BRITISH GEOLOGICAL SURVEY

REPORT OR/13/054

Bulletin of British Earthquakes 2012

D D Galloway (Editor)

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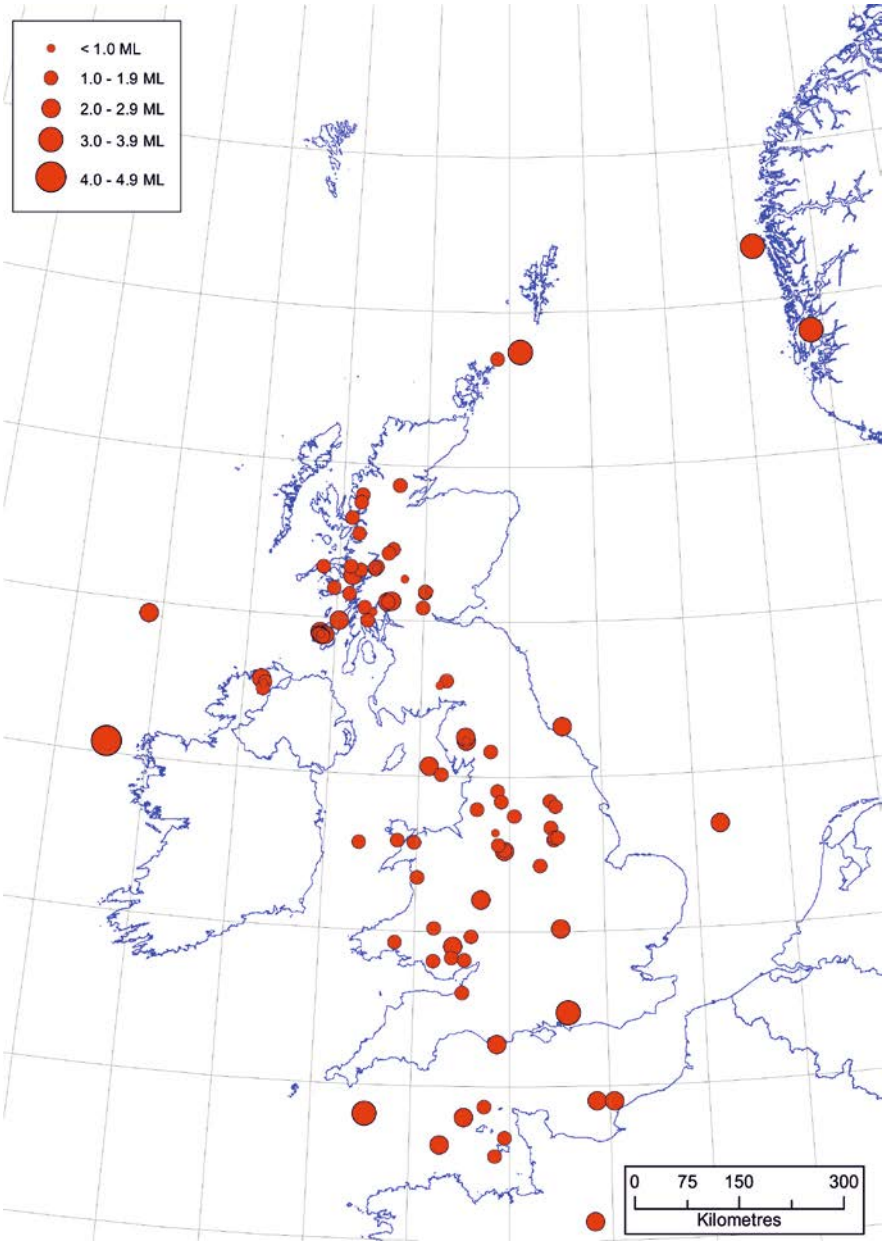

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1 Introduction

The British Geological Survey's (BGS) Seismic Monitoring and Information Service operate a nationwide network of seismograph stations in the United Kingdom (UK). Earthquakes in the UK and coastal waters are detected within limits dependent on the distribution of seismograph stations. Location accuracy is improved in offshore areas through data exchange with neighbouring countries. This bulletin contains locations, magnitudes and phase data for all earthquakes detected and located by the BGS during 2012, listed in Tables 1 and 2. Maps showing seismic activity in 2012 (Figure 1), and the larger magnitude events since 1979 (ML> 2.5) and since 1970 (ML> 3.5) are also included. The bulletin covers all of the UK land mass and its coastal waters including the North Sea (11^{o}W to 6^{o}E and 47^{o}N to 65^{o}N).

All events believed to be of true tectonic origin are included. Coalfield events are also included. Acoustic disturbances, such as sonic booms from supersonic aircraft, are included when they are felt. The airborne waves are readily identified by their slow travel time across an array or by their signature on a microphone, but they are frequently mistaken as small earthquakes by the public. They are indicated by 'SONIC' in both the locality and comments column of Table 1.

Significant non-natural events, such as explosions, which received media attention or were greater than magnitude 2.5 ML or felt by local residents, are also included in Table 1. Smaller events that are known, or suspected to be of explosive origin are excluded from the bulletin where possible. These include explosions due to quarrying, mining, weapon testing or disposal, naval exercises, geophysical prospecting and civil engineering. Unfortunately, identification by record character, location and time of occurrence is not always conclusive and some man-made events may be included in the bulletin or, more rarely, a small natural event may have been excluded.

2 The BGS UK Seismograph Network

The UK seismograph network consists of over 100 stations with broadband, short period and/or strong motion accelerometers. Thirty-six sites are equipped with broadband seismometers and twenty-four have strong motion accelerometers, seventeen of which are co-located with broadband sensors. The remaining sites are equipped with short period seismometers. Data from nearly all stations are transferred in near real-time to the BGS offices in Edinburgh for automatic processing, analysis and archival. Seismic events are detected using automatic processing algorithms, but can also be extracted manually from our archive of continuous data, then analysed to determine event types, locations and magnitudes. Operational BGS seismograph stations are shown in Figure 2.

The detection capabilities of a network depend upon station distribution, instrument sensitivity and background noise levels. Figure 2 also shows the magnitude detection thresholds for the seismograph stations operational in December 2012. The contours illustrate the lower threshold magnitude for an earthquake to significantly exceed 4 nanometres of noise (average) at 10 Hz on at least four seismographs. These detection levels hold true only if data from all stations are continuously monitored. Smaller events may go undetected unless they are felt and reported to BGS by local inhabitants, in which case detection can be strongly dependent on the population density.

The whole of the UK is covered by the seismograph network for approximately magnitude 1.5 ML, and above, at times of average ambient noise levels. Noise sources such as wind, ocean waves and traffic vary considerably with time (typically 0.5 to 15 nanometres, at 10 Hz) causing the magnitude thresholds to increase or decrease. In conditions of high noise, 0.8 ML should be added to the contour values, causing the threshold to rise to about 2.3 ML. Normally, however, an earthquake of this size would be felt, if not detected, in the areas of poorer instrumental coverage. The bulletin can, therefore, be assumed to be complete for all earthquakes of magnitude 2.3 ML and above.

Given the variability in the earthquake detection threshold, as governed by ambient noise conditions and the geometry of the observing network, the bulletin is biased towards certain localities. Figure 3 shows only earthquakes with magnitude 2.5 ML or greater, in the period 1979 to 2012. The data set is considered complete for these magnitudes in all localities onshore. Seismicity for the period 1970 to 2012 is shown in Figure 4 with a threshold magnitude of 3.5 ML. This is the period covered by BGS instrumentation that, in the early years, only consisted of the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) and a station near Kyle of Lochalsh (KYL). The data set is likely to be complete for such magnitudes.

3 Earthquake Parameters and Their Errors

HYPOCENTRE LOCATION

By accurately timing the signal onsets at a minimum of three stations, a location can be found for an earthquake that satisfies the observed pattern of arrivals. Instrumental locations in the bulletin were obtained using the computer program HYPOCENTER (Lienert and Havskov 1995) that iteratively adjusts a trial hypocentre (latitude, longitude, depth, and origin time) until the observed and computed arrival times coincide closely.

The accuracy of locations is dependent on distances from the closest stations, the distribution of the stations around the epicentre, the resolution to which signal onsets can be timed from the records, and the accuracy with which the seismic wave velocities through the Earth are known.

The accurate determination of earthquake depth presents a more difficult problem, mainly because phase arrival patterns at the seismographs can still be satisfied for a large range of depths merely by adjusting the origin time to suit. Depth is usually only well constrained when there is a station very close to the epicentre.

The best depth determinations are obtained when an earthquake or earthquake series occurs almost beneath a network. For events at larger distances the depth errors can be many kilometres. Where the depth error, ERZ in Table 1, is 0.0, this indicates that the depth has been fixed in the hypocentre calculation. This is the case for explosions, which are known to occur at the surface, and for events at larger distances, where depth control is poor.

MAGNITUDE

All earthquakes in the bulletin have been assigned a local magnitude (ML) as defined by Richter (1935):

$$ML = \log_{10} (A/ A_0)$$

Where A is the maximum deflection (centre to peak in mm) registered on a Wood-Anderson seismograph and A_0 is that for a 'standard' magnitude zero earthquake at the same distance. The A_0 term is thus a distance correction factor, tabulated by Richter to 200 km, and later adjusted to

include up to 600 km. Although Richter intended his method to be an approximate quantification of earthquake size and his attenuation term, A_0, strictly only applies to California, the formula is still used worldwide today. The ML magnitudes in this bulletin have been calculated according to Richter's formula after converting the output of the BGS instruments to an equivalent Wood-Anderson deflection. Ideally, the measurements are made on two horizontal instruments and averaged but, if this is not possible, the mean of the magnitudes from a number of verticals are used. Ground motion registered at a seismograph varies with site conditions, distance and direction from the earthquake, and the nature of the ray path. Consequently, it is important to take the mean from a good distribution of stations. The resulting errors on magnitudes quoted in the bulletin will normally be less than 0.4 ML.

INTENSITY

Intensity is a measure of the effect of the shaking produced by the earthquake on people, structures and objects. It decreases with distance from a maximum value (I_{max}) usually found close to the epicentre. The maximum felt intensity is quoted, where known, with reference to the European Macroseismic Scale (EMS), (Grünthal, 1993).

4 Summary of 2012 Seismicity

There were 117 earthquakes located by the BGS seismic monitoring network during the year, with 35 having magnitudes of 2.0 ML or greater, seven having magnitudes of 3.0 ML or greater and one with a magnitude of 4.0 ML. Nineteen events with a magnitude of 2.0 ML or greater were reported felt, together with a further 34 smaller ones, bringing the total to 53 felt earthquakes in 2012.

The largest offshore earthquake of the year, with a magnitude of 4.0 ML, occurred approximately 50 km offshore the west coast of Ireland, on 6 June, at 07:58 UTC, at a depth of around 3 km (Figure 5). It was located approximately 160 km west of Sligo, County Sligo and 160 km NW of Galway, County Galway. It was reported felt by many residents in towns and villages in the counties of Mayo, Sligo and Galway. Reports described "our windows rattled" and "was like a lorry going into the side of the house or a steamroller going down the road", indicating an intensity of at least 3 EMS. It locates approximately 250 km south of the magnitude 3.3 ML Atlantic, NW of Ireland earthquake of 13 April 1980. Later on in the year, on 21 November, an earthquake, with a magnitude of 2.7 ML and a depth of 34 km, occurred approximately 190 km NNE of the magnitude 4.0 event.

The largest onshore earthquake of the year, with a magnitude of 2.9 ML, occurred approximately 12 km NNW of Chichester, West Sussex, on 14 December at 23:03 UTC, at a depth of approximately 9 km (Figure 6). It was felt, be several residents, in Chichester, Bracklesham Bay, Haslemere, Singleton, Bognor Regis and Midhurst (West Sussex), in Liphook (Hampshire), in Hindhead (East Sussex) and in Brighton (Hampshire). Reports described "felt the floor move beneath me and it sounded like an explosion", "computer monitor on desk shook for a few seconds", "sounded like a crack of lightning accompanied by thunder" and "my bed shook in one fast jerking motion" indicating an intensity of at least 3 EMS. This is the largest event detected in the area since a magnitude 2.5 ML earthquake on 9 September 1995 in Horndean, Hampshire. Historically, the largest earthquake to have occurred nearby was the magnitude 4.7 ML Chichester event that occurred on 25 October 1963, which was felt throughout Sussex and Hampshire, with a maximum intensity of 5 EMS. Chichester was also hit by a series of small but high-intensity events that took place between 1833 and 1835. One of these events, with a macroseismic magnitude of 2.9 ML, occurred on 18 September 1833, and collapsed a few chimneys in the region and caused a fall in a chalk pit in Cocking, which killed a man who was working there. The largest, and most damaging, event of the series, with a magnitude of 3.3 ML,

occurred on 27 August 1834, and caused many chimneys and chimney pots to fall, many windows to break and caused extreme alarm in the region.

On 11 January, at 12:00 UTC, a magnitude 2.4 ML earthquake occurred near Stoke-on-Trent, Staffordshire, at a depth of 1 km. The BGS received four reports from residents in Stoke-on-Trent which described, "felt walls shake momentarily", "there was a very quick sudden jerk" and "we thought our neighbour had slammed his door closed" indicating an intensity of 3 EMS. A further event, with a magnitude of 1.7 ML, occurred in the same region eight days later, on 19 January. These events were located within a few kilometres of the magnitude 2.8 ML Stoke-on-Trent earthquake on 6 May 1996, which was felt with intensities of at least 4 EMS in the epicentral area.

On 18 January, at 18:33 UTC, an earthquake with a magnitude of 3.5 ML, occurred in the English Channel. It was located approximately 40 km SSE of Lizard Point, Cornwall. A further seven events occurred in the English Channel during the year, with magnitudes ranging between 1.4 ML and 2.3 ML, of which none were felt. Included in the seven other events are two events offshore Jersey, Channel Isles on 17 July and 13 October, with magnitudes of 1.4 ML and 1.5 ML, respectively, and a magnitude 2.2 ML event offshore Guernsey, Channel Isles on 8 October.

Four earthquakes occurred in County Donegal, Ireland during the year. They occurred on 26 January, 13 and 14 March and 8 September with magnitudes of 2.2 ML, 1.0 ML, 0.7 ML and 1.1 ML, respectively. All four were reported felt. The magnitude 2.2 ML event on 26 January was reported felt throughout County Donegal with intensities of at least 3 EMS, while the other three were only reported felt by one or two residents in Buncrana and Milford, with intensities of 2 EMS.

Twenty earthquakes, with magnitudes ranging between 0.9 ML and 2.8 ML, occurred on the Island of Islay, Argyll and Bute during the year. Nineteen were reported felt. The largest occurred at 09:14 UTC on 29 February (Figure 7) and was felt in the hamlets of Bowmore, Ardnave, Port Charlotte, Kilchoman, Portnahaven, Bridgend, Foreland, Bruichladdich, Sanaigmore and Ballygrant on the island. Reports described "it felt like a big lorry passing the house", "you could feel a distinct vibration" and "the whole bed shuddered" indicating an intensity of at least 3 EMS.

A magnitude 2.9 ML earthquake, with a depth of 5 km, occurred on 26 February, at 22:31 UTC, with an epicentre approximately 11 km offshore Loftus, Cleveland. A single report was received for this event, from Loftus, describing "a moderate rumbling and a faint sound". This event was located within a few kilometres of the magnitude 2.4 ML Loftus earthquake on 5 September 1989, which was felt with a maximum intensity of 5 EMS in the epicentral area.

Near Ludlow, Shropshire, an earthquake with a magnitude of 2.4 ML and a depth of 7 km, occurred at 12:16 on 1 June. The BGS received reports from a few residents in Craven Arms and Clee Saint Margaret, Shropshire, which described "the floor vibrating" and "a slight shake of the building" indicating an intensity of 3 EMS. It locates approximately 10 km NNE of the magnitude 4.8 ML Ludlow earthquake of 15 August 1926 which was felt from Plymouth to Hull, with a maximum intensity of 6 EMS in the epicentral area.

Three earthquakes, one on 29 February and another two on 4 March (08:34 and 23:23 UTC) with magnitudes of 2.4 ML, 1.8 ML and 2.8 ML, respectively, occurred near Arrochar, Argyll and Bute. All three were felt (intensity 3 EMS) by people in towns and villages throughout the region including Arrochar, Ardgartan, Tarbet, Lochgoilhead, Succoth, Cairndow, Inveraray, Strachur, Inveroaden and Craggan. Reports received described "I have never felt anything so violent before in Arrochar", "bed shook and wardrobe doors rattled", "felt like an explosion under the ground", "my husband ran downstairs alarmed after hearing a very loud bang", "thought it was a large articulated lorry passing", "seemed to be an approaching rumble from an easterly direction" and "the whole house shook quite noticeably".

At 14:59 UTC, on 2 March, an earthquake with a magnitude of 3.2 ML occurred approximately 6 km southwest of Fair Isle, Shetland. The BGS received several felt reports from residents on Fair Isle and southern Shetland who described “if it wasn’t for the horses reaction I’d have passed it of as my neighbour driving past in his lorry with a heavy load”, “many people on Fair Isle felt it, particularily the loud rumbling” and “while emptying the dishwasher, I could see the contents vibrating and could hear the cups on the shelf behind me rattle”, indicating an intensity of around 3 EMS.

An earthquake with a magnitude of 2.0 ML, and a depth of around 8 km, occurred at 15:53 UTC on 15 April, with a location 4 km NNW of Ambleside, Cumbria. An intensity of 3 EMS was assigned to this event after reports were received from a residents in Staveley, Windemere, Kentmere Troutbeck, and Patterdale describing, “a loud rumble and the ceiling creaked”, “thought it was a lorry on the road outside” and “all the windows rattled”. The location is approximately 4 km north of the magnitude 3.0 ML and 2.8 ML Ambleside earthquakes on 12 September 1988 which were felt with a maximum intensity of 5 EMS in the epicentral area.

Six earthquakes, with magnitudes ranging between 0.8 ML and 1.5 ML, occurred near Ballchulish, Highland between 14 and 25 June. All six events were felt, by one or two residents in Ballachulish and Duror, and were assigned intensities of between 2 and 3 EMS.

In Perth and Kinross, three events on 21, 22 and 30 September with magnitudes of 1.4 ML, 1.1 ML and 0.6 ML, respectively, occurred near the village of Comrie. The two larger events were felt by several residents in the village with intensities of 3 EMS.

An earthquake with a magnitude of 2.7 ML occurred on 31 October, on the Island of Jura, Argyll and Bute. A single report was received for this event, from a resident on the Island of Islay, describing “a moderate rumbling and a faint sound”, indicating an intensity of 2 EMS.

On 28 November, a magnitude 2.1 ML earthquake occurred near Patterdale, Cumbria (Figure 8). The BGS received around 40 reports, from throughout Cumbria, describing “heard a loud bang, similar to thunder”, “was like a heavy piece of furniture being dragged across the floor”, “sounded like a large lorry passing very close to the house”, “just a sound, a long, low, deep, rumble” and “thought the boiler had explode” indicating an intensity of at least 3 EMS. The epicentre is approximately 6 km north of the magnitude 2.0 ML Ambleside event which occurred earlier in the year on on 15 April. Historically, the largest event to have occurred in this area was the magnitude 3.1 ML Grasmere earthquakes on 30 June 1885 and 16 May 1911, which were both felt throughout Cumbria with maximum intensities of 5 EMS.

The coalfield areas of Nottinghamshire and South Yorkshire continued to experience shallow earthquake activity that is believed to be mining induced. Some, six coalfield events, with magnitudes ranging between 1.3 ML and 1.7 ML, were detected during the year. Local residents reported two of these events to be felt.

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Scottish Power
Scottish Water
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Institute de Physique du Globe (Paris, France)
Koninklijk Nederlands Meteorologisch Instituut (Ae de Bilt, Netherlands)
Laboratoire de Detection et de Geophysique (Bruyères-le-Châtel, France)
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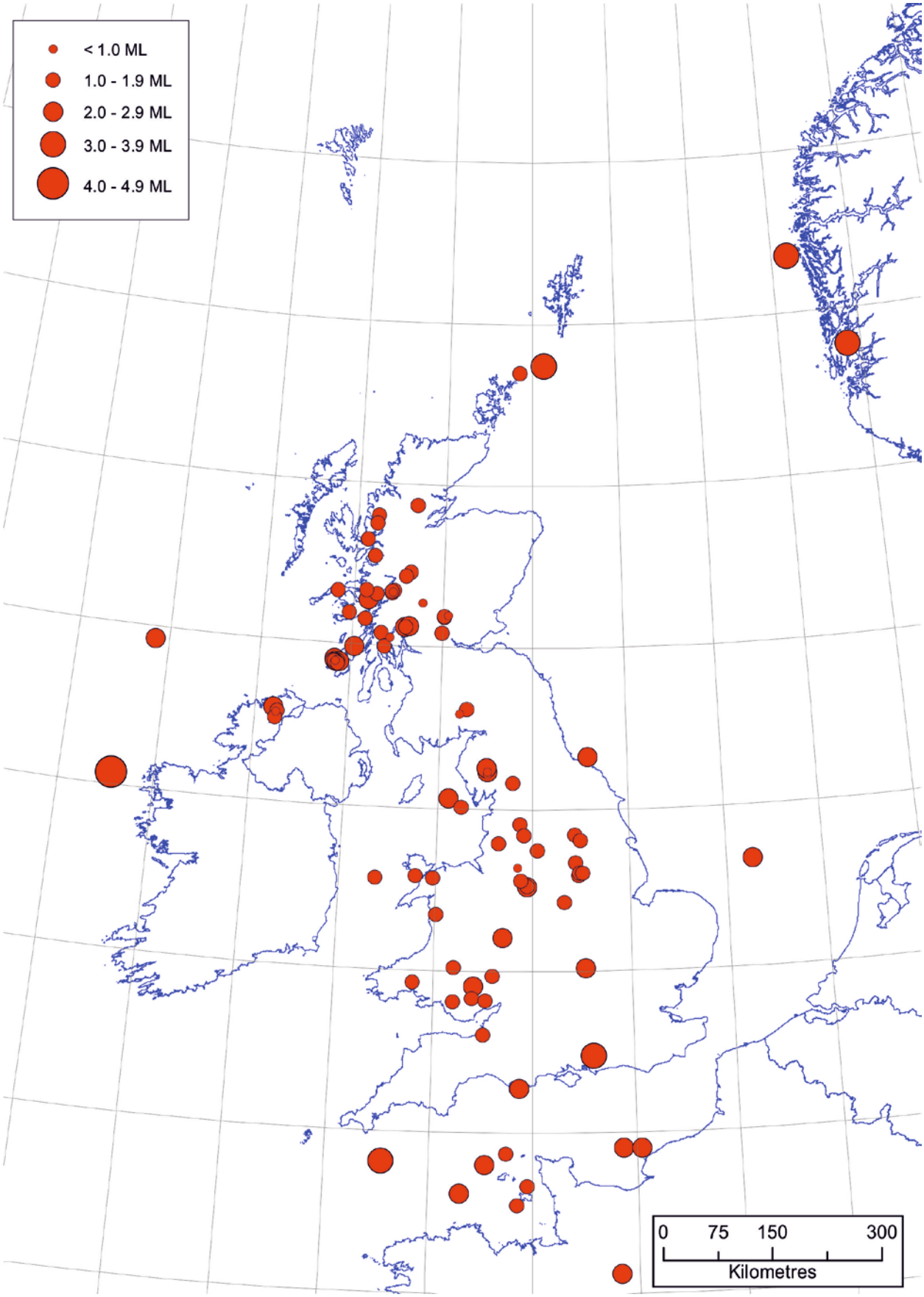

Figure 1. Epicentre map of earthquakes in 2012 as listed in Table 1.

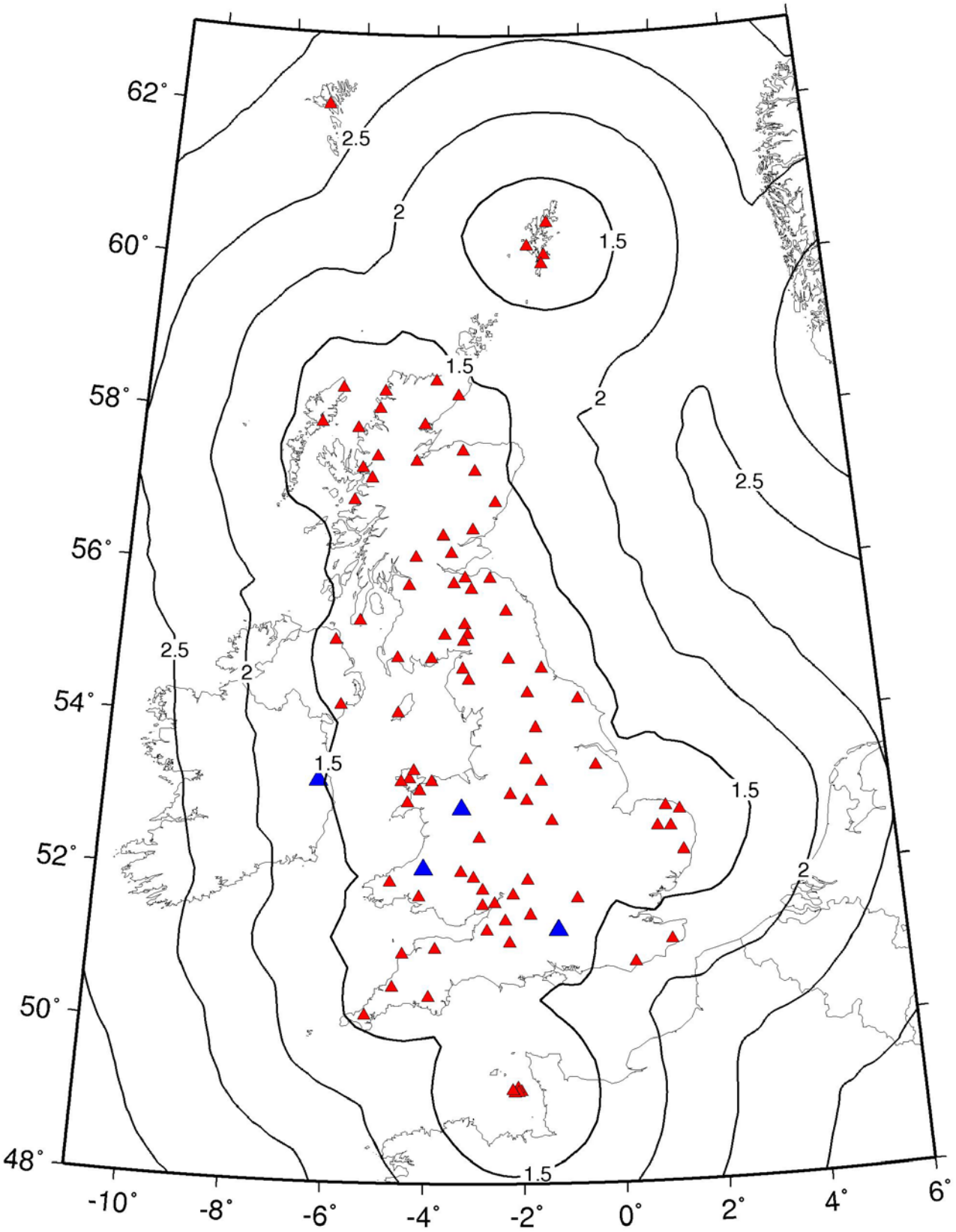

Figure 2. Seismograph stations operated by BGS during 2012 (red) along with station operated by other agencies in the British Isles and used for automatic detection (blue). The contours show earthquake detection capability in terms of Richter local magnitude (ML) calculated for average background noise conditions (4nm) where the detection criterion is that the signal has to exceed 4nm at 10Hz at 4 stations.

Figure 3. Epicentres of earthquakes with magnitudes of 2.5 ML and above, in the period 1979 to 2012.

Figure 4. Epicentres of earthquakes with magnitudes of 3.5 ML and above, in the period 1970 - 2012.

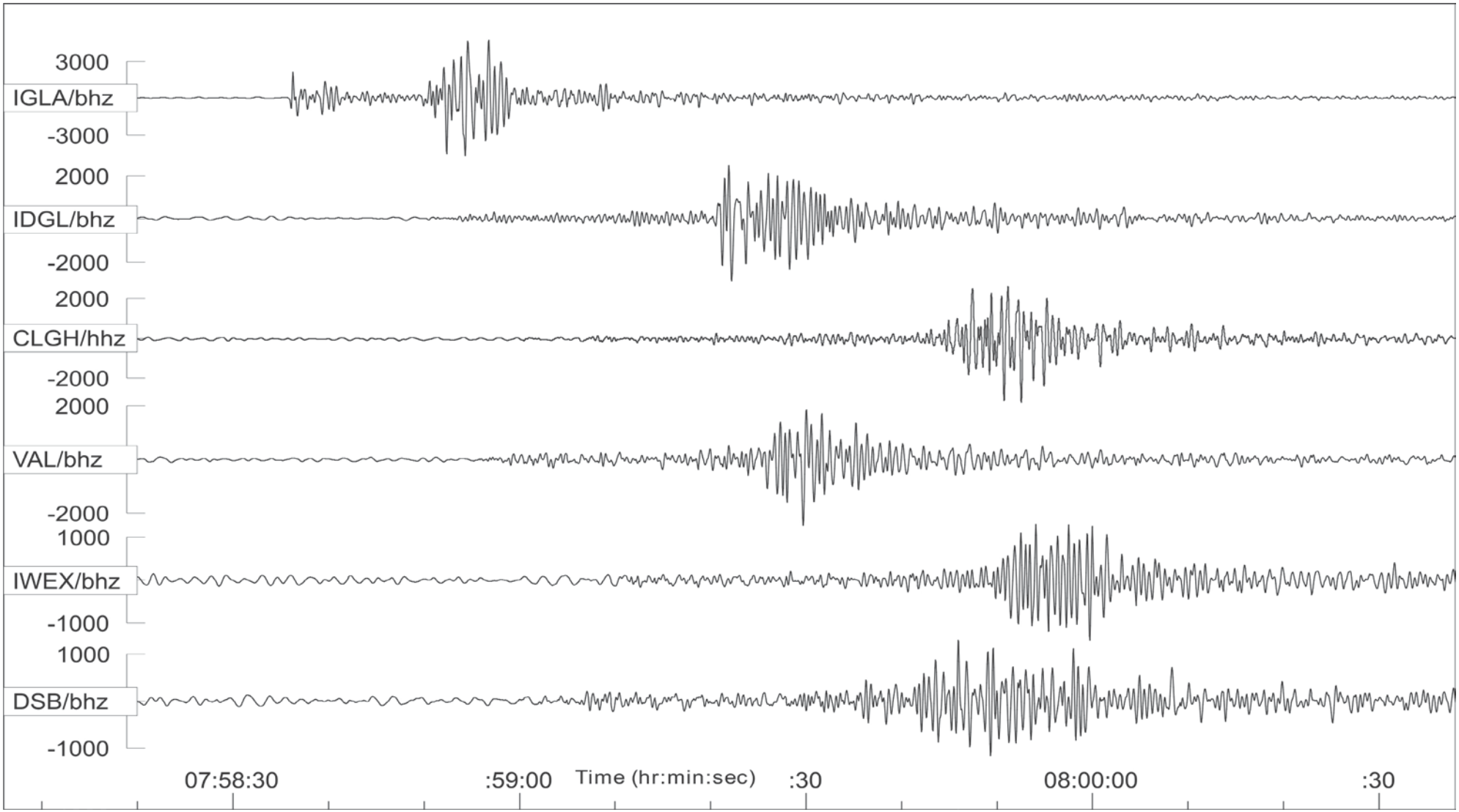

Figure 5. Seismograms of the ground displacement from the magnitude 4.0 ML West Coast of Ireland earthquake, 6 June 2012, recorded by BGS and DIAS seismograph stations.

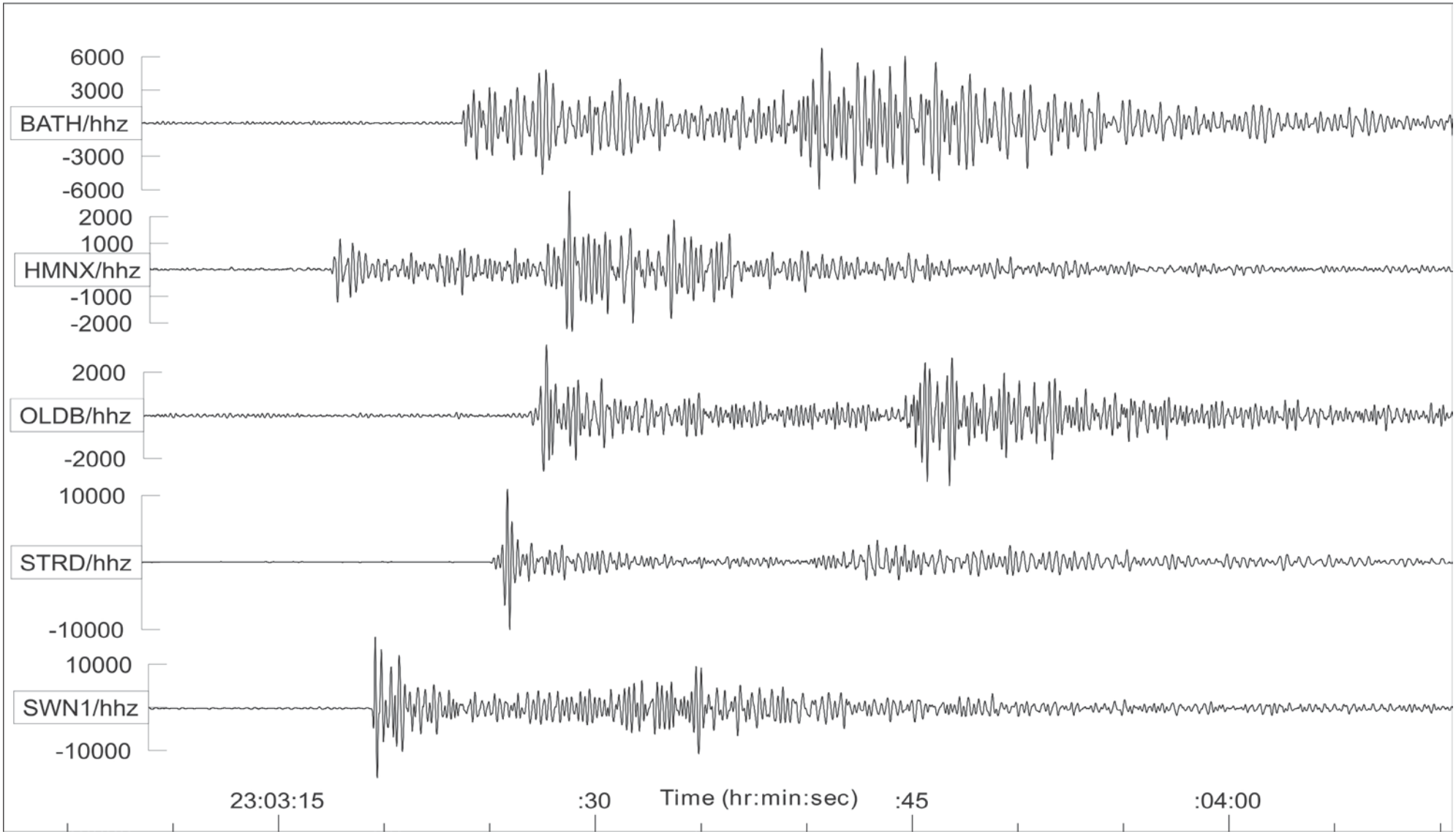

Figure 6. Seismograms of the ground displacement from the magnitude 2.9 ML Chichester, West Sussex earthquake, 14 December 2012, recorded by BGS seismograph stations.

