BRITISH GEOLOGICAL SURVEY

REPORT IR/06/047

# Bulletin of British Earthquakes 2005

D. D. Galloway (Editor)

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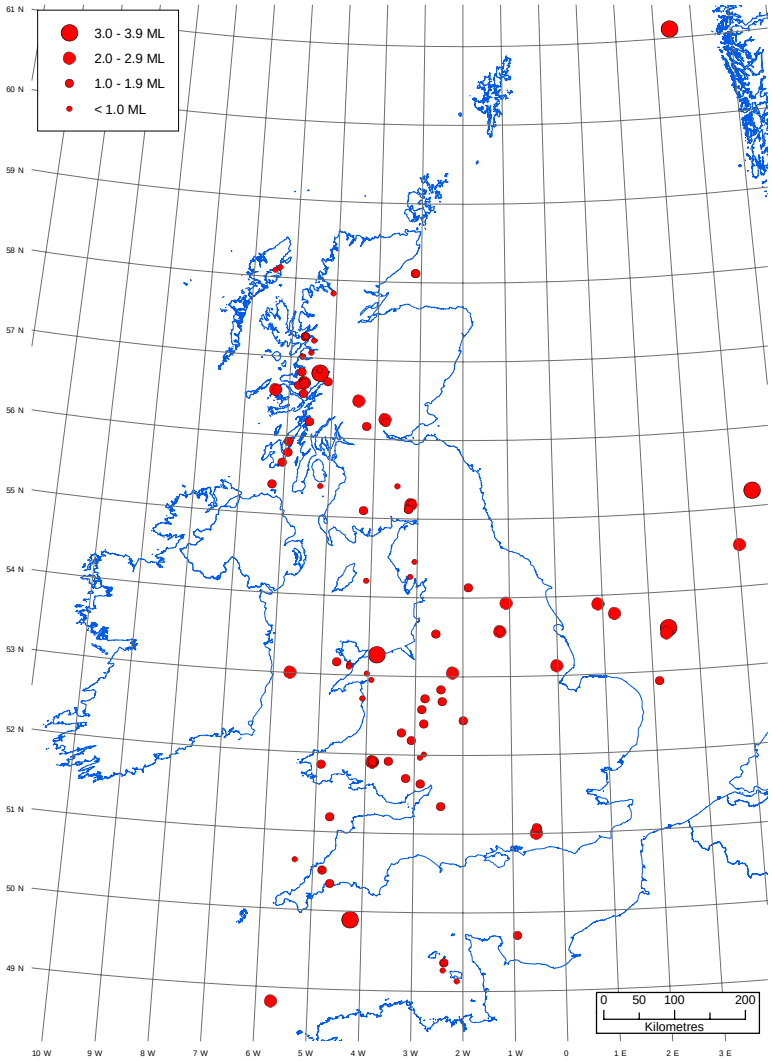




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# 1 Introduction

The British Geological Survey's (BGS) Seismic Monitoring and Information Service operates 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 BGS during 2005, listed in Tables 1 and 2. Maps showing seismic activity in 2005 (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 to 800 kmE and 1500 kmN.

All events believed to be of true tectonic origin are included. Coalfield events are also included. These are small events occurring near coal workings that are believed to be caused by the extraction of coal and, in some cases by collapse in old workings. They are indicated by C/F in the comments column of Tables 1 and 2.

Acoustic disturbances, such as sonic booms from supersonic aircraft, are included when they are felt. The air-borne 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 a number of sub-networks, which, in turn, consist of up to ten 'outstation' vertical seismometers radio-linked over distances of up to 100 km to a central site. Here, the data, along with that from a local 3-component set of two horizontal and one vertical seismometer, are recorded digitally by SDAS, the SEISLOG data acquisition system (Utheim and Havskov, 1993). The system records data continuously, but also creates event-triggered files. The sub-networks are accessed for data transfer to Edinburgh several times a day through Internet or dial-up modems. Once transferred, the events are analysed to determine location and magnitude. At a number of sites, low-gain vertical seismometers are installed to extend the dynamic range of the system (by 34 dB) to stronger motions, and low frequency microphones are used to aid the discrimination of sonic booms. In addition, strong motion accelerometers have been installed at locations throughout the country and record accelerations up to 0.1g. A number of broadband seismic stations provide data with a larger dynamic range and over a wider frequency band. Operational seismograph stations in December 2005 are shown in Figure 2.

The detection capabilities of a network depend upon station distribution, instrument sensitivity and background noise levels. Figure 3 shows the magnitude detection thresholds for the seismograph stations operational in December 2005. 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. Small events may go undetected unless they are felt and reported to BGS by local inhabitants, so the detection capabilities of this process are 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 4 shows only earthquakes with magnitude 2.5 ML or greater, in the period 1979 to 2005. The data set is considered complete for these magnitudes in all localities onshore. Seismicity for the period 1970 to 2005 is shown in Figure 5 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

**EPICENTRE 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.

HYPOCENTER uses a 1-dimensional (1-D) velocity-depth model to calculate theoretical arrival times for different trial locations. BGS uses different –1-D seismic velocity models depending on which part of the UK the seismic event is located (Table 4). These models have been derived from interpretation of data from large-scale seismic refraction and wide-angle reflection surveys carried out by various institutions. For further details see Bamford *et al* (1976 and 1978), Assumpçao and Bamford (1978), and Bott *et al* (1985).

**DEPTH DETERMINATION**

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):

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

where A is the maximum deflection (centre to peak in mm) registered on a Wood-Anderson seismograph and Ao is that for a 'standard' magnitude zero earthquake at the same distance. The Ao 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, Ao, 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, 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 (Imax) 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 2005 Seismicity

There were 112 earthquakes located by the monitoring network during the year, with 27 having magnitudes of 2.0 ML or greater and six having magnitudes of 3.0 ML or greater. Twelve of the events with a magnitude of 2.0 ML or greater were reported felt, together with a further three smaller ones, bringing the total to fifteen felt earthquakes in 2005.

The largest onshore earthquake had a magnitude of 3.3 ML and occurred at Conwy, Gwynedd, North Wales, on 14 February, at a depth of 10.7 km. Several reports were received by the BGS, via the North Wales Police and a number of residents in the Llandudno, Betwys-y-Coed, Bethel, Abergele and Conwy areas of North Wales which described, "we heard a loud bang and all the windows shook" and "it sounded like a massive explosion and the whole house shook" indicating an intensity of at least 4 EMS.

The largest offshore earthquakes occurred in the northern North Sea on 27 June and in the central North Sea on 7 September, both with a magnitude of 3.2 ML. The northern North Sea event was located approximately 270 km east northeast of Lerwick, Shetland Islands, and the central North Sea event was located approximately 390 km east of Newcastle, Tyne and Wear. A further nine events occurred in the North Sea and surrounding waters during the year, with magnitudes ranging between 1.2 and 3.0 ML.

An earthquake with a magnitude of 2.8 ML occurred on 19 January, near Doncaster, South Yorkshire. No reports of this event being felt were received by the BGS. The earthquake was the largest event in the area since a magnitude 3.1 ML event on 19 August 2003, which was felt with intensities of 3 EMS in the Retford area of South Yorkshire.

The following day, on 20 January, a magnitude 2.7 ML earthquake occurred in Killin, Central region. The BGS received a number of reports, via the Central Police, the Fire Service and local residents in Killin and Kenmore, which described, "we heard a loud noise and the windows shook" and "it sounded like an explosion which got me out of bed", indicating an intensity of at least 4 EMS.

On 28 and 29 April, two earthquakes, with magnitudes of 2.0 and 2.1 ML, respectively, occurred near Eskdalemuir, Dumfries and Galloway. A few residents in Eskdalemuir, Wester Kirk and Langholm reported both events to the BGS. Their reports described, "gradually increasing rumble", "the whole house shook" and "all glasses in a cabinet rattled" indicating intensities of at least 3 EMS for both events. A swarm of 39 earthquakes was recorded in the same area between 13 October and 30 December 2004 and these two events (April 28 and 29) showed characteristics similar to the swarm of 2004. The two largest events in the 2004 swarm occurred on 3 and 28 November, with magnitudes of 2.7 and 2.9 ML, respectively.

An earthquake with a magnitude of 2.6 ML occurred on 8 June near Stoke-on-Trent, Staffordshire. The BGS received several reports from residents in the Stoke-on-Trent area which described, "the windows and house shook" and "we could feel the movement beneath our feet" indicating an intensity of 4 EMS. The event was located within a kilometre of the magnitude 2.8 ML Stoke-on-Trent earthquake on 6 May 1996, which was also felt with intensities of 4 EMS in the epicentral area.

On 18 and 19 June, and again on 16 July, three earthquakes occurred near Billinghurst, West Sussex with magnitudes of 1.4, 1.6 and 2.2 ML. These are the first events to be detected in the area since a series of high-intensity events that took place in the Chichester region between 1833 and 1835. The largest of these events, with a magnitude of 3.3 ML, occurred on 27 August 1834, and caused severe damage in the area, when many chimneys and chimney pots fell down and numerous windows were broken. Another event in the series, on 18 September 1833 was reported to have collapsed a few chimneys in Chichester and caused a fall in a chalk pit at Cocking, killing a man who was working there.

An earthquake, with a magnitude of 3.0 ML, occurred in the English Channel, approximately 50 km south of Plymouth, Devon on 24 August. Residents in south Devon reported "ornaments moved and the whole house shook" and "sitting at a desk which began to move" indicating an intensity of 3 EMS. A magnitude 2.7 ML earthquake also occurred in the English Channel, about 100 km south of Penzance, Cornwall earlier in the year on 28 March.

On 10 December, a magnitude 3.0 ML earthquake occurred near Fort William, Highland, at a depth of 10.8 km. The BGS received many reports from residents in Fort William and the surrounding area who felt the event. A macroseismic survey was launched on the BGS 'Earthquakes' web site and 210 responses were received. The highest intensity experienced was 5 EMS, which was observed over an area extending approximately 14 kilometres to the northeast and southeast of the epicentre. The total felt area was over 7,300 $km^2$. Comments included descriptions of the effects made by the earthquake as sounding like a heavy clap of thunder, a gust of wind, or even a quarry blast.

A magnitude 2.8 ML earthquake occurred on 14 December, with an epicentre in the Irish Sea. A single report was received for this event from Greystones, a coastal town in County Wicklow, Ireland describing, "we were awoken from sleep", "the whole house rattled, pictures moved and lights swayed" indicating an intensity of 4 EMS. This is the largest event in the area since a magnitude 3.7 ML earthquake on 11 January 1951, which was felt with intensities of around 5 EMS in southeast Ireland.

Two earthquakes, within 90 minutes of each other, were detected on 23 December in the Sunart area of the Highlands. They occurred at 03:25 and 04:58 UTC with magnitudes of 2.7 and 2.4 ML, respectively. Several reports were received from residents in the epicentral area who described, “a rumbling noise as if a severe gust of wind had hit the house” and “the bedside table vibrated” indicating intensities of at least 3 EMS.

The final earthquake of the year, with a magnitude of 2.5 ML, occurred on 31 December in Blackford, Tayside. Reports, received by the BGS described “shaking similar to a heavy lorry passing by” and “all the windows rattled”, indicating an intensity of 4 EMS. Blackford is an area that has continued to be active in recent years, the most active year being 1997 when 50 events, of which five were felt, were located in the area. All these events are in the same general area as the magnitude 3.2 ML Ochil Hills earthquake in 1979, which had a maximum intensity of 5 EMS.

Another notable event during the year was the explosion at the Buncefield fuel depot, near Hemel Hempstead on 11 December at 06:01:31.45 UTC. The explosion was felt throughout a large part of England, with the most distant reports coming from as far north as Lancashire, West Yorkshire and Humberside, and as far west as Powys, Mid Glamorgan and Somerset.

Most reports of damage to property came from within a radius of 7 km from the blast site. Examples of damage included ‘three windows smashed’, ‘French-windows were blown in’, 'loft-hatch made of glass shattered', ‘roof tiles dislodged’ and ‘many windows shattered’. Numerous comments were received from people about the effects they felt. These included reports of car alarms being triggered, doors swinging open and closing, guttering and drainpipes rattling, banging noises, windows rattling, loft hatches being blown open and items of furniture being moved.

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HM Nuclear Installations Inspectorate

Jersey Water

Natural Environment Research Council

Office of the Deputy Prime Minister

Scottish & Southern Energy plc

Scottish Power

Scottish Water

United Kingdom Atomic Energy Authority

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Centre Seismologique Euro-Mediterranean (Bruyères-le-Châtel, France)

Dublin Institute for Advanced Studies (Dublin, Ireland)

Institute de Physique du Globe (Paris, France)

Koninklijk Nederlands Meteorologisch Instituut (Ae de Bilt, Netherlands)

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NORSAR (Oslo, Norway)

University of Bergen (Bergen, Norway)

University of Keele (Keele, UK)

This report is published with the approval of the Director of the British Geological Survey (NERC).

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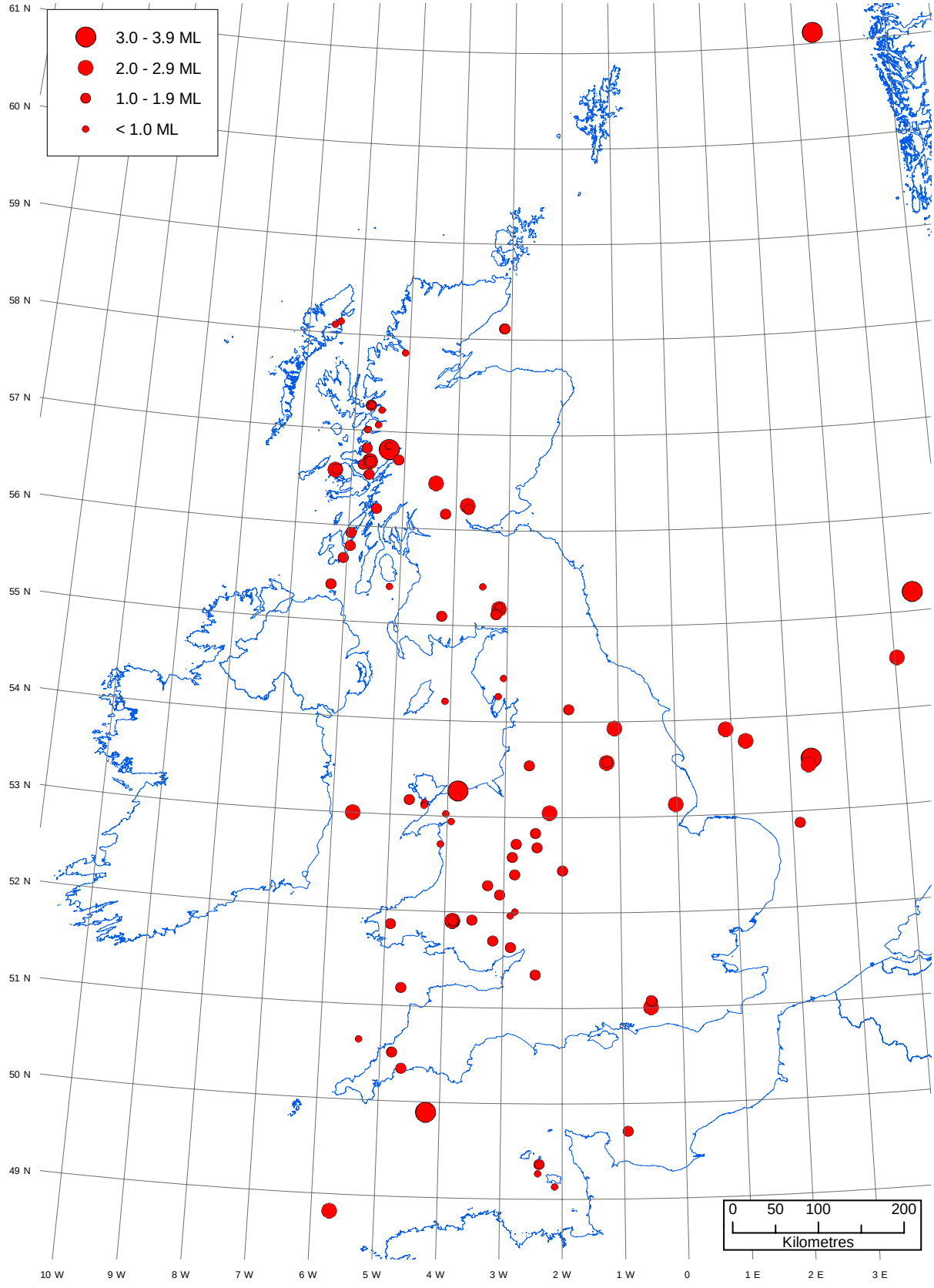


**Figure 1. Epicentre map of earthquakes in 2005 as listed in Table 1.**

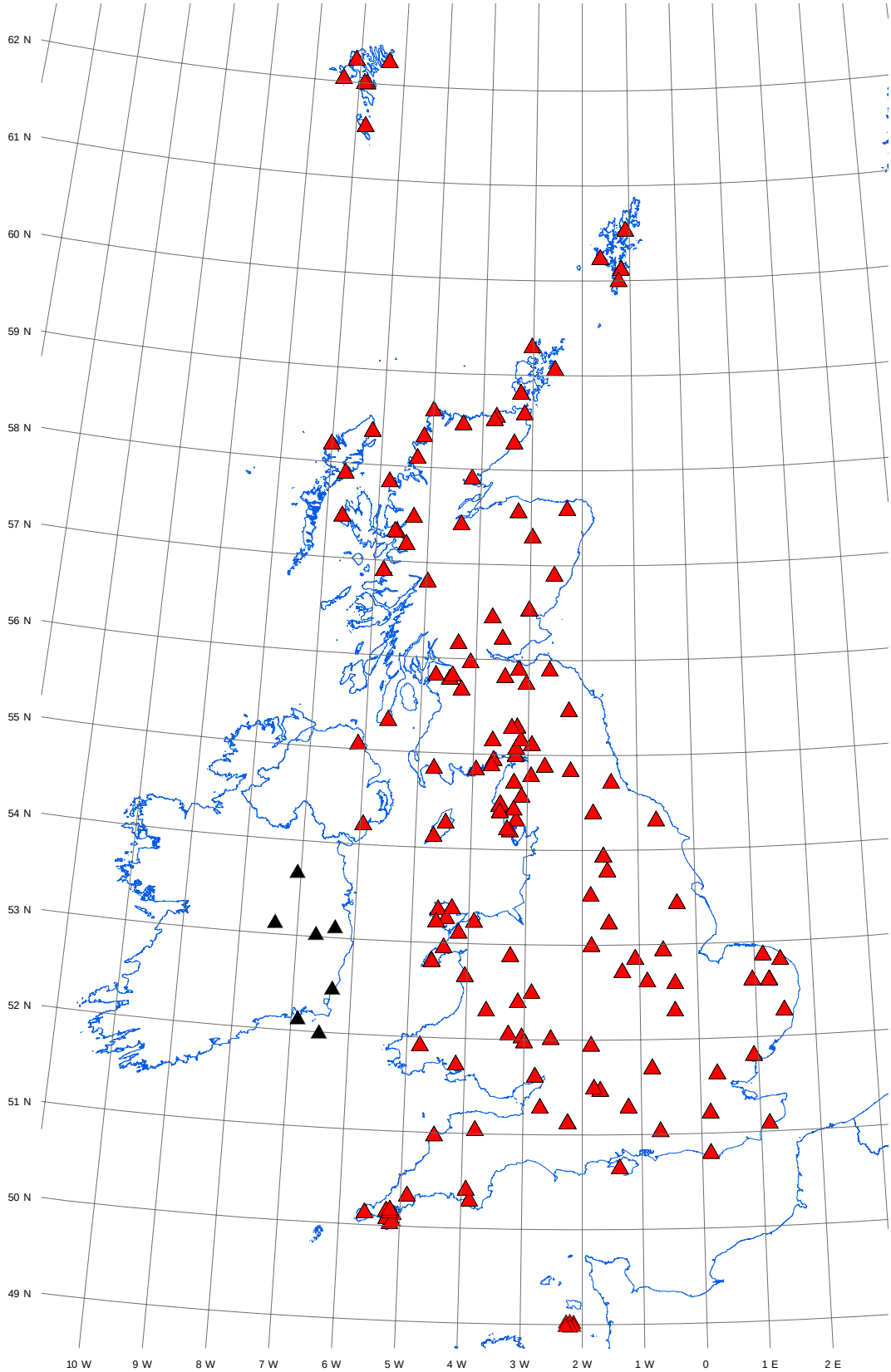


**Figure 2. Seismograph network operational in December 2005. Red triangles indicate BGS stations: black traingles indicate stations operated by the Dublin Institute of Advanced Studies (DIAS).**

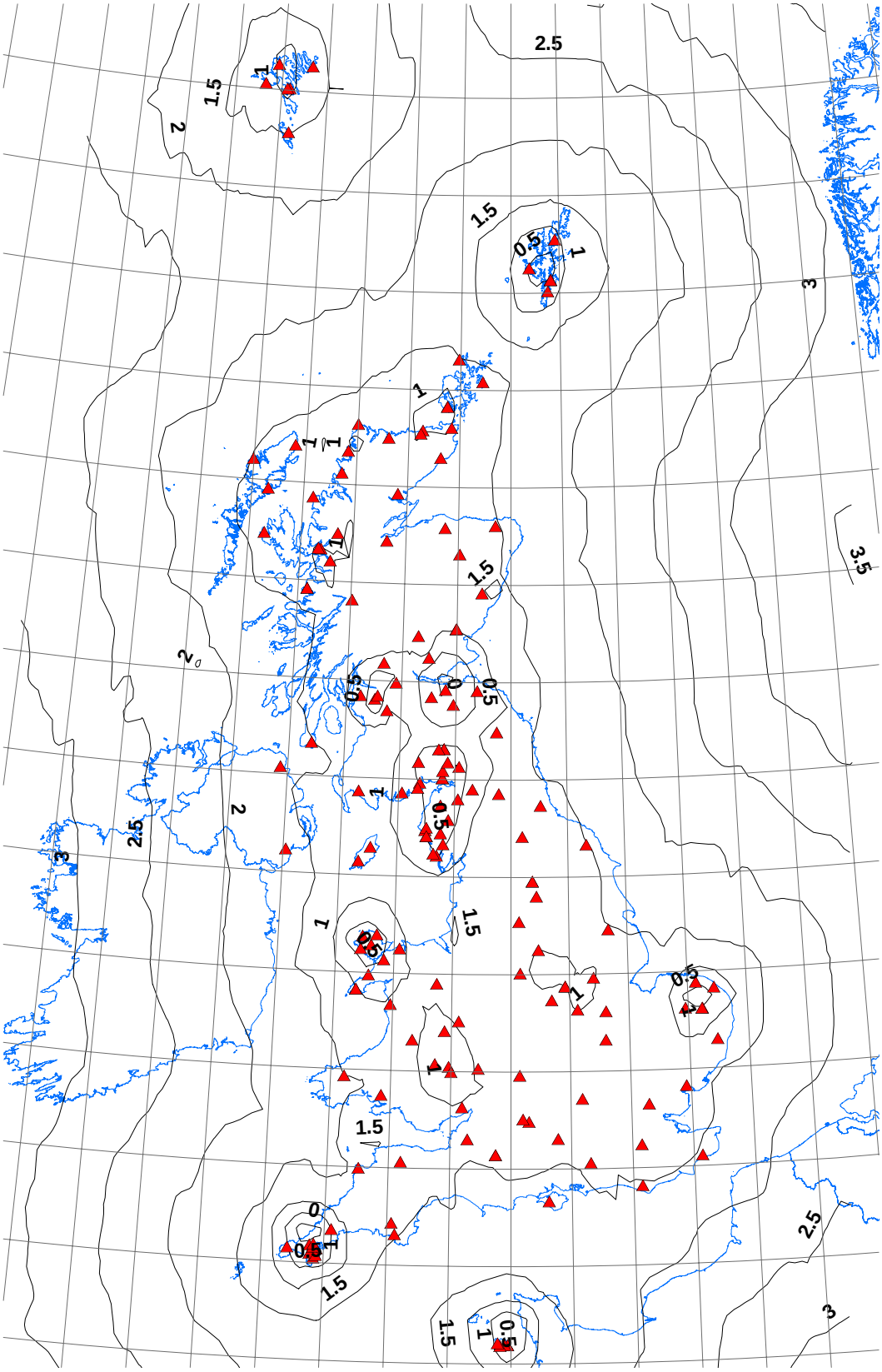


**Figure 3. Earthquake detection capability in December 2005. Contour values are for Richter local magnitude (ML) calculated for average background noise conditions (4nm) where the detection criterion is that the signal has to exceed 4nm at 10Hz at 4 stations.**

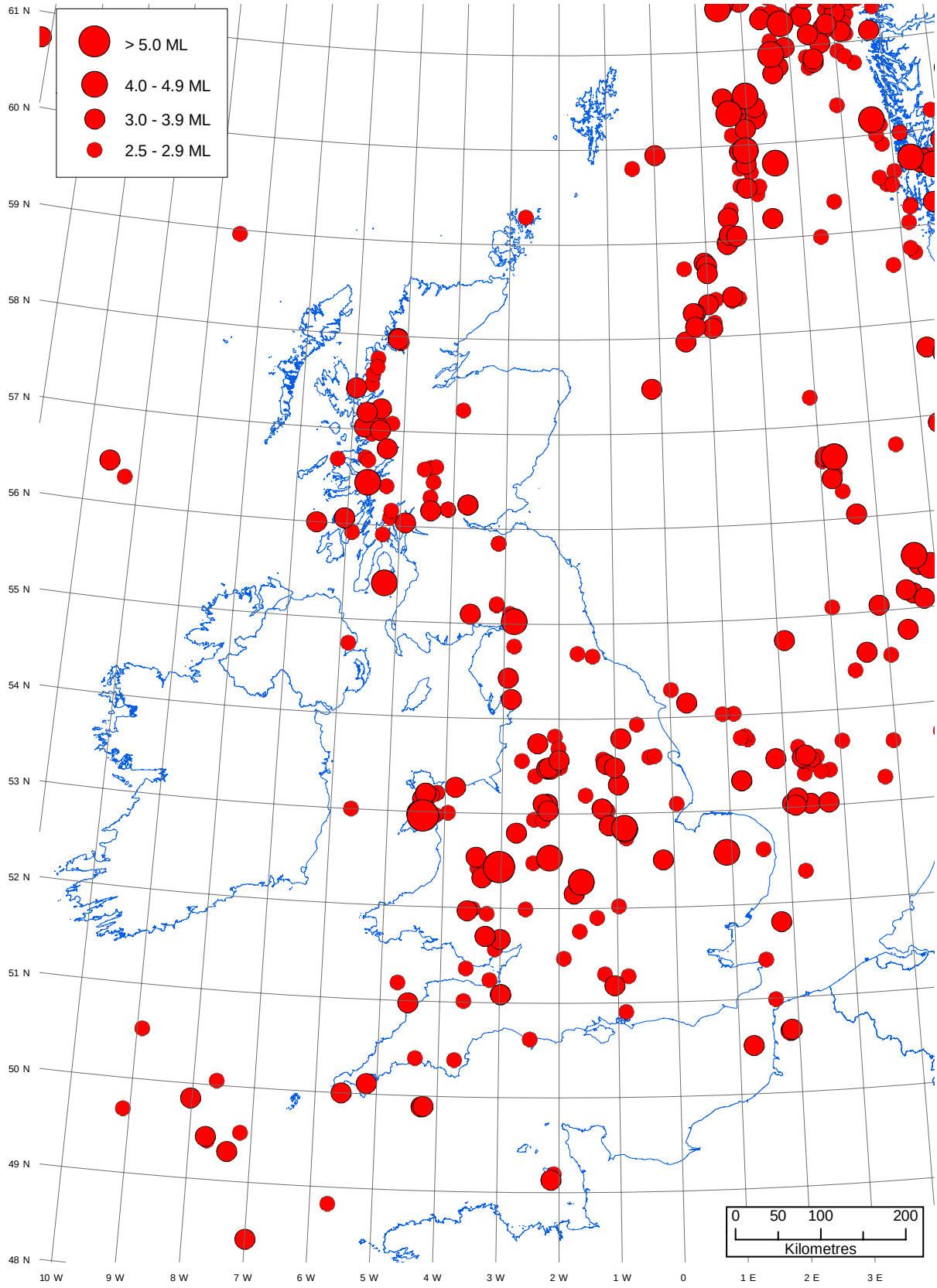


**Figure 4. Epicentres of earthquakes with magnitudes of 2.5 ML and above, in the period 1979 to 2005.**

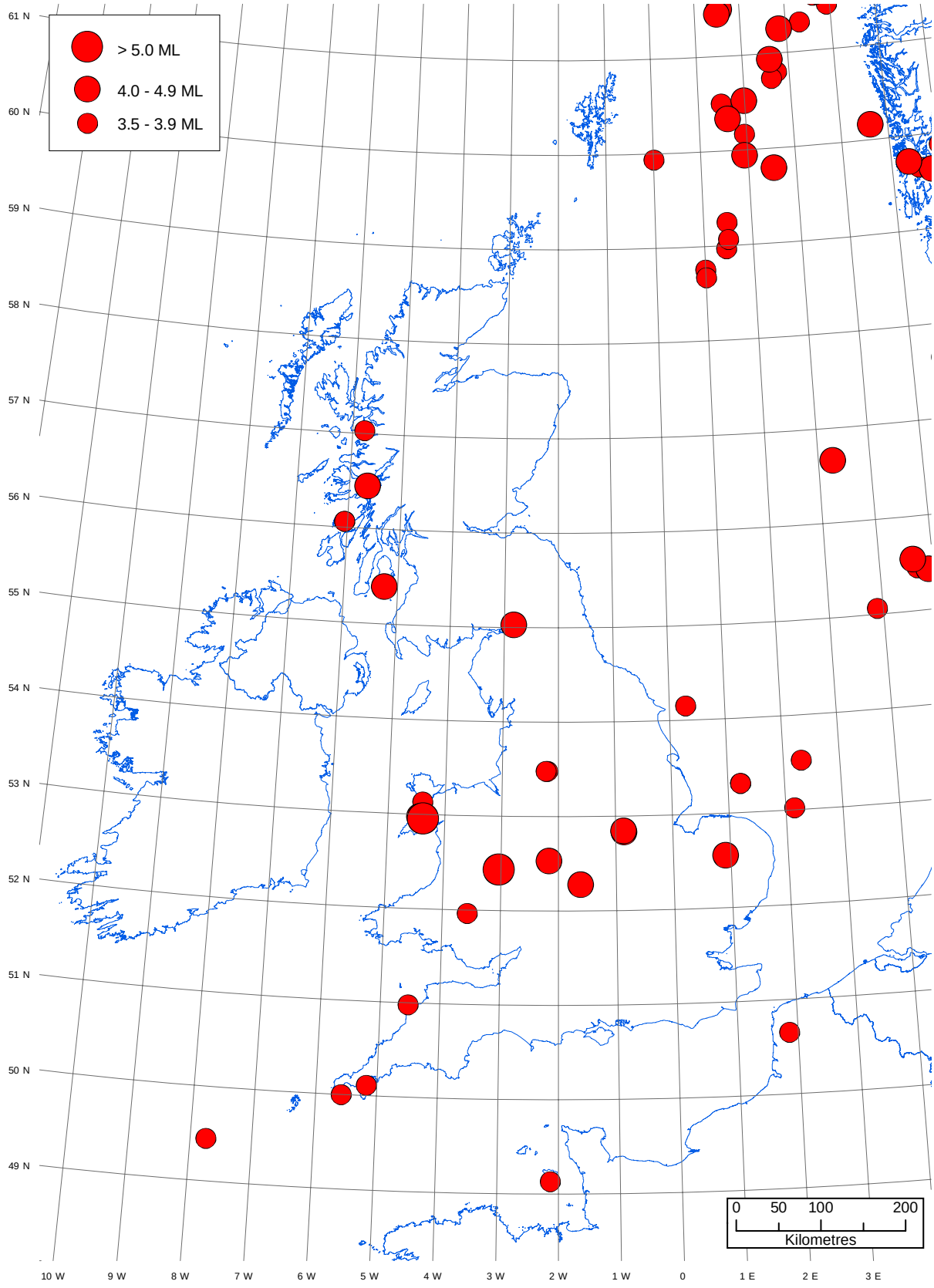


**Figure 5. Epicentres of earthquakes with magnitudes of 3.5 ML and above, in the period 1970 - 2005.**

# TABLE 1 : CATALOGUE OF EVENTS : 2005

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | Gap | RMS | ERH | ERZ | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20050118 | 031700.0 | | | | | | | SONIC-CORNWALL | F | 1 | | | | | FELT TRURO... |
| 20050119 | 224108.4 | 53.57 | -1.21 | 452.2 | 408.7 | 15.0 | 2.8 | DONCASTER,S YORKSHIRE | | 12 | 109 | 0.60 | 19.68 | 9.70 | |
| 20050120 | 221322.9 | 56.48 | -4.39 | 253.0 | 734.6 | 3.8 | 2.7 | KILLIN,CENTRAL | 4 | 13 | 145 | 0.40 | 7.64 | 5.80 | FELT KILLIN... |
| 20050124 | 025618.7 | 52.68 | -2.44 | 370.5 | 309.6 | 7.7 | 1.4 | TELFORD,SHROPSHIRE | | 9 | 242 | 0.10 | 6.24 | 10.00 | |
| 20050125 | 231916.7 | 56.19 | -5.50 | 183.1 | 705.3 | 7.2 | 1.9 | KILMELFORD,STRATHCLYDE | 2 | 10 | 188 | 0.20 | 9.22 | 9.50 | FELT MAOLACHY... |
| 20050129 | 013230.0 | 56.82 | -5.73 | 172.3 | 775.9 | 2.1 | 1.6 | MOIDART,HIGHLAND | | 7 | 178 | 0.30 | 8.69 | 10.80 | |
| 20050130 | 230953.3 | 54.13 | -1.89 | 407.4 | 470.7 | 5.0 | 1.8 | RIPON,NORTH YORKSHIRE | | 11 | 99 | 0.20 | 2.46 | 3.10 | |
| 20050202 | 230037.0 | 55.41 | -3.46 | 307.7 | 613.9 | 0.4 | 0.9 | MOFFAT,D & G | | 6 | 277 | 0.20 | 9.93 | 6.40 | 10KM NW OF MOFFAT |
| 20050214 | 001916.0 | 50.34 | -4.65 | 211.7 | 52.8 | 0.5 | 1.6 | FOWEY,CORNWALL | | 8 | 165 | 0.30 | 10.60 | 7.30 | |
| 20050214 | 184401.4 | 53.27 | -3.82 | 278.4 | 376.0 | 10.7 | 3.3 | CONWY,GWYNEDD | 4 | 51 | 32 | 0.40 | 3.05 | 2.10 | FELT CONWY... |
| 20050215 | 114718.2 | 52.72 | -2.80 | 346.1 | 313.6 | 11.5 | 1.4 | SHREWSBURY,SHROPSHIRE | | 11 | 218 | 0.10 | 4.05 | 1.20 | |
| 20050220 | 025112.9 | 51.35 | -2.46 | 368.2 | 161.5 | 13.8 | 1.5 | BATH,AVON | | 10 | 108 | 0.10 | 3.02 | 2.20 | 6KM SW OF BATH |
| 20050221 | 202217.6 | 53.58 | -1.21 | 452.2 | 409.1 | 10.7 | 1.9 | DONCASTER,S YORKSHIRE | | 6 | 135 | 0.10 | 3.59 | 8.40 | |
| 20050227 | 221201.1 | 55.79 | -5.95 | 152.2 | 662.3 | 4.2 | 1.2 | SOUND OF JURA,HIGHLAND | | 5 | 257 | 0.30 | 14.23 | 24.00 | |
| 20050228 | 170559.3 | 57.70 | -3.39 | 317.0 | 868.6 | 0.0 | 1.0 | EXPL-HOPEMAN,GRAMPIAN | F | 5 | 146 | 0.20 | 6.39 | 0.00 | FELT HOPEMAN |
| 20050228 | 173434.9 | 57.67 | -3.42 | 315.2 | 865.1 | 0.0 | 1.0 | EXPL-HOPEMAN,GRAMPIAN | F | 4 | 191 | 0.20 | 9.06 | 0.00 | FELT HOPEMAN |
| 20050303 | 083152.5 | 53.12 | -4.41 | 239.0 | 361.2 | 13.8 | 0.1 | CAERNARFON BAY | | 6 | 137 | 0.10 | 1.71 | 2.80 | |
| 20050308 | 001600.3 | 50.53 | -4.83 | 199.7 | 73.7 | 9.9 | 0.5 | WADEBRIDGE,CORNWALL | | 11 | 152 | 0.10 | 2.72 | 1.60 | |
| 20050323 | 162600.0 | | | | | | | SONIC-CUMBRIA | F | 1 | | | | | FELT SELLAFIELD... |
| 20050328 | 014758.1 | 48.82 | -5.71 | 128.0 | -112.9 | 12.7 | 2.7 | ENGLISH CHANNEL | | 11 | 284 | 0.40 | 89.90 | 78.00 | 100KM S OF PENZANCE |
| 20050328 | 080450.0 | 53.90 | 0.91 | 591.1 | 448.3 | 24.2 | 2.0 | SOUTHERN NORTH SEA | | 4 | 344 | 0.20 | 30.37 | 5.20 | |
| 20050329 | 023839.7 | 53.76 | 1.25 | 614.3 | 434.6 | 5.0 | 2.5 | SOUTHERN NORTH SEA | | 11 | 230 | 0.60 | 17.49 | 0.00 | |
| 20050408 | 035429.7 | 53.13 | -4.40 | 239.4 | 362.4 | 6.6 | 0.3 | CAERNARFON BAY | | 5 | 133 | 0.10 | 1.80 | 6.40 | |
| 20050410 | 162425.4 | 53.11 | -4.41 | 238.9 | 359.3 | 5.6 | 0.0 | CAERNARFON BAY | | 5 | 140 | 0.10 | 3.07 | 15.30 | |
| 20050411 | 032758.6 | 54.45 | -3.05 | 331.9 | 507.1 | 5.0 | 0.7 | AMBLESIDE,CUMBRIA | | 6 | 309 | 0.30 | 10.98 | 0.00 | 5KM W OF AMBLESIDE |
| 20050414 | 150150.7 | 52.28 | -3.27 | 313.1 | 265.5 | 18.6 | 1.4 | LLANDRINDOD WELLS | | 7 | 182 | 0.10 | 4.00 | 2.60 | LLANDRINDOD WELLS,POWYS |
| 20050427 | 063736.3 | 55.12 | -3.21 | 322.8 | 581.5 | 4.0 | 1.3 | LOCKERBIE,D & G | | 7 | 164 | 0.10 | 1.56 | 1.70 | |
| 20050428 | 092736.6 | 55.19 | -3.15 | 327.0 | 588.9 | 2.6 | 1.9 | ESKDALEMUIR,D & G | 3 | 13 | 109 | 0.30 | 4.37 | 3.30 | FELT ESKDALEMUIR... |
| 20050429 | 112319.6 | 55.18 | -3.15 | 326.5 | 588.2 | 2.6 | 2.1 | ESKDALEMUIR,D & G | 3 | 13 | 112 | 0.30 | 4.49 | 5.90 | FELT ESKDALEMUIR... |
| 20050501 | 132451.9 | 55.20 | -3.16 | 326.2 | 589.6 | 5.0 | 0.9 | ESKDALEMUIR,D & G | | 7 | 127 | 0.20 | 3.18 | 2.50 | |
| 20050502 | 052857.3 | 56.85 | -5.32 | 197.5 | 778.2 | 7.4 | 0.9 | LOCH EIL,HIGHLAND | | 4 | 283 | 0.30 | 15.27 | 0.00 | |
| 20050503 | 075912.6 | 56.85 | -5.33 | 197.3 | 778.2 | 7.0 | 0.8 | LOCH EIL,HIGHLAND | | 4 | 283 | 0.40 | 20.43 | 0.00 | |
| 20050508 | 164725.7 | 56.85 | -5.32 | 197.9 | 778.4 | 7.0 | 0.9 | LOCH EIL,HIGHLAND | | 4 | 283 | 0.40 | 21.47 | 0.00 | |
| 20050511 | 192021.3 | 54.26 | -3.14 | 325.6 | 486.0 | 8.3 | 0.7 | GRIZEBECK,CUMBRIA | | 6 | 209 | 0.30 | 28.58 | 92.20 | |
| 20050512 | 122615.5 | 51.91 | -3.86 | 272.1 | 224.7 | 9.2 | 2.3 | LLANDEILO,DYFED | | 21 | 69 | 0.30 | 2.70 | 2.90 | 9KM E OF LLANDEILO |
| 20050512 | 200606.8 | 51.91 | -3.86 | 271.9 | 224.8 | 10.2 | 2.1 | LLANDEILO,DYFED | | 22 | 69 | 0.30 | 2.72 | 2.90 | 9KM E OF LLANDEILO |
| 20050520 | 052808.1 | 51.92 | -3.54 | 294.2 | 225.3 | 17.6 | 1.0 | SENNYBRIDGE,POWYS | | 5 | 168 | 0.10 | 3.26 | 4.70 | |
| 20050520 | 111947.0 | 51.90 | -3.84 | 273.2 | 223.6 | 10.9 | 1.3 | LLANDEILO,DYFED | | 8 | 146 | 0.10 | 2.88 | 2.50 | 9KM E OF LLANDEILO |
| 20050521 | 180156.6 | 51.90 | -3.86 | 272.3 | 223.8 | 10.0 | 1.2 | LLANDEILO,DYFED | | 10 | 105 | 0.20 | 3.44 | 3.40 | 9KM E OF LLANDEILO |
| 20050521 | 201721.0 | 51.91 | -3.86 | 271.9 | 224.9 | 11.2 | 1.4 | LLANDEILO,DYFED | | 10 | 107 | 0.20 | 2.91 | 2.40 | 9KM E OF LLANDEILO |
| 20050521 | 232108.9 | 49.13 | -2.12 | 391.2 | -85.4 | 9.2 | 0.7 | OFFSHORE JERSEY | | 5 | 289 | 0.00 | 0.78 | 0.50 | |
| 20050522 | 055849.2 | 57.83 | -5.07 | 217.6 | 886.6 | 1.4 | 0.9 | ULLAPOOL,HIGHLAND | | 6 | 124 | 0.40 | 6.49 | 7.50 | 7KM SE OF ULLAPOOL |
| 20050523 | 131710.0 | 50.51 | -4.81 | 200.9 | 71.9 | 6.2 | 1.2 | WADEBRIDGE,CORNWALL | | 9 | 223 | 0.10 | 3.52 | 2.30 | |
| 20050526 | 141121.9 | 58.09 | -6.49 | 135.4 | 919.9 | 2.6 | 0.9 | LEWIS,WESTERN ISLES | | 6 | 175 | 0.20 | 5.60 | 8.70 | |
| 20050530 | 031923.7 | 51.19 | -4.70 | 211.3 | 147.1 | 22.3 | 1.7 | LUNDY ISLAND,DEVON | | 14 | 148 | 0.30 | 6.05 | 5.20 | BRISTOL CHANNEL AREA |
| 20050531 | 233634.0 | 55.93 | -5.95 | 153.2 | 677.5 | 5.0 | 1.8 | ISLE OF JURA,HIGHLAND | | 7 | 177 | 0.30 | 6.17 | 0.00 | |

