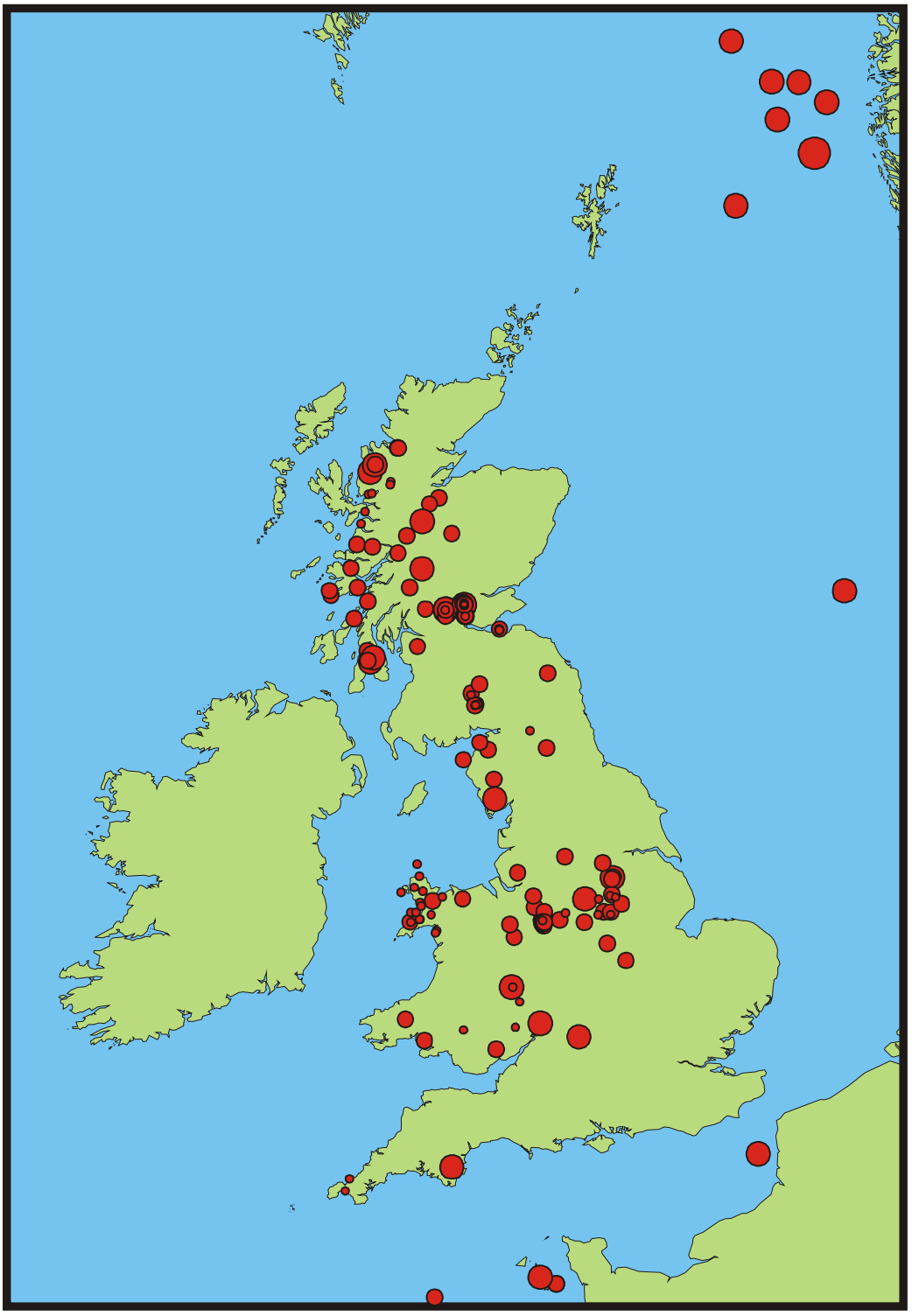
British Geological Survey

BULLETIN OF BRITISH EARTHQUAKES 1997



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£12.50

BRITISH GEOLOGICAL SURVEY

TECHNICAL REPORT WL/98/01

Global Seismology and Geomagnetism Group

Bulletin of British earthquakes 1997

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March 1998

Bibliographic reference

Walker, A B (editor), 1998.
Bulletin of British earthquakes 1998.
British Geological Survey Technical Report WL/98/01.

Edinburgh British Geological Survey 1998

BRITISH GEOLOGICAL SURVEY

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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. This area, 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 1997 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 1997 Seismicity

There have been 235 earthquakes located by the monitoring network during the year, with 33 of them having magnitudes 2.0 ML or greater. Of these, 15 are known to have been felt, together with a further 22 smaller ones, bringing the total to 37 felt earthquakes in 1997.