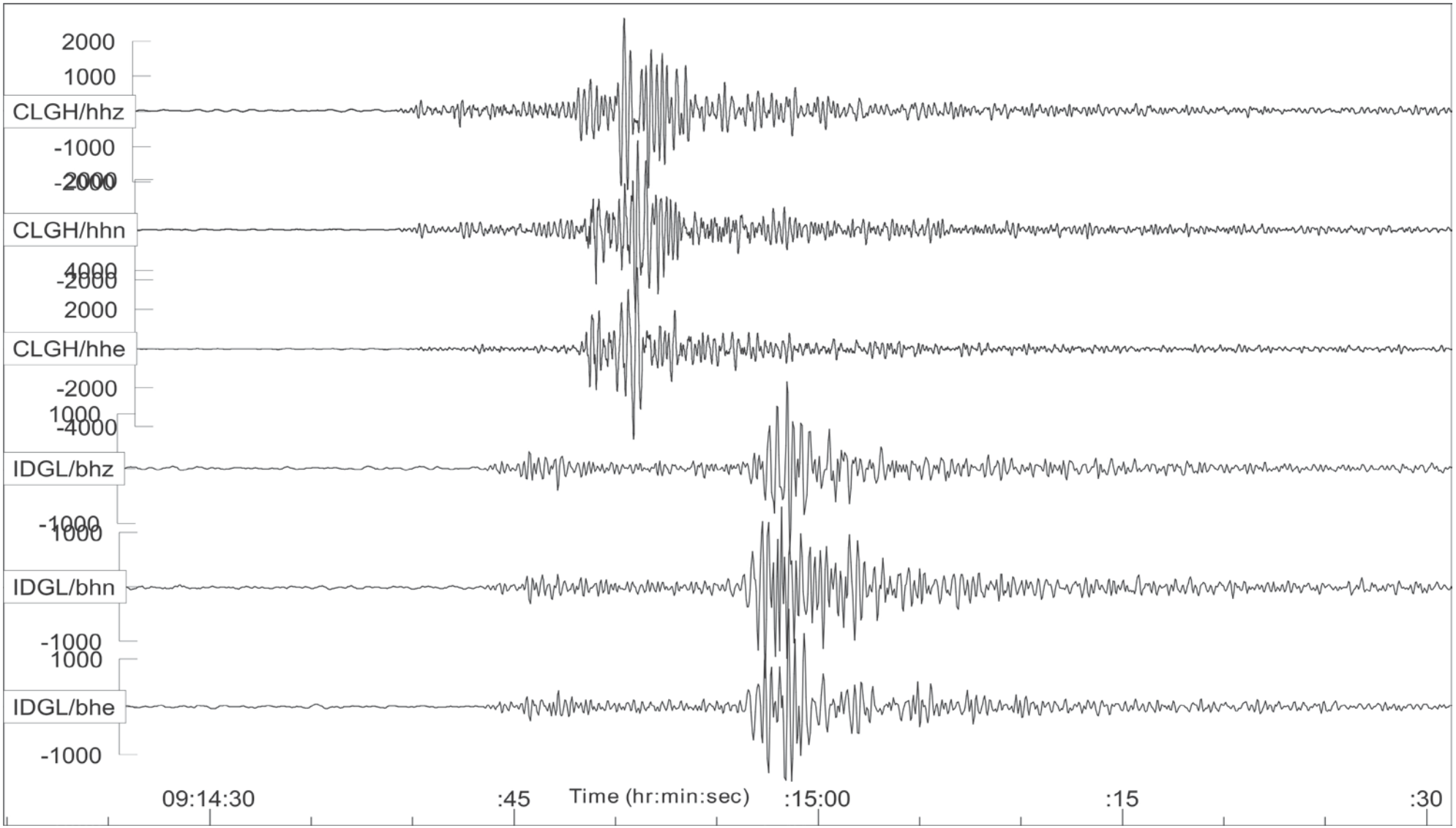

Figure 7. Seismograms of the ground displacement from the magnitude 2.8 ML Islay, Argyll and Bute earthquake, 29 February 2012, recorded by BGS and DIAS seismograph stations.

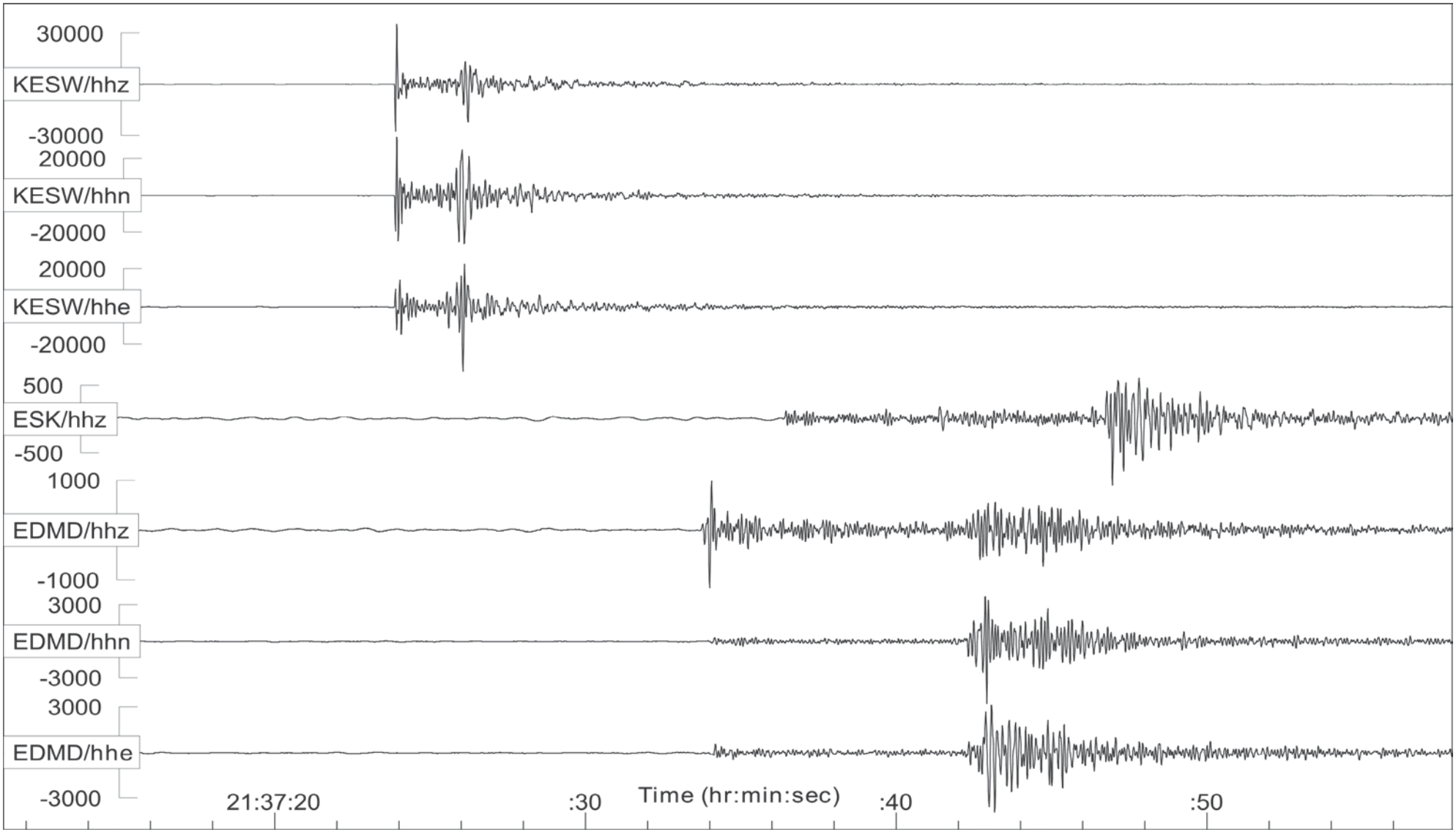

Figure 8. Seismograms of the ground displacement from the magnitude 2.1 ML Patterdale, Cumbria earthquake, 28 November 2012, recorded by BGS seismograph stations.

TABLE 1 : CATALOGUE OF EVENTS : 2012

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20120110	231327.7	54.13	-3.78	283.4	472.1	7.4	2.1	IRISH SEA		12	65	0.40	4.25	8.90	50KM SSW WHITEHAVEN
20120111	052443.3	54.33	-2.43	372.2	492.8	4.5	1.4	SEDBERGH,CUMBRIA		9	102	0.50	5.86	0.80	
20120111	120045.0	53.05	-2.13	391.6	349.8	1.0	2.4	STOKE-ON-TRENT,STAFFS	3	12	88	0.30	2.00	1.40	FELT STOKE-ON-TRENT
20120112	151328.0							SONIC - NORTHUMBERLAND	3	1					FELT NORTHUMBERLAND...
20120113	201344.0	49.74	-2.52	362.3	-17.1	4.5	1.7	ENGLISH CHANNEL		6	194	0.80	9.62	1.10	60KM NNW OF JERSEY
20120116	121150.2	51.67	-3.23	315.3	197.3	5.1	1.0	BARGOED,CAERPHILLY		4	271	0.10	4.02	2.60	2KM SSW OF BARGOED
20120118	183329.4	49.63	-4.92	189.2	-26.1	10.0	3.5	ENGLISH CHANNEL		19	238	0.40	8.64	7.50	40KM SSE LIZARD PT
20120119	181239.1	53.05	-2.13	391.3	350.7	2.4	1.7	STOKE-ON-TRENT,STAFFS		8	87	0.20	3.00	4.90	
20120126	010431.4	55.16	-7.62	42.2	599.2	3.3	2.2	BUNCRANA,IRELAND	3	13	227	0.30	8.61	3.00	FELT BUNCRANA...
20120126	155500.0							SONIC - YORKSHIRE	3	1					FELT YORKSHIRE...
20120205	151503.3	55.80	-6.37	126.3	665.0	6.4	1.5	ISLAY,ARGYLL/BUTE	3	11	152	0.40	8.35	3.30	FELT ISLAY
20120209	205935.6	59.40	-2.33	381.5	1056.7	22.3	1.3	ORKNEY ISLANDS		4	175	0.20	0.35	6.90	60KM NE OF KIRKWALL
20120219	133443.7	51.63	-2.96	333.6	193.3	12.6	1.9	PONTHIR,MONMOUTHSHIRE		10	238	0.20	4.34	2.00	
20120220	053548.9	55.78	-6.35	127.3	662.6	12.8	2.6	ISLAY,ARGYLL/BUTE	3	13	150	0.20	4.48	4.90	FELT ISLAY
20120220	071820.0	55.75	-6.32	129.1	659.2	9.2	1.4	ISLAY,ARGYLL/BUTE	2	4	258	0.10	7.28	7.50	FELT ISLAY
20120222	084013.4	53.33	2.53	701.6	391.3	11.1	2.7	SOUTHERN NORTH SEA		4	328	0.50	2.06	4.50	90KM ENE OF CROMER
20120226	223116.0	54.65	-0.84	474.9	529.0	5.0	2.9	LOFTUS,CLEVELAND	2	8	193	0.60	0.83	0.00	FELT LOFTUS
20120227	082047.3	55.78	-6.30	130.3	662.0	12.9	1.6	ISLAY,ARGYLL/BUTE	3	8	202	0.10	9.06	1.00	FELT ISLAY
20120228	140303.0							SONIC - COUNTY DURHAM	3	1					FELT COUNTY DURHAM
20120229	030030.3	56.65	-6.38	131.3	759.8	4.2	1.2	MULL,ARGYLL/BUTE		8	216	0.20	5.58	5.00	10KM NW OF CALGARY
20120229	070413.3	55.77	-6.34	127.9	661.2	10.1	1.0	ISLAY,ARGYLL/BUTE	2	3	324	0.50	5.78	0.00	FELT ISLAY
20120229	075055.3	55.78	-6.34	127.7	662.8	9.0	0.9	ISLAY,ARGYLL/BUTE	2	3	325	0.90	0.42	0.00	FELT ISLAY
20120229	091426.0	55.78	-6.34	127.8	662.4	12.3	2.8	ISLAY,ARGYLL/BUTE	3	19	150	0.20	3.14	3.40	FELT ISLAY
20120229	092508.3	55.78	-6.35	127.2	663.0	9.5	2.1	ISLAY,ARGYLL/BUTE	3	12	150	0.30	5.08	8.30	FELT ISLAY
20120229	093206.7	55.77	-6.35	127.1	661.1	10.2	1.2	ISLAY,ARGYLL/BUTE	3	5	212	0.40	2.02	9.10	FELT ISLAY
20120229	145529.2	56.23	-4.84	223.9	708.1	1.4	2.4	ARROCHAR,ARGYLL/BUTE	3	17	126	0.50	5.24	4.00	FELT ARROCHAR...
20120302	145901.3	59.48	-1.74	414.6	1066.2	9.5	3.2	FAIR ISLE,SHETLAND	3	14	163	0.30	3.20	2.60	FELT FAIR ISLE...
20120304	083406.7	56.23	-4.83	224.9	708.1	2.6	1.8	ARROCHAR,ARGYLL/BUTE	3	13	125	0.50	6.13	7.10	FELT ARROCHAR
20120304	225808.8	57.74	-4.65	242.5	875.7	7.7	1.6	DINGWALL,HIGHLAND		10	74	0.40	5.20	0 00	15KM NW OF DINGWALL
20120304	232353.7	56.24	-4.77	228.5	709.3	3.2	2.8	ARROCHAR,ARGYLL/BUTE	3	15	123	0.30	4.68	5.20	FELT ARROCHAR...
20120306	122643.9	55.77	-6.34	127.7	661.9	9.7	1.4	ISLAY,ARGYLL/BUTE	2	6	210	0.20	7.78	8.50	FELT ISLAY
20120309	010321.9	57.30	-5.76	173.7	829.4	10.6	1.0	KYLE OF LOCHALSH		4	295	0.00	1.33	0.30	
20120313	212203.1	55.11	-7.53	47.5	593.7	3.4	1.0	BUNCRANA,IRELAND	2	4	272	0.30	0.51	0.00	FELT MILFORD
20120314	000148.0	55.10	-7.56	45.6	592.1	2.9	0.7	BUNCRANA,IRELAND	2	3	290	0.10	2.28	0.00	FELT MILFORD
20120314	192228.1	59.53	5.52	824.6	1095.6	18.5	3.6	SOUTHERN NORWAY	5	19	78	0.40	4.74	3.90	FELT NORWAY
20120323	221131.2	55.78	-6.41	123.5	663.0	8.0	1.3	ISLAY,ARGYLL/BUTE		7	209	0.20	7.69	7.10	
20120324	060519.4	60.61	4.47	753.6	1209.5	28.5	3.3	SOUTHERN NORWAY		13	113	0.30	5.63	1.80	
20120330	045325.8	55.74	-6.32	128.6	658.2	10.4	1.3	ISLAY,ARGYLL/BUTE	2	5	258	0.10	6.06	4.80	FELT ISLAY

TABLE 1 : CATALOGUE OF EVENTS : 2012

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20120402	165154.2	55.78	-6.40	124.0	662.8	8.7	1.7	ISLAY,ARGYLL/BUTE	3	8	208	0.20	6.55	6.10	FELT ISLAY
20120405	170717.3	56.15	-5.37	190.9	700.4	7.5	1.5	KILMELFORD,ARGYLL/BUTE	3	9	189	0.30	9.43	8.40	FELT KILMELFORD...
20120412	171700.0							SONIC - WEST MIDLANDS	3						FELT WEST MIDLANDS...
20120413	045151.7	53.69	-1.12	457.8	421.9	3.3	1.5	HENSALL,N YORKSHIRE	3	6	179	0.40	8.25	6.60	FELT HENSALL
20120415	155122.1	54.44	-2.97	337.1	505.1	7.0	0.7	AMBLESIDE,CUMBRIA		3	214	0.20	3.34	0.00	
20120415	155303.9	54.46	-2.98	336.6	507.9	7.7	2.0	AMBLESIDE,CUMBRIA	3	11	76	0.30	2.92	2.30	FELT WINDERMERE...
20120419	074131.7	51.62	-3.60	289.1	192.5	8.0	1.2	MAESTEG,BRIDGEND		8	120	0.20	3.48	7.90	
20120420	180142.7	52.04	-0.94	472.6	238.9	13.3	2.0	MILTON KEYNES,BUCKS		11	223	0.10	1.92	1.70	10KM WEST OF MK
20120421	015821.9	56.17	-4.02	274.9	699.6	2.6	1.1	DOUNE,STIRLING		7	96	0.20	3.19	3.60	
20120421	022926.4	52.69	-3.98	266.1	312.5	9.4	1.1	BARMOUTH,GWYNEDD		7	151	0.50	7.35	3.40	
20120421	035824.3	55.17	-3.60	298.4	587.9	3.1	0.2	LOCHARBRIGGS,D & G		3	307	0.10	5.36	0.00	
20120427	043631.7	53.14	-4.06	262.2	362.6	4.0	1.3	BETHESDA,GWYNEDD		4	166	0.30	6.86	3.10	
20120507	184944.9	48.08	-2.65	351.9	-202.5	5.0	2.4	NORTHWEST FRANCE		4	303	0.40	8.29	0.00	
20120507	202017.6	53.83	-2.27	382.4	436.6	17.7	1.6	BURNLEY,LANCASHIRE		7	90	0.30	4.03	4.00	
20120511	181714.2	51.85	-4.42	233.6	219.9	5.0	1.8	CARMARTHEN,DYFED		12	171	0.30	4.25	6.60	
20120515	021852.7	54.03	-3.51	301.0	460.0	5.0	1.5	IRISH SEA		12	70	0.50	4.34	2.40	
20120515	064144.8	51.81	-3.21	316.9	212.9	11.5	2.5	RASSAU,BLAENAU GWENT		13	101	0.40	7.22	4.70	
20120519	120300.0							SONIC - JERSEY	2	1					FELT JERSEY
20120519	195019.1	54.47	-2.98	336.6	508.2	7.5	0.8	AMBLESIDE,CUMBRIA		7	265	0.30	7.25	2.90	
20120522	203649.0							SONIC - GRAMPIAN	3	1					FELT ABERDEENSHIRE
20120523	234556.5	53.62	-1.02	464.9	414.4	1.7	1.4	THORNE,SOUTH YORKSHIRE		6	158	0.30	3.12	8.40	C/F
20120525	032344.8	53.69	-2.20	387.0	421.3	7.5	1.2	BACUP,LANCASHIRE		9	84	0.50	4.75	0.20	
20120528	140745.5	55.75	-6.33	128.3	658.9	10.1	1.6	ISLAY,ARGYLL/BUTE	2	6	196	0.20	2.98	3.60	FELT ISLAY
20120530	132836.3	53.16	-4.43	237.5	365.9	7.4	1.0	ANGLESEY,NORTH WALES		8	191	0.20	3.40	2.50	2KM SW OF BODORGAN
20120601	121646.2	52.41	-2.62	357.6	279.4	7.1	2.8	LUDLOW,SHROPSHIRE	3	23	93	0.40	3.23	6.10	FELT CRAVEN ARMS...
20120602	052140.9	56.09	-5.17	202.6	693.6	7.9	0.8	LOCH FYNE,ARGYLL/BUTE		4	224	0.20	2.20	6.50	
20120604	000504.9	53.59	-2.71	352.8	410.2	8.2	1.6	WIGAN,GTR MANCHESTER		9	78	0.40	3.86	6.70	
20120606	075813.9	54.15	-10.90	-180.7	509.5	3.4	4.0	WEST COAST OF IRELAND	3	23	231	0.30	5.66	4.80	FELT COUNTY MAYO...
20120614	060628.0	56.65	-5.17	205.6	755.8	5.5	1.4	BALLACHULISH,HIGHLAND	3	7	204	0.30	9.35	2.20	FELT BALLACHULISH...
20120614	061839.1	56.66	-5.15	206.9	756.4	4.3	0.8	BALLACHULISH,HIGHLAND	2	3	202	0.30	1.40	0.00	FELT DUROR
20120617	050432.4	56.67	-5.16	206.7	758.0	4.7	1.5	BALLACHULISH,HIGHLAND	3	11	147	0.40	7.02	0.40	FELT DUROR
20120618	183533.4	56.67	-5.15	206.8	757.7	5.1	1.5	BALLACHULISH,HIGHLAND	3	8	182	0.40	9.22	5.70	FELT BALLACHULISH...
20120619	153650.5	56.68	-5.12	208.8	758.3	4.0	1.5	BALLACHULISH,HIGHLAND	3	10	145	0.30	5.98	0.80	FELT BALLACHULISH
20120623	080523.8	56.53	-4.46	248.9	740.6	2.7	0.9	GLEN LYON,PERTH/KINROSS		5	152	0.30	5.75	4.80	
20120623	081637.9	57.10	-5.59	182.8	806.6	2.6	1.1	LOCH HOURN,HIGHLAND		7	209	0.30	9.31	3.40	
20120625	133735.1	56.32	-5.74	168.8	720.3	8.4	1.4	MULL,ARGYLL/BUTE		4	237	0.20	6.51	3.20	
20120625	182933.6	56.67	-5.16	206.2	757.4	5.5	1.2	BALLACHULISH,HIGHLAND	2	7	199	0.40	0.53	3.90	FELT BALLACHULISH
20120628	203536.6	56.63	-5.51	184.7	754.5	4.5	1.2	LOCH LINNHE,HIGHLAND		5	230	0.20	2.45	3.90	5KM W OF KILMALIEU
20120705	222821.6	53.19	-1.07	462.4	366.7	2.0	1.3	EDWINSTOWE,NOTTS		6	137	0.70	6.89	7.00	C/F

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YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20120710	032724.2	48.25	-0.34	523.3	-182.4	4.3	2.7	NORTHWEST FRANCE		5	299	0.20	7.16	0.00	
20120715	085235.6	53.35	-1.12	458.7	384.1	1.1	1.7	WORKSOP,NOTTS	3	8	95	0.70	7.50	7.40	C/F,FELT CARLTON...
20120717	135401.8	49.35	-2.11	392.2	-61.5	5.7	1.4	JERSEY,CHANNEL ISLES		3	328	0.00	9.95	7.00	10KM OFFSHORE JERSEY
20120719	144347.7	55.77	-6.37	126.3	661.5	9.4	1.7	ISLAY,ARGYLL/BUTE	3	6	206	0.40	1.91	2.70	FELT ISLAY
20120720	231343.6	55.76	-6.36	126.4	660.2	6.2	1.3	ISLAY,ARGYLL/BUTE	3	5	206	0.40	0.63	0.90	FELT ISLAY
20120722	114307.2	55.81	-6.36	126.7	665.8	8.7	2.3	ISLAY,ARGYLL/BUTE	3	8	152	0.40	7.83	3.80	FELT ISLAY
20120805	212000.0	64.34	-4.45	281.8	1609.2	10.0	3.6	NORWEGIAN SEA		12	311	0.20	0.41	0.00	260KM NE FAROE ISLES
20120809	215119.7	53.19	-1.06	462.8	366.4	1.2	1.4	EDWINSTOWE,NOTTS		8	192	0.30	4.52	3.20	C/F
20120810	105916.7	56.56	-5.70	173.0	746.5	12.9	2.3	LOCHALINE,HIGHLAND	3	11	173	0.40	9.65	8.30	FELT LISMORE,OBAN
20120826	203740.6	50.55	-2.28	380.3	72.6	9.7	2.0	ENGLISH CHANNEL		11	136	0.70	0.32	5.90	13KM SE OF WEYMOUTH
20120827	125729.1	55.78	-6.37	126.0	662.4	8.0	1.6	ISLAY,ARGYLL/BUTE	3	6	206	0.40	1.94	1.40	FELT ISLAY
20120901	070412.0	55.75	-6.29	130.6	659.0	8.9	1.1	ISLAY,ARGYLL/BUTE	2	4	201	0.20	3.36	0.00	FELT ISLAY
20120902	170646.6	53.28	-2.32	378.4	376.0	8.6	0.7	OLLERTON,CHESHIRE		5	162	0.20	4.61	0.60	
20120905	160810.2	53.13	-2.26	382.5	358.8	7.9	1.1	CONGLETON,CHESHIRE		9	101	0.40	4.00	7.90	
20120908	190254.5	55.03	-7.57	44.0	584.7	1.3	1.1	COUNTY DONEGAL,IRELAND	2	4	307	0.60	6.66	7.50	FELT TAMNEY
20120917	082648.2	57.62	-5.56	187.7	864.8	2.6	1.1	TORRIDON,HIGHLAND		7	121	0.40	5.48	6.80	
20120921	092952.0	56.37	-3.97	278.3	721.5	2.1	1.4	COMRIE,PERTH/KINROSS	3	10	89	0.30	4.53	4.50	FELT COMRIE
20120922	073957.7	56.38	-3.98	277.7	722.7	2.4	1.1	COMRIE,PERTH/KINROSS	3	8	154	0.30	3.94	4.40	FELT COMRIE
20120925	171950.2	49.80	0.08	549.9	-8.8	5.0	2.1	ENGLISH CHANNEL		6	221	0.20	6.26	0.00	
20120930	062030.4	56.39	-3.88	284.1	723.4	2.1	0.6	COMRIE,PERTH/KINROSS		4	161	0.30	5.09	0.00	
20121006	123056.0	55.24	-3.44	308.5	595.0	2.5	1.1	JOHNSTONEBRIDGE,D & G		9	98	0.30	5.57	7.70	
20121008	031125.1	49.60	-2.93	332.9	-32.7	7.5	2.2	GUERNSEY,CHANNEL ISLES		6	163	0.70	3.19	8.60	OFFSHORE GUERNSEY
20121008	092858.9	53.22	-1.05	463.6	369.6	1.1	1.6	OLLERTON,NOTTS	2	7	223	0.60	9.66	1.60	C/F,FELT OLLERTON
20121010	051809.8	52.85	-1.36	443.2	328.6	11.4	1.8	CASTLE DONINGTON,LEICS		10	69	0.30	3.18	3.00	
20121012	213322.7	56.91	-4.75	232.5	783.4	7.5	1.3	SPEAN BRIDGE,HIGHLAND	2	7	147	0.30	6.40	9.20	FELT BOHUNTINE
20121013	032424.3	49.10	-2.31	377.2	-88.5	5.3	1.5	JERSEY,CHANNEL ISLES		3	264	0.00	1.00	0.80	17KM SW OF ST HELIER
20121018	151556.0							SONIC - CORNWALL/DEVON	3	1					FELT CORNWALL/DEVON
20121027	170738.8	56.38	-6.10	147.0	728.9	1.3	1.1	MULL,ARGYLL/BUTE	2	6	194	0.30	8.73	5.90	FELT PENNYGHAEL,MULL
20121031	155919.8	55.97	-5.94	154.1	682.2	7.4	2.7	JURA,ARGYLL/BUTE	2	16	180	0.40	5.89	8.60	FELT ISLAY
20121107	191012.5	55.99	-5.28	195.6	682.2	9.7	1.0	KILFINAN,ARGYLL/BUTE		4	235	0.20	6.85	5.80	4KM NE OF KILFINAN
20121108	091044.6	49.25	-3.41	297.3	-71.6	15.9	2.3	ENGLISH CHANNEL		7	216	0.30	2.79	9.30	85KM WEST OF JERSEY
20121109	194319.8	52.53	-1.00	467.8	292.6	7.5	1.7	KIBWORTH,LEICS		7	146	0.40	4.26	9.70	
20121118	163348.9	53.22	-0.98	468.0	369.2	1.2	1.4	OLLERTON,NOTTS		5	230	0.50	8.63	0.00	C/F
20121121	090822.9	55.85	-10.31	-119.7	693.3	34.3	2.7	ATLANTIC,NW OF IRELAND		10	250	0.40	8.19	9.10	190KM NW LETTERKENNY
20121122	194638.0	55.78	-6.26	132.7	661.9	12.9	2.0	ISLAY ARGYLL/BUTE	3	6	199	0.20	9.46	4.80	FELT ISLAY
20121128	213721.0	54.51	-2.99	336.2	513.4	7.5	2.1	PATTERDALE,CUMBRIA	3	17	105	0.20	2.39	1.80	FELT SOUTH CUMBRIA
20121201	102416.0	53.13	-5.25	182.4	364.2	9.6	1.1	IRISH SEA		7	180	0.20	8.98	3.40	45KM WEST HOLYHEAD
20121202	025519.5	53.49	-1.91	406.2	399.8	11.4	1.2	CROWDEN,DERBYSHIRE		6	111	0.40	1.74	2.20	
20121205	095314.1	64.41	-4.29	289.7	1617.0	20.0	3.0	NORWEGIAN SEA		4	311	0.60	7.01	0.00	260KM NE FAROE ISLES

TABLE 1 : CATALOGUE OF EVENTS : 2012

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	Gap	RMS	ERH	ERZ	Comments
20121205	130242.4	64.44	-4.26	291.3	1620.4	20.0	2.9	NORWEGIAN SEA		5	312	0.50	3.15	0.00	260KM NE FAROE ISLES
20121205	135745.0							SONIC - SOUTH WALES	3	1					FELT LLANDOVERY...
20121208	011155.9	57.51	-5.56	186.6	851.9	6.2	1.7	SHIELDAIG,HIGHLAND	3	8	109	0.30	4.25	4.50	FELT SHIELDAIG...
20121208	194908.0	52.05	-3.60	290.1	239.8	8.5	1.6	LLANWRTYD WELLS,POWYS		12	88	0.20	1.42	2.10	
20121211	192227.9	56.86	-4.85	226.0	777.8	7.5	1.6	SPEAN BRIDGE,HIGHLAND	3	10	149	0.60	9.23	8.20	FELT SPEAN BRIDGE...
20121214	230303.4	50.96	-0.82	482.6	118.3	8.6	2.9	CHICHESTER,WEST SUSSEX	3	16	110	0.40	5.59	6.90	FELT CHICHESTER...
20121229	223050.0	51.94	-2.82	343.7	227.2	14.8	1.4	PONTRILAS,HEREFORDSHIRE		6	97	0.20	2.02	1.60	15KM SSW OF HEREFORD
20121230	025231.5	51.22	-3.00	330.0	147.0	7.1	1.3	HIGHBRIDGE,SOMERSET		6	206	0.10	4.18	4.30	
20121230	033613.9	56.67	-5.74	171.1	759.9	7.7	1.4	MORVERN,HIGHLAND		5	242	0.30	2.95	0.00	5KM SSE OF SALEN

TABLE 2 : PHASE DATA

January 10 2012 Time: 23:13 27.7 UTC Magnitude: 2.1 ML
Lat: 54.131N Lon: -3.784W Depth: 7.4 km
Grid Ref: 283.44 kmE 472.06 kmN RMS: 0.40 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 50KM SSW WHITEHAVEN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	67.4	EP			23:13	38.70			-0.36
KESW	HN	67.4	ES			23:13	46.66			-0.69
KESW	HE	67.4	AML			23:13	47.64	45	0.22	
KESW	HN	67.4	AML			23:13	47.83	54	0.58	
WPS	HZ	94.0	EP			23:13	43.25			0.11
WPS	HN	94.0	ES			23:13	53.86			-0.55
WPS	HE	94.0	AML			23:13	56.02	53	0.18	
WPS	HN	94.0	AML			23:13	56.52	60	0.20	
GAL1	HZ	102.0	EP			23:13	44.77			0.44
GAL1	HE	102.0	ES			23:13	56.46			0.01
GAL1	HE	102.0	AML			23:13	57.76	15	0.30	
GAL1	HN	102.0	AML			23:13	57.92	13	0.22	
BHH	SZ	113.0	EP			23:13	46.47			0.32
BHH	SE	113.0	ES			23:13	59.70			0.10
BHH	SN	113.0	AML			23:14	01.35	80	0.20	
BHH	SE	113.0	AML			23:14	01.40	84	0.32	
ESK	HZ	137.0	EP			23:13	49.82			0.11
ESK	HE	137.0	ES			23:14	05.38			-0.38
EDMD	HZ	141.0	EP			23:13	50.38			0.11
EDMD	HN	141.0	ES			23:14	06.59			-0.15
EDMD	HN	141.0	AML			23:14	07.51	129	0.18	
EDMD	HE	141.0	AML			23:14	07.81	157	0.20	
GMM	EZ	142.0	EP			23:13	50.80			0.43
LHO	EZ	143.0	EP			23:13	51.33			0.78
HPK	HZ	143.0	EP			23:13	51.10			0.59
HPK	HN	143.0	ES			23:14	07.96			0.81
HPK	HN	143.0	AML			23:14	09.28	78	0.30	
HPK	HE	143.0	AML			23:14	09.54	52	0.20	
FOEL	HZ	144.0	EP			23:13	50.60			-0.06
FOEL	HE	144.0	ES			23:14	07.00			-0.41
FOEL	HE	144.0	AML			23:14	09.87	18	0.48	
FOEL	HN	144.0	AML			23:14	10.69	30	0.52	
LBWR	HN	158.0	ES			23:14	11.87			0.86
LBWR	HE	158.0	AML			23:14	13.40	48	0.58	
LBWR	HN	158.0	AML			23:14	13.98	56	0.36	
PGB1	HZ	192.0	EP			23:13	57.89			0.76
PGB1	HN	192.0	AML			23:14	22.55	13	0.31	
PGB1	HE	192.0	AML			23:14	23.92	9	0.32	

January 11 2012 Time: 05:24 43.3 UTC Magnitude: 1.4 ML
Lat: 54.330N Lon: -2.427W Depth: 4.5 km
Grid Ref: 372.23 kmE 492.82 kmN RMS: 0.50 secs
Locality: SEDBERGH,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	52.5	EP			05:24	51.87			-0.47
KESW	HE	52.5	ES			05:24	58.16			-0.77
KESW	HN	52.5	AML			05:24	58.36	27	0.24	
KESW	HE	52.5	AML			05:24	59.44	30	0.12	
EDMD	HZ	63.3	EP			05:24	53.78			-0.18
EDMD	HE	63.3	ES			05:25	01.38			-0.36
EDMD	HE	63.3	AML			05:25	02.57	43	0.12	
EDMD	HN	63.3	AML			05:25	02.80	39	0.12	
LCP	EZ	76.5	EP			05:24	55.96			-0.07
LHO	EZ	95.1	EP			05:24	58.96			-0.01
BHH	SZ	99.0	EP			05:25	00.30			0.77
BHH	SN	99.0	ES			05:25	12.24			0.85
BHH	SN	99.0	AML			05:25	13.63	21	0.36	
BHH	SE	99.0	AML			05:25	14.00	25	0.26	
LBWR	HZ	113.0	EP			05:25	02.04			0.28
LBWR	HE	113.0	ES			05:25	15.17			-0.07
LBWR	HN	113.0	AML			05:25	17.78	22	0.22	
LBWR	HE	113.0	AML			05:25	17.90	18	0.18	
ESK	HZ	121.0	EP			05:25	03.24			0.37
ESK	HE	121.0	ES			05:25	16.83			-0.32
ESK	HE	121.0	AML			05:25	18.13	9	0.20	
ESK	HN	121.0	AML			05:25	18.81	7	0.36	
GAL1	HZ	159.0	EP			05:25	08.92			0.57
GAL1	HN	159.0	ES			05:25	26.37			-0.27
GAL1	HN	159.0	AML			05:25	28.92	6	0.26	
GAL1	HE	159.0	AML			05:25	29.59	2	0.34	
FOEL	HZ	168.0	EP			05:25	09.72			0.06