# TABLE 1 : CATALOGUE OF EVENTS : 2005

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | Gap | RMS | ERH | ERZ | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20050605 | 130117.7 | 51.97 | -2.88 | 339.7 | 230.5 | 11.2 | 0.8 | HEREFORD,HEREFORDSHIRE | | 9 | 101 | 0.20 | 4.79 | 2.40 | 12KM SW OF HEREFORD |
| 20050606 | 100430.0 | 55.12 | -3.21 | 322.7 | 581.5 | 4.6 | 1.2 | LOCKERBIE,D & G | | 9 | 96 | 0.20 | 2.15 | 2.80 | |
| 20050607 | 004650.2 | 55.09 | -4.20 | 259.4 | 579.6 | 1.9 | 1.4 | NEW GALLOWAY,D & G | | 12 | 84 | 0.30 | 4.69 | 6.00 | |
| 20050608 | 004950.0 | 53.93 | -1.07 | 461.3 | 449.0 | 7.7 | 2.4 | YORK,NORTH YORKSHIRE | 2 | 10 | 107 | 0.20 | 3.53 | 6.40 | FELT YORK |
| 20050608 | 012123.3 | 53.05 | -2.21 | 385.6 | 350.1 | 1.5 | 2.6 | STOKE-ON-TRENT,STAFFS | 4 | 29 | 49 | 0.60 | 4.58 | 6.00 | FELT STOKE-ON-TRENT |
| 20050618 | 075055.8 | 51.06 | -0.50 | 505.4 | 130.5 | 5.0 | 1.4 | BILLINGHURST, W SUSSEX | | 4 | 137 | 0.70 | 11.26 | 0.00 | 5KM NW OF BILLINGHURST |
| 20050619 | 114934.3 | 51.07 | -0.51 | 504.1 | 131.5 | 5.0 | 1.6 | BILLINGHURST, W SUSSEX | | 10 | 149 | 0.50 | 10.72 | 0.00 | 5KM NW OF BILLINGHURST |
| 20050625 | 095201.5 | 58.13 | -6.38 | 141.9 | 923.6 | 4.0 | 0.6 | LEWIS,WESTERN ISLES | | 4 | 162 | 0.10 | 85.30 | 112.00 | |
| 20050627 | 184636.5 | 61.12 | 3.42 | 691.9 | 1260.4 | 12.7 | 3.2 | NORTHERN NORTH SEA | | 25 | 169 | 0.40 | 8.23 | 7.40 | |
| 20050716 | 182910.4 | 51.01 | -0.52 | 504.1 | 124.0 | 5.0 | 2.1 | BILLINGHURST, W SUSSEX | | 12 | 249 | 0.70 | 16.79 | 0.00 | |
| 20050717 | 013559.8 | 52.40 | -2.81 | 344.6 | 278.0 | 14.5 | 1.1 | LUDLOW,SHROPSHIRE | | 7 | 112 | 0.10 | 3.38 | 3.40 | 5KM NW OF LUDLOW |
| 20050723 | 170541.6 | 57.11 | 6.46 | 911.7 | 834.0 | 15.0 | 2.9 | SKAGERRAK | | 16 | 286 | 0.40 | 12.61 | 0.00 | |
| 20050729 | 020709.2 | 58.11 | -3.14 | 332.7 | 914.4 | 6.7 | 1.5 | MORAY FIRTH AREA | | 11 | 156 | 0.10 | 2.47 | 7.00 | |
| 20050729 | 021113.0 | 58.12 | -3.13 | 333.3 | 914.6 | 7.7 | 1.2 | MORAY FIRTH AREA | | 9 | 156 | 0.20 | 5.51 | 9.70 | |
| 20050729 | 191258.7 | 51.85 | -4.91 | 199.5 | 221.4 | 4.4 | 1.6 | HAVERFORDWEST,DYFED | | 11 | 212 | 0.10 | 3.35 | 6.10 | 5KM NE OF HAVERFORDWEST |
| 20050730 | 111942.4 | 52.58 | -2.86 | 341.5 | 298.3 | 15.6 | 1.0 | SHREWSBURY,SHROPSHIRE | | 7 | 106 | 0.00 | 1.21 | 1.10 | 10KM SW OF SHREWSBURY |
| 20050801 | 211156.2 | 51.70 | -3.17 | 319.0 | 201.3 | 2.0 | 1.2 | BLACKWOOD,GWENT | | 8 | 106 | 0.10 | 2.15 | 3.20 | |
| 20050802 | 221138.7 | 54.53 | 4.05 | 791.2 | 532.1 | 15.0 | 2.8 | CENTRAL NORTH SEA | | 13 | 286 | 0.20 | 23.78 | 21.10 | |
| 20050808 | 033431.9 | 50.64 | -5.36 | 162.6 | 87.3 | 15.0 | 0.9 | TREVOSE HEAD,CORNWALL | | 7 | 297 | 0.10 | 10.22 | 15.30 | 25KM NW TREVOSE HEAD |
| 20050809 | 182801.8 | 54.20 | -4.09 | 263.4 | 480.6 | 15.0 | 0.6 | IRISH SEA | | 5 | 217 | 0.20 | 9.01 | 4.90 | |
| 20050811 | 040212.7 | 52.88 | 2.13 | 677.8 | 339.6 | 5.0 | 1.8 | SOUTHERN NORTH SEA | | 8 | 282 | 0.30 | 15.21 | 0.00 | |
| 20050812 | 080510.2 | 53.54 | 2.38 | 690.4 | 414.1 | 5.0 | 3.0 | SOUTHERN NORTH SEA | | 12 | 258 | 0.30 | 15.69 | 0.00 | |
| 20050813 | 014910.6 | 55.66 | -6.07 | 144.4 | 648.2 | 5.0 | 1.2 | ISLAY,INNER HEBRIDES | | 4 | 312 | 0.10 | 10.90 | 0.00 | |
| 20050824 | 143215.5 | 49.89 | -4.23 | 240.1 | 1.3 | 12.2 | 3.0 | ENGLISH CHANNEL | 3 | 24 | 168 | 0.40 | 5.19 | 5.70 | FELT SOUTH DEVON |
| 20050826 | 000447.2 | 49.27 | -2.39 | 371.6 | -70.2 | 10.6 | 0.9 | OFFSHORE JERSEY | | 4 | 337 | 0.00 | 1.42 | 1.70 | |
| 20050827 | 220301.0 | 53.48 | 2.34 | 688.0 | 406.9 | 8.6 | 2.7 | SOUTHERN NORTH SEA | | 11 | 267 | 0.40 | 30.75 | 12.50 | |
| 20050828 | 013520.4 | 49.36 | -2.38 | 372.5 | -59.9 | 11.9 | 0.3 | OFFSHORE JERSEY | | 4 | 340 | 0.00 | 2.48 | 3.90 | |
| 20050828 | 180135.8 | 52.83 | -2.46 | 368.9 | 326.3 | 6.4 | 1.8 | MARKET DRAYTON,SALOP | | 12 | 120 | 0.20 | 3.94 | 10.60 | 8KM S OF MARKET DRAYTON |
| 20050828 | 193846.0 | 52.18 | -3.07 | 327.0 | 254.6 | 11.9 | 1.6 | KINGTON,HEREFORDSHIRE | | 10 | 113 | 0.40 | 7.37 | 4.60 | 5KM SW OF KINGTON |
| 20050901 | 001321.0 | 57.27 | -5.70 | 177.1 | 825.6 | 2.9 | 1.1 | LOCH ALSH,HIGHLAND | | 9 | 99 | 0.50 | 10.09 | 6.10 | |
| 20050901 | 014201.2 | 57.26 | -5.69 | 177.6 | 825.3 | 0.3 | 0.6 | LOCH ALSH,HIGHLAND | | 7 | 98 | 0.50 | 11.89 | 7.40 | |
| 20050903 | 003658.9 | 57.01 | -5.74 | 172.8 | 797.4 | 2.5 | 0.1 | MALLAIG,HIGHLAND | | 4 | 166 | 0.00 | 1.68 | 1.30 | |
| 20050903 | 013944.5 | 57.01 | -5.73 | 173.7 | 797.1 | 2.5 | 0.4 | MALLAIG,HIGHLAND | | 4 | 172 | 0.00 | 1.58 | 1.30 | |
| 20050903 | 041433.2 | 57.27 | -5.67 | 178.6 | 825.5 | 2.6 | 0.2 | LOCH ALSH,HIGHLAND | | 3 | 256 | 0.10 | 86.14 | 31.90 | |
| 20050907 | 173236.0 | 55.20 | 4.42 | 808.5 | 608.4 | 0.4 | 3.2 | CENTRAL NORTH SEA | | 16 | 271 | 0.40 | 44.35 | 33.30 | |
| 20050909 | 102719.6 | 49.37 | -2.38 | 372.8 | -59.4 | 7.7 | 1.2 | OFFSHORE JERSEY | | 4 | 340 | 0.00 | 1.35 | 27.30 | |
| 20050909 | 152407.6 | 52.01 | -2.80 | 345.0 | 234.9 | 13.8 | 0.8 | HEREFORD,HEREFORDSHIRE | | 5 | 105 | 0.00 | 0.86 | 0.90 | 5KM SW OF HEREFORD |
| 20050912 | 005708.5 | 57.26 | -5.70 | 177.0 | 825.1 | 2.6 | 0.6 | LOCH ALSH,HIGHLAND | | 4 | 186 | 0.10 | 2.82 | 2.20 | |
| 20050912 | 133639.6 | 57.27 | -5.68 | 178.3 | 825.6 | 2.7 | -0.1 | LOCH ALSH,HIGHLAND | | 3 | 258 | 0.20 | 39.94 | 11.90 | |
| 20050917 | 023749.2 | 56.57 | -6.31 | 135.5 | 750.7 | 5.0 | 2.2 | ISLE OF MULL,HIGHLAND | | 11 | 217 | 0.20 | 9.22 | 0.00 | |
| 20050917 | 023951.8 | 56.58 | -6.28 | 137.1 | 751.3 | 5.0 | 1.6 | ISLE OF MULL,HIGHLAND | | 9 | 231 | 0.30 | 11.68 | 0.00 | |
| 20050925 | 094600.4 | 53.54 | -2.58 | 361.7 | 405.4 | 8.7 | 1.4 | WIGAN,GTR MANCHESTER | | 12 | 86 | 0.30 | 4.83 | 7.60 | |
| 20051004 | 153706.7 | 51.64 | -2.88 | 339.3 | 193.4 | 16.2 | 1.5 | NEWPORT,GWENT | | 6 | 138 | 0.10 | 6.06 | 2.70 | 8KM NE OF NEWPORT |
| 20051008 | 214603.0 | 52.44 | -1.99 | 400.4 | 282.8 | 14.5 | 1.7 | BIRMINGHAM, W MIDLANDS | | 11 | 115 | 0.40 | 6.40 | 31.20 | |
| 20051011 | 180200.4 | 52.71 | -4.10 | 258.1 | 314.4 | 8.6 | 0.6 | BARMOUTH,GWYNEDD | | 10 | 188 | 0.30 | 9.57 | 11.40 | |
| 20051021 | 201838.3 | 53.03 | -4.03 | 264.1 | 349.6 | 16.6 | 0.5 | BLAENAU FFESTINIOG | | 6 | 242 | 0.10 | 3.69 | 4.00 | BLAENAU FFESTINIOG,GWYNEDD |
| 20051024 | 055133.7 | 49.71 | -0.93 | 476.9 | -20.8 | 5.0 | 1.9 | CHERBOURG PENINSULA | | 6 | 265 | 0.30 | 34.57 | 0.00 | OFFSHORE LOCATION |
| 20051030 | 205506.5 | 56.54 | -5.67 | 174.5 | 744.9 | 0.0 | 1.6 | SOUND OF MULL,HIGHLAND | | 5 | 335 | 0.30 | 253.76 | 165.40 | |

# TABLE 1 : CATALOGUE OF EVENTS : 2005

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | Gap | RMS | ERH | ERZ | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20051101 | 235145.9 | 56.68 | -5.69 | 173.9 | 760.1 | 5.0 | 1.7 | LOCH SUNART,HIGHLAND | | 9 | 165 | 0.40 | 14.60 | 0.00 | |
| 20051102 | 210734.7 | 56.65 | -5.79 | 167.5 | 756.8 | 5.0 | 1.9 | LOCH SUNART,HIGHLAND | | 11 | 181 | 0.50 | 13.51 | 0.00 | |
| 20051102 | 213918.5 | 56.67 | -5.69 | 174.0 | 758.8 | 5.0 | 1.4 | LOCH SUNART,HIGHLAND | | 7 | 216 | 0.30 | 12.98 | 0.00 | |
| 20051103 | 113804.7 | 56.68 | -5.66 | 175.7 | 759.8 | 5.0 | 1.3 | LOCH SUNART,HIGHLAND | | 7 | 191 | 0.20 | 8.74 | 0.00 | |
| 20051108 | 210625.5 | 55.22 | -3.12 | 329.1 | 592.1 | 3.3 | 0.7 | LANGHOLM,D & G | 2 | 23 | 173 | 0.10 | 2.85 | 2.50 | FELT LANGHOLM |
| 20051109 | 040651.9 | 52.95 | -3.93 | 270.6 | 340.4 | 15.7 | 0.4 | FFESTINIOG,GWYNEDD | | 6 | 141 | 0.10 | 2.42 | 7.80 | |
| 20051109 | 045345.8 | 56.71 | -5.12 | 209.2 | 761.9 | 6.2 | 1.3 | BALLACHULISH,HIGHLAND | | 7 | 157 | 0.30 | 13.37 | 29.40 | 5KM NE OF BALLACHULISH |
| 20051110 | 205228.1 | 57.26 | -5.69 | 177.3 | 825.3 | 2.6 | 1.2 | LOCH ALSH,HIGHLAND | | 5 | 99 | 0.10 | 1.34 | 2.80 | |
| 20051115 | 143825.4 | 55.21 | -3.16 | 326.3 | 591.0 | 2.1 | 0.8 | ESKDALEMUIR,D & G | | 3 | 198 | 0.10 | 150.72 | 81.00 | |
| 20051115 | 201324.5 | 57.06 | -5.54 | 185.6 | 802.6 | 2.5 | 0.4 | LOCH HOURN,HIGHLAND | | 4 | 204 | 0.10 | 4.59 | 3.60 | |
| 20051120 | 172703.0 | 57.22 | -5.49 | 189.6 | 819.9 | 1.7 | 0.4 | SHIEL BRIDGE,HIGHLAND | | 4 | 110 | 0.10 | 1.36 | 0.70 | |
| 20051124 | 080131.4 | 53.16 | -4.67 | 221.2 | 366.1 | 0.4 | 1.3 | CAERNARFON BAY | | 10 | 135 | 0.30 | 5.87 | 5.90 | |
| 20051204 | 190403.5 | 55.38 | -6.26 | 130.1 | 617.5 | 5.0 | 1.6 | NORTH CHANNEL | | 5 | 241 | 0.30 | 12.71 | 0.00 | |
| 20051206 | 172915.3 | 55.38 | -5.18 | 198.3 | 614.5 | 2.5 | 0.5 | ARRAN,STRATHCLYDE | | 3 | 251 | 0.10 | 5.38 | 2.80 | SOUTH OF ARRAN |
| 20051210 | 232129.7 | 56.81 | -5.31 | 197.9 | 773.9 | 10.8 | 3.0 | FORT WILLIAM,HIGHLAND | 5 | 16 | 96 | 0.60 | 11.77 | 13.00 | FELT FORT WILLIAM... |
| 20051211 | 060131.4 | 51.77 | -0.43 | 508.5 | 208.7 | 0.0 | 2.3 | EXPL-HEMEL HEMPSTEAD | F | 32 | 64 | 0.40 | 9.55 | 0.00 | FELT SE ENGLAND... |
| 20051211 | 231407.7 | 53.13 | -0.01 | 533.0 | 360.6 | 21.4 | 2.0 | BOSTON,LINCS | | 9 | 156 | 0.20 | 7.93 | 10.70 | 11KM N OF BOSTON |
| 20051212 | 000321.4 | 56.16 | -4.20 | 263.6 | 698.9 | 3.2 | 1.4 | THORNHILL,CENTRAL | | 8 | 184 | 0.20 | 7.91 | 7.50 | |
| 20051214 | 033025.4 | 53.01 | -5.64 | 155.5 | 351.5 | 8.8 | 2.8 | IRISH SEA | 3 | 19 | 139 | 0.40 | 5.66 | 6.20 | FELT COAST OF WICKLOW |
| 20051223 | 032551.8 | 56.69 | -5.66 | 176.0 | 760.8 | 4.8 | 2.7 | LOCH SUNART,HIGHLAND | 3 | 16 | 135 | 0.50 | 11.20 | 11.70 | FELT STRONTIAN |
| 20051223 | 045821.6 | 56.68 | -5.66 | 175.6 | 759.9 | 7.5 | 2.4 | LOCH SUNART,HIGHLAND | 3 | 16 | 135 | 0.40 | 8.54 | 10.20 | FELT STRONTIAN |
| 20051229 | 044029.7 | 56.22 | -3.76 | 290.7 | 704.0 | 7.5 | 1.2 | GLENDEVON,CENTRAL | 3 | 7 | 121 | 0.20 | 6.41 | 19.40 | FELT GLENDEVON |
| 20051231 | 224005.8 | 56.26 | -3.77 | 290.1 | 708.7 | 3.5 | 2.4 | BLACKFORD,TAYSIDE | 4 | 11 | 196 | 0.30 | 10.78 | 11.10 | FELT BLACKFORD... |

# TABLE 2 : PHASE DATA

**January 18 2005 Time: 03:17 00.0 UTC**
**Lat: Lon: Depth:**
**Grid Ref: RMS:**
**Locality: SONIC-CORNWALL**
**Comment: FELT TRURO... Intensity: F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| CCA | SZ | | EP | | | 03:17 | 22.55 | | | |
| CR2 | SZ | | EP | | | 03:17 | 23.05 | | | |
| CSA | SZ | | EP | | | 03:17 | 28.78 | | | |

**January 19 2005 Time: 22:41 08.4 UTC Magnitude: 2.8 ML**
**Lat: 53.572N Lon: -1.211W Depth: 15.0 km**
**Grid Ref: 452.24 kmE 408.69 kmN RMS: 0.60 secs**
**Locality: DONCASTER,S YORKSHIRE**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| LDU | SZ | 34.5 | IP | | D | 22:41 | 14.98 | | | 0.24 |
| KBI | SZ | 41.1 | EP | 2 | | 22:41 | 16.03 | | | 0.27 |
| LHO | SZ | 42.7 | IP | | C | 22:41 | 16.19 | | | 0.14 |
| HPK | SZ | 50.9 | IP | | D | 22:41 | 17.35 | | | 0.11 |
| HPK | SN | 50.9 | ES | 2 | | 22:41 | 23.24 | | | -0.49 |
| LMK | SZ | 60.1 | EP | 3 | | 22:41 | 18.69 | | | 0.06 |
| KWE | SZ | 74.7 | EP | 2 | | 22:41 | 21.02 | | | 0.11 |
| LWH | SZ | 91.9 | EP | 2 | | 22:41 | 23.59 | | | 0.16 |
| LCP | SZ | 131.0 | EP | 2 | | 22:41 | 29.18 | | | 0.21 |
| SBD | SZ | 155.0 | IP | | D | 22:41 | 31.50 | | | -1.02 |
| HLM | SZ | 162.0 | EP | 3 | | 22:41 | 32.95 | | | -0.38 |
| SSP | SZ | 181.0 | EP | 2 | | 22:41 | 35.85 | | | 0.15 |
| SSP | SN | 181.0 | ES | 2 | | 22:41 | 57.50 | | | 1.84 |
| SSP | SN | 181.0 | AML | | | 22:41 | 59.33 | 71 | 0.25 | |
| SSP | SE | 181.0 | AML | | | 22:41 | 59.58 | 83 | 0.22 | |
| MCH | SE | 213.0 | ES | 4 | | 22:42 | 02.65 | | | 0.23 |
| MCH | SE | 213.0 | AML | | | 22:42 | 06.77 | 92 | 0.15 | |
| MCH | SN | 213.0 | AML | | | 22:42 | 07.38 | 89 | 0.18 | |

**January 20 2005 Time: 22:13 22.9 UTC Magnitude: 2.7 ML**
**Lat: 56.481N Lon: -4.388W Depth: 3.8 km**
**Grid Ref: 252.95 kmE 734.64 kmN RMS: 0.40 secs**
**Locality: KILLIN,CENTRAL**
**Velocity model: Lownet**
**Comment: FELT KILLIN... Intensity: 4**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| EAB | SZ | 32.7 | IP | | C | 22:13 | 29.02 | | | 0.07 |
| EAB | SZ | 32.7 | ES | 2 | | 22:13 | 32.47 | | | -0.90 |
| PCO | SZ | 57.7 | IP | | C | 22:13 | 33.23 | | | 0.25 |
| PCO | SZ | 57.7 | ES | 3 | | 22:13 | 40.43 | | | 0.08 |
| POB | SZ | 70.8 | EP | 3 | | 22:13 | 35.62 | | | 0.66 |
| EDU | SZ | 85.1 | EP | 2 | | 22:13 | 36.86 | | | -0.40 |
| EAU | SZ | 91.8 | EP | 2 | | 22:13 | 38.27 | | | -0.01 |
| EDI | HZ | 97.0 | EP | | | 22:13 | 38.90 | | | -0.14 |
| EDI | HN | 97.0 | ES | 2 | | 22:13 | 51.32 | | | 0.48 |
| EDI | HE | 97.0 | AML | | | 22:13 | 54.83 | 278 | 0.33 | |
| EDI | HN | 97.0 | AML | | | 22:13 | 54.93 | 579 | 0.33 | |
| MDO | SZ | 107.0 | IP | | C | 22:13 | 40.56 | | | -0.08 |
| MME | SZ | 127.0 | EP | 2 | | 22:13 | 43.46 | | | -0.32 |
| MCD | SZ | 141.0 | EP | | | 22:13 | 46.06 | | | 0.33 |
| MCD | SN | 141.0 | ES | 2 | | 22:14 | 01.83 | | | -0.57 |
| MCD | SE | 141.0 | AML | | | 22:14 | 07.45 | 141 | 0.29 | |
| MCD | SN | 141.0 | AML | | | 22:14 | 07.78 | 135 | 0.41 | |
| GMK | SZ | 147.0 | EP | 2 | | 22:13 | 47.04 | | | 0.41 |
| RRR | SZ | 176.0 | EP | 4 | | 22:13 | 50.66 | | | 0.05 |
| RRR | SN | 176.0 | AML | | | 22:14 | 15.69 | 88 | 0.28 | |
| RRR | SE | 176.0 | AML | | | 22:14 | 15.99 | 104 | 0.41 | |
| GAL | SZ | 181.0 | IP | | C | 22:13 | 51.40 | | | 0.13 |
| GAL | SN | 181.0 | ES | 2 | | 22:14 | 11.51 | | | -0.47 |
| GAL | SE | 181.0 | AML | | | 22:14 | 15.65 | 93 | 0.23 | |
| GAL | SN | 181.0 | AML | | | 22:14 | 16.75 | 60 | 0.19 | |
| GCL | SZ | 190.0 | EP | 2 | | 22:13 | 51.89 | | | -0.61 |

**January 24 2005 Time: 02:56 18.7 UTC Magnitude: 1.4 ML**
**Lat: 52.683N Lon: -2.436W Depth: 7.7 km**
**Grid Ref: 370.53 kmE 309.61 kmN RMS: 0.10 secs**
**Locality: TELFORD,SHROPSHIRE**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 35.3 | IP | 1 | C | 02:56 | 25.07 | | | -0.07 |
| HLM | SZ | 35.3 | ES | 3 | | 02:56 | 29.83 | | | 0.03 |
| SSP | SZ | 54.5 | EP | 1 | C | 02:56 | 28.07 | | | -0.05 |
| SSP | SN | 54.5 | ES | 2 | | 02:56 | 35.26 | | | 0.29 |
| SSP | SN | 54.5 | AML | | | 02:56 | 35.86 | 18 | 0.14 | |
| SSP | SE | 54.5 | AML | | | 02:56 | 36.07 | 20 | 0.15 | |
| SBD | SZ | 60.8 | IP | 1 | C | 02:56 | 29.12 | | | 0.02 |
| HAE | SZ | 72.2 | EP | 2 | | 02:56 | 30.96 | | | 0.12 |
| MCH | SZ | 85.4 | EP | 1 | C | 02:56 | 32.76 | | | -0.10 |
| MCH | SN | 85.4 | ES | 2 | | 02:56 | 42.96 | | | -0.21 |
| MCH | SE | 85.4 | AML | | | 02:56 | 43.73 | 18 | 0.19 | |
| MCH | SN | 85.4 | AML | | | 02:56 | 44.21 | 20 | 0.20 | |
| HTR | SZ | 87.9 | EP | 2 | | 02:56 | 33.29 | | | 0.01 |
| WPM | SZ | 118.0 | EP | 2 | | 02:56 | 38.02 | | | 0.13 |
| HGH | SZ | 119.0 | EP | 2 | | 02:56 | 38.39 | | | 0.31 |
| YRE | SZ | 138.0 | EP | 1 | C | 02:56 | 40.76 | | | -0.09 |

**January 25 2005 Time: 23:19 16.7 UTC Magnitude: 1.9 ML**
**Lat: 56.191N Lon: -5.496W Depth: 7.2 km**
**Grid Ref: 183.11 kmE 705.31 kmN RMS: 0.20 secs**
**Locality: KILMELFORD,STRATHCLYDE**
**Velocity model: Lownet**
**Comment: FELT MAOLACHY... Intensity: 2**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| PMS | SZ | 60.6 | EP | 3 | | 23:19 | 27.11 | | | 0.11 |
| EAB | SZ | 71.9 | IP | | C | 23:19 | 28.55 | | | -0.19 |
| PCO | SZ | 89.8 | IP | 1 | C | 23:19 | 31.71 | | | 0.21 |
| GMK | SZ | 94.3 | EP | 2 | | 23:19 | 32.14 | | | -0.06 |
| GCL | SZ | 130.0 | EP | 3 | | 23:19 | 37.56 | | | -0.13 |
| EAU | SZ | 133.0 | EP | 2 | | 23:19 | 38.51 | | | 0.33 |
| EDI | EZ | 147.0 | EP | 3 | | 23:19 | 40.04 | | | -0.01 |
| MDO | SZ | 155.0 | EP | 3 | | 23:19 | 41.42 | | | 0.10 |
| GAL | SZ | 156.0 | EP | 2 | | 23:19 | 41.44 | | | 0.14 |
| GAL | SE | 156.0 | ES | | | 23:19 | 59.24 | | | -0.03 |
| GAL | SE | 156.0 | AML | | | 23:20 | 02.40 | 14 | 0.18 | |
| GAL | SN | 156.0 | AML | | | 23:20 | 02.70 | 12 | 0.19 | |
| MCD | SZ | 207.0 | EP | 4 | | 23:19 | 48.39 | | | 0.48 |
| MCD | SN | 207.0 | AML | | | 23:20 | 17.15 | 15 | 0.21 | |
| MCD | SE | 207.0 | AML | | | 23:20 | 17.63 | 12 | 0.22 | |

**January 29 2005 Time: 01:32 30.0 UTC Magnitude: 1.6 ML**
**Lat: 56.819N Lon: -5.731W Depth: 2.1 km**
**Grid Ref: 172.34 kmE 775.91 kmN RMS: 0.30 secs**
**Locality: MOIDART,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KSB | SE | 47.4 | EP | 1 | | 01:32 | 38.52 | | | -0.16 |
| KSK | SZ | 92.9 | EP | 1 | D | 01:32 | 45.83 | | | 0.08 |
| MDO | SZ | 108.0 | EP | 2 | | 01:32 | 48.23 | | | 0.12 |
| EAB | SZ | 111.0 | EP | 2 | | 01:32 | 48.39 | | | -0.14 |
| EAB | SZ | 111.0 | ES | 3 | | 01:33 | 02.06 | | | 0.02 |
| EAB | SZ | 111.0 | AML | | | 01:33 | 03.70 | 11 | 0.26 | |
| PCO | SZ | 137.0 | IP | 1 | C | 01:32 | 52.73 | | | 0.23 |
| PCO | SZ | 137.0 | ES | 3 | | 01:33 | 08.70 | | | -0.20 |
| PCO | SZ | 137.0 | AML | | | 01:33 | 11.06 | 12 | 0.21 | |
| EBH | SZ | 151.0 | EP | 2 | | 01:32 | 54.96 | | | 0.43 |
| EBH | SZ | 151.0 | AML | | | 01:33 | 15.03 | 10 | 0.15 | |
| PCA | SZ | 154.0 | EP | 2 | | 01:32 | 54.35 | | | -0.69 |
| PCA | SZ | 154.0 | AML | | | 01:33 | 16.09 | 16 | 0.53 | |

**January 30 2005 Time: 23:09 53.3 UTC Magnitude: 1.8 ML**
**Lat: 54.132N Lon: -1.887W Depth: 5.0 km**
**Grid Ref: 407.38 kmE 470.71 kmN RMS: 0.20 secs**
**Locality: RIPON,NORTH YORKSHIRE**
**Velocity model: Borders**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HPK | SZ | 25.9 | IP | | D | 23:09 | 58.11 | | | -0.05 |
| HPK | SE | 25.9 | ES | 2 | | 23:10 | 01.69 | | | 0.06 |
| LHO | SZ | 65.4 | EP | 1 | C | 23:10 | 04.53 | | | -0.08 |
| LCP | SZ | 72.4 | EP | 2 | | 23:10 | 05.59 | | | -0.11 |
| LWH | SZ | 82.4 | EP | 1 | C | 23:10 | 07.29 | | | -0.05 |
| LMI | SZ | 93.2 | EP | 3 | | 23:10 | 09.13 | | | 0.06 |
| LMI | SE | 93.2 | ES | 3 | | 23:10 | 19.79 | | | -0.51 |
| LMI | SE | 93.2 | AML | | | 23:10 | 20.89 | 20 | 0.48 | |
| LMI | SN | 93.2 | AML | | | 23:10 | 22.99 | 22 | 0.23 | |
| BTA | SZ | 100.0 | EP | 1 | D | 23:10 | 10.37 | | | 0.11 |
| BTA | SE | 100.0 | ES | 3 | | 23:10 | 21.76 | | | -0.57 |
| BTA | SN | 100.0 | AML | | | 23:10 | 23.73 | 16 | 0.23 | |
| BTA | SE | 100.0 | AML | | | 23:10 | 24.87 | 20 | 0.24 | |
| BDL | SZ | 101.0 | EP | 2 | | 23:10 | 10.61 | | | 0.25 |
| BBO | SZ | 111.0 | EP | 2 | | 23:10 | 11.97 | | | 0.01 |
| BBO | SE | 111.0 | ES | 3 | | 23:10 | 25.27 | | | 0.03 |
| BBO | SE | 111.0 | AML | | | 23:10 | 26.18 | 42 | 0.18 | |
| BBO | SN | 111.0 | AML | | | 23:10 | 26.61 | 52 | 0.29 | |
| LMK | SZ | 127.0 | EP | 3 | | 23:10 | 14.99 | | | 0.35 |
| BBH | SZ | 130.0 | EP | 2 | | 23:10 | 15.04 | | | -0.06 |
| BHH | SZ | 137.0 | EP | 1 | C | 23:10 | 16.18 | | | 0.13 |
| BHH | SE | 137.0 | ES | 3 | | 23:10 | 32.02 | | | -0.21 |
| BHH | SN | 137.0 | AML | | | 23:10 | 32.82 | 28 | 0.44 | |
| BHH | SE | 137.0 | AML | | | 23:10 | 34.05 | 27 | 0.26 | |

**February 2 2005 Time: 23:00 37.0 UTC Magnitude: 0.9 ML**
**Lat: 55.410N Lon: -3.458W Depth: 0.4 km**
**Grid Ref: 307.70 kmE 613.87 kmN RMS: 0.20 secs**
**Locality: MOFFAT,D & G**
**Velocity model: Lownet**
**Comment: 10KM NW OF MOFFAT**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ESK1 | BZ | 19.1 | EP | 2 | | 23:00 | 41.03 | | | -0.16 |
| ESK1 | BE | 19.1 | ES | 2 | | 23:00 | 43.73 | | | -0.48 |
| BWH | SZ | 28.9 | IP | | D | 23:00 | 42.83 | | | -0.03 |
| BWH | SZ | 28.9 | ES | 3 | | 23:00 | 46.71 | | | -0.39 |
| BHH | SZ | 38.4 | IP | | D | 23:00 | 44.53 | | | 0.07 |
| BHH | SN | 38.4 | ES | 2 | | 23:00 | 49.64 | | | -0.22 |
| BHH | SE | 38.4 | AML | | | 23:00 | 49.69 | 18 | 0.24 | |
| BHH | SN | 38.4 | AML | | | 23:00 | 49.71 | 30 | 0.21 | |
| BBH | SZ | 45.5 | EP | 2 | | 23:00 | 45.60 | | | -0.06 |
| BTA | SZ | 74.7 | EP | 2 | | 23:00 | 50.39 | | | 0.10 |
| BTA | SN | 74.7 | ES | | | 23:01 | 00.12 | | | 0.17 |
| BTA | SE | 74.7 | AML | | | 23:01 | 00.73 | 9 | 0.17 | |
| BTA | SN | 74.7 | AML | | | 23:01 | 00.76 | 8 | 0.13 | |
| BBO | SZ | 76.2 | EP | 3 | | 23:00 | 50.69 | | | 0.19 |
| BBO | SN | 76.2 | AML | | | 23:01 | 02.01 | 3 | 0.14 | |
| BBO | SE | 76.2 | AML | | | 23:01 | 03.20 | 3 | 0.22 | |

**February 14 2005 Time: 00:19 16.0 UTC Magnitude: 1.6 ML**
**Lat: 50.344N Lon: -4.647W Depth: 0.5 km**
**Grid Ref: 211.68 kmE 52.76 kmN RMS: 0.30 secs**
**Locality: FOWEY,CORNWALL**
**Velocity model: Cornwall**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| CSA | SZ | 17.4 | IP | | C | 00:19 | 19.23 | | | 0.15 |
| CSA | SZ | 17.4 | ES | 2 | | 00:19 | 21.26 | | | -0.17 |
| CR2 | SZ | 42.0 | IP | | C | 00:19 | 23.44 | | | 0.08 |
| CR2 | SN | 42.0 | ES | 2 | | 00:19 | 28.53 | | | -0.47 |
| CR2 | SE | 42.0 | AML | | | 00:19 | 28.99 | 67 | 0.13 | |
| CR2 | SN | 42.0 | AML | | | 00:19 | 29.08 | 70 | 0.09 | |
| CCA | SZ | 44.9 | IP | | C | 00:19 | 23.84 | | | -0.01 |
| CCA | SZ | 44.9 | ES | 2 | | 00:19 | 29.32 | | | -0.56 |
| CMA | SZ | 44.9 | EP | 2 | | 00:19 | 24.15 | | | 0.30 |
| CGW | SZ | 49.1 | IP | | C | 00:19 | 24.74 | | | 0.16 |
| CGH | SZ | 49.2 | EP | 2 | | 00:19 | 24.83 | | | 0.23 |
| DYA | SZ | 52.0 | EP | 2 | | 00:19 | 24.60 | | | -0.48 |
| CPZ | SZ | 69.9 | IP | 1 | C | 00:19 | 28.02 | | | -0.17 |

**February 14 2005 Time: 18:44 01.4 UTC Magnitude: 3.3 ML**
**Lat: 53.267N Lon: -3.824W Depth: 10.7 km**
**Grid Ref: 278.36 kmE 376.03 kmN RMS: 0.40 secs**
**Locality: CONWY,GWYNEDD**

# TABLE 2 : PHASE DATA

**Velocity model: Lleyn**
**Comment: FELT CONWY...** **Intensity: 4**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| WPM | SZ | 5.5 | IP | | D | 18:44 | 03.75 | | | 0.30 |
| YLL | SZ | 27.1 | IP | | C | 18:44 | 06.17 | | | -0.12 |
| WME | SZ | 35.1 | IP | | D | 18:44 | 07.84 | | | 0.30 |
| WME | SZ | 35.1 | ES | 3 | | 18:44 | 11.58 | | | -0.15 |
| WLF | SZ | 38.3 | IP | | D | 18:44 | 08.09 | | | 0.04 |
| WCB | SZ | 49.7 | IP | | D | 18:44 | 09.99 | | | 0.08 |
| WCB | SE | 49.7 | ES | 2 | | 18:44 | 15.77 | | | 0.06 |
| YRC | SZ | 50.2 | IP | 1 | C | 18:44 | 09.90 | | | -0.07 |
| YRC | SZ | 50.2 | ES | 3 | | 18:44 | 15.49 | | | -0.33 |
| YRE | SZ | 51.3 | IP | | C | 18:44 | 10.01 | | | -0.15 |
| SBD | SZ | 55.2 | IP | | D | 18:44 | 10.39 | | | -0.44 |
| HLM | SZ | 105.0 | IP | | D | 18:44 | 18.51 | | | -0.02 |
| HLM | SZ | 105.0 | ES | 3 | | 18:44 | 30.90 | | | 0.69 |
| SSP | SZ | 106.0 | IP | | D | 18:44 | 18.76 | | | 0.03 |
| SSP | SE | 106.0 | ES | 2 | | 18:44 | 30.49 | | | -0.04 |
| SSP | SE | 106.0 | AML | | | 18:44 | 31.71 | 689 | 0.29 | |
| SSP | SN | 106.0 | AML | | | 18:44 | 35.39 | 560 | 0.18 | |
| WIM | SZ | 113.0 | EP | 1 | D | 18:44 | 20.41 | | | 0.61 |
| WIM | SZ | 113.0 | ES | 3 | | 18:44 | 33.01 | | | 0.68 |
| LHO | SZ | 135.0 | EP | 2 | | 18:44 | 23.30 | | | 0.17 |
| KWE | SZ | 136.0 | EP | 2 | | 18:44 | 23.56 | | | 0.29 |
| KWE | SZ | 136.0 | ES | 3 | | 18:44 | 38.05 | | | -0.11 |
| HTR | SZ | 137.0 | IP | | D | 18:44 | 23.41 | | | -0.15 |
| HTR | SZ | 137.0 | AML | | | 18:44 | 39.74 | 563 | 0.44 | |
| MCH | SZ | 152.0 | IP | | D | 18:44 | 25.49 | | | -0.16 |
| MCH | SN | 152.0 | ES | 1 | | 18:44 | 42.56 | | | 0.40 |
| MCH | SE | 152.0 | AML | | | 18:44 | 44.59 | 742 | 0.38 | |
| MCH | SN | 152.0 | AML | | | 18:44 | 45.98 | 650 | 0.28 | |
| KBI | SZ | 153.0 | EP | 2 | | 18:44 | 25.98 | | | 0.16 |
| HPE | SZ | 161.0 | EP | 2 | | 18:44 | 26.48 | | | -0.37 |
| HAE | SZ | 162.0 | IP | | D | 18:44 | 27.40 | | | 0.49 |
| HAE | SZ | 162.0 | ES | 3 | | 18:44 | 44.50 | | | 0.22 |
| HAE | SZ | 162.0 | AML | | | 18:44 | 49.73 | 354 | 0.59 | |
| LDU | SZ | 162.0 | EP | 3 | | 18:44 | 26.82 | | | -0.07 |
| LDU | SZ | 162.0 | AML | | | 18:44 | 48.23 | 315 | 0.30 | |
| HPK | SZ | 165.0 | EP | | | 18:44 | 27.19 | | | -0.05 |
| HPK | SN | 165.0 | ES | 3 | | 18:44 | 46.28 | | | 1.44 |
| BBO | SZ | 168.0 | EP | 1 | C | 18:44 | 27.44 | | | -0.21 |
| BBO | SE | 168.0 | ES | 2 | | 18:44 | 46.11 | | | 0.59 |
| HSA | SZ | 170.0 | EP | 2 | | 18:44 | 27.72 | | | -0.23 |
| GMM | SZ | 177.0 | EP | 2 | | 18:44 | 28.34 | | | -0.44 |
| BDL | SZ | 181.0 | EP | 1 | C | 18:44 | 29.12 | | | -0.10 |
| GAL | SZ | 187.0 | EP | 3 | | 18:44 | 29.68 | | | -0.38 |
| GAL | SE | 187.0 | ES | 3 | | 18:44 | 50.17 | | | 0.60 |
| GAL | SN | 187.0 | AML | | | 18:44 | 55.14 | 202 | 0.28 | |
| GAL | SE | 187.0 | AML | | | 18:44 | 55.18 | 293 | 0.28 | |
| HGH | SZ | 194.0 | EP | 2 | | 18:44 | 31.10 | | | 0.19 |
| HGH | SZ | 194.0 | AML | | | 18:44 | 58.37 | 358 | 0.34 | |
| BTA | SZ | 197.0 | EP | 1 | C | 18:44 | 31.15 | | | -0.15 |
| BTA | SE | 197.0 | ES | 3 | | 18:44 | 52.26 | | | 0.60 |
| BCC | SZ | 199.0 | EP | 3 | | 18:44 | 31.23 | | | -0.24 |
| BHH | SZ | 207.0 | EP | 2 | | 18:44 | 32.04 | | | -0.51 |
| BHH | SN | 207.0 | ES | 3 | | 18:44 | 54.70 | | | 0.95 |
| BWH | SZ | 213.0 | EP | 1 | C | 18:44 | 32.95 | | | -0.31 |
| BBH | SZ | 216.0 | EP | 2 | | 18:44 | 33.12 | | | -0.51 |
| LCP | SZ | 225.0 | EP | 2 | | 18:44 | 34.37 | | | -0.38 |
| SMD | SZ | 231.0 | EP | 3 | | 18:44 | 36.72 | | | 1.22 |
| ESK1 | HZ | 232.0 | EP | 2 | | 18:44 | 35.17 | | | -0.46 |
| ESK1 | HE | 232.0 | ES | 3 | | 18:45 | 00.03 | | | 1.11 |
| SWN | SZ | 239.0 | EP | 3 | | 18:44 | 37.73 | | | 1.22 |
| LWH | SZ | 239.0 | EP | 3 | | 18:44 | 36.63 | | | 0.06 |
| HEX | SZ | 245.0 | EP | 2 | | 18:44 | 37.22 | | | -0.05 |
| GCL | SZ | 252.0 | EP | 2 | | 18:44 | 37.55 | | | -0.56 |
| HTL | EZ | 257.0 | EP | 2 | | 18:44 | 38.89 | | | 0.14 |
| HTL | HN | 257.0 | AML | | | 18:45 | 12.21 | 249 | 0.52 | |
| HTL | HE | 257.0 | AML | | | 18:45 | 12.80 | 157 | 0.17 | |
| SWK | SZ | 259.0 | EP | 2 | | 18:44 | 39.68 | | | 0.62 |
| GMK | SZ | 259.0 | EP | 2 | | 18:44 | 38.55 | | | -0.41 |
| EAU | SZ | 288.0 | EP | 2 | | 18:44 | 42.45 | | | -0.24 |
| EDI | EZ | 299.0 | EP | 3 | | 18:44 | 43.71 | | | -0.26 |
| EAB | SZ | 327.0 | EP | 3 | | 18:44 | 46.89 | | | -0.65 |
| CSA | SZ | 332.0 | EP | 3 | | 18:44 | 47.67 | | | -0.53 |
| EBH | SZ | 332.0 | EP | 3 | | 18:44 | 48.18 | | | -0.06 |
| CR2 | SZ | 357.0 | EP | 3 | | 18:44 | 50.66 | | | -0.64 |
| CR2 | SN | 357.0 | AML | | | 18:45 | 41.16 | 45 | 0.23 | |
| CR2 | SE | 357.0 | AML | | | 18:45 | 43.96 | 118 | 0.61 | |
| CMA | SZ | 366.0 | EP | 3 | | 18:44 | 51.74 | | | -0.59 |
| CPZ | SZ | 367.0 | EP | 3 | | 18:44 | 52.00 | | | -0.50 |
| CGH | SZ | 370.0 | EP | 3 | | 18:44 | 52.22 | | | -0.63 |
| TEB | SZ | 385.0 | EP | 3 | | 18:44 | 55.00 | | | 0.23 |

