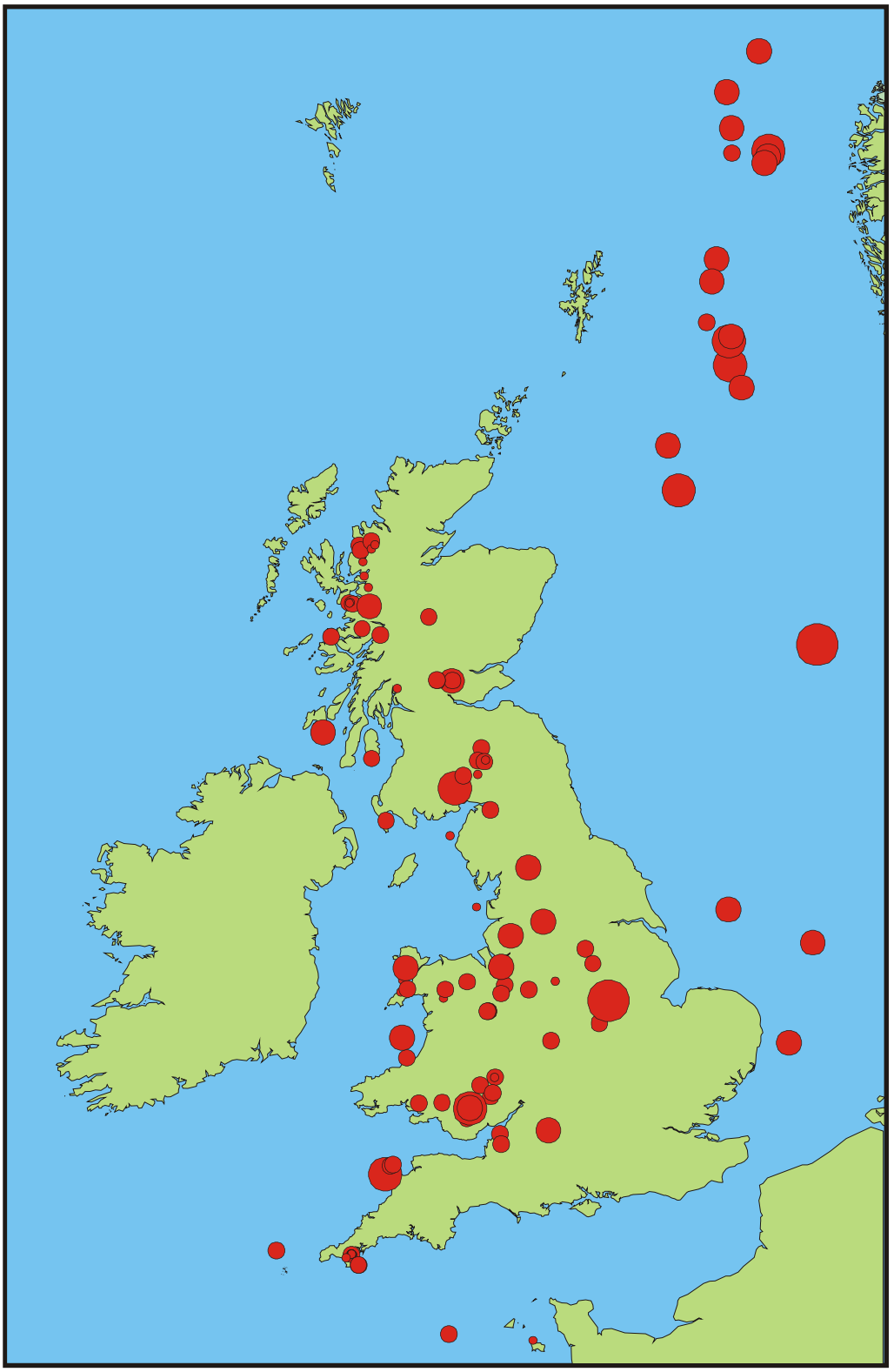
# British Geological Survey

# BULLETIN OF BRITISH EARTHQUAKES 2001



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£12.50

**BRITISH GEOLOGICAL SURVEY**

**TECHNICAL REPORT IR/02/26**

**Global Seismology and Geomagnetism**

# Bulletin of British earthquakes 2001

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**March 2002**

*Bibliographic reference*

**Simpson, B A (editor),** 2002.
Bulletin of British earthquakes 2001.
*British Geological Survey Technical Report IR/02/26.*



**Edinburgh British Geological Survey 2002**

## BRITISH GEOLOGICAL SURVEY

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*The British Geological Survey is a component body of the Natural Environment Research Council*


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**CONTENTS**

# 1. INTRODUCTION

## 1.1 The Bulletin

The British Geological Survey's Seismic Monitoring and Information Service operates a nationwide network of seismograph stations in the United Kingdom. The whole of the UK, including coastal waters, is covered within the limits of the detection capabilities of the seismograph network, and accuracy is extended through data exchange with neighbouring countries. Seismic phase data, location details and magnitudes are presented in the Bulletin for all earthquakes detected and located by BGS during 2001 together with maps showing the larger magnitude events since 1979 ($ML \geq 2.5$) and since 1970 ($ML \geq 3.5$). All felt areas are quoted in km², and are for the area enclosed within isoseismal 3 EMS (European Macroseismic Scale, Appendix C).

## 1.2 Summary of 2001 Seismicity

There have been 135 earthquakes located by the monitoring network during the year, with 37 of them having magnitudes of 2.0 ML or greater. Of these, 10 are known to have been felt, together with a further 6 smaller ones, bringing the total to 16 felt earthquakes in 2001.

The largest onshore earthquake, with a magnitude of 4.1 ML, occurred near Melton Mowbray, Leicestershire on 28 October (Appendix A5). BGS initiated a macroseismic survey and earthquake questionnaires were distributed through local and national newspapers. Approximately 1800 emailed responses were received, the most received for any UK earthquake so far, together with an estimated 4200 paper questionnaires, giving a total of 6000 responses in all. Many media interviews were conducted and a large number of enquiries were received. The earthquake was felt throughout Lincolnshire, Leicestershire, Warwickshire, Yorkshire, Shropshire and Nottinghamshire. The most distant reports were from the following places: in the west, the earthquake was felt near Chester. In the east, the earthquake was reported felt in King's Lynn, Norfolk. In the north, the limit of observation was marked by Knaresborough. In the south, the shock was felt as far as Oxford, with also a single very distant observation from Salisbury. There were reports of damage to chimneys in the Melton Mowbray area, indicating an intensity of 6 EMS. Felt reports described "we ran into the streets", "the whole house shook", "the table moved" and "we were very frightened". A maximum acceleration of 0.02g was measured at the strong motion station at Keyworth, some 15 km from the earthquake. The focal mechanism for the Melton Mowbray earthquake also shows oblique normal faulting along either a near N-S fault plane dipping at 51° or along a near E-W fault plane dipping at 58°. The average maximum compressive stress direction has an azimuth of 140°and dip of 55° and the minimum stress direction strikes at 44° and dips at 4°.

The largest offshore earthquake occurred in the Central North Sea on 7 May. It had a magnitude of 5.0 Mw (Appendix A1) and was located approximately 410 km east of Edinburgh. It was felt on three nearby oil platforms in the Ekofisk field, The Ekofisk Hotel platform control tower described "a swaying lasting 2 minutes which left us feeling dizzy", they also confirmed that the Albuskjell platform some 15 km to the north and the Eldfisk platform, some 26 km to the south reported similar felt effects. The focal mechanism obtained for the earthquake shows normal faulting with north-south trending nodal planes. A further 22 events occurred in the North Sea and surrounding waters during the year, with magnitudes ranging between 1.2 and 3.9 ML, and were located using both the BGS and Norwegian networks.

An earthquake with a magnitude 3.0 ML, occurred on 13 May (Appendix A2), with a location near Dumfries. BGS received many felt reports, from the Police, the media, Dumfries Council and residents of the Dumfries area. Felt reports described "the entire house shook", "the neighbours felt a shaking and ran into their back gardens", "the floor moved" and "felt like an explosion". A macroseismic survey was conducted and over 590 replies were received, indicating a maximum intensity of 5 EMS. This event was followed by four aftershocks on the same day with magnitudes ranging between 0.5 and 1.3 ML, the largest event was felt with intensities of at least 3 EMS. The focal mechanism obtained for the Dumfries earthquake shows predominantly strike-slip faulting along near vertical fault planes striking approximately NNW-SSE and ENE-WSW respectively. The near horizontal, NW-SE orientation for the principal stress direction (P-axis) is in ground agreement with the expected regional stress tensor.

An earthquake, with a magnitude of 3.6 ML, occurred off Hartland Point, Devon, on 31 May (Appendix A3). BGS received many felt reports from residents of Cornwall and Devon, who described "I ran outside alarmed", " I thought a nuclear explosion had gone off" and "the whole house shook". A macroseismic survey was conducted and over 520 replies were received, indicating a maximum intensity of 5 EMS.

Near Mallaig, Highland an earthquake with a magnitude of 1.7 ML, occurred on 20 June. Felt reports were received from the village of Mallaig, where intensities reached 3 EMS. Felt reports described "I felt a shudder through my feet" and "sounded like a large explosion".

Fifteen events occurred in Constantine, Cornwall throughout June, with magnitudes ranging between 0.0 and 1.1 ML. This is an area that has experienced similar swarm activity in the past.

An earthquake with a magnitude of 2.2 ML, occurred on 27 June, with a location near Sedbergh, Cumbria. A single felt report was received from a resident of Cowgill**,** some 9 km to the west of the epicentre, who described the following "the whole house shook, I was woken from sleep and I heard a bang", indicating an intensity of at least 4 EMS.

On 21 July, an earthquake with a magnitude of 1.9 ML occurred at the northern end of the Isle of Mull, western Scotland. BGS received one felt report from a resident of Salen, approximately 15 km southeast of the epicenter, who described "the whole house shook" and "quite a weak rumble", indicating an intensity of 3 EMS.

On 1 September, an earthquake with a magnitude of 1.8 ML occurred near Blackford, Tayside. BGS received felt reports from residents of Glendevon, which described "the whole house shook". A further two earthquakes with magnitudes of 2.1 and 1.3 ML, occurred in the Blackford area, with intensities of 3 EMS, respectively, on 19 December. Felt reports were received from the Blackford and Glendevon areas of Tayside and described "we heard a loud rumble", "the house shook" and "the radiators rattled". This is an area that has continued to be active in recent years; 49 events occurred in 1997, of which five were felt by local residents; 10 events occurred in 1998, of which 2 were felt by local residents, 3 events occurred in 1999 and 4 events occurred in 2000, of which 3 were felt**.** In the same general area in 1979, a magnitude 3.2 ML Ochil Hills earthquake was felt with a maximum intensity of 5 EMS.

An earthquake with a magnitude 3.1 ML, occurred on 10 October (Appendix A4), with a location near Bargoed, Mid-Glamorgan. BGS received felt reports from residents of the Bargoed area. Felt reports described “the bed was shaking”, “the entire house shook” and “I was woken from sleep”. A macroseismic survey was conducted and approximately 120 replies were received, indicating a maximum intensity of 4 EMS. This event was followed by three aftershocks with magnitudes of 1.6, 1.6 and 2.5 ML, the largest event (2.5 ML) on 18 October was felt with intensities of 4 EMS. The Bargoed focal mechanism shows oblique normal faulting along either a NW-SE striking fault plane dipping at 38° or a NNE-SSW striking fault plane dipping at 63°. The average maximum compressive stress direction has an azimuth of 142°and dip of 61° and the minimum stress direction strikes at 258° and dips at 14°.

Near Swindon, Wiltshire, an earthquake with a magnitude of 2.7 ML occurred on 18 March. Earthquakes of this size are usually felt when they occur onshore but enquiries to local Police stations and post offices revealed that no felt reports were received. This is an area that has experienced little seismicity in both the historical and instrumental periods, with only one event located since 1970 within a 20 km radius of this event.

Near Chester, Cheshire, three events occurred on 17 October, with magnitudes of 2.4, 2.1 and 1.5 ML, BGS received no felt reports for these earthquakes.

An earthquake with a magnitude of 2.3 ML, occurred near Anglesey, Gwynedd on 5 November. BGS received a single felt report for this earthquake which described “a bang, then a rumbling” indicating an intensity of at least 2 EMS.

An earthquake with a magnitude of 1.5 ML, occurred on 1 December with a location near Ballachulish, Highland. BGS received a number of felt reports from residents of Glenachulish, Ballachulish and Onich. Felt reports described "we heard a loud rumble", "we felt a vibration" and "we ran outside", indicating an intensity of 4 EMS.

On 16 December, an earthquake with a magnitude of 2.6 ML, occurred approximately 6 km southwest of Halifax, West Yorkshire. BGS received felt reports from residents of Halifax and Todmorden which described "we heard a loud rumble", the "whole house shook" and "we ran outside", indicating an intensity of 4 EMS. This event locates approximately 3 km southeast of the magnitude 4.0 ML Todmorden earthquake, on 7 March 1972, that was felt with intensities of 5 EMS.

In North Wales, two events on 6 and 11 December with magnitudes of 1.2 ML and 0.7 ML respectively, occurred on the Lleyn Peninsula, in the same area and at similar depths (20 km) as the magnitude 5.4 ML Lleyn earthquake of 19 July 1984, which was felt throughout England and Wales and into Scotland and Ireland.

The coalfield areas of Yorkshire, Staffordshire, Nottinghamshire and Derbyshire continued to experience shallow earthquake activity that is believed to be mining induced. Some 4 coalfield events, with magnitudes ranging between 0.8 and 1.8 ML, were detected during the year.

# 2. BULLETIN FORMAT

## 2.1 Tables

Data on the earthquakes and seismograph stations operated in 2001 are arranged as follows:

**TABLE 1**: This is a chronological listing of all earthquakes in and near the UK for which a reliable epicentral location could be obtained together with felt sonic events and other significant non-natural events.

**TABLE 2:** This is a listing of earthquakes arranged in order of decreasing latitude to facilitate identification of earthquakes in selected regions.

**TABLE 3:** This is a chronological listing of felt sonic events and significant non-natural events detected by the seismograph network. These events are included in Table 1 but not Table 2.

**TABLES 4:** This is an alphabetical listing of the geographical co-ordinates of seismograph stations operated in 2001 by BGS, DIAS (the Dublin Institute of Advanced Studies) and KUN (Keele University). Table 4a lists the short period instruments; Table 4b the BGS low gain stations and Table 4c the BGS strong motion instruments.

**TABLE 5:** This lists the arrival times of phases for the events in Table 2 at each station, together with amplitude information used for magnitude calculation.

**TABLE 6:** This shows the crustal seismic velocity models used for event location.

## 2.2 Figures

**FIGURE 1:** Seismograph network operational in December 2001.

**FIGURE 2:** Detection threshold of the seismograph stations operational in December 2001 for average background noise conditions where the detection criterion is that the signal has to exceed 4 nanometers at 10 Hz on 4 stations.

**FIGURE 3:** Epicentral location map of all the events in 2001 that are listed in Table 2. It is estimated that the dataset is complete for the land area.

**FIGURE 4:** Locations of earthquakes in the UK of magnitude 2.5 ML and above in the period 1979 to 2001. It is estimated that the dataset is complete for the land area.

**FIGURE 5:** Locations of earthquakes in the UK of magnitude 3.5 ML and above in the period 1970 to 2001.

# 3. THE BGS UK SEISMOGRAPH NETWORK

## 3.1 Instrumentation

A standard seismic network consists 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 seismometers, are recorded onto a digital event-triggered recorder (SEISLOG). It is designed to trigger on events and write to a computer disk which is accessed from Edinburgh via a modem. Four times a day, data is transferred automatically to the Edinburgh central computer and the events are analysed during that day providing a rapid response for location and magnitude determinations. All of the recording centres in the UK have been upgraded to provide a SEISLOG system (Figs 1 and 2). At some centres, a continuous back-up facility is provided by the traditional magnetic tape Geostore recorders, and tapes are dispatched weekly to Edinburgh for analysis. SEISLOGS have the advantage over the Geostore system by providing digital data, of wider dynamic range (72 db), a bandwidth of up to 40 Hz and the capacity for 32 seismic channels. The system also has the facility to auto-reboot in the event of mains power failure and this normally takes three minutes once power has recovered.

At some locations, on-line paper chart recorders display three channels to enable local operators to view earthquake data. At other stations, low-gain vertical seismometers 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 digitally recorded broad-band station (Guralp) located in Edinburgh, provides an assessment of surface-wave (Richter magnitude) for large Global earthquakes.

Recent developments in geographic coverage of the UK are described in Walker (2002, in press) and details of the SEISLOG system, which has been jointly developed by Bergen university and BGS are given in Utheim and Havskov (1993).

## 3.2 Detection Threshold

The detection capabilities of a network depend upon station distribution, instrument sensitivity and background noise levels. For the BGS UK network, the lower limit of sensitivity is governed by the background noise level. The contours in Figure 2 illustrate the lower threshold magnitude for an earthquake to significantly exceed 4 nanometers of noise (average) at 10 Hz on at least four seismographs. Noise sources such as wind, waves, traffic and livestock vary considerably with time (typically 0.5 to 15 nanometers, 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.

The detection contours in Figure 2 hold true only if all stations are continuously monitored. Small events in unmonitored areas may then go undetected unless they are felt and reported to BGS by local inhabitants. The detection capabilities by this process are strongly dependent on population density.

### 3.3 Environmental Monitoring

The infrastructure provided by the UK nationwide seismic monitoring network, comprising remote sensing stations linked to computers, is ideal for expansion into a full-spectrum environmental monitoring network (including pollution, radioactivity and climate). The remote sites required for seismic stations (in order to escape 'cultural' vibration noise from industry, towns, roads etc) are ideal for establishing environmental baselines, long-term trends, the effects of sudden release incidents and the long-range impacts of power stations, traffic and city emissions. The data-rate for seismics, at 100 samples per second per channel, is very high compared to the normal requirements of an environmental monitoring station. It has, therefore, proved to be relatively simple to provide for the transmission of 16 channels of environmental data, at 1 minute intervals, alongside the seismics. To demonstrate this, BGS has established several remote environmental stations, recording Ultra Violet-B, a full set of meteorological parameters, radioactivity, NOx, $SO_2$ and $O_3$ gases. At Eskdalemuir Observatory, in the Scottish Borders, a comprehensive system for environmental monitoring has been installed to prove this capability through an INTERNET connection with the wider community.

## 4. HYPOCENTRE PARAMETERS AND THEIR ERRORS

### 4.1 Epicentre Location

By accurately timing the signal onsets at a minimum of three stations, a location can be found for an earthquake which satisfies the observed pattern of arrivals. Instrumental locations in the bulletin were obtained using the computer program HYPO71 (Lee and Lahr, 1975) which 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 velocity through the earth can be modelled.

The velocity models used for the location of events in 2001 are given in Table 6 and were derived from a series of refraction profiles traversing Britain, LISPB (Bamford et al, 1976; Bamford et al, 1978; Assumpçao and Bamford, 1978 and Bott et al., 1985).

### 4.2 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. Constraints on the depth can usually only be imposed when a station is very near the epicentre and even then the accuracy depends on the velocity model.

The best depth determinations have been obtained when an earthquake or earthquake series occurred almost beneath a network. For events at larger distances, and where the error columns (ERH and ERZ), in the tables, are blank, the depth errors can be up to tens of kilometres. The quality factor of the event, as listed in the tables (SQD), is an indication of the depth error. As a general guide only, A*A, A*B, B*A and possibly B*B class events, have reliable depths.

### 4.3 Seismicity Distribution

Owing to variability in the earthquake detection threshold, which is governed by ambient noise conditions and the geometry of the observing network (see 3.2), the bulletin is biased towards certain localities. In order to present a consistent picture of UK seismic activity, earthquakes with magnitude 2.5 ML or greater, in the period 1979 to 2001, have been plotted in Figure 4. The data set is considered complete for these magnitudes in all localities of the onshore area. Seismicity for the period 1970 to 2001 is shown in Figure 5 with a threshold magnitude of 3.5 ML. This is the period covered by BGS instrumentation which in the early years, only consisted of the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) and a station near Kyle of Lochalsh (KYL). The dataset is likely to be complete for such magnitudes.

### 4.4 Magnitude

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

$$ML = \log10\ (A/Ao)$$

where A is the maximum deflection (centre to peak in mm) registered by the earthquake 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 out 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 world-wide today. The ML magnitudes in this bulletin have been calculated according to Richter by 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 was not possible, the mean of the magnitudes from a number of verticals has been 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.

### 4.5 Intensity

Intensity is a measure of the effect of the shaking 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, on the European Macroseismic Scale (EMS), (Grünthal, 1998).

# 5. BULLETIN CONTENT AND COMPLETENESS

## 5.1 The Geographical Area

The bulletin covers all of the UK land mass and its coastal waters including the North Sea to 800 kmE and 1500 kmN.

## 5.2 Events Included

All events believed to be of true tectonic origins have been included, that is, events caused by natural stresses within the earth.

Coalfield events are also included. These are small events occurring near coal workings which are believed to be caused by the redistribution of stress as the coal is extracted and, in some cases by collapse in old workings. They are indicated by C/F in the comments column of Tables 1, 2 and 5.

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 reported by local people as small earthquakes. They are indicated by 'SONIC' in both the locality and comments column of Tables 1 and 3. There were five felt sonic events reported during the year.

Significant non-natural events which received media attention or were greater than magnitude 2.5 ML and felt explosions are also included in Tables 1 and 3. The felt explosions are indicated by 'EXPL' in both the locality and comments column.

## 5.3 Events Excluded

Events that are known, or suspected to be of explosive origin, are excluded from the bulletin. Explosions due to quarrying, mining, weapon testing or disposal, naval exercises, geophysical prospecting and civil engineering are all excluded where possible, unless they are greater than 2.5 ML or reported to be felt. Unfortunately, identification by record character, location and time of occurrence is not always conclusive and some man-made events may have been included in the bulletin or, more rarely, a small natural event may have been excluded.

## 5.4 Completeness

The contours of detection threshold in Figure 2 show that 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. High noise levels may cause this 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.

# 6. ACKNOWLEDGEMENTS

We are indebted to the States of Jersey Meteorological Office, the Universities of East Anglia, and Leeds, and many individuals who assisted with station operation; to P H O Henni, and R M W Musson, who supplied the macroseismic data, A B Walker, B Baptie and J Bott for focal mechanism studies and to T Alexander, J Bukits, P S Day, D Dawes, H Gordon, J Laughlin, D L Petrie, R Southworth, D A Stewart and W Velzian who have provided data analysis and field support.

The work was supported in part by:

British Energy
BNFL Magnox Generation
British Nuclear Fuels plc
Department of the Environment Transport and the Regions
Faroese Museum of Natural History
GEM Oil Industry
Health and Safety Executive
HM Nuclear Installations Inspectorate
Hiscox Syndicates Ltd
The Jersey New Waterworks Company
Natural Environment Research Council
Renfrewshire Council
Scottish Coal
Scottish & Southern Energy plc
United Kingdom Atomic Energy Authority
Welsh Assembly
Western Frontiers Association

Interchange of data with UK and European agencies, has contributed to the accuracy of location of some of these events and to the determination of their magnitudes. They include:

Atomic Weapons Establishment (Blacknest, UK)
Centre Seismologique Euro-Mediterranean (Bruyeres-de-Chatel, France)
Dublin Institute for Advanced Studies (Dublin, Ireland)
Kort-og Matrikelstyrelsen (Copenhagen, Denmark)
Icelandic Meteorological Office (Reykjavik, Iceland)
Institute de Physique du Globe (Paris, France)
Instituto Geografico Nacional (Madrid, Spain)
Instituto Nacional de Meteorologia e Geofisica (Lisbon, Portugal)
International Seismological Centre (Newbury, UK)
Karlsruhe Geophysicalisches Institut (Karlsruhe, Germany)
Koninklijk Nederlands Meteorologisch Instituut (Ae de Bilt, Netherlands)
Laboratoire de Detection et de Geophysique (Bruyeres-de-Chatel, France)
Laboratoire Souterrain de Geodynamique (Walferdange, Luxembourg)
NORSAR (Oslo, Norway)
Observatoire Royal de Belgique (Brussels, Belgium)
Powys Observatory (Knighton, UK)
University of Bergen (Bergen, Norway)
University of Keele (Keele, UK)
University of Liverpool (Liverpool, UK)

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

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**UK Earthquake Monitoring Annual Reports**

| YEAR | AUTHOR(S) | BGS REPORT NO. |
|---|---|---|
| 89/90 | Browitt, CWA and Turbitt, T | WL/90/13 |
| 90/91 | Browitt, CWA and Turbitt T | WL/91/26 |
| 91/92 | Browitt, CWA and Turbitt T | WL/92/11 |
| 92/93 | Browitt, CWA and Walker, AB | WL/93/08 |
| 93/94 | Walker, AB and Browitt, CWA | WL/94/10 |
| 94/95 | Walker, AB and Browitt, CWA | WL/95/10 |
| 95/96 | Walker, AB and Browitt, CWA | WL/96/06 |
| 96/97 | Walker, AB | WL/97/16 |
| 97/98 | Walker, AB | WL/98/03 |
| 98/99 | Walker, AB | WL/99/03 |
| 99/00 | Walker, AB | WL/00/03 |
| 00/01 | Walker, AB | IR/01/46 |

**TABLE 1**

**CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 2001**

# 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, neg ative longitude indicates west. |
| **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. |
| **DM** | : | Epicentral distance in kilometres to the closest station. |
| **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. |
| **SQD** | : | S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations. |

## Locality abbreviations

| | | | | | |
|---|---|---|---|---|---|
| Sonic | : | Sonic boom | N Yorkshire | : | North Yorkshire |
| Expl | : | Explosion | Notts | : | Nottinghamshire |
| D & G | : | Dumfries and Galloway | Lincs | : | Lincolnshire |
| Gtr | : | Greater | N'umberlnd | : | Northumberland |
| Her & Worcs | : | Hereford and Worcester | Staffs | : | Staffordshire |
| S'Clyde | : | Strathclyde | Leics | : | Leicestershire |
| S Yorkshire | : | South Yorkshire | W Mids | : | West Midlands |
| New-U-Lyme | : | Newcastle-Under-Lyme | Salop | : | Shropshire |
| Penin | : | Peninsula | | | |

## Comments abbreviations

| | | |
|---|---|---|
| Sonic | : | Sonic boom |
| Expl | : | Explosion |
| C/F | : | Coalfield type event |
| ... | : | and felt elsewhere |

# TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010101 | 182707.9 | 55.63 | -6.14 | 139.3 | 645.6 | 9.0 | 2.1 | ISLAY,INNER HEBRIDES | | 6 | 47 | 256 | 0.08 | 2.2 | 3.7 | B*D | |
| 20010103 | 065848.7 | 59.85 | 1.97 | 622.5 | 1114.1 | 15.0 | 2.6 | NORTHERN NORTH SEA | | 9 | 179 | 140 | 0.47 | 5.4 | 17.8 | D*D | |
| 20010104 | 213117.1 | 59.80 | 1.92 | 619.7 | 1108.3 | 19.2 | 3.1 | NORTHERN NORTH SEA | | 9 | 177 | 143 | 0.15 | 2.0 | 6.2 | C*D | |
| 20010105 | 003116.2 | 49.29 | -3.53 | 288.5 | -66.3 | 7.1 | 1.6 | ENGLISH CHANNEL | | 8 | 97 | 251 | 0.31 | 16.0 | 14.2 | D*D | |
| 20010105 | 005152.0 | 55.39 | -3.10 | 330.0 | 611.1 | 8.5 | 1.0 | HAWICK,BORDERS | | 10 | 10 | 148 | 0.06 | 0.8 | 1.5 | A*C | 20KM WSW OF HAWICK |
| 20010105 | 210026.5 | 56.24 | -3.76 | 291.1 | 706.4 | 3.9 | 0.5 | BLACKFORD,TAYSIDE | | 6 | 15 | 152 | 0.03 | 0.4 | 0.6 | A*C | |
| 20010109 | 192611.0 | 60.02 | 1.47 | 593.3 | 1130.9 | 5.0 | 1.2 | NORTHERN NORTH SEA | | 5 | 148 | 337 | 0.35 | | | D*D | |
| 20010113 | 170853.3 | 52.86 | -3.76 | 281.6 | 331.0 | 11.9 | 0.3 | BALA,GWYNEDD | | 8 | 27 | 141 | 0.05 | 0.3 | 1.1 | A*C | 10KM SE OF BALA |
| 20010116 | 142416.4 | 54.73 | -4.89 | 213.9 | 541.1 | 3.9 | 1.1 | LUCE BAY,D & G | | 9 | 19 | 81 | 0.23 | 1.6 | 4.3 | B*C | |
| 20010117 | 161225.0 | 59.55 | 1.91 | 621.1 | 1079.8 | 10.0 | 3.0 | NORTHERN NORTH SEA | | 10 | 185 | 157 | 0.50 | 4.7 | 12.5 | D*D | |
| 20010121 | 010425.0 | 52.43 | -1.86 | 409.4 | 281.0 | 8.9 | 1.0 | BIRMINGHAM,W MIDLANDS | | 6 | 51 | 132 | 0.17 | 2.6 | | C*D | |
| 20010130 | 201006.5 | 55.38 | -5.21 | 196.9 | 614.7 | 8.1 | 1.3 | SOUTH OF ISLE OF ARRAN | | 8 | 25 | 129 | 0.10 | 0.9 | | C*C | |
| 20010209 | 214522.1 | 62.84 | 3.15 | 661.9 | 1450.3 | 15.0 | 2.9 | NORWEGIAN SEA | | 6 | 339 | 314 | 0.34 | | | D*D | |
| 20010212 | 111948.4 | 52.33 | 2.27 | 690.8 | 278.4 | 15.4 | 2.7 | SOUTHERN NORTH SEA | | 6 | 54 | 312 | 0.08 | 2.3 | 2.2 | B*D | |
| 20010214 | 225133.8 | 51.87 | -2.87 | 340.0 | 219.3 | 13.0 | 1.2 | ABERGAVENNY,GWENT | | 7 | 17 | 120 | 0.07 | 0.7 | 1.0 | A*B | |
| 20010217 | 002950.7 | 52.42 | -4.46 | 232.4 | 283.5 | 5.6 | 1.5 | CARDIGAN BAY,WALES | | 11 | 41 | 191 | 0.14 | 0.8 | 2.8 | B*D | 25KM WEST OF ABERYSTWYTH |
| 20010219 | 124521.5 | 59.39 | 6.08 | 858.0 | 1083.4 | 15.0 | 3.0 | NORWEGIAN COAST | | 5 | 416 | 352 | 0.29 | | | D*D | |
| 20010220 | 093646.0 | | | | | | | SONIC-MONTROSE,TAYSIDE | 3+ | | | | | | | | SONIC-FELT MORPHIE |
| 20010220 | 150400.0 | | | | | | | PROBABLE SONIC-N'HANTS | 3+ | | | | | | | | SONIC-FELT N'HANTS... |
| 20010221 | 112259.0 | | | | | | | SONIC-YORKS/HUMBERSIDE | 3+ | | | | | | | | SONIC-FELT SCARBOROUGH… |
| 20010225 | 123938.4 | 53.54 | -2.58 | 361.4 | 405.1 | 10.4 | 2.2 | WIGAN,GTR MANCHESTER | | 15 | 77 | 126 | 0.09 | 0.5 | 1.2 | A*D | |
| 20010225 | 215309.2 | 53.53 | -2.57 | 362.2 | 404.2 | 10.9 | 1.6 | WIGAN,GTR MANCHESTER | | 9 | 75 | 87 | 0.09 | 0.6 | 1.7 | A*D | |
| 20010228 | 004236.9 | 54.88 | -2.98 | 337.4 | 553.9 | 9.6 | 1.1 | CARLISLE,CUMBRIA | | 11 | 8 | 83 | 0.15 | 0.7 | 1.9 | B*A | |
| 20010301 | 201306.0 | 52.92 | -4.51 | 231.3 | 338.6 | 16.6 | 0.6 | PWLLHELI,GWYNEDD | | 8 | 34 | 224 | 0.06 | 1.1 | 4.4 | B*D | 5KM NW OF PWLLHELI |
| 20010304 | 223630.9 | 52.43 | -4.46 | 232.9 | 284.6 | 8.9 | 2.0 | CARDIGAN BAY,WALES | | 12 | 40 | 190 | 0.08 | 0.5 | 0.7 | A*D | 25KM WEST OF ABERYSTWYTH |
| 20010310 | 092934.0 | 52.93 | -2.74 | 350.1 | 336.8 | 4.2 | 1.1 | WHITCHURCH,SHROPSHIRE | | 9 | 35 | 145 | 0.08 | 0.8 | 1.7 | A*C | 5KM SW OF WHITCHURCH |
| 20010314 | 222043.3 | 58.25 | 0.69 | 558.1 | 932.4 | 19.5 | 3.4 | CENTRAL NORTH SEA | | 28 | 210 | 239 | 0.19 | 1.7 | 3.2 | B*D | |
| 20010315 | 004937.3 | 52.97 | -2.25 | 383.0 | 341.3 | 2.3 | 1.2 | NEWCASTLE-U-LYME,STAFF | | 7 | 28 | 193 | 0.17 | 2.3 | 2.4 | B*D | C/F |
| 20010315 | 130534.2 | 53.02 | -2.68 | 354.6 | 346.7 | 9.9 | 1.7 | WHITCHURCH,SHROPSHIRE | | 8 | 41 | 178 | 0.09 | 0.9 | | C*C | 4KM NORTH OF WHITCHURCH |
| 20010318 | 014349.0 | 51.47 | -1.91 | 406.0 | 175.1 | 8.5 | 2.7 | SWINDON,WILTSHIRE | | 12 | 64 | 203 | 0.22 | 2.4 | 3.6 | B*D | |
| 20010324 | 003342.9 | 57.69 | -5.41 | 196.5 | 871.9 | 9.6 | 1.2 | KINLOCHEWE,HIGHLAND | | 10 | 22 | 151 | 0.05 | 0.3 | 2.1 | B*C | 10KM NW OF KINLOCHEWE |
| 20010324 | 103325.1 | 57.01 | -5.71 | 174.7 | 797.5 | 11.6 | 1.0 | LOCH NEVIS,HIGHLAND | | 5 | 13 | 175 | 0.07 | 0.2 | 0.8 | A*D | |
| 20010327 | 235259.0 | 52.61 | -1.02 | 466.3 | 301.3 | 5.3 | 1.6 | LEICESTER,LEICS | | 8 | 24 | 179 | 0.07 | 0.7 | 1.3 | A*C | |
| 20010415 | 045548.5 | 50.07 | -5.26 | 166.7 | 24.1 | 10.1 | 0.3 | HELSTON,CORNWALL | | 8 | 4 | 262 | 0.06 | 1.1 | 0.8 | B*D | 4KM SOUTH OF HELSTON |
| 20010421 | 143554.2 | 51.59 | -3.30 | 309.9 | 189.3 | 16.9 | 1.9 | PONTYPRIDD,GWENT | | 8 | 35 | 83 | 0.06 | 0.5 | 1.2 | A*C | |
| 20010423 | 181828.0 | 56.14 | -4.78 | 227.0 | 697.5 | 4.1 | 0.6 | LOCH LONG,STRATHCLYDE | | 7 | 28 | 263 | 0.09 | 1.4 | 1.3 | B*D | |
| 20010426 | 002638.6 | 57.32 | -5.52 | 187.9 | 830.5 | 9.7 | 0.8 | LOCHCARRON,HIGHLAND | | 5 | 8 | 136 | 0.17 | 5.2 | 10.4 | D*D | 10KM SOUTH OF LOCHCARRON |
| 20010428 | 174108.2 | 55.40 | -3.23 | 322.2 | 612.2 | 3.7 | 1.4 | ETTRICK,BORDERS | | 19 | 34 | 117 | 0.18 | 0.7 | 3.4 | B*C | |
| 20010507 | 094334.0 | 56.54 | 3.19 | 718.9 | 750.7 | 5.0 | 5.0Mw | EKOFISK | 4+ | 10 | 297 | 231 | 0.84 | 14.8 | | D*D | FELT EKOFISK FIELD |

# TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010509 | 163826.5 | 53.77 | 1.32 | 619.0 | 436.1 | 8.3 | 2.6 | SOUTHERN NORTH SEA | | 13 | 99 | 238 | 0.50 | 6.4 | 5.7 | D*D | |
| 20010509 | 233117.4 | 51.75 | -3.74 | 280.2 | 207.4 | 21.0 | 1.2 | YSTRADGYNLAIS,POWYS | | 10 | 29 | 104 | 0.07 | 0.5 | 1.6 | A*B | |
| 20010512 | 011317.6 | 55.41 | -3.08 | 331.4 | 612.9 | 7.5 | 0.7 | HAWICK,BORDERS | | 13 | 13 | 205 | 0.12 | 0.8 | 2.1 | B*D | 20KM WEST OF HAWICK |
| 20010513 | 082659.4 | 55.10 | -3.64 | 295.5 | 579.6 | 11.5 | 3.0 | DUMFRIES,D & G | 5 | 12 | 9 | 136 | 0.11 | 0.8 | 1.7 | A*C | FELT DUMFRIES... |
| 20010513 | 084951.0 | 55.09 | -3.63 | 296.0 | 578.9 | 10.8 | 0.7 | DUMFRIES,D & G | | 8 | 9 | 133 | 0.08 | 0.9 | 2.1 | B*B | |
| 20010513 | 095816.3 | 55.09 | -3.63 | 296.3 | 579.1 | 9.7 | 0.5 | DUMFRIES,D & G | | 7 | 9 | 130 | 0.07 | 0.9 | 2.3 | B*B | |
| 20010513 | 112109.2 | 55.09 | -3.63 | 296.1 | 578.9 | 9.6 | 0.8 | DUMFRIES,D & G | | 9 | 9 | 131 | 0.07 | 0.7 | 1.8 | A*B | |
| 20010513 | 112629.3 | 55.10 | -3.63 | 295.9 | 579.2 | 10.8 | 1.3 | DUMFRIES,D & G | 3+ | 9 | 9 | 133 | 0.07 | 0.8 | 1.8 | A*B | FELT DUMFRIES... |
| 20010514 | 042857.0 | 54.60 | -3.71 | 289.8 | 523.6 | 13.8 | 0.5 | SOLWAY FIRTH | | 11 | 17 | 89 | 0.11 | 0.6 | 2.5 | B*B | 9KM WEST OF WHITEHAVEN |
| 20010514 | 055039.4 | 62.44 | 2.21 | 617.0 | 1403.1 | 13.8 | 2.2 | NORTHERN NORTH SEA | | 5 | 274 | 354 | 0.10 | | | D*D | |
| 20010515 | 071933.0 | 59.30 | 2.12 | 634.7 | 1053.4 | 23.7 | 2.4 | NORTHERN NORTH SEA | | 5 | 205 | 345 | 0.28 | | | D*D | |
| 20010531 | 181929.6 | 53.40 | -1.25 | 449.9 | 389.7 | 0.0 | 1.6 | ROTHERHAM,SOUTH YORKS | | 4 | 25 | 314 | 0.06 | | | A*D | C/F,6KM SE OF ROTHERHAM |
| 20010531 | 234259.1 | 50.98 | -4.53 | 215.6 | 127.2 | 26.4 | 3.6 | OFF HARTLAND PT,DEVON | 5 | 10 | 10 | 180 | 0.07 | 0.9 | 0.3 | A*D | FELT CORNWALL & DEVON |
| 20010601 | 061807.0 | 61.79 | 3.06 | 666.4 | 1333.6 | 15.9 | 3.7 | NORTHERN NORTH SEA | | 13 | 107 | 223 | 0.13 | 5.8 | 3.7 | D*D | |
| 20010601 | 062251.4 | 61.66 | 2.94 | 661.6 | 1319.1 | 9.7 | 2.8 | NORTHERN NORTH SEA | | 8 | 182 | 227 | 0.20 | 4.8 | | C*D | |
| 20010601 | 062620.2 | 61.73 | 3.04 | 666.0 | 1327.2 | 10.1 | 2.3 | NORTHERN NORTH SEA | | 11 | 107 | 219 | 0.30 | 3.7 | 4.8 | C*D | |
| 20010602 | 004457.2 | 56.81 | 6.80 | 936.4 | 803.3 | 15.0 | 3.9 | NORWEGIAN-DANISH BASIN | | 15 | 569 | 300 | 0.38 | 16.2 | | D*D | |
| 20010605 | 083955.3 | 50.11 | -5.17 | 173.4 | 28.3 | 5.6 | 0.1 | CONSTANTINE,CORNWALL | | 8 | 3 | 149 | 0.06 | 0.7 | 1.0 | A*C | |
| 20010605 | 084343.7 | 50.11 | -5.18 | 173.0 | 28.1 | 6.2 | 0.2 | CONSTANTINE,CORNWALL | | 9 | 3 | 86 | 0.01 | 0.1 | 0.2 | A*A | |
| 20010605 | 090409.9 | 50.11 | -5.17 | 173.6 | 28.1 | 6.6 | 0.2 | CONSTANTINE,CORNWALL | | 8 | 4 | 137 | 0.03 | 0.3 | 0.8 | A*C | |
| 20010605 | 102104.9 | 51.43 | -2.74 | 348.9 | 170.5 | 5.1 | 1.2 | BRISTOL,AVON | | 6 | 24 | 230 | 0.05 | 1.3 | 0.8 | B*D | 8KM EAST OF BRISTOL |
| 20010605 | 115047.6 | 50.11 | -5.17 | 173.0 | 28.2 | 6.8 | 0.8 | CONSTANTINE,CORNWALL | | 10 | 3 | 87 | 0.03 | 0.2 | 0.4 | A*A | |
| 20010605 | 120427.5 | 50.11 | -5.18 | 172.8 | 28.2 | 6.7 | 0.8 | CONSTANTINE,CORNWALL | | 10 | 3 | 83 | 0.03 | 0.2 | 0.4 | A*A | |
| 20010605 | 120431.5 | 50.11 | -5.18 | 172.4 | 28.8 | 8.0 | 0.6 | CONSTANTINE,CORNWALL | | 9 | 2 | 98 | 0.07 | 0.7 | 1.3 | A*B | |
| 20010605 | 120738.8 | 50.11 | -5.17 | 173.5 | 28.2 | 5.9 | 0.2 | CONSTANTINE,CORNWALL | | 8 | 3 | 94 | 0.02 | 0.2 | 0.4 | A*B | |
| 20010605 | 153004.0 | 50.11 | -5.17 | 173.1 | 28.1 | 6.0 | 0.7 | CONSTANTINE,CORNWALL | | 9 | 3 | 88 | 0.02 | 0.1 | 0.3 | A*A | |
| 20010605 | 155946.3 | 50.11 | -5.17 | 173.0 | 28.1 | 6.2 | 1.1 | CONSTANTINE,CORNWALL | | 9 | 3 | 86 | 0.01 | 0.1 | 0.2 | A*A | |
| 20010605 | 160128.5 | 50.11 | -5.15 | 174.8 | 27.6 | 5.5 | 0.0 | CONSTANTINE,CORNWALL | | 6 | 3 | 126 | 0.05 | 0.8 | 1.9 | A*B | |
| 20010605 | 160654.2 | 50.11 | -5.17 | 173.0 | 28.1 | 6.3 | 0.4 | CONSTANTINE,CORNWALL | | 8 | 3 | 159 | 0.01 | 0.2 | 0.3 | A*C | |
| 20010605 | 162320.8 | 50.11 | -5.17 | 173.1 | 28.2 | 6.3 | 0.9 | CONSTANTINE,CORNWALL | | 9 | 3 | 88 | 0.01 | 0.1 | 0.2 | A*A | |
| 20010605 | 164832.5 | 50.11 | -5.17 | 173.4 | 28.3 | 6.7 | 0.4 | CONSTANTINE,CORNWALL | | 9 | 3 | 92 | 0.02 | 0.2 | 0.4 | A*B | |
| 20010609 | 004928.4 | 50.11 | -5.18 | 173.0 | 28.1 | 6.3 | 0.2 | CONSTANTINE,CORNWALL | | 9 | 3 | 86 | 0.02 | 0.2 | 0.4 | A*A | |
| 20010612 | 063955.9 | 50.11 | -5.18 | 173.0 | 28.2 | 6.1 | 0.6 | CONSTANTINE,CORNWALL | | 8 | 3 | 128 | 0.01 | 0.1 | 0.2 | A*B | |
| 20010617 | 235112.2 | 60.43 | 1.87 | 613.1 | 1177.9 | 15.0 | 3.0 | NORTHERN NORTH SEA | | 6 | 163 | 340 | 0.24 | | | D*D | |
| 20010620 | 114514.6 | 51.95 | -3.09 | 325.1 | 228.3 | 28.8 | 1.8 | TALGARTH,POWYS | | 8 | 8 | 103 | 0.04 | 0.5 | 0.5 | A*B | 10KM SE OF TALGARTH |
| 20010620 | 213338.7 | 57.02 | -5.79 | 170.0 | 798.9 | 5.6 | 1.7 | MALLAIG,HIGHLAND | 3+ | 10 | 30 | 197 | 0.07 | 0.6 | 0.7 | A*D | FELT MALLAIG |
| 20010627 | 030619.8 | 54.27 | -2.27 | 382.1 | 485.8 | 7.2 | 2.2 | SEDBERGH,CUMBRIA | 4+ | 12 | 35 | 204 | 0.10 | 0.2 | 4.2 | B*D | FELT COWGILL |
| 20010711 | 201647.5 | 53.05 | -4.48 | 233.8 | 352.8 | 10.1 | 0.4 | CAERNARVON BAY,GWYNEDD | | 8 | 8 | 191 | 0.06 | 1.5 | 3.5 | B*D | |
| 20010713 | 011713.6 | 55.53 | -3.16 | 326.8 | 627.4 | 8.6 | 1.0 | PEEBLES,BORDERS | | 12 | 27 | 118 | 0.12 | 0.8 | 16.9 | C*C | 15KM SOUTH OF PEEBLES |

# TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010717 | 213624.4 | 51.64 | -3.07 | 325.7 | 193.6 | 4.3 | 0.7 | CWMBRAN,GWENT | | 4 | 19 | 278 | 0.11 | | | A*D | |
| 20010721 | 004330.7 | 56.65 | -6.10 | 149.0 | 758.8 | 4.3 | 1.9 | MULL,STRATHCLYDE | 3+ | 10 | 71 | 242 | 0.06 | 1.0 | 1.5 | B*D | FELT SALEN |
| 20010724 | 041204.6 | 56.76 | -5.51 | 185.6 | 768.4 | 12.4 | 1.4 | FORT WILLIAM,HIGHLAND | | 5 | 34 | 274 | 0.09 | 6.6 | | D*D | 25KM SW OF FORT WILLIAM |
| 20010724 | 212910.1 | 57.59 | -5.61 | 184.0 | 861.4 | 4.1 | 1.2 | TORRIDON,HIGHLAND | | 4 | 22 | 294 | 0.02 | | | A*D | 7KM NORTHWEST OF TORRIDON |
| 20010725 | 232104.0 | 57.47 | -5.56 | 186.4 | 847.3 | 14.0 | 0.8 | LOCHCARRON,HIGHLAND | | 4 | 15 | 236 | 0.02 | | | A*D | |
| 20010726 | 031114.4 | 53.06 | -1.79 | 414.4 | 351.3 | 0.1 | 0.8 | ASHBOURNE,DERBYSHIRE | | 5 | 6 | 180 | 0.24 | 13.1 | 14.7 | D*D | C/F |
| 20010731 | 135636.4 | 52.22 | -4.36 | 238.6 | 260.6 | 8.1 | 1.5 | NEW QUAY,DYFED | | 7 | 42 | 135 | 0.09 | 0.9 | | C*C | |
| 20010809 | 012532.4 | 55.25 | -3.22 | 322.5 | 595.7 | 14.6 | 0.4 | ESKDALEMUIR,D & G | | 6 | 17 | 232 | 0.02 | 0.6 | 0.7 | A*D | |
| 20010813 | 095658.5 | 60.48 | 2.02 | 620.8 | 1184.0 | 15.0 | 2.0 | NORTHERN NORTH SEA | | 5 | 171 | 341 | 0.08 | | | D*D | |
| 20010816 | 003459.7 | 49.24 | -2.16 | 388.1 | -73.5 | 9.6 | 0.1 | JERSEY,CHANNEL ISLANDS | | 6 | 5 | 301 | 0.01 | 0.4 | 0.2 | A*D | |
| 20010825 | 031013.6 | 52.03 | -2.84 | 342.6 | 237.5 | 18.5 | 0.4 | HEREFORD,HER & WOR | | 6 | 12 | 112 | 0.04 | 0.4 | 1.0 | A*B | |
| 20010830 | 014458.5 | 53.84 | -3.20 | 321.0 | 439.1 | 8.0 | 0.9 | IRISH SEA | | 8 | 43 | 211 | 0.31 | 5.4 | | D*D | 10KM WEST OF BLACKPOOL |
| 20010831 | 223224.4 | 51.83 | -2.91 | 337.6 | 215.0 | 12.8 | 1.0 | ABERGAVENNY,GWENT | | 9 | 20 | 102 | 0.08 | 0.5 | 0.5 | A*B | |
| 20010901 | 120952.0 | 56.24 | -3.74 | 291.9 | 706.3 | 4.2 | 1.8 | BLACKFORD,TAYSIDE | 3+ | 8 | 36 | 151 | 0.05 | 0.6 | 1.6 | A*C | FELT GLENDEVON |
| 20010902 | 052950.6 | 57.64 | -5.65 | 182.2 | 867.0 | 4.1 | 1.3 | GAIRLOCH,HIGHAND | | 8 | 26 | 116 | 0.09 | 0.8 | 1.4 | A*C | 10KM SOUTH OF GAIRLOCH |
| 20010903 | 220629.9 | 57.02 | -5.78 | 170.6 | 798.8 | 4.0 | 0.5 | MALLAIG,HIGHLAND | | 5 | 30 | 258 | 0.08 | 5.2 | 4.9 | D*D | |
| 20010905 | 034821.4 | 52.74 | -2.96 | 335.2 | 316.0 | 10.4 | 1.1 | SHREWSBURY,SHROPSHIRE | | 10 | 27 | 207 | 0.07 | 0.9 | 0.7 | A*D | 15KM WEST OF SHREWSBURY |
| 20010913 | 234534.3 | 52.04 | -2.83 | 343.0 | 237.9 | 20.7 | 1.0 | HEREFORD,HER & WOR | | 7 | 12 | 114 | 0.04 | 0.4 | 0.5 | A*B | |
| 20010914 | 193334.1 | 57.65 | -5.34 | 200.7 | 867.4 | 5.2 | 0.8 | KINLOCHEWE,HIGHLAND | | 5 | 17 | 222 | 0.08 | 0.9 | 1.0 | A*D | 5KM SE OF KINLOCHEWE |
| 20010916 | 024431.4 | 51.74 | -4.13 | 252.7 | 207.0 | 13.5 | 1.8 | LLANELLI,DYFED | | 9 | 2 | 114 | 0.07 | 0.5 | 0.5 | A*B | |
| 20010918 | 055842.4 | 62.19 | 2.32 | 624.5 | 1375.1 | 15.0 | 2.9 | NORTHERN NORTH SEA | | 5 | 257 | 354 | 0.05 | | | D*D | |
| 20011005 | 224903.5 | 55.24 | -3.49 | 305.2 | 595.5 | 6.0 | 0.5 | JOHNSTONEBRIDGE,D & G | | 7 | 13 | 193 | 0.08 | 0.3 | 2.6 | B*D | |
| 20011008 | 103314.1 | 51.08 | -4.54 | 222.3 | 134.2 | 22.1 | 1.5 | OFF HARTLAND PT,DEVON | | 6 | 10 | 191 | 0.18 | 2.3 | 2.4 | B*D | 6KM NORTH OF HARTLAND POINT |
| 20011010 | 025225.3 | 51.70 | -3.25 | 313.3 | 200.7 | 6.5 | 3.1 | BARGOED,MID GLAMORGAN | 4 | 8 | 32 | 83 | 0.09 | 0.6 | 4.4 | B*C | FELT BARGOED... |
| 20011010 | 050148.0 | 51.70 | -3.25 | 313.4 | 200.9 | 5.3 | 1.6 | BARGOED,MID GLAMORGAN | | 7 | 32 | 106 | 0.07 | 0.8 | 1.7 | A*C | |
| 20011014 | 101732.6 | 53.37 | 2.79 | 718.8 | 397.0 | 15.0 | 2.7 | SOUTHERN NORTH SEA | | 8 | 108 | 324 | 0.45 | | 18.7 | D*D | |
| 20011017 | 230311.1 | 53.21 | -2.75 | 350.2 | 368.2 | 8.7 | 2.4 | CHESTER,CHESHIRE | | 13 | 17 | 87 | 0.05 | 0.3 | 1.7 | A*B | |
| 20011017 | 230559.2 | 53.21 | -2.73 | 351.4 | 368.2 | 9.2 | 1.5 | CHESTER,CHESHIRE | | 11 | 16 | 87 | 0.12 | 0.8 | 1.8 | A*B | |
| 20011017 | 232108.7 | 61.79 | 2.35 | 629.5 | 1330.7 | 13.5 | 1.8 | NORTHERN NORTH SEA | | 5 | 231 | 351 | 0.22 | | | D*D | |
| 20011017 | 232135.2 | 53.21 | -2.75 | 349.8 | 368.0 | 6.9 | 2.1 | CHESTER,CHESHIRE | | 11 | 17 | 86 | 0.05 | 0.5 | 0.8 | A*C | |
| 20011018 | 035013.6 | 51.70 | -3.26 | 313.3 | 201.3 | 7.9 | 2.5 | BARGOED,MID GLAMORGAN | 4+ | 8 | 32 | 92 | 0.10 | 0.7 | | C*C | FELT BARGOED... |
| 20011021 | 003129.0 | 56.89 | 7.43 | 973.5 | 817.3 | 15.0 | 3.7 | NORWEGIAN-DANISH BASIN | | 19 | 608 | 321 | 0.56 | | | D*D | |
| 20011022 | 151648.3 | 51.70 | -3.25 | 313.4 | 201.1 | 7.6 | 1.6 | BARGOED,MID GLAMORGAN | | 6 | 32 | 113 | 0.10 | 0.9 | | C*C | |
| 20011028 | 162525.1 | 52.85 | -0.86 | 477.0 | 328.3 | 11.6 | 4.1 | MELTON MOWBRAY,LEICS | 5 | 11 | 15 | 77 | 0.14 | 1.2 | 1.6 | B*B | FELT MELTON MOWBRAY... |
| 20011101 | 015611.4 | 51.07 | -4.58 | 218.9 | 133.2 | 26.9 | 1.1 | OFF HARTLAND PT,DEVON | | 5 | 11 | 212 | 0.02 | 0.9 | 0.6 | A*D | |
| 20011102 | 042514.0 | 53.05 | -3.35 | 309.7 | 351.1 | 10.5 | 1.4 | RUTHIN,CLWYD | | 9 | 17 | 218 | 0.07 | 0.8 | 1.0 | A*D | 7KM SOUTH OF RUTHIN |
| 20011102 | 195918.0 | 50.00 | -5.05 | 181.3 | 15.5 | 23.8 | 1.5 | OFF LIZARD PT,CORNWALL | | 10 | 10 | 310 | 0.03 | 0.8 | 0.6 | A*D | 10KM EAST OF LIZARD POINT |
| 20011102 | 200100.1 | 50.00 | -5.05 | 181.4 | 15.3 | 24.1 | 1.2 | OFF LIZARD PT,CORNWALL | | 10 | 10 | 310 | 0.03 | 0.7 | 0.5 | A*D | 10KM EAST OF LIZARD POINT |
| 20011105 | 025218.9 | 53.17 | -4.44 | 237.1 | 366.9 | 7.5 | 2.3 | ANGLESEY,GWYNEDD | 2+ | 13 | 63 | 86 | 0.18 | 0.8 | 2.5 | B*D | FELT ANGLESEY |

# TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20011107 | 042311.7 | 57.03 | -5.77 | 171.5 | 799.6 | 6.8 | 0.6 | MALLAIG,HIGHLAND | | 5 | 29 | 325 | 0.17 | 3.3 | 7.1 | C*D | |
| 20011113 | 170202.0 | 57.00 | -5.39 | 194.2 | 794.8 | 6.0 | 2.2 | FORT WILLIAM,HIGHLAND | | 6 | 24 | 252 | 0.10 | 3.1 | 1.6 | C*D | 27KM NW OF FORT WILLIAM |
| 20011113 | 205844.0 | | | | | | | SONIC-BERWICKSHIRE | 3+ | | | | | | | | SONIC-FELT EYEMOUTH... |
| 20011115 | 063554.0 | 51.32 | -2.71 | 350.2 | 158.7 | 16.9 | 1.8 | BRISTOL,AVON | | 10 | 2 | 96 | 0.08 | 0.7 | 0.4 | A*B | 14KM SOUTH OF BRISTOL |
| 20011116 | 101229.0 | | | | | | | SONIC-FELT NE ENGLAND | 3+ | | | | | | | | SONIC-FELT SUNDERLAND... |
| 20011125 | 210919.1 | 52.73 | -2.98 | 333.9 | 315.8 | 12.1 | 1.4 | SHREWSBURY,SHROPSHIRE | | 7 | 27 | 113 | 0.04 | 0.4 | 0.5 | A*C | 15KM WEST OF SHREWSBURY |
| 20011127 | 175116.1 | 52.96 | -3.73 | 284.1 | 341.6 | 12.2 | 1.5 | BALA,GWYNEDD | | 9 | 32 | 121 | 0.05 | 0.4 | 1.1 | A*C | 10KM NW OF BALA |
| 20011129 | 061541.1 | 56.91 | -4.23 | 264.5 | 782.1 | 9.0 | 1.4 | DALWHINNIE,HIGHLAND | | 12 | 47 | 73 | 0.22 | 0.6 | | C*C | 7KM SOUTH OF DALWHINNIE |
| 20011130 | 024614.9 | 50.11 | -6.42 | 84.0 | 32.6 | 5.1 | 1.9 | NW OF SCILLY ISLES | | 5 | 60 | 357 | 0.19 | | 16.9 | D*D | |
| 20011201 | 211424.9 | 56.70 | -5.15 | 207.1 | 760.7 | 7.8 | 1.5 | BALLACHULISH,HIGHLAND | 4+ | 11 | 59 | 172 | 0.16 | 1.4 | 6.9 | C*D | FELT BALLACHULISH... |
| 20011205 | 182412.2 | 57.20 | -5.42 | 193.2 | 817.2 | 12.0 | 0.1 | GLEN SHEIL,HIGHLAND | | 3 | 1 | 313 | 0.22 | | | B*D | |
| 20011206 | 064253.0 | 52.95 | -4.39 | 239.3 | 341.8 | 24.9 | 1.2 | LLEYN PENINSULA | | 8 | 4 | 187 | 0.03 | 0.6 | 0.7 | A*D | |
| 20011208 | 174705.5 | 57.61 | -5.40 | 196.8 | 862.3 | 5.4 | 0.6 | KINLOCHEWE,HIGHLAND | | 4 | 13 | 160 | 0.08 | | | A*D | |
| 20011210 | 040551.5 | 53.24 | -1.12 | 458.6 | 372.2 | 0.3 | 1.8 | WORKSOP,NOTTS | | 7 | 27 | 176 | 0.13 | 1.1 | 1.6 | B*C | C/F,7KM S OF WORKSOP |
| 20011211 | 063106.4 | 56.24 | -4.03 | 274.3 | 707.4 | 5.5 | 1.7 | DUNBLANE,CENTRAL | | 12 | 20 | 145 | 0.08 | 0.4 | 0.8 | A*C | 6KM NW OF DUNBLANE |
| 20011211 | 075059.7 | 56.24 | -4.03 | 274.5 | 707.1 | 5.2 | 1.5 | DUNBLANE,CENTRAL | | 10 | 20 | 144 | 0.08 | 0.4 | 0.9 | A*C | 6KM NW OF DUNBLANE |
| 20011211 | 214746.4 | 52.96 | -4.38 | 240.2 | 342.8 | 21.9 | 0.7 | LLEYN PENINSULA | | 10 | 4 | 99 | 0.05 | 0.4 | 1.0 | A*B | |
| 20011216 | 132520.0 | 53.69 | -2.00 | 399.9 | 421.8 | 9.8 | 2.6 | HALIFAX,WEST YORKSHIRE | 4+ | 17 | 19 | 81 | 0.12 | 0.6 | 1.5 | A*B | FELT HALIFAX... |
| 20011219 | 151325.7 | 55.23 | -3.49 | 305.2 | 594.3 | 7.0 | 1.3 | JOHNSTONEBRIDGE,D & G | | 13 | 12 | 147 | 0.08 | 0.3 | 1.4 | A*C | |
| 20011219 | 205845.1 | 56.24 | -3.74 | 292.0 | 706.5 | 4.8 | 2.1 | BLACKFORD,TAYSIDE | 3+ | 10 | 15 | 129 | 0.06 | 0.4 | 0.7 | A*C | FELT GLENDEVON... |
| 20011219 | 213035.0 | 56.24 | -3.73 | 292.8 | 707.1 | 5.8 | 1.3 | BLACKFORD,TAYSIDE | 3+ | 8 | 14 | 128 | 0.06 | 0.6 | 1.3 | A*C | FELT GLENDEVON... |
| 20011220 | 035633.3 | 52.73 | -2.97 | 334.5 | 315.6 | 7.7 | 1.4 | WELSHPOOL,POWYS | | 8 | 25 | 205 | 0.07 | 0.9 | | C*D | |
| 20011221 | 093456.9 | 58.73 | 0.55 | 547.6 | 984.8 | 18.1 | 2.7 | NORTHERN NORTH SEA | | 5 | 176 | 349 | 0.12 | | | D*D | |

**TABLE 2**

## CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 2001

# 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, neg ative longitude indicates west. |
| **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. |
| **DM** | : | Epicentral distance in kilometres to the closest station. |
| **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. |
| **SQD** | : | S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations. |

## Locality abbreviations

| | | | | | |
|---|---|---|---|---|---|
| Sonic | : | Sonic boom | N Yorkshire | : | North Yorkshire |
| Expl | : | Explosion | Notts | : | Nottinghamshire |
| D & G | : | Dumfries and Galloway | Lincs | : | Lincolnshire |
| Gtr | : | Greater | N'umberlnd | : | Northumberland |
| Her & Worcs | : | Hereford and Worcester | Staffs | : | Staffordshire |
| S'Clyde | : | Strathclyde | Leics | : | Leicestershire |
| S Yorkshire | : | South Yorkshire | W Mids | : | West Midlands |
| New-U-Lyme | : | Newcastle-Under-Lyme | Salop | : | Shropshire |
| Penin | : | Peninsula | | | |

## Comments abbreviations

| | | |
|---|---|---|
| Sonic | : | Sonic boom |
| Expl | : | Explosion |
| C/F | : | Coalfield type event |
| ... | : | and felt elsewhere |

# TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010209 | 214522.1 | 62.84 | 3.15 | 661.9 | 1450.3 | 15.0 | 2.9 | NORWEGIAN SEA | | 6 | 339 | 314 | 0.34 | | | D*D | |
| 20010514 | 055039.4 | 62.44 | 2.21 | 617.0 | 1403.1 | 13.8 | 2.2 | NORTHERN NORTH SEA | | 5 | 274 | 354 | 0.10 | | | D*D | |
| 20010918 | 055842.4 | 62.19 | 2.32 | 624.5 | 1375.1 | 15.0 | 2.9 | NORTHERN NORTH SEA | | 5 | 257 | 354 | 0.05 | | | D*D | |
| 20010601 | 061807.0 | 61.79 | 3.06 | 666.4 | 1333.6 | 15.9 | 3.7 | NORTHERN NORTH SEA | | 13 | 107 | 223 | 0.13 | 5.8 | 3.7 | D*D | |
| 20011017 | 232108.7 | 61.79 | 2.35 | 629.5 | 1330.7 | 13.5 | 1.8 | NORTHERN NORTH SEA | | 5 | 231 | 351 | 0.22 | | | D*D | |
| 20010601 | 062620.2 | 61.73 | 3.04 | 666.0 | 1327.2 | 10.1 | 2.3 | NORTHERN NORTH SEA | | 11 | 107 | 219 | 0.30 | 3.7 | 4.8 | C*D | |
| 20010601 | 062251.4 | 61.66 | 2.94 | 661.6 | 1319.1 | 9.7 | 2.8 | NORTHERN NORTH SEA | | 8 | 182 | 227 | 0.20 | 4.8 | | C*D | |
| 20010813 | 095658.5 | 60.48 | 2.02 | 620.8 | 1184.0 | 15.0 | 2.0 | NORTHERN NORTH SEA | | 5 | 171 | 341 | 0.08 | | | D*D | |
| 20010617 | 235112.2 | 60.43 | 1.87 | 613.1 | 1177.9 | 15.0 | 3.0 | NORTHERN NORTH SEA | | 6 | 163 | 340 | 0.24 | | | D*D | |
| 20010109 | 192611.0 | 60.02 | 1.47 | 593.3 | 1130.9 | 5.0 | 1.2 | NORTHERN NORTH SEA | | 5 | 148 | 337 | 0.35 | | | D*D | |
| 20010103 | 065848.7 | 59.85 | 1.97 | 622.5 | 1114.1 | 15.0 | 2.6 | NORTHERN NORTH SEA | | 9 | 179 | 140 | 0.47 | 5.4 | 17.8 | D*D | |
| 20010104 | 213117.1 | 59.80 | 1.92 | 619.7 | 1108.3 | 19.2 | 3.1 | NORTHERN NORTH SEA | | 9 | 177 | 143 | 0.15 | 2.0 | 6.2 | C*D | |
| 20010117 | 161225.0 | 59.55 | 1.91 | 621.1 | 1079.8 | 10.0 | 3.0 | NORTHERN NORTH SEA | | 10 | 185 | 157 | 0.50 | 4.7 | 12.5 | D*D | |
| 20010219 | 124521.5 | 59.39 | 6.08 | 858.0 | 1083.4 | 15.0 | 3.0 | NORWEGIAN COAST | | 5 | 416 | 352 | 0.29 | | | D*D | |
| 20010515 | 071933.0 | 59.30 | 2.12 | 634.7 | 1053.4 | 23.7 | 2.4 | NORTHERN NORTH SEA | | 5 | 205 | 345 | 0.28 | | | D*D | |
| 20011221 | 093456.9 | 58.73 | 0.55 | 547.6 | 984.8 | 18.1 | 2.7 | NORTHERN NORTH SEA | | 5 | 176 | 349 | 0.12 | | | D*D | |
| 20010314 | 222043.3 | 58.25 | 0.69 | 558.1 | 932.4 | 19.5 | 3.4 | CENTRAL NORTH SEA | | 28 | 210 | 239 | 0.19 | 1.7 | 3.2 | B*D | |
| 20010324 | 003342.9 | 57.69 | -5.41 | 196.5 | 871.9 | 9.6 | 1.2 | KINLOCHEWE,HIGHLAND | | 10 | 22 | 151 | 0.05 | 0.3 | 2.1 | B*C | 10KM NW OF KINLOCHEWE |
| 20010914 | 193334.1 | 57.65 | -5.34 | 200.7 | 867.4 | 5.2 | 0.8 | KINLOCHEWE,HIGHLAND | | 5 | 17 | 222 | 0.08 | 0.9 | 1.0 | A*D | 5KM SE OF KINLOCHEWE |
| 20010902 | 052950.6 | 57.64 | -5.65 | 182.2 | 867.0 | 4.1 | 1.3 | GAIRLOCH,HIGHAND | | 8 | 26 | 116 | 0.09 | 0.8 | 1.4 | A*C | 10KM SOUTH OF GAIRLOCH |
| 20011208 | 174705.5 | 57.61 | -5.40 | 196.8 | 862.3 | 5.4 | 0.6 | KINLOCHEWE,HIGHLAND | | 4 | 13 | 160 | 0.08 | | | A*D | |
| 20010724 | 212910.1 | 57.59 | -5.61 | 184.0 | 861.4 | 4.1 | 1.2 | TORRIDON,HIGHLAND | | 4 | 22 | 294 | 0.02 | | | A*D | 7KM NORTHWEST OF TORRIDON |
| 20010725 | 232104.0 | 57.47 | -5.56 | 186.4 | 847.3 | 14.0 | 0.8 | LOCHCARRON,HIGHLAND | | 4 | 15 | 236 | 0.02 | | | A*D | |
| 20010426 | 002638.6 | 57.32 | -5.52 | 187.9 | 830.5 | 9.7 | 0.8 | LOCHCARRON,HIGHLAND | | 5 | 8 | 136 | 0.17 | 5.2 | 10.4 | D*D | 10KM SOUTH OF LOCHCARRON |
| 20011205 | 182412.2 | 57.20 | -5.42 | 193.2 | 817.2 | 12.0 | 0.1 | GLEN SHEIL,HIGHLAND | | 3 | 1 | 313 | 0.22 | | | B*D | |
| 20011107 | 042311.7 | 57.03 | -5.77 | 171.5 | 799.6 | 6.8 | 0.6 | MALLAIG,HIGHLAND | | 5 | 29 | 325 | 0.17 | 3.3 | 7.1 | C*D | |
| 20010620 | 213338.7 | 57.02 | -5.79 | 170.0 | 798.9 | 5.6 | 1.7 | MALLAIG,HIGHLAND | 3+ | 10 | 30 | 197 | 0.07 | 0.6 | 0.7 | A*D | FELT MALLAIG |
| 20010903 | 220629.9 | 57.02 | -5.78 | 170.6 | 798.8 | 4.0 | 0.5 | MALLAIG,HIGHLAND | | 5 | 30 | 258 | 0.08 | 5.2 | 4.9 | D*D | |
| 20010324 | 103325.1 | 57.01 | -5.71 | 174.7 | 797.5 | 11.6 | 1.0 | LOCH NEVIS,HIGHLAND | | 5 | 13 | 175 | 0.07 | 0.2 | 0.8 | A*D | |
| 20011113 | 170202.0 | 57.00 | -5.39 | 194.2 | 794.8 | 6.0 | 2.2 | FORT WILLIAM,HIGHLAND | | 6 | 24 | 252 | 0.10 | 3.1 | 1.6 | C*D | 27KM NW OF FORT WILLIAM |
| 20011129 | 061541.1 | 56.91 | -4.23 | 264.5 | 782.1 | 9.0 | 1.4 | DALWHINNIE,HIGHLAND | | 12 | 47 | 73 | 0.22 | 0.6 | | C*C | 7KM SOUTH OF DALWHINNIE |
| 20011021 | 003129.0 | 56.89 | 7.43 | 973.5 | 817.3 | 15.0 | 3.7 | NORWEGIAN-DANISH BASIN | | 19 | 608 | 321 | 0.56 | | | D*D | |
| 20010602 | 004457.2 | 56.81 | 6.80 | 936.4 | 803.3 | 15.0 | 3.9 | NORWEGIAN-DANISH BASIN | | 15 | 569 | 300 | 0.38 | 16.2 | | D*D | |
| 20010507 | 094334.0 | 56.54 | 3.19 | 718.9 | 750.7 | 5.0 | 5.0Mw | EKOFISK | 4+ | 10 | 297 | 231 | 0.84 | 14.8 | | D*D | FELT EKOFISK FIELD |
| 20010724 | 041204.6 | 56.76 | -5.51 | 185.6 | 768.4 | 12.4 | 1.4 | FORT WILLIAM,HIGHLAND | | 5 | 34 | 274 | 0.09 | 6.6 | | D*D | 25KM SW OF FORT WILLIAM |
| 20011201 | 211424.9 | 56.70 | -5.15 | 207.1 | 760.7 | 7.8 | 1.5 | BALLACHULISH,HIGHLAND | 4+ | 11 | 59 | 172 | 0.16 | 1.4 | 6.9 | C*D | FELT BALLACHULISH... |
| 20010721 | 004330.7 | 56.65 | -6.10 | 149.0 | 758.8 | 4.3 | 1.9 | MULL,STRATHCLYDE | 3+ | 10 | 71 | 242 | 0.06 | 1.0 | 1.5 | B*D | FELT SALEN |
| 20010105 | 210026.5 | 56.24 | -3.76 | 291.1 | 706.4 | 3.9 | 0.5 | BLACKFORD,TAYSIDE | | 6 | 15 | 152 | 0.03 | 0.4 | 0.6 | A*C | |
| 20010901 | 120952.0 | 56.24 | -3.74 | 291.9 | 706.3 | 4.2 | 1.8 | BLACKFORD,TAYSIDE | 3+ | 8 | 36 | 151 | 0.05 | 0.6 | 1.6 | A*C | FELT GLENDEVON |

# TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20011211 | 063106.4 | 56.24 | -4.03 | 274.3 | 707.4 | 5.5 | 1.7 | DUNBLANE,CENTRAL | | 12 | 20 | 145 | 0.08 | 0.4 | 0.8 | A*C | 6KM NW OF DUNBLANE |
| 20011211 | 075059.7 | 56.24 | -4.03 | 274.5 | 707.1 | 5.2 | 1.5 | DUNBLANE,CENTRAL | | 10 | 20 | 144 | 0.08 | 0.4 | 0.9 | A*C | 6KM NW OF DUNBLANE |
| 20011219 | 205845.1 | 56.24 | -3.74 | 292.0 | 706.5 | 4.8 | 2.1 | BLACKFORD,TAYSIDE | 3+ | 10 | 15 | 129 | 0.06 | 0.4 | 0.7 | A*C | FELT GLENDEVON... |
| 20011219 | 213035.0 | 56.24 | -3.73 | 292.8 | 707.1 | 5.8 | 1.3 | BLACKFORD,TAYSIDE | 3+ | 8 | 14 | 128 | 0.06 | 0.6 | 1.3 | A*C | FELT GLENDEVON... |
| 20010423 | 181828.0 | 56.14 | -4.78 | 227.0 | 697.5 | 4.1 | 0.6 | LOCH LONG,STRATHCLYDE | | 7 | 28 | 263 | 0.09 | 1.4 | 1.3 | B*D | |
| 20010101 | 182707.9 | 55.63 | -6.14 | 139.3 | 645.6 | 9.0 | 2.1 | ISLAY,INNER HEBRIDES | | 6 | 47 | 256 | 0.08 | 2.2 | 3.7 | B*D | |
| 20010713 | 011713.6 | 55.53 | -3.16 | 326.8 | 627.4 | 8.6 | 1.0 | PEEBLES,BORDERS | | 12 | 27 | 118 | 0.12 | 0.8 | 16.9 | C*C | 15KM SOUTH OF PEEBLES |
| 20010512 | 011317.6 | 55.41 | -3.08 | 331.4 | 612.9 | 7.5 | 0.7 | HAWICK,BORDERS | | 13 | 13 | 205 | 0.12 | 0.8 | 2.1 | B*D | 20KM WEST OF HAWICK |
| 20010428 | 174108.2 | 55.40 | -3.23 | 322.2 | 612.2 | 3.7 | 1.4 | ETTRICK,BORDERS | | 19 | 34 | 117 | 0.18 | 0.7 | 3.4 | B*C | |
| 20010105 | 005152.0 | 55.39 | -3.10 | 330.0 | 611.1 | 8.5 | 1.0 | HAWICK,BORDERS | | 10 | 10 | 148 | 0.06 | 0.8 | 1.5 | A*C | 20KM WSW OF HAWICK |
| 20010130 | 201006.5 | 55.38 | -5.21 | 196.9 | 614.7 | 8.1 | 1.3 | SOUTH OF ISLE OF ARRAN | | 8 | 25 | 129 | 0.10 | 0.9 | | C*C | |
| 20010809 | 012532.4 | 55.25 | -3.22 | 322.5 | 595.7 | 14.6 | 0.4 | ESKDALEMUIR,D & G | | 6 | 17 | 232 | 0.02 | 0.6 | 0.7 | A*D | |
| 20011005 | 224903.5 | 55.24 | -3.49 | 305.2 | 595.5 | 6.0 | 0.5 | JOHNSTONEBRIDGE,D & G | | 7 | 13 | 193 | 0.08 | 0.3 | 2.6 | B*D | |
| 20011219 | 151325.7 | 55.23 | -3.49 | 305.2 | 594.3 | 7.0 | 1.3 | JOHNSTONEBRIDGE,D & G | | 13 | 12 | 147 | 0.08 | 0.3 | 1.4 | A*C | |
| 20010513 | 082659.4 | 55.10 | -3.64 | 295.5 | 579.6 | 11.5 | 3.0 | DUMFRIES,D & G | 5 | 12 | 9 | 136 | 0.11 | 0.8 | 1.7 | A*C | FELT DUMFRIES... |
| 20010513 | 112629.3 | 55.10 | -3.63 | 295.9 | 579.2 | 10.8 | 1.3 | DUMFRIES,D & G | 3+ | 9 | 9 | 133 | 0.07 | 0.8 | 1.8 | A*B | FELT DUMFRIES... |
| 20010513 | 084951.0 | 55.09 | -3.63 | 296.0 | 578.9 | 10.8 | 0.7 | DUMFRIES,D & G | | 8 | 9 | 133 | 0.08 | 0.9 | 2.1 | B*B | |
| 20010513 | 095816.3 | 55.09 | -3.63 | 296.3 | 579.1 | 9.7 | 0.5 | DUMFRIES,D & G | | 7 | 9 | 130 | 0.07 | 0.9 | 2.3 | B*B | |
| 20010513 | 112109.2 | 55.09 | -3.63 | 296.1 | 578.9 | 9.6 | 0.8 | DUMFRIES,D & G | | 9 | 9 | 131 | 0.07 | 0.7 | 1.8 | A*B | |
| 20010228 | 004236.9 | 54.88 | -2.98 | 337.4 | 553.9 | 9.6 | 1.1 | CARLISLE,CUMBRIA | | 11 | 8 | 83 | 0.15 | 0.7 | 1.9 | B*A | |
| 20010116 | 142416.4 | 54.73 | -4.89 | 213.9 | 541.1 | 3.9 | 1.1 | LUCE BAY,D & G | | 9 | 19 | 81 | 0.23 | 1.6 | 4.3 | B*C | |
| 20010514 | 042857.0 | 54.60 | -3.71 | 289.8 | 523.6 | 13.8 | 0.5 | SOLWAY FIRTH | | 11 | 17 | 89 | 0.11 | 0.6 | 2.5 | B*B | 9KM WEST OF WHITEHAVEN |
| 20010627 | 030619.8 | 54.27 | -2.27 | 382.1 | 485.8 | 7.2 | 2.2 | SEDBERGH,CUMBRIA | 4+ | 12 | 35 | 204 | 0.10 | 0.2 | 4.2 | B*D | FELT COWGILL |
| 20010830 | 014458.5 | 53.84 | -3.20 | 321.0 | 439.1 | 8.0 | 0.9 | IRISH SEA | | 8 | 43 | 211 | 0.31 | 5.4 | | D*D | 10KM WEST OF BLACKPOOL |
| 20010509 | 163826.5 | 53.77 | 1.32 | 619.0 | 436.1 | 8.3 | 2.6 | SOUTHERN NORTH SEA | | 13 | 99 | 238 | 0.50 | 6.4 | 5.7 | D*D | |
| 20011216 | 132520.0 | 53.69 | -2.00 | 399.9 | 421.8 | 9.8 | 2.6 | HALIFAX,WEST YORKSHIRE | 4+ | 17 | 19 | 81 | 0.12 | 0.6 | 1.5 | A*B | FELT HALIFAX... |
| 20010225 | 123938.4 | 53.54 | -2.58 | 361.4 | 405.1 | 10.4 | 2.2 | WIGAN,GTR MANCHESTER | | 15 | 77 | 126 | 0.09 | 0.5 | 1.2 | A*D | |
| 20010225 | 215309.2 | 53.53 | -2.57 | 362.2 | 404.2 | 10.9 | 1.6 | WIGAN,GTR MANCHESTER | | 9 | 75 | 87 | 0.09 | 0.6 | 1.7 | A*D | |
| 20010531 | 181929.6 | 53.40 | -1.25 | 449.9 | 389.7 | 0.0 | 1.6 | ROTHERHAM,SOUTH YORKS | | 4 | 25 | 314 | 0.06 | | | A*D | C/F,6KM SE OF ROTHERHAM |
| 20011014 | 101732.6 | 53.37 | 2.79 | 718.8 | 397.0 | 15.0 | 2.7 | SOUTHERN NORTH SEA | | 8 | 108 | 324 | 0.45 | | 18.7 | D*D | |
| 20011210 | 040551.5 | 53.24 | -1.12 | 458.6 | 372.2 | 0.3 | 1.8 | WORKSOP,NOTTS | | 7 | 27 | 176 | 0.13 | 1.1 | 1.6 | B*C | C/F,7KM S OF WORKSOP |
| 20011017 | 230311.1 | 53.21 | -2.75 | 350.2 | 368.2 | 8.7 | 2.4 | CHESTER,CHESHIRE | | 13 | 17 | 87 | 0.05 | 0.3 | 1.7 | A*B | |
| 20011017 | 230559.2 | 53.21 | -2.73 | 351.4 | 368.2 | 9.2 | 1.5 | CHESTER,CHESHIRE | | 11 | 16 | 87 | 0.12 | 0.8 | 1.8 | A*B | |
| 20011017 | 232135.2 | 53.21 | -2.75 | 349.8 | 368.0 | 6.9 | 2.1 | CHESTER,CHESHIRE | | 11 | 17 | 86 | 0.05 | 0.5 | 0.8 | A*C | |
| 20011105 | 025218.9 | 53.17 | -4.44 | 237.1 | 366.9 | 7.5 | 2.3 | ANGLESEY,GWYNEDD | 2+ | 13 | 63 | 86 | 0.18 | 0.8 | 2.5 | B*D | FELT ANGLESEY |
| 20010726 | 031114.4 | 53.06 | -1.79 | 414.4 | 351.3 | 0.1 | 0.8 | ASHBOURNE,DERBYSHIRE | | 5 | 6 | 180 | 0.24 | 13.1 | 14.7 | D*D | C/F |
| 20010711 | 201647.5 | 53.05 | -4.48 | 233.8 | 352.8 | 10.1 | 0.4 | CAERNARVON BAY,GWYNEDD | | 8 | 8 | 191 | 0.06 | 1.5 | 3.5 | B*D | |
| 20011102 | 042514.0 | 53.05 | -3.35 | 309.7 | 351.1 | 10.5 | 1.4 | RUTHIN,CLWYD | | 9 | 17 | 218 | 0.07 | 0.8 | 1.0 | A*D | 7KM SOUTH OF RUTHIN |
| 20010315 | 130534.2 | 53.02 | -2.68 | 354.6 | 346.7 | 9.9 | 1.7 | WHITCHURCH,SHROPSHIRE | | 8 | 41 | 178 | 0.09 | 0.9 | | C*C | 4KM NORTH OF WHITCHURCH |

# TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010315 | 004937.3 | 52.97 | -2.25 | 383.0 | 341.3 | 2.3 | 1.2 | NEWCASTLE-U-LYME,STAFF | | 7 | 28 | 193 | 0.17 | 2.3 | 2.4 | B*D | C/F |
| 20011127 | 175116.1 | 52.96 | -3.73 | 284.1 | 341.6 | 12.2 | 1.5 | BALA,GWYNEDD | | 9 | 32 | 121 | 0.05 | 0.4 | 1.1 | A*C | 10KM NW OF BALA |
| 20011211 | 214746.4 | 52.96 | -4.38 | 240.2 | 342.8 | 21.9 | 0.7 | LLEYN PENINSULA | | 10 | 4 | 99 | 0.05 | 0.4 | 1.0 | A*B | |
| 20011206 | 064253.0 | 52.95 | -4.39 | 239.3 | 341.8 | 24.9 | 1.2 | LLEYN PENINSULA | | 8 | 4 | 187 | 0.03 | 0.6 | 0.7 | A*D | |
| 20010310 | 092934.0 | 52.93 | -2.74 | 350.1 | 336.8 | 4.2 | 1.1 | WHITCHURCH,SHROPSHIRE | | 9 | 35 | 145 | 0.08 | 0.8 | 1.7 | A*C | 5KM SW OF WHITCHURCH |
| 20010301 | 201306.0 | 52.92 | -4.51 | 231.3 | 338.6 | 16.6 | 0.6 | PWLLHELI,GWYNEDD | | 8 | 34 | 224 | 0.06 | 1.1 | 4.4 | B*D | 5KM NW OF PWLLHELI |
| 20010113 | 170853.3 | 52.86 | -3.76 | 281.6 | 331.0 | 11.9 | 0.3 | BALA,GWYNEDD | | 8 | 27 | 141 | 0.05 | 0.3 | 1.1 | A*C | 10KM SE OF BALA |
| 20011028 | 162525.1 | 52.85 | -0.86 | 477.0 | 328.3 | 11.6 | 4.1 | MELTON MOWBRAY,LEICS | 5 | 11 | 15 | 77 | 0.14 | 1.2 | 1.6 | B*B | FELT MELTON MOWBRAY... |
| 20010905 | 034821.4 | 52.74 | -2.96 | 335.2 | 316.0 | 10.4 | 1.1 | SHREWSBURY,SHROPSHIRE | | 10 | 27 | 207 | 0.07 | 0.9 | 0.7 | A*D | 15KM WEST OF SHREWSBURY |
| 20011125 | 210919.1 | 52.73 | -2.98 | 333.9 | 315.8 | 12.1 | 1.4 | SHREWSBURY,SHROPSHIRE | | 7 | 27 | 113 | 0.04 | 0.4 | 0.5 | A*C | 15KM WEST OF SHREWSBURY |
| 20011220 | 035633.3 | 52.73 | -2.97 | 334.5 | 315.6 | 7.7 | 1.4 | WELSHPOOL,POWYS | | 8 | 25 | 205 | 0.07 | 0.9 | | C*D | |
| 20010327 | 235259.0 | 52.61 | -1.02 | 466.3 | 301.3 | 5.3 | 1.6 | LEICESTER,LEICS | | 8 | 24 | 179 | 0.07 | 0.7 | 1.3 | A*C | |
| 20010121 | 010425.0 | 52.43 | -1.86 | 409.4 | 281.0 | 8.9 | 1.0 | BIRMINGHAM,W MIDLANDS | | 6 | 51 | 132 | 0.17 | 2.6 | | C*D | |
| 20010304 | 223630.9 | 52.43 | -4.46 | 232.9 | 284.6 | 8.9 | 2.0 | CARDIGAN BAY,WALES | | 12 | 40 | 190 | 0.08 | 0.5 | 0.7 | A*D | 25KM WEST OF ABERYSTWYTH |
| 20010217 | 002950.7 | 52.42 | -4.46 | 232.4 | 283.5 | 5.6 | 1.5 | CARDIGAN BAY,WALES | | 11 | 41 | 191 | 0.14 | 0.8 | 2.8 | B*D | 25KM WEST OF ABERYSTWYTH |
| 20010212 | 111948.4 | 52.33 | 2.27 | 690.8 | 278.4 | 15.4 | 2.7 | SOUTHERN NORTH SEA | | 6 | 54 | 312 | 0.08 | 2.3 | 2.2 | B*D | |
| 20010731 | 135636.4 | 52.22 | -4.36 | 238.6 | 260.6 | 8.1 | 1.5 | NEW QUAY,DYFED | | 7 | 42 | 135 | 0.09 | 0.9 | | C*C | |
| 20010913 | 234534.3 | 52.04 | -2.83 | 343.0 | 237.9 | 20.7 | 1.0 | HEREFORD,HER & WOR | | 7 | 12 | 114 | 0.04 | 0.4 | 0.5 | A*B | |
| 20010825 | 031013.6 | 52.03 | -2.84 | 342.6 | 237.5 | 18.5 | 0.4 | HEREFORD,HER & WOR | | 6 | 12 | 112 | 0.04 | 0.4 | 1.0 | A*B | |
| 20010620 | 114514.6 | 51.95 | -3.09 | 325.1 | 228.3 | 28.8 | 1.8 | TALGARTH,POWYS | | 8 | 8 | 103 | 0.04 | 0.5 | 0.5 | A*B | 10KM SE OF TALGARTH |
| 20010214 | 225133.8 | 51.87 | -2.87 | 340.0 | 219.3 | 13.0 | 1.2 | ABERGAVENNY,GWENT | | 7 | 17 | 120 | 0.07 | 0.7 | 1.0 | A*B | |
| 20010831 | 223224.4 | 51.83 | -2.91 | 337.6 | 215.0 | 12.8 | 1.0 | ABERGAVENNY,GWENT | | 9 | 20 | 102 | 0.08 | 0.5 | 0.5 | A*B | |
| 20010509 | 233117.4 | 51.75 | -3.74 | 280.2 | 207.4 | 21.0 | 1.2 | YSTRADGYNLAIS,POWYS | | 10 | 29 | 104 | 0.07 | 0.5 | 1.6 | A*B | |
| 20010916 | 024431.4 | 51.74 | -4.13 | 252.7 | 207.0 | 13.5 | 1.8 | LLANELLI,DYFED | | 9 | 2 | 114 | 0.07 | 0.5 | 0.5 | A*B | |
| 20011010 | 025225.3 | 51.70 | -3.25 | 313.3 | 200.7 | 6.5 | 3.1 | BARGOED,MID GLAMORGAN | 4 | 8 | 32 | 83 | 0.09 | 0.6 | 4.4 | B*C | FELT BARGOED... |
| 20011010 | 050148.0 | 51.70 | -3.25 | 313.4 | 200.9 | 5.3 | 1.6 | BARGOED,MID GLAMORGAN | | 7 | 32 | 106 | 0.07 | 0.8 | 1.7 | A*C | |
| 20011018 | 035013.6 | 51.70 | -3.26 | 313.3 | 201.3 | 7.9 | 2.5 | BARGOED,MID GLAMORGAN | 4+ | 8 | 32 | 92 | 0.10 | 0.7 | | C*C | FELT BARGOED... |
| 20011022 | 151648.3 | 51.70 | -3.25 | 313.4 | 201.1 | 7.6 | 1.6 | BARGOED,MID GLAMORGAN | | 6 | 32 | 113 | 0.10 | 0.9 | | C*C | |
| 20010717 | 213624.4 | 51.64 | -3.07 | 325.7 | 193.6 | 4.3 | 0.7 | CWMBRAN,GWENT | | 4 | 19 | 278 | 0.11 | | | A*D | |
| 20010421 | 143554.2 | 51.59 | -3.30 | 309.9 | 189.3 | 16.9 | 1.9 | PONTYPRIDD,GWENT | | 8 | 35 | 83 | 0.06 | 0.5 | 1.2 | A*C | |
| 20010318 | 014349.0 | 51.47 | -1.91 | 406.0 | 175.1 | 8.5 | 2.7 | SWINDON,WILTSHIRE | | 12 | 64 | 203 | 0.22 | 2.4 | 3.6 | B*D | |
| 20010605 | 102104.9 | 51.43 | -2.74 | 348.9 | 170.5 | 5.1 | 1.2 | BRISTOL,AVON | | 6 | 24 | 230 | 0.05 | 1.3 | 0.8 | B*D | 8KM EAST OF BRISTOL |
| 20011115 | 063554.0 | 51.32 | -2.71 | 350.2 | 158.7 | 16.9 | 1.8 | BRISTOL,AVON | | 10 | 2 | 96 | 0.08 | 0.7 | 0.4 | A*B | 14KM SOUTH OF BRISTOL |
| 20011008 | 103314.1 | 51.08 | -4.54 | 222.3 | 134.2 | 22.1 | 1.5 | OFF HARTLAND PT,DEVON | | 6 | 10 | 191 | 0.18 | 2.3 | 2.4 | B*D | 6KM NORTH OF HARTLAND POINT |
| 20011101 | 015611.4 | 51.07 | -4.58 | 218.9 | 133.2 | 26.9 | 1.1 | OFF HARTLAND PT,DEVON | | 5 | 11 | 212 | 0.02 | 0.9 | 0.6 | A*D | |
| 20010531 | 234259.1 | 50.98 | -4.53 | 215.6 | 127.2 | 26.4 | 3.6 | OFF HARTLAND PT,DEVON | 5 | 10 | 10 | 180 | 0.07 | 0.9 | 0.3 | A*D | FELT CORNWALL & DEVON |
| 20010605 | 083955.3 | 50.11 | -5.17 | 173.4 | 28.3 | 5.6 | 0.1 | CONSTANTINE,CORNWALL | | 8 | 3 | 149 | 0.06 | 0.7 | 1.0 | A*C | |
| 20010605 | 084343.7 | 50.11 | -5.18 | 173.0 | 28.1 | 6.2 | 0.2 | CONSTANTINE,CORNWALL | | 9 | 3 | 86 | 0.01 | 0.1 | 0.2 | A*A | |
| 20010605 | 090409.9 | 50.11 | -5.17 | 173.6 | 28.1 | 6.6 | 0.2 | CONSTANTINE,CORNWALL | | 8 | 4 | 137 | 0.03 | 0.3 | 0.8 | A*C | |

# TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010605 | 115047.6 | 50.11 | -5.17 | 173.0 | 28.2 | 6.8 | 0.8 | CONSTANTINE,CORNWALL | | 10 | 3 | 87 | 0.03 | 0.2 | 0.4 | A*A | |
| 20010605 | 120427.5 | 50.11 | -5.18 | 172.8 | 28.2 | 6.7 | 0.8 | CONSTANTINE,CORNWALL | | 10 | 3 | 83 | 0.03 | 0.2 | 0.4 | A*A | |
| 20010605 | 120431.5 | 50.11 | -5.18 | 172.4 | 28.8 | 8.0 | 0.6 | CONSTANTINE,CORNWALL | | 9 | 2 | 98 | 0.07 | 0.7 | 1.3 | A*B | |
| 20010605 | 120738.8 | 50.11 | -5.17 | 173.5 | 28.2 | 5.9 | 0.2 | CONSTANTINE,CORNWALL | | 8 | 3 | 94 | 0.02 | 0.2 | 0.4 | A*B | |
| 20010605 | 153004.0 | 50.11 | -5.17 | 173.1 | 28.1 | 6.0 | 0.7 | CONSTANTINE,CORNWALL | | 9 | 3 | 88 | 0.02 | 0.1 | 0.3 | A*A | |
| 20010605 | 155946.3 | 50.11 | -5.17 | 173.0 | 28.1 | 6.2 | 1.1 | CONSTANTINE,CORNWALL | | 9 | 3 | 86 | 0.01 | 0.1 | 0.2 | A*A | |
| 20010605 | 160128.5 | 50.11 | -5.15 | 174.8 | 27.6 | 5.5 | 0.0 | CONSTANTINE,CORNWALL | | 6 | 3 | 126 | 0.05 | 0.8 | 1.9 | A*B | |
| 20010605 | 160654.2 | 50.11 | -5.17 | 173.0 | 28.1 | 6.3 | 0.4 | CONSTANTINE,CORNWALL | | 8 | 3 | 159 | 0.01 | 0.2 | 0.3 | A*C | |
| 20010605 | 162320.8 | 50.11 | -5.17 | 173.1 | 28.2 | 6.3 | 0.9 | CONSTANTINE,CORNWALL | | 9 | 3 | 88 | 0.01 | 0.1 | 0.2 | A*A | |
| 20010605 | 164832.5 | 50.11 | -5.17 | 173.4 | 28.3 | 6.7 | 0.4 | CONSTANTINE,CORNWALL | | 9 | 3 | 92 | 0.02 | 0.2 | 0.4 | A*B | |
| 20010609 | 004928.4 | 50.11 | -5.18 | 173.0 | 28.1 | 6.3 | 0.2 | CONSTANTINE,CORNWALL | | 9 | 3 | 86 | 0.02 | 0.2 | 0.4 | A*A | |
| 20010612 | 063955.9 | 50.11 | -5.18 | 173.0 | 28.2 | 6.1 | 0.6 | CONSTANTINE,CORNWALL | | 8 | 3 | 128 | 0.01 | 0.1 | 0.2 | A*B | |
| 20011130 | 024614.9 | 50.11 | -6.42 | 84.0 | 32.6 | 5.1 | 1.9 | NW OF SCILLY ISLES | | 5 | 60 | 357 | 0.19 | | 16.9 | D*D | |
| 20010415 | 045548.5 | 50.07 | -5.26 | 166.7 | 24.1 | 10.1 | 0.3 | HELSTON,CORNWALL | | 8 | 4 | 262 | 0.06 | 1.1 | 0.8 | B*D | 4KM SOUTH OF HELSTON |
| 20011102 | 195918.0 | 50.00 | -5.05 | 181.3 | 15.5 | 23.8 | 1.5 | OFF LIZARD PT,CORNWALL | | 10 | 10 | 310 | 0.03 | 0.8 | 0.6 | A*D | 10KM EAST OF LIZARD POINT |
| 20011102 | 200100.1 | 50.00 | -5.05 | 181.4 | 15.3 | 24.1 | 1.2 | OFF LIZARD PT,CORNWALL | | 10 | 10 | 310 | 0.03 | 0.7 | 0.5 | A*D | 10KM EAST OF LIZARD POINT |
| 20010105 | 003116.2 | 49.29 | -3.53 | 288.5 | -66.3 | 7.1 | 1.6 | ENGLISH CHANNEL | | 8 | 97 | 251 | 0.31 | 16.0 | 14.2 | D*D | |
| 20010816 | 003459.7 | 49.24 | -2.16 | 388.1 | -73.5 | 9.6 | 0.1 | JERSEY,CHANNEL ISLANDS | | 6 | 5 | 301 | 0.01 | 0.4 | 0.2 | A*D | |

## TABLE 3

## CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY: 2001

## 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, negative longitude indicates west. |
| **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. |
| **DM** | **:** | Epicentral distance in kilometres to the closest station. |
| **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. |
| **SQD** | **:** | S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations. |

### Locality abbreviations

| | | | | | |
|---|---|---|---|---|---|
| Sonic | **:** | Sonic boom | N Yorkshire | **:** | North Yorkshire |
| Expl | **:** | Explosion | Notts | **:** | Nottinghamshire |
| D & G | **:** | Dumfries and Galloway | Lincs | **:** | Lincolnshire |
| Gtr | **:** | Greater | N' umberlnd | **:** | Northumberland |
| Her & Worcs | **:** | Hereford and Worcester | Staffs | **:** | Staffordshire |
| S'Clyde | **:** | Strathclyde | Leics | **:** | Leicestershire |
| S Yorkshire | **:** | South Yorkshire | W Mids | **:** | West Midlands |
| New-U-Lyme | **:** | Newcastle-Under-Lyme | Salop | **:** | Shropshire |
| Penin | **:** | Peninsula | | | |

### Comments abbreviations

| | | |
|---|---|---|
| Sonic | **:** | Sonic boom |
| Expl | **:** | Explosion |
| C/F | **:** | Coalfield type event |
| ... | **:** | and felt elsewhere |

## TABLE 3: CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY: 2001

| YearMoDy | HrMnSecs | Lat | Lon | kmE | kmN | Dep | Mag | Locality | Int | No | DM | Gap | RMS | ERH | ERZ | SQD | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20010220 | 093646.0 | | | | | | | SONIC-MONTROSE,TAYSIDE | 3+ | | | | | | | | SONIC-FELT MORPHIE |
| 20010220 | 150400.0 | | | | | | | PROBABLE SONIC-N'HANTS | 3+ | | | | | | | | SONIC-FELT N'HANTS... |
| 20010221 | 112259.0 | | | | | | | SONIC-YORKS/HUMBERSIDE | 3+ | | | | | | | | SONIC-FELT SCARBOROUGH… |
| 20011113 | 205844.0 | | | | | | | SONIC-BERWICKSHIRE | 3+ | | | | | | | | SONIC-FELT EYEMOUTH... |
| 20011116 | 101229.0 | | | | | | | SONIC-FELT NE ENGLAND | 3+ | | | | | | | | SONIC-FELT SUNDERLAND... |

**TABLES 4**

**GEOGRAPHICAL COORDINATES OF SEISMOGRAPH STATIONS: DECEMBER 2001**

## TABLE 4a

## GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, DECEMBER 2001

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Yrs open | Comp | Agency |
|---|---|---|---|---|---|---|---|---|---|
| ABA | BACONSTHORPE | 52.8884 | 1.1453 | 611.58 | 337.00 | 74 | 82- | 1 | BGS |
| AEU | EAST ANGLIA UNIV | 52.6208 | 1.2403 | 619.30 | 307.53 | 45 | 00- | 3M | BGS |
| APA | PACKWAY | 52.3006 | 1.4782 | 637.12 | 272.68 | 58 | 84- | 1 | BGS |
| AWH | WHINBURGH | 52.6297 | 0.9507 | 599.67 | 307.68 | 64 | 80- | 1R | BGS |
| AWI | WITTON | 52.8319 | 1.4471 | 632.17 | 331.65 | 46 | 83- | 1 | BGS |
| BBH | BRUNTSHEIL | 55.1333 | -2.9299 | 340.72 | 582.50 | 216 | 92- | 1 | BGS |
| BBO | BOTHEL | 54.7367 | -3.2464 | 319.76 | 538.69 | 209 | 92- | 3 | BGS |
| BCM | CHAPELCROSS MIC | 55.0151 | -3.2212 | 321.92 | 569.64 | 78 | 92- | M | BGS |
| BDL | DOBCROSS HALL | 54.8030 | -2.9385 | 339.68 | 545.76 | 157 | 92- | 1 | BGS |
| BHH | HOWATS HILL | 55.0931 | -3.2181 | 322.27 | 578.31 | 216 | 92- | 3 | BGS |
| BNA | NEW ABBEY | 54.9658 | -3.6242 | 296.03 | 564.68 | 28 | 92- | 1 | BGS |
| BTA | TALKIN | 54.9057 | -2.6844 | 356.12 | 557.00 | 279 | 92- | 3 | BGS |
| BWH | WARDLAW | 55.1758 | -3.6549 | 294.62 | 588.09 | 269 | 92- | 1 | BGS |
| CBW | BUDOCK WATER | 50.1482 | -5.1144 | 177.53 | 32.29 | 94 | 81- | 1 | BGS |
| CCA | CARNMENELLIS | 50.1866 | -5.2277 | 169.62 | 36.90 | 210 | 81- | 1 | BGS |
| CCO | CONSTANTINE | 50.1357 | -5.1957 | 171.66 | 31.14 | 168 | 81- | 1 | BGS |
| CDU | DUNNERDALE | 54.3362 | -3.1952 | 322.30 | 494.08 | 355 | 92- | 1 | BGS |
| CGH | GOONHILLY | 50.0507 | -5.1649 | 173.46 | 21.60 | 97 | 81- | 1 | BGS |
| CGW | GWEEK | 50.1006 | -5.2228 | 169.56 | 27.32 | 9 | 93- | 1 | BGS |
| CKE | KESWICK | 54.5877 | -3.1059 | 328.54 | 521.96 | 304 | 92- | 1 | BGS |
| CMA | MANACCAN | 50.0821 | -5.1274 | 176.29 | 24.98 | 42 | 93- | 1 | BGS |
| CPZ | PENZANCE | 50.1566 | -5.5828 | 144.12 | 34.72 | 199 | 81- | 1R | BGS |
| CR2 | ROSEMANOWES 2 | 50.1667 | -5.1687 | 173.74 | 34.51 | 143 | 81- | 3 | BGS |
| CSA | ST AUSTELL | 50.3527 | -4.8919 | 194.30 | 54.38 | 112 | 81- | 1 | BGS |
| CSF | SCAFELL | 54.4478 | -3.2430 | 319.41 | 506.55 | 540 | 92- | 1 | BGS |
| CSM | SELLAFIELD MIC | 54.4183 | -3.4913 | 303.24 | 503.58 | 50 | 92- | M | BGS |
| CST | STITHIANS | 50.1952 | -5.1635 | 174.24 | 37.66 | 141 | 81- | 1 | BGS |
| CWF | CHARNWOOD FST | 52.7385 | -1.3076 | 446.74 | 315.91 | 203 | 75- | 3R | BGS |
| DCO | COMBE FARM | 50.3201 | -3.8721 | 266.74 | 48.43 | 117 | 82- | 1R | BGS |
| DYA | YADSWORTHY | 50.4353 | -3.9310 | 262.88 | 61.34 | 292 | 82- | 3R | BGS |
| EAB | ABERFOYLE | 56.1887 | -4.3373 | 254.97 | 702.02 | 279 | 69- | 1R | BGS |
| EAU | AUCHINOON | 55.8454 | -3.4474 | 309.38 | 662.30 | 359 | 69- | 1R | BGS |
| EBH | BLACK HILL | 56.2476 | -3.5084 | 306.54 | 707.13 | 375 | 69- | 1R | BGS |
| EBL | BROAD LAW | 55.7723 | -3.0445 | 334.48 | 653.71 | 436 | 69- | 1R | BGS |
| ECK | CAULDKAINE HILL | 55.1810 | -3.1292 | 328.10 | 588.00 | 351 | 81- | 1R | BGS |
| EDI | EDINBURGH | 55.9233 | -3.1875 | 325.80 | 670.66 | 125 | 69- | 3R | BGS |
| EDR | DRUMTOCHTY | 56.9190 | -2.5393 | 367.17 | 780.97 | 401 | 89- | 1R | BGS |
| EDU | DUNDEE | 56.5477 | -3.0110 | 337.85 | 739.97 | 421 | 69- | 1R | BGS |
| ELO | LOGIEALMOND | 56.4703 | -3.7112 | 294.59 | 732.21 | 523 | 69- | 1R | BGS |
| ESK | ESKDALEMUIR | 55.3165 | -3.2052 | 323.52 | 603.16 | 261 | 65- | 3R | BGS |
| ESY | STONEYPATH | 55.9175 | -2.6141 | 361.62 | 669.55 | 337 | 81- | 1R | BGS |
| FHV | HALDARSVIK | 62.2597 | -7.0984 | 135.46 | 1385.95 | 380 | 99- | 1R | BGS |
| FSD | SUDUROY | 61.5701 | -6.7884 | 145.86 | 1308.06 | 480 | 99- | 1R | BGS |
| FSV | SVINOY | 62.2598 | -6.3550 | 173.99 | 1383.14 | 430 | 99- | 1R | BGS |
| FTO | TORSHAVN | 62.0199 | -6.8274 | 147.51 | 1358.21 | 325 | 99- | 3R | BGS |
| FVA | VAGAR | 62.0575 | -7.3520 | 120.46 | 1364.55 | 430 | 99- | 1R | BGS |
| GAL | GALLOWAY | 54.8664 | -4.7114 | 226.02 | 555.78 | 117 | 89- | 3M | BGS |
| GCD | CASTLE DOUGLAS | 54.8630 | -3.9403 | 275.48 | 553.76 | 184 | 89- | 1R | BGS |
| GCL | CUSHENDALL | 55.0783 | -6.1264 | 136.66 | 583.77 | 278 | 89- | 1R | BGS |
| GIM | ISLE OF MAN (North) | 54.2923 | -4.4672 | 239.44 | 491.35 | 346 | 89- | 3R | BGS |
| GMK | MULL OF KINTYRE | 55.3458 | -5.5934 | 172.19 | 611.64 | 164 | 89- | 1R | BGS |
| GMM | MTNS OF MOURNE | 54.2377 | -5.9498 | 142.66 | 489.67 | 155 | 89- | 1R | BGS |
| HAE | ALDERS END | 52.0368 | -2.5434 | 362.73 | 237.79 | 260 | 82- | 1R | BGS |
| HCG | CRAIG GOCH | 52.3231 | -3.6570 | 287.08 | 270.78 | 533 | 80- | 1R | BGS |
| HEX | EXMOOR | 51.0664 | -3.8026 | 273.71 | 131.28 | 230 | 91- | 1R | BGS |
| HGH | GRAY HILL | 51.6379 | -2.8057 | 344.25 | 193.59 | 223 | 80- | 1R | BGS |
| HLM | LONG MYND | 52.5184 | -2.8807 | 340.25 | 291.57 | 429 | 84- | 1 | BGS |

