

# Seismological Bulletin

from the

## IGIDL Seismic Network

November to December

2012

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## STATIONS USED

The stations listed below are those operated by the Institute of Geophysics Infante D. Luis, University of Lisbon (UL).

Lisboa (IGIDL)  
GGNV

Latitude	38.7165N
Longitude	9.1491W
Height	77m

Almeirim (Fazendas)  
ALMR

Latitude	39.1554N
Longitude	8.5768W
Height	165m

Marmelete (Picos)  
MORF

Latitude	37.3063N
Longitude	8.6508W
Height	650m

Messejana  
MESJ

Latitude	37.8395N
Longitude	8.2199W
Height	250m

Evora (S.Brisos) - CEA - SCIENCES DE LA TERRE ET DE L'ENVIRONNEMENT  
EVOP

Latitude	38.5280N
Longitude	8.12360W
Height	100m

November 1 2012 Hour: 1:43 37.4 Lat: 37.08N Lon: 5.39W Depth: 11F Agency: IGL Regional  
Rms: 0.0 secs

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	264	289	EP		144	14.55	0.01							1.0

November 1 2012 Hour: 5:53 45.9 Lat: 36.40N Lon: 5.39W Depth: 0 Agency: IGL Regional  
Rms: 0.1 secs

**STRAIT OF GIBRALTAR Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	298	303	EP		554	28.42	0.07							1.0
MORF	HZ	308	290	EP		554	29.54	-0.07							1.0

November 1 2012 Hour: 19:50 28.8 Lat: 36.57N Lon: 9.72W Depth: 14F Agency: IGL Regional  
Magnitudes: 1.1ML IGL Rms: 0.0 secs

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	125	49	EP		1950	48.51	0.04							1.0
MORF	HN	125	49	ES		1951	2.81	-0.02							1.0
MORF	HN	125	49	AML		1951	5.03			5	0.2				
MESJ	HZ	194	43	EP		1950	56.88	-0.05							1.0
MESJ	HN	194	43	ES		1951	17.49	0.02							1.0
MESJ	HN	194	43	AML		1951	20.53			1	0.3				

November 1 2012 Hour: 21:50 58.5 Lat: 37.15N Lon: 12.96W Depth: 16F Agency: IGL Regional  
Magnitudes: 3.0ML IGL Rms: 0.4 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	383	86	EP		2151	49.67	-0.35							1.0
MESJ	HZ	426	78	EP		2151	55.07	-0.24							1.0
MESJ	HN	426	78	ES		2152	36.35	-0.42							1.0
MESJ	HN	426	78	AML		2152	42.49			28	0.5				
ALMR	HZ	444	59	EP		2151	58.09	0.63							1.0
ALMR	HN	444	59	ES		2152	40.91	0.42							1.0
ALMR	HN	444	59	AML		2152	45.28			50	0.3				

November 1 2012 Hour: 22:10 11.5 Lat: 37.15N Lon: 13.00W Depth: 40F Agency: IGL Regional  
Magnitudes: 2.5ML IGL Rms: 0.2 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	386	86	EP		2211	1.74	-0.22							1.0
MORF	HN	386	86	ES		2211	38.84	0.01							1.0
MORF	HN	386	86	AML		2211	44.52			12	0.2				
MESJ	HZ	429	78	EP		2211	7.10	-0.06							1.0
MESJ	HN	429	78	ES		2211	47.73	-0.10							1.0
MESJ	HN	429	78	AML		2211	54.36			10	0.3				
ALMR	HZ	447	59	EP		2211	9.66	0.39							1.0

November 1 2012 Hour: 22:11 56.7 Lat: 37.12N Lon: 13.08W Depth: 40F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.2 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	394	86	EP		2212	47.80	-0.32							1.0
MORF	HN	394	86	ES		2213	25.48	-0.17							1.0
MORF	HE	394	86	AML		2213	35.46			11	0.3				
MESJ	HZ	437	78	EP		2212	53.37	0.02							1.0
MESJ	HN	437	78	ES		2213	34.77	0.07							1.0
MESJ	HN	437	78	AML		2213	40.58			6	0.4				
ALMR	HZ	455	59	EP		2212	55.88	0.42							1.0

November 1 2012 Hour: 22:55 47.2 Lat: 35.40N Lon: 6.08W Depth: 26F Agency: IGL Regional  
Magnitudes: 2.5ML IGL Rms: 0.2 secs

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	313	313	EP		2256	28.89	-0.30							1.0
MORF	HN	313	313	ES		2256	59.79	-0.06							1.0
MORF	HN	313	313	AML		2257	3.70			19	0.2				
MESJ	HZ	332	325	EP		2256	31.74	0.28							1.0
MESJ	HN	332	325	ES		2257	3.87	0.10							1.0
MESJ	HN	332	325	AML		2257	6.28			17	0.2				

November 1 2012 Hour: 23:21 23.9 Lat: 37.32N Lon: 8.58W Depth: 16F Agency: IGL Regional  
Magnitudes: 0.8ML IGL Rms: 0.1 secs

**W MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	6	256	EP		2321	26.50	-0.18							1.0
MORF	HN	6	256	ES		2321	28.80	0.05							1.0
MORF	HN	6	256	AML		2321	29.80			46	0.1				
MESJ	HZ	66	29	EP		2321	34.66	0.11							1.0
MESJ	HE	66	29	ES		2321	42.38	0.03							1.0
MESJ	HN	66	29	AML		2321	44.97			3	0.0				

November 2 2012 Hour: 0:46 1.1 Lat: 37.17N Lon: 12.95W Depth: 30F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.1 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	382	86	EP		046	51.27	-0.18							1.0
MESJ	HZ	425	79	EP		046	56.71	0.06							1.0
MESJ	HN	425	79	ES		047	37.31	0.13							1.0
MESJ	HN	425	79	AML		047	43.95			7	0.2				

November 2 2012 Hour: 1:10 53.8 Lat: 37.18N Lon: 12.72W Depth: 1 Agency: IGL Regional  
Magnitudes: 1.7ML IGL Rms: 0.1 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	361	87	EP		111	44.12	0.13							1.0
MESJ	HE	404	78	ES		112	29.72	-0.13							1.0
MESJ	HN	404	78	AML		112	40.18			2	0.4				

November 2 2012 Hour: 1:21 43.7 Lat: 37.23N Lon: 12.66W Depth: 0 Agency: IGL Regional  
Magnitudes: 1.8ML IGL Rms: 0.1 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	356	87	EP		122	33.39	0.00							1.0
MESJ	HZ	398	79	EP		122	38.50	-0.14							1.0
MESJ	HN	398	79	ES		123	18.78	0.04							1.0
MESJ	HN	398	79	AML		123	24.73			2	0.3				
ALMR	HZ	417	58	EP		122	41.02	0.09							1.0

November 2 2012 Hour: 1:33 54.2 Lat: 37.22N Lon: 12.69W Depth: 0 Agency: IGL Regional  
Magnitudes: 1.6ML IGL Rms: 0.2 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	358	87	EP		134	44.09	-0.08							1.0
MESJ	HZ	401	79	EP		134	49.24	-0.19							1.0
MESJ	HN	401	79	ES		135	30.02	0.27							1.0
MESJ	HN	401	79	AML		135	36.55			2	0.3				

November 2 2012 Hour: 1:48 56.0 Lat: 37.16N Lon: 13.19W Depth: 10F Agency: IGL Regional  
Rms: 0.0 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	403	86	EP		149	50.49	-0.05							1.0
MESJ	HZ	446	79	EP		149	55.78	0.05							1.0

November 2 2012 Hour: 1:49 15.7 Lat: 37.30N Lon: 12.66W Depth: 0 Agency: IGL Regional  
Rms: 0.1 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	356	89	EP		150	5.26	-0.11							1.0
MESJ	HZ	397	80	EP		150	10.58	0.12							1.0

November 2 2012 Hour: 1:52 3.2 Lat: 55.88N Lon: 162.79E Depth: 6F Agency: IGL Distant  
Magnitudes: 5.4MS IGL Rms: 0.2 secs

**NEAR EAST COAST OF KAMCHATKA, RUSSIA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	9589	353	EP		2 4	45.71	0.25							1.0
MESJ	BN	9589	353	ESKSac		215	12.10	-0.16							1.0
MESJ	BZ	9589	353	AMS		247	41.09			1234	23.6				
MORF	BZ	9651	353	EP		2 4	48.29	0.03							1.0
MORF	BN	9651	353	ESKSac		215	15.72	-0.12							1.0
MORF	BZ	9651	353	AMS		253	18.44			1328	11.0				

November 2 2012 Hour: 7:47 15.6 Lat: 36.68N Lon: 9.77W Depth: 20F Agency: IGL Regional  
Magnitudes: 1.1ML IGL Rms: 0.1 secs

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	121	55	EP		747	34.30	0.04							1.0
MORF	HN	121	55	ES		747	47.87	-0.01							1.0
MORF	HN	121	55	AML		747	48.89			5	0.1				
MESJ	HZ	188	46	EP		747	42.40	-0.13							1.0
MESJ	HN	188	46	ES		748	2.29	0.10							1.0
MESJ	HN	188	46	AML		748	4.46			1	0.1				

November 2 2012 Hour: 18:17 33.0 Lat: 9.26N Lon: 126.23E Depth: 38F Agency: IGL Distant  
Magnitudes: 5.7MS IGL Rms: 0.0 secs

**MINDANAO, PHILIPPINES Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ALMR	BZ12927	322	EPP			1837	17.10	0.03							1.0
ALMR	BN12927	322	AMS			1924	35.01			1922	18.8				
MESJ	BZ12993	321	EPKpdf			1836	12.94	-0.04							1.0
MESJ	BZ12993	321	EPP			1837	21.28	0.03							1.0
MESJ	BZ12993	321	AMS			1931	5.07			1644	26.5				
GGNV	BZ12996	322	EPP			1837	21.44	0.03							1.0
GGNV	BE12996	322	AMS			1933	39.82			1758	19.8				
MORF	BZ13059	321	EPKpdf			1836	14.13	-0.05							1.0
MORF	BZ13059	321	AMS			1931	54.84			1975	21.1				

November 2 2012 Hour: 21:13 42.2 Lat: 35.06N Lon: 4.56W Depth: 83F Agency: IGL Regional  
Magnitudes: 2.4ML IGL Rms: 0.1 secs

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	444	305	EP		2114	39.10	-0.13							1.0
MESJ	HZ	450	314	EP		2114	39.96	0.08							1.0
MESJ	HN	450	314	ES		2115	22.00	0.05							1.0
MESJ	HN	450	314	AML		2115	25.01			9	0.1				

November 3 2012 Hour: 5:38 38.0 Lat: 36.60N Lon: 9.72W Depth: 13F Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.0 secs

WEST OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	123	50	EP		538	57.44	0.02							1.0
MORF	HN	123	50	ES		539	11.61	0.04							1.0
MORF	HN	123	50	AML		539	12.43			20	0.1				
MESJ	HZ	191	44	EP		539	5.91	-0.05							1.0
MESJ	HE	191	44	ES		539	26.34	-0.01							1.0
MESJ	HN	191	44	AML		539	27.91			6	0.2				
ALMR	HE	301	19	ES		539	49.86	0.00							0.9
ALMR	HN	301	19	AML		539	53.80			12	0.7				

November 3 2012 Hour: 5:57 29.5 Lat: 37.20N Lon: 12.78W Depth: 5F Agency: IGL Regional  
Magnitudes: 2.7ML IGL Rms: 0.3 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	366	87	EP		558	19.87	-0.16							1.0
MORF	HN	366	87	ES		558	57.25	0.38							1.0
MORF	HN	366	87	AML		559	2.27			19	0.4				
MESJ	HZ	409	79	EP		558	25.47	0.16							1.0
MESJ	HN	409	79	ES		559	5.82	-0.20							1.0
MESJ	HN	409	79	AML		559	11.23			21	0.4				
ALMR	HZ	427	58	EP		558	27.83	0.26							1.0
ALMR	HN	427	58	ES		559	9.46	-0.46							1.0
ALMR	HN	427	58	AML		559	14.47			27	0.3				

November 3 2012 Hour: 6:3 33.1 Lat: 37.33N Lon: 12.70W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.4ML IGL Rms: 0.1 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	359	89	EP		6 4	22.98	-0.15							1.0
MORF	HN	359	89	ES		6 4	59.73	0.10							1.0
MORF	HN	359	89	AML		6 5	7.67			14	0.2				
MESJ	HZ	400	80	EP		6 4	28.16	-0.01							1.0
MESJ	HN	400	80	ES		6 5	8.27	-0.08							1.0
MESJ	HN	400	80	AML		6 5	16.05			11	0.2				
ALMR	HZ	414	59	EP		6 4	30.10	0.15							1.0

November 3 2012 Hour: 6:9 59.8 Lat: 37.24N Lon: 12.75W Depth: 0 Agency: IGL Regional  
Magnitudes: 3.0ML IGL Rms: 0.2 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HE	356	62	ES		611	25.62	0.00							1.0
GGNV	HE	356	62	AML		611	26.68			58	0.3				
MORF	HZ	363	88	EP		610	49.94	-0.43							1.0
MORF	HN	363	88	ES		611	27.28	-0.04							1.0
MORF	HN	363	88	AML		611	31.79			46	0.4				
MESJ	HZ	405	79	EP		610	55.61	0.03							1.0
MESJ	HN	405	79	ES		611	36.34	0.02							1.0
MESJ	HN	405	79	AML		611	41.20			33	0.6				
ALMR	HZ	422	59	EP		610	57.85	0.17							1.0
ALMR	HN	422	59	ES		611	40.23	0.28							1.0
ALMR	HN	422	59	AML		611	44.31			47	0.4				

November 3 2012 Hour: 6:15 19.8 Lat: 37.26N Lon: 12.70W Depth: 0 Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.1 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	359	88	EP		616	9.73	-0.20							1.0
MESJ	HZ	401	79	EP		616	15.23	0.13							1.0
MESJ	HN	401	79	ES		616	55.54	0.07							1.0
MESJ	HN	401	79	AML		617	0.29			3	0.4				

November 3 2012 Hour: 11:43 10.4 Lat: 36.11N Lon: 6.14W Depth: 31F Agency: IGL Regional  
Magnitudes: 1.8ML IGL Rms: 0.1 secs

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	267	317	EP		1143	46.38	0.08							1.0
MESJ	HE	267	317	ES		1144	12.41	-0.08							1.0
MESJ	HE	267	317	AML		1144	14.25			5	0.0				

November 3 2012 Hour: 12:58 11.6 Lat: 7.07N Lon: 34.08W Depth: 9F Agency: IGL Distant  
Magnitudes: 5.2MS IGL Rms: 0.1 secs

**CENTRAL MID-ATLANTIC RIDGE NET: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	4225	34	EP		13 5	29.63	-0.05							1.0
MORF	BN	4225	34	ES		1311	22.75	-0.03							1.0
MORF	BZ	4225	34	AMS		1317	32.20			4222	21.0				
MESJ	BZ	4294	34	EP		13 5	35.04	0.19							1.0
MESJ	BN	4294	34	ES		1311	32.00	-0.07							1.0
MESJ	BZ	4294	34	AMS		1318	1.03			4268	22.6				
GGNV	BZ	4310	32	EP		13 5	36.09	0.07							1.0
GGNV	BN	4310	32	ES		1311	34.22	0.06							1.0
GGNV	BZ	4310	32	AMS		1318	0.71			3547	21.3				
ALMR	BN	4379	32	ES		1311	43.42	-0.16							1.0
ALMR	BZ	4379	32	AMS		1318	21.26			2914	19.2				

November 4 2012 Hour: 6:37 37.3 Lat: 15.95S Lon: 71.97W Depth: 123FAgency: IGL Distant  
Magnitudes: 5.4MB IGL Rms: 0.1 secs

**SOUTHERN PERU Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ALMR	BZ	8970	45	EP		649	36.29	-0.10							1.0
ALMR	BZ	8970	45	AMB		649	39.63			99	1.3				

November 4 2012 Hour: 11:47 16.5 Lat: 34.71N Lon: 5.28W Depth: 9F Agency: IGL Regional  
Magnitudes: 2.2ML IGL Rms: 0.0 secs

**MOROCCO Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	419	314	EP		1148	13.13	0.02							1.0
MESJ	HZ	436	324	EP		1148	15.20	-0.01							1.0
MESJ	HN	436	324	ES		1148	58.04	-0.01							1.0
MESJ	HN	436	324	AML		1149	0.76			6	0.4				

November 4 2012 Hour: 23:49 19.6 Lat: 37.28N Lon: 12.75W Depth: 0 Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.0 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	405	80	EP		2350	15.43	-0.02							1.0
MESJ	HN	405	80	ES		2350	56.21	0.02							1.0
MESJ	HN	405	80	AML		2351	3.27			3	0.1				

November 5 2012 Hour: 0:3 41.0 Lat: 37.28N Lon: 12.70W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.0ML IGL Rms: 0.2 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	359	88	EP		0 4	30.85	-0.16							1.0
MESJ	HZ	400	80	EP		0 4	36.11	-0.04							1.0
MESJ	HN	400	80	ES		0 5	16.66	0.21							1.0
MESJ	HN	400	80	AML		0 5	23.68			4	0.4				

**November 5 2012 Hour: 4:33 43.9 Lat: 38.24N Lon: 7.85W Depth: 25F Agency: IGL Regional**  
**Magnitudes: 0.6ML IGL Rms: 0.1 secs**

**NW VIDIGUEIRA, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	55	216	EP		433	53.16	-0.09							1.0
MESJ	HN	55	216	ES		434	0.17	0.09							1.0
MESJ	HN	55	216	AML		434	4.73			3	0.1				

**November 5 2012 Hour: 5:25 42.3 Lat: 35.50N Lon: 8.77W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.2ML IGL Rms: 0.2 secs**