**February 15 2005 Time: 11:47 18.2 UTC Magnitude: 1.4 ML**
**Lat: 52.717N Lon: -2.798W Depth: 11.5 km**
**Grid Ref: 346.10 kmE 313.60 kmN RMS: 0.10 secs**
**Locality: SHREWSBURY,SHROPSHIRE**
**Velocity model: Mid Wales**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 22.8 | IP | | C | 11:47 | 22.59 | | | -0.01 |
| HLM | SZ | 22.8 | ES | 2 | | 11:47 | 25.71 | | | -0.07 |
| SBD | SZ | 37.5 | EP | 2 | | 11:47 | 24.83 | | | -0.08 |
| SBD | SZ | 37.5 | ES | 3 | | 11:47 | 29.34 | | | -0.40 |
| SSP | SZ | 39.5 | IP | | C | 11:47 | 25.30 | | | 0.08 |
| SSP | SN | 39.5 | AML | | | 11:47 | 25.59 | 45 | 0.10 | |
| SSP | SE | 39.5 | ES | 3 | | 11:47 | 30.33 | | | 0.04 |
| SSP | SE | 39.5 | AML | | | 11:47 | 31.53 | 24 | 0.16 | |
| HAE | SZ | 77.6 | EP | 3 | | 11:47 | 31.38 | | | 0.01 |
| HTR | SZ | 77.9 | EP | 3 | | 11:47 | 31.42 | | | 0.00 |
| MCH | SZ | 81.2 | EP | 3 | | 11:47 | 31.80 | | | -0.11 |
| MCH | SE | 81.2 | ES | 2 | | 11:47 | 41.68 | | | -0.11 |
| MCH | SE | 81.2 | AML | | | 11:47 | 42.25 | 29 | 0.25 | |
| MCH | SN | 81.2 | AML | | | 11:47 | 44.67 | 17 | 0.15 | |
| WPM | SZ | 95.7 | EP | 3 | | 11:47 | 34.28 | | | 0.18 |
| YRE | SZ | 114.0 | EP | 3 | | 11:47 | 36.94 | | | 0.17 |
| HGH | SZ | 120.0 | EP | 2 | | 11:47 | 37.73 | | | -0.02 |
| YRC | SZ | 133.0 | EP | 3 | | 11:47 | 39.88 | | | 0.15 |
| WCB | SE | 138.0 | ES | 4 | | 11:47 | 56.20 | | | -0.39 |
| WCB | SE | 138.0 | AML | | | 11:47 | 58.26 | 6 | 0.23 | |
| WCB | SN | 138.0 | AML | | | 11:47 | 58.56 | 9 | 0.33 | |

**February 20 2005 Time: 02:51 12.9 UTC Magnitude: 1.5 ML**
**Lat: 51.351N Lon: -2.457W Depth: 13.8 km**
**Grid Ref: 368.18 kmE 161.48 kmN RMS: 0.10 secs**
**Locality: BATH,AVON**
**Velocity model: Mid Wales**
**Comment: 6KM SW OF BATH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| SMD | SZ | 18.7 | EP | 2 | | 02:51 | 16.83 | | | -0.05 |
| SWK | SZ | 26.9 | IP | 1 | C | 02:51 | 18.06 | | | 0.01 |
| HGH | SZ | 40.0 | IP | | D | 02:51 | 20.08 | | | 0.01 |
| SWN | SZ | 49.1 | EP | 3 | | 02:51 | 21.34 | | | -0.18 |
| SWN | SE | 49.1 | ES | 3 | | 02:51 | 27.84 | | | 0.09 |
| SWN | SE | 49.1 | AML | | | 02:51 | 29.09 | 38 | 0.22 | |
| SWN | SN | 49.1 | AML | | | 02:51 | 32.57 | 28 | 0.24 | |
| HAE | SZ | 76.5 | EP | 2 | | 02:51 | 25.49 | | | -0.24 |
| MCH | SZ | 81.0 | EP | 2 | | 02:51 | 26.26 | | | -0.15 |
| MCH | SN | 81.0 | ES | 3 | | 02:51 | 35.91 | | | -0.25 |
| MCH | SN | 81.0 | AML | | | 02:51 | 36.35 | 23 | 0.15 | |
| MCH | SE | 81.0 | AML | | | 02:51 | 37.10 | 31 | 0.25 | |
| HTR | SZ | 98.4 | EP | 1 | C | 02:51 | 29.03 | | | -0.01 |
| SKP | SZ | 122.0 | EP | 3 | | 02:51 | 32.53 | | | 0.03 |
| SSP | SZ | 127.0 | EP | 1 | D | 02:51 | 33.54 | | | 0.21 |
| SSP | SN | 127.0 | ES | 3 | | 02:51 | 48.11 | | | 0.05 |
| SSP | SN | 127.0 | AML | | | 02:51 | 50.68 | 10 | 0.28 | |
| SSP | SE | 127.0 | AML | | | 02:51 | 51.12 | 10 | 0.33 | |
| HLM | SZ | 133.0 | EP | 3 | | 02:51 | 34.25 | | | -0.01 |

**February 21 2005 Time: 20:22 17.6 UTC Magnitude: 1.9 ML**
**Lat: 53.576N Lon: -1.211W Depth: 10.7 km**
**Grid Ref: 452.24 kmE 409.14 kmN RMS: 0.10 secs**
**Locality: DONCASTER,S YORKSHIRE**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KBI | SZ | 41.6 | EP | 1 | C | 20:22 | 25.12 | | | 0.14 |
| KBI | SZ | 41.6 | ES | 3 | | 20:22 | 30.19 | | | -0.16 |
| LHO | SZ | 42.8 | EP | 1 | C | 20:22 | 25.22 | | | 0.02 |
| HPK | SZ | 50.5 | EP | 1 | | 20:22 | 26.36 | | | 0.02 |
| HPK | SE | 50.5 | ES | 2 | | 20:22 | 32.67 | | | -0.05 |
| HPK | SN | 50.5 | AML | | | 20:22 | 33.26 | 88 | 0.12 | |
| HPK | SE | 50.5 | AML | | | 20:22 | 34.58 | 90 | 0.14 | |
| LMK | SZ | 60.2 | EP | 3 | | 20:22 | 27.76 | | | -0.07 |
| KWE | SZ | 75.2 | EP | 1 | | 20:22 | 30.04 | | | -0.14 |
| SBD | SZ | 156.0 | EP | 3 | | 20:22 | 42.22 | | | 0.11 |

**February 27 2005 Time: 22:12 01.1 UTC Magnitude: 1.2 ML**
**Lat: 55.790N Lon: -5.953W Depth: 4.2 km**
**Grid Ref: 152.22 kmE 662.26 kmN RMS: 0.30 secs**
**Locality: SOUND OF JURA,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| GMK | SZ | 54.4 | EP | 2 | | 22:12 | 10.43 | | | -0.18 |
| PMS | SZ | 76.0 | EP | 3 | | 22:12 | 13.99 | | | -0.01 |
| GCL | SZ | 80.0 | EP | 3 | | 22:12 | 14.88 | | | 0.28 |
| GCL | SZ | 80.0 | ES | 3 | | 22:12 | 24.34 | | | -0.13 |
| PCA | SZ | 107.0 | EP | 3 | | 22:12 | 18.67 | | | -0.14 |
| GAL | SZ | 130.0 | EP | 3 | | 22:12 | 22.91 | | | 0.65 |
| GAL | SN | 130.0 | ES | 3 | | 22:12 | 37.80 | | | 0.09 |
| GAL | SE | 130.0 | AML | | | 22:12 | 40.67 | 5 | 0.15 | |
| GAL | SN | 130.0 | AML | | | 22:12 | 41.93 | 5 | 0.44 | |

**February 28 2005 Time: 17:05 59.3 UTC Magnitude: 1.0 ML**
**Lat: 57.700N Lon: -3.393W Depth: 0.0 km**
**Grid Ref: 316.98 kmE 868.62 kmN RMS: 0.20 secs**
**Locality: EXPL-HOPEMAN,GRAMPIAN**
**Velocity model: Lownet**
**Comment: FELT HOPEMAN** **Intensity: F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| MCD | SZ | 15.5 | IP | | C | 17:06 | 03.14 | | | 0.24 |
| MCD | SE | 15.5 | ES | 2 | | 17:06 | 04.90 | | | -0.63 |
| MCD | SE | 15.5 | AML | | | 17:06 | 06.74 | 39 | 0.36 | |
| MCD | SN | 15.5 | AML | | | 17:06 | 06.98 | 67 | 0.43 | |
| MME | SZ | 50.0 | IP | | C | 17:06 | 08.77 | | | -0.02 |
| MVH | SZ | 53.2 | EP | 2 | | 17:06 | 09.06 | | | -0.20 |
| MDO | SZ | 64.8 | EP | 2 | | 17:06 | 11.16 | | | 0.05 |
| MLA | SZ | 67.4 | IP | | C | 17:06 | 11.45 | | | -0.02 |

**February 28 2005 Time: 17:34 34.9 UTC Magnitude: 1.0 ML**
**Lat: 57.668N Lon: -3.422W Depth: 0.0 km**
**Grid Ref: 315.18 kmE 865.10 kmN RMS: 0.20 secs**
**Locality: EXPL-HOPEMAN,GRAMPIAN**
**Velocity model: Lownet**
**Comment: FELT HOPEMAN** **Intensity: F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| MCD | SZ | 13.8 | IP | | C | 17:34 | 38.33 | | | 0.14 |
| MCD | SN | 13.8 | ES | 2 | | 17:34 | 40.30 | | | -0.31 |
| MCD | SN | 13.8 | AML | | | 17:34 | 41.29 | 71 | 0.38 | |
| MCD | SE | 13.8 | AML | | | 17:34 | 42.18 | 56 | 0.47 | |
| MME | SZ | 47.9 | IP | | C | 17:34 | 43.98 | | | -0.03 |
| MVH | SZ | 53.5 | EP | 3 | | 17:34 | 44.24 | | | -0.66 |
| MDO | SZ | 61.8 | EP | 2 | | 17:34 | 46.28 | | | 0.06 |

**March 3 2005 Time: 08:31 52.5 UTC Magnitude: 0.1 ML**
**Lat: 53.123N Lon: -4.406W Depth: 13.8 km**
**Grid Ref: 239.02 kmE 361.16 kmN RMS: 0.10 secs**
**Locality: CAERNARFON BAY**
**Velocity model: Lleyn**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 15.8 | IP | | C | 08:31 | 56.01 | | | 0.02 |
| YRE | SZ | 15.8 | ES | 3 | | 08:31 | 58.22 | | | -0.18 |
| YLL | SZ | 15.9 | EP | 3 | | 08:31 | 56.15 | | | 0.15 |
| YRC | SZ | 18.2 | EP | 2 | | 08:31 | 56.26 | | | -0.02 |
| WLF | SZ | 18.5 | EP | 3 | | 08:31 | 56.28 | | | -0.05 |

# TABLE 2 : PHASE DATA

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| WCB | SZ | 29.9 | EP | 1 | C | 08:31 | 57.96 | | | -0.01 |
| WCB | SE | 29.9 | ES | 2 | | 08:32 | 01.74 | | | 0.02 |
| WCB | SN | 29.9 | AML | | | 08:32 | 02.22 | 2 | 0.06 | |
| WCB | SE | 29.9 | AML | | | 08:32 | 02.68 | 4 | 0.18 | |
| WPM | SZ | 36.7 | EP | 2 | | 08:31 | 58.99 | | | -0.03 |

**March 8 2005 Time: 00:16 00.3 UTC Magnitude: 0.5 ML**
**Lat: 50.528N Lon: -4.827W Depth: 9.9 km**
**Grid Ref: 199.66 kmE 73.69 kmN RMS: 0.10 secs**
**Locality: WADEBRIDGE,CORNWALL**
**Velocity model: Cornwall**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| CSA | SZ | 20.0 | IP | | C | 00:16 | 04.29 | | | 0.12 |
| CSA | SZ | 20.0 | ES | 3 | | 00:16 | 06.88 | | | -0.28 |
| CR2 | SZ | 46.9 | IP | | C | 00:16 | 08.54 | | | -0.08 |
| CR2 | SN | 46.9 | ES | 2 | | 00:16 | 15.06 | | | 0.01 |
| CR2 | SE | 46.9 | AML | | | 00:16 | 16.60 | 6 | 0.08 | |
| CR2 | SN | 46.9 | AML | | | 00:16 | 16.69 | 4 | 0.08 | |
| CCA | SZ | 47.4 | IP | | C | 00:16 | 08.74 | | | 0.03 |
| CMA | SZ | 54.0 | IP | | C | 00:16 | 09.84 | | | 0.02 |
| CGW | SZ | 55.2 | IP | | C | 00:16 | 10.02 | | | -0.01 |
| HTL | HZ | 57.2 | EP | 2 | | 00:16 | 10.18 | | | -0.20 |
| HTL | HN | 57.2 | AML | | | 00:16 | 18.18 | 3 | 0.12 | |
| HTL | HE | 57.2 | AML | | | 00:16 | 18.22 | 3 | 0.23 | |
| CGH | SZ | 58.3 | IP | | C | 00:16 | 10.51 | | | -0.04 |
| DYA | SZ | 64.4 | EP | 1 | C | 00:16 | 11.53 | | | -0.05 |
| CPZ | SZ | 67.8 | IP | | C | 00:16 | 12.06 | | | 0.01 |
| DCO | SZ | 71.7 | EP | 2 | | 00:16 | 12.48 | | | -0.13 |
| HEX | SZ | 93.8 | EP | 2 | | 00:16 | 16.16 | | | 0.33 |

**March 23 2005 Time: 16:26 00.0 UTC**
**Lat: Lon: Depth:**
**Grid Ref: RMS:**
**Locality: SONIC-CUMBRIA**
**Comment: FELT SELLAFIELD... Intensity: F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| THP | SZ | | EP | | | 16:26 | 08.21 | | | |

**March 28 2005 Time: 01:47 58.1 UTC Magnitude: 2.7 ML**
**Lat: 48.824N Lon: -5.707W Depth: 12.7 km**
**Grid Ref: 127.96 kmE -112.94 kmN RMS: 0.40 secs**
**Locality: ENGLISH CHANNEL**
**Velocity model: Cornwall**
**Comment: 100KM S OF PENZANCE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| CGH | SZ | 142.0 | EP | | | 01:48 | 20.76 | | | 0.56 |
| CMA | SZ | 146.0 | EP | | | 01:48 | 20.43 | | | -0.28 |
| CGW | SZ | 146.0 | EP | | | 01:48 | 20.80 | | | 0.08 |
| CPZ | SZ | 148.0 | EP | | | 01:48 | 21.14 | | | 0.11 |
| CR2 | SZ | 154.0 | EP | | | 01:48 | 21.23 | | | -0.52 |
| CR2 | SE | 154.0 | ES | 3 | | 01:48 | 39.92 | | | 0.00 |
| CR2 | SE | 154.0 | AML | | | 01:48 | 40.86 | 127 | 0.33 | |
| CR2 | SN | 154.0 | AML | | | 01:48 | 41.10 | 93 | 0.05 | |
| CCA | SZ | 155.0 | EP | | | 01:48 | 21.82 | | | -0.08 |
| CSA | SZ | 180.0 | EP | | | 01:48 | 25.05 | | | 0.10 |
| JVM | SZ | 260.0 | EP | | | 01:48 | 35.57 | | | 0.66 |
| JRS | SZ | 268.0 | EP | | | 01:48 | 35.82 | | | -0.08 |
| JLP | SZ | 268.0 | EP | | | 01:48 | 36.06 | | | 0.15 |
| JQE | SZ | 272.0 | EP | | | 01:48 | 35.68 | | | -0.72 |

**March 28 2005 Time: 08:04 50.0 UTC Magnitude: 2.0 ML**
**Lat: 53.895N Lon: 0.908W Depth: 24.2 km**
**Grid Ref: 591.05 kmE 448.25 kmN RMS: 0.20 secs**
**Locality: SOUTHERN NORTH SEA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ABA | SZ | 113.0 | EP | 2 | | 08:05 | 07.85 | | | -0.01 |
| AWI | SZ | 124.0 | EP | 2 | | 08:05 | 09.37 | | | 0.01 |
| AWH | SZ | 141.0 | EP | 3 | | 08:05 | 12.04 | | | 0.52 |
| AWH | SZ | 141.0 | ES | 3 | | 08:05 | 26.98 | | | -0.26 |
| AEU | SZ | 144.0 | EP | 2 | | 08:05 | 11.72 | | | -0.13 |
| AEU | SN | 144.0 | ES | 2 | | 08:05 | 27.87 | | | 0.06 |
| AEU | SE | 144.0 | AML | | | 08:05 | 30.00 | 35 | 0.13 | |
| AEU | SN | 144.0 | AML | | | 08:05 | 33.57 | 23 | 0.29 | |

**March 29 2005 Time: 02:38 39.7 UTC Magnitude: 2.5 ML**
**Lat: 53.763N Lon: 1.251W Depth: 5.0 km**
**Grid Ref: 614.25 kmE 434.56 kmN RMS: 0.60 secs**
**Locality: SOUTHERN NORTH SEA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ABA | SZ | 97.6 | EP | 2 | | 02:38 | 55.66 | | | -0.23 |
| AWI | SZ | 104.0 | EP | 2 | | 02:38 | 56.88 | | | -0.07 |
| LMK | SZ | 110.0 | EP | 2 | | 02:38 | 57.71 | | | -0.08 |
| AEU | SZ | 127.0 | EP | 3 | | 02:38 | 59.97 | | | -0.50 |
| AEU | SN | 127.0 | ES | 2 | | 02:39 | 16.29 | | | 0.68 |
| AEU | SN | 127.0 | AML | | | 02:39 | 16.89 | 30 | 0.23 | |
| AEU | SE | 127.0 | AML | | | 02:39 | 17.63 | 35 | 0.09 | |
| AWH | SZ | 128.0 | EP | 2 | | 02:39 | 00.18 | | | -0.38 |
| APA | SZ | 163.0 | EP | 2 | | 02:39 | 05.86 | | | 0.20 |
| HPK | SZ | 190.0 | EP | 2 | | 02:39 | 09.46 | | | 0.28 |
| HPK | SN | 190.0 | ES | 3 | | 02:39 | 32.05 | | | 1.37 |
| HPK | SN | 190.0 | AML | | | 02:39 | 36.31 | 167 | 0.35 | |
| HPK | SE | 190.0 | AML | | | 02:39 | 40.40 | 212 | 0.49 | |
| KBI | SZ | 193.0 | EP | 2 | | 02:39 | 08.61 | | | -0.89 |
| LHO | SZ | 207.0 | EP | 3 | | 02:39 | 10.36 | | | -0.92 |
| LCP | SZ | 208.0 | EP | 2 | | 02:39 | 11.91 | | | 0.53 |
| KWE | SZ | 222.0 | EP | 3 | | 02:39 | 12.99 | | | -0.14 |

**April 8 2005 Time: 03:54 29.7 UTC Magnitude: 0.3 ML**
**Lat: 53.134N Lon: -4.401W Depth: 6.6 km**
**Grid Ref: 239.40 kmE 362.37 kmN RMS: 0.10 secs**
**Locality: CAERNARFON BAY**
**Velocity model: Lleyn**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| YLL | SZ | 15.5 | EP | 2 | | 03:54 | 32.72 | | | 0.09 |
| YLL | SZ | 15.5 | ES | 3 | | 03:54 | 34.55 | | | -0.04 |
| YRE | SZ | 17.1 | EP | 1 | C | 03:54 | 32.86 | | | -0.03 |
| WLF | SZ | 17.3 | EP | 1 | C | 03:54 | 32.87 | | | -0.03 |
| WLF | SZ | 17.3 | ES | 2 | | 03:54 | 35.01 | | | -0.03 |
| YRC | SZ | 17.4 | EP | 2 | | 03:54 | 32.96 | | | 0.04 |
| YRC | SZ | 17.4 | ES | 3 | | 03:54 | 35.32 | | | 0.24 |
| WCB | SZ | 28.8 | EP | 3 | | 03:54 | 34.98 | | | 0.22 |
| WCB | SE | 28.8 | ES | 3 | | 03:54 | 37.90 | | | -0.27 |
| WCB | SE | 28.8 | AML | | | 03:54 | 38.54 | 4 | 0.22 | |
| WCB | SN | 28.8 | AML | | | 03:54 | 39.03 | 6 | 0.49 | |

**April 10 2005 Time: 16:24 25.4 UTC Magnitude: 0.0 ML**
**Lat: 53.106N Lon: -4.407W Depth: 5.6 km**
**Grid Ref: 238.89 kmE 359.27 kmN RMS: 0.10 secs**
**Locality: CAERNARFON BAY**
**Velocity model: Lleyn**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 14.0 | IP | | D | 16:24 | 28.02 | | | 0.00 |
| YLL | SZ | 16.2 | EP | 2 | | 16:24 | 28.40 | | | 0.02 |
| YRC | SZ | 19.7 | EP | 2 | | 16:24 | 28.78 | | | -0.13 |
| YRC | SZ | 19.7 | ES | 3 | | 16:24 | 31.50 | | | 0.22 |
| WLF | SZ | 20.4 | EP | 2 | | 16:24 | 28.87 | | | -0.16 |
| WLF | SZ | 20.4 | ES | 3 | | 16:24 | 31.65 | | | 0.17 |
| WCB | SZ | 31.7 | EP | 2 | | 16:24 | 31.09 | | | 0.21 |
| WCB | SE | 31.7 | ES | 3 | | 16:24 | 34.40 | | | -0.19 |
| WCB | SN | 31.7 | AML | | | 16:24 | 34.83 | 2 | 0.19 | |
| WCB | SE | 31.7 | AML | | | 16:24 | 35.12 | 3 | 0.19 | |

**April 11 2005 Time: 03:27 58.6 UTC Magnitude: 0.7 ML**
**Lat: 54.455N Lon: -3.051W Depth: 5.0 km**
**Grid Ref: 331.87 kmE 507.15 kmN RMS: 0.30 secs**
**Locality: AMBLESIDE,CUMBRIA**
**Velocity model: Lownet**
**Comment: 5KM W OF AMBLESIDE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BBO | SZ | 33.8 | IP | | D | 03:28 | 04.59 | | | -0.28 |
| BBO | SN | 33.8 | ES | 2 | | 03:28 | 09.35 | | | -0.09 |
| BBO | SN | 33.8 | AML | | | 03:28 | 09.69 | 4 | 0.11 | |
| BBO | SE | 33.8 | AML | | | 03:28 | 09.84 | 8 | 0.23 | |
| BDL | SZ | 39.5 | EP | 2 | | 03:28 | 05.48 | | | -0.30 |
| BTA | SZ | 55.5 | EP | 2 | | 03:28 | 08.55 | | | 0.25 |
| BTA | SN | 55.5 | ES | 2 | | 03:28 | 14.97 | | | -0.39 |
| BTA | SE | 55.5 | AML | | | 03:28 | 15.74 | 7 | 0.51 | |
| BTA | SN | 55.5 | AML | | | 03:28 | 16.41 | 5 | 0.09 | |
| BHH | SZ | 71.9 | EP | 2 | | 03:28 | 11.24 | | | 0.42 |
| BHH | SN | 71.9 | ES | 2 | | 03:28 | 20.23 | | | 0.50 |
| BHH | SN | 71.9 | AML | | | 03:28 | 20.87 | 9 | 0.36 | |
| BHH | SE | 71.9 | AML | | | 03:28 | 21.33 | 3 | 0.18 | |
| BBH | SZ | 76.0 | EP | 2 | | 03:28 | 11.86 | | | 0.41 |
| BWH | SZ | 89.2 | EP | 2 | | 03:28 | 13.84 | | | 0.33 |

**April 14 2005 Time: 15:01 50.7 UTC Magnitude: 1.4 ML**
**Lat: 52.280N Lon: -3.274W Depth: 18.6 km**
**Grid Ref: 313.10 kmE 265.46 kmN RMS: 0.10 secs**
**Locality: LLANDRINDOD WELLS**
**Velocity model: Mid Wales**
**Comment: LLANDRINDOD WELLS,POWYS**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| SSP | SZ | 18.9 | IP | | C | 15:01 | 55.14 | | | -0.01 |
| SSP | SE | 18.9 | ES | | | 15:01 | 58.42 | | | 0.04 |
| SSP | SE | 18.9 | AML | 2 | | 15:01 | 58.56 | 51 | 0.11 | |
| SSP | SN | 18.9 | AML | | | 15:01 | 58.71 | 83 | 0.13 | |
| HTR | SZ | 22.4 | IP | | D | 15:01 | 55.54 | | | -0.02 |
| MCH | SZ | 36.6 | IP | | D | 15:01 | 57.47 | | | -0.03 |
| MCH | SE | 36.6 | ES | 2 | | 15:02 | 02.33 | | | -0.09 |
| MCH | SN | 36.6 | AML | | | 15:02 | 02.68 | 49 | 0.16 | |
| MCH | SE | 36.6 | AML | | | 15:02 | 02.72 | 52 | 0.10 | |
| HLM | SZ | 37.7 | EP | 2 | | 15:01 | 57.40 | | | -0.28 |
| HAE | SZ | 56.8 | EP | 2 | | 15:02 | 00.61 | | | 0.12 |
| SBD | SZ | 69.7 | EP | 2 | | 15:02 | 02.49 | | | 0.05 |
| HGH | SZ | 78.3 | EP | 2 | | 15:02 | 03.97 | | | 0.26 |

**April 27 2005 Time: 06:37 36.3 UTC Magnitude: 1.3 ML**
**Lat: 55.122N Lon: -3.211W Depth: 4.0 km**
**Grid Ref: 322.78 kmE 581.52 kmN RMS: 0.10 secs**
**Locality: LOCKERBIE,D & G**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 3.2 | EP | 2 | | 06:37 | 37.60 | | | 0.11 |
| BHH | SN | 3.2 | ES | 2 | | 06:37 | 38.27 | | | -0.07 |
| BHH | SN | 3.2 | AML | | | 06:37 | 38.37 | 1015 | 0.09 | |
| BHH | SE | 3.2 | AML | | | 06:37 | 38.49 | 981 | 0.18 | |
| BCC | SZ | 11.9 | IP | | C | 06:37 | 38.80 | | | -0.04 |
| BBH | SZ | 18.0 | IP | | C | 06:37 | 39.84 | | | -0.04 |
| BWH | SZ | 28.9 | IP | | D | 06:37 | 41.76 | | | 0.01 |
| BDL | SZ | 39.5 | EP | 2 | | 06:37 | 43.70 | | | 0.18 |
| BTA | SZ | 41.4 | EP | 2 | | 06:37 | 44.00 | | | 0.14 |
| BBO | SZ | 42.9 | EP | 2 | | 06:37 | 44.01 | | | -0.09 |
| BBO | SE | 42.9 | AML | | | 06:37 | 51.95 | 20 | 0.37 | |
| BBO | SN | 42.9 | AML | | | 06:37 | 52.49 | 8 | 0.24 | |

**April 28 2005 Time: 09:27 36.6 UTC Magnitude: 1.9 ML**
**Lat: 55.189N Lon: -3.146W Depth: 2.6 km**
**Grid Ref: 327.05 kmE 588.91 kmN RMS: 0.30 secs**
**Locality: ESKDALEMUIR,D & G**
**Velocity model: Lownet**
**Comment: FELT ESKDALEMUIR... Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 11.7 | EP | | | 09:27 | 38.84 | | | -0.06 |
| BHH | SN | 11.7 | ES | | | 09:27 | 40.53 | | | -0.01 |
| BHH | SN | 11.7 | AML | | | 09:27 | 40.55 | 3976 | 0.12 | |
| BHH | SE | 11.7 | AML | | | 09:27 | 40.70 | 3874 | 0.16 | |
| ESK | EZ | 14.6 | EP | | | 09:27 | 39.22 | | | -0.19 |
| ESK | EE | 14.6 | ES | | | 09:27 | 41.22 | | | -0.20 |
| ESK | EN | 14.6 | AML | | | 09:27 | 41.38 | 144 | 0.12 | |
| ESK | EE | 14.6 | AML | | | 09:27 | 41.39 | 191 | 0.11 | |
| BBH | SZ | 15.1 | EP | | | 09:27 | 39.37 | | | -0.11 |
| BCC | SZ | 19.9 | EP | | | 09:27 | 40.26 | | | -0.03 |

# TABLE 2 : PHASE DATA

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 32.5 | EP | | 09:27 | 42.11 | | -0.32 |
| BTA | SZ | 43.2 | EP | | 09:27 | 44.23 | | -0.03 |
| BTA | SE | 43.2 | ES | | 09:27 | 49.82 | | 0.01 |
| BTA | SN | 43.2 | AML | | 09:27 | 52.14 | 100 0.23 | |
| BTA | SE | 43.2 | AML | | 09:27 | 52.25 | 107 0.22 | |
| BDL | SZ | 45.0 | EP | | 09:27 | 44.67 | | 0.13 |
| BBO | SZ | 50.8 | EP | | 09:27 | 45.39 | | -0.11 |
| BBO | SE | 50.8 | ES | | 09:27 | 51.93 | | -0.04 |
| BBO | SE | 50.8 | AML | | 09:27 | 54.38 | 134 0.31 | |
| BBO | SN | 50.8 | AML | | 09:27 | 54.94 | 63 0.19 | |
| EBL | HE | 65.2 | ES | | 09:27 | 55.32 | | -0.58 |
| EAU | SZ | 75.5 | EP | | 09:27 | 49.69 | | 0.33 |
| EDI | HZ | 81.7 | EP | | 09:27 | 50.69 | | 0.41 |
| EDI | HE | 81.7 | ES | | 09:28 | 00.15 | | -0.09 |
| EDI | HE | 81.7 | AML | | 09:28 | 00.41 | 41 0.24 | |
| EDI | HN | 81.7 | AML | | 09:28 | 01.36 | 59 0.22 | |
| EBH | SZ | 120.0 | EP | | 09:27 | 56.91 | | 0.65 |
| EAB | SZ | 134.0 | EP | | 09:27 | 58.65 | | 0.24 |

**April 29 2005 Time: 11:23 19.6 UTC Magnitude: 2.1 ML**
**Lat: 55.183N Lon: -3.155W Depth: 2.6 km**
**Grid Ref: 326.46 kmE 588.25 kmN RMS: 0.30 secs**
**Locality: ESKDALEMUIR,D & G**
**Velocity model: Lownet**
**Comment: FELT ESKDALEMUIR... Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 10.8 | IP | | C | 11:23 | 21.73 | | | 0.00 |
| BHH | SN | 10.8 | ES | | | 11:23 | 23.42 | | | 0.17 |
| BHH | SE | 10.8 | AML | | | 11:23 | 23.61 | 4232 | 0.16 | |
| BHH | SN | 10.8 | AML | | | 11:23 | 23.63 | 3829 | 0.19 | |
| ESK | EZ | 15.2 | EP | | | 11:23 | 22.09 | | | -0.40 |
| ESK | EE | 15.2 | ES | 2 | | 11:23 | 24.03 | | | -0.55 |
| ESK | EE | 15.2 | AML | | | 11:23 | 24.21 | 288 | 0.08 | |
| ESK | EN | 15.2 | AML | | | 11:23 | 24.29 | 258 | 0.14 | |
| BBH | SZ | 15.3 | IP | | C | 11:23 | 22.27 | | | -0.23 |
| BCC | SZ | 19.1 | IP | | C | 11:23 | 23.15 | | | 0.02 |
| BWH | SZ | 31.9 | IP | | C | 11:23 | 24.99 | | | -0.33 |
| BTA | SZ | 43.1 | EP | | | 11:23 | 27.15 | | | -0.06 |
| BTA | SN | 43.1 | ES | 2 | | 11:23 | 32.71 | | | -0.04 |
| BTA | SN | 43.1 | AML | | | 11:23 | 35.20 | 184 | 0.35 | |
| BTA | SE | 43.1 | AML | | | 11:23 | 38.40 | 162 | 0.73 | |
| BDL | SZ | 44.5 | EP | | | 11:23 | 27.56 | | | 0.13 |
| BBO | SZ | 50.0 | IP | | C | 11:23 | 28.26 | | | -0.10 |
| BBO | SE | 50.0 | AML | | | 11:23 | 37.29 | 198 | 0.34 | |
| BBO | SN | 50.0 | AML | | | 11:23 | 37.74 | 91 | 0.25 | |
| EDI | HZ | 82.5 | EP | | | 11:23 | 33.59 | | | 0.21 |
| GAL | SZ | 106.0 | EP | | | 11:23 | 36.65 | | | -0.31 |
| GAL | SN | 106.0 | AML | | | 11:23 | 51.87 | 145 | 0.26 | |
| GAL | SE | 106.0 | AML | | | 11:23 | 51.88 | 47 | 0.20 | |
| EBH | SZ | 121.0 | EP | | | 11:23 | 39.78 | | | 0.43 |
| PMS | SZ | 125.0 | EP | | | 11:23 | 40.20 | | | 0.23 |
| EAB | SZ | 134.0 | EP | | | 11:23 | 41.83 | | | 0.39 |

**May 1 2005 Time: 13:24 51.9 UTC Magnitude: 0.9 ML**
**Lat: 55.195N Lon: -3.159W Depth: 5.0 km**
**Grid Ref: 326.23 kmE 589.59 kmN RMS: 0.20 secs**
**Locality: ESKDALEMUIR,D & G**
**Velocity model: Borders**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 11.9 | IP | | C | 13:24 | 54.50 | | | -0.01 |
| BHH | SN | 11.9 | ES | 2 | | 13:24 | 56.09 | | | -0.28 |
| BHH | SN | 11.9 | AML | | | 13:24 | 56.26 | 204 | 0.12 | |
| BHH | SE | 11.9 | AML | | | 13:24 | 56.77 | 243 | 0.21 | |
| ESK | EZ | 13.8 | IP | | D | 13:24 | 54.86 | | | 0.03 |
| ESK | SZ | 13.8 | EP | 2 | | 13:24 | 54.89 | | | 0.06 |
| ESK | EN | 13.8 | AML | | | 13:24 | 57.06 | 9 | 0.15 | |
| ESK | EE | 13.8 | AML | | | 13:24 | 57.08 | 21 | 0.17 | |
| ESK | EN | 13.8 | E | | | 13:26 | 02.62 | | | |
| BBH | SZ | 16.1 | IP | | C | 13:24 | 55.03 | | | -0.16 |
| BWH | SZ | 31.7 | IP | | C | 13:24 | 57.75 | | | 0.03 |
| BWH | SZ | 31.7 | I | | | 13:25 | 00.94 | | | |
| BTA | SZ | 44.2 | EP | 2 | | 13:24 | 59.82 | | | 0.06 |
| BTA | SN | 44.2 | ES | 2 | | 13:25 | 05.52 | | | 0.17 |
| BDL | SZ | 45.8 | EP | 2 | | 13:25 | 00.42 | | | 0.42 |
| XSO | SZ | 66.4 | I | | | 13:24 | 59.96 | | | |

**May 2 2005 Time: 05:28 57.3 UTC Magnitude: 0.9 ML**
**Lat: 56.851N Lon: -5.322W Depth: 7.4 km**
**Grid Ref: 197.46 kmE 778.19 kmN RMS: 0.30 secs**
**Locality: LOCH EIL,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 31.8 | IP | | C | 05:29 | 03.07 | | | -0.10 |
| KAR | SZ | 31.8 | ES | 3 | | 05:29 | 07.49 | | | 0.07 |
| KAR | SZ | 31.8 | AML | | | 05:29 | 07.98 | 18 | 0.26 | |
| KSB | SZ | 40.4 | EP | 2 | | 05:29 | 04.17 | | | -0.37 |
| KSB | SZ | 40.4 | ES | 3 | | 05:29 | 09.43 | | | -0.37 |
| KSB | SZ | 40.4 | AML | | | 05:29 | 10.16 | 15 | 0.23 | |
| KAC | SZ | 72.1 | EP | 2 | | 05:29 | 09.68 | | | 0.26 |
| KAC | SZ | 72.1 | ES | 3 | | 05:29 | 18.25 | | | 0.01 |
| KAC | SZ | 72.1 | AML | | | 05:29 | 19.14 | 6 | 0.40 | |
| KSK | SZ | 108.0 | EP | 2 | | 05:29 | 15.56 | | | 0.58 |

**May 3 2005 Time: 07:59 12.6 UTC Magnitude: 0.8 ML**
**Lat: 56.851N Lon: -5.325W Depth: 7.0 km**
**Grid Ref: 197.27 kmE 778.19 kmN RMS: 0.40 secs**
**Locality: LOCH EIL,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 31.6 | IP | | C | 07:59 | 18.26 | | | -0.11 |
| KAR | SZ | 31.6 | ES | 3 | | 07:59 | 22.88 | | | 0.26 |
| KAR | SZ | 31.6 | AML | | | 07:59 | 24.26 | 15 | 0.36 | |
| KSB | SZ | 40.4 | EP | 2 | | 07:59 | 19.32 | | | -0.45 |
| KSB | SZ | 40.4 | ES | 3 | | 07:59 | 24.47 | | | -0.57 |
| KSB | SZ | 40.4 | AML | | | 07:59 | 25.30 | 10 | 0.17 | |
| KSB | SZ | 40.4 | AML | | | 07:59 | 25.34 | 10 | 0.31 | |
| KAC | SZ | 72.2 | EP | 2 | | 07:59 | 25.07 | | | 0.41 |
| KSK | SZ | 108.0 | EP | 2 | | 07:59 | 30.76 | | | 0.57 |

**May 8 2005 Time: 16:47 25.7 UTC Magnitude: 0.9 ML**
**Lat: 56.853N Lon: -5.315W Depth: 7.0 km**
**Grid Ref: 197.89 kmE 778.39 kmN RMS: 0.40 secs**
**Locality: LOCH EIL,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 32.2 | EP | 2 | | 16:47 | 31.30 | | | -0.27 |
| KSB | SZ | 40.2 | EP | 2 | | 16:47 | 32.39 | | | -0.47 |
| KSB | SZ | 40.2 | ES | 3 | | 16:47 | 37.75 | | | -0.37 |
| KSB | SZ | 40.2 | AML | | | 16:47 | 38.40 | 15 | 0.19 | |
| KAC | SZ | 71.9 | EP | 2 | | 16:47 | 38.04 | | | 0.31 |
| KAC | SZ | 71.9 | ES | 3 | | 16:47 | 46.71 | | | 0.17 |
| KAC | SZ | 71.9 | AML | | | 16:47 | 47.38 | 6 | 0.33 | |
| KSK | SZ | 108.0 | EP | 2 | | 16:47 | 43.84 | | | 0.49 |

**May 11 2005 Time: 19:20 21.3 UTC Magnitude: 0.7 ML**
**Lat: 54.264N Lon: -3.143W Depth: 8.3 km**
**Grid Ref: 325.56 kmE 485.99 kmN RMS: 0.30 secs**
**Locality: GRIZEBECK,CUMBRIA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BBO | SZ | 53.0 | IP | 1 | C | 19:20 | 30.14 | | | -0.24 |
| BBO | SE | 53.0 | ES | 3 | | 19:20 | 36.66 | | | -0.37 |
| BBO | SE | 53.0 | AML | | | 19:20 | 37.95 | 4 | 0.22 | |
| BBO | SN | 53.0 | AML | | | 19:20 | 38.17 | 4 | 0.14 | |
| BDL | SZ | 61.4 | EP | 1 | C | 19:20 | 31.59 | | | -0.08 |
| BTA | SZ | 77.3 | EP | 2 | | 19:20 | 34.16 | | | 0.00 |
| BTA | SE | 77.3 | AML | | | 19:20 | 47.42 | 6 | 0.35 | |
| BTA | SN | 77.3 | AML | | | 19:20 | 48.20 | 5 | 0.11 | |
| BHH | SZ | 92.4 | EP | 4 | | 19:20 | 36.83 | | | 0.34 |
| BBH | SZ | 97.7 | EP | 2 | | 19:20 | 37.91 | | | 0.60 |
| BWH | SZ | 107.0 | EP | 2 | | 19:20 | 39.00 | | | 0.29 |
| LHO | SZ | 116.0 | EP | 3 | | 19:20 | 40.02 | | | -0.24 |