January 11 2012 Time: 12:00 45.0 UTC Magnitude: 2.4 ML
Lat: 53.045N Lon: -2.126W Depth: 1.0 km
Grid Ref: 391.55 kmE 349.79 kmN RMS: 0.30 secs
Locality: STOKE-ON-TRENT,STAFFS
Velocity model: Lownet Xnear: 75.0 Xfar: 200.0
Comment: FELT STOKE-ON-TRENT Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	7.5	IP		D	12:00	46.84			-0.02
STNC	HN	7.5	ES			12:00	48.05			-0.20
STNC	HN	7.5	AML			12:01	03.26	14236	0.26	
STNC	HE	7.5	AML			12:01	03.27	8485	0.18	
KEELE	LN	10.9	EP	9		12:00	49.40			1.82
KEELE	LN	10.9	ES			12:00	51.42			0.11
LBWR	HZ	47.9	EP			12:00	54.03			0.15
LBWR	HE	47.9	ES			12:01	00.37			-0.02
LBWR	HN	47.9	AML			12:01	00.61	119	0.50	
LBWR	HE	47.9	AML			12:01	01.20	132	0.52	
LHO	EZ	58.6	EP			12:00	55.63			0.03
CWF	HZ	64.7	EP			12:00	56.69			0.18
CWF	HE	64.7	ES			12:01	04.51			-0.43
CWF	HN	64.7	AML			12:01	05.44	44	0.36	
CWF	HE	64.7	AML			12:01	05.45	38	0.36	
FOEL	HZ	74.2	EP			12:00	57.93			-0.10
FOEL	HN	74.2	ES			12:01	07.56			0.00
FOEL	HE	74.2	AML			12:01	10.97	30	0.52	
FOEL	HN	74.2	AML			12:01	11.19	46	0.60	
HPK	HZ	107.0	EP			12:01	03.70			0.64
HPK	HE	107.0	ES			12:01	16.06			-0.22
HPK	HE	107.0	AML			12:01	19.46	212	0.20	
HPK	HN	107.0	AML			12:01	19.50	197	0.26	
MONM	HZ	142.0	EP			12:01	08.70			0.35
MONM	HN	142.0	ES			12:01	25.68			0.25
MONM	HE	142.0	AML			12:01	28.97	177	0.32	
MONM	HN	142.0	AML			12:01	29.06	79	0.28	
WME	EZ	151.0	EP			12:01	09.73			0.12
OLDB	HN	157.0	AML			12:01	32.19	256	0.32	
OLDB	HE	157.0	AML			12:01	35.87	191	0.38	
WPS	HZ	163.0	EP			12:01	11.83			0.42
EDMD	HZ	199.0	EP			12:01	16.08			0.02
EDMD	HE	199.0	AML			12:01	41.84	45	0.20	
EDMD	HN	199.0	AML			12:01	41.99	43	0.40	

January 13 2012 Time: 20:13 44.0 UTC Magnitude: 1.7 ML
Lat: 49.745N Lon: -2.524W Depth: 4.5 km
Grid Ref: 362.25 kmE -17.05 kmN RMS: 0.80 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 200.0 Xfar: 500.0
Comment: 60KM NNW OF JERSEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JRS	EZ	68.9	EP			20:13	55.94			0.09
JRS	EE	68.9	ES			20:14	04.68			0.15
JQE	SZ	70.1	EP			20:13	55.96			-0.06
JQE	SZ	70.1	ES			20:14	04.08			-0.74
DYA	HZ	127.0	EP			20:14	03.96			-0.88
DYA	HN	127.0	ES			20:14	18.48			-1.60
DYA	HN	127.0	AML			20:14	20.99	21	0.11	
DYA	HE	127.0	AML			20:14	21.14	24	0.15	
SBD	BZ	179.0	EP			20:14	13.05			0.72
SBD	BN	179.0	ES			20:14	33.63			0.60
SBD	BN	179.0	AML			20:14	37.58	13	0.19	
SBD	BE	179.0	AML			20:14	37.91	10	0.29	
HTL	HZ	197.0	EP			20:14	15.29			0.81
HTL	HN	197.0	AML			20:14	40.80	7	0.48	
HTL	HE	197.0	AML			20:14	41.36	5	0.34	
CCA1	HZ	200.0	EP			20:14	15.83			0.92
CCA1	HE	200.0	ES			20:14	37.48			-0.02
CCA1	HE	200.0	AML			20:14	41.67	5	0.16	
CCA1	HN	200.0	AML			20:14	42.87	12	0.20	

January 16 2012 Time: 12:11 50.2 UTC Magnitude: 1.0 ML
Lat: 51.668N Lon: -3.225W Depth: 5.1 km
Grid Ref: 315.29 kmE 197.34 kmN RMS: 0.10 secs
Locality: BARGOED,CAERPHILLY
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 2KM SSW OF BARGOED

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	34.8	EP			12:11	56.47			-0.09
MONM	HE	34.8	ES			12:12	01.31			0.07
MONM	HE	34.8	AML			12:12	01.51	28	0.20	
MONM	HN	34.8	AML			12:12	01.70	21	0.18	
MCH1	HZ	39.9	EP			12:11	57.39			-0.01
MCH1	HE	39.9	ES			12:12	02.71			0.03
MCH1	HN	39.9	AML			12:12	03.00	13	0.16	
MCH1	HE	39.9	AML			12:12	03.02	20	0.18	
OLDB	HZ	46.7	EP			12:11	58.21			-0.20
BATH	HZ	67.1	EP			12:12	01.85			0.25
BATH	HN	67.1	ES			12:12	09.90			-0.05

January 18 2012 Time: 18:33 29.4 UTC Magnitude: 3.5 ML
Lat: 49.628N Lon: -4.919W Depth: 10.0 km
Grid Ref: 189.23 kmE -26.10 kmN RMS: 0.40 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: 40KM SSE LIZARD PT

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CCA1	HZ	66.0	IP		D	18:33	40.78			0.28
CCA1	HE	66.0	ES			18:33	47.87			-0.75
CCA1	HE	66.0	AML			18:33	48.23	983	0.25	
CCA1	HN	66.0	AML			18:33	49.59	990	0.48	
SBD	BZ	106.0	EP			18:33	46.74			0.10
SBD	BE	106.0	ES			18:33	59.32			0.08
DYA	HZ	114.0	IP		C	18:33	48.13			0.16
DYA	HN	114.0	ES			18:34	01.42			-0.12
DYA	HE	114.0	AML			18:34	03.31	1305	0.43	
DYA	HN	114.0	AML			18:34	04.72	933	0.32	
HTL	HZ	155.0	EP			18:33	54.21			0.46
HTL	HN	155.0	ES			18:34	11.71			0.17
HTL	HE	155.0	AML			18:34	17.75	513	0.32	

TABLE 2 : PHASE DATA

HTL	HN	155.0	AML	18:34	18.69	571	0.45	
JRS	EZ	211.0	EP	18:34	00.44			-0.39
JRS	EE	211.0	ES	18:34	23.17			-0.62
JQE	EZ	214.0	EP	18:34	01.30			0.02
HGH	EZ	269.0	EP	18:34	08.07			-0.07
OLDB	HZ	281.0	EP	18:34	09.51			-0.14
OLDB	HE	281.0	AML	18:34	52.15	803	0.38	
OLDB	HN	281.0	AML	18:34	57.99	880	0.36	
LPW	BZ	283.0	EP	18:34	10.10			0.24
MONM	HZ	288.0	EP	18:34	10.57			0.10
MONM	HE	288.0	AML	18:34	54.52	195	0.72	
MONM	HN	288.0	AML	18:34	56.53	336	0.78	
MCH1	HZ	296.0	EP	18:34	11.44			-0.11
MCH1	HE	296.0	ES	18:34	42.85			0.51
MCH1	HN	296.0	AML	18:34	57.38	136	0.30	
MCH1	HE	296.0	AML	18:34	58.36	113	0.32	
SWN1	HZ	305.0	EP	18:34	13.17			0.59
SWN1	HE	305.0	AML	18:35	09.56	297	0.52	
SWN1	HN	305.0	AML	18:35	11.61	313	0.56	
STRD	HZ	308.0	EP	18:34	13.41			0.37
STRD	HN	308.0	AML	18:35	00.18	437	0.76	
STRD	HE	308.0	AML	18:35	03.51	325	0.84	
SSW	EZ	338.0	EP	18:34	17.33			0.50
FOEL	HZ	382.0	EP	18:34	22.84			0.50
FOEL	HE	382.0	AML	18:35	17.99	60	0.58	
FOEL	HN	382.0	AML	18:35	26.94	167	0.56	
WPM1	EZ	410.0	EP	18:34	25.82			0.02
CWF	HZ	428.0	EP	18:34	27.71			-0.34
CWF	HN	428.0	AML	18:35	35.26	29	0.48	
CWF	HE	428.0	AML	18:35	35.56	30	0.34	
LBWR	HZ	475.0	EP	18:34	34.16			0.27
LBWR	HN	475.0	AML	18:35	50.50	54	0.42	
LBWR	HE	475.0	AML	18:35	51.53	114	0.66	
WACR	HZ	519.0	EP	18:34	39.51			0.20
WACR	HE	519.0	AML	18:35	34.21	29	0.22	
WACR	HN	519.0	AML	18:35	34.73	24	0.28	

January 19 2012 Time: 18:12 39.1 UTC Magnitude: 1.7 ML
Lat: 53.053N Lon: -2.130W Depth: 2.4 km
Grid Ref: 391.29 kmE 350.68 kmN RMS: 0.20 secs
Locality: STOKE-ON-TRENT,STAFFS
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
STNC	HZ	6.7	IP		D	18:12	40.66			-0.09
STNC	HN	6.7	ES			18:12	41.87			-0.09
STNC	HE	6.7	AML			18:12	57.17	5167	0.16	
STNC	HN	6.7	AML			18:12	57.19	4566	0.23	
LBWR	HZ	47.2	EP			18:12	47.85			0.20
LBWR	HE	47.2	ES			18:12	53.52			-0.38
LBWR	HE	47.2	AML			18:12	54.40	27	0.15	
LBWR	HN	47.2	AML			18:12	54.42	53	0.21	
LHO	EZ	57.7	EP			18:12	49.83			0.49
CWF	HZ	65.5	EP			18:12	50.60			0.11
CWF	HN	65.5	ES			18:12	58.67			-0.14
CWF	HE	65.5	AML			18:12	59.22	13	0.11	
CWF	HN	65.5	AML			18:12	59.23	20	0.14	
FOEL	HZ	74.2	EP			18:12	51.94			0.05
HLM1	HZ	78.2	EP			18:12	52.31			-0.20
HLM1	HE	78.2	ES			18:13	02.32			0.02
STRD	HZ	142.0	EP			18:13	03.14			0.87
MONM	HZ	143.0	EP			18:13	02.87			0.54

January 26 2012 Time: 01:04 31.4 UTC Magnitude: 2.2 ML
Lat: 55.157N Lon: -7.619W Depth: 3.3 km
Grid Ref: 42.20 kmE 599.16 kmN RMS: 0.30 secs
Locality: BUNCRANA,IRELAND
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: FELT BUNCRANA... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IDGL	BZ	11.9	EP			01:04	33.81			-0.11
IDGL	BN	11.9	ES			01:04	35.69			-0.06
GMK	EZ	131.0	EP			01:04	53.41			0.56
GMM	EZ	149.0	EP			01:04	55.29			-0.15
GMM	EZ	149.0	ES			01:05	13.12			0.14
GAL1	HZ	189.0	EP			01:05	01.20			0.30
GAL1	HN	189.0	ES			01:05	22.10			-0.33
GAL1	HE	189.0	AML			01:05	26.74	11	0.25	
GAL1	HN	189.0	AML			01:05	26.77	19	0.27	
PGB1	HZ	211.0	EP			01:05	03.32			-0.40
PGB1	HN	211.0	ES			01:05	27.08			-0.22
PGB1	HN	211.0	AML			01:05	37.17	43	0.49	
PGB1	HE	211.0	AML			01:05	39.09	28	0.54	
DSB	BZ	228.0	EP			01:05	05.72			-0.02
DSB	BN	228.0	ES			01:05	30.98			0.18
DSB	BE	228.0	AML			01:05	35.95	33	0.52	
DSB	BN	228.0	AML			01:05	38.62	20	0.48	
EAB	EZ	236.0	EP			01:05	05.91			-0.96
KPL	HZ	272.0	EP			01:05	11.21			-0.05
KPL	HN	272.0	ES			01:05	40.37			0.03
KPL	HN	272.0	AML			01:05	49.45	8	0.31	
KPL	HE	272.0	AML			01:05	54.82	10	0.35	
ESK	HZ	281.0	EP			01:05	11.54			-0.96
EDI	HZ	292.0	EP			01:05	13.54			-0.32
KESW	HZ	297.0	EP			01:05	14.40			-0.01
KAC	EZ	298.0	EP			01:05	14.26			-0.26
EDMD	HZ	364.0	EP			01:05	22.17			-0.58

February 5 2012 Time: 15:15 03.3 UTC Magnitude: 1.5 ML
Lat: 55.801N Lon: -6.368W Depth: 6.4 km
Grid Ref: 126.30 kmE 665.05 kmN RMS: 0.40 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	70.4	IP		C	15:15	15.01			-0.13
GCL	EZ	81.9	EP			15:15	16.81			-0.14
IDGL	BZ	109.0	IP		D	15:15	21.53			0.43
IDGL	BN	109.0	ES			15:15	33.70			-0.41
IDGL	BN	109.0	AML			15:15	34.64	13	0.61	
IDGL	BE	109.0	AML			15:15	36.11	11	0.34	
PGB1	HZ	118.0	EP			15:15	22.91			0.36
PGB1	HE	118.0	ES			15:15	36.76			0.14
PGB1	HN	118.0	AML			15:15	37.69	24	0.21	
PGB1	HE	118.0	AML			15:15	37.86	14	0.16	
EAB	EZ	134.0	EP			15:15	24.17			-0.73
GAL1	HZ	148.0	EP			15:15	27.65			0.77
KSB	EZ	167.0	EP			15:15	29.56			-0.15
GMM	EZ	176.0	EP			15:15	31.40			0.63
KPL	HZ	177.0	EP			15:15	30.51			-0.31
KPL	HN	177.0	ES			15:15	51.48			0.55
KPL	HN	177.0	AML			15:15	52.33	4	0.46	
KPL	HE	177.0	AML			15:15	54.22	8	0.35	
KAC	EZ	200.0	EP			15:15	33.18			-0.59
ESK	HZ	207.0	EP			15:15	34.81			0.19

February 9 2012 Time: 20:59 35.6 UTC Magnitude: 1.3 ML
Lat: 59.397N Lon: -2.325W Depth: 22.3 km
Grid Ref: 381.55 kmE 1056.75 kmN RMS: 0.20 secs
Locality: ORKNEY ISLANDS
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 60KM NE OF KIRKWALL

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SAN1	EZ	92.3	EP			20:59	49.93			-0.30
SAN1	EZ	92.3	ES			21:00	00.79			-0.16
LRW	HZ	105.0	EP			20:59	52.23			0.32
LRW	HN	105.0	ES			21:00	03.97			0.12
LRW	HN	105.0	AML			21:00	06.76	8	0.22	
LRW	HE	105.0	AML			21:00	06.80	8	0.33	
MLA1	EZ	136.0	EP			20:59	55.86			0.10
BIGH	HE	136.0	EP			20:59	55.93			0.14
BIGH	HN	136.0	ES			21:00	10.36			-0.21
BIGH	HN	136.0	AML			21:00	15.42	6	0.28	
BIGH	HZ	136.0	AML			21:00	15.81	6	0.44	

February 19 2012 Time: 13:34 43.7 UTC Magnitude: 1.9 ML
Lat: 51.634N Lon: -2.960W Depth: 12.6 km
Grid Ref: 333.57 kmE 193.29 kmN RMS: 0.20 secs
Locality: PONTHIR,MONMOUTHSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HGH	EZ	10.7	EP			13:34	47.38			0.15
MONM	HZ	25.2	EP			13:34	49.05			0.13
MONM	HE	25.2	ES			13:34	52.99			0.27
MONM	HE	25.2	AML			13:34	53.35	231	0.10	
MONM	HN	25.2	AML			13:34	53.35	223	0.10	
OLDB	HZ	28.5	EP			13:34	49.27			-0.08
OLDB	HN	28.5	ES			13:34	53.50			0.05
OLDB	HE	28.5	AML			13:34	53.91	313	0.42	
OLDB	HN	28.5	AML			13:34	54.11	516	0.34	
MCH1	HZ	40.5	EP			13:34	50.93			-0.18
MCH1	HE	40.5	ES			13:34	56.53			0.02
MCH1	HN	40.5	AML			13:34	56.66	68	0.10	
MCH1	HE	40.5	AML			13:34	56.70	170	0.18	
BATH	HZ	48.8	EP			13:34	52.24			-0.10
BATH	HN	48.8	ES			13:34	58.45			-0.18
BATH	HN	48.8	AML			13:35	01.56	173	0.36	
BATH	HE	48.8	AML			13:35	02.67	231	0.58	
STRD	HZ	57.4	EP			13:34	53.44			-0.20
STRD	HE	57.4	ES			13:35	00.60			-0.29
STRD	HN	57.4	AML			13:35	01.31	56	0.17	
STRD	HE	57.4	AML			13:35	01.43	73	0.15	
SWN1	HZ	81.5	EP			13:34	57.56			0.38
SSW	EZ	85.1	EP			13:34	58.11			0.40
HLM1	HZ	98.5	EP			13:34	59.60			-0.06
HLM1	HE	98.5	ES			13:35	11.21			-0.08
HLM1	HN	98.5	AML			13:35	13.46	19	0.20	
HLM1	HE	98.5	AML			13:35	13.68	20	0.18	
FOEL	HZ	141.0	EP			13:35	05.14			-0.53
FOEL	HE	141.0	ES			13:35	21.58			-0.12
FOEL	HN	141.0	AML			13:35	22.35	16	0.78	
FOEL	HE	141.0	AML			13:35	22.60	11	0.46	

February 20 2012 Time: 05:35 48.9 UTC Magnitude: 2.6 ML
Lat: 55.780N Lon: -6.349W Depth: 12.8 km
Grid Ref: 127.35 kmE 662.64 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

TABLE 2 : PHASE DATA

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	67.9	IP		C	05:36	00.47			0.12
CLGH	HZ	79.1	EP			05:36	02.18			0.10
CLGH	HE	79.1	ES			05:36	11.51			-0.19
CLGH	HN	79.1	AML			05:36	14.06	258	0.24	
CLGH	HE	79.1	AML			05:36	14.19	406	0.42	
IDGL	BZ	108.0	EP			05:36	06.39			0.02
IDGL	BN	108.0	ES			05:36	19.15			0.03
IDGL	BN	108.0	AML			05:36	20.45	191	0.33	
IDGL	BE	108.0	AML			05:36	21.74	264	0.42	
PGB1	HZ	117.0	EP			05:36	07.99			0.30
PGB1	HN	117.0	ES			05:36	21.45			0.04
PGB1	HN	117.0	AML			05:36	23.24	202	0.31	
PGB1	HE	117.0	AML			05:36	23.94	174	0.32	
EAB	EZ	134.0	EP			05:36	09.44			-0.63
GAL1	HZ	145.0	EP	9		05:36	13.06			1.33
KSB	EZ	169.0	EP			05:36	14.80			-0.17
KPL	HZ	179.0	EP			05:36	15.85			-0.24
KPL	HN	179.0	ES			05:36	35.95			0.01
KPL	HE	179.0	AML			05:36	39.75	68	0.38	
KPL	HN	179.0	AML			05:36	39.78	31	0.32	
KAC	EZ	202.0	EP			05:36	18.56			-0.47
IOMK	HZ	204.0	EP			05:36	18.75			-0.52
ESK	HZ	205.0	EP			05:36	18.49			-0.93
KESW	HZ	246.0	EP			05:36	24.59			0.11
DRUM	HZ	270.0	EP			05:36	26.79			-0.75
EDMD	HZ	298.0	EP			05:36	31.17			0.20

February 20 2012 Time: 07:18 20.0 UTC Magnitude: 1.4 ML
Lat: 55.750N Lon: -6.317W Depth: 9.2 km
Grid Ref: 129.14 kmE 659.18 kmN RMS: 0.10 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	64.1	EP			07:18	30.79			-0.06
CLGH	HZ	75.4	EP			07:18	32.80			0.18
CLGH	HN	75.4	ES			07:18	41.71			-0.09
CLGH	HN	75.4	AML			07:18	42.42	16	0.09	
CLGH	HE	75.4	AML			07:18	43.85	16	0.18	
PGB1	HZ	115.0	EP			07:18	38.69			-0.09
PGB1	HN	115.0	ES			07:18	52.59			0.12
PGB1	HN	115.0	AML			07:18	53.45	11	0.19	
PGB1	HE	115.0	AML			07:18	53.65	8	0.19	
EAB	EZ	133.0	EP			07:18	41.21			-0.12

February 22 2012 Time: 08:40 13.4 UTC Magnitude: 2.7 ML
Lat: 53.332N Lon: 2.530W Depth: 11.1 km
Grid Ref: 701.55 kmE 391.28 kmN RMS: 0.50 secs
Locality: SOUTHERN NORTH SEA
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: 90KM ENE OF CROMER

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WACR	HZ	144.0	EP			08:40	36.59			0.91
WACR	HN	144.0	ES			08:40	51.47			-0.50
WACR	HN	144.0	AML			08:40	55.35	69	0.22	
WACR	HE	144.0	AML			08:40	55.51	75	0.96	
LMK	HZ	190.0	EP			08:40	40.51			-0.91
LMK	HN	190.0	ES			08:41	02.42			0.52
LMK	HN	190.0	AML			08:41	05.10	209	0.26	
LMK	HE	190.0	AML			08:41	05.41	219	0.26	
CWF	HZ	266.0	EP			08:40	50.52			-0.25
CWF	HN	266.0	ES			08:41	18.27			0.19
CWF	HN	266.0	AML			08:41	28.81	28	0.42	
CWF	HE	266.0	AML			08:41	33.63	19	0.42	
MCH1	HZ	402.0	EP			08:41	07.98			0.25
MCH1	HN	402.0	ES			08:41	47.22			-0.21
MCH1	HN	402.0	AML			08:42	08.84	18	0.48	
MCH1	HE	402.0	AML			08:42	17.40	14	0.60	

February 26 2012 Time: 22:31 16.0 UTC Magnitude: 2.9 ML
Lat: 54.650N Lon: -0.839W Depth: 5.0 km
Grid Ref: 474.90 kmE 528.95 kmN RMS: 0.60 secs
Locality: LOFTUS,CLEVELAND
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: FELT LOFTUS Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EDMD	HZ	75.1	IP		D	22:31	28.64			-0.02
EDMD	HN	75.1	ES			22:31	37.67			-0.23
EDMD	HE	75.1	AML			22:31	43.08	342	0.18	
EDMD	HN	75.1	AML			22:31	43.40	571	0.27	
LMK	HZ	137.0	EP			22:31	37.95			-0.21
LMK	HN	137.0	ES			22:31	54.52			0.18
LMK	HN	137.0	AML			22:31	56.57	945	0.32	
LMK	HE	137.0	AML			22:31	56.81	650	0.44	
LBWR	HZ	151.0	EP			22:31	39.99			-0.16
LBWR	HN	151.0	ES			22:31	58.41			0.63
LBWR	HE	151.0	AML			22:32	00.63	516	0.31	
LBWR	HN	151.0	AML			22:32	01.32	552	0.32	
ESK	HZ	169.0	EP			22:31	42.34			-0.38
ESY	EZ	181.0	EP			22:31	45.53			1.27
STNC	HZ	195.0	EP	4		22:32	01.14			15.07
STNC	HN	195.0	ES	4		22:32	25.36			17.33
STNC	HE	195.0	AML			22:32	27.64	137	0.36	
STNC	HN	195.0	AML			22:32	28.34	108	0.59	
CWF	HZ	215.0	EP			22:31	46.73			-1.78
CWF	HE	215.0	ES			22:32	12.02			-0.23
CWF	HN	215.0	AML			22:32	16.08	44	0.39	
CWF	HE	215.0	AML			22:32	17.00	51	0.24	
WACR	HZ	235.0	EP			22:31	50.78			-0.23
WACR	HN	235.0	AML			22:32	28.87	37	0.25	
WACR	HE	235.0	AML			22:32	29.56	40	0.39	

February 27 2012 Time: 08:20 47.3 UTC Magnitude: 1.6 ML
Lat: 55.776N Lon: -6.301W Depth: 12.9 km
Grid Ref: 130.33 kmE 662.00 kmN RMS: 0.10 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	65.5	IP		C	08:20	58.09			-0.06
CLGH	HZ	78.1	EP			08:21	00.12			0.15
CLGH	HN	78.1	ES			08:21	09.10			-0.08
CLGH	HN	78.1	AML			08:21	11.58	48	0.22	
CLGH	HE	78.1	AML			08:21	11.63	70	0.44	
PGB1	HE	114.0	ES			08:21	18.11			0.06
PGB1	HN	114.0	AML			08:21	21.32	29	0.48	
PGB1	HE	114.0	AML			08:21	21.36	28	0.54	
EAB	EZ	131.0	EP			08:21	07.32			-0.19
GAL1	HZ	143.0	EP	9		08:21	10.71			1.57
GAL1	HN	143.0	ES			08:21	27.42			0.79
GAL1	HE	143.0	AML			08:21	29.68	4	0.16	
GAL1	HN	143.0	AML			08:21	33.07	4	0.40	
KSB	EZ	169.0	EP			08:21	12.65			0.25
KPL	HZ	179.0	EP			08:21	13.70			0.14
KPL	HE	179.0	AML			08:21	37.22	8	0.50	
KPL	HN	179.0	AML			08:21	37.67	6	0.68	
KAC	EZ	201.0	EP			08:21	16.50			0.04

February 29 2012 Time: 03:00 30.3 UTC Magnitude: 1.2 ML
Lat: 56.653N Lon: -6.384W Depth: 4.2 km
Grid Ref: 131.34 kmE 759.82 kmN RMS: 0.20 secs
Locality: MULL,ARGYLL/BUTE
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: 10KM NW OF CALGARY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KSB	EZ	85.3	EP			03:00	44.36			-0.32
KPL	HZ	88.4	EP			03:00	45.23			0.16
KPL	HN	88.4	ES			03:00	55.92			0.06
KPL	HN	88.4	AML			03:00	57.35	4	0.55	
KPL	HE	88.4	AML			03:00	59.84	6	0.18	
KAC	EZ	115.0	EP			03:00	49.17			-0.05
EAB	EZ	137.0	EP			03:00	52.84			0.34
PGB1	HE	151.0	ES			03:01	12.02			-0.14
PGB1	HN	151.0	AML			03:01	12.53	6	0.42	
PGB1	HE	151.0	AML			03:01	13.53	5	0.32	
GMK	EZ	154.0	EP			03:00	54.91			-0.03
CLGH	HZ	176.0	EP			03:00	57.88			-0.13
CLGH	HE	176.0	ES			03:01	18.29			0.06
CLGH	HE	176.0	AML			03:01	22.21	4	0.45	
CLGH	HN	176.0	AML			03:01	22.92	5	0.44	
GAL1	HZ	225.0	EP			03:01	04.22			0.08

February 29 2012 Time: 07:04 13.3 UTC Magnitude: 1.0 ML
Lat: 55.767N Lon: -6.339W Depth: 10.1 km
Grid Ref: 127.88 kmE 661.15 kmN RMS: 0.50 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	66.4	EP			07:04	24.23			-0.25
CLGH	HZ	77.5	EP			07:04	26.58			0.37
CLGH	HE	77.5	ES			07:04	35.26			-0.38
CLGH	HN	77.5	AML			07:04	37.66	7	0.24	
CLGH	HE	77.5	AML			07:04	37.73	12	0.46	
GAL1	HZ	144.0	EP			07:04	36.92			0.84
GAL1	HN	144.0	AML			07:04	54.47	6	0.68	
GAL1	HE	144.0	AML			07:04	54.77	1	0.36	

February 29 2012 Time: 07:50 55.3 UTC Magnitude: 0.9 ML
Lat: 55.782N Lon: -6.344W Depth: 9.0 km
Grid Ref: 127.67 kmE 662.84 kmN RMS: 0.90 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	67.8	EP			07:51	06.47			-0.23
CLGH	HZ	79.2	EP			07:51	08.55			0.07
CLGH	HN	79.2	ES			07:51	17.38			-0.71
CLGH	HE	79.2	AML			07:51	19.93	8	0.18	
CLGH	HN	79.2	AML			07:51	20.41	7	0.38	
GAL1	HZ	145.0	EP			07:51	19.50			1.15
GAL1	HZ	145.0	ES			07:51	37.20			
GAL1	HN	145.0	AML			07:51	37.30	2	0.74	
GAL1	HE	145.0	AML			07:51	37.40	1	0.36	

February 29 2012 Time: 09:14 26.0 UTC Magnitude: 2.8 ML
Lat: 55.778N Lon: -6.342W Depth: 12.3 km

TABLE 2 : PHASE DATA

Grid Ref: 127.77 kmE 662.39 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	67.4	IP		C	09:14	37.44			0.13
CLGH	HZ	78.7	EP			09:14	39.15			0.08
CLGH	HE	78.7	ES			09:14	48.48			-0.17
CLGH	HN	78.7	AML			09:14	50.91	374	0.11	
CLGH	HE	78.7	AML			09:14	51.18	625	0.28	
IDGL	BZ	108.0	EP			09:14	43.61			0.14
IDGL	BE	108.0	ES			09:14	56.23			-0.03
IDGL	BN	108.0	AML			09:14	57.29	187	0.41	
IDGL	BE	108.0	AML			09:14	58.76	199	0.35	
PGB1	HZ	117.0	EP			09:14	44.72			0.02
PGB1	HN	117.0	ES			09:14	58.64			0.25
PGB1	HN	117.0	AML			09:15	00.15	346	0.24	
PGB1	HE	117.0	AML			09:15	00.88	340	0.28	
EAB	EZ	133.0	EP			09:14	46.54			-0.55
GAL1	HZ	145.0	EP			09:14	48.82			0.09
GAL1	HN	145.0	ES			09:15	05.13			-0.23
GAL1	HN	145.0	AML			09:15	07.92	64	0.41	
GAL1	HE	145.0	AML			09:15	08.01	61	0.22	
KSB	EZ	169.0	EP			09:14	51.87			-0.20
GMM	EZ	173.0	EP			09:14	52.80			0.28
KPL	HZ	179.0	EP			09:14	52.83			-0.37
KPL	HN	179.0	ES			09:15	12.81			-0.28
KPL	HE	179.0	AML			09:15	16.66	129	0.32	
KPL	HN	179.0	AML			09:15	19.90	54	0.32	
EDI	HZ	198.0	EP	4		09:14	57.31			1.68
EDI	HN	198.0	ES			09:15	17.26			-0.04
EDI	HE	198.0	AML			09:15	22.07	64	0.52	
EDI	HN	198.0	AML			09:15	23.56	101	0.42	
KAC	EZ	202.0	EP			09:14	55.58			-0.55
ESK	HZ	205.0	EP			09:14	55.24			-1.21
ESK	HN	205.0	AML			09:15	23.37	58	0.32	
ESK	HE	205.0	AML			09:15	24.55	47	0.26	
MDO	EZ	221.0	EP			09:14	57.65			-0.95
EDU	EZ	224.0	EP			09:14	58.04			-0.88
ESY	EZ	234.0	EP			09:14	59.95			-0.20
KESW	HZ	245.0	EP			09:15	01.58			0.07
KESW	HN	245.0	AML			09:15	39.50	48	0.40	
KESW	HE	245.0	AML			09:15	39.66	59	0.44	
DRUM	HZ	270.0	EP			09:15	03.78			-0.81
DRUM	HN	270.0	AML			09:15	44.77	104	0.38	
DRUM	HE	270.0	AML			09:15	49.03	84	0.64	
EDMD	HZ	297.0	EP			09:15	08.03			0.03
EDMD	HN	297.0	AML			09:15	53.06	52	0.50	
EDMD	HE	297.0	AML			09:15	55.52	32	0.32	
BIGH	HZ	336.0	EP			09:15	11.54			-1.34
BIGH	HN	336.0	AML			09:16	00.86	45	0.30	
BIGH	HE	336.0	AML			09:16	08.75	76	0.36	

February 29 2012 Time: 09:25 08.3 UTC Magnitude: 2.1 ML
Lat: 55.783N Lon: -6.352W Depth: 9.5 km
Grid Ref: 127.18 kmE 662.98 kmN RMS: 0.30 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	68.3	IP		C	09:25	19.79			0.07
CLGH	HZ	79.5	EP			09:25	21.64			0.17
CLGH	HN	79.5	ES			09:25	30.79			-0.32
CLGH	HE	79.5	AML			09:25	32.94	136	0.18	
CLGH	HN	79.5	AML			09:25	33.43	129	0.30	
IDGL	BZ	108.0	EP			09:25	25.77			-0.11
IDGL	BE	108.0	ES			09:25	38.84			0.09
IDGL	BN	108.0	AML			09:25	39.84	42	0.29	
IDGL	BE	108.0	AML			09:25	41.14	59	0.39	
PGB1	HZ	117.0	IP		D	09:25	27.78			0.51
PGB1	HE	117.0	ES			09:25	41.13			-0.02
PGB1	HN	117.0	AML			09:25	42.66	83	0.43	
PGB1	HE	117.0	AML			09:25	43.17	68	0.15	
EAB	EZ	134.0	EP			09:25	29.03			-0.60
GAL1	HZ	146.0	EP			09:25	31.32			-0.02
GAL1	HN	146.0	ES			09:25	48.51			0.32
GAL1	HN	146.0	AML			09:25	50.47	8	0.36	
GAL1	HE	146.0	AML			09:25	52.58	12	0.14	
KSB	EZ	169.0	EP			09:25	34.20			-0.40
KPL	HZ	179.0	EP			09:25	35.28			-0.43
KPL	HE	179.0	AML			09:25	58.99	30	0.74	
KPL	HN	179.0	AML			09:25	59.01	16	0.80	
KAC	EZ	202.0	EP			09:25	38.05			-0.60
ESK	HZ	205.0	EP			09:25	38.01			-1.10
ESK	HN	205.0	AML			09:26	04.81	13	0.30	
ESK	HE	205.0	AML			09:26	05.50	11	0.22	
DRUM	HN	270.0	AML			09:26	27.68	21	0.46	
DRUM	HE	270.0	AML			09:26	29.76	14	0.36	
BIGH	HZ	336.0	EP			09:25	54.59			-0.82
BIGH	HN	336.0	AML			09:26	44.07	15	0.48	
BIGH	HE	336.0	AML			09:26	49.85	17	0.56	

February 29 2012 Time: 09:32 06.7 UTC Magnitude: 1.2 ML
Lat: 55.766N Lon: -6.351W Depth: 10.2 km
Grid Ref: 127.12 kmE 661.09 kmN RMS: 0.40 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	67.7	EP			09:32	17.89			-0.18
CLGH	HZ	77.8	EP			09:32	19.91			0.27
CLGH	HE	77.8	ES			09:32	28.84			-0.25
CLGH	HN	77.8	AML			09:32	31.32	18	0.30	
CLGH	HE	77.8	AML			09:32	31.38	21	0.44	
EAB	EZ	135.0	EP			09:32	28.18			-0.10
GAL1	HZ	145.0	EP			09:32	30.56			0.90
GAL1	HE	145.0	AML			09:32	47.71	2	1.04	
GAL1	HN	145.0	AML			09:32	49.98	2	0.40	
KSB	EZ	171.0	EP			09:32	32.42			-0.83