**TABLE 4a: continued**

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Yrs open | Comp | Agency |
|---|---|---|---|---|---|---|---|---|---|
| HPE | PEMBROKE | 51.9372 | -4.7746 | 209.29 | 230.21 | 349 | 90- | 1R | BGS |
| HPK | HAVERAH PARK | 53.9581 | -1.6241 | 424.66 | 451.42 | 233 | 78- | 3R | BGS |
| HSA | SWANSEA | 51.7500 | -4.1532 | 251.38 | 207.94 | 293 | 87- | 1R | BGS |
| HTL | HARTLAND | 50.9943 | -4.4849 | 225.64 | 124.66 | 86 | 81- | 3RM | BGS |
| HTR | TREWERN HILL | 52.0785 | -3.2679 | 313.12 | 243.04 | 337 | 82- | 1R | BGS |
| JLP | LES PLATONS | 49.2486 | -2.1039 | | | 129 | 81- | 1R | BGS |
| JQE | QUEENS EAST | 49.2000 | -2.0383 | | | 58 | 91- | 1 | BGS |
| JRS | MAISON ST LOUIS | 49.1922 | -2.0922 | | | 56 | 81- | 3R | BGS |
| JSA | ST AUBINS | 49.1878 | -2.1717 | | | 39 | 81- | 1R | BGS |
| JVM | VALLE D.L.MARE | 49.2169 | -2.2067 | | | 64 | 81 | 1R | BGS |
| KAC | ACHNASHELLACH | 57.4989 | -5.2988 | 202.36 | 850.19 | 206 | 83- | 1R | BGS |
| KAR | ARISAIG | 56.9188 | -5.8290 | 166.98 | 787.34 | 186 | 83- | 1 | BGS |
| KBI | BIRLEY GRANGE | 53.2543 | -1.5279 | 431.49 | 373.17 | 272 | 88- | 1 | BGS |
| KLE | KEELE UNIVERSITY | 53.0038 | -2.2657 | 382.17 | 345.23 | 203 | | 1 | KUN |
| KLE3 | NEWCHAPEL | 53.0928 | -2.2047 | 386.29 | 355.12 | 200 | | 1 | KUN |
| KNR | NEVIS RANGE | 56.8219 | -4.9714 | 218.68 | 773.97 | 1147 | 91- | 1R | BGS |
| KPL | PLOCKTON | 57.3391 | -5.6527 | 180.21 | 833.50 | 13 | 86- | 3R | BGS |
| KSB | SHIEL BRIDGE | 57.2099 | -5.4214 | 193.40 | 818.40 | 417 | 83- | 1R | BGS |
| KSK | SCOVAL | 57.4659 | -6.7002 | 118.21 | 851.46 | 265 | 89- | 1R | BGS |
| KSY | SYSTON | 52.9642 | -0.5872 | 494.88 | 341.73 | 121 | 88- | 1R | BGS |
| KTG | TILBROOK GRNGE | 52.3264 | -0.4019 | 508.90 | 271.06 | 83 | 88- | 1 | BGS |
| KUF | UFFORD | 52.6170 | -0.3907 | 508.94 | 303.39 | 38 | 88- | 1R | BGS |
| KWE | WEAVER FARM | 53.0164 | -1.8412 | 410.65 | 346.61 | 328 | 88- | 1R | BGS |
| LCP | CASSOP | 54.7370 | -1.4744 | 433.84 | 538.14 | 185 | 91- | 1R | BGS |
| LDU | LEEDS | 53.8058 | -1.5540 | 429.37 | 434.51 | 74 | 83- | M | BGS |
| LHO | HOLMEFIRTH | 53.5453 | -1.8548 | 409.62 | 405.44 | 462 | 91- | 1R | BGS |
| LMI | MILLOM | 54.2206 | -3.3070 | 314.79 | 481.35 | 129 | 89- | 3R | BGS |
| LMK | MARKET RASEN | 53.4569 | -0.3260 | 511.14 | 396.90 | 146 | 91- | 1R | BGS |
| LRN | RICHMOND | 54.4165 | -1.8007 | 412.93 | 502.37 | 313 | 91- | 1R | BGS |
| LRW | LERWICK | 60.1360 | -1.1779 | 445.66 | 1139.27 | 98 | 78- | 3R | BGS |
| LWH | WHINNY NAB | 54.3338 | -0.6717 | 486.36 | 493.97 | 277 | 91- | 1R | BGS |
| MCD | COLEBURN DISTIL | 57.5828 | -3.2541 | 325.02 | 855.42 | 293 | 81- | 3RM | BGS |
| MCH | MICHAELCHURCH | 51.9974 | -2.9983 | 331.47 | 233.74 | 219 | 78- | 3 | BGS |
| MDO | DOCHFOUR | 57.4409 | -4.3633 | 258.17 | 841.39 | 415 | 81- | 1R | BGS |
| MFI | FISHRIE | 57.6119 | -2.2956 | 382.34 | 858.00 | 232 | 88- | 1R | BGS |
| MLA | LATHERON | 58.3055 | -3.3627 | 320.15 | 935.98 | 188 | 81- | 1 | BGS |
| MME | MEIKLE CAIRN | 57.3149 | -2.9647 | 341.90 | 825.32 | 475 | 81- | 1 | BGS |
| MVH | ACHVAICH | 57.9250 | -4.1825 | 270.75 | 894.90 | 185 | 84- | 1 | BGS |
| OBR | BRABSTER | 58.6142 | -3.1626 | 332.47 | 970.13 | 89 | 95- | 1R | BGS |
| OHO | HOY | 58.8322 | -3.2465 | 328.05 | 994.48 | 172 | 95- | 1R | BGS |
| ORE | REAY | 58.5480 | -3.7622 | 297.45 | 963.52 | 100 | 95- | 3RM | BGS |
| OST | STRONSAY | 59.0860 | -2.5516 | 368.39 | 1022.20 | 21 | 95- | 1R | BGS |
| OTO | TONGUE | 58.4953 | -4.3939 | 260.49 | 958.79 | 338 | 95- | 1R | BGS |
| OWE | WESTRAY | 59.3180 | -3.0289 | 341.44 | 1048.36 | 87 | 95- | 1R | BGS |
| PCA | CARROT | 55.7007 | -4.2550 | 258.30 | 647.55 | 302 | 83- | 1 | BGS |
| PCO | CORRIE | 55.9880 | -4.1002 | 269.00 | 679.21 | 267 | 83- | 1 | BGS |
| PGB | GLENIFFERBRAES | 55.8115 | -4.4837 | 244.38 | 660.37 | 199 | 84- | 3 | BGS |
| PMS | MUIRSHIEL | 55.8459 | -4.7452 | 228.15 | 664.82 | 351 | 83- | 1 | BGS |
| RCR | CAPE WRATH | 58.6245 | -4.9987 | 225.90 | 974.58 | 100 | 95- | 1R | BGS |
| REB | EISG-BRACHAIDH | 58.1194 | -5.2802 | 206.82 | 919.16 | 100 | 95- | 1R | BGS |
| RFO | FORSNAVAL | 58.2133 | -7.0052 | 106.10 | 935.83 | 195 | 95- | 1R | BGS |
| RRH | RHENIGIDALE | 57.9197 | -6.6881 | 122.43 | 901.86 | 103 | 95- | 1R | BGS |
| RRR | RUBHA REIDH | 57.8577 | -5.8067 | 174.19 | 891.68 | 61 | 95- | 3RM | BGS |
| RSC | SCOURIE | 58.3485 | -5.1683 | 214.61 | 944.33 | 60 | 95- | 1R | BGS |
| RTO | TOLSTA | 58.3778 | -6.2092 | 153.95 | 950.93 | 74 | 95- | 1R | BGS |
| SAN | SANDWICK | 60.0179 | -1.2392 | 442.41 | 1126.08 | 150 | 85- | 1 | BGS |
| SBD | BRYN DU | 52.9055 | -3.2585 | 315.37 | 335.01 | 489 | 80- | 1 | BGS |
| SFH | HASELMERE | 51.0604 | -0.6912 | 491.71 | 129.88 | 260 | 93- | 1 | BGS |

## TABLE 4a: continued

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Yrs open | Comp | Agency |
|---|---|---|---|---|---|---|---|---|---|
| SIW | ISLE OF WHITE | 50.6711 | -1.3747 | 444.18 | 85.97 | 162 | 93- | 1 | BGS |
| SKP | KOPHILL | 51.7218 | -0.8096 | 482.22 | 203.29 | 212 | 93- | 1 | BGS |
| SMD | MENDIPS | 51.3083 | -2.7170 | 350.03 | 156.88 | 310 | 93- | 1 | BGS |
| SSP | STONEY POUND | 52.4177 | -3.1119 | 324.39 | 280.59 | 428 | 90- | 3 | BGS |
| SSW | STOW-ON-WOLD | 51.9667 | -1.8499 | 410.31 | 229.86 | 291 | 93- | 1 | BGS |
| SWK | WARMINSTER | 51.1483 | -2.2471 | 382.72 | 138.87 | 266 | 93- | 1 | BGS |
| SWN | SWINDON | 51.5137 | -1.8007 | 413.83 | 179.49 | 192 | 93- | 3 | BGS |
| TBW | BRENTWOOD | 51.6549 | 0.2913 | 558.48 | 197.66 | 89 | 89- | 1R | BGS |
| TCR | COLCHESTER | 51.8347 | 0.9212 | 601.24 | 219.20 | 45 | 89- | 1R | BGS |
| TEB | EASTBOURNE | 50.8187 | 0.1457 | 551.13 | 104.39 | 68 | 89- | 1R | BGS |
| TFO | FOLKESTONE | 51.1135 | 1.1409 | 619.81 | 139.66 | 202 | 89- | 3 | BGS |
| TSA | SEVENOAKS | 51.2426 | 0.1561 | 550.48 | 151.53 | 177 | 89- | 1 | BGS |
| WAL | WALLS | 60.2564 | -1.6173 | 421.18 | 1152.46 | 167 | 80- | 1 | BGS |
| WCB | CHURCH BAY | 53.3782 | -4.5467 | 230.62 | 389.87 | 139 | 85- | 3M | BGS |
| WFB | FAIRBOURNE | 52.6831 | -4.0383 | 262.23 | 311.48 | 316 | 85- | 1R | BGS |
| WIM | ISLE OF MAN(South) | 54.1475 | -4.6738 | 225.39 | 475.73 | 386 | 85- | 1R | BGS |
| WLF | LLYNFAES | 53.2894 | -4.3966 | 240.27 | 379.65 | 58 | 85- | 1 | BGS |
| WME | MYNDD EILIAN | 53.3969 | -4.3032 | 246.88 | 391.40 | 129 | 85- | 1R | BGS |
| WPM | PENMAENMAWR | 53.2581 | -3.9048 | 272.95 | 375.18 | 353 | 85- | 1R | BGS |
| XAL | ALLENDALE | 54.8617 | -2.2147 | 386.22 | 551.91 | 458 | 83- | 1R | BGS |
| XDE | DENT | 54.5056 | -3.4902 | 303.52 | 513.29 | 301 | 83- | 1R | BGS |
| XSO | SOURHOPE | 55.4924 | -2.2510 | 384.14 | 622.10 | 516 | 83- | 1R | BGS |
| YEL | YELL | 60.5509 | -1.0830 | 450.29 | 1185.55 | 203 | 79- | 1 | BGS |
| YLL | LLANBERIS | 53.1402 | -4.1704 | 254.84 | 362.57 | 159 | 84- | 1R | BGS |
| YRC | RHOSCOLYN | 53.2508 | -4.5753 | 228.21 | 375.77 | 22 | 84- | 1R | BGS |
| YRE | YR EIFL | 52.9811 | -4.4254 | 237.19 | 345.43 | 193 | 84- | 1R | BGS |
| YRH | RHIW | 52.8336 | -4.6288 | 222.94 | 329.51 | 286 | 84- | 1R | BGS |
| DCN | CROGHAN | 53.3439 | -7.2767 | | | 150 | 77- | 1R | DIAS |
| DLF | LYONS FARM | 53.2958 | -6.5314 | | | 96 | 91- | 3 | DIAS |
| ASK | ASKOY | 60.4830 | 5.1950 | | | 50 | 83- | 1 | BER |
| BER | BERGEN | 60.3838 | 5.3339 | | | 50 | | 1 | BER |
| EGD | ESPEGREND | 60.2712 | 5.2257 | | | 20 | 91- | 1 | BER |
| FOO | FLORO | 61.5980 | 5.0440 | | | 50 | | 1 | BER |
| KMY | KARMOY | 59.2120 | 5.2470 | | | 58 | 84- | 1 | BER |
| MOL | MOLDE | 62.5700 | 7.5480 | | | 98 | 87- | 1 | BER |
| ODD1 | ODDA | 59.9120 | 6.6280 | | | 684 | 87- | 1 | BER |
| SUE | SULEN | 61.0570 | 4.7610 | | | 10 | 84- | 1 | BER |

**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 |

**Agency Codes:**

| | |
|---|---|
| BGS | British Geological Survey |
| DIAS | Dublin Institute of Advanced Studies |
| KUN | Keele University |
| BER | University of Bergen |

## TABLE 4b

## GEOGRAPHIC COORDINATES OF LOW GAIN STATIONS, DECEMBER 2001

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Yrs open | Comp | Agency |
|---|---|---|---|---|---|---|---|---|---|
| AEU | EAST ANGLIA | 52.6202 | 1.2347 | 618.93 | 307.45 | 28 | 94- | L | BGS |
| BCC | CHAPELCROSS | 55.0153 | -3.2201 | 321.99 | 569.66 | 138 | 92- | L | BGS |
| CRQ | ROSEMANOWES | 50.1672 | -5.1726 | 173.46 | 34.57 | 156 | 81- | L | BGS |
| DYA | YADSWORTHY | 50.4353 | -3.9310 | 262.88 | 61.34 | 292 | 82- | LR | BGS |
| EDI | EDINBURGH | 55.9233 | -3.1875 | 325.80 | 670.66 | 125 | 89- | LR | BGS |
| ESK | ESKDALEMUIR | 55.3165 | -3.2052 | 323.52 | 603.16 | 261 | 86- | LR | BGS |
| GAL | GALLOWAY | 54.8664 | -4.7114 | 226.02 | 555.78 | 117 | 89- | L | BGS |
| HBL2 | BONNYLANDS | 52.0508 | -3.0384 | 328.80 | 239.71 | 437 | 91- | LR | BGS |
| HTL | HARTLAND | 50.9943 | -4.4849 | 225.64 | 124.66 | 86 | 87- | LR | BGS |
| JRS | MAISON ST LOUIS | 49.1922 | -2.0922 | | | 56 | 81- | LR | BGS |
| KEY | KEYWORTH | 52.8779 | -1.0757 | 462.20 | 331.59 | 59 | 88- | L | BGS |
| KPL | PLOCKTON | 57.3391 | -5.6527 | 180.21 | 833.50 | 13 | 86- | LR | BGS |
| LDU | LEEDS | 53.8058 | -1.5540 | 429.37 | 434.51 | 74 | 94- | L | BGS |
| LRW | LERWICK | 60.1360 | -1.1779 | 445.66 | 1139.27 | 98 | 78- | LR | BGS |
| MCH | MICHAELCHURCH | 51.9974 | -2.9983 | 331.47 | 233.74 | 219 | 78- | L | BGS |
| MCD | COLEBURN DISTIL | 57.5828 | -3.2541 | 325.02 | 855.42 | 293 | 81- | LR | BGS |
| ORE | REAY | 58.5480 | -3.7622 | 297.45 | 963.52 | 100 | 95- | LR | BGS |
| POB | OBSERVATORY | 55.8458 | -44299 | 247.88 | 664.06 | 34 | 92- | L | BGS |
| RRR | RUBHA REIDH | 57.8577 | -5.8067 | 174.19 | 891.68 | 61 | 95- | LR | BGS |
| SWN | SWINDON | 51.5131 | -1.8004 | 413.85 | 179.42 | 192 | 93- | L | BGS |
| TFO | FOLKESTONE | 51.1135 | 1.1409 | 619.81 | 139.66 | 202 | 89- | L | BGS |
| WCB | CHURCH BAY | 53.3782 | -4.5467 | 230.62 | 389.87 | 139 | 85- | L | BGS |

**Component Codes:**

L Single low-gain vertical seismometer
R Station coordinates registered with the International Seismological Centre (ISC), England and the National Earthquake Information Centre (NEIC), USA

**Agency Codes:**

BGS British Geological Survey

## TABLE 4c

## GEOGRAPHIC COORDINATES OF STRONG MOTION STATIONS, DECEMBER 2001

| Code | Name | Lat | Lon | KmE (km) | KmN (km) | Ht (m) | Yrs open | Comp | Agency |
|---|---|---|---|---|---|---|---|---|---|
| AEU | EAST ANGLIA | 52.6202 | 1.2347 | 618.93 | 307.45 | 28 | 82-95 | S | BGS |
| BCC | CHAPELCROSS | 55.0153 | -3.2201 | 321.99 | 569.66 | 138 | 92- | S | BGS |
| CRQ | ROSEMANOWES | 50.1672 | -5.1726 | 173.46 | 34.57 | 156 | 87- | SR | BGS |
| JDC | DAM (CREST) | 49.1947 | -2.0469 | | | 39 | 92- | 1 | BGS |
| JDG | DAM (GALLERY) | 49.1947 | -2.0469 | | | 7 | 92- | S | BGS |
| HUA | HUNTERSTON A | 55.7190 | -4.8970 | 218.06 | 651.09 | 10 | 90- | S | BGS |
| HUB | HUNTERSTON B | 55.7210 | -4.8890 | 218.57 | 651.29 | 10 | 90- | S | BGS |
| KEY2 | KEYWORTH | 52.8790 | -1.0770 | 462.13 | 331.73 | 76 | 97- | S | BGS |
| KPL | PLOCKTON | 57.3391 | -5.6527 | 180.21 | 833.50 | 13 | 94- | SR | BGS |
| HBL2 | BONNYLANDS | 52.0509 | -3.0365 | 328.93 | 239.72 | 437 | 94- | SR | BGS |
| LDU | LEEDS | 53.8058 | -1.5540 | 429.00 | 435.00 | 74 | 98- | S | BGS |
| LRWS | LERWICK | 60.1397 | -1.1831 | 445.37 | 1139.69 | 80 | 96- | S | BGS |
| MCD | COLEBURN DISTIL | 57.5828 | -3.2541 | 325.02 | 855.42 | 293 | 98- | S | BGS |
| ODR | DOUNREAY | 58.5825 | -3.7241 | 299.77 | 967.30 | 100 | 00- | S | BGS |
| RRR | RUBHA REIDH | 57.8577 | -5.8067 | 174.19 | 891.68 | 61 | 95- | SR | BGS |
| SWN | SWINDON | 51.5137 | -1.8007 | 413.83 | 179.49 | 192 | 95- | S | BGS |
| TFO | FOLKESTONE | 51.1135 | 1.1409 | 619.81 | 139.66 | 202 | 94- | S | BGS |
| TOA | TORNESS A | 55.9692 | -2.4037 | 374.80 | 675.20 | 5 | 94- | S | BGS |
| TOB | TORNESS B | 55.9673 | -2.4085 | 374.50 | 674.99 | 5 | 94- | S | BGS |
| WCB | CHURCH BAY | 53.3782 | -4.5467 | 230.62 | 389.87 | 139 | 98- | S | BGS |

**Component Codes:**

| | |
|---|---|
| S | Orthogonal set of 3 strong motion seismometers |
| 1 | Single strong motion seismometer – aligned NS |
| R | Station coordinates registered with the International Seismological Centre (ISC), England and the National Earthquake Information Centre (NEIC), USA |

**Agency Codes:**

| | |
|---|---|
| BGS | British Geological Survey |

**TABLE 5**

**PHASE DATA: 2001**

# 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.
**Quality** : Solution quality of hypocentre averaged from QS and QD. A, excellent; B, good; C, fair; D, poor
**RMS** : Root Mean Square of the travel -time residuals in seconds.
**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

## Locality abbreviations

| | | | | | |
|---|---|---|---|---|---|
| Sonic | : | Sonic boom | N Yorkshire | : | North Yorkshire |
| Expl | : | Explosion | Notts | : | Nottinghamshire |
| D & G | : | Dumfries and Galloway | Lincs | : | Lincolnshire |
| Gtr | : | Greater | N'umberlnd | : | Northumberland |
| Her & Worcs | : | Hereford and Worcester | Staffs | : | Staffordshire |
| S'Clyde | : | Strathclyde | Leics | : | Leicestershire |
| S Yorkshire | : | South Yorkshire | W Mids | : | West Midlands |
| New-U-Lyme | : | Newcastle-Under-Lyme | Salop | : | Shropshire |
| Penin | : | Peninsula | | | |

## Comments abbreviations

Sonic : Sonic boom
Expl : Explosion
C/F : Coalfield type event
... : and felt elsewhere

# PHASE DATA : 2001

**January 1 2001 Time: 18:27 07.9 UTC Magnitude: 2.1 ML**
**Lat: 55.634N Lon: -6.143W Depth: 9.0 km**
**Grid Ref: 139.29 kmE 645.61 kmE RMS: 0.08 secs**
**Locality: ISLAY,INNER HEBRIDES Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| GMK | SZ | 47 | IP | | U | 18:27 | 16.09 | | |
| GCL | SZ | 62 | IP | 1 | U | 18:27 | 18.29 | | |
| PMS | SZ | 91 | EP | 2 | | 18:27 | 22.80 | | |
| PGB | SZ | 106 | EP | 2 | | 18:27 | 25.42 | | |
| PGB | SE | 106 | ES | 2 | | 18:27 | 37.66 | | |
| PGB | SN | 106 | | | | 18:27 | 39.99 | 62 | 0.19 |
| PGB | SE | 106 | | | | 18:27 | 39.45 | 72 | 0.20 |
| PCA | SZ | 119 | IP | 1 | U | 18:27 | 27.18 | | |
| GAL | SZ | 125 | EP | 3 | | 18:27 | 29.06 | | |
| GAL | SN | 125 | | | | 18:27 | 48.04 | 22 | 0.16 |
| GAL | SE | 125 | | | | 18:27 | 46.16 | 26 | 0.13 |

**January 3 2001 Time: 06:58 48.7 UTC Magnitude: 2.6 ML**
**Lat: 59.852N Lon: 1.974W Depth: 15.0 km**
**Grid Ref: 622.55 kmE 1114.10 kmE RMS: 0.47 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LRW | SZ | 179 | EP | 2 | | 06:59 | 16.04 | | |
| LRW | SE | 179 | ES | 3 | | 06:59 | 34.17 | | |
| LRW | SN | 179 | | | | 06:59 | 38.86 | 53 | 0.09 |
| LRW | SE | 179 | | | | 06:59 | 39.64 | 56 | 0.26 |
| SAN | SZ | 181 | EP | 3 | | 06:59 | 14.90 | | |
| EGD | SZ | 187 | EP | 2 | | 06:59 | 16.75 | | |
| YEL | SZ | 187 | EP | 2 | | 06:59 | 16.58 | | |
| ASK | SZ | 192 | EP | 3 | | 06:59 | 17.54 | | |
| KMY | SZ | 199 | EP | 3 | | 06:59 | 17.78 | | |
| WAL | SZ | 205 | EP | 2 | | 06:59 | 18.38 | | |
| OST | SZ | 270 | EP | 2 | | 06:59 | 27.88 | | |
| OHO | SZ | 318 | EP | 2 | | 06:59 | 32.87 | | |

**January 4 2001 Time: 21:31 17.1 UTC Magnitude: 3.1 ML**
**Lat: 59.802N Lon: 1.917W Depth: 19.2 km**
**Grid Ref: 619.71 kmE 1108.26 kmE RMS: 0.15 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LRW | SZ | 177 | EP | 2 | | 21:31 | 43.38 | | |
| LRW | SN | 177 | ES | 2 | | 21:32 | 02.67 | | |
| LRW | SN | 177 | | | | 21:32 | 06.44 | 143 | 0.14 |
| LRW | SE | 177 | | | | 21:32 | 07.99 | 193 | 0.23 |
| SAN | SZ | 178 | EP | 2 | | 21:31 | 43.22 | | |
| YEL | SZ | 186 | EP | 2 | | 21:31 | 44.97 | | |
| EGD | SZ | 192 | EP | 1 | | 21:31 | 45.27 | | |
| ASK | SZ | 198 | EP | 1 | | 21:31 | 46.10 | | |
| KMY | SZ | 200 | EP | 2 | | 21:31 | 46.38 | | |
| WAL | SZ | 204 | IP | 1 | U | 21:31 | 46.91 | | |
| OST | SZ | 266 | EP | 2 | | 21:31 | 55.73 | | |
| OWE | SZ | 285 | EP | 2 | | 21:31 | 58.07 | | |
| OHO | SZ | 313 | IP | 1 | D | 21:32 | 01.31 | | |

**January 5 2001 Time: 00:31 16.2 UTC Magnitude: 1.6 ML**
**Lat: 49.293N Lon: -3.534W Depth: 7.1 km**
**Grid Ref: 288.47 kmE -66.26 kmE RMS: 0.31 secs**
**Locality: ENGLISH CHANNEL Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| JVM | SZ | 97 | EP | 2 | | 00:31 | 31.74 | | |
| JSA | SZ | 100 | EP | 2 | | 00:31 | 32.30 | | |
| JLP | SZ | 104 | EP | 2 | | 00:31 | 32.94 | | |
| JRS | SZ | 106 | EP | 2 | | 00:31 | 33.62 | | |
| JRS | SN | 106 | ES | 2 | | 00:31 | 46.59 | | |
| DCO | SZ | 117 | EP | 2 | | 00:31 | 35.41 | | |
| DYA | SZ | 130 | EP | 2 | | 00:31 | 37.46 | | |
| DYA | SN | 130 | ES | 2 | | 00:31 | 52.18 | | |
| DYA | SN | 130 | | | | 00:31 | 54.47 | 8 | 0.18 |
| DYA | SE | 130 | | | | 00:31 | 53.92 | 9 | 0.16 |

**January 5 2001 Time: 00:51 52.0 UTC Magnitude: 1.0 ML**
**Lat: 55.389N Lon: -3.105W Depth: 8.5 km**
**Grid Ref: 330.01 kmE 611.10 kmE RMS: 0.06 secs**
**Locality: HAWICK,BORDERS Quality: B**
**Comment: 20KM WSW OF HAWICK**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| ESK | SZ | 10 | IP | | U | 00:51 | 54.59 | | |
| ESK | SE | 10 | ES | 2 | | 00:51 | 56.35 | | |
| ESK | SN | 10 | | | | 00:51 | 56.79 | 46 | 0.11 |
| ESK | SE | 10 | | | | 00:51 | 56.80 | 122 | 0.14 |
| ECK | SZ | 23 | IP | | U | 00:51 | 56.48 | | |
| BBH | SZ | 31 | IP | | U | 00:51 | 57.71 | | |
| BHH | SZ | 34 | IP | | U | 00:51 | 58.20 | | |
| BHH | SN | 34 | ES | 2 | | 00:52 | 02.51 | | |
| BHH | SN | 34 | | | | 00:52 | 02.74 | 20 | 0.37 |
| BHH | SE | 34 | | | | 00:52 | 04.01 | 21 | 0.30 |
| EBL | SZ | 43 | IP | | U | 00:51 | 59.65 | | |
| EAU | SZ | 55 | EP | 2 | | 00:52 | 02.14 | | |
| BTA | SZ | 60 | IP | | D | 00:52 | 02.60 | | |
| BTA | SN | 60 | ES | 2 | | 00:52 | 09.80 | | |
| BTA | SN | 60 | | | | 00:52 | 09.92 | 14 | 0.21 |
| BTA | SE | 60 | | | | 00:52 | 10.35 | 10 | 0.34 |
| BBO | SZ | 73 | IP | 1 | U | 00:52 | 04.75 | | |

**January 5 2001 Time: 21:00 26.5 UTC Magnitude: 0.5 ML**
**Lat: 56.237N Lon: -3.757W Depth: 3.9 km**
**Grid Ref: 291.11 kmE 706.38 kmE RMS: 0.03 secs**
**Locality: BLACKFORD,TAYSIDE Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EBH | SZ | 16 | IP | | U | 21:00 | 29.57 | | |
| EBH | SZ | 16 | ES | 3 | | 21:00 | 31.76 | | |
| EAB | SZ | 36 | IP | | U | 21:00 | 33.11 | | |
| EAU | SZ | 48 | EP | 2 | | 21:00 | 35.75 | | |
| EDI | SZ | 50 | EP | 2 | | 21:00 | 35.38 | | |
| EDI | SN | 50 | ES | 2 | | 21:00 | 41.64 | | |
| EDI | SN | 50 | | | | 21:00 | 42.00 | 4 | 0.38 |
| EDI | SE | 50 | | | | 21:00 | 42.07 | 2 | 0.19 |
| EDU | SZ | 58 | EP | 2 | | 21:00 | 36.49 | | |

**January 9 2001 Time: 19:26 11.0 UTC Magnitude: 1.2 ML**
**Lat: 60.018N Lon: 1.469W Depth: 5.0 km**
**Grid Ref: 593.30 kmE 1130.90 kmE RMS: 0.35 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LRW | SZ | 148 | EP | 2 | | 19:26 | 33.97 | | |
| LRW | SE | 148 | ES | 2 | | 19:26 | 51.92 | | |
| LRW | SN | 148 | | | | 19:26 | 57.76 | 3 | 0.15 |
| LRW | SE | 148 | | | | 19:26 | 54.70 | 3 | 0.17 |
| SAN | SZ | 151 | EP | 2 | | 19:26 | 35.41 | | |
| YEL | SZ | 153 | EP | 2 | | 19:26 | 35.44 | | |
| WAL | SZ | 174 | EP | 2 | | 19:26 | 39.12 | | |

**January 13 2001 Time: 17:08 53.3 UTC Magnitude: 0.3 ML**
**Lat: 52.863N Lon: -3.759W Depth: 11.9 km**
**Grid Ref: 281.61 kmE 330.99 kmE RMS: 0.05 secs**
**Locality: BALA,GWYNEDD Quality: B**
**Comment: 10KM SE OF BALA**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| WFB | SZ | 28 | IP | 1 | U | 17:08 | 58.31 | | |
| SBD | SZ | 34 | EP | 2 | | 17:08 | 59.29 | | |
| YLL | SZ | 41 | EP | 2 | | 17:09 | 00.33 | | |
| YLL | SZ | 41 | ES | 3 | | 17:09 | 05.42 | | |
| WPM | SZ | 45 | EP | 2 | | 17:09 | 01.11 | | |
| YRE | SZ | 47 | EP | 2 | | 17:09 | 01.37 | | |
| WCB | SZ | 78 | EP | 3 | | 17:09 | 06.12 | | |
| WCB | SE | 78 | ES | 3 | | 17:09 | 14.94 | | |
| WCB | SN | 78 | | | | 17:09 | 15.53 | 1 | 0.15 |
| WCB | SE | 78 | | | | 17:09 | 19.02 | 1 | 0.05 |

**January 16 2001 Time: 14:24 16.4 UTC Magnitude: 1.1 ML**
**Lat: 54.730N Lon: -4.891W Depth: 3.9 km**
**Grid Ref: 213.85 kmE 541.09 kmE RMS: 0.23 secs**
**Locality: LUCE BAY,D & G Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| GAL | SZ | 19 | IP | | U | 14:24 | 20.19 | | |
| GAL | SE | 19 | ES | 2 | | 14:24 | 22.56 | | |
| GAL | SN | 19 | | | | 14:24 | 22.73 | 77 | 0.07 |
| GAL | SE | 19 | | | | 14:24 | 22.71 | 49 | 0.11 |
| GIM | SZ | 56 | IP | 1 | D | 14:24 | 26.42 | | |
| GIM | SE | 56 | ES | 2 | | 14:24 | 33.29 | | |
| GIM | SN | 56 | | | | 14:24 | 34.09 | 12 | 0.22 |
| GIM | SE | 56 | | | | 14:24 | 33.53 | 21 | 0.10 |
| GCD | SZ | 63 | EP | 2 | | 14:24 | 26.96 | | |
| GMK | SZ | 82 | EP | 2 | | 14:24 | 30.44 | | |
| GCL | SZ | 88 | EP | 2 | | 14:24 | 31.17 | | |
| GMM | SZ | 88 | EP | 2 | | 14:24 | 30.71 | | |
| CDU | SZ | 118 | EP | 2 | | 14:24 | 35.83 | | |

**January 17 2001 Time: 16:12 25.0 UTC Magnitude: 3.0 ML**
**Lat: 59.546N Lon: 1.912W Depth: 10.0 km**
**Grid Ref: 621.10 kmE 1079.84 kmE RMS: 0.50 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SAN | SZ | 185 | EP | 2 | | 16:12 | 52.17 | | |
| LRW | SZ | 186 | EP | 3 | | 16:12 | 53.82 | | |
| LRW | SN | 186 | ES | 2 | | 16:13 | 15.08 | | |
| LRW | SN | 186 | | | | 16:13 | 17.31 | 55 | 0.16 |
| LRW | SE | 186 | | | | 16:13 | 17.52 | 70 | 0.14 |
| KMY | SZ | 193 | EP | 2 | | 16:12 | 54.23 | | |
| YEL | SZ | 201 | EP | 2 | | 16:12 | 54.73 | | |
| EGD | SZ | 202 | EP | 2 | | 16:12 | 55.82 | | |
| ASK | SZ | 211 | EP | 2 | | 16:12 | 56.16 | | |
| WAL | SZ | 213 | EP | 2 | | 16:12 | 55.96 | | |
| OST | SZ | 260 | EP | 2 | | 16:13 | 03.07 | | |
| OWE | SZ | 282 | EP | 2 | | 16:13 | 05.86 | | |
| ORE | SZ | 345 | EP | 2 | | 16:13 | 12.83 | | |
| ORE | SN | 345 | | | | 16:14 | 02.36 | 57 | 0.31 |
| ORE | SE | 345 | | | | 16:14 | 04.88 | 46 | 0.42 |

**January 21 2001 Time: 01:04 25.0 UTC Magnitude: 1.0 ML**
**Lat: 52.426N Lon: -1.861W Depth: 8.9 km**
**Grid Ref: 409.42 kmE 280.96 kmE RMS: 0.17 secs**
**Locality: BIRMINGHAM,W MIDLANDS Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SSW | SZ | 51 | EP | 2 | | 01:04 | 33.80 | | |
| CWF | SZ | 51 | EP | 2 | | 01:04 | 33.84 | | |
| CWF | SE | 51 | ES | 2 | | 01:04 | 40.08 | | |
| CWF | SN | 51 | | | | 01:04 | 40.17 | 7 | 0.23 |
| CWF | SE | 51 | | | | 01:04 | 40.19 | 7 | 0.10 |
| HAE | SZ | 64 | EP | 2 | | 01:04 | 35.34 | | |
| HLM | SZ | 70 | EP | 2 | | 01:04 | 37.18 | | |
| SSP | SZ | 85 | EP | 2 | | 01:04 | 39.34 | | |
| MCH | SN | 91 | ES | 2 | | 01:04 | 49.94 | | |
| MCH | SN | 91 | | | | 01:04 | 50.56 | 7 | 0.24 |
| MCH | SE | 91 | | | | 01:04 | 50.35 | 4 | 0.14 |

**January 30 2001 Time: 20:10 06.5 UTC Magnitude: 1.3 ML**
**Lat: 55.384N Lon: -5.207W Depth: 8.1 km**

# PHASE DATA : 2001

**Grid Ref: 196.88 kmE 614.67 kmE** **RMS: 0.10 secs**
**Locality: SOUTH OF ISLE OF ARRAN** **Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| GMK | SZ | 25 | EP | 1 | D | 20:10 | 11.17 | | |
| PMS | SZ | 59 | EP | 2 | | 20:10 | 16.57 | | |
| PGB | SZ | 66 | EP | 2 | | 20:10 | 17.36 | | |
| PGB | SE | 66 | ES | 3 | | 20:10 | 25.12 | | |
| PGB | SN | 66 | | | | 20:10 | 25.51 | 12 | 0.06 |
| PGB | SE | 66 | | | | 20:10 | 25.51 | 12 | 0.13 |
| GAL | SZ | 66 | EP | 2 | | 20:10 | 17.74 | | |
| GAL | SE | 66 | ES | | | 20:10 | 25.49 | | |
| GAL | SN | 66 | | | | 20:10 | 28.81 | 8 | 0.14 |
| GAL | SE | 66 | | 3 | | 20:10 | 28.12 | 15 | 0.06 |
| GCL | SZ | 68 | EP | 3 | | 20:10 | 17.66 | | |
| PCA | SZ | 70 | EP | 1 | U | 20:10 | 18.12 | | |

**February 9 2001 Time: 21:45 22.1 UTC** **Magnitude: 2.9 ML**
**Lat: 62.837N Lon: 3.147W** **Depth: 15.0 km**
**Grid Ref: 661.92 kmE 1450.31 kmE** **RMS: 0.34 secs**
**Locality: NORWEGIAN SEA** **Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YEL | SZ | 339 | EP | 2 | | 21:46 | 08.68 | | |
| LRW | SZ | 379 | EP | 2 | | 21:46 | 14.80 | | |
| LRW | SN | 379 | ES | 2 | | 21:46 | 52.12 | | |
| LRW | SN | 379 | | | | 21:46 | 56.48 | 10 | 0.19 |
| LRW | SE | 379 | | | | 21:46 | 57.08 | 16 | 0.30 |
| WAL | SZ | 384 | EP | 2 | | 21:46 | 14.62 | | |
| SAN | SZ | 392 | EP | 2 | | 21:46 | 15.68 | | |
| FSV | SZ | 494 | EP | 2 | | 21:46 | 28.63 | | |

**February 12 2001 Time: 11:19 48.4 UTC** **Magnitude: 2.7 ML**
**Lat: 52.326N Lon: 2.268W** **Depth: 15.4 km**
**Grid Ref: 690.78 kmE 278.39 kmE** **RMS: 0.08 secs**
**Locality: SOUTHERN NORTH SEA** **Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| APA | SZ | 54 | IP | | U | 11:19 | 57.71 | | |
| APA | SZ | 54 | ES | 3 | | 11:20 | 04.83 | | |
| AEU | SZ | 77 | EP | 2 | | 11:20 | 01.35 | | |
| AEU | SE | 77 | ES | 3 | | 11:20 | 10.65 | | |
| AEU | SN | 77 | | | | 11:20 | 11.13 | 240 | 0.18 |
| AEU | SE | 77 | | | | 11:20 | 11.82 | 221 | 0.20 |
| AWI | SZ | 79 | EP | 2 | | 11:20 | 01.66 | | |
| AWH | SZ | 96 | EP | 2 | | 11:20 | 03.90 | | |

**February 14 2001 Time: 22:51 33.8 UTC** **Magnitude: 1.2 ML**
**Lat: 51.869N Lon: -2.871W** **Depth: 13.0 km**
**Grid Ref: 340.03 kmE 219.34 kmE** **RMS: 0.07 secs**
**Locality: ABERGAVENNY,GWENT** **Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| MCH | SZ | 17 | IP | | D | 22:51 | 37.61 | | |
| MCH | SE | 17 | ES | 2 | | 22:51 | 40.58 | | |
| MCH | SN | 17 | | | | 22:51 | 40.63 | 179 | 0.11 |
| MCH | SE | 17 | | | | 22:51 | 40.64 | 263 | 0.11 |
| HGH | SZ | 26 | EP | 1 | U | 22:51 | 38.84 | | |
| HAE | SZ | 29 | IP | | U | 22:51 | 39.27 | | |
| HTR | SZ | 36 | IP | | D | 22:51 | 40.21 | | |
| SSP | SZ | 63 | IP | | D | 22:51 | 44.76 | | |
| SSP | SN | 63 | ES | 2 | | 22:51 | 52.78 | | |
| SSP | SN | 63 | | | | 22:51 | 52.96 | 5 | 0.03 |
| SSP | SE | 63 | | | | 22:51 | 54.17 | 8 | 0.13 |
| HSA | SZ | 89 | EP | 2 | | 22:51 | 48.51 | | |

**February 17 2001 Time: 00:29 50.7 UTC** **Magnitude: 1.5 ML**
**Lat: 52.423N Lon: -4.465W** **Depth: 5.6 km**
**Grid Ref: 232.43 kmE 283.51 kmE** **RMS: 0.14 secs**
**Locality: CARDIGAN BAY,WALES** **Quality: C**
**Comment: 25KM WEST OF ABERYSTWYTH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| WFB | SZ | 41 | EP | 2 | | 00:29 | 57.60 | | |
| HSA | SZ | 78 | EP | 2 | | 00:30 | 03.90 | | |
| YLL | SZ | 82 | EP | 2 | | 00:30 | 04.63 | | |
| HTR | SZ | 90 | EP | 2 | | 00:30 | 06.04 | | |
| YRC | SZ | 92 | EP | 2 | | 00:30 | 06.65 | | |
| SSP | SZ | 92 | EP | 2 | | 00:30 | 06.42 | | |
| SSP | SE | 92 | ES | 2 | | 00:30 | 17.61 | | |
| SSP | SN | 92 | | | | 00:30 | 18.23 | 25 | 0.22 |
| SSP | SE | 92 | | | | 00:30 | 18.71 | 17 | 0.17 |
| SBD | SZ | 98 | EP | 2 | | 00:30 | 07.01 | | |
| WCB | SZ | 106 | EP | 2 | | 00:30 | 08.56 | | |
| WCB | SE | 106 | ES | 2 | | 00:30 | 21.71 | | |
| WCB | SN | 106 | | | | 00:30 | 25.18 | 4 | 0.21 |
| WCB | SE | 106 | | | | 00:30 | 23.63 | 4 | 0.30 |
| HLM | SZ | 108 | EP | 2 | | 00:30 | 08.87 | | |
| MCH | SZ | 111 | EP | 2 | | 00:30 | 09.22 | | |
| MCH | SN | 111 | ES | 2 | | 00:30 | 22.25 | | |
| MCH | SN | 111 | | | | 00:30 | 25.59 | 12 | 0.17 |
| MCH | SE | 111 | | | | 00:30 | 24.62 | 10 | 0.24 |

**February 19 2001 Time: 12:45 21.5 UTC** **Magnitude: 3.0 ML**
**Lat: 59.387N Lon: 6.077W** **Depth: 15.0 km**
**Grid Ref: 858.02 kmE 1083.44 kmE** **RMS: 0.29 secs**
**Locality: NORWEGIAN COAST** **Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LRW | SZ | 416 | EP | 3 | | 12:46 | 17.91 | | |
| LRW | SE | 416 | ES | 3 | | 12:46 | 57.54 | | |
| LRW | SN | 416 | | | | 12:46 | 59.09 | 10 | 0.19 |
| LRW | SE | 416 | | | | 12:47 | 02.17 | 12 | 0.16 |
| SAN | SZ | 418 | EP | 3 | | 12:46 | 16.99 | | |
| YEL | SZ | 420 | EP | 3 | | 12:46 | 17.73 | | |
| WAL | SZ | 443 | EP | 3 | | 12:46 | 20.51 | | |

**February 25 2001 Time: 12:39 38.4 UTC** **Magnitude: 2.2 ML**
**Lat: 53.541N Lon: -2.583W** **Depth: 10.4 km**
**Grid Ref: 361.38 kmE 405.11 kmE** **RMS: 0.09 secs**
**Locality: WIGAN,GTR MANCHESTER** **Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KWE | SZ | 77 | EP | 2 | | 12:39 | 51.11 | | |
| KBI | SZ | 77 | EP | 2 | | 12:39 | 51.12 | | |
| SBD | SZ | 84 | EP | 1 | U | 12:39 | 52.32 | | |
| WPM | SZ | 93 | IP | 1 | U | 12:39 | 53.82 | | |
| LRN | SZ | 110 | EP | 1 | D | 12:39 | 56.34 | | |
| YLL | SZ | 115 | EP | 2 | | 12:39 | 56.69 | | |
| WME | SZ | 115 | EP | 3 | | 12:39 | 56.59 | | |
| HLM | SZ | 116 | EP | 3 | | 12:39 | 56.99 | | |
| CWF | SZ | 124 | EP | 1 | U | 12:39 | 58.33 | | |
| CWF | SE | 124 | ES | 3 | | 12:40 | 13.16 | | |
| CWF | SN | 124 | | | | 12:40 | 14.16 | 47 | 0.13 |
| CWF | SE | 124 | | | | 12:40 | 15.29 | 28 | 0.10 |
| WLF | SZ | 124 | EP | 3 | | 12:39 | 58.13 | | |
| SSP | SZ | 130 | EP | 2 | | 12:39 | 59.41 | | |
| SSP | SE | 130 | ES | 3 | | 12:40 | 15.14 | | |
| SSP | SN | 130 | | | | 12:40 | 16.22 | 28 | 0.15 |
| SSP | SE | 130 | | | | 12:40 | 16.59 | 37 | 0.15 |
| WCB | SZ | 132 | EP | 3 | | 12:39 | 59.05 | | |
| YRC | SZ | 136 | EP | 3 | | 12:39 | 59.65 | | |
| WFB | SZ | 137 | EP | 3 | | 12:39 | 59.76 | | |
| WIM | SZ | 153 | EP | 3 | | 12:40 | 01.48 | | |
| HAE | SZ | 167 | EP | 3 | | 12:40 | 04.65 | | |
| MCH | SZ | 174 | EP | 4 | | 12:40 | 05.17 | | |
| MCH | SN | 174 | | | | 12:40 | 26.70 | 35 | 0.24 |
| MCH | SE | 174 | | | | 12:40 | 28.71 | 25 | 0.17 |
| KUF | SZ | 179 | EP | 3 | | 12:40 | 03.08 | | |

**February 25 2001 Time: 21:53 09.2 UTC** **Magnitude: 1.6 ML**
**Lat: 53.533N Lon: -2.571W** **Depth: 10.9 km**
**Grid Ref: 362.17 kmE 404.20 kmE** **RMS: 0.09 secs**
**Locality: WIGAN,GTR MANCHESTER** **Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KWE | SZ | 75 | IP | 1 | U | 21:53 | 21.81 | | |
| KBI | SZ | 76 | EP | 2 | | 21:53 | 21.68 | | |
| SBD | SZ | 84 | EP | 2 | | 21:53 | 23.01 | | |
| LMI | SZ | 91 | EP | 2 | | 21:53 | 24.16 | | |
| LMI | SN | 91 | ES | 3 | | 21:53 | 35.02 | | |
| LMI | SN | 91 | | | | 21:53 | 36.15 | 12 | 0.14 |
| LMI | SE | 91 | | | | 21:53 | 36.23 | 14 | 0.20 |
| WPM | SZ | 94 | EP | 2 | | 21:53 | 24.53 | | |
| CDU | SZ | 98 | EP | 2 | | 21:53 | 25.09 | | |
| LRN | SZ | 111 | EP | 2 | | 21:53 | 27.14 | | |
| HLM | SZ | 115 | EP | 2 | | 21:53 | 27.67 | | |
| WME | SZ | 116 | EP | 2 | | 21:53 | 27.43 | | |
| CWF | SZ | 122 | EP | 2 | | 21:53 | 29.06 | | |
| CWF | SN | 122 | ES | 2 | | 21:53 | 43.96 | | |
| CWF | SN | 122 | | | | 21:53 | 45.24 | 10 | 0.27 |
| CWF | SE | 122 | | | | 21:53 | 44.72 | 8 | 0.11 |
| SSP | SZ | 129 | EP | 2 | | 21:53 | 30.07 | | |
| SSP | SN | 129 | | | | 21:53 | 46.41 | 10 | 0.12 |
| SSP | SE | 129 | | | | 21:53 | 47.19 | 14 | 0.22 |

**February 28 2001 Time: 00:42 36.9 UTC** **Magnitude: 1.1 ML**
**Lat: 54.876N Lon: -2.976W** **Depth: 9.6 km**
**Grid Ref: 337.38 kmE 553.88 kmE** **RMS: 0.15 secs**
**Locality: CARLISLE,CUMBRIA** **Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BDL | SZ | 8 | IP | | D | 00:42 | 38.95 | | |
| BDL | SZ | 8 | ES | 3 | | 00:42 | 41.11 | | |
| BTA | SZ | 19 | IP | 1 | U | 00:42 | 40.83 | | |
| BTA | SN | 19 | ES | 2 | | 00:42 | 43.72 | | |
| BTA | SN | 19 | | | | 00:42 | 44.65 | 33 | 0.26 |
| BTA | SE | 19 | | | | 00:42 | 45.81 | 70 | 0.44 |
| BBO | SZ | 23 | IP | | U | 00:42 | 41.39 | | |
| BBO | SN | 23 | ES | 2 | | 00:42 | 44.90 | | |
| BBO | SN | 23 | | | | 00:42 | 45.36 | 95 | 0.25 |
| BBO | SE | 23 | | | | 00:42 | 45.30 | 97 | 0.22 |
| BHH | SZ | 29 | IP | 1 | D | 00:42 | 42.27 | | |
| BHH | SN | 29 | ES | 2 | | 00:42 | 46.18 | | |
| BHH | SN | 29 | | | | 00:42 | 46.87 | 78 | 0.30 |
| BHH | SE | 29 | | | | 00:42 | 48.87 | 68 | 0.26 |
| BBH | SZ | 29 | EP | 2 | | 00:42 | 42.23 | | |
| CKE | SZ | 33 | EP | 2 | | 00:42 | 43.08 | | |
| GCD | SZ | 62 | EP | 2 | | 00:42 | 47.69 | | |

**March 1 2001 Time: 20:13 06.0 UTC** **Magnitude: 0.6 ML**
**Lat: 52.918N Lon: -4.510W** **Depth: 16.6 km**
**Grid Ref: 231.30 kmE 338.62 kmE** **RMS: 0.06 secs**
**Locality: PWLLHELI,GWYNEDD** **Quality: C**
**Comment: 5KM NW OF PWLLHELI**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YLL | SZ | 34 | IP | | U | 20:13 | 12.13 | | |
| YRC | SZ | 37 | EP | 2 | | 20:13 | 12.62 | | |
| WFB | SZ | 41 | IP | 1 | D | 20:13 | 13.25 | | |
| WLF | SZ | 42 | EP | 2 | | 20:13 | 13.40 | | |
| WCB | SZ | 51 | EP | 2 | | 20:13 | 14.96 | | |
| WCB | SE | 51 | ES | 2 | | 20:13 | 20.79 | | |
| WCB | SN | 51 | | | | 20:13 | 20.77 | 3 | 0.14 |
| WCB | SE | 51 | | | | 20:13 | 21.66 | 4 | 0.10 |
| WPM | SZ | 55 | IP | | U | 20:13 | 15.42 | | |
| WME | SZ | 55 | EP | 2 | | 20:13 | 15.02 | | |

# PHASE DATA : 2001

**March 4 2001 Time: 22:36 30.9 UTC Magnitude: 2.0 ML**
**Lat: 52.433N Lon: -4.459W Depth: 8.9 km**
**Grid Ref: 232.88 kmE 284.59 kmE RMS: 0.08 secs**
**Locality: CARDIGAN BAY,WALES Quality: C**
**Comment: 25KM WEST OF ABERYSTWYTH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| WFB | SZ | 40 | IP | 1 | U | 22:36 | 37.83 | | |
| HSA | SZ | 79 | EP | 2 | | 22:36 | 44.17 | | |
| YLL | SZ | 81 | EP | 2 | | 22:36 | 44.67 | | |
| HTR | SZ | 90 | IP | 1 | U | 22:36 | 46.25 | | |
| YRC | SZ | 91 | EP | 2 | | 22:36 | 46.39 | | |
| SSP | SZ | 92 | EP | 2 | | 22:36 | 46.40 | | |
| SSP | SN | 92 | ES | 2 | | 22:36 | 57.39 | | |
| SSP | SN | 92 | | | | 22:36 | 58.09 | 38 | 0.17 |
| SSP | SE | 92 | | | | 22:37 | 02.52 | 35 | 0.14 |
| WLF | SZ | 95 | EP | 2 | | 22:36 | 46.76 | | |
| SBD | SZ | 97 | EP | 2 | | 22:36 | 47.04 | | |
| WPM | SZ | 99 | EP | 1 | U | 22:36 | 47.35 | | |
| HLM | SZ | 108 | EP | 2 | | 22:36 | 48.87 | | |
| WME | SZ | 108 | EP | 2 | | 22:36 | 48.81 | | |
| MCH | SZ | 111 | EP | 2 | | 22:36 | 49.34 | | |
| MCH | SN | 111 | ES | 2 | | 22:37 | 02.30 | | |
| MCH | SN | 111 | | | | 22:37 | 05.72 | 29 | 0.19 |
| MCH | SE | 111 | | | | 22:37 | 06.10 | 29 | 0.19 |
| HTL | SZ | 160 | EP | 2 | | 22:36 | 57.27 | | |
| HTL | SN | 160 | | | | 22:37 | 17.02 | 27 | 0.18 |
| HTL | SE | 160 | | | | 22:37 | 17.13 | 23 | 0.23 |

**March 10 2001 Time: 09:29 34.0 UTC Magnitude: 1.1 ML**
**Lat: 52.926N Lon: -2.743W Depth: 4.2 km**
**Grid Ref: 350.09 kmE 336.84 kmE RMS: 0.08 secs**
**Locality: WHITCHURCH,SHROPSHIRE Quality: B**
**Comment: 5KM SW OF WHITCHURCH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SBD | SZ | 35 | IP | | U | 09:29 | 40.36 | | |
| HLM | SZ | 46 | EP | 2 | | 09:29 | 42.31 | | |
| KWE | SZ | 61 | EP | 2 | | 09:29 | 44.60 | | |
| SSP | SZ | 62 | EP | 2 | | 09:29 | 44.67 | | |
| SSP | SE | 62 | ES | 2 | | 09:29 | 52.50 | | |
| SSP | SN | 62 | | | | 09:29 | 53.52 | 9 | 0.14 |
| SSP | SE | 62 | | | | 09:29 | 53.03 | 6 | 0.15 |
| WPM | SZ | 86 | EP | 2 | | 09:29 | 48.64 | | |
| WFB | SZ | 92 | EP | 2 | | 09:29 | 48.98 | | |
| YLL | SZ | 99 | EP | 2 | | 09:29 | 50.04 | | |
| CWF | SZ | 99 | EP | 3 | | 09:29 | 51.42 | | |
| CWF | SN | 99 | ES | 2 | | 09:30 | 01.79 | | |
| CWF | SN | 99 | | | | 09:30 | 03.93 | 6 | 0.37 |
| CWF | SE | 99 | | | | 09:30 | 02.81 | 4 | 0.23 |