**May 12 2005 Time: 12:26 15.5 UTC Magnitude: 2.3 ML**
**Lat: 51.906N Lon: -3.860W Depth: 9.2 km**
**Grid Ref: 272.06 kmE 224.73 kmN RMS: 0.30 secs**
**Locality: LLANDEILO,DYFED**
**Velocity model: Mid Wales**
**Comment: 9KM E OF LLANDEILO**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 26.6 | IP | | C | 12:26 | 20.53 | | | 0.14 |
| HTR | SZ | 45.0 | IP | | C | 12:26 | 23.56 | | | 0.19 |
| HBL2 | Z | 58.7 | EP | 2 | | 12:26 | 25.67 | | | 0.04 |
| HBL2 | E | 58.7 | ES | 2 | | 12:26 | 32.79 | | | -0.12 |
| MCH | HZ | 60.1 | IP | | C | 12:26 | 25.84 | | | 0.00 |
| MCH | SZ | 60.1 | IP | 1 | C | 12:26 | 25.84 | | | 0.00 |
| MCH | SE | 60.1 | ES | 2 | | 12:26 | 33.13 | | | -0.14 |
| MCH | SE | 60.1 | AML | | | 12:26 | 33.46 | 218 | 0.14 | |
| MCH | SN | 60.1 | AML | | | 12:26 | 33.77 | 276 | 0.21 | |
| HPE | SZ | 63.0 | EP | 1 | C | 12:26 | 25.84 | | | -0.50 |
| SSP | SZ | 76.6 | IP | 1 | C | 12:26 | 28.61 | | | 0.04 |
| SSP | SN | 76.6 | ES | 3 | | 12:26 | 38.14 | | | 0.17 |
| SSP | SN | 76.6 | AML | | | 12:26 | 43.45 | 62 | 0.19 | |
| SSP | SE | 76.6 | AML | | | 12:26 | 43.54 | 91 | 0.17 | |
| HGH | SZ | 78.6 | EP | 1 | | 12:26 | 28.80 | | | -0.09 |
| HAE | SZ | 91.6 | EP | 1 | C | 12:26 | 30.68 | | | -0.30 |
| HAE | SZ | 91.6 | ES | 3 | | 12:26 | 41.45 | | | -0.65 |
| HEX | SZ | 93.4 | EP | 1 | C | 12:26 | 31.21 | | | -0.04 |
| HLM | SZ | 95.5 | EP | 1 | C | 12:26 | 31.36 | | | -0.22 |
| HTL | HZ | 110.0 | IP | 1 | C | 12:26 | 33.96 | | | 0.20 |
| HTL | HE | 110.0 | ES | 3 | | 12:26 | 46.45 | | | -0.45 |
| SBD | SZ | 119.0 | EP | 2 | | 12:26 | 35.13 | | | 0.08 |
| YRE | SZ | 126.0 | EP | 2 | | 12:26 | 36.48 | | | 0.39 |
| YLL | SZ | 139.0 | EP | 3 | | 12:26 | 38.07 | | | -0.02 |
| SWK | SZ | 140.0 | EP | 3 | | 12:26 | 38.99 | | | 0.73 |
| SWN | SN | 149.0 | ES | 4 | | 12:26 | 58.01 | | | 1.11 |
| SWN | SE | 149.0 | AML | | | 12:26 | 59.51 | 85 | 0.57 | |
| SWN | SN | 149.0 | AML | | | 12:27 | 00.09 | 120 | 0.28 | |
| WPM | SZ | 151.0 | EP | 3 | | 12:26 | 39.75 | | | -0.09 |
| YRC | SZ | 157.0 | EP | 3 | | 12:26 | 40.73 | | | -0.07 |
| WME | SZ | 169.0 | EP | 3 | | 12:26 | 42.35 | | | 0.12 |
| WCB | SZ | 170.0 | EP | 3 | | 12:26 | 42.56 | | | 0.12 |
| WCB | SN | 170.0 | AML | | | 12:27 | 03.55 | 30 | 0.38 | |
| WCB | SE | 170.0 | AML | | | 12:27 | 03.73 | 23 | 0.24 | |
| KWE | SZ | 185.0 | EP | 2 | | 12:26 | 44.78 | | | 0.52 |

**May 12 2005 Time: 20:06 06.8 UTC Magnitude: 2.1 ML**
**Lat: 51.907N Lon: -3.862W Depth: 10.2 km**
**Grid Ref: 271.93 kmE 224.85 kmN RMS: 0.30 secs**
**Locality: LLANDEILO,DYFED**
**Velocity model: Mid Wales**
**Comment: 9KM E OF LLANDEILO**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 26.6 | IP | | C | 20:06 | 11.80 | | | 0.05 |
| HTR | SZ | 45.0 | EP | 1 | C | 20:06 | 14.86 | | | 0.14 |
| HBL2 | Z | 58.8 | IP | 1 | C | 20:06 | 17.13 | | | 0.15 |
| HBL2 | E | 58.8 | ES | 3 | | 20:06 | 24.07 | | | -0.21 |
| MCH | SZ | 60.2 | IP | | C | 20:06 | 17.22 | | | 0.03 |
| MCH | SE | 60.2 | ES | 2 | | 20:06 | 24.39 | | | -0.26 |
| MCH | SE | 60.2 | AML | | | 20:06 | 24.75 | 139 | 0.11 | |
| MCH | SN | 60.2 | AML | | | 20:06 | 25.07 | 167 | 0.24 | |
| HPE | SZ | 62.9 | EP | 1 | C | 20:06 | 17.13 | | | -0.52 |
| SSP | SZ | 76.6 | IP | 1 | C | 20:06 | 19.92 | | | 0.01 |
| SSP | SN | 76.6 | ES | 2 | | 20:06 | 29.45 | | | 0.14 |
| SSP | SN | 76.6 | AML | | | 20:06 | 34.74 | 46 | 0.13 | |
| SSP | SE | 76.6 | AML | | | 20:06 | 34.85 | 60 | 0.17 | |
| HGH | SZ | 78.8 | EP | 1 | D | 20:06 | 20.12 | | | -0.13 |
| HAE | SZ | 91.7 | EP | 2 | | 20:06 | 22.08 | | | -0.17 |
| HAE | SZ | 91.7 | ES | 3 | | 20:06 | 32.71 | | | -0.63 |
| HEX | SZ | 93.6 | EP | 2 | | 20:06 | 22.29 | | | -0.23 |
| HLM | SZ | 95.5 | EP | 2 | | 20:06 | 22.53 | | | -0.31 |
| HTL | EZ | 110.0 | IP | | C | 20:06 | 25.29 | | | 0.27 |
| HTL | EE | 110.0 | ES | 3 | | 20:06 | 37.28 | | | -0.83 |
| SBD | SZ | 118.0 | EP | 2 | | 20:06 | 26.37 | | | 0.08 |

# TABLE 2 : PHASE DATA

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 126.0 | EP | 2 | | 20:06 | 27.75 | | | 0.42 |
| YLL | SZ | 139.0 | EP | 2 | | 20:06 | 29.39 | | | 0.07 |
| SWN | SN | 149.0 | ES | 4 | | 20:06 | 49.16 | | | 1.02 |
| SWN | SE | 149.0 | AML | | | 20:06 | 51.08 | 49 | 0.30 | |
| SWN | SN | 149.0 | AML | | | 20:06 | 51.36 | 71 | 0.25 | |
| WPM | SZ | 150.0 | EP | 3 | | 20:06 | 31.10 | | | 0.02 |
| YRC | SZ | 157.0 | EP | 3 | | 20:06 | 32.00 | | | 0.00 |
| WLF | SZ | 158.0 | EP | 3 | | 20:06 | 32.06 | | | -0.06 |
| DYA | SZ | 164.0 | ES | 3 | | 20:06 | 51.33 | | | -0.25 |
| WME | SZ | 169.0 | EP | 3 | | 20:06 | 33.18 | | | -0.25 |
| WCB | SZ | 170.0 | EP | 3 | | 20:06 | 33.92 | | | 0.28 |
| WCB | SN | 170.0 | AML | | | 20:06 | 54.85 | 19 | 0.33 | |
| WCB | SE | 170.0 | AML | | | 20:06 | 55.12 | 14 | 0.39 | |
| KWE | SZ | 185.0 | EP | 3 | | 20:06 | 36.07 | | | 0.59 |

**May 20 2005 Time: 05:28 08.1 UTC Magnitude: 1.0 ML**
**Lat: 51.916N Lon: -3.538W Depth: 17.6 km**
**Grid Ref: 294.23 kmE 225.33 kmN RMS: 0.10 secs**
**Locality: SENNYBRIDGE,POWYS**
**Velocity model: Mid Wales**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HTR | SZ | 25.9 | IP | 1 | C | 05:28 | 13.38 | | | 0.01 |
| HSA | SZ | 46.2 | EP | 2 | | 05:28 | 16.19 | | | -0.11 |
| SSP | SZ | 63.0 | EP | 1 | C | 05:28 | 18.75 | | | -0.08 |
| SSP | SN | 63.0 | ES | 3 | | 05:28 | 26.78 | | | 0.21 |
| SSP | SN | 63.0 | AML | | | 05:28 | 27.21 | 9 | 0.25 | |
| SSP | SE | 63.0 | AML | | | 05:28 | 27.45 | 7 | 0.39 | |
| HAE | SZ | 69.7 | EP | 2 | | 05:28 | 19.88 | | | 0.07 |
| HPE | SZ | 85.1 | EP | 2 | | 05:28 | 22.28 | | | 0.14 |

**May 20 2005 Time: 11:19 47.0 UTC Magnitude: 1.3 ML**
**Lat: 51.896N Lon: -3.843W Depth: 10.9 km**
**Grid Ref: 273.20 kmE 223.59 kmN RMS: 0.10 secs**
**Locality: LLANDEILO,DYFED**
**Velocity model: Mid Wales**
**Comment: 9KM E OF LLANDEILO**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 26.8 | EP | 2 | | 11:19 | 51.84 | | | -0.13 |
| HTR | SZ | 44.4 | EP | 1 | C | 11:19 | 54.89 | | | 0.10 |
| MCH | HZ | 59.2 | EP | 1 | C | 11:19 | 57.16 | | | -0.02 |
| MCH | SZ | 59.2 | EP | 1 | C | 11:19 | 57.21 | | | |
| MCH | SE | 59.2 | ES | 2 | | 11:20 | 04.41 | | | -0.11 |
| MCH | HE | 59.2 | ES | 3 | | 11:20 | 04.51 | | | -0.01 |
| MCH | SE | 59.2 | AML | | | 11:20 | 04.76 | 29 | 0.16 | |
| MCH | SN | 59.2 | AML | | | 11:20 | 05.08 | 24 | 0.22 | |
| SSP | SZ | 76.6 | EP | 2 | | 11:19 | 59.99 | | | -0.08 |
| SSP | SN | 76.6 | ES | 3 | | 11:20 | 09.88 | | | 0.39 |
| SSP | SN | 76.6 | AML | | | 11:20 | 14.77 | 10 | 0.16 | |
| SSP | SE | 76.6 | AML | | | 11:20 | 14.88 | 12 | 0.17 | |
| HGH | SZ | 77.1 | EP | 2 | | 11:20 | 00.18 | | | 0.05 |
| HAE | SZ | 90.7 | EP | 1 | C | 11:20 | 02.11 | | | -0.06 |
| HTL | HZ | 110.0 | EP | 2 | | 11:20 | 05.33 | | | 0.31 |
| HTL | HN | 110.0 | ES | 2 | | 11:20 | 17.91 | | | -0.10 |
| HTL | HN | 110.0 | AML | | | 11:20 | 19.16 | 5 | 0.27 | |
| HTL | HE | 110.0 | AML | | | 11:20 | 19.33 | 7 | 0.40 | |
| SBD | SZ | 119.0 | EP | 2 | | 11:20 | 06.41 | | | -0.08 |

**May 21 2005 Time: 18:01 56.6 UTC Magnitude: 1.2 ML**
**Lat: 51.898N Lon: -3.856W Depth: 10.0 km**
**Grid Ref: 272.31 kmE 223.84 kmN RMS: 0.20 secs**
**Locality: LLANDEILO,DYFED**
**Velocity model: Mid Wales**
**Comment: 9KM E OF LLANDEILO**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 26.3 | IP | | C | 18:02 | 01.56 | | | 0.08 |
| HTR | SZ | 45.1 | EP | 2 | | 18:02 | 04.61 | | | 0.10 |
| MCH | SZ | 60.0 | EP | 2 | | 18:02 | 06.89 | | | -0.05 |
| MCH | HZ | 60.0 | EP | 2 | | 18:02 | 06.95 | | | |
| MCH | HE | 60.0 | ES | 3 | | 18:02 | 14.10 | | | -0.26 |
| MCH | SN | 60.0 | ES | 2 | | 18:02 | 14.19 | | | -0.17 |
| MCH | SE | 60.0 | AML | | | 18:02 | 14.50 | 23 | 0.13 | |
| MCH | SN | 60.0 | AML | | | 18:02 | 14.79 | 22 | 0.18 | |
| HPE | SZ | 63.3 | EP | 2 | | 18:02 | 07.01 | | | -0.49 |
| SSP | SZ | 77.0 | IP | | C | 18:02 | 09.71 | | | -0.05 |
| SSP | SN | 77.0 | ES | 2 | | 18:02 | 19.58 | | | 0.37 |
| SSP | SN | 77.0 | AML | | | 18:02 | 20.95 | 7 | 0.18 | |
| SSP | SE | 77.0 | AML | | | 18:02 | 24.62 | 11 | 0.17 | |
| HGH | SZ | 78.1 | EP | 2 | | 18:02 | 09.94 | | | 0.02 |
| HAE | SZ | 91.5 | EP | 2 | | 18:02 | 11.81 | | | -0.19 |
| HLM | SZ | 95.9 | EP | 2 | | 18:02 | 12.65 | | | -0.04 |
| HTL | HZ | 110.0 | EP | 2 | | 18:02 | 15.09 | | | 0.37 |
| HTL | HN | 110.0 | ES | 2 | | 18:02 | 27.62 | | | -0.12 |
| HTL | HN | 110.0 | AML | | | 18:02 | 28.76 | 5 | 0.40 | |
| HTL | HE | 110.0 | AML | | | 18:02 | 29.24 | 5 | 0.18 | |
| SBD | SZ | 119.0 | EP | 2 | | 18:02 | 16.35 | | | 0.16 |

**May 21 2005 Time: 20:17 21.0 UTC Magnitude: 1.4 ML**
**Lat: 51.907N Lon: -3.863W Depth: 11.2 km**
**Grid Ref: 271.86 kmE 224.85 kmN RMS: 0.20 secs**
**Locality: LLANDEILO,DYFED**
**Velocity model: Mid Wales**
**Comment: 9KM E OF LLANDEILO**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 26.6 | IP | | C | 20:17 | 26.02 | | | 0.02 |
| HTR | SZ | 45.1 | IP | | C | 20:17 | 29.06 | | | 0.11 |
| MCH | SZ | 60.3 | IP | | C | 20:17 | 31.40 | | | -0.02 |
| MCH | SN | 60.3 | ES | 2 | | 20:17 | 38.73 | | | -0.16 |
| MCH | SE | 60.3 | AML | | | 20:17 | 38.96 | 39 | 0.14 | |
| MCH | SN | 60.3 | AML | | | 20:17 | 39.27 | 38 | 0.22 | |
| HPE | SZ | 62.8 | EP | 2 | | 20:17 | 31.47 | | | -0.38 |
| SSP | SZ | 76.6 | EP | 2 | | 20:17 | 34.16 | | | 0.05 |
| SSP | SN | 76.6 | AML | | | 20:17 | 48.98 | 12 | 0.09 | |
| SSP | SE | 76.6 | AML | | | 20:17 | 49.06 | 16 | 0.17 | |
| HGH | SZ | 78.9 | EP | 2 | | 20:17 | 34.22 | | | -0.21 |
| HAE | SZ | 91.8 | EP | 2 | | 20:17 | 36.26 | | | -0.12 |
| HLM | SZ | 95.5 | EP | 2 | | 20:17 | 36.89 | | | -0.07 |
| HTL | HZ | 110.0 | EP | 2 | | 20:17 | 39.47 | | | 0.32 |
| HTL | EZ | 110.0 | EP | 3 | | 20:17 | 39.49 | | | 0.34 |
| HTL | HN | 110.0 | ES | 2 | | 20:17 | 52.10 | | | -0.10 |
| HTL | HN | 110.0 | AML | | | 20:17 | 53.35 | 7 | 0.27 | |
| HTL | HE | 110.0 | AML | | | 20:17 | 53.69 | 6 | 0.14 | |
| SBD | SZ | 118.0 | EP | 2 | | 20:17 | 40.55 | | | 0.14 |

**May 21 2005 Time: 23:21 08.9 UTC Magnitude: 0.7 ML**
**Lat: 49.131N Lon: -2.120W Depth: 9.2 km**
**Grid Ref: 391.25 kmE -85.43 kmN RMS: 0.00 secs**
**Locality: OFFSHORE JERSEY**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| JRS | SZ | 7.1 | IP | | C | 23:21 | 11.10 | | | 0.00 |
| JRS | SE | 7.1 | ES | 2 | | 23:21 | 12.71 | | | 0.01 |
| JRS | SE | 7.1 | AML | | | 23:21 | 12.83 | 37 | 0.09 | |
| JSA | SZ | 7.4 | IP | | C | 23:21 | 11.13 | | | 0.00 |
| JSA | SZ | 7.4 | ES | 3 | | 23:21 | 12.74 | | | -0.01 |
| JQE | SZ | 9.7 | EP | 2 | | 23:21 | 11.39 | | | -0.02 |
| JVM | SZ | 11.5 | IP | | C | 23:21 | 11.64 | | | 0.00 |
| JVM | SZ | 11.5 | AML | | | 23:21 | 13.70 | 29 | 0.10 | |
| JLP | SZ | 13.2 | IP | | C | 23:21 | 11.90 | | | 0.01 |
| JLP | SZ | 13.2 | ES | 3 | | 23:21 | 14.03 | | | -0.04 |

**May 22 2005 Time: 05:58 49.2 UTC Magnitude: 0.9 ML**
**Lat: 57.832N Lon: -5.073W Depth: 1.4 km**
**Grid Ref: 217.56 kmE 886.61 kmN RMS: 0.40 secs**
**Locality: ULLAPOOL,HIGHLAND**
**Velocity model: Lownet**
**Comment: 7KM SE OF ULLAPOOL**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| REB | SZ | 34.3 | IP | | C | 05:58 | 55.69 | | | -0.03 |
| REB | SZ | 34.3 | ES | 3 | | 05:58 | 59.81 | | | -0.65 |
| KAC | SZ | 39.4 | EP | 2 | | 05:58 | 56.74 | | | 0.13 |
| RRR | SZ | 43.6 | EP | 2 | | 05:58 | 57.35 | | | 0.05 |
| RRR | SE | 43.6 | AML | | | 05:58 | 59.20 | 4 | 0.32 | |
| RRR | SN | 43.6 | ES | 3 | | 05:59 | 02.37 | | | -0.82 |
| RRR | SN | 43.6 | AML | | | 05:59 | 03.12 | 6 | 0.30 | |
| MDO | SZ | 60.8 | IP | | C | 05:58 | 59.87 | | | -0.26 |
| RRH | SZ | 96.3 | EP | 2 | | 05:59 | 06.22 | | | 0.64 |
| MCD | SZ | 112.0 | EP | 2 | | 05:59 | 08.42 | | | 0.39 |
| MCD | SN | 112.0 | ES | 2 | | 05:59 | 22.08 | | | 0.32 |
| MCD | SN | 112.0 | AML | | | 05:59 | 23.22 | 12 | 0.17 | |
| MCD | SE | 112.0 | AML | | | 05:59 | 23.35 | 9 | 0.14 | |

**May 23 2005 Time: 13:17 10.0 UTC Magnitude: 1.2 ML**
**Lat: 50.512N Lon: -4.809W Depth: 6.2 km**
**Grid Ref: 200.87 kmE 71.86 kmN RMS: 0.10 secs**
**Locality: WADEBRIDGE,CORNWALL**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| CSA | SZ | 18.7 | IP | | C | 13:17 | 13.67 | | | -0.02 |
| CSA | SZ | 18.7 | ES | 3 | | 13:17 | 16.29 | | | -0.12 |
| CR2 | SZ | 46.2 | IP | | C | 13:17 | 17.95 | | | -0.14 |
| CR2 | SE | 46.2 | ES | 2 | | 13:17 | 23.91 | | | -0.10 |
| CR2 | SE | 46.2 | AML | | | 13:17 | 24.09 | 20 | 0.08 | |
| CR2 | SN | 46.2 | AML | | | 13:17 | 25.77 | 16 | 0.05 | |
| CCA | SZ | 46.9 | IP | | C | 13:17 | 18.12 | | | -0.09 |
| CMA | SZ | 52.9 | IP | | C | 13:17 | 19.24 | | | 0.12 |
| CGW | SZ | 54.4 | IP | | C | 13:17 | 19.42 | | | 0.08 |
| CGH | SZ | 57.3 | IP | | C | 13:17 | 19.90 | | | 0.10 |
| DYA | SZ | 62.9 | EP | 2 | | 13:17 | 20.85 | | | 0.14 |
| DYA | SN | 62.9 | ES | 2 | | 13:17 | 28.38 | | | -0.17 |
| DYA | SN | 62.9 | AML | | | 13:17 | 28.80 | 17 | 0.11 | |
| CPZ | SZ | 67.8 | IP | | C | 13:17 | 21.44 | | | -0.01 |
| DCO | SZ | 69.9 | EP | 2 | | 13:17 | 21.76 | | | 0.00 |

**May 26 2005 Time: 14:11 21.9 UTC Magnitude: 0.9 ML**
**Lat: 58.089N Lon: -6.490W Depth: 2.6 km**
**Grid Ref: 135.40 kmE 919.88 kmN RMS: 0.20 secs**
**Locality: LEWIS,WESTERN ISLES**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| RRH | SZ | 22.2 | IP | | C | 14:11 | 25.94 | | | -0.02 |
| RRH | SZ | 22.2 | ES | 3 | | 14:11 | 28.85 | | | -0.04 |
| RTO | SZ | 36.1 | EP | 2 | | 14:11 | 28.08 | | | -0.23 |
| RRR | SZ | 47.9 | EP | 1 | C | 14:11 | 30.04 | | | -0.27 |
| RRR | SN | 47.9 | ES | 3 | | 14:11 | 36.09 | | | -0.33 |
| RRR | SN | 47.9 | AML | | | 14:11 | 42.12 | 10 | 0.32 | |
| RRR | SE | 47.9 | AML | | | 14:11 | 42.54 | 11 | 0.26 | |
| REB | SZ | 71.4 | EP | 3 | | 14:11 | 34.07 | | | 0.10 |
| MVH | SZ | 138.0 | EP | 2 | | 14:11 | 44.43 | | | 0.25 |
| MDO | SZ | 146.0 | EP | 1 | C | 14:11 | 45.70 | | | 0.32 |

**May 30 2005 Time: 03:19 23.7 UTC Magnitude: 1.7 ML**
**Lat: 51.191N Lon: -4.701W Depth: 22.3 km**
**Grid Ref: 211.28 kmE 147.06 kmN RMS: 0.30 secs**
**Locality: LUNDY ISLAND,DEVON**
**Velocity model: Lownet**
**Comment: BRISTOL CHANNEL AREA**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HTL | HZ | 26.6 | EP | 2 | | 03:19 | 29.62 | | | 0.15 |
| HTL | HN | 26.6 | ES | 2 | | 03:19 | 33.22 | | | -0.45 |
| HTL | HE | 26.6 | AML | | | 03:19 | 34.00 | 86 | 0.11 | |
| HTL | HN | 26.6 | AML | | | 03:19 | 34.44 | 60 | 0.08 | |
| HEX | SZ | 64.4 | IP | | D | 03:19 | 34.57 | | | -0.09 |
| HSA | SZ | 72.9 | IP | | C | 03:19 | 36.07 | | | 0.19 |
| HPE | SZ | 83.2 | EP | 2 | | 03:19 | 37.02 | | | -0.33 |
| CSA | SZ | 94.2 | EP | 2 | | 03:19 | 38.77 | | | -0.11 |
| DYA | SZ | 100.0 | IP | | C | 03:19 | 39.95 | | | 0.20 |
| DYA | SN | 100.0 | ES | 2 | | 03:19 | 51.58 | | | 0.13 |
| CCA | SZ | 118.0 | EP | 2 | | 03:19 | 42.44 | | | 0.18 |
| CR2 | SZ | 119.0 | EP | 2 | | 03:19 | 42.59 | | | 0.22 |
| CR2 | SE | 119.0 | ES | 2 | | 03:19 | 55.25 | | | -0.73 |
| CR2 | SE | 119.0 | AML | | | 03:19 | 57.16 | 29 | 0.08 | |
| CR2 | SN | 119.0 | AML | | | 03:19 | 57.23 | 17 | 0.11 | |
| CGW | SZ | 127.0 | EP | 2 | | 03:19 | 43.79 | | | 0.29 |
| CPZ | SZ | 131.0 | EP | 2 | | 03:19 | 44.28 | | | 0.16 |

# TABLE 2 : PHASE DATA

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| HTR | SZ | 140.0 | EP | 2 | | 03:19 | 45.44 | | | 0.11 |
| HGH | SZ | 141.0 | EP | 2 | | 03:19 | 45.95 | | | 0.53 |
| MCH | HZ | 148.0 | IP | | D | 03:19 | 46.01 | | | -0.32 |
| MCH | HN | 148.0 | ES | 2 | | 03:20 | 02.79 | | | -0.05 |
| MCH | SN | 148.0 | ES | 2 | | 03:20 | 02.81 | | | |
| MCH | SN | 148.0 | AML | | | 03:20 | 04.77 | 32 | 0.21 | |
| MCH | HN | 148.0 | AML | | | 03:20 | 05.07 | 14 | 0.19 | |
| MCH | HE | 148.0 | AML | | | 03:20 | 05.40 | 9 | 0.26 | |
| MCH | SE | 148.0 | AML | | | 03:20 | 05.41 | 20 | 0.23 | |
| SSP | SZ | 175.0 | EP | 2 | | 03:19 | 49.75 | | | 0.02 |
| SSP | SE | 175.0 | AML | | | 03:20 | 14.27 | 11 | 0.13 | |
| SSP | SN | 175.0 | AML | | | 03:20 | 14.31 | 10 | 0.18 | |

**May 31 2005 Time: 23:36 34.0 UTC Magnitude: 1.8 ML**
**Lat: 55.927N Lon: -5.952W Depth: 5.0 km**
**Grid Ref: 153.15 kmE 677.49 kmN RMS: 0.30 secs**
**Locality: ISLE OF JURA,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| GMK | SZ | 68.5 | EP | 2 | | 23:36 | 45.40 | | | -0.27 |
| PMS | SZ | 76.1 | IP | | C | 23:36 | 46.77 | | | -0.10 |
| GCL | SZ | 95.1 | EP | 2 | | 23:36 | 49.64 | | | -0.17 |
| KAR | SZ | 111.0 | EP | 2 | | 23:36 | 51.88 | | | -0.33 |
| GAL | SZ | 142.0 | EP | 2 | | 23:36 | 57.31 | | | 0.45 |
| GAL | SN | 142.0 | ES | 2 | | 23:37 | 13.73 | | | 0.19 |
| GAL | SE | 142.0 | AML | | | 23:37 | 15.20 | 25 | 0.27 | |
| GAL | SN | 142.0 | AML | | | 23:37 | 15.33 | 10 | 0.15 | |
| KSB | SZ | 147.0 | EP | 2 | | 23:36 | 57.87 | | | 0.28 |
| KAC | SZ | 180.0 | EP | 2 | | 23:37 | 02.35 | | | 0.26 |

**June 5 2005 Time: 13:01 17.7 UTC Magnitude: 0.8 ML**
**Lat: 51.969N Lon: -2.878W Depth: 11.2 km**
**Grid Ref: 339.69 kmE 230.47 kmN RMS: 0.20 secs**
**Locality: HEREFORD,HEREFORDSHIRE**
**Velocity model: Cornwall**
**Comment: 12KM SW OF HEREFORD**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| MCH | HZ | 8.8 | IP | | D | 13:01 | 20.41 | | | 0.16 |
| MCH | HN | 8.8 | ES | 2 | | 13:01 | 21.93 | | | -0.25 |
| MCH | HN | 8.8 | AML | | | 13:01 | 22.43 | 22 | 0.05 | |
| MCH | HE | 8.8 | AML | | | 13:01 | 22.45 | 124 | 0.10 | |
| HBL2 | Z | 14.3 | IP | | D | 13:01 | 21.10 | | | 0.16 |
| HBL2 | E | 14.3 | ES | 2 | | 13:01 | 23.24 | | | -0.17 |
| HAE | SZ | 24.2 | EP | 2 | | 13:01 | 22.62 | | | 0.22 |
| HTR | SZ | 29.4 | EP | 2 | | 13:01 | 23.04 | | | -0.19 |
| HGH | SZ | 37.2 | IP | | C | 13:01 | 24.33 | | | -0.18 |
| SSP | SZ | 52.4 | EP | 2 | | 13:01 | 26.93 | | | -0.15 |
| SSP | SN | 52.4 | ES | 3 | | 13:01 | 33.56 | | | -0.71 |
| SSP | SN | 52.4 | AML | | | 13:01 | 34.00 | 4 | 0.12 | |
| SSP | SE | 52.4 | AML | | | 13:01 | 34.03 | 6 | 0.23 | |
| HLM | SZ | 61.1 | EP | 2 | | 13:01 | 28.29 | | | -0.16 |
| HSA | SZ | 91.2 | EP | 2 | | 13:01 | 32.64 | | | -0.15 |
| HEX | SZ | 119.0 | EP | 2 | | 13:01 | 37.32 | | | 0.47 |

**June 6 2005 Time: 10:04 30.0 UTC Magnitude: 1.2 ML**
**Lat: 55.122N Lon: -3.212W Depth: 4.6 km**
**Grid Ref: 322.72 kmE 581.52 kmN RMS: 0.20 secs**
**Locality: LOCKERBIE,D & G**
**Velocity model: Borders**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 3.2 | IP | | C | 10:04 | 31.34 | | | 0.07 |
| BHH | SN | 3.2 | ES | 2 | | 10:04 | 31.99 | | | -0.18 |
| ECK | SZ | 8.4 | IP | | C | 10:04 | 32.02 | | | -0.05 |
| ECK | SZ | 8.4 | ES | 3 | | 10:04 | 33.33 | | | -0.21 |
| BCC | AZ | 11.9 | IP | | C | 10:04 | 32.54 | | | -0.05 |
| BCC | AE | 11.9 | ES | 2 | | 10:04 | 34.10 | | | -0.33 |
| BCC | AE | 11.9 | AML | | | 10:04 | 34.37 | 286 | 0.19 | |
| BCC | AN | 11.9 | AML | | | 10:04 | 35.91 | 136 | 0.23 | |
| BBH | SZ | 18.1 | IP | | D | 10:04 | 33.50 | | | -0.11 |
| ESK | SZ | 21.7 | IP | | C | 10:04 | 34.32 | | | 0.12 |
| ESK | SN | 21.7 | ES | 1 | | 10:04 | 37.03 | | | -0.15 |
| ESK | SE | 21.7 | AML | | | 10:04 | 37.31 | 73 | 0.20 | |
| ESK | SN | 21.7 | AML | | | 10:04 | 37.58 | 28 | 0.24 | |
| BWH | SZ | 28.8 | IP | | D | 10:04 | 35.45 | | | 0.08 |
| BWH | SZ | 28.8 | ES | 3 | | 10:04 | 38.94 | | | -0.24 |
| BDL | SZ | 39.6 | EP | 3 | | 10:04 | 37.50 | | | 0.40 |
| BTA | SZ | 41.5 | EP | 2 | | 10:04 | 37.58 | | | 0.16 |
| BTA | SN | 41.5 | ES | 2 | | 10:04 | 43.04 | | | 0.35 |
| BTA | SN | 41.5 | AML | | | 10:04 | 43.77 | 37 | 0.29 | |
| BTA | SE | 41.5 | AML | | | 10:04 | 45.19 | 22 | 0.37 | |
| BBO | SZ | 42.9 | IP | 1 | C | 10:04 | 37.73 | | | 0.08 |
| BBO | SE | 42.9 | ES | 3 | | 10:04 | 42.74 | | | -0.34 |
| BBO | SE | 42.9 | AML | | | 10:04 | 45.70 | 28 | 0.34 | |
| BBO | SN | 42.9 | AML | | | 10:04 | 46.13 | 14 | 0.37 | |

**June 7 2005 Time: 00:46 50.2 UTC Magnitude: 1.4 ML**
**Lat: 55.091N Lon: -4.204W Depth: 1.9 km**
**Grid Ref: 259.36 kmE 579.62 kmN RMS: 0.30 secs**
**Locality: NEW GALLOWAY,D & G**
**Velocity model: Borders**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| GCD | SZ | 30.5 | IP | | D | 00:46 | 56.00 | | | -0.13 |
| GCD | SZ | 30.5 | ES | 3 | | 00:46 | 59.43 | | | -0.89 |
| BWH | SZ | 36.3 | IP | | C | 00:46 | 57.00 | | | -0.09 |
| GAL | SZ | 41.0 | IP | | C | 00:46 | 57.93 | | | 0.10 |
| GAL | SN | 41.0 | ES | 2 | | 00:47 | 02.83 | | | -0.40 |
| GAL | SN | 41.0 | AML | | | 00:47 | 03.82 | 29 | 0.20 | |
| GAL | SE | 41.0 | AML | | | 00:47 | 03.88 | 18 | 0.34 | |
| BHH | SZ | 62.9 | IP | | C | 00:47 | 01.15 | | | -0.27 |
| BHH | SE | 62.9 | ES | 3 | | 00:47 | 09.20 | | | -0.16 |
| BBO | SZ | 73.0 | EP | 2 | | 00:47 | 03.46 | | | 0.41 |
| BBO | SN | 73.0 | ES | 2 | | 00:47 | 12.24 | | | 0.09 |
| BBO | SE | 73.0 | AML | | | 00:47 | 15.64 | 19 | 0.19 | |
| BBO | SN | 73.0 | AML | | | 00:47 | 15.70 | 18 | 0.43 | |
| BBH | SZ | 81.4 | EP | 1 | C | 00:47 | 04.03 | | | -0.40 |
| BDL | SZ | 87.2 | EP | 1 | D | 00:47 | 05.86 | | | 0.51 |
| GMK | SZ | 92.9 | EP | 2 | | 00:47 | 06.51 | | | 0.24 |
| BTA | SZ | 99.4 | EP | 2 | | 00:47 | 07.80 | | | 0.44 |
| BTA | SE | 99.4 | ES | 2 | | 00:47 | 20.09 | | | 0.57 |
| BTA | SN | 99.4 | AML | | | 00:47 | 21.93 | 19 | 0.12 | |
| BTA | SE | 99.4 | AML | | | 00:47 | 22.71 | 23 | 0.33 | |
| PCO | SZ | 100.0 | EP | 3 | | 00:47 | 08.08 | | | 0.61 |
| GCL | SZ | 123.0 | EP | 2 | | 00:47 | 11.20 | | | 0.04 |
| GMM | SZ | 147.0 | EP | 2 | | 00:47 | 14.75 | | | 0.01 |

**June 8 2005 Time: 00:49 50.0 UTC Magnitude: 2.4 ML**
**Lat: 53.933N Lon: -1.066W Depth: 7.7 km**
**Grid Ref: 461.31 kmE 448.97 kmN RMS: 0.20 secs**
**Locality: YORK,NORTH YORKSHIRE**
**Velocity model: Lownet**
**Comment: FELT YORK Intensity: 2**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HPK | SZ | 36.8 | EP | 2 | | 00:49 | 56.28 | | | -0.28 |
| HPK | SN | 36.8 | ES | 2 | | 00:50 | 01.60 | | | 0.23 |
| HPK | SN | 36.8 | AML | | | 00:50 | 03.26 | 1180 | 0.30 | |
| HPK | SE | 36.8 | AML | | | 00:50 | 03.50 | 952 | 0.28 | |
| LWH | SZ | 51.5 | IP | | C | 00:49 | 58.78 | | | -0.07 |
| LHO | SZ | 67.6 | IP | | C | 00:50 | 01.22 | | | -0.17 |
| LRN | SZ | 72.1 | EP | | | 00:50 | 02.03 | | | -0.02 |
| LMK | SZ | 72.1 | EP | 2 | | 00:50 | 02.09 | | | 0.07 |
| KBI | SZ | 81.5 | IP | | C | 00:50 | 03.54 | | | 0.03 |
| LCP | SZ | 93.3 | EP | 2 | | 00:50 | 05.77 | | | 0.45 |
| KWE | SZ | 114.0 | EP | 2 | | 00:50 | 09.06 | | | 0.46 |
| SBD | SZ | 185.0 | EP | 2 | | 00:50 | 18.47 | | | -0.07 |
| SSP | SZ | 217.0 | EP | 2 | | 00:50 | 22.59 | | | 0.07 |
| SSP | SE | 217.0 | AML | | | 00:50 | 53.60 | 13 | 0.26 | |
| SSP | SN | 217.0 | AML | | | 00:50 | 54.80 | 10 | 0.45 | |

**June 8 2005 Time: 01:21 23.3 UTC Magnitude: 2.6 ML**
**Lat: 53.048N Lon: -2.215W Depth: 1.5 km**
**Grid Ref: 385.59 kmE 350.14 kmN RMS: 0.60 secs**
**Locality: STOKE-ON-TRENT,STAFFS**
**Velocity model: Lownet**
**Comment: FELT STOKE-ON-TRENT Intensity: 4**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| MS#1 | SZ | | EP | 3 | | 01:21 | 29.44 | | | |
| SALV | SZ | | EP | 2 | | 01:21 | 29.39 | | | |
| MS#2 | SZ | | EP | 3 | | 01:21 | 29.28 | | | |
| KWE | SZ | 25.3 | IP | | C | 01:21 | 27.75 | | | -0.52 |
| GC#1 | SZ | 30.5 | EP | 2 | | 01:21 | 29.49 | | | 0.37 |
| GC#1 | SN | 30.5 | ES | 2 | | 01:21 | 33.44 | | | 0.05 |
| PEUG | SZ | 31.0 | EP | 2 | | 01:21 | 29.39 | | | 0.20 |
| CUMB | SZ | 31.1 | EP | 3 | | 01:21 | 29.37 | | | 0.14 |
| CUMB | SE | 31.1 | ES | 3 | | 01:21 | 33.69 | | | 0.11 |
| KBI | SZ | 51.4 | IP | | C | 01:21 | 32.42 | | | -0.25 |
| LHO | SZ | 60.4 | EP | 2 | | 01:21 | 33.89 | | | -0.21 |
| SBD | SZ | 71.8 | IP | | C | 01:21 | 35.60 | | | -0.28 |
| HLM | SZ | 74.0 | IP | | D | 01:21 | 35.75 | | | -0.46 |
| SSP | SZ | 92.6 | IP | | D | 01:21 | 38.99 | | | -0.10 |
| SSP | SN | 92.6 | ES | 2 | | 01:21 | 49.93 | | | -0.71 |
| SSP | SN | 92.6 | AML | | | 01:21 | 53.84 | 75 | 0.42 | |
| SSP | SE | 92.6 | AML | | | 01:21 | 54.86 | 98 | 0.31 | |
| HPK | SZ | 109.0 | EP | 2 | | 01:21 | 41.82 | | | 0.28 |
| HPK | SE | 109.0 | ES | 2 | | 01:21 | 55.34 | | | 0.47 |
| HPK | SN | 109.0 | AML | | | 01:21 | 58.18 | 372 | 0.18 | |
| HPK | SE | 109.0 | AML | | | 01:21 | 58.83 | 466 | 0.20 | |
| HAE | SZ | 115.0 | EP | 2 | | 01:21 | 42.28 | | | -0.19 |
| WPM | SZ | 115.0 | EP | 2 | | 01:21 | 42.52 | | | -0.09 |
| MCH | SZ | 128.0 | EP | 1 | C | 01:21 | 44.56 | | | -0.03 |
| MCH | SN | 128.0 | ES | 2 | | 01:21 | 59.69 | | | -0.46 |
| MCH | SE | 128.0 | AML | | | 01:22 | 03.51 | 160 | 0.12 | |
| MCH | SN | 128.0 | AML | | | 01:22 | 05.89 | 149 | 0.35 | |
| HTR | SZ | 129.0 | EP | 3 | | 01:21 | 45.07 | | | 0.31 |
| YLL | SZ | 131.0 | EP | 2 | | 01:21 | 44.98 | | | -0.06 |
| WME | SZ | 145.0 | EP | 2 | | 01:21 | 47.23 | | | 0.26 |
| YRE | SZ | 148.0 | EP | 1 | C | 01:21 | 47.60 | | | 0.08 |
| WLF | SZ | 148.0 | EP | 2 | | 01:21 | 47.62 | | | 0.15 |
| LRN | SZ | 155.0 | EP | 2 | | 01:21 | 49.09 | | | 0.64 |
| YRC | SZ | 159.0 | EP | 2 | | 01:21 | 49.16 | | | 0.10 |
| WCB | SZ | 160.0 | IP | | D | 01:21 | 49.51 | | | 0.35 |
| WCB | SN | 160.0 | ES | 2 | | 01:22 | 07.48 | | | -0.57 |
| WCB | SN | 160.0 | AML | | | 01:22 | 08.78 | 29 | 0.24 | |
| WCB | SE | 160.0 | AML | | | 01:22 | 09.16 | 61 | 0.22 | |
| HGH | SZ | 162.0 | EP | 2 | | 01:21 | 49.92 | | | 0.47 |
| SWN | SZ | 173.0 | EP | 2 | | 01:21 | 52.17 | | | 1.14 |
| SWN | SN | 173.0 | ES | 3 | | 01:22 | 13.88 | | | 2.58 |
| SWN | SE | 173.0 | AML | | | 01:22 | 14.24 | 95 | 0.22 | |
| SWN | SN | 173.0 | AML | | | 01:22 | 17.32 | 118 | 0.35 | |
| SKP | SZ | 176.0 | EP | 2 | | 01:21 | 52.04 | | | 0.65 |
| LCP | SZ | 194.0 | EP | 3 | | 01:21 | 53.82 | | | 0.13 |
| SWK | SZ | 211.0 | EP | 2 | | 01:21 | 57.44 | | | 1.60 |