February 29 2012 Time: 14:55 29.2 UTC Magnitude: 2.4 ML
Lat: 56.233N Lon: -4.841W Depth: 1.4 km
Grid Ref: 223.93 kmE 708.12 kmN RMS: 0.50 secs
Locality: ARROCHAR,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ARROCHAR... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	31.7	EP			14:55	34.91			-0.37
PGB1	HZ	52.0	IP		C	14:55	39.13			0.44
PGB1	HN	52.0	ES			14:55	45.21			-0.42
PGB1	HN	52.0	AML			14:55	46.09	206	0.37	
PGB1	HE	52.0	AML			14:55	46.16	215	0.36	
EDI	HZ	109.0	EP			14:55	47.39			-0.06
EDI	HN	109.0	ES			14:56	01.54			0.75
EDI	HN	109.0	AML			14:56	04.32	136	0.62	
EDI	HE	109.0	AML			14:56	04.39	78	0.17	
KSB	EZ	114.0	EP			14:55	48.51			0.10
KPL	HZ	133.0	IP		D	14:55	51.67			0.50
KPL	HN	133.0	ES			14:56	06.83			-0.39
KPL	HE	133.0	AML			14:56	08.43	130	0.26	
KPL	HN	133.0	AML			14:56	10.01	166	0.32	
MDO	EZ	138.0	EP			14:55	51.77			-0.19
ESY	EZ	143.0	EP			14:55	52.36			-0.36
KAC	EZ	144.0	IP		D	14:55	52.87			0.09
ESK	HZ	145.0	IP		C	14:55	52.45			-0.50
CLGH	HZ	151.0	EP			14:55	53.66			-0.17
CLGH	HE	151.0	ES			14:56	12.39			0.57
CLGH	HE	151.0	AML			14:56	14.52	80	0.16	
CLGH	HN	151.0	AML			14:56	16.12	102	0.42	
GAL1	HZ	152.0	EP			14:55	54.37			0.36
GAL1	HE	152.0	ES			14:56	11.60			-0.53
GAL1	HE	152.0	AML			14:56	14.18	28	0.34	
GAL1	HN	152.0	AML			14:56	15.89	11	0.31	
DRUM	HZ	163.0	EP			14:55	55.59			0.00
DRUM	HN	163.0	ES			14:56	13.95			-0.91
DRUM	HE	163.0	AML			14:56	18.57	98	0.21	
DRUM	HN	163.0	AML			14:56	18.65	130	0.21	
MCD	EZ	179.0	IP		D	14:55	57.00			-0.72
MCD	EE	179.0	ES			14:56	19.84			1.30
MCD	EE	179.0	AML			14:56	20.95	157	0.32	
MCD	EN	179.0	AML			14:56	22.63	149	0.55	
IDGL	BZ	212.0	EP			14:56	00.99			-0.87
IDGL	BE	212.0	AML			14:56	34.12	17	0.17	
IDGL	BN	212.0	AML			14:56	34.14	24	0.24	
KESW	HZ	214.0	EP			14:56	02.83			0.75
EDMD	HZ	240.0	EP			14:56	05.92			0.65
BIGH	HZ	258.0	EP			14:56	06.13			-1.43

March 2 2012 Time: 14:59 01.3 UTC Magnitude: 3.2 ML
Lat: 59.482N Lon: -1.743W Depth: 9.5 km
Grid Ref: 414.56 kmE 1066.19 kmN RMS: 0.30 secs
Locality: FAIR ISLE,SHETLAND
Velocity model: North Sea Xnear: 400.0 Xfar: 600.0
Comment: FELT FAIR ISLE... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SAN1	EZ	66.1	IP		D	14:59	12.27			0.23
LRW	HZ	79.4	EP			14:59	14.33			0.15
LRW	HE	79.4	ES			14:59	23.40			-0.20
LRW	HN	79.4	AML			14:59	25.15	2629	0.16	
LRW	HE	79.4	AML			14:59	25.31	2454	0.16	
MLA1	EZ	161.0	EP			14:59	26.03			0.21
BIGH	HZ	166.0	EP			14:59	26.87			0.39
BIGH	HN	166.0	ES			14:59	44.81			-0.07
BIGH	HN	166.0	AML			14:59	53.91	211	0.38	
BIGH	HE	166.0	AML			14:59	55.83	327	0.50	
MCD	EZ	229.0	EP			14:59	34.50			0.20
MCD	EN	229.0	ES			14:59	59.07			0.65
MCD	EN	229.0	AML			15:00	11.86	129	0.52	
MCD	EE	229.0	AML			15:00	12.76	108	0.36	
MME1	EZ	252.0	EP			14:59	37.04			-0.09
MDO	EZ	274.0	EP			14:59	39.93			0.04
DRUM	HZ	289.0	EP			14:59	41.97			0.17
DRUM	HE	289.0	ES			15:00	10.82			-0.56
DRUM	HE	289.0	AML			15:00	15.68	112	0.12	
DRUM	HN	289.0	AML			15:00	27.51	70	0.60	
KAC	EZ	303.0	EP			14:59	43.00			-0.46
KPL	HZ	330.0	EP			14:59	46.52			-0.33
KPL	HE	330.0	ES			15:00	20.40			0.27

TABLE 2 : PHASE DATA

KPL	HN	330.0	AML		15:00	37.27	60	0.48
KPL	HE	330.0	AML		15:00	40.54	49	0.80
KSB	EZ	332.0	EP		14:59	46.48		-0.65
EAB	EZ	398.0	EP		14:59	55.14		-0.11
ESY	EZ	400.0	EP		14:59	55.74		0.16
PGB1	HE	440.0	AML		15:01	13.03	34	0.58
PGB1	HN	440.0	AML		15:01	19.23	34	0.46

March 4 2012 Time: 08:34 06.7 UTC Magnitude: 1.8 ML
Lat: 56.233N Lon: -4.826W Depth: 2.6 km
Grid Ref: 224.85 kmE 708.08 kmN RMS: 0.50 secs
Locality: ARROCHAR,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ARROCHAR Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	30.7	EP			08:34	12.05			-0.34
EAB	EZ	30.7	ES			08:34	15.98			-0.59
PGB1	HZ	51.6	EP			08:34	16.18			0.31
PGB1	HE	51.6	ES			08:34	22.44			-0.16
PGB1	HE	51.6	AML			08:34	23.33	41	0.36	
PGB1	HN	51.6	AML			08:34	23.33	42	0.17	
EDI	HZ	108.0	EP			08:34	24.98			0.42
EDI	HN	108.0	ES			08:34	38.46			0.83
EDI	HN	108.0	AML			08:34	41.61	21	0.29	
EDI	HE	108.0	AML			08:34	42.00	19	0.26	
KSB	EZ	115.0	EP			08:34	25.71			0.01
KPL	HZ	133.0	EP			08:34	28.73			0.26
KPL	HN	133.0	ES			08:34	44.02			-0.37
KPL	HE	133.0	AML			08:34	45.45	27	0.23	
KPL	HN	133.0	AML			08:34	47.16	26	0.19	
MDO	EZ	137.0	EP			08:34	29.30			0.13
ESY	EZ	142.0	EP			08:34	30.39			0.56
KAC	EZ	144.0	EP			08:34	29.99			-0.06
ESK	HZ	144.0	IP		C	08:34	29.63			-0.46
ESK	HE	144.0	ES			08:34	46.02			-1.17
ESK	HE	144.0	AML			08:34	48.30	10	0.22	
ESK	HN	144.0	AML			08:34	48.82	11	0.24	
CLGH	HZ	151.0	EP			08:34	30.90			-0.23
CLGH	HN	151.0	ES			08:34	48.93			-0.07
CLGH	HE	151.0	AML			08:34	51.69	25	0.18	
CLGH	HN	151.0	AML			08:34	53.37	17	0.18	
GAL1	HZ	152.0	EP			08:34	31.64			0.40
DRUM	HZ	163.0	EP			08:34	33.16			0.45
MCD	EZ	178.0	EP			08:34	34.04			-0.84
MCD	EE	178.0	AML			08:34	58.24	30	0.29	
MCD	EN	178.0	AML			08:34	59.85	24	0.19	

March 4 2012 Time: 22:58 08.8 UTC Magnitude: 1.6 ML
Lat: 57.744N Lon: -4.646W Depth: 7.7 km
Grid Ref: 242.52 kmE 875.74 kmN RMS: 0.40 secs
Locality: DINGWALL,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 150.0
Comment: 15KM NW OF DINGWALL

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MDO	EZ	37.8	IP		D	22:58	15.33			-0.24
MDO	EZ	37.8	ES			22:58	19.78			-0.74
KAC	EZ	47.6	EP			22:58	17.25			0.20
KAC	EZ	47.6	ES			22:58	22.81			-0.27
RRR	SZ	70.1	IP		C	22:58	20.86			0.35
RRR	SN	70.1	ES			22:58	28.89			-0.18
RRR	SN	70.1	AML			22:58	29.30	17	0.36	
RRR	SE	70.1	AML			22:58	33.27	16	0.24	
RSC	SZ	74.0	IP		C	22:58	21.23			0.11
RSC	SZ	74.0	ES			22:58	29.62			-0.50
KPL	HZ	75.3	EP			22:58	21.50			0.20
KPL	HN	75.3	ES			22:58	30.08			-0.35
KPL	HN	75.3	AML			22:58	33.97	20	0.21	
KPL	HE	75.3	AML			22:58	34.02	14	0.13	
KSB	EZ	75.5	EP			22:58	22.36			0.94
MCD	EZ	85.0	EP			22:58	23.38			0.51
MCD	EN	85.0	AML			22:58	36.44	23	0.12	
MCD	EE	85.0	AML			22:58	36.76	43	0.19	
BIGH	HZ	94.0	EP			22:58	24.65			0.43
BIGH	HE	94.0	ES			22:58	35.03			-0.46
BIGH	HE	94.0	AML			22:58	38.19	68	0.08	
BIGH	HN	94.0	AML			22:58	38.27	58	0.20	
DRUM	HZ	160.0	EP			22:58	35.41			1.43
DRUM	HE	160.0	AML			22:58	56.10	9	0.13	
DRUM	HN	160.0	AML			22:58	56.34	14	0.18	
EAB	EZ	174.0	EP			22:58	37.69			1.76

March 4 2012 Time: 23:23 53.7 UTC Magnitude: 2.8 ML
Lat: 56.245N Lon: -4.768W Depth: 3.2 km
Grid Ref: 228.50 kmE 709.27 kmN RMS: 0.30 secs
Locality: ARROCHAR,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ARROCHAR... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	27.5	EP			23:23	58.92			0.06
EAB	EZ	27.5	ES			23:24	02.42			-0.22
PGB1	HZ	51.4	EP			23:24	03.11			0.27
PGB1	HE	51.4	ES			23:24	09.49			-0.04
PGB1	HE	51.4	AML			23:24	10.30	367	0.38	
PGB1	HN	51.4	AML			23:24	10.33	387	0.18	
KSB	EZ	115.0	IP		D	23:24	12.65			-0.03
KPL	HZ	133.0	IP		D	23:24	15.82			0.35
KPL	HE	133.0	ES			23:24	31.12			-0.24
KPL	HE	133.0	AML			23:24	32.57	218	0.28	
KPL	HN	133.0	AML			23:24	34.16	245	0.17	
MDO	EZ	135.0	EP			23:24	15.82			-0.04
ESY	EZ	139.0	EP			23:24	16.68			0.33
ESK	HZ	143.0	IP		C	23:24	16.56			-0.28
KAC	EZ	143.0	EP			23:24	16.91			-0.03
GAL1	HZ	154.0	EP			23:24	18.56			0.17
CLGH	HZ	155.0	IP		C	23:24	17.80			-0.75
CLGH	HE	155.0	ES			23:24	36.50			-0.20
CLGH	HE	155.0	AML			23:24	38.58	144	0.20	
CLGH	HN	155.0	AML			23:24	40.26	152	0.33	
DRUM	HZ	159.0	EP			23:24	19.60			0.46
MCD	EZ	175.0	EP			23:24	21.04			-0.42
MCD	EE	175.0	AML			23:24	45.08	321	0.28	
MCD	EN	175.0	AML			23:24	46.76	285	0.54	
KESW	HZ	212.0	EP			23:24	26.32			0.21
IDGL	BZ	217.0	EP			23:24	24.91			-1.69
IDGL	BN	217.0	AML			23:24	58.29	46	0.23	
IDGL	BE	217.0	AML			23:24	58.70	30	0.21	
BIGH	HZ	256.0	EP			23:24	30.25			-1.22
BIGH	HN	256.0	AML			23:25	06.05	30	0.43	
BIGH	HE	256.0	AML			23:25	06.70	74	0.41	

March 6 2012 Time: 12:26 43.9 UTC Magnitude: 1.4 ML
Lat: 55.774N Lon: -6.343W Depth: 9.7 km
Grid Ref: 127.68 kmE 661.95 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	65.8	EP			12:26	54.92			-0.11
CLGH	HZ	76.5	EP			12:26	56.84			0.15
CLGH	HN	76.5	ES			12:27	05.94			-0.07
CLGH	HN	76.5	AML			12:27	08.31	24	0.26	
CLGH	HE	76.5	AML			12:27	08.34	31	0.48	
PGB1	HZ	117.0	EP			12:27	02.85			0.10
PGB1	HE	117.0	ES			12:27	16.48			0.00
PGB1	HN	117.0	AML			12:27	17.48	15	0.18	
PGB1	HE	117.0	AML			12:27	18.59	11	0.22	
EAB	EZ	134.0	EP			12:27	05.32			0.08
GAL1	HE	143.0	ES	4		12:27	24.33			1.30
GAL1	HN	143.0	AML			12:27	25.07	3	0.42	
GAL1	HE	143.0	AML			12:27	25.30	3	0.14	
KSB	EZ	171.0	EP			12:27	09.41			-0.97

March 9 2012 Time: 01:03 21.9 UTC Magnitude: 1.0 ML
Lat: 57.299N Lon: -5.757W Depth: 10.6 km
Grid Ref: 173.69 kmE 829.38 kmN RMS: 0.00 secs
Locality: KYLE OF LOCHALSH
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HE	7.7	IP		C	01:03	24.27			0.01
KPL	HN	7.7	ES			01:03	26.02			0.00
KPL	HN	7.7	AML			01:03	26.47	93	0.40	
KPL	HZ	7.7	AML			01:03	26.54	39	0.24	
KSB	EZ	22.5	IP		C	01:03	26.34			-0.01
KAC	EZ	35.4	IP		C	01:03	28.25			-0.01
MDO	EZ	85.3	EP			01:03	36.03			0.01

March 13 2012 Time: 21:22 03.1 UTC Magnitude: 1.0 ML
Lat: 55.112N Lon: -7.529W Depth: 3.4 km
Grid Ref: 47.53 kmE 593.71 kmN RMS: 0.30 secs
Locality: BUNCRANA,IRELAND
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: FELT MILFORD Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IDGL	BZ	4.8	EP			21:22	03.96			-0.47
IDGL	BN	4.8	ES			21:22	05.66			0.28
IDGL	BN	4.8	AML			21:22	06.13	60	0.26	
CLGH	HZ	90.6	EP			21:22	18.05			-0.31
CLGH	HN	90.6	ES			21:22	29.32			-0.17
CLGH	HN	90.6	AML			21:22	31.86	11	0.10	
CLGH	HE	90.6	AML			21:22	32.07	11	0.13	
GMK	EZ	126.0	EP			21:22	24.31			0.50
GMM	EZ	141.0	EP			21:22	26.19			0.17

March 14 2012 Time: 00:01 48.0 UTC Magnitude: 0.7 ML
Lat: 55.096N Lon: -7.557W Depth: 2.9 km
Grid Ref: 45.60 kmE 592.07 kmN RMS: 0.10 secs
Locality: BUNCRANA,IRELAND
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: FELT MILFORD Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IDGL	BZ	7.3	EP			00:01	49.65			-0.11
IDGL	BN	7.3	ES			00:01	51.07			0.05
IDGL	BN	7.3	AML			00:01	51.34	16	0.20	
CLGH	HZ	91.6	EP			00:02	03.48			0.05
CLGH	HN	91.6	ES			00:02	14.61			-0.06
CLGH	HN	91.6	AML			00:02	17.11	6	0.40	
CLGH	HE	91.6	AML			00:02	17.27	6	0.14	
GMK	EZ	130.0	EP			00:02	09.36			0.07

TABLE 2 : PHASE DATA

March 14 2012 Time: 19:22 28.1 UTC Magnitude: 3.6 ML
Lat: 59.530N Lon: 5.517W Depth: 18.5 km
Grid Ref: 824.58 kmE 1095.56 kmN RMS: 0.40 secs
Locality: SOUTHERN NORWAY
Velocity model: North Sea Xnear: 350.0 Xfar: 700.0
Comment: FELT NORWAY Intensity: 5

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
BER	HZ	95.7	EP			19:22	43.59			0.16
BER	HE	95.7	ES			19:22	54.89			0.25
BER	HN	95.7	AML			19:22	56.52	885	0.25	
BER	HE	95.7	AML			19:22	56.66	1216	0.22	
KONO	BZ	231.0	EP			19:23	00.44			-0.04
MOL	HZ	356.0	IP		C	19:23	15.34			-0.68
MOL	HE	356.0	ES			19:23	51.25			0.23
MOL	HE	356.0	AML			19:24	05.55	147	0.14	
MOL	HN	356.0	AML			19:24	09.22	191	0.38	
LRW	HZ	381.0	EP			19:23	18.76			-0.39
LRW	HE	381.0	ES			19:23	56.50			0.07
LRW	HE	381.0	AML			19:23	59.97	20	0.14	
LRW	HN	381.0	AML			19:24	05.22	19	0.14	
MUD	HZ	404.0	EP			19:23	22.38			0.38
MUD	HN	404.0	AML			19:24	29.74	300	0.75	
MUD	HE	404.0	AML			19:24	29.93	248	0.74	
BIGH	HE	553.0	AML			19:24	41.29	52	0.30	
MME1	EZ	553.0	EP			19:23	40.46			-0.06
BIGH	HN	553.0	AML			19:24	37.60	59	0.42	
DRUM	HZ	553.0	EP			19:23	40.62			0.16
DRUM	HE	553.0	ES			19:24	33.66			0.35
DRUM	HE	553.0	AML			19:24	43.49	32	0.34	
DRUM	HN	553.0	AML			19:24	44.13	43	0.35	
BIGH	HZ	553.0	EP			19:23	40.28			-0.23
BIGH	HN	553.0	ES			19:24	32.77			-0.62
MCD	EZ	554.0	EP			19:23	40.38			-0.26
MCD	EE	554.0	ES			19:24	34.90			1.28
MCD	EE	554.0	AML			19:24	45.40	25	0.28	
MCD	EN	554.0	AML			19:24	48.26	32	0.52	
MDO	EZ	621.0	EP			19:23	48.82			-0.10
ESY	EZ	629.0	EP			19:23	49.06			-0.88
KAC	EZ	669.0	EP			19:23	53.72			-1.15
KSB	EZ	689.0	EP			19:23	56.52			-0.92
EDMD	HZ	691.0	EP			19:23	56.36			-1.22
EDMD	HE	691.0	ES			19:25	02.50			-0.42
EDMD	HE	691.0	AML			19:25	06.90	33	0.24	
EDMD	HN	691.0	AML			19:25	12.19	32	0.28	
EAB	EZ	692.0	EP			19:23	57.81			0.02
ESK	HZ	702.0	EP			19:23	57.44			-1.60
GAL1	HZ	806.0	EP			19:24	10.72			-1.17
FOEL	HZ	914.0	EP			19:24	24.07			-1.33
HLM1	HZ	938.0	EP			19:24	27.23			-1.14

March 23 2012 Time: 22:11 31.2 UTC Magnitude: 1.3 ML
Lat: 55.781N Lon: -6.411W Depth: 8.0 km
Grid Ref: 123.47 kmE 662.99 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	70.7	EP			22:11	43.01			-0.08
CLGH	HZ	80.0	EP			22:11	44.82			0.28
CLGH	HN	80.0	ES			22:11	54.05			-0.19
CLGH	HE	80.0	AML			22:11	56.45	25	0.34	
CLGH	HN	80.0	AML			22:11	56.50	20	0.18	
PGB1	HZ	121.0	EP			22:11	50.86			-0.01
PGB1	HN	121.0	ES			22:12	05.13			-0.07
PGB1	HN	121.0	AML			22:12	05.54	9	0.22	
PGB1	HE	121.0	AML			22:12	05.64	9	0.20	
EAB	EZ	137.0	EP			22:11	53.27			0.06
GAL1	HZ	148.0	EP			22:11	54.59			-0.18
GAL1	HE	148.0	ES			22:12	12.34			0.40
GAL1	HN	148.0	AML			22:12	14.31	2	0.14	
GAL1	HE	148.0	AML			22:12	14.52	3	0.10	
KSB	EZ	170.0	EP			22:11	57.51			-0.39
KPL	HZ	180.0	EP			22:11	58.77			-0.21
KPL	HE	180.0	AML			22:12	21.98	2	0.44	
KPL	HN	180.0	AML			22:12	30.15	2	0.88	

March 24 2012 Time: 06:05 19.4 UTC Magnitude: 3.3 ML
Lat: 60.613N Lon: 4.467W Depth: 28.5 km
Grid Ref: 753.60 kmE 1209.53 kmN RMS: 0.30 secs
Locality: SOUTHERN NORWAY
Velocity model: North Sea Xnear: 350.0 Xfar: 700.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
BER	HZ	54.2	IP		D	06:05	29.18			0.27
BER	HN	54.2	ES			06:05	35.72			-0.16
BER	HE	54.2	AML			06:05	36.15	606	0.35	
BER	HN	54.2	AML			06:05	36.78	814	0.25	
FOO	HZ	114.0	EP			06:05	36.32			0.03
MOL	HZ	273.0	EP			06:05	55.45			-0.55
MOL	HN	273.0	ES			06:06	22.88			0.13
MOL	HN	273.0	AML			06:06	23.94	248	0.10	
MOL	HE	273.0	AML			06:06	24.21	172	0.16	
KONO	BZ	305.0	EP			06:06	00.17			0.17
LRW	HZ	316.0	EP			06:06	01.95			0.58
LRW	HN	316.0	ES			06:06	32.15			0.11
LRW	HE	316.0	AML			06:06	33.96	22	0.40	
LRW	HN	316.0	AML			06:06	43.26	15	0.26	
SAN1	EZ	322.0	EP			06:06	02.00			-0.17
MLA1	EZ	513.0	ES			06:07	14.09			-0.25
BIGH	HZ	529.0	EP			06:06	28.04			0.21
BIGH	HE	529.0	ES			06:07	17.07			-0.74
BIGH	HE	529.0	AML			06:07	19.13	50	0.24	
BIGH	HN	529.0	AML			06:07	19.26	91	0.42	
MCD	EZ	556.0	EP			06:06	30.86			-0.37
MCD	EE	556.0	ES			06:07	23.42			-0.26
MCD	EE	556.0	AML			06:07	24.31	40	0.44	
MCD	EN	556.0	AML			06:07	24.50	33	0.41	
MME1	EZ	563.0	ES			06:07	24.78			-0.48
DRUM	HZ	575.0	EP			06:06	33.81			0.17
DRUM	HN	575.0	ES			06:07	27.46			-0.40
DRUM	HE	575.0	AML			06:07	30.21	35	0.58	
DRUM	HN	575.0	AML			06:07	30.35	47	0.34	
KAC	EZ	658.0	EP			06:06	43.51			-0.39
KPL	HZ	686.0	EP			06:06	47.02			-0.30
KPL	HN	686.0	ES			06:07	50.28			-1.24
KPL	HN	686.0	AML			06:07	53.20	7	0.20	
KPL	HE	686.0	AML			06:07	55.25	7	0.42	

March 30 2012 Time: 04:53 25.8 UTC Magnitude: 1.3 ML
Lat: 55.741N Lon: -6.324W Depth: 10.4 km
Grid Ref: 128.64 kmE 658.20 kmN RMS: 0.10 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	63.7	EP			04:53	36.55			-0.03
CLGH	HZ	74.5	EP			04:53	38.45			0.18
CLGH	HE	74.5	ES			04:53	47.28			-0.08
CLGH	HN	74.5	AML			04:53	48.16	18	0.13	
CLGH	HE	74.5	AML			04:53	49.61	19	0.13	
PGB1	HZ	116.0	EP			04:53	44.47			-0.09
PGB1	HE	116.0	ES			04:53	58.38			0.14
PGB1	HN	116.0	AML			04:53	59.17	14	0.18	
PGB1	HE	116.0	AML			04:53	59.89	14	0.24	
EAB	EZ	134.0	EP			04:53	46.99			-0.15
GAL1	HZ	141.0	EP			04:53	48.10			-0.10
GAL1	HN	141.0	ES			04:54	04.50			-0.03
GAL1	HN	141.0	AML			04:54	07.05	2	0.48	
GAL1	HE	141.0	AML			04:54	07.48	2	0.26	

April 2 2012 Time: 16:51 54.2 UTC Magnitude: 1.7 ML
Lat: 55.780N Lon: -6.403W Depth: 8.7 km
Grid Ref: 123.96 kmE 662.85 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
GMK	EZ	70.3	EP			16:52	05.81			-0.16
CLGH	HZ	79.8	EP			16:52	07.57			0.11
CLGH	HN	79.8	ES			16:52	17.06			-0.08
CLGH	HE	79.8	AML			16:52	18.89	53	0.17	
CLGH	HN	79.8	AML			16:52	19.39	62	0.10	
PGB1	HZ	120.0	EP			16:52	13.75			0.04
PGB1	HN	120.0	ES			16:52	28.01			0.05
PGB1	HN	120.0	AML			16:52	28.51	32	0.24	
PGB1	HE	120.0	AML			16:52	29.18	26	0.30	
EAB	EZ	137.0	EP			16:52	16.06			0.01
GAL1	HZ	148.0	EP			16:52	18.16			0.54
GAL1	HN	148.0	ES			16:52	34.57			-0.15
GAL1	HN	148.0	AML			16:52	35.47	7	0.41	
GAL1	HE	148.0	AML			16:52	36.27	6	0.16	
KSB	EZ	170.0	EP			16:52	20.46			-0.32
KPL	HZ	180.0	EP			16:52	21.54			-0.32
KPL	HE	180.0	AML			16:52	44.92	8	0.40	
KPL	HN	180.0	AML			16:52	49.66	6	0.26	
KAC	EZ	203.0	EP			16:52	24.08			-0.75

April 5 2012 Time: 17:07 17.3 UTC Magnitude: 1.5 ML
Lat: 56.150N Lon: -5.367W Depth: 7.5 km
Grid Ref: 190.89 kmE 700.35 kmN RMS: 0.30 secs
Locality: KILMELFORD,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT KILMELFORD... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	64.1	IP		C	17:07	28.13			0.03
PGB1	HZ	66.8	EP			17:07	28.64			0.15
PGB1	HN	66.8	ES			17:07	36.36			-0.33
PGB1	HN	66.8	AML			17:07	36.89	20	0.21	
PGB1	HE	66.8	AML			17:07	37.15	23	0.30	
KSB	EZ	118.0	EP			17:07	36.51			0.02
KPL	HZ	134.0	EP			17:07	38.87			0.18
KPL	HE	134.0	ES			17:07	54.23			-0.11
KPL	HN	134.0	AML			17:08	00.27	7	0.06	
KPL	HE	134.0	AML			17:08	00.74	13	0.51	
EDI	HZ	138.0	EP			17:07	40.03			0.66
GAL1	HZ	149.0	EP			17:07	40.85			-0.03
KAC	EZ	150.0	EP			17:07	40.70			-0.42
ESK	HZ	164.0	EP			17:07	42.56			-0.59
ECK	EZ	177.0	EP			17:07	45.76			0.93

TABLE 2 : PHASE DATA

April 13 2012 Time: 04:51 51.7 UTC Magnitude: 1.5 ML
Lat: 53.690N Lon: -1.125W Depth: 3.3 km
Grid Ref: 457.77 kmE 421.89 kmN RMS: 0.40 secs
Locality: HENSALL,N YORKSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT HENSALL Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HPK	HZ	44.4	EP			04:51	59.39			-0.32
HPK	HE	44.4	ES			04:52	05.47			-0.10
HPK	HN	44.4	AML			04:52	10.64	27	0.72	
HPK	HE	44.4	AML			04:52	15.53	27	0.80	
LHO	EZ	50.9	EP			04:52	00.66			-0.14
LBWR	HZ	51.1	EP			04:52	01.41			0.60
LBWR	HE	51.1	ES			04:52	07.21			-0.26
LBWR	HN	51.1	AML			04:52	09.06	63	0.30	
LBWR	HE	51.1	AML			04:52	12.41	38	0.40	
STNC	HZ	98.1	EP			04:52	08.75			0.69
STNC	HE	98.1	ES			04:52	20.13			0.11
STNC	HN	98.1	AML			04:52	25.36	20	0.46	
STNC	HE	98.1	AML			04:52	26.27	27	0.56	
CWF	HZ	107.0	EP			04:52	09.16			-0.22
CWF	HE	107.0	ES			04:52	21.69			-0.61
CWF	HE	107.0	AML			04:52	24.88	19	0.60	
CWF	HN	107.0	AML			04:52	25.51	13	0.48	
WACR	HZ	159.0	EP			04:52	18.02			0.89
WACR	HN	159.0	AML			04:52	39.58	10	0.34	
WACR	HE	159.0	AML			04:52	43.22	7	0.30	

April 15 2012 Time: 15:51 22.1 UTC Magnitude: 0.7 ML
Lat: 54.437N Lon: -2.970W Depth: 7.0 km
Grid Ref: 337.09 kmE 505.07 kmN RMS: 0.20 secs
Locality: AMBLESIDE,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	19.1	EP			15:51	26.16			0.27
KESW	HN	19.1	ES			15:51	28.59			-0.06
KESW	HE	19.1	AML			15:51	28.95	12	0.10	
KESW	HN	19.1	AML			15:51	29.11	16	0.16	
SPK	EE	33.6	ES			15:51	32.67			-0.16
EDMD	HZ	78.5	EP			15:51	35.58			0.28
EDMD	HE	78.5	ES			15:51	44.61			-0.32
EDMD	HN	78.5	AML			15:51	44.88	4	0.12	
EDMD	HE	78.5	AML			15:51	45.26	4	0.24	

April 15 2012 Time: 15:53 03.9 UTC Magnitude: 2.0 ML
Lat: 54.462N Lon: -2.978W Depth: 7.7 km
Grid Ref: 336.61 kmE 507.86 kmN RMS: 0.30 secs
Locality: AMBLESIDE,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT WINDERMERE... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	16.2	IP		D	15:53	07.50			0.22
KESW	HE	16.2	ES			15:53	10.07			0.30
KESW	HE	16.2	AML			15:53	10.44	373	0.22	
KESW	HN	16.2	AML			15:53	10.65	367	0.19	
SPK	EZ	33.2	IP		C	15:53	09.89			0.02
SPK	EN	33.2	ES			15:53	14.19			-0.06
SPK	EN	33.2	AML			15:53	14.37	221	0.14	
SPK	EE	33.2	AML			15:53	15.20	196	0.24	
EDMD	HZ	77.4	IP		C	15:53	16.93			0.23
EDMD	HN	77.4	ES			15:53	25.77			-0.30
EDMD	HN	77.4	AML			15:53	26.29	125	0.20	
EDMD	HE	77.4	AML			15:53	26.49	97	0.12	
ECK	EZ	80.6	EP			15:53	17.84			0.58
ESK	HZ	96.2	EP			15:53	19.35			-0.32
ESK	HE	96.2	ES			15:53	30.79			-0.41
ESK	HE	96.2	AML			15:53	31.82	17	0.33	
ESK	HN	96.2	AML			15:53	32.45	12	0.10	
HPK	HZ	105.0	EP			15:53	21.12			0.14
HPK	HE	105.0	ES			15:53	33.08			-0.39
HPK	HN	105.0	AML			15:53	35.75	115	0.18	
HPK	HE	105.0	AML			15:53	35.84	99	0.18	
IOMK	HZ	106.0	EP			15:53	21.18			0.06
IOMK	HN	106.0	ES			15:53	33.20			-0.51
IOMK	HE	106.0	AML			15:53	34.15	19	0.16	
IOMK	HN	106.0	AML			15:53	35.12	40	0.24	
GAL1	HZ	121.0	EP			15:53	23.51			0.10
LBWR	HZ	144.0	EP			15:53	27.13			0.29
LBWR	HE	144.0	ES			15:53	43.90			0.30
LBWR	HE	144.0	AML			15:53	49.07	43	0.26	
LBWR	HN	144.0	AML			15:53	49.91	57	0.26	
WPS	HZ	155.0	EP			15:53	28.95			0.64
WPS	HE	155.0	AML			15:53	48.82	18	0.14	
WPS	HN	155.0	AML			15:53	50.73	13	0.20	
FOEL	HE	176.0	AML			15:53	54.00	11	0.74	
FOEL	HN	176.0	AML			15:53	54.59	20	0.42	

April 19 2012 Time: 07:41 31.7 UTC Magnitude: 1.2 ML
Lat: 51.620N Lon: -3.602W Depth: 8.0 km
Grid Ref: 289.11 kmE 192.51 kmN RMS: 0.20 secs
Locality: MAESTEG,BRIDGEND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HGH	EZ	55.2	EP			07:41	40.98			-0.14
MCH1	HZ	59.2	IP		C	07:41	41.38			-0.35
MCH1	HN	59.2	ES			07:41	48.78			-0.29
MCH1	HE	59.2	AML			07:41	49.08	9	0.10	
MCH1	HN	59.2	AML			07:41	49.12	13	0.26	
MONM	HZ	60.3	EP			07:41	41.99			0.10
MONM	HE	60.3	ES			07:41	49.32			-0.03
MONM	HE	60.3	AML			07:41	50.73	12	0.17	
MONM	HN	60.3	AML			07:41	51.74	13	0.18	
LPW	BZ	63.6	EP			07:41	42.70			0.30
OLDB	HZ	73.0	EP			07:41	43.95			0.12
BATH	HZ	90.6	EP			07:41	46.90			0.31
HTL	HZ	92.9	EP			07:41	47.17			0.24
HTL	HN	92.9	ES			07:41	57.66			-0.41
HTL	HE	92.9	AML			07:41	58.38	4	0.36	
HTL	HN	92.9	AML			07:41	58.40	5	0.49	
STRD	HZ	101.0	EP			07:41	48.37			0.15
STRD	HE	101.0	ES			07:42	00.31			0.01
STRD	HE	101.0	AML			07:42	01.33	27	0.30	
STRD	HN	101.0	AML			07:42	01.38	29	0.47	

April 20 2012 Time: 18:01 42.7 UTC Magnitude: 2.0 ML
Lat: 52.043N Lon: -0.941W Depth: 13.3 km
Grid Ref: 472.62 kmE 238.87 kmN RMS: 0.10 secs
Locality: MILTON KEYNES,BUCKS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 10KM WEST OF MK

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SKP	EZ	36.9	EP			18:01	49.32			-0.04
SSW	EZ	63.0	EP			18:01	53.52			0.15
SWN1	HZ	83.6	EP			18:01	56.46			-0.08
SWN1	HN	83.6	ES			18:02	06.73			0.06
SWN1	HE	83.6	AML			18:02	07.40	37	0.19	
SWN1	HN	83.6	AML			18:02	07.44	41	0.18	
STRD	HZ	89.1	IP		C	18:01	57.30			-0.09
STRD	HE	89.1	ES			18:02	08.08			-0.07
STRD	HE	89.1	AML			18:02	08.64	49	0.13	
STRD	HN	89.1	AML			18:02	08.80	86	0.39	
BATH	HZ	117.0	EP			18:02	01.34			-0.02
OLDB	HZ	119.0	IP		D	18:02	01.72			0.10
OLDB	HE	119.0	ES			18:02	15.42			-0.04
OLDB	HE	119.0	AML			18:02	16.78	117	0.40	
OLDB	HN	119.0	AML			18:02	17.13	158	0.32	
MONM	HZ	130.0	EP			18:02	03.45			0.18
HGH	EZ	136.0	EP			18:02	04.12			-0.03
MCH1	HZ	141.0	IP		D	18:02	04.97			0.09
MCH1	HN	141.0	ES			18:02	21.16			0.05
MCH1	HE	141.0	AML			18:02	22.55	32	0.13	
MCH1	HN	141.0	AML			18:02	22.56	34	0.13	
HLM1	HZ	143.0	EP			18:02	05.07			-0.03
HLM1	HE	143.0	ES			18:02	21.26			-0.22
HLM1	HE	143.0	AML			18:02	22.64	11	0.18	
HLM1	HN	143.0	AML			18:02	22.70	12	0.29	
FOEL	HZ	180.0	EP			18:02	09.99			-0.06

April 21 2012 Time: 01:58 21.9 UTC Magnitude: 1.1 ML
Lat: 56.173N Lon: -4.016W Depth: 2.6 km
Grid Ref: 274.85 kmE 699.64 kmN RMS: 0.20 secs
Locality: DOUNE,STIRLING
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	20.0	IP		C	01:58	25.41			-0.36
PGB1	HZ	49.8	EP			01:58	30.94			0.14
PGB1	HN	49.8	ES			01:58	37.35			0.03
PGB1	HN	49.8	AML			01:58	37.58	10	0.14	
PGB1	HE	49.8	AML			01:58	37.69	13	0.26	
EDU	EZ	74.8	EP			01:58	34.72			0.00
ESK	HZ	108.0	EP			01:58	40.08			0.22
ESK	HE	108.0	ES			01:58	52.72			-0.28
ESK	HN	108.0	AML			01:58	55.61	5	0.22	
ESK	HE	108.0	AML			01:58	55.74	5	0.22	
GMK	EZ	135.0	EP			01:58	44.38			0.36
KSB	EZ	144.0	EP			01:58	45.45			0.13
KPL	HZ	164.0	EP			01:58	48.42			0.34
KPL	HE	164.0	ES			01:59	07.38			0.15
KPL	HE	164.0	AML			01:59	08.94	4	0.52	
KPL	HN	164.0	AML			01:59	10.75	3	0.74	

