D is the hypocentral distance in km.This relation is valid for hypocentral distances between 10 and 700 km. All available amplitudes are used for magnitude calculations. No station corrections are used for magnitude calculations.

STATION COORDINATES

The stations listed below are those operated by Seismology Department of the International Institute of Earthquake Engineering and Seismology (IIEES).

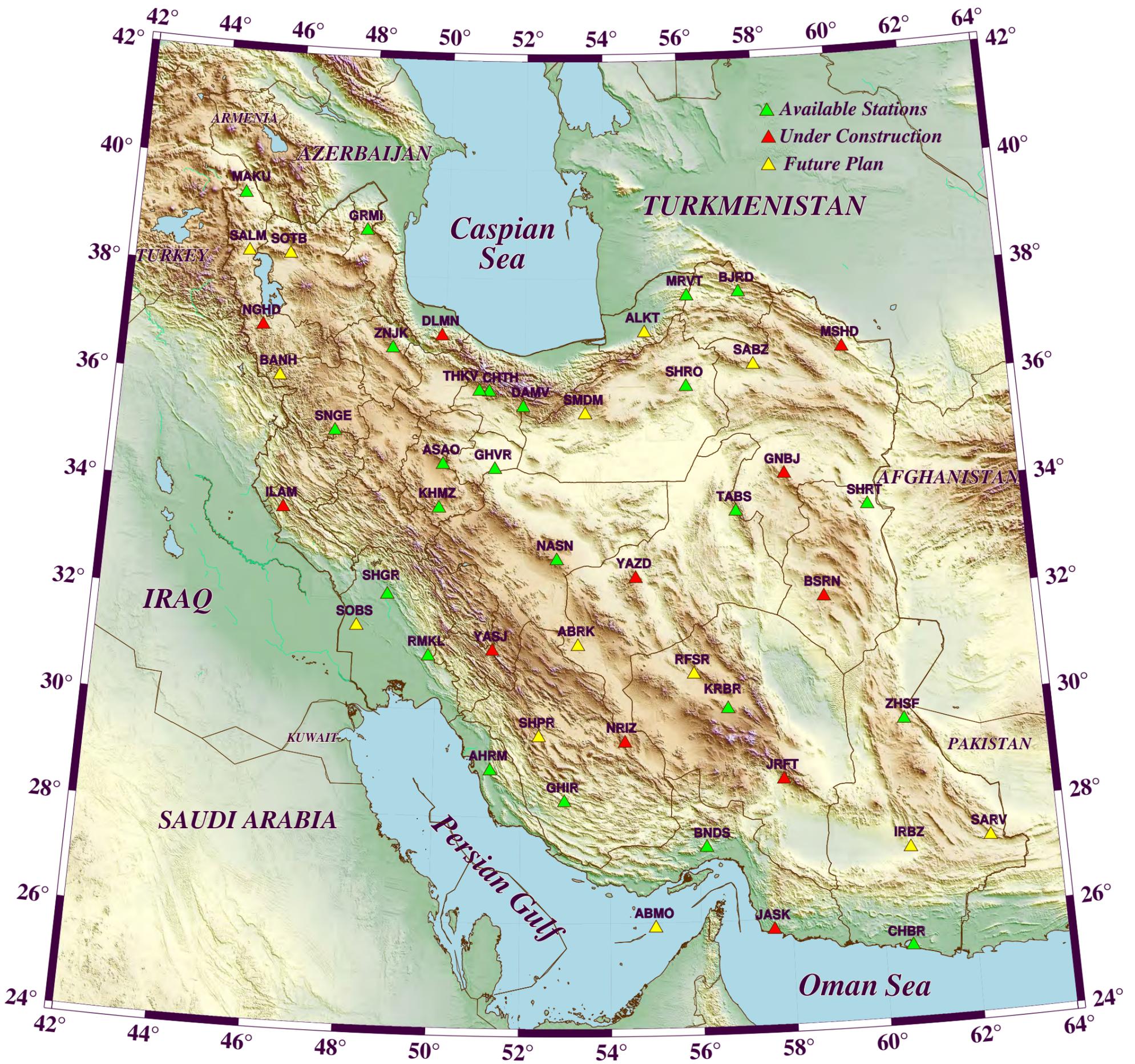
STATION	LATITUDE	LONGITUDE	ALTITUDE(m)	NAME
ASAO	3432.88N	5001.52E	2217	Ashtian
BJRD	3741.98N	5724.49E	1337	Bojnoord
BNDS	2723.96N	5610.28E	1500	Bandar Abbas
CHTH	3554.48N	5107.56E	2250	Charan
DAMV	3537.82N	5158.26E	2300	Damavand
GHIR	2817.13N	5259.20E	1200	Ghir
GHVR	3428.80N	5114.72E	0927	Qom
GRMI	3848.59N	4753.63E	1300	Germi
KHMZ	3344.38N	4957.85E	1985	Khomein
KRBA	2958.93N	5645.63E	2576	Bardsir
MAKU	3921.29N	4441.00E	1730	Maku
MRVT	3739.56N	5605.36E	0870	Maraveh tapeh
NASN	3247.95N	5248.50E	2800	Naein
SHGR	3206.50N	4848.08E	0150	Shushtar
SHRO	3600.51N	5600.78E	1264	Shahrud
SHRT	3338.77N	6017.46E	0837	Shah-rakht
SNGE	3505.55N	4720.82E	1940	Sanandaj
TABS	3338.94N	5707.14E	0000	Tabas
THKV	3554.94N	5052.73E	1795	Kavosh
ZHSF	2936.66N	6046.52E	1575	Zahedan
ZNJK	3640.25N	4841.11E	2200	Zanjan

ABBREVIATIONS

TIME: Origin time in UTC (hour, minute, and seconds)
LAT: Latitude of epicenter (degree-minute)
LON: Longitude of epicenter (degree-minute)
DEPTH: Focal depth in kilometer (F indicates fixed depth)
AGENCY: Hypocenter reporting agency
MAGNITUDES: Up to 3 different magnitudes can be given followed by type and reporting agency
RMS: Root mean square value of travel time residuals (seconds)
STAT: Station code
CO: Component, S: short period, L: long period, B: broadband,
DIST: Epicentral 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 asterix 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.

REFERENCES

- Doloei, J. and R. Roberts (2003). Crustal and uppermost mantle structure of Tehran region from teleseismic P-waveform receiver function analysis, *Tectonophysics*, 364, 115-133.
- Hutton, L. K. and D. M. Boore (1987). The ML scale in Southern California, *Bull. Seism. Soc. Am.*, 77, No. 6, pp. 2074-2094.
- Kaviani, A. (2004). La chaîne de collision continentale du Zagros (Iran): structure lithosphérique par analyse de données sismologiques. Ph.D. Thesis, University of Joseph Fourier-Grenoble I.
- Lienert, B.R., E. Berg, and L.N. Frazer (1986). Hypocenter: An earthquake location method using centered, scaled, and adaptively least squares, *Bull. Seism. Soc. Am.*, 76., pp 771-783.
- Tatar M. (2001). Etude sismotectonique de deux zones de collision continentale: le Zagros Central et l'Alborz, Ph.D. thesis, University of Joseph Fourier-Grenoble I.



Broadband Iranian National Seismic Network (BIN)

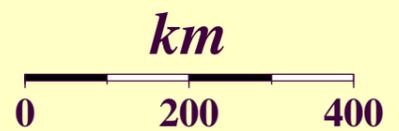
- | | | |
|--------------------|--------------------|-------------|
| Available Stations | Under Construction | Future Plan |
|--------------------|--------------------|-------------|

More information available at :

http://www.iiees.ac.ir/Seismology/seis_stations.html/



International Institute of Earthquake Engineering and Seismology(IIEES)



April 1 2010 Hour: 7:31 59.7 Lat: 27.46N Lon: 53.60E Depth: 39 Agency: INS Local
Magnitudes: 3.9ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	109	327	EPg		732	18.45	0.0							1.0
GHIR	BN	109	327	AML		732	42.63			2581	0.5				
BNDS	BZ	255	91	EPn		732	36.84	0.0							1.0
BNDS	BN	255	91	AML		733	16.50			674	0.5				
BNDS	BE	255	91	AML		733	33.92			663	0.8				
KRBR	BZ	417	47	EPn		732	57.10	0.0							0.9
KRBR	BN	417	47	AML		733	46.36			184	0.6				
NASN	BZ	596	353	EPn		733	19.50	0.1							0.7
SHGR	BZ	693	319	EPn		733	30.91	-0.1							0.7
GHVR	BZ	810	344	EPn		733	45.96	0.3							0.6
ASAO	BZ	856	337	EPn		733	51.41	-0.2							0.6
SHRT	BZ	939	41	EPN5		734	1.34	-0.4							0.5

April 1 2010 Hour: 7:37 26.1 Lat: 27.55N Lon: 53.65E Depth: 34 Agency: INS Local
Magnitudes: 3.9ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	104	321	EPg		737	43.91	0.0							1.0
GHIR	BE	104	321	AML		738	4.80			2793	0.6				
BNDS	BZ	250	93	EPn		738	3.02	0.0							1.0
KRBR	BZ	406	48	EPn		738	22.83	0.2							0.9
KRBR	BN	406	48	AML		739	24.66			193	0.4				
KRBR	BE	406	48	AML		739	28.47			195	0.5				
NASN	BZ	587	352	EP		738	45.15	0.0							0.8
SHGR	BZ	689	318	EPn		738	57.57	0.1							0.7
GHVR	BZ	802	344	EPn		739	11.42	-0.1							0.6
ASAO	BZ	849	337	EPn		739	17.48	-0.2							0.6
SHRT	BZ	928	42	EPN5		739	26.90	-0.3							0.5

April 1 2010 Hour: 8:43 6.8 Lat: 27.44N Lon: 53.56E Depth: 33 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	109	329	EPg		843	25.32	0.0							1.0
GHIR	BN	109	329	AML		843	48.97			1343	0.5				
GHIR	BE	109	329	AML		843	49.96			1712	0.3				
BNDS	BZ	258	91	EPn		843	44.91	0.0							1.0
BNDS	BN	258	91	AML		844	23.00			392	0.3				
KRBR	BZ	421	47	EPn		844	5.16	-0.1							0.9
KRBR	BN	421	47	AML		844	51.50			137	0.5				
KRBR	BE	421	47	AML		845	11.90			152	0.6				
NASN	BZ	598	353	EPn		844	27.45	0.1							0.7
SHGR	BZ	692	319	EPn		844	38.36	-0.3							0.7
CHBR	BZ	720	105	EPn		844	42.22	0.2							0.7
ASAO	BZ	857	338	EPn		844	59.61	0.2							0.6
SNGE	BZ	1034	327	EPn		845	21.44	0.1							0.4