**June 18 2005 Time: 07:50 55.8 UTC Magnitude: 1.4 ML**
**Lat: 51.064N Lon: -0.496W Depth: 5.0 km**
**Grid Ref: 505.38 kmE 130.54 kmN RMS: 0.70 secs**
**Locality: BILLINGHURST, W SUSSEX**
**Velocity model: Lownet**
**Comment: 5KM NW OF BILLINGHURST**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| TEB | SZ | 52.7 | EP | | | 07:51 | 05.19 | | | 0.21 |
| SIW | SZ | 75.7 | EP | | | 07:51 | 08.35 | | | -0.21 |
| SKP | SZ | 76.4 | EP | | | 07:51 | 08.38 | | | -0.30 |
| CWF | HE | 195.0 | ES | 4 | | 07:51 | 32.11 | | | -15.50 |
| MCH | HZ | 202.0 | EP | | | 07:51 | 26.55 | | | -0.17 |
| MCH | HN | 202.0 | ES | 2 | | 07:51 | 51.22 | | | 1.91 |
| MCH | HN | 202.0 | AML | | | 07:51 | 52.45 | 5 | 0.24 | |
| MCH | HE | 202.0 | AML | | | 07:51 | 52.92 | 3 | 0.23 | |

**June 19 2005 Time: 11:49 34.3 UTC Magnitude: 1.6 ML**
**Lat: 51.073N Lon: -0.514W Depth: 5.0 km**
**Grid Ref: 504.10 kmE 131.52 kmN RMS: 0.50 secs**
**Locality: BILLINGHURST, W SUSSEX**
**Velocity model: Lownet**
**Comment: 5KM NW OF BILLINGHURST**

# TABLE 2 : PHASE DATA

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| TEB | SZ | 54.3 | EP | 2 | | 11:49 | 43.12 | | | -0.65 |
| WOL | BZ | 56.3 | EP | | | 11:49 | 43.08 | | | -1.01 |
| WOL | BE | 56.3 | ES | 2 | | 11:49 | 51.40 | | | 0.18 |
| SKP | SZ | 75.0 | EP | | | 11:49 | 46.98 | | | -0.03 |
| SWN | SZ | 102.0 | EP | | | 11:49 | 51.20 | | | -0.02 |
| SWN | SE | 102.0 | ES | 2 | | 11:50 | 04.68 | | | 1.12 |
| SWN | SN | 102.0 | AML | | | 11:50 | 05.10 | 40 | 0.27 | |
| SWN | SE | 102.0 | AML | | | 11:50 | 05.57 | 31 | 0.68 | |
| TFO | SZ | 116.0 | EP | | | 11:49 | 53.71 | | | 0.35 |
| SWK | SZ | 122.0 | EP | | | 11:49 | 54.30 | | | 0.05 |
| HAE | SZ | 177.0 | EP | | | 11:50 | 02.02 | | | -0.08 |
| CWF | HZ | 193.0 | EP | 9 | | 11:49 | 46.53 | | | -17.60 |
| CWF | HN | 193.0 | ES | 9 | | 11:50 | 09.98 | | | 1.70 |
| CWF | HE | 193.0 | AML | | | 11:50 | 11.23 | 6 | 0.50 | |
| CWF | HN | 193.0 | AML | | | 11:50 | 11.33 | 4 | 0.35 | |
| MCH | HZ | 201.0 | EP | | | 11:50 | 05.29 | | | 0.23 |
| MCH | HE | 201.0 | ES | 2 | | 11:50 | 28.00 | | | 0.50 |
| MCH | HE | 201.0 | AML | | | 11:50 | 30.16 | 3 | 0.42 | |
| MCH | HN | 201.0 | AML | | | 11:50 | 30.30 | 6 | 0.21 | |
| HTL | HN | 279.0 | ES | 2 | | 11:50 | 45.25 | | | 0.94 |

**June 25 2005 Time: 09:52 01.5 UTC Magnitude: 0.6 ML**
**Lat: 58.126N Lon: -6.385W Depth: 4.0 km**
**Grid Ref: 141.85 kmE 923.59 kmN RMS: 0.10 secs**
**Locality: LEWIS,WESTERN ISLES**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| RRH | SZ | 29.1 | IP | | D | 09:52 | 06.96 | | | 0.05 |
| RRH | SZ | 29.1 | ES | 2 | | 09:52 | 10.70 | | | -0.17 |
| RTO | SZ | 29.9 | EP | 1 | C | 09:52 | 06.98 | | | -0.05 |
| RRR | SZ | 45.4 | EP | 2 | | 09:52 | 09.79 | | | 0.18 |
| RRR | SE | 45.4 | ES | 2 | | 09:52 | 15.41 | | | -0.14 |
| RRR | SE | 45.4 | AML | | | 09:52 | 15.66 | 7 | 0.18 | |
| RRR | SN | 45.4 | AML | | | 09:52 | 15.66 | 4 | 0.19 | |
| REB | SZ | 65.1 | EP | 3 | | 09:52 | 12.85 | | | 0.17 |

**June 27 2005 Time: 18:46 36.5 UTC Magnitude: 3.2 ML**
**Lat: 61.117N Lon: 3.422W Depth: 12.7 km**
**Grid Ref: 691.91 kmE 1260.35 kmN RMS: 0.40 secs**
**Locality: NORTHERN NORTH SEA**
**Velocity model: North Sea**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| SUE | SZ | 72.5 | EP | | | 18:46 | 48.48 | | | 0.21 |
| SUE | SN | 72.5 | ES | | | 18:46 | 56.76 | | | -0.08 |
| FOO | SZ | 102.0 | EP | | | 18:46 | 52.36 | | | -0.42 |
| FOO | SE | 102.0 | ES | | | 18:47 | 04.25 | | | -0.40 |
| BER | BZ | 132.0 | EP | | | 18:46 | 57.30 | | | 0.08 |
| HYA | SZ | 149.0 | EP | | | 18:46 | 59.29 | | | 0.02 |
| HYA | SN | 149.0 | ES | | | 18:47 | 16.14 | | | 0.27 |
| ODD1 | SZ | 221.0 | EP | | | 18:47 | 07.41 | | | -0.91 |
| KMY | SZ | 236.0 | EP | | | 18:47 | 10.15 | | | 0.08 |
| BLS5 | SZ | 253.0 | EP | | | 18:47 | 12.63 | | | 0.45 |
| LRW | HN | 274.0 | ES | | | 18:47 | 43.15 | | | 0.31 |
| OST | SZ | 402.0 | EP | | | 18:47 | 30.84 | | | 0.17 |
| OWE | SZ | 410.0 | EP | | | 18:47 | 32.08 | | | 0.43 |
| NOA | SZ | 420.0 | EP | | | 18:47 | 33.50 | | | 0.44 |
| OHO | SZ | 451.0 | EP | | | 18:47 | 37.22 | | | 0.46 |
| OBR | SZ | 462.0 | EP | | | 18:47 | 38.77 | | | 0.61 |
| MLA | SZ | 493.0 | EP | | | 18:47 | 42.34 | | | 0.27 |
| MLA | SZ | 493.0 | ES | | | 18:48 | 29.56 | | | -0.36 |
| ORE | SZ | 494.0 | EP | | | 18:47 | 42.49 | | | 0.39 |
| ORE | SN | 494.0 | ES | | | 18:48 | 29.42 | | | -0.55 |
| ORE | SE | 494.0 | AML | | | 18:48 | 31.48 | 18 | 0.28 | |
| ORE | SN | 494.0 | AML | | | 18:48 | 32.51 | 21 | 0.22 | |
| OTO | SZ | 526.0 | EP | | | 18:47 | 46.28 | | | 0.09 |
| MCD | SZ | 546.0 | EP | | | 18:47 | 48.70 | | | 0.03 |
| MCD | SN | 546.0 | ES | | | 18:48 | 41.50 | | | 0.16 |
| MCD | SN | 546.0 | AML | | | 18:48 | 44.48 | 20 | 0.40 | |
| MCD | SE | 546.0 | AML | | | 18:48 | 45.89 | 13 | 0.34 | |
| MVH | SZ | 558.0 | EP | | | 18:47 | 49.52 | | | -0.53 |
| MME | SZ | 558.0 | EP | | | 18:47 | 50.01 | | | -0.16 |
| MDO | SZ | 603.0 | EP | | | 18:47 | 54.94 | | | -0.78 |
| RRR | SN | 636.0 | ES | | | 18:48 | 59.65 | | | -0.81 |
| RRR | SN | 636.0 | AML | | | 18:49 | 02.80 | 11 | 0.28 | |
| RRR | SE | 636.0 | AML | | | 18:49 | 02.81 | 11 | 0.28 | |
| KAC | SZ | 639.0 | EP | | | 18:47 | 59.87 | | | -0.26 |
| KSB | SZ | 666.0 | EP | 3 | | 18:48 | 02.87 | | | -0.70 |
| KSK | SZ | 705.0 | EP | | | 18:48 | 09.23 | | | 0.92 |
| KAR | SZ | 707.0 | EP | | | 18:48 | 08.47 | | | -0.09 |

**July 16 2005 Time: 18:29 10.4 UTC Magnitude: 2.1 ML**
**Lat: 51.005N Lon: -0.516W Depth: 5.0 km**
**Grid Ref: 504.11 kmE 123.95 kmN RMS: 0.70 secs**
**Locality: BILLINGHURST, W SUSSEX**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| WOL | BZ | 60.1 | EP | | | 18:29 | 19.43 | | | -1.30 |
| WOL | BE | 60.1 | ES | | | 18:29 | 27.16 | | | -1.13 |
| SKP | SZ | 82.3 | EP | 2 | | 18:29 | 23.31 | | | -0.86 |
| SWN | SZ | 106.0 | EP | | | 18:29 | 27.99 | | | 0.15 |
| SWN | SN | 106.0 | ES | 2 | | 18:29 | 40.94 | | | 0.34 |
| SWN | SN | 106.0 | AML | | | 18:29 | 41.51 | 101 | 0.28 | |
| SWN | SE | 106.0 | AML | | | 18:29 | 41.65 | 83 | 0.36 | |
| SWK | SZ | 122.0 | EP | | | 18:29 | 30.58 | | | 0.18 |
| HGH | SZ | 174.0 | EP | 2 | | 18:29 | 37.66 | | | -0.16 |
| HAE | SZ | 182.0 | EP | 2 | | 18:29 | 38.37 | | | -0.35 |
| MCH | HZ | 205.0 | EP | | | 18:29 | 41.71 | | | 0.12 |
| MCH | HN | 205.0 | ES | | | 18:30 | 05.44 | | | 1.04 |
| MCH | HN | 205.0 | AML | | | 18:30 | 06.75 | 16 | 0.30 | |
| MCH | HE | 205.0 | AML | | | 18:30 | 08.10 | 8 | 0.40 | |
| AWH | SZ | 207.0 | EP | | | 18:29 | 41.70 | | | -0.17 |
| HTR | SZ | 225.0 | EP | 2 | | 18:29 | 43.88 | | | -0.30 |
| HLM | SZ | 234.0 | EP | 2 | | 18:29 | 45.23 | | | -0.14 |
| SSP | SZ | 238.0 | EP | 2 | | 18:29 | 45.78 | | | -0.09 |
| SSP | SE | 238.0 | ES | | | 18:30 | 12.67 | | | 0.88 |
| SSP | SE | 238.0 | AML | | | 18:30 | 14.85 | 12 | 0.39 | |
| SSP | SN | 238.0 | AML | | | 18:30 | 17.44 | 12 | 0.41 | |
| KWE | SZ | 242.0 | EP | | | 18:29 | 46.84 | | | 0.61 |

**July 17 2005 Time: 01:35 59.8 UTC Magnitude: 1.1 ML**
**Lat: 52.397N Lon: -2.815W Depth: 14.5 km**
**Grid Ref: 344.55 kmE 278.02 kmN RMS: 0.10 secs**
**Locality: LUDLOW,SHROPSHIRE**
**Velocity model: Mid Wales**
**Comment: 5KM NW OF LUDLOW**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 14.2 | IP | | D | 01:36 | 03.21 | | | -0.10 |
| SSP | SZ | 20.3 | IP | | C | 01:36 | 04.15 | | | 0.06 |
| SSP | SN | 20.3 | ES | 1 | | 01:36 | 07.31 | | | 0.12 |
| SSP | SN | 20.3 | AML | | | 01:36 | 07.46 | 69 | 0.09 | |
| SSP | SE | 20.3 | AML | | | 01:36 | 07.58 | 40 | 0.09 | |
| HAE | SZ | 44.2 | IP | | D | 01:36 | 07.76 | | | 0.07 |
| MCH | SZ | 46.2 | EP | 2 | | 01:36 | 07.87 | | | -0.14 |
| MCH | SN | 46.2 | ES | 2 | | 01:36 | 13.87 | | | -0.05 |
| MCH | SE | 46.2 | AML | | | 01:36 | 14.02 | 18 | 0.18 | |
| MCH | SN | 46.2 | AML | | | 01:36 | 14.29 | 11 | 0.13 | |
| HTR | SZ | 47.0 | EP | 2 | | 01:36 | 07.86 | | | -0.29 |
| KWE | SZ | 95.3 | EP | 2 | | 01:36 | 15.31 | | | -0.13 |
| KBI | SZ | 129.0 | EP | 2 | | 01:36 | 20.75 | | | 0.25 |

**July 23 2005 Time: 17:05 41.6 UTC Magnitude: 2.9 ML**
**Lat: 57.111N Lon: 6.462W Depth: 15.0 km**
**Grid Ref: 911.70 kmE 834.02 kmN RMS: 0.40 secs**
**Locality: SKAGERRAK**
**Velocity model: North Sea**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| LRW | SZ | 557.0 | EP | 3 | | 17:06 | 54.36 | | | -0.43 |
| LRW | SE | 557.0 | ES | 3 | | 17:07 | 47.56 | | | -0.66 |
| LRW | SE | 557.0 | AML | | | 17:07 | 50.40 | 3 | 0.24 | |
| LRW | SN | 557.0 | AML | | | 17:07 | 54.10 | 3 | 0.57 | |
| LCP | SZ | 562.0 | EP | 3 | | 17:06 | 55.35 | | | -0.06 |
| WAL | SZ | 584.0 | EP | 3 | | 17:06 | 58.11 | | | -0.13 |
| WAL | SZ | 584.0 | ES | | | 17:07 | 54.29 | | | 0.10 |
| MCD | SZ | 587.0 | EP | 3 | | 17:06 | 59.30 | | | 0.75 |
| MCD | SN | 587.0 | ES | 3 | | 17:07 | 54.78 | | | 0.06 |
| OHO | SZ | 605.0 | EP | 3 | | 17:07 | 01.36 | | | 0.56 |
| BTA | SZ | 621.0 | EP | 3 | | 17:07 | 02.90 | | | 0.17 |
| BBH | SZ | 624.0 | EP | 2 | | 17:07 | 03.19 | | | 0.08 |
| BBH | SZ | 624.0 | ES | 3 | | 17:08 | 03.48 | | | 0.87 |
| EAU | SZ | 626.0 | EP | 3 | | 17:07 | 04.21 | | | 0.78 |
| ORE | SZ | 628.0 | EP | 3 | | 17:07 | 03.26 | | | -0.32 |
| ORE | SN | 628.0 | ES | 3 | | 17:08 | 02.67 | | | -0.76 |
| ORE | SN | 628.0 | AML | | | 17:08 | 06.47 | 6 | 0.16 | |
| ORE | SE | 628.0 | AML | | | 17:08 | 07.56 | 6 | 0.18 | |
| BDL | SZ | 640.0 | EP | 3 | | 17:07 | 05.29 | | | 0.12 |
| BHH | SZ | 642.0 | EP | 3 | | 17:07 | 05.36 | | | -0.06 |
| BHH | SE | 642.0 | ES | 3 | | 17:08 | 06.95 | | | 0.34 |
| BHH | SN | 642.0 | AML | | | 17:08 | 10.52 | 8 | 0.37 | |
| BHH | SE | 642.0 | AML | | | 17:08 | 14.62 | 7 | 0.13 | |
| MVH | SZ | 644.0 | ES | 3 | | 17:08 | 07.06 | | | 0.15 |
| LHO | SZ | 660.0 | EP | 3 | | 17:07 | 07.09 | | | -0.53 |
| BBO | SZ | 661.0 | EP | 3 | | 17:07 | 07.62 | | | -0.16 |
| BBO | SN | 661.0 | ES | 3 | | 17:08 | 10.46 | | | -0.23 |
| BBO | SN | 661.0 | AML | | | 17:08 | 15.81 | 4 | 0.32 | |
| BBO | SE | 661.0 | AML | | | 17:08 | 17.51 | 4 | 0.27 | |
| BWH | SZ | 664.0 | EP | 2 | | 17:07 | 07.84 | | | -0.29 |
| RRR | SN | 740.0 | ES | 3 | | 17:08 | 26.35 | | | -1.15 |
| RRR | SN | 740.0 | AML | | | 17:08 | 31.17 | 5 | 0.29 | |

**July 29 2005 Time: 02:07 09.2 UTC Magnitude: 1.5 ML**
**Lat: 58.114N Lon: -3.143W Depth: 6.7 km**
**Grid Ref: 332.66 kmE 914.43 kmN RMS: 0.10 secs**
**Locality: MORAY FIRTH AREA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| OBR | SZ | 55.7 | IP | | D | 02:07 | 18.58 | | | -0.13 |
| MCD | SZ | 59.6 | IP | | C | 02:07 | 19.29 | | | -0.06 |
| MCD | SN | 59.6 | ES | 2 | | 02:07 | 26.75 | | | -0.04 |
| MCD | SN | 59.6 | AML | | | 02:07 | 27.41 | 37 | 0.33 | |
| MCD | SE | 59.6 | AML | | | 02:07 | 31.90 | 32 | 0.16 | |
| ORE | SZ | 60.4 | IP | | D | 02:07 | 19.34 | | | -0.10 |
| ORE | SN | 60.4 | ES | 3 | | 02:07 | 26.61 | | | -0.34 |
| ORE | SN | 60.4 | AML | | | 02:07 | 26.84 | 26 | 0.24 | |
| ORE | SE | 60.4 | AML | | | 02:07 | 26.84 | 44 | 0.25 | |
| MVH | SZ | 65.0 | EP | 2 | | 02:07 | 20.28 | | | 0.11 |
| OHO | SZ | 80.2 | IP | | D | 02:07 | 22.62 | | | 0.10 |
| OTO | SZ | 84.7 | EP | | | 02:07 | 23.24 | | | -0.02 |
| MME | SZ | 89.7 | EP | | | 02:07 | 24.04 | | | -0.01 |
| MDO | SZ | 104.0 | EP | 3 | | 02:07 | 26.74 | | | 0.41 |
| OST | SZ | 114.0 | EP | | | 02:07 | 27.80 | | | 0.13 |
| REB | SZ | 126.0 | EP | | | 02:07 | 29.70 | | | 0.11 |
| OWE | SZ | 134.0 | EP | | | 02:07 | 30.73 | | | -0.04 |

**July 29 2005 Time: 02:11 13.0 UTC Magnitude: 1.2 ML**
**Lat: 58.116N Lon: -3.132W Depth: 7.7 km**
**Grid Ref: 333.31 kmE 914.64 kmN RMS: 0.20 secs**
**Locality: MORAY FIRTH AREA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| OBR | SZ | 55.5 | EP | | | 02:11 | 22.16 | | | -0.26 |
| MCD | SZ | 59.8 | EP | | | 02:11 | 22.92 | | | -0.21 |
| MCD | SN | 59.8 | ES | | | 02:11 | 30.46 | | | -0.10 |
| ORE | SZ | 60.6 | EP | | | 02:11 | 22.98 | | | -0.23 |
| ORE | SE | 60.6 | ES | 2 | | 02:11 | 30.38 | | | -0.32 |
| ORE | SE | 60.6 | AML | | | 02:11 | 30.71 | 18 | 0.26 | |
| ORE | SN | 60.6 | AML | | | 02:11 | 35.03 | 12 | 0.07 | |
| OHO | SZ | 80.0 | EP | | | 02:11 | 26.29 | | | 0.05 |
| OTO | SZ | 85.2 | EP | | | 02:11 | 27.27 | | | 0.20 |
| MME | SZ | 89.8 | EP | | | 02:11 | 27.90 | | | 0.09 |
| MDO | SZ | 105.0 | EP | | | 02:11 | 30.42 | | | 0.27 |
| OST | SZ | 113.0 | EP | | | 02:11 | 31.53 | | | 0.18 |
| OWE | SZ | 134.0 | EP | | | 02:11 | 34.55 | | | 0.10 |

# TABLE 2 : PHASE DATA

**July 29 2005 Time: 19:12 58.7 UTC Magnitude: 1.6 ML**
**Lat: 51.855N Lon: -4.912W Depth: 4.4 km**
**Grid Ref: 199.48 kmE 221.44 kmN RMS: 0.10 secs**
**Locality: HAVERFORDWEST,DYFED**
**Velocity model: Lownet**
**Comment: 5KM NE OF HAVERFORDWEST**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 53.6 | IP | | C | 19:13 | 08.09 | | | -0.02 |
| HTL | HZ | 100.0 | EP | | | 19:13 | 15.32 | | | 0.02 |
| HTL | HN | 100.0 | ES | 2 | | 19:13 | 27.11 | | | -0.31 |
| HTL | HN | 100.0 | AML | | | 19:13 | 28.08 | 18 | 0.21 | |
| HTL | HE | 100.0 | AML | | | 19:13 | 28.25 | 17 | 0.30 | |
| HTR | SZ | 116.0 | EP | | | 19:13 | 17.71 | | | -0.04 |
| HEX | SZ | 117.0 | IP | | C | 19:13 | 17.96 | | | 0.07 |
| YRE | SZ | 130.0 | EP | | | 19:13 | 19.88 | | | 0.00 |
| MCH | HZ | 133.0 | IP | | D | 19:13 | 20.15 | | | -0.15 |
| MCH | HN | 133.0 | ES | 2 | | 19:13 | 36.04 | | | -0.03 |
| MCH | HN | 133.0 | AML | | | 19:13 | 37.75 | 7 | 0.16 | |
| MCH | HE | 133.0 | AML | | | 19:13 | 38.09 | 9 | 0.11 | |
| SSP | SZ | 138.0 | EP | | | 19:13 | 21.21 | | | 0.06 |
| SSP | SN | 138.0 | ES | 3 | | 19:13 | 38.04 | | | 0.49 |
| SSP | SN | 138.0 | AML | | | 19:13 | 39.09 | 26 | 0.17 | |
| SSP | SE | 138.0 | AML | | | 19:13 | 40.42 | 18 | 0.10 | |
| HGH | SZ | 147.0 | EP | | | 19:13 | 22.62 | | | 0.20 |
| YLL | SZ | 152.0 | EP | | | 19:13 | 23.02 | | | 0.00 |
| SBD | SZ | 162.0 | EP | | | 19:13 | 24.46 | | | -0.15 |
| WPM | SZ | 170.0 | EP | | | 19:13 | 25.81 | | | 0.07 |

**July 30 2005 Time: 11:19 42.4 UTC Magnitude: 1.0 ML**
**Lat: 52.579N Lon: -2.863W Depth: 15.6 km**
**Grid Ref: 341.53 kmE 298.30 kmN RMS: 0.00 secs**
**Locality: SHREWSBURY,SHROPSHIRE**
**Velocity model: Mid Wales**
**Comment: 10KM SW OF SHREWSBURY**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 6.9 | IP | | D | 11:19 | 45.34 | | | -0.04 |
| SSP | SZ | 24.7 | IP | | C | 11:19 | 47.48 | | | 0.07 |
| SSP | SE | 24.7 | ES | 2 | | 11:19 | 51.01 | | | 0.00 |
| SSP | SN | 24.7 | AML | | | 11:19 | 51.19 | 27 | 0.21 | |
| SSP | SE | 24.7 | AML | | | 11:19 | 51.72 | 22 | 0.10 | |
| SBD | SZ | 45.1 | EP | | | 11:19 | 50.45 | | | -0.01 |
| HTR | SZ | 62.2 | EP | | | 11:19 | 52.97 | | | -0.04 |
| HAE | SZ | 64.1 | EP | | | 11:19 | 53.34 | | | 0.05 |
| MCH | SN | 65.4 | ES | 2 | | 11:20 | 01.34 | | | -0.11 |
| MCH | SE | 65.4 | AML | | | 11:20 | 01.60 | 7 | 0.20 | |
| MCH | SN | 65.4 | AML | | | 11:20 | 01.84 | 8 | 0.10 | |
| KWE | SZ | 84.3 | EP | | | 11:19 | 56.33 | | | -0.01 |

**August 1 2005 Time: 21:11 56.2 UTC Magnitude: 1.2 ML**
**Lat: 51.704N Lon: -3.173W Depth: 2.0 km**
**Grid Ref: 318.95 kmE 201.29 kmN RMS: 0.10 secs**
**Locality: BLACKWOOD,GWENT**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 26.4 | IP | | C | 21:12 | 01.18 | | | -0.13 |
| MCH | SZ | 34.7 | EP | | | 21:12 | 02.81 | | | 0.09 |
| MCH | SE | 34.7 | ES | 3 | | 21:12 | 07.57 | | | 0.10 |
| MCH | SN | 34.7 | AML | | | 21:12 | 07.95 | 76 | 0.18 | |
| MCH | SE | 34.7 | AML | | | 21:12 | 08.35 | 87 | 0.27 | |
| HTR | SZ | 42.2 | EP | | | 21:12 | 03.90 | | | -0.10 |
| HAE | SZ | 57.0 | EP | | | 21:12 | 06.45 | | | 0.04 |
| HSA | SZ | 67.9 | IP | | C | 21:12 | 07.93 | | | -0.18 |
| SSP | SZ | 79.5 | EP | | | 21:12 | 10.05 | | | 0.12 |
| SSP | SE | 79.5 | ES | 2 | | 21:12 | 19.85 | | | -0.08 |
| SSP | SE | 79.5 | AML | | | 21:12 | 20.36 | 8 | 0.22 | |
| SSP | SN | 79.5 | AML | | | 21:12 | 27.46 | 5 | 0.13 | |
| HEX | SZ | 83.4 | EP | | | 21:12 | 10.54 | | | 0.04 |
| HTL | HZ | 121.0 | EP | | | 21:12 | 16.41 | | | 0.14 |
| HTL | HN | 121.0 | ES | 2 | | 21:12 | 30.90 | | | 0.01 |
| HTL | HE | 121.0 | AML | | | 21:12 | 32.74 | 8 | 0.29 | |
| HTL | HN | 121.0 | AML | | | 21:12 | 33.44 | 4 | 0.14 | |

**August 2 2005 Time: 22:11 38.7 UTC Magnitude: 2.8 ML**
**Lat: 54.532N Lon: 4.050W Depth: 15.0 km**
**Grid Ref: 791.23 kmE 532.05 kmN RMS: 0.20 secs**
**Locality: CENTRAL NORTH SEA**
**Velocity model: North Sea**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| AWI | SZ | 256.0 | EP | | | 22:12 | 14.57 | | | 0.11 |
| ABA | SZ | 265.0 | EP | | | 22:12 | 15.43 | | | -0.19 |
| AWH | SZ | 295.0 | EP | | | 22:12 | 19.21 | | | -0.12 |
| AWH | SZ | 295.0 | ES | 3 | | 22:12 | 49.60 | | | 0.60 |
| APA | SZ | 301.0 | EP | | | 22:12 | 20.13 | | | -0.02 |
| APA | SZ | 301.0 | ES | 3 | | 22:12 | 50.60 | | | 0.18 |
| LCP | SZ | 357.0 | EP | | | 22:12 | 27.28 | | | 0.17 |
| HPK | SN | 375.0 | ES | 3 | | 22:13 | 06.46 | | | 0.14 |
| KBI | SZ | 393.0 | EP | | | 22:12 | 31.95 | | | 0.38 |
| KBI | SZ | 393.0 | ES | 3 | | 22:13 | 10.26 | | | 0.08 |
| KBI | SZ | 393.0 | AML | | | 22:13 | 13.25 | 9 | 0.24 | |
| LHO | SZ | 402.0 | EP | | | 22:12 | 32.58 | | | -0.10 |
| KWE | SZ | 423.0 | EP | | | 22:12 | 35.28 | | | -0.03 |
| KWE | SZ | 423.0 | ES | 3 | | 22:13 | 15.92 | | | -0.73 |
| KWE | SZ | 423.0 | AML | | | 22:13 | 18.92 | 11 | 0.44 | |
| EAU | SZ | 499.0 | EP | | | 22:12 | 44.59 | | | -0.15 |
| EAU | SZ | 499.0 | ES | 3 | | 22:13 | 32.82 | | | -0.15 |
| EAU | SZ | 499.0 | AML | | | 22:13 | 33.67 | 14 | 0.36 | |
| WCB | SN | 578.0 | ES | 3 | | 22:13 | 49.84 | | | -0.11 |
| WCB | SE | 578.0 | AML | | | 22:13 | 51.39 | 7 | 0.44 | |
| WCB | SN | 578.0 | AML | | | 22:13 | 51.95 | 6 | 0.14 | |
| YRC | SZ | 584.0 | ES | 3 | | 22:13 | 51.17 | | | -0.04 |
| YRE | SZ | 585.0 | ES | 3 | | 22:13 | 50.65 | | | -0.66 |

**August 8 2005 Time: 03:34 31.9 UTC Magnitude: 0.9 ML**
**Lat: 50.636N Lon: -5.358W Depth: 15.0 km**
**Grid Ref: 162.58 kmE 87.26 kmN RMS: 0.10 secs**
**Locality: TREVOSE HEAD,CORNWALL**
**Velocity model: Cornwall**
**Comment: 25KM NW TREVOSE HEAD**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| CSA | SZ | 45.6 | IP | | D | 03:34 | 39.97 | | | -0.02 |
| CCA | SZ | 50.8 | IP | | D | 03:34 | 40.74 | | | -0.01 |
| CR2 | SZ | 53.9 | EP | | | 03:34 | 41.03 | | | -0.16 |
| CR2 | SE | 53.9 | ES | 1 | | 03:34 | 48.30 | | | -0.02 |
| CR2 | SE | 53.9 | AML | | | 03:34 | 48.52 | 9 | 0.08 | |
| CR2 | SN | 53.9 | AML | | | 03:34 | 48.58 | 9 | 0.15 | |
| CPZ | SZ | 55.6 | EP | | | 03:34 | 41.41 | | | -0.04 |
| CGW | SZ | 60.3 | EP | | | 03:34 | 42.16 | | | 0.06 |
| CMA | SZ | 63.7 | EP | | | 03:34 | 42.69 | | | 0.09 |
| CGH | SZ | 66.5 | IP | | D | 03:34 | 43.12 | | | 0.10 |

**August 9 2005 Time: 18:28 01.8 UTC Magnitude: 0.6 ML**
**Lat: 54.203N Lon: -4.094W Depth: 15.0 km**
**Grid Ref: 263.43 kmE 480.63 kmN RMS: 0.20 secs**
**Locality: IRISH SEA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| WIM | SZ | 38.4 | IP | | C | 18:28 | 08.82 | | | -0.01 |
| WIM | SZ | 38.4 | ES | 3 | | 18:28 | 14.30 | | | 0.34 |
| GAL | SZ | 83.9 | IP | | D | 18:28 | 15.62 | | | -0.09 |
| GAL | SN | 83.9 | ES | 2 | | 18:28 | 26.06 | | | 0.20 |
| GAL | SE | 83.9 | AML | | | 18:28 | 27.26 | 3 | 0.16 | |
| GAL | SN | 83.9 | AML | | | 18:28 | 27.45 | 2 | 0.13 | |
| WCB | SZ | 96.5 | EP | | | 18:28 | 17.41 | | | -0.10 |
| WCB | SE | 96.5 | ES | 2 | | 18:28 | 28.79 | | | -0.19 |
| WLF | SZ | 104.0 | EP | 2 | | 18:28 | 18.36 | | | -0.15 |
| YRE | SZ | 138.0 | EP | | | 18:28 | 23.62 | | | 0.21 |

**August 11 2005 Time: 04:02 12.7 UTC Magnitude: 1.8 ML**
**Lat: 52.882N Lon: 2.129W Depth: 5.0 km**
**Grid Ref: 677.76 kmE 339.64 kmN RMS: 0.30 secs**
**Locality: SOUTHERN NORTH SEA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| AWI | SZ | 46.2 | EP | | | 04:02 | 20.36 | | | -0.50 |
| ABA | SZ | 66.2 | EP | | | 04:02 | 23.65 | | | -0.31 |
| AEU | SZ | 67.0 | EP | | | 04:02 | 24.55 | | | 0.47 |
| AEU | SN | 67.0 | ES | 2 | | 04:02 | 32.82 | | | 0.42 |
| AEU | SN | 67.0 | AML | | | 04:02 | 33.60 | 61 | 0.37 | |
| AEU | SE | 67.0 | AML | | | 04:02 | 36.05 | 43 | 0.12 | |
| APA | SZ | 78.2 | EP | | | 04:02 | 25.68 | | | -0.14 |
| AWH | SZ | 84.3 | EP | | | 04:02 | 26.70 | | | -0.07 |
| AWH | SZ | 84.3 | ES | 3 | | 04:02 | 37.26 | | | 0.20 |
| LMK | SZ | 176.0 | EP | | | 04:02 | 40.75 | | | 0.42 |
| KBI | SZ | 249.0 | EP | | | 04:02 | 49.69 | | | 0.29 |
| LHO | SZ | 276.0 | EP | | | 04:02 | 52.61 | | | -0.28 |

**August 12 2005 Time: 08:05 10.2 UTC Magnitude: 3.0 ML**
**Lat: 53.543N Lon: 2.384W Depth: 5.0 km**
**Grid Ref: 690.40 kmE 414.12 kmN RMS: 0.30 secs**
**Locality: SOUTHERN NORTH SEA**
**Velocity model: North Sea**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| AWI | SZ | 101.0 | IP | | C | 08:05 | 26.62 | | | 0.12 |
| ABA | SZ | 110.0 | IP | | C | 08:05 | 27.87 | | | -0.13 |
| ABA | SZ | 110.0 | ES | 3 | | 08:05 | 41.20 | | | 0.21 |
| AEU | SZ | 128.0 | EP | | | 08:05 | 30.81 | | | -0.06 |
| AEU | SN | 128.0 | ES | 2 | | 08:05 | 46.25 | | | 0.29 |
| AEU | SE | 128.0 | AML | | | 08:05 | 47.75 | 319 | 0.39 | |
| AEU | SN | 128.0 | AML | | | 08:05 | 48.22 | 295 | 0.32 | |
| AWH | SZ | 140.0 | IP | | D | 08:05 | 32.32 | | | -0.27 |
| APA | SZ | 151.0 | EP | | | 08:05 | 34.25 | | | 0.27 |
| APA | SZ | 151.0 | ES | 3 | | 08:05 | 51.70 | | | 0.35 |
| LMK | SZ | 180.0 | EP | | | 08:05 | 38.31 | | | 0.71 |
| LWH | SZ | 219.0 | EP | | | 08:05 | 42.74 | | | 0.28 |
| KBI | SZ | 262.0 | EP | | | 08:05 | 47.88 | | | 0.07 |
| LHO | SZ | 281.0 | EP | | | 08:05 | 49.94 | | | -0.22 |
| KWE | SZ | 288.0 | EP | | | 08:05 | 50.83 | | | -0.17 |
| MCH | HZ | 402.0 | EP | | | 08:06 | 04.62 | | | -0.53 |
| MCH | HE | 402.0 | AML | | | 08:07 | 05.64 | 24 | 0.51 | |
| MCH | HN | 402.0 | AML | | | 08:07 | 09.48 | 29 | 0.58 | |
| EAU | SZ | 455.0 | EP | | | 08:06 | 11.56 | | | -0.19 |

**August 13 2005 Time: 01:49 10.6 UTC Magnitude: 1.2 ML**
**Lat: 55.660N Lon: -6.065W Depth: 5.0 km**
**Grid Ref: 144.36 kmE 648.21 kmN RMS: 0.10 secs**
**Locality: ISLAY,INNER HEBRIDES**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| GMK | SZ | 45.9 | IP | | C | 01:49 | 18.59 | | | -0.17 |
| GCL | SZ | 64.9 | EP | | | 01:49 | 21.74 | | | 0.02 |
| GAL | SZ | 123.0 | EP | | | 01:49 | 30.90 | | | 0.15 |
| GAL | SE | 123.0 | ES | 3 | | 01:49 | 45.57 | | | 0.11 |
| GAL | SE | 123.0 | AML | | | 01:49 | 47.91 | 6 | 0.22 | |
| GMM | SZ | 158.0 | EP | 3 | | 01:49 | 35.76 | | | -0.08 |

**August 24 2005 Time: 14:32 15.5 UTC Magnitude: 3.0 ML**
**Lat: 49.890N Lon: -4.226W Depth: 12.2 km**
**Grid Ref: 240.13 kmE 1.31 kmN RMS: 0.40 secs**
**Locality: ENGLISH CHANNEL**
**Velocity model: Lownet**
**Comment: FELT SOUTH DEVON Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| DCO | SZ | 54.1 | IP | | D | 14:32 | 24.95 | | | 0.16 |
| DYA | EZ | 64.2 | IP | | D | 14:32 | 26.65 | | | 0.27 |
| DYA | EE | 64.2 | ES | 1 | | 14:32 | 33.83 | | | -0.50 |
| CMA | SZ | 68.1 | EP | | | 14:32 | 26.92 | | | -0.01 |
| CGH | SZ | 69.7 | EP | | | 14:32 | 27.18 | | | -0.01 |
| CSA | SZ | 70.1 | IP | | D | 14:32 | 27.24 | | | -0.02 |
| CR2 | SZ | 74.2 | IP | | C | 14:32 | 27.79 | | | -0.11 |
| CR2 | SE | 74.2 | ES | 2 | | 14:32 | 36.38 | | | -0.57 |
| CGW | SZ | 75.2 | EP | | | 14:32 | 28.02 | | | -0.01 |
| CCA | SZ | 79.0 | EP | | | 14:32 | 28.58 | | | -0.07 |
| CPZ | SZ | 102.0 | EP | | | 14:32 | 32.58 | | | 0.46 |
| HTL | HZ | 124.0 | EP | | | 14:32 | 35.48 | | | 0.16 |

# TABLE 2 : PHASE DATA

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HTL | HN | 124.0 | ES | 2 | 14:32 | 49.60 | | | -0.19 |
| HTL | HN | 124.0 | AML | | 14:32 | 51.65 | 165 | 0.26 | |
| HTL | HE | 124.0 | AML | | 14:32 | 52.23 | 184 | 0.15 | |
| HEX | SZ | 134.0 | EP | | 14:32 | 36.55 | | | -0.24 |
| JVM | SZ | 164.0 | EP | | 14:32 | 40.65 | | | -0.27 |
| JSA | SZ | 168.0 | EP | | 14:32 | 41.06 | | | -0.33 |
| JLP | SZ | 169.0 | EP | | 14:32 | 41.26 | | | -0.31 |
| JRS | SZ | 173.0 | EP | | 14:32 | 42.25 | | | 0.25 |
| SWK | SZ | 198.0 | IP | C | 14:32 | 45.25 | | | 0.03 |
| HGH | SZ | 219.0 | EP | | 14:32 | 47.53 | | | -0.25 |
| SIW | SZ | 221.0 | EP | | 14:32 | 48.31 | | | 0.26 |
| SWN | SZ | 249.0 | EP | | 14:32 | 51.84 | | | 0.30 |
| SWN | SE | 249.0 | AML | | 14:33 | 28.03 | 256 | 0.49 | |
| SWN | SN | 249.0 | AML | | 14:33 | 28.18 | 304 | 0.41 | |
| MCH | HZ | 250.0 | EP | | 14:32 | 51.11 | | | -0.55 |
| MCH | HN | 250.0 | ES | 2 | 14:33 | 17.29 | | | -0.77 |
| MCH | HN | 250.0 | AML | | 14:33 | 26.35 | 74 | 0.30 | |
| MCH | HE | 250.0 | AML | | 14:33 | 26.41 | 54 | 0.24 | |
| HTR | SZ | 253.0 | EP | | 14:32 | 51.92 | | | -0.11 |
| HAE | SZ | 266.0 | EP | | 14:32 | 53.60 | | | -0.15 |
| SSW | SZ | 285.0 | EP | | 14:32 | 57.26 | | | 1.18 |
| SSP | SZ | 292.0 | EP | | 14:32 | 56.99 | | | 0.03 |
| SSP | SE | 292.0 | AML | | 14:33 | 38.41 | 69 | 0.45 | |
| SSP | SN | 292.0 | AML | | 14:33 | 40.21 | 69 | 0.33 | |

**August 26 2005 Time: 00:04 47.2 UTC Magnitude: 0.9 ML**
**Lat: 49.267N Lon: -2.390W Depth: 10.6 km**
**Grid Ref: 371.63 kmE -70.25 kmN RMS: 0.00 secs**
**Locality: OFFSHORE JERSEY**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| JVM | SZ | 14.4 | IP | | D | 00:04 | 50.51 | | | 0.02 |
| JVM | SZ | 14.4 | ES | 3 | | 00:04 | 52.85 | | | -0.01 |
| JSA | SZ | 18.1 | IP | | D | 00:04 | 50.99 | | | -0.02 |
| JSA | SZ | 18.1 | ES | 3 | | 00:04 | 53.70 | | | -0.06 |
| JLP | SZ | 20.9 | IP | | D | 00:04 | 51.42 | | | -0.01 |
| JRS | SZ | 23.2 | IP | | D | 00:04 | 51.78 | | | 0.02 |
| JRS | SE | 23.2 | ES | | | 00:04 | 55.06 | | | 0.00 |
| JRS | SE | 23.2 | AML | | | 00:04 | 55.26 | 26 | 0.12 | |

**August 27 2005 Time: 22:03 01.0 UTC Magnitude: 2.7 ML**
**Lat: 53.480N Lon: 2.342W Depth: 8.6 km**
**Grid Ref: 688.04 kmE 406.95 kmN RMS: 0.40 secs**
**Locality: SOUTHERN NORTH SEA**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| AWI | SZ | 93.7 | EP | | | 22:03 | 16.22 | | | -0.18 |
| ABA | SZ | 104.0 | EP | | | 22:03 | 18.15 | | | 0.21 |
| AEU | SZ | 121.0 | EP | | | 22:03 | 20.62 | | | 0.01 |
| AEU | SN | 121.0 | ES | | | 22:03 | 35.26 | | | 0.36 |
| AEU | SN | 121.0 | AML | | | 22:03 | 37.86 | 221 | 0.25 | |
| AEU | SE | 121.0 | AML | | | 22:03 | 41.24 | 194 | 0.21 | |
| AWH | SZ | 133.0 | EP | | | 22:03 | 22.36 | | | 0.06 |
| APA | SZ | 144.0 | EP | | | 22:03 | 23.81 | | | -0.01 |
| LMK | SZ | 177.0 | EP | | | 22:03 | 28.48 | | | 0.06 |
| LWH | SZ | 220.0 | EP | | | 22:03 | 34.83 | | | 1.07 |
| KBI | SZ | 259.0 | EP | | | 22:03 | 38.04 | | | -0.61 |
| LHO | SZ | 278.0 | EP | | | 22:03 | 40.56 | | | -0.59 |
| KWE | SZ | 284.0 | EP | | | 22:03 | 41.59 | | | -0.21 |
| MCH | HZ | 397.0 | EP | | | 22:03 | 55.67 | | | -0.18 |
| MCH | HN | 397.0 | AML | | | 22:04 | 53.40 | 15 | 0.46 | |
| MCH | HE | 397.0 | AML | | | 22:04 | 58.64 | 14 | 0.48 | |