April 21 2012 Time: 02:29 26.4 UTC Magnitude: 1.1 ML
Lat: 52.693N Lon: -3.981W Depth: 9.4 km
Grid Ref: 266.13 kmE 312.47 kmN RMS: 0.50 secs
Locality: BARMOUTH,GWYNEDD
Velocity model: Mid Wales Xnear: 60.0 Xfar: 120.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LLW	BZ	27.5	EP			02:29	31.76			0.41
LLW	BE	27.5	ES			02:29	35.52			0.56
FOEL	HZ	57.0	EP			02:29	35.80			-0.39
FOEL	HE	57.0	ES			02:29	42.52			-0.75
FOEL	HE	57.0	AML			02:29	43.44	8	0.52	
FOEL	HN	57.0	AML			02:29	43.47	11	0.52	
LPW	BZ	64.7	EP			02:29	37.21			-0.21
LPW	BE	64.7	AML			02:29	45.85	28	0.30	
LPW	BN	64.7	AML			02:29	46.42	52	0.71	
WLF1	HZ	72.0	EP			02:29	38.57			-0.05

TABLE 2 : PHASE DATA

WLF1	HE	72.0	ES		02:29	46.98			-0.47
WLF1	HE	72.0	AML		02:29	47.26	16	0.10	
WLF1	HN	72.0	AML		02:29	47.30	10	0.09	
HLM1	HZ	77.0	EP		02:29	39.91			0.44
HLM1	HN	77.0	ES		02:29	49.12			0.20
HLM1	HN	77.0	AML		02:29	49.85	4	0.27	
HLM1	HE	77.0	AML		02:29	49.95	4	0.25	
WPS	HZ	86.1	EP		02:29	41.90			0.97
MCH1	HZ	102.0	EP		02:29	43.85			0.45

April 21 2012 Time: 03:58 24.3 UTC Magnitude: 0.2 ML
Lat: 55.175N Lon: -3.596W Depth: 3.1 km
Grid Ref: 298.37 kmE 587.91 kmN RMS: 0.10 secs
Locality: LOCHARBRIGGS,D & G
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
BHH	SZ	25.8	EP			03:58	29.25			0.05
BHH	SE	25.8	ES			03:58	32.66			-0.10
BHH	SE	25.8	AML			03:58	32.95	10	0.08	
BHH	SN	25.8	AML			03:58	34.66	6	0.18	
ESK	HZ	29.4	EP			03:58	29.61			-0.22
ESK	HN	29.4	ES			03:58	33.91			0.07
ESK	HE	29.4	AML			03:58	35.03	3	0.14	
ESK	HN	29.4	AML			03:58	35.05	3	0.15	
ECK	EZ	29.7	EP			03:58	30.10			0.20

April 27 2012 Time: 04:36 31.7 UTC Magnitude: 1.3 ML
Lat: 53.142N Lon: -4.060W Depth: 4.0 km
Grid Ref: 262.23 kmE 362.55 kmN RMS: 0.30 secs
Locality: BETHESDA,GWYNEDD
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
WPM1	EZ	16.6	EP	9		04:36	50.84			16.07
WLF1	HZ	27.8	EP			04:36	36.69			0.09
WLF1	HE	27.8	ES			04:36	39.92			-0.22
WLF1	HN	27.8	AML			04:36	42.92	54	0.64	
WLF1	HE	27.8	AML			04:36	42.93	66	0.60	
WPS	HZ	41.0	EP			04:36	38.88			0.10
LLW	BZ	42.0	EP			04:36	39.49			0.53
LLW	BN	42.0	ES			04:36	43.87			-0.33
FOEL	HZ	64.2	EP			04:36	42.49			-0.16

May 7 2012 Time: 18:49 44.9 UTC Magnitude: 2.4 ML
Lat: 48.076N Lon: -2.646W Depth: 5.0 km
Grid Ref: 351.89 kmE -202.50 kmN RMS: 0.40 secs
Locality: NORTHWEST FRANCE
Velocity model: Lownet Xnear: 100.0 Xfar: 400.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JRS	EZ	131.0	EP			18:50	06.39			0.20
JRS	EE	131.0	ES			18:50	21.72			0.01
JQE	EZ	133.0	EP			18:50	06.34			-0.16
DYA	HZ	279.0	EP			18:50	24.54			-0.89
DYA	HE	279.0	AML			18:51	09.22	17	0.26	
DYA	HN	279.0	AML			18:51	09.24	22	0.18	
CCA1	HZ	301.0	EP			18:50	29.15			0.94
CCA1	HN	301.0	AML			18:51	18.07	11	0.52	
CCA1	HE	301.0	AML			18:51	19.33	11	0.26	

May 7 2012 Time: 20:20 17.6 UTC Magnitude: 1.6 ML
Lat: 53.825N Lon: -2.268W Depth: 17.7 km
Grid Ref: 382.36 kmE 436.58 kmN RMS: 0.30 secs
Locality: BURNLEY,LANCASHIRE
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HPK	HZ	44.8	IP		C	20:20	25.70			0.05
HPK	HN	44.8	ES			20:20	31.34			-0.20
HPK	HN	44.8	AML			20:20	31.84	39	0.24	
HPK	HE	44.8	AML			20:20	33.24	28	0.14	
LBWR	HZ	59.3	EP			20:20	28.01			0.16
LBWR	HE	59.3	ES			20:20	35.40			0.05
LBWR	HN	59.3	AML			20:20	36.14	27	0.10	
LBWR	HE	59.3	AML			20:20	37.19	25	0.24	
KESW	HZ	101.0	EP			20:20	34.12			0.32
KESW	HE	101.0	ES			20:20	45.61			-0.03
KESW	HE	101.0	AML			20:20	46.71	31	0.18	
KESW	HN	101.0	AML			20:20	47.13	26	0.14	
SPK	EN	105.0	ES			20:20	46.38			-0.08
EDMD	HZ	114.0	EP			20:20	35.87			0.32
EDMD	HN	114.0	ES			20:20	48.50			-0.17
EDMD	HE	114.0	AML			20:20	49.85	32	0.28	
EDMD	HN	114.0	AML			20:20	50.01	59	0.20	
FOEL	HZ	121.0	EP			20:20	36.14			-0.58
FOEL	HN	121.0	ES			20:20	49.98			-0.71
FOEL	HN	121.0	AML			20:20	52.30	29	0.78	
FOEL	HE	121.0	AML			20:20	54.61	6	0.74	
LLW	BZ	143.0	EP			20:20	39.86			0.08

May 11 2012 Time: 18:17 14.2 UTC Magnitude: 1.8 ML
Lat: 51.852N Lon: -4.416W Depth: 5.0 km
Grid Ref: 233.62 kmE 219.85 kmN RMS: 0.30 secs
Locality: CARMARTHEN,DYFED
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LPW	BZ	37.7	EP			18:17	20.92			-0.12
HTL	HZ	95.5	EP			18:17	30.19			0.18
HTL	HE	95.5	ES			18:17	41.63			0.06
MCH1	HZ	98.8	EP			18:17	30.46			-0.09
MCH1	HE	98.8	ES			18:17	42.27			-0.24
MCH1	HN	98.8	AML			18:17	47.38	40	0.16	
MCH1	HE	98.8	AML			18:17	47.56	32	0.30	
MONM	HZ	111.0	EP			18:17	32.77			0.34
MONM	HN	111.0	ES			18:17	45.72			-0.04
MONM	HN	111.0	AML			18:17	49.85	28	0.18	
MONM	HE	111.0	AML			18:17	49.99	21	0.18	
HGH	EZ	114.0	EP			18:17	32.84			-0.02
HLM1	HZ	129.0	EP			18:17	35.39			0.20
HLM1	HE	129.0	ES			18:17	51.00			0.46
HLM1	HE	129.0	AML			18:17	53.40	18	0.08	
HLM1	HN	129.0	AML			18:17	53.42	26	0.09	
FOEL	HZ	142.0	EP			18:17	36.94			-0.19
FOEL	HE	142.0	ES			18:17	53.67			-0.23
FOEL	HN	142.0	AML			18:17	55.41	20	0.15	
FOEL	HE	142.0	AML			18:17	56.28	14	0.38	
SBD	BZ	144.0	EP			18:17	36.85			-0.56
STRD	HZ	156.0	EP			18:17	39.65			0.64
YRC	EZ	156.0	EP	4		18:17	59.22			20.18
WLF1	HZ	160.0	EP			18:17	39.44			-0.17
WPM1	EZ	160.0	EP	4		18:17	59.49			19.78
DYA	HZ	161.0	EP			18:17	38.71			-1.12
WPS	HZ	172.0	EP			18:17	41.83			0.50

May 15 2012 Time: 02:18 52.7 UTC Magnitude: 1.5 ML
Lat: 54.026N Lon: -3.511W Depth: 5.0 km
Grid Ref: 301.03 kmE 459.97 kmN RMS: 0.50 secs
Locality: IRISH SEA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	68.0	EP			02:19	04.16			-0.15
KESW	HE	68.0	ES			02:19	12.23			-0.57
KESW	HN	68.0	AML			02:19	13.51	15	0.25	
KESW	HE	68.0	AML			02:19	14.98	14	0.19	
IOMK	HZ	73.7	EP			02:19	05.46			0.28
IOMK	HN	73.7	ES			02:19	14.17			-0.12
IOMK	HN	73.7	AML			02:19	14.45	15	0.20	
IOMK	HE	73.7	AML			02:19	15.06	6	0.07	
WPS	HZ	95.3	EP			02:19	08.52			0.02
WPS	HN	95.3	ES			02:19	20.36			0.33
WLF1	HZ	101.0	EP			02:19	09.08			-0.25
WLF1	HE	101.0	ES			02:19	21.24			-0.24
WLF1	HE	101.0	AML			02:19	22.63	24	0.20	
WLF1	HN	101.0	AML			02:19	22.87	19	0.22	
GAL1	HZ	122.0	EP			02:19	13.19			0.58
HPK	HZ	124.0	EP			02:19	13.03			0.05
HPK	HE	124.0	ES			02:19	28.34			0.55
HPK	HE	124.0	AML			02:19	29.50	36	0.19	
HPK	HN	124.0	AML			02:19	30.83	46	0.26	
FOEL	HZ	128.0	IP		D	02:19	12.53			-1.13
ECK	EZ	131.0	EP			02:19	14.75			0.70
LBWR	HZ	137.0	EP			02:19	15.57			0.67
ESK	HZ	145.0	IP		D	02:19	15.85			-0.20
HLM1	HZ	173.0	EP			02:19	20.49			0.48
EDI	HZ	212.0	EP			02:19	27.72			2.85

May 15 2012 Time: 06:41 44.8 UTC Magnitude: 2.5 ML
Lat: 51.808N Lon: -3.205W Depth: 11.5 km
Grid Ref: 316.93 kmE 212.89 kmN RMS: 0.40 secs
Locality: RASSAU,BLAENAU GWENT
Velocity model: Lownet Xnear: 100.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	25.4	EP			06:41	49.64			-0.09
MCH1	HN	25.4	ES			06:41	53.47			0.15
MCH1	HE	25.4	AML			06:41	53.98	582	0.11	
MCH1	HN	25.4	AML			06:41	54.02	328	0.11	
MONM	HZ	27.9	EP			06:41	49.93			-0.14
MONM	HE	27.9	ES			06:41	54.04			0.12
MONM	HE	27.9	AML			06:41	54.52	790	0.25	
MONM	HN	27.9	AML			06:41	54.54	813	0.28	
HGH	EZ	33.4	EP			06:41	50.32			-0.61
OLDB	HZ	48.1	EP			06:41	52.83			-0.31
OLDB	HE	48.1	ES			06:41	59.03			-0.19
OLDB	HN	48.1	AML			06:41	59.78	1198	0.33	
OLDB	HE	48.1	AML			06:41	59.83	1035	0.41	
LPW	BZ	68.4	EP			06:41	56.35			0.06
STRD	HZ	72.0	IP		C	06:41	56.87			0.00
STRD	HN	72.0	ES			06:42	05.57			-0.11
STRD	HN	72.0	AML			06:42	06.62	179	0.16	
STRD	HE	72.0	AML			06:42	06.75	182	0.16	
BATH	HZ	73.1	EP			06:41	58.29			1.27
BATH	HE	73.1	ES			06:42	05.55			-0.39
BATH	HE	73.1	AML			06:42	06.13	175	0.37	
BATH	HN	73.1	AML			06:42	10.72	187	0.62	
HLM1	HZ	82.1	EP			06:41	58.46			-0.02
SWN1	HZ	103.0	EP			06:42	02.10			0.50
FOEL	HZ	120.0	IP		D	06:42	03.84			-0.36
HTL	HZ	127.0	EP			06:42	04.83			-0.23
DYA	HZ	161.0	EP			06:42	08.63			-1.30
CWF	HZ	166.0	EP			06:42	09.58			-0.95

TABLE 2 : PHASE DATA

May 19 2012 Time: 19:50 19.1 UTC Magnitude: 0.8 ML
Lat: 54.465N Lon: -2.978W Depth: 7.5 km
Grid Ref: 336.62 kmE 508.19 kmN RMS: 0.30 secs
Locality: AMBLESIDE,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	16.0	IP		D	19:50	22.52			0.01
KESW	HE	16.0	ES			19:50	24.90			-0.08
KESW	HN	16.0	IAML			19:50	25.81	13	0.12	
KESW	HE	16.0	IAML			19:50	25.87	21	0.22	
SPK	EZ	33.3	EP			19:50	25.18			0.04
SPK	EN	33.3	ES			19:50	29.35			-0.17
SPK	EE	33.3	IAML			19:50	29.47	36	0.13	
SPK	EN	33.3	IAML			19:50	30.14	33	0.10	
BHH	SN	71.6	ES			19:50	40.16			0.29
BHH	SN	71.6	IAML			19:50	43.08	18	0.16	
BHH	SE	71.6	IAML			19:50	43.95	10	0.20	
ECK	EZ	80.3	EP			19:50	33.11			0.62
ESK	HZ	95.9	EP			19:50	34.33			-0.56
ESK	HE	95.9	ES			19:50	45.92			-0.48
ESK	HN	95.9	IAML			19:50	48.37	2	0.26	
ESK	HE	95.9	IAML			19:50	48.67	3	0.20	
IOMK	HZ	106.0	EP			19:50	36.49			0.10
IOMK	HN	106.0	ES			19:50	48.75			-0.24
IOMK	HE	106.0	IAML			19:50	49.38	3	0.37	
IOMK	HN	106.0	IAML			19:50	50.25	3	0.12	
GAL1	HZ	120.0	EP			19:50	38.88			0.22
GAL1	HN	120.0	ES			19:50	53.42			0.50
GAL1	HE	120.0	IAML			19:50	54.28	1	0.13	
GAL1	HN	120.0	IAML			19:50	54.41	1	0.22	

May 23 2012 Time: 23:45 56.5 UTC Magnitude: 1.4 ML
Lat: 53.622N Lon: -1.019W Depth: 1.7 km
Grid Ref: 464.88 kmE 414.41 kmN RMS: 0.30 secs
Locality: THORNE,SOUTH YORKSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LMK	HE	49.5	ES			23:46	11.55			-0.23
LMK	HE	49.5	IAML			23:46	12.57	34	0.46	
LMK	HN	49.5	IAML			23:46	20.39	45	0.37	
LBWR	HZ	52.8	EP			23:46	05.77			-0.13
LBWR	HN	52.8	ES			23:46	12.70			-0.04
LBWR	HN	52.8	IAML			23:46	13.43	35	0.42	
LBWR	HE	52.8	IAML			23:46	13.81	27	0.34	
HPK	HZ	54.6	EP			23:46	06.27			0.11
HPK	HN	54.6	ES			23:46	13.11			-0.07
HPK	HN	54.6	IAML			23:46	14.61	23	0.26	
HPK	HE	54.6	IAML			23:46	15.33	25	0.27	
WACR	HZ	149.0	EP			23:46	21.37			0.88
FOEL	HN	167.0	ES			23:46	43.40			0.82
FOEL	HE	167.0	IAML			23:46	43.75	4	0.36	
FOEL	HN	167.0	IAML			23:46	44.71	13	0.42	
KESW	HZ	174.0	EP			23:46	24.55			0.49
KESW	HE	174.0	ES			23:46	44.13			-0.03

May 25 2012 Time: 03:23 44.8 UTC Magnitude: 1.2 ML
Lat: 53.688N Lon: -2.197W Depth: 7.5 km
Grid Ref: 386.99 kmE 421.33 kmN RMS: 0.50 secs
Locality: BACUP,LANCASHIRE
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	44.7	EP			03:23	52.82			0.21
LBWR	HE	44.7	ES			03:23	58.44			0.10
LBWR	HN	44.7	IAML			03:23	59.00	43	0.10	
LBWR	HE	44.7	IAML			03:23	59.18	56	0.29	
HPK	HZ	48.2	EP			03:23	52.90			-0.23
HPK	HN	48.2	ES			03:23	58.72			-0.52
HPK	HN	48.2	IAML			03:23	59.17	34	0.22	
HPK	HE	48.2	IAML			03:23	59.19	23	0.18	
FOEL	HZ	111.0	EP			03:24	02.40			-0.55
FOEL	HE	111.0	ES			03:24	15.33			-0.89
FOEL	HE	111.0	IAML			03:24	17.58	4	0.32	
FOEL	HN	111.0	IAML			03:24	20.98	5	0.50	
KESW	HZ	116.0	EP			03:24	04.41			0.69
KESW	HE	116.0	ES			03:24	17.60			0.04
KESW	HE	116.0	IAML			03:24	18.99	4	0.25	
KESW	HN	116.0	IAML			03:24	19.44	4	0.17	
WPM1	EZ	123.0	EP			03:24	05.02			0.25
LLW	BZ	135.0	EP			03:24	06.82			0.34
LLW	BN	135.0	ES			03:24	22.46			0.13
HLM1	HZ	138.0	EP			03:24	07.35			0.43
HLM1	HE	138.0	ES			03:24	23.59			0.50
HLM1	HE	138.0	IAML			03:24	25.16	7	0.28	
WME	EZ	143.0	EP			03:24	07.85			0.23
WLF1	HZ	153.0	EP			03:24	09.05			0.12
WLF1	HN	153.0	ES			03:24	25.70			-0.86
WLF1	HN	153.0	IAML			03:24	27.94	4	0.13	
WLF1	HE	153.0	IAML			03:24	29.96	6	0.68	

May 28 2012 Time: 14:07 45.5 UTC Magnitude: 1.6 ML
Lat: 55.747N Lon: -6.330W Depth: 10.1 km
Grid Ref: 128.31 kmE 658.89 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	75.3	EP			14:07	58.15			0.04
CLGH	HE	75.3	ES			14:08	07.36			0.08
CLGH	HN	75.3	IAML			14:08	07.95	31	0.12	
CLGH	HE	75.3	IAML			14:08	10.10	28	0.24	
IDGL	BZ	106.0	EP			14:08	02.92			0.05
IDGL	BN	106.0	ES			14:08	15.43			-0.09
IDGL	BN	106.0	IAML			14:08	17.03	19	0.20	
IDGL	BE	106.0	IAML			14:08	17.49	17	0.40	
PGB1	HZ	116.0	EP			14:08	04.33			-0.03
PGB1	HE	116.0	ES			14:08	17.95			-0.14
PGB1	HN	116.0	IAML			14:08	18.87	22	0.28	
PGB1	HE	116.0	IAML			14:08	19.55	16	0.36	
EAB	EZ	134.0	EP			14:08	06.85			-0.05
GAL1	HN	142.0	ES			14:08	24.34			-0.15
GAL1	HN	142.0	IAML			14:08	26.64	4	0.46	
INVG	HZ	161.0	EP			14:08	10.54			-0.28
INVG	HE	161.0	ES			14:08	30.19			0.92
INVG	HN	161.0	IAML			14:08	31.38	10	0.22	
INVG	HE	161.0	IAML			14:08	32.76	9	0.23	

May 30 2012 Time: 13:28 36.3 UTC Magnitude: 1.0 ML
Lat: 53.165N Lon: -4.431W Depth: 7.4 km
Grid Ref: 237.51 kmE 365.89 kmN RMS: 0.20 secs
Locality: ANGLESEY,NORTH WALES
Velocity model: Lleyn Xnear: 80.0 Xfar: 200.0
Comment: 2KM SW OF BODORGAN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
YRC	EZ	13.6	EP			13:28	39.02			0.10
WLF1	HZ	14.1	EP			13:28	39.01			0.02
WLF1	HN	14.1	ES			13:28	40.99			0.16
WLF1	HN	14.1	IAML			13:28	41.21	138	0.12	
WLF1	HE	14.1	IAML			13:28	41.28	66	0.13	
YLL	EZ	17.6	EP			13:28	39.66			0.12
WPS	HZ	26.6	EP			13:28	40.92			-0.04
WPS	HE	26.6	ES			13:28	43.98			-0.15
WPS	HE	26.6	IAML			13:28	44.06	15	0.10	
WPS	HN	26.6	IAML			13:28	44.10	18	0.10	
WME	EZ	27.2	EP			13:28	40.81			-0.25
WPM1	EZ	36.6	EP			13:28	42.55			-0.06
LLW	BZ	62.2	EP			13:28	46.69			-0.10
LLW	BN	62.2	ES			13:28	54.00			0.06
IOMK	HZ	122.0	EP			13:28	56.19			-0.13
IOMK	HN	122.0	ES			13:29	10.37			0.41
IOMK	HN	122.0	IAML			13:29	10.67	2	0.20	
IOMK	HE	122.0	IAML			13:29	11.93	5	0.20	

June 1 2012 Time: 12:16 46.2 UTC Magnitude: 2.8 ML
Lat: 52.411N Lon: -2.624W Depth: 7.1 km
Grid Ref: 357.56 kmE 279.45 kmN RMS: 0.40 secs
Locality: LUDLOW,SHROPSHIRE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: FELT CRAVEN ARMS... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HLM1	HZ	21.1	IP		D	12:16	50.47			0.09
HLM1	HE	21.1	ES			12:16	53.71			0.25
HLM1	HE	21.1	IAML			12:16	53.80	2715	0.10	
HLM1	HN	21.1	IAML			12:16	53.86	3009	0.10	
MCH1	HZ	52.7	IP		C	12:16	54.95			-0.29
MCH1	HN	52.7	ES			12:17	01.56			-0.30
MCH1	HN	52.7	IAML			12:17	01.90	1338	0.22	
MCH1	HE	52.7	IAML			12:17	02.03	730	0.14	
MONM	HZ	64.8	EP			12:16	57.04			-0.07
MONM	HN	64.8	ES			12:17	05.05			-0.05
MONM	HN	64.8	IAML			12:17	05.33	312	0.15	
MONM	HE	64.8	IAML			12:17	05.34	222	0.19	
FOEL	HZ	66.0	IP		D	12:16	56.48			-0.86
FOEL	HE	66.0	ES			12:17	04.61			-0.90
FOEL	HE	66.0	IAML			12:17	04.91	52	0.58	
FOEL	HN	66.0	IAML			12:17	10.43	82	0.56	
STRD	HZ	77.4	EP			12:16	58.82			-0.25
STRD	HE	77.4	IAML			12:17	09.01	282	0.10	
STRD	HN	77.4	IAML			12:17	09.15	333	0.12	
STNC	HZ	80.8	EP			12:16	59.57			-0.03
STNC	HE	80.8	ES			12:17	09.44			0.04
STNC	HN	80.8	IAML			12:17	09.59	533	0.22	
STNC	HE	80.8	IAML			12:17	09.71	548	0.30	
OLDB	HZ	83.7	IP		D	12:16	59.96			-0.04
OLDB	HE	83.7	ES			12:17	09.97			-0.13
OLDB	HE	83.7	IAML			12:17	10.38	758	0.30	
OLDB	HN	83.7	IAML			12:17	12.02	581	0.42	
LLW	BZ	85.7	IP		D	12:17	00.57			0.22
LLW	BN	85.7	ES			12:17	10.69			-0.01
HGH	EZ	86.9	EP			12:17	00.68			0.13
BATH	HZ	110.0	EP			12:17	04.11			0.05
BATH	HE	110.0	ES			12:17	17.06			-0.06
BATH	HN	110.0	IAML			12:17	20.13	296	0.20	
BATH	HE	110.0	IAML			12:17	22.81	385	0.28	
SWN1	HZ	115.0	EP			12:17	05.41			0.54
SWN1	HE	115.0	IAML			12:17	22.33	523	0.18	
SWN1	HN	115.0	IAML			12:17	22.41	182	0.18	
LBWR	HZ	126.0	EP			12:17	06.64			0.07

TABLE 2 : PHASE DATA

LBWR	HE	126.0	ES	12:17	21.35			-0.12
LBWR	HN	126.0	IAML	12:17	23.69	242	0.23	
LBWR	HE	126.0	IAML	12:17	24.31	329	0.22	
YLL	EZ	132.0	EP	12:17	07.72			0.27
SKP	EZ	146.0	EP	12:17	09.82			0.36
WLF1	HZ	154.0	EP	12:17	10.80			0.21
WLF1	HN	154.0	IAML	12:17	29.73	163	0.50	
WLF1	HE	154.0	IAML	12:17	30.49	133	0.24	
WOL	BZ	156.0	EP	12:17	11.26			0.45
WME	EZ	157.0	EP	12:17	11.33			0.27
YRC	EZ	161.0	EP	12:17	11.87			0.28
WPS	HZ	167.0	EP	12:17	12.84			0.39
WPS	HE	167.0	ES	12:17	32.44			0.79
HPK	HZ	185.0	EP	12:17	14.29			-0.36
HPK	HN	185.0	IAML	12:17	39.42	221	0.16	
HPK	HE	185.0	IAML	12:17	40.00	201	0.22	
HTL	HZ	203.0	EP	12:17	17.04			0.07
HTL	HE	203.0	IAML	12:17	42.68	41	0.42	
HTL	HN	203.0	IAML	12:17	44.85	32	0.19	
DYA	HZ	238.0	EP	12:17	20.70			-0.61
EDMD	HZ	273.0	EP	12:17	25.24			-0.39
EDMD	HE	273.0	IAML	12:18	02.49	72	0.36	
EDMD	HN	273.0	IAML	12:18	08.17	54	0.38	

June 2 2012 Time: 05:21 40.9 UTC Magnitude: 0.8 ML
Lat: 56.094N Lon: -5.173W Depth: 7.9 km
Grid Ref: 202.64 kmE 693.55 kmN RMS: 0.20 secs
Locality: LOCH FYNE,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	53.0	EP			05:21	50.11			0.08
PGB1	HZ	53.3	EP			05:21	50.16			0.10
PGB1	HN	53.3	IAML			05:21	56.42	5	0.58	
PGB1	HE	53.3	IAML			05:21	56.47	4	0.32	
INVG	HZ	79.2	EP			05:21	54.38			0.29
INVG	HN	79.2	ES			05:22	03.41			-0.30
INVG	HN	79.2	IAML			05:22	07.06	7	0.14	
INVG	HE	79.2	IAML			05:22	07.39	8	0.40	
GMK	EZ	87.3	EP			05:21	55.16			-0.17

June 4 2012 Time: 00:05 04.9 UTC Magnitude: 1.6 ML
Lat: 53.586N Lon: -2.713W Depth: 8.2 km
Grid Ref: 352.81 kmE 410.20 kmN RMS: 0.40 secs
Locality: WIGAN,GTR MANCHESTER
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	68.7	IP		D	00:05	16.69			0.21
LBWR	HE	68.7	ES			00:05	25.18			0.26
LBWR	HE	68.7	IAML			00:05	26.13	37	0.14	
LBWR	HN	68.7	IAML			00:05	26.49	34	0.12	
HPK	HE	82.9	ES			00:05	28.33			-0.35
HPK	HE	82.9	IAML			00:05	31.74	175	0.15	
HPK	HN	82.9	IAML			00:05	31.88	82	0.30	
FOEL	HZ	84.1	EP			00:05	18.35			-0.53
FOEL	HE	84.1	ES			00:05	28.49			-0.58
FOEL	HE	84.1	IAML			00:05	30.25	9	0.33	
FOEL	HN	84.1	IAML			00:05	31.08	45	0.36	
WPM1	EZ	87.2	EP			00:05	19.89			0.54
KESW	HZ	115.0	IP		C	00:05	23.91			0.34
KESW	HE	115.0	ES			00:05	36.75			-0.43
KESW	HE	115.0	IAML			00:05	37.84	13	0.46	
KESW	HN	115.0	IAML			00:05	38.02	9	0.34	
WLF1	HZ	117.0	EP			00:05	24.09			0.23
WLF1	HN	117.0	ES			00:05	37.78			0.10
WLF1	HE	117.0	IAML			00:05	39.65	19	0.17	
WLF1	HN	117.0	IAML			00:05	39.66	19	0.21	
HLM1	HZ	119.0	EP			00:05	24.94			0.59
HLM1	HN	119.0	ES			00:05	38.44			-0.09
HLM1	HE	119.0	IAML			00:05	39.93	14	0.17	
HLM1	HN	119.0	IAML			00:05	41.69	9	0.08	
WPS	HZ	120.0	EP			00:05	24.52			0.11
IOMK	HZ	143.0	EP			00:05	27.38			-0.31
IOMK	HE	143.0	IAML			00:05	45.42	6	0.19	
IOMK	HN	143.0	IAML			00:05	46.19	5	0.17	

June 6 2012 Time: 07:58 13.9 UTC Magnitude: 4.0 ML
Lat: 54.151N Lon: -10.904W Depth: 3.4 km
Grid Ref: -180.74 kmE 509.51 kmN RMS: 0.30 secs
Locality: WEST COAST OF IRELAND
Velocity model: Lownet Xnear: 200.0 Xfar: 500.0
Comment: FELT COUNTY MAYO... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IGLA	BZ	130.0	EP			07:58	35.31			0.15
IGLA	BE	130.0	ES			07:58	50.45			-0.22
IGLA	BN	130.0	IAML			07:58	52.84	2289	0.50	
IGLA	BE	130.0	IAML			07:58	52.99	1700	0.28	
IDGL	BZ	242.0	EP			07:58	49.86			-0.12
IDGL	BN	242.0	IAML			07:59	24.30	1178	0.32	
IDGL	BE	242.0	IAML			07:59	26.49	724	0.39	
VAL	BZ	250.0	EP			07:58	51.13			0.13
VAL	BN	250.0	ES			07:59	17.91			-0.16
DSB	BZ	316.0	EP			07:58	59.35			0.21
DSB	BE	316.0	IAML			07:59	47.00	226	0.43	
DSB	BN	316.0	IAML			07:59	47.80	273	0.42	
CLGH	HZ	327.0	EP			07:59	00.04			-0.53
CLGH	HN	327.0	ES			07:59	35.13			0.50
CLGH	HE	327.0	IAML			07:59	46.71	654	0.24	
CLGH	HN	327.0	IAML			07:59	49.26	1098	0.48	
IWEX	BZ	339.0	EP			07:59	02.91			0.79
IWEX	BN	339.0	IAML			07:59	51.60	421	0.55	
IWEX	BE	339.0	IAML			07:59	55.29	334	0.41	
WIM	EZ	407.0	IP		D	07:59	10.42			-0.24
IOMK	HZ	414.0	EP			07:59	11.03			-0.42
IOMK	HN	414.0	IAML			08:00	13.77	175	0.34	
IOMK	HE	414.0	IAML			08:00	16.68	206	0.51	
YRC	EZ	430.0	EP			07:59	13.04			-0.37
WPS	HZ	430.0	EP			07:59	13.36			-0.14
WLF1	HZ	440.0	EP			07:59	14.30			-0.41
WLF1	HN	440.0	IAML			08:00	23.17	336	0.60	
WLF1	HE	440.0	IAML			08:00	26.25	213	0.55	
WME	EZ	443.0	EP			07:59	14.90			-0.21
PGB1	HZ	451.0	EP			07:59	15.57			-0.49
PGB1	HE	451.0	IAML			08:00	26.92	264	0.35	
PGB1	HN	451.0	IAML			08:00	27.55	330	0.35	
WPM1	EZ	473.0	EP			07:59	19.17			0.32
EAB	EZ	476.0	EP			07:59	18.58			-0.66
KPL	HZ	484.0	EP			07:59	19.35			-0.90
KESW	HZ	509.0	EP			07:59	22.60			-0.79
FOEL	HZ	530.0	EP			07:59	25.43			-0.57
MDO	EZ	550.0	EP			07:59	27.88			-0.62
HLM1	HZ	564.0	EP			07:59	30.50			0.19
ESY	EZ	565.0	EP			07:59	30.04			-0.36
MCH1	HZ	581.0	EP			07:59	32.78			0.39
SSW	EZ	653.0	EP			07:59	42.30			0.87

June 14 2012 Time: 06:06 28.0 UTC Magnitude: 1.4 ML
Lat: 56.654N Lon: -5.171W Depth: 5.5 km
Grid Ref: 205.64 kmE 755.84 kmN RMS: 0.30 secs
Locality: BALLACHULISH,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT BALLACHULISH... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	73.0	EP			06:06	40.65			0.34
INVG	HZ	73.8	EP			06:06	40.08			-0.35
INVG	HN	73.8	ES			06:06	49.34			-0.20
INVG	HE	73.8	IAML			06:06	52.31	22	0.10	
INVG	HN	73.8	IAML			06:06	52.35	22	0.10	
KPL	HZ	81.7	EP			06:06	41.90			0.29
KPL	HE	81.7	ES			06:06	51.21			-0.37
KPL	HN	81.7	IAML			06:06	55.60	7	0.20	
KPL	HE	81.7	IAML			06:06	55.95	6	0.32	
MDO	EZ	100.0	EP			06:06	44.67			0.09
EDU	EZ	133.0	EP			06:06	49.68			0.08
MME1	EZ	153.0	EP			06:06	52.68			0.24
MCD	EN	155.0	ES			06:07	11.45			0.59
MCD	EN	155.0	IAML			06:07	13.26	8	0.25	
MCD	EE	155.0	IAML			06:07	13.33	14	0.34	

June 14 2012 Time: 06:18 39.1 UTC Magnitude: 0.8 ML
Lat: 56.660N Lon: -5.151W Depth: 4.3 km
Grid Ref: 206.90 kmE 756.45 kmN RMS: 0.30 secs
Locality: BALLACHULISH,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT DUROR Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
EAB	EZ	72.6	EP			06:18	51.55			0.07
INVG	HZ	72.9	EP			06:18	50.99			-0.53
INVG	HN	72.9	ES			06:19	00.87			0.29
INVG	HE	72.9	IAML			06:19	03.10	6	0.10	
INVG	HN	72.9	IAML			06:19	03.15	6	0.10	
KPL	HZ	81.5	EP			06:18	53.17			0.36
KPL	HE	81.5	ES			06:19	02.63			-0.19
KPL	HN	81.5	IAML			06:19	06.50	4	0.39	
KPL	HE	81.5	IAML			06:19	06.75	2	0.26	