April 6 2010 Hour: 0:47 7.4 Lat: 39.27N Lon: 54.30E Depth: 15 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MRVT	BZ	238	138	EPn		047	44.57	0.0							1.0
MRVT	BE	238	138	AML		048	10.20			525	0.3				
MRVT	BN	238	138	AML		048	10.32			643	0.4				
DAMV	BZ	453	208	EPn		048	11.71	0.1							0.8
CHTH	BZ	466	218	EPn		048	13.18	0.0							0.8
GRMI	BZ	557	267	EPn		048	24.24	0.0							0.8
ZNJK	BZ	571	241	EPn		048	26.30	0.1							0.8
ZNJK	BN	571	241	AML		049	34.88			45	0.6				
ZNJK	BE	571	241	AML		049	35.69			57	0.5				
GHVR	BZ	597	208	EPn		048	29.42	0.2							0.7
KHMZ	BZ	726	214	EPn		048	44.79	-0.6							0.6

April 8 2010 Hour: 9:25 11.8 Lat: 37.16N Lon: 50.21E Depth: 15 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZNJK	BZ	147	249	EPg		925	36.41	0.1							1.0
CHTH	BZ	161	149	EPg		925	39.14	0.5							1.0
CHTH	BN	161	149	ESg		925	58.32	0.0							1.0
DAMV	BZ	232	137	EPg		925	49.28	-0.6							1.0
DAMV	BN	232	137	AML		926	29.58			324	0.6				
GRMI	BZ	274	313	EPn		925	53.56	0.1							1.0
GHVR	BZ	312	162	EPn		925	58.39	0.3							1.0
GHVR	BE	312	162	AML		926	50.79			344	0.5				
GHVR	BN	312	162	AML		926	51.82			409	0.6				
SNGE	BZ	345	229	EPn		926	2.02	-0.4							0.9

April 9 2010 Hour: 21:21 56.0 Lat: 32.56N Lon: 48.37E Depth: 15 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	65	141	EPg		2122	7.36	0.0							1.0
SNGE	BZ	296	342	EPn		2122	40.70	0.1							1.0
SNGE	BE	296	342	AML		2123	23.36			243	0.6				
GHVR	BZ	341	51	EPn		2122	46.60	0.6							0.9
GHVR	BN	341	51	AML		2123	42.68			342	0.8				
GHVR	BE	341	51	AML		2123	44.43			284	0.7				
NASN	BZ	417	85	EPn		2122	55.49	-0.2							0.9
NASN	BN	417	85	AML		2123	42.39			129	0.4				
NASN	BE	417	85	AML		2124	2.53			139	0.6				
CHTH	BZ	450	34	EPn		2122	59.16	-0.5							0.9
CHTH	BE	450	34	ESg		2124	1.70	0.0							0.9
ZNJK	BZ	457	4	EPn		2123	0.36	-0.2							0.8

April 10 2010 Hour: 8:48 10.4 Lat: 31.23N Lon: 50.04E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	153	310	EPg		848	35.67	-0.1							1.0
SHGR	BN	153	310	ESg		848	54.21	0.0							1.0
NASN	BZ	314	56	EPn		848	57.29	-0.1							1.0
GHVR	BZ	377	17	EPn		849	5.11	0.1							0.9
GHVR	BN	377	17	AML		850	6.15			86	0.7				
GHVR	BE	377	17	AML		850	12.21			116	0.5				
GHIR	BZ	433	138	EPn		849	12.06	0.0							0.9
GHIR	BN	433	138	AML		850	38.37			55	0.6				
ZNJK	BZ	616	349	EPn		849	35.04	0.1							0.7
TABS	BZ	717	66	EPn		849	47.29	0.0							0.7
SHRT	BZ	1000	72	EPn		850	22.32	0.0							0.4

April 10 2010 Hour: 23:49 58.9 Lat: 29.18N Lon: 58.44E Depth: 14 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	185	299	EPg		2350	29.62	0.0							1.0
KRBR	BN	185	299	AML		2350	54.74			1462	0.1				
KRBR	BE	185	299	AML		2350	56.55			2375	0.3				
ZHSF	BZ	232	78	EPg		2350	36.89	0.0							1.0
ZHSF	BN	232	78	AML		2351	11.39			156	0.4				
BNDS	BZ	298	229	EPn		2350	43.73	0.0							1.0
BNDS	BN	298	229	AML		2351	35.16			245	0.1				
BNDS	BE	298	229	AML		2351	35.19			307	0.1				
GHIR	BZ	542	261	EPn		2351	14.08	0.0							0.8
GHIR	BN	542	261	AML		2352	27.56			30	1.3				

April 11 2010 Hour: 13:49 13.3 Lat: 28.53N Lon: 56.88E Depth: 14 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	143	209	EPg		1349	36.96	-0.2							1.0
BNDS	BN	143	209	ESg		1349	54.65	0.1							1.0
BNDS	BN	143	209	AML		1350	2.79			2498	0.4				
BNDS	BE	143	209	AML		1350	5.42			2527	0.4				
KRBR	BZ	162	356	EPg		1349	40.20	0.0							1.0
KRBR	BN	162	356	ESg		1349	59.96	0.0							1.0
KRBR	BN	162	356	AML		1350	4.31			948	0.7				
KRBR	BE	162	356	AML		1350	15.03			1126	0.5				
GHIR	BZ	382	267	EPn		1350	8.63	0.1							0.9
GHIR	BN	382	267	AML		1350	56.12			176	0.5				
GHIR	BE	382	267	AML		1350	57.92			123	0.6				
ZHSF	BZ	398	71	EPn		1350	10.61	0.1							0.9
NASN	BZ	614	322	EPn		1350	37.42	-0.1							0.7

April 12 2010 Hour: 8:29 2.8 Lat: 34.75N Lon: 58.56E Depth: 35 Agency: INS Local
Magnitudes: 4.0ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	180	228	EPg		829	32.34	0.2							1.0
TABS	BE	180	228	AML		830	2.93			1686	0.4				
TABS	BN	180	228	AML		830	4.90			2508	0.5				
SHRT	BZ	201	127	EPg		829	35.16	-0.2							1.0
MRVT	BZ	392	326	EPn		829	57.66	0.4							0.9
KRBR	BZ	555	198	EPn		830	18.28	0.5							0.8
KRBR	BE	555	198	AML		832	4.20			148	0.5				
KRBR	BN	555	198	AML		832	6.22			105	0.6				
NASN	BZ	575	249	EP		830	19.82	-0.4							0.8
NASN	BN	575	249	AML		832	0.38			45	0.3				
DAMV	BZ	608	281	EPn		830	23.54	-0.7							0.7

April 12 2010 Hour: 8:54 17.4 Lat: 34.66N Lon: 58.69E Depth: 32 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	183	233	EPg		854	47.16	0.0							1.0
TABS	BN	183	233	AML		855	19.59			485	0.5				
SHRT	BZ	186	127	EPg		854	47.49	0.0							1.0
SHRT	BE	186	127	AML		855	18.21			997	0.5				
SHRT	BN	186	127	AML		855	18.28			568	0.6				
MRVT	BZ	407	326	EPn		855	14.07	0.1							0.9
KRBR	BZ	550	200	EPn		855	32.01	0.1							0.8
CHTH	BZ	701	284	EPn		855	50.42	-0.3							0.7

April 12 2010 Hour: 9:34 3.7 Lat: 34.89N Lon: 58.63E Depth: 15F Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	196	226	EPg		934	35.89	-0.1							1.0
TABS	BN	196	226	ESg		934	59.65	0.1							1.0
TABS	BE	196	226	AML		935	5.01			320	0.6				
TABS	BN	196	226	AML		935	7.68			475	0.8				
SHRT	BZ	206	132	EPg		934	37.53	0.0							1.0
SHRT	BE	206	132	AML		935	6.39			1501	0.4				
MRVT	BZ	383	324	EPn		934	58.90	0.0							0.9

April 12 2010 Hour: 11:56 30.7 Lat: 35.13N Lon: 58.67E Depth: 15F Agency: INS Local
Magnitudes: 4.6ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	218	221	EPg		1157	5.91	-0.5							1.0
TABS	BE	218	221	ESg		1157	32.38	-0.1							1.0
TABS	BE	218	221	AML		1157	36.21			6552	0.5				
SHRT	BZ	222	137	EPg		1157	6.87	-0.1							1.0
SHRT	BN	222	137	AML		1157	37.50			5312	0.8				

KRBR	BZ	598	198	EPn	1157	53.39	0.5										0.7
KRBR	BE	598	198	ESg	1159	17.64	0.4										0.7
KRBR	BE	598	198	AML	1159	32.12				403	0.8						
KRBR	BN	598	198	AML	1159	41.07				519	0.7						
NASN	BZ	600	246	EPn	1157	52.93	-0.2										0.7
NASN	BN	600	246	AML	1159	33.58				318	0.6						
NASN	BE	600	246	AML	1159	41.61				195	0.6						
DAMV	BZ	611	277	EPn	1157	54.87	0.4										0.7
DAMV	BN	611	277	AML	1159	41.66				121	0.6						
DAMV	BE	611	277	AML	1159	43.30				164	0.6						
GHVR	BZ	683	266	EPn	1158	2.82	-0.4										0.7
GHVR	BE	683	266	AML	1159	59.20				238	0.6						
GHVR	BN	683	266	AML	12 0	11.84				162	0.8						
CHTH	BZ	690	279	EPn	1158	4.56	0.4										0.7
CHTH	BE	690	279	AML	12 0	11.49				70	0.7						

April 13 2010 Hour: 12:40 28.9 Lat: 34.29N Lon: 48.34E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SNGE	BZ	127	315	EPg		1240	50.31	0.1							1.0
SNGE	BE	127	315	ESg		1241	5.77	-0.1							1.0
SHGR	BZ	246	170	EPn		1241	7.22	0.2							1.0
SHGR	BE	246	170	ESg		1241	38.21	-0.1							1.0
SHGR	BE	246	170	AML		1241	48.54			328	0.7				
SHGR	BN	246	170	AML		1241	49.98			328	0.7				
GHVR	BZ	268	85	EPn		1241	9.84	-0.1							1.0
GHVR	BN	268	85	AML		1241	48.28			225	0.6				
GHVR	BE	268	85	AML		1241	54.58			315	0.5				
CHTH	BZ	311	54	EPn		1241	15.37	0.0							1.0