**WEST OF GIBRALTAR Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	201	3	EP		526	12.55	-0.21							1.0
MORF	HE	201	3	ES		526	34.87	-0.14							1.0
MORF	HN	201	3	AML		526	39.75			30	0.3				
MESJ	HZ	265	11	EP		526	20.70	0.08							1.0
MESJ	HE	265	11	ES		526	48.89	0.29							1.0
MESJ	HN	265	11	AML		526	52.32			7	0.2				

**November 5 2012 Hour: 10:52 22.7 Lat: 36.40N Lon: 9.76W Depth: 5F Agency: IGL Regional**  
**Magnitudes: 1.6ML IGL Rms: 0.0 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	141	44	EP		1052	45.17	-0.03							1.0
MORF	HN	141	44	ES		1053	1.55	-0.04							1.0
MORF	HN	141	44	AML		1053	3.99			11	0.2				
MESJ	HZ	210	40	EP		1052	53.89	0.06							1.0
MESJ	HN	210	40	ES		1053	16.53	0.01							1.0
MESJ	HN	210	40	AML		1053	19.02			3	0.1				

**November 5 2012 Hour: 17:32 11.9 Lat: 36.36N Lon: 9.10W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 2.2ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	112	21	EP		1732	29.77	0.04							1.0
MORF	HN	112	21	ES		1732	42.71	-0.04							1.0
MORF	HN	112	21	AML		1732	46.08			72	0.3				
MESJ	HZ	182	25	EP		1732	38.83	-0.10							1.0
MESJ	HN	182	25	ES		1732	58.76	0.10							1.0
MESJ	HN	182	25	AML		1733	3.24			17	0.1				

**November 5 2012 Hour: 22:0 7.1 Lat: 36.44N Lon: 11.72W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 3.7ML IGL Rms: 0.3 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	290	70	EP		22 0	45.78	-0.17							1.0
MORF	HN	290	70	ES		22 1	14.02	-0.26							1.0
MORF	HN	290	70	AML		22 1	18.85			501	0.3				
GGNV	HZ	340	41	EP		22 0	51.83	-0.24							1.0
GGNV	HE	340	41	ES		22 1	24.79	-0.08							1.0
GGNV	HE	340	41	AML		22 1	25.77			313	0.4				
MESJ	HZ	348	62	EP		22 0	52.91	-0.16							1.0
MESJ	HE	348	62	ES		22 1	26.66	0.07							1.0
MESJ	HN	348	62	AML		22 1	34.46			147	0.5				
ALMR	HZ	409	42	EP		22 1	1.02	0.37							0.9
ALMR	HN	409	42	ES		22 1	40.25	0.54							0.9
ALMR	HN	409	42	AML		22 1	42.76			206	0.3				



November 6 2012 Hour: 4:10 36.0 Lat: 35.69N Lon: 8.81W Depth: 30F Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.1 secs

WEST OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	180	4	EP		411	1.15	-0.05							1.0
MORF	HN	180	4	ES		411	19.52	-0.07							1.0
MORF	HN	180	4	AML		411	20.49			15	0.2				
MESJ	HZ	244	12	EP		411	9.19	0.03							1.0
MESJ	HN	244	12	ES		411	33.46	0.09							1.0
MESJ	HN	244	12	AML		411	35.83			5	0.1				

November 6 2012 Hour: 6:17 28.8 Lat: 10.10N Lon: 57.21E Depth: 10F Agency: IGL Distant  
Magnitudes: 5.5MB IGL Rms: 0.1 secs

CARLSBERG RIDGE Net: CSEM

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	7179	307	EP		628	5.82	-0.03							1.0
MESJ	BZ	7179	307	AMb		628	11.75			107	1.7				
MESJ	BE	7179	307	ES		636	45.96	0.10							1.0
MORF	BZ	7210	306	EP		628	7.64	-0.07							1.0
MORF	BZ	7210	306	AMb		628	16.59			128	2.1				

November 6 2012 Hour: 23:54 40.1 Lat: 32.83N Lon: 5.56W Depth: 1 Agency: IGL Regional  
Rms: 0.0 secs

MOROCCO Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	572	331	EP		2355	56.14	0.04							1.0
MESJ	HZ	607	337	EP		2356	0.28	-0.04							1.0

November 7 2012 Hour: 8:27 31.4 Lat: 37.33N Lon: 8.54W Depth: 9F Agency: IGL Regional  
Magnitudes: 1.0ML IGL Rms: 0.0 secs

NE MONCHIQUE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	10	255	EP		827	33.72	0.03							1.0
MORF	HN	10	255	ES		827	35.31	-0.03							1.0
MORF	HN	10	255	AML		827	36.25			67	0.2				

November 7 2012 Hour: 16:35 49.9 Lat: 14.08N Lon: 91.92W Depth: 42F Agency: IGL Distant  
Magnitudes: 7.5MS IGL Rms: 0.1 secs

OFFSHORE GUATEMALA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	8431	53	EP		1647	31.29	-0.11							1.0
GGNV	BE	8431	53	ES		1657	10.85	0.12							1.0
GGNV	BN	8431	53	ESS		17 2	3.52	0.01							1.0
GGNV	BZ	8431	53	AMS		1718	4.23			227000	21.7				
ALMR	BZ	8474	53	EP		1647	33.41	-0.23							0.9
ALMR	BE	8474	53	ES		1657	15.16	0.09							1.0
ALMR	BN	8474	53	ESS		17 2	9.52	0.06							1.0
ALMR	BZ	8474	53	AMS		1717	59.72			200000	23.3				
MORF	BZ	8493	55	EP		1647	34.52	-0.17							1.0
MORF	BN	8493	55	ES		1657	17.18	0.11							1.0
MORF	BE	8493	55	ESS		17 2	12.27	0.12							1.0
MORF	BZ	8493	55	AMS		1718	44.54			252000	19.6				
MESJ	BZ	8524	54	EP		1647	36.01	-0.16							1.0
MESJ	BE	8524	54	ES		1657	20.01	0.07							1.0
MESJ	BE	8524	54	ESS		17 2	16.20	0.05							1.0
MESJ	BZ	8524	54	AMS		1719	5.48			255000	22.2				

November 7 2012 Hour: 19:49 14.4 Lat: 37.25N Lon: 12.89W Depth: 8F Agency: IGL Regional  
 Magnitudes: 2.1ML IGL Rms: 0.2 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	376	88	EP		1950	5.62	0.16							1.0
MORF	HN	376	88	ES		1950	43.46	0.18							1.0
MORF	HN	376	88	AML		1950	46.30			7	0.2				
MESJ	HZ	418	80	EP		1950	11.08	0.13							1.0
MESJ	HN	418	80	ES		1950	52.07	0.15							1.0
MESJ	HN	418	80	AML		1950	59.32			4	0.2				

November 7 2012 Hour: 22:42 48.8 Lat: 13.91N Lon: 92.22W Depth: 35F Agency: IGL Distant  
 Magnitudes: 5.3MS IGL Rms: 0.1 secs

**OFFSHORE GUATEMALA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	8469	53	EP		2254	33.09	0.05							1.0
GGNV	BN	8469	53	AMS		2321	32.67			1245	21.1				
ALMR	BZ	8513	53	EP		2254	35.35	0.07							1.0
ALMR	BE	8513	53	AMS		2321	48.16			1262	21.4				
MORF	BZ	8532	55	EP		2254	36.44	0.11							1.0
MORF	BN	8532	55	ES		23 4	20.92	0.23							1.0
MORF	BZ	8532	55	AMS		2329	29.49			2014	18.0				
MESJ	BZ	8562	54	EP		2254	37.79	0.01							1.0
MESJ	BZ	8562	54	AMS		2326	47.81			1403	17.0				

November 7 2012 Hour: 23:42 16.9 Lat: 8.66S Lon: 148.05E Depth: 96F Agency: IGL Distant  
 Rms: 0.0 secs

**EASTERN NEW GUINEA REGION, PAPUA NEW GUINEA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	16088	327	EP	Kpdf	24 1	41.54	0.03							1.0

November 8 2012 Hour: 2:15 1.2 Lat: 49.19N Lon: 128.53W Depth: 17F Agency: IGL Distant  
 Magnitudes: 6.1MS IGL Rms: 0.1 secs

**VANCOUVER ISLAND, CANADA REGION Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ALMR	BZ	8589	44	EP		213	44.66	0.10							1.0
ALMR	BE	8589	44	ES		223	34.08	0.15							1.0
ALMR	BE	8589	44	AMS		242	27.63			12352	19.9				
GGNV	BZ	8599	44	EP		213	45.15	0.06							1.0
GGNV	BN	8599	44	ES		223	35.42	0.17							1.0
GGNV	BE	8599	44	AMS		242	7.63			12218	23.9				
MESJ	BZ	8726	44	EP		213	51.27	0.18							1.0
MESJ	BE	8726	44	ES		223	47.67	0.10							1.0
MESJ	BE	8726	44	AMS		242	38.74			7754	21.3				
MORF	BZ	8752	45	EP		213	52.72	0.10							1.0
MORF	BN	8752	45	ES		223	50.21	0.00							1.0
MORF	BE	8752	45	AMS		242	34.35			7313	20.1				

November 8 2012 Hour: 11:30 59.6 Lat: 36.56N Lon: 7.63W Depth: 23F Agency: IGL Regional  
 Magnitudes: 1.3ML IGL Rms: 0.0 secs

**STRAIT OF GIBRALTAR Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	152	340	EP		1131	21.70	0.04							1.0
MESJ	HE	152	340	ES		1131	37.92	0.04							1.0
MESJ	HN	152	340	AML		1131	40.51			4	0.2				

November 8 2012 Hour: 13:45 29.8 Lat: 37.40N Lon: 12.66W Depth: 1 Agency: IGL Regional  
 Magnitudes: 1.9ML IGL Rms: 0.0 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	355	90	EP		1346	19.32	0.01							1.0
MESJ	HZ	395	81	EP		1346	24.25	0.04							1.0
MESJ	HN	395	81	ES		1347	3.86	0.05							1.0

MESJ HN 395 81 AML 1347 9.00 3 0.4

**November 8 2012 Hour: 16:355.8 Lat: 37.33N Lon: 8.59W Depth: 14F Agency: IGL Regional  
Magnitudes: 0.5ML IGL Rms: 0.1 secs**

**NW MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	6	244	EP		16	3	58.14	-0.14						1.0
MORF	HN	6	244	ES		16	4	0.12	0.00						1.0
MORF	HN	6	244	AML		16	4	0.63		26	0.2				
MESJ	HZ	65	30	EP		16	4	6.43	0.09						1.0
MESJ	HE	65	30	ES		16	4	14.13	0.06						1.0
MESJ	HN	65	30	AML		16	4	16.50		1	0.0				

**November 8 2012 Hour: 20:4340.3 Lat: 36.67N Lon: 9.70W Depth: 29F Agency: IGL Regional  
Magnitudes: 1.6ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	117	53	EP		2043		57.70	-0.02						1.0
MORF	HE	117	53	ES		2044		10.43	-0.04						1.0
MORF	HE	117	53	AML		2044		11.22		14	0.3				
MESJ	HZ	185	45	EP		2044		6.00	-0.08						1.0
MESJ	HN	185	45	ES		2044		25.07	0.15						1.0
MESJ	HN	185	45	AML		2044		26.50		4	0.3				

**November 9 2012 Hour: 5:5143.3 Lat: 42.73S Lon: 124.70E Depth: 10F Agency: IGL Distant  
Rms: 0.0 secs**

**SOUTH OF AUSTRALIA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ALMR	BZ16103	280		EPKpdf		611		19.97	-0.01						1.0

**November 9 2012 Hour: 19:432.3 Lat: 37.33N Lon: 8.51W Depth: 12F Agency: IGL Regional  
Magnitudes: 1.6ML IGL Rms: 0.0 secs**

**NE MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	13	258	EP		19	4	35.14	-0.04						1.0
MORF	HE	13	258	ES		19	4	37.27	-0.02						1.0
MORF	HN	13	258	AML		19	4	38.05		199	0.2				
MESJ	HZ	62	24	EP		19	4	42.44	0.06						1.0

**November 9 2012 Hour: 20:1145.6 Lat: 35.87N Lon: 8.79W Depth: 31F Agency: IGL Regional  
Magnitudes: 1.3ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	160	4	EP		2012		8.09	-0.15						1.0
MORF	HN	160	4	ES		2012		24.82	0.05						1.0
MORF	HN	160	4	AML		2012		26.95		4	0.4				
MESJ	HZ	224	13	EP		2012		16.34	0.12						1.0
MESJ	HN	224	13	ES		2012		38.56	-0.02						1.0
MESJ	HN	224	13	AML		2012		45.75		2					

**November 10 2012 Hour: 2:036.4 Lat: 37.31N Lon: 8.62W Depth: 14F Agency: IGL Regional  
Magnitudes: 0.5ML IGL Rms: 0.2 secs**

**W MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	3	262	EP		2	0	38.52	-0.28						1.0
MORF	HN	3	262	ES		2	0	40.68	0.15						1.0
MORF	HN	3	262	AML		2	0	41.11		19	0.1				
MESJ	HZ	69	31	EP		2	0	47.67	0.16						1.0
MESJ	HN	69	31	ES		2	0	55.57	-0.02						1.0
MESJ	HN	69	31	AML		2	0	57.18		2	0.2				

November 10 2012 Hour: 14:49 11.2 Lat: 37.25N Lon: 12.71W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.8ML IGL Rms: 0.2 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	352	61	EP		1450	0.42	-0.02							1.0
MORF	HZ	360	88	EP		1450	1.07	-0.33							1.0
MESJ	HE	402	79	ES		1450	47.33	0.31							1.0
MESJ	HN	402	79	AML		1450	53.11			19	0.2				
ALMR	HN	419	58	ES		1450	50.76	0.06							1.0
ALMR	HE	419	58	AML		1450	55.82			31	0.2				

November 10 2012 Hour: 14:57 48.8 Lat: 8.91S Lon: 75.05W Depth:118F Agency: IGL Distant  
Magnitudes: 5.7MB IGL Rms: 0.1 secs

CENTRAL PERU Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	8586	49	EP		15 9	29.74	0.03							1.0
MORF	BZ	8586	49	AMb		15 9	35.29			714	2.2				
MORF	BE	8586	49	ES		1519	9.88	-0.01							1.0
GGNV	BZ	8605	47	EP		15 9	30.49	-0.05							1.0
GGNV	BZ	8605	47	AMb		15 9	33.21			273	1.8				
MESJ	BZ	8644	48	EP		15 9	32.56	0.04							1.0
MESJ	BZ	8644	48	AMb		15 9	36.93			165	2.2				
MESJ	BE	8644	48	ES		1519	15.41	0.06							1.0
ALMR	BZ	8669	47	EP		15 9	33.69	-0.08							1.0
ALMR	BZ	8669	47	AMb		15 9	37.92			319	1.3				

November 10 2012 Hour: 19:43 55.5 Lat: 37.07N Lon: 12.94W Depth: 30F Agency: IGL Regional  
Magnitudes: 2.2ML IGL Rms: 0.4 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	382	85	EP		1944	45.62	-0.19							1.0
MESJ	HZ	426	77	EP		1944	50.79	-0.39							1.0
MESJ	HN	426	77	ES		1945	31.69	-0.13							1.0
MESJ	HN	426	77	AML		1945	37.97			6	0.1				
ALMR	HZ	447	58	EP		1944	54.42	0.73							1.0

November 10 2012 Hour: 20:51 33.7 Lat: 37.25N Lon: 12.75W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.1ML IGL Rms: 0.1 secs

AZORES-CAPE ST. VINCENT RIDGE Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	363	88	EP		2052	24.26	-0.05							1.0
MESJ	HN	405	79	ES		2053	10.30	0.05							1.0
MESJ	HN	405	79	AML		2053	17.36			6	0.3				

November 11 2012 Hour: 0:19 20.3 Lat: 36.30N Lon: 3.73W Depth: 9F Agency: IGL Regional  
Magnitudes: 3.2ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	434	294	EP		020	18.67	-0.03							1.0
MESJ	HN	434	294	ES		021	1.37	0.03							1.0
MESJ	HE	434	294	AML		021	5.63			39	0.4				
MORF	HZ	453	286	EP		020	20.97	-0.05							1.0
MORF	HE	453	286	ES		021	5.40	0.05							1.0
MORF	HN	453	286	AML		021	10.30			84	0.3				

November 11 2012 Hour: 1:15 49.9 Lat: 37.61N Lon: 8.37W Depth: 0 Agency: IGL Regional  
Magnitudes: 0.7ML IGL Rms: 0.2 secs

SW OURIQUE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	29	27	EP		115	54.41	-0.14							1.0
MESJ	HN	29	27	ES		115	57.74	-0.19							1.0
MESJ	HN	29	27	AML		115	58.01			11	0.1				
MORF	HZ	42	216	EP		115	57.00	0.33							1.0

**November 11 2012 Hour: 10:54 50.1 Lat: 35.90N Lon: 6.44W Depth: 25F Agency: IGL Regional**  
**Magnitudes: 2.2ML IGL Rms: 0.0 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	267	324	EP		1055	26.45	0.01							1.0
MESJ	HN	267	324	ES		1055	52.98	-0.01							1.0
MESJ	HN	267	324	AML		1055	57.66			11	0.2				

**November 11 2012 Hour: 22:14 60.0 Lat: 14.16N Lon: 92.17W Depth: 27F Agency: IGL Distant**  
**Magnitudes: 6.3MS IGL Rms: 0.0 secs**