**August 28 2005 Time: 01:35 20.4 UTC Magnitude: 0.3 ML**
**Lat: 49.360N Lon: -2.379W Depth: 11.9 km**
**Grid Ref: 372.48 kmE -59.91 kmN RMS: 0.00 secs**
**Locality: OFFSHORE JERSEY**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| JVM | SZ | 20.2 | IP | | D | 01:35 | 24.51 | | | 0.00 |
| JVM | SZ | 20.2 | ES | 3 | | 01:35 | 27.46 | | | -0.08 |
| JLP | SZ | 23.5 | IP | | D | 01:35 | 25.01 | | | 0.01 |
| JLP | SZ | 23.5 | ES | 3 | | 01:35 | 28.32 | | | -0.06 |
| JSA | SZ | 24.3 | EP | | | 01:35 | 25.13 | | | 0.03 |
| JSA | SZ | 24.3 | ES | 3 | | 01:35 | 28.47 | | | -0.09 |
| JRS | SZ | 28.0 | EP | | | 01:35 | 25.61 | | | -0.04 |
| JRS | SE | 28.0 | ES | 2 | | 01:35 | 29.56 | | | 0.06 |
| JRS | SE | 28.0 | AML | | | 01:35 | 29.80 | 5 | 0.18 | |

**August 28 2005 Time: 18:01 35.8 UTC Magnitude: 1.8 ML**
**Lat: 52.833N Lon: -2.461W Depth: 6.4 km**
**Grid Ref: 368.95 kmE 326.30 kmN RMS: 0.20 secs**
**Locality: MARKET DRAYTON,SALOP**
**Velocity model: Lownet**
**Comment: 8KM S OF MARKET DRAYTON**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 45.1 | EP | | | 18:01 | 43.52 | | | -0.27 |
| KWE | SZ | 46.4 | IP | | C | 18:01 | 43.82 | | | -0.15 |
| SBD | SZ | 54.3 | IP | | C | 18:01 | 44.98 | | | -0.25 |
| SSP | SZ | 63.9 | IP | | C | 18:01 | 46.70 | | | 0.00 |
| SSP | SN | 63.9 | ES | 2 | | 18:01 | 54.22 | | | -0.44 |
| SSP | SE | 63.9 | AML | | | 18:01 | 55.53 | 47 | 0.19 | |
| SSP | SN | 63.9 | AML | | | 18:01 | 55.72 | 65 | 0.12 | |
| KBI | SZ | 78.2 | EP | | | 18:01 | 48.88 | | | -0.01 |
| HAE | SZ | 88.8 | IP | | D | 18:01 | 50.57 | | | 0.04 |
| LHO | SZ | 89.0 | EP | | | 18:01 | 50.59 | | | -0.02 |
| MCH | SZ | 99.9 | EP | | | 18:01 | 52.20 | | | -0.05 |
| MCH | SN | 99.9 | ES | 2 | | 18:02 | 03.98 | | | -0.28 |
| MCH | SN | 99.9 | AML | | | 18:02 | 05.05 | 36 | 0.07 | |
| MCH | SE | 99.9 | AML | | | 18:02 | 07.94 | 42 | 0.15 | |
| HTR | SZ | 100.0 | EP | | | 18:01 | 52.43 | | | 0.10 |
| WPM | SZ | 108.0 | EP | | | 18:01 | 53.85 | | | 0.36 |
| HGH | SZ | 135.0 | EP | | | 18:01 | 58.03 | | | 0.45 |
| HPK | SN | 137.0 | ES | 2 | | 18:02 | 13.92 | | | -0.05 |

**August 28 2005 Time: 19:38 46.0 UTC Magnitude: 1.6 ML**
**Lat: 52.184N Lon: -3.068W Depth: 11.9 km**
**Grid Ref: 326.99 kmE 254.55 kmN RMS: 0.40 secs**
**Locality: KINGTON,HEREFORDSHIRE**
**Velocity model: Mid Wales**
**Comment: 5KM SW OF KINGTON**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HTR | SZ | 18.0 | IP | | C | 19:38 | 49.73 | | | -0.01 |
| MCH | SZ | 21.3 | IP | | D | 19:38 | 50.28 | | | 0.08 |
| MCH | SN | 21.3 | AML | | | 19:38 | 53.54 | 286 | 0.08 | |
| MCH | SE | 21.3 | AML | | | 19:38 | 53.55 | 278 | 0.08 | |
| SSP | SZ | 26.2 | IP | | D | 19:38 | 51.17 | | | 0.21 |
| SSP | SN | 26.2 | ES | 1 | | 19:38 | 54.83 | | | 0.30 |
| SSP | SN | 26.2 | AML | | | 19:38 | 55.14 | 74 | 0.09 | |
| SSP | SE | 26.2 | AML | | | 19:38 | 55.31 | 93 | 0.11 | |
| HLM | SZ | 39.3 | EP | | | 19:38 | 52.92 | | | -0.11 |
| HAE | SZ | 39.5 | IP | | C | 19:38 | 53.08 | | | 0.04 |
| HGH | SZ | 63.4 | IP | | D | 19:38 | 56.69 | | | -0.22 |
| SBD | SZ | 81.3 | EP | | | 19:38 | 59.56 | | | -0.19 |
| HSA | SZ | 88.8 | EP | | | 19:39 | 00.33 | | | -0.53 |
| HEX | SZ | 134.0 | IP | | D | 19:39 | 08.02 | | | 0.32 |
| HTL | HZ | 165.0 | EP | | | 19:39 | 11.83 | | | -0.11 |
| HTL | HE | 165.0 | ES | 2 | | 19:39 | 32.06 | | | 1.45 |
| HTL | HE | 165.0 | AML | | | 19:39 | 32.60 | 4 | 0.20 | |
| HTL | HN | 165.0 | AML | | | 19:39 | 33.32 | 8 | 0.21 | |

**September 1 2005 Time: 00:13 21.0 UTC Magnitude: 1.1 ML**
**Lat: 57.267N Lon: -5.698W Depth: 2.9 km**
**Grid Ref: 177.05 kmE 825.63 kmN RMS: 0.50 secs**
**Locality: LOCH ALSH,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 8.5 | IP | | D | 00:13 | 22.82 | | | -0.10 |
| KPL | SN | 8.5 | ES | 1 | | 00:13 | 23.96 | | | -0.36 |
| KPL | SE | 8.5 | AML | | | 00:13 | 24.34 | 73 | 0.14 | |
| KPL | SN | 8.5 | AML | | | 00:13 | 24.45 | 74 | 0.17 | |
| KSB | SZ | 17.9 | IP | | C | 00:13 | 24.34 | | | -0.24 |
| KAC | SZ | 35.3 | EP | | | 00:13 | 27.30 | | | -0.19 |
| KAR | SZ | 39.5 | EP | | | 00:13 | 27.87 | | | -0.34 |
| KSK | SZ | 64.2 | IP | | C | 00:13 | 32.40 | | | 0.22 |
| RRR | SZ | 66.1 | IP | | D | 00:13 | 32.21 | | | -0.23 |
| RRR | SE | 66.1 | ES | 2 | | 00:13 | 39.98 | | | -0.80 |
| RRR | SN | 66.1 | AML | | | 00:13 | 44.39 | 22 | 0.34 | |
| RRR | SE | 66.1 | AML | | | 00:13 | 45.25 | 15 | 0.11 | |
| REB | SZ | 98.2 | EP | | | 00:13 | 38.43 | | | 1.02 |
| RSC | SZ | 125.0 | EP | | | 00:13 | 42.03 | | | 0.54 |
| RTO | SZ | 127.0 | EP | | | 00:13 | 41.67 | | | -0.27 |

**September 1 2005 Time: 01:42 01.2 UTC Magnitude: 0.6 ML**
**Lat: 57.264N Lon: -5.689W Depth: 0.3 km**
**Grid Ref: 177.58 kmE 825.26 kmN RMS: 0.50 secs**
**Locality: LOCH ALSH,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 8.7 | IP | | D | 01:42 | 03.37 | | | 0.04 |
| KPL | SN | 8.7 | ES | 1 | | 01:42 | 04.51 | | | -0.40 |
| KPL | SE | 8.7 | AML | | | 01:42 | 04.87 | 30 | 0.11 | |
| KPL | SN | 8.7 | AML | | | 01:42 | 05.00 | 30 | 0.16 | |
| KSB | SZ | 17.2 | IP | | C | 01:42 | 04.88 | | | -0.16 |
| KAC | SZ | 35.1 | EP | | | 01:42 | 07.99 | | | -0.04 |
| KAR | SZ | 39.4 | EP | | | 01:42 | 08.52 | | | -0.22 |
| KSK | SZ | 64.9 | EP | | | 01:42 | 13.00 | | | 0.10 |
| RRR | SZ | 66.5 | EP | | | 01:42 | 12.77 | | | -0.34 |
| RRR | SE | 66.5 | ES | 2 | | 01:42 | 20.56 | | | -1.26 |
| RRR | SN | 66.5 | AML | | | 01:42 | 24.77 | 5 | 0.17 | |
| RRR | SE | 66.5 | AML | | | 01:42 | 24.81 | 6 | 0.26 | |
| REB | SZ | 98.3 | EP | | | 01:42 | 19.21 | | | 1.16 |

**September 3 2005 Time: 00:36 58.9 UTC Magnitude: 0.1 ML**
**Lat: 57.012N Lon: -5.742W Depth: 2.5 km**
**Grid Ref: 172.84 kmE 797.41 kmN RMS: 0.00 secs**
**Locality: MALLAIG,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 11.6 | IP | | D | 00:37 | 01.16 | | | 0.00 |
| KSB | SZ | 29.4 | EP | | | 00:37 | 04.20 | | | -0.02 |
| KPL | SZ | 36.8 | IP | | D | 00:37 | 05.38 | | | -0.02 |
| KPL | SE | 36.8 | ES | 2 | | 00:37 | 10.17 | | | 0.03 |
| KPL | SE | 36.8 | AML | | | 00:37 | 10.90 | 4 | 0.55 | |
| KPL | SN | 36.8 | AML | | | 00:37 | 12.51 | 2 | 0.41 | |
| KAC | SZ | 60.5 | IP | | D | 00:37 | 09.31 | | | 0.03 |

**September 3 2005 Time: 01:39 44.5 UTC Magnitude: 0.4 ML**
**Lat: 57.010N Lon: -5.728W Depth: 2.5 km**
**Grid Ref: 173.68 kmE 797.14 kmN RMS: 0.00 secs**
**Locality: MALLAIG,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 11.8 | IP | | D | 01:39 | 46.73 | | | 0.00 |
| KSB | SZ | 29.0 | IP | | D | 01:39 | 49.67 | | | -0.02 |
| KPL | SZ | 37.0 | IP | | D | 01:39 | 50.96 | | | -0.01 |
| KPL | SE | 37.0 | ES | 2 | | 01:39 | 55.70 | | | -0.02 |
| KPL | SE | 37.0 | AML | | | 01:39 | 56.14 | 5 | 0.21 | |
| KPL | SN | 37.0 | AML | | | 01:39 | 56.22 | 4 | 0.21 | |
| KAC | SZ | 60.3 | EP | | | 01:39 | 54.83 | | | 0.04 |

**September 3 2005 Time: 04:14 33.2 UTC Magnitude: 0.2 ML**
**Lat: 57.267N Lon: -5.672W Depth: 2.6 km**
**Grid Ref: 178.62 kmE 825.54 kmN RMS: 0.10 secs**
**Locality: LOCH ALSH,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 8.1 | IP | | D | 04:14 | 34.78 | | | -0.04 |
| KPL | SN | 8.1 | ES | | | 04:14 | 36.00 | | | 0.01 |
| KPL | SN | 8.1 | AML | | | 04:14 | 36.26 | 23 | 0.12 | |
| KPL | SE | 8.1 | AML | | | 04:14 | 36.61 | 13 | 0.11 | |
| KSB | SZ | 16.4 | IP | | C | 04:14 | 36.29 | | | -0.03 |
| KSB | SZ | 16.4 | ES | 3 | | 04:14 | 38.26 | | | -0.32 |
| KAC | SZ | 34.2 | EP | | | 04:14 | 39.37 | | | 0.08 |

# TABLE 2 : PHASE DATA

**September 7 2005 Time: 17:32 36.0 UTC Magnitude: 3.2 ML**
**Lat: 55.200N Lon: 4.423W Depth: 0.4 km**
**Grid Ref: 808.48 kmE 608.36 kmN RMS: 0.40 secs**
**Locality: CENTRAL NORTH SEA**
**Velocity model: North Sea**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ABA | SZ | 335.0 | EP | | | 17:33 | 23.89 | | | 0.80 |
| LWH | SZ | 342.0 | EP | | | 17:33 | 24.79 | | | 0.85 |
| AWH | SZ | 366.0 | EP | | | 17:33 | 26.64 | | | -0.28 |
| HPK | SN | 415.0 | ES | 2 | | 17:34 | 14.65 | | | 0.04 |
| LHO | SZ | 447.0 | EP | | | 17:33 | 36.84 | | | -0.25 |
| EBL | SZ | 476.0 | EP | | | 17:33 | 40.61 | | | -0.05 |
| KWE | SZ | 476.0 | EP | | | 17:33 | 40.26 | | | -0.38 |
| ECK | SZ | 481.0 | EP | | | 17:33 | 40.69 | | | -0.53 |
| EAU | SZ | 502.0 | EP | | | 17:33 | 44.60 | | | 0.74 |
| MME | SZ | 515.0 | EP | | | 17:33 | 45.56 | | | 0.13 |
| SBD | SZ | 564.0 | EP | | | 17:33 | 51.21 | | | -0.34 |
| HAE | SZ | 580.0 | EP | | | 17:33 | 53.54 | | | 0.05 |
| SSP | SZ | 585.0 | EP | | | 17:33 | 54.16 | | | 0.04 |
| SSP | SN | 585.0 | ES | | | 17:34 | 51.25 | | | 0.08 |
| MLA | SZ | 588.0 | EP | | | 17:33 | 54.21 | | | -0.32 |
| MCH | SZ | 606.0 | EP | | | 17:33 | 56.46 | | | -0.36 |
| MCH | HZ | 606.0 | EP | | | 17:33 | 56.55 | | | |
| MCH | HE | 606.0 | ES | 2 | | 17:34 | 55.48 | | | -0.36 |
| MCH | HN | 606.0 | AML | | | 17:34 | 58.71 | 15 | 0.16 | |
| MCH | HE | 606.0 | AML | | | 17:34 | 58.86 | 8 | 0.05 | |
| HTR | SZ | 615.0 | EP | | | 17:33 | 57.85 | | | -0.10 |

**September 9 2005 Time: 10:27 19.6 UTC Magnitude: 1.2 ML**
**Lat: 49.365N Lon: -2.375W Depth: 7.7 km**
**Grid Ref: 372.78 kmE -59.36 kmN RMS: 0.00 secs**
**Locality: OFFSHORE JERSEY**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| JVM | SZ | 20.5 | IP | | D | 10:27 | 23.66 | | | 0.00 |
| JLP | SZ | 23.6 | IP | | D | 10:27 | 24.15 | | | 0.00 |
| JLP | SZ | 23.6 | ES | 3 | | 10:27 | 27.45 | | | 0.00 |
| JSA | SZ | 24.6 | IP | | D | 10:27 | 24.30 | | | 0.00 |
| JRS | SZ | 28.1 | IP | | D | 10:27 | 24.85 | | | 0.00 |
| JRS | SE | 28.1 | ES | 3 | | 10:27 | 28.63 | | | -0.02 |
| JRS | SE | 28.1 | AML | | | 10:27 | 28.86 | 41 | 0.18 | |

**September 9 2005 Time: 15:24 07.6 UTC Magnitude: 0.8 ML**
**Lat: 52.009N Lon: -2.801W Depth: 13.8 km**
**Grid Ref: 345.03 kmE 234.86 kmN RMS: 0.00 secs**
**Locality: HEREFORD,HEREFORDSHIRE**
**Velocity model: Mid Wales**
**Comment: 5KM SW OF HEREFORD**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| MCH | SZ | 13.6 | IP | | C | 15:24 | 10.97 | | | 0.04 |
| MCH | SN | 13.6 | ES | | | 15:24 | 13.32 | | | -0.01 |
| MCH | SN | 13.6 | AML | | | 15:24 | 13.43 | 209 | 0.09 | |
| MCH | SE | 13.6 | AML | | | 15:24 | 13.44 | 86 | 0.08 | |
| HAE | SZ | 18.0 | IP | | C | 15:24 | 11.48 | | | -0.01 |
| HTR | SZ | 32.9 | EP | | | 15:24 | 13.66 | | | -0.03 |
| HGH | SZ | 41.2 | EP | | | 15:24 | 14.98 | | | -0.01 |
| SSP | SZ | 50.2 | EP | | | 15:24 | 16.49 | | | 0.05 |
| SSP | SN | 50.2 | ES | 2 | | 15:24 | 22.71 | | | -0.10 |
| SSP | SN | 50.2 | AML | | | 15:24 | 23.03 | 2 | 0.10 | |
| SSP | SE | 50.2 | AML | | | 15:24 | 23.50 | 1 | 0.19 | |

**September 12 2005 Time: 00:57 08.5 UTC Magnitude: 0.6 ML**
**Lat: 57.262N Lon: -5.699W Depth: 2.6 km**
**Grid Ref: 176.96 kmE 825.07 kmN RMS: 0.10 secs**
**Locality: LOCH ALSH,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 9.1 | IP | | C | 00:57 | 10.27 | | | 0.03 |
| KPL | SE | 9.1 | ES | | | 00:57 | 11.43 | | | -0.10 |
| KPL | SN | 9.1 | AML | | | 00:57 | 11.70 | 33 | 0.19 | |
| KPL | SE | 9.1 | AML | | | 00:57 | 11.72 | 41 | 0.22 | |
| KSB | SZ | 17.7 | IP | | C | 00:57 | 11.79 | | | 0.00 |
| KSB | SZ | 17.7 | ES | 3 | | 00:57 | 13.86 | | | -0.35 |
| KAC | SZ | 35.7 | EP | | | 00:57 | 14.91 | | | 0.12 |
| KAR | SZ | 39.0 | EP | | | 00:57 | 15.32 | | | -0.03 |

**September 12 2005 Time: 13:36 39.6 UTC Magnitude: -0.1 ML**
**Lat: 57.267N Lon: -5.678W Depth: 2.7 km**
**Grid Ref: 178.26 kmE 825.56 kmN RMS: 0.20 secs**
**Locality: LOCH ALSH,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 8.2 | IP | | D | 13:36 | 41.39 | | | -0.03 |
| KPL | SN | 8.2 | ES | 2 | | 13:36 | 42.41 | | | -0.37 |
| KPL | SE | 8.2 | AML | | | 13:36 | 42.88 | 7 | 0.10 | |
| KPL | SN | 8.2 | AML | | | 13:36 | 43.01 | 8 | 0.17 | |
| KSB | SZ | 16.7 | IP | | C | 13:36 | 42.90 | | | -0.03 |
| KSB | SZ | 16.7 | ES | 3 | | 13:36 | 44.98 | | | -0.41 |
| KAC | SZ | 34.5 | EP | | | 13:36 | 46.08 | | | 0.18 |

**September 17 2005 Time: 02:37 49.2 UTC Magnitude: 2.2 ML**
**Lat: 56.574N Lon: -6.307W Depth: 5.0 km**
**Grid Ref: 135.50 kmE 750.74 kmN RMS: 0.20 secs**
**Locality: ISLE OF MULL,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 48.2 | EP | | | 02:37 | 57.67 | | | -0.10 |
| KSB | SZ | 89.0 | IP | | C | 02:38 | 04.01 | | | -0.12 |
| KPL | SZ | 94.0 | EP | | | 02:38 | 04.47 | | | -0.36 |
| KPL | SE | 94.0 | ES | 2 | | 02:38 | 16.67 | | | 0.45 |
| KPL | SE | 94.0 | AML | | | 02:38 | 22.31 | 75 | 0.32 | |
| KPL | SN | 94.0 | AML | | | 02:38 | 23.25 | 43 | 0.32 | |
| KSK | SZ | 102.0 | EP | | | 02:38 | 06.14 | | | 0.00 |
| KAC | SZ | 120.0 | IP | | C | 02:38 | 08.95 | | | 0.09 |
| PMS | SZ | 126.0 | EP | | | 02:38 | 09.78 | | | -0.13 |
| EAB | SZ | 129.0 | EP | | | 02:38 | 10.20 | | | -0.10 |
| RRR | SZ | 146.0 | EP | | | 02:38 | 12.80 | | | 0.10 |
| RRR | SN | 146.0 | ES | 2 | | 02:38 | 30.18 | | | 0.36 |
| RRR | SE | 146.0 | AML | | | 02:38 | 31.11 | 49 | 0.23 | |
| RRR | SN | 146.0 | AML | | | 02:38 | 33.59 | 42 | 0.21 | |
| PCO | SZ | 151.0 | EP | | | 02:38 | 13.27 | | | -0.23 |
| EAU | SZ | 195.0 | EP | | | 02:38 | 19.39 | | | 0.08 |
| EDI | HZ | 206.0 | EP | | | 02:38 | 21.26 | | | 0.58 |
| EDI | HE | 206.0 | ES | 2 | | 02:38 | 43.60 | | | -0.03 |
| EDI | HN | 206.0 | AML | | | 02:38 | 49.33 | 27 | 0.28 | |
| EDI | HE | 206.0 | AML | | | 02:38 | 50.51 | 15 | 0.30 | |

**September 17 2005 Time: 02:39 51.8 UTC Magnitude: 1.6 ML**
**Lat: 56.580N Lon: -6.281W Depth: 5.0 km**
**Grid Ref: 137.14 kmE 751.31 kmN RMS: 0.30 secs**
**Locality: ISLE OF MULL,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 46.8 | EP | | | 02:39 | 59.94 | | | -0.14 |
| KSB | SZ | 87.5 | IP | | C | 02:40 | 06.30 | | | -0.14 |
| KPL | SZ | 92.8 | IP | | C | 02:40 | 06.76 | | | -0.42 |
| KPL | SN | 92.8 | ES | 2 | | 02:40 | 19.13 | | | 0.71 |
| KPL | SN | 92.8 | AML | | | 02:40 | 22.66 | 11 | 0.19 | |
| KPL | SE | 92.8 | AML | | | 02:40 | 24.57 | 16 | 0.30 | |
| KSK | SZ | 102.0 | EP | | | 02:40 | 08.66 | | | 0.02 |
| KAC | SZ | 118.0 | EP | | | 02:40 | 11.19 | | | 0.00 |
| EAB | SZ | 128.0 | EP | | | 02:40 | 12.48 | | | -0.16 |
| RRR | SE | 145.0 | ES | 2 | | 02:40 | 32.86 | | | 0.74 |
| RRR | SN | 145.0 | AML | | | 02:40 | 33.39 | 12 | 0.34 | |
| RRR | SE | 145.0 | AML | | | 02:40 | 33.56 | 17 | 0.34 | |
| PCO | SZ | 150.0 | EP | | | 02:40 | 15.86 | | | -0.01 |
| EDI | HZ | 205.0 | EP | | | 02:40 | 23.52 | | | 0.47 |

**September 25 2005 Time: 09:46 00.4 UTC Magnitude: 1.4 ML**
**Lat: 53.544N Lon: -2.578W Depth: 8.7 km**
**Grid Ref: 361.70 kmE 405.44 kmN RMS: 0.30 secs**
**Locality: WIGAN,GTR MANCHESTER**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| LHO | SZ | 47.9 | IP | | C | 09:46 | 08.51 | | | -0.24 |
| KWE | SZ | 76.6 | EP | | | 09:46 | 13.30 | | | 0.14 |
| HPK | SN | 78.0 | ES | 2 | | 09:46 | 22.14 | | | -0.70 |
| SBD | SZ | 84.3 | EP | | | 09:46 | 14.49 | | | 0.09 |
| WPM | SZ | 93.8 | EP | | | 09:46 | 16.07 | | | 0.23 |
| LRN | SZ | 110.0 | EP | | | 09:46 | 18.61 | | | 0.32 |
| YLL | SZ | 115.0 | EP | | | 09:46 | 19.08 | | | -0.03 |
| HLM | SZ | 116.0 | EP | | | 09:46 | 19.17 | | | -0.11 |
| CKE | SZ | 121.0 | EP | | | 09:46 | 20.32 | | | 0.29 |
| WLF | SZ | 124.0 | EP | | | 09:46 | 19.96 | | | -0.45 |
| SSP | SZ | 130.0 | EP | | | 09:46 | 21.50 | | | 0.13 |
| SSP | SE | 130.0 | ES | 2 | | 09:46 | 37.22 | | | 0.53 |
| SSP | SN | 130.0 | AML | | | 09:46 | 38.11 | 7 | 0.22 | |
| SSP | SE | 130.0 | AML | | | 09:46 | 39.59 | 10 | 0.17 | |
| YRE | SZ | 138.0 | EP | | | 09:46 | 22.11 | | | -0.34 |

**October 4 2005 Time: 15:37 06.7 UTC Magnitude: 1.5 ML**
**Lat: 51.636N Lon: -2.877W Depth: 16.2 km**
**Grid Ref: 339.31 kmE 193.44 kmN RMS: 0.10 secs**
**Locality: NEWPORT,GWENT**
**Velocity model: Lownet**
**Comment: 8KM NE OF NEWPORT**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 5.0 | IP | | D | 15:37 | 09.78 | | | 0.07 |
| MCH | SZ | 41.0 | IP | | C | 15:37 | 14.14 | | | -0.02 |
| MCH | SE | 41.0 | ES | 1 | | 15:37 | 19.74 | | | 0.15 |
| MCH | SE | 41.0 | AML | | | 15:37 | 20.00 | 152 | 0.13 | |
| MCH | SN | 41.0 | AML | | | 15:37 | 20.03 | 50 | 0.08 | |
| HTR | SZ | 56.1 | EP | | | 15:37 | 16.20 | | | -0.25 |
| SSP | SZ | 88.4 | EP | | | 15:37 | 21.25 | | | 0.00 |
| SSP | SE | 88.4 | ES | 2 | | 15:37 | 31.95 | | | 0.08 |
| SSP | SN | 88.4 | AML | | | 15:37 | 32.97 | 16 | 0.18 | |
| SSP | SE | 88.4 | AML | | | 15:37 | 33.05 | 10 | 0.18 | |
| HSA | SZ | 89.1 | EP | | | 15:37 | 21.49 | | | 0.16 |
| HEX | SZ | 90.4 | EP | | | 15:37 | 21.43 | | | -0.06 |

**October 8 2005 Time: 21:46 03.0 UTC Magnitude: 1.7 ML**
**Lat: 52.443N Lon: -1.994W Depth: 14.5 km**
**Grid Ref: 400.41 kmE 282.82 kmN RMS: 0.40 secs**
**Locality: BIRMINGHAM, W MIDLANDS**
**Velocity model: Mid Wales**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 60.8 | IP | | C | 21:46 | 13.29 | | | -0.22 |
| KWE | SZ | 64.6 | IP | | C | 21:46 | 13.80 | | | -0.27 |
| SSP | SZ | 76.1 | IP | | C | 21:46 | 15.85 | | | 0.05 |
| SSP | SE | 76.1 | ES | 2 | | 21:46 | 25.20 | | | 0.21 |
| SSP | SN | 76.1 | AML | | | 21:46 | 25.37 | 49 | 0.22 | |
| SSP | SE | 76.1 | AML | | | 21:46 | 25.39 | 34 | 0.24 | |
| MCH | SZ | 84.7 | IP | | C | 21:46 | 16.76 | | | -0.31 |
| MCH | SE | 84.7 | ES | 2 | | 21:46 | 26.87 | | | -0.30 |
| MCH | SN | 84.7 | AML | | | 21:46 | 27.50 | 23 | 0.11 | |
| MCH | SE | 84.7 | AML | | | 21:46 | 27.59 | 28 | 0.10 | |
| KBI | SZ | 95.6 | EP | | | 21:46 | 18.83 | | | 0.11 |
| HTR | SZ | 95.9 | IP | | C | 21:46 | 18.44 | | | -0.34 |
| SBD | SZ | 99.8 | EP | | | 21:46 | 20.00 | | | 0.62 |
| SWN | SZ | 104.0 | EP | | | 21:46 | 20.18 | | | 0.16 |
| SWN | SE | 104.0 | ES | 3 | | 21:46 | 32.63 | | | 0.38 |
| SWN | SN | 104.0 | AML | | | 21:46 | 33.04 | 30 | 0.28 | |
| SWN | SE | 104.0 | AML | | | 21:46 | 33.31 | 26 | 0.41 | |
| HGH | SZ | 105.0 | EP | | | 21:46 | 20.00 | | | -0.20 |
| SKP | SZ | 114.0 | EP | | | 21:46 | 21.16 | | | -0.34 |
| SWK | SZ | 145.0 | EP | | | 21:46 | 26.90 | | | 0.74 |

**October 11 2005 Time: 18:02 00.4 UTC Magnitude: 0.6 ML**
**Lat: 52.708N Lon: -4.101W Depth: 8.6 km**
**Grid Ref: 258.07 kmE 314.37 kmN RMS: 0.30 secs**
**Locality: BARMOUTH,GWYNEDD**
**Velocity model: Lleyn**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|

# TABLE 2 : PHASE DATA

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 37.4 | IP | D | 18:02 | 06.93 | | | 0.10 |
| YLL | SZ | 48.3 | EP | | 18:02 | 08.66 | | | 0.06 |
| YLL | SZ | 48.3 | ES | 3 | 18:02 | 14.05 | | | -0.16 |
| SBD | SZ | 60.9 | EP | | 18:02 | 10.89 | | | 0.20 |
| WPM | SZ | 62.6 | EP | | 18:02 | 10.77 | | | -0.19 |
| WLF | SZ | 67.7 | EP | | 18:02 | 11.49 | | | -0.28 |
| YRC | SZ | 68.3 | EP | | 18:02 | 11.71 | | | -0.16 |
| SSP | SZ | 74.4 | EP | | 18:02 | 13.04 | | | 0.13 |
| SSP | SN | 74.4 | ES | 2 | 18:02 | 21.93 | | | 0.48 |
| SSP | SE | 74.4 | AML | | 18:02 | 22.54 | 4 | 0.15 | |
| SSP | SN | 74.4 | AML | | 18:02 | 23.07 | 4 | 0.07 | |
| WCB | SZ | 80.4 | EP | | 18:02 | 14.62 | | | 0.76 |
| WCB | SE | 80.4 | ES | 2 | 18:02 | 22.57 | | | -0.48 |
| HLM | SZ | 85.3 | EP | | 18:02 | 14.41 | | | -0.25 |
| MCH | HZ | 109.0 | EP | | 18:02 | 17.83 | | | -0.46 |
| MCH | HE | 109.0 | ES | 2 | 18:02 | 30.92 | | | 0.43 |
| MCH | HE | 109.0 | AML | | 18:02 | 31.91 | 1 | 0.18 | |
| MCH | HN | 109.0 | AML | | 18:02 | 32.24 | 1 | 0.06 | |

**October 21 2005 Time: 20:18 38.3 UTC Magnitude: 0.5 ML**
**Lat: 53.026N Lon: -4.027W Depth: 16.6 km**
**Grid Ref: 264.07 kmE 349.59 kmN RMS: 0.10 secs**
**Locality: BLAENAU FFESTINIOG**
**Velocity model: Lleyn**
**Comment: BLAENAU FFESTINIOG,GWYNEDD**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| YLL | SZ | 15.9 | IP | | D | 20:18 | 42.04 | | | -0.06 |
| WPM | SZ | 27.1 | EP | | | 20:18 | 43.62 | | | 0.06 |
| YRE | SZ | 27.2 | IP | | D | 20:18 | 43.59 | | | 0.04 |
| WLF | SZ | 38.3 | EP | | | 20:18 | 45.08 | | | -0.06 |
| YRC | SZ | 44.4 | EP | | | 20:18 | 46.11 | | | 0.06 |
| WCB | SZ | 52.3 | EP | | | 20:18 | 47.16 | | | -0.10 |
| WCB | SN | 52.3 | ES | 2 | | 20:18 | 53.60 | | | 0.23 |
| WCB | SE | 52.3 | AML | | | 20:18 | 53.93 | 3 | 0.22 | |
| WCB | SN | 52.3 | AML | | | 20:18 | 55.31 | 4 | 0.44 | |

**October 24 2005 Time: 05:51 33.7 UTC Magnitude: 1.9 ML**
**Lat: 49.708N Lon: -0.934W Depth: 5.0 km**
**Grid Ref: 476.85 kmE -20.75 kmN RMS: 0.30 secs**
**Locality: CHERBOURG PENINSULA**
**Velocity model: Lownet**
**Comment: OFFSHORE LOCATION**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| JLP | SZ | 99.0 | EP | | | 05:51 | 49.77 | | | -0.28 |
| JRS | SZ | 102.0 | EP | | | 05:51 | 50.66 | | | 0.20 |
| JRS | SE | 102.0 | ES | 2 | | 05:52 | 02.96 | | | 0.24 |
| JSA | SZ | 107.0 | EP | | | 05:51 | 51.60 | | | 0.36 |
| JVM | SZ | 107.0 | EP | | | 05:51 | 50.93 | | | -0.38 |
| SWK | SZ | 185.0 | EP | | | 05:52 | 02.24 | | | -0.25 |
| MCH | HZ | 293.0 | EP | | | 05:52 | 16.25 | | | 0.29 |
| MCH | HE | 293.0 | AML | | | 05:52 | 48.70 | 5 | 0.34 | |
| MCH | HN | 293.0 | AML | | | 05:52 | 50.45 | 4 | 0.30 | |

**October 30 2005 Time: 20:55 06.5 UTC Magnitude: 1.6 ML**
**Lat: 56.542N Lon: -5.668W Depth: 0.0 km**
**Grid Ref: 174.53 kmE 744.90 kmN RMS: 0.30 secs**
**Locality: SOUND OF MULL,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 43.1 | EP | | | 20:55 | 14.66 | | | -0.14 |
| KSB | SZ | 75.8 | EP | | | 20:55 | 19.57 | | | -0.49 |
| KPL | SZ | 88.7 | IP | | D | 20:55 | 22.33 | | | 0.35 |
| KPL | SN | 88.7 | ES | 3 | | 20:55 | 33.33 | | | 0.08 |
| KPL | SN | 88.7 | AML | | | 20:55 | 34.83 | 25 | 0.30 | |
| KPL | SE | 88.7 | AML | | | 20:55 | 35.20 | 33 | 0.25 | |
| KAC | SZ | 109.0 | EP | | | 20:55 | 25.41 | | | 0.28 |
| PCO | SZ | 115.0 | EP | 9 | | 20:55 | 29.90 | | | 3.79 |
| PCO | SZ | 115.0 | ES | 9 | | 20:55 | 44.65 | | | 0.46 |
| EDI | EZ | 169.0 | EP | 9 | | 20:55 | 37.94 | | | 3.98 |
| EDI | EE | 169.0 | ES | 9 | | 20:55 | 57.93 | | | |
| EDI | EE | 169.0 | AML | | | 20:55 | 59.72 | 6 | 0.34 | |
| EDI | EN | 169.0 | AML | | | 20:56 | 00.18 | 8 | 0.27 | |

**November 1 2005 Time: 23:51 45.9 UTC Magnitude: 1.7 ML**
**Lat: 56.678N Lon: -5.691W Depth: 5.0 km**
**Grid Ref: 173.93 kmE 760.10 kmN RMS: 0.40 secs**
**Locality: LOCH SUNART,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 28.1 | IP | | C | 23:51 | 50.93 | | | -0.22 |
| KSB | SZ | 61.4 | IP | | C | 23:51 | 55.86 | | | -0.63 |
| KPL | SZ | 73.6 | EP | | | 23:51 | 58.39 | | | 0.08 |
| KPL | SE | 73.6 | ES | | | 23:52 | 07.76 | | | 0.38 |
| KPL | SN | 73.6 | AML | | | 23:52 | 11.31 | 29 | 0.19 | |
| KPL | SE | 73.6 | AML | | | 23:52 | 11.52 | 42 | 0.31 | |
| KAC | SZ | 94.4 | EP | | | 23:52 | 01.69 | | | 0.12 |
| EAB | SZ | 99.7 | EP | | | 23:52 | 01.80 | | | -0.61 |
| PCO | SZ | 125.0 | EP | | | 23:52 | 06.05 | | | -0.25 |
| GMK | SZ | 148.0 | EP | | | 23:52 | 09.79 | | | 0.10 |
| EAU | SZ | 167.0 | EP | | | 23:52 | 12.58 | | | 0.18 |
| EDI | HZ | 176.0 | EP | | | 23:52 | 14.40 | | | 0.85 |
| EDI | HN | 176.0 | AML | | | 23:52 | 36.53 | 10 | 0.28 | |
| EDI | HE | 176.0 | AML | | | 23:52 | 36.91 | 9 | 0.29 | |

**November 2 2005 Time: 21:07 34.7 UTC Magnitude: 1.9 ML**
**Lat: 56.645N Lon: -5.792W Depth: 5.0 km**
**Grid Ref: 167.54 kmE 756.77 kmN RMS: 0.50 secs**
**Locality: LOCH SUNART,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 30.6 | IP | | C | 21:07 | 40.61 | | | 0.17 |
| KSB | SZ | 66.9 | EP | | | 21:07 | 45.63 | | | -0.57 |
| KPL | SZ | 77.8 | EP | | | 21:07 | 47.72 | | | -0.10 |
| KPL | SE | 77.8 | ES | 2 | | 21:07 | 56.23 | | | -1.13 |
| KPL | SN | 77.8 | AML | | | 21:08 | 00.87 | 52 | 0.21 | |
| KPL | SE | 77.8 | AML | | | 21:08 | 01.20 | 62 | 0.24 | |
| KAC | SZ | 99.7 | EP | | | 21:07 | 51.36 | | | 0.11 |
| EAB | SZ | 103.0 | IP | | D | 21:07 | 51.53 | | | -0.26 |
| MDO | SZ | 124.0 | EP | | | 21:07 | 54.53 | | | -0.53 |
| PCO | SZ | 128.0 | EP | | | 21:07 | 55.54 | | | -0.06 |
| RRR | SZ | 135.0 | EP | | | 21:07 | 57.30 | | | 0.68 |
| RRR | SN | 135.0 | ES | 2 | | 21:08 | 12.63 | | | 0.03 |
| RRR | SN | 135.0 | AML | | | 21:08 | 15.52 | 19 | 0.37 | |
| RRR | SE | 135.0 | AML | | | 21:08 | 16.45 | 22 | 0.42 | |
| GMK | SZ | 145.0 | EPg | | | 21:07 | 59.45 | | | -0.38 |
| EDI | HZ | 180.0 | EP | | | 21:08 | 03.40 | | | 0.51 |
| EDI | HN | 180.0 | ES | 2 | | 21:08 | 24.01 | | | 0.57 |
| EDI | HN | 180.0 | AML | | | 21:08 | 26.23 | 14 | 0.28 | |
| EDI | HE | 180.0 | AML | | | 21:08 | 26.60 | 10 | 0.27 | |
| MCD | SZ | 186.0 | EP | | | 21:08 | 04.20 | | | 0.56 |
| MCD | SE | 186.0 | AML | | | 21:08 | 27.52 | 11 | 0.17 | |
| MCD | SN | 186.0 | AML | | | 21:08 | 28.46 | 12 | 0.30 | |

**November 2 2005 Time: 21:39 18.5 UTC Magnitude: 1.4 ML**
**Lat: 56.666N Lon: -5.688W Depth: 5.0 km**
**Grid Ref: 174.04 kmE 758.76 kmN RMS: 0.30 secs**
**Locality: LOCH SUNART,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 29.4 | EP | | | 21:39 | 23.72 | | | -0.29 |
| KSB | SZ | 62.7 | EP | | | 21:39 | 28.84 | | | -0.48 |
| KPL | SZ | 75.0 | EP | | | 21:39 | 31.53 | | | 0.39 |
| KPL | SE | 75.0 | ES | | | 21:39 | 40.65 | | | 0.28 |
| KPL | SN | 75.0 | AML | | | 21:39 | 44.01 | 17 | 0.23 | |
| KPL | SE | 75.0 | AML | | | 21:39 | 44.35 | 18 | 0.25 | |
| KAC | SZ | 95.7 | EP | | | 21:39 | 34.60 | | | 0.21 |
| EAB | SZ | 98.8 | EP | | | 21:39 | 35.05 | | | 0.15 |
| MDO | SZ | 118.0 | EP | | | 21:39 | 37.59 | | | -0.29 |
| PCO | SZ | 124.0 | EP | | | 21:39 | 38.80 | | | 0.02 |

**November 3 2005 Time: 11:38 04.7 UTC Magnitude: 1.3 ML**
**Lat: 56.676N Lon: -5.662W Depth: 5.0 km**
**Grid Ref: 175.69 kmE 759.78 kmN RMS: 0.20 secs**
**Locality: LOCH SUNART,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 28.9 | EP | | | 11:38 | 10.11 | | | -0.02 |
| KSB | SZ | 61.2 | EP | | | 11:38 | 14.90 | | | -0.40 |
| KPL | SZ | 73.8 | EP | | | 11:38 | 17.11 | | | -0.07 |
| KPL | SN | 73.8 | ES | 3 | | 11:38 | 26.54 | | | 0.26 |
| KPL | SN | 73.8 | AML | | | 11:38 | 30.27 | 14 | 0.21 | |
| KPL | SE | 73.8 | AML | | | 11:38 | 30.62 | 16 | 0.24 | |
| KAC | SZ | 94.2 | EP | | | 11:38 | 20.85 | | | 0.47 |
| EAB | SZ | 98.1 | EP | | | 11:38 | 20.90 | | | -0.10 |
| PMS | SZ | 109.0 | EP | | | 11:38 | 22.71 | | | 0.08 |
| MDO | SZ | 116.0 | EP | | | 11:38 | 23.83 | | | 0.03 |