**March 14 2001 Time: 22:20 43.3 UTC Magnitude: 3.4 ML**
**Lat: 58.252N Lon: 0.695W Depth: 19.5 km**
**Grid Ref: 558.13 kmE 932.38 kmE RMS: 0.19 secs**
**Locality: CENTRAL NORTH SEA Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| OST | SZ | 210 | IP | 1 | D | 22:21 | 13.64 | | |
| SAN | SZ | 226 | EP | 3 | | 22:21 | 15.75 | | |
| OBR | SZ | 229 | EP | 3 | | 22:21 | 16.10 | | |
| LRW | SZ | 236 | EP | 3 | | 22:21 | 17.05 | | |
| LRW | SE | 236 | ES | 3 | | 22:21 | 41.33 | | |
| LRW | SN | 236 | | | | 22:21 | 43.70 | 126 | 0.18 |
| LRW | SE | 236 | | | | 22:21 | 49.42 | 133 | 0.12 |
| MLA | SZ | 238 | EP | 2 | | 22:21 | 17.63 | | |
| OHO | SZ | 239 | EP | 2 | | 22:21 | 17.56 | | |
| MME | SZ | 241 | EP | 2 | | 22:21 | 17.73 | | |
| OWE | SZ | 246 | EP | 3 | | 22:21 | 18.33 | | |
| MCD | SZ | 246 | EP | 2 | | 22:21 | 18.37 | | |
| MCD | SE | 246 | ES | 3 | | 22:21 | 44.30 | | |
| MCD | SN | 246 | | | | 22:21 | 57.34 | 153 | 0.34 |
| MCD | SE | 246 | | | | 22:21 | 57.82 | 115 | 0.39 |
| WAL | SZ | 259 | EP | 3 | | 22:21 | 19.98 | | |
| ORE | SZ | 263 | EP | 2 | | 22:21 | 20.22 | | |
| ORE | SE | 263 | ES | 3 | | 22:21 | 46.35 | | |
| ORE | SN | 263 | | | | 22:21 | 48.07 | 393 | 0.18 |
| ORE | SE | 263 | | | | 22:21 | 48.68 | 264 | 0.27 |
| YEL | SZ | 275 | EP | 3 | | 22:21 | 22.16 | | |
| EDU | SZ | 293 | EP | 3 | | 22:21 | 23.99 | | |
| OTO | SZ | 299 | EP | 2 | | 22:21 | 24.60 | | |
| MDO | SZ | 314 | EP | 3 | | 22:21 | 26.78 | | |
| ESY | SZ | 328 | EP | 2 | | 22:21 | 28.28 | | |
| ELO | SZ | 331 | EP | 3 | | 22:21 | 28.71 | | |
| EBH | SZ | 338 | EP | 3 | | 22:21 | 29.72 | | |
| EDI | SZ | 350 | EP | 2 | | 22:21 | 31.21 | | |
| EDI | SN | 350 | ES | 3 | | 22:22 | 06.25 | | |
| EDI | SN | 350 | | | | 22:22 | 09.13 | 63 | 0.38 |
| EDI | SE | 350 | | | | 22:22 | 07.99 | 48 | 0.17 |
| EBL | SZ | 358 | EP | 3 | | 22:21 | 32.33 | | |
| KAC | SZ | 365 | EP | 3 | | 22:21 | 32.55 | | |
| EAU | SZ | 368 | EP | 3 | | 22:21 | 33.44 | | |
| KSB | SZ | 383 | EP | 3 | | 22:21 | 34.58 | | |
| KPL | SZ | 391 | EP | 3 | | 22:21 | 35.86 | | |
| KPL | SE | 391 | ES | 4 | | 22:22 | 14.11 | | |
| KPL | SN | 391 | | | | 22:22 | 17.54 | 28 | 0.15 |
| KPL | SE | 391 | | | | 22:22 | 15.80 | 34 | 0.17 |

**March 15 2001 Time: 00:49 37.3 UTC Magnitude: 1.2 ML**
**Lat: 52.968N Lon: -2.253W Depth: 2.3 km**
**Grid Ref: 383.00 kmE 341.28 kmE RMS: 0.17 secs**
**Locality: NEWCASTLE-U-LYME,STAFF Quality: C**
**Comment: C/F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KWE | SZ | 28 | EP | 2 | | 00:49 | 42.51 | | |
| KBI | SZ | 58 | EP | 2 | | 00:49 | 47.53 | | |
| HLM | SZ | 66 | EP | 2 | | 00:49 | 48.84 | | |
| CWF | SZ | 69 | EP | 3 | | 00:49 | 48.85 | | |
| CWF | SN | 69 | ES | 2 | | 00:49 | 57.93 | | |
| CWF | SN | 69 | | | | 00:49 | 58.23 | 4 | 0.26 |
| CWF | SE | 69 | | | | 00:49 | 58.77 | 3 | 0.17 |
| SSP | SZ | 84 | EP | 2 | | 00:49 | 51.87 | | |
| SSP | SN | 84 | ES | 2 | | 00:50 | 01.69 | | |
| SSP | SN | 84 | | | | 00:50 | 03.07 | 7 | 0.24 |
| SSP | SE | 84 | | | | 00:50 | 04.00 | 9 | 0.22 |
| HAE | SZ | 106 | EP | 3 | | 00:49 | 55.32 | | |
| MCH | SZ | 119 | EP | 3 | | 00:49 | 57.15 | | |
| MCH | SN | 119 | ES | 2 | | 00:50 | 11.36 | | |
| MCH | SN | 119 | | | | 00:50 | 15.93 | 15 | 0.21 |
| MCH | SE | 119 | | | | 00:50 | 15.74 | 15 | 0.18 |

**March 15 2001 Time: 13:05 34.2 UTC Magnitude: 1.7 ML**
**Lat: 53.015N Lon: -2.677W Depth: 9.9 km**
**Grid Ref: 354.56 kmE 346.66 kmE RMS: 0.09 secs**
**Locality: WHITCHURCH,SHROPSHIRE Quality: C**
**Comment: 4KM NORTH OF WHITCHURCH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SBD | SZ | 41 | IP | | U | 13:05 | 41.33 | | |
| KWE | SZ | 56 | IP | | U | 13:05 | 43.69 | | |
| HLM | SZ | 57 | IP | 1 | U | 13:05 | 43.89 | | |
| SSP | SZ | 73 | IP | | D | 13:05 | 46.32 | | |
| SSP | SN | 73 | ES | 2 | | 13:05 | 55.04 | | |
| SSP | SN | 73 | | | | 13:05 | 57.14 | 18 | 0.13 |
| SSP | SE | 73 | | | | 13:05 | 57.02 | 17 | 0.11 |
| KBI | SZ | 82 | EP | 2 | | 13:05 | 47.76 | | |
| CWF | SZ | 97 | EP | 2 | | 13:05 | 50.84 | | |
| CWF | SN | 97 | ES | 2 | | 13:06 | 00.94 | | |
| CWF | SN | 97 | | | | 13:06 | 01.92 | 14 | 0.13 |
| CWF | SE | 97 | | | | 13:06 | 04.22 | 17 | 0.12 |
| MCH | SZ | 115 | EP | 2 | | 13:05 | 53.06 | | |
| MCH | SN | 115 | ES | 2 | | 13:06 | 06.51 | | |
| MCH | SN | 115 | | | | 13:06 | 06.82 | 29 | 0.25 |
| MCH | SE | 115 | | | | 13:06 | 09.16 | 15 | 0.13 |

**March 18 2001 Time: 01:43 49.0 UTC Magnitude: 2.7 ML**
**Lat: 51.474N Lon: -1.914W Depth: 8.5 km**
**Grid Ref: 405.97 kmE 175.12 kmE RMS: 0.22 secs**
**Locality: SWINDON,WILTSHIRE Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 64 | IP | | D | 01:43 | 59.90 | | |
| HAE | SZ | 76 | EP | 2 | | 01:44 | 01.94 | | |
| MCH | SZ | 95 | IP | 1 | D | 01:44 | 04.31 | | |
| MCH | SE | 95 | ES | 2 | | 01:44 | 15.72 | | |
| MCH | SN | 95 | | | | 01:44 | 16.54 | 188 | 0.16 |
| MCH | SE | 95 | | | | 01:44 | 15.93 | 112 | 0.20 |
| HTR | SZ | 115 | EP | 2 | | 01:44 | 07.30 | | |
| SSP | SZ | 134 | EP | 2 | | 01:44 | 10.28 | | |
| SSP | SN | 134 | ES | 2 | | 01:44 | 26.27 | | |
| SSP | SN | 134 | | | | 01:44 | 26.97 | 116 | 0.23 |
| SSP | SE | 134 | | | | 01:44 | 27.26 | 159 | 0.42 |
| HLM | SZ | 134 | EP | 2 | | 01:44 | 10.20 | | |
| HEX | SZ | 139 | EP | 2 | | 01:44 | 10.38 | | |
| KTG | SZ | 141 | EP | 2 | | 01:44 | 11.30 | | |
| CWF | SZ | 147 | EP | 2 | | 01:44 | 11.70 | | |
| CWF | SE | 147 | ES | 2 | | 01:44 | 28.46 | | |
| CWF | SN | 147 | | | | 01:44 | 29.49 | 134 | 0.15 |
| CWF | SE | 147 | | | | 01:44 | 29.19 | 229 | 0.18 |
| HTL | SZ | 188 | EP | 2 | | 01:44 | 16.05 | | |
| HTL | SN | 188 | | | | 01:44 | 39.72 | 58 | 0.15 |
| HTL | SE | 188 | | | | 01:44 | 38.90 | 61 | 0.23 |

**March 24 2001 Time: 00:33 42.9 UTC Magnitude: 1.2 ML**
**Lat: 57.691N Lon: -5.415W Depth: 9.6 km**
**Grid Ref: 196.49 kmE 871.90 kmE RMS: 0.05 secs**
**Locality: KINLOCHEWE,HIGHLAND Quality: C**
**Comment: 10KM NW OF KINLOCHEWE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KAC | SZ | 23 | IP | | U | 00:33 | 47.28 | | |
| RRR | SZ | 30 | IP | | U | 00:33 | 48.45 | | |
| RRR | SE | 30 | ES | 3 | | 00:33 | 52.25 | | |
| RRR | SN | 30 | | | | 00:33 | 53.97 | 30 | 0.07 |
| RRR | SE | 30 | | | | 00:33 | 52.53 | 17 | 0.07 |
| KPL | SZ | 42 | EP | 2 | | 00:33 | 50.12 | | |
| KPL | SE | 42 | ES | 3 | | 00:33 | 54.91 | | |
| KPL | SN | 42 | | | | 00:33 | 55.31 | 32 | 0.11 |
| KPL | SE | 42 | | | | 00:33 | 55.31 | 37 | 0.13 |
| REB | SZ | 48 | EP | 2 | | 00:33 | 51.23 | | |
| KSB | SZ | 54 | IP | 1 | D | 00:33 | 52.05 | | |
| RSC | SZ | 75 | EP | 2 | | 00:33 | 55.34 | | |
| RRH | SZ | 80 | EP | 1 | U | 00:33 | 56.17 | | |
| KAR | SZ | 90 | EP | 3 | | 00:33 | 57.73 | | |
| RFO | SZ | 111 | EP | 2 | | 00:34 | 01.04 | | |

**March 24 2001 Time: 10:33 25.1 UTC Magnitude: 1.0 ML**
**Lat: 57.014N Lon: -5.712W Depth: 11.6 km**
**Grid Ref: 174.67 kmE 797.48 kmE RMS: 0.07 secs**
**Locality: LOCH NEVIS,HIGHLAND Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KAR | SZ | 13 | IP | | D | 10:33 | 28.16 | | |
| KSB | SZ | 28 | IP | | D | 10:33 | 30.30 | | |
| KPL | SZ | 36 | EP | 3 | | 10:33 | 31.99 | | |
| KPL | SE | 36 | ES | 3 | | 10:33 | 36.39 | | |

# PHASE DATA : 2001

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KPL | SN | 36 | | | 10:33 | 36.81 | 14 | 0.13 |
| KPL | SE | 36 | | | 10:33 | 36.79 | 20 | 0.13 |
| KAC | SZ | 60 | EP | 2 | 10:33 | 35.58 | | |

**March 27 2001 Time: 23:52 59.0 UTC Magnitude: 1.6 ML**
**Lat: 52.605N Lon: -1.020W Depth: 5.3 km**
**Grid Ref: 466.32 kmE 301.31 kmE RMS: 0.07 secs**
**Locality: LEICESTER,LEICS Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CWF | SZ | 24 | IP | | D | 23:53 | 03.59 | | |
| CWF | SN | 24 | ES | 2 | | 23:53 | 06.95 | | |
| CWF | SN | 24 | | | | 23:53 | 07.28 | 161 | 0.14 |
| CWF | SE | 24 | | | | 23:53 | 07.26 | 116 | 0.15 |
| KEY | SZ | 31 | EP | 2 | | 23:53 | 04.64 | | |
| KWE | SZ | 72 | IP | 1 | U | 23:53 | 11.09 | | |
| SSW | SZ | 91 | EP | 2 | | 23:53 | 14.37 | | |
| SKP | SZ | 99 | EP | 2 | | 23:53 | 15.33 | | |
| HAE | SZ | 122 | EP | 1 | U | 23:53 | 18.71 | | |
| HLM | SZ | 126 | EP | 2 | | 23:53 | 19.32 | | |
| SSP | SZ | 144 | EP | 2 | | 23:53 | 22.56 | | |
| SSP | SN | 144 | ES | 2 | | 23:53 | 38.77 | | |
| SSP | SN | 144 | | | | 23:53 | 38.96 | 10 | 0.22 |
| SSP | SE | 144 | | | | 23:53 | 39.24 | 11 | 0.27 |
| MCH | SZ | 151 | EP | 2 | | 23:53 | 23.06 | | |
| MCH | SN | 151 | ES | 2 | | 23:53 | 40.59 | | |
| MCH | SN | 151 | | | | 23:53 | 40.91 | 13 | 0.23 |
| MCH | SE | 151 | | | | 23:53 | 41.10 | 10 | 0.13 |

**April 15 2001 Time: 04:55 48.5 UTC Magnitude: 0.3 ML**
**Lat: 50.071N Lon: -5.260W Depth: 10.1 km**
**Grid Ref: 166.73 kmE 24.11 kmE RMS: 0.06 secs**
**Locality: HELSTON,CORNWALL Quality: C**
**Comment: 4KM SOUTH OF HELSTON**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CGW | SZ | 4 | IP | 1 | U | 04:55 | 50.56 | | |
| CGW | SZ | 4 | ES | 2 | | 04:55 | 52.08 | | |
| CGW | SZ | 4 | | | | 04:55 | 52.10 | 4 | 0.06 |
| CGH | SZ | 7 | EP | 3 | | 04:55 | 50.82 | | |
| CR2 | SZ | 13 | EP | 2 | | 04:55 | 51.42 | | |
| CR2 | SN | 13 | ES | 1 | | 04:55 | 53.59 | | |
| CCA | SZ | 13 | EP | 2 | | 04:55 | 51.47 | | |
| CBW | SZ | 14 | ES | 3 | | 04:55 | 53.85 | | |
| CBW | SZ | 14 | | | | 04:55 | 53.91 | 5 | 0.06 |
| CST | SZ | 16 | EP | 3 | | 04:55 | 52.17 | | |
| CST | SZ | 16 | | | | 04:55 | 54.34 | 8 | 0.04 |

**April 21 2001 Time: 14:35 54.2 UTC Magnitude: 1.9 ML**
**Lat: 51.594N Lon: -3.301W Depth: 16.9 km**
**Grid Ref: 309.91 kmE 189.26 kmE RMS: 0.06 secs**
**Locality: PONTYPRIDD,GWENT Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 35 | IP | | U | 14:36 | 00.78 | | |
| MCH | SZ | 49 | EP | 2 | | 14:36 | 02.57 | | |
| MCH | SE | 49 | ES | 2 | | 14:36 | 09.11 | | |
| MCH | SN | 49 | | | | 14:36 | 09.60 | 38 | 0.09 |
| MCH | SE | 49 | | | | 14:36 | 09.26 | 81 | 0.14 |
| SMD | SZ | 52 | IP | | D | 14:36 | 03.14 | | |
| HTR | SZ | 54 | IP | | U | 14:36 | 03.59 | | |
| HSA | SZ | 61 | IP | 1 | U | 14:36 | 04.71 | | |
| HEX | SZ | 68 | IP | | U | 14:36 | 05.74 | | |
| HAE | SZ | 72 | EP | 2 | | 14:36 | 06.38 | | |
| SSP | SZ | 93 | EP | 2 | | 14:36 | 09.37 | | |
| SSP | SE | 93 | ES | 2 | | 14:36 | 20.69 | | |
| SSP | SN | 93 | | | | 14:36 | 22.66 | 22 | 0.13 |
| SSP | SE | 93 | | | | 14:36 | 22.02 | 35 | 0.14 |
| SWN | SZ | 104 | EP | 2 | | 14:36 | 12.02 | | |
| SWN | SN | 104 | | | | 14:36 | 25.80 | 52 | 0.22 |
| SWN | SE | 104 | | | | 14:36 | 25.66 | 35 | 0.18 |
| HTL | SZ | 106 | IP | 1 | U | 14:36 | 11.58 | | |
| HTL | SN | 106 | ES | 2 | | 14:36 | 24.01 | | |
| HTL | SN | 106 | | | | 14:36 | 25.62 | 15 | 0.16 |
| HTL | SE | 106 | | | | 14:36 | 24.88 | 23 | 0.13 |

**April 23 2001 Time: 18:18 28.0 UTC Magnitude: 0.6 ML**
**Lat: 56.139N Lon: -4.784W Depth: 4.1 km**
**Grid Ref: 227.04 kmE 697.48 kmE RMS: 0.09 secs**
**Locality: LOCH LONG,STRATHCLYDE Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EAB | SZ | 28 | EP | 2 | | 18:18 | 33.23 | | |
| EAB | SZ | 28 | | | | 18:18 | 37.66 | 8 | 0.16 |
| PMS | SZ | 33 | IP | | U | 18:18 | 33.97 | | |
| PMS | SZ | 33 | ES | 3 | | 18:18 | 38.36 | | |
| PMS | SZ | 33 | | | | 18:18 | 38.61 | 13 | 0.06 |
| PGB | SZ | 41 | EP | 2 | | 18:18 | 35.69 | | |
| PGB | SN | 41 | ES | 2 | | 18:18 | 40.82 | | |
| PCO | SZ | 46 | IP | | U | 18:18 | 36.23 | | |
| PCA | SZ | 59 | EP | 2 | | 18:18 | 38.20 | | |

**April 26 2001 Time: 00:26 38.6 UTC Magnitude: 0.8 ML**
**Lat: 57.316N Lon: -5.523W Depth: 9.7 km**
**Grid Ref: 187.90 kmE 830.50 kmE RMS: 0.17 secs**
**Locality: LOCHCARRON,HIGHLAND Quality: D**
**Comment: 10KM SOUTH OF LOCHCARRON**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 8 | IP | | U | 00:26 | 41.23 | | |
| KPL | SN | 8 | ES | 2 | | 00:26 | 42.57 | | |
| KPL | SN | 8 | | | | 00:26 | 42.68 | 62 | 0.09 |
| KPL | SE | 8 | | | | 00:26 | 42.72 | 88 | 0.14 |
| KSB | SZ | 13 | IP | | U | 00:26 | 41.57 | | |
| KAC | SZ | 24 | EP | 2 | | 00:26 | 43.05 | | |
| MDO | SZ | 71 | EP | 1 | U | 00:26 | 50.69 | | |

**April 28 2001 Time: 17:41 08.2 UTC Magnitude: 1.4 ML**
**Lat: 55.397N Lon: -3.229W Depth: 3.7 km**
**Grid Ref: 322.17 kmE 612.18 kmE RMS: 0.18 secs**
**Locality: ETTRICK,BORDERS Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 34 | IP | | D | 17:41 | 14.48 | | |
| BHH | SN | 34 | ES | 2 | | 17:41 | 18.58 | | |
| BHH | SN | 34 | | | | 17:41 | 18.88 | 65 | 0.22 |
| BHH | SE | 34 | | | | 17:41 | 19.68 | 56 | 0.25 |
| BBH | SZ | 35 | EP | 2 | | 17:41 | 14.57 | | |
| BWH | SZ | 37 | EP | 1 | U | 17:41 | 14.76 | | |
| EBL | SZ | 43 | EP | 2 | | 17:41 | 16.00 | | |
| EAU | SZ | 52 | IP | 1 | D | 17:41 | 17.62 | | |
| EDI | SZ | 59 | EP | 3 | | 17:41 | 18.67 | | |
| EDI | SN | 59 | ES | 3 | | 17:41 | 25.56 | | |
| EDI | SN | 59 | | | | 17:41 | 25.87 | 11 | 0.19 |
| EDI | SE | 59 | | | | 17:41 | 26.17 | 13 | 0.21 |
| BTA | SZ | 65 | EP | 1 | D | 17:41 | 19.59 | | |
| BTA | SN | 65 | ES | 3 | | 17:41 | 27.66 | | |
| BDL | SZ | 69 | EP | 2 | | 17:41 | 20.34 | | |
| ESY | SZ | 70 | EP | 2 | | 17:41 | 19.98 | | |
| BBO | SZ | 74 | EP | 1 | D | 17:41 | 20.95 | | |
| BBO | SE | 74 | ES | 3 | | 17:41 | 29.63 | | |
| BBO | SN | 74 | | | | 17:41 | 32.24 | 10 | 0.27 |
| BBO | SE | 74 | | | | 17:41 | 32.09 | 13 | 0.27 |
| GCD | SZ | 75 | EP | 3 | | 17:41 | 20.78 | | |
| CKE | SZ | 91 | EP | 2 | | 17:41 | 23.63 | | |
| EBH | SZ | 96 | EP | 3 | | 17:41 | 24.71 | | |
| XDE | SZ | 101 | EP | 3 | | 17:41 | 25.55 | | |
| CDU | SZ | 118 | EP | 3 | | 17:41 | 28.04 | | |

**May 7 2001 Time: 09:43 34.0 UTC Magnitude: 5.0 Mw**
**Lat: 56.540N Lon: 3.190W Depth: 5.0 km**
**Grid Ref: 718.90 kmE 750.70 kmE RMS: 0.84 secs**
**Locality: EKOFISK Quality: D**
**Comment: FELT EKOFISK FIELD Intensity: 4+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KMY | SZ | 297 | EP | 3 | | 09:44 | 16.08 | | |
| EDR | SZ | 351 | EP | 3 | | 09:44 | 21.43 | | |
| ESY | SZ | 373 | EP | 3 | | 09:44 | 25.68 | | |
| EDU | SZ | 382 | EP | 3 | | 09:44 | 27.10 | | |
| EDI | SZ | 407 | EP | 3 | | 09:44 | 30.95 | | |
| EDI | SN | 407 | ES | 4 | | 09:45 | 15.14 | | |
| EDI | SN | 407 | | | | 09:45 | 49.02 | 634 | 1.23 |
| EDI | SE | 407 | | | | 09:45 | 55.87 | 437 | 1.24 |
| EGD | SZ | 408 | EP | 4 | | 09:44 | 32.00 | | |
| EBH | SZ | 418 | EP | 3 | | 09:44 | 30.66 | | |
| BER | SZ | 422 | EP | 4 | | 09:44 | 36.83 | | |
| EAU | SZ | 424 | EP | 3 | | 09:44 | 32.04 | | |
| ASK | SZ | 429 | EP | 4 | | 09:44 | 34.45 | | |
| OBR | SZ | 432 | EP | 3 | | 09:44 | 28.67 | | |
| ORE | SZ | 460 | EP | 3 | | 09:44 | 32.37 | | |
| ORE | SN | 460 | ES | 3 | | 09:45 | 22.88 | | |
| KONO | BZ | 494 | EP | 4 | | 09:44 | 41.50 | | |
| KONO | BZ | 494 | ES | 4 | | 09:45 | 30.00 | | |
| NRA0 | SZ | 654 | EP | 4 | | 09:45 | 01.49 | | |
| MUD | HZ | | EP | 4 | | 09:44 | 25.79 | | |
| MUD | HZ | | ES | 4 | | 09:45 | 00.32 | | |
| RUND | BZ | | EP | 4 | | 09:44 | 36.21 | | |
| RUND | BZ | | ES | 4 | | 09:45 | 22.29 | | |
| NAO01 | BZ | | EP | 4 | | 09:45 | 00.44 | | |
| NAO01 | BZ | | ES | 4 | | 09:46 | 00.81 | | |
| ARE0 | BZ | | EP | 4 | | 09:47 | 17.08 | | |
| JMI | BZ | | E | 4 | | 09:53 | 14.86 | 74 | 19.40 |
| KBS | LZ | | E | 4 | | 09:58 | 05.51 | 20 | 17.60 |

**May 9 2001 Time: 16:38 26.5 UTC Magnitude: 2.6 ML**
**Lat: 53.775N Lon: 1.324W Depth: 8.3 km**
**Grid Ref: 619.00 kmE 436.10 kmE RMS: 0.50 secs**
**Locality: SOUTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| ABA | SZ | 99 | EP | 2 | | 16:38 | 42.68 | | |
| ABA | SZ | 99 | ES | 3 | | 16:38 | 54.48 | | |
| AWI | SZ | 105 | EP | 2 | | 16:38 | 44.03 | | |
| AEU | SZ | 129 | EP | 3 | | 16:38 | 47.68 | | |
| AEU | SN | 129 | ES | 2 | | 16:39 | 02.08 | | |
| AWH | SZ | 130 | ES | 3 | | 16:39 | 02.46 | | |
| KUF | SZ | 172 | EP | 2 | | 16:38 | 52.86 | | |
| KBI | SZ | 198 | EP | 2 | | 16:38 | 55.35 | | |
| CWF | SZ | 210 | EP | 2 | | 16:38 | 58.64 | | |
| CWF | SE | 210 | ES | 2 | | 16:39 | 21.46 | | |
| CWF | SN | 210 | | | | 16:39 | 23.06 | 37 | 0.24 |
| CWF | SE | 210 | | | | 16:39 | 24.73 | 25 | 0.21 |
| KWE | SZ | 227 | EP | 2 | | 16:38 | 59.84 | | |
| XAL | SZ | 260 | EP | 2 | | 16:39 | 04.70 | | |
| CDU | SZ | 302 | EP | 3 | | 16:39 | 09.86 | | |
| CSF | SZ | 308 | EP | 3 | | 16:39 | 10.54 | | |
| SSP | SZ | 333 | EP | 3 | | 16:39 | 13.30 | | |
| SSP | SE | 333 | ES | 3 | | 16:39 | 46.39 | | |
| SSP | SN | 333 | | | | 16:40 | 03.85 | 8 | 0.15 |
| SSP | SE | 333 | | | | 16:40 | 03.62 | 11 | 0.42 |

**May 9 2001 Time: 23:31 17.4 UTC Magnitude: 1.2 ML**
**Lat: 51.752N Lon: -3.735W Depth: 21.0 km**
**Grid Ref: 280.23 kmE 207.42 kmE RMS: 0.07 secs**
**Locality: YSTRADGYNLAIS,POWYS Quality: B**

# PHASE DATA : 2001

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 29 | IP | | U | 23:31 | 23.23 | | |
| HTR | SZ | 49 | EP | 2 | | 23:31 | 26.09 | | |
| MCH | SZ | 58 | EP | 2 | | 23:31 | 27.29 | | |
| MCH | SE | 58 | ES | 2 | | 23:31 | 34.44 | | |
| MCH | SN | 58 | | | | 23:31 | 37.71 | 6 | 0.14 |
| MCH | SE | 58 | | | | 23:31 | 34.67 | 13 | 0.14 |
| HGH | SZ | 66 | EP | 1 | U | 23:31 | 28.47 | | |
| HPE | SZ | 75 | EP | 2 | | 23:31 | 29.75 | | |
| HEX | SZ | 76 | EP | 2 | | 23:31 | 30.24 | | |
| SSP | SZ | 86 | EP | 2 | | 23:31 | 31.70 | | |
| SSP | SN | 86 | ES | 2 | | 23:31 | 42.28 | | |
| SSP | SN | 86 | | | | 23:31 | 45.32 | 4 | 0.17 |
| SSP | SE | 86 | | | | 23:31 | 42.53 | 9 | 0.16 |
| HTL | SZ | 99 | EP | 2 | | 23:31 | 33.78 | | |
| HTL | SE | 99 | ES | 3 | | 23:31 | 45.19 | | |
| HTL | SN | 99 | | | | 23:31 | 46.00 | 7 | 0.18 |
| HTL | SE | 99 | | | | 23:31 | 46.40 | 8 | 0.13 |

**May 12 2001 Time: 01:13 17.6 UTC Magnitude: 0.7 ML**
**Lat: 55.405N Lon: -3.083W Depth: 7.5 km**
**Grid Ref: 331.40 kmE 612.88 kmE RMS: 0.12 secs**
**Locality: HAWICK,BORDERS Quality: C**
**Comment: 20KM WEST OF HAWICK**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| ESK | SZ | 13 | IP | | U | 01:13 | 20.49 | | |
| ESK | SE | 13 | ES | 2 | | 01:13 | 22.25 | | |
| ESK | SN | 13 | | | | 01:13 | 22.69 | 52 | 0.10 |
| ESK | SE | 13 | | | | 01:13 | 22.70 | 44 | 0.12 |
| ECK | SZ | 25 | IP | | U | 01:13 | 22.38 | | |
| BBH | SZ | 32 | EP | 2 | | 01:13 | 23.59 | | |
| BHH | SZ | 36 | IP | | U | 01:13 | 24.12 | | |
| BHH | SN | 36 | ES | 2 | | 01:13 | 28.52 | | |
| BHH | SN | 36 | | | | 01:13 | 28.48 | 7 | 0.26 |
| BHH | SE | 36 | | | | 01:13 | 29.90 | 6 | 0.32 |
| BWH | SZ | 44 | EP | 2 | | 01:13 | 25.36 | | |
| XSO | SZ | 54 | EP | 2 | | 01:13 | 26.85 | | |
| BTA | SZ | 61 | EP | 2 | | 01:13 | 28.48 | | |
| BTA | SN | 61 | ES | 2 | | 01:13 | 35.65 | | |
| BTA | SN | 61 | | | | 01:13 | 35.79 | 6 | 0.25 |
| BTA | SE | 61 | | | | 01:13 | 36.88 | 2 | 0.22 |
| BBO | SZ | 75 | EP | 2 | | 01:13 | 30.45 | | |
| BBO | SE | 75 | ES | 2 | | 01:13 | 40.12 | | |
| XAL | SZ | 82 | EP | 2 | | 01:13 | 31.66 | | |

**May 13 2001 Time: 08:26 59.4 UTC Magnitude: 3.0 ML**
**Lat: 55.099N Lon: -3.638W Depth: 11.5 km**
**Grid Ref: 295.49 kmE 579.57 kmE RMS: 0.11 secs**
**Locality: DUMFRIES,D & G Quality: B**
**Comment: FELT DUMFRIES... Intensity: 5**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 9 | IP | | C | 08:27 | 02.05 | | |
| BHH | SZ | 27 | IP | | D | 08:27 | 04.62 | | |
| BHH | SN | 27 | ES | 2 | | 08:27 | 07.91 | | |
| BHH | SN | 27 | | | | 08:27 | 08.05 | 870 | 0.21 |
| BHH | SE | 27 | | | | 08:27 | 09.26 | 765 | 0.30 |
| BCC | AZ | 28 | IP | | D | 08:27 | 05.11 | | |
| BCC | AN | 28 | ES | 2 | | 08:27 | 08.57 | | |
| BCC | AN | 28 | | | | 08:27 | 09.09 | 209 | 0.32 |
| BCC | AE | 28 | | | | 08:27 | 08.79 | 300 | 0.32 |
| GCD | SZ | 33 | IP | | C | 08:27 | 05.45 | | |
| ECK | SZ | 34 | IP | | C | 08:27 | 05.60 | | |
| ESK | SZ | 37 | IP | | C | 08:27 | 06.09 | | |
| ESK | SE | 37 | ES | 2 | | 08:27 | 10.48 | | |
| BBH | SZ | 45 | IP | 1 | D | 08:27 | 07.51 | | |
| BBO | SZ | 48 | IP | 1 | D | 08:27 | 08.33 | | |
| BBO | SN | 48 | ES | 2 | | 08:27 | 14.23 | | |
| BBO | SN | 48 | | | | 08:27 | 15.30 | 778 | 0.21 |
| BBO | SE | 48 | | | | 08:27 | 19.24 | 814 | 0.57 |
| BDL | SZ | 56 | IP | | D | 08:27 | 09.77 | | |
| BTA | SZ | 65 | IP | | D | 08:27 | 11.26 | | |
| BTA | SN | 65 | ES | 2 | | 08:27 | 19.96 | | |
| BTA | SN | 65 | | | | 08:27 | 23.02 | 910 | 0.43 |
| BTA | SE | 65 | | | | 08:27 | 24.74 | 852 | 0.42 |
| CKE | SZ | 67 | IP | 1 | D | 08:27 | 11.39 | | |
| XDE | SZ | 67 | IP | | C | 08:27 | 11.36 | | |
| GAL | SZ | 73 | IP | | C | 08:27 | 12.08 | | |
| CSF | SZ | 77 | IP | | D | 08:27 | 12.88 | | |
| PCA | SZ | 78 | IP | | D | 08:27 | 13.46 | | |
| EAU | SZ | 84 | IP | | C | 08:27 | 14.52 | | |
| EBL | SZ | 84 | IP | | C | 08:27 | 14.12 | | |
| CDU | SZ | 90 | IP | | D | 08:27 | 15.03 | | |
| XAL | SZ | 95 | IP | 1 | D | 08:27 | 15.68 | | |
| EDI | SZ | 96 | IP | | C | 08:27 | 16.35 | | |
| GIM | SZ | 105 | IP | 1 | C | 08:27 | 17.24 | | |
| GIM | SN | 105 | ES | 2 | | 08:27 | 30.32 | | |
| PMS | SZ | 109 | IP | | D | 08:27 | 18.22 | | |
| GMK | SZ | 128 | IP | | D | 08:27 | 20.97 | | |

**May 13 2001 Time: 08:49 51.0 UTC Magnitude: 0.7 ML**
**Lat: 55.093N Lon: -3.630W Depth: 10.8 km**
**Grid Ref: 295.97 kmE 578.88 kmE RMS: 0.08 secs**
**Locality: DUMFRIES,D & G Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 9 | EP | 1 | U | 08:49 | 53.64 | | |
| BHH | SZ | 26 | IP | 1 | D | 08:49 | 56.27 | | |
| BHH | SE | 26 | ES | 2 | | 08:49 | 59.54 | | |
| BHH | SN | 26 | | | | 08:49 | 59.68 | 28 | 0.17 |
| BHH | SE | 26 | | | | 08:50 | 00.87 | 39 | 0.21 |
| GCD | SZ | 32 | EP | 2 | | 08:49 | 57.01 | | |
| ECK | SZ | 33 | EP | 2 | | 08:49 | 57.18 | | |
| ESK | SZ | 37 | IP | | U | 08:49 | 57.72 | | |
| ESK | SE | 37 | ES | 2 | | 08:50 | 02.19 | | |
| ESK | SN | 37 | | | | 08:50 | 03.11 | 8 | 0.21 |
| ESK | SE | 37 | | | | 08:50 | 03.10 | 9 | 0.23 |
| BBH | SZ | 45 | EP | 2 | | 08:49 | 59.28 | | |
| BBO | SZ | 47 | EP | 2 | | 08:49 | 59.99 | | |
| BBO | SN | 47 | | | | 08:50 | 06.96 | 3 | 0.22 |
| BBO | SE | 47 | | | | 08:50 | 06.88 | 2 | 0.12 |
| BDL | SZ | 55 | EP | 2 | | 08:50 | 01.61 | | |
| BTA | SZ | 64 | EP | 2 | | 08:50 | 03.19 | | |

**May 13 2001 Time: 09:58 16.3 UTC Magnitude: 0.5 ML**
**Lat: 55.095N Lon: -3.626W Depth: 9.7 km**
**Grid Ref: 296.27 kmE 579.05 kmE RMS: 0.07 secs**
**Locality: DUMFRIES,D & G Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 9 | IP | | U | 09:58 | 18.83 | | |
| BHH | SZ | 26 | IP | | D | 09:58 | 21.46 | | |
| BHH | SN | 26 | ES | 2 | | 09:58 | 24.69 | | |
| BHH | SN | 26 | | | | 09:58 | 24.87 | 20 | 0.22 |
| BHH | SE | 26 | | | | 09:58 | 26.06 | 23 | 0.22 |
| ECK | SZ | 33 | EP | 2 | | 09:58 | 22.50 | | |
| GCD | SZ | 33 | EP | 2 | | 09:58 | 22.34 | | |
| ESK | SZ | 36 | IP | | U | 09:58 | 22.90 | | |
| ESK | SE | 36 | ES | 2 | | 09:58 | 27.30 | | |
| ESK | SN | 36 | | | | 09:58 | 28.27 | 7 | 0.20 |
| ESK | SE | 36 | | | | 09:58 | 28.27 | 8 | 0.22 |
| BBO | SZ | 47 | EP | 2 | | 09:58 | 25.12 | | |
| BBO | SN | 47 | | | | 09:58 | 31.83 | 2 | 0.17 |
| BBO | SE | 47 | | | | 09:58 | 31.35 | 2 | 0.19 |

**May 13 2001 Time: 11:21 09.2 UTC Magnitude: 0.8 ML**
**Lat: 55.093N Lon: -3.628W Depth: 9.6 km**
**Grid Ref: 296.14 kmE 578.87 kmE RMS: 0.07 secs**
**Locality: DUMFRIES,D & G Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 9 | IP | 1 | U | 11:21 | 11.74 | | |
| BHH | SZ | 26 | IP | | D | 11:21 | 14.37 | | |
| BHH | SN | 26 | ES | 2 | | 11:21 | 17.64 | | |
| BHH | SN | 26 | | | | 11:21 | 17.78 | 29 | 0.21 |
| BHH | SE | 26 | | | | 11:21 | 18.98 | 36 | 0.21 |
| ECK | SZ | 33 | EP | 2 | | 11:21 | 15.36 | | |
| GCD | SZ | 33 | IP | | U | 11:21 | 15.21 | | |
| ESK | SZ | 37 | IP | | U | 11:21 | 15.81 | | |
| ESK | SE | 37 | ES | 2 | | 11:21 | 20.39 | | |
| ESK | SN | 37 | | | | 11:21 | 21.19 | 10 | 0.19 |
| ESK | SE | 37 | | | | 11:21 | 21.18 | 12 | 0.20 |
| BBH | SZ | 45 | EP | 2 | | 11:21 | 17.32 | | |
| BBO | SZ | 47 | EP | 2 | | 11:21 | 18.11 | | |
| BBO | SE | 47 | ES | 2 | | 11:21 | 24.29 | | |
| BBO | SN | 47 | | | | 11:21 | 25.08 | 4 | 0.24 |
| BBO | SE | 47 | | | | 11:21 | 26.52 | 4 | 0.29 |

**May 13 2001 Time: 11:26 29.3 UTC Magnitude: 1.3 ML**
**Lat: 55.096N Lon: -3.631W Depth: 10.8 km**
**Grid Ref: 295.93 kmE 579.21 kmE RMS: 0.07 secs**
**Locality: DUMFRIES,D & G Quality: B**
**Comment: FELT DUMFRIES... Intensity: 3+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 9 | IP | | U | 11:26 | 31.92 | | |
| BHH | SZ | 26 | IP | | D | 11:26 | 34.54 | | |
| BHH | SE | 26 | ES | 2 | | 11:26 | 37.81 | | |
| BHH | SN | 26 | | | | 11:26 | 37.96 | 101 | 0.20 |
| BHH | SE | 26 | | | | 11:26 | 39.16 | 126 | 0.22 |
| ECK | SZ | 33 | EP | 2 | | 11:26 | 35.48 | | |
| GCD | SZ | 33 | IP | | U | 11:26 | 35.36 | | |
| ESK | SZ | 37 | IP | | U | 11:26 | 36.01 | | |
| ESK | SE | 37 | ES | 2 | | 11:26 | 40.51 | | |
| ESK | SN | 37 | | | | 11:26 | 41.38 | 35 | 0.17 |
| ESK | SE | 37 | | | | 11:26 | 41.38 | 41 | 0.20 |
| BBH | SZ | 45 | IP | | U | 11:26 | 37.56 | | |
| BBO | SZ | 47 | IP | | D | 11:26 | 38.30 | | |
| BBO | SN | 47 | ES | 2 | | 11:26 | 44.44 | | |
| BBO | SN | 47 | | | | 11:26 | 45.25 | 12 | 0.24 |
| BBO | SE | 47 | | | | 11:26 | 44.82 | 10 | 0.30 |
| BDL | SZ | 55 | EP | 2 | | 11:26 | 39.88 | | |
| BTA | SZ | 64 | EP | 2 | | 11:26 | 41.32 | | |
| BTA | SN | 64 | ES | 2 | | 11:26 | 50.08 | | |
| BTA | SN | 64 | | | | 11:26 | 52.91 | 17 | 0.44 |
| BTA | SE | 64 | | | | 11:26 | 54.65 | 14 | 0.33 |

**May 14 2001 Time: 04:28 57.0 UTC Magnitude: 0.5 ML**
**Lat: 54.595N Lon: -3.705W Depth: 13.8 km**
**Grid Ref: 289.84 kmE 523.59 kmE RMS: 0.11 secs**
**Locality: SOLWAY FIRTH Quality: B**
**Comment: 9KM WEST OF WHITEHAVEN**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| XDE | SZ | 17 | IP | | D | 04:29 | 00.90 | | |
| GCD | SZ | 33 | IP | | D | 04:29 | 03.39 | | |
| BBO | SZ | 34 | EP | 2 | | 04:29 | 03.14 | | |
| BBO | SN | 34 | ES | 2 | | 04:29 | 07.97 | | |
| BBO | SN | 34 | | | | 04:29 | 08.14 | 2 | 0.08 |
| BBO | SE | 34 | | | | 04:29 | 08.66 | 3 | 0.20 |
| CSF | SZ | 34 | EP | 2 | | 04:29 | 03.44 | | |
| CKE | SZ | 39 | EP | 2 | | 04:29 | 04.23 | | |
| CDU | SZ | 44 | EP | 2 | | 04:29 | 04.97 | | |
| LMI | SZ | 49 | IP | 1 | D | 04:29 | 06.00 | | |

# PHASE DATA : 2001

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LMI | SN | 49 | ES | 2 | 04:29 | 12.95 | | | |
| LMI | SN | 49 | | | 04:29 | 14.66 | 2 | 0.23 | |
| LMI | SE | 49 | | | 04:29 | 14.02 | 2 | 0.22 | |
| GIM | SZ | 60 | EP | 2 | 04:29 | 07.54 | | | |
| GIM | SN | 60 | | | 04:29 | 18.41 | 3 | 0.25 | |
| GIM | SE | 60 | | | 04:29 | 18.43 | 3 | 0.10 | |
| GAL | SZ | 72 | EP | 2 | 04:29 | 09.70 | | | |
| GAL | SN | 72 | ES | 2 | 04:29 | 17.94 | | | |
| GAL | SN | 72 | | | 04:29 | 18.46 | 5 | 0.13 | |
| GAL | SE | 72 | | | 04:29 | 19.92 | 2 | 0.23 | |

**May 14 2001 Time: 05:50 39.4 UTC Magnitude: 2.2 ML**
**Lat: 62.444N Lon: 2.207W Depth: 13.8 km**
**Grid Ref: 617.02 kmE 1403.09 kmE RMS: 0.10 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YEL | SZ | 274 | EP | 2 | | 05:51 | 17.61 | | |
| LRW | SZ | 315 | EP | 3 | | 05:51 | 22.97 | | |
| LRW | SN | 315 | ES | 3 | | 05:51 | 54.21 | | |
| LRW | SN | 315 | | | | 05:51 | 56.24 | 4 | 0.25 |
| LRW | SE | 315 | | | | 05:51 | 57.78 | 6 | 0.11 |
| WAL | SZ | 318 | EP | 3 | | 05:51 | 23.09 | | |
| SAN | SZ | 328 | EP | 3 | | 05:51 | 24.08 | | |

**May 15 2001 Time: 07:19 33.0 UTC Magnitude: 2.4 ML**
**Lat: 59.302N Lon: 2.124W Depth: 23.7 km**
**Grid Ref: 634.73 kmE 1053.43 kmE RMS: 0.28 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SAN | SZ | 206 | EP | 2 | | 07:20 | 01.76 | | |
| LRW | SZ | 208 | EP | 3 | | 07:20 | 02.38 | | |
| LRW | SN | 208 | ES | 2 | | 07:20 | 22.51 | | |
| LRW | SN | 208 | | | | 07:20 | 24.28 | 26 | 0.22 |
| LRW | SE | 208 | | | | 07:20 | 25.58 | 18 | 0.14 |
| YEL | SZ | 227 | EP | 2 | | 07:20 | 04.56 | | |
| WAL | SZ | 235 | EP | 3 | | 07:20 | 05.60 | | |

**May 31 2001 Time: 18:19 29.6 UTC Magnitude: 1.6 ML**
**Lat: 53.401N Lon: -1.249W Depth: 0.0 km**
**Grid Ref: 449.90 kmE 389.68 kmE RMS: 0.06 secs**
**Locality: ROTHERHAM,SOUTH YORKS Quality: C**
**Comment: C/F,6KM SE OF ROTHERHAM**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KBI | SZ | 25 | EP | 3 | | 18:19 | 34.70 | | |
| KWE | SZ | 58 | EP | 3 | | 18:19 | 40.47 | | |
| CWF | SZ | 74 | EP | 2 | | 18:19 | 42.77 | | |
| CWF | SE | 74 | ES | 2 | | 18:19 | 52.38 | | |
| CWF | SN | 74 | | | | 18:19 | 53.79 | 19 | 0.24 |
| CWF | SE | 74 | | | | 18:19 | 53.99 | 21 | 0.18 |

**May 31 2001 Time: 23:42 59.1 UTC Magnitude: 3.6 ML**
**Lat: 50.977N Lon: -4.531W Depth: 26.4 km**
**Grid Ref: 215.55 kmE 127.16 kmE RMS: 0.07 secs**
**Locality: OFF HARTLAND PT,DEVON Quality: C**
**Comment: FELT CORNWALL & DEVON Intensity: 5**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| STB | SZ | | EP | | C | 23:43 | 07.34 | | |
| STB | SZ | | AMPP | | | 23:43 | 07.80 | 79 | 0.41 |
| STB | SZ | | ES | | | 23:43 | 13.91 | | |
| STB | SZ | | AMPS | | | 23:43 | 14.29 | 1 | 0.40 |
| HEX | SZ | | EP | | C | 23:43 | 08.39 | | |
| DYA | SZ | | EP | | D | 23:43 | 11.17 | | |
| DYA | SZ | | I | | | 23:43 | 11.93 | | |
| DCO | SZ | | EP | | D | 23:43 | 12.79 | | |
| HSA | SZ | | EP | | C | 23:43 | 12.18 | | |
| CRQ | SZ | | EP | 9 | C | 23:43 | 06.80 | | |
| CRQ | SZ | | ES | | | 23:43 | 19.52 | | |
| CRQ | AE | | | | | 23:43 | 19.77 | 503 | 0.32 |
| CRQ | AN | | | | | 23:43 | 24.21 | 454 | 0.44 |
| CR2 | SZ | | EP | | C | 23:43 | 06.79 | | |
| CRQ | SZ | | AMPP | | | 23:43 | 06.83 | 36 | 0.14 |
| CRQ | SZ | | AMPS | | | 23:43 | 19.70 | 71 | 0.10 |
| WFB | SZ | | EP | | | 23:43 | 25.33 | | |
| WFB | SZ | | I | | | 23:43 | 31.84 | | |
| LLW | BZ | | EP | 2 | | 23:43 | 29.40 | | |
| LLW | BZ | | ES | | | 23:43 | 56.06 | | |
| YRE | SZ | | EP | | | 23:43 | 29.30 | | |
| YRC | SZ | | EP | | | 23:43 | 33.15 | | |
| YRC | SZ | | I | | | 23:43 | 39.58 | | |
| JVM | SZ | | EP | | | 23:43 | 33.79 | | |
| WPM | SZ | | EP | | C | 23:43 | 33.55 | | |
| WPM | SZ | | I | | | 23:43 | 39.81 | | |
| JLP | SZ | | EP | | C | 23:43 | 34.16 | | |
| JSA | SZ | | EP | | | 23:43 | 34.43 | | |
| JRS | SZ | | EP | | | 23:43 | 34.90 | | |
| JQE | SZ | | EP | | | 23:43 | 35.08 | | |
| WCB | SZ | | EP | | | 23:43 | 34.63 | | |
| WCB | SZ | | E | | | 23:43 | 35.19 | | |
| WCB | SN | | | | | 23:44 | 11.11 | 135 | 0.21 |
| WCB | SE | | | | | 23:44 | 14.57 | 277 | 0.82 |
| WME | SZ | | EP | | | 23:43 | 35.48 | | |
| DSB | BZ | | EP | | | 23:43 | 35.47 | | |
| DSB | BZ | | E | | | 23:43 | 35.77 | | |
| KWE | SZ | | EP | | | 23:43 | 37.92 | | |
| CWF | SZ | | EP | | C | 23:43 | 38.16 | | |
| CWF | SN | | | | | 23:44 | 25.42 | 115 | 0.28 |
| CWF | SE | | | | | 23:44 | 28.95 | 86 | 0.32 |
| TEB | SZ | | EP | | | 23:43 | 43.31 | | |
| WIM | SZ | | EP | | | 23:43 | 45.54 | | |
| GAL | SZ | | EP | | | 23:43 | 54.87 | | |
| BTA | SZ | | EP | | | 23:43 | 57.84 | | |
| BHH | SZ | | EP | | | 23:43 | 58.91 | | |
| HTL | SZ | | EP | | D | 23:43 | 03.46 | | |
| HTL | SZ | | I | | | 23:43 | 03.47 | | |
| HTL | SZ | | AMPP | | | 23:43 | 03.48 | 58 | 0.11 |
| HTL | SZ | | ES | | | 23:43 | 06.39 | | |
| HTL | SZ | | AMPS | | | 23:43 | 06.53 | 30 | 0.06 |

**June 1 2001 Time: 06:18 07.0 UTC Magnitude: 3.7 ML**
**Lat: 61.790N Lon: 3.057W Depth: 15.9 km**
**Grid Ref: 666.45 kmE 1333.59 kmE RMS: 0.13 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| FOO | SZ | 107 | EP | 2 | | 06:18 | 24.09 | | |
| FOO | SN | 107 | ES | 2 | | 06:18 | 36.67 | | |
| SUE | SZ | 122 | EP | 2 | | 06:18 | 26.14 | | |
| SUE | SN | 122 | ES | 2 | | 06:18 | 40.08 | | |
| YEL | SZ | 262 | IP | 1 | D | 06:18 | 43.47 | | |
| LRW | SZ | 294 | IP | | U | 06:18 | 47.68 | | |
| LRW | SN | 294 | ES | 2 | | 06:19 | 17.92 | | |
| LRW | SN | 294 | | | | 06:19 | 24.19 | 46 | 0.15 |
| LRW | SE | 294 | | | | 06:19 | 28.12 | 34 | 0.18 |
| WAL | SZ | 305 | EP | 2 | | 06:18 | 48.79 | | |
| SAN | SZ | 306 | EP | 2 | | 06:18 | 48.74 | | |
| OST | SZ | 432 | EP | 2 | | 06:19 | 04.82 | | |
| OWE | SZ | 433 | EP | 2 | | 06:19 | 04.21 | | |
| OHO | SZ | 480 | EP | 3 | | 06:19 | 10.19 | | |
| OBR | SZ | 494 | EP | 3 | | 06:19 | 12.13 | | |
| ORE | SZ | 523 | EP | 2 | | 06:19 | 15.45 | | |
| ORE | SN | 523 | ES | 3 | | 06:20 | 06.19 | | |
| ORE | SN | 523 | | | | 06:20 | 08.53 | 91 | 0.27 |
| ORE | SE | 523 | | | | 06:20 | 08.41 | 72 | 0.27 |
| MCD | SZ | 588 | EP | 3 | | 06:19 | 23.53 | | |
| MCD | SE | 588 | ES | 2 | | 06:20 | 19.22 | | |
| MCD | SN | 588 | | | | 06:20 | 22.40 | 55 | 0.29 |
| MCD | SE | 588 | | | | 06:20 | 22.08 | 29 | 0.15 |

**June 1 2001 Time: 06:22 51.4 UTC Magnitude: 2.8 ML**
**Lat: 61.664N Lon: 2.943W Depth: 9.7 km**
**Grid Ref: 661.57 kmE 1319.09 kmE RMS: 0.20 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HYA | SZ | 182 | EP | 2 | | 06:23 | 18.50 | | |
| BER | SZ | 193 | EP | 2 | | 06:23 | 20.07 | | |
| EGD | SZ | 198 | EP | 2 | | 06:23 | 20.23 | | |
| YEL | SZ | 250 | IP | 1 | D | 06:23 | 26.85 | | |
| LRW | SZ | 281 | EP | 2 | | 06:23 | 31.08 | | |
| LRW | SE | 281 | ES | 3 | | 06:24 | 00.76 | | |
| LRW | SN | 281 | | | | 06:24 | 01.52 | 28 | 0.10 |
| LRW | SE | 281 | | | | 06:24 | 01.71 | 33 | 0.16 |
| SAN | SZ | 292 | EP | 2 | | 06:23 | 32.35 | | |
| WAL | SZ | 292 | EP | 2 | | 06:23 | 32.21 | | |

**June 1 2001 Time: 06:26 20.2 UTC Magnitude: 2.3 ML**
**Lat: 61.733N Lon: 3.038W Depth: 10.1 km**
**Grid Ref: 665.97 kmE 1327.22 kmE RMS: 0.30 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| FOO | SZ | 107 | EP | 2 | | 06:26 | 37.17 | | |
| FOO | SZ | 107 | ES | 3 | | 06:26 | 49.75 | | |
| SUE | SZ | 119 | EP | 2 | | 06:26 | 39.27 | | |
| SUE | SZ | 119 | ES | 3 | | 06:26 | 52.47 | | |
| HYA | SZ | 180 | EP | 2 | | 06:26 | 48.16 | | |
| EGD | SZ | 201 | EP | 2 | | 06:26 | 49.91 | | |
| YEL | SZ | 258 | EP | 2 | | 06:26 | 56.52 | | |
| LRW | SZ | 290 | EP | 2 | | 06:27 | 00.84 | | |
| LRW | SE | 290 | ES | 2 | | 06:27 | 30.55 | | |
| LRW | SN | 290 | | | | 06:27 | 35.55 | 6 | 0.04 |
| LRW | SE | 290 | | | | 06:27 | 31.35 | 8 | 0.19 |
| SAN | SZ | 301 | EP | 2 | | 06:27 | 02.07 | | |
| WAL | SZ | 301 | EP | 2 | | 06:27 | 01.94 | | |