April 19 2010 Hour: 3:31 15.3 Lat: 37.38N Lon: 56.70E Depth: 15 Agency: INS Local
Magnitudes: 4.3ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	415	175	EPN5		332	15.18	0.6							1.0
TABS	BN	415	175	AML		333	33.91			504	0.7				
DAMV	BZ	465	247	EPn		332	21.09	0.1							1.0
DAMV	BN	465	247	AML		333	49.65			345	0.6				
CHTH	BZ	524	254	EPn		332	28.31	0.1							0.9
SHRT	BZ	527	141	EPn		332	28.02	-0.3							0.9
GHVR	BZ	587	238	EPn		332	35.98	0.1							0.9
GHVR	BE	587	238	AML		334	34.64			195	0.8				
NASN	BZ	619	216	EPn		332	39.37	-0.7							0.8
KHMZ	BZ	731	239	EPn		332	53.66	-0.3							0.7
SNGE	BZ	877	256	EP		333	12.24	0.2							0.6
GHIR	BZ	1066	200	EPn		333	34.98	-0.4							0.5
BNDS	BZ	1107	183	EPn		333	40.44	-0.1							0.4

April 24 2010 Hour: 6: 4 53.1 Lat: 35.65N Lon: 59.44E Depth: 15F Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHRT	BZ	235	160	EPg		6 5	31.58	0.0							1.0
SHRT	BN	235	160	ESg		6 5	59.59	0.0							1.0
SHRT	BN	235	160	AML		6 6	2.74			296	0.3				
SHRT	BE	235	160	AML		6 6	8.93			271	0.5				
TABS	BZ	307	225	EPn		6 5	39.13	0.1							1.0
TABS	BN	307	225	AML		6 6	25.78			171	0.5				
KRBR	BZ	676	203	EPn		6 6	24.95	-0.1							0.7
NASN	BZ	688	245	EPn		6 6	26.26	-0.2							0.7

April 27 2010 Hour: 22:57 59.9 Lat: 27.02N Lon: 54.83E Depth: 35 Agency: INS Local
Magnitudes: 5.1ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	140	72	EPg		2258	23.06	0.0							1.0
BNDS	BN	140	72	ESg		2258	40.03	0.0							1.0
BNDS	BN	140	72	AML		2258	41.43			50454	0.8				
BNDS	BE	140	72	AML		2258	43.81			53230	0.2				
GHIR	BZ	229	308	EPg		2258	36.81	0.0							1.0
GHIR	BE	229	308	AML		2259	15.01			15613	0.8				
GHIR	BN	229	308	AML		2259	18.19			15624	0.2				
KRBR	BZ	379	30	EPn		2258	53.11	0.1							0.9
KRBR	BN	379	30	AML		2259	58.21			1661	0.6				
KRBR	BE	379	30	AML		23 0	0.10			1594	0.3				
NASN	BZ	669	344	EPn		2259	29.11	0.0							0.7
TABS	BZ	767	16	EPn		2259	40.88	-0.1							0.6

April 27 2010 Hour: 23:11 27.3 Lat: 27.16N Lon: 54.85E Depth: 15 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	134	78	EPg		2311	49.68	0.0							1.0
BNDS	BE	134	78	AML		2312	11.46			1485	0.4				
BNDS	BN	134	78	AML		2312	13.91			1417	0.4				
GHIR	BZ	222	305	EPg		2312	3.73	0.0							1.0
GHIR	BN	222	305	AML		2312	43.13			480	0.7				
GHIR	BE	222	305	AML		2312	47.39			532	0.6				
KRBR	BZ	365	30	EPn		2312	20.47	0.0							0.9

April 28 2010 Hour: 13: 6 35.6 Lat: 27.03N Lon: 54.92E Depth: 31 Agency: INS Local
Magnitudes: 3.9ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	130	71	EPg		13 6	57.78	0.5							1.0
BNDS	BN	130	71	ESg		13 7	12.78	-0.3							1.0
BNDS	BN	130	71	AML		13 7	16.86			2177	0.5				
BNDS	BE	130	71	AML		13 7	17.25			3200	0.5				
GHIR	BZ	236	306	EPg		13 7	12.98	-0.5							1.0
GHIR	BN	236	306	ESg		13 7	41.46	0.3							1.0
GHIR	BE	236	306	AML		13 7	50.82			951	0.6				
GHIR	BN	236	306	AML		13 7	53.11			861	0.7				
KRBR	BZ	373	28	EPn		13 7	28.31	0.0							0.9
NASN	BZ	671	343	EPn		13 8	5.31	0.0							0.7

April 28 2010 Hour: 17:39 16.3 Lat: 35.90N Lon: 49.10E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZNJK	BZ	93	337	EPg		1739	32.34	0.0							1.0
ASAO	BZ	172	150	EPg		1739	44.89	0.0							1.0
ASAO	BE	172	150	ESg		1740	5.72	0.0							1.0
ASAO	BE	172	150	AML		1740	6.76			300	0.4				
CHTH	BZ	183	89	EPg		1739	46.53	-0.1							1.0
DAMV	BZ	261	96	EPn		1739	56.76	0.1							1.0
DAMV	BN	261	96	AML		1740	37.55			425	0.6				
DAMV	BE	261	96	AML		1740	38.95			408	0.6				

April 28 2010 Hour: 20: 4 17.7 Lat: 35.89N Lon: 49.07E Depth: 14 Agency: INS Local
Magnitudes: 4.2ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZNJK	BZ	94	339	EPg		20 4	33.91	0.2							1.0
ASAO	BZ	172	149	EPg		20 4	46.52	0.3							1.0
ASAO	BN	172	149	ESg		20 5	7.15	0.0							1.0
SNGE	BZ	179	241	EPg		20 4	47.14	-0.2							1.0
SNGE	BN	179	241	AML		20 5	10.03			3904	0.5				
SNGE	BE	179	241	AML		20 5	11.24			3074	0.6				
CHTH	BZ	186	89	EPg		20 4	48.06	-0.4							1.0

DAMV	BZ	264	95	EPn		20	4	58.54	0.1								1.0
DAMV	BN	264	95	ESg		20	5	32.40	0.0								1.0
DAMV	BE	264	95	AML		20	5	40.20			1039	0.7					

April 29 2010 Hour: 21:13 20.4 Lat: 28.60N Lon: 57.44E Depth: 14 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	167	337	EPg		2113	48.16	-0.1							1.0
KRBR	BN	167	337	AML		2114	17.29			815	0.5				
BNDS	BZ	182	224	EPg		2113	50.54	0.1							1.0
ZHSF	BZ	343	70	EPn		2114	10.98	0.1							0.9
GHIR	BZ	438	267	EPn		2114	22.52	0.0							0.9
GHIR	BN	438	267	AML		2115	10.59			77	0.4				
CHBR	BZ	449	137	EPn		2114	23.58	-0.2							0.9

April 29 2010 Hour: 21:14 1.3 Lat: 28.55N Lon: 57.45E Depth: 29 Agency: INS Local
Magnitudes: 3.9ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	179	225	EPg		2114	30.18	-0.3							1.0
BNDS	BE	179	225	ESg		2114	51.95	0.2							1.0
BNDS	BE	179	225	AML		2114	54.73			1498	0.6				
BNDS	BN	179	225	AML		2114	58.89			1252	0.6				
ZHSF	BZ	345	69	EPn		2114	50.72	0.2							0.9
GHIR	BZ	438	267	EPn		2115	1.99	-0.1							0.9
GHIR	BN	438	267	AML		2115	49.53			160	0.5				
CHBR	BZ	445	137	EPN5		2115	2.67	-0.1							0.9

May 1 2010 Hour: 13:28 16.0 Lat: 30.85N Lon: 57.60E Depth: 14 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	126	220	EPg		1328	37.25	0.0							1.0
KRBR	BN	126	220	AML		1328	53.07			2305	0.3				
KRBR	BE	126	220	AML		1328	54.34			1420	0.7				
TABS	BZ	313	352	EPn		1329	2.63	0.0							1.0
TABS	BE	313	352	AML		1329	52.10			157	0.8				
TABS	BN	313	352	AML		1329	56.27			453	1.1				
ZHSF	BZ	335	113	EPn		1329	5.36	0.0							0.9
SHRT	BZ	400	39	EPn		1329	13.46	0.1							0.9
BNDS	BZ	407	200	EPn		1329	14.38	0.0							0.9
BNDS	BN	407	200	AML		1330	18.26			75	0.6				

May 5 2010 Hour: 16:10 7.4 Lat: 26.90N Lon: 53.71E Depth: 43 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	170	335	EPg		1610	35.36	0.0							1.0
GHIR	BN	170	335	AML		1611	0.93			1358	0.5				
GHIR	BE	170	335	AML		1611	2.57			1352	0.7				
BNDS	BZ	250	77	EPn		1610	43.57	0.0							1.0
BNDS	BN	250	77	AML		1611	24.00			323	0.4				
BNDS	BE	250	77	AML		1611	34.60			374	0.6				
KRBR	BZ	454	40	EPn		1611	9.06	0.0							0.8
KRBR	BN	454	40	AML		1612	14.76			142	0.6				
KRBR	BE	454	40	AML		1612	15.18			150	0.5				
ZHSF	BZ	755	65	EPn		1611	46.35	0.0							0.6
ASAO	BZ	919	338	EPn		1612	6.76	0.0							0.5

May 6 2010 Hour: 11:11 51.7 Lat: 28.36N Lon: 50.82E Depth: 37 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	213	92	EPg		1112	26.06	0.0							1.0
GHIR	BN	213	92	ESg		1112	51.14	0.0							1.0
GHIR	BE	213	92	AML		1113	4.40			1075	0.6				
NASN	BZ	528	21	EPn		1113	3.20	0.0							0.8
KRBR	BZ	605	71	EPn		1113	12.75	0.0							0.7

KRBR	BE	605	71	AML		1114	15.04			39	0.4				
KRBR	BN	605	71	AML		1114	18.77			35	0.4				
TABS	BZ	840	44	EPn		1113	41.64	-0.1							0.6

May 6 2010 Hour: 15: 7 11.3 Lat: 26.77N Lon: 53.86E Depth: 16 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	189	333	EPg		15	7	42.46	0.0						1.0
GHIR	BN	189	333	ESg		15	8	5.23	0.0						1.0
GHIR	BN	189	333	AML		15	8	7.20		2070	0.7				
GHIR	BE	189	333	AML		15	8	11.76		1415	0.8				
BNDS	BZ	239	72	EPg		15	7	50.46	0.0						1.0
BNDS	BN	239	72	AML		15	8	37.64		296	0.5				
KRBR	BZ	456	38	EPn		15	8	15.64	0.0						0.8
KRBR	BN	456	38	AML		15	9	21.74		102	0.7				
KRBR	BE	456	38	AML		15	9	22.33		82	0.2				

May 7 2010 Hour: 9:41 58.5 Lat: 31.73N Lon: 49.75E Depth: 14 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	99	296	EPg		942	15.35	0.0							1.0
SHGR	BN	99	296	AML		942	37.39			2100	0.6				
SHGR	BE	99	296	AML		942	45.22			1496	0.5				
NASN	BZ	312	67	EPn		942	45.23	0.0							1.0
GHVR	BZ	336	24	EPn		942	48.00	0.0							0.9
GHVR	BE	336	24	ESg		943	32.70	0.0							0.9
GHVR	BN	336	24	AML		943	44.53			142	0.8				
GHVR	BE	336	24	AML		943	48.36			211	0.7				
DAMV	BZ	480	25	EPn		943	5.96	0.0							0.8
DAMV	BE	480	25	AML		944	27.06			60	0.6				
DAMV	BN	480	25	AML		944	32.02			48	0.7				
CHTH	BZ	481	15	EPn		943	6.21	0.0							0.8