The largest onshore earthquake occurred on 10 February, with a magnitude of 2.9 ML; it was located approximately 6 km southwest of Chesterfield in Derbyshire (Appendix A1). Felt effects were experienced throughout Chesterfield, Ashgate, South Wingfield and Matlock, where residents typically reported "the house trembled" and "the whole bed shook". A fault plane solution of the event shows reverse faulting with a component of strike-slip motion on planes striking EW and dipping south or planes striking NE and dipping to the NW. This is the first event that has been felt in the area, since the magnitude 1.8 ML Chesterfield earthquake, on 3 February 1987, which was felt with intensities of at least 3 EMS in the epicentral area.

The largest offshore earthquake occurred in the northern North Sea on 13 May. It had a magnitude of 3.4 ML and was located approximately 270 km ENE of Lerwick, Shetland, in the North Viking Graben region of the North Sea; no felt reports were received. A further six events occurred in the northern North Sea area during the year, with magnitudes ranging between 2.1 and 2.9 ML, and were located using both the BGS and Norwegian networks.

On 4 February, an earthquake, with a magnitude of 2.7 ML, occurred in the Rannoch Moor area of Tayside. It was felt in Appin, Bridge of Orchy and on Rannoch Moor with intensities of at least 3 EMS. Felt reports described "a rumble like thunder", "the whole house shook and I was frightened" and "heard a loud bang". This event locates in the same general area as the magnitude 2.5 ML, Glen Lyon earthquake on 9 January 1990, which was felt with intensities of at least 4 EMS.

On 19 May, an earthquake, with a magnitude of 2.7 ML, occurred near the town of Carterton, Oxfordshire. The event was felt throughout the villages of Carterton, Witney, Burford and Bampton. Felt reports described "felt like the foundations were lifted", "the light fitting rattled" and "the whole desk shook and items rattled" indicating a maximum intensity of at least 4 EMS in the epicentral area. This is the largest event in the immediate area, since the magnitude 1.9 ML Lechlade earthquake on 15 June 1984, approximately 5 km to the southwest.

On 22 June, an earthquake, with a magnitude of 2.2 ML, occurred offshore Jersey in the Channel Islands, approximately 2 km west of Grosnez Point (Appendix A2). The event was felt throughout Jersey, where felt reports described "the floor vibrated for 15-20 seconds", "the whole bungalow shook" and "like a plane crashing". A macroseismic survey was carried out and 117 replies were received (111 positive and 6 negative). They indicated a maximum intensity of 4 EMS close to the epicentre. This is the largest event in the area since the magnitude 3.5 ML St. Aubin's Bay earthquake, on 30 April 1990, which was felt throughout Jersey and Guernsey and had a maximum intensity of 5 EMS.

On 8 October, an earthquake, with a magnitude of 2.1 ML, occurred in Ulverston, Cumbria. Felt reports were received from Ulverston, Kirkby-in-Furnace, Broughton Beck and Bouth, and included "like an explosion followed by a rumble" and "a loud bang", indicating an intensity of 3 EMS. This is the largest event in the area since the magnitude 3.0 ML, Grange-over-Sands earthquake of 26 June 1993, which was felt over an area of 9000 km2 and had a maximum intensity of 5 EMS.

An earthquake, with a magnitude of 2.8 ML, occurred on 16 October approximately 10 km northwest of Dartmouth in Devon (Appendix A3). Felt reports described "being woken up and the bedside cabinet shaking", "a great shake moved the foundations" and "the house shook from side to side for 1-2 seconds". A macroseismic survey was carried out and 162 replies were received (156 positive and 6 negative). They indicated a maximum intensity of 4 EMS close to the epicentre and a felt area of 1400 km2. No focal mechanism was obtained for this event owing to the poor station distribution in the epicentral region.

In the Loch Maree area, of the Scottish Highlands, an earthquake, with a magnitude of 2.5 ML, occurred approximately 10 km southeast of the village of Gairloch on 8 November. Felt reports were received from the village of Gairloch where some residents were awakened from sleep and described the effects like "a large rumble and the house was shaking" and "like distant thunder".

Near Doune, Central Scotland, ten earthquakes were detected during 1997, with magnitudes ranging between 0.9 and 2.7 ML. The two largest events with magnitudes of 2.7 ML, occurred on 6 October and 30 November and were reported felt throughout the Doune, Callander, Thornhill and Dunblane areas of Central Scotland. Felt reports described "we were woken up", "the whole house shook" and "cups fell off the sideboard", indicating an intensity of at least 4 EMS in the epicentral area and in some cases 5 EMS. A further four events were reported felt throughout the Doune area, with magnitudes ranging between 1.7 and 2.6 ML.