**June 2 2001 Time: 00:44 57.2 UTC Magnitude: 3.9 ML**
**Lat: 56.810N Lon: 6.800W Depth: 15.0 km**
**Grid Ref: 936.42 kmE 803.27 kmE RMS: 0.38 secs**
**Locality: NORWEGIAN-DANISH BASIN Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EDR | SZ | 569 | EP | 2 | | 00:46 | 12.12 | | |
| ESY | SZ | 590 | EP | 2 | | 00:46 | 14.60 | | |
| LRW | SZ | 595 | EP | 3 | | 00:46 | 15.45 | | |
| MME | SZ | 595 | EP | 2 | | 00:46 | 14.79 | | |
| XAL | SZ | 606 | EP | 2 | | 00:46 | 15.96 | | |
| OST | SZ | 610 | EP | 2 | | 00:46 | 17.36 | | |
| EBL | SZ | 620 | EP | 3 | | 00:46 | 17.79 | | |
| EDI | SZ | 625 | EP | 3 | | 00:46 | 18.89 | | |
| EDI | SN | 625 | ES | 3 | | 00:47 | 24.12 | | |
| EDI | SN | 625 | | | | 00:47 | 29.10 | 21 | 0.38 |
| EDI | SE | 625 | | | | 00:47 | 31.33 | 16 | 0.42 |
| OBR | SZ | 627 | EP | 2 | | 00:46 | 19.04 | | |
| BTA | SZ | 630 | EP | 2 | | 00:46 | 18.84 | | |
| BTA | SN | 630 | | | | 00:47 | 28.63 | 48 | 0.29 |
| BTA | SE | 630 | | | | 00:47 | 27.10 | 48 | 0.34 |
| MLA | SZ | 630 | EP | 3 | | 00:46 | 20.12 | | |
| BBH | SZ | 635 | EP | 2 | | 00:46 | 19.75 | | |
| OHO | SZ | 639 | EP | 3 | | 00:46 | 19.34 | | |
| EAU | SZ | 644 | EP | 3 | | 00:46 | 21.13 | | |
| ESK | SZ | 645 | EP | 2 | | 00:46 | 21.08 | | |
| ESK | SE | 645 | ES | 3 | | 00:47 | 27.00 | | |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ESK | SN | 645 | | | 00:47 | 30.69 | 16 | 0.19 |
| ESK | SE | 645 | | | 00:47 | 30.16 | 16 | 0.17 |
| BDL | SZ | 650 | EP | 2 | 00:46 | 21.30 | | |
| BHH | SZ | 654 | EP | 2 | 00:46 | 21.90 | | |
| BHH | SN | 654 | | | 00:47 | 32.66 | 46 | 0.40 |
| BHH | SE | 654 | | | 00:47 | 33.11 | 43 | 0.25 |
| ORE | SZ | 659 | EP | 3 | 00:46 | 22.33 | | |
| ORE | SN | 659 | ES | 3 | 00:47 | 26.43 | | |
| ORE | SN | 659 | | | 00:47 | 33.81 | 35 | 0.43 |
| ORE | SE | 659 | | | 00:47 | 35.06 | 24 | 0.26 |
| BBO | SZ | 671 | EP | 2 | 00:46 | 23.76 | | |
| BWH | SZ | 677 | EP | 2 | 00:46 | 24.63 | | |
| EAB | SZ | 689 | EP | 3 | 00:46 | 27.33 | | |

**June 5 2001 Time: 08:39 55.3 UTC Magnitude: 0.1 ML**
**Lat: 50.111N Lon: -5.170W Depth: 5.6 km**
**Grid Ref: 173.37 kmE 28.34 kmE RMS: 0.06 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | EP | 2 | | 08:39 | 56.35 | | |
| CMA | SZ | 4 | IP | 1 | D | 08:39 | 56.57 | | |
| CR2 | SZ | 6 | EP | 2 | | 08:39 | 56.76 | | |
| CR2 | SN | 6 | ES | 2 | U | 08:39 | 57.93 | | |
| CR2 | SN | 6 | | | | 08:39 | 57.95 | 15 | 0.04 |
| CR2 | SE | 6 | | | | 08:39 | 57.97 | 24 | 0.04 |
| CBW | SZ | 6 | EP | 2 | | 08:39 | 56.60 | | |
| CGH | SZ | 7 | EP | 3 | | 08:39 | 56.77 | | |
| CCA | SZ | 9 | EP | 2 | | 08:39 | 57.29 | | |
| CST | SZ | 9 | EP | 1 | D | 08:39 | 57.17 | | |

**June 5 2001 Time: 08:43 43.7 UTC Magnitude: 0.2 ML**
**Lat: 50.109N Lon: -5.176W Depth: 6.2 km**
**Grid Ref: 172.97 kmE 28.13 kmE RMS: 0.01 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | EP | 1 | U | 08:43 | 44.90 | | |
| CGW | SZ | 4 | IP | | D | 08:43 | 44.90 | | |
| CMA | SZ | 5 | EP | 2 | | 08:43 | 45.02 | | |
| CBW | SZ | 6 | IP | | U | 08:43 | 45.17 | | |
| CR2 | SZ | 6 | IP | | U | 08:43 | 45.22 | | |
| CR2 | SN | 6 | ES | 2 | | 08:43 | 46.38 | | |
| CR2 | SN | 6 | | | | 08:43 | 46.41 | 37 | 0.06 |
| CR2 | SE | 6 | | | | 08:43 | 46.43 | 15 | 0.04 |
| CGH | SZ | 7 | EP | 2 | | 08:43 | 45.21 | | |
| CCA | SZ | 9 | IP | | U | 08:43 | 45.61 | | |
| CST | SZ | 10 | IP | | U | 08:43 | 45.66 | | |

**June 5 2001 Time: 09:04 09.9 UTC Magnitude: 0.2 ML**
**Lat: 50.109N Lon: -5.167W Depth: 6.6 km**
**Grid Ref: 173.56 kmE 28.12 kmE RMS: 0.03 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 4 | EP | 2 | | 09:04 | 11.18 | | |
| CGW | SZ | 4 | IP | 1 | D | 09:04 | 11.30 | | |
| CR2 | SZ | 6 | IP | 1 | U | 09:04 | 11.51 | | |
| CR2 | SN | 6 | ES | 2 | | 09:04 | 12.67 | | |
| CR2 | SN | 6 | | | | 09:04 | 12.68 | 16 | 0.07 |
| CR2 | SE | 6 | | | | 09:04 | 12.70 | 27 | 0.05 |
| CBW | SZ | 6 | IP | | U | 09:04 | 11.46 | | |
| CGH | SZ | 7 | IP | | U | 09:04 | 11.52 | | |
| CCA | SZ | 10 | EP | 2 | | 09:04 | 11.87 | | |
| CST | SZ | 10 | EP | 1 | U | 09:04 | 11.94 | | |

**June 5 2001 Time: 10:21 04.9 UTC Magnitude: 1.2 ML**
**Lat: 51.431N Lon: -2.736W Depth: 5.1 km**
**Grid Ref: 348.88 kmE 170.53 kmE RMS: 0.05 secs**
**Locality: BRISTOL,AVON Quality: C**
**Comment: 8KM EAST OF BRISTOL**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 24 | IP | | D | 10:21 | 09.36 | | |
| MCH | SZ | 66 | EP | 1 | D | 10:21 | 16.04 | | |
| MCH | SE | 66 | ES | 2 | | 10:21 | 24.27 | | |
| MCH | SN | 66 | | | | 10:21 | 31.68 | 6 | 0.24 |
| MCH | SE | 66 | | | | 10:21 | 26.72 | 8 | 0.17 |
| HAE | SZ | 69 | EP | 2 | | 10:21 | 16.56 | | |
| HTR | SZ | 81 | EP | 2 | | 10:21 | 18.23 | | |
| HEX | SZ | 85 | EP | 2 | | 10:21 | 19.05 | | |
| SSP | SZ | 113 | EP | 2 | | 10:21 | 23.50 | | |
| SSP | SN | 113 | ES | 2 | | 10:21 | 37.39 | | |
| SSP | SN | 113 | | | | 10:21 | 40.56 | 7 | 0.19 |
| SSP | SE | 113 | | | | 10:21 | 40.66 | 4 | 0.21 |

**June 5 2001 Time: 11:50 47.6 UTC Magnitude: 0.8 ML**
**Lat: 50.110N Lon: -5.175W Depth: 6.8 km**
**Grid Ref: 173.02 kmE 28.22 kmE RMS: 0.03 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | EP | 1 | U | 11:50 | 48.90 | | |
| CGW | SZ | 4 | IP | | U | 11:50 | 48.93 | | |
| CMA | SZ | 5 | IP | | D | 11:50 | 49.00 | | |
| CR2 | SZ | 6 | IP | | U | 11:50 | 49.21 | | |
| CR2 | SN | 6 | ES | 1 | | 11:50 | 50.38 | | |
| CR2 | SN | 6 | | | | 11:50 | 50.40 | 64 | 0.05 |
| CR2 | SE | 6 | | | | 11:50 | 50.42 | 93 | 0.06 |
| CBW | SZ | 6 | EP | 2 | | 11:50 | 49.13 | | |
| CGH | SZ | 7 | IP | | U | 11:50 | 49.22 | | |
| CCA | SZ | 9 | IP | 1 | U | 11:50 | 49.60 | | |
| CST | SZ | 10 | IP | | U | 11:50 | 49.65 | | |
| CPZ | SZ | 30 | EP | 2 | | 11:50 | 52.73 | | |

**June 5 2001 Time: 12:04 27.5 UTC Magnitude: 0.8 ML**
**Lat: 50.110N Lon: -5.179W Depth: 6.7 km**
**Grid Ref: 172.75 kmE 28.20 kmE RMS: 0.03 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | IP | 1 | U | 12:04 | 28.78 | | |
| CGW | SZ | 3 | IP | 1 | D | 12:04 | 28.77 | | |
| CMA | SZ | 5 | IP | | D | 12:04 | 28.87 | | |
| CR2 | SZ | 6 | IP | | U | 12:04 | 29.09 | | |
| CR2 | SN | 6 | ES | 1 | | 12:04 | 30.25 | | |
| CR2 | SN | 6 | | | | 12:04 | 30.27 | 60 | 0.04 |
| CR2 | SE | 6 | | | | 12:04 | 30.29 | 97 | 0.05 |
| CBW | SZ | 6 | IP | | U | 12:04 | 29.04 | | |
| CGH | SZ | 7 | IP | | U | 12:04 | 29.09 | | |
| CCA | SZ | 9 | EP | 2 | | 12:04 | 29.49 | | |
| CST | SZ | 10 | IP | | U | 12:04 | 29.51 | | |
| CPZ | SZ | 29 | EP | 1 | D | 12:04 | 32.61 | | |

**June 5 2001 Time: 12:04 31.5 UTC Magnitude: 0.6 ML**
**Lat: 50.115N Lon: -5.184W Depth: 8.0 km**
**Grid Ref: 172.36 kmE 28.77 kmE RMS: 0.07 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | EP | 2 | | 12:04 | 33.01 | | |
| CGW | SZ | 3 | IP | 1 | U | 12:04 | 33.07 | | |
| CR2 | SZ | 6 | IP | | U | 12:04 | 33.38 | | |
| CR2 | SN | 6 | ES | 2 | | 12:04 | 34.54 | | |
| CR2 | SN | 6 | | | | 12:04 | 34.56 | 41 | 0.05 |
| CR2 | SE | 6 | | | | 12:04 | 34.58 | 73 | 0.06 |
| CBW | SZ | 6 | IP | | U | 12:04 | 33.33 | | |
| CMA | SZ | 6 | EP | 2 | | 12:04 | 33.15 | | |
| CGH | SZ | 7 | EP | 2 | | 12:04 | 33.38 | | |
| CCA | SZ | 9 | EP | 2 | | 12:04 | 33.34 | | |
| CST | SZ | 9 | EP | 2 | | 12:04 | 33.68 | | |

**June 5 2001 Time: 12:07 38.8 UTC Magnitude: 0.2 ML**
**Lat: 50.110N Lon: -5.168W Depth: 5.9 km**
**Grid Ref: 173.48 kmE 28.16 kmE RMS: 0.02 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 4 | EP | 2 | | 12:07 | 40.04 | | |
| CGW | SZ | 4 | EP | 1 | D | 12:07 | 40.07 | | |
| CMA | SZ | 4 | EP | 1 | D | 12:07 | 40.11 | | |
| CR2 | SZ | 6 | IP | 1 | U | 12:07 | 40.33 | | |
| CR2 | SN | 6 | ES | 1 | | 12:07 | 41.47 | | |
| CR2 | SN | 6 | | | | 12:07 | 41.50 | 21 | 0.06 |
| CR2 | SE | 6 | | | | 12:07 | 41.52 | 24 | 0.04 |
| CBW | SZ | 6 | IP | 1 | D | 12:07 | 40.27 | | |
| CGH | SZ | 7 | EP | 1 | U | 12:07 | 40.33 | | |
| CST | SZ | 10 | EP | 2 | | 12:07 | 40.75 | | |

**June 5 2001 Time: 15:30 04.0 UTC Magnitude: 0.7 ML**
**Lat: 50.109N Lon: -5.174W Depth: 6.0 km**
**Grid Ref: 173.09 kmE 28.13 kmE RMS: 0.02 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | IP | 1 | U | 15:30 | 05.20 | | |
| CGW | SZ | 4 | EP | 1 | D | 15:30 | 05.18 | | |
| CMA | SZ | 5 | IP | | D | 15:30 | 05.29 | | |
| CR2 | SZ | 6 | IP | | U | 15:30 | 05.50 | | |
| CR2 | SN | 6 | ES | 2 | | 15:30 | 06.65 | | |
| CR2 | SN | 6 | | | | 15:30 | 06.67 | 48 | 0.06 |
| CR2 | SE | 6 | | | | 15:30 | 06.69 | 83 | 0.06 |
| CBW | SZ | 6 | IP | 1 | U | 15:30 | 05.45 | | |
| CGH | SZ | 7 | EP | 1 | U | 15:30 | 05.51 | | |
| CCA | SZ | 9 | IP | 1 | D | 15:30 | 05.92 | | |
| CST | SZ | 10 | IP | 1 | U | 15:30 | 05.92 | | |

**June 5 2001 Time: 15:59 46.3 UTC Magnitude: 1.1 ML**
**Lat: 50.109N Lon: -5.175W Depth: 6.2 km**
**Grid Ref: 173.03 kmE 28.15 kmE RMS: 0.01 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | IP | 1 | D | 15:59 | 47.55 | | |
| CGW | SZ | 4 | IP | | D | 15:59 | 47.57 | | |
| CMA | SZ | 5 | IP | | D | 15:59 | 47.67 | | |
| CR2 | SZ | 6 | IP | | U | 15:59 | 47.88 | | |
| CR2 | SN | 6 | ES | 1 | | 15:59 | 49.04 | | |
| CR2 | SN | 6 | | | | 15:59 | 49.06 | 152 | 0.06 |
| CR2 | SE | 6 | | | | 15:59 | 49.11 | 180 | 0.06 |
| CBW | SZ | 6 | IP | | U | 15:59 | 47.83 | | |
| CGH | SZ | 7 | IP | | U | 15:59 | 47.88 | | |
| CCA | SZ | 9 | IP | 1 | D | 15:59 | 48.26 | | |
| CST | SZ | 10 | IP | | U | 15:59 | 48.31 | | |

**June 5 2001 Time: 16:01 28.5 UTC Magnitude: 0.0 ML**
**Lat: 50.105N Lon: -5.150W Depth: 5.5 km**
**Grid Ref: 174.77 kmE 27.63 kmE RMS: 0.05 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CMA | SZ | 3 | EP | 2 | | 16:01 | 29.57 | | |
| CBW | SZ | 5 | IP | 1 | U | 16:01 | 29.82 | | |
| CCO | SZ | 5 | EP | 2 | | 16:01 | 29.76 | | |
| CGH | SZ | 6 | EP | 2 | | 16:01 | 29.88 | | |
| CR2 | SZ | 7 | EP | 3 | | 16:01 | 29.87 | | |
| CR2 | SE | 7 | ES | 3 | | 16:01 | 31.06 | | |
| CR2 | SN | 7 | | | | 16:01 | 31.05 | 11 | 0.05 |
| CR2 | SE | 7 | | | | 16:01 | 31.07 | 16 | 0.06 |

# PHASE DATA : 2001

**June 5 2001 Time: 16:06 54.2 UTC Magnitude: 0.4 ML**
**Lat: 50.109N Lon: -5.175W Depth: 6.3 km**
**Grid Ref: 173.04 kmE 28.15 kmE RMS: 0.01 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | IP | 1 | D | 16:06 | 55.46 | | |
| CMA | SZ | 5 | EP | 1 | D | 16:06 | 55.56 | | |
| CR2 | SZ | 6 | IP | | U | 16:06 | 55.76 | | |
| CR2 | SN | 6 | ES | 1 | | 16:06 | 56.93 | | |
| CR2 | SN | 6 | | | | 16:06 | 56.95 | 30 | 0.04 |
| CR2 | SE | 6 | | | | 16:06 | 56.97 | 33 | 0.05 |
| CBW | SZ | 6 | IP | | U | 16:06 | 55.71 | | |
| CGH | SZ | 7 | IP | | U | 16:06 | 55.77 | | |
| CCA | SZ | 9 | IP | 1 | D | 16:06 | 56.16 | | |
| CST | SZ | 10 | IP | | U | 16:06 | 56.20 | | |

**June 5 2001 Time: 16:23 20.8 UTC Magnitude: 0.9 ML**
**Lat: 50.110N Lon: -5.174W Depth: 6.3 km**
**Grid Ref: 173.10 kmE 28.22 kmE RMS: 0.01 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | IP | 1 | U | 16:23 | 21.99 | | |
| CGW | SZ | 4 | EP | 3 | | 16:23 | 22.01 | | |
| CMA | SZ | 5 | IP | | D | 16:23 | 22.10 | | |
| CR2 | SZ | 6 | IP | | U | 16:23 | 22.31 | | |
| CR2 | SN | 6 | ES | 1 | | 16:23 | 23.46 | | |
| CR2 | SN | 6 | | | | 16:23 | 23.49 | 102 | 0.05 |
| CR2 | SE | 6 | | | | 16:23 | 23.51 | 121 | 0.05 |
| CBW | SZ | 6 | IP | | U | 16:23 | 22.26 | | |
| CGH | SZ | 7 | IP | | U | 16:23 | 22.32 | | |
| CCA | SZ | 9 | IP | | U | 16:23 | 22.70 | | |
| CST | SZ | 10 | IP | | U | 16:23 | 22.72 | | |

**June 5 2001 Time: 16:48 32.5 UTC Magnitude: 0.4 ML**
**Lat: 50.111N Lon: -5.170W Depth: 6.7 km**
**Grid Ref: 173.38 kmE 28.28 kmE RMS: 0.02 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | IP | 1 | U | 16:48 | 33.84 | | |
| CGW | SZ | 4 | EP | 2 | | 16:48 | 33.91 | | |
| CMA | SZ | 4 | IP | | D | 16:48 | 33.93 | | |
| CR2 | SZ | 6 | IP | 1 | U | 16:48 | 34.14 | | |
| CR2 | SN | 6 | ES | 2 | | 16:48 | 35.30 | | |
| CR2 | SN | 6 | | | | 16:48 | 35.32 | 20 | 0.06 |
| CR2 | SE | 6 | | | | 16:48 | 35.34 | 55 | 0.06 |
| CBW | SZ | 6 | IP | | U | 16:48 | 34.09 | | |
| CGH | SZ | 7 | EP | 1 | U | 16:48 | 34.15 | | |
| CST | SZ | 9 | IP | | U | 16:48 | 34.57 | | |
| CCA | SZ | 9 | IP | 1 | D | 16:48 | 34.51 | | |

**June 9 2001 Time: 00:49 28.4 UTC Magnitude: 0.2 ML**
**Lat: 50.109N Lon: -5.176W Depth: 6.3 km**
**Grid Ref: 172.98 kmE 28.15 kmE RMS: 0.02 secs**
**Locality: CONSTANTINE,CORNWALL Quality: A**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | EP | 1 | U | 00:49 | 29.69 | | |
| CGW | SZ | 4 | EP | 2 | | 00:49 | 29.65 | | |
| CMA | SZ | 5 | IP | 1 | D | 00:49 | 29.78 | | |
| CR2 | SZ | 6 | IP | | U | 00:49 | 29.98 | | |
| CR2 | SN | 6 | ES | 2 | | 00:49 | 31.14 | | |
| CR2 | SN | 6 | | | | 00:49 | 31.15 | 14 | 0.04 |
| CR2 | SE | 6 | | | | 00:49 | 31.18 | 28 | 0.06 |
| CBW | SZ | 6 | IP | | U | 00:49 | 29.93 | | |
| CGH | SZ | 7 | EP | 2 | | 00:49 | 29.99 | | |
| CCA | SZ | 9 | EP | 2 | | 00:49 | 30.36 | | |
| CST | SZ | 10 | IP | | U | 00:49 | 30.40 | | |

**June 12 2001 Time: 06:39 55.9 UTC Magnitude: 0.6 ML**
**Lat: 50.110N Lon: -5.175W Depth: 6.1 km**
**Grid Ref: 173.01 kmE 28.22 kmE RMS: 0.01 secs**
**Locality: CONSTANTINE,CORNWALL Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CCO | SZ | 3 | EP | 2 | | 06:39 | 57.16 | | |
| CGW | SZ | 4 | EP | 2 | | 06:39 | 57.18 | | |
| CR2 | SZ | 6 | IP | | U | 06:39 | 57.48 | | |
| CR2 | SN | 6 | ES | 1 | | 06:39 | 58.63 | | |
| CR2 | SN | 6 | | | | 06:39 | 58.66 | 40 | 0.05 |
| CR2 | SE | 6 | | | | 06:39 | 58.68 | 68 | 0.04 |
| CBW | SZ | 6 | IP | | U | 06:39 | 57.44 | | |
| CGH | SZ | 7 | IP | 1 | U | 06:39 | 57.50 | | |
| CCA | SZ | 9 | IP | 1 | D | 06:39 | 57.86 | | |
| CST | SZ | 10 | IP | | U | 06:39 | 57.91 | | |

**June 17 2001 Time: 23:51 12.2 UTC Magnitude: 3.0 ML**
**Lat: 60.429N Lon: 1.872W Depth: 15.0 km**
**Grid Ref: 613.05 kmE 1177.90 kmE RMS: 0.24 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YEL | SZ | 163 | IP | 1 | U | 23:51 | 36.30 | | |
| YEL | SZ | 163 | ES | 3 | | 23:51 | 54.50 | | |
| LRW | SZ | 172 | IP | | U | 23:51 | 37.63 | | |
| LRW | SN | 172 | ES | 3 | | 23:51 | 55.40 | | |
| LRW | SN | 172 | | | | 23:51 | 57.05 | 84 | 0.11 |
| LRW | SE | 172 | | | | 23:51 | 59.56 | 83 | 0.21 |
| SAN | SZ | 179 | EP | 2 | | 23:51 | 38.47 | | |
| WAL | SZ | 194 | EP | 2 | | 23:51 | 40.81 | | |
| ORE | SZ | 382 | EP | 3 | | 23:52 | 02.95 | | |
| ORE | SN | 382 | | | | 23:52 | 57.41 | 21 | 0.29 |
| ORE | SE | 382 | | | | 23:52 | 57.56 | 29 | 0.40 |

**June 20 2001 Time: 11:45 14.6 UTC Magnitude: 1.8 ML**
**Lat: 51.948N Lon: -3.090W Depth: 28.8 km**
**Grid Ref: 325.13 kmE 228.35 kmE RMS: 0.04 secs**
**Locality: TALGARTH,POWYS Quality: B**
**Comment: 10KM SE OF TALGARTH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| MCH | SZ | 8 | IP | | D | 11:45 | 19.39 | | |
| MCH | SN | 8 | ES | 2 | | 11:45 | 22.89 | | |
| HTR | SZ | 19 | IP | | D | 11:45 | 20.12 | | |
| HAE | SZ | 39 | IP | | U | 11:45 | 22.28 | | |
| HGH | SZ | 40 | IP | | D | 11:45 | 22.47 | | |
| SSP | SZ | 52 | IP | | D | 11:45 | 24.15 | | |
| SSP | SN | 52 | ES | 2 | | 11:45 | 31.09 | | |
| SSP | SN | 52 | | | | 11:45 | 31.37 | 58 | 0.14 |
| SSP | SE | 52 | | | | 11:45 | 31.22 | 38 | 0.27 |
| HSA | SZ | 77 | EP | 2 | | 11:45 | 27.41 | | |

**June 20 2001 Time: 21:33 38.7 UTC Magnitude: 1.7 ML**
**Lat: 57.024N Lon: -5.790W Depth: 5.6 km**
**Grid Ref: 169.99 kmE 798.95 kmE RMS: 0.07 secs**
**Locality: MALLAIG,HIGHLAND Quality: C**
**Comment: FELT MALLAIG Intensity: 3+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 31 | IP | | U | 21:33 | 44.34 | | |
| KPL | SZ | 36 | IP | 1 | U | 21:33 | 45.28 | | |
| KPL | SN | 36 | ES | 3 | | 21:33 | 49.92 | | |
| KPL | SN | 36 | | | | 21:33 | 50.03 | 38 | 0.16 |
| KPL | SE | 36 | | | | 21:33 | 50.60 | 36 | 0.18 |
| KNR | SZ | 55 | EP | 2 | | 21:33 | 48.16 | | |
| KAC | SZ | 61 | EP | 2 | | 21:33 | 49.15 | | |
| KSK | SZ | 74 | EP | 2 | | 21:33 | 51.25 | | |
| RRR | SZ | 93 | EP | 2 | | 21:33 | 54.04 | | |
| RRR | SN | 93 | ES | 3 | | 21:34 | 04.99 | | |
| RRR | SN | 93 | | | | 21:34 | 08.08 | 57 | 0.12 |
| RRR | SE | 93 | | | | 21:34 | 08.48 | 28 | 0.12 |
| RRH | SZ | 113 | IP | 1 | U | 21:33 | 57.05 | | |
| REB | SZ | 126 | EP | 2 | | 21:33 | 59.55 | | |
| RFO | SZ | 151 | EP | 1 | U | 21:34 | 02.29 | | |

**June 27 2001 Time: 03:06 19.8 UTC Magnitude: 2.2 ML**
**Lat: 54.267N Lon: -2.275W Depth: 7.2 km**
**Grid Ref: 382.10 kmE 485.79 kmE RMS: 0.10 secs**
**Locality: SEDBERGH,CUMBRIA Quality: C**
**Comment: FELT COWGILL 15KM E Intensity: 4+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LRN | SZ | 35 | IP | | U | 03:06 | 26.12 | | |
| CDU | SZ | 60 | EP | 2 | | 03:06 | 30.34 | | |
| CKE | SZ | 65 | EP | 2 | | 03:06 | 30.99 | | |
| CSF | SZ | 66 | EP | 2 | | 03:06 | 31.19 | | |
| LMI | SZ | 68 | IP | | U | 03:06 | 31.52 | | |
| LMI | SE | 68 | ES | 2 | | 03:06 | 39.37 | | |
| LMI | SN | 68 | | | | 03:06 | 40.49 | 45 | 0.21 |
| LMI | SE | 68 | | | | 03:06 | 40.33 | 61 | 0.18 |
| BDL | SZ | 74 | EP | 2 | | 03:06 | 32.49 | | |
| BTA | SZ | 76 | IP | | U | 03:06 | 32.92 | | |
| BTA | SN | 76 | ES | 2 | | 03:06 | 41.83 | | |
| BTA | SN | 76 | | | | 03:06 | 42.35 | 66 | 0.24 |
| BTA | SE | 76 | | | | 03:06 | 42.25 | 51 | 0.33 |
| BBO | SZ | 82 | EP | 2 | | 03:06 | 33.80 | | |
| BBO | SE | 82 | ES | 2 | | 03:06 | 43.35 | | |
| BBO | SN | 82 | | | | 03:06 | 46.41 | 135 | 0.25 |
| BBO | SE | 82 | | | | 03:06 | 46.25 | 97 | 0.23 |
| XDE | SZ | 83 | IP | | U | 03:06 | 34.04 | | |
| BBH | SZ | 105 | IP | 1 | U | 03:06 | 37.87 | | |
| BHH | SZ | 110 | EP | 2 | | 03:06 | 38.74 | | |
| BHH | SE | 110 | ES | 2 | | 03:06 | 51.59 | | |
| BHH | SN | 110 | | | | 03:06 | 52.63 | 174 | 0.28 |
| BHH | SE | 110 | | | | 03:06 | 53.79 | 65 | 0.25 |
| GIM | SN | | | | | 03:07 | 01.43 | 58 | 0.17 |

**July 11 2001 Time: 20:16 47.5 UTC Magnitude: 0.4 ML**
**Lat: 53.046N Lon: -4.480W Depth: 10.1 km**
**Grid Ref: 233.80 kmE 352.77 kmE RMS: 0.06 secs**
**Locality: CAERNARVON BAY,GWYNEDD Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 8 | EP | 2 | | 20:16 | 49.65 | | |
| YLL | SZ | 23 | EP | 2 | | 20:16 | 51.80 | | |
| YRC | SZ | 24 | EP | 1 | U | 20:16 | 51.85 | | |
| WLF | SZ | 28 | EP | 2 | | 20:16 | 52.36 | | |
| WCB | SZ | 37 | EP | 3 | | 20:16 | 54.18 | | |
| WCB | SN | 37 | ES | 3 | | 20:16 | 58.29 | | |
| WCB | SN | 37 | | | | 20:16 | 58.47 | 4 | 0.09 |
| WCB | SE | 37 | | | | 20:16 | 59.45 | 4 | 0.16 |
| WME | SZ | 41 | EP | 1 | D | 20:16 | 54.39 | | |
| WPM | SZ | 45 | EP | 2 | | 20:16 | 55.15 | | |

**July 13 2001 Time: 01:17 13.6 UTC Magnitude: 1.0 ML**
**Lat: 55.535N Lon: -3.159W Depth: 8.6 km**
**Grid Ref: 326.85 kmE 627.38 kmE RMS: 0.12 secs**
**Locality: PEEBLES,BORDERS Quality: C**
**Comment: 15KM SOUTH OF PEEBLES**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EBL | SZ | 27 | IP | | D | 01:17 | 18.67 | | |
| EAU | SZ | 39 | IP | 1 | D | 01:17 | 20.67 | | |
| EDI | SZ | 43 | EP | 2 | | 01:17 | 21.14 | | |
| EDI | SN | 43 | ES | 3 | | 01:17 | 26.70 | | |
| EDI | SN | 43 | | | | 01:17 | 26.84 | 8 | 0.16 |

# PHASE DATA : 2001

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EDI | SE | 43 | | | | 01:17 | 27.05 | 4 | 0.17 |
| BBH | SZ | 47 | EP | 2 | | 01:17 | 22.04 | | |
| BHH | SZ | 49 | IP | 1 | D | 01:17 | 22.26 | | |
| BHH | SE | 49 | ES | 3 | | 01:17 | 27.93 | | |
| BHH | SN | 49 | | | | 01:17 | 28.53 | 7 | 0.13 |
| BHH | SE | 49 | | | | 01:17 | 28.70 | 19 | 0.22 |
| BWH | SZ | 51 | EP | 2 | | 01:17 | 22.28 | | |
| ESY | SZ | 55 | EP | 2 | | 01:17 | 22.91 | | |
| BTA | SZ | 76 | EP | 3 | | 01:17 | 26.85 | | |
| BTA | SN | 76 | EP | 2 | | 01:17 | 26.86 | | |
| BDL | SZ | 83 | EP | 2 | | 01:17 | 27.97 | | |
| BBO | SZ | 89 | EP | 2 | | 01:17 | 28.91 | | |
| BBO | SN | 89 | | | | 01:17 | 40.92 | 5 | 0.26 |
| BBO | SE | 89 | | | | 01:17 | 40.39 | 5 | 0.20 |

**July 17 2001 Time: 21:36 24.4 UTC Magnitude: 0.7 ML**
**Lat: 51.636N Lon: -3.074W Depth: 4.3 km**
**Grid Ref: 325.66 kmE 193.62 kmE RMS: 0.11 secs**
**Locality: CWMBRAN,GWENT Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 19 | IP | 1 | U | 21:36 | 28.03 | | |
| MCH | SZ | 41 | EP | 2 | | 21:36 | 31.59 | | |
| MCH | SE | 41 | ES | 3 | | 21:36 | 37.83 | | |
| MCH | SN | 41 | | | | 21:36 | 38.02 | 8 | 0.10 |
| MCH | SE | 41 | | | | 21:36 | 38.03 | 5 | 0.18 |
| HAE | SZ | 58 | EP | 2 | | 21:36 | 34.47 | | |

**July 21 2001 Time: 00:43 30.7 UTC Magnitude: 1.9 ML**
**Lat: 56.653N Lon: -6.096W Depth: 4.3 km**
**Grid Ref: 149.01 kmE 758.77 kmE RMS: 0.06 secs**
**Locality: MULL,STRATHCLYDE Quality: C**
**Comment: FELT SALEN Intensity: 3+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KNR | SZ | 71 | IP | 1 | U | 00:43 | 42.83 | | |
| KSB | SZ | 74 | EP | 1 | D | 00:43 | 43.24 | | |
| KPL | SZ | 81 | IP | 1 | D | 00:43 | 44.31 | | |
| KPL | SN | 81 | ES | 3 | | 00:43 | 54.17 | | |
| KPL | SN | 81 | | | | 00:43 | 57.34 | 43 | 0.12 |
| KPL | SE | 81 | | | | 00:43 | 57.25 | 41 | 0.10 |
| KAC | SZ | 106 | EP | 2 | | 00:43 | 48.26 | | |
| PMS | SZ | 123 | EP | 1 | U | 00:43 | 50.76 | | |
| PGB | SE | 137 | EP | 2 | | 00:43 | 53.04 | | |
| PGB | SE | 137 | ES | 3 | | 00:44 | 09.20 | | |
| PGB | SN | 137 | | | | 00:44 | 11.26 | 13 | 0.27 |
| PGB | SE | 137 | | | | 00:44 | 10.08 | 22 | 0.23 |
| MDO | SZ | 137 | EP | 2 | | 00:43 | 53.09 | | |
| PCO | SZ | 144 | EP | 2 | | 00:43 | 54.04 | | |

**July 24 2001 Time: 04:12 04.6 UTC Magnitude: 1.4 ML**
**Lat: 56.758N Lon: -5.508W Depth: 12.4 km**
**Grid Ref: 185.60 kmE 768.41 kmE RMS: 0.09 secs**
**Locality: FORT WILLIAM,HIGHLAND Quality: D**
**Comment: 25KM SW OF FORT WILLIAM**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KNR | SZ | 34 | IP | 1 | U | 04:12 | 10.74 | | |
| KSB | SZ | 51 | EP | 2 | | 04:12 | 13.20 | | |
| KPL | SZ | 65 | EP | 2 | | 04:12 | 15.64 | | |
| KPL | SE | 65 | ES | 3 | | 04:12 | 23.63 | | |
| KPL | SN | 65 | | | | 04:12 | 26.70 | 17 | 0.12 |
| KPL | SE | 65 | | | | 04:12 | 23.81 | 10 | 0.19 |
| KAC | SZ | 84 | EP | 2 | | 04:12 | 18.69 | | |

**July 24 2001 Time: 21:29 10.1 UTC Magnitude: 1.2 ML**
**Lat: 57.591N Lon: -5.614W Depth: 4.1 km**
**Grid Ref: 184.03 kmE 861.41 kmE RMS: 0.02 secs**
**Locality: TORRIDON,HIGHLAND Quality: C**
**Comment: 7KM NORTHWEST OF TORRIDON**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KAC | SZ | 22 | IP | 1 | U | 21:29 | 14.19 | | |
| KPL | SZ | 28 | EP | 1 | U | 21:29 | 15.32 | | |
| KPL | SE | 28 | ES | 2 | | 21:29 | 19.09 | | |
| KPL | SN | 28 | | | | 21:29 | 19.32 | 48 | 0.13 |
| KPL | SE | 28 | | | | 21:29 | 19.69 | 56 | 0.12 |
| KSB | SZ | 44 | IP | 1 | U | 21:29 | 17.94 | | |

**July 25 2001 Time: 23:21 04.0 UTC Magnitude: 0.8 ML**
**Lat: 57.466N Lon: -5.563W Depth: 14.0 km**
**Grid Ref: 186.37 kmE 847.33 kmE RMS: 0.02 secs**
**Locality: LOCHCARRON,HIGHLAND Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KPL | SZ | 15 | IP | | U | 23:21 | 07.60 | | |
| KPL | SN | 15 | ES | 3 | | 23:21 | 10.31 | | |
| KPL | SN | 15 | | | | 23:21 | 10.76 | 48 | 0.13 |
| KPL | SE | 15 | | | | 23:21 | 10.80 | 56 | 0.18 |
| KAC | SZ | 16 | IP | 1 | U | 23:21 | 07.78 | | |
| KSB | SZ | 30 | IP | 1 | U | 23:21 | 09.68 | | |

**July 26 2001 Time: 03:11 14.4 UTC Magnitude: 0.8 ML**
**Lat: 53.059N Lon: -1.785W Depth: 0.1 km**
**Grid Ref: 414.38 kmE 351.32 kmE RMS: 0.24 secs**
**Locality: ASHBOURNE,DERBYSHIRE Quality: D**
**Comment: C/F**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KWE | SZ | 6 | IP | | U | 03:11 | 15.76 | | |
| KWE | SZ | 6 | ES | 3 | | 03:11 | 18.32 | | |
| KBI | SZ | 28 | EP | 2 | | 03:11 | 20.12 | | |
| CWF | SZ | 48 | EP | 3 | | 03:11 | 23.86 | | |
| CWF | SE | 48 | ES | 2 | | 03:11 | 29.93 | | |
| CWF | SN | 48 | | | | 03:11 | 30.78 | 8 | 0.24 |
| CWF | SE | 48 | | | | 03:11 | 30.52 | 6 | 0.22 |

**July 31 2001 Time: 13:56 36.4 UTC Magnitude: 1.5 ML**
**Lat: 52.219N Lon: -4.364W Depth: 8.1 km**
**Grid Ref: 238.55 kmE 260.58 kmE RMS: 0.09 secs**
**Locality: NEW QUAY,DYFED Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HPE | SZ | 42 | IP | | U | 13:56 | 43.76 | | |
| HSA | SZ | 54 | EP | 2 | | 13:56 | 45.67 | | |
| WFB | SZ | 56 | IP | | U | 13:56 | 45.77 | | |
| HTR | SZ | 77 | EP | 2 | | 13:56 | 49.11 | | |
| YRE | SZ | 85 | EP | 2 | | 13:56 | 50.70 | | |
| SSP | SZ | 88 | EP | 2 | | 13:56 | 50.81 | | |
| SSP | SN | 88 | ES | 2 | | 13:57 | 00.76 | | |
| SSP | SN | 88 | | | | 13:57 | 01.80 | 11 | 0.17 |
| SSP | SE | 88 | | | | 13:57 | 02.73 | 21 | 0.13 |
| MCH | SZ | 97 | EP | 2 | | 13:56 | 52.06 | | |
| MCH | SN | 97 | ES | 2 | | 13:57 | 03.06 | | |
| MCH | SN | 97 | | | | 13:57 | 03.58 | 17 | 0.15 |
| MCH | SE | 97 | | | | 13:57 | 03.67 | 11 | 0.18 |
| WCB | SZ | 130 | EP | 2 | | 13:56 | 57.38 | | |
| WCB | SN | 130 | | | | 13:57 | 13.86 | 7 | 0.27 |
| WCB | SE | 130 | | | | 13:57 | 13.60 | 6 | 0.18 |

**August 9 2001 Time: 01:25 32.4 UTC Magnitude: 0.4 ML**
**Lat: 55.250N Lon: -3.220W Depth: 14.6 km**
**Grid Ref: 322.46 kmE 595.74 kmE RMS: 0.02 secs**
**Locality: ESKDALEMUIR,D & G Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BHH | SZ | 17 | IP | | D | 01:25 | 36.45 | | |
| BHH | SN | 17 | ES | 2 | | 01:25 | 39.30 | | |
| BHH | SN | 17 | | | | 01:25 | 39.48 | 3 | 0.02 |
| BHH | SE | 17 | | | | 01:25 | 39.43 | 18 | 0.21 |
| BBH | SZ | 23 | EP | 2 | | 01:25 | 37.08 | | |
| BWH | SZ | 29 | IP | | U | 01:25 | 38.06 | | |
| BTA | SZ | 51 | EP | 2 | | 01:25 | 41.60 | | |
| BTA | SE | 51 | ES | 2 | | 01:25 | 47.36 | | |
| BTA | SN | 51 | | | | 01:25 | 48.30 | 9 | 0.24 |
| BTA | SE | 51 | | | | 01:25 | 48.26 | 5 | 0.17 |
| BDL | SZ | 53 | EP | 2 | | 01:25 | 41.78 | | |

**August 13 2001 Time: 09:56 58.5 UTC Magnitude: 2.0 ML**
**Lat: 60.480N Lon: 2.019W Depth: 15.0 km**
**Grid Ref: 620.82 kmE 1184.03 kmE RMS: 0.08 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YEL | SZ | 171 | EP | 2 | | 09:57 | 23.68 | | |
| LRW | SZ | 181 | EP | 2 | | 09:57 | 24.90 | | |
| LRW | SE | 181 | ES | 3 | | 09:57 | 44.30 | | |
| LRW | SN | 181 | | | | 09:57 | 47.42 | 14 | 0.16 |
| LRW | SE | 181 | | | | 09:57 | 47.53 | 13 | 0.14 |
| SAN | SZ | 188 | EP | 3 | | 09:57 | 25.97 | | |
| WAL | SZ | 202 | EP | 3 | | 09:57 | 28.78 | | |

**August 16 2001 Time: 00:34 59.7 UTC Magnitude: 0.1 ML**
**Lat: 49.238N Lon: -2.164W Depth: 9.6 km**
**Grid Ref: 388.06 kmE -73.55 kmE RMS: 0.01 secs**
**Locality: JERSEY,CHANNEL ISLANDS Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| JLP | SZ | 5 | IP | 1 | U | 00:35 | 01.68 | | |
| JLP | SZ | 5 | ES | 2 | | 00:35 | 03.13 | | |
| JRS | SZ | 7 | IP | | D | 00:35 | 01.93 | | |
| JRS | SE | 7 | ES | 2 | | 00:35 | 03.58 | | |
| JRS | SN | 7 | | | | 00:35 | 03.62 | 9 | 0.08 |
| JRS | SE | 7 | | | | 00:35 | 03.62 | 29 | 0.10 |
| JQE | SZ | 10 | IP | | D | 00:35 | 02.29 | | |
| JQE | SZ | 10 | ES | 3 | | 00:35 | 04.11 | | |

**August 25 2001 Time: 03:10 13.6 UTC Magnitude: 0.4 ML**
**Lat: 52.032N Lon: -2.837W Depth: 18.5 km**
**Grid Ref: 342.60 kmE 237.48 kmE RMS: 0.04 secs**
**Locality: HEREFORD,HER & WOR Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| MCH | SZ | 12 | EP | 2 | | 03:10 | 17.37 | | |
| MCH | SN | 12 | ES | 2 | | 03:10 | 20.33 | | |
| MCH | SN | 12 | | | | 03:10 | 20.38 | 32 | 0.13 |
| MCH | SE | 12 | | | | 03:10 | 20.41 | 25 | 0.12 |
| HAE | SZ | 20 | IP | | U | 03:10 | 18.19 | | |
| HTR | SZ | 30 | IP | | U | 03:10 | 19.45 | | |
| HGH | SZ | 44 | IP | 1 | D | 03:10 | 21.53 | | |
| SSP | SZ | 47 | IP | | D | 03:10 | 21.90 | | |
| SSP | SN | 47 | ES | 2 | | 03:10 | 28.00 | | |
| SSP | SN | 47 | | | | 03:10 | 28.07 | 3 | 0.05 |
| SSP | SE | 47 | | | | 03:10 | 28.47 | 3 | 0.12 |

**August 30 2001 Time: 01:44 58.5 UTC Magnitude: 0.9 ML**
**Lat: 53.842N Lon: -3.200W Depth: 8.0 km**
**Grid Ref: 321.02 kmE 439.05 kmE RMS: 0.31 secs**
**Locality: IRISH SEA Quality: D**
**Comment: 10KM WEST OF BLACKPOOL**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LMI | SZ | 43 | EP | 2 | | 01:45 | 05.70 | | |
| LMI | SN | 43 | ES | 3 | | 01:45 | 11.17 | | |
| LMI | SN | 43 | | | | 01:45 | 11.25 | 5 | 0.26 |
| LMI | SE | 43 | | | | 01:45 | 12.85 | 6 | 0.18 |
| CDU | SZ | 55 | EP | 3 | | 01:45 | 08.51 | | |
| CSF | SZ | 68 | EP | 2 | | 01:45 | 09.98 | | |
| WPM | SZ | 80 | EP | 2 | | 01:45 | 11.52 | | |
| CKE | SZ | 83 | EP | 2 | | 01:45 | 12.46 | | |

# PHASE DATA : 2001

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WME | SZ | 88 | EP | 2 | 01:45 | 13.44 | | |
| GIM | SN | 97 | ES | 3 | 01:45 | 26.05 | | |
| GIM | SN | 97 | | | 01:45 | 27.27 | 3 | 0.21 |
| GIM | SE | 97 | | | 01:45 | 27.51 | 3 | 0.18 |
| WCB | SZ | 103 | EP | 2 | 01:45 | 14.47 | | |
| WCB | SN | 103 | ES | 2 | 01:45 | 27.29 | | |
| WCB | SN | 103 | | | 01:45 | 28.54 | 4 | 0.16 |
| WCB | SE | 103 | | | 01:45 | 28.70 | 5 | 0.11 |

**August 31 2001 Time: 22:32 24.4 UTC Magnitude: 1.0 ML**
**Lat: 51.830N Lon: -2.906W Depth: 12.8 km**
**Grid Ref: 337.57 kmE 215.00 kmE RMS: 0.08 secs**
**Locality: ABERGAVENNY,GWENT Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| MCH | SZ | 20 | EP | 2 | | 22:32 | 28.53 | | |
| MCH | SN | 20 | ES | 2 | | 22:32 | 31.28 | | |
| MCH | SN | 20 | | | | 22:32 | 31.86 | 49 | 0.12 |
| MCH | SE | 20 | | | | 22:32 | 31.89 | 136 | 0.17 |
| HGH | SZ | 23 | IP | 1 | D | 22:32 | 28.82 | | |
| HAE | SZ | 34 | EP | 2 | | 22:32 | 30.49 | | |
| HTR | SZ | 37 | IP | | U | 22:32 | 31.03 | | |
| SSP | SZ | 67 | EP | 2 | | 22:32 | 36.14 | | |
| SSP | SN | 67 | ES | 2 | | 22:32 | 44.18 | | |
| SSP | SN | 67 | | | | 22:32 | 45.72 | 6 | 0.18 |
| SSP | SE | 67 | | | | 22:32 | 46.29 | 3 | 0.16 |
| SSW | SZ | 74 | EP | 2 | | 22:32 | 36.95 | | |
| HSA | SZ | 87 | EP | 2 | | 22:32 | 38.69 | | |

**September 1 2001 Time: 12:09 52.0 UTC Magnitude: 1.8 ML**
**Lat: 56.237N Lon: -3.744W Depth: 4.2 km**
**Grid Ref: 291.94 kmE 706.30 kmE RMS: 0.05 secs**
**Locality: BLACKFORD,TAYSIDE Quality: B**
**Comment: FELT GLENDEVON Intensity: 3+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| PCO | SZ | 36 | EP | 2 | | 12:09 | 58.59 | | |
| EAB | SZ | 37 | IP | | U | 12:09 | 58.80 | | |
| EAU | SZ | 47 | EP | 2 | | 12:10 | 00.50 | | |
| EDI | SZ | 49 | EP | 2 | | 12:10 | 00.78 | | |
| EDI | SN | 49 | ES | 2 | | 12:10 | 06.96 | | |
| EDI | SN | 49 | | | | 12:10 | 07.04 | 48 | 0.19 |
| EDI | SE | 49 | | | | 12:10 | 07.24 | 61 | 0.27 |
| EDU | SZ | 57 | EP | 2 | | 12:10 | 01.94 | | |
| PGB | SE | 66 | ES | 2 | | 12:10 | 12.27 | | |
| PGB | SN | 66 | | | | 12:10 | 14.47 | 32 | 0.31 |
| PGB | SE | 66 | | | | 12:10 | 14.64 | 43 | 0.17 |
| PCA | SZ | 68 | EP | 2 | | 12:10 | 03.69 | | |
| PMS | SZ | 76 | EP | 2 | | 12:10 | 04.82 | | |

**September 2 2001 Time: 05:29 50.6 UTC Magnitude: 1.3 ML**
**Lat: 57.641N Lon: -5.650W Depth: 4.1 km**
**Grid Ref: 182.20 kmE 867.03 kmE RMS: 0.09 secs**
**Locality: GAIRLOCH,HIGHAND Quality: B**
**Comment: 10KM SOUTH OF GAIRLOCH**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| RRR | SZ | 26 | EP | 2 | | 05:29 | 55.42 | | |
| RRR | SN | 26 | ES | 2 | | 05:29 | 58.95 | | |
| RRR | SN | 26 | | | | 05:29 | 59.77 | 46 | 0.16 |
| RRR | SE | 26 | | | | 05:29 | 59.67 | 75 | 0.16 |
| KAC | SZ | 26 | IP | | U | 05:29 | 55.56 | | |
| KPL | SZ | 34 | IP | 1 | U | 05:29 | 56.70 | | |
| KPL | SN | 34 | ES | 2 | | 05:30 | 00.38 | | |
| KPL | SN | 34 | | | | 05:30 | 00.65 | 64 | 0.12 |
| KPL | SE | 34 | | | | 05:30 | 01.01 | 71 | 0.18 |
| KSB | SZ | 50 | IP | | U | 05:29 | 59.31 | | |
| REB | SZ | 58 | EP | 2 | | 05:30 | 00.43 | | |
| RRH | SZ | 69 | EP | 2 | | 05:30 | 02.51 | | |
| KNR | SZ | 100 | IP | | U | 05:30 | 07.40 | | |

**September 3 2001 Time: 22:06 29.9 UTC Magnitude: 0.5 ML**
**Lat: 57.023N Lon: -5.780W Depth: 4.0 km**
**Grid Ref: 170.60 kmE 798.78 kmE RMS: 0.08 secs**
**Locality: MALLAIG,HIGHLAND Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 30 | EP | 2 | | 22:06 | 35.56 | | |
| KPL | SZ | 36 | EP | 3 | | 22:06 | 36.45 | | |
| KPL | SE | 36 | ES | 3 | | 22:06 | 41.00 | | |
| KPL | SN | 36 | | | | 22:06 | 41.19 | 4 | 0.17 |
| KPL | SE | 36 | | | | 22:06 | 41.42 | 6 | 0.13 |
| KNR | SZ | 54 | EP | 2 | | 22:06 | 39.37 | | |
| KAC | SZ | 60 | EP | 3 | | 22:06 | 40.53 | | |

**September 5 2001 Time: 03:48 21.4 UTC Magnitude: 1.1 ML**
**Lat: 52.738N Lon: -2.960W Depth: 10.4 km**
**Grid Ref: 335.17 kmE 316.05 kmE RMS: 0.07 secs**
**Locality: SHREWSBURY,SHROPSHIRE Quality: C**
**Comment: 15KM WEST OF SHREWSBURY**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SBD | SZ | 27 | IP | | D | 03:48 | 26.37 | | |
| SSP | SZ | 37 | IP | | D | 03:48 | 27.96 | | |
| SSP | SN | 37 | ES | 2 | | 03:48 | 32.59 | | |
| SSP | SN | 37 | | | | 03:48 | 33.26 | 24 | 0.17 |
| SSP | SE | 37 | | | | 03:48 | 33.54 | 33 | 0.19 |
| WFB | SZ | 73 | EP | 2 | | 03:48 | 33.88 | | |
| HTR | SZ | 76 | EP | 2 | | 03:48 | 34.42 | | |
| MCH | SZ | 82 | EP | 3 | | 03:48 | 35.58 | | |
| MCH | SE | 82 | ES | 2 | | 03:48 | 45.23 | | |
| MCH | SN | 82 | | | | 03:48 | 45.61 | 3 | 0.12 |
| MCH | SE | 82 | | | | 03:48 | 45.62 | 6 | 0.19 |
| HAE | SZ | 83 | EP | 2 | | 03:48 | 35.40 | | |
| WPM | SZ | 86 | EP | 2 | | 03:48 | 35.75 | | |
| YLL | SZ | 93 | EP | 2 | | 03:48 | 37.10 | | |

**September 13 2001 Time: 23:45 34.3 UTC Magnitude: 1.0 ML**
**Lat: 52.036N Lon: -2.832W Depth: 20.7 km**
**Grid Ref: 342.97 kmE 237.87 kmE RMS: 0.04 secs**
**Locality: HEREFORD,HER & WOR Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| MCH | SZ | 12 | IP | | U | 23:45 | 38.28 | | |
| MCH | SN | 12 | ES | 2 | | 23:45 | 41.22 | | |
| MCH | SN | 12 | | | | 23:45 | 41.27 | 114 | 0.13 |
| MCH | SE | 12 | | | | 23:45 | 41.29 | 95 | 0.13 |
| HAE | SZ | 20 | IP | 1 | U | 23:45 | 39.06 | | |
| HTR | SZ | 30 | IP | | U | 23:45 | 40.33 | | |
| HGH | SZ | 44 | IP | | D | 23:45 | 42.40 | | |
| SSP | SZ | 47 | IP | | D | 23:45 | 42.79 | | |
| SSP | SE | 47 | ES | 2 | | 23:45 | 48.76 | | |
| SSP | SN | 47 | | | | 23:45 | 48.97 | 11 | 0.13 |
| SSP | SE | 47 | | | | 23:45 | 49.10 | 14 | 0.16 |

**September 14 2001 Time: 19:33 34.1 UTC Magnitude: 0.8 ML**
**Lat: 57.653N Lon: -5.341W Depth: 5.2 km**
**Grid Ref: 200.69 kmE 867.39 kmE RMS: 0.08 secs**
**Locality: KINLOCHEWE,HIGHLAND Quality: C**
**Comment: 5KM SE OF KINLOCHEWE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KAC | SZ | 17 | IP | 1 | U | 19:33 | 37.51 | | |
| RRR | SZ | 36 | IP | 1 | U | 19:33 | 40.74 | | |
| RRR | SN | 36 | ES | 3 | | 19:33 | 45.35 | | |
| RRR | SN | 36 | | | | 19:33 | 45.51 | 17 | 0.12 |
| RRR | SE | 36 | | | | 19:33 | 45.43 | 15 | 0.14 |
| KPL | SZ | 40 | EP | 3 | | 19:33 | 41.40 | | |
| KPL | SE | 40 | ES | 3 | | 19:33 | 46.44 | | |
| KPL | SN | 40 | | | | 19:33 | 46.81 | 5 | 0.10 |
| KPL | SE | 40 | | | | 19:33 | 46.74 | 9 | 0.16 |

**September 16 2001 Time: 02:44 31.4 UTC Magnitude: 1.8 ML**
**Lat: 51.742N Lon: -4.134W Depth: 13.5 km**
**Grid Ref: 252.68 kmE 207.02 kmE RMS: 0.07 secs**
**Locality: LLANELLI,DYFED Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HSA | SZ | 2 | IP | | U | 02:44 | 33.77 | | |
| HPE | SZ | 49 | IP | 1 | D | 02:44 | 39.89 | | |
| HTR | SZ | 70 | EP | 2 | | 02:44 | 43.17 | | |
| HEX | SZ | 79 | EP | 2 | | 02:44 | 44.42 | | |
| MCH | SZ | 83 | EP | 2 | | 02:44 | 45.08 | | |
| MCH | SN | 83 | ES | 2 | | 02:44 | 55.10 | | |
| MCH | SN | 83 | | | | 02:44 | 55.84 | 16 | 0.13 |
| MCH | SE | 83 | | | | 02:44 | 57.11 | 15 | 0.14 |
| HTL | SZ | 87 | IP | 1 | U | 02:44 | 46.02 | | |
| HTL | SN | 87 | ES | 2 | | 02:44 | 55.83 | | |
| HTL | SN | 87 | | | | 02:44 | 57.75 | 34 | 0.14 |
| HTL | SE | 87 | | | | 02:44 | 57.75 | 45 | 0.16 |
| HGH | SZ | 93 | EP | 2 | | 02:44 | 46.65 | | |
| SSP | SZ | 103 | EP | 2 | | 02:44 | 48.41 | | |
| SSP | SN | 103 | | | | 02:45 | 04.94 | 37 | 0.20 |
| SSP | SE | 103 | | | | 02:45 | 05.22 | 35 | 0.24 |