May 7 2010 Hour: 16: 9 51.5 Lat: 29.24N Lon: 51.27E Depth: 15F Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	198	122	EPg		1610	24.11	0.0							1.0
GHIR	BE	198	122	AML		1610	54.70			1631	0.7				
GHIR	BN	198	122	AML		1611	2.51			1527	0.7				
NASN	BZ	421	20	EPn		1610	51.68	-0.1							0.9
NASN	BE	421	20	AML		1611	39.91			48	0.9				
KRBR	BZ	538	80	EPn		1611	6.30	0.1							0.8
KRBR	BE	538	80	AML		1612	14.25			54	0.9				
GHVR	BZ	581	360	EPn		1611	11.48	0.1							0.8
GHVR	BN	581	360	AML		1612	16.22			70	0.5				
GHVR	BE	581	360	AML		1612	16.91			26	1.0				
ASAO	BZ	600	349	EPn		1611	13.95	0.0							0.7

May 8 2010 Hour: 1:16 53.6 Lat: 31.39N Lon: 49.58E Depth: 39 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	109	317	EPg		117	12.20	0.0							1.0
SHGR	BE	109	317	AML		117	31.49			1481	0.5				
SHGR	BN	109	317	AML		117	32.82			1236	2.7				
NASN	BZ	342	62	EPn		117	41.78	0.1							0.9
ASAO	BZ	353	7	EPn		117	43.56	0.6							0.9
ASAO	BN	353	7	AML		118	37.90			112	0.4				
ASAO	BE	353	7	AML		118	40.98			106	0.7				
GHVR	BZ	377	24	EPn		117	45.71	0.0							0.9
GHVR	BE	377	24	AML		118	45.42			137	0.8				
SNGE	BZ	461	334	EPn		117	56.18	-0.1							0.8
DAMV	BZ	520	25	EPn		118	3.33	-0.4							0.8
CHTH	BZ	521	15	EPn		118	3.54	-0.3							0.8

May 8 2010 Hour: 10:54 3.6 Lat: 34.89N Lon: 57.44E Depth: 35 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	141	192	EPg		1054	26.36	-0.6							1.0
TABS	BN	141	192	ESg		1054	44.27	0.2							1.0
TABS	BN	141	192	AML		1054	47.83			1659	0.5				
TABS	BE	141	192	AML		1054	49.35			974	0.8				
SHRO	BZ	179	314	EPg		1054	33.11	0.4							1.0
SHRT	BZ	297	117	EPn		1054	46.52	0.2							1.0
SHRT	BN	297	117	ESg		1055	25.34	0.1							1.0
SHRT	BE	297	117	AML		1055	36.16			415	0.5				
MRVT	BZ	330	339	EPn		1054	49.91	-0.5							0.9
NASN	BZ	487	243	EPn		1055	10.50	0.3							0.8

May 9 2010 Hour: 3:10 10.2 Lat: 27.02N Lon: 54.82E Depth: 29 Agency: INS Local
Magnitudes: 4.1ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	140	73	EPg		310	33.12	-0.2							1.0
BNDS	BN	140	73	ESg		310	50.40	0.1							1.0
BNDS	BE	140	73	AML		310	52.77			4131	0.4				
BNDS	BN	140	73	AML		310	56.13			3189	0.5				
GHIR	BZ	228	308	EPg		310	46.90	0.1							1.0
GHIR	BZ	228	308	AML		311	34.35			1136	0.8				
KRBR	BZ	379	30	EPn		311	3.71	-0.1							0.9
CHBR	BZ	587	104	EPn		311	29.43	0.1							0.8

May 12 2010 Hour: 17:29 9.6 Lat: 27.07N Lon: 54.87E Depth: 31 Agency: INS Local
Magnitudes: 4.0ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	134	74	EPg		1729	31.92	0.0							1.0
GHIR	BZ	229	306	EPg		1729	46.36	0.0							1.0
GHIR	BE	229	306	AML		1730	26.45			1302	0.6				
GHIR	BN	229	306	AML		1730	31.56			934	0.8				
KRBR	BZ	372	29	EPn		1730	2.22	0.1							0.9
KRBR	BN	372	29	AML		1731	5.21			285	0.6				
KRBR	BE	372	29	AML		1731	9.60			290	0.5				
CHBR	BZ	584	105	EPn		1730	28.16	0.0							0.8
ZHSF	BZ	644	63	EPN5		1730	35.73	-0.1							0.7
SHRT	BZ	896	34	EPn		1731	6.78	-0.2							0.5

May 12 2010 Hour: 21:11 30.4 Lat: 37.18N Lon: 56.00E Depth: 15F Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.6 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MRVT	BZ	54	9	EPg		2111	39.48	-0.6							1.0
MRVT	BE	54	9	AML		2111	48.96			3048	0.2				
SHRO	BZ	130	179	EPg		2111	51.21	-0.9							1.0
BJRD	BZ	138	65	EPg		2111	53.89	0.5							1.0
DAMV	BZ	400	246	EPn		2112	28.48	0.6							0.9
DAMV	BE	400	246	AML		2113	35.13			130	0.5				
TABS	BZ	404	165	EPn		2112	28.94	0.7							0.9
CHTH	BZ	458	254	EPn		2112	35.62	0.5							0.8
GHVR	BZ	523	237	EPn		2112	43.08	0.1							0.8
GHVR	BN	523	237	AML		2114	6.68			49	0.8				
GHVR	BE	523	237	AML		2114	8.87			50	0.7				
SHRT	BZ	552	134	EPn		2112	46.50	-0.1							0.8
ASAO	BZ	613	243	EPn		2112	53.76	-0.6							0.7

May 14 2010 Hour: 9:33 16.9 Lat: 27.10N Lon: 54.85E Depth: 30 Agency: INS Local
 Magnitudes: 4.5ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	135	75	EPg		933	39.72	0.4							1.0
BNDS	BN	135	75	ESg		933	55.33	-0.3							1.0
BNDS	BN	135	75	AML		934	1.84			15839	0.6				
BNDS	BE	135	75	AML		934	3.57			9600	0.6				
GHIR	BZ	226	306	EPg		933	53.08	-0.1							1.0
GHIR	BE	226	306	AML		934	35.92			4669	0.7				
GHIR	BN	226	306	AML		934	42.24			4587	0.5				
KRBR	BZ	370	30	EPn		934	9.40	0.1							0.9
KRBR	BN	370	30	AML		935	7.98			612	0.6				
KRBR	BE	370	30	AML		935	21.97			611	0.6				
CHBR	BZ	586	105	EPn		934	35.60	-0.2							0.8
ZHSF	BZ	644	63	EPn		934	43.15	0.0							0.7

May 14 2010 Hour: 11:21 23.6 Lat: 29.62N Lon: 56.74E Depth: 5 Agency: INS Local
 Magnitudes: 4.0ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	40	2	EPg		1121	31.17	0.0							1.0
KRBR	BN	40	2	AML		1121	37.29			23077	0.4				
KRBR	BE	40	2	AML		1121	37.33			22784	0.2				
BNDS	BZ	253	193	EPn		1122	4.00	0.1							1.0
BNDS	BE	253	193	AML		1122	36.64			918	0.3				
BNDS	BN	253	193	AML		1122	41.34			607	0.7				
ZHSF	BZ	390	89	EPn		1122	20.98	-0.1							0.9
GHIR	BZ	395	249	EPn		1122	21.47	-0.1							0.9
TABS	BZ	448	4	EPn		1122	28.15	0.0							0.9
TABS	BN	448	4	AML		1123	40.37			325	0.6				
TABS	BE	448	4	AML		1123	44.13			128	0.5				
NASN	BZ	515	314	EPn		1122	36.68	0.1							0.8
SHRT	BZ	559	36	EPn		1122	41.84	0.0							0.8

May 14 2010 Hour: 18:49 53.6 Lat: 29.38N Lon: 51.52E Depth: 7F Agency: INS Local
 Magnitudes: 5.2ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	188	130	EPg		1850	25.81	-0.1							1.0
GHIR	BN	188	130	AML		1850	56.69			16597	0.5				
GHIR	BE	188	130	AML		1850	58.72			15004	0.5				
NASN	BZ	398	18	EPn		1850	51.91	0.1							0.9
NASN	BN	398	18	Sn		1851	34.47	0.1							0.9
SHGR	BZ	399	320	EPn		1850	51.86	0.3							0.9
SHGR	BE	399	320	AML		1851	59.84			6086	0.5				
SHGR	BN	399	320	AML		1852	8.27			4091	0.6				
KRBR	BZ	512	81	EPn		1851	6.32	0.4							0.8
KRBR	BE	512	81	AML		1852	34.11			1190	0.8				
KRBR	BN	512	81	AML		1852	55.61			850	0.8				
ASAO	BZ	590	347	EPn		1851	15.49	-0.1							0.7
ASAO	BE	590	347	AML		1852	18.10			1140	0.6				
ASAO	BN	590	347	AML		1852	21.17			1128	0.6				
DAMV	BZ	694	3	EPn		1851	27.80	-0.8							0.7
DAMV	BE	694	3	AML		1852	39.42			1627	0.7				
DAMV	BN	694	3	AML		1852	40.29			1113	0.5				
TABS	BZ	712	47	EPn		1851	30.48	-0.1							0.7
SNGE	BZ	745	329	EPn		1851	34.81	0.0							0.6
ZNJK	BZ	851	343	EPn		1851	47.86	-0.1							0.6

May 16 2010 Hour: 4:35 24.4 Lat: 28.38N Lon: 54.94E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	163	132	EPg		435	51.55	0.1							1.0
BNDS	BN	163	132	ESg		436	11.13	-0.1							1.0
BNDS	BE	163	132	AML		436	12.81			704	0.5				
BNDS	BN	163	132	AML		436	16.45			511	0.3				
GHIR	BZ	192	267	EPg		435	55.90	-0.1							1.0
KRBR	BZ	250	45	EPn		436	3.74	0.3							1.0
KRBR	BE	250	45	ESg		436	35.22	-0.2							1.0
KRBR	BN	250	45	AML		436	41.17			286	0.5				