June 17 2012 Time: 05:04 32.4 UTC Magnitude: 1.5 ML
Lat: 56.674N Lon: -5.155W Depth: 4.7 km
Grid Ref: 206.73 kmE 758.02 kmN RMS: 0.40 secs
Locality: BALLACHULISH,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT DUROR Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KSB	EZ	61.8	EP			05:04	43.17			0.07
KSB	EZ	61.8	ES			05:04	50.47			-0.44
INVG	HZ	73.7	EP			05:04	44.11			-0.80
INVG	HN	73.7	ES			05:04	54.50			0.46
INVG	HE	73.7	IAML			05:04	56.37	91	0.05	
INVG	HN	73.7	IAML			05:04	56.43	49	0.09	
EAB	EZ	73.9	EP			05:04	44.66			-0.30
KPL	HZ	80.0	EP			05:04	46.30			0.46
KPL	HE	80.0	ES			05:04	55.66			0.01
KPL	HN	80.0	IAML			05:04	59.76	14	0.16	
KPL	HE	80.0	IAML			05:05	00.25	12	0.19	
MDO	EZ	98.0	EP			05:04	48.70			0.00
PGB1	HZ	105.0	EP			05:04	50.05			0.34
PGB1	HE	105.0	ES			05:05	02.18			-0.16
PGB1	HN	105.0	IAML			05:05	02.74	11	0.19	
PGB1	HE	105.0	IAML			05:05	03.42	9	0.21	

TABLE 2 : PHASE DATA

```
EDU    EZ  132.0  EP          05:04  54.05             0.05
EDI    HZ  148.0  EP          05:04  56.49             0.36
EDI    HN  148.0  ES          05:05  13.30            -0.16
EDI    HE  148.0   IAML       05:05  15.73     5  0.18
EDI    HN  148.0   IAML       05:05  16.45     5  0.21
GMK    EZ  150.0  EP          05:04  56.79             0.27
MME1   EZ  151.0  EP          05:04  57.00             0.32
MCD    EZ  153.0  EP          05:04  57.68             0.72

June 18 2012        Time: 18:35 33.4 UTC     Magnitude: 1.5 ML
  Lat: 56.671N      Lon: -5.154W             Depth: 5.1 km
  Grid Ref: 206.77 kmE  757.68 kmN           RMS: 0.40 secs
  Locality: BALLACHULISH,HIGHLAND
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
  Comment: FELT BALLACHULISH...              Intensity: 3
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
INVG   HZ   73.5  EP          18:35  45.52            -0.73
INVG   HN   73.5  ES          18:35  55.85             0.24
INVG   HE   73.5   IAML       18:35  57.69    36  0.10
INVG   HN   73.5   IAML       18:35  57.73    43  0.10
EAB    EZ   73.7  EP          18:35  46.03            -0.24
KPL    HZ   80.3  EP          18:35  47.78             0.53
KPL    HE   80.3  ES          18:35  56.94            -0.40
KPL    HN   80.3   IAML       18:36  01.02    14  0.20
KPL    HE   80.3   IAML       18:36  01.37    12  0.31
MDO    EZ   98.2  EP          18:35  50.08            -0.02
PGB1   HZ  104.0  EP          18:35  51.36             0.34
PGB1   HN  104.0   IAML       18:36  03.97     8  0.18
PGB1   HE  104.0   IAML       18:36  04.64     9  0.20
EDU    EZ  132.0  EP          18:35  55.42             0.03
EDI    HZ  148.0  EP          18:35  57.78             0.26
EDI    HN  148.0   IAML       18:36  16.09     5  0.29
EDI    HE  148.0   IAML       18:36  17.20     5  0.26
MCD    EZ  153.0  EP          18:35  58.80             0.40
MCD    EE  153.0  ES          18:36  17.26             0.63
MCD    EN  153.0   IAML       18:36  18.53    16  0.24
MCD    EE  153.0   IAML       18:36  18.72    23  0.21

June 19 2012        Time: 15:36 50.5 UTC     Magnitude: 1.5 ML
  Lat: 56.677N      Lon: -5.122W             Depth: 4.0 km
  Grid Ref: 208.76 kmE  758.26 kmN           RMS: 0.30 secs
  Locality: BALLACHULISH,HIGHLAND
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
  Comment: FELT BALLACHULISH                 Intensity: 3
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
INVG   HZ   71.9  IP        C 15:37  02.17            -0.61
INVG   HN   71.9  ES          15:37  11.94             0.19
INVG   HE   71.9   IAML       15:37  14.40    42  0.08
INVG   HN   71.9   IAML       15:37  14.49    49  0.10
EAB    EZ   72.8  IP        C 15:37  02.71            -0.21
KPL    HZ   80.5  EP          15:37  04.36             0.30
KPL    HE   80.5  ES          15:37  13.66            -0.31
KPL    HN   80.5   IAML       15:37  17.80    16  0.20
KPL    HE   80.5   IAML       15:37  18.28    14  0.18
MDO    EZ   96.8  EP          15:37  06.67             0.01
PGB1   HZ  104.0  EP          15:37  08.04             0.28
PGB1   HE  104.0  ES          15:37  20.26            -0.11
PGB1   HN  104.0   IAML       15:37  20.70    10  0.22
PGB1   HE  104.0   IAML       15:37  21.47    10  0.23
EDU    EZ  130.0  EP          15:37  12.16             0.28
MME1   EZ  149.0  EP          15:37  14.92             0.36
GMK    EZ  151.0  EP          15:37  15.23             0.46
MCD    EZ  152.0  EP          15:37  15.47             0.59
BIGH   HZ  215.0  EP          15:37  25.71             2.62

June 23 2012        Time: 08:05 23.8 UTC     Magnitude: 0.9 ML
  Lat: 56.533N      Lon: -4.457W             Depth: 2.7 km
  Grid Ref: 248.91 kmE  740.58 kmN           RMS: 0.30 secs
  Locality: GLEN LYON,PERTH/KINROSS
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
INVG   HZ   28.0  IP        C 08:05  29.10             0.07
INVG   HN   28.0  ES          08:05  32.48            -0.39
INVG   HN   28.0   IAML       08:05  32.60    17  0.11
INVG   HE   28.0   IAML       08:05  32.82    12  0.10
EAB    EZ   39.0  EP          08:05  31.21             0.31
EDU    EZ   88.9  EP          08:05  38.78            -0.03
KPL    HZ  116.0  EP          08:05  42.96             0.10
KPL    HN  116.0  ES          08:05  56.32            -0.48
KPL    HN  116.0   IAML       08:05  56.95     3  0.16
KPL    HE  116.0   IAML       08:05  56.96     3  0.23
MCD    EZ  138.0  EP          08:05  46.58             0.28
MCD    EN  138.0  ES          08:06  03.31             0.56
MCD    EN  138.0   IAML       08:06  04.03     4  0.18
MCD    EE  138.0   IAML       08:06  04.31     4  0.15

June 23 2012        Time: 08:16 37.9 UTC     Magnitude: 1.1 ML
  Lat: 57.099N      Lon: -5.587W             Depth: 2.6 km
  Grid Ref: 182.76 kmE  806.58 kmN           RMS: 0.30 secs
  Locality: LOCH HOURN,HIGHLAND
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
KPL    HZ   27.1  EP          08:16  42.84            -0.09
KPL    HN   27.1   IAML       08:16  43.26    29  0.27
KPL    HE   27.1  ES          08:16  46.46            -0.16
KPL    HE   27.1   IAML       08:16  46.94    52  0.19
MDO    EZ   83.1  EP          08:16  52.41             0.41
MDO    EZ   83.1  ES          08:17  02.10            -0.22
INVG   HZ  120.0  EP          08:16  57.60            -0.16
EAB    EZ  127.0  EP          08:16  58.87             0.07
EAB    EZ  127.0  ES          08:17  13.88            -0.19
MCD    EZ  150.0  EP          08:17  02.66             0.45
MME1   EZ  160.0  EP          08:17  04.22             0.57
BIGH   HZ  185.0  EP          08:17  08.01             1.18

June 25 2012        Time: 13:37 35.1 UTC     Magnitude: 1.4 ML
  Lat: 56.319N      Lon: -5.740W             Depth: 8.4 km
  Grid Ref: 168.75 kmE  720.34 kmN           RMS: 0.20 secs
  Locality: MULL,ARGYLL/BUTE
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
EAB    EZ   88.1  EP          13:37  49.56            -0.14
PGB1   HZ   96.5  EP          13:37  51.25             0.27
PGB1   HN   96.5  ES          13:38  02.41            -0.14
PGB1   HE   96.5   IAML       13:38  04.80     8  0.42
PGB1   HN   96.5   IAML       13:38  05.64     8  0.48
INVG   HZ  105.0  EP          13:37  52.56             0.17
INVG   HN  105.0  ES          13:38  04.95            -0.03
INVG   HN  105.0   IAML       13:38  07.83    17  0.20
INVG   HE  105.0   IAML       13:38  07.99    12  0.15
KPL    HZ  114.0  EP          13:37  53.33            -0.29
KPL    HE  114.0  ES          13:38  07.24             0.13
KPL    HN  114.0   IAML       13:38  10.24     9  0.30
KPL    HE  114.0   IAML       13:38  11.72    19  0.40

June 25 2012        Time: 18:29 33.6 UTC     Magnitude: 1.2 ML
  Lat: 56.668N      Lon: -5.163W             Depth: 5.5 km
  Grid Ref: 206.20 kmE  757.37 kmN           RMS: 0.40 secs
  Locality: BALLACHULISH,HIGHLAND
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
  Comment: FELT BALLACHULISH                 Intensity: 2
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
INVG   HZ   70.1  EP          18:29  45.20            -0.17
INVG   HE   70.1  ES          18:29  53.60            -0.36
INVG   HE   70.1   IAML       18:29  57.39    19  0.06
INVG   HN   70.1   IAML       18:29  57.49    19  0.12
EAB    EZ   70.5  EP          18:29  45.78             0.35
EAB    EZ   70.5  ES          18:29  53.79            -0.27
KPL    HZ   82.9  EP          18:29  47.50             0.21
KPL    HE   82.9  ES          18:29  56.81            -0.47
KPL    HN   82.9   IAML       18:30  00.82     6  0.18
KPL    HE   82.9   IAML       18:30  01.09     5  0.29
MDO    EZ   98.1  EP          18:29  49.75             0.01
EDU    EZ  129.0  EP          18:29  55.19             0.71
MME1   EZ  149.0  EP          18:29  57.86             0.49
MCD    EZ  152.0  EP          18:29  58.75             1.00

June 28 2012        Time: 20:35 36.6 UTC     Magnitude: 1.2 ML
  Lat: 56.633N      Lon: -5.511W             Depth: 4.5 km
  Grid Ref: 184.69 kmE  754.52 kmN           RMS: 0.20 secs
  Locality: LOCH LINNHE,HIGHLAND
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
  Comment: 5KM W OF KILMALIEU
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
KPL    HZ   79.1  EP          20:35  49.83            -0.12
KPL    HE   79.1  ES          20:35  59.66             0.00
KPL    HE   79.1   IAML       20:36  04.62    12  0.24
KPL    HN   79.1   IAML       20:36  05.29     8  0.40
EAB    EZ   87.8  EP          20:35  51.63             0.28
INVG   HZ   93.2  EP          20:35  51.78            -0.40
INVG   HN   93.2  ES          20:36  03.53             0.00
INVG   HN   93.2   IAML       20:36  06.48    12  0.53
INVG   HE   93.2   IAML       20:36  08.20    11  0.10
MDO    EZ  114.0  EP          20:35  55.71             0.31
EDU    EZ  154.0  EP          20:36  01.40             0.07

July 5 2012         Time: 22:28 21.6 UTC     Magnitude: 1.3 ML
  Lat: 53.193N      Lon: -1.066W             Depth: 2.0 km
  Grid Ref: 462.39 kmE  366.65 kmN           RMS: 0.70 secs
  Locality: EDWINSTOWE,NOTTS
  Velocity model: Lownet  Xnear: 100.0  Xfar: 200.0
  Comment: C/F
STAT   CO  DIST   PHAS  WT P  HrMn   SECS   AMPL  PERI   RES
CWF    HZ   53.1  EP          22:28  30.46            -0.67
CWF    HN   53.1  ES          22:28  37.78            -0.33
CWF    HN   53.1   IAML       22:28  38.14     5  0.19
CWF    HE   53.1   IAML       22:28  38.18     6  0.25
HPK    HE   92.8  ES          22:28  48.39            -0.37
HPK    HN   92.8   IAML       22:28  52.55    24  0.23
HPK    HE   92.8   IAML       22:28  52.61    25  0.24
WACR   HZ  125.0  EP          22:28  43.26             0.98
WACR   HE  125.0  ES          22:28  57.35            -0.04
WACR   HN  125.0   IAML       22:29  00.18     5  0.26
WACR   HE  125.0   IAML       22:29  00.56     7  0.23
HLM1   HZ  143.0  EP          22:28  45.45             0.39
HLM1   HE  143.0  ES          22:29  02.82             0.62
HLM1   HE  143.0   IAML       22:29  05.72     9  0.32
FOEL   HZ  147.0  EP          22:28  46.03             0.46
```

TABLE 2 : PHASE DATA

FOEL	HE	147.0	ES		22:29	04.42			1.33
FOEL	HN	147.0	IAML		22:29	07.03	5	0.53	
FOEL	HE	147.0	IAML		22:29	07.20	4	0.46	
MCH1	HZ	187.0	EP		22:28	51.52			0.57
MCH1	HN	187.0	ES		22:29	13.83			1.44
MCH1	HN	187.0	IAML		22:29	16.11	5	0.29	
MCH1	HE	187.0	IAML		22:29	16.46	4	0.16	

July 10 2012 Time: 03:27 24.2 UTC Magnitude: 2.7 ML
Lat: 48.247N Lon: -0.339W Depth: 4.3 km
Grid Ref: 523.30 kmE -182.36 kmN RMS: 0.20 secs
Locality: NORTHWEST FRANCE
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JQE	EZ	164.0	EP			03:27	50.45			0.22
JQE	EZ	164.0	ES			03:28	09.42			0.16
JRS	EZ	166.0	EP			03:27	50.63			0.04
JRS	EE	166.0	ES			03:28	09.69			-0.18
JSA	HZ	171.0	EP			03:27	51.12			-0.07
JSA	HE	171.0	ES			03:28	11.11			0.19
JSA	HN	171.0	IAML			03:28	14.21	41	0.27	
JSA	HE	171.0	IAML			03:28	16.38	39	0.22	
HMNX	HZ	296.0	EP			03:28	06.85			0.05
HMNX	HN	296.0	IAML			03:28	56.00	118	0.27	
HMNX	HE	296.0	IAML			03:28	58.58	104	0.70	
DYA	HZ	357.0	EP			03:28	14.11			-0.41
DYA	HN	357.0	IAML			03:29	08.14	11	0.42	
DYA	HE	357.0	IAML			03:29	08.88	9	0.52	

July 15 2012 Time: 08:52 35.6 UTC Magnitude: 1.7 ML
Lat: 53.350N Lon: -1.118W Depth: 1.1 km
Grid Ref: 458.71 kmE 384.07 kmN RMS: 0.70 secs
Locality: WORKSOP,NOTTS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: C/F,FELT CARLTON... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	40.7	EP			08:52	42.58			-0.71
LBWR	HN	40.7	IAML			08:52	51.77	63	0.42	
LBWR	HE	40.7	IAML			08:52	56.93	42	0.50	
LMK	HN	54.0	ES			08:52	52.48			-0.18
LMK	HN	54.0	IAML			08:53	05.81	158	0.78	
LMK	HE	54.0	IAML			08:53	05.84	79	0.54	
CWF	HZ	69.2	EP			08:52	48.14			0.30
CWF	HE	69.2	ES			08:52	56.26			-0.51
CWF	HN	69.2	IAML			08:52	58.86	13	0.18	
CWF	HE	69.2	IAML			08:52	59.49	17	0.14	
WACR	HZ	136.0	EP			08:52	59.11			0.94
WACR	HN	136.0	IAML			08:53	17.52	22	0.46	
WACR	HE	136.0	IAML			08:53	19.39	13	0.16	
FOEL	HZ	148.0	EP			08:53	00.69			0.70
FOEL	HN	148.0	ES			08:53	19.38			1.59
FOEL	HE	148.0	IAML			08:53	19.74	13	0.38	
FOEL	HN	148.0	IAML			08:53	20.28	25	0.30	
HLM1	HE	150.0	ES			08:53	18.40			0.15
EDMD	HE	174.0	ES			08:53	24.99			1.09
EDMD	HE	174.0	IAML			08:53	27.96	11	0.38	
EDMD	HN	174.0	IAML			08:53	28.91	12	0.26	
MCH1	HZ	197.0	EP			08:53	07.32			0.85
MCH1	HE	197.0	ES			08:53	30.65			1.65
MCH1	HE	197.0	IAML			08:53	32.16	14	0.28	
MCH1	HN	197.0	IAML			08:53	32.60	17	0.22	

July 17 2012 Time: 13:54 01.8 UTC Magnitude: 1.4 ML
Lat: 49.346N Lon: -2.107W Depth: 5.7 km
Grid Ref: 392.23 kmE -61.53 kmN RMS: 0.00 secs
Locality: JERSEY,CHANNEL ISLES
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 10KM OFFSHORE JERSEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JQE	EZ	16.9	EP			13:54	05.20			0.03
JQE	EZ	16.9	ES			13:54	07.70			0.05
JRS	EZ	17.1	EP			13:54	05.13			-0.06
JRS	EE	17.1	ES			13:54	07.62			-0.08
JSA	HZ	18.2	EP			13:54	05.39			0.02
JSA	HN	18.2	ES			13:54	08.03			0.03
JSA	HN	18.2	IAML			13:54	08.17	88	0.10	
JSA	HE	18.2	IAML			13:54	08.22	105	0.16	

July 19 2012 Time: 14:43 47.7 UTC Magnitude: 1.7 ML
Lat: 55.769N Lon: -6.365W Depth: 9.4 km
Grid Ref: 126.27 kmE 661.48 kmN RMS: 0.40 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	78.0	EP			14:44	00.72			0.08
CLGH	HN	78.0	ES			14:44	09.88			-0.24
CLGH	HN	78.0	IAML			14:44	10.33	63	0.12	
CLGH	HE	78.0	IAML			14:44	12.25	41	0.14	
PGB1	HZ	118.0	EP			14:44	06.72			-0.07
PGB1	HE	118.0	ES			14:44	20.66			-0.10
PGB1	HN	118.0	IAML			14:44	21.42	35	0.20	
PGB1	HE	118.0	IAML			14:44	22.63	31	0.20	
EAB	EZ	135.0	EP			14:44	09.28			0.07
GAL1	HZ	145.0	EP			14:44	11.33			0.67
GAL1	HN	145.0	ES			14:44	27.56			0.11
GAL1	HN	145.0	IAML			14:44	29.05	6	0.44	
GAL1	HE	145.0	IAML			14:44	29.72	6	0.16	
INVG	HZ	162.0	EP			14:44	12.85			-0.22
INVG	HN	162.0	ES			14:44	32.34			0.71
INVG	HN	162.0	IAML			14:44	33.81	18	0.24	
INVG	HE	162.0	IAML			14:44	35.09	11	0.18	
KPL	HZ	180.0	EP			14:44	14.52			-0.81
KPL	HN	180.0	ES			14:44	34.68			-0.85
KPL	HE	180.0	IAML			14:44	37.16	10	0.26	
KPL	HN	180.0	IAML			14:44	41.10	6	0.41	

July 20 2012 Time: 23:13 43.6 UTC Magnitude: 1.3 ML
Lat: 55.758N Lon: -6.361W Depth: 6.2 km
Grid Ref: 126.44 kmE 660.24 kmN RMS: 0.40 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	76.8	EP			23:13	56.64			0.10
CLGH	HE	76.8	ES			23:14	05.72			-0.28
CLGH	HN	76.8	IAML			23:14	06.42	16	0.12	
CLGH	HE	76.8	IAML			23:14	06.51	10	0.12	
PGB1	HZ	118.0	EP			23:14	02.75			-0.15
PGB1	HN	118.0	ES			23:14	16.83			-0.19
PGB1	HN	118.0	IAML			23:14	17.54	9	0.20	
PGB1	HE	118.0	IAML			23:14	18.74	8	0.22	
GAL1	HZ	144.0	EP			23:14	07.39			0.61
GAL1	HE	144.0	ES			23:14	24.40			0.68
INVG	HZ	162.0	EP			23:14	09.52			0.13
INVG	HN	162.0	ES			23:14	28.34			0.10
INVG	HN	162.0	IAML			23:14	29.92	4	0.26	
INVG	HE	162.0	IAML			23:14	31.31	3	0.27	
KPL	HE	181.0	ES			23:14	31.83			-0.67
KPL	HE	181.0	IAML			23:14	33.27	3	0.28	
KPL	HN	181.0	IAML			23:14	34.58	1	0.37	

July 22 2012 Time: 11:43 07.2 UTC Magnitude: 2.3 ML
Lat: 55.808N Lon: -6.363W Depth: 8.7 km
Grid Ref: 126.67 kmE 665.80 kmN RMS: 0.40 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 300.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	82.2	EP			11:43	20.94			0.10
CLGH	HE	82.2	ES			11:43	30.18			-0.62
CLGH	HN	82.2	IAML			11:43	32.05	194	0.10	
CLGH	HE	82.2	IAML			11:43	32.48	248	0.32	
IDGL	BZ	110.0	EP			11:43	25.46			0.40
IDGL	BN	110.0	ES			11:43	37.95			-0.14
IDGL	BN	110.0	IAML			11:43	40.14	102	0.20	
IDGL	BE	110.0	IAML			11:43	40.89	74	0.20	
PGB1	HZ	118.0	EP			11:43	26.25			-0.10
PGB1	HE	118.0	ES			11:43	40.88			0.56
PGB1	HN	118.0	IAML			11:43	41.56	148	0.24	
PGB1	HE	118.0	IAML			11:43	41.81	112	0.13	
EAB	EZ	133.0	EP			11:43	28.24			-0.34
GAL1	HZ	148.0	EP			11:43	31.10			0.43
GAL1	HE	148.0	ES			11:43	48.22			0.42
GAL1	HE	148.0	IAML			11:43	48.68	27	0.26	
GAL1	HN	148.0	IAML			11:43	50.75	23	0.19	
INVG	HZ	160.0	EP			11:43	32.29			-0.08
INVG	HE	160.0	ES			11:43	50.08			-0.67
INVG	HN	160.0	IAML			11:43	54.16	51	0.28	
INVG	HE	160.0	IAML			11:43	54.29	44	0.27	
KPL	HZ	176.0	EP			11:43	34.71			0.29
KPL	HE	176.0	IAML			11:43	58.01	24	0.44	
KPL	HN	176.0	IAML			11:44	06.46	15	0.36	
MDO	EZ	219.0	EP			11:43	39.33			-0.59

August 5 2012 Time: 21:20 00.0 UTC Magnitude: 3.6 ML
Lat: 64.337N Lon: -4.446W Depth: 10.0 km
Grid Ref: 281.84 kmE 1609.23 kmN RMS: 0.20 secs
Locality: NORWEGIAN SEA
Velocity model: North Sea Xnear: 500.0 Xfar: 800.0
Comment: 260KM NE FAROE ISLES

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SOFL	HZ	283.0	EP			21:20	39.71			0.06
SOFL	HE	283.0	IAML			21:21	11.91	183	0.56	
SOFL	HN	283.0	IAML			21:21	14.01	161	0.42	
LRW	HZ	498.0	EP			21:21	06.44			0.07
LRW	HE	498.0	ES			21:21	54.83			0.02
LRW	HE	498.0	IAML			21:21	57.32	49	0.26	
LRW	HN	498.0	IAML			21:21	57.34	57	0.18	
BIGH	HZ	652.0	EP			21:21	24.88			-0.61
BIGH	HN	652.0	IAML			21:22	30.87	19	0.46	
BIGH	HE	652.0	IAML			21:22	31.39	11	0.24	
MCD	EZ	755.0	EP			21:21	38.39			0.03
MME1	EZ	786.0	EP			21:21	41.57			-0.69
DRUM	HZ	834.0	EP			21:21	47.65			-0.48
DRUM	HN	834.0	IAML			21:23	11.32	8	0.30	
DRUM	HE	834.0	IAML			21:23	13.23	10	0.26	
EDU	EZ	871.0	EP			21:21	52.61			-0.18

TABLE 2 : PHASE DATA

INVG	HZ	881.0	EP		21:21	53.43		-0.60
INVG	HE	881.0	ES		21:23	17.42		0.16
INVG	HE	881.0	IAML		21:23	22.46	5 0.38	
INVG	HN	881.0	IAML		21:23	25.29	6 0.32	
EAB	EZ	908.0	EP		21:21	57.17		-0.13
ESK	HZ	1007.0	EP		21:22	08.87		-0.78
ESK	HE	1007.0	ES		21:23	44.25		-0.03
ESK	HE	1007.0	IAML		21:23	48.52	4 0.24	
ESK	HN	1007.0	IAML		21:23	51.15	4 0.38	
EDMD	HZ	1068.0	EP		21:22	16.18		-0.98
HPK	HZ	1167.0	EP		21:22	28.75		-0.73

August 9 2012 Time: 21:51 19.7 UTC Magnitude: 1.4 ML
Lat: 53.191N Lon: -1.060W Depth: 1.2 km
Grid Ref: 462.80 kmE 366.43 kmN RMS: 0.30 secs
Locality: EDWINSTOWE,NOTTS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	50.1	EP			21:51	29.05			-0.13
LBWR	HE	50.1	ES			21:51	35.74			-0.35
LBWR	HN	50.1	IAML			21:51	36.65	25	0.38	
LBWR	HE	50.1	IAML			21:51	36.88	26	0.36	
CWF	HZ	53.0	EP			21:51	29.43			-0.20
CWF	HE	53.0	ES			21:51	36.72			-0.13
CWF	HE	53.0	IAML			21:51	40.70	5	0.30	
CWF	HN	53.0	IAML			21:51	42.55	4	0.30	
HPK	HZ	93.2	EP			21:51	36.00			0.13
HPK	HE	93.2	IAML			21:51	51.33	37	0.22	
HPK	HN	93.2	IAML			21:51	51.66	37	0.20	
GDLE	HZ	138.0	EP			21:51	43.04			0.28
GDLE	HN	138.0	ES			21:51	59.69			0.12
GDLE	HE	138.0	IAML			21:52	02.55	14	0.40	
GDLE	HN	138.0	IAML			21:52	03.74	15	0.32	
HLM1	HE	144.0	ES			21:52	01.64			0.58
FOEL	HZ	147.0	EP			21:51	44.69			0.54
FOEL	HE	147.0	ES			21:52	02.58			0.60
FOEL	HE	147.0	IAML			21:52	06.75	8	0.88	
FOEL	HN	147.0	IAML			21:52	09.30	6	0.32	
MCH1	HZ	187.0	EP			21:51	50.59			1.08
MCH1	HN	187.0	ES			21:52	11.46			0.20
MCH1	HN	187.0	IAML			21:52	14.80	5	0.28	
MCH1	HE	187.0	IAML			21:52	15.42	4	0.22	
EDMD	HE	192.0	ES			21:52	12.51			0.22
EDMD	HN	192.0	IAML			21:52	16.68	5	0.16	
EDMD	HE	192.0	IAML			21:52	17.60	6	0.20	

August 10 2012 Time: 10:59 16.7 UTC Magnitude: 2.3 ML
Lat: 56.556N Lon: -5.695W Depth: 12.9 km
Grid Ref: 172.95 kmE 746.55 kmN RMS: 0.40 secs
Locality: LOCHALINE,HIGHLAND
Velocity model: Lownet Xnear: 120.0 Xfar: 240.0
Comment: FELT LISMORE,OBAN Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	87.2	IP		C	10:59	31.11			0.06
KPL	HE	87.2	ES			10:59	41.44			-0.11
KPL	HN	87.2	IAML			10:59	44.28	58	0.26	
KPL	HE	87.2	IAML			10:59	44.89	106	0.24	
EAB	EZ	93.4	EP			10:59	31.86			-0.19
INVG	HZ	103.0	EP			10:59	33.33			-0.07
INVG	HE	103.0	ES			10:59	45.16			-0.47
INVG	HN	103.0	IAML			10:59	47.36	140	0.10	
INVG	HE	103.0	IAML			10:59	47.49	80	0.14	
PGB1	HZ	112.0	IP		C	10:59	35.14			0.43
PGB1	HE	112.0	ES			10:59	48.33			0.45
PGB1	HN	112.0	IAML			10:59	49.45	57	0.19	
PGB1	HE	112.0	IAML			10:59	49.47	60	0.18	
MDO	EZ	127.0	EP			10:59	37.10			0.13
EDU	EZ	165.0	EP			10:59	43.14			0.94
CLGH	HZ	166.0	EP			10:59	41.58			-0.70
CLGH	HE	166.0	IAML			11:00	03.10	41	0.42	
CLGH	HN	166.0	IAML			11:00	03.86	57	0.16	
MME1	EZ	186.0	EP			10:59	44.15			-0.73
MCD	EZ	187.0	EP			10:59	44.16			-0.76
MCD	EE	187.0	IAML			11:00	10.36	31	0.32	
MCD	EN	187.0	IAML			11:00	11.25	27	0.24	
DRUM	HZ	200.0	EP			10:59	46.66			0.10
DRUM	HE	200.0	IAML			11:00	14.70	41	0.14	
DRUM	HN	200.0	IAML			11:00	16.55	46	0.36	
ESK	HZ	208.0	EP			10:59	47.07			-0.46
ESK	HN	208.0	IAML			11:00	14.60	19	0.23	
ESK	HE	208.0	IAML			11:00	15.72	16	0.20	

August 26 2012 Time: 20:37 40.6 UTC Magnitude: 2.0 ML
Lat: 50.552N Lon: -2.278W Depth: 9.7 km
Grid Ref: 380.31 kmE 72.57 kmN RMS: 0.70 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 100.0 Xfar: 300.0
Comment: 13KM SE OF WEYMOUTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SWN1	HZ	112.0	EP			20:37	58.42			-0.43
WOL	BZ	112.0	EP			20:37	58.40			-0.52
WOL	BE	112.0	ES			20:38	13.47			1.18
SWN1	HN	112.0	ES			20:38	12.21			0.04
SWN1	HE	112.0	IAML			20:38	14.06	49	0.16	
SWN1	HN	112.0	IAML			20:38	14.15	26	0.27	
DYA	HZ	118.0	IP			20:38	00.01			0.27
DYA	HN	118.0	ES			20:38	13.93			0.22
DYA	HN	118.0	IAML			20:38	15.16	30	0.39	
DYA	HE	118.0	IAML			20:38	15.81	21	0.16	
OLDB	HZ	125.0	EP			20:38	00.08			-0.56
OLDB	HN	125.0	ES			20:38	14.72			-0.55
OLDB	HN	125.0	IAML			20:38	17.04	122	0.40	
OLDB	HE	125.0	IAML			20:38	17.45	128	0.35	
STRD	HZ	136.0	EP			20:38	02.19			-0.15
JSA	HZ	152.0	EP			20:38	05.62			1.08
JSA	HE	152.0	ES			20:38	20.75			-1.25
JSA	HN	152.0	IAML			20:38	25.63	9	0.27	
JSA	HE	152.0	IAML			20:38	25.76	10	0.25	
SSW	EZ	160.0	EP			20:38	05.68			-0.08
HTL	HZ	163.0	EP			20:38	06.54			0.39
MCH1	HZ	168.0	EP			20:38	06.39			-0.44
SBD	BZ	171.0	EP			20:38	07.84			0.74
HLM1	HZ	223.0	EP			20:38	14.68			1.03

August 27 2012 Time: 12:57 29.1 UTC Magnitude: 1.6 ML
Lat: 55.777N Lon: -6.370W Depth: 8.0 km
Grid Ref: 126.01 kmE 662.39 kmN RMS: 0.40 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	79.0	EP			12:57	42.65			0.38
CLGH	HE	79.0	ES			12:57	51.44			-0.42
CLGH	HN	79.0	IAML			12:57	52.39	33	0.13	
CLGH	HE	79.0	IAML			12:57	54.50	26	0.27	
PGB1	HZ	118.0	EP			12:57	48.59			0.22
PGB1	HE	118.0	ES			12:58	02.41			-0.01
PGB1	HN	118.0	IAML			12:58	03.38	21	0.18	
PGB1	HE	118.0	IAML			12:58	03.94	20	0.36	
EAB	EZ	135.0	EP			12:57	50.01			-0.78
GAL1	HZ	146.0	EP			12:57	52.87			0.51
GAL1	HE	146.0	ES			12:58	09.71			0.40
KPL	HZ	179.0	EP			12:57	56.22			-0.63
KPL	HE	179.0	IAML			12:58	19.52	7	0.58	
KPL	HN	179.0	IAML			12:58	24.55	4	0.41	
KAC	EZ	203.0	EP			12:57	59.11			-0.68

September 1 2012 Time: 07:04 12.0 UTC Magnitude: 1.1 ML
Lat: 55.749N Lon: -6.293W Depth: 8.9 km
Grid Ref: 130.64 kmE 658.97 kmN RMS: 0.20 secs
Locality: ISLAY,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CLGH	HZ	75.1	EP			07:04	24.67			0.13
CLGH	HE	75.1	ES			07:04	33.58			-0.11
CLGH	HE	75.1	IAML			07:04	35.63	10	0.17	
CLGH	HN	75.1	IAML			07:04	35.78	13	0.07	
PGB1	HZ	114.0	EP			07:04	30.57			0.05
PGB1	HN	114.0	ES			07:04	44.09			0.06
PGB1	HN	114.0	IAML			07:04	45.40	5	0.19	
PGB1	HE	114.0	IAML			07:04	45.59	6	0.18	
INVG	HZ	159.0	EP			07:04	36.79			-0.26
INVG	HN	159.0	ES			07:04	55.05			-0.27
INVG	HE	159.0	IAML			07:04	58.03	1	0.17	
INVG	HN	159.0	IAML			07:04	58.38	2	0.27	
KPL	HZ	181.0	EP			07:04	39.55			-0.32

September 2 2012 Time: 17:06 46.6 UTC Magnitude: 0.7 ML
Lat: 53.280N Lon: -2.324W Depth: 8.6 km
Grid Ref: 378.40 kmE 375.97 kmN RMS: 0.20 secs
Locality: OLLERTON,CHESHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	42.1	EP			17:06	54.08			0.04
LBWR	HN	42.1	ES			17:06	59.32			-0.16
LBWR	HN	42.1	IAML			17:06	59.78	9	0.09	
LBWR	HE	42.1	IAML			17:07	00.39	10	0.16	
FOEL	HZ	73.0	EP			17:06	59.04			0.20
FOEL	HN	73.0	ES			17:07	07.99			0.21
FOEL	HE	73.0	IAML			17:07	10.13	2	0.21	
FOEL	HN	73.0	IAML			17:07	10.75	4	0.11	
CWF	HE	91.0	ES			17:07	12.73			0.21
CWF	HE	91.0	IAML			17:07	13.69	2	0.15	
CWF	HN	91.0	IAML			17:07	15.78	3	0.09	
HLM1	HZ	92.6	EP			17:07	01.77			-0.11
HLM1	HN	92.6	ES			17:07	12.66			-0.38
HLM1	HE	92.6	IAML			17:07	14.90	5	0.19	
HLM1	HN	92.6	IAML			17:07	15.03	4	0.17	
WPM1	EZ	106.0	EP			17:07	03.84			-0.02

September 5 2012 Time: 16:08 10.2 UTC Magnitude: 1.1 ML
Lat: 53.126N Lon: -2.262W Depth: 7.9 km
Grid Ref: 382.47 kmE 358.82 kmN RMS: 0.40 secs
Locality: CONGLETON,CHESHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES

TABLE 2 : PHASE DATA

LBWR	HZ	47.2	EP		16:08	18.68			0.24
LBWR	HN	47.2	ES		16:08	23.82			-0.63
LBWR	HE	47.2	IAML		16:08	25.17	35	0.10	
LBWR	HN	47.2	IAML		16:08	26.11	23	0.12	
FOEL	HZ	68.2	IP	C	16:08	21.55			-0.17
FOEL	HN	68.2	ES		16:08	30.13			0.02
FOEL	HN	68.2	IAML		16:08	33.68	6	0.08	
FOEL	HE	68.2	IAML		16:08	34.85	4	0.40	
CWF	HZ	77.3	EP		16:08	23.82			0.74
CWF	HN	77.3	ES		16:08	32.17			-0.31
HLM1	HZ	79.4	EP		16:08	23.33			-0.12
HLM1	HE	79.4	ES		16:08	33.00			-0.12
HLM1	HE	79.4	IAML		16:08	34.82	10	0.19	
HLM1	HN	79.4	IAML		16:08	34.83	15	0.12	
HPK	HZ	102.0	EP		16:08	27.28			0.39
WPM1	EZ	111.0	EP		16:08	28.30			0.00
WME	EZ	139.0	EP		16:08	32.59			0.10
WPS	HZ	152.0	EP		16:08	34.72			0.42
YRC	EZ	155.0	EP		16:08	33.95			-0.77