**September 18 2001 Time: 05:58 42.4 UTC Magnitude: 2.9 ML**
**Lat: 62.189N Lon: 2.316W Depth: 15.0 km**
**Grid Ref: 624.51 kmE 1375.10 kmE RMS: 0.05 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YEL | SZ | 258 | IP | 1 | U | 05:59 | 18.42 | | |
| LRW | SZ | 296 | IP | 1 | D | 05:59 | 23.26 | | |
| LRW | SE | 296 | ES | 3 | | 05:59 | 52.97 | | |
| LRW | SN | 296 | | | | 05:59 | 56.59 | 28 | 0.15 |
| LRW | SE | 296 | | | | 05:59 | 57.30 | 27 | 0.09 |
| WAL | SZ | 302 | EP | 2 | | 05:59 | 23.88 | | |
| SAN | SZ | 309 | EP | 2 | | 05:59 | 24.67 | | |
| OST | SZ | 437 | EP | 3 | | 05:59 | 40.29 | | |
| OBR | SZ | 500 | EP | 3 | | 05:59 | 47.61 | | |
| ORE | SZ | 526 | EP | 3 | | 05:59 | 51.36 | | |
| ORE | SE | 526 | ES | 3 | | 06:00 | 41.11 | | |

**October 5 2001 Time: 22:49 03.5 UTC Magnitude: 0.5 ML**
**Lat: 55.245N Lon: -3.490W Depth: 6.0 km**
**Grid Ref: 305.25 kmE 595.53 kmE RMS: 0.08 secs**
**Locality: JOHNSTONEBRIDGE,D & G Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 13 | IP | | U | 22:49 | 06.31 | | |
| ESK | SZ | 20 | IP | | U | 22:49 | 07.50 | | |
| ESK | SN | 20 | ES | 2 | | 22:49 | 10.01 | | |
| ESK | SN | 20 | | | | 22:49 | 11.17 | 11 | 0.17 |
| ESK | SE | 20 | | | | 22:49 | 10.10 | 16 | 0.16 |
| BHH | SZ | 24 | IP | | D | 22:49 | 08.19 | | |
| BHH | SN | 24 | ES | 2 | | 22:49 | 11.13 | | |
| BHH | SN | 24 | | | | 22:49 | 11.18 | 29 | 0.17 |
| BHH | SE | 24 | | | | 22:49 | 11.18 | 38 | 0.20 |
| ECK | SZ | 24 | IP | | U | 22:49 | 08.17 | | |
| BBH | SZ | 38 | IP | | U | 22:49 | 10.37 | | |

**October 8 2001 Time: 10:33 14.1 UTC Magnitude: 1.5 ML**
**Lat: 51.079N Lon: -4.537W Depth: 22.1 km**
**Grid Ref: 222.35 kmE 134.23 kmE RMS: 0.18 secs**
**Locality: OFF HARTLAND PT,DEVON Quality: C**
**Comment: 6KM NORTH OF HARTLAND PT**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HTL | SZ | 10 | IP | | D | 10:33 | 18.11 | | |

# PHASE DATA : 2001

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HTL | SN | 10 | ES | 2 | 10:33 | 21.53 | | |
| HTL | SN | 10 | | | 10:33 | 22.01 | 91 | 0.11 |
| HTL | SE | 10 | | | 10:33 | 21.99 | 67 | 0.08 |
| HEX | SZ | 51 | EP | 2 | 10:33 | 23.07 | | |
| HEX | SZ | 51 | ES | 3 | 10:33 | 29.55 | | |
| HSA | SZ | 79 | EP | 2 | 10:33 | 26.98 | | |
| HPE | SZ | 97 | EP | 3 | 10:33 | 29.18 | | |
| MCH | SZ | 148 | EP | 2 | 10:33 | 35.66 | | |
| MCH | SE | 148 | ES | 2 | 10:33 | 52.58 | | |
| MCH | SN | 148 | | | 10:33 | 57.28 | 13 | 0.13 |
| MCH | SE | 148 | | | 10:33 | 54.12 | 15 | 0.12 |
| SSP | SZ | 179 | EP | 2 | 10:33 | 39.66 | | |
| SSP | SN | 179 | | | 10:34 | 05.97 | 7 | 0.16 |
| SSP | SE | 179 | | | 10:34 | 02.85 | 6 | 0.26 |

**October 10 2001 Time: 02:52 25.3 UTC Magnitude: 3.1 ML**
**Lat: 51.698N Lon: -3.255W Depth: 6.5 km**
**Grid Ref: 313.30 kmE 200.73 kmE RMS: 0.09 secs**
**Locality: BARGOED,MID GLAMORGAN Quality: C**
**Comment: FELT BARGOED... Intensity: 4**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 32 | IP | | U | 02:52 | 31.10 | | |
| MCH | SZ | 38 | IP | | U | 02:52 | 31.96 | | |
| MCH | SN | 38 | ES | 2 | | 02:52 | 36.94 | | |
| HTR | SZ | 42 | IP | | U | 02:52 | 32.71 | | |
| SMD | SZ | 57 | IP | | D | 02:52 | 35.02 | | |
| HAE | SZ | 62 | IP | | U | 02:52 | 35.96 | | |
| HSA | SZ | 62 | IP | | U | 02:52 | 35.87 | | |
| HEX | SZ | 80 | IP | | U | 02:52 | 38.89 | | |
| SSW | SZ | 101 | IP | | U | 02:52 | 42.81 | | |
| HPE | SZ | 108 | EP | 2 | | 02:52 | 42.79 | | |
| HTL | SZ | 116 | IP | | U | 02:52 | 45.03 | | |
| CWF | SZ | 176 | EP | 2 | | 02:52 | 53.42 | | |
| CWF | SN | 176 | | | | 02:53 | 16.14 | 342 | 0.23 |
| CWF | SE | 176 | | | | 02:53 | 16.13 | 254 | 0.24 |
| CR2 | SZ | 217 | EP | 2 | | 02:52 | 57.28 | | |
| CR2 | SN | 217 | | | | 02:53 | 29.17 | 53 | 0.18 |
| CR2 | SE | 217 | | | | 02:53 | 27.34 | 53 | 0.19 |

**October 10 2001 Time: 05:01 48.0 UTC Magnitude: 1.6 ML**
**Lat: 51.700N Lon: -3.253W Depth: 5.3 km**
**Grid Ref: 313.39 kmE 200.88 kmE RMS: 0.07 secs**
**Locality: BARGOED,MID GLAMORGAN Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 32 | IP | | U | 05:01 | 53.85 | | |
| MCH | SZ | 38 | IP | | U | 05:01 | 54.72 | | |
| MCH | SN | 38 | ES | 2 | | 05:01 | 59.72 | | |
| MCH | SN | 38 | | | | 05:01 | 59.88 | 70 | 0.16 |
| MCH | SE | 38 | | | | 05:01 | 59.97 | 42 | 0.13 |
| HTR | SZ | 42 | EP | 2 | | 05:01 | 55.41 | | |
| HAE | SZ | 62 | EP | 2 | | 05:01 | 58.79 | | |
| HSA | SZ | 63 | EP | 2 | | 05:01 | 58.67 | | |
| HEX | SZ | 80 | EP | 2 | | 05:02 | 01.44 | | |
| HTL | SZ | 116 | EP | 2 | | 05:02 | 08.12 | | |
| HTL | SN | 116 | | | | 05:02 | 22.77 | 13 | 0.32 |
| HTL | SE | 116 | | | | 05:02 | 22.90 | 12 | 0.20 |

**October 14 2001 Time: 10:17 32.6 UTC Magnitude: 2.7 ML**
**Lat: 53.373N Lon: 2.794W Depth: 15.0 km**
**Grid Ref: 718.82 kmE 396.96 kmE RMS: 0.45 secs**
**Locality: SOUTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| AWI | SZ | 109 | IP | 1 | U | 10:17 | 49.68 | | |
| ABA | SZ | 123 | EP | 2 | | 10:17 | 51.63 | | |
| AEU | SZ | 134 | EP | 3 | | 10:17 | 54.43 | | |
| AEU | SN | 134 | ES | 3 | | 10:18 | 08.80 | | |
| AEU | SN | 134 | | | | 10:18 | 10.08 | 174 | 0.37 |
| AEU | SE | 134 | | | | 10:18 | 10.21 | 187 | 0.33 |
| AWH | SZ | 149 | EP | 3 | | 10:17 | 56.30 | | |
| CWF | SZ | 284 | EP | 3 | | 10:18 | 13.22 | | |
| CWF | SE | 284 | ES | 3 | | 10:18 | 42.83 | | |
| CWF | SN | 284 | | | | 10:18 | 50.55 | 21 | 0.27 |
| CWF | SE | 284 | | | | 10:18 | 45.08 | 8 | 0.30 |
| KBI | SZ | 289 | EP | 3 | | 10:18 | 13.37 | | |

**October 17 2001 Time: 23:03 11.1 UTC Magnitude: 2.4 ML**
**Lat: 53.209N Lon: -2.745W Depth: 8.7 km**
**Grid Ref: 350.22 kmE 368.25 kmE RMS: 0.05 secs**
**Locality: CHESTER,CHESHIRE Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| B203 | SZ | 17 | IP | | | 23:03 | 14.63 | | |
| B203 | SZ | 17 | ES | 2 | | 23:03 | 17.00 | | |
| B204 | SZ | 17 | IP | | | 23:03 | 14.64 | | |
| B204 | SZ | 17 | ES | 2 | | 23:03 | 17.06 | | |
| B101 | SZ | 17 | IP | | | 23:03 | 14.68 | | |
| B101 | SZ | 17 | ES | 2 | | 23:03 | 17.11 | | |
| SBD | SZ | 48 | IP | | U | 23:03 | 19.38 | | |
| KWE | SZ | 64 | EP | 2 | | 23:03 | 21.85 | | |
| WPM | SZ | 78 | IP | | U | 23:03 | 23.99 | | |
| SSP | SZ | 91 | IP | | U | 23:03 | 26.17 | | |
| SSP | SN | 91 | ES | 2 | | 23:03 | 37.05 | | |
| SSP | SN | 91 | | | | 23:03 | 39.40 | 64 | 0.16 |
| SSP | SE | 91 | | | | 23:03 | 37.97 | 127 | 0.25 |
| LMI | SZ | 119 | EP | 2 | | 23:03 | 30.41 | | |
| LMI | SN | 119 | ES | 2 | | 23:03 | 43.89 | | |
| LMI | SN | 119 | | | | 23:03 | 45.40 | 61 | 0.25 |
| LMI | SE | 119 | | | | 23:03 | 45.70 | 109 | 0.24 |
| WCB | SE | 122 | ES | 2 | | 23:03 | 44.70 | | |
| WCB | SN | 122 | | | | 23:03 | 46.20 | 33 | 0.25 |
| WCB | SE | 122 | | | | 23:03 | 46.35 | 55 | 0.19 |
| MCH | SZ | 136 | EP | 2 | | 23:03 | 33.34 | | |
| MCH | SN | 136 | ES | 2 | | 23:03 | 49.09 | | |
| MCH | SN | 136 | | | | 23:03 | 51.38 | 125 | 0.21 |
| MCH | SE | 136 | | | | 23:03 | 51.94 | 104 | 0.21 |

**October 17 2001 Time: 23:05 59.2 UTC Magnitude: 1.5 ML**
**Lat: 53.208N Lon: -2.728W Depth: 9.2 km**
**Grid Ref: 351.42 kmE 368.18 kmE RMS: 0.12 secs**
**Locality: CHESTER,CHESHIRE Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| B203 | SZ | 16 | IP | | | 23:06 | 02.49 | | |
| B203 | SZ | 16 | ES | 2 | | 23:06 | 04.89 | | |
| B204 | SZ | 16 | IP | | | 23:06 | 02.49 | | |
| B204 | SZ | 16 | ES | 2 | | 23:06 | 04.89 | | |
| SBD | SZ | 49 | EP | 2 | | 23:06 | 07.36 | | |
| KWE | SZ | 63 | EP | 2 | | 23:06 | 09.83 | | |
| WPM | SZ | 79 | EP | 2 | | 23:06 | 12.43 | | |
| SSP | SZ | 92 | EP | 3 | | 23:06 | 14.84 | | |
| SSP | SE | 92 | ES | 3 | | 23:06 | 25.40 | | |
| SSP | SN | 92 | | | | 23:06 | 27.13 | 6 | 0.18 |
| SSP | SE | 92 | | | | 23:06 | 25.67 | 11 | 0.24 |
| LMI | SZ | 119 | EP | 2 | | 23:06 | 18.44 | | |
| LMI | SN | 119 | ES | 2 | | 23:06 | 32.34 | | |
| LMI | SN | 119 | | | | 23:06 | 32.62 | 8 | 0.23 |
| LMI | SE | 119 | | | | 23:06 | 33.24 | 21 | 0.98 |
| WCB | SN | 123 | ES | 2 | | 23:06 | 33.14 | | |
| WCB | SN | 123 | | | | 23:06 | 34.22 | 8 | 0.29 |
| WCB | SE | 123 | | | | 23:06 | 34.13 | 11 | 0.17 |

**October 17 2001 Time: 23:21 08.7 UTC Magnitude: 1.8 ML**
**Lat: 61.788N Lon: 2.354W Depth: 13.5 km**
**Grid Ref: 629.47 kmE 1330.71 kmE RMS: 0.22 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YEL | SZ | 231 | EP | 2 | | 23:21 | 41.50 | | |
| LRW | SZ | 265 | EP | 3 | D | 23:21 | 46.16 | | |
| LRW | SE | 265 | ES | 3 | | 23:22 | 12.40 | | |
| LRW | SN | 265 | | | | 23:22 | 13.38 | 4 | 0.12 |
| LRW | SE | 265 | | | | 23:22 | 13.25 | 3 | 0.17 |
| WAL | SZ | 274 | EP | 3 | | 23:21 | 47.02 | | |
| SAN | SZ | 277 | EP | 3 | | 23:21 | 47.07 | | |

**October 17 2001 Time: 23:21 35.2 UTC Magnitude: 2.1 ML**
**Lat: 53.206N Lon: -2.751W Depth: 6.9 km**
**Grid Ref: 349.83 kmE 368.01 kmE RMS: 0.05 secs**
**Locality: CHESTER,CHESHIRE Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| B203 | SZ | 17 | IP | | | 23:21 | 38.81 | | |
| B203 | SZ | 17 | ES | 2 | | 23:21 | 41.23 | | |
| B207 | SZ | 18 | IP | | | 23:21 | 38.82 | | |
| B207 | SZ | 18 | ES | 2 | | 23:21 | 41.24 | | |
| SBD | SZ | 48 | EP | 1 | U | 23:21 | 43.55 | | |
| KWE | SZ | 65 | IP | | D | 23:21 | 46.11 | | |
| WPM | SZ | 77 | EP | 2 | | 23:21 | 48.09 | | |
| SSP | SZ | 91 | EP | 2 | | 23:21 | 50.30 | | |
| SSP | SN | 91 | ES | 2 | | 23:22 | 01.08 | | |
| SSP | SN | 91 | | | | 23:22 | 03.55 | 34 | 0.08 |
| SSP | SE | 91 | | | | 23:22 | 02.13 | 55 | 0.23 |
| LMI | SZ | 119 | EP | 2 | | 23:21 | 54.45 | | |
| LMI | SE | 119 | ES | 2 | | 23:22 | 08.42 | | |
| LMI | SN | 119 | | | | 23:22 | 09.42 | 21 | 0.40 |
| LMI | SE | 119 | | | | 23:22 | 09.88 | 31 | 0.20 |
| WCB | SZ | 121 | EP | 2 | | 23:21 | 55.15 | | |
| WCB | SE | 121 | ES | 2 | | 23:22 | 08.81 | | |
| WCB | SN | 121 | | | | 23:22 | 10.76 | 29 | 0.24 |
| WCB | SE | 121 | | | | 23:22 | 10.51 | 40 | 0.14 |
| MCH | SZ | 136 | EP | 2 | | 23:21 | 57.63 | | |
| MCH | SN | 136 | | | | 23:22 | 15.91 | 53 | 0.22 |
| MCH | SE | 136 | | | | 23:22 | 15.09 | 42 | 0.14 |

**October 18 2001 Time: 03:50 13.6 UTC Magnitude: 2.5 ML**
**Lat: 51.703N Lon: -3.255W Depth: 7.9 km**
**Grid Ref: 313.26 kmE 201.31 kmE RMS: 0.10 secs**
**Locality: BARGOED,MID GLAMORGAN Quality: C**
**Comment: FELT BARGOED... Intensity: 4+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 32 | IP | | U | 03:50 | 19.30 | | |
| MCH | SZ | 37 | IP | | U | 03:50 | 20.15 | | |
| MCH | SN | 37 | ES | 2 | | 03:50 | 25.12 | | |
| SMD | SZ | 58 | EP | 3 | | 03:50 | 23.38 | | |
| HAE | SZ | 62 | IP | | U | 03:50 | 24.17 | | |
| HSA | SZ | 62 | IP | | U | 03:50 | 24.09 | | |
| SSP | SZ | 80 | IP | | U | 03:50 | 26.97 | | |
| SSP | SN | 80 | | | | 03:50 | 44.44 | 84 | 0.15 |
| SSP | SE | 80 | | | | 03:50 | 43.98 | 72 | 0.17 |
| HEX | SZ | 80 | EP | 1 | U | 03:50 | 27.12 | | |
| SWN | SZ | 103 | EP | 2 | | 03:50 | 31.47 | | |
| SWN | SN | 103 | | | | 03:50 | 46.09 | 148 | 0.17 |
| SWN | SE | 103 | | | | 03:50 | 49.42 | 72 | 0.12 |
| HPE | SZ | 108 | EP | 2 | | 03:50 | 31.07 | | |
| HTL | SZ | 117 | IP | | U | 03:50 | 33.24 | | |
| HTL | SE | 117 | ES | 2 | | 03:50 | 46.17 | | |
| HTL | SN | 117 | | | | 03:50 | 48.45 | 140 | 0.19 |
| HTL | SE | 117 | | | | 03:50 | 48.36 | 130 | 0.19 |

**October 21 2001 Time: 00:31 29.0 UTC Magnitude: 3.7 ML**
**Lat: 56.890N Lon: 7.431W Depth: 15.0 km**
**Grid Ref: 973.50 kmE 817.27 kmE RMS: 0.56 secs**

# PHASE DATA : 2001

**Locality: NORWEGIAN-DANISH BASIN** **Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EDR | SZ | 608 | EP | 2 | | 00:32 | 48.84 | | |
| ESY | SZ | 630 | EP | 2 | | 00:32 | 50.80 | | |
| MME | SZ | 632 | EP | 2 | | 00:32 | 51.88 | | |
| EDU | SZ | 641 | EP | 3 | | 00:32 | 52.95 | | |
| MCD | SZ | 651 | EP | 4 | | 00:32 | 55.37 | | |
| MCD | SN | 651 | ES | 3 | | 00:33 | 55.28 | | |
| MCD | SN | 651 | | | | 00:33 | 59.44 | 12 | 0.41 |
| MCD | SE | 651 | | | | 00:33 | 59.52 | 14 | 0.59 |
| OBR | SZ | 659 | EP | 3 | | 00:32 | 56.15 | | |
| EBL | SZ | 660 | EP | 2 | | 00:32 | 54.49 | | |
| EDI | SZ | 665 | EP | 3 | | 00:32 | 55.27 | | |
| EDI | SN | 665 | ES | 3 | | 00:33 | 59.41 | | |
| EDI | SN | 665 | | | | 00:34 | 06.92 | 8 | 0.19 |
| EDI | SE | 665 | | | | 00:34 | 12.33 | 9 | 0.39 |
| OHO | SZ | 669 | EP | 3 | | 00:32 | 56.52 | | |
| BTA | SZ | 670 | EP | 2 | | 00:32 | 55.06 | | |
| BTA | SE | 670 | ES | 2 | | 00:33 | 59.87 | | |
| BTA | SN | 670 | | | | 00:34 | 03.17 | 30 | 0.21 |
| BTA | SE | 670 | | | | 00:34 | 03.89 | 26 | 0.37 |
| BBH | SZ | 675 | EP | 2 | | 00:32 | 55.89 | | |
| EAU | SZ | 682 | EP | 3 | | 00:32 | 57.74 | | |
| BDL | SZ | 691 | EP | 3 | | 00:32 | 57.57 | | |
| ORE | SZ | 693 | EP | 2 | | 00:32 | 59.17 | | |
| ORE | SN | 693 | ES | 3 | | 00:34 | 03.44 | | |
| ORE | SN | 693 | | | | 00:34 | 07.91 | 17 | 0.29 |
| ORE | SE | 693 | | | | 00:34 | 11.88 | 15 | 0.15 |
| BHH | SZ | 694 | EP | 2 | | 00:32 | 58.26 | | |
| BHH | SE | 694 | ES | 3 | | 00:34 | 03.73 | | |
| BHH | SN | 694 | | | | 00:34 | 10.07 | 39 | 0.38 |
| BHH | SE | 694 | | | | 00:34 | 20.74 | 41 | 0.43 |
| BBO | SZ | 711 | EP | 2 | | 00:32 | 59.99 | | |

**October 22 2001 Time: 15:16 48.3 UTC Magnitude: 1.6 ML**
**Lat: 51.702N Lon: -3.254W Depth: 7.6 km**
**Grid Ref: 313.37 kmE 201.12 kmE RMS: 0.10 secs**
**Locality: BARGOED,MID GLAMORGAN Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HGH | SZ | 32 | EP | 2 | | 15:16 | 53.99 | | |
| MCH | SZ | 37 | IP | | U | 15:16 | 54.85 | | |
| MCH | SN | 37 | ES | 2 | | 15:16 | 59.85 | | |
| MCH | SN | 37 | | | | 15:17 | 00.18 | 82 | 0.16 |
| MCH | SE | 37 | | | | 15:16 | 59.98 | 60 | 0.12 |
| HSA | SZ | 62 | IP | | U | 15:16 | 58.77 | | |
| HAE | SZ | 62 | EP | 2 | | 15:16 | 58.99 | | |
| HEX | SZ | 80 | EP | 2 | | 15:17 | 01.81 | | |
| HTL | SZ | 117 | EP | 2 | | 15:17 | 08.11 | | |
| HTL | SE | 117 | ES | 2 | | 15:17 | 21.47 | | |
| HTL | SN | 117 | | | | 15:17 | 23.14 | 15 | 0.26 |
| HTL | SE | 117 | | | | 15:17 | 23.08 | 11 | 0.18 |

**October 28 2001 Time: 16:25 25.1 UTC Magnitude: 4.1 ML**
**Lat: 52.846N Lon: -0.856W Depth: 11.6 km**
**Grid Ref: 477.05 kmE 328.28 kmE RMS: 0.14 secs**
**Locality: MELTON MOWBRAY,LEICS Quality: B**
**Comment: FELT MELTON MOWBRAY... Intensity: 5**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KEY | SZ | 15 | EP | 2 | | 16:25 | 28.82 | | |
| KEY2 | AZ | 15 | EP | 2 | | 16:25 | 28.85 | | |
| KEY2 | AE | 15 | ES | 2 | | 16:25 | 31.19 | | |
| KSY | SZ | 22 | IP | | U | 16:25 | 29.47 | | |
| CWF | SZ | 33 | IP | | D | 16:25 | 30.94 | | |
| KBI | SZ | 64 | IP | | D | 16:25 | 35.72 | | |
| KWE | SZ | 69 | IP | | D | 16:25 | 36.48 | | |
| LMK | SZ | 77 | IP | | U | 16:25 | 37.94 | | |
| LDU | AN | 117 | ES | 4 | | 16:25 | 58.06 | | |
| LDU | AN | 117 | | | | 16:25 | 58.87 | 317 | 0.38 |
| LDU | AE | 117 | | | | 16:25 | 58.55 | 163 | 0.56 |
| SSW | SZ | 119 | EP | 1 | U | 16:25 | 44.58 | | |
| AWH | SZ | 125 | EP | 2 | | 16:25 | 45.01 | | |
| SKP | SZ | 125 | IP | 1 | D | 16:25 | 45.35 | | |
| AEU | SZ | 144 | EP | 2 | | 16:25 | 48.13 | | |
| AEU | AZ | 144 | EP | 2 | | 16:25 | 48.90 | | |
| AEU | SN | 144 | ES | 2 | | 16:26 | 04.56 | | |
| AEU | AN | 144 | | | | 16:26 | 06.10 | 241 | 0.43 |
| AEU | AE | 144 | | | | 16:26 | 08.11 | 915 | 0.64 |
| HAE | SZ | 146 | IP | | U | 16:25 | 48.31 | | |
| SSP | SZ | 160 | EP | 2 | | 16:25 | 50.01 | | |
| SSP | SE | 160 | ES | 2 | | 16:26 | 08.66 | | |
| SWN | SZ | 162 | EP | 2 | | 16:25 | 50.93 | | |
| SWN | SN | 162 | ES | 2 | | 16:26 | 10.51 | | |
| MCH | SZ | 174 | IP | | U | 16:25 | 51.72 | | |
| MCH | SN | 174 | ES | 2 | | 16:26 | 12.17 | | |
| TFO | SZ | 237 | EP | 2 | | 16:26 | 00.31 | | |
| TFO | SN | 237 | | | | 16:26 | 39.76 | 545 | 0.31 |
| TFO | SE | 237 | | | | 16:26 | 36.89 | 463 | 0.21 |
| WCB | SZ | 254 | EP | 2 | | 16:26 | 01.09 | | |
| WCB | SN | 254 | | | | 16:26 | 35.94 | 344 | 0.31 |
| WCB | SE | 254 | | | | 16:26 | 36.15 | 294 | 0.28 |
| BBO | SZ | 263 | EP | 2 | | 16:26 | 01.77 | | |
| GIM | SZ | 288 | EP | 2 | | 16:26 | 04.57 | | |
| GIM | SN | 288 | | | | 16:26 | 45.61 | 402 | 0.25 |
| GIM | SE | 288 | | | | 16:26 | 49.56 | 340 | 0.22 |

**November 1 2001 Time: 01:56 11.4 UTC Magnitude: 1.1 ML**
**Lat: 51.069N Lon: -4.585W Depth: 26.9 km**
**Grid Ref: 218.94 kmE 133.18 kmE RMS: 0.02 secs**
**Locality: OFF HARTLAND PT,DEVON Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HTL | SZ | 11 | IP | | D | 01:56 | 16.13 | | |
| HTL | SN | 11 | ES | 2 | | 01:56 | 19.55 | | |
| HTL | SN | 11 | | | | 01:56 | 20.04 | 134 | 0.06 |
| HTL | SE | 11 | | | | 01:56 | 19.64 | 122 | 0.10 |
| HEX | SZ | 55 | EP | 2 | | 01:56 | 21.08 | | |
| HSA | SZ | 82 | EP | 2 | | 01:56 | 24.82 | | |
| HPE | SZ | 98 | EP | 2 | | 01:56 | 26.92 | | |

**November 2 2001 Time: 04:25 14.0 UTC Magnitude: 1.4 ML**
**Lat: 53.049N Lon: -3.348W Depth: 10.5 km**
**Grid Ref: 309.68 kmE 351.11 kmE RMS: 0.07 secs**
**Locality: RUTHIN,CLWYD Quality: C**
**Comment: 7KM SOUTH OF RUTHIN**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SBD | SZ | 17 | IP | | D | 04:25 | 17.34 | | |
| SBD | SZ | 17 | ES | 3 | | 04:25 | 19.81 | | |
| WPM | SZ | 44 | IP | | D | 04:25 | 21.55 | | |
| WFB | SZ | 62 | IP | | U | 04:25 | 24.45 | | |
| YRE | SZ | 73 | IP | 1 | U | 04:25 | 26.21 | | |
| WLF | SZ | 75 | EP | 2 | | 04:25 | 26.45 | | |
| YRC | SZ | 85 | EP | 2 | | 04:25 | 28.02 | | |
| WCB | SZ | 88 | EP | 2 | | 04:25 | 28.74 | | |
| WCB | SN | 88 | ES | 2 | | 04:25 | 38.75 | | |
| WCB | SN | 88 | | | | 04:25 | 40.50 | 7 | 0.08 |
| WCB | SE | 88 | | | | 04:25 | 39.17 | 7 | 0.21 |
| MCH | SZ | 120 | EP | 2 | | 04:25 | 33.36 | | |
| MCH | SN | 120 | | | | 04:25 | 49.41 | 9 | 0.27 |
| MCH | SE | 120 | | | | 04:25 | 49.58 | 13 | 0.32 |

**November 2 2001 Time: 19:59 18.0 UTC Magnitude: 1.5 ML**
**Lat: 49.998N Lon: -5.053W Depth: 23.8 km**
**Grid Ref: 181.26 kmE 15.46 kmE RMS: 0.03 secs**
**Locality: OFF LIZARD PT,CORNWALL Quality: C**
**Comment: 10KM EAST OF LIZARD PT**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CGH | SZ | 10 | IP | | D | 19:59 | 22.18 | | |
| CMA | SZ | 11 | IP | | D | 19:59 | 22.20 | | |
| CBW | SZ | 17 | IP | | D | 19:59 | 22.72 | | |
| CGW | SZ | 17 | IP | | D | 19:59 | 22.62 | | |
| CCO | SZ | 18 | IP | | D | 19:59 | 22.86 | | |
| CR2 | SZ | 21 | IP | | D | 19:59 | 23.06 | | |
| CR2 | SE | 21 | ES | 2 | | 19:59 | 27.00 | | |
| CST | SZ | 23 | IP | 1 | D | 19:59 | 23.35 | | |
| CCA | SZ | 24 | IP | 1 | D | 19:59 | 23.51 | | |
| CPZ | SZ | 42 | IP | | D | 19:59 | 25.72 | | |
| HTL | SZ | 118 | EP | 2 | | 19:59 | 37.02 | | |
| HTL | SN | 118 | | | | 19:59 | 52.43 | 11 | 0.11 |
| HTL | SE | 118 | | | | 19:59 | 52.66 | 9 | 0.13 |

**November 2 2001 Time: 20:01 00.1 UTC Magnitude: 1.2 ML**
**Lat: 49.997N Lon: -5.050W Depth: 24.1 km**
**Grid Ref: 181.44 kmE 15.29 kmE RMS: 0.03 secs**
**Locality: OFF LIZARD PT,CORNWALL Quality: C**
**Comment: 10KM EAST OF LIZARD PT**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CGH | SZ | 10 | IP | | D | 20:01 | 04.35 | | |
| CMA | SZ | 11 | IP | 1 | D | 20:01 | 04.36 | | |
| CBW | SZ | 17 | IP | | D | 20:01 | 04.90 | | |
| CGW | SZ | 17 | IP | 1 | D | 20:01 | 04.79 | | |
| CCO | SZ | 19 | EP | 2 | | 20:01 | 05.00 | | |
| CR2 | SZ | 21 | IP | | D | 20:01 | 05.24 | | |
| CR2 | SN | 21 | ES | 2 | | 20:01 | 09.20 | | |
| CR2 | SN | 21 | | | | 20:01 | 09.32 | 91 | 0.10 |
| CR2 | SE | 21 | | | | 20:01 | 09.34 | 125 | 0.06 |
| CST | SZ | 24 | IP | | D | 20:01 | 05.53 | | |
| CCA | SZ | 25 | IP | | D | 20:01 | 05.69 | | |
| CPZ | SZ | 42 | IP | | D | 20:01 | 07.88 | | |

**November 5 2001 Time: 02:52 18.9 UTC Magnitude: 2.3 ML**
**Lat: 53.174N Lon: -4.438W Depth: 7.5 km**
**Grid Ref: 237.07 kmE 366.87 kmE RMS: 0.18 secs**
**Locality: ANGLESEY,GWYNEDD Quality: C**
**Comment: FELT ANGLESEY Intensity: 2+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LLW | SZ | 63 | EP | 2 | | 02:52 | 29.79 | | |
| LLW | SZ | 63 | ES | 3 | | 02:52 | 37.22 | | |
| SBD | SZ | 85 | EP | 2 | | 02:52 | 32.66 | | |
| SBD | SZ | 85 | ES | 3 | | 02:52 | 42.87 | | |
| GIM | SZ | 125 | EP | 2 | | 02:52 | 39.27 | | |
| GIM | SE | 125 | ES | 2 | | 02:52 | 53.60 | | |
| GIM | SN | 125 | | | | 02:52 | 54.95 | 62 | 0.19 |
| GIM | SE | 125 | | | | 02:52 | 55.36 | 67 | 0.18 |
| LMI | SZ | 138 | EP | 2 | | 02:52 | 41.03 | | |
| LMI | SE | 138 | ES | 2 | | 02:52 | 58.28 | | |
| LMI | SN | 138 | | | | 02:53 | 00.16 | 30 | 0.33 |
| LMI | SE | 138 | | | | 02:53 | 00.97 | 38 | 0.31 |
| HPE | SZ | 140 | EP | 2 | | 02:52 | 41.21 | | |
| DLF | SZ | 141 | EP | 2 | | 02:52 | 41.20 | | |
| HSA | SZ | 160 | EP | 2 | | 02:52 | 44.22 | | |
| MCH | SZ | 163 | EP | 2 | | 02:52 | 44.45 | | |
| MCH | SN | 163 | ES | 2 | | 02:53 | 03.60 | | |
| MCH | SN | 163 | | | | 02:53 | 05.20 | 33 | 0.25 |
| MCH | SE | 163 | | | | 02:53 | 05.05 | 35 | 0.29 |
| KWE | SZ | 175 | ES | 3 | | 02:53 | 06.13 | | |
| DMUB | SZ | 183 | EP | 2 | | 02:52 | 46.30 | | |
| DCN | SZ | 190 | EP | 2 | | 02:52 | 47.20 | | |
| CWF | SN | 216 | ES | 2 | | 02:53 | 15.23 | | |

# PHASE DATA : 2001

**November 7 2001 Time: 04:23 11.7 UTC Magnitude: 0.6 ML**
**Lat: 57.031N Lon: -5.766W Depth: 6.8 km**
**Grid Ref: 171.50 kmE 799.62 kmE RMS: 0.17 secs**
**Locality: MALLAIG,HIGHLAND Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 29 | EP | 3 | | 04:23 | 17.06 | | |
| KSB | SZ | 29 | ES | 3 | | 04:23 | 21.00 | | |
| KPL | SZ | 35 | EP | 2 | | 04:23 | 18.02 | | |
| KPL | SE | 35 | ES | 3 | | 04:23 | 22.59 | | |
| KPL | SN | 35 | | | | 04:23 | 22.96 | 7 | 0.11 |
| KPL | SE | 35 | | | | 04:23 | 22.99 | 6 | 0.12 |
| KAC | SZ | 59 | EP | 3 | | 04:23 | 22.95 | | |

**November 13 2001 Time: 17:02 02.0 UTC Magnitude: 2.2 ML**
**Lat: 56.998N Lon: -5.389W Depth: 6.0 km**
**Grid Ref: 194.21 kmE 794.79 kmE RMS: 0.10 secs**
**Locality: FORT WILLIAM,HIGHLAND Quality: D**
**Comment: 27KM NW OF FORT WILLIAM**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 24 | IP | 1 | U | 17:02 | 06.48 | | |
| KPL | SZ | 41 | IP | | U | 17:02 | 09.34 | | |
| KPL | SE | 41 | ES | 3 | | 17:02 | 14.51 | | |
| KPL | SN | 41 | | | | 17:02 | 15.78 | 37 | 0.10 |
| KPL | SE | 41 | | | | 17:02 | 15.36 | 90 | 0.12 |
| KAC | SZ | 56 | EP | 2 | | 17:02 | 11.80 | | |
| MDO | SZ | 79 | EP | 2 | | 17:02 | 15.10 | | |
| KSK | SZ | 95 | EP | 2 | | 17:02 | 17.49 | | |
| RRR | SN | 99 | ES | 4 | | 17:02 | 30.78 | | |
| RRR | SN | 99 | | | | 17:02 | 33.74 | 200 | 0.15 |
| RRR | SE | 99 | | | | 17:02 | 34.13 | 86 | 0.17 |
| REB | SZ | 125 | EP | 3 | | 17:02 | 22.08 | | |
| RRH | SZ | 129 | EP | 2 | | 17:02 | 22.57 | | |
| PGB | SN | 144 | EP | 3 | | 17:02 | 24.20 | | |
| PGB | SE | 144 | ES | 3 | | 17:02 | 40.44 | | |
| PGB | SN | 144 | | | | 17:02 | 41.68 | 55 | 0.28 |
| PGB | SE | 144 | | | | 17:02 | 41.81 | 43 | 0.20 |
| MCD | SZ | 144 | EP | 2 | | 17:02 | 25.50 | | |
| MCD | SE | 144 | ES | 3 | | 17:02 | 42.75 | | |
| MCD | SN | 144 | | | | 17:02 | 43.67 | 41 | 0.30 |
| MCD | SE | 144 | | | | 17:02 | 43.39 | 34 | 0.13 |
| RSC | SZ | 151 | EP | 3 | | 17:02 | 25.54 | | |
| PCA | SZ | 161 | EP | 2 | | 17:02 | 25.69 | | |
| EDI | SE | 181 | ES | 4 | | 17:02 | 50.99 | | |
| EDI | SN | 181 | | | | 17:02 | 52.40 | 44 | 0.39 |
| EDI | SE | 181 | | | | 17:02 | 51.93 | 25 | 0.21 |

**November 15 2001 Time: 06:35 54.0 UTC Magnitude: 1.8 ML**
**Lat: 51.325N Lon: -2.715W Depth: 16.9 km**
**Grid Ref: 350.22 kmE 158.68 kmE RMS: 0.08 secs**
**Locality: BRISTOL,AVON Quality: B**
**Comment: 14KM SOUTH OF BRISTOL**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SMD | SZ | 2 | IP | | D | 06:35 | 56.95 | | |
| HGH | SZ | 35 | EP | 2 | | 06:36 | 00.45 | | |
| SWK | SZ | 38 | IP | | D | 06:36 | 00.87 | | |
| SWN | SZ | 67 | EP | 3 | | 06:36 | 05.29 | | |
| SWN | SE | 67 | ES | 3 | | 06:36 | 13.90 | | |
| SWN | SN | 67 | | | | 06:36 | 14.76 | 43 | 0.28 |
| SWN | SE | 67 | | | | 06:36 | 14.58 | 38 | 0.11 |
| MCH | SZ | 77 | EP | 2 | | 06:36 | 06.80 | | |
| MCH | SE | 77 | ES | 3 | | 06:36 | 16.05 | | |
| MCH | SN | 77 | | | | 06:36 | 16.30 | 26 | 0.17 |
| MCH | SE | 77 | | | | 06:36 | 16.51 | 42 | 0.15 |
| HAE | SZ | 80 | EP | 2 | | 06:36 | 07.29 | | |
| HEX | SZ | 81 | EP | 2 | | 06:36 | 07.40 | | |
| SSW | SZ | 93 | EP | 3 | | 06:36 | 09.55 | | |
| HSA | SZ | 111 | EP | 2 | | 06:36 | 12.35 | | |
| HTL | SZ | 129 | EP | 3 | | 06:36 | 14.62 | | |
| HTL | SN | 129 | ES | 3 | | 06:36 | 29.36 | | |
| HTL | SN | 129 | | | | 06:36 | 30.99 | 11 | 0.22 |
| HTL | SE | 129 | | | | 06:36 | 30.86 | 24 | 0.16 |
| SKP | SZ | 140 | EP | 1 | U | 06:36 | 16.11 | | |

**November 25 2001 Time: 21:09 19.1 UTC Magnitude: 1.4 ML**
**Lat: 52.735N Lon: -2.979W Depth: 12.1 km**
**Grid Ref: 333.88 kmE 315.75 kmE RMS: 0.04 secs**
**Locality: SHREWSBURY,SHROPSHIRE Quality: B**
**Comment: 15KM WEST OF SHREWSBURY**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SBD | SZ | 27 | IP | | D | 21:09 | 24.15 | | |
| SSP | SZ | 36 | EP | 2 | | 21:09 | 25.66 | | |
| SSP | SN | 36 | ES | 2 | | 21:09 | 30.35 | | |
| SSP | SN | 36 | | | | 21:09 | 31.09 | 32 | 0.21 |
| SSP | SE | 36 | | | | 21:09 | 31.27 | 45 | 0.25 |
| WFB | SZ | 72 | EP | 2 | | 21:09 | 31.28 | | |
| MCH | SZ | 82 | EP | 2 | | 21:09 | 33.67 | | |
| MCH | SE | 82 | ES | 2 | | 21:09 | 42.98 | | |
| HAE | SZ | 83 | EP | 2 | | 21:09 | 33.14 | | |
| KWE | SZ | 83 | EP | 2 | | 21:09 | 33.01 | | |
| CWF | SZ | 113 | EP | 2 | | 21:09 | 38.45 | | |
| CWF | SE | 113 | ES | 2 | | 21:09 | 52.13 | | |
| CWF | SN | 113 | | | | 21:09 | 54.87 | 8 | 0.09 |
| CWF | SE | 113 | | | | 21:09 | 53.73 | 6 | 0.14 |

**November 27 2001 Time: 17:51 16.1 UTC Magnitude: 1.5 ML**
**Lat: 52.959N Lon: -3.726W Depth: 12.2 km**
**Grid Ref: 284.07 kmE 341.65 kmE RMS: 0.05 secs**
**Locality: BALA,GWYNEDD Quality: B**
**Comment: 10KM NW OF BALA**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SBD | SZ | 32 | IP | | U | 17:51 | 21.89 | | |
| WPM | SZ | 35 | IP | | D | 17:51 | 22.40 | | |
| YLL | SZ | 36 | IP | | D | 17:51 | 22.43 | | |
| WFB | SZ | 37 | IP | | U | 17:51 | 22.67 | | |
| YRE | SZ | 47 | IP | | U | 17:51 | 24.45 | | |
| YRC | SZ | 66 | IP | 1 | D | 17:51 | 27.06 | | |
| WCB | SZ | 72 | EP | 2 | | 17:51 | 28.08 | | |
| WCB | SE | 72 | ES | 2 | | 17:51 | 36.25 | | |
| WCB | SN | 72 | | | | 17:51 | 36.55 | 11 | 0.17 |
| WCB | SE | 72 | | | | 17:51 | 36.52 | 21 | 0.14 |
| SSP | SZ | 73 | IP | 1 | D | 17:51 | 28.95 | | |
| SSP | SE | 73 | ES | 2 | | 17:51 | 37.81 | | |
| SSP | SN | 73 | | | | 17:51 | 38.80 | 16 | 0.23 |
| SSP | SE | 73 | | | | 17:51 | 38.66 | 16 | 0.14 |

**November 29 2001 Time: 06:15 41.1 UTC Magnitude: 1.4 ML**
**Lat: 56.910N Lon: -4.225W Depth: 9.0 km**
**Grid Ref: 264.52 kmE 782.06 kmE RMS: 0.22 secs**
**Locality: DALWHINNIE,HIGHLAND Quality: C**
**Comment: 7KM SOUTH OF DALWHINNIE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KNR | SZ | 47 | IP | 1 | U | 06:15 | 49.07 | | |
| ELO | SZ | 58 | IP | 1 | U | 06:15 | 50.88 | | |
| MDO | SZ | 60 | EP | 2 | | 06:15 | 51.19 | | |
| MDO | SZ | 60 | ES | 3 | | 06:15 | 58.33 | | |
| KSB | SZ | 80 | EP | 2 | | 06:15 | 54.66 | | |
| EAB | SZ | 81 | EP | 3 | | 06:15 | 54.87 | | |
| EDU | SZ | 85 | EP | 3 | | 06:15 | 55.46 | | |
| EBH | SZ | 86 | EP | 2 | | 06:15 | 55.80 | | |
| MME | SZ | 89 | EP | 3 | | 06:15 | 55.87 | | |
| KAC | SZ | 92 | EP | 2 | | 06:15 | 56.67 | | |
| MCD | SZ | 95 | EP | 2 | | 06:15 | 57.53 | | |
| KPL | SZ | 99 | IP | 1 | U | 06:15 | 57.83 | | |
| KPL | SE | 99 | ES | 3 | | 06:16 | 09.51 | | |
| KPL | SN | 99 | | | | 06:16 | 12.59 | 6 | 0.07 |
| KPL | SE | 99 | | | | 06:16 | 12.80 | 14 | 0.17 |
| EDR | SZ | 103 | EP | 2 | | 06:15 | 58.47 | | |
| EBL | SZ | 146 | EP | 3 | | 06:16 | 05.50 | | |

**November 30 2001 Time: 02:46 14.9 UTC Magnitude: 1.9 ML**
**Lat: 50.108N Lon: -6.420W Depth: 5.1 km**
**Grid Ref: 84.02 kmE 32.57 kmE RMS: 0.19 secs**
**Locality: NW OF SCILLY ISLES Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| CPZ | SZ | 60 | EP | 2 | | 02:46 | 24.92 | | |
| CR2 | SZ | 90 | IP | 1 | D | 02:46 | 29.95 | | |
| CR2 | SN | 90 | ES | 3 | | 02:46 | 40.72 | | |
| CR2 | SN | 90 | | | | 02:46 | 43.82 | 23 | 0.08 |
| CR2 | SE | 90 | | | | 02:46 | 43.57 | 33 | 0.07 |
| CST | SZ | 90 | EP | 2 | | 02:46 | 30.09 | | |
| CBW | SZ | 94 | EP | 1 | U | 02:46 | 30.47 | | |

**December 1 2001 Time: 21:14 24.9 UTC Magnitude: 1.5 ML**
**Lat: 56.698N Lon: -5.150W Depth: 7.8 km**
**Grid Ref: 207.13 kmE 760.71 kmE RMS: 0.16 secs**
**Locality: BALLACHULISH,HIGHLAND Quality: D**
**Comment: FELT BALLACHULISH... Intensity: 4+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 59 | IP | 1 | U | 21:14 | 34.77 | | |
| EAB | SZ | 76 | EP | 2 | | 21:14 | 37.26 | | |
| KPL | SZ | 78 | EP | 1 | U | 21:14 | 37.88 | | |
| KPL | SE | 78 | ES | 3 | | 21:14 | 47.00 | | |
| KPL | SN | 78 | | | | 21:14 | 50.82 | 13 | 0.11 |
| KPL | SE | 78 | | | | 21:14 | 51.57 | 16 | 0.18 |
| ELO | SZ | 92 | EP | 2 | | 21:14 | 39.80 | | |
| MDO | SZ | 96 | EP | 3 | | 21:14 | 40.84 | | |
| PMS | SZ | 98 | EP | 3 | | 21:14 | 41.00 | | |
| PCO | SZ | 102 | EP | 3 | | 21:14 | 41.69 | | |
| PGB | SN | 107 | ES | 3 | | 21:14 | 54.72 | | |
| PGB | SN | 107 | | | | 21:14 | 54.96 | 14 | 0.27 |
| PGB | SE | 107 | | | | 21:14 | 54.89 | 10 | 0.19 |
| EBH | SZ | 113 | EP | 3 | | 21:14 | 43.48 | | |
| PCA | SZ | 124 | EP | 3 | | 21:14 | 45.07 | | |

**December 5 2001 Time: 18:24 12.2 UTC Magnitude: 0.1 ML**
**Lat: 57.199N Lon: -5.423W Depth: 12.0 km**
**Grid Ref: 193.24 kmE 817.23 kmE RMS: 0.22 secs**
**Locality: GLEN SHEIL,HIGHLAND Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KSB | SZ | 1 | EP | 1 | U | 18:24 | 14.33 | | |
| KPL | SZ | 21 | EP | 3 | | 18:24 | 16.89 | | |
| KPL | SN | 21 | ES | 3 | | 18:24 | 19.30 | | |
| KPL | SN | 21 | | | | 18:24 | 19.51 | 7 | 0.24 |
| KPL | SE | 21 | | | | 18:24 | 19.42 | 10 | 0.14 |

**December 6 2001 Time: 06:42 53.0 UTC Magnitude: 1.2 ML**
**Lat: 52.949N Lon: -4.391W Depth: 24.9 km**
**Grid Ref: 239.34 kmE 341.76 kmE RMS: 0.03 secs**
**Locality: LLEYN PENINSULA Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 4 | IP | 1 | D | 06:42 | 57.12 | | |
| YLL | SZ | 26 | IP | 1 | U | 06:42 | 58.85 | | |
| YRC | SZ | 36 | IP | 1 | D | 06:43 | 00.09 | | |
| WLF | SZ | 38 | IP | 1 | D | 06:43 | 00.26 | | |
| WFB | SZ | 38 | EP | 1 | D | 06:43 | 00.35 | | |
| WPM | SZ | 47 | IP | 1 | U | 06:43 | 01.72 | | |
| WCB | SZ | 49 | EP | 1 | U | 06:43 | 02.09 | | |
| WCB | SE | 49 | ES | 3 | | 06:43 | 07.90 | | |

KEY TO PHASE DATA ENCODING

# PHASE DATA : 2001

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WCB | SN | 49 | | | 06:43 | 08.67 | 11 | 0.09 |
| WCB | SE | 49 | | | 06:43 | 08.59 | 17 | 0.08 |
| WME | SZ | 50 | EP | 3 | 06:43 | 02.14 | | |

**December 8 2001 Time: 17:47 05.5 UTC Magnitude: 0.6 ML**
**Lat: 57.605N Lon: -5.402W Depth: 5.4 km**
**Grid Ref: 196.79 kmE 862.31 kmE RMS: 0.08 secs**
**Locality: KINLOCHEWE,HIGHLAND Quality: C**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KAC | SZ | 13 | IP | | D | 17:47 | 08.27 | | |
| KPL | SZ | 33 | EP | 1 | D | 17:47 | 11.71 | | |
| KPL | SE | 33 | ES | 3 | | 17:47 | 15.86 | | |
| KPL | SN | 33 | | | | 17:47 | 16.26 | 8 | 0.17 |
| KPL | SE | 33 | | | | 17:47 | 16.27 | 11 | 0.11 |
| REB | SZ | 58 | EP | 3 | | 17:47 | 15.36 | | |

**December 10 2001 Time: 04:05 51.5 UTC Magnitude: 1.8 ML**
**Lat: 53.243N Lon: -1.123W Depth: 0.3 km**
**Grid Ref: 458.55 kmE 372.22 kmE RMS: 0.13 secs**
**Locality: WORKSOP,NOTTS Quality: C**
**Comment: C/F,7KM S OF WORKSOP**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| KBI | SZ | 27 | EP | 2 | | 04:05 | 56.94 | | |
| KWE | SZ | 54 | EP | 1 | D | 04:06 | 01.55 | | |
| KWE | SZ | 54 | ES | 3 | | 04:06 | 09.32 | | |
| LMK | SZ | 58 | EP | 3 | | 04:06 | 02.15 | | |
| LHO | SZ | 59 | EP | 2 | | 04:06 | 02.14 | | |
| HPK | SZ | 86 | EP | 2 | | 04:06 | 06.70 | | |
| HPK | SE | 86 | ES | 3 | | 04:06 | 17.46 | | |
| SSP | SN | 163 | ES | 4 | | 04:06 | 39.42 | | |
| SSP | SN | 163 | | | | 04:06 | 41.27 | 12 | 0.25 |
| SSP | SE | 163 | | | | 04:06 | 41.53 | 12 | 0.18 |
| MCH | SZ | 188 | EP | 4 | | 04:06 | 22.92 | | |

**December 11 2001 Time: 06:31 06.4 UTC Magnitude: 1.7 ML**
**Lat: 56.243N Lon: -4.028W Depth: 5.5 km**
**Grid Ref: 274.33 kmE 707.41 kmE RMS: 0.08 secs**
**Locality: DUNBLANE,CENTRAL Quality: B**
**Comment: 6KM NW OF DUNBLANE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EAB | SZ | 20 | IP | | U | 06:31 | 10.32 | | |
| PCO | SZ | 29 | IP | | D | 06:31 | 11.81 | | |
| EBH | SZ | 32 | IP | | U | 06:31 | 12.35 | | |
| ELO | SZ | 32 | IP | 1 | U | 06:31 | 12.34 | | |
| PGB | SN | 56 | EP | 2 | | 06:31 | 16.12 | | |
| PGB | SE | 56 | ES | 3 | | 06:31 | 22.92 | | |
| PGB | SN | 56 | | | | 06:31 | 23.81 | 55 | 0.26 |
| PGB | SE | 56 | | | | 06:31 | 23.50 | 36 | 0.24 |
| PCA | SZ | 62 | IP | 1 | D | 06:31 | 16.95 | | |
| PMS | SZ | 63 | EP | 2 | | 06:31 | 17.42 | | |
| EDI | SZ | 63 | EP | 2 | | 06:31 | 17.34 | | |
| EDI | SE | 63 | ES | | | 06:31 | 25.00 | | |
| EDI | SN | 63 | | | | 06:31 | 25.20 | 22 | 0.34 |
| EDI | SE | 63 | | 2 | | 06:31 | 25.21 | 28 | 0.28 |
| EBL | SZ | 81 | EP | 3 | | 06:31 | 20.20 | | |
| ESY | SZ | 95 | EP | 3 | | 06:31 | 22.35 | | |

**December 11 2001 Time: 07:50 59.7 UTC Magnitude: 1.5 ML**
**Lat: 56.240N Lon: -4.026W Depth: 5.2 km**
**Grid Ref: 274.47 kmE 707.13 kmE RMS: 0.08 secs**
**Locality: DUNBLANE,CENTRAL Quality: B**
**Comment: 6KM NW OF DUNBLANE**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EAB | SZ | 20 | IP | | U | 07:51 | 03.59 | | |
| PCO | SZ | 29 | EP | 1 | D | 07:51 | 05.07 | | |
| PCO | SZ | 29 | ES | 3 | | 07:51 | 08.84 | | |
| EBH | SZ | 32 | IP | | U | 07:51 | 05.62 | | |
| ELO | SZ | 32 | EP | 1 | U | 07:51 | 05.61 | | |
| PGB | SE | 56 | ES | 3 | | 07:51 | 16.11 | | |
| PGB | SN | 56 | | | | 07:51 | 17.07 | 34 | 0.32 |
| PGB | SE | 56 | | | | 07:51 | 16.75 | 20 | 0.22 |
| PCA | SZ | 62 | EP | 2 | | 07:51 | 10.19 | | |
| EDI | SZ | 63 | EP | 3 | | 07:51 | 10.61 | | |
| EDI | SE | 63 | ES | 3 | | 07:51 | 18.17 | | |
| EDI | SN | 63 | | | | 07:51 | 18.44 | 14 | 0.28 |
| EDI | SE | 63 | | | | 07:51 | 18.45 | 17 | 0.28 |
| PMS | SZ | 63 | EP | 2 | | 07:51 | 10.69 | | |