**OFFSHORE GUATEMALA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	8447	53	EP		2226	44.25	-0.03							1.0
GGNV	BN	8447	53	AMS		2253	17.39			12354	18.7				
ALMR	BZ	8490	53	EP		2226	46.59	0.07							1.0
ALMR	BZ	8490	53	AMS		2257	17.10			13271	23.7				
MORF	BZ	8510	55	EP		2226	47.56	-0.04							1.0
MORF	BZ	8510	55	AMS		2258	6.69			18889	13.0				
MESJ	BZ	8540	54	EP		2226	49.08	0.01							1.0
MESJ	BZ	8540	54	AMS		2257	44.52			14652	18.0				

**November 12 2012 Hour: 14:52 49.6 Lat: 37.32N Lon: 8.55W Depth: 13F Agency: IGL Regional**  
**Magnitudes: 0.8ML IGL Rms: 0.0 secs**

**NE MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	9	260	EP		1452	52.19	-0.02							1.0
MORF	HN	9	260	ES		1452	54.15	0.02							1.0
MORF	HN	9	260	AML		1452	55.04			38	0.3				

**November 12 2012 Hour: 20:42 19.6 Lat: 57.54N Lon: 142.89W Depth: 55F Agency: IGL Distant**  
**Magnitudes: 6.4MS IGL Rms: 0.1 secs**

**GULF OF ALASKA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
ALMR	BZ	8474	35	EP		2054	2.15	-0.01							1.0
ALMR	BN	8474	35	ES		21	3	42.94	0.17						0.9
ALMR	BZ	8474	35	AMS		2126	22.28			24306	13.7				
GGNV	BZ	8499	36	EP		2054	3.46	0.03							1.0
GGNV	BZ	8499	36	AMS		2126	3.93			12306	21.4				
MESJ	BZ	8621	35	EP		2054	9.50	-0.10							1.0
MESJ	BN	8621	35	ES		21	3	57.17	0.02						1.0
MESJ	BZ	8621	35	AMS		2126	58.92			16594	17.6				
MORF	BZ	8660	36	EP		2054	11.54	-0.10							1.0
MORF	BN	8660	36	ES		21	4	1.07	-0.01						1.0
MORF	BE	8660	36	AMS		2126	53.03			10072	17.3				

**November 13 2012 Hour: 8:33 2.2 Lat: 37.52N Lon: 8.99W Depth: 6F Agency: IGL Regional**  
**Magnitudes: 1.3ML IGL Rms: 0.0 secs**

**NW ALJEZUR, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	38	128	EP		833	8.43	-0.01							1.0
MORF	HE	38	128	ES		833	12.96	-0.05							1.0
MORF	HN	38	128	AML		833	14.26			25	0.2				
MESJ	HN	77	62	ES		833	23.68	0.05							1.0
MESJ	HN	77	62	AML		833	25.97			14	0.3				

**November 13 2012 Hour: 23:24 8.9 Lat: 42.54N Lon: 19.00E Depth: 10F Agency: IGL Distant**  
**Magnitudes: 4.1MB IGL Rms: 0.0 secs**

**MONTENEGRO Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	2365	266	EP		2328	55.41	0.00							1.0
MESJ	BZ	2365	266	AMB		2328	58.25			14	1.4				

November 14 2012 Hour: 0:045.4 Lat: 27.37S Lon: 69.12W Depth: 91F Agency: IGL Distant  
Magnitudes: 4.8MB IGL Rms: 0.1 secs

ATACAMA, CHILE Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	9610	44	EP		013	17.58	0.07							1.0
MESJ	BZ	9610	44	AMb		013	20.42			16	1.1				

November 14 2012 Hour: 19:26.0 Lat: 29.16S Lon: 71.27W Depth: 62F Agency: IGL Distant  
Magnitudes: 6.0MS IGL Rms: 0.1 secs

COQUIMBO, CHILE Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	9831	45	EP		1914	51.00	-0.11							1.0
MORF	BN	9831	45	ESKSac		1925	13.87	-0.02							1.0
MORF	BZ	9831	45	AMS		1954	5.37			6262	19.0				
GGNV	BZ	9896	44	EP		1914	53.81	0.07							1.0
GGNV	BE	9896	44	ESKSac		1925	17.09	-0.16							1.0
GGNV	BZ	9896	44	AMS		1952	15.32			6430	20.3				
MESJ	BZ	9898	45	EP		1914	53.93	0.06							1.0
MESJ	BZ	9898	45	EPP		1918	23.92	-0.05							1.0
MESJ	BN	9898	45	ESKSac		1925	17.39	-0.01							1.0
MESJ	BZ	9898	45	AMS		1954	15.76			6158	21.4				
ALMR	BZ	9965	44	EP		1914	56.75	0.09							1.0
ALMR	BE	9965	44	ESKSac		1925	21.08	0.10							1.0
ALMR	BZ	9965	44	AMS		1953	16.35			7076	24.6				

November 15 2012 Hour: 1:3942.2 Lat: 36.36N Lon: 7.70W Depth: 31F Agency: IGL Regional  
Magnitudes: 1.0ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	171	344	EP		140	6.06	-0.05							1.0
MESJ	HN	171	344	ES		140	23.63	0.05							1.0
MESJ	HN	171	344	AML		140	24.78			2	0.2				

November 15 2012 Hour: 9:2023.2 Lat: 18.41N Lon: 100.37W Depth: 61F Agency: IGL Distant  
Magnitudes: 6.0MB IGL Rms: 0.1 secs

GUERRERO, MEXICO Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	8864	53	EP		932	24.42	0.15							1.0
GGNV	BZ	8864	53	AMb		932	27.42			447	1.0				
ALMR	BZ	8899	52	EP		932	25.91	-0.08							1.0
ALMR	BZ	8899	52	AMb		932	28.81			814	1.2				
MORF	BZ	8948	54	EP		932	28.39	-0.05							1.0
MORF	BZ	8948	54	AMb		932	32.60			179	1.6				
MESJ	BZ	8969	53	EP		932	29.35	-0.02							1.0
MESJ	BZ	8969	53	AMb		932	32.60			281	1.4				

November 15 2012 Hour: 13:216.9 Lat: 36.55N Lon: 7.62W Depth: 20F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.1 secs

STRAIT OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	124	313	EP		1321	25.79	-0.12							1.0
MESJ	HZ	153	340	EP		1321	29.51	0.11							1.0
MESJ	HE	153	340	ES		1321	45.80	-0.02							1.0
MESJ	HN	153	340	AML		1321	48.38			41	0.1				
ALMR	HZ	301	344	EP		1321	47.87	0.04							0.9

November 16 2012 Hour: 18:1240.0 Lat: 49.27N Lon: 155.47E Depth: 29F Agency: IGL Distant  
Magnitudes: 6.5MS IGL Rms: 0.1 secs

KURIL ISLANDS Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ10149	348	EP			1825	42.40	0.03							1.0
GGNV	BZ10149	348	EPP			1829	20.34	0.07							1.0
GGNV	BN10149	348	ESKSac			1836	12.70	0.11							1.0

GGNV	BE10149	348	AMS	1910	0.44				13188	18.6							
MESJ	BZ10230	347	EP	1825	45.79	-0.01											1.0
MESJ	BZ10230	347	EPP	1829	26.09	0.02											1.0
MESJ	BN10230	347	ESKSac	1836	16.72	-0.09											1.0
MESJ	BZ10230	347	AMS	1913	42.45				17489	21.1							
MORF	BZ10295	347	EP	1825	48.52	-0.04											1.0
MORF	BZ10295	347	EPP	1829	30.64	-0.09											1.0
MORF	BN10295	347	ESKSac	1836	20.20	0.01											1.0
MORF	BZ10295	347	AMS	1914	33.95				18897	17.6							

**November 16 2012 Hour: 19:45 35.8 Lat: 37.10N Lon: 8.72W Depth: 22F Agency: IGL Regional**  
**Magnitudes: 1.5ML IGL Rms: 0.0 secs**

**W LAGOS, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	24	15	EP		1945	40.96	0.03							1.0
MORF	HE	24	15	ES		1945	44.62	-0.06							1.0
MORF	HN	24	15	AML		1945	45.15			84	0.1				
MESJ	HZ	93	28	EP		1945	50.62	0.06							1.0
MESJ	HN	93	28	ES		1946	1.31	-0.03							1.0
MESJ	HN	93	28	AML		1946	3.30			10	0.3				

**November 17 2012 Hour: 5:12 57.0 Lat: 18.31S Lon: 172.37W Depth: 10F Agency: IGL Distant**  
**Magnitudes: 5.8MS IGL Rms: 0.0 secs**

**TONGA REGION Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ17245	32	EPKpdf			532	49.39	0.02							1.0
GGNV	BE17245	32	AMS			645	4.88			1931	22.6				
MESJ	BZ17372	32	EPKpdf			532	51.01	0.07							1.0
MESJ	BZ17372	32	EPP			536	56.47	-0.05							1.0
MESJ	BZ17372	32	AMS			638	57.60			1326	16.3				
MORF	BZ17392	34	EPKpdf			532	51.20	-0.04							1.0
MORF	BZ17392	34	AMS			639	2.43			1212	21.1				

**November 17 2012 Hour: 18:6 29.5 Lat: 36.45N Lon: 9.68W Depth: 15F Agency: IGL Regional**  
**Magnitudes: 2.7ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	132	44	EP		18 6	49.86	-0.09							1.0
MORF	HN	132	44	ES		18 7	4.98	0.13							1.0
MORF	HN	132	44	AML		18 7	7.34			198	0.3				
MESJ	HZ	202	40	EP		18 6	58.47	-0.07							1.0
MESJ	HE	202	40	ES		18 7	19.73	0.02							1.0
MESJ	HN	202	40	AML		18 7	21.67			38	0.2				

**November 18 2012 Hour: 17:44 57.6 Lat: 36.70N Lon: 7.24W Depth: 22F Agency: IGL Regional**  
**Magnitudes: 2.5ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	142	299	EP		1745	18.72	0.07							1.0
MORF	HN	142	299	ES		1745	34.09	0.05							1.0
MORF	HN	142	299	AML		1745	35.81			95	0.0				
MESJ	HZ	153	326	EP		1745	19.90	-0.08							1.0
MESJ	HE	153	326	ES		1745	36.31	-0.04							1.0
MESJ	HN	153	326	AML		1745	40.40			45	0.0				

**November 19 2012 Hour: 3:19 49.7 Lat: 36.77N Lon: 7.95W Depth: 20F Agency: IGL Regional**  
**Magnitudes: 1.4ML IGL Rms: 0.0 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	86	314	EP		320	3.53	-0.04							1.0
MESJ	HZ	121	349	EP		320	8.36	0.06							1.0
MESJ	HN	121	349	ES		320	21.85	-0.01							1.0
MESJ	HN	121	349	AML		320	25.24			6	0.2				

November 19 2012 Hour: 6:38 15.0 Lat: 39.62N Lon: 9.01W Depth: 9F Agency: IGL Regional  
Magnitudes: 1.5ML IGL Rms: 0.1 secs

NE NAZARE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	209	161	EP		638	45.44	-0.09							1.0
MESJ	HN	209	161	ES		639	7.83	0.01							1.0
MESJ	HN	209	161	AML		639	13.36			4	0.2				

November 19 2012 Hour: 9:44 33.9 Lat: 5.73S Lon: 151.61E Depth: 10F Agency: IGL Distant  
Magnitudes: 5.9MS IGL Rms: 0.0 secs

NEW BRITAIN REGION, PAPUA NEW GUINEA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ15899	335	EPKpdf			10 4	7.03	-0.01							1.0
GGNV	BZ15899	335	AMS			1116	42.53			2891	16.6				
MESJ	BZ15934	333	EPKpdf			10 4	7.65	0.02							1.0
MESJ	BZ15934	333	AMS			1114	27.88			2054	24.6				
MORF	BZ16005	333	EPKpdf			10 4	8.78	0.00							1.0
MORF	BZ16005	333	AMS			1116	20.07			1533	19.7				

November 19 2012 Hour: 17:54 8.6 Lat: 30.45N Lon: 67.54E Depth: 14F Agency: IGL Distant  
Magnitudes: 5.2MB IGL Rms: 0.0 secs

PAKISTAN Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	6847	299	EP		18 4	25.48	0.02							1.0
MESJ	BZ	6847	299	AMb		18 4	29.37			34	1.0				
MORF	BZ	6902	299	EP		18 4	28.80	-0.02							1.0
MORF	BZ	6902	299	AMb		18 4	32.25			58	1.6				

November 20 2012 Hour: 22:34 44.7 Lat: 37.16N Lon: 8.61W Depth: 16F Agency: IGL Regional  
Magnitudes: 0.6ML IGL Rms: 0.1 secs

NW PORTIMAO, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HE	17	347	ES		2234	51.22	0.08							1.0
MORF	HE	17	347	AML		2234	51.47			11	0.2				
MESJ	HE	83	24	ES		2235	7.62	-0.01							1.0
MESJ	HE	83	24	AML		2235	9.65			2	0.2				
MORF	HZ	17	347	EP		2234	48.34	-0.07							1.0

November 21 2012 Hour: 7:49 30.7 Lat: 36.81N Lon: 7.07W Depth: 30F Agency: IGL Regional  
Magnitudes: 3.4ML IGL Rms: 0.2 secs

STRAIT OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	151	292	EP		749	51.98	-0.36							1.0
MORF	HN	151	292	ES		750	8.13	0.02							1.0
MORF	HN	151	292	AML		750	10.30			697	0.3				
MESJ	HZ	153	319	EP		749	52.62	0.05							1.0
MESJ	HN	153	319	ES		750	8.41	-0.10							1.0
MESJ	HN	153	319	AML		750	9.99			484	0.2				
GGNV	HZ	280	320	EP		750	8.64	0.34							0.9
GGNV	HE	280	320	ES		750	35.84	0.12							0.9
GGNV	HN	280	320	AML		750	37.47			126	0.6				

November 21 2012 Hour: 12:34 34.3 Lat: 36.60N Lon: 7.60W Depth: 7F Agency: IGL Regional  
Magnitudes: 1.5ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	148	338	EP		1234	57.44	0.00							1.0
MESJ	HN	148	338	ES		1235	14.33	0.00							1.0
MESJ	HN	148	338	AML		1235	16.08			6	0.1				



November 21 2012 Hour: 15:17 2.6 Lat: 36.60N Lon: 9.60W Depth: 19F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.0 secs

WEST OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	115	47	EP		1517	20.65	0.04							1.0
MORF	HE	115	47	ES		1517	33.73	0.00							1.0
MORF	HN	115	47	AML		1517	35.18			108	0.1				
MESJ	HZ	184	41	EP		1517	29.13	0.00							1.0
MESJ	HN	184	41	ES		1517	48.44	-0.04							1.0
MESJ	HN	184	41	AML		1517	50.57			17	0.1				

November 21 2012 Hour: 16:46 38.5 Lat: 11.38S Lon: 117.93E Depth: 10F Agency: IGL Distant  
Rms: 0.1 secs

SOUTH OF SUMBAWA, INDONESIA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ13945	308		EPKpdf		17 5	39.35	0.14							1.0
MORF	BZ13997	308		EPKpdf		17 5	40.01	-0.14							1.0

November 22 2012 Hour: 3:21 43.6 Lat: 35.03N Lon: 3.91W Depth: 9F Agency: IGL Regional  
Magnitudes: 2.5ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	496	310	EP		322	49.51	-0.03							1.0
MESJ	HN	496	310	ES		323	37.72	0.03							1.0
MESJ	HN	496	310	AML		323	42.91			9	0.3				

November 22 2012 Hour: 5:55 12.8 Lat: 19.18S Lon: 67.51W Depth:194FAgency: IGL Distant  
Rms: 0.0 secs

ORURO, BOLIVIA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	8780	44	EP		6 6	54.75	-0.02							1.0
MESJ	BZ	8844	44	EP		6 6	57.89	0.02							1.0

November 22 2012 Hour: 13: 7 6.4 Lat: 22.67S Lon: 63.49W Depth:459FAgency: IGL Distant  
Magnitudes: 5.6MB IGL Rms: 0.1 secs

SALTA, ARGENTINA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	8776	42	EP		1318	21.09	-0.09							1.0
MORF	BZ	8776	42	AMb		1318	23.11			513	1.3				
GGNV	BZ	8843	40	EP		1318	24.31	0.03							1.0
MESJ	BZ	8843	41	EP		1318	24.37	0.05							1.0
MESJ	BZ	8843	41	AMb		1318	25.66			477	1.2				
GGNV	BZ	8843	40	AMb		1318	27.17			419	1.6				

November 23 2012 Hour: 0:35 29.3 Lat: 37.06N Lon: 4.88W Depth: 21F Agency: IGL Regional  
Magnitudes: 1.7ML IGL Rms: 0.1 secs

SPAIN Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	308	287	EP		036	10.97	-0.05							1.0
MESJ	HE	308	287	ES		036	41.55	0.09							1.0
MESJ	HN	308	287	AML		036	49.42			3	0.3				
MORF	HZ	336	276	EP		036	14.50	-0.05							1.0

November 23 2012 Hour: 1:26 46.0 Lat: 36.81N Lon: 8.50W Depth: 8F Agency: IGL Regional  
Magnitudes: 1.0ML IGL Rms: 0.1 secs

S LAGOA, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	57	346	EP		126	55.33	0.10							1.0
MORF	HN	57	346	ES		127	1.88	-0.10							1.0
MORF	HN	57	346	AML		127	2.84			13	0.1				
MESJ	HE	117	12	ES		127	18.17	-0.01							1.0
MESJ	HN	117	12	AML		127	21.74			2	0.3				

November 25 2012 Hour: 11:36 47.2 Lat: 36.52N Lon: 4.43W Depth: 78F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.3 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	367	295	EP		1137	35.31	0.20							1.0
MESJ	HN	367	295	ES		1138	9.94	-0.16							1.0
MESJ	HE	367	295	ES		1138	10.33								
MESJ	HN	367	295	AML		1138	12.92			5	0.2				
MORF	HZ	386	284	EP		1137	37.73	0.35							1.0
MORF	HN	386	284	ES		1138	13.64	-0.39							1.0
MORF	HN	386	284	AML		1138	17.92			14	0.1				