September 8 2012 Time: 19:02 54.5 UTC Magnitude: 1.1 ML
Lat: 55.029N Lon: -7.573W Depth: 1.3 km
Grid Ref: 43.99 kmE 584.71 kmN RMS: 0.60 secs
Locality: COUNTY DONEGAL,IRELAND
Velocity model: Lownet Xnear: 100.0 Xfar: 225.0
Comment: FELT TAMNEY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IDGL	BZ	6.1	EP			19:02	55.52			-0.58
IDGL	BE	6.1	IAML			19:02	56.40	39	0.22	
IDGL	BN	6.1	ES			19:02	57.63			0.38
IDGL	BN	6.1	IAML			19:02	58.00	44	0.30	
CLGH	HZ	93.7	EP			19:03	10.92			0.39
CLGH	HN	93.7	ES			19:03	21.88			-0.33
CLGH	HN	93.7	IAML			19:03	23.64	23	0.19	
CLGH	HE	93.7	IAML			19:03	24.10	25	0.15	
GAL1	HZ	184.0	EP			19:03	25.12			1.37
PGB1	HZ	214.0	EP			19:03	29.03			1.53
PGB1	HE	214.0	ES			19:03	49.71			-1.86
PGB1	HE	214.0	IAML			19:03	55.69	2	0.25	
PGB1	HN	214.0	IAML			19:03	58.00	3	0.33	

September 17 2012 Time: 08:26 48.2 UTC Magnitude: 1.1 ML
Lat: 57.623N Lon: -5.556W Depth: 2.6 km
Grid Ref: 187.68 kmE 864.77 kmN RMS: 0.40 secs
Locality: TORRIDON,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KAC	EZ	20.7	IP		C	08:26	52.40			0.23
KAC	EZ	20.7	ES			08:26	54.77			-0.33
RRR	SZ	30.0	EP			08:26	53.85			0.13
RRR	SE	30.0	ES			08:26	57.26			-0.53
RRR	SE	30.0	IAML			08:26	58.40	22	0.30	
RRR	SN	30.0	IAML			08:26	59.04	23	0.26	
KPL	HZ	32.2	EP			08:26	54.50			0.43
KPL	HN	32.2	ES			08:26	57.86			-0.54
KPL	HN	32.2	IAML			08:26	58.60	13	0.15	
KPL	HE	32.2	IAML			08:26	58.75	17	0.13	
KSB	EZ	46.8	EP			08:26	56.77			0.15
RRH	SZ	75.0	EP			08:27	01.32			0.34
MCD	EZ	138.0	EP			08:27	11.14			0.47
MCD	EE	138.0	ES			08:27	26.83			-0.28
MCD	EN	138.0	IAML			08:27	29.56	11	0.20	
MCD	EE	138.0	IAML			08:27	29.60	10	0.11	
INVG	HZ	162.0	EP			08:27	14.72			0.61
INVG	HN	162.0	ES			08:27	32.85			-0.21
INVG	HE	162.0	IAML			08:27	35.01	3	0.10	
INVG	HN	162.0	IAML			08:27	35.89	5	0.21	

September 21 2012 Time: 09:29 52.0 UTC Magnitude: 1.4 ML
Lat: 56.370N Lon: -3.970W Depth: 2.1 km
Grid Ref: 278.33 kmE 721.48 kmN RMS: 0.30 secs
Locality: COMRIE,PERTH/KINROSS
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0
Comment: FELT COMRIE Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	7.8	IP		D	09:29	54.08			0.10
INVG	HN	7.8	ES			09:29	55.02			-0.39
INVG	HE	7.8	IAML			09:29	55.07	574	0.10	
INVG	HN	7.8	IAML			09:29	55.11	413	0.07	
EAB	EZ	30.4	EP			09:29	58.45			0.32
EDU	EZ	62.3	EP			09:30	03.60			0.18
EDI	HE	69.6	ES			09:30	13.32			-0.25
EDI	HE	69.6	IAML			09:30	15.41	11	0.24	
EDI	HN	69.6	IAML			09:30	18.96	12	0.22	
PGB1	HN	69.9	ES			09:30	13.61			-0.09
PGB1	HE	69.9	IAML			09:30	14.18	16	0.32	
PGB1	HN	69.9	IAML			09:30	19.16	17	0.14	
MDO	EZ	122.0	EP			09:30	13.28			0.67
KSB	EZ	129.0	EP			09:30	14.10			0.37
MCD	EZ	142.0	EP			09:30	16.26			0.62
MCD	EE	142.0	ES			09:30	32.77			-0.11
MCD	EN	142.0	IAML			09:30	34.86	14	0.25	
MCD	EE	142.0	IAML			09:30	36.61	16	0.21	
KAC	EZ	149.0	EP			09:30	17.06			0.36
KPL	HZ	149.0	EP			09:30	17.37			0.79
KPL	HN	149.0	ES			09:30	34.15			-0.37
KPL	HN	149.0	IAML			09:30	35.67	9	0.49	
KPL	HE	149.0	IAML			09:30	38.30	8	0.20	

September 22 2012 Time: 07:39 57.7 UTC Magnitude: 1.1 ML
Lat: 56.381N Lon: -3.981W Depth: 2.4 km
Grid Ref: 277.69 kmE 722.72 kmN RMS: 0.30 secs
Locality: COMRIE,PERTH/KINROSS
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0
Comment: FELT COMRIE Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	6.5	IP		D	07:39	59.51			0.15
INVG	HE	6.5	ES			07:40	00.40			-0.15
INVG	HE	6.5	IAML			07:40	00.50	161	0.10	
INVG	HN	6.5	IAML			07:40	00.52	105	0.06	
EAB	EZ	30.7	EP			07:40	03.87			-0.05
EDU	EZ	62.6	EP			07:40	09.11			-0.09
MDO	EZ	120.0	EP			07:40	18.78			0.63
KSB	EZ	128.0	EP			07:40	19.81			0.54
MCD	EN	141.0	IAML			07:40	40.15	5	0.42	
MCD	EE	141.0	IAML			07:40	42.03	5	0.21	
KPL	HN	148.0	IAML			07:40	41.09	3	0.55	
KPL	HE	148.0	IAML			07:40	43.61	2	0.20	
KAC	EZ	148.0	EP			07:40	22.67			0.41
KPL	HZ	148.0	EP			07:40	22.98			0.84

September 25 2012 Time: 17:19 50.2 UTC Magnitude: 2.1 ML
Lat: 49.802N Lon: 0.083W Depth: 5.0 km
Grid Ref: 549.87 kmE -8.77 kmN RMS: 0.20 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 200.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HMNX	HE	120.0	ES			17:20	24.03			-0.11
HMNX	HN	120.0	IAML			17:20	27.09	70	0.18	
HMNX	HE	120.0	IAML			17:20	27.42	90	0.39	
ELSH	HZ	167.0	EP			17:20	16.99			0.26
JDC	EZ	168.0	EP			17:20	16.87			-0.01
JDC	EN	168.0	ES			17:20	36.37			0.04
JRS	EZ	172.0	EP			17:20	17.27			-0.02
JRS	EE	172.0	ES			17:20	37.07			0.02
JSA	HZ	177.0	EP			17:20	17.52			-0.46
JSA	HN	177.0	ES			17:20	38.50			0.27
JSA	HE	177.0	IAML			17:20	39.81	11	0.27	
JSA	HN	177.0	IAML			17:20	42.75	12	0.31	
DYA	HZ	296.0	EP			17:20	33.14			0.29
DYA	HN	296.0	ES			17:21	04.53			0.58
DYA	HN	296.0	IAML			17:21	13.62	7	0.38	
DYA	HE	296.0	IAML			17:21	14.66	5	0.61	

September 30 2012 Time: 06:20 30.4 UTC Magnitude: 0.6 ML
Lat: 56.389N Lon: -3.878W Depth: 2.1 km
Grid Ref: 284.07 kmE 723.43 kmN RMS: 0.30 secs
Locality: COMRIE,PERTH/KINROSS
Velocity model: Lownet Xnear: 75.0 Xfar: 150.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	11.1	IP		C	06:20	32.36			-0.47
INVG	HE	11.1	ES			06:20	34.88			0.24
INVG	HE	11.1	IAML			06:20	35.15	12	0.18	
INVG	HN	11.1	IAML			06:20	35.25	10	0.16	
EAB	EZ	36.1	EP			06:20	37.38			0.30
EDU	EZ	56.3	EP			06:20	40.37			-0.07
KPL	HZ	151.0	EP	9		06:20	49.33			-5.54
KPL	HN	151.0	ES			06:21	03.86			-3.36
KPL	HN	151.0	IAML			06:21	05.28	3	0.34	
KPL	HE	151.0	IAML			06:21	06.42	3	0.37	

October 6 2012 Time: 12:30 56.0 UTC Magnitude: 1.1 ML
Lat: 55.241N Lon: -3.440W Depth: 2.5 km
Grid Ref: 308.45 kmE 595.04 kmN RMS: 0.30 secs
Locality: JOHNSTONEBRIDGE,D & G
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
ESK	HZ	17.2	EP			12:30	59.20			-0.18
ESK	HE	17.2	ES			12:31	01.69			-0.19
ESK	HE	17.2	IAML			12:31	02.02	43	0.10	
ESK	HN	17.2	IAML			12:31	02.64	30	0.24	
BHH	SZ	21.7	EP			12:31	00.17			0.03
BHH	SN	21.7	ES			12:31	03.11			-0.08
BHH	SN	21.7	IAML			12:31	03.33	89	0.10	
BHH	SE	21.7	IAML			12:31	03.40	108	0.14	
BBO1	SZ	57.5	EP			12:31	06.64			0.55
KESW	HZ	75.7	EP			12:31	08.65			-0.28
KESW	HN	75.7	ES			12:31	18.02			-0.39
KESW	HN	75.7	IAML			12:31	20.86	10	0.14	
KESW	HE	75.7	IAML			12:31	20.92	10	0.15	
PGB1	HZ	91.5	EP			12:31	11.48			0.11
ESY	EZ	91.6	EP			12:31	11.50			0.09
EDMD	HZ	105.0	EP			12:31	13.99			0.58
EAB	EZ	120.0	EP			12:31	15.53			-0.22
CLGH	HZ	171.0	EP			12:31	22.78			-0.47

October 8 2012 Time: 03:11 25.1 UTC Magnitude: 2.2 ML
Lat: 49.602N Lon: -2.929W Depth: 7.5 km

TABLE 2 : PHASE DATA

Grid Ref: 332.88 kmE -32.67 kmN RMS: 0.70 secs
Locality: GUERNSEY,CHANNEL ISLES
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: OFFSHORE GUERNSEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JSA	HZ	71.7	EP			03:11	36.83			-0.23
JSA	HN	71.7	ES			03:11	45.56			-0.24
JSA	HN	71.7	IAML			03:11	45.85	92	0.09	
JSA	HE	71.7	IAML			03:11	45.87	138	0.20	
DYA	HZ	117.0	EP			03:11	44.01			-0.17
DYA	HE	117.0	ES			03:11	57.26			-0.86
DYA	HE	117.0	IAML			03:11	58.59	63	0.30	
DYA	HN	117.0	IAML			03:11	59.44	123	0.16	
SBD	BZ	165.0	EP			03:11	51.51			0.42
CCA1	HZ	178.0	EP			03:11	53.33			0.68
CCA1	HN	178.0	ES			03:12	12.51			-0.26
CCA1	HN	178.0	IAML			03:12	16.08	27	0.17	
CCA1	HE	178.0	IAML			03:12	16.80	26	0.12	
HTL	HZ	191.0	EP			03:11	55.53			1.28
MONM	HZ	249.0	EP			03:12	03.42			1.84

October 8 2012 Time: 09:28 58.9 UTC Magnitude: 1.6 ML
Lat: 53.219N Lon: -1.047W Depth: 1.1 km
Grid Ref: 463.63 kmE 369.56 kmN RMS: 0.60 secs
Locality: OLLERTON,NOTTS
Velocity model: Lownet Xnear: 100.0 Xfar: 300.0
Comment: C/F,FELT OLLERTON Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	49.5	EP			09:29	07.90			-0.43
LBWR	HE	49.5	ES			09:29	14.67			-0.51
LBWR	HN	49.5	IAML			09:29	15.59	39	0.38	
LBWR	HE	49.5	IAML			09:29	15.83	33	0.30	
CWF	HZ	56.2	EP			09:29	08.34			-1.03
HPK	HZ	90.7	EP			09:29	15.28			0.55
HPK	HE	90.7	IAML			09:29	28.85	30	0.20	
HPK	HN	90.7	IAML			09:29	30.86	43	0.18	
HLM1	HZ	146.0	EP			09:29	23.74			0.54
HLM1	HN	146.0	ES			09:29	40.75			-0.16
HLM1	HE	146.0	IAML			09:29	43.24	9	0.36	
HLM1	HN	146.0	IAML			09:29	43.44	7	0.34	
FOEL	HZ	149.0	EP			09:29	23.98			0.36
FOEL	HE	149.0	ES			09:29	42.18			0.54
FOEL	HN	149.0	IAML			09:29	45.17	12	0.44	
FOEL	HE	149.0	IAML			09:29	46.82	5	0.48	
MCH1	HZ	190.0	EP			09:29	29.13			0.02
MCH1	HE	190.0	ES			09:29	52.18			1.04
MCH1	HN	190.0	IAML			09:29	53.69	7	0.28	
MCH1	HE	190.0	IAML			09:29	53.97	5	0.30	
MONM	HZ	194.0	EP			09:29	29.96			0.26
MONM	HN	194.0	ES			09:29	53.16			1.01
MONM	HN	194.0	IAML			09:29	54.29	8	0.44	
MONM	HE	194.0	IAML			09:29	54.76	11	0.34	

October 10 2012 Time: 05:18 09.8 UTC Magnitude: 1.8 ML
Lat: 52.853N Lon: -1.359W Depth: 11.4 km
Grid Ref: 443.16 kmE 328.62 kmN RMS: 0.30 secs
Locality: CASTLE DONINGTON,LEICS
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	13.2	EP			05:18	12.80			-0.13
CWF	HE	13.2	ES			05:18	15.07			-0.18
CWF	HN	13.2	IAML			05:18	15.30	194	0.16	
CWF	HE	13.2	IAML			05:18	15.43	165	0.16	
LBWR	HZ	65.7	EP			05:18	20.85			-0.04
LBWR	HN	65.7	IAML			05:18	32.58	36	0.20	
LBWR	HE	65.7	IAML			05:18	32.63	40	0.12	
LMK	HZ	96.4	EP			05:18	25.76			0.17
LMK	HE	96.4	ES			05:18	37.24			0.10
LMK	HE	96.4	IAML			05:18	38.08	80	0.28	
LMK	HN	96.4	IAML			05:18	40.27	105	0.26	
HLM1	HZ	109.0	EP			05:18	27.29			-0.30
HLM1	HE	109.0	ES			05:18	40.26			-0.35
HLM1	HE	109.0	IAML			05:18	41.41	7	0.12	
HLM1	HN	109.0	IAML			05:18	43.80	8	0.33	
FOEL	HZ	124.0	EP			05:18	30.37			0.69
FOEL	HE	124.0	IAML			05:18	46.81	5	0.24	
FOEL	HN	124.0	IAML			05:18	46.35	10	0.22	
HPK	HZ	124.0	EP			05:18	29.87			0.20
HPK	HE	124.0	ES			05:18	43.96			-0.24
HPK	HE	124.0	IAML			05:18	46.13	31	0.17	
HPK	HN	124.0	IAML			05:18	46.76	34	0.14	
STRD	HZ	132.0	EP			05:18	31.07			0.33
STRD	HN	132.0	ES			05:18	46.43			0.37
STRD	HE	132.0	IAML			05:18	47.22	69	0.78	
STRD	HN	132.0	IAML			05:18	50.22	35	0.29	
WACR	HZ	135.0	EP			05:18	31.30			0.15
WACR	HN	135.0	ES			05:18	46.48			-0.29
WACR	HN	135.0	IAML			05:18	48.16	26	0.20	
WACR	HE	135.0	IAML			05:18	49.13	18	0.14	
MCH1	HZ	147.0	EP			05:18	32.87			0.01
MCH1	HE	147.0	ES			05:18	49.45			-0.28
MCH1	HE	147.0	IAML			05:18	50.25	20	0.20	
MCH1	HN	147.0	IAML			05:18	51.50	19	0.21	
EDMD	HZ	224.0	EP			05:18	41.89			-0.80
EDMD	HN	224.0	IAML			05:19	10.64	4	0.15	
EDMD	HE	224.0	IAML			05:19	10.71	5	0.21	

October 12 2012 Time: 21:33 22.7 UTC Magnitude: 1.3 ML
Lat: 56.912N Lon: -4.752W Depth: 7.5 km
Grid Ref: 232.47 kmE 783.43 kmN RMS: 0.30 secs
Locality: SPEAN BRIDGE,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT BOHUNTINE Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KSB	EZ	52.4	EP			21:33	31.44			-0.29
INVG	HZ	69.2	EP			21:33	34.11			-0.20
INVG	HN	69.2	ES			21:33	42.47			-0.33
INVG	HN	69.2	IAML			21:33	43.02	11	0.07	
INVG	HE	69.2	IAML			21:33	46.09	12	0.26	
KPL	HZ	72.4	EP			21:33	34.98			0.24
KPL	HE	72.4	ES			21:33	43.65			0.10
KPL	HE	72.4	IAML			21:33	47.26	12	0.16	
KPL	HN	72.4	IAML			21:33	47.29	16	0.15	
KAC	EZ	73.2	EP			21:33	34.63			-0.28
EAB	EZ	84.5	EP			21:33	37.05			0.38
EDU	EZ	114.0	EP			21:33	41.54			0.26
DRUM	HZ	138.0	EP			21:33	45.19			0.41
DRUM	HN	138.0	ES			21:34	00.98			0.07
DRUM	HN	138.0	IAML			21:34	03.08	11	0.30	
DRUM	HE	138.0	IAML			21:34	03.16	10	0.10	

October 13 2012 Time: 03:24 24.3 UTC Magnitude: 1.5 ML
Lat: 49.103N Lon: -2.313W Depth: 5.3 km
Grid Ref: 377.16 kmE -88.50 kmN RMS: 0.00 secs
Locality: JERSEY,CHANNEL ISLES
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 17KM SW OF ST HELIER

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JSA	HZ	13.9	EP			03:24	27.25			0.01
JSA	HE	13.9	ES			03:24	29.34			-0.01
JSA	HN	13.9	IAML			03:24	29.47	212	0.09	
JSA	HE	13.9	IAML			03:24	29.50	146	0.10	
JRS	EZ	18.9	EP			03:24	28.05			-0.01
JRS	EE	18.9	ES			03:24	30.78			0.01
DYA	HZ	189.0	EP			03:24	53.55			0.00

October 27 2012 Time: 17:07 38.8 UTC Magnitude: 1.1 ML
Lat: 56.385N Lon: -6.099W Depth: 1.3 km
Grid Ref: 147.01 kmE 728.94 kmN RMS: 0.30 secs
Locality: MULL,ARGYLL/BUTE
Velocity model: Lownet Xnear: 125.0 Xfar: 250.0
Comment: FELT PENNYGHAEL,MULL Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	45.5	EP			17:07	47.24			0.02
LAWE	HN	45.5	ES			17:07	53.00			-0.37
LAWE	HN	45.5	IAML			17:07	53.66	15	0.29	
LAWE	HE	45.5	IAML			17:07	54.26	15	0.14	
KPL	HZ	110.0	EP			17:07	56.89			-0.34
KPL	HN	110.0	ES			17:08	11.01			0.31
KPL	HE	110.0	IAML			17:08	13.37	8	0.09	
KPL	HN	110.0	IAML			17:08	13.67	5	0.14	
EAB	EZ	111.0	EP			17:07	57.97			0.45
INVG	HZ	127.0	EP			17:08	00.24			0.28
INVG	HN	127.0	IAML			17:08	16.64	8	0.13	
INVG	HE	127.0	IAML			17:08	17.01	2	0.13	
KAC	EZ	133.0	EP			17:08	00.52			-0.40
CLGH	HZ	145.0	EP			17:08	02.60			0.00

October 31 2012 Time: 15:59 19.8 UTC Magnitude: 2.7 ML
Lat: 55.970N Lon: -5.942W Depth: 7.4 km
Grid Ref: 154.05 kmE 682.23 kmN RMS: 0.40 secs
Locality: JURA,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT ISLAY Intensity: 2

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	46.7	IP		D	15:59	27.83			-0.06
LAWE	HE	46.7	ES			15:59	33.37			-0.45
LAWE	HN	46.7	IAML			15:59	34.60	354	0.12	
LAWE	HE	46.7	IAML			15:59	34.87	449	0.10	
PGB1	HZ	92.9	IP		C	15:59	35.55			0.49
PGB1	HN	92.9	ES			15:59	46.12			-0.11
PGB1	HE	92.9	IAML			15:59	48.83	207	0.13	
PGB1	HN	92.9	IAML			15:59	48.86	154	0.13	
CLGH	HZ	99.3	EP			15:59	36.27			0.20
CLGH	HE	99.3	ES			15:59	47.60			-0.36
CLGH	HN	99.3	IAML			15:59	50.31	435	0.20	
CLGH	HE	99.3	IAML			15:59	50.47	473	0.47	
EAB	EZ	103.0	EP			15:59	36.79			0.17
INVG	HZ	128.0	EP			15:59	40.43			-0.08
INVG	HN	128.0	ES			15:59	55.72			0.06
INVG	HN	128.0	IAML			15:59	57.83	195	0.19	
INVG	HE	128.0	IAML			15:59	57.97	123	0.19	
KPL	HZ	154.0	EP			15:59	43.35			-0.70
KPL	HN	154.0	ES			16:00	02.78			1.00
KPL	HE	154.0	IAML			16:00	04.55	176	0.23	
KPL	HN	154.0	IAML			16:00	05.50	82	0.31	
EDI	HZ	172.0	EP			15:59	47.69			1.05
KAC	EZ	175.0	EP			15:59	46.89			-0.09

TABLE 2 : PHASE DATA

ESK	HZ	187.0	EP		15:59	48.12			-0.41
MDO	EZ	190.0	EP		15:59	48.39			-0.57
IOMK	HZ	210.0	EP		15:59	50.99			-0.34
KESW	HZ	237.0	EP		15:59	54.91			0.14
DRUM	HZ	238.0	EP		15:59	54.66			-0.17
MCD	EZ	243.0	EP		15:59	54.68			-0.90
EDMD	HZ	282.0	EP		16:00	00.14			-0.22
BIGH	HZ	307.0	EP		16:00	02.41			-1.03

November 7 2012 Time: 19:10 12.5 UTC Magnitude: 1.0 ML
Lat: 55.989N Lon: -5.278W Depth: 9.7 km
Grid Ref: 195.56 kmE 682.18 kmN RMS: 0.20 secs
Locality: KILFINAN,ARGYLL/BUTE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 4KM NE OF KILFINAN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	31.1	EP			19:10	18.26			0.04
LAWE	HE	31.1	ES			19:10	22.29			-0.10
LAWE	HE	31.1	IAML			19:10	22.73	27	0.18	
LAWE	HN	31.1	IAML			19:10	22.98	15	0.19	
PGB1	HZ	53.5	EP			19:10	21.48			-0.22
PGB1	HE	53.5	EP			19:10	21.48			
PGB1	HN	53.5	IAML			19:10	28.28	7	0.24	
PGB1	HE	53.5	IAML			19:10	28.44	7	0.16	
EAB	EZ	62.6	EP			19:10	23.37			0.24
INVG	HZ	90.8	EP			19:10	27.68			0.19
INVG	HN	90.8	ES			19:10	38.28			-0.15
INVG	HN	90.8	IAML			19:10	41.41	11	0.22	
INVG	HE	90.8	IAML			19:10	41.55	6	0.24	

November 8 2012 Time: 09:10 44.6 UTC Magnitude: 2.3 ML
Lat: 49.247N Lon: -3.411W Depth: 15.9 km
Grid Ref: 297.32 kmE -71.59 kmN RMS: 0.30 secs
Locality: ENGLISH CHANNEL
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 85KM WEST OF JERSEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
JSA	HZ	90.5	EP			09:10	59.15			-0.24
JSA	HN	90.5	ES			09:11	10.10			-0.08
JSA	HE	90.5	IAML			09:11	12.22	158	0.16	
JSA	HN	90.5	IAML			09:11	12.34	136	0.22	
JRS	EZ	96.3	EP			09:10	59.78			-0.43
JRS	EE	96.3	ES			09:11	11.73			0.13
JDG	EZ	99.6	EP			09:11	00.65			-0.02
JDC	EZ	99.6	EP			09:11	00.64			-0.04
JDC	EE	99.6	ES			09:11	12.70			0.29
JDG	EE	99.6	ES			09:11	12.52			0.12
DYA	HZ	137.0	EP			09:11	06.35			0.23
DYA	HN	137.0	IAML			09:11	26.27	53	0.12	
DYA	HE	137.0	IAML			09:11	26.80	37	0.24	
CCA1	HZ	168.0	EP			09:11	10.92			0.78
CCA1	HN	168.0	ES			09:11	28.46			-0.32
CCA1	HN	168.0	IAML			09:11	32.77	32	0.16	
CCA1	HE	168.0	IAML			09:11	32.89	27	0.21	
HTL	HZ	209.0	EP			09:11	14.86			-0.43
HTL	HN	209.0	IAML			09:11	51.27	16	0.42	
HTL	HE	209.0	IAML			09:11	52.61	13	0.54	

November 9 2012 Time: 19:43 19.8 UTC Magnitude: 1.7 ML
Lat: 52.527N Lon: -1.000W Depth: 7.5 km
Grid Ref: 467.83 kmE 292.64 kmN RMS: 0.40 secs
Locality: KIBWORTH,LEICS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
CWF	HZ	31.4	IP		D	19:43	25.29			-0.24
CWF	HN	31.4	ES			19:43	29.20			-0.53
CWF	HE	31.4	IAML			19:43	29.63	39	0.15	
CWF	HN	31.4	IAML			19:43	29.78	38	0.14	
LBWR	HZ	109.0	EP			19:43	38.19			0.63
LBWR	HE	109.0	ES			19:43	50.83			0.29
LBWR	HE	109.0	IAML			19:43	53.91	29	0.30	
LBWR	HN	109.0	IAML			19:43	54.39	34	0.34	
WACR	HZ	112.0	EP			19:43	38.13			0.06
WACR	HN	112.0	ES			19:43	51.17			-0.25
WACR	HE	112.0	IAML			19:43	51.79	36	0.24	
WACR	HN	112.0	IAML			19:43	53.12	43	0.18	
STRD	HZ	115.0	EP			19:43	38.57			0.02
HLM1	HZ	128.0	EP			19:43	40.82			0.37
HLM1	HE	128.0	ES			19:43	55.01			-0.52
HLM1	HN	128.0	IAML			19:43	56.42	10	0.19	
HLM1	HE	128.0	IAML			19:43	56.80	8	0.24	
MCH1	HZ	149.0	EP			19:43	43.54			0.14
MCH1	HN	149.0	ES			19:44	00.40			-0.24
MCH1	HN	149.0	IAML			19:44	02.00	26	0.13	
MCH1	HE	149.0	IAML			19:44	02.11	21	0.12	
FOEL	HZ	154.0	EP			19:43	44.75			0.53
FOEL	HN	154.0	ES			19:44	02.73			0.67
FOEL	HE	154.0	IAML			19:44	03.26	6	0.37	
FOEL	HN	154.0	IAML			19:44	04.26	17	0.36	

November 18 2012 Time: 16:33 48.9 UTC Magnitude: 1.4 ML
Lat: 53.215N Lon: -0.982W Depth: 1.2 km
Grid Ref: 467.97 kmE 369.18 kmN RMS: 0.50 secs
Locality: OLLERTON,NOTTS
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	53.7	EP			16:33	58.10			-0.60
LBWR	HE	53.7	ES			16:34	06.12			0.24
LBWR	HN	53.7	IAML			16:34	07.11	47	0.38	
LBWR	HE	53.7	IAML			16:34	07.69	28	0.27	
CWF	HZ	57.4	EP			16:33	58.61			-0.63
CWF	HN	57.4	ES			16:34	06.98			0.16
CWF	HN	57.4	IAML			16:34	13.67	6	0.10	
CWF	HE	57.4	IAML			16:34	13.83	5	0.14	
HPK	HZ	93.0	EP			16:34	04.99			0.21
HPK	HE	93.0	ES			16:34	16.60			0.21
HPK	HE	93.0	IAML			16:34	20.76	28	0.32	
HPK	HN	93.0	IAML			16:34	21.15	51	0.18	
HLM1	HZ	150.0	EP			16:34	14.13			0.74
HLM1	HE	150.0	ES			16:34	31.45			0.17
HLM1	HN	150.0	IAML			16:34	34.95	8	0.28	
HLM1	HE	150.0	IAML			16:34	35.30	7	0.36	
FOEL	HE	153.0	ES			16:34	32.98			0.81
FOEL	HE	153.0	IAML			16:34	35.00	5	0.38	
FOEL	HN	153.0	IAML			16:34	36.90	13	0.42	

November 21 2012 Time: 09:08 22.9 UTC Magnitude: 2.7 ML
Lat: 55.851N Lon: -10.313W Depth: 34.3 km
Grid Ref: -119.73 kmE 693.26 kmN RMS: 0.40 secs
Locality: ATLANTIC,NW OF IRELAND
Velocity model: Lownet Xnear: 500.0 Xfar: 1000.0
Comment: 190KM NW LETTERKENNY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
IGLA	BZ	277.0	EP			09:09	00.39			-0.45
IGLA	BE	277.0	ES			09:09	28.02			-0.48
IGLA	BN	277.0	IAML			09:09	38.57	12	0.22	
IGLA	BE	277.0	IAML			09:09	39.87	13	0.38	
CLGH	HZ	279.0	EP			09:09	01.18			0.07
CLGH	HE	279.0	ES			09:09	29.47			0.50
CLGH	HN	279.0	IAML			09:09	31.72	49	0.14	
CLGH	HE	279.0	IAML			09:09	32.88	41	0.12	
LAWE	HZ	309.0	EP			09:09	05.41			0.54
LAWE	HN	309.0	ES			09:09	35.27			-0.21
LAWE	HN	309.0	IAML			09:09	38.96	44	0.32	
LAWE	HE	309.0	IAML			09:09	39.24	35	0.28	
KPL	HZ	331.0	EP			09:09	07.09			-0.41
KPL	HE	331.0	ES			09:09	39.49			-0.54
KPL	HE	331.0	IAML			09:09	41.99	28	0.21	
KPL	HN	331.0	IAML			09:09	43.07	21	0.15	
KAC	EZ	358.0	EP			09:09	10.92			-0.02
PGB1	HN	365.0	ES			09:09	47.06			-0.50
PGB1	HN	365.0	IAML			09:09	49.34	29	0.18	
PGB1	HE	365.0	IAML			09:09	50.80	28	0.22	
EAB	EZ	374.0	EP			09:09	13.18			0.15
DSB	BZ	386.0	EP			09:09	14.92			0.52
INVG	HZ	395.0	EP			09:09	15.83			0.25
INVG	HN	395.0	ES			09:09	54.07			0.07
INVG	HE	395.0	IAML			09:09	56.31	5	0.17	
INVG	HN	395.0	IAML			09:09	58.09	11	0.29	
DRUM	HZ	497.0	EP			09:09	28.90			0.51

November 22 2012 Time: 19:46 38.0 UTC Magnitude: 2.0 ML
Lat: 55.776N Lon: -6.263W Depth: 12.9 km
Grid Ref: 132.71 kmE 661.86 kmN RMS: 0.20 secs
Locality: ISLAY ARGYLL/BUTE
Velocity model: Lownet Xnear: 125.0 Xfar: 225.0
Comment: FELT ISLAY Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LAWE	HZ	76.2	EP			19:46	50.46			-0.28
LAWE	HE	76.2	ES			19:47	00.17			0.15
LAWE	HE	76.2	IAML			19:47	01.46	60	0.13	
LAWE	HN	76.2	IAML			19:47	01.50	82	0.22	
CLGH	HZ	77.8	EP			19:46	51.40			0.39
CLGH	HE	77.8	ES			19:47	00.24			-0.25
CLGH	HN	77.8	IAML			19:47	02.49	117	0.11	
CLGH	HE	77.8	IAML			19:47	03.00	107	0.24	
EAB	EZ	129.0	EP			19:46	58.56			0.07
INVG	HZ	156.0	EP			19:47	02.36			-0.03
INVG	HN	156.0	ES			19:47	20.15			-0.02
INVG	HN	156.0	IAML			19:47	24.53	22	0.32	
INVG	HE	156.0	IAML			19:47	25.35	11	0.20	
KPL	HZ	178.0	EP			19:47	05.05			-0.06
EDI	HZ	193.0	EP	4		19:47	10.81			3.76
KAC	EZ	201.0	EP			19:47	07.55			-0.44

November 28 2012 Time: 21:37 21.0 UTC Magnitude: 2.1 ML
Lat: 54.512N Lon: -2.986W Depth: 7.5 km
Grid Ref: 336.17 kmE 513.43 kmN RMS: 0.20 secs
Locality: PATTERDALE,CUMBRIA
Velocity model: Lownet Xnear: 100.0 Xfar: 150.0
Comment: FELT SOUTH CUMBRIA Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KESW	HZ	11.5	EP			21:37	23.66			0.00
KESW	HE	11.5	ES			21:37	25.50			-0.12
KESW	HN	11.5	IAML			21:37	26.04	508	0.19	
KESW	HE	11.5	IAML			21:37	26.11	365	0.10	
SPK	EZ	33.7	IP		C	21:37	27.15			0.10

TABLE 2 : PHASE DATA

SPK	EN	33.7	ES		21:37	31.35			-0.14
BHH	SZ	66.4	EP		21:37	32.10			-0.05
BHH	SN	66.4	ES		21:37	40.42			0.10
BHH	SE	66.4	IAML		21:37	41.27	143	0.16	
BHH	SN	66.4	IAML		21:37	41.62	162	0.18	
EDMD	HZ	75.0	EP		21:37	33.67			0.23
EDMD	HN	75.0	ES		21:37	42.23			-0.31
EDMD	HN	75.0	IAML		21:37	42.92	207	0.09	
EDMD	HE	75.0	IAML		21:37	43.00	231	0.22	
ESK	HZ	90.7	IP	D	21:37	36.28			0.36
ESK	HE	90.7	ES		21:37	46.70			-0.14
ESK	HN	90.7	IAML		21:37	47.64	45	0.32	
ESK	HE	90.7	IAML		21:37	47.71	59	0.31	
IOMK	HZ	106.0	EP		21:37	38.42			0.07
WIM	EZ	117.0	EP		21:37	39.86			-0.18
LBWR	HZ	149.0	EP		21:37	44.86			0.22
LBWR	HE	149.0	IAML		21:38	07.72	38	0.29	
LBWR	HN	149.0	IAML		21:38	07.91	42	0.25	
WME	EZ	151.0	EP		21:37	44.05			-0.90
WPM1	EZ	152.0	EP		21:37	44.53			-0.58
ESY	EZ	158.0	EP		21:37	46.79			0.80
WPS	HZ	159.0	EP		21:37	44.93			-1.05
WLF1	HZ	165.0	EP		21:37	45.78			-1.07
PGB1	HZ	173.0	EP		21:37	48.98			0.98
YRC	EZ	175.0	EP		21:37	47.04			-1.13
FOEL	HZ	181.0	EP		21:37	49.23			0.21
INVG	HZ	224.0	EP		21:37	54.44			0.15