May 17 2010 Hour: 0:56 55.8 Lat: 32.54N Lon: 47.69E Depth: 14F Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	115	114	EPg		057	15.01	-0.1							1.0
SHGR	BE	115	114	AML		057	35.76			1288	0.3				
SHGR	BN	115	114	AML		057	40.59			1423	0.6				
SNGE	BZ	285	354	EPn		057	39.18	0.1							1.0
SNGE	BE	285	354	AML		058	26.59			217	0.7				
ASAO	BZ	310	44	EPn		057	42.33	0.0							1.0
ASAO	BE	310	44	ESg		058	23.23	0.0							1.0
GHVR	BZ	394	56	EPn		057	53.34	0.9							0.9
GHVR	BN	394	56	AML		058	40.85			109	0.4				
GHVR	BE	394	56	AML		058	43.20			67	0.4				
ZNJK	BZ	467	11	EPn		058	1.64	-0.1							0.8
CHTH	BZ	489	39	EPn		058	3.72	-0.8							0.8

May 17 2010 Hour: 12:37 19.5 Lat: 31.33N Lon: 49.55E Depth: 38 Agency: INS Local
Magnitudes: 4.1ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	111	321	EPg		1237	38.46	0.0							1.0
SHGR	BE	111	321	AML		1238	22.23			7243	1.0				
SHGR	BN	111	321	AML		1238	28.71			6131	1.2				
ASAO	BZ	359	7	EPn		1238	9.85	0.0							0.9
ASAO	BN	359	7	ESg		1238	58.08	0.0							0.9
ASAO	BE	359	7	AML		1239	8.56			405	0.9				
ASAO	BN	359	7	AML		1239	9.26			529	0.2				
GHVR	BZ	383	24	EPn		1238	12.70	0.0							0.9
GHVR	BE	383	24	AML		1239	15.23			340	0.8				
SNGE	BZ	465	334	EPn		1238	22.94	0.0							0.8

May 18 2010 Hour: 3:59 36.6 Lat: 33.72N Lon: 56.85E Depth: 7 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	26	108	EPg		359	41.44	0.0							1.0
TABS	BN	26	108	AML		359	45.22			12941	0.2				
SHRO	BZ	265	343	EPn		4 0	17.98	-0.1							1.0
SHRT	BZ	319	91	EPn		4 0	24.55	-0.1							0.9
NASN	BZ	391	256	EPn		4 0	33.38	-0.5							0.9
NASN	BE	391	256	AML		4 1	37.86			95	0.5				
KRBR	BZ	414	181	EPn		4 0	37.11	0.3							0.9
MRVT	BZ	443	351	EPn		4 0	40.26	0.2							0.9
CHTH	BZ	578	296	EPn		4 0	57.62	0.6							0.8

May 18 2010 Hour: 9:14 11.3 Lat: 34.14N Lon: 53.69E Depth: 15F Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
NASN	BZ	170	209	EPg		914	39.57	0.0							1.0
NASN	BE	170	209	ESg		915	0.09	-0.1							1.0
DAMV	BZ	228	317	EPg		914	47.88	-0.9							1.0
GHVR	BZ	228	280	EPg		914	48.28	-0.4							1.0
GHVR	BE	228	280	AML		915	25.74			1192	0.6				

GHVR	BN	228	280	AML		915	41.54			475	0.6						
SHRO	BZ	297	45	EPn		914	55.75	-0.1									1.0
CHTH	BZ	305	311	EPn		914	57.94	0.9									1.0
TABS	BZ	322	99	EPn		914	58.78	-0.2									0.9
ASAO	BZ	340	279	EPn		915	2.15	0.7									0.9
ASAO	BN	340	279	AML		915	57.22			141	0.6						
ASAO	BE	340	279	AML		915	58.24			137	0.6						
MRVT	BZ	447	28	EPn		915	14.82	0.4									0.9

May 19 2010 Hour: 19:41 46.3 Lat: 27.35N Lon: 56.19E Depth: 27 Agency: INS Local
Magnitudes: 3.9ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	6	338	EPg		1941	51.27	0.0							1.0
BNDS	BN	6	338	ESg		1941	54.92	0.0							1.0
BNDS	BE	6	338	AML		1941	55.55			30690	0.3				
BNDS	BN	6	338	AML		1941	57.28			29974	0.6				
KRBR	BZ	297	11	EPn		1942	29.90	0.0							1.0
KRBR	BE	297	11	AML		1943	8.38			383	0.6				
KRBR	BN	297	11	AML		1943	15.43			371	0.8				
ZHSF	BZ	514	60	EPn		1942	56.73	0.0							0.8
NASN	BZ	687	332	EPn		1943	18.37	0.0							0.7

May 20 2010 Hour: 12:33 53.7 Lat: 28.31N Lon: 57.23E Depth: 15F Agency: INS Local
Magnitudes: 4.2ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	145	226	EPg		1234	17.99	0.0							1.0
BNDS	BN	145	226	AML		1234	38.29			6659	0.5				
BNDS	BE	145	226	AML		1234	40.28			4351	0.5				
KRBR	BZ	191	346	EPg		1234	25.23	-0.2							1.0
KRBR	BN	191	346	AML		1234	59.68			2335	0.4				
KRBR	BE	191	346	AML		1235	2.37			1717	0.7				
ZHSF	BZ	374	66	EPn		1234	47.74	-0.2							0.9
SHRT	BZ	660	25	EPn		1235	23.99	0.6							0.7

May 22 2010 Hour: 23:51 0.1 Lat: 27.21N Lon: 54.86E Depth: 15 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	131	80	EPg		2351	22.17	0.0							1.0
BNDS	BE	131	80	AML		2351	41.81			3973	0.4				
BNDS	BN	131	80	AML		2351	41.98			4193					
GHIR	BZ	220	303	EPg		2351	36.24	0.0							1.0
GHIR	BE	220	303	AML		2352	8.87			298	0.4				
GHIR	BN	220	303	AML		2352	19.22			425	0.4				
KRBR	BZ	359	31	EPn		2351	52.64	0.0							0.9
KRBR	BE	359	31	AML		2352	48.48			68	1.4				
KRBR	BN	359	31	AML		2353	0.22			86	0.7				

May 25 2010 Hour: 13: 3 17.9 Lat: 38.25N Lon: 57.94E Depth: 25 Agency: INS Local
Magnitudes: 4.3ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BJRD	BZ	77	218	EPg		13	3	31.42	0.0						1.0
BJRD	BE	77	218	AML		13	3	41.77		17041	0.4				
MRVT	BZ	176	249	EPg		13	3	46.44	0.0						1.0
MRVT	BN	176	249	ESg		13	4	7.24	0.0						1.0
MRVT	BN	176	249	AML		13	4	12.48		2202	0.5				
SHRO	BZ	302	215	EPn		13	4	2.16	0.0						1.0

May 26 2010 Hour: 5:25 31.8 Lat: 35.99N Lon: 54.01E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHRO	BZ	181	89	EPg		526	1.62	0.0							1.0
DAMV	BZ	188	258	EPg		526	2.59	-0.3							1.0
DAMV	BN	188	258	AML		526	33.31			617	0.5				
MRVT	BZ	263	44	EPn		526	12.42	0.3							1.0

MRVT	BE	263	44	ESg		526	45.60	-0.2									1.0
MRVT	BN	263	44	AML		526	55.06			229	0.3						
GHVR	BZ	302	237	EPn		526	17.28	0.3									1.0
NASN	BZ	370	198	EPn		526	25.26	-0.5									0.9
TABS	BZ	385	131	EPn		526	27.47	0.1									0.9
ASAO	BZ	396	247	EPn		526	29.17	0.3									0.9
GRMI	BZ	625	302	EPn		526	57.30	0.1									0.7
SHRT	BZ	631	112	EPn		526	57.97	0.1									0.7

May 28 2010 Hour: 1:50 57.5 Lat: 28.45N Lon: 56.92E Depth: 14 Agency: INS Local
Magnitudes: 4.5ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	138	212	EPg		151	20.20	-0.4							1.0
BNDS	BN	138	212	ESg		151	37.78	0.3							1.0
BNDS	BE	138	212	AML		151	39.48			13050	0.6				
BNDS	BN	138	212	AML		151	43.23			9317	0.4				
KRBR	BZ	170	355	EPg		151	25.75	0.0							1.0
KRBR	BN	170	355	AML		151	54.89			4073	0.6				
KRBR	BE	170	355	AML		151	55.90			4773	0.8				
GHIR	BZ	386	268	EPn		151	52.81	-0.3							0.9
GHIR	BN	386	268	Sn		152	33.71	0.0							0.9
ZHSF	BZ	397	70	EPn		151	54.61	0.0							0.9
NASN	BZ	622	322	EPn		152	23.14	0.4							0.7

May 28 2010 Hour: 7:23 40.0 Lat: 28.40N Lon: 52.42E Depth: 14 Agency: INS Local
Magnitudes: 4.0ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	57	103	EPg		723	50.14	-0.1							1.0
GHIR	BE	57	103	ESg		723	57.50	-0.1							1.0
GHIR	BE	57	103	AML		724	0.83			17394	0.5				
BNDS	BZ	385	106	EPn		724	35.87	0.2							0.9
BNDS	BN	385	106	AML		725	53.31			242	0.6				
BNDS	BE	385	106	AML		725	53.81			275	0.6				
KRBR	BZ	457	66	EPn		724	44.95	0.2							0.8
KRBR	BE	457	66	ESg		725	47.79	0.1							0.8
KRBR	BE	457	66	AML		725	56.56			156	0.8				
KRBR	BN	457	66	AML		726	8.35			143	0.6				
NASN	BZ	489	4	EPn		724	48.42	-0.3							0.8
ASAO	BZ	719	342	EPn		725	17.31	0.1							0.7

May 28 2010 Hour: 11:16 54.2 Lat: 26.86N Lon: 55.67E Depth: 2F Agency: INS Local
Magnitudes: 4.1ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	308	301	EPn		1117	41.83	0.0							1.0
GHIR	BE	308	301	Sn		1118	16.63	0.1							1.0
GHIR	BN	308	301	AML		1118	43.17			450	0.5				
GHIR	BE	308	301	AML		1118	44.17			434	0.6				
KRBR	BZ	362	17	EPn		1117	48.92	0.3							1.0
KRBR	BN	362	17	AML		1118	31.36			779	0.6				
KRBR	BZ	362	17	AML		1118	32.45			554	0.5				
CHBR	BZ	501	105	EPn		1118	5.54	0.0							0.9
NASN	BZ	714	338	EPn		1118	31.58	-0.8							0.7

May 30 2010 Hour: 11:12 47.2 Lat: 32.77N Lon: 55.31E Depth: 14 Agency: INS Local
Magnitudes: 4.2ML INS Rms: 0.6 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
TABS	BZ	195	60	EPg		1113	18.59	-0.7							1.0
TABS	BN	195	60	AML		1113	45.89			1758	0.3				
NASN	BZ	235	271	EPg		1113	25.22	-0.6							1.0
NASN	BE	235	271	ESg		1113	53.42	-0.5							1.0
NASN	BN	235	271	AML		1113	54.87			2639	0.3				
NASN	BE	235	271	AML		1113	55.68			1568	0.4				
KRBR	BZ	339	156	EPn		1113	37.65	0.4							0.9
SHRO	BZ	365	10	EPn		1113	40.08	-0.2							0.9