November 25 2012 Hour: 15:45 50.5 Lat: 36.38N Lon: 8.01W Depth: 7F Agency: IGL Regional  
Magnitudes: 1.5ML IGL Rms: 0.1 secs

WEST OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	118	331	EP		1546	9.22	-0.06							1.0
MESJ	HZ	163	353	EP		1546	15.44	-0.05							1.0
MESJ	HN	163	353	ES		1546	33.85	0.11							1.0
MESJ	HN	163	353	AML		1546	34.65			5	0.3				

November 26 2012 Hour: 5:33 50.9 Lat: 40.42N Lon: 90.37E Depth: 20F Agency: IGL Distant  
Magnitudes: 4.7MS IGL Rms: 0.0 secs

SOUTHERN XINJIANG, CHINA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	8036	305	EP		545	15.02	0.00							1.0
MESJ	BN	8036	305	AMS		614	29.60			356	20.4				
GGNV	BZ	8041	306	EP		545	15.28	0.06							1.0
GGNV	BN	8041	306	AMS		633	40.25			771	14.5				
MORF	BZ	8102	305	EP		545	18.58	-0.06							1.0
MORF	BN	8102	305	AMS		614	35.61			266	20.9				

November 26 2012 Hour: 17:3 55.9 Lat: 36.67N Lon: 5.42W Depth: 6F Agency: IGL Regional  
Rms: 0.1 secs

SPAIN Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	280	298	EP		17	4	35.53	-0.06						1.0

November 27 2012 Hour: 8:51 34.5 Lat: 34.99N Lon: 2.89W Depth: 6F Agency: IGL Regional  
Magnitudes: 3.3ML IGL Rms: 0.1 secs

MOROCCO Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	573	305	EP		852	50.11	0.09							1.0
MESJ	HE	573	305	ES		853	45.10	-0.09							1.0
MESJ	HN	573	305	AML		853	55.23			39	0.4				

November 27 2012 Hour: 9:58 39.7 Lat: 35.00N Lon: 2.89W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.8ML IGL Rms: 0.1 secs

MOROCCO Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	572	305	EP		959	55.61	-0.12							1.0
MESJ	HN	572	305	ES		10	0	51.39	0.12						1.0
MESJ	HN	572	305	AML		10	0	56.53		14	0.6				

November 27 2012 Hour: 13:40 22.5 Lat: 36.49N Lon: 8.32W Depth: 16F Agency: IGL Regional  
Magnitudes: 2.5ML IGL Rms: 0.1 secs

WEST OF GIBRALTAR NET: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	95	342	EP		1340	37.62	-0.01							1.0
MORF	HN	95	342	ES		1340	48.83	0.14							1.0
MORF	HN	95	342	AML		1340	50.01			188	0.3				
MESJ	HZ	150	3	EP		1340	44.93	-0.07							1.0
MESJ	HN	150	3	ES		1341	1.37	-0.07							1.0

MESJ HN 150 3 AML 1341 2.23 32 0.2

November 27 2012 Hour: 14:55 46.5 Lat: 37.41N Lon: 9.09W Depth: 29F Agency: IGL Regional  
Magnitudes: 1.1ML IGL Rms: 0.1 secs

NW ALJEZUR, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	41	106	EP		1455	54.32	0.09							1.0
MORF	HN	41	106	ES		1455	59.73	-0.11							1.0
MORF	HE	41	106	AML		1456	0.77			23	0.1				
MESJ	HZ	90	58	EP		1456	0.58	-0.07							1.0
MESJ	HN	90	58	ES		1456	11.03	0.08							1.0
MESJ	HN	90	58	AML		1456	13.83			3	0.1				

November 28 2012 Hour: 0:21 21.7 Lat: 36.05N Lon: 6.16W Depth: 26F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HN	262	303	ES		022	23.43	-0.02							1.0
MORF	HN	262	303	AML		022	25.64			11	0.1				
MESJ	HZ	270	318	EP		021	58.32	0.01							1.0
MESJ	HE	270	318	ES		022	25.05	0.01							1.0
MESJ	HN	270	318	AML		022	26.92			18					

November 28 2012 Hour: 1:26 35.1 Lat: 36.61N Lon: 7.06W Depth: 20F Agency: IGL Regional  
Magnitudes: 1.8ML IGL Rms: 0.3 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	161	299	EP		126	58.42	-0.23							1.0
MORF	HN	161	299	ES		127	15.55	-0.31							1.0
MORF	HN	161	299	AML		127	16.89			12	0.2				
MESJ	HZ	171	323	EP		126	59.97	0.15							1.0
MESJ	HN	171	323	ES		127	18.28	0.40							1.0
MESJ	HN	171	323	AML		127	20.31			8	0.4				

November 28 2012 Hour: 3:9 48.6 Lat: 4.51S Lon: 76.05W Depth: 120F Agency: IGL Distant  
Magnitudes: 5.3MB IGL Rms: 0.1 secs

NORTHERN PERU Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	8352	50	EP		321	17.27	-0.03							1.0
MORF	BZ	8352	50	AMb		321	22.28			217	1.4				
MORF	BE	8352	50	ES		330	46.02	-0.15							1.0
GGNV	BZ	8359	48	EP		321	17.74	0.17							1.0
GGNV	BZ	8359	48	AMb		321	26.87			147	1.6				
GGNV	BE	8359	48	ES		330	46.62	-0.10							1.0
MESJ	BZ	8406	49	EP		321	20.16	0.12							1.0
MESJ	BZ	8406	49	AMb		321	23.61			70	2.2				
MESJ	BE	8406	49	ES		330	51.45	-0.01							1.0

November 28 2012 Hour: 8:56 17.0 Lat: 5.40S Lon: 131.11E Depth: 56F Agency: IGL Distant  
Magnitudes: 5.1MS IGL Rms: 0.0 secs

BANDA SEA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ14574	317	EPKpdf			915	21.82	0.06							1.0
MESJ	BZ14574	317	EPP			917	38.88	0.02							1.0
MESJ	BZ14574	317	AMS			1020	50.13			188	36.1				
GGNV	BZ14592	318	EPP			917	39.89	0.00							1.0
GGNV	BE14592	318	AMS			1023	9.97			1007	14.9				
MORF	BZ14637	317	EPP			917	42.50	-0.08							1.0
MORF	BN14637	317	AMS			1025	42.88			316	19.6				

November 28 2012 Hour: 14:39 36.8 Lat: 36.74N Lon: 7.44W Depth: 24F Agency: IGL Regional  
Magnitudes: 2.2ML IGL Rms: 0.1 secs

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	125	301	EP		1439	55.59	0.02							1.0
MORF	HN	125	301	ES		1440	9.21	-0.04							1.0
MORF	HE	125	301	AML		1440	9.96			59	0.2				
MESJ	HZ	140	331	EP		1439	57.61	0.14							1.0
MESJ	HE	140	331	ES		1440	12.42	-0.11							1.0
MESJ	HN	140	331	AML		1440	12.97			27	0.1				

November 28 2012 Hour: 14:50 1.8 Lat: 36.80N Lon: 7.42W Depth: 21F Agency: IGL Regional  
Magnitudes: 1.5ML IGL Rms: 0.0 secs

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	135	329	EP		1450	22.14	0.02							1.0
MESJ	HE	135	329	ES		1450	36.89	-0.02							1.0
MESJ	HN	135	329	AML		1450	39.13			7	0.2				

November 28 2012 Hour: 23:15 28.2 Lat: 36.84N Lon: 5.19E Depth: 10F Agency: IGL Distant  
Magnitudes: 4.0MS IGL Rms: 0.0 secs

**NORTHERN ALGERIA Net: CSEM**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	1193	279	EP		2318	1.90	0.04							1.0
MESJ	BZ	1193	279	AMS		2322	18.95			1702	17.9				

November 29 2012 Hour: 7:9 13.1 Lat: 6.58S Lon: 80.94W Depth: 12F Agency: IGL Distant  
Magnitudes: 5.1MS IGL Rms: 0.1 secs

**NEAR COAST OF CENTRAL PERU Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	8913	50	EP		721	22.99	-0.08							1.0
MORF	BN	8913	50	ES		731	28.07	-0.05							1.0
MORF	BZ	8913	50	AMS		8 2	17.01			761	18.4				
GGNV	BZ	8916	49	EP		721	23.11	0.02							1.0
GGNV	BE	8916	49	AMS		8 3	36.57			1566	19.0				
MESJ	BZ	8966	50	EP		721	25.70	0.12							1.0
MESJ	BZ	8966	50	AMS		759	57.78			614	19.2				

November 29 2012 Hour: 11:10 28.1 Lat: 3.71S Lon: 145.44E Depth: 10F Agency: IGL Distant  
Magnitudes: 6.1MS IGL Rms: 0.0 secs

**NEAR NORTH COAST OF NEW GUINEA, PAPUA NEW GUINEA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ15381	330	EPP			1132	42.04	0.03							1.0
GGNV	BE15381	330	AMS			1233	41.47			4992	21.4				
MESJ	BZ15402	328	EPP			1132	43.18	-0.01							1.0
MESJ	BZ15402	328	AMS			1234	47.49			3046	19.5				
MORF	BZ15471	328	EPP			1132	47.09	-0.02							1.0
MORF	BZ15471	328	AMS			1235	39.86			2699	22.2				

November 30 2012 Hour: 3:16 24.8 Lat: 35.87N Lon: 10.22W Depth: 31F Agency: IGL Regional  
Magnitudes: 1.7ML IGL Rms: 0.0 secs

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	282	39	EP		317	2.50	-0.05							1.0
MESJ	HE	282	39	ES		317	30.18	0.05							1.0
MESJ	HE	282	39	AML		317	33.28			4	0.1				

**December 1 2012 Hour: 8:057.3 Lat: 58.53N Lon: 154.18W Depth: 88F Agency: IGL Distant**  
**Magnitudes: 5.8MB IGL Rms: 0.1 secs**

**ALASKA PENINSULA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	8752	27	EP		812	50.05	0.11							1.0
GGNV	BZ	8752	27	AMb		812	51.31			384	1.4				
MESJ	BZ	8869	27	EP		812	55.58	-0.13							1.0
MESJ	BZ	8869	27	AMb		812	56.95			109	1.2				
MORF	BZ	8914	27	EP		812	57.96	0.01							1.0
MORF	BZ	8914	27	AMb		812	58.84			233	1.0				

**December 1 2012 Hour: 9:45 32.0 Lat: 36.25N Lon: 9.86W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 3.3ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	159	42	EP		945	54.70	0.09							1.0
MORF	HN	159	42	ES		946	11.08	-0.01							1.0
MORF	HN	159	42	AML		946	13.55			419	0.2				
MESJ	HZ	229	39	EP		946	3.22	0.00							1.0
MESJ	HE	229	39	ES		946	25.99	0.00							1.0
MESJ	HN	229	39	AML		946	28.25			93	0.2				
GGNV	HN	281	13	ES		946	37.04	-0.08							0.9
GGNV	HE	281	13	AML		946	38.77			232	0.2				

**December 1 2012 Hour: 23:41 40.0 Lat: 35.96N Lon: 10.43W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 2.5ML IGL Rms: 0.0 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	218	46	EP		2342	9.88	0.01							1.0
MORF	HE	218	46	ES		2342	31.72	0.03							1.0
MORF	HN	218	46	AML		2342	34.08			55	0.2				
MESJ	HZ	287	43	EP		2342	18.33	-0.03							1.0
MESJ	HN	287	43	ES		2342	46.36	-0.02							1.0
MESJ	HN	287	43	AML		2342	48.30			13	0.2				

**December 2 2012 Hour: 0:54 23.0 Lat: 17.01S Lon: 167.63E Depth: 34F Agency: IGL Distant**  
**Magnitudes: 6.3MS IGL Rms: 0.1 secs**

**VANUATU Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ17605	353	EPKpdf			114	15.80	0.06							1.0
GGNV	BZ17605	353	EPP			118	30.27	-0.05							1.0
GGNV	BZ17605	353	AMS			230	55.97			5187	16.9				
MESJ	BZ17687	351	EPKpdf			114	16.69	0.02							1.0
MESJ	BZ17687	351	EPP			118	34.39	0.00							1.0
MESJ	BN17687	351	ESS			138	36.89	0.08							1.0
MESJ	BZ17687	351	AMS			230	57.19			4556	18.4				
MORF	BZ17753	351	EPKpdf			114	17.36	-0.05							1.0
MORF	BZ17753	351	EPP			118	37.56	-0.06							1.0
MORF	BZ17753	351	AMS			227	10.79			4884	25.5				

**December 2 2012 Hour: 7:31 32.7 Lat: 37.23N Lon: 1.95W Depth: 14F Agency: IGL Regional**  
**Magnitudes: 3.3ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	558	279	EP		732	45.59	-0.10							1.0

**December 2 2012 Hour: 10:55 4.5 Lat: 36.95N Lon: 8.42W Depth: 27F Agency: IGL Regional**  
**Magnitudes: 0.5ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	45	333	EP		1055	12.49	-0.11							1.0
MORF	HE	45	333	ES		1055	18.59	0.11							1.0
MORF	HE	45	333	AML		1055	19.77			3	0.2				

December 2 2012 Hour: 23:18 12.6 Lat: 37.25N Lon: 1.96W Depth: 11F Agency: IGL Regional  
Rms: 0.0 secs

SPAIN Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	557	279	EP		2319	25.71	0.01							1.0

December 3 2012 Hour: 15:50 40.4 Lat: 37.31N Lon: 8.60W Depth: 16F Agency: IGL Regional  
Magnitudes: 0.4ML IGL Rms: 0.2 secs

SW MONCHIQUE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	5	265	EP		1550	42.91	-0.17							1.0
MORF	HE	5	265	ES		1550	45.24	0.17							1.0
MORF	HN	5	265	AML		1550	45.75			13	0.2				

December 4 2012 Hour: 1:42 43.8 Lat: 61.23N Lon: 150.72W Depth: 34F Agency: IGL Distant  
Magnitudes: 5.1MB IGL Rms: 0.1 secs

SOUTHERN ALASKA Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	8394	30	EP		154	24.69	-0.01							1.0
GGNV	BZ	8394	30	AMb		154	26.65			84	1.7				
MESJ	BZ	8512	30	EP		154	30.71	-0.04							1.0
MESJ	BZ	8512	30	AMb		154	36.81			39	1.5				
MESJ	BN	8512	30	ES		2 4	14.87	-0.12							1.0
MORF	BN	8557	30	ES		2 4	19.65	0.16							1.0
MORF	BZ	8557	30	EP		154	33.10	0.02							1.0
MORF	BZ	8557	30	AMb		154	42.69			71	3.2				

December 4 2012 Hour: 10:19 20.3 Lat: 36.49N Lon: 4.44W Depth: 71F Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.1 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	368	295	EP		1020	8.29	-0.08							1.0
MESJ	HN	368	295	ES		1020	43.59	0.14							1.0
MESJ	HE	368	295	AML		1020	46.26			3	0.2				
MORF	HZ	386	285	EP		1020	10.56	-0.06							1.0

December 4 2012 Hour: 15:22 7.0 Lat: 36.57N Lon: 4.43W Depth: 58F Agency: IGL Regional  
Magnitudes: 2.2ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	364	294	EP		1522	54.57	-0.04							1.0
MESJ	HN	364	294	ES		1523	29.39	0.04							1.0
MESJ	HN	364	294	AML		1523	32.33			7	0.4				

December 5 2012 Hour: 7:29 23.6 Lat: 38.60N Lon: 10.29W Depth: 22F Agency: IGL Regional  
Magnitudes: 2.4ML IGL Rms: 0.2 secs

NORTH ATLANTIC OCEAN Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	100	82	EP		729	39.17	-0.13							1.0
GGNV	HN	100	82	ES		729	51.16	0.38							1.0
GGNV	HN	100	82	AML		729	54.12			547	0.5				
MESJ	HZ	200	114	EP		729	51.68	-0.10							1.0
MESJ	HN	200	114	ES		730	12.51	0.15							1.0
MESJ	HN	200	114	AML		730	21.30			13	0.2				
MORF	HZ	203	134	EP		729	52.05	-0.18							1.0
MORF	HN	203	134	ES		730	13.01	-0.15							1.0
MORF	HN	203	134	AML		730	15.36			15	0.1				

**December 5 2012 Hour: 9:23 13.0 Lat: 38.63N Lon: 10.29W Depth: 15F Agency: IGL Regional**  
**Magnitudes: 2.4ML IGL Rms: 0.1 secs**

**NORTH ATLANTIC OCEAN Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	100	84	EP		923	28.69	-0.08							1.0
GGNV	HN	100	84	ES		923	40.56	0.26							1.0
GGNV	HN	100	84	AML		923	43.84			367	0.3				
MESJ	HZ	201	115	EP		923	41.85	-0.11							1.0
MESJ	HE	201	115	ES		924	3.08	-0.03							1.0
MESJ	HE	201	115	AML		924	12.69			9	0.4				
MORF	HN	206	135	ES		924	4.05	-0.06							1.0
MORF	HN	206	135	AML		924	6.41			22	0.2				

**December 5 2012 Hour: 17: 8 11.9 Lat: 33.49N Lon: 59.55E Depth: 6F Agency: IGL Distant**  
**Magnitudes: 5.3MS IGL Rms: 0.0 secs**

**EASTERN IRAN Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	6021	295	EP		1717	37.82	0.00							1.0
MESJ	BZ	6021	295	AMS		1749	19.52			1741	14.2				
GGNV	BZ	6070	297	EP		1717	41.00	0.02							1.0
GGNV	BE	6070	297	AMS		1752	39.08			2523	18.7				
MORF	BZ	6075	295	EP		1717	41.36	-0.08							1.0
MORF	BN	6075	295	ES		1725	22.69	0.05							1.0
MORF	BE	6075	295	AMS		1753	12.81			2155	16.8				