**November 8 2005 Time: 21:06 25.5 UTC Magnitude: 0.7 ML**
**Lat: 55.218N Lon: -3.115W Depth: 3.3 km**
**Grid Ref: 329.07 kmE 592.10 kmN RMS: 0.10 secs**
**Locality: LANGHOLM,D & G**
**Velocity model: Lownet**
**Comment: FELT LANGHOLM Intensity: 2**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ECK | SZ | 4.2 | IP | | | 21:06 | 26.49 | | | -0.24 |
| EKB1 | SZ | 10.9 | EP | | | 21:06 | 27.87 | | | 0.04 |
| EKR10 | SZ | 10.9 | EP | | | 21:06 | 27.79 | | | -0.06 |
| EKR9 | SZ | 11.0 | EP | | | 21:06 | 27.87 | | | 0.00 |
| EKR8 | SZ | 11.1 | EP | | | 21:06 | 27.95 | | | 0.06 |
| EKR7 | SZ | 11.3 | EP | | | 21:06 | 28.00 | | | 0.08 |
| EKR7 | SZ | 11.3 | ES | | | 21:06 | 29.45 | | | -0.26 |
| EKB2 | SZ | 11.6 | ES | | | 21:06 | 29.54 | | | -0.22 |
| EKR6 | SZ | 11.6 | EP | | | 21:06 | 28.00 | | | 0.03 |
| EKB2 | SZ | 11.6 | EP | | | 21:06 | 27.93 | | | -0.02 |
| EKR5 | SZ | 12.0 | EP | | | 21:06 | 28.05 | | | 0.03 |
| EKB3 | SZ | 12.3 | EP | | | 21:06 | 28.14 | | | 0.06 |
| ESK | HZ | 12.4 | EP | | | 21:06 | 28.10 | | | 0.02 |
| ESK | EZ | 12.4 | EP | | | 21:06 | 28.12 | | | |
| ESK | HN | 12.4 | ES | | | 21:06 | 29.98 | | | -0.01 |
| ESK | EN | 12.4 | ES | | | 21:06 | 30.04 | | | |
| ESK | EN | 12.4 | AML | | | 21:06 | 30.23 | 9 | 0.09 | |
| EKR4 | SZ | 12.4 | EP | | | 21:06 | 28.17 | | | 0.08 |
| ESK | EE | 12.4 | AML | | | 21:06 | 30.16 | 16 | 0.10 | |
| EKR3 | SZ | 12.8 | EP | | | 21:06 | 28.23 | | | 0.07 |
| EKB4 | SZ | 13.0 | EP | | | 21:06 | 28.31 | | | 0.13 |
| EKR2 | SZ | 13.3 | EP | | | 21:06 | 28.27 | | | 0.02 |
| EKB5 | SZ | 13.7 | EP | | | 21:06 | 28.42 | | | 0.11 |
| EKR1 | SZ | 13.9 | EP | | | 21:06 | 28.37 | | | 0.02 |
| EKB6 | SZ | 14.5 | EP | | | 21:06 | 28.56 | | | 0.11 |
| EKB7 | SZ | 15.3 | EP | | | 21:06 | 28.64 | | | 0.04 |
| EKB8 | SZ | 16.2 | EP | | | 21:06 | 28.71 | | | -0.04 |
| EKB9 | SZ | 16.9 | EP | | | 21:06 | 28.90 | | | 0.04 |
| EKB10 | SZ | 17.7 | EP | | | 21:06 | 29.05 | | | 0.07 |
| EDI | HN | 78.7 | ES | | | 21:06 | 48.40 | | | -0.16 |
| EDI | HE | 78.7 | AML | | | 21:06 | 49.36 | 4 | 0.24 | |
| EDI | HN | 78.7 | AML | | | 21:06 | 49.59 | 18 | 0.59 | |

**November 9 2005 Time: 04:06 51.9 UTC Magnitude: 0.4 ML**
**Lat: 52.945N Lon: -3.926W Depth: 15.7 km**
**Grid Ref: 270.60 kmE 340.39 kmN RMS: 0.10 secs**
**Locality: FFESTINIOG,GWYNEDD**
**Velocity model: Lleyn**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| YLL | SZ | 27.2 | EP | | | 04:06 | 56.98 | | | -0.09 |
| YRE | SZ | 33.8 | EP | | | 04:06 | 58.07 | | | 0.04 |
| YRE | SZ | 33.8 | ES | 3 | | 04:07 | 02.32 | | | 0.10 |
| WPM | SZ | 34.8 | EP | | | 04:06 | 58.34 | | | 0.13 |
| WPM | SZ | 34.8 | ES | 3 | | 04:07 | 02.91 | | | 0.38 |
| SBD | SZ | 45.1 | EP | | | 04:06 | 59.66 | | | -0.11 |
| WLF | SZ | 49.6 | EP | | | 04:07 | 00.33 | | | -0.07 |
| SSP | SZ | 80.5 | EP | | | 04:07 | 05.26 | | | 0.08 |
| SSP | SE | 80.5 | AML | | | 04:07 | 15.85 | 2 | 0.19 | |
| SSP | SN | 80.5 | AML | | | 04:07 | 18.95 | 2 | 0.22 | |

# TABLE 2 : PHASE DATA

**November 9 2005 Time: 04:53 45.8 UTC Magnitude: 1.3 ML**
**Lat: 56.710N Lon: -5.118W Depth: 6.2 km**
**Grid Ref: 209.17 kmE 761.92 kmN RMS: 0.30 secs**
**Locality: BALLACHULISH,HIGHLAND**
**Velocity model: Lownet**
**Comment: 5KM NE OF BALLACHULISH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 49.3 | IP | | C | 04:53 | 54.68 | | | 0.26 |
| KSB | SZ | 58.7 | EP | | | 04:53 | 55.69 | | | -0.23 |
| EAB | SZ | 75.4 | EP | | | 04:53 | 58.03 | | | -0.45 |
| KPL | SZ | 77.3 | IP | | C | 04:53 | 58.55 | | | -0.17 |
| KPL | SE | 77.3 | ES | 2 | | 04:54 | 07.45 | | | -0.70 |
| KPL | SE | 77.3 | AML | | | 04:54 | 12.97 | 17 | 0.35 | |
| KPL | SN | 77.3 | AML | | | 04:54 | 13.05 | 11 | 0.10 | |
| KAC | SZ | 88.6 | EP | | | 04:54 | 00.88 | | | 0.37 |
| PCO | SZ | 102.0 | EP | | | 04:54 | 02.61 | | | 0.00 |
| EDI | EZ | 148.0 | EP | | | 04:54 | 09.83 | | | 0.38 |

**November 10 2005 Time: 20:52 28.1 UTC Magnitude: 1.2 ML**
**Lat: 57.264N Lon: -5.693W Depth: 2.6 km**
**Grid Ref: 177.33 kmE 825.28 kmN RMS: 0.10 secs**
**Locality: LOCH ALSH,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 8.7 | IP | | D | 20:52 | 29.87 | | | 0.03 |
| KPL | SN | 8.7 | ES | 2 | | 20:52 | 30.90 | | | -0.18 |
| KPL | SN | 8.7 | AML | | | 20:52 | 31.32 | 141 | 0.19 | |
| KPL | SE | 8.7 | AML | | | 20:52 | 31.35 | 153 | 0.15 | |
| KSB | SZ | 17.4 | IP | | C | 20:52 | 31.41 | | | 0.02 |
| KAC | SZ | 35.3 | EP | | | 20:52 | 34.39 | | | 0.01 |
| KAR | SZ | 39.3 | IP | | C | 20:52 | 34.98 | | | -0.07 |
| KSK | SZ | 64.7 | EP | | | 20:52 | 39.19 | | | 0.05 |

**November 15 2005 Time: 14:38 25.4 UTC Magnitude: 0.8 ML**
**Lat: 55.208N Lon: -3.158W Depth: 2.1 km**
**Grid Ref: 326.32 kmE 591.03 kmN RMS: 0.10 secs**
**Locality: ESKDALEMUIR,D & G**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ECK | SZ | 3.6 | IP | | D | 14:38 | 26.46 | | | -0.02 |
| ESK | EZ | 12.4 | IP | | C | 14:38 | 28.16 | | | 0.07 |
| ESK | EN | 12.4 | ES | | | 14:38 | 30.00 | | | -0.06 |
| ESK | EE | 12.4 | AML | | | 14:38 | 30.21 | 31 | 0.10 | |
| ESK | EN | 12.4 | AML | | | 14:38 | 30.25 | 16 | 0.13 | |
| EDI | EE | 79.6 | ES | 3 | | 14:38 | 49.12 | | | 0.13 |
| EDI | EE | 79.6 | AML | | | 14:38 | 49.54 | 11 | 0.32 | |
| EDI | EN | 79.6 | AML | | | 14:38 | 50.19 | 9 | 0.19 | |

**November 15 2005 Time: 20:13 24.5 UTC Magnitude: 0.4 ML**
**Lat: 57.065N Lon: -5.537W Depth: 2.5 km**
**Grid Ref: 185.59 kmE 802.64 kmN RMS: 0.10 secs**
**Locality: LOCH HOURN,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 17.5 | IP | | D | 20:13 | 27.73 | | | -0.08 |
| KAR | SZ | 24.1 | IP | | C | 20:13 | 28.86 | | | -0.03 |
| KPL | SZ | 31.3 | EP | | | 20:13 | 30.17 | | | 0.10 |
| KPL | SE | 31.3 | ES | | | 20:13 | 34.06 | | | -0.05 |
| KPL | SE | 31.3 | AML | | | 20:13 | 34.63 | 9 | 0.27 | |
| KPL | SN | 31.3 | AML | | | 20:13 | 39.26 | 4 | 0.33 | |
| KAC | SZ | 50.3 | IP | | C | 20:13 | 33.38 | | | 0.06 |

**November 20 2005 Time: 17:27 03.0 UTC Magnitude: 0.4 ML**
**Lat: 57.222N Lon: -5.485W Depth: 1.7 km**
**Grid Ref: 189.63 kmE 819.94 kmN RMS: 0.10 secs**
**Locality: SHIEL BRIDGE,HIGHLAND**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 4.1 | IP | | C | 17:27 | 04.15 | | | -0.01 |
| KPL | SZ | 16.5 | IP | | D | 17:27 | 06.41 | | | 0.01 |
| KPL | SE | 16.5 | ES | 3 | | 17:27 | 08.67 | | | -0.21 |
| KPL | SE | 16.5 | AML | | | 17:27 | 09.21 | 10 | 0.10 | |
| KPL | SN | 16.5 | AML | | | 17:27 | 09.22 | 17 | 0.32 | |
| KAC | SZ | 32.8 | IP | | D | 17:27 | 09.20 | | | 0.01 |
| KAR | SZ | 39.7 | EP | | | 17:27 | 10.37 | | | 0.00 |

**November 24 2005 Time: 08:01 31.4 UTC Magnitude: 1.3 ML**
**Lat: 53.162N Lon: -4.675W Depth: 0.4 km**
**Grid Ref: 221.19 kmE 366.14 kmN RMS: 0.30 secs**
**Locality: CAERNARFON BAY**
**Velocity model: Lleyn**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| YRC | SZ | 11.9 | IP | | C | 08:01 | 34.00 | | | 0.36 |
| WLF | SZ | 23.4 | IP | | C | 08:01 | 35.51 | | | -0.10 |
| WCB | SZ | 25.5 | IP | | C | 08:01 | 36.05 | | | 0.08 |
| WCB | SE | 25.5 | ES | 2 | | 08:01 | 38.89 | | | -0.16 |
| WCB | SE | 25.5 | AML | | | 08:01 | 39.11 | 64 | 0.10 | |
| WCB | SN | 25.5 | AML | | | 08:01 | 39.20 | 78 | 0.16 | |
| YRE | SZ | 26.2 | IP | | D | 08:01 | 36.15 | | | 0.06 |
| YLL | SZ | 33.9 | EP | | | 08:01 | 37.29 | | | -0.06 |
| WME | SZ | 36.0 | IP | | C | 08:01 | 37.55 | | | -0.15 |
| WPM | SZ | 52.6 | EP | | | 08:01 | 40.43 | | | -0.03 |
| DSB | BN | 114.0 | ES | 2 | | 08:02 | 03.55 | | | -0.06 |
| DSB | BN | 114.0 | AML | | | 08:02 | 05.53 | 7 | 0.23 | |
| DSB | BZ | 114.0 | AML | | | 08:02 | 05.91 | 6 | 0.23 | |
| SSP | SZ | 134.0 | EP | | | 08:01 | 53.72 | | | -0.10 |
| SSP | SE | 134.0 | AML | | | 08:02 | 11.17 | 9 | 0.16 | |
| SSP | SN | 134.0 | AML | | | 08:02 | 11.34 | 8 | 0.17 | |
| MCH | HZ | 172.0 | EP | | | 08:01 | 59.19 | | | -0.25 |
| MCH | HN | 172.0 | ES | 2 | | 08:02 | 19.42 | | | 0.94 |
| MCH | HE | 172.0 | AML | | | 08:02 | 20.12 | 2 | 0.19 | |
| MCH | HN | 172.0 | AML | | | 08:02 | 20.83 | 5 | 0.33 | |

**December 4 2005 Time: 19:04 03.5 UTC Magnitude: 1.6 ML**
**Lat: 55.377N Lon: -6.261W Depth: 5.0 km**
**Grid Ref: 130.11 kmE 617.49 kmN RMS: 0.30 secs**
**Locality: NORTH CHANNEL**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| GCL | SZ | 34.3 | IP | | D | 19:04 | 09.55 | | | -0.32 |
| GCL | SZ | 34.3 | ES | 3 | | 19:04 | 14.26 | | | -0.25 |
| GMK | SZ | 42.5 | IP | | C | 19:04 | 10.75 | | | -0.40 |
| GAL | SZ | 114.0 | IP | | D | 19:04 | 22.68 | | | 0.45 |
| GAL | SE | 114.0 | ES | 3 | | 19:04 | 36.21 | | | 0.31 |
| GAL | SE | 114.0 | AML | | | 19:04 | 38.82 | 16 | 0.24 | |
| GAL | SN | 114.0 | AML | | | 19:04 | 38.83 | 17 | 0.24 | |
| GMM | SZ | 128.0 | EP | | | 19:04 | 24.67 | | | 0.21 |
| EAB | SZ | 151.0 | EP | | | 19:04 | 27.74 | | | 0.06 |

**December 6 2005 Time: 17:29 15.3 UTC Magnitude: 0.5 ML**
**Lat: 55.383N Lon: -5.185W Depth: 2.5 km**
**Grid Ref: 198.26 kmE 614.51 kmN RMS: 0.10 secs**
**Locality: ARRAN,STRATHCLYDE**
**Velocity model: Lownet**
**Comment: SOUTH OF ARRAN**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| GMK | SZ | 26.2 | IP | | C | 17:29 | 20.28 | | | 0.08 |
| GMK | SZ | 26.2 | ES | | | 17:29 | 23.75 | | | -0.06 |
| GAL | SZ | 64.9 | EP | | | 17:29 | 26.58 | | | 0.03 |
| GAL | SE | 64.9 | ES | | | 17:29 | 34.76 | | | -0.02 |
| GAL | SE | 64.9 | AML | | | 17:29 | 34.83 | 3 | 0.10 | |
| GAL | SN | 64.9 | AML | | | 17:29 | 35.76 | 2 | 0.37 | |
| GCL | SZ | 68.8 | EP | | | 17:29 | 27.08 | | | -0.09 |
| GCL | SZ | 68.8 | ES | | | 17:29 | 35.93 | | | 0.06 |

**December 10 2005 Time: 23:21 29.7 UTC Magnitude: 3.0 ML**
**Lat: 56.813N Lon: -5.312W Depth: 10.8 km**
**Grid Ref: 197.86 kmE 773.93 kmN RMS: 0.60 secs**
**Locality: FORT WILLIAM,HIGHLAND**
**Velocity model: Lownet**
**Comment: FELT FORT WILLIAM... Intensity: 5**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 33.6 | IP | | C | 23:21 | 36.59 | | | 0.78 |
| KSB | SZ | 44.7 | IP | | D | 23:21 | 37.44 | | | -0.12 |
| KPL | SZ | 62.1 | IP | | D | 23:21 | 40.26 | | | 0.09 |
| KPL | SE | 62.1 | ES | 2 | | 23:21 | 47.47 | | | -0.36 |
| KPL | SE | 62.1 | AML | | | 23:21 | 48.49 | 331 | 0.12 | |
| KPL | SN | 62.1 | AML | | | 23:21 | 51.51 | 380 | 0.09 | |
| KAC | SZ | 76.4 | EP | | | 23:21 | 42.29 | | | -0.13 |
| MDO | SZ | 90.5 | EP | | | 23:21 | 43.83 | | | -0.82 |
| EAB | SZ | 91.8 | IP | | C | 23:21 | 44.86 | | | 0.03 |
| KSK | SZ | 111.0 | EP | | | 23:21 | 48.74 | | | 0.99 |
| MVH | SZ | 141.0 | IP | | D | 23:21 | 51.16 | | | -0.89 |
| MCD | SZ | 151.0 | EP | | | 23:21 | 53.57 | | | 0.10 |
| MCD | SE | 151.0 | ES | | | 23:22 | 10.94 | | | 0.10 |
| MCD | SN | 151.0 | AML | | | 23:22 | 12.91 | 552 | 0.24 | |
| MCD | SE | 151.0 | AML | | | 23:22 | 12.95 | 740 | 0.23 | |
| EAU | SZ | 158.0 | EP | | | 23:21 | 55.21 | | | 0.76 |
| EDI | HZ | 164.0 | IP | | C | 23:21 | 55.94 | | | 0.66 |
| EDI | HN | 164.0 | ES | 2 | | 23:22 | 14.91 | | | 0.94 |
| EDI | HE | 164.0 | AML | | | 23:22 | 15.84 | 327 | 0.28 | |
| EDI | HN | 164.0 | AML | | | 23:22 | 15.88 | 491 | 0.34 | |
| GMK | SZ | 164.0 | EP | | | 23:21 | 54.50 | | | -0.77 |
| EBL | SZ | 182.0 | EP | | | 23:21 | 58.57 | | | 1.02 |
| GCL | SZ | 200.0 | EP | | | 23:21 | 59.01 | | | -0.71 |
| GAL | SZ | 220.0 | EP | | | 23:22 | 01.51 | | | -0.71 |
| GAL | SN | 220.0 | AML | | | 23:22 | 33.90 | 38 | 0.31 | |
| GAL | SE | 220.0 | AML | | | 23:22 | 34.16 | 75 | 0.23 | |
| GMM | SZ | 289.0 | EP | | | 23:22 | 10.37 | | | -0.55 |

**December 11 2005 Time: 06:01 31.4 UTC Magnitude: 2.3 ML**
**Lat: 51.766N Lon: -0.427W Depth: 0.0 km**
**Grid Ref: 508.54 kmE 208.70 kmN RMS: 0.40 secs**
**Locality: EXPL-HEMEL HEMPSTEAD**
**Comment: FELT SE ENGLAND... Intensity: F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| SKP | SZ | 26.9 | IP | | C | 06:01 | 06.39 | | | -0.54 |
| HHUK | E | 28.5 | EP | 9 | | 06:01 | 07.83 | | | 0.66 |
| TSA | SZ | 70.9 | EP | | | 06:01 | 04.14 | | | 0.02 |
| TSA | SZ | 70.9 | AMP | | | 06:01 | 06.66 | 164 | 0.51 | |
| WOL | BZ | 74.8 | EP | | | 06:01 | 04.18 | | | -0.53 |
| WOL | BZ | 74.8 | AMP | | | 06:01 | 06.23 | 139 | 0.66 | |
| TCR | SZ | 93.3 | EP | 4 | | 06:01 | 06.80 | | | -0.76 |
| TCR | SZ | 93.3 | AMP | | | 06:01 | 07.94 | 53 | 0.16 | |
| SWN | SZ | 99.1 | EP | | | 06:01 | 08.70 | | | 0.20 |
| SWN | SZ | 99.1 | AMP | | | 06:01 | 09.24 | 166 | 0.19 | |
| SSW | SZ | 101.0 | IP | | C | 06:01 | 08.71 | | | -0.02 |
| SSW | SZ | 101.0 | AMP | | | 06:01 | 06.00 | 108 | 0.57 | |
| TFO | EZ | 131.0 | EP | | | 06:01 | 03.65 | | | 0.22 |
| TFO | EZ | 131.0 | AMP | | | 06:01 | 03.86 | 95 | 0.22 | |
| AWH | SZ | 135.0 | EP | | | 06:01 | 04.29 | | | 0.33 |
| AWH | SZ | 135.0 | AMP | | | 06:01 | 04.47 | 67 | 0.32 | |
| SIW | SZ | 139.0 | EP | | | 06:01 | 04.80 | | | 0.24 |
| SIW | SZ | 139.0 | AMP | | | 06:01 | 06.13 | 110 | 0.28 | |
| SWK | SZ | 144.0 | EP | | | 06:01 | 05.76 | | | 0.41 |
| SWK | SZ | 144.0 | AMP | | | 06:01 | 06.99 | 96 | 0.29 | |
| APA | SZ | 144.0 | EP | | | 06:01 | 05.76 | | | 0.50 |
| APA | SZ | 144.0 | AMP | | | 06:01 | 06.61 | 73 | 0.23 | |
| AEU | SZ | 148.0 | EP | | | 06:01 | 06.44 | | | 0.55 |
| AEU | SZ | 148.0 | AMP | | | 06:01 | 06.61 | 13 | 0.26 | |
| STED | BZ | 157.0 | EP | 9 | | 06:01 | 07.58 | | | 0.44 |
| HGH | SZ | 165.0 | EP | | | 06:01 | 08.54 | | | 0.19 |
| HGH | SZ | 165.0 | AMP | | | 06:01 | 09.46 | 44 | 0.24 | |
| ABA | SZ | 165.0 | EP | | | 06:01 | 08.53 | | | 0.28 |
| ABA | SZ | 165.0 | AMP | | | 06:01 | 09.19 | 47 | 0.29 | |
| KWE | SZ | 169.0 | EP | | | 06:01 | 08.93 | | | -0.03 |
| KWE | SZ | 169.0 | AMP | | | 06:02 | 00.45 | 32 | 0.49 | |
| AWI | SZ | 174.0 | EP | | | 06:02 | 00.19 | | | 0.55 |
| AWI | SZ | 174.0 | AMP | | | 06:02 | 00.77 | 135 | 0.23 | |
| MCH | HZ | 179.0 | IP | | C | 06:02 | 00.32 | | | 0.07 |
| MCH | HZ | 179.0 | AMP | | | 06:02 | 01.03 | 16 | 0.35 | |
| KBI | SZ | 182.0 | EP | | | 06:02 | 00.50 | | | -0.11 |
| KBI | SZ | 182.0 | AMP | | | 06:02 | 02.30 | 60 | 0.58 | |
| HLM | SZ | 188.0 | EP | | | 06:02 | 01.76 | | | 0.37 |

# TABLE 2 : PHASE DATA

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 188.0 | AMP | | 06:02 | 02.39 | 41 | 0.35 | |
| SSP | SZ | 198.0 | EP | | 06:02 | 03.09 | | | 0.44 |
| SSP | SZ | 198.0 | AMP | | 06:02 | 04.13 | 85 | 0.57 | |
| HTR | SZ | 199.0 | EP | | 06:02 | 02.59 | | | -0.14 |
| HTR | SZ | 199.0 | AMP | | 06:02 | 04.01 | 21 | 0.34 | |
| LHO | SZ | 220.0 | EP | 4 | 06:02 | 06.36 | | | 0.88 |
| LHO | SZ | 220.0 | AMP | | 06:02 | 08.68 | 19 | 0.61 | |
| SBD | SZ | 231.0 | EP | | 06:02 | 08.40 | | | 1.59 |
| SBD | SZ | 231.0 | AMP | | 06:02 | 09.25 | 10 | 0.48 | |
| HEX | SZ | 247.0 | EP | | 06:02 | 09.08 | | | 0.27 |
| HEX | SZ | 247.0 | AMP | | 06:02 | 04.40 | 14 | 0.37 | |
| HSA | SZ | 257.0 | EP | | 06:02 | 02.59 | | | 2.52 |
| HSA | SZ | 257.0 | AMP | | 06:02 | 04.28 | 9 | 0.49 | |
| DYA | EZ | 287.0 | EP | 4 | 06:02 | 03.70 | | | -0.03 |
| DYA | EZ | 287.0 | AMP | | 06:02 | 02.59 | 12 | 0.53 | |
| WPM | SZ | 289.0 | EP | 4 | 06:02 | 03.71 | | | -0.28 |
| HTL | HZ | 295.0 | EP | 4 | 06:02 | 04.83 | | | 0.07 |
| HTL | HZ | 295.0 | AMP | | 06:02 | 07.25 | 4 | 0.87 | |
| YRE | SZ | 304.0 | EP | 4 | 06:02 | 06.31 | | | 0.43 |
| EKR1 | SZ | 437.0 | EP | 4 | 06:02 | 01.72 | | | -0.85 |
| EKR1 | SZ | 437.0 | AMP | | 06:02 | 05.50 | 4 | 0.98 | |
| HGN | BZ | 457.0 | EP | 4 | 06:02 | 04.69 | | | -0.36 |
| HGN | BZ | 457.0 | AMP | | 06:02 | 05.46 | 2 | 0.15 | |

**December 11 2005 Time: 23:14 07.7 UTC Magnitude: 2.0 ML**
**Lat: 53.126N Lon: -0.012W Depth: 21.4 km**
**Grid Ref: 533.01 kmE 360.64 kmN RMS: 0.20 secs**
**Locality: BOSTON,LINCS**
**Velocity model: Lownet**
**Comment: 11KM N OF BOSTON**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| ABA | SZ | 82.1 | EP | | | 23:14 | 20.93 | | | -0.18 |
| AWH | SZ | 85.2 | IP | | C | 23:14 | 21.25 | | | -0.30 |
| AEU | SZ | 101.0 | EP | | | 23:14 | 24.11 | | | 0.30 |
| AEU | SN | 101.0 | ES | 2 | | 23:14 | 35.14 | | | -0.43 |
| AEU | SN | 101.0 | AML | | | 23:14 | 37.44 | 42 | 0.17 | |
| AEU | SE | 101.0 | AML | | | 23:14 | 38.48 | 50 | 0.15 | |
| KBI | SZ | 102.0 | EP | | | 23:14 | 24.08 | | | 0.05 |
| AWI | SZ | 103.0 | EP | | | 23:14 | 24.35 | | | 0.21 |
| KWE | SZ | 123.0 | EP | | | 23:14 | 27.07 | | | 0.05 |
| LHO | SZ | 131.0 | EP | | | 23:14 | 28.09 | | | -0.12 |
| APA | SZ | 136.0 | EP | | | 23:14 | 28.94 | | | 0.10 |
| HPK | SN | 141.0 | ES | 2 | | 23:14 | 45.37 | | | -0.07 |

**December 12 2005 Time: 00:03 21.4 UTC Magnitude: 1.4 ML**
**Lat: 56.163N Lon: -4.197W Depth: 3.2 km**
**Grid Ref: 263.58 kmE 698.87 kmN RMS: 0.20 secs**
**Locality: THORNHILL,CENTRAL**
**Velocity model: Lownet**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| EAB | SZ | 9.2 | IP | | C | 00:03 | 23.31 | | | -0.12 |
| PCO | SZ | 20.4 | IP | | D | 00:03 | 25.06 | | | -0.27 |
| PMS | SZ | 49.1 | EP | | | 00:03 | 29.88 | | | -0.30 |
| EAU | SZ | 58.6 | EP | | | 00:03 | 31.62 | | | -0.03 |
| EDI | HZ | 68.3 | EP | | | 00:03 | 33.20 | | | 0.09 |
| EDI | HE | 68.3 | ES | 2 | | 00:03 | 41.26 | | | -0.44 |
| EDI | HN | 68.3 | AML | | | 00:03 | 41.69 | 22 | 0.25 | |
| EDI | HE | 68.3 | AML | | | 00:03 | 41.75 | 27 | 0.18 | |
| EBL | SZ | 84.1 | EP | | | 00:03 | 35.81 | | | 0.19 |
| GMK | SZ | 126.0 | EP | | | 00:03 | 42.47 | | | 0.36 |
| GAL | SZ | 148.0 | EP | | | 00:03 | 45.43 | | | 0.18 |
| GAL | SE | 148.0 | ES | 3 | | 00:04 | 03.11 | | | 0.41 |
| GAL | SE | 148.0 | AML | | | 00:04 | 04.51 | 6 | 0.37 | |
| GAL | SN | 148.0 | AML | | | 00:04 | 05.37 | 6 | 0.25 | |

**December 14 2005 Time: 03:30 25.4 UTC Magnitude: 2.8 ML**
**Lat: 53.005N Lon: -5.644W Depth: 8.8 km**
**Grid Ref: 155.55 kmE 351.54 kmN RMS: 0.40 secs**
**Locality: IRISH SEA**
**Velocity model: Lleyn**
**Comment: FELT COAST OF WICKLOW Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| DSB | BE | 55.8 | EP | | | 03:30 | 34.98 | | | 0.14 |
| DSB | BN | 55.8 | ES | 2 | | 03:30 | 41.82 | | | 0.54 |
| DSB | BN | 55.8 | AML | | | 03:30 | 42.58 | 951 | 0.39 | |
| DSB | BZ | 55.8 | AML | | | 03:30 | 42.77 | 549 | 0.18 | |
| YRC | SZ | 76.6 | IP | | C | 03:30 | 38.38 | | | 0.12 |
| YRE | SZ | 81.9 | EP | | | 03:30 | 38.93 | | | -0.18 |
| WCB | SZ | 84.3 | IP | | C | 03:30 | 39.61 | | | 0.13 |
| WCB | SE | 84.3 | ES | 2 | | 03:30 | 48.92 | | | -0.16 |
| WCB | SN | 84.3 | AML | | | 03:30 | 50.01 | 502 | 0.39 | |
| WCB | SE | 84.3 | AML | | | 03:30 | 51.14 | 599 | 0.41 | |
| WLF | SZ | 89.3 | IP | | C | 03:30 | 40.29 | | | 0.05 |
| WME | SZ | 99.6 | EP | 2 | | 03:30 | 42.01 | | | 0.17 |
| YLL | SZ | 99.9 | EP | | | 03:30 | 42.00 | | | 0.11 |
| WPM | SZ | 120.0 | EP | | | 03:30 | 44.96 | | | 0.00 |
| WIM | SZ | 142.0 | EP | | | 03:30 | 48.41 | | | -0.05 |
| SBD | SZ | 161.0 | IP | | D | 03:30 | 50.59 | | | -0.40 |
| GIM | SZ | 163.0 | EP | | | 03:30 | 50.99 | | | -0.28 |
| HSA | SZ | 173.0 | EP | | | 03:30 | 52.18 | | | -0.28 |
| SSP | SZ | 183.0 | EP | | | 03:30 | 53.79 | | | 0.00 |
| SSP | SN | 183.0 | ES | 2 | | 03:31 | 14.73 | | | 1.61 |
| SSP | SN | 183.0 | AML | | | 03:31 | 16.66 | 190 | 0.30 | |
| SSP | SE | 183.0 | AML | | | 03:31 | 16.87 | 308 | 0.43 | |
| HTR | SZ | 191.0 | EP | | | 03:30 | 54.59 | | | -0.21 |
| HLM | SZ | 194.0 | EP | | | 03:30 | 55.18 | | | 0.00 |
| MCH | HZ | 212.0 | EP | | | 03:30 | 57.35 | | | 0.01 |
| MCH | HN | 212.0 | ES | 2 | | 03:31 | 20.33 | | | 1.26 |
| MCH | HN | 212.0 | AML | | | 03:31 | 24.29 | 34 | 0.35 | |
| MCH | HE | 212.0 | AML | | | 03:31 | 28.73 | 41 | 0.41 | |
| HTL | HZ | 237.0 | EP | | | 03:31 | 00.45 | | | -0.08 |
| HTL | HN | 237.0 | AML | | | 03:31 | 32.24 | 36 | 0.51 | |
| HTL | HE | 237.0 | AML | | | 03:31 | 32.91 | 43 | 0.39 | |
| HGH | SZ | 246.0 | EP | | | 03:31 | 01.76 | | | 0.13 |
| HEX | SZ | 250.0 | EP | | | 03:31 | 02.04 | | | -0.07 |

**December 23 2005 Time: 03:25 51.8 UTC Magnitude: 2.7 ML**
**Lat: 56.685N Lon: -5.658W Depth: 4.8 km**
**Grid Ref: 175.99 kmE 760.77 kmN RMS: 0.50 secs**
**Locality: LOCH SUNART,HIGHLAND**
**Velocity model: Lownet**
**Comment: FELT STRONTIAN Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 28.0 | IP | | C | 03:25 | 56.93 | | | -0.14 |
| KSB | SZ | 60.2 | IP | | C | 03:26 | 02.03 | | | -0.20 |
| KPL | SZ | 72.8 | IP | | C | 03:26 | 03.96 | | | -0.16 |
| KPL | SE | 72.8 | ES | 2 | | 03:26 | 12.52 | | | -0.59 |
| KPL | SN | 72.8 | AML | | | 03:26 | 17.19 | 370 | 0.24 | |
| KPL | SE | 72.8 | AML | | | 03:26 | 17.39 | 484 | 0.28 | |
| KAC | SZ | 93.2 | IP | | C | 03:26 | 07.69 | | | 0.38 |
| EAB | SZ | 98.4 | IP | | C | 03:26 | 07.68 | | | -0.46 |
| KSK | SZ | 108.0 | EP | | | 03:26 | 10.24 | | | 0.70 |
| MDO | SZ | 115.0 | EP | | | 03:26 | 10.67 | | | -0.08 |
| POB | S | 121.0 | EP | | | 03:26 | 11.50 | | | -0.01 |
| PCO | SZ | 124.0 | IP | | C | 03:26 | 11.96 | | | -0.09 |
| GMK | SZ | 149.0 | EP | | | 03:26 | 15.18 | | | -0.54 |
| EAU | SZ | 166.0 | IP | | C | 03:26 | 18.51 | | | 0.36 |
| EDI | HZ | 175.0 | EP | | | 03:26 | 19.86 | | | 0.56 |
| EDI | HN | 175.0 | AML | | | 03:26 | 42.50 | 115 | 0.24 | |
| EDI | HE | 175.0 | AML | | | 03:26 | 42.90 | 95 | 0.33 | |
| MCD | SZ | 177.0 | EP | | | 03:26 | 18.94 | | | -0.61 |
| MCD | SE | 177.0 | ES | 2 | | 03:26 | 39.00 | | | -0.81 |
| MCD | SE | 177.0 | AML | | | 03:26 | 43.55 | 114 | 0.25 | |
| MCD | SN | 177.0 | AML | | | 03:26 | 44.63 | 126 | 0.26 | |
| GCL | SZ | 181.0 | EP | | | 03:26 | 19.66 | | | -0.48 |
| EBL | SZ | 191.0 | EP | | | 03:26 | 22.45 | | | 1.03 |
| GAL | SZ | 211.0 | EP | | | 03:26 | 23.89 | | | 0.07 |
| GAL | SE | 211.0 | AML | | | 03:26 | 50.50 | 41 | 0.24 | |
| GAL | SN | 211.0 | AML | | | 03:26 | 52.44 | 23 | 0.33 | |

**December 23 2005 Time: 04:58 21.6 UTC Magnitude: 2.4 ML**
**Lat: 56.677N Lon: -5.664W Depth: 7.5 km**
**Grid Ref: 175.58 kmE 759.90 kmN RMS: 0.40 secs**
**Locality: LOCH SUNART,HIGHLAND**
**Velocity model: Lownet**
**Comment: FELT STRONTIAN Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 28.8 | IP | | C | 04:58 | 26.61 | | | -0.31 |
| KSB | SZ | 61.2 | EP | | | 04:58 | 31.69 | | | -0.30 |
| KPL | SZ | 73.8 | EP | | | 04:58 | 33.36 | | | -0.50 |
| KPL | SE | 73.8 | ES | 2 | | 04:58 | 42.21 | | | -0.62 |
| KPL | SN | 73.8 | AML | | | 04:58 | 46.77 | 259 | 0.22 | |
| KPL | SE | 73.8 | AML | | | 04:58 | 47.12 | 271 | 0.24 | |
| KAC | SZ | 94.2 | EP | | | 04:58 | 37.25 | | | 0.18 |
| EAB | SZ | 98.2 | EP | | | 04:58 | 37.37 | | | -0.34 |
| KSK | SZ | 108.0 | EP | | | 04:58 | 39.86 | | | 0.64 |
| MDO | SZ | 116.0 | EP | | | 04:58 | 40.34 | | | -0.16 |
| PCO | SZ | 123.0 | EP | | | 04:58 | 41.65 | | | 0.04 |
| GMK | SZ | 148.0 | EP | | | 04:58 | 44.95 | | | -0.19 |
| MVH | SZ | 165.0 | EP | | | 04:58 | 48.08 | | | 0.51 |
| EAU | SZ | 166.0 | EP | | | 04:58 | 48.13 | | | 0.47 |
| EDI | EZ | 175.0 | EP | | | 04:58 | 49.05 | | | 0.28 |
| EDI | EN | 175.0 | ES | | | 04:59 | 08.24 | | | -0.38 |
| EDI | EE | 175.0 | AML | | | 04:59 | 11.43 | 49 | 0.55 | |
| EDI | EN | 175.0 | AML | | | 04:59 | 12.09 | 58 | 0.26 | |
| MCD | SZ | 177.0 | EP | | | 04:58 | 48.91 | | | -0.23 |
| MME | SZ | 179.0 | EP | | | 04:58 | 49.80 | | | 0.45 |
| GCL | SZ | 180.0 | EP | | | 04:58 | 49.05 | | | -0.44 |
| GAL | SZ | 210.0 | EP | | | 04:58 | 53.62 | | | 0.42 |
| GAL | SN | 210.0 | AML | | | 04:59 | 21.91 | 15 | 0.56 | |
| GAL | SE | 210.0 | AML | | | 04:59 | 22.02 | 19 | 0.38 | |

**December 29 2005 Time: 04:40 29.7 UTC Magnitude: 1.2 ML**
**Lat: 56.216N Lon: -3.762W Depth: 7.5 km**
**Grid Ref: 290.74 kmE 703.99 kmN RMS: 0.20 secs**
**Locality: GLENDEVON,CENTRAL**
**Velocity model: Lownet**
**Comment: FELT GLENDEVON Intensity: 3**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| PCO | SZ | 33.0 | IP | | C | 04:40 | 35.83 | | | 0.14 |
| EAB | SZ | 35.9 | IP | | C | 04:40 | 36.02 | | | -0.11 |
| EAB | SZ | 35.9 | ES | | | 04:40 | 40.72 | | | -0.12 |
| EAU | SZ | 45.7 | EP | | | 04:40 | 37.66 | | | -0.01 |
| EDI | HZ | 48.4 | EP | | | 04:40 | 37.88 | | | -0.16 |
| EDI | HN | 48.4 | ES | | | 04:40 | 44.08 | | | -0.07 |
| EDI | HN | 48.4 | AML | | | 04:40 | 44.30 | 20 | 0.09 | |
| EDI | HE | 48.4 | AML | | | 04:40 | 44.46 | 26 | 0.33 | |
| EBL | SZ | 66.7 | EP | | | 04:40 | 41.13 | | | 0.19 |
| MDO | SZ | 141.0 | EP | | | 04:40 | 52.59 | | | 0.31 |
| MCD | SZ | 155.0 | EP | | | 04:40 | 54.27 | | | 0.01 |
| MCD | SN | 155.0 | ES | | | 04:41 | 12.03 | | | -0.18 |

**December 31 2005 Time: 22:40 05.8 UTC Magnitude: 2.4 ML**
**Lat: 56.258N Lon: -3.775W Depth: 3.5 km**
**Grid Ref: 290.05 kmE 708.68 kmN RMS: 0.30 secs**
**Locality: BLACKFORD,TAYSIDE**
**Velocity model: Lownet**
**Comment: FELT BLACKFORD... Intensity: 4**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI | RES |
|---|---|---|---|---|---|---|---|---|---|---|
| EBH | SZ | 16.5 | EP | | | 22:40 | 08.99 | | | -0.19 |
| EAB | SZ | 35.7 | IP | | C | 22:40 | 12.47 | | | 0.06 |
| PCO | SZ | 36.2 | IP | | C | 22:40 | 12.48 | | | 0.00 |
| EAU | SZ | 50.2 | EP | | | 22:40 | 14.72 | | | -0.09 |
| EDI | EZ | 52.2 | EP | | | 22:40 | 14.88 | | | -0.18 |
| EDI | EE | 52.2 | ES | 2 | | 22:40 | 21.29 | | | -0.51 |
| EDI | EN | 52.2 | AML | | | 22:40 | 21.68 | 111 | 0.21 | |
| EDI | EE | 52.2 | AML | | | 22:40 | 23.62 | 179 | 0.32 | |
| PGB | HZ | 66.5 | EP | | | 22:40 | 17.08 | | | -0.21 |
| PGB | HN | 66.5 | ES | | | 22:40 | 25.30 | | | -0.36 |
| EBL | SZ | 70.7 | EP | | | 22:40 | 18.00 | | | 0.01 |
| ESK | EZ | 111.0 | EP | | | 22:40 | 24.96 | | | 0.80 |
| ESK | EE | 111.0 | AML | | | 22:40 | 42.08 | 179 | 0.26 | |
| ESK | EN | 111.0 | AML | | | 22:40 | 42.90 | 94 | 0.28 | |
| KSB | SZ | 146.0 | EP | 9 | | 22:40 | 30.38 | | | 0.86 |

# TABLE 2 : PHASE DATA

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 146.0 | EP | 9 | 22:40 | 30.63 | | | 1.18 | | GAL | SZ | 166.0 | EP | | 22:40 | 32.11 | | -0.14 |
| GMK | SZ | 153.0 | EP | | 22:40 | 30.71 | | | 0.33 | | GAL | SN | 166.0 | ES | 2 | 22:40 | 51.95 | | 0.42 |
| KPL | SZ | 166.0 | EP | 9 | 22:40 | 33.48 | | | 1.17 | | GAL | SN | 166.0 | AML | | 22:40 | 52.65 | 85 | 0.33 |
| KPL | SZ | 166.0 | ES | 9 | 22:40 | 52.80 | | | -0.01 | | GAL | SE | 166.0 | AML | | 22:40 | 52.93 | 100 | 0.47 |
| KPL | SN | 166.0 | AML | | 22:40 | 54.44 | 74 | 0.43 | | | KAC | SZ | 167.0 | EP | 9 | 22:40 | 33.64 | | |
| KPL | SE | 166.0 | AML | | 22:40 | 54.48 | 74 | 0.41 | | | | | | | | | | | |