**December 11 2001 Time: 21:47 46.4 UTC Magnitude: 0.7 ML**
**Lat: 52.958N Lon: -4.380W Depth: 21.9 km**
**Grid Ref: 240.16 kmE 342.75 kmE RMS: 0.05 secs**
**Locality: LLEYN PENINSULA Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| YRE | SZ | 4 | IP | 1 | D | 21:47 | 49.96 | | |
| YRH | SZ | 22 | IP | 1 | U | 21:47 | 51.39 | | |
| YLL | SZ | 25 | IP | 1 | U | 21:47 | 51.73 | | |
| YRC | SZ | 35 | EP | 2 | | 21:47 | 53.06 | | |
| WLF | SZ | 37 | EP | 1 | U | 21:47 | 53.26 | | |
| WFB | SZ | 38 | EP | 2 | | 21:47 | 53.50 | | |
| WPM | SZ | 46 | EP | 1 | U | 21:47 | 54.69 | | |
| WCB | SZ | 48 | EP | 3 | | 21:47 | 55.12 | | |
| WCB | SE | 48 | ES | 3 | | 21:48 | 00.78 | | |
| WCB | SN | 48 | | | | 21:48 | 05.68 | 7 | 1.02 |
| WCB | SE | 48 | | | | 21:48 | 05.62 | 14 | 1.09 |
| WME | SZ | 49 | EP | 2 | | 21:47 | 54.94 | | |

**December 16 2001 Time: 13:25 20.0 UTC Magnitude: 2.6 ML**
**Lat: 53.692N Lon: -2.002W Depth: 9.8 km**
**Grid Ref: 399.86 kmE 421.77 kmE RMS: 0.12 secs**
**Locality: HALIFAX,WEST YORKSHIRE Quality: B**
**Comment: FELT HALIFAX... Intensity: 4+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| LHO | SZ | 19 | IP | | D | 13:25 | 23.74 | | |
| LDU | SZ | 32 | IP | | U | 13:25 | 25.91 | | |
| LDU | SZ | 32 | ES | 2 | | 13:25 | 29.92 | | |
| LDU | SZ | 32 | | | | 13:25 | 30.91 | 631 | 0.07 |
| HPK | SZ | 39 | IP | | D | 13:25 | 26.79 | | |
| HPK | SN | 39 | ES | 2 | | 13:25 | 31.87 | | |
| KBI | SZ | 58 | IP | | U | 13:25 | 29.80 | | |
| KWE | SZ | 76 | EP | 2 | | 13:25 | 32.81 | | |
| LMI | SZ | 104 | EP | 2 | | 13:25 | 36.94 | | |
| LMI | SN | 104 | | | | 13:25 | 50.72 | 228 | 0.15 |
| LMI | SE | 104 | | | | 13:25 | 50.74 | 138 | 0.14 |
| KEY | SZ | 110 | EP | 2 | | 13:25 | 38.38 | | |
| LMK | SZ | 114 | EP | 2 | | 13:25 | 39.07 | | |
| CWF | SZ | 116 | EP | 2 | | 13:25 | 38.77 | | |
| CWF | SE | 116 | ES | 3 | | 13:25 | 52.10 | | |
| CWF | SN | 116 | | | | 13:25 | 54.17 | 190 | 0.20 |
| CWF | SE | 116 | | | | 13:25 | 54.60 | 201 | 0.19 |
| CSF | SZ | 117 | EP | 2 | | 13:25 | 38.85 | | |
| LCP | SZ | 121 | EP | 2 | | 13:25 | 40.49 | | |
| SBD | SZ | 121 | EP | 3 | | 13:25 | 39.16 | | |
| CKE | SZ | 123 | EP | 2 | | 13:25 | 39.80 | | |
| XDE | SZ | 133 | EP | 2 | | 13:25 | 40.72 | | |
| WPM | SZ | 135 | EP | 3 | | 13:25 | 40.77 | | |
| BDL | SZ | 138 | EP | 3 | | 13:25 | 41.87 | | |
| BBO | SZ | 142 | EP | 3 | | 13:25 | 42.11 | | |
| BBO | SE | 142 | ES | 2 | | 13:25 | 58.72 | | |
| BBO | SN | 142 | | | | 13:25 | 59.86 | 126 | 0.16 |
| BBO | SE | 142 | | | | 13:25 | 59.38 | 122 | 0.28 |
| BTA | SN | 142 | ES | 4 | | 13:25 | 58.99 | | |
| BTA | SN | 142 | | | | 13:26 | 00.55 | 120 | 0.26 |
| BTA | SE | 142 | | | | 13:26 | 05.77 | 130 | 0.61 |
| HLM | SZ | 143 | EP | 3 | | 13:25 | 42.41 | | |
| WME | SZ | 156 | EP | 2 | | 13:25 | 43.12 | | |
| YLL | SZ | 157 | EP | 3 | | 13:25 | 43.34 | | |
| SSP | SZ | 160 | EP | 3 | | 13:25 | 44.74 | | |
| SSP | SN | 160 | | | | 13:26 | 04.95 | 67 | 0.24 |
| SSP | SE | 160 | | | | 13:26 | 05.38 | 69 | 0.25 |
| WLF | SZ | 165 | EP | 2 | | 13:25 | 44.30 | | |
| BBH | SZ | 171 | EP | 3 | | 13:25 | 45.54 | | |
| WCB | SZ | 172 | EP | 3 | | 13:25 | 45.10 | | |
| WCB | SN | 172 | | | | 13:26 | 06.79 | 41 | 0.17 |
| WCB | SE | 172 | | | | 13:26 | 04.64 | 41 | 0.18 |
| GIM | SZ | 175 | EP | 2 | | 13:25 | 45.64 | | |
| GIM | SN | 175 | | | | 13:26 | 08.39 | 62 | 0.17 |
| YRC | SZ | 178 | EP | 3 | | 13:25 | 46.25 | | |
| YRE | SZ | 180 | EP | 2 | | 13:25 | 46.37 | | |
| GCD | SZ | 181 | EP | 3 | | 13:25 | 46.75 | | |
| WIM | SZ | 183 | EP | 3 | | 13:25 | 47.03 | | |
| KTG | SZ | 186 | EP | 2 | | 13:25 | 49.87 | | |
| HAE | SZ | 188 | EP | 3 | | 13:25 | 48.42 | | |
| BWH | SZ | 197 | EP | 3 | | 13:25 | 48.59 | | |
| HTR | SZ | 199 | EP | 3 | | 13:25 | 49.46 | | |
| YRH | SZ | 200 | EP | 2 | | 13:25 | 49.01 | | |
| HGH | SZ | 235 | EP | 3 | | 13:25 | 54.39 | | |
| BHH | SN | | | | | 13:26 | 10.14 | 133 | 0.28 |
| BHH | SE | | | | | 13:26 | 10.40 | 109 | 0.30 |
| GIM | SE | | AMPL | | | 13:26 | 09.37 | 55 | 0.20 |
| MCH | SZ | 200 | EP | | | 13:25 | 49.83 | | |
| MCH | SN | 200 | | | | 13:26 | 15.18 | 44 | 0.15 |
| MCH | SE | 200 | ES | 4 | | 13:26 | 12.35 | | |

**December 19 2001 Time: 15:13 25.7 UTC Magnitude: 1.3 ML**
**Lat: 55.234N Lon: -3.490W Depth: 7.0 km**
**Grid Ref: 305.23 kmE 594.35 kmE RMS: 0.08 secs**
**Locality: JOHNSTONEBRIDGE,D & G Quality: B**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| BWH | SZ | 12 | IP | | U | 15:13 | 28.35 | | |
| ESK | SZ | 20 | IP | | U | 15:13 | 29.56 | | |
| ESK | SE | 20 | ES | 3 | | 15:13 | 32.03 | | |
| ESK | SN | 20 | | | | 15:13 | 33.22 | 51 | 0.14 |
| ESK | SE | 20 | | | | 15:13 | 32.15 | 65 | 0.08 |
| BHH | SZ | 23 | IP | | D | 15:13 | 30.21 | | |
| BHH | SE | 23 | ES | 1 | | 15:13 | 33.18 | | |
| BHH | SN | 23 | | | | 15:13 | 33.24 | 126 | 0.24 |
| BHH | SE | 23 | | | | 15:13 | 33.22 | 165 | 0.23 |
| ECK | SZ | 24 | IP | | U | 15:13 | 30.22 | | |
| BBH | SZ | 37 | IP | | U | 15:13 | 32.42 | | |
| BBO | SZ | 58 | EP | 1 | D | 15:13 | 35.77 | | |
| BBO | SN | 58 | ES | 3 | | 15:13 | 43.33 | | |
| BBO | SN | 58 | | | | 15:13 | 46.22 | 9 | 0.23 |
| BBO | SE | 58 | | | | 15:13 | 45.00 | 10 | 0.23 |
| BTA | SZ | 63 | EP | 3 | | 15:13 | 37.10 | | |
| BTA | SN | 63 | ES | 3 | | 15:13 | 44.38 | | |
| EBL | SZ | 66 | EP | 3 | | 15:13 | 37.33 | | |
| XDE | SZ | 81 | EP | 3 | | 15:13 | 39.43 | | |
| ESY | SZ | 94 | EP | 3 | | 15:13 | 41.89 | | |
| LMI | SZ | 113 | EP | 2 | | 15:13 | 44.83 | | |
| LMI | SN | 113 | | | | 15:13 | 59.13 | 10 | 0.19 |
| LMI | SE | 113 | | | | 15:14 | 00.14 | 11 | 0.21 |

**December 19 2001 Time: 20:58 45.1 UTC Magnitude: 2.1 ML**
**Lat: 56.239N Lon: -3.742W Depth: 4.8 km**
**Grid Ref: 292.03 kmE 706.48 kmE RMS: 0.06 secs**
**Locality: BLACKFORD,TAYSIDE Quality: B**
**Comment: FELT GLENDEVON... Intensity: 3+**

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

# PHASE DATA : 2001

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EBH | SZ | 15 | IP | | U | 20:58 | 48.02 | | |
| ELO | SZ | 26 | IP | | U | 20:58 | 49.92 | | |
| PCO | SZ | 36 | IP | | U | 20:58 | 51.62 | | |
| EDI | SZ | 49 | EP | 1 | D | 20:58 | 53.74 | | |
| EDI | SN | 49 | ES | 2 | | 20:58 | 59.86 | | |
| EDI | SN | 49 | | | | 20:58 | 59.95 | 104 | 0.18 |
| EDI | SE | 49 | | | | 20:59 | 02.31 | 91 | 0.33 |
| EDU | SZ | 57 | EP | 2 | | 20:58 | 54.97 | | |
| PGB | SE | 66 | ES | 3 | | 20:59 | 03.96 | | |
| PGB | SN | 66 | | | | 20:59 | 07.48 | 90 | 0.47 |
| PGB | SE | 66 | | | | 20:59 | 07.62 | 102 | 0.20 |
| PCA | SZ | 68 | EP | 1 | U | 20:58 | 56.70 | | |
| EBL | SZ | 68 | EP | 2 | | 20:58 | 57.04 | | |
| PMS | SZ | 76 | EP | 2 | | 20:58 | 57.79 | | |
| ESY | SZ | 79 | EP | 2 | | 20:58 | 58.43 | | |
| EDR | SZ | 106 | EP | 3 | | 20:59 | 02.37 | | |

**December 19 2001 Time: 21:30 35.0 UTC Magnitude: 1.3 ML**
**Lat: 56.245N Lon: -3.730W Depth: 5.8 km**
**Grid Ref: 292.80 kmE 707.11 kmE RMS: 0.06 secs**
**Locality: BLACKFORD,TAYSIDE Quality: B**
**Comment: FELT GLENDEVON... Intensity: 3+**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| EBH | SZ | 14 | IP | | U | 21:30 | 37.87 | | |
| EBH | SZ | 14 | ES | 1 | | 21:30 | 39.93 | | |
| EBH | SZ | 14 | | | | 21:30 | 39.98 | 256 | 0.07 |
| ELO | SZ | 25 | IP | | U | 21:30 | 39.79 | | |
| ELO | SZ | 25 | ES | 2 | | 21:30 | 43.20 | | |
| ELO | SZ | 25 | | | | 21:30 | 43.33 | 50 | 0.14 |
| PCO | SZ | 37 | IP | 1 | U | 21:30 | 41.53 | | |
| EDU | SZ | 56 | EP | 2 | | 21:30 | 44.59 | | |
| EDU | SZ | 56 | | | | 21:30 | 53.63 | 25 | 0.04 |
| PCA | SZ | 69 | EP | 2 | | 21:30 | 46.74 | | |
| PMS | SZ | 77 | EP | 2 | | 21:30 | 48.00 | | |
| EDR | SZ | 105 | EP | 3 | | 21:30 | 52.36 | | |

**December 20 2001 Time: 03:56 33.3 UTC Magnitude: 1.4 ML**
**Lat: 52.734N Lon: -2.971W Depth: 7.7 km**
**Grid Ref: 334.45 kmE 315.61 kmE RMS: 0.07 secs**
**Locality: WELSHPOOL,POWYS Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| HLM | SZ | 25 | IP | | D | 03:56 | 37.97 | | |
| SBD | SZ | 27 | IP | 1 | D | 03:56 | 38.32 | | |
| SSP | SZ | 37 | EP | 2 | | 03:56 | 39.82 | | |
| SSP | SN | 37 | ES | 2 | | 03:56 | 44.45 | | |
| SSP | SN | 37 | | | | 03:56 | 45.16 | 42 | 0.25 |
| SSP | SE | 37 | | | | 03:56 | 45.53 | 77 | 0.26 |
| WFB | SZ | 72 | EP | 3 | | 03:56 | 45.53 | | |
| MCH | SZ | 82 | EP | 3 | | 03:56 | 47.05 | | |
| MCH | SN | 82 | ES | 3 | | 03:56 | 56.56 | | |
| MCH | SN | 82 | | | | 03:56 | 58.08 | 9 | 0.26 |
| MCH | SE | 82 | | | | 03:56 | 57.49 | 10 | 0.16 |
| HAE | SZ | 83 | IP | 1 | D | 03:56 | 47.35 | | |
| YRE | SZ | 102 | EP | 3 | | 03:56 | 50.45 | | |
| YRH | SZ | 112 | EP | 3 | | 03:56 | 52.03 | | |

**December 21 2001 Time: 09:34 56.9 UTC Magnitude: 2.7 ML**
**Lat: 58.726N Lon: 0.550W Depth: 18.1 km**
**Grid Ref: 547.64 kmE 984.78 kmE RMS: 0.12 secs**
**Locality: NORTHERN NORTH SEA Quality: D**

| STAT | CO | DIST | PHAS | WT | P | HrMn | SECS | AMPL | PERI |
|---|---|---|---|---|---|---|---|---|---|
| SAN | SZ | 176 | EP | 3 | | 09:35 | 22.42 | | |
| LRW | SZ | 185 | EP | 3 | | 09:35 | 24.03 | | |
| LRW | SN | 185 | ES | 3 | | 09:35 | 43.18 | | |
| LRW | SN | 185 | | | | 09:35 | 44.46 | 77 | 0.17 |
| LRW | SE | 185 | | | | 09:35 | 44.04 | 58 | 0.17 |
| WAL | SZ | 210 | EP | 3 | | 09:35 | 26.75 | | |
| YEL | SZ | 223 | EP | 3 | | 09:35 | 28.36 | | |

# TABLE 6

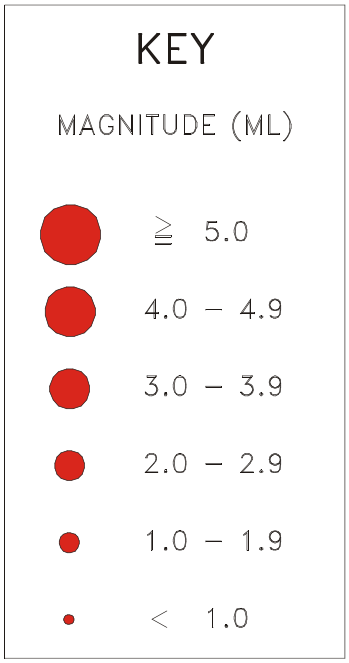
## DEPTH/CRUSTAL VELOCITY MODELS

**TABLE 6**

## Depth / crustal velocity models used in earthquake locations

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

**FIGURES 1 TO 5**




**KEY TO EPICENTRE MAPS, FIGURES 3 TO 5**

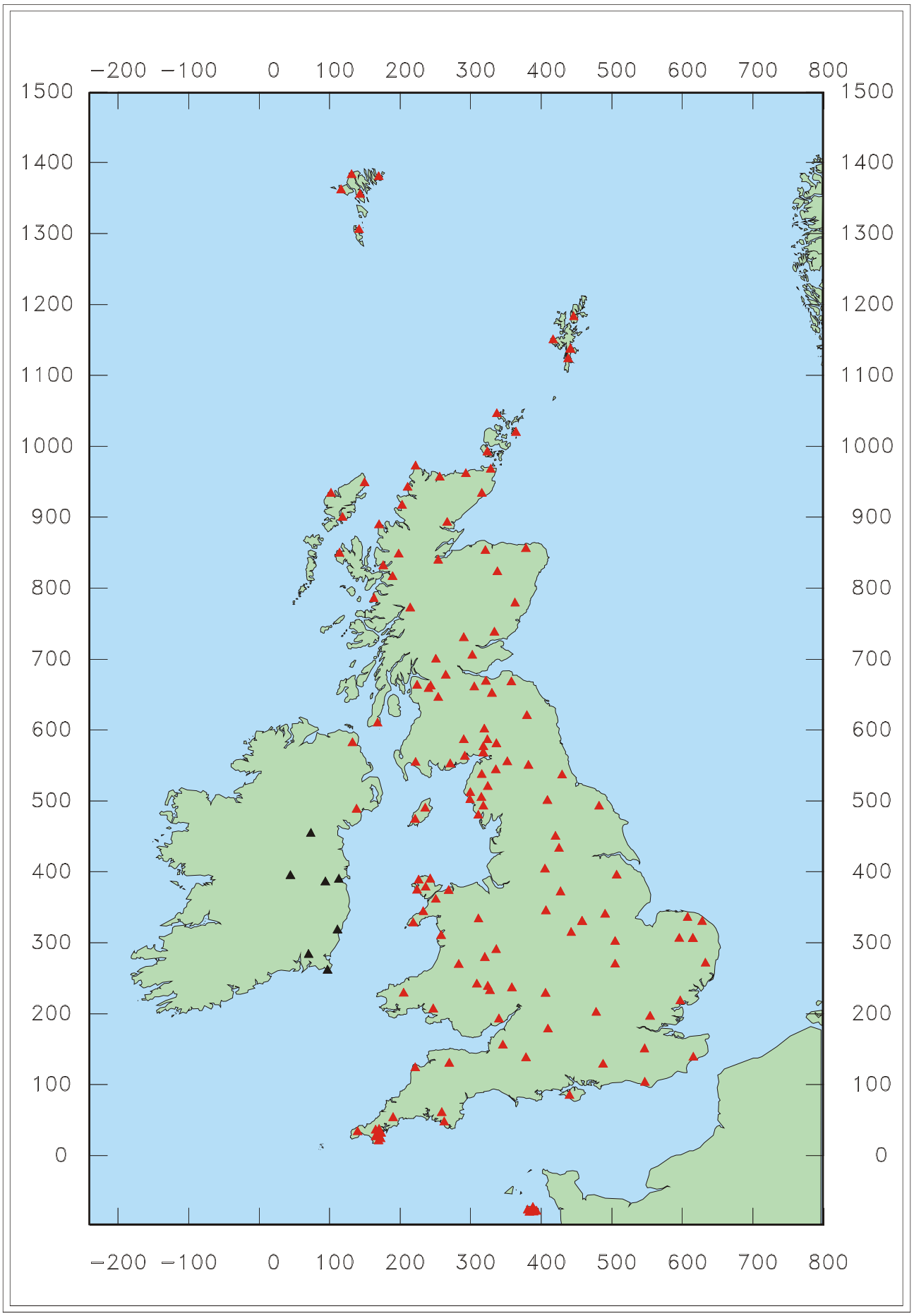



Figure 1. Seismograph network operational in December 2001. Colour coding shows the rapid access stations (red) and DIAS stations (black).

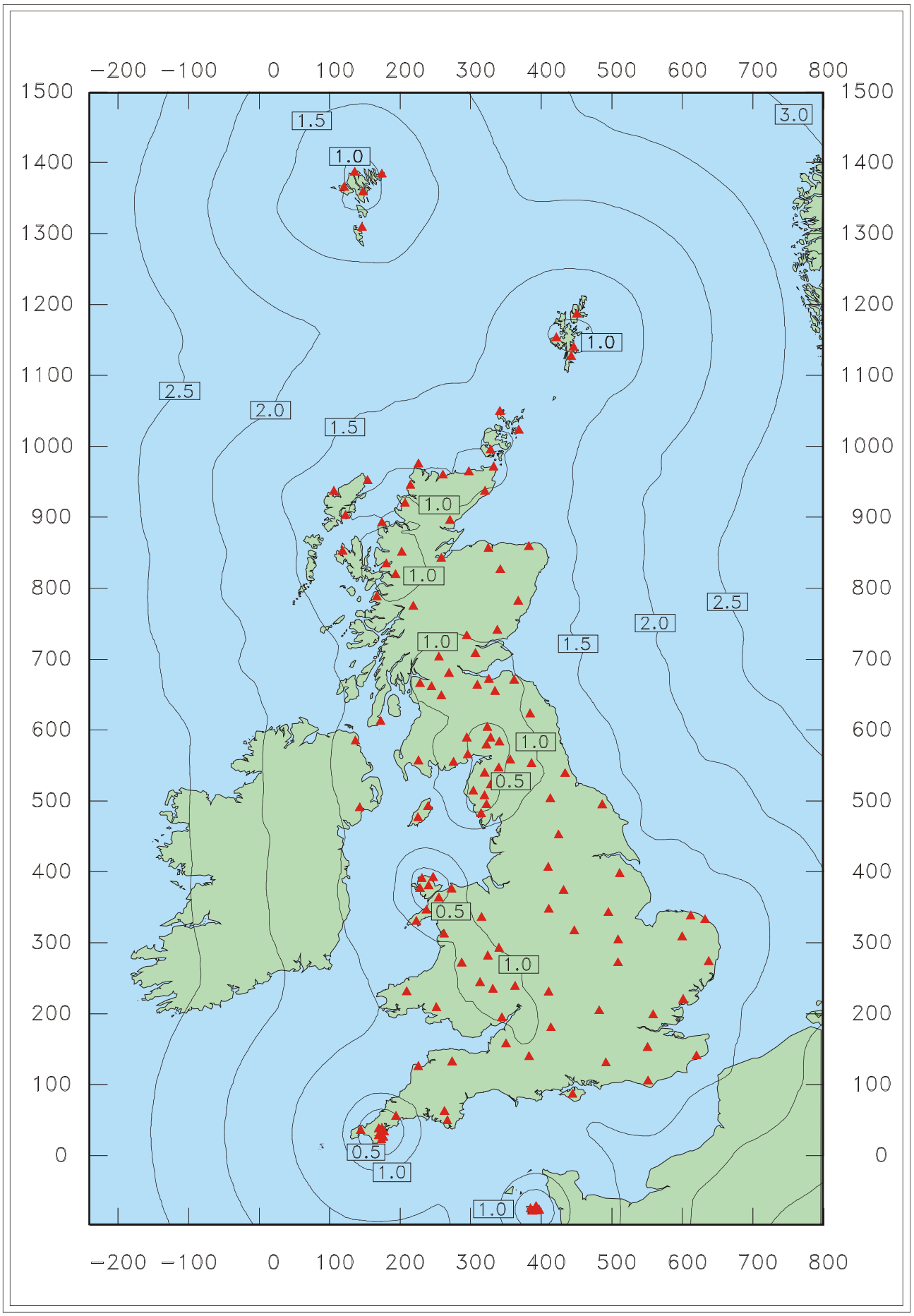



Figure 2. Earthquake detection capability in December 2001. Contour values are Richter local magnitude (ML) for 4 nanometres of noise (average) and S-wave amplitude twice that at the fourth nearest station.

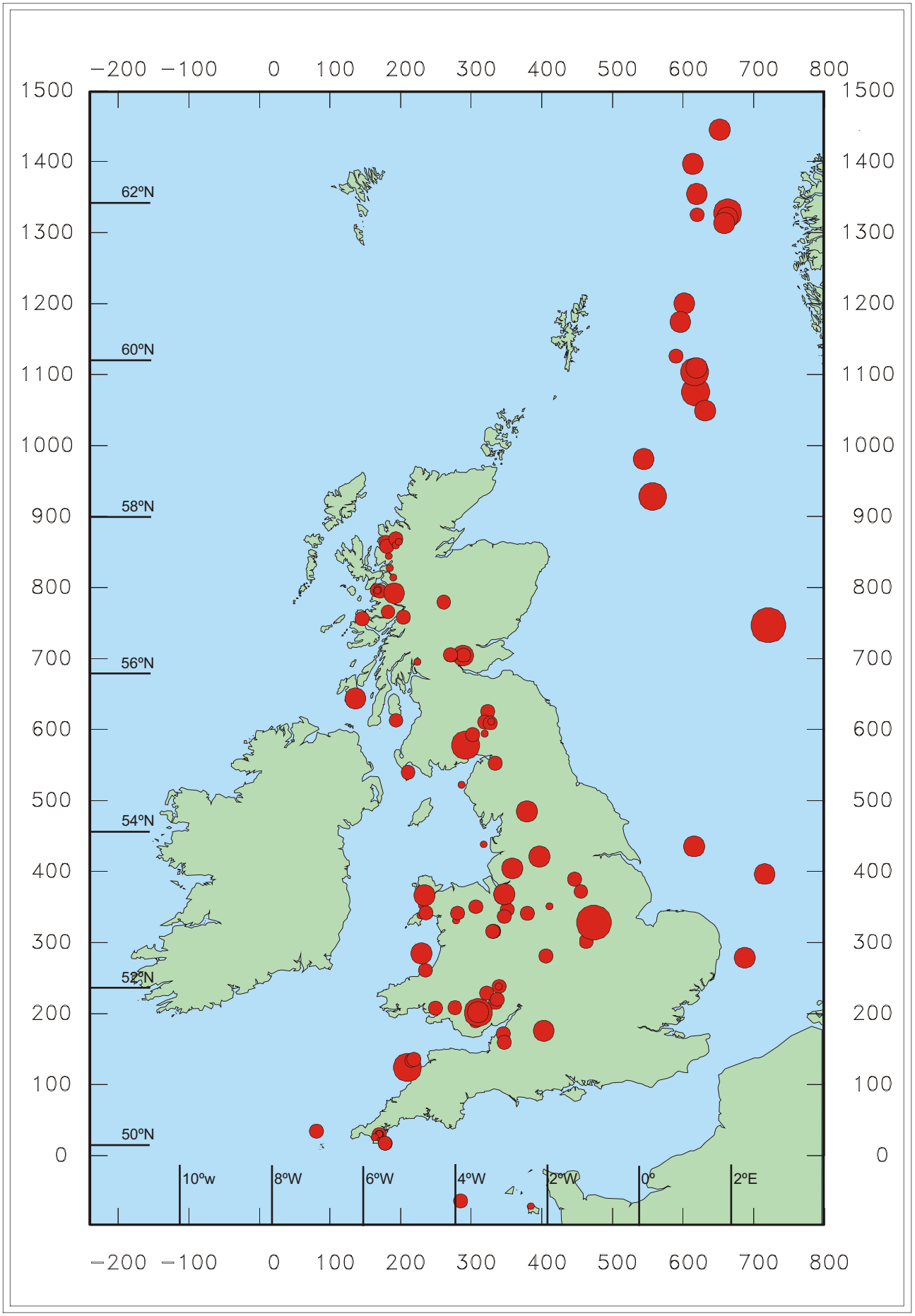



Figure 3. Epicentres of all UK earthquakes located in 2001.

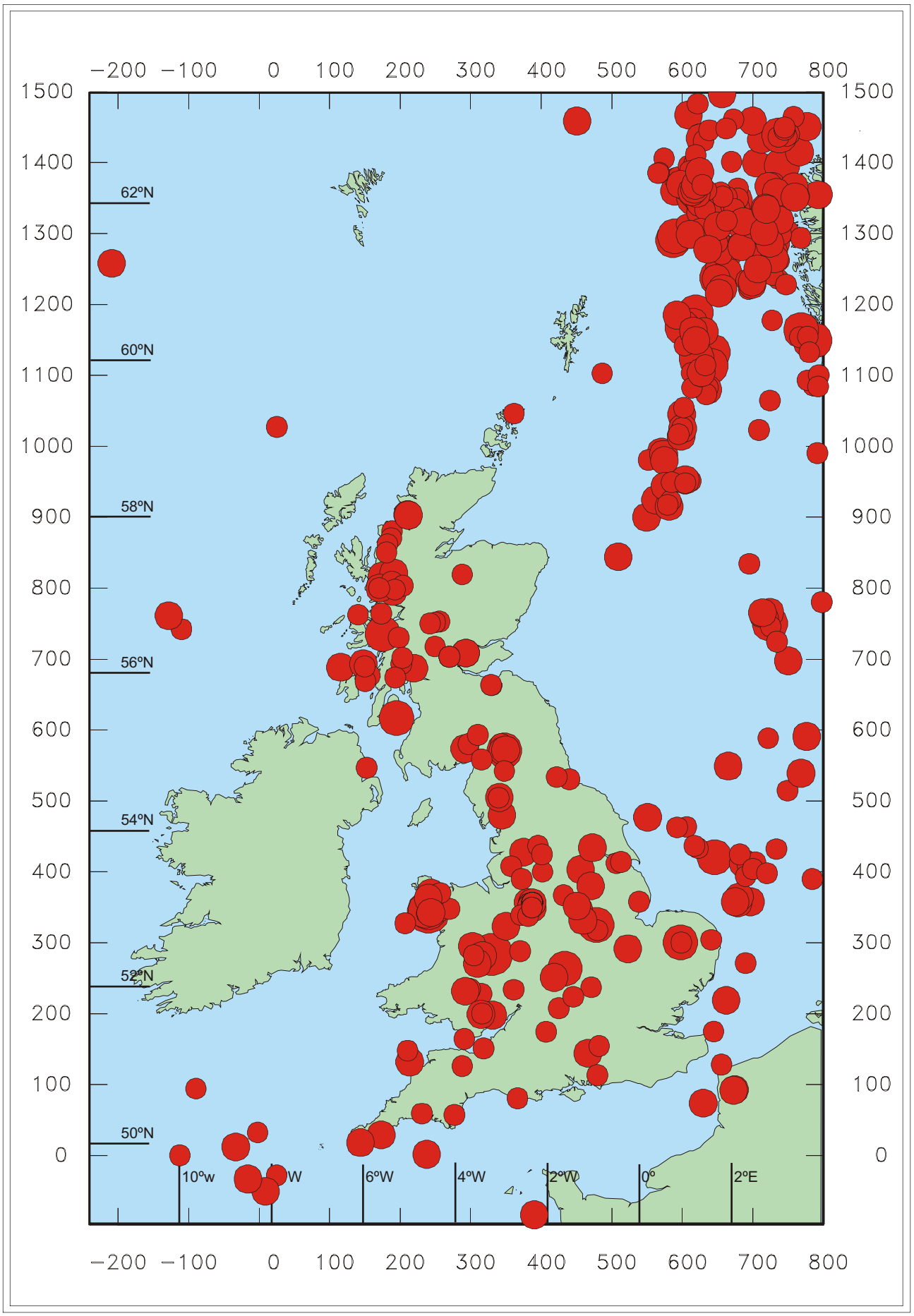



Figure 4. Epicentres of earthquakes with magnitudes 2.5 ML or greater, for the period 1979 to 2001.

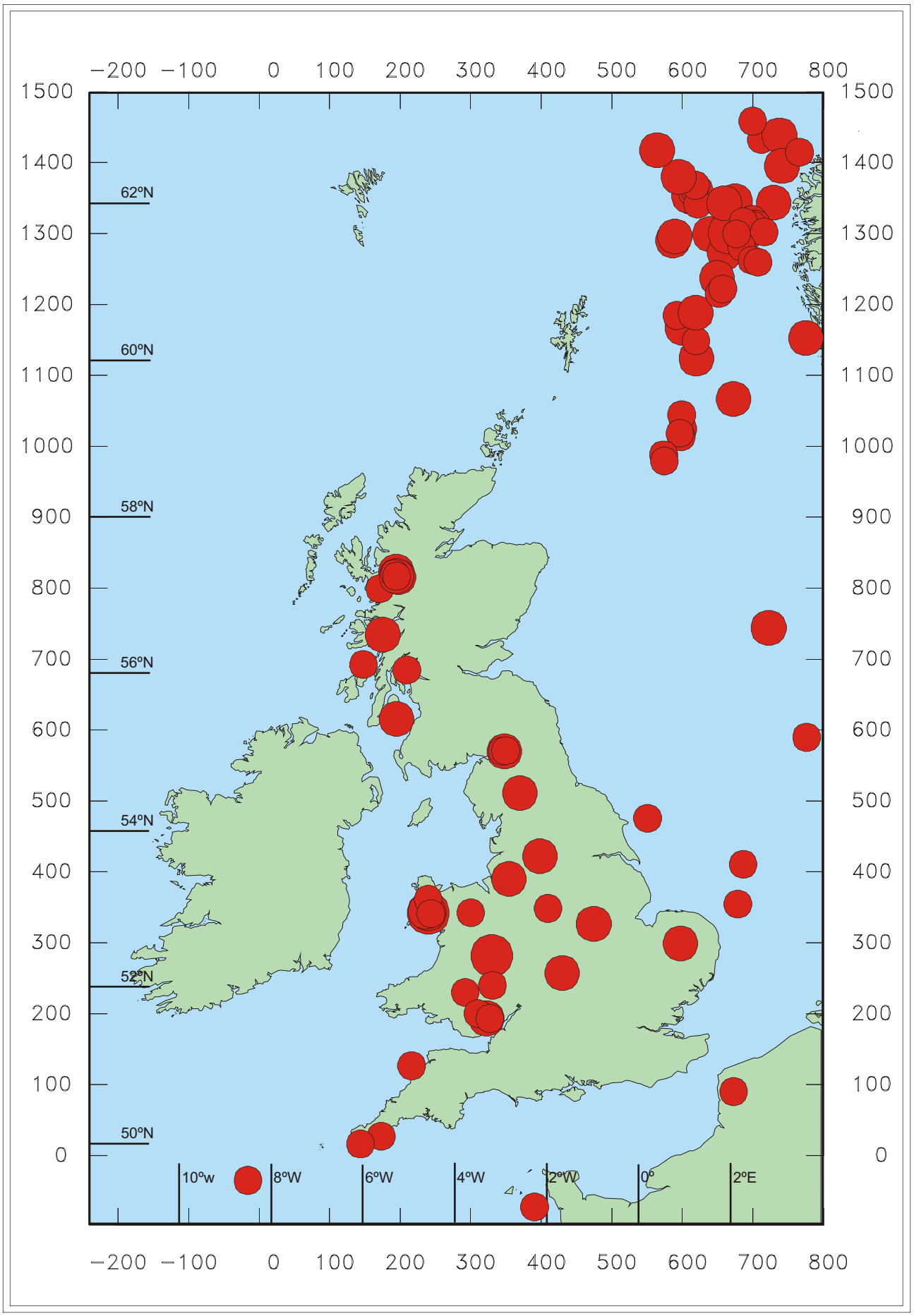



Figure 5. Epicentres of earthquakes with magnitudes 3.5 ML or greater, for the period 1970 to 2001.

**APPENDIX A**

**SIGNIFICANT EARTHQUAKES IN 2001**

# APPENDIX A1

## EKOFISK EARTHQUAKE, 7 MAY 2001

### PARAMETERS

| | |
|---|---|
| **Date:** | **7 May 2001** |
| **Origin Time:** | **09:43 34.0 UTC** |
| **Latitude and longitude:** | **56.54.$^{o}$ N 3.19$^{o}$ E** |
| **Grid Reference:** | **718.9 km E 750.7 km N** |
| **Depth:** | **5.0 km** |
| **Magnitude:** | **5.0 Mw** |
| **Hypo Solution Quality:** | **D (D*D)** |
| **Epicentral Error (1 std. dev.):** | **5.0 km** |
| **Depth Error (1 std. dev.):** | **10.0 km** |

**Discussion**

The largest offshore earthquake occurred in the Central North Sea on 7 May 2001. It had a magnitude of 5.0 Mw and was located approximately 410 km east of Edinburgh. It was felt on three nearby oil platforms in the Ekofisk field, The Ekofisk Hotel platform control tower described “a swaying lasting 2 minutes which left us feeling dizzy”, they also confirmed that the Albuskjell platform some 15 km to the north and the Eldfisk platform, some 26 km to the south reported similar felt effects. The focal mechanism obtained for the earthquake shows normal faulting with north-south trending nodal planes.

Seismograms recorded by the broadband instruments at Edinburgh are shown in Figure A1.1, the focal mechanism is shown in Figure A1.2 and the observed and synthetic seismograms for azimuthally selected stations is shown in Figure A1.3.

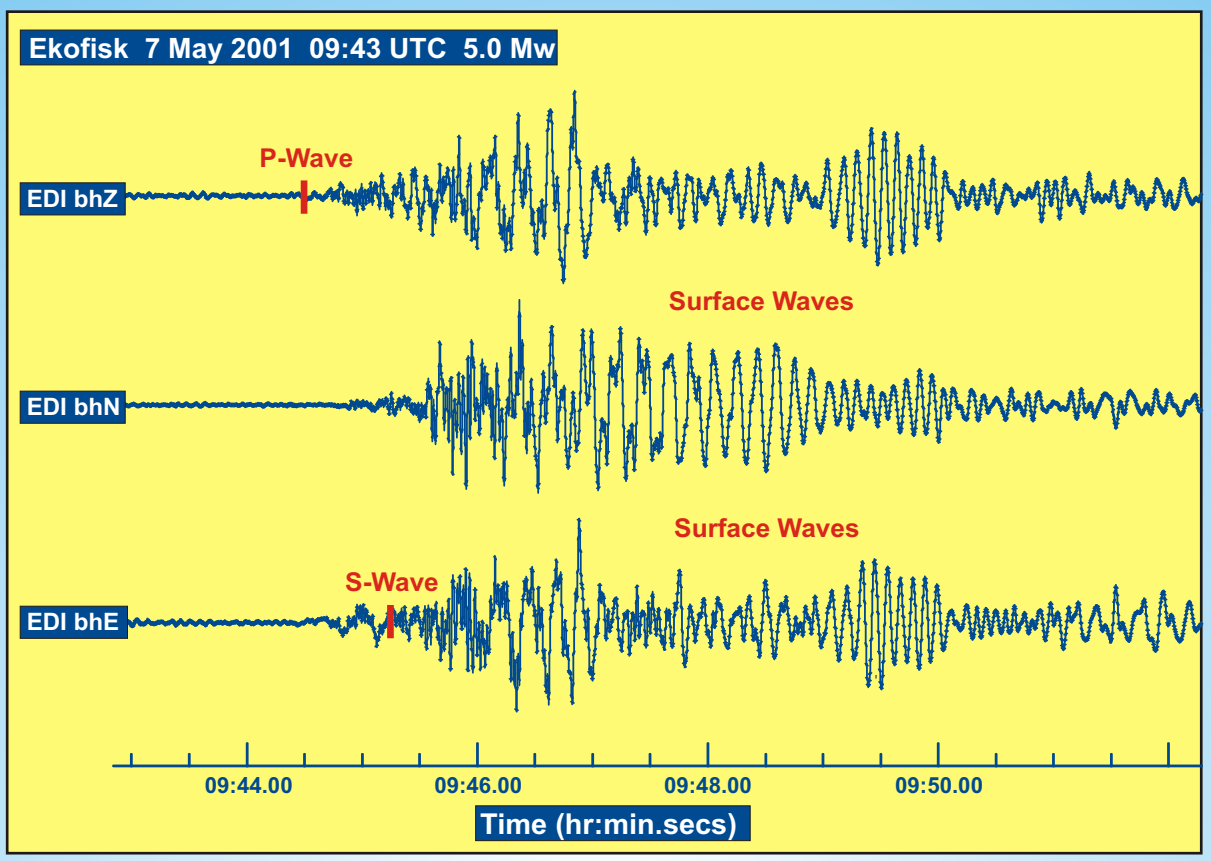



**Figure A1.1.** Seismograms of the Ekofisk earthquake of 7 May 2001 09:43 UTC 5.0 Mw recorded on the broadband instruments at Edinburgh.

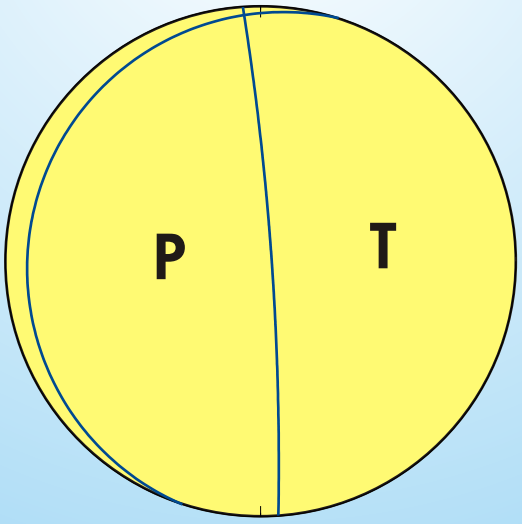



**Figure A1.2.** Equal area projection of the upper lower hemisphere for the Ekofisk earthquake 7 May 2001 09:43 UTC 5.0 Mw. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

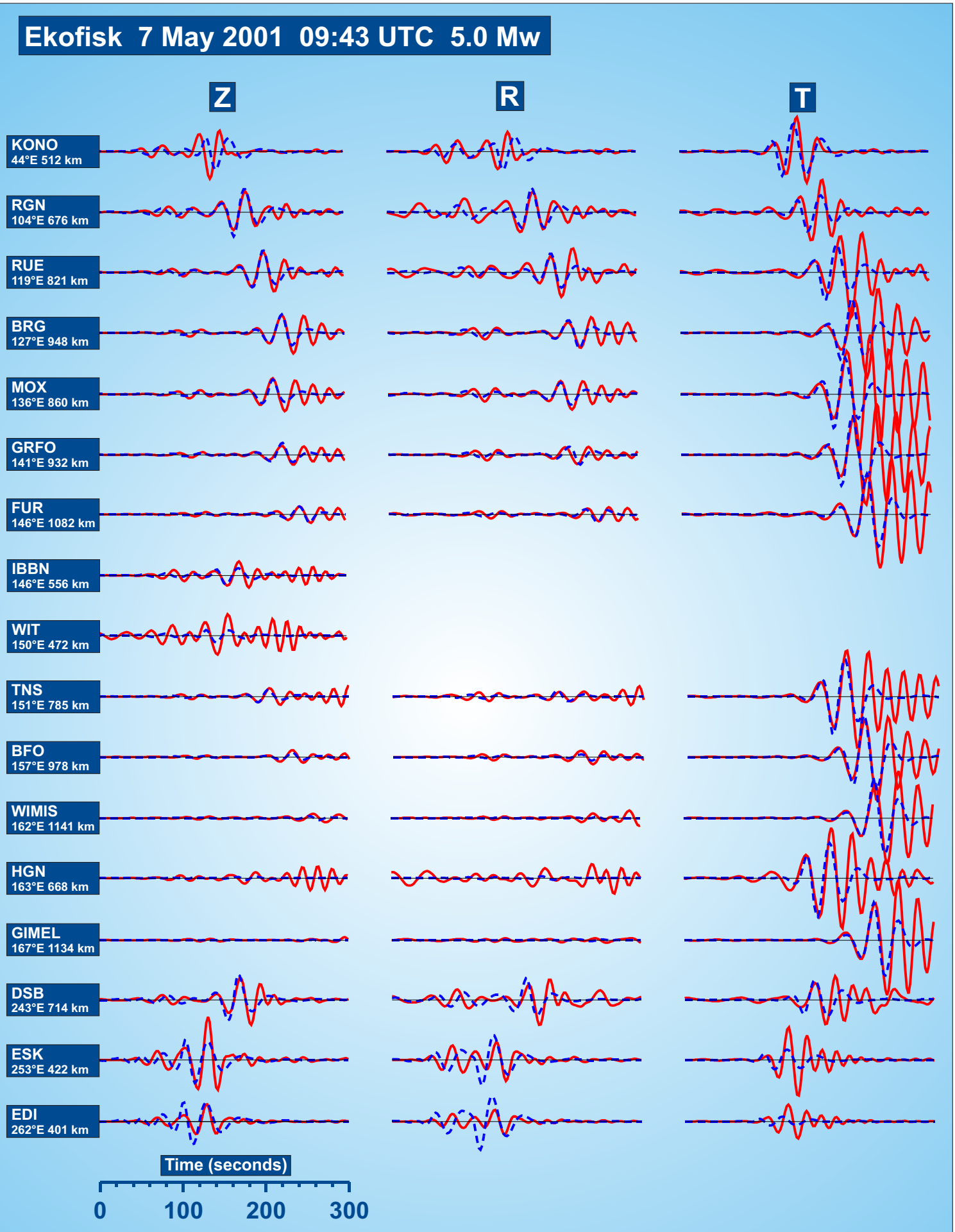



**Figure A1.3.** Observed (red solid) and synthetic (blue dashed) seismograms for azimuthally selected stations in the 30-50s pass-band for stations at epicentral distances of less than 1200 km. Z, R, and T are the vertical, radial, and transverse components. Stations are listed in azimuthal order; numbers beneath the station codes are event-station azimuth and distance. Seismogram amplitudes are normalized to the same epicentral distance assuming cylindrical spreading (from Braunmiller et al., 2001).

# APPENDIX A2

## DUMFRIES EARTHQUAKE, 13 MAY 2001

### PARAMETERS

| | |
|---|---|
| **Date:** | **13 May 2001** |
| **Origin Time:** | **08:26 59.4 UTC** |
| **Latitude and longitude:** | **55.10$^{o}$ N 3.64$^{o}$ W** |
| **Grid Reference:** | **295.5 km E 579.6 km N** |
| **Depth:** | **11.5 km** |
| **Magnitude:** | **3.0 ML** |
| **Hypo Solution Quality:** | **C (B*C)** |
| **Epicentral Error (1 std. dev.):** | **1.5 km** |
| **Depth Error (1 std. dev.):** | **3.3 km** |

**Discussion**

An earthquake with a magnitude 3.0 ML, occurred on 13 May, with a location near Dumfries. BGS received many felt reports, from the Police, the media, Dumfries Council and residents of the Dumfries area. Felt reports described "the entire house shook", "the neighbours felt a shaking and ran into their back gardens", "the floor moved" and "felt like an explosion". A macroseismic survey was conducted and over 590 replies were received, indicating a maximum intensity of 5 EMS. This event was followed by four aftershocks on the same day with magnitudes ranging between 0.5 and 1.3 ML, the largest event (1.3 ML) was felt with intensities of at least 3 EMS. The focal mechanism obtained for the Dumfries earthquake shows predominantly strike-slip faulting along near-vertical fault planes striking approximately NNW-SSE and ENE-WSW respectively. The near horizontal, NW-SE orientation for the principal stress direction (P-axis) is in ground agreement with the expected regional stress tensor.

Seismograms recorded on the strong motion instruments at Chapelcross (BCC) and by the BGS network around Edinburgh are shown in Figure A2.1 and Figure A2.2, the focal mechanism is shown in Figure A2.3 and an isoseismal map is shown in Figure A2.4.

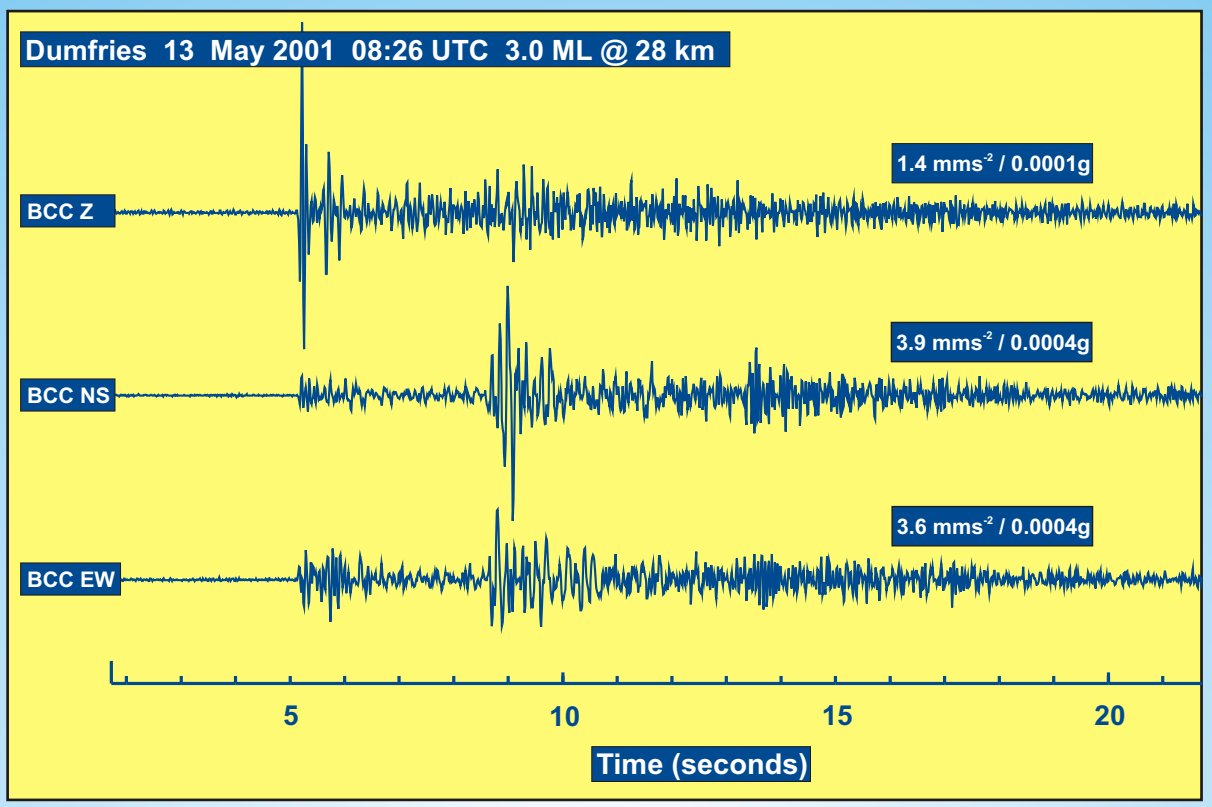



**Figure A2.1.** Seismograms of the Dumfries earthquake of 13 May 2001 08:26 UTC 3.0 ML recorded on the strong motion instruments at Chapelcross.