**December 5 2012 Hour: 20:54 6.1 Lat: 38.59N Lon: 10.25W Depth: 20F Agency: IGL Regional**  
**Magnitudes: 2.0ML IGL Rms: 0.3 secs**

**NORTH ATLANTIC OCEAN Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	97	81	EP		2054	21.39	-0.10							1.0
GGNV	HN	97	81	ES		2054	33.01	0.30							1.0
GGNV	HN	97	81	AML		2054	36.00			189	0.4				
MESJ	HZ	196	114	EP		2054	33.76	-0.28							1.0
MESJ	HE	196	114	ES		2054	54.74	0.31							1.0
MESJ	HN	196	114	AML		2054	57.11			4	0.2				
MORF	HZ	200	135	EP		2054	34.16	-0.39							1.0
MORF	HN	200	135	ES		2054	55.45	0.15							1.0
MORF	HN	200	135	AML		2054	57.71			6	0.2				

**December 7 2012 Hour: 0:35 2.9 Lat: 36.50N Lon: 11.12W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 2.3ML IGL Rms: 0.1 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	238	67	EP		035	36.89	0.02							1.0
MORF	HE	238	67	ES		036	1.57	-0.10							1.0
MORF	HN	238	67	AML		036	3.75			35	0.3				
MESJ	HZ	297	59	EP		035	44.31	0.04							1.0
MESJ	HN	297	59	ES		036	14.51	0.04							1.0
MESJ	HE	297	59	AML		036	16.70			7	0.1				

**December 7 2012 Hour: 8:18 23.9 Lat: 37.89N Lon: 144.09E Depth: 36F Agency: IGL Distant**  
**Magnitudes: 7.7MS IGL Rms: 0.1 secs**

**OFF EAST COAST OF HONSHU, JAPAN Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ11106	339	339	EP		832	4.55	0.02							1.0
GGNV	BZ11106	339	339	EPP		836	9.46	-0.10							1.0
GGNV	BN11106	339	339	ESKSac		842	40.28	0.12							1.0
GGNV	BN11106	339	339	ESS		850	30.51	0.13							1.0
GGNV	BE11106	339	339	AMS		914	2.41			309000	24.6				
MESJ	BZ11166	338	338	EP		832	6.86	-0.12							1.0
MESJ	BZ11166	338	338	EPP		836	13.64	-0.08							1.0
MESJ	BN11166	338	338	ESKSac		842	43.04	0.15							1.0
MESJ	BE11166	338	338	ESS		850	38.02	-0.02							1.0

MESJ	BE11166	338	AMS	915	34.94				245000	19.8							
MORF	BZ11235	338	EP	832	9.71	-0.08											1.0
MORF	BZ11235	338	EPP	836	18.59	0.11											1.0
MORF	BN11235	338	ESKSac	842	45.98	-0.01											1.0
MORF	BN11235	338	ESS	850	46.66	-0.11											1.0
MORF	BE11235	338	AMS	916	3.46				331000	23.2							

**December 7 2012 Hour: 8:31 14.9 Lat: 37.94N Lon: 143.76E Depth: 29F Agency: IGL Distant Rms: 0.0 secs**

**OFF EAST COAST OF HONSHU, JAPAN Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ11150	338	EP			844	58.32	-0.04							1.0
MESJ	BE11150	338	ESKSac			855	35.03	0.04							1.0
MORF	BZ11220	338	EP			845	1.17	0.00							1.0

**December 7 2012 Hour: 18:19 7.0 Lat: 38.32S Lon: 176.09E Depth: 167F Agency: IGL Distant Rms: 0.1 secs**

**NORTH ISLAND OF NEW ZEALAND Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ19553	83	EPKpdf			1838	56.37	-0.11							1.0
GGNV	BZ19553	83	EPP			1844	29.46	0.04							1.0
GGNV	BN19553	83	ESS			19 5	43.57	0.13							1.0
MORF	BZ19580	104	EPKpdf			1838	56.52	-0.10							1.0
MORF	BZ19580	104	EPP			1844	30.70	0.07							1.0
MESJ	BZ19630	97	EPKpdf			1838	56.74	0.07							1.0
MESJ	BZ19630	97	EPP			1844	32.56	-0.16							1.0
MESJ	BN19630	97	ESS			19 5	50.07	0.05							1.0

**December 8 2012 Hour: 8:39 32.0 Lat: 37.15N Lon: 7.88W Depth: 8F Agency: IGL Regional Magnitudes: 0.6ML IGL Rms: 0.2 secs**

**SW S. BRAS DE ALPORTEL, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	71	284	EP		839	43.24	-0.28							1.0
MORF	HE	71	284	ES		839	51.82	-0.07							1.0
MORF	HN	71	284	AML		839	53.98		3	0.1					
MESJ	HZ	82	339	EP		839	45.32	-0.06							1.0
MESJ	HE	82	339	ES		839	55.51	0.40							1.0
MESJ	HE	82	339	AML		839	57.60		1	0.3					

**December 8 2012 Hour: 11:35 34.1 Lat: 36.66N Lon: 9.84W Depth: 18F Agency: IGL Regional Magnitudes: 1.7ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	128	55	EP		1135	53.69	-0.12							1.0
MORF	HN	128	55	ES		1136	8.12	-0.05							1.0
MORF	HN	128	55	AML		1136	11.31		23	0.2					
MESJ	HZ	195	47	EP		1136	2.06	0.02							1.0
MESJ	HE	195	47	ES		1136	22.58	0.16							1.0
MESJ	HN	195	47	AML		1136	25.95		3	0.4					

**December 8 2012 Hour: 14: 6 43.2 Lat: 36.60N Lon: 9.74W Depth: 14F Agency: IGL Regional Magnitudes: 1.1ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	125	51	EP		14 7	2.70	-0.06							1.0
MORF	HE	125	51	ES		14 7	17.14	0.08							1.0
MORF	HN	125	51	AML		14 7	18.56		3	0.1					
MESJ	HZ	193	44	EP		14 7	11.15	-0.02							1.0



**December 8 2012 Hour: 16:35 17.0 Lat: 7.21S Lon: 143.93E Depth: 11F Agency: IGL Distant**  
**Magnitudes: 5.6MS IGL Rms: 0.1 secs**

**NEAR SOUTH COAST OF NEW GUINEA, PAPUA NEW GUINEA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ15621	326		EPKpdf		1654	45.43	-0.08							1.0
GGNV	BN15621	326		AMS		1756	33.53			1168	25.2				
MESJ	BZ15631	325		EPKpdf		1654	45.77	0.07							1.0
MESJ	BZ15631	325		AMS		18 0	52.24			1055	23.4				
MORF	BZ15699	324		EPKpdf		1654	46.85	0.00							1.0
MORF	BZ15699	324		AMS		18 1	20.98			1167	18.1				

**December 9 2012 Hour: 6:11 18.8 Lat: 35.24N Lon: 11.98W Depth: 24F Agency: IGL Regional**  
**Magnitudes: 1.9ML IGL Rms: 0.1 secs**

**AZORES-CAPE ST. VINCENT BRIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	377	52	EP		612	8.94	0.13							1.0
MORF	HN	377	52	ES		612	45.36	0.00							1.0
MORF	HN	377	52	AML		612	47.13			4	0.2				
MESJ	HZ	443	48	EP		612	16.83	-0.07							1.0
MESJ	HN	443	48	ES		612	59.29	-0.06							1.0
MESJ	HN	443	48	AML		613	1.55			3	0.1				

**December 9 2012 Hour: 9:20 52.2 Lat: 37.56N Lon: 9.40W Depth: 27F Agency: IGL Regional**  
**Magnitudes: 1.4ML IGL Rms: 0.1 secs**

**NW ALJEZUR, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	72	113	EP		921	4.18	0.20							1.0
MORF	HE	72	113	ES		921	12.43	-0.16							1.0
MORF	HN	72	113	AML		921	13.78			35	0.1				
MESJ	HZ	109	73	EP		921	8.74	0.06							1.0
MESJ	HE	109	73	ES		921	20.62	-0.11							1.0
MESJ	HN	109	73	AML		921	22.80			4	0.3				

**December 9 2012 Hour: 19:12 44.0 Lat: 38.05N Lon: 3.28W Depth: 1 Agency: IGL Regional**  
**Magnitudes: 3.1ML IGL Rms: 0.3 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	435	268	EP		1913	43.41	0.10							1.0
MESJ	HE	435	268	ES		1914	25.96	-0.64							1.0
MESJ	HN	435	268	ESg		1914	44.85	-0.57							1.0
MESJ	HN	435	268	AML		1914	52.91			39	0.3				
MORF	HZ	481	262	EP		1913	48.91	-0.01							1.0
MORF	HN	481	262	ES		1914	35.89	-0.41							1.0
MORF	HN	481	262	ESg		1914	57.98	-0.27							1.0
MORF	HN	481	262	AML		1915	5.02			43	0.5				

**December 9 2012 Hour: 20:32 33.8 Lat: 36.82N Lon: 11.05W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 1.6ML IGL Rms: 0.0 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	220	75	EP		2033	3.92	0.02							1.0
MORF	HN	220	75	ES		2033	25.91	0.02							1.0
MORF	HN	220	75	AML		2033	28.00			4	0.2				
MESJ	HZ	275	65	EP		2033	10.65	-0.06							1.0
MESJ	HE	275	65	ES		2033	37.67	0.01							1.0
MESJ	HN	275	65	AML		2033	42.19			3	0.3				

**December 9 2012 Hour: 21:45 34.8 Lat: 6.72N Lon: 126.18E Depth: 56F Agency: IGL Distant**  
**Magnitudes: 4.9MS IGL Rms: 0.1 secs**

**MINDANAO, PHILIPPINES Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ13206	320		EPKpdf		22	4	16.13	-0.09						1.0
MESJ	BZ13206	320		AMS		23	1	25.50		261	27.5				
MORF	BZ13272	320		EPKpdf		22	4	17.49	0.09						1.0
MORF	BZ13272	320		AMS		23	3	46.75		350	18.9				

**December 10 2012 Hour: 5:39 52.5 Lat: 37.33N Lon: 8.63W Depth: 12F Agency: IGL Regional**  
**Magnitudes: 0.8ML IGL Rms: 0.1 secs**

**NW MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	3	215	EP		539	54.39	-0.19							1.0
MORF	HE	3	215	ES		539	56.19	0.08							1.0
MORF	HN	3	215	AML		539	56.97			75	0.3				
MESJ	HZ	67	33	EP		540	3.51	0.17							1.0
MESJ	HE	67	33	ES		540	11.22	-0.05							1.0
MESJ	HE	67	33	AML		540	11.98			2	0.2				

**December 10 2012 Hour: 6:24 9.9 Lat: 36.61N Lon: 7.27W Depth: 19F Agency: IGL Regional**  
**Magnitudes: 1.5ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HN	145	303	ES		624	47.31	-0.13							1.0
MORF	HN	145	303	AML		624	47.83			5	0.1				
MESJ	HZ	160	329	EP		624	33.49	0.04							1.0
MESJ	HE	160	329	ES		624	50.74	0.10							1.0
MESJ	HN	160	329	AML		624	52.28			6	0.5				

**December 10 2012 Hour: 16:53 9.6 Lat: 6.54S Lon: 129.82E Depth: 159F Agency: IGL Distant**  
**Magnitudes: 6.7MS IGL Rms: 0.2 secs**

**BANDA SEA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ14565	316		EPKpdf		1712	1.60	0.01							1.0
MESJ	BZ14565	316		EPP		1714	19.94	0.17							1.0
MESJ	BZ14565	316		AMS		1818	7.09			14256	24.0				
GGNV	BZ14588	317		EPKpdf		1712	1.93	-0.02							1.0
GGNV	BZ14588	317		EPP		1714	21.31	0.23							1.0
GGNV	BN14588	317		AMS		1818	34.70			19402	17.7				
MORF	BZ14627	315		EPKpdf		1712	2.48	-0.21							1.0
MORF	BZ14627	315		EPP		1714	23.21	-0.19							1.0
MORF	BZ14627	315		AMS		1818	11.21			17750	24.9				

**December 10 2012 Hour: 23:34 20.9 Lat: 36.76N Lon: 7.22W Depth: 25F Agency: IGL Regional**  
**Magnitudes: 1.4ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HE	141	296	ES		2334	56.58	-0.10							1.0
MORF	HN	141	296	AML		2334	57.91			10	0.1				
MESJ	HZ	149	324	EP		2334	42.54	0.00							1.0
MESJ	HN	149	324	ES		2334	58.44	0.09							1.0
MESJ	HE	149	324	AML		2334	59.79			2	0.1				

**December 11 2012 Hour: 0:41 29.7 Lat: 37.33N Lon: 8.55W Depth: 14F Agency: IGL Regional**  
**Magnitudes: 0.7ML IGL Rms: 0.1 secs**

**NE MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	9	254	EP		041	32.26	-0.17							1.0
MORF	HN	9	254	ES		041	34.44	-0.01							1.0
MORF	HN	9	254	AML		041	35.05			41	0.0				
MESJ	HZ	64	27	EP		041	40.19	0.19							1.0
MESJ	HE	64	27	ES		041	47.54	0.00							1.0

MESJ HE 64 27 AML 041 48.24 2 0.1

**December 11 2012 Hour: 3:19 23.7 Lat: 37.09N Lon: 13.82W Depth: 60F Agency: IGL Regional  
Magnitudes: 3.7ML IGL Rms: 0.2 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	449	65	EP		320	21.80	0.27							1.0
GGNV	HE	449	65	ES		321	3.54	-0.19							1.0
GGNV	HN	449	65	AML		321	5.69			236	0.6				
MORF	HZ	460	85	EP		320	22.88	-0.01							1.0
MESJ	HZ	503	79	EP		320	28.06	0.02							1.0
MESJ	HN	503	79	ES		321	14.91	-0.09							1.0
MESJ	HN	503	79	AML		321	18.38			94	0.4				

**December 11 2012 Hour: 5:12 21.5 Lat: 68.14N Lon: 136.41W Depth: 10F Agency: IGL Distant  
Magnitudes: 4.7MB IGL Rms: 0.0 secs**

**NORTHERN YUKON TERRITORY, CANADA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	7490	42	EP		523	17.09	0.02							1.0
MESJ	BZ	7490	42	AMb		523	25.13			16	2.1				
MORF	BZ	7534	43	EP		523	19.61	-0.02							1.0
MORF	BZ	7534	43	AMb		523	22.32			25	1.8				

**December 11 2012 Hour: 6:18 28.2 Lat: 0.60N Lon: 126.25E Depth: 30F Agency: IGL Distant  
Magnitudes: 5.5MS IGL Rms: 0.0 secs**

**MOLUCCA SEA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ13720	317	EP	KPpdf		637	21.83	-0.02							1.0
MESJ	BZ13720	317	AMS			746	43.70			971	22.3				
MORF	BZ13784	317	EP	KPpdf		637	23.02	0.02							1.0
MORF	BE13784	317	AMS			735	21.00			1580	26.5				

**December 12 2012 Hour: 7:12 53.5 Lat: 38.33N Lon: 9.18W Depth: 1 Agency: IGL Regional  
Magnitudes: 1.4ML IGL Rms: 0.1 secs**

**NORTH ATLANTIC OCEAN Net; IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	100	123	EP		713	9.60	-0.04							1.0
MESJ	HN	100	123	ES		713	21.51	0.06							1.0
MESJ	HN	100	123	AML		713	23.50			5	0.2				
MORF	HZ	123	158	EP		713	13.20	-0.07							1.0
MORF	HE	123	158	ES		713	27.78	0.05							1.0
MORF	HN	123	158	AML		713	28.82			11	0.2				

**December 12 2012 Hour: 9:41 52.8 Lat: 36.89N Lon: 7.37W Depth: 27F Agency: IGL Regional  
Magnitudes: 1.2ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	130	325	EP		942	11.77	-0.10							1.0
MESJ	HN	130	325	ES		942	25.92	0.10							1.0
MESJ	HN	130	325	AML		942	27.58			4	0.4				

**December 12 2012 Hour: 16:47 0.3 Lat: 37.02N Lon: 8.33W Depth: 27F Agency: IGL Regional  
Magnitudes: 3.1ML IGL Rms: 0.0 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	43	318	EP		1647	8.16	0.03							1.0
MORF	HN	43	318	ES		1647	13.90	0.06							1.0
MORF	HN	43	318	AML		1647	14.53			1252	0.1				
MESJ	HZ	92	6	EP		1647	14.63	-0.05							1.0
MESJ	HN	92	6	ES		1647	25.12	-0.05							1.0
MESJ	HN	92	6	AML		1647	25.38			427	0.2				

**December 12 2012 Hour: 20:18 15.7 Lat: 36.52N Lon: 9.79W Depth: 11F Agency: IGL Regional**  
**Magnitudes: 1.1ML IGL Rms: 0.0 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	134	49	EP		2018	36.70	-0.01							1.0
MORF	HN	134	49	ES		2018	52.05	0.01							1.0
MORF	HN	134	49	AML		2018	53.70			3	0.2				

**December 12 2012 Hour: 21:50 24.1 Lat: 37.04N Lon: 13.80W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.0ML IGL Rms: 0.2 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	458	85	EP		2151	26.23	-0.11							1.0
MESJ	HZ	501	78	EP		2151	31.39	-0.19							1.0
MESJ	HN	501	78	ES		2152	21.16	0.30							1.0
MESJ	HE	501	78	AML		2152	23.86			3	0.1				

**December 13 2012 Hour: 0:26 24.9 Lat: 35.80N Lon: 8.83W Depth: 22F Agency: IGL Regional**  
**Magnitudes: 1.3ML IGL Rms: 0.1 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	168	5	EP		026	49.08	-0.10							1.0
MORF	HN	168	5	ES		027	6.98	0.10							1.0
MORF	HN	168	5	AML		027	8.65			3	0.2				