## TABLE 3

## GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2005

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Comp |
|---|---|---|---|---|---|---|---|
| ABA | BACONSTHORPE | 52.8884 | 1.1453 | 611.58 | 337.00 | 74 | 1 |
| AEA | EAST ANGLIA UNIV | 52.6208 | 1.2403 | 619.30 | 307.53 | 45 | 3M |
| AEU | EAST ANGLIA | 52.6202 | 1.2347 | 618.93 | 307.45 | 28 | SM |
| APA | PACKWAY | 52.3006 | 1.4782 | 637.12 | 272.68 | 58 | 1 |
| AWH | WHINBURGH | 52.6297 | 0.9507 | 599.67 | 307.68 | 64 | 1R |
| AWI | WITTON | 52.8319 | 1.4471 | 632.17 | 331.65 | 46 | 1 |
| BBH | BRUNTSHEIL | 55.1333 | -2.9299 | 340.72 | 582.50 | 216 | 1 |
| BBO | BOTHEL | 54.7367 | -3.2464 | 319.76 | 538.69 | 209 | 3 |
| BCC | CHAPELCROSS | 55.0153 | -3.2201 | 321.99 | 569.66 | 138 | 1SM |
| BCM | CHAPELCROSS MIC | 55.0151 | -3.2212 | 321.92 | 569.64 | 78 | M |
| BDL | DOBCROSS HALL | 54.8030 | -2.9385 | 339.68 | 545.76 | 157 | 1 |
| BHH | HOWATS HILL | 55.0931 | -3.2181 | 322.27 | 578.31 | 216 | 3 |
| BNA | NEW ABBEY | 54.9658 | -3.6242 | 296.03 | 564.68 | 28 | 1 |
| BTA | TALKIN | 54.9057 | -2.6844 | 356.12 | 557.00 | 279 | 3 |
| BWH | WARDLAW | 55.1758 | -3.6549 | 294.62 | 588.09 | 269 | 1 |
| CBW | BUDOCK WATER | 50.1482 | -5.1144 | 177.53 | 32.29 | 94 | 1 |
| CCA | CARNMENELLIS | 50.1866 | -5.2277 | 169.62 | 36.90 | 210 | 1 |
| CCO | CONSTANTINE | 50.1357 | -5.1957 | 171.66 | 31.14 | 168 | 1 |
| CDU | DUNNERDALE | 54.3362 | -3.1952 | 322.30 | 494.08 | 355 | 1 |
| CGH | GOONHILLY | 50.0507 | -5.1649 | 173.46 | 21.60 | 97 | 1 |
| CGW | GWEEK | 50.1006 | -5.2228 | 169.56 | 27.32 | 9 | 1 |
| CKE | KESWICK | 54.5877 | -3.1059 | 328.54 | 521.96 | 304 | 1 |
| CMA | MANACCAN | 50.0821 | -5.1274 | 176.29 | 24.98 | 42 | 1 |
| CPZ | PENZANCE | 50.1566 | -5.5828 | 144.12 | 34.72 | 199 | 1R |
| CR2 | ROSEMANOWES 2 | 50.1667 | -5.1687 | 173.74 | 34.51 | 143 | 3 |
| CRQ | ROSEMANOWES | 50.1672 | -5.1726 | 173.46 | 34.57 | 156 | SM |
| CSA | ST AUSTELL | 50.3527 | -4.8919 | 194.30 | 54.38 | 112 | 1 |
| CSF | SCAFELL | 54.4478 | -3.2430 | 319.41 | 506.55 | 540 | 1 |
| CSM | SELLAFIELD MIC | 54.4183 | -3.4913 | 303.24 | 503.58 | 50 | M |
| CST | STITHIANS | 50.1952 | -5.1635 | 174.24 | 37.66 | 141 | 1 |
| CWF | CHARNWOOD FST | 52.7385 | -1.3076 | 446.74 | 315.91 | 203 | 3BB |
| DCO | COMBE FARM | 50.3201 | -3.8721 | 266.74 | 48.43 | 117 | 1R |
| DYA | YADSWORTHY | 50.4353 | -3.9310 | 262.88 | 61.34 | 292 | 3RMLG |
| 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 | 3BB |
| EDR | DRUMTOCHTY | 56.9190 | -2.5393 | 367.17 | 780.97 | 401 | 1R |
| EDU | DUNDEE | 56.5477 | -3.0110 | 337.85 | 739.97 | 421 | 1R |
| ELO | LOGIEALMOND | 56.4703 | -3.7112 | 294.59 | 732.21 | 523 | 1R |
| ESK | ESKDALEMUIR | 55.3165 | -3.2052 | 323.52 | 603.16 | 261 | 3RMBB |
| ESY | STONEYPATH | 55.9175 | -2.6141 | 361.62 | 669.55 | 337 | 1R |
| FHV | HALDARSVIK | 62.2597 | -7.0984 | 135.46 | 1385.95 | 380 | 1R |
| FSD | SUDUROY | 61.5701 | -6.7884 | 145.86 | 1308.06 | 480 | 1R |
| FSV | SVINOY | 62.2598 | -6.3550 | 173.99 | 1383.14 | 430 | 1R |
| FTO | TORSHAVN | 62.0199 | -6.8274 | 147.51 | 1358.21 | 325 | 3R |
| FVA | VAGAR | 62.0575 | -7.3520 | 120.46 | 1364.55 | 430 | 1R |
| GAL | GALLOWAY | 54.8664 | -4.7114 | 226.02 | 555.78 | 117 | 3MLG |
| GCD | CASTLE DOUGLAS | 54.8630 | -3.9403 | 275.48 | 553.76 | 184 | 1R |
| GCL | CUSHENDALL | 55.0783 | -6.1264 | 136.66 | 583.77 | 278 | 1R |
| GIM | ISLE OF MAN (North) | 54.2923 | -4.4672 | 239.44 | 491.35 | 346 | 3R |
| 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 |
| HAE | ALDERS END | 52.0368 | -2.5434 | 362.73 | 237.79 | 260 | 1R |
| HBL2 | BONNYLANDS | 52.0508 | -3.0384 | 328.80 | 239.71 | 437 | SM |
| HCG | CRAIG GOCH | 52.3231 | -3.6570 | 287.08 | 270.78 | 533 | 1R |
| HEX | EXMOOR | 51.0664 | -3.8026 | 273.71 | 131.28 | 230 | 1R |

## TABLE 3

## GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2005

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Comp |
|---|---|---|---|---|---|---|---|
| HGH | GRAY HILL | 51.6379 | -2.8057 | 344.25 | 193.59 | 223 | 1R |
| HLM | LONG MYND | 52.5184 | -2.8807 | 340.25 | 291.57 | 429 | 1 |
| HPE | PEMBROKE | 51.9372 | -4.7746 | 209.29 | 230.21 | 349 | 1R |
| HPK | HAVERAH PARK | 53.9581 | -1.6241 | 424.66 | 451.42 | 233 | 3R |
| HSA | SWANSEA | 51.7500 | -4.1532 | 251.38 | 207.94 | 293 | 1R |
| HTL | HARTLAND | 50.9943 | -4.4849 | 225.64 | 124.66 | 86 | BBMSM |
| HTR | TREWERN HILL | 52.0785 | -3.2679 | 313.12 | 243.04 | 337 | 1R |
| JDC | DAM (CREST) | 49.1947 | -2.0469 | | | 39 | SM |
| JDG | DAM (GALLERY) | 49.1947 | -2.0469 | | | 7 | SM |
| JRS | MAISON ST LOUIS | 49.1922 | -2.0922 | | | 56 | 3RLG |
| JSA | ST AUBINS | 49.1878 | -2.1717 | | | 39 | 1R |
| JVM | VALLE D.L.MARE | 49.2169 | -2.2067 | | | 64 | 1R |
| KAC | ACHNASHELLACH | 57.4989 | -5.2988 | 202.36 | 850.19 | 206 | 1R |
| KAR | ARISAIG | 56.9188 | -5.8290 | 166.98 | 787.34 | 186 | 1 |
| KBI | BIRLEY GRANGE | 53.2543 | -1.5279 | 431.49 | 373.17 | 272 | 1 |
| KEY | KEYWORTH | 52.8779 | -1.0757 | 462.20 | 331.59 | 59 | LG |
| KEY2 | KEYWORTH (SM) | 52.8790 | -1.0770 | 462.13 | 331.73 | 76 | SM |
| KNR | NEVIS RANGE | 56.8219 | -4.9714 | 218.68 | 773.97 | 1147 | 1R |
| KPL | PLOCKTON | 57.3391 | -5.6527 | 180.21 | 833.50 | 13 | BBSM |
| KSB | SHIEL BRIDGE | 57.2099 | -5.4214 | 193.40 | 818.40 | 417 | 1R |
| KSK | SCOVAL | 57.4659 | -6.7002 | 118.21 | 851.46 | 265 | 1R |
| KSY | SYSTON | 52.9642 | -0.5872 | 494.88 | 341.73 | 121 | 1R |
| KTG | TILBROOK GRNGE | 52.3264 | -0.4019 | 508.90 | 271.06 | 83 | 1 |
| KUF | UFFORD | 52.6170 | -0.3907 | 508.94 | 303.39 | 38 | 1R |
| KWE | WEAVER FARM | 53.0164 | -1.8412 | 410.65 | 346.61 | 328 | 1R |
| LCP | CASSOP | 54.7370 | -1.4744 | 433.84 | 538.14 | 185 | 1R |
| LDU | LEEDS | 53.8058 | -1.5540 | 429.37 | 434.51 | 74 | MLGSM |
| LHO | HOLMEFIRTH | 53.5453 | -1.8548 | 409.62 | 405.44 | 462 | 1R |
| LMI | MILLOM | 54.2206 | -3.3070 | 314.79 | 481.35 | 129 | 3R |
| LMK | MARKET RASEN | 53.4569 | -0.3260 | 511.14 | 396.90 | 146 | 1R |
| LRN | RICHMOND | 54.4165 | -1.8007 | 412.93 | 502.37 | 313 | 1R |
| LRW | LERWICK | 60.1360 | -1.1779 | 445.66 | 1139.27 | 98 | 3RMLGSMBB |
| 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 | 3RMLGSM |
| MCH | MICHAELCHURCH | 51.9974 | -2.9983 | 331.47 | 233.74 | 219 | BBSM |
| MDO | DOCHFOUR | 57.4409 | -4.3633 | 258.17 | 841.39 | 415 | 1R |
| MFI | FISHRIE | 57.6119 | -2.2956 | 382.34 | 858.00 | 232 | 1R |
| MLA | LATHERON | 58.3055 | -3.3627 | 320.15 | 935.98 | 188 | 1 |
| MME | MEIKLE CAIRN | 57.3149 | -2.9647 | 341.90 | 825.32 | 475 | 1 |
| MVH | ACHVAICH | 57.9250 | -4.1825 | 270.75 | 894.90 | 185 | 1 |
| OBR | BRABSTER | 58.6142 | -3.1626 | 332.47 | 970.13 | 89 | 1R |
| ODR | DOUNREAY | 58.5822 | -3.7256 | 299.68 | 967.27 | 100 | SM |
| OHO | HOY | 58.8322 | -3.2465 | 328.05 | 994.48 | 172 | 1R |
| ORE | REAY | 58.5480 | -3.7622 | 297.45 | 963.52 | 100 | 3RMLG |
| OST | STRONSAY | 59.0860 | -2.5516 | 368.39 | 1022.20 | 21 | 1R |
| OTO | TONGUE | 58.4953 | -4.3939 | 260.49 | 958.79 | 338 | 1R |
| OWE | WESTRAY | 59.3180 | -3.0289 | 341.44 | 1048.36 | 87 | 1R |
| PCA | CARROT | 55.7007 | -4.2550 | 258.30 | 647.55 | 302 | 1 |
| PCO | CORRIE | 55.9880 | -4.1002 | 269.00 | 679.21 | 267 | 1 |
| PGB | GLENIFFERBRAES | 55.8115 | -4.4837 | 244.38 | 660.37 | 199 | BB |
| PMS | MUIRSHIEL | 55.8459 | -4.7452 | 228.15 | 664.82 | 351 | 1 |
| POB | OBSERVATORY | 55.8458 | -44299 | 247.88 | 664.06 | 34 | MLG |
| RCR | CAPE WRATH | 58.6245 | -4.9987 | 225.90 | 974.58 | 100 | 1R |
| REB | EISG-BRACHAIDH | 58.1194 | -5.2802 | 206.82 | 919.16 | 100 | 1R |
| RFO | FORSNAVAL | 58.2133 | -7.0052 | 106.10 | 935.83 | 195 | 1R |
| RRH | RHENIGIDALE | 57.9197 | -6.6881 | 122.43 | 901.86 | 103 | 1R |
| RRR | RUBHA REIDH | 57.8577 | -5.8067 | 174.19 | 891.68 | 61 | 3RMLGSM |
| RSC | SCOURIE | 58.3485 | -5.1683 | 214.61 | 944.33 | 60 | 1R |
| RTO | TOLSTA | 58.3778 | -6.2092 | 153.95 | 950.93 | 74 | 1R |

## TABLE 3

## GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, 2005

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Comp |
|---|---|---|---|---|---|---|---|
| SAN | SANDWICK | 60.0179 | -1.2392 | 442.41 | 1126.08 | 150 | 1 |
| SBD | BRYN DU | 52.9055 | -3.2585 | 315.37 | 335.01 | 489 | 1 |
| SFH | HASELMERE | 51.0604 | -0.6912 | 491.71 | 129.88 | 260 | 1 |
| SIW | ISLE OF WHITE | 50.6711 | -1.3747 | 444.18 | 85.97 | 162 | 1 |
| SKP | KOPHILL | 51.7218 | -0.8096 | 482.22 | 203.29 | 212 | 1 |
| SMD | MENDIPS | 51.3083 | -2.7170 | 350.03 | 156.88 | 310 | 1 |
| SSP | STONEY POUND | 52.4177 | -3.1119 | 324.39 | 280.59 | 428 | 3 |
| SSW | STOW-ON-WOLD | 51.9667 | -1.8499 | 410.31 | 229.86 | 291 | 1 |
| SWK | WARMINSTER | 51.1483 | -2.2471 | 382.72 | 138.87 | 266 | 1 |
| SWN | SWINDON | 51.5137 | -1.8007 | 413.83 | 179.49 | 192 | 3MLGSMBB |
| TBW | BRENTWOOD | 51.6549 | 0.2913 | 558.48 | 197.66 | 89 | 1R |
| TCR | COLCHESTER | 51.8347 | 0.9212 | 601.24 | 219.20 | 45 | 1R |
| TEB | EASTBOURNE | 50.8187 | 0.1457 | 551.13 | 104.39 | 68 | 1R |
| TFO | FOLKESTONE | 51.1135 | 1.1409 | 619.81 | 139.66 | 202 | 3MLGSM |
| TSA | SEVENOAKS | 51.2426 | 0.1561 | 550.48 | 151.53 | 177 | 1 |
| WAL | WALLS | 60.2564 | -1.6173 | 421.18 | 1152.46 | 167 | 1 |
| WCB | CHURCH BAY | 53.3782 | -4.5467 | 230.62 | 389.87 | 139 | 3MSM |
| WFB | FAIRBOURNE | 52.6831 | -4.0383 | 262.23 | 311.48 | 316 | 1R |
| WIM | ISLE OF MAN(South) | 54.1475 | -4.6738 | 225.39 | 475.73 | 386 | 1R |
| WLF | LLYNFAES | 53.2894 | -4.3966 | 240.27 | 379.65 | 58 | 1 |
| WME | MYNDD EILIAN | 53.3969 | -4.3032 | 246.88 | 391.40 | 129 | 1R |
| WPM | PENMAENMAWR | 53.2581 | -3.9048 | 272.95 | 375.18 | 353 | 1R |
| XAL | ALLENDALE | 54.8617 | -2.2147 | 386.22 | 551.91 | 458 | 1R |
| XDE | DENT | 54.5056 | -3.4902 | 303.52 | 513.29 | 301 | 1R |
| XSO | SOURHOPE | 55.4924 | -2.2510 | 384.14 | 622.10 | 516 | 1R |
| YEL | YELL | 60.5509 | -1.0830 | 450.29 | 1185.55 | 203 | 1 |
| YLL | LLANBERIS | 53.1402 | -4.1704 | 254.84 | 362.57 | 159 | 1R |
| YRC | RHOSCOLYN | 53.2508 | -4.5753 | 228.21 | 375.77 | 22 | 1R |
| YRE | YR EIFL | 52.9811 | -4.4254 | 237.19 | 345.43 | 193 | 1R |
| YRH | RHIW | 52.8336 | -4.6288 | 222.94 | 329.51 | 286 | 1R |

**Component Codes:**

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

**TABLE 4**

**Depth/crustal velocity models used in earthquake locations**

| Structural area | Depth to top of layer (km) | P-wave velocity (km/s) | Vp/Vs |
|---|---|---|---|
| North Sea | 0.00 | 6.20 | 1.73 |
| | 12.00 | 6.50 | |
| | 23.00 | 7.10 | |
| | 31.00 | 8.05 | |
| Lownet and | 0.00 | 4.00 | 1.73 |
| general UK | 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 | 0.00 | 5.40 | 1.68 |
| (Lleyn) | 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 east. |
| 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 | N Yorkshire | North Yorkshire |
| Expl | Explosion | Staffs | Staffordshire |
| D & G | Dumfries and Galloway | W Midlands | West Midlands |
| Gtr | Greater | Salop | Shropshire |
| S Yorkshire | South Yorkshire | W Sussex | West Sussex |

Comments abbreviations

| | |
|---|---|
| ... | and felt elsewhere |

# 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. |
| 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.

# Appendix 4 Significant events in 2005

**CONWY, 14 FEBRUARY 2005, 3.3 ML**

When an earthquake (Figure 6) was felt in North Wales, at 18:44 (UTC) on 14 February, with a maximum intensity of 4 EMS significant media and public interest was created. The earthquake was located about 5 km south of Conwy with a magnitude of 3.3 ML.

The earthquake location was well determined, with horizontal errors of 1.8 and 2.5 km in the north-south and east-west directions respectively. The RMS error in the travel-time residuals was 0.4s and the azimuthal gap in the stations used for locating the earthquake was 32°. The depth was calculated at 10.7 km with an error of ±2.1 km.

A source mechanism for the earthquake was determined from first motion polarities (Figure 7). The grid search method of Snoke *et al*. (1984) was used to determine the best-fitting fault plane solutions, with a grid spacing of 2°. Sixty-six possible solutions were found to fit the observed polarity data, which all showed very similar fault motion. The solutions show either left lateral strike-slip motion on a north-south fault dipping slightly to the west, or right lateral strike-slip motion on an east-west fault dipping slightly to the north. The *P*-axis orientations agree well with the regional tectonic model, which predicts northwest compression.

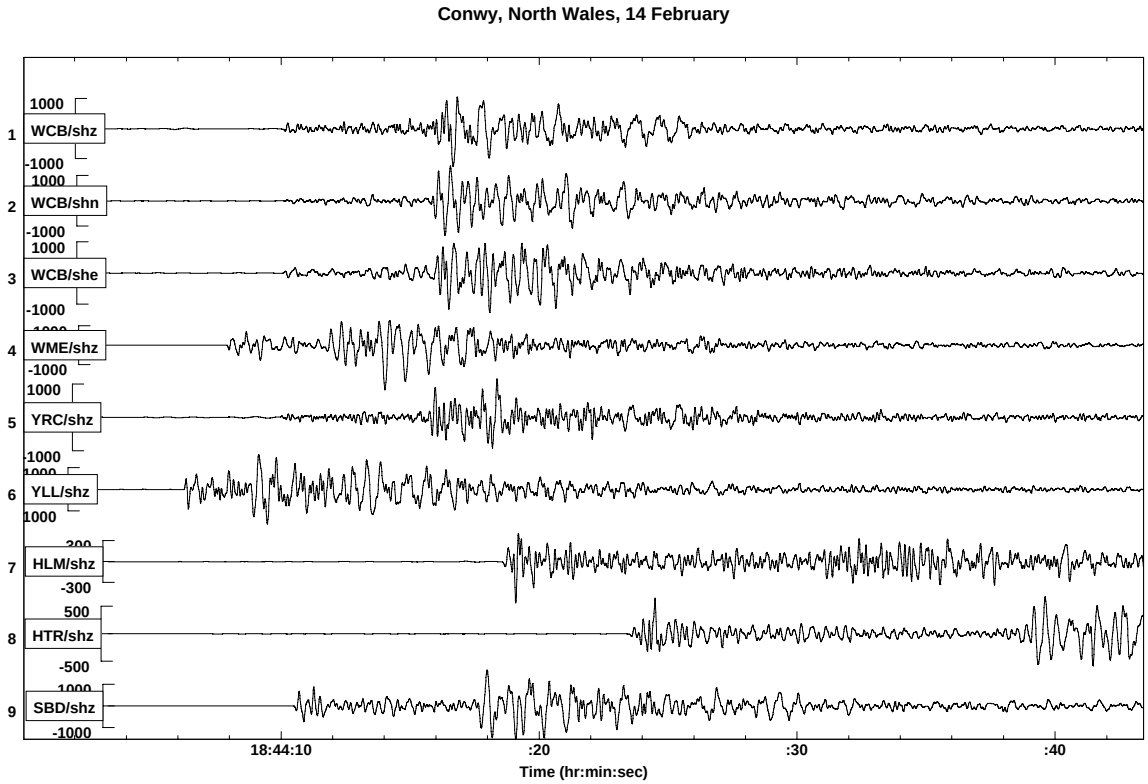


**Figure 6. Seismograms of the ground displacement from the Conwy earthquake, 14 February 2005, recorded by BGS seismograph stations.**

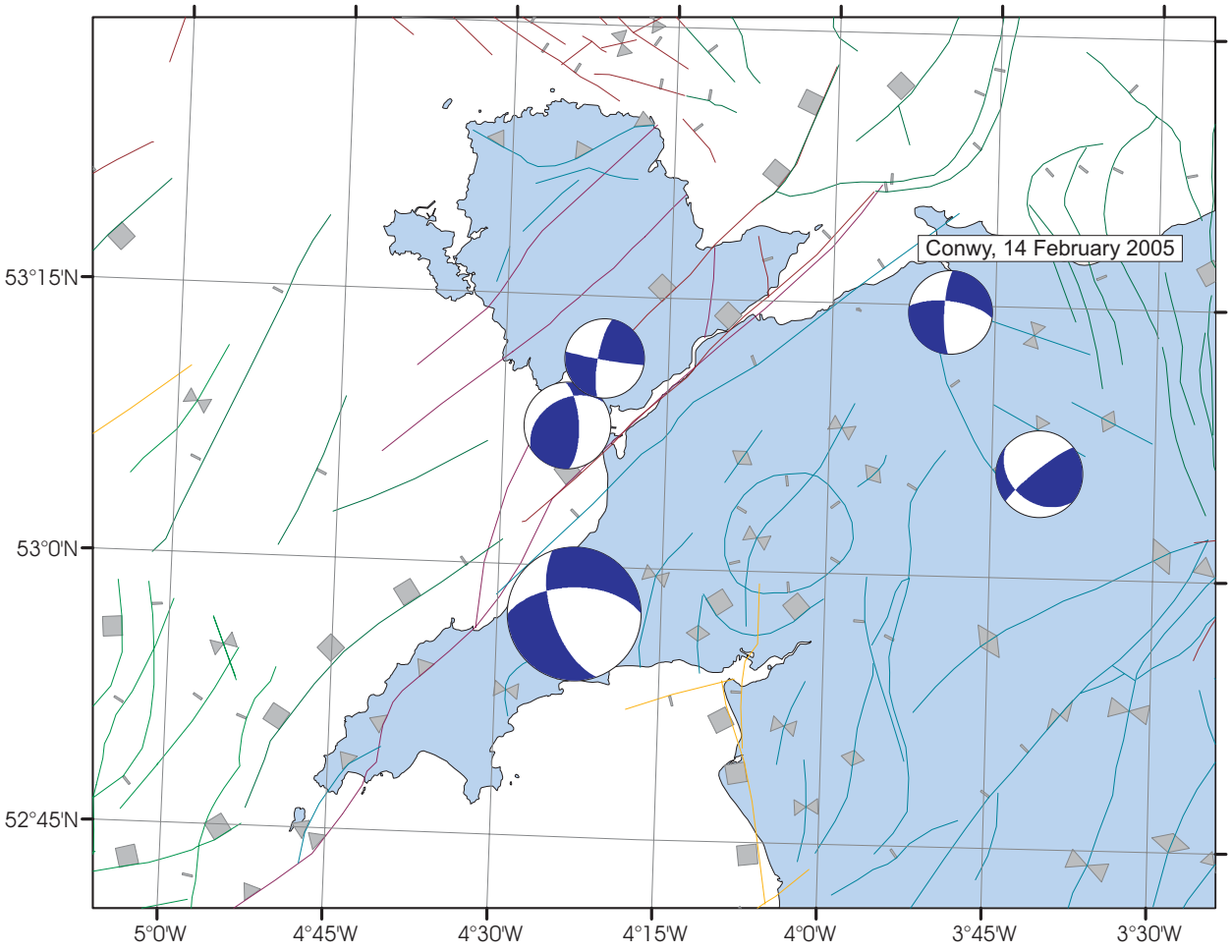


**Figure 7. Focal mechanism for the Conwy earthquake showing the observed surface faulting in the region and focal mechanisms for other earthquakes in North Wales.**

## FORT WILLIAM, 10 DECEMBER 2005, 3.0 ML

This earthquake (Figure 8) occurred on 10 December 2005 at 23:21 UTC, with an epicentre approximately 8 kilometres west of Fort William. The instrumental magnitude was determined at 3.0 ML, and initial reports suggested that the earthquake had been felt throughout Lochaber. A macroseismic survey was launched on the BGS 'Earthquakes' web site and 210 responses were received.

The highest intensity experienced was 5 EMS, which was observed over an area extending approximately 14 kilometres to the northeast and southeast of the epicentre. The greatest number of replies came from Fort William.

Comments received included descriptions of the noise made by the earthquake as sounding like a heavy clap of thunder, a gust of wind, or even a quarry blast. Most of the people who felt the event described the shaking as weak to moderate. A few people reported objects falling over or coming off their wall fixing. In several reports it was stated that domestic animals were alarmed. There were no reports of damage to property. The most distant report was from Mull, 75 km to the southwest. The total felt area was over 7,300 km$^2$ (Figure 9). The areas within each isoseismal (rounded to the nearest 100 km$^2$) were as follows: 1,100 km$^2$ (isoseismal 4) and 200 km$^2$ (isoseismal 5).

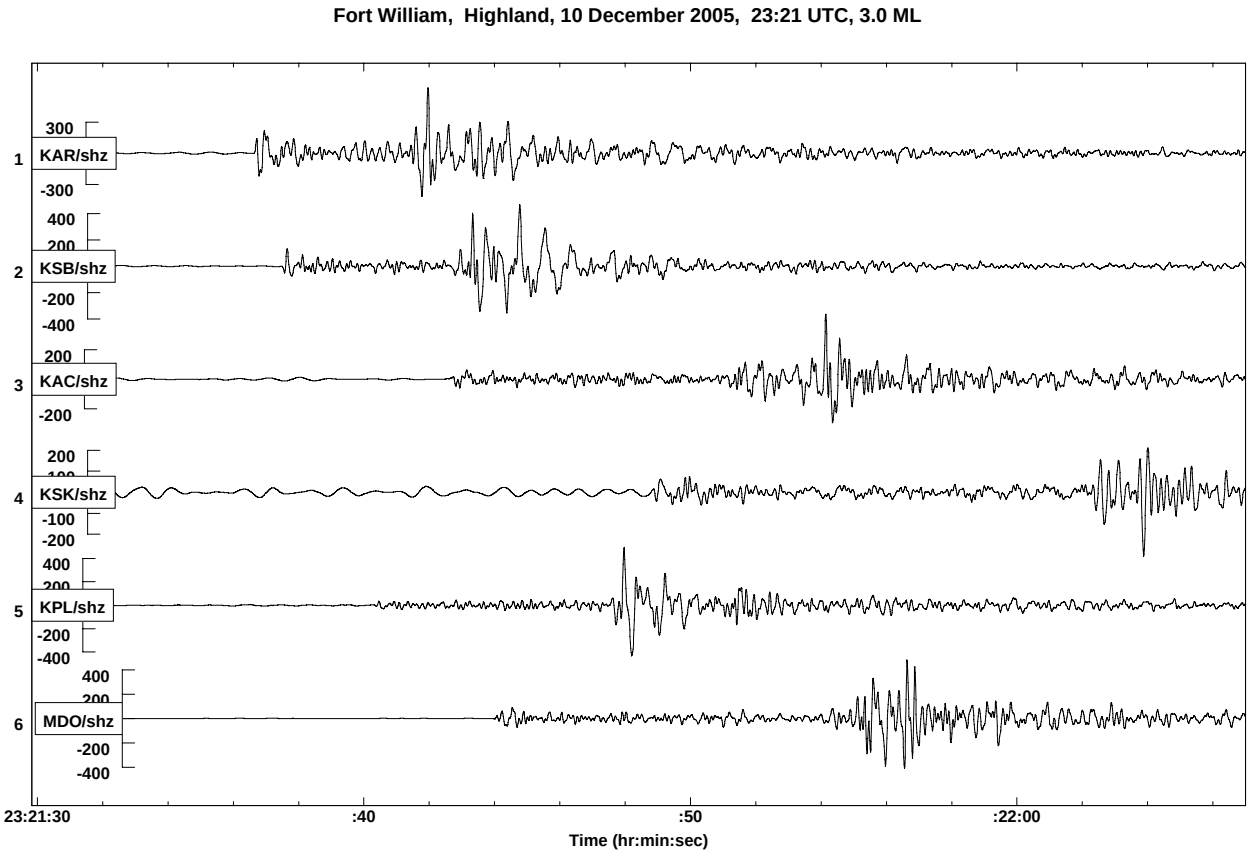


**Figure 8. Seismograms of the ground displacement from the Fort William earthquake, 10 December 2005, recorded by BGS seismograph stations.**

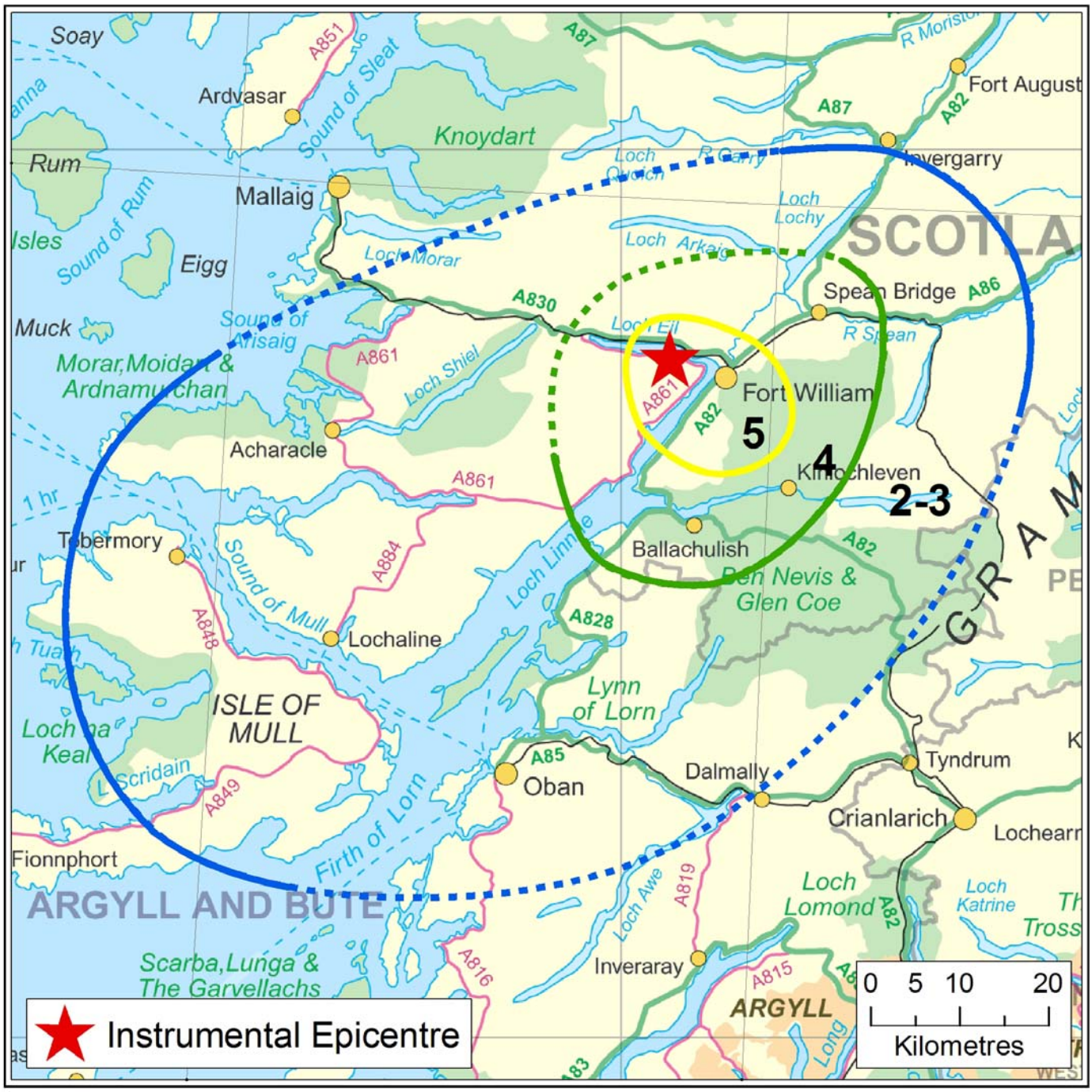


**Figure 9. Isoseismal map for the Fort William earthquake.**

## BUNCEFIELD EXPLOSION, 11 DECEMBER 2005

The main explosion at the Buncefield fuel depot on 11 December 2005 was detected at more than 30 seismic stations in the UK, and also on stations in the Netherlands. Signals from both seismic and acoustic waves were recorded. Smaller explosions reported to have occurred after the main explosion, were not detected at the seismic stations, indicating that these were significantly smaller than the main explosion. The seismograms (Figure 10) were analysed to identify P-wave arrival times, which were then used to compute the origin time. The explosion source location and depth in this procedure were fixed to the known location of the fuel depot (51.766°N and 0.427°W). The origin time was determined to have been 06:01:31.45 UTC with a robust uncertainty of 0.5 sec. This result was obtained based on a velocity model derived for Mid Wales, in the absence of a specific model for central England. However, the Mid Wales model provides a good match between observed and calculated travel times. Inversion for location, in addition to origin time, resulted in a shift of only 1.4 km from the known location and a shift in origin time of 0.1 sec. The origin time was also found to be consistent with the arrival times of the acoustic waves that were observed on the seismograms. The magnitude (2.3 ML) was computed based on S-wave amplitudes, which underestimates the true energy release for two reasons. First, S-wave amplitudes are less for explosions compared to earthquakes and second, the explosion was above ground and, therefore, not well coupled to the ground.

To study the felt effects of the explosion a survey was carried out. Members of the public were invited to complete the questionnaire on the BGS "Earthquakes" web site. The results (Figure 11) confirmed that the explosion was felt throughout a large part of England, with the most distant reports coming from as far north as Lancashire, West Yorkshire and Humberside, and as far west as Powys, Mid Glamorgan and Somerset.

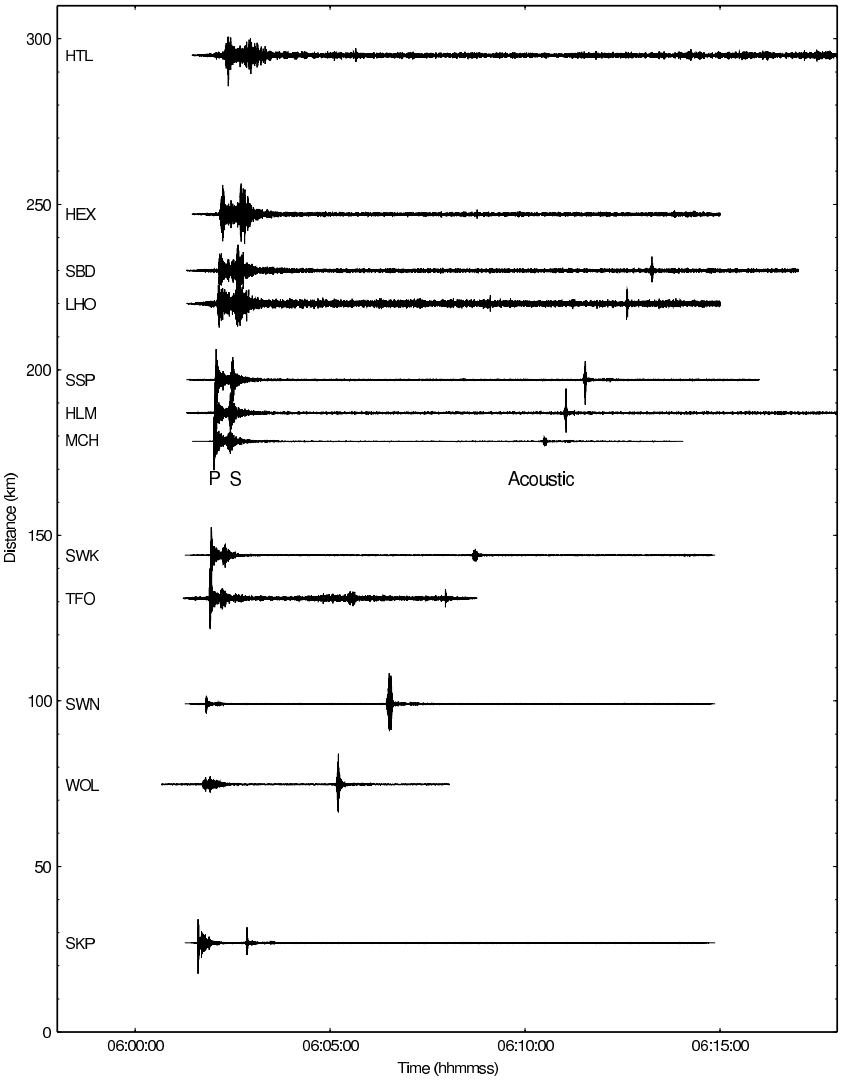


**Figure 10. Seismogram of the Buncefield explosion, 11 December 2005, recorded on BGS seismograph network stations.**

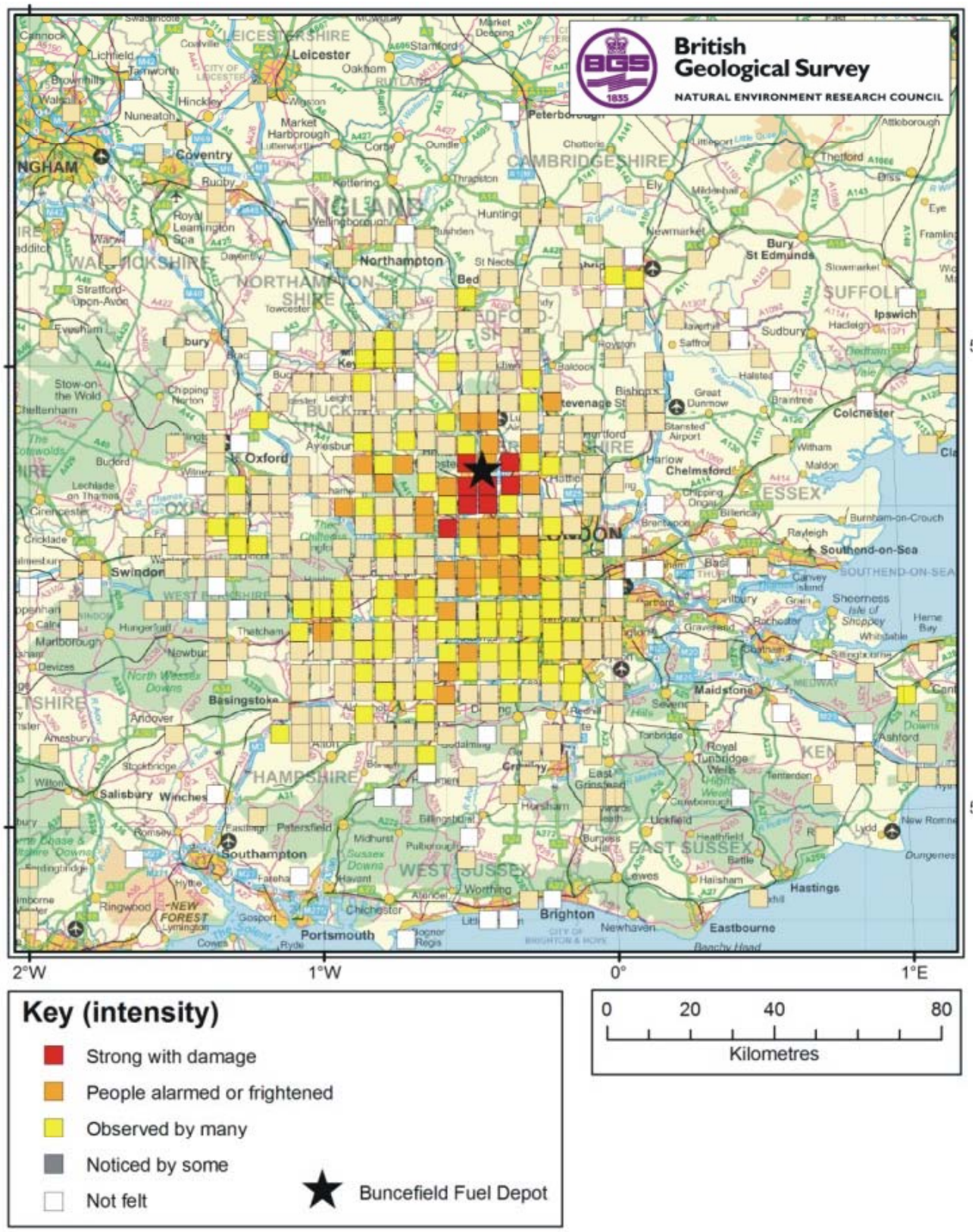


**Figure 11. Strength of shaking from the explosion determined for 5 x 5 km grid squares.**