December 1 2012 Time: 10:24 16.0 UTC Magnitude: 1.1 ML
Lat: 53.130N Lon: -5.253W Depth: 9.6 km
Grid Ref: 182.40 kmE 364.18 kmN RMS: 0.20 secs
Locality: IRISH SEA
Velocity model: Lleyn Xnear: 100.0 Xfar: 150.0
Comment: 45KM WEST HOLYHEAD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
YRC	EZ	47.2	IP		C	10:24	24.29			0.20
YRC	EZ	47.2	ES			10:24	29.19			-0.40
WPS	HZ	58.6	EP			10:24	26.24			0.29
WPS	HE	58.6	ES			10:24	32.70			-0.02
WPS	HN	58.6	IAML			10:24	33.22	18	0.16	
WPS	HE	58.6	IAML			10:24	33.52	9	0.12	
WLF1	HZ	59.9	EP			10:24	26.32			0.16
WLF1	HN	59.9	ES			10:24	32.78			-0.28
WLF1	HE	59.9	IAML			10:24	33.18	9	0.12	
WLF1	HN	59.9	IAML			10:24	33.43	22	0.16	
WME	EZ	70.0	IP		D	10:24	28.14			0.32
WME	EZ	70.0	ES			10:24	35.75			-0.10
DSB	BZ	76.2	EP			10:24	28.60			-0.19
DSB	BN	76.2	ES			10:24	37.44			-0.05
IOMK	HZ	134.0	EP			10:24	38.24			0.57
FOEL	HZ	140.0	EP			10:24	38.67			-0.04
FOEL	HN	140.0	ES			10:24	54.41			0.25
FOEL	HE	140.0	IAML			10:24	55.94	4	0.23	
FOEL	HN	140.0	IAML			10:24	55.95	5	0.22	

December 2 2012 Time: 02:55 19.5 UTC Magnitude: 1.2 ML
Lat: 53.495N Lon: -1.907W Depth: 11.4 km
Grid Ref: 406.17 kmE 399.84 kmN RMS: 0.40 secs
Locality: CROWDEN,DERBYSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
LBWR	HZ	16.0	EP			02:55	23.09			0.00
LBWR	HN	16.0	ES			02:55	25.72			0.02
LBWR	HN	16.0	IAML			02:55	26.19	76	0.09	
LBWR	HE	16.0	IAML			02:55	26.87	67	0.11	
HPK	HZ	54.8	EP			02:55	29.32			0.40
HPK	HE	54.8	ES			02:55	35.13			-0.66
HPK	HN	54.8	IAML			02:55	35.46	49	0.16	
HPK	HE	54.8	IAML			02:55	35.48	57	0.23	
CWF	HZ	93.3	EP			02:55	34.93			0.06
CWF	HE	93.3	ES			02:55	46.03			-0.05
CWF	HE	93.3	IAML			02:55	46.63	5	0.25	
CWF	HN	93.3	IAML			02:55	46.80	5	0.11	
FOEL	HZ	110.0	EP			02:55	37.64			0.28
FOEL	HE	110.0	ES			02:55	49.98			-0.41
FOEL	HE	110.0	IAML			02:55	52.13	3	0.44	
FOEL	HN	110.0	IAML			02:55	52.29	8	0.22	
KESW	HZ	145.0	EP			02:55	42.85			0.50
EDMD	HZ	149.0	EP			02:55	43.49			0.63

December 5 2012 Time: 09:53 14.1 UTC Magnitude: 3.0 ML
Lat: 64.409N Lon: -4.289W Depth: 20.0 km
Grid Ref: 289.71 kmE 1616.97 kmN RMS: 0.60 secs
Locality: NORWEGIAN SEA
Velocity model: Lownet Xnear: 500.0 Xfar: 800.0
Comment: 260KM NE FAROE ISLES

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SOFL	HZ	293.0	EP			09:53	54.63			-0.33
SOFL	HN	293.0	ES			09:54	25.18			0.38
SOFL	HE	293.0	IAML			09:54	27.13	83	0.63	
SOFL	HN	293.0	IAML			09:54	28.00	48	0.39	
LRW	HZ	503.0	EP			09:54	21.49			0.36
LRW	HE	503.0	ES			09:55	10.19			0.11
LRW	HN	503.0	IAML			09:55	12.44	13	0.12	
LRW	HE	503.0	IAML			09:55	13.08	14	0.18	
BIGH	HZ	659.0	EP			09:54	40.18			-0.54
BIGH	HN	659.0	ES			09:55	42.17			-1.80
KPL	HZ	791.0	EP			09:54	56.03			-1.13

December 5 2012 Time: 13:02 42.4 UTC Magnitude: 2.9 ML
Lat: 64.440N Lon: -4.259W Depth: 20.0 km
Grid Ref: 291.28 kmE 1620.37 kmN RMS: 0.50 secs
Locality: NORWEGIAN SEA
Velocity model: Lownet Xnear: 300.0 Xfar: 900.0
Comment: 260KM NE FAROE ISLES

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
SOFL	HZ	297.0	EP			13:03	23.60			-0.19
SOFL	HN	297.0	ES			13:03	54.12			0.15
SOFL	HE	297.0	IAML			13:03	56.37	41	0.43	
SOFL	HN	297.0	IAML			13:03	57.04	34	0.40	
LRW	HZ	506.0	EP			13:03	50.56			0.71
LRW	HE	506.0	ES			13:04	38.75			-0.30
LRW	HE	506.0	IAML			13:04	41.52	14	0.22	
LRW	HZ	506.0	IAML			13:04	41.61	17	0.30	
BIGH	HZ	663.0	EP			13:04	08.97			-0.55
KPL	HZ	795.0	EP			13:04	24.44			-1.54
DRUM	HZ	844.0	EP			13:04	31.68			-0.52

December 8 2012 Time: 01:11 55.9 UTC Magnitude: 1.7 ML
Lat: 57.507N Lon: -5.563W Depth: 6.2 km
Grid Ref: 186.59 kmE 851.89 kmN RMS: 0.30 secs
Locality: SHIELDAIG,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT SHIELDAIG... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KAC	EZ	15.8	EP			01:11	59.07			-0.07
KPL	HZ	19.5	EP			01:11	59.80			0.09
KPL	HN	19.5	ES			01:12	02.27			-0.24
KPL	HN	19.5	IAML			01:12	02.56	260	0.10	
KPL	HE	19.5	IAML			01:12	02.57	548	0.10	
RRR	SZ	41.6	EP			01:12	03.65			0.38
RRR	SE	41.6	ES			01:12	08.16			-0.51
RRR	SN	41.6	IAML			01:12	09.10	30	0.18	
RRR	SE	41.6	IAML			01:12	09.25	25	0.11	
MDO	EZ	72.3	EP			01:12	07.92			-0.18
RRH	SZ	81.3	EP			01:12	09.67			0.24
MCD	EZ	138.0	EP			01:12	18.81			0.63
MCD	EE	138.0	ES			01:12	34.46			0.00
MCD	EN	138.0	IAML			01:12	36.04	27	0.17	
MCD	EE	138.0	IAML			01:12	38.48	27	0.24	
BIGH	HZ	147.0	EP			01:12	19.72			0.38
BIGH	HE	147.0	ES			01:12	36.16			-0.32
BIGH	HN	147.0	IAML			01:12	38.38	18	0.15	
BIGH	HE	147.0	IAML			01:12	38.58	21	0.10	
INVG	HZ	152.0	EP			01:12	20.43			0.38
INVG	HN	152.0	ES			01:12	37.45			-0.25
INVG	HN	152.0	IAML			01:12	37.99	10	0.20	
INVG	HE	152.0	IAML			01:12	39.83	6	0.16	

December 8 2012 Time: 19:49 08.0 UTC Magnitude: 1.6 ML
Lat: 52.045N Lon: -3.602W Depth: 8.5 km
Grid Ref: 290.15 kmE 239.77 kmN RMS: 0.20 secs
Locality: LLANWRTYD WELLS,POWYS
Velocity model: Mid Wales Xnear: 80.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MCH1	HZ	41.8	EP			19:49	15.51			0.20
MCH1	HN	41.8	ES			19:49	20.74			0.18
MCH1	HE	41.8	IAML			19:49	20.84	90	0.10	
MCH1	HN	41.8	IAML			19:49	20.89	116	0.15	
MONM	HZ	59.5	EP			19:49	18.32			0.12
MONM	HN	59.5	ES			19:49	25.51			-0.03
MONM	HN	59.5	IAML			19:49	25.78	64	0.18	
MONM	HE	59.5	IAML			19:49	25.78	62	0.11	
RSBS	HZ	79.2	EP			19:49	21.38			-0.08
RSBS	HE	79.2	ES			19:49	31.06			-0.09
RSBS	HN	79.2	IAML			19:49	34.78	7	0.14	
RSBS	HE	79.2	IAML			19:49	35.47	6	0.10	
OLDB	HZ	84.2	EP			19:49	22.20			-0.07
OLDB	HN	84.2	ES			19:49	32.22			-0.31
OLDB	HN	84.2	IAML			19:49	32.67	115	0.32	
OLDB	HE	84.2	IAML			19:49	32.69	70	0.20	
LLW	BZ	89.5	EP			19:49	23.36			0.20
LLW	BN	89.5	ES			19:49	33.79			-0.28
FOEL	HZ	97.8	EP			19:49	24.67			0.21
FOEL	HN	97.8	ES			19:49	36.29			-0.01
FOEL	HN	97.8	IAML			19:49	37.00	8	0.15	
FOEL	HE	97.8	IAML			19:49	38.94	6	0.54	
STRD	HZ	103.0	EP			19:49	25.21			-0.08
STRD	HE	103.0	ES			19:49	37.53			-0.20
STRD	HN	103.0	IAML			19:49	37.69	18	0.16	
STRD	HE	103.0	IAML			19:49	38.04	20	0.24	
HTL	HZ	132.0	EP			19:49	29.87			0.31
HTL	HE	132.0	ES			19:49	45.29			0.21
HTL	HE	132.0	IAML			19:49	46.01	10	0.14	
HTL	HN	132.0	IAML			19:49	46.21	12	0.20	
WPM1	EZ	136.0	EP			19:49	30.34			0.07
YRC	EZ	149.0	EP			19:49	32.17			-0.01
CWF	HZ	174.0	EP			19:49	35.52			0.03

TABLE 2 : PHASE DATA

CWF	HE	174.0	ES		19:49	54.67			-0.61
CWF	HE	174.0	IAML		19:49	56.37	4	0.14	
CWF	HN	174.0	IAML		19:49	56.95	5	0.12	
DYA	HE	181.0	IAML		19:49	58.55	6	0.35	
DYA	HN	181.0	IAML		19:49	59.15	6	0.14	

December 11 2012 Time: 19:22 27.9 UTC Magnitude: 1.6 ML
Lat: 56.859N Lon: -4.854W Depth: 7.5 km
Grid Ref: 226.02 kmE 777.79 kmN RMS: 0.60 secs
Locality: SPEAN BRIDGE,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: FELT SPEAN BRIDGE... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
INVG	HZ	69.2	EP			19:22	39.32			-0.16
INVG	HN	69.2	ES			19:22	47.18			-0.79
INVG	HN	69.2	IAML			19:22	52.23	24	0.07	
INVG	HE	69.2	IAML			19:22	52.37	18	0.13	
MDO	EZ	71.2	EP			19:22	39.51			-0.32
KPL	HZ	72.1	EP			19:22	39.93			0.05
KPL	HN	72.1	ES			19:22	48.40			-0.26
KPL	HN	72.1	IAML			19:22	52.16	36	0.13	
KPL	HE	72.1	IAML			19:22	53.89	40	0.19	
KAC	EZ	76.1	EP			19:22	40.48			-0.07
PGB1	HZ	119.0	EP			19:22	47.74			0.56
PGB1	HE	119.0	ES			19:23	01.43			0.15
PGB1	HE	119.0	IAML			19:23	02.82	22	0.22	
PGB1	HN	119.0	IAML			19:23	03.20	28	0.18	
MCD	EZ	126.0	EP			19:22	49.00			0.76
DRUM	HZ	144.0	IP		C	19:22	51.99			1.11
EDI	HZ	146.0	EP			19:22	52.33			1.17
BIGH	HZ	190.0	EP			19:22	56.41			-0.59
CLGH	HZ	213.0	EP			19:23	01.76			1.93

December 14 2012 Time: 23:03 03.4 UTC Magnitude: 2.9 ML
Lat: 50.958N Lon: -0.824W Depth: 8.6 km
Grid Ref: 482.58 kmE 118.34 kmN RMS: 0.40 secs
Locality: CHICHESTER,WEST SUSSEX
Velocity model: Lownet Xnear: 150.0 Xfar: 300.0
Comment: FELT CHICHESTER... Intensity: 3

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
HEA	HZ	54.1	EP			23:03	12.72			-0.18
HEA	HE	54.1	ES			23:03	19.61			-0.20
HEA	HN	54.1	IAML			23:03	20.40	772	0.15	
HEA	HE	54.1	IAML			23:03	23.14	576	0.37	
BUW	HZ	57.5	EP			23:03	13.31			-0.11
BUW	HE	57.5	ES			23:03	20.40			-0.31
BUW	HE	57.5	IAML			23:03	21.80	898	0.32	
BUW	HN	57.5	IAML			23:03	22.35	805	0.26	
HMNX	HZ	82.2	IP		D	23:03	17.39			0.17
HMNX	HN	82.2	ES			23:03	27.35			0.06
HMNX	HN	82.2	IAML			23:03	28.23	607	0.16	
HMNX	HE	82.2	IAML			23:03	28.36	740	0.37	
SWN1	HZ	92.0	EP			23:03	19.25			0.47
STRD	HZ	130.0	EP			23:03	24.95			0.25
STRD	HE	130.0	ES			23:03	40.72			0.50
STRD	HE	130.0	IAML			23:03	42.83	292	0.15	
STRD	HN	130.0	IAML			23:03	43.61	390	0.15	
ELSH	HZ	139.0	EP			23:03	26.12			0.20
OLDB	HZ	144.0	EP			23:03	26.80			0.25
OLDB	HN	144.0	ES			23:03	43.93			0.51
OLDB	HN	144.0	IAML			23:03	44.92	633	0.35	
OLDB	HE	144.0	IAML			23:03	47.99	477	0.43	
MONM	HZ	169.0	EP			23:03	29.70			-0.54
MCH1	HZ	190.0	EP			23:03	32.12			-0.79
MCH1	HN	190.0	ES			23:03	54.21			-0.22
MCH1	HE	190.0	IAML			23:03	56.19	93	0.22	
MCH1	HN	190.0	IAML			23:03	57.70	85	0.14	
JSA	HZ	219.0	EP			23:03	35.86			-0.64
WACR	HZ	221.0	EP			23:03	36.28			-0.38
HLM1	HZ	224.0	EP			23:03	36.30			-0.92
DYA	HZ	227.0	EP			23:03	37.32			-0.21
DYA	HN	227.0	IAML			23:04	08.41	100	0.26	
DYA	HE	227.0	IAML			23:04	09.01	60	0.27	
STNC	HZ	256.0	EP			23:03	40.54			-0.55
FOEL	HZ	270.0	EP			23:03	42.04			-0.89
LBWR	HZ	279.0	EP			23:03	43.39			-0.62

December 29 2012 Time: 22:30 50.0 UTC Magnitude: 1.4 ML
Lat: 51.940N Lon: -2.819W Depth: 14.8 km
Grid Ref: 343.71 kmE 227.20 kmN RMS: 0.20 secs
Locality: PONTRILAS,HEREFORDSHIRE
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 15KM SSW OF HEREFORD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	11.2	IP		D	22:30	53.24			-0.06
MONM	HE	11.2	ES			22:30	55.82			0.12
MCH1	HZ	13.9	IP		D	22:30	53.75			0.15
MCH1	HE	13.9	ES			22:30	56.23			0.01
MCH1	HN	13.9	IAML			22:30	56.74	187	0.10	
MCH1	HE	13.9	IAML			22:30	56.75	169	0.10	
STRD	HZ	48.8	EP			22:30	58.37			-0.20
STRD	HE	48.8	ES			22:31	04.73			-0.08
STRD	HN	48.8	IAML			22:31	05.30	42	0.16	
STRD	HE	48.8	IAML			22:31	05.44	27	0.11	
HLM1	HZ	64.5	EP			22:31	01.10			0.08
HLM1	HE	64.5	ES			22:31	08.81			-0.24
HLM1	HE	64.5	IAML			22:31	09.93	17	0.18	
HLM1	HN	64.5	IAML			22:31	10.33	13	0.10	
RSBS	HZ	132.0	EP			22:31	10.90			0.01
RSBS	HN	132.0	ES			22:31	25.98			-0.15
RSBS	HN	132.0	IAML			22:31	27.85	6	0.19	
RSBS	HE	132.0	IAML			22:31	28.04	6	0.11	
CWF	HZ	136.0	EP			22:31	11.62			0.22
CWF	HE	136.0	ES			22:31	27.47			0.47
CWF	HN	136.0	IAML			22:31	28.81	10	0.08	
CWF	HE	136.0	IAML			22:31	29.14	15	0.11	

December 30 2012 Time: 02:52 31.5 UTC Magnitude: 1.3 ML
Lat: 51.217N Lon: -3.002W Depth: 7.1 km
Grid Ref: 330.03 kmE 146.96 kmN RMS: 0.10 secs
Locality: HIGHBRIDGE,SOMERSET
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
MONM	HZ	70.6	EP			02:52	43.26			-0.08
MONM	HE	70.6	ES			02:52	52.19			0.21
MONM	HE	70.6	IAML			02:52	52.32	19	0.50	
MONM	HN	70.6	IAML			02:52	52.75	17	0.26	
MCH1	HZ	86.8	EP			02:52	45.88			0.01
MCH1	HN	86.8	ES			02:52	56.28			-0.08
MCH1	HE	86.8	IAML			02:52	56.76	8	0.16	
MCH1	HN	86.8	IAML			02:52	56.91	16	0.34	
DYA	HZ	109.0	EP			02:52	49.37			0.07
DYA	HN	109.0	ES			02:53	02.27			-0.03
DYA	HE	109.0	IAML			02:53	03.30	6	0.26	
DYA	HN	109.0	IAML			02:53	03.60	9	0.13	
HLM1	HZ	145.0	EP			02:52	54.49			-0.20
HLM1	HE	145.0	ES			02:53	11.39			-0.22
HLM1	HE	145.0	IAML			02:53	13.71	8	0.23	
HLM1	HN	145.0	IAML			02:53	13.76	6	0.22	
RSBS	HZ	146.0	EP			02:52	54.85			0.06
RSBS	HN	146.0	ES			02:53	11.84			0.06
RSBS	HN	146.0	IAML			02:53	12.75	5	0.16	
RSBS	HE	146.0	IAML			02:53	12.79	6	0.20	
CWF	HE	205.0	ES			02:53	24.47			-0.81
CWF	HN	205.0	IAML			02:53	26.99	3	0.32	
CWF	HE	205.0	IAML			02:53	27.14	2	0.22	

December 30 2012 Time: 03:36 13.9 UTC Magnitude: 1.4 ML
Lat: 56.675N Lon: -5.737W Depth: 7.7 km
Grid Ref: 171.10 kmE 759.92 kmN RMS: 0.30 secs
Locality: MORVERN,HIGHLAND
Velocity model: Lownet Xnear: 100.0 Xfar: 200.0
Comment: 5KM SSE OF SALEN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	RES
KPL	HZ	74.1	EP			03:36	26.04			-0.17
KPL	HN	74.1	ES			03:36	35.03			-0.18
KAC	EZ	95.5	IP		D	03:36	29.62			0.06
EAB	EZ	102.0	EP			03:36	30.57			-0.01
INVG	HZ	108.0	EP			03:36	31.53			0.05
INVG	HE	108.0	ES			03:36	44.08			-0.24
INVG	HN	108.0	IAML			03:36	45.35	14	0.10	
INVG	HE	108.0	IAML			03:36	45.56	7	0.10	
MDO	EZ	119.0	EP			03:36	33.98			0.70

TABLE 3

GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2012

Code	Name	Lat	Lon	E (km)	N (km)	Ht (m)	Comp
ABA1	BACONSTHORPE	52.8884	1.1453	611.58	337.00	74	1R
AEU	EAST ANGLIA	52.6202	1.2347	618.93	307.45	28	SMR
APAE	PACKWAY	52.3006	1.4782	637.12	272.68	58	1R
AWH	WHINBURGH	52.6297	0.9507	599.67	307.68	64	1R
BATH	BATH	51.4429	-2.3292	377.22	171.60	131	BBR
BBH	BRUNTSHEIL	55.1333	-2.9299	340.72	582.50	216	1R
BBO1	BOTHEL	54.7367	-3.2464	319.76	538.69	209	3R
BCC1	CHAPELCROSS	55.0153	-3.2201	321.99	569.66	138	1SMR
BDL	DOBCROSS HALL	54.8030	-2.9385	339.68	545.76	157	1R
BHH	HOWATS HILL	55.0931	-3.2181	322.27	578.31	216	3R
BIGH	UPPER BIGHOUSE	58.4932	-3.9102	288.75	957.69	70	BBR
BTA	TALKIN	54.9057	-2.6844	356.12	557.00	279	3R
BWH	WARDLAW	55.1758	-3.6549	294.62	588.09	269	1R
CCA1	CARNMENELLIS	50.1866	-5.2277	169.62	36.90	210	BBR
CLGH	CUSHENDALL	55.0828	-6.1106	137.76	584.21	239	BBR
CWF	CHARNWOOD FST	52.7385	-1.3076	446.74	315.91	203	BBR
DRUM	DRUMTOCHTY	56.9123	-2.4865	370.48	780.23	208	BBR
DYA	YADSWORTHY	50.4353	-3.9310	262.88	61.34	292	BBR
EAB	ABERFOYLE	56.1887	-4.3373	254.97	702.02	279	1R
EAU	AUCHINOON	55.8454	-3.4474	309.38	662.30	359	1R
EBH	BLACK HILL	56.2476	-3.5084	306.54	707.13	375	1R
EBL	BROAD LAW	55.7723	-3.0445	334.48	653.71	436	1R
ECK	CAULDKAINE HILL	55.1810	-3.1292	328.10	588.00	351	1R
EDI	EDINBURGH	55.9233	-3.1875	325.80	670.66	125	BBR
EDMD	EDMUNDBYERS	54.8312	-1.9636	402.43	548.48	337	BBR
EDU	DUNDEE	56.5477	-3.0110	337.85	739.97	421	1R
ELO	LOGIEALMOND	56.4703	-3.7112	294.59	732.21	523	1R
ELSH	ELHAM	51.1482	1.1345	619.32	143.44	126	BBR
ESK	ESKDALEMUIR	55.3165	-3.2052	323.52	603.16	261	3MLGBBR
ESY	STONEYPATH	55.9175	-2.6141	361.62	669.55	337	1R
FOEL	FOEL WYLFA	52.8898	-3.2012	319.27	333.15	449	BBR
GAL1	GALLOWAY	54.8664	-4.7114	226.02	555.78	117	3MLGBBR
GCD	CASTLE DOUGLAS	54.8630	-3.9403	275.48	553.76	184	1R
GDLE	GLAISDALE	54.4218	-0.8157	476.94	503.57	228	BBR
GMK	MULL OF KINTYRE	55.3458	-5.5934	172.19	611.64	164	1R
GMM	MTNS OF MOURNE	54.2377	-5.9498	142.66	489.67	155	1R
HEX	EXMOOR	51.0664	-3.8026	273.71	131.28	230	1R
HGH	GRAY HILL	51.6379	-2.8057	344.25	193.59	223	1R
HLM1	LONG MYND	52.5184	-2.8807	340.25	291.57	429	BBR
HMNX	HERSTMONCEUX	50.8674	0.3363	564.49	110.15	26	BBR
HPE	PEMBROKE	51.9372	-4.7746	209.29	230.21	349	1R
HPK	HAVERAH PARK	53.9581	-1.6241	424.66	451.42	233	BBR
HSA	SWANSEA	51.7500	-4.1532	251.38	207.94	293	1R
HTL	HARTLAND	50.9943	-4.4849	225.64	124.66	86	3MLGSMBBR
HTR	TREWERN HILL	52.0785	-3.2679	313.12	243.04	337	1R
INVG	INVERGELDIE	56.4273	-4.0452	273.96	727.99	279	BBR
IOMK	KIRK MICHAEL	54.2605	-4.5663	232.95	488.02	188	BBR
JDC	DAM (CREST)	49.1947	-2.0469			39	SMR
JDG	DAM (GALLERY)	49.1947	-2.0469			7	SMR
JLP	LES PLATONS	49.2486	-2.1039			129	1R
JQE	QUEENS EAST	49.2000	-2.0383			58	1R
JRS	MAISON ST LOUIS	49.1922	-2.0922			56	3LGR
JSA	ST AUBINS	49.1878	-2.1717			39	BBR
JVM	VALLE D.L.MARE	49.2169	-2.2067			64	1R
KAC	ACHNASHELLACH	57.4989	-5.2988	202.36	850.19	206	1R
KBI1	BIRLEY GRANGE	53.2543	-1.5279	431.49	373.17	272	1R
KESW	KESWICK	54.5886	-3.1048	328.70	522.05	282	BBR
KEY2	KEYWORTH	52.8790	-1.0770	462.13	331.73	76	SMR
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	13	3LGSMBBR

TABLE 3

GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2012

Code	Name	Lat	Lon	E (km)	N (km)	Ht (m)	Comp
KSB	SHIEL BRIDGE	57.2099	-5.4214	193.40	818.40	417	1R
KSY	SYSTON	52.9642	-0.5872	494.88	341.73	121	1R
KTG1	TILBROOK GRNGE	52.3264	-0.4019	508.90	271.06	83	1R
KUF	UFFORD	52.6170	-0.3907	508.94	303.39	38	1R
LBWR	LADYBOWER	53.4016	-1.7248	418.40	389.45	353	BBR
LAWE	LOCH AWE	56.2601	-5.3990	189.58	712.71	137	BBR
LCP	CASSOP	54.7370	-1.4744	433.84	538.14	185	1R
LHO	HOLMEFIRTH	53.5453	-1.8548	409.62	405.44	462	1R
LMK1	MARKET RASEN	53.4573	-0.3274	511.15	396.92	133	BBR
LRN	RICHMOND	54.4165	-1.8007	412.93	502.37	313	1R
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	98	3MLGBBR
LWH	WHINNY NAB	54.3338	-0.6717	486.36	493.97	277	1R
MCD	COLEBURN DISTIL	57.5828	-3.2541	325.02	855.42	293	3MLGSMR
MCH1	MICHAELCHURCH	51.9974	-2.9983	331.47	233.74	219	SMBBR
MDO	DOCHFOUR	57.4409	-4.3633	258.17	841.39	415	1R
MLA1	LATHERON	58.3055	-3.3627	320.15	935.98	188	1R
MME1	MEIKLE CAIRN	57.3149	-2.9647	341.90	825.32	475	1R
MONM	MONMOUTH	51.8396	-2.8054	344.61	215.98	145	BBR
MVH1	ACHVAICH	57.9250	-4.1825	270.75	894.90	185	1R
OLDB	OLDBURY	51.6609	-2.5514	361.95	195.94	6	BBR
PCO1	CORRIE	55.9880	-4.1002	269.00	679.21	267	1R
PGB1	GLENIFFERBRAES	55.8115	-4.4837	244.38	660.37	199	BBR
REB	EISG-BRACHAIDH	58.1194	-5.2802	206.82	919.16	100	1R
RRR	RUBHA REIDH	57.8577	-5.8067	174.19	891.68	61	3MLGSMR
RSBS	ROSEBUSH	51.9530	-4.7448	211.48	231.84	278	BBR
RSC	SCOURIE	58.3485	-5.1683	214.61	944.33	60	1R
RTO	TOLSTA	58.3778	-6.2092	153.95	950.93	74	1R
SAN1	SANDWICK	60.0179	-1.2392	442.41	1126.08	150	1R
SKP1	KOPHILL	51.7218	-0.8096	482.22	203.29	212	1R
SOFL	SORNFELLI	62.0689	-6.9658			721	BBR
SSW	STOW-ON-WOLD	51.9667	-1.8499	410.31	229.86	291	1R
STNC	STOKE	53.0913	-2.2062	354.95	386.19	234	BBR
STRD	STROUD	51.7763	-2.1643	388.77	208.64	200	BBR
SWK	WARMINSTER	51.1483	-2.2471	382.72	138.87	266	1R
SWN1	SWINDON	51.5137	-1.8007	413.83	179.49	192	3MLGSMBBR
WACR	WEST ACRE	52.7247	0.6267	577.48	317.35	66	BBR
WAL1	WALLS	60.2564	-1.6173	421.18	1152.46	167	1R
WIM	ISLE OF MAN (South)	54.1475	-4.6738	225.39	475.73	386	1R
WLF1	LLYNFAES	53.2894	-4.3966	240.27	379.65	58	BBR
WME	MYNDD EILIAN	53.3969	-4.3032	246.88	391.40	129	1R
WPM1	PENMAENMAWR	53.2581	-3.9048	272.95	375.18	353	1R
WPS	CAMAES, ANGLESEY	53.4004	-4.4986	233.98	392.19	16	BBR
XSO	SOURHOPE	55.4924	-2.2510	384.14	622.10	516	1R
YLL	LLANBERIS	53.1402	-4.1704	254.84	362.57	159	1R
YEL1	YELL	60.5509	-1.0830	450.29	1185.55	203	1R
YRC	RHOSCOLYN	53.2508	-4.5753	228.21	375.77	22	1R
YRE	YR EIFL	52.9810	-4.4254	237.19	345.42	197	1R

Component Codes:

1 Single vertical seismometer
3 Orthogonal set of 3 seismometers
M Low-frequency microphone
LG Single low-gain vertical seismometer
SM Strong motion seismometers
BB Broadband Instrument
R Station coordinates registered with the International Seismological Centre (ISC), England and the National Earthquake Information Centre (NEIC), USA

TABLE 4

Depth / crustal velocity models used in earthquake locations

Structural area	Depth to top of layer (km)	P-wave velocity (km/sec)	Vp/Vs
North Sea	0.00	6.20	1.73
	12.00	6.50	
	23.00	7.10	
	31.00	8.05	
Lownet and general UK	0.00	4.00	1.73
	2.52	5.90	
	7.55	6.45	
	18.87	7.00	
	34.15	8.00	
Borders	0.00	4.10	1.71
	3.00	5.60	
	4.10	6.15	
	17.00	6.60	
	30.00	8.00	
North Wales (Lleyn)	0.00	5.40	1.68
	2.00	6.05	
	13.00	6.50	
	25.00	6.80	
	34.00	8.00	
Mid Wales	0.00	5.40	1.72
	3.80	6.05	
	15.50	6.65	
	34.30	8.00	
Cornwall	0.00	5.50	1.77
	0.30	5.76	
	15.00	6.90	
	30.00	8.00	

Appendix 1 Key to Bulletin Encoding

YearMoDy	Year, month and day of event.
HrMn Secs	Time of occurrence of event in hours, mins and secs, (UTC).
Lat	Latitude of the event, positive latitude indicates north.
Lon	Longitude of the event, positive longitude indicates eest.
kmE	UK National Grid Reference in kilometres east of grid origin.
kmN	UK National Grid Reference in kilometres north of grid origin.
Dep	Depth of the hypocentre in kilometres.
Mag	Richter local magnitude of the event.
Locality	A geographical indication of the epicentral area, usually the nearest town followed by the region. A key to the abbreviations used in the locality column are given below.
Int	Maximum EMS intensity. 2+ indicates felt, no macroseismic details. 3+, 4+ etc indicates felt at 3 or 4, but no survey carried out. 3, 4, 5 etc describes the maximum EMS intensity produced by the event.
Comments	Additional comments about the event eg: C/F, see below under comments abbreviations.

The following abbreviations are extracted from the output of the location program HYPO71 (Lee and Lahr,1975)

No	Total number of P and S readings used in the event location.
Gap	Largest azimuthal separation in degrees between stations.
RMS	Root Mean Square of the travel time residuals in seconds.
ERH	Standard error of the epicentre in kilometres. When this column is blank, the error is large and indeterminate.
ERZ	Standard error of the focal depth in kilometres. When this column is blank, the error is large and indeterminate.

Locality abbreviations

Sonic	Sonic boom
Leics	Leicestershire
D & G	Dumfries and Galloway
Shrops	Shropshire
Notts	Nottinghamshire
Worcs	Worcestershire
Staffs	Staffordshire

Comments abbreviations

...	and felt elsewhere
N,S,E,W	North, South, East,West

Appendix 2 Key to Phase Data Encoding

Time	Time of occurrence of event in hours, mins and secs, (UTC).
Lat	Latitude of the event, N indicates North.
Lon	Longitude of the event, W indicates West, E indicates East.
Depth	Depth of the hypocentre in kilometres.
Grid Ref	UK National Grid Reference in kilometres east (kmE) and kilometres north (kmN) of grid origin.
RMS	Root Mean Square of the travel time residuals in seconds.
Velocity Model	Velocity model used in location.
Magnitude	Richter local magnitude of the event.
Locality	A geographical indication of the epicentral area, usually the nearest town followed by the region.
Intensity	Maximum EMS intensity. 2+ indicates felt, no macroseismic details. 3+, 4+ etc indicates felt at 3 or 4, but no survey carried out. 3, 4, 5 etc describes the maximum EMS intensity produced by the event.
Comments	Additional comments about the event eg: C/F see list of comments abbreviations below.
STAT	Station name
CO	Station component S=short period Z=vertical N=north south E=east west
DIST	Distance from earthquake to station (km)
PHAS	Phase identifier; the first letter characterizes onset E=emergent I=impulsive, the second indicates the phase eg P, S, PG and PN. AML
WT	Hypo weighting factor to arrival. 0 or blank=full weighting to 4=zero weighting (ignore). 9=use P S interval only for this line.
P	Polarity C=Compression/up D=Dilatation/down
HrMn	Hour, Minute of event
SECS	Seconds of event
AMPL	Amplitude centre to peak in nanometres (nm)
PERI	Period in seconds
RES	Station residual

Appendix 3 The European Macroseismic Scale (EMS 98)

1 - **Not felt**
Not felt, even under the most favourable circumstances.

2 - **Scarcely felt**
Vibration is felt only by individual people at rest in houses, especially on upper floors of buildings.

3 - **Weak**
The vibration is weak and is felt indoors by a few people. People at rest feel a swaying or light trembling.

4 - **Largely observed**
The earthquake is felt indoors by many people, outdoors by very few. A few people are awakened. The level of vibration is not frightening. Windows, doors and dishes rattle. Hanging objects swing.

5 - **Strong**
The earthquake is felt indoors by most, outdoors by few. Many sleeping people awake. A few run outdoors. Buildings tremble throughout. Hanging objects swing considerably. China and glasses clatter together. The vibration is strong. Top heavy objects topple over. Doors and windows swing open or shut.

6 - **Slightly damaging**
Felt by most indoors and by many outdoors. Many people in buildings are frightened and run outdoors. Small objects fall. Slight damage to many ordinary buildings eg; fine cracks in plaster and small pieces of plaster fall.

7 - **Damaging**
Most people are frightened and run outdoors. Furniture is shifted and objects fall from shelves in large numbers. Many ordinary buildings suffer moderate damage: small cracks in walls; partial collapse of chimneys.

8 - **Heavily damaging**
Furniture may be overturned. Many ordinary buildings suffer damage: chimneys fall; large cracks appear in walls and a few buildings may partially collapse.

9 - **Destructive**
Monuments and columns fall or are twisted. Many ordinary buildings partially collapse and a few collapse completely.

10 - **Very destructive**
Many ordinary buildings collapse.

11 - **Devastating**
Most ordinary buildings collapse.

12 - **Completely devastating**
Practically all structures above and below ground are heavily damaged or destroyed.

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A complete description of the EMS-98 scale is given in: Grunthal, G., (Ed) 1998. European Macroseismic scale 1998. Cahiers du Centre European de Geodynamique et de Seismologie. Vol 15.