**December 13 2012 Hour: 0:53 31.3 Lat: 30.93S Lon: 178.25W Depth: 65F Agency: IGL Distant**  
**Magnitudes: 5.1MS IGL Rms: 0.1 secs**

**KERMADEC ISLANDS, NEW ZEALAND Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ18826	47	EPKPdf			113	30.52	-0.08							1.0
MORF	BZ18829	51	EPKPdf			113	30.76	0.08							1.0
MORF	BE18829	51	AMS			228	28.54			268	20.2				

**December 13 2012 Hour: 20:13 14.6 Lat: 39.16N Lon: 9.32W Depth: 14F Agency: IGL Regional**  
**Magnitudes: 2.5ML IGL Rms: 0.2 secs**

**S LOURINHA, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	51	163	EP		2013	23.20	0.10							1.0
GGNV	HN	51	163	ES		2013	29.61	0.32							1.0
GGNV	HN	51	163	AML		2013	30.39			286	0.1				
MESJ	HZ	175	146	EP		2013	40.32	-0.13							0.9
MESJ	HN	175	146	ES		2013	59.30	0.01							0.9
MESJ	HN	175	146	AML		2014	1.39			43	0.4				
MORF	HZ	214	164	EP		2013	44.93	-0.36							0.9

**December 13 2012 Hour: 21:18 7.5 Lat: 38.18N Lon: 7.90W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 0.4ML IGL Rms: 0.0 secs**

**NW CUBA, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	47	217	EP		2118	15.12	0.04							1.0
MESJ	HN	47	217	ES		2118	20.58	-0.04							1.0
MESJ	HN	47	217	AML		2118	21.66			3	0.3				
MORF	HZ	117	215	EP		2118	26.42	0.00							1.0

**December 13 2012 Hour: 23: 3 39.4 Lat: 80.79N Lon: 121.45E Depth: 10F Agency: IGL Distant**  
**Magnitudes: 5.8MB IGL Rms: 0.2 secs**

**EAST OF SEVERNAYA ZEMLYA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	6414	315	EP		2313	30.53	0.30							1.0
GGNV	BZ	6414	315	AMb		2313	41.99			200	1.7				
MESJ	BZ	6498	314	EP		2313	35.45	-0.15							1.0
MESJ	BZ	6498	314	AMb		2313	45.88			126	0.8				
MORF	BZ	6562	315	EP		2313	39.51	-0.15							1.0

MORF BZ 6562 315 AMb 2313 49.03 161 1.5

**December 14 2012 Hour: 10:36 1.7 Lat: 31.21N Lon: 119.56W Depth: 11F Agency: IGL Distant  
Magnitudes: 6.3MS IGL Rms: 0.1 secs**

**OFF WEST COAST OF BAJA CALIFORNIA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ	9452	47	EP		1048	37.50	0.22							1.0
GGNV	BE	9452	47	ESKSac		1059	0.69	-0.03							1.0
GGNV	BN	9452	47	AMS		1120	44.90		15043	15.5					
MESJ	BZ	9575	48	EP		1048	42.69	-0.16							1.0
MESJ	BN	9575	48	ESKSac		1059	7.82	0.00							1.0
MESJ	BZ	9575	48	AMS		1124	41.15		11465	20.0					
MORF	BZ	9580	48	EP		1048	42.96	-0.17							1.0
MORF	BE	9580	48	ESKSac		1059	8.34	0.15							1.0
MORF	BE	9580	48	AMS		1120	25.96		11088	24.1					

**December 15 2012 Hour: 2:10 7.5 Lat: 37.07N Lon: 5.36W Depth: 4F Agency: IGL Regional  
Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	267	290	EP		210	45.67	-0.09							1.0

**December 15 2012 Hour: 4:49 31.5 Lat: 52.34N Lon: 173.96E Depth: 30F Agency: IGL Distant  
Magnitudes: 5.5MB IGL Rms: 0.1 secs**

**NEAR ISLANDS, ALEUTIAN ISLANDS Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ10017		2	EP		5	2	28.08	-0.15						1.0
MESJ	BZ10017		2	AMb		5	2	36.56		82	2.7				
MORF	BZ10075		2	EP		5	2	30.87	0.15						1.0
MORF	BZ10075		2	AMb		5	2	32.68		99	2.1				

**December 15 2012 Hour: 16: 0 43.9 Lat: 38.06N Lon: 3.28W Depth: 2F Agency: IGL Regional  
Magnitudes: 3.3ML IGL Rms: 0.3 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	435	268	EP		16	1	43.39	0.26						1.0
MESJ	HE	435	268	ES		16	2	26.36	-0.04						1.0
MESJ	HN	435	268	ESg		16	2	44.80	-0.43						1.0
MESJ	HN	435	268	AML		16	2	50.26		55	0.5				
MORF	HN	481	262	ESg		16	2	58.32	0.21						1.0
MORF	HN	481	262	AML		16	3	6.20		68	0.3				

**December 15 2012 Hour: 18:59 53.7 Lat: 38.03N Lon: 3.29W Depth: 3F Agency: IGL Regional  
Magnitudes: 3.6ML IGL Rms: 0.4 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	434	269	EP		19	0	52.84	0.15						1.0
MESJ	HN	434	269	ES		19	1	36.21	0.43						1.0
MESJ	HN	434	269	ESg		19	1	54.14	-0.58						1.0
MESJ	HN	434	269	AML		19	1	59.26		109	0.7				
MORF	HZ	480	262	EP		19	0	58.46	0.19						1.0
MORF	HE	480	262	ES		19	1	45.72	0.27						1.0
MORF	HN	480	262	ESg		19	2	7.05	-0.46						1.0
MORF	HN	480	262	AML		19	2	18.56		136	0.4				

**December 15 2012 Hour: 19:30 1.3 Lat: 4.72S Lon: 152.96E Depth: 56F Agency: IGL Distant  
Magnitudes: 5.8MS IGL Rms: 0.1 secs**

**NEW BRITAIN REGION, PAPUA NEW GUINEA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ15900		335	EPKpdf		1949	27.95	0.11							1.0
MESJ	BZ15900		335	AMS		2056	32.19		1670	21.6					
MORF	BZ15970		335	EPKpdf		1949	28.88	-0.11							1.0
MORF	BZ15970		335	AMS		2057	5.86		1375	17.5					

**December 15 2012 Hour: 22:37 52.2 Lat: 36.65N Lon: 7.27W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.8ML IGL Rms: 0.2 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	143	301	EP		2238	14.98	-0.27							1.0
MORF	HN	143	301	ES		2238	32.36	0.31							1.0
MORF	HN	143	301	AML		2238	35.36			133	0.1				
MESJ	HZ	157	328	EP		2238	17.12	-0.04							1.0

**December 16 2012 Hour: 4:9 4.5 Lat: 38.06N Lon: 3.30W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 3.3ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	433	268	ES		410	47.04	0.05							1.0
MESJ	HN	433	268	ESg		411	5.19	-0.14							1.0
MESJ	HN	433	268	AML		411	10.36			72	0.4				
MORF	HN	479	262	ES		410	56.83	0.08							1.0
MORF	HN	479	262	ESg		411	18.25	0.02							1.0
MORF	HN	479	262	AML		411	24.56			59	0.4				

**December 16 2012 Hour: 14:19 56.6 Lat: 36.79N Lon: 8.62W Depth: 26F Agency: IGL Regional**  
**Magnitudes: 2.0ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	57	357	EP		1420	6.31	-0.06							1.0
MORF	HN	57	357	ES		1420	13.38	-0.10							1.0
MORF	HN	57	357	AML		1420	14.22			81	0.2				
MESJ	HN	122	17	ES		1420	28.28	0.16							1.0
MESJ	HN	122	17	AML		1420	29.24			18	0.3				

**December 16 2012 Hour: 16:30 45.2 Lat: 38.97N Lon: 10.46W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 1.9ML IGL Rms: 0.2 secs**

**NORTH ATLANTIC OCEAN Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	232	122	EP		1631	18.72	0.26							1.0
MESJ	HN	232	122	ES		1631	42.51	-0.27							1.0
MESJ	HN	232	122	AML		1631	46.46			6	0.3				
MORF	HZ	243	139	EP		1631	19.68	-0.18							1.0
MORF	HN	243	139	ES		1631	45.38	0.19							1.0
MORF	HN	243	139	AML		1631	47.61			10	0.2				

**December 17 2012 Hour: 2:52 50.6 Lat: 38.06N Lon: 3.30W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.4ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	434	268	ES		254	33.27	0.06							1.0
MESJ	HE	434	268	ESg		254	51.53	-0.06							1.0
MESJ	HN	434	268	AML		254	57.06			8	0.6				

**December 17 2012 Hour: 3:28 6.9 Lat: 35.57N Lon: 6.79W Depth: 26F Agency: IGL Regional**  
**Magnitudes: 1.9ML IGL Rms: 0.2 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	255	320	EP		328	41.40	-0.31							1.0
MORF	HN	255	320	ES		329	7.04	-0.05							1.0
MORF	HN	255	320	AML		329	10.60			9	0.1				
MESJ	HZ	282	334	EP		328	45.34	0.24							1.0
MESJ	HN	282	334	ES		329	13.09	0.13							1.0
MESJ	HN	282	334	AML		329	14.90			4	0.7				

**December 17 2012 Hour: 5:34 6.7 Lat: 38.04N Lon: 3.30W Depth: 4F Agency: IGL Regional**  
**Magnitudes: 3.5ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	433	269	ES		535	48.56	-0.02							1.0
MESJ	HN	433	269	ESg		536	7.59	-0.09							1.0
MESJ	HN	433	269	AML		536	12.77			90	0.7				
MORF	HZ	479	262	EP		535	11.31	0.11							1.0
MORF	HE	479	262	ES		535	58.28	0.01							1.0
MORF	HN	479	262	ESg		536	20.50	0.01							1.0
MORF	HN	479	262	AML		536	32.08			103	0.4				

**December 17 2012 Hour: 5:44 56.4 Lat: 36.38N Lon: 9.88W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 1.9ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	150	46	EP		545	17.77	-0.10							1.0
MORF	HN	150	46	ES		545	33.71	0.18							1.0
MORF	HN	150	46	AML		545	34.99			14	0.1				
MESJ	HZ	219	42	EP		545	26.30	-0.09							1.0

**December 17 2012 Hour: 6: 0 29.7 Lat: 38.06N Lon: 3.29W Depth: 4F Agency: IGL Regional**  
**Magnitudes: 2.9ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	434	268	ES		6 2	11.66	0.12							1.0
MESJ	HN	434	268	ESg		6 2	30.28	-0.38							1.0
MESJ	HN	434	268	AML		6 2	35.47			19	0.4				
MORF	HZ	480	262	EP		6 1	34.47	0.29							1.0
MORF	HN	480	262	ES		6 2	21.47	0.18							1.0
MORF	HN	480	262	ESg		6 2	43.35	-0.19							1.0
MORF	HN	480	262	AML		6 2	51.39			40	0.3				

**December 17 2012 Hour: 6: 9 9.6 Lat: 38.05N Lon: 3.29W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 2.6ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	434	268	ES		610	50.57	0.20							1.0
MESJ	HN	434	268	ESg		611	10.36	-0.26							1.0
MESJ	HN	434	268	AML		611	15.31			8	0.3				
MORF	HE	480	262	ES		611	0.14	0.06							1.0
MORF	HN	480	262	AML		611	31.76			16	0.3				

**December 17 2012 Hour: 6:33 8.8 Lat: 38.07N Lon: 3.29W Depth: 4F Agency: IGL Regional**  
**Magnitudes: 2.4ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	434	268	EP		634	7.92	0.18							1.0
MESJ	HE	434	268	ES		634	50.77	-0.01							1.0
MESJ	HN	434	268	ESg		635	9.80	-0.13							1.0
MESJ	HN	434	268	AML		635	12.97			6	0.7				
MORF	HE	480	262	ES		635	0.50	-0.04							1.0
MORF	HN	480	262	AML		635	31.48			13	0.2				

**December 17 2012 Hour: 8:11 39.3 Lat: 37.99N Lon: 3.29W Depth: 5F Agency: IGL Regional**  
**Magnitudes: 3.0ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	434	269	ESg		813	40.12	-0.19							1.0
MESJ	HN	434	269	AML		813	55.60			26	0.8				
MORF	HE	479	263	ES		813	30.75	0.20							1.0
MORF	HN	479	263	AML		814	0.69			36	0.4				

**December 17 2012 Hour: 13:34 56.4 Lat: 38.06N Lon: 3.29W Depth: 4F Agency: IGL Regional**  
**Magnitudes: 2.9ML IGL Rms: 0.4 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	434	268	ES		1336	38.60	0.36							1.0
MESJ	HN	434	268	ESg		1336	56.98	-0.36							1.0
MESJ	HN	434	268	AML		1337	7.26			31	0.8				

**December 17 2012 Hour: 19:26 12.6 Lat: 38.06N Lon: 3.29W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.9ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	434	268	ES		1927	55.49	0.20							1.0
MESJ	HN	434	268	ESg		1928	13.62	-0.08							1.0
MESJ	HN	434	268	AML		1928	24.12			24	0.6				
MORF	HN	480	262	ES		1928	4.92	-0.12							1.0
MORF	HN	480	262	AML		1928	36.59			33	0.4				

**December 17 2012 Hour: 20:38 56.6 Lat: 38.09N Lon: 3.28W Depth: 1 Agency: IGL Regional**  
**Magnitudes: 2.7ML IGL Rms: 0.0 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	435	268	ESg		2040	58.03	0.02							1.0
MESJ	HN	435	268	AML		2041	7.80			17	0.8				

**December 17 2012 Hour: 22:50 52.8 Lat: 43.03N Lon: 0.25W Depth: 0 Agency: IGL Regional**  
**Rms: 0.2 secs**

**PYRENEES Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	888	232	EP		2252	46.67	0.16							1.0
MORF	HZ	956	231	EP		2252	54.40	-0.18							1.0

**December 17 2012 Hour: 23:47 3.9 Lat: 38.06N Lon: 3.27W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.8ML IGL Rms: 0.0 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	435	268	ES		2348	46.86	0.00							1.0
MESJ	HN	435	268	ESg		2349	5.38	0.01							1.0
MESJ	HN	435	268	AML		2349	9.42			19	0.6				
MORF	HE	482	262	ES		2348	56.64	0.06							1.0
MORF	HN	482	262	ESg		2349	18.17	-0.07							1.0
MORF	HN	482	262	AML		2349	25.34			25	0.4				

**December 17 2012 Hour: 23:49 1.9 Lat: 38.07N Lon: 3.30W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.6ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	433	268	ES		2350	44.47	0.10							1.0
MESJ	HN	433	268	AML		2351	6.46			8	0.3				
MORF	HE	479	261	ES		2350	54.07	-0.06							1.0
MORF	HN	479	261	ESg		2351	15.58	-0.05							1.0
MORF	HN	479	261	AML		2351	24.13			18	0.5				

**December 18 2012 Hour: 2:44 59.8 Lat: 38.08N Lon: 3.28W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.6ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	435	268	EP		245	59.51	0.26							1.0
MESJ	HN	435	268	ES		246	42.49	-0.15							1.0
MESJ	HN	435	268	ESg		247	1.27	0.05							1.0
MESJ	HN	435	268	AML		247	4.71			9	0.4				
MORF	HZ	482	261	EP		246	5.09	0.17							1.0
MORF	HE	482	261	ES		246	52.29	-0.15							1.0



MORF HN 482 261 ESg 247 13.99-0.19 1.0  
MORF HN 482 261 AML 247 22.05 16 0.2

**December 18 2012 Hour: 3:20 38.6 Lat: 38.07N Lon: 3.28W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.8ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	435	268	ES		322	21.64	0.09							1.0
MESJ	HN	435	268	ESg		322	39.71	-0.33							1.0
MESJ	HN	435	268	AML		322	48.95			19	0.4				
MORF	HE	481	262	ES		322	31.58	0.26							1.0
MORF	HN	481	262	AML		323	1.13			22	0.4				

**December 18 2012 Hour: 3:32 54.5 Lat: 38.07N Lon: 3.30W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.9ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	433	268	EP		333	53.81	0.03							1.0
MESJ	HE	433	268	ES		334	37.16	0.10							1.0
MESJ	HN	433	268	ESg		334	55.30	-0.13							1.0
MESJ	HN	433	268	AML		335	4.55			25	0.5				

**December 18 2012 Hour: 3:36 2.7 Lat: 38.03N Lon: 3.32W Depth: 1 Agency: IGL Regional  
Magnitudes: 2.4ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	432	269	EP		337	1.83	0.14							1.0
MESJ	HE	432	269	ES		337	44.65	-0.08							1.0
MESJ	HN	432	269	ESg		338	3.09	-0.06							1.0
MESJ	HN	432	269	AML		338	8.84			9	0.4				

**December 18 2012 Hour: 5:15 41.7 Lat: 35.31N Lon: 6.11W Depth: 10F Agency: IGL Regional  
Magnitudes: 2.1ML IGL Rms: 0.2 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	318	315	EP		516	25.46	-0.25							1.0
MORF	HN	318	315	ES		516	57.93	0.12							1.0
MORF	HN	318	315	AML		517	0.98			8	0.3				
MESJ	HZ	338	327	EP		516	28.19	-0.01							1.0
MESJ	HN	338	327	ES		517	2.25	0.14							1.0
MESJ	HN	338	327	AML		517	5.97			6	0.1				