GHVR	BZ	422	298	EPn		1113	48.35	0.9									0.9
DAMV	BZ	442	317	EPn		1113	50.98	0.9									0.9
DAMV	BE	442	317	AML		1115	6.60			341	0.7						
SHRT	BZ	474	77	EPn		1113	53.75	-0.1									0.8
MRVT	BZ	547	7	EPn		1114	3.27	0.4									0.8
BNDS	BZ	601	172	EPn		1114	9.82	0.1									0.7

June 3 2010 Hour: 4:53 28.0 Lat: 40.58N Lon: 50.53E Depth: 15 Agency: INS Local
Magnitudes: 4.6ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MAKU	BZ	518	257	EPn		454	40.03	0.0							1.0
CHTH	BZ	521	174	EPn		454	39.87	-0.7							1.0
DAMV	BZ	564	167	EPn		454	46.24	0.4							1.0
DAMV	BE	564	167	AML		455	43.72			497	0.4				
MRVT	BZ	580	122	EPn		454	47.61	0.0							0.9
MRVT	BN	580	122	AML		455	46.10			277	0.4				
SNGE	BZ	671	206	EPn		454	59.18	0.1							0.9
ASAO	BZ	671	184	EPn		454	58.94	-0.2							0.9
BJRD	BZ	675	116	EPn		454	59.52	0.0							0.9
SHRO	BZ	698	135	EPn		455	2.51	0.1							0.8
KHMZ	BZ	761	184	EPn		455	10.74	0.4							0.8
NASN	BZ	887	166	EPn		455	26.48	0.4							0.7
TABS	BZ	966	141	EPn		455	35.70	0.0							0.6
SHRT	BZ	1158	129	EPn		455	58.84	-0.6							0.4

June 4 2010 Hour: 2:37 28.8 Lat: 29.19N Lon: 58.40E Depth: 15F Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.5 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	182	299	EPg		237	58.47	-0.4							1.0
KRBR	BE	182	299	AML		238	23.55			1036	0.2				
KRBR	BN	182	299	AML		238	24.50			1088	0.4				
ZHSF	BZ	235	78	EPg		238	6.83	-0.4							1.0
BNDS	BZ	296	228	EPn		238	13.46	0.3							1.0
BNDS	BE	296	228	AML		238	56.19			146	0.6				
SHRT	BZ	526	19	EPn		238	42.61	0.9							0.8

June 6 2010 Hour: 17:48 57.3 Lat: 28.45N Lon: 56.82E Depth: 16 Agency: INS Local
Magnitudes: 4.2ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	170	358	EPg		1749	25.34	-0.2							1.0
KRBR	BN	170	358	AML		1749	54.17			5058	0.5				
KRBR	BE	170	358	AML		1749	59.98			4316	0.4				
GHIR	BZ	376	268	EPn		1749	51.64	0.0							0.9
GHIR	BN	376	268	AML		1751	3.78			316	0.5				
ZHSF	BZ	406	71	EP		1749	55.56	0.2							0.9
NASN	BZ	616	322	EPn		1750	21.45	-0.2							0.7
NASN	BN	616	322	ESg		1751	49.19	0.3							0.7
KHMZ	BZ	878	314	EPn		1750	53.81	-0.2							0.5

June 7 2010 Hour: 0:57 33.2 Lat: 27.94N Lon: 55.10E Depth: 17 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	122	119	EPg		057	53.76	0.0							1.0
BNDS	BN	122	119	AML		058	14.26			1044	0.6				
GHIR	BZ	211	281	EPg		058	7.79	0.0							1.0
KRBR	BZ	278	35	EPn		058	15.38	0.0							1.0
KRBR	BN	278	35	ESg		058	51.88	0.0							1.0
KRBR	BN	278	35	AML		059	2.10			236	0.6				
KRBR	BE	278	35	AML		059	6.98			188	0.7				

June 7 2010 Hour: 2:28 10.2 Lat: 30.87N Lon: 50.04E Depth: 26 Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	181	320	EPg		228	39.54	0.0							1.0
SHGR	BE	181	320	AML		229	6.39			1610	0.6				
SHGR	BN	181	320	AML		229	9.60			2084	0.7				
KHMZ	BZ	318	359	EPn		228	56.78	0.3							0.9
NASN	BZ	338	50	EPn		228	58.80	-0.3							0.9
GHIR	BZ	404	134	EPn		229	7.20	0.1							0.9
GHIR	BN	404	134	AML		230	23.18			106	0.5				
GHIR	BE	404	134	AML		230	30.95			151	0.6				
ASAO	BZ	408	360	EPn		229	7.87	0.2							0.9
ASAO	BE	408	360	AML		230	15.67			99	0.6				
GHVR	BZ	416	15	EPn		229	8.57	0.1							0.9
SNGE	BZ	532	332	EPn		229	22.38	-0.7							0.8
SNGE	BN	532	332	Sn		230	16.26	0.1							0.8

June 8 2010 Hour: 13:47 12.2 Lat: 31.01N Lon: 50.19E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHGR	BZ	180	313	EPg		1347	41.42	-0.3							1.0
SHGR	BE	180	313	ESg		1348	3.57	0.2							1.0
SHGR	BE	180	313	AML		1348	9.61			762	0.8				
SHGR	BN	180	313	AML		1348	10.79			1148	0.9				
AHRM	BZ	260	156	EPn		1347	52.01	-0.1							1.0
KHMZ	BZ	304	356	EPn		1347	57.94	0.2							1.0
KHMZ	BE	304	356	ESg		1348	37.34	-0.3							1.0
KHMZ	BE	304	356	AML		1348	51.41			119	0.9				
NASN	BZ	317	51	EPn		1347	59.54	0.0							1.0
ASAO	BZ	393	358	EPn		1348	8.79	-0.1							0.9
ASAO	BN	393	358	AML		1349	9.01			47	0.3				
GHVR	BZ	397	14	EPn		1348	9.77	0.5							0.9

June 11 2010 Hour: 10:38 35.3 Lat: 30.80N Lon: 56.74E Depth: 6 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.1 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
KRBR	BZ	91	179	EPg		1038	51.27	-0.1							1.0
KRBR	BE	91	179	ESg		1039	2.94	-0.1							1.0
KRBR	BN	91	179	AML		1039	4.10			1633	0.1				
KRBR	BE	91	179	AML		1039	5.64			2814	0.4				
TABS	BZ	318	6	EPn		1039	23.48	0.0							0.9
BNDS	BZ	381	189	EPn		1039	31.58	0.2							0.9
BNDS	BE	381	189	AML		1040	37.44			75	0.6				
NASN	BZ	433	302	EPn		1039	37.89	-0.2							0.9
GHIR	BZ	458	233	EPn		1039	41.05	0.1							0.8
SHRT	BZ	460	46	EPn		1039	41.04	0.0							0.8

June 14 2010 Hour: 4:13 45.8 Lat: 28.33N Lon: 57.12E Depth: 15 Agency: INS Local
Magnitudes: 4.0ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	139	222	EPg		414	8.77	-0.3							1.0
KRBR	BZ	187	349	EPg		414	16.32	-0.4							1.0
KRBR	BE	187	349	AML		414	49.72			1453	0.4				
KRBR	BN	187	349	AML		414	51.42			1529	0.3				
ZHSF	BZ	384	67	EPn		414	41.29	0.1							0.9
GHIR	BZ	405	270	EPn		414	44.26	0.4							0.9
GHIR	BN	405	270	AML		416	45.57			274	0.3				
GHIR	BE	405	270	AML		416	46.00			260	0.6				
TABS	BZ	590	360	EPn		415	7.11	0.4							0.7
SHRT	BZ	663	26	EPn		415	15.62	-0.1							0.7
KHMZ	BZ	909	313	EPn		415	46.62	0.2							0.5
SNGE	BZ	1191	311	EPN5		416	21.37	-0.1							0.3

June 14 2010 Hour: 4:14 53.5 Lat: 28.32N Lon: 57.21E Depth: 14 Agency: INS Local
Magnitudes: 4.4ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	144	225	EPg		415	17.26	-0.4							1.0
BNDS	BN	144	225	ESg		415	35.49	0.3							1.0
BNDS	BN	144	225	AML		415	36.97			5594	0.6				
KRBR	BZ	190	347	EPg		415	24.78	-0.1							1.0
KRBR	BN	190	347	AML		415	59.25			3928	0.2				
TABS	BZ	591	359	EPn		416	14.74	0.1							0.7
NASN	BZ	652	321	EPn		416	22.72	0.2							0.7
SHRT	BZ	660	26	EPn		416	23.42	0.2							0.7
SNGE	BZ	1198	311	EPn		417	29.46	-0.8							0.3

June 14 2010 Hour: 8:11 39.7 Lat: 28.31N Lon: 57.17E Depth: 14 Agency: INS Local
Magnitudes: 3.9ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	141	224	EPg		812	3.09	-0.1							1.0
BNDS	BN	141	224	AML		812	23.30			2020	0.4				
BNDS	BE	141	224	AML		812	25.74			2358	0.4				
KRBR	BZ	190	348	EPg		812	10.78	-0.3							1.0
KRBR	BE	190	348	AML		812	44.04			1021	0.5				
KRBR	BN	190	348	AML		812	45.78			1075	0.5				
ZHSF	BZ	380	67	EPn		812	34.66	0.0							0.9
GHIR	BZ	410	271	EPn		812	38.58	0.2							0.9
TABS	BZ	592	360	EPn		813	1.12	0.2							0.7
NASN	BZ	650	321	EPn		813	8.60	0.2							0.7
SHRT	BZ	663	26	EPn		813	9.87	0.2							0.7
SNGE	BZ	1196	311	EPn		814	16.09	0.0							0.3

June 15 2010 Hour: 7:34 37.0 Lat: 33.16N Lon: 60.26E Depth: 14 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
SHRT	BZ	54	3	EPg		734	46.43	-0.3							1.0
SHRT	BN	54	3	ESg		734	53.86	0.1							1.0
SHRT	BE	54	3	AML		734	54.91			4666	0.5				
SHRT	BN	54	3	AML		734	55.84			4518	0.2				
TABS	BZ	297	281	EPn		735	22.00	0.3							1.0
TABS	BN	297	281	ESg		736	0.34	-0.2							1.0
TABS	BN	297	281	AML		736	5.18			243	0.7				
ZHSF	BZ	397	173	EPn		735	34.00	-0.2							0.9
KRBR	BZ	484	224	EPn		735	45.34	0.2							0.8
KRBR	BN	484	224	AML		737	12.25			55	0.6				
SHRO	BZ	501	310	EPn		735	46.88	-0.2							0.8
BJRD	BZ	566	334	EPn		735	55.10	0.0							0.8
MRVT	BZ	626	324	EPn		736	2.75	0.2							0.7