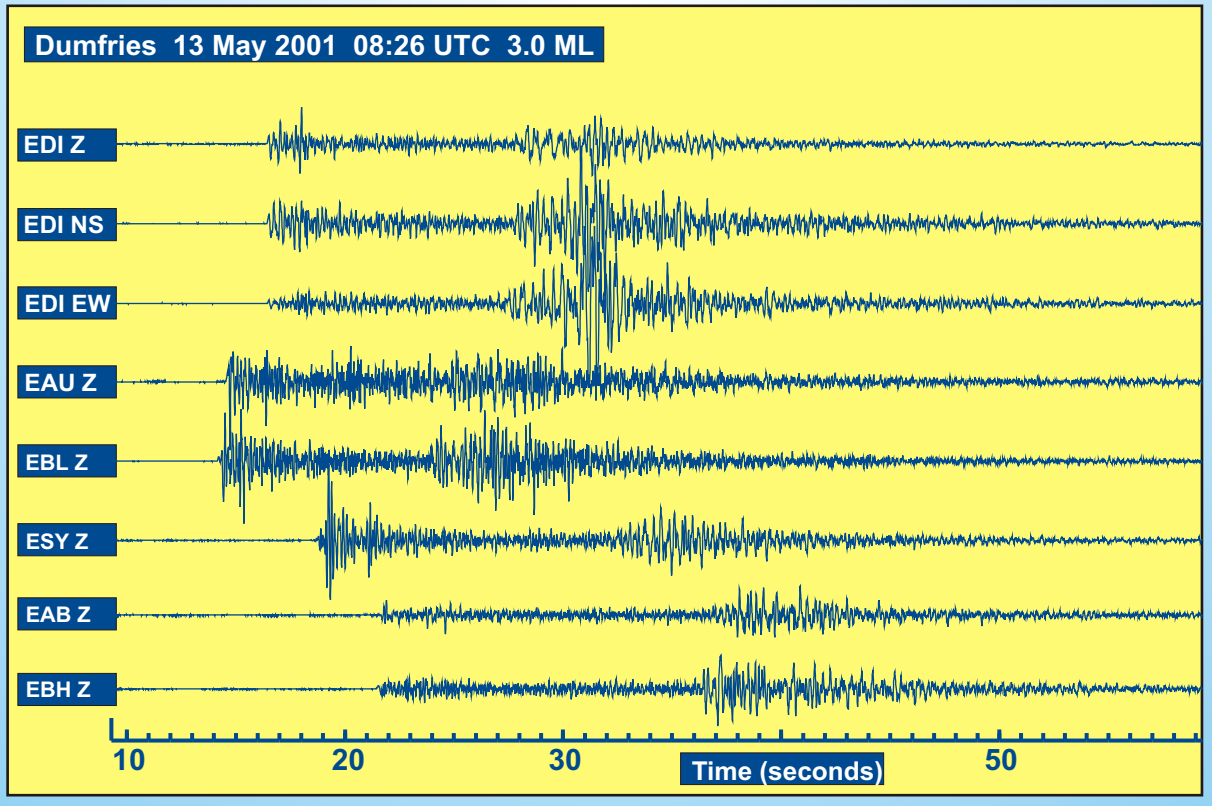



**Figure A2.2.** Seismograms of the Dumfries earthquake of 13 May 2001 08:26 UTC 3.0 ML recorded on the LOWNET network.

**FAULT PLANE SOLUTION : DUMFRIES EARTHQUAKE OF 13 MAY 2001**

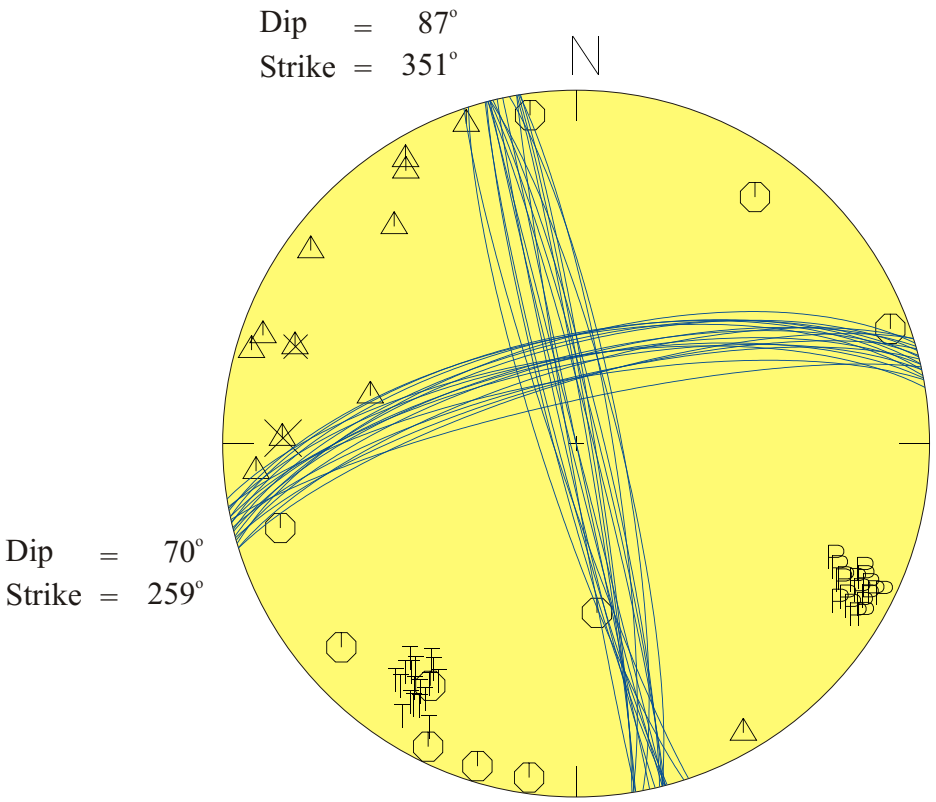



**Figure A2.3.** Equal area projection of the upper lower hemisphere for the Dumfries earthquake 13 May 2001 08:26 UTC 3.0 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

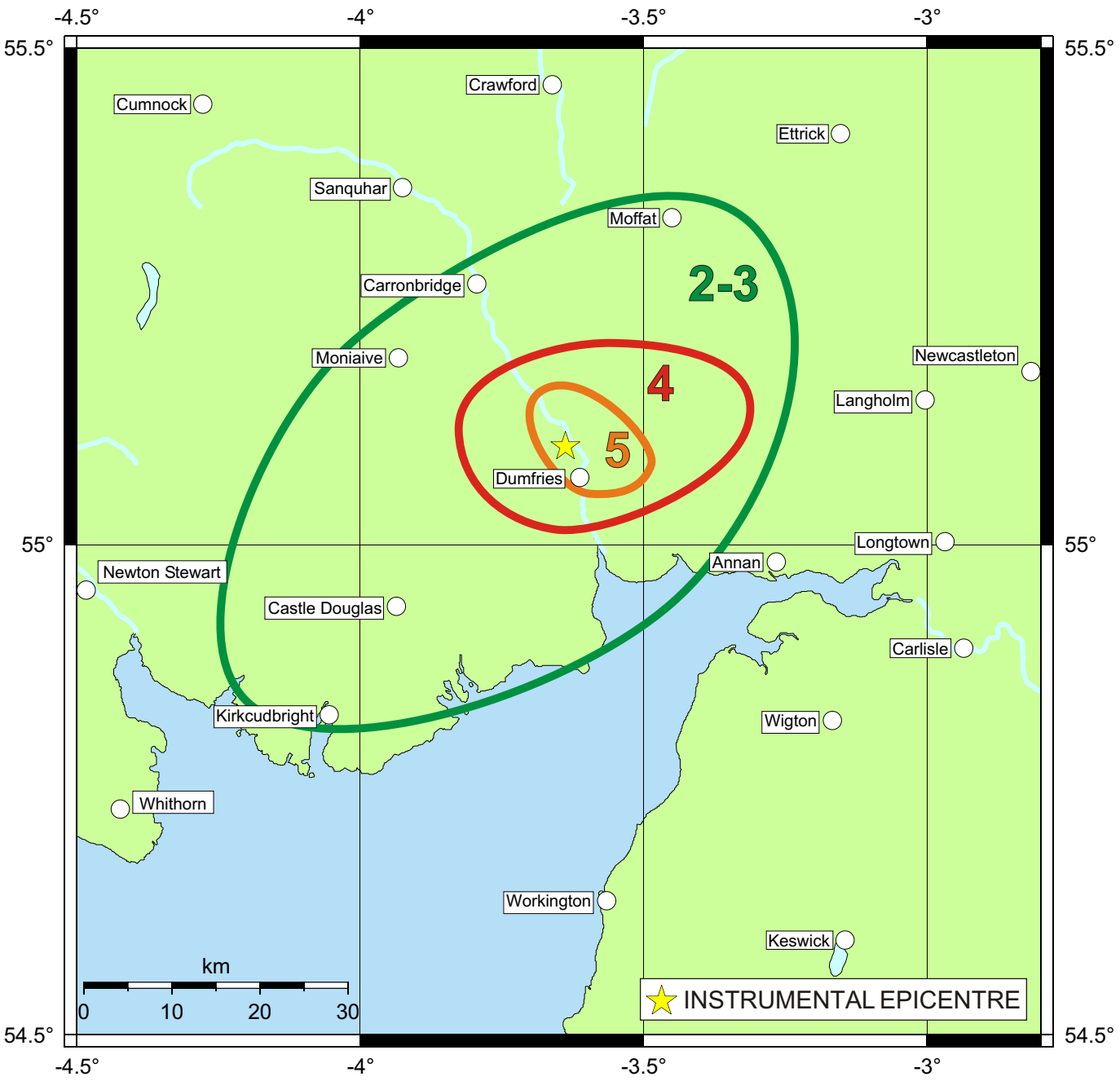



**Figure A2.4.** Dumfries Earthquake 13 May 2001, 08:26 UTC (3.0 ML) - EMS Intensities

# APPENDIX A3

## OFF HARTLAND POINT EARTHQUAKE, 31 MAY 2001

### PARAMETERS

| | |
|---|---|
| **Date:** | **31 May 2001** |
| **Origin Time:** | **23:42 57.8 UTC** |
| **Latitude and longitude:** | **50.98$^{o}$ N 4.53$^{o}$ W** |
| **Grid Reference:** | **215.6 km E 127.2 km N** |
| **Depth:** | **26.4 km** |
| **Magnitude:** | **3.6 ML** |
| **Hypo Solution Quality:** | **C (A*D)** |
| **Epicentral Error (1 std. dev.):** | **3.0 km** |
| **Depth Error (1 std. dev.):** | **4.0 km** |

### Discussion

An earthquake, with a magnitude of 3.6 ML, occurred off Hartland Point, Devon, on 31 May. BGS received many felt reports from residents of Cornwall and Devon, who described "I ran outside alarmed", " I thought a nuclear explosion had gone off" and "the whole house shook". A macroseismic survey was conducted and over 520 replies were received, indicating a maximum intensity of 5 EMS.

Seismograms recorded by the BGS networks around North Wales and Jersey are shown in Figure A3.1 an isoseismal map is shown in Figure A3.2.

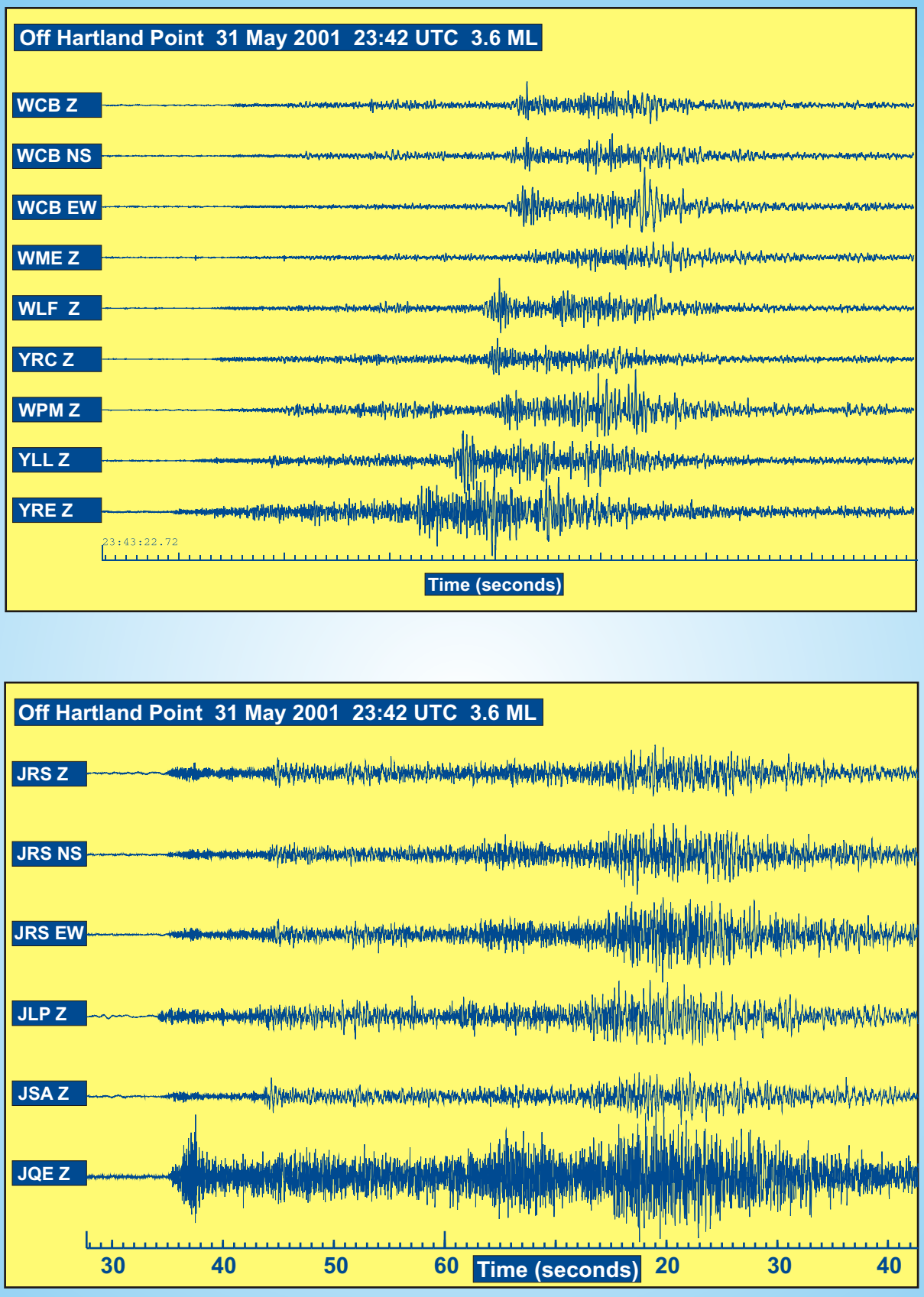



**Figure A3.1.** Seismograms of the earthquake off Hartland Point of 31 May 2001 23:42 UTC 3.6 ML recorded on the North Wales and Jersey networks.

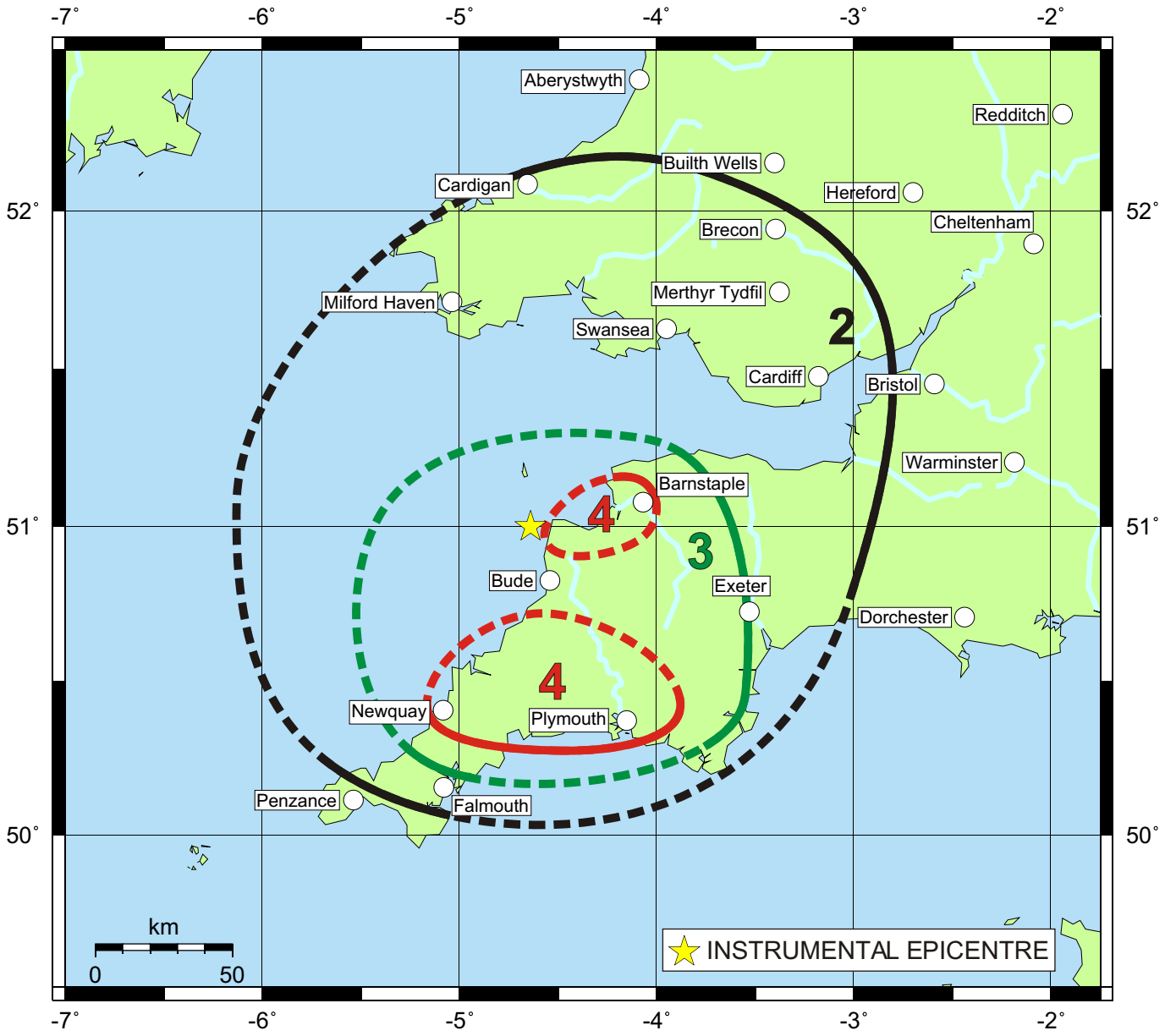



**Figure A3.2.** Off Hartland Point Earthquake 31 May 2001, 23:42 UTC (3.6 ML) - EMS Intensities

## APPENDIX A4

## BARGOED EARTHQUAKE, 10 OCTOBER 2001

### PARAMETERS

| | |
|---|---|
| **Date:** | **10 October 2001** |
| **Origin Time:** | **02:52 25.3 UTC** |
| **Latitude and longitude:** | **51.70$^{o}$ N 3.26$^{o}$ W** |
| **Grid Reference:** | **313.3 km E 200.7 km N** |
| **Depth:** | **6.5 km** |
| **Magnitude:** | **3.1 ML** |
| **Hypo Solution Quality:** | **B (A*B)** |
| **Epicentral Error (1 std. dev.):** | **0.8 km** |
| **Depth Error (1 std. dev.):** | **2.8 km** |

### Discussion

An earthquake with a magnitude 3.1 ML, occurred on 10 October, with a location near Bargoed, Mid-Glamorgan. BGS received felt reports from residents of the Bargoed area. Felt reports described "the bed was shaking", "the entire house shook" and "I was woken from sleep". A macroseismic survey was conducted and approximately 120 replies were received, indicating a maximum intensity of 4 EMS. This event was followed by three aftershocks with magnitudes of 1.6, 1.6 and 2.5 ML, the largest event (2.5 ML) on 18 October was felt with intensities of 4 EMS. The Bargoed focal mechanism shows oblique normal faulting along either a NW-SE striking fault plane dipping at 38° or a NNE-SSW striking fault plane dipping at 63°. The average maximum compressive stress direction has an azimuth of 142°and dip of 61° and the minimum stress direction strikes at 258° and dips at 14°.

Seismograms recorded by the BGS networks around Hereford and Keyworth are shown in Figure A4.1, the focal mechanism is shown in Figure A4.2 and an isoseismal map is shown in Figure A4.3.

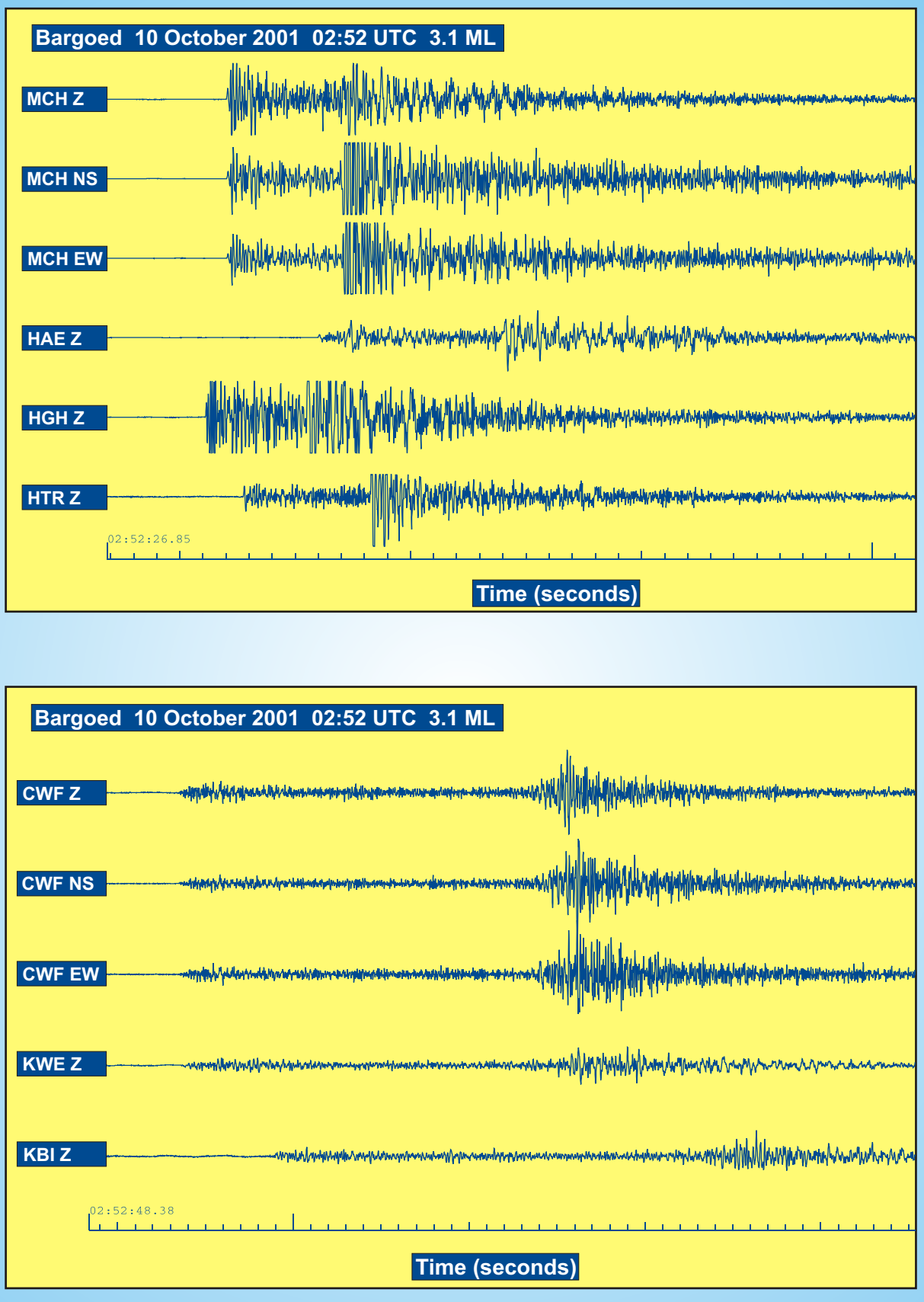



**Figure A4.1.** Seismograms of the Bargoed earthquake of 10 October 2001 02:52 UTC 3.1 ML recorded on the Hereford and Keyworth networks.

**FAULT PLANE SOLUTION : BARGOED EARTHQUAKE OF 10 OCTOBER 2001**

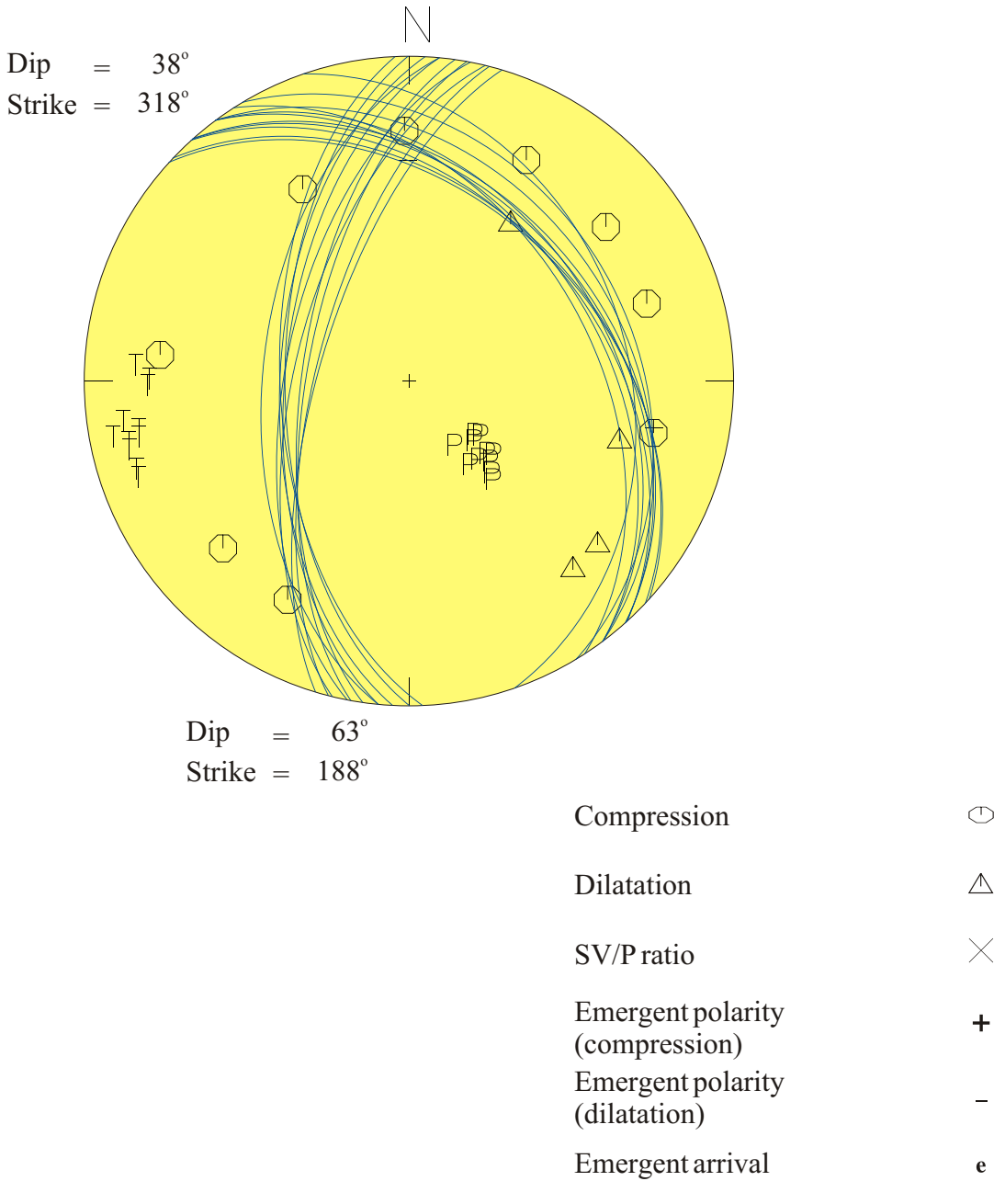



**Figure A4.2.** Equal area projection of the upper lower hemisphere for the Bargoed earthquake 10 October 2001 02:52 UTC 3.1 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

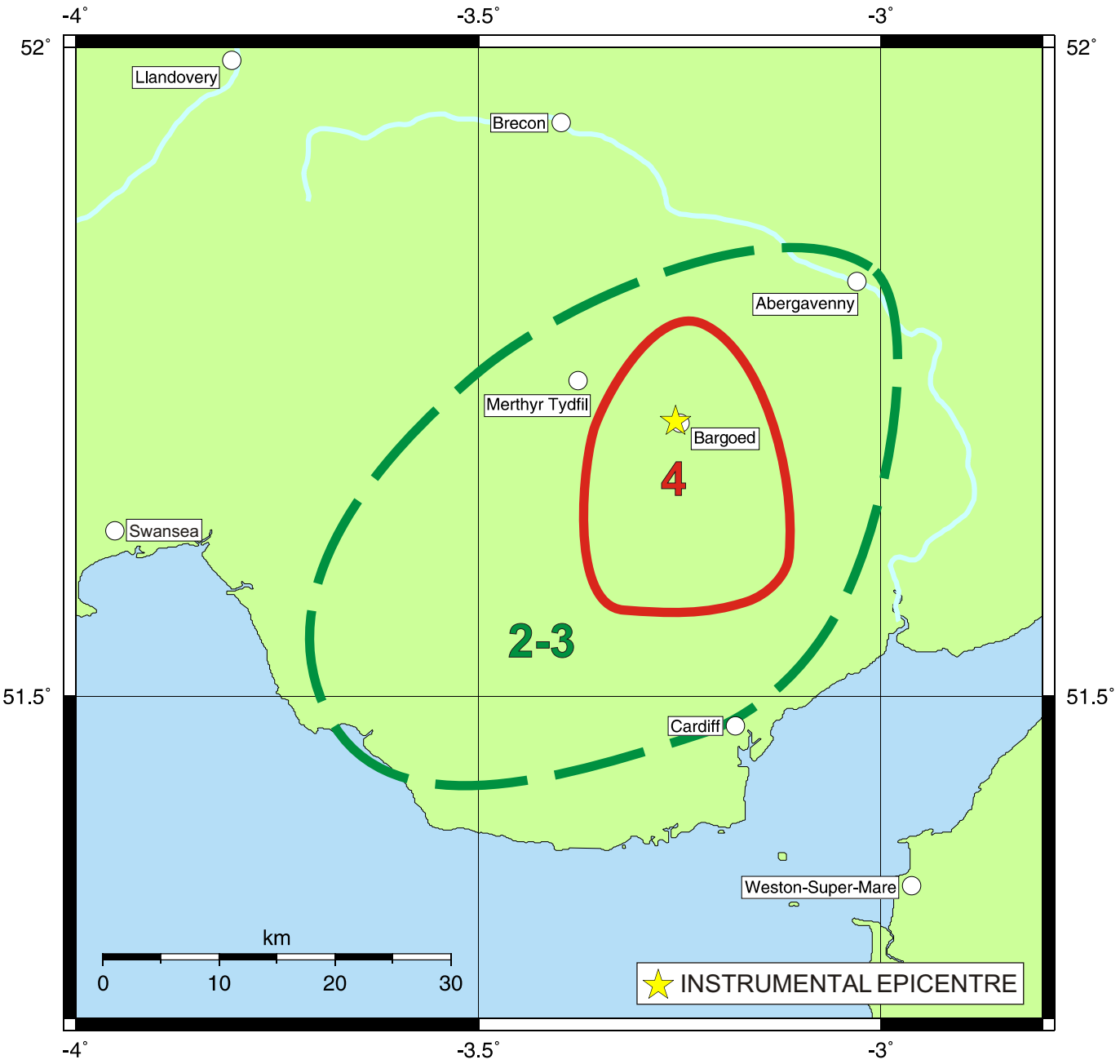



**Figure A4.3.** Bargoed Earthquake 10 October 2001, 02:52 UTC (3.1 ML) - EMS Intensities

# APPENDIX A5

## MELTON MOWBRAY EARTHQUAKE, 28 OCTOBER 2001

### PARAMETERS

| | |
|---|---|
| **Date:** | **28 October 2001** |
| **Origin Time:** | **16:25 25.1 UTC** |
| **Latitude and longitude:** | **52.85$^{o}$ N 0.86$^{o}$ W** |
| **Grid Reference:** | **477.1 km E 328.3 km N** |
| **Depth:** | **11.6 km** |
| **Magnitude:** | **4.1 ML** |
| **Hypo Solution Quality:** | **B (B*B)** |
| **Epicentral Error (1 std. dev.):** | **0.8 km** |
| **Depth Error (1 std. dev.):** | **4.1 km** |

### Discussion

The largest onshore earthquake, with a magnitude of 4.1 ML, occurred near Melton Mowbray, Leicestershire on 28 October 2001. BGS initiated a macroseismic survey and earthquake questionnaires were distributed through local and national newspapers. Approximately 1800 emailed responses were received, the most received for any UK earthquake so far, together with an estimated 4200 paper questionnaires, giving a total of 6000 responses in all. Many media interviews were conducted and a large number of enquiries were received. The earthquake was felt throughout Lincolnshire, Leicestershire, Warwickshire, Yorkshire, Shropshire and Nottinghamshire. The most distant reports were from the following places: in the west, the earthquake was felt near Chester. In the east, the earthquake was reported felt in King's Lynn, Norfolk. In the north, the limit of observation was marked by Knaresborough. In the south, the shock was felt as far as Oxford, with also a single very distant observation from Salisbury. There were reports of damage to chimneys in the Melton Mowbray area, indicating an intensity of 6 EMS. Felt reports described "we ran into the streets", "the whole house shook", "the table moved" and "we were very frightened". A maximum acceleration of 0.02g was measured at the strong motion station at Keyworth, some 15 km from the earthquake. The focal mechanism for the Melton Mowbray earthquake also shows oblique normal faulting along either a near N-S fault plane dipping at 51° or along a near E-W fault plane dipping at 58°. The average maximum compressive stress direction has an azimuth of 140°and dip of 55° and the minimum stress direction strikes at 44° and dips at 4°.

Seismograms recorded on the strong motion instruments at Keyworth (KEY2) and by the BGS network around Hartland are shown in Figure A5.1 and A5.2, the focal mechanism is shown in figure A5.3 and an isoseismal map is shown in Figure A5.4.

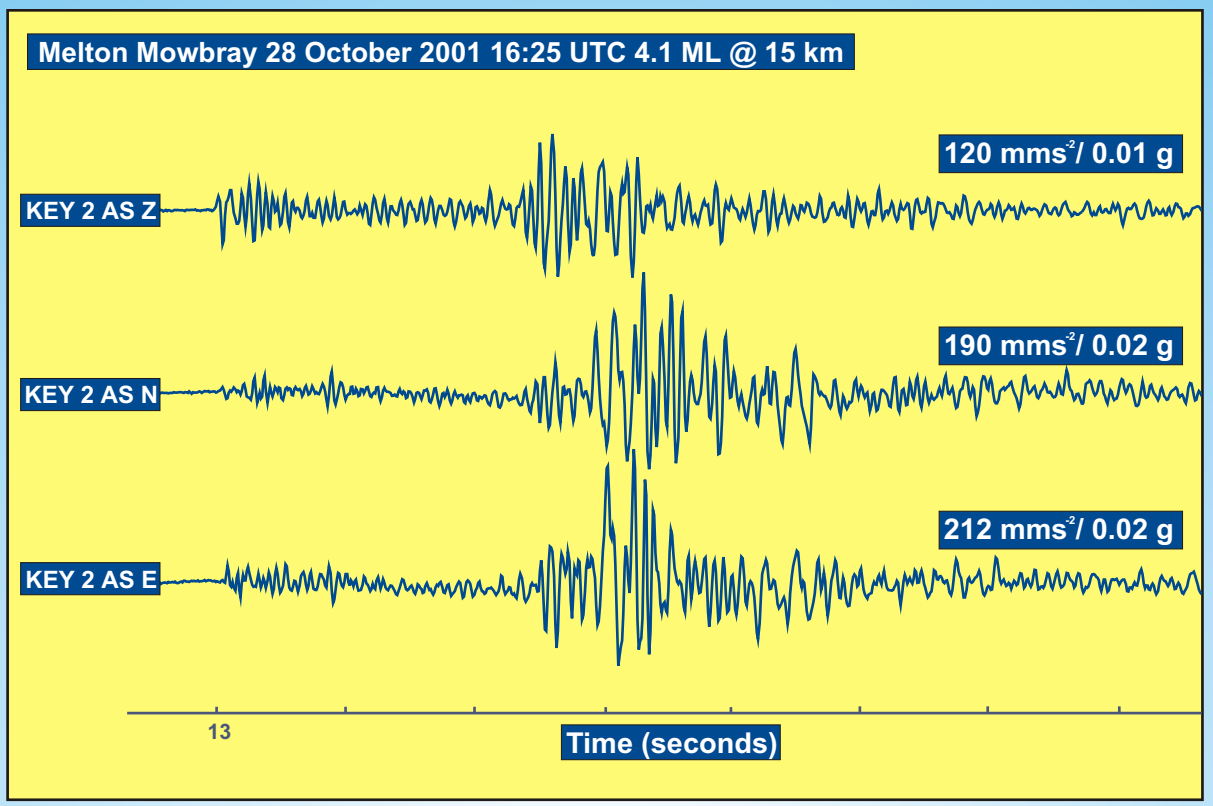



**Figure A5.1.** Seismograms of the Melton Mowbray earthquake of 28 October 2001 16:25 UTC 4.1 ML recorded on the strong motion instruments at Keyworth (KEY2).

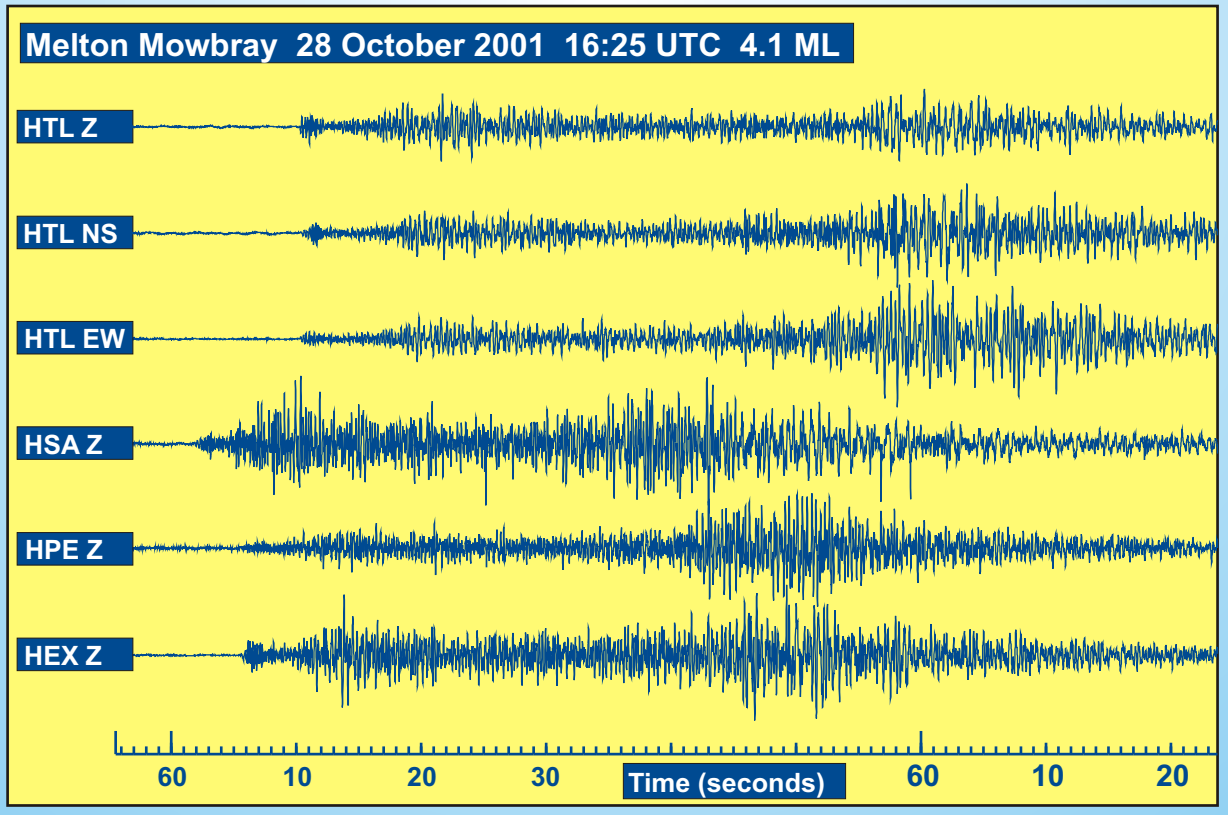



**Figure A5.2.** Seismograms of the Melton Mowbray earthquake of 28 October 2001 16:25 UTC 4.1 ML recorded on the Hartland network.

**FAULT PLANE SOLUTION : MELTON MOWBRAY EARTHQUAKE OF 28 OCTOBER 2001**

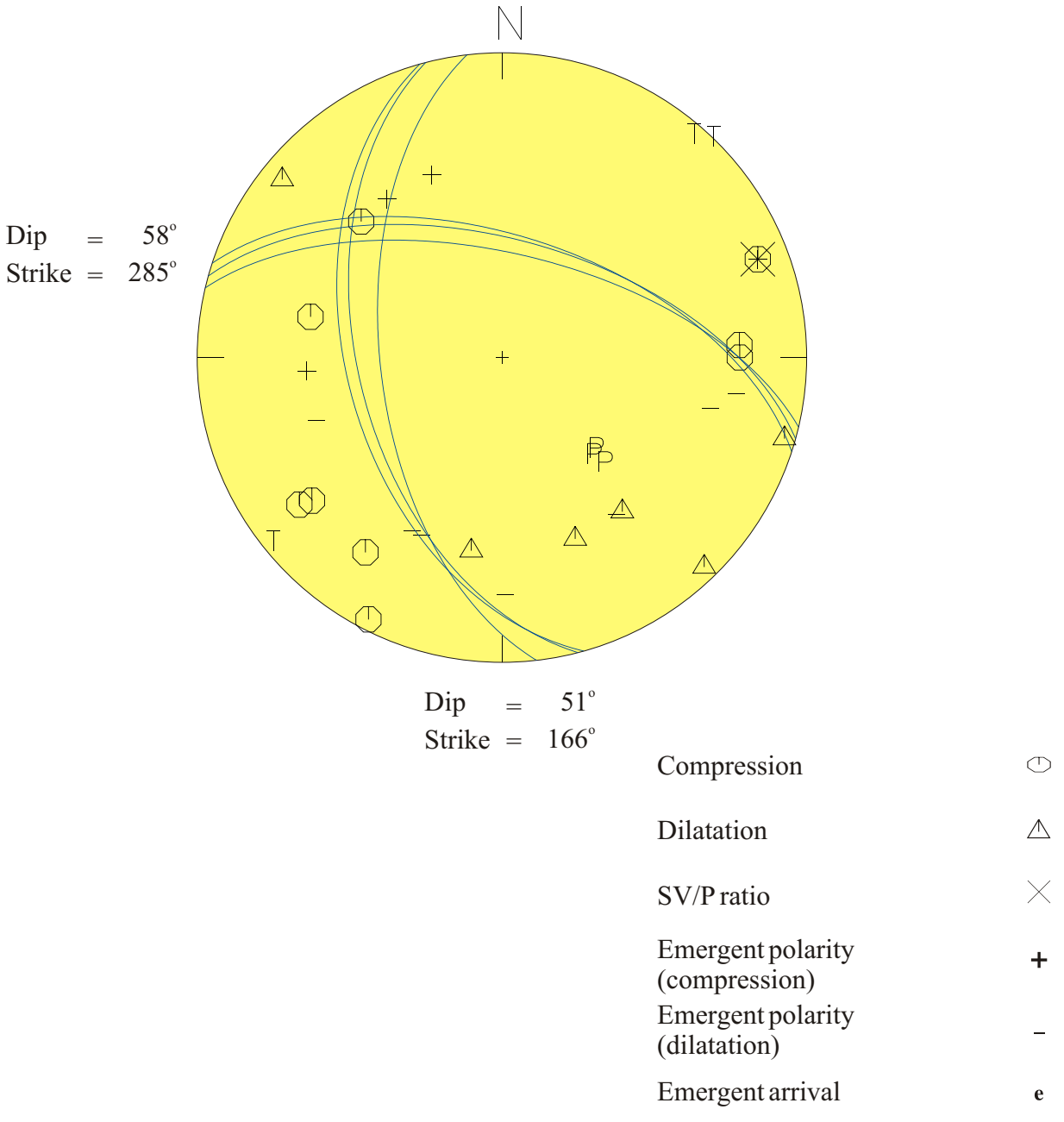



**Figure A5.3.** Equal area projection of the upper lower hemisphere for the Melton Mowbray earthquake 28 October 2001 16:25 UTC 4.1 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

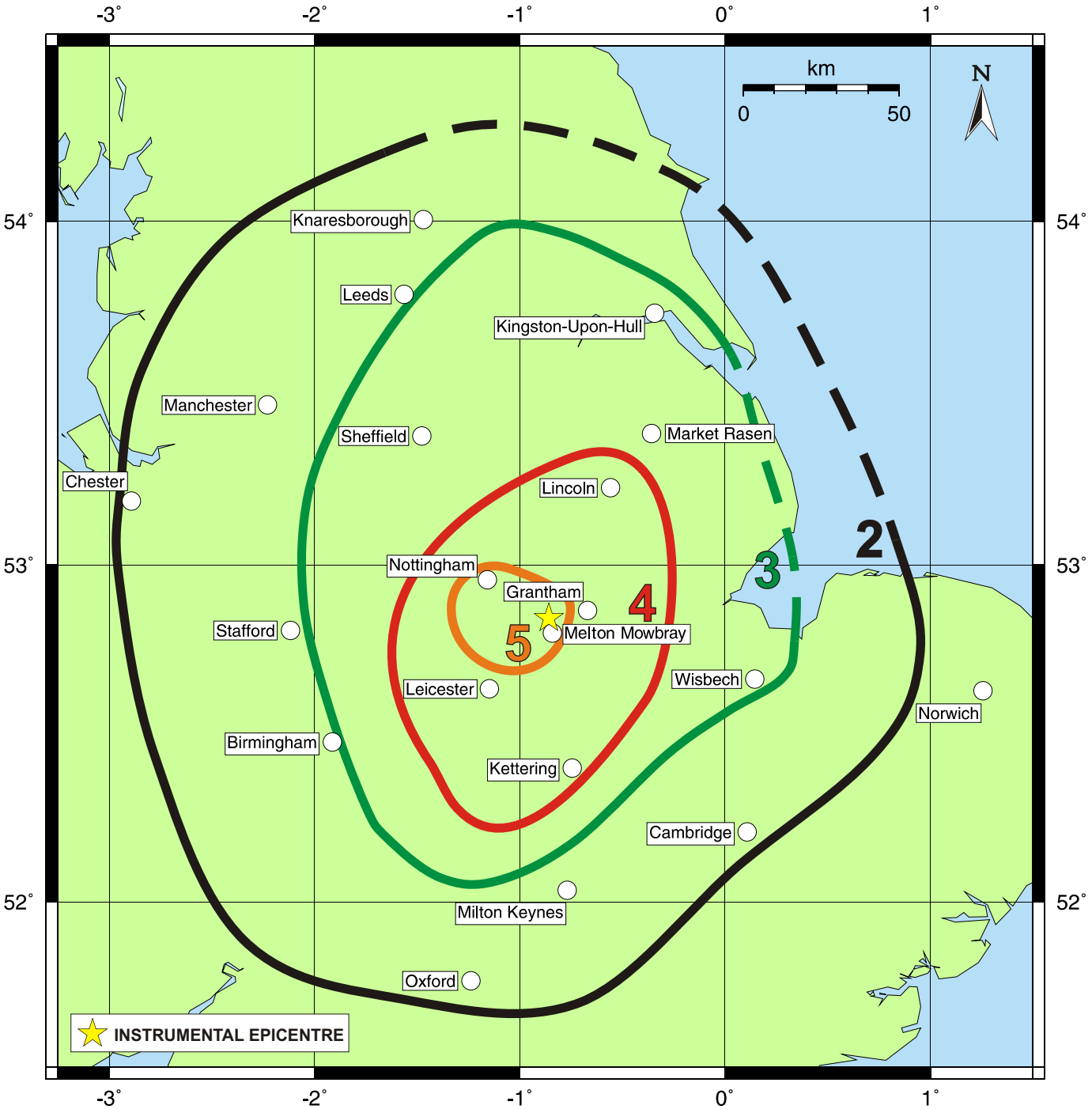



**Figure A5.4.** Melton Mowbray earthquake 28 October 2001, 16:25 UTC, (4.1 ML ) - EMS Intensities

# APPENDIX B

## EARTHQUAKE INFORMATION CHARGES

## APPENDIX B

| SUMMARY OF CHARGES FOR DATABASE ENQUIRIES | COST (£) |
|---|---|
| A search of the instrumental database producing a catalogue list, a map of the seismicity, a key to the abbreviations and a covering letter. | **£150.00 + VAT** |
| A search of the historical database producing a catalogue list, a map of the seismicity, a key to the abbreviations and a covering letter. | **£150.00 + VAT** |
| A combined search of both the historical and instrumental database providing the above for both the historical and instrumental seismicity. | **£275.00 + VAT** |
| An enquiry involving searching data tapes for specific events. £80.00 for first hour and £40.00 for each additional ½ hour. Note: charges can be waived for the public, media and schools. | **£80.00 + VAT** |
| A search and interpretation of raw macroseismic data (felt reports) for a specific region for an individual earthquake. | **£120.00 + VAT** |

For more information on the above and other services available please contact Mr Glenn D Ford, (g.ford@bgs.ac.uk) or Mr Bennett Simpson, (b.simpson@bgs.ac.uk) at the Global Seismology and Geomagnetism Group, Murchison House, West Mains Road, Edinburgh, EH9 3LA.

### BULLETIN OF BRITISH EARTHQUAKES: PRICE LIST

| | |
|---|---|
| Burton, P.W. and Neilson, G., 1980. **Annual catalogues of British earthquakes recorded on LOWNET (1967-1978). Inst.Geol.Sci. Seismological Bulletin No.7.** | **£3 + pp** |
| Turbitt, T., et al., 1984. **Catalogue of British earthquakes recorded by the BGS seismograph network 1979, 1980, 1981.** BGS Global Seismology Report No. 210. | **£11 + pp** |
| Turbitt, T., et al., 1985. **Catalogue of British Earthquakes recorded by the BGS Seismograph Network 1982, 1983, 1984.** BGS Global Seismology Report No. 260. | **£15 + pp** |
| Turbitt, T., et al., 1987. **Bulletin of British Earthquakes 1985.** BGS Global Seismology Report No. 303. | **£10 + pp** |
| Turbitt, T., et al., 1988. **Bulletin of British Earthquakes 1986.** BGS Global Seismology Report No. WL/88/11. | **£10 + pp** |
| Turbitt, T., et al., 1989. **Bulletin of British Earthquakes 1987**. BGS Global Seismology Report No. WL/89/09. | **£10 + pp** |
| Turbitt, T., et al., 1990. **Bulletin of British Earthquakes 1988.** BGS Global Seismology Report No. WL/90/03 | **£10 + pp** |

| **BULLETIN OF BRITISH EARTHQUAKES: PRICE LIST** | **COST (£)** |
|---|---|
| Turbitt, T., et al., 1990. **Bulletin of British Earthquakes 1989**. BGS Global Seismology Report No. WL/90/49 | **£12.50 + pp** |
| Turbitt, T., et al., 1991. **Bulletin of British Earthquakes 1990.** BGS Global Seismology Report No. WL/91/34. | **£12.50 + pp** |
| Turbitt, T., et al., 1992. **Bulletin of British Earthquakes 1991.** BGS Global Seismology Report No. WL/92/29. | **£12.50 + pp** |
| Walker, A.B., et al., 1993. **Bulletin of British Earthquakes 1992.** BGS Global Seismology Report No. WL/93/11. | **£12.50 + pp** |
| Musson, R.M.W., 1994. **A Catalogue of British earthquakes**. BGS Global Seismology Report No. WL/94/04. | **£15.00 + pp** |
| Walker, A.B., et al., 1994. **Bulletin of British Earthquakes 1993.** BGS Global Seismology Report No. WL/94/09. | **£12.50 + pp** |
| Walker, A.B., et al., 1995. **Bulletin of British Earthquakes 1994.** BGS Global Seismology Report No. WL/95/04. | **£12.50 + pp** |
| Walker, A.B., et al., 1996. **Bulletin of British Earthquakes 1995.** BGS Global Seismology Report No. WL/96/04. | **£12.50 + pp** |
| Walker, A.B., et al., 1997. **Bulletin of British Earthquakes 1996.** BGS Global Seismology Report No. WL/97/03. | **£12.50 + pp** |
| Walker, A.B., et al., 1998. **Bulletin of British Earthquakes 1997.** BGS Global Seismology Report No. WL/98/01. | **£12.50 + pp** |
| Walker, A.B., et al., 1999. **Bulletin of British Earthquakes 1998.** BGS Global Seismology Report No. WL/99/01. | **£12.50 + pp** |
| Walker, A.B., et al., 2000. **Bulletin of British Earthquakes 1999.** BGS Global Seismology Report No. WL/00/01. | **£12.50 + pp** |
| Simpson, B A, et al., 2001. **Bulletin of British Earthquakes 2000.** BGS Global Seismology Report No. IR/01/281. | **£12.50 + pp** |

A complete list of Seismology group publications can be obtained by writing to the secretary at the Global Seismology and Geomagnetism Group, Murchison House, West Mains Road, Edinburgh, EH9 3LA.

# APPENDIX C

## EUROPEAN MACROSEISMIC SCALE (EMS 98)

## APPENDIX C

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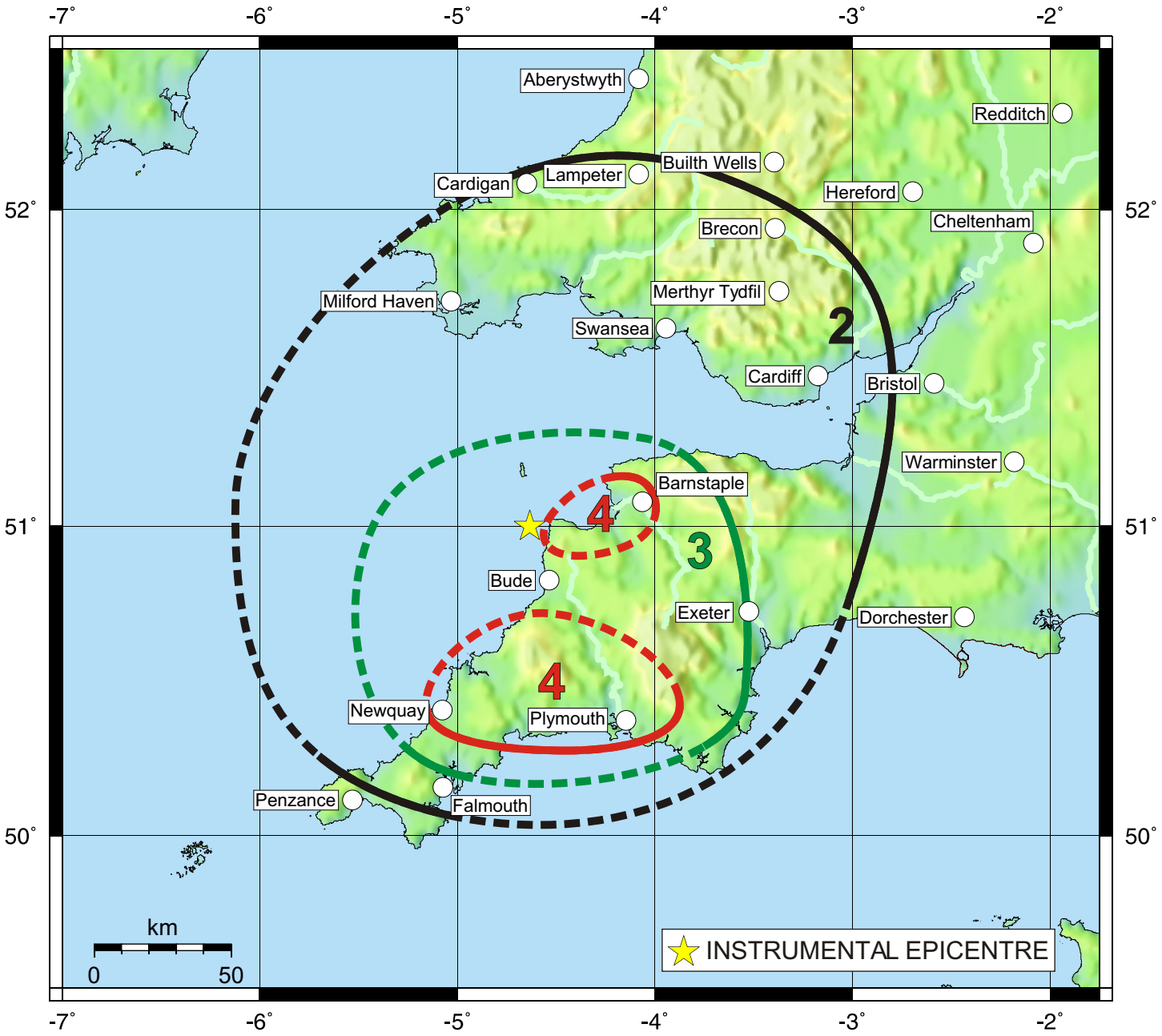
A complete description of the EMS-98 scale is given in: Grunthal, G., (Ed) 1998. European Macroseismic scale 1998. Cahiers du Centre European de Geodynamique et de Seismologie. Vol 15.

NATURAL ENVIRONMENT RESEARCH COUNCIL




**Hartland Point Earthquake 31 May 2001, 23:42 UTC (3.6 ML) - EMS Intensities**