**December 18 2012 Hour: 22:55 23.1 Lat: 39.09N Lon: 13.74W Depth: 1 Agency: IGL Regional  
Magnitudes: 2.6ML IGL Rms: 0.1 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	488	112	EP		2256	28.77	-0.19							1.0
MORF	HN	488	112	ES		2257	17.08	0.06							1.0
MORF	HN	488	112	AML		2257	20.60			12	0.1				
MESJ	HZ	502	104	EP		2256	30.76	0.19							1.0
MESJ	HN	502	104	ES		2257	19.76	-0.05							1.0
MESJ	HN	502	104	AML		2257	25.36			12	0.2				

**December 19 2012 Hour: 1:32 57.6 Lat: 38.05N Lon: 3.30W Depth: 0 Agency: IGL Regional  
Magnitudes: 2.7ML IGL Rms: 0.4 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	433	268	ES		134	40.45	0.28							1.0
MESJ	HE	433	268	ESg		134	57.89	-0.65							1.0
MESJ	HN	433	268	AML		135	8.48			14	0.7				
MORF	HE	479	262	ES		134	50.21	0.31							1.0
MORF	HE	479	262	ESg		135	11.48	0.08							1.0
MORF	HN	479	262	AML		135	22.63			17	0.7				

**December 19 2012 Hour: 6:31 11.8 Lat: 38.06N Lon: 3.27W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.6ML IGL Rms: 0.0 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	436	268	ES		632	54.75	-0.02							1.0
MESJ	HE	436	268	ESg		633	13.28	-0.01							1.0
MESJ	HN	436	268	AML		633	21.87			11	0.4				
MORF	HE	482	262	ES		633	4.58	0.07							1.0
MORF	HE	482	262	ESg		633	26.14	-0.03							1.0
MORF	HN	482	262	AML		633	35.25			16	0.5				

**December 19 2012 Hour: 7:35 13.8 Lat: 38.04N Lon: 3.27W Depth: 3F Agency: IGL Regional**  
**Magnitudes: 3.0ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	435	269	ES		736	56.35	0.11							1.0
MESJ	HE	435	269	ESg		737	15.09	-0.20							1.0
MESJ	HN	435	269	AML		737	27.08			27	0.6				
MORF	HE	481	262	ES		737	6.02	0.09							1.0
MORF	HN	481	262	AML		737	40.55			30	0.3				

**December 19 2012 Hour: 15:31 5.9 Lat: 36.37N Lon: 7.77W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 1.7ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	168	346	EP		1531	29.57	0.08							1.0
MESJ	HE	168	346	ES		1531	46.65	-0.08							1.0
MESJ	HN	168	346	AML		1531	48.01			9	0.3				

**December 19 2012 Hour: 21: 6 52.6 Lat: 36.88N Lon: 12.93W Depth: 1 Agency: IGL Regional**  
**Magnitudes: 1.8ML IGL Rms: 0.0 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	431	74	EP		21 7	51.47	-0.01							1.0
MESJ	HN	431	74	ES		21 8	34.44	0.01							1.0
MESJ	HN	431	74	AML		21 8	37.09			2	0.8				

**December 19 2012 Hour: 21:29 42.7 Lat: 37.60N Lon: 7.92W Depth: 15F Agency: IGL Regional**  
**Magnitudes: 1.0ML IGL Rms: 0.0 secs**

**NE ALMODOVAR, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	38	315	EP		2129	49.08	-0.03							1.0
MESJ	HN	38	315	ES		2129	53.83	0.03							1.0
MESJ	HN	38	315	AML		2129	56.44			13	0.1				

**December 20 2012 Hour: 3:41 48.7 Lat: 36.54N Lon: 9.78W Depth: 15F Agency: IGL Regional**  
**Magnitudes: 1.6ML IGL Rms: 0.0 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	132	49	EP		342	9.07	0.03							1.0
MORF	HN	132	49	ES		342	23.87	-0.04							1.0
MORF	HN	132	49	AML		342	26.00			10	0.3				
MESJ	HZ	200	43	EP		342	17.46	-0.02							1.0
MESJ	HE	200	43	ES		342	38.54	0.03							1.0
MESJ	HN	200	43	AML		342	41.95			4	0.4				

**December 20 2012 Hour: 4:52 12.8 Lat: 37.05N Lon: 12.93W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 1.6ML IGL Rms: 0.0 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	426	77	EP		453	10.16	0.00							1.0

**December 20 2012 Hour: 5:17 11.7 Lat: 38.04N Lon: 3.29W Depth: 3F Agency: IGL Regional**  
**Magnitudes: 2.3ML IGL Rms: 0.0 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HE	434	269	ES		518	53.93	-0.01							1.0
MESJ	HN	434	269	ESg		519	12.93	0.01							1.0
MESJ	HN	434	269	AML		519	23.08			8	0.8				

**December 20 2012 Hour: 7:19 5.8 Lat: 37.08N Lon: 13.08W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 2.3ML IGL Rms: 0.1 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	438	77	EP		720	4.55	-0.07							1.0

**December 20 2012 Hour: 10:30 18.1 Lat: 36.49N Lon: 9.56W Depth: 11F Agency: IGL Regional**  
**Magnitudes: 1.3ML IGL Rms: 0.0 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	191	38	EP		1030	46.11	-0.05							1.0
MESJ	HN	191	38	ES		1031	6.72	0.05							1.0
MESJ	HN	191	38	AML		1031	12.27			2	0.8				

**December 20 2012 Hour: 13:49 26.5 Lat: 38.02N Lon: 3.22W Depth: 1 Agency: IGL Regional**  
**Magnitudes: 3.3ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	440	269	ES		1351	10.39	0.14							1.0
MESJ	HE	440	269	ESg		1351	29.29	0.03							1.0
MESJ	HN	440	269	AML		1351	42.42			63	0.6				
MORF	HE	486	262	ES		1351	19.70	-0.17							1.0
MORF	HN	486	262	AML		1351	55.71			67	0.4				

**December 20 2012 Hour: 13:53 51.1 Lat: 38.03N Lon: 3.26W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.7ML IGL Rms: 0.3 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	436	269	ES		1355	34.54	0.29							1.0
MESJ	HN	436	269	ESg		1355	52.55	-0.29							1.0
MESJ	HN	436	269	AML		1356	2.27			17	0.8				

**December 20 2012 Hour: 15: 0 18.2 Lat: 22.81S Lon: 63.71W Depth: 525F Agency: IGL Distant**  
**Magnitudes: 4.3MB IGL Rms: 0.0 secs**

**SALTA, ARGENTINA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	8869	42	EP		1511	31.38	-0.02							1.0
MESJ	BZ	8869	42	AMb		1511	32.73			26	1.2				

**December 21 2012 Hour: 0:23 11.0 Lat: 36.90N Lon: 4.12W Depth: 20F Agency: IGL Regional**  
**Magnitudes: 3.1ML IGL Rms: 0.3 secs**

**STRAIT OF GIBRALTAR Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	378	287	EP		024	1.21	-0.26							1.0
MESJ	HN	378	287	ES		024	38.54	0.22							1.0
MESJ	HE	378	287	AML		024	42.40			29	0.2				
MORF	HZ	405	278	EP		024	5.32	0.42							1.0
MORF	HN	405	278	ES		024	43.87	-0.38							1.0
MORF	HN	405	278	AML		024	47.10			75	0.3				

December 21 2012 Hour: 5:49 19.4 Lat: 35.89N Lon: 4.80W Depth: 20F Agency: IGL Regional  
Magnitudes: 2.3ML IGL Rms: 0.0 secs

STRAIT OF GIBRALTAR Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	373	306	EP		550	9.37	0.06							1.0
MESJ	HN	373	306	ES		550	45.70	-0.05							1.0
MESJ	HN	373	306	AML		550	51.19			13	1.0				
MORF	HZ	378	296	EP		550	9.90	-0.04							1.0
MORF	HN	378	296	ES		550	46.88	0.03							1.0
MORF	HN	378	296	AML		550	50.49			6	0.1				

December 21 2012 Hour: 6:53 39.0 Lat: 36.62N Lon: 9.72W Depth: 17F Agency: IGL Regional  
Magnitudes: 1.4ML IGL Rms: 0.2 secs

WEST OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	122	51	EP		653	57.87	-0.09							1.0
MORF	HN	122	51	ES		654	11.96	0.15							1.0
MORF	HN	122	51	AML		654	13.72			7	0.2				
MESJ	HZ	190	44	EP		654	6.13	-0.23							1.0
MESJ	HN	190	44	ES		654	26.51	0.16							1.0
MESJ	HE	190	44	AML		654	28.98			3	0.0				

December 21 2012 Hour: 7:22 37.4 Lat: 39.03N Lon: 8.78W Depth: 0 Agency: IGL Regional  
Magnitudes: 1.6ML IGL Rms: 0.0 secs

E SALVATERRA DE MAGOS, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	141	160	EP		723	0.01	-0.03							1.0
MESJ	HN	141	160	ES		723	16.62	0.03							1.0
MESJ	HN	141	160	AML		723	18.83			9	0.2				

December 21 2012 Hour: 17:22 44.5 Lat: 34.55N Lon: 12.28W Depth: 1 Agency: IGL Regional  
Magnitudes: 2.4ML IGL Rms: 0.1 secs

MADEIRA ISLANDS, PORTUGAL REGION Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	448	46	EP		1723	45.35	-0.05							1.0
MESJ	HZ	516	44	EP		1723	53.70	0.07							1.0
MESJ	HE	516	44	ES		1724	44.10	-0.02							1.0
MESJ	HN	516	44	AML		1724	49.52			6	0.3				

December 21 2012 Hour: 20:20 6.8 Lat: 38.04N Lon: 3.28W Depth: 4F Agency: IGL Regional  
Magnitudes: 2.6ML IGL Rms: 0.0 secs

SPAIN Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	435	269	ESg		2022	8.04	-0.02							1.0
MESJ	HN	435	269	AML		2022	17.68			13	0.4				
MORF	HN	480	262	ESg		2022	20.90	0.02							1.0
MORF	HN	480	262	AML		2022	31.02			13	0.3				

December 21 2012 Hour: 21: 6 52.7 Lat: 38.94N Lon: 8.41W Depth: 15F Agency: IGL Regional  
Magnitudes: 1.2ML IGL Rms: 0.1 secs

E CORUCHE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	123	172	EP		21 7	11.92	-0.07							1.0
MESJ	HE	123	172	ES		21 7	26.14	0.07							1.0
MESJ	HN	123	172	AML		21 7	28.26			4	0.3				

December 21 2012 Hour: 22:28 10.2 Lat: 14.38S Lon: 167.26E Depth: 207F Agency: IGL Distant  
Magnitudes: 6.2MS IGL Rms: 0.3 secs

VANUATU Net: NEIC

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	BZ17313	353	353	EP		2247	38.65	0.41							1.0
GGNV	BZ17313	353	353	EPP		2251	43.63	0.17							1.0
GGNV	BZ17313	353	353	AMS		24 5	23.54			3211	15.4				

MESJ	BZ17395	351	EP	2247	39.58	0.32										1.0
MESJ	BZ17395	351	EPP	2251	47.09	-0.49										1.0
MESJ	BN17395	351	ESS	2311	21.10	-0.17										1.0
MESJ	BZ17395	351	AMS	2355	41.08				2854	17.6						
MORF	BZ17460	352	EP	2247	40.06	-0.01										1.0
MORF	BZ17460	352	EPP	2251	50.61	-0.24										1.0
MORF	BZ17460	352	AMS	24	7	10.86			2763	19.7						

**December 22 2012 Hour: 0:56 23.9 Lat: 37.33N Lon: 8.59W Depth: 12F Agency: IGL Regional**  
**Magnitudes: 1.3ML IGL Rms: 0.1 secs**

**NW MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	6	244	EP		056	25.99	-0.11							1.0
MORF	HN	6	244	ES		056	27.85	0.11							1.0
MORF	HN	6	244	AML		056	28.70			130	0.1				

**December 22 2012 Hour: 2:26 4.9 Lat: 37.27N Lon: 8.64W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 0.5ML IGL Rms: 0.0 secs**

**SW MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	4	347	EP		226	6.72	0.01							1.0
MORF	HN	4	347	ES		226	8.03	-0.01							1.0
MORF	HN	4	347	AML		226	8.75			34	0.1				

**December 22 2012 Hour: 2:44 23.8 Lat: 36.83N Lon: 10.92W Depth: 10F Agency: IGL Regional**  
**Magnitudes: 1.6ML IGL Rms: 0.2 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	209	75	EP		244	54.00	-0.16							1.0
MORF	HN	209	75	ES		245	16.49	0.16							1.0
MORF	HN	209	75	AML		245	19.36			5	0.2				

**December 22 2012 Hour: 6:48 22.0 Lat: 37.05N Lon: 8.11W Depth: 2F Agency: IGL Regional**  
**Magnitudes: 1.0ML IGL Rms: 0.0 secs**

**SW LOULE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	56	301	EP		648	30.93	-0.04							1.0
MORF	HN	56	301	ES		648	37.62	0.07							1.0
MORF	HN	56	301	AML		648	39.23			6	0.3				
MESJ	HE	88	354	ES		648	46.54	-0.03							1.0
MESJ	HN	88	354	AML		648	49.69			6	0.4				

**December 22 2012 Hour: 12:46 42.4 Lat: 37.07N Lon: 8.73W Depth: 2F Agency: IGL Regional**  
**Magnitudes: 0.2ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	27	15	EP		1246	46.76	-0.06							1.0
MORF	HN	27	15	ES		1246	50.09	0.06							1.0
MORF	HE	27	15	AML		1246	52.16			4	0.2				

**December 22 2012 Hour: 13:32 12.3 Lat: 37.62N Lon: 7.91W Depth: 6F Agency: IGL Regional**  
**Magnitudes: 0.9ML IGL Rms: 0.0 secs**

**SE CASTRO VERDE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	37	312	EP		1332	18.30	0.00							1.0
MESJ	HN	37	312	ES		1332	22.67	0.00							1.0
MESJ	HN	37	312	AML		1332	24.91			13	0.2				

**December 22 2012 Hour: 14:12 56.4 Lat: 37.32N Lon: 8.58W Depth: 13F Agency: IGL Regional**  
**Magnitudes: 1.3ML IGL Rms: 0.1 secs**

**NW MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	6	256	EP		1412	58.73	-0.11							1.0
MORF	HE	6	256	ES		1413	0.67	0.07							1.0
MORF	HN	6	256	AML		1413	1.50		264	0.3					
MESJ	HZ	66	29	EP		1413	7.07	-0.01							1.0
MESJ	HE	66	29	ES		1413	14.92	0.06							1.0
MESJ	HE	66	29	AML		1413	17.07		6	0.1					

**December 22 2012 Hour: 16:41 44.9 Lat: 22.43N Lon: 94.75E Depth:126F Agency: IGL Distant**  
**Magnitudes: 4.9MB IGL Rms: 0.1 secs**

**MYANMAR Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	9585	309	EP		1654	11.90	-0.13							1.0
MESJ	BZ	9585	309	AMb		1654	14.08		15	0.7					

**December 22 2012 Hour: 20:54 23.5 Lat: 38.04N Lon: 3.29W Depth: 3F Agency: IGL Regional**  
**Magnitudes: 2.6ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HE	480	262	ES		2056	15.63	0.20							1.0
MORF	HN	480	262	ESg		2056	37.34	-0.20							1.0
MORF	HN	480	262	AML		2056	46.37		12	0.3					

**December 22 2012 Hour: 21:35 35.3 Lat: 37.65N Lon: 7.83W Depth: 18F Agency: IGL Regional**  
**Magnitudes: 0.5ML IGL Rms: 0.0 secs**

**W MERTOLA, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	40	302	EP		2135	42.29	-0.04							1.0
MESJ	HE	40	302	ES		2135	47.48	0.06							1.0
MESJ	HE	40	302	AML		2135	49.65		4	0.2					
MORF	HN	82	243	ES		2135	58.12	-0.03							1.0
MORF	HN	82	243	AML		2135	59.88		1	0.0					

**December 22 2012 Hour: 23:20 14.4 Lat: 39.24N Lon: 10.43W Depth: 18F Agency: IGL Regional**  
**Magnitudes: 2.4ML IGL Rms: 0.3 secs**

**NORTH ATLANTIC OCEAN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	125	117	EP		2320	33.93	0.30							1.0
GGNV	HN	125	117	ES		2320	47.52	-0.17							1.0
GGNV	HN	125	117	AML		2320	51.26		216	0.2					
MESJ	HZ	247	128	EP		2320	49.23	0.40							0.9
MESJ	HN	247	128	ES		2321	13.91	-0.07							0.9
MESJ	HN	247	128	AML		2321	16.80		9	0.1					
MORF	HZ	265	143	EP		2320	50.83	-0.20							0.9
MORF	HN	265	143	ES		2321	17.50	-0.28							0.9
MORF	HN	265	143	AML		2321	19.48		12	0.2					

**December 23 2012 Hour: 7: 2 52.7 Lat: 33.39N Lon: 4.83W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 2.5ML IGL Rms: 0.2 secs**

**MOROCCO Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	556	322	EP		7 4	6.81	-0.07							1.0
MESJ	HZ	581	329	EP		7 4	9.72	-0.18							1.0
MESJ	HN	581	329	ES		7 5	6.52	0.25							1.0
MESJ	HN	581	329	AML		7 5	12.11		7	0.4					

**December 23 2012 Hour: 13:31 40.0 Lat: 42.42N Lon: 41.06E Depth: 10F Agency: IGL Distant**  
**Magnitudes: 5.2MS IGL Rms: 0.3 secs**

**BLACK SEA, OFFSHORE GEORGIA Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	4172	280	EP		1338	54.35	0.24							1.0
MESJ	BZ	4172	280	EPP		1340	20.15	0.35							1.0
MESJ	BN	4172	280	ES		1344	43.75	-0.31							1.0
MESJ	BE	4172	280	AMS		14 0	17.19		3704	20.7					
GGNV	BZ	4210	282	EP		1338	57.02	0.07							1.0
GGNV	BN	4210	282	ES		1344	48.83	-0.33							1.0
GGNV	BN	4210	282	AMS		1355	2.36		4528	23.7					
MORF	BZ	4230	279	EP		1338	58.91	0.31							1.0
MORF	BN	4230	279	ES		1344	51.77	-0.33							1.0
MORF	BE	4230	279	AMS		14 0	8.47		3982	17.4					