June 17 2010 Hour: 13:40 17.0 Lat: 26.51N Lon: 54.69E Depth: 14 Agency: INS Local
Magnitudes: 3.5ML INS Rms: 0.0 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
BNDS	BZ	176	56	EPg		1340	46.18	0.0							1.0
BNDS	BN	176	56	AML		1341	15.64			371	0.6				
BNDS	BE	176	56	AML		1341	20.85			578	0.6				
GHIR	BZ	259	320	EPn		1340	56.93	0.0							1.0
GHIR	BE	259	320	ESg		1341	30.15	0.0							1.0
GHIR	BE	259	320	AML		1341	37.93			344	0.6				
GHIR	BN	259	320	AML		1341	41.20			379	0.4				
KRBR	BZ	435	27	EPn		1341	19.00	0.1							0.9
KRBR	BN	435	27	AML		1342	12.58			68	0.6				
KRBR	BE	435	27	AML		1342	30.89			56	0.7				

June 17 2010 Hour: 22:22 13.9 Lat: 28.40N Lon: 52.48E Depth: 10 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.3 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	51	105	EPg		2222	23.00	-0.1							1.0
GHIR	BN	51	105	AML		2222	40.46		10291	0.3					
GHIR	BE	51	105	AML		2222	43.05		7122	0.6					
AHRM	BZ	127	294	EPg		2222	36.23	0.4							1.0
AHRM	BE	127	294	ESg		2222	51.65	-0.2							1.0
BNDS	BZ	380	106	EPn		2223	9.14	-0.2							0.9
BNDS	BE	380	106	AML		2224	16.11		144	0.5					
BNDS	BN	380	106	AML		2224	25.58		169	0.5					
KRBR	BZ	451	66	EPn		2223	18.91	0.5							0.9
KRBR	BN	451	66	AML		2224	34.25		88	0.6					
KRBR	BE	451	66	AML		2224	45.62		90	0.6					
NASN	BZ	488	4	EPn		2223	22.60	-0.4							0.8
TABS	BZ	731	36	EPn		2223	53.00	0.1							0.6
SHRO	BZ	906	21	EPn		2224	14.59	-0.1							0.5

June 20 2010 Hour: 13:34 60.0 Lat: 27.90N Lon: 54.40E Depth: 17 Agency: INS Local
Magnitudes: 4.2ML INS Rms: 0.4 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	145	287	EPg		1335	24.20	0.0							1.0
GHIR	BE	145	287	AML		1335	48.51		3101	0.6					
GHIR	BN	145	287	AML		1335	58.55		3404	0.6					
BNDS	BZ	183	107	EPg		1335	30.29	0.0							1.0
BNDS	BE	183	107	AML		1336	12.73		2617	0.5					
BNDS	BN	183	107	AML		1336	15.86		3514	0.6					
AHRM	BZ	323	290	EPn		1335	47.48	0.1							0.9
KRBR	BZ	326	44	EPn		1335	48.57	0.4							0.9
KRBR	BN	326	44	AML		1336	38.95		1018	0.7					
KRBR	BE	326	44	AML		1336	50.08		916	0.8					
CHBR	BZ	656	111	EPn		1336	28.56	-0.3							0.7
TABS	BZ	689	22	EPn		1336	32.16	-0.8							0.7

June 22 2010 Hour: 1: 7 12.4 Lat: 27.77N Lon: 54.48E Depth: 15 Agency: INS Local
Magnitudes: 3.6ML INS Rms: 0.2 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	158	292	EPg		1 7	38.33	-0.3							1.0
GHIR	BN	158	292	ESg		1 7	57.91	0.2							1.0
GHIR	BE	158	292	AML		1 8	3.90		1235	0.3					
GHIR	BN	158	292	AML		1 8	10.98		1283	0.4					
BNDS	BZ	172	103	EPg		1 7	40.94	0.1							1.0
BNDS	BE	172	103	AML		1 8	21.65		447	0.4					
KRBR	BZ	331	42	EPn		1 8	1.36	0.0							0.9
KRBR	BE	331	42	ESg		1 8	45.49	0.0							0.9
KRBR	BN	331	42	AML		1 8	47.77		193	0.6					
KRBR	BE	331	42	AML		1 8	58.04		248	0.6					

June 23 2010 Hour: 15:20 24.3 Lat: 28.02N Lon: 59.07E Depth: 15F Agency: INS Local
Magnitudes: 3.8ML INS Rms: 0.6 secs

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ZHSF	BZ	243	43	EPg		1521	3.87	-0.2							1.0
ZHSF	BN	243	43	ESg		1521	33.53	0.5							1.0
BNDS	BZ	294	257	EPn		1521	9.45	0.8							1.0
BNDS	BE	294	257	AML		1521	53.26		298	0.3					
BNDS	BN	294	257	AML		1521	54.88		528	0.4					
CHBR	BZ	303	152	EPN5		1521	8.57	-0.9							1.0
CHBR	BE	303	152	Sn		1521	42.62	0.2							1.0
CHBR	BE	303	152	AML		1522	7.14		309	0.7					
CHBR	BN	303	152	AML		1522	14.93		274	0.8					
KRBR	BZ	313	315	EPn		1521	11.45	0.3							1.0
KRBR	BE	313	315	ESg		1521	52.18	-0.5							1.0
KRBR	BN	313	315	AML		1521	53.62		308	0.7					

KRBR	BE	313	315	AML	1522	5.79				339	0.7			
GHIR	BZ	599	274	EPn	1521	46.52	0.1							0.7
SHRT	BZ	635	10	EPn	1521	49.90	-0.9							0.7

June 29 2010 Hour: 20: 4 40.1 Lat: 27.71N Lon: 54.34E Depth: 15 Agency: INS Local
Magnitudes: 3.7ML INS Rms: 0.0 secs

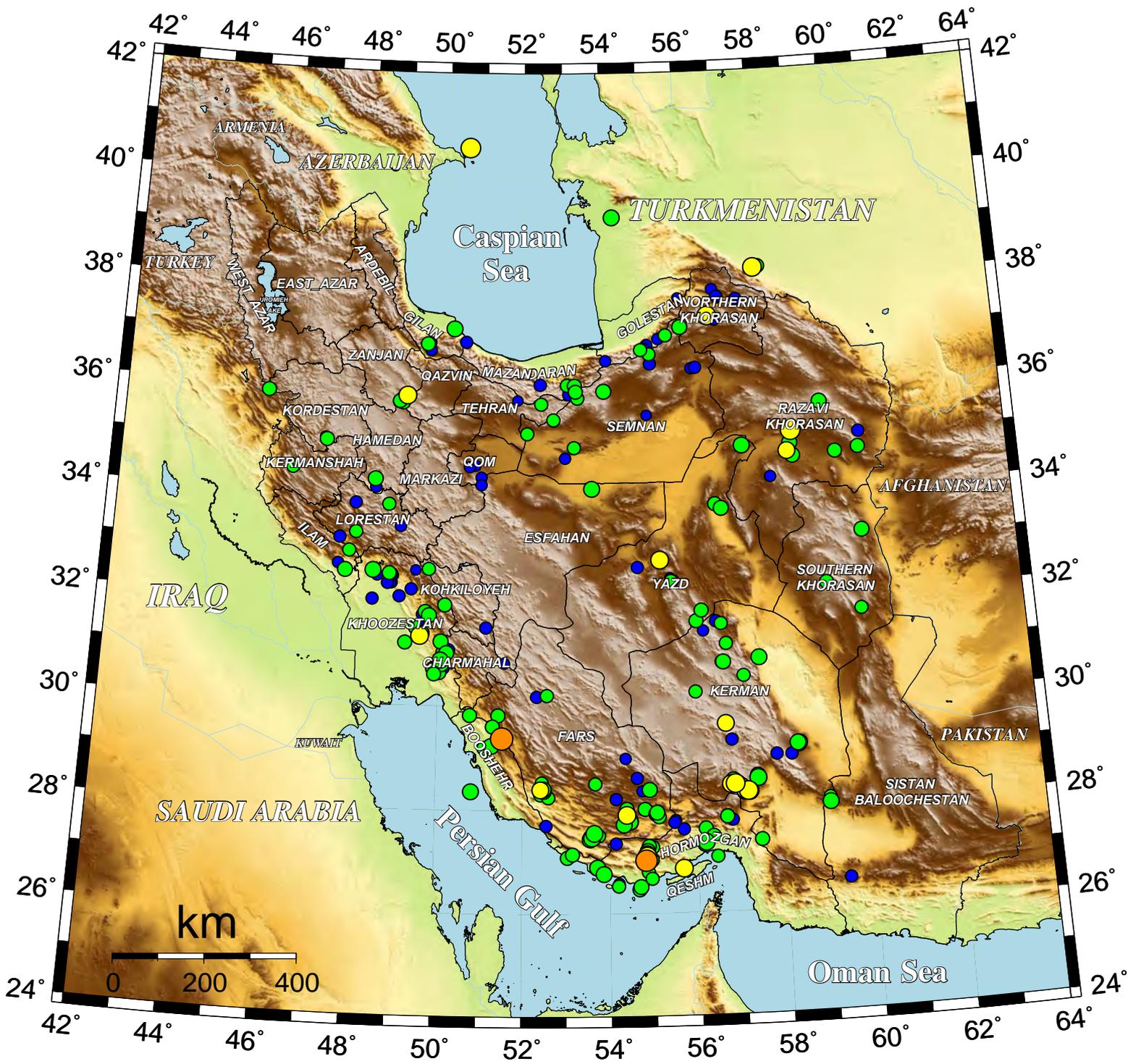
STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GHIR	BZ	147	296	EPg		20	5	4.68	0.0						1.0
GHIR	BN	147	296	AML		20	5	33.75		1365	0.5				
BNDS	BZ	184	100	EPg		20	5	10.62	0.0						1.0
BNDS	BE	184	100	AML		20	5	49.74		653	0.1				
KRBR	BZ	345	43	EPn		20	5	30.91	0.0						0.9
KRBR	BE	345	43	AML		20	6	26.27		230	0.3				
KRBR	BN	345	43	AML		20	6	28.93		230	0.3				

IIES EARTHQUAKES CATALOGUE (April-June 2010)