**December 23 2012 Hour: 20:56 44.4 Lat: 37.30N Lon: 8.62W Depth: 17F Agency: IGL Regional**  
**Magnitudes: 1.1ML IGL Rms: 0.1 secs**

**SW MONCHIQUE, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HN	3	284	ES		2056	49.19	-0.04							1.0
MORF	HN	3	284	AML		2056	50.00		45	0.1					
MESJ	HZ	70	30	EP		2056	55.78	0.16							1.0
MESJ	HN	70	30	ES		2057	3.73	-0.11							1.0
MESJ	HN	70	30	AML		2057	5.60		11	0.1					

**December 24 2012 Hour: 6:12 60.0 Lat: 38.20N Lon: 8.13W Depth: 6F Agency: IGL Regional**  
**Magnitudes: 0.7ML IGL Rms: 0.1 secs**

**SW ALVITO, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	41	191	EP		613	6.73	0.09							1.0
MESJ	HN	41	191	ES		613	11.40	-0.09							1.0
MESJ	HN	41	191	AML		613	14.28		7	0.7					

**December 24 2012 Hour: 12:42 6.2 Lat: 36.93N Lon: 5.49W Depth: 28F Agency: IGL Regional**  
**Magnitudes: 0.7ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	262	293	EP		1242	41.60	-0.07							1.0

**December 24 2012 Hour: 16:49 13.5 Lat: 37.46N Lon: 9.11W Depth: 16F Agency: IGL Regional**  
**Magnitudes: 1.7ML IGL Rms: 0.1 secs**

**NW ALJEZUR, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	44	113	EP		1649	20.96	-0.05							1.0
MORF	HN	44	113	ES		1649	26.40	-0.06							1.0
MORF	HN	44	113	AML		1649	27.96		102	0.3					
MORF	HE	44	113	AML		1649	28.37		96	0.1					
MESJ	HZ	89	62	EP		1649	27.73	-0.02							1.0
MESJ	HN	89	62	ES		1649	38.25	0.13							1.0
MESJ	HN	89	62	AML		1649	40.01		6	0.2					

**December 24 2012 Hour: 22:59 14.0 Lat: 37.36N Lon: 8.69W Depth: 4F Agency: IGL Regional**  
**Magnitudes: 0.8ML IGL Rms: 0.2 secs**

**NE ALJEZUR, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	7	150	EP		2259	15.17	-0.12							1.0
MORF	HN	7	150	ES		2259	16.48	0.21							1.0
MORF	HN	7	150	AML		2259	17.14		108	0.1					
MESJ	HN	68	38	ES		2259	32.73	-0.10							1.0
MESJ	HN	68	38	AML		2259	36.74		4	0.3					

**December 25 2012 Hour: 3:22 37.4 Lat: 36.20N Lon: 9.79W Depth: 31F Agency: IGL Regional**  
**Magnitudes: 1.9ML IGL Rms: 0.2 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	159	39	EP		323	0.02	0.08							1.0
MORF	HN	159	39	ES		323	16.15	-0.27							1.0
MORF	HN	159	39	AML		323	19.16			22	0.2				
MESJ	HN	229	37	ES		323	31.60	0.20							1.0
MESJ	HN	229	37	AML		323	34.49			5	0.1				

**December 25 2012 Hour: 17:20 43.9 Lat: 33.58N Lon: 4.21W Depth: 0 Agency: IGL Regional**  
**Magnitudes: 0.0ML IGL Rms: 0.0 secs**

**MOROCCO Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	596	324	EP		1722	2.87	-0.02							1.0

**December 25 2012 Hour: 17:36 29.2 Lat: 28.40N Lon: 66.42E Depth: 9F Agency: IGL Distant**  
**Magnitudes: 5.2MB IGL Rms: 0.0 secs**

**PAKISTAN Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	6866	300	EP		1746	47.94	0.02							1.0
MESJ	BZ	6866	300	AMb		1746	52.80			45	1.3				

**December 25 2012 Hour: 18:47 15.8 Lat: 37.65N Lon: 7.81W Depth: 3F Agency: IGL Regional**  
**Magnitudes: 0.9ML IGL Rms: 0.0 secs**

**W MERTOLA, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	42	300	EP		1847	22.56	0.00							1.0
MESJ	HN	42	300	ES		1847	27.50	0.00							1.0
MESJ	HN	42	300	AML		1847	28.86			10	0.2				

**December 26 2012 Hour: 15:59 29.6 Lat: 36.01N Lon: 7.63W Depth: 15F Agency: IGL Regional**  
**Magnitudes: 1.9ML IGL Rms: 0.1 secs**

**STRAIT OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HN	170	328	ES		16	0	13.07	-0.09						1.0
MORF	HN	170	328	AML		16	0	15.19		14	0.2				
MESJ	HZ	210	346	EP		1559	59.69	0.04							1.0
MESJ	HE	210	346	ES		16	0	21.61	0.05						1.0
MESJ	HN	210	346	AML		16	0	23.66		9	0.0				

**December 26 2012 Hour: 21:46 37.8 Lat: 38.15N Lon: 8.92W Depth: 1 Agency: IGL Regional**  
**Magnitudes: 1.5ML IGL Rms: 0.3 secs**

**W MELIDES, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	71	119	EP		2146	48.81	-0.35							1.0
MESJ	HN	71	119	ES		2146	57.63	0.17							1.0
MESJ	HN	71	119	AML		2147	2.14			14	0.2				
MORF	HZ	97	166	EP		2146	53.12	-0.25							1.0
MORF	HN	97	166	ES		2147	5.18	0.43							1.0
MORF	HN	97	166	AML		2147	8.36			15					

**December 27 2012 Hour: 0:37 10.0 Lat: 35.76S Lon: 73.27W Depth: 22F Agency: IGL Distant**  
**Magnitudes: 5.8MS IGL Rms: 0.0 secs**

**OFFSHORE MAULE, CHILE Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ10474	46	EPP			054	13.72	-0.02							1.0
MORF	BZ10474	46	AMS			131	9.62			3527	19.8				
MESJ	BZ10542	46	EPP			054	18.47	0.01							1.0
MESJ	BZ10542	46	AMS			131	37.61			2997	18.9				
GGNV	BZ10548	45	EPP			054	18.84	0.00							1.0
GGNV	BZ10548	45	AMS			134	4.75			3812	21.1				



December 27 2012 Hour: 2:53 11.2 Lat: 36.97N Lon: 2.79W Depth: 0 Agency: IGL Regional  
Rms: 0.0 secs

SPAIN Net: MAD

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	491	283	EP		254	17.43	0.00							1.0

December 27 2012 Hour: 19:1 53.4 Lat: 37.32N Lon: 8.52W Depth: 10F Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.1 secs

NE MONCHIQUE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	12	263	EP		19	1	55.87	-0.06						1.0
MORF	HE	12	263	ES		19	1	57.86	0.07						1.0
MORF	HN	12	263	AML		19	1	58.43		488	0.2				
MESJ	HZ	63	25	EP		19	2	3.75	-0.01						1.0

December 28 2012 Hour: 3:4 57.2 Lat: 37.30N Lon: 8.57W Depth: 16F Agency: IGL Regional  
Magnitudes: 0.2ML IGL Rms: 0.0 secs

SW MONCHIQUE, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	7	276	EP		3	5	0.08	-0.02						1.0
MORF	HN	7	276	ES		3	5	2.22	0.02						1.0
MORF	HN	7	276	AML		3	5	2.71		8	0.1				

December 28 2012 Hour: 11:35 22.0 Lat: 38.14N Lon: 8.96W Depth: 1F Agency: IGL Regional  
Magnitudes: 3.4ML IGL Rms: 0.2 secs

W MELIDES, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
GGNV	HZ	66	346	EP		1135	32.57	-0.06							1.0
GGNV	HN	66	346	ES		1135	40.50	0.09							1.0
GGNV	HN	66	346	AML		1135	46.88		1400	0.4					
MESJ	HZ	73	117	EP		1135	33.45	-0.30							1.0
MESJ	HN	73	117	ES		1135	42.23	-0.13							1.0
MESJ	HN	73	117	AML		1135	47.57		1636	0.1					
MORF	HZ	96	163	EP		1135	37.59	0.06							1.0
MORF	HN	96	163	ES		1135	49.22	0.34							1.0
MORF	HN	96	163	AML		1135	52.13		1329	0.6					

December 28 2012 Hour: 12:6 15.8 Lat: 38.14N Lon: 8.94W Depth: 3F Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.2 secs

W MELIDES, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	72	118	EP		12	6	27.18	-0.21						1.0
MESJ	HE	72	118	ES		12	6	35.71	-0.11						1.0
MESJ	HN	72	118	AML		12	6	41.40		42	0.1				
MORF	HZ	96	165	EP		12	6	31.57	0.23						1.0
MORF	HE	96	165	ES		12	6	42.74	0.10						1.0
MORF	HN	96	165	AML		12	6	45.75		28	0.3				

December 28 2012 Hour: 12:9 20.4 Lat: 38.16N Lon: 8.94W Depth: 1 Agency: IGL Regional  
Magnitudes: 1.5ML IGL Rms: 0.2 secs

W MELIDES, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	73	119	EP		12	9	31.94	-0.16						1.0
MESJ	HN	73	119	ES		12	9	40.81	0.16						1.0
MESJ	HN	73	119	AML		12	9	45.41		17	0.1				

December 29 2012 Hour: 4:54 52.7 Lat: 38.15N Lon: 8.93W Depth: 3F Agency: IGL Regional  
Magnitudes: 2.2ML IGL Rms: 0.2 secs

W MELIDES, PORTUGAL Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	71	119	EP		455	3.94	-0.23							1.0
MESJ	HE	71	119	ES		455	12.70	0.13							1.0
MESJ	HN	71	119	AML		455	17.38		83	0.2					

MORF HZ	97	165	EP	455	8.11	-0.19										1.0
MORF HE	97	165	ES	455	20.00	0.30										1.0
MORF HN	97	165	AML	455	22.50				64	0.4						

**December 29 2012 Hour: 6:50 53.4 Lat: 38.04N Lon: 3.27W Depth: 2F Agency: IGL Regional  
Magnitudes: 2.8ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HN	436	269	ES		652	35.92	-0.20							1.0
MESJ	HN	436	269	ESg		652	55.13	0.12							1.0
MESJ	HE	436	269	AML		653	0.36		11	0.5					
MORF	HN	482	262	ES		652	45.88	0.08							1.0
MORF	HN	482	262	AML		653	18.98		32	0.4					

**December 29 2012 Hour: 6:57 26.0 Lat: 38.05N Lon: 3.28W Depth: 2F Agency: IGL Regional  
Magnitudes: 3.3ML IGL Rms: 0.2 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	435	268	EP		658	25.45	0.17							1.0
MESJ	HE	435	268	ES		659	8.58	0.05							1.0
MESJ	HN	435	268	ESg		659	27.01	-0.33							1.0
MESJ	HN	435	268	AML		659	36.02		65	0.6					
MORF	HN	481	262	ESg		659	40.29	0.11							1.0
MORF	HN	481	262	AML		659	48.22		78	0.3					

**December 29 2012 Hour: 9:20 34.0 Lat: 38.82N Lon: 7.96W Depth: 18F Agency: IGL Regional  
Magnitudes: 2.0ML IGL Rms: 0.2 secs**

**NE ARRAIOLOS, PORTUGAL Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	111	192	EP		920	51.82	0.24							1.0
MESJ	HE	111	192	ES		921	4.15	-0.24							1.0
MESJ	HN	111	192	AML		921	5.63		33	0.1					

**December 29 2012 Hour: 12: 2 44.7 Lat: 37.51N Lon: 3.67W Depth: 22F Agency: IGL Regional  
Magnitudes: 1.7ML IGL Rms: 0.1 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	403	277	EP		12 3	38.19	0.11							1.0
MESJ	HN	403	277	ES		12 4	16.94	-0.11							1.0
MESJ	HN	403	277	AML		12 4	22.14		2	0.3					

**December 29 2012 Hour: 15: 0 28.6 Lat: 38.14N Lon: 8.95W Depth: 5F Agency: IGL Regional  
Magnitudes: 1.9ML IGL Rms: 0.2 secs**

**W MELIDES, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	72	117	EP		15 0	40.04	-0.28							1.0
MESJ	HN	72	117	ES		15 0	48.87	0.02							1.0
MESJ	HN	72	117	AML		15 0	54.14		39	0.0					
MORF	HN	96	164	ES		15 0	55.79	0.27							1.0
MORF	HN	96	164	AML		15 0	58.70		30	0.6					

**December 29 2012 Hour: 16:32 30.6 Lat: 36.82N Lon: 10.48W Depth: 10F Agency: IGL Regional  
Magnitudes: 2.0ML IGL Rms: 0.1 secs**

**AZORES-CAPE ST. VINCENT RIDGE Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	171	71	EP		1632	56.23	-0.16							1.0
MORF	HN	171	71	ES		1633	15.25	0.05							1.0
MORF	HN	171	71	AML		1633	17.75		26	0.2					
MESJ	HZ	230	60	EP		1633	3.72	0.08							1.0
MESJ	HN	230	60	ES		1633	27.78	0.04							1.0
MESJ	HN	230	60	AML		1633	30.94		5	0.2					

**December 29 2012 Hour: 17:50 52.4 Lat: 35.68N Lon: 70.59E Depth:110F Agency: IGL Distant**  
**Magnitudes: 5.5MB IGL Rms: 0.1 secs**

**HINDU KUSH REGION, AFGHANISTAN Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	BZ	6819	298	EP		18 0	56.48	0.01							1.0
MESJ	BZ	6819	298	AMb		18 0	58.20			128	1.1				
GGNV	BZ	6853	299	EP		18 0	58.53	0.06							1.0
GGNV	BZ	6853	299	AMb		18 1	0.28			279	1.4				
MORF	BZ	6878	297	EP		18 1	0.05	-0.07							1.0
MORF	BZ	6878	297	AMb		18 1	2.78			157	1.3				

**December 29 2012 Hour: 18:19 57.8 Lat: 38.24N Lon: 9.31W Depth: 30F Agency: IGL Regional**  
**Magnitudes: 1.4ML IGL Rms: 0.1 secs**

**SW SESIMBRA, PORTUGAL Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	106	115	EP		1820	13.69	-0.03							1.0
MESJ	HN	106	115	ES		1820	25.40	0.06							1.0
MESJ	HE	106	115	AML		1820	26.55			8	0.1				
MORF	HZ	119	151	EP		1820	15.27	-0.13							1.0
MORF	HN	119	151	ES		1820	28.34	0.09							1.0
MORF	HN	119	151	AML		1820	29.55			7	0.1				

**December 30 2012 Hour: 0: 8 38.1 Lat: 37.13N Lon: 3.74W Depth: 0 Agency: IGL Regional**  
**Rms: 0.0 secs**

**SPAIN Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	404	283	EP		0 9	33.74	0.00							1.0

**December 30 2012 Hour: 13:15 16.4 Lat: 36.36N Lon: 9.87W Depth: 30F Agency: IGL Regional**  
**Magnitudes: 1.8ML IGL Rms: 0.1 secs**

**WEST OF GIBRALTAR Net: IMP**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	HZ	151	46	EP		1315	38.07	0.00							1.0
MORF	HN	151	46	ES		1315	53.73	-0.12							1.0
MORF	HN	151	46	AML		1315	55.92			16	0.2				
MESJ	HZ	220	41	EP		1315	46.67	0.06							1.0
MESJ	HN	220	41	ES		1316	8.69	0.07							1.0
MESJ	HN	220	41	AML		1316	10.66			4	0.1				

**December 30 2012 Hour: 20:49 31.4 Lat: 12.88S Lon: 70.97W Depth: 42F Agency: IGL Distant**  
**Magnitudes: 5.1MB IGL Rms: 0.3 secs**

**CENTRAL PERU Net: NEIC**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MORF	BZ	8553	46	EP		21 1	18.93	-0.30							1.0
MORF	BZ	8553	46	AMb		21 1	21.95			70	1.6				
MESJ	BZ	8614	46	EP		21 1	22.56	0.30							1.0
MESJ	BZ	8614	46	AMb		21 1	24.11			34	1.4				

**December 30 2012 Hour: 23:35 3.0 Lat: 43.05N Lon: 0.22W Depth: 1 Agency: IGL Regional**  
**Magnitudes: 3.7ML IGL Rms: 0.1 secs**

**PYRENEES Net: MAD**

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	891	232	EP		2336	56.97	0.03							1.0
MESJ	HE	891	232	ES		2338	19.91	-0.20							1.0
MESJ	HN	891	232	AML		2339	21.53			40	1.0				
MORF	HZ	959	231	EP		2337	5.16	0.14							1.0
MORF	HN	959	231	ES		2338	34.12	0.04							1.0
MORF	HN	959	231	AML		2339	47.29			46	1.3				

December 31 2012 Hour: 4:47 31.0 Lat: 36.72N Lon: 7.38W Depth: 20F Agency: IGL Regional  
Magnitudes: 1.3ML IGL Rms: 0.1 secs

STRAIT OF GIBRALTAR Net: IMP

STAT	CO	DIST	AZI	PHASE	P	HRMN	SECON	TRES	CODA	AMPL	PERI	BAZ	ARES	VELO	WT
MESJ	HZ	145	329	EP		447	52.42	-0.13							1.0
MESJ	HE	145	329	ES		448	8.39	0.13							1.0
MESJ	HE	145	329	AML		448	10.50			4	0.1				