Year	Month	Day	Hour	Minute	Second	Error	Lat	Error	Long	Error	Depth	Error	NSt	NPh	Gap	Dmin	Rms	M _L
2010	4	1	7	31	59.7	0.42	27.463	7.0	53.595	5.0	39.8	4.4	8	8	228	109.0	0.17	3.9
2010	4	1	7	37	26.1	0.41	27.552	6.5	53.651	4.8	34.1	4.7	8	8	225	104.3	0.15	3.9
2010	4	1	8	43	6.8	0.41	27.445	6.2	53.559	4.9	33.5	4.6	8	8	215	108.9	0.14	3.7
2010	4	6	0	47	7.4	0.49	39.270	7.6	54.297	2.4	15.0	0.0	7	7	232	237.5	0.22	3.8
2010	4	8	9	25	11.8	1.05	37.162	7.3	50.213	7.2	15.6	9.8	6	7	184	146.7	0.34	3.7
2010	4	9	21	21	56.0	0.95	32.562	4.0	48.371	8.8	15.7	10.1	6	7	201	64.6	0.30	3.8
2010	4	10	8	48	10.4	0.32	31.231	2.4	50.043	4.1	14.1	7.8	7	8	172	152.7	0.07	3.5
2010	4	10	23	49	58.9	0.34	29.185	9.9	58.440	2.6	14.1	13.7	4	4	151	185.2	0.02	3.7
2010	4	11	13	49	13.3	0.41	28.526	1.1	56.877	2.9	14.1	3.6	5	7	138	142.9	0.10	3.8
2010	4	12	8	29	2.8	1.23	34.752	9.1	58.558	8.5	35.3	14.6	6	6	161	180.4	0.43	4.0
2010	4	12	8	54	17.4	0.48	34.661	3.8	58.687	3.3	32.5	6.1	5	5	161	183.0	0.15	3.6
2010	4	12	9	34	3.7	0.32	34.894	1.6	58.634	1.7	15.0	0.0	3	4	168	196.3	0.07	3.6
2010	4	12	11	56	30.7	0.97	35.130	4.6	58.673	5.3	15.0	0.0	7	9	218	217.8	0.36	4.6
2010	4	13	12	40	28.9	0.40	34.294	1.5	48.338	3.7	14.1	5.9	4	6	145	126.9	0.09	3.5
2010	4	19	3	31	15.3	0.72	37.375	15.6	56.696	3.1	15.0	0.0	10	10	245	415.1	0.38	4.3
2010	4	24	6	4	53.1	0.35	35.646	6.3	59.444	6.9	15.0	0.0	4	5	276	235.0	0.12	3.5
2010	4	27	22	57	59.9	0.36	27.022	11.0	54.827	1.7	35.0	4.5	5	6	236	139.6	0.07	5.1
2010	4	27	23	11	27.3	0.30	27.156	7.0	54.850	2.1	15.0	0.0	3	3	227	133.6	0.00	3.7
2010	4	28	13	6	35.6	1.15	27.032	21.3	54.924	5.0	31.6	10.4	4	6	235	130.1	0.36	3.9
2010	4	28	17	39	16.3	0.34	35.901	1.6	49.100	3.4	14.2	4.3	4	5	186	93.2	0.05	3.5
2010	4	28	20	4	17.7	0.67	35.887	2.4	49.067	2.5	14.2	7.6	5	7	110	93.5	0.20	4.2
2010	4	29	21	13	20.4	0.40	28.596	2.0	57.442	2.8	14.2	5.0	5	5	93	167.3	0.10	3.6
2010	4	29	21	14	1.3	0.66	28.554	6.8	57.446	4.5	29.4	11.6	4	5	162	179.2	0.20	3.9
2010	5	1	13	28	16.0	0.33	30.852	1.8	57.603	3.2	14.3	5.8	5	5	132	125.9	0.04	3.7
2010	5	5	16	10	7.4	0.31	26.897	10.2	53.714	7.6	43.3	6.0	5	5	259	169.8	0.01	3.8
2010	5	6	11	11	51.7	0.31	28.358	8.2	50.820	4.9	37.2	7.0	4	5	289	212.6	0.02	3.8
2010	5	6	15	7	11.3	0.34	26.768	6.6	53.863	5.0	16.0	4.7	3	4	260	189.2	0.00	3.8
2010	5	7	9	41	58.5	0.30	31.726	3.3	49.751	2.9	14.1	4.8	5	6	229	99.4	0.02	3.6
2010	5	7	16	9	51.5	0.29	29.239	4.1	51.273	6.5	15.0	0.0	5	5	227	197.9	0.06	3.7
2010	5	8	1	16	53.6	0.94	31.387	26.1	49.585	14.1	39.8	14.3	7	7	255	109.1	0.31	3.5
2010	5	8	10	54	3.6	1.11	34.894	4.1	57.437	4.7	35.0	8.8	5	7	138	141.1	0.37	3.7
2010	5	9	3	10	10.2	0.51	27.025	6.2	54.819	2.2	29.3	4.9	4	5	204	140.2	0.14	4.1

Year	Month	Day	Hour	Minute	Second	Error	Lat	Error	Long	Error	Depth	Error	NSt	NPh	Gap	Dmin	Rms	M _L
2010	5	12	17	29	9.6	0.34	27.073	4.4	54.865	2.3	31.9	3.3	6	6	201	134.4	0.08	4.0
2010	5	12	21	11	30.4	1.40	37.177	5.5	55.998	7.5	15.0	0.0	9	9	115	54.2	0.58	3.6
2010	5	14	9	33	16.9	0.87	27.101	10.6	54.852	3.9	30.8	7.3	5	6	201	134.8	0.25	4.5
2010	5	14	11	21	23.6	0.33	29.622	1.8	56.745	2.2	5.0	2.7	7	7	104	39.9	0.06	4.0
2010	5	14	18	49	53.6	0.72	29.382	3.7	51.519	5.2	7.0	0.0	9	10	190	187.8	0.29	5.2
2010	5	16	4	35	24.4	0.60	28.383	2.1	54.941	2.3	14.1	7.2	3	5	137	163.0	0.17	3.5
2010	5	17	0	56	55.8	1.11	32.542	5.8	47.694	8.3	14.2	0.0	6	7	239	114.8	0.44	3.5
2010	5	17	12	37	19.5	0.31	31.333	4.7	49.549	5.7	38.3	4.8	4	5	297	111.4	0.01	4.1
2010	5	18	3	59	36.6	0.83	33.719	4.4	56.855	5.6	7.0	9.6	7	7	99	25.7	0.31	3.6
2010	5	18	9	14	11.3	1.36	34.139	4.2	53.689	6.0	15.0	0.0	8	9	110	169.6	0.53	3.7
2010	5	19	19	41	46.3	0.31	27.349	7.7	56.194	4.8	27.7	2.1	4	5	273	6.0	0.02	3.9
2010	5	20	12	33	53.7	0.75	28.307	4.4	57.234	6.0	15.0	0.0	4	4	160	145.2	0.31	4.2
2010	5	22	23	51	0.1	0.30	27.207	6.4	54.862	2.0	15.0	0.0	3	3	223	131.4	0.00	3.6
2010	5	25	13	3	17.9	0.34	38.250	7.5	57.944	3.7	25.9	4.1	3	4	327	77.1	0.00	4.3
2010	5	26	5	25	31.8	0.76	35.986	3.6	54.007	3.1	14.2	6.2	9	10	103	180.9	0.27	3.5
2010	5	28	1	50	57.5	0.83	28.455	3.3	56.917	4.9	14.5	6.1	5	7	142	138.1	0.27	4.5
2010	5	28	7	23	40.0	0.58	28.401	3.9	52.422	5.2	14.1	8.4	5	7	236	56.9	0.18	4.0
2010	5	28	11	16	54.2	0.77	26.860	8.9	55.669	5.0	2.0	0.0	4	5	196	308.4	0.35	4.1
2010	5	30	11	12	47.2	1.60	32.772	7.2	55.311	5.6	14.2	12.7	9	10	100	194.6	0.57	4.2
2010	6	3	4	53	28.0	0.58	40.583	7.5	50.531	3.1	15.0	0.0	12	12	219	521.5	0.34	4.6
2010	6	4	2	37	28.8	1.28	29.190	9.5	58.404	6.6	15.0	0.0	4	4	150	181.8	0.54	3.7
2010	6	6	17	48	57.3	0.58	28.453	8.1	56.820	3.5	16.2	12.2	5	6	197	169.6	0.21	4.2
2010	6	7	0	57	33.2	0.34	27.942	1.6	55.095	1.6	17.7	3.9	3	4	162	122.0	0.00	3.5
2010	6	7	2	28	10.2	0.82	30.871	6.3	50.044	7.7	26.4	8.3	7	8	185	181.0	0.27	3.8
2010	6	8	13	47	12.2	0.84	31.009	3.6	50.192	6.5	14.1	11.6	6	8	158	179.7	0.27	3.5
2010	6	11	10	38	35.3	0.42	30.801	2.1	56.742	3.7	6.1	5.8	6	7	133	90.8	0.11	3.5
2010	6	14	4	13	45.8	0.80	28.329	3.8	57.119	5.8	15.0	5.8	8	8	155	139.0	0.30	4.0
2010	6	14	4	14	53.5	0.67	28.318	4.7	57.211	10.2	14.1	8.4	6	7	200	144.4	0.29	4.4
2010	6	14	8	11	39.7	0.52	28.310	2.7	57.169	3.7	14.2	5.1	8	8	158	140.8	0.17	3.9
2010	6	15	7	34	37.0	0.63	33.163	2.8	60.256	3.3	14.1	6.6	7	9	169	53.6	0.21	3.6
2010	6	17	13	40	17.0	0.35	26.514	8.4	54.695	3.4	14.1	5.4	3	4	264	176.4	0.03	3.5
2010	6	17	22	22	13.9	0.95	28.404	11.2	52.483	6.0	10.2	9.5	7	8	188	51.1	0.31	3.7
2010	6	20	13	34	60.0	1.09	27.899	11.4	54.401	5.3	17.2	11.7	6	6	176	145.5	0.36	4.2
2010	6	22	1	7	12.4	0.60	27.771	3.6	54.482	1.8	15.2	7.3	3	5	188	157.7	0.15	3.6

Year	Month	Day	Hour	Minute	Second	Error	Lat	Error	Long	Error	Depth	Error	NSt	NPh	Gap	Dmin	Rms	M _L
2010	6	23	15	20	24.3	1.51	28.016	4.2	59.074	4.9	15.0	0.0	6	9	109	242.5	0.57	3.8
2010	6	29	20	4	40.1	0.30	27.713	4.1	54.337	1.9	15.0	0.0	3	3	195	147.2	0.00	3.7



246 events during 2010/04/01 to 2010/06/30

Magnitude

● $2.5 \leq M < 3$	● $3 \leq M < 4$	● $4 \leq M < 5$	● $5 \leq M < 6$	● $6 \leq M < 7$
N = 87	N = 137	N = 20	N = 2	N = 0

The events are located at:

Broadband Iranian National Seismic Network Center (BIN)

More information available at: <http://www.iiees.ac.ir/EQsearch/EventQuery.aspx>



International Institute of Earthquake Engineering and Seismology (IIEES)