A swarm of forty-nine earthquakes, five felt by local residents, were detected in the Blackford area of Tayside during 1997 with magnitudes ranging between -0.2 and 2.4 ML. The largest, with a magnitude of 2.4 ML, occurred on 30 July and was felt throughout the Blackford area. The local Police were flooded with calls and felt reports described "the whole building shook", "pictures on the walls moved" and "the cupboard doors flew open" indicating an intensity of at least 4 EMS. This is an area that has experienced a number of events in the past, including the magnitude 3.2 ML Ochil Hills earthquake, on 19 February 1979, and had a maximum intensity of 5 EMS.

On 8 December, an earthquake, with a magnitude of 2.3 ML, was located approximately 5 km southeast of the village of Fort Augustus, Scottish Highlands. Felt reports were received from Fort Augustus, which described "we were woken up" and "items in the house were rattling" indicating an intensity of at least 4 EMS.

Near Caernarvon, Gwynedd, a small earthquake with a magnitude of 1.2 ML, was felt by a resident in the village of Tregarth, on 19 December. She described "the house shook" and "heard a rumble" indicating an intensity of 3 EMS, which is surprising as events with such small magnitudes are rarely felt.

In North Wales, two events with magnitudes of -0.2 and 0.1 ML were located on the Lleyn Peninsula, in the same area and at similar depths as the magnitude 5.4 ML Lleyn earthquake of 19 July 1984, which was felt over an area of 250,000 km2.

The coalfield areas of central Scotland, Yorkshire, Staffordshire and Nottinghamshire continued to experience earthquake activity of a shallow nature which is believed to be mining induced. Some 61 coalfield events, with magnitudes ranging between -0.6 and 2.0 ML, were detected in the year. Seventeen of these were reported felt by local residents.

The area east of Edinburgh continued to be active during the first three months of the year, a series of 17 events occurred in the Musselburgh/Newcraighall area (Appendix A4), and represent a continuation of the activity which started in October 1996 (Walker, 1997). The largest of these events in 1997, with magnitudes of 1.7 ML, occurred on 9 and 11 January and were felt in the Musselburgh area with intensities of at least 4 EMS. Four events in this series were felt by local residents who described "the whole house shook and rumbled" and "there was a loud bang". The pattern (most events occurring in the working week - Figure A4.3) and location of the activity was a consequence of mining at Monktonhall colliery. The two most likely causes of these events are: the undermining and subsidence of old workings with void and pillar collapses and shearing in strained rock layers; or the bridging, and subsequent breaking during subsidence, of a strong rock layer between the mine and the surface (in this case, 900 metres above). Following the closure of Monktonhall Colliery in March 1997, no further events have been detected.

Near Newcastle-under-Lyme, Staffordshire, thirteen shallow events occurred, with magnitudes ranging between 0.9 and 1.8 ML. Six of these events were felt by local residents in the Keele and Whitmore areas of Staffordshire.

Seventeen events, with magnitudes ranging between 0.7 and 1.5 ML, were located near Clackmannan in the central region of Scotland; none were reported felt. This is an area which has experienced many such mining induced events in the past.

2. BULLETIN FORMAT

2.1 Tables

Data on the earthquakes and seismograph stations operated in 1997 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 1997 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 1997.

FIGURE 2: Detection threshold of the seismograph stations operational in December 1997 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 1997 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 1997. 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 1997.

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 where 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, automatic data transfers are made 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 of providing digital data, a 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 were installed at locations throughout the country and record accelerations up to 0.1g. A broad-band station (Guralp) in Edinburgh records digitally, and provides an assessment of surface-wave (Richter magnitude) for large Global earthquakes.

Recent developments in geographic coverage of the UK are described in Walker (1998, 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). In December 1997, all of the 141 UK stations were being recorded on a rapid access SEISLOG system.

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 and this is not always the case. 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 this end, BGS has established two environmental stations which are recording UVB, humidity, temperature, radioactivity and NOx gases. In collaboration with the Institute of Terrestrial Ecology (ITE) another station, some 35 km south of Edinburgh, has been installed and is transmitting ozone data from an ITE sensor as well as recording temperature and humidity.

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 1997 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 1997, 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 1997 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 to 200, and later 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, 1993).

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 1400 kmN.

5.2 Events Included

All events believed to be due to 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. In 1997, nine sonic events were reported felt and eight were detected by the UK network. Although no signal was recorded for the event which was felt in Llanfair Caereinion, near Welshpool, on 2 December; military aircraft were in the area and the felt effects (double boom) were consistent with a sonic boom.

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. In 1997, three felt explosions were detected.

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 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 and to the BGS Operations section: J Riddick, D L Petrie, D A Stewart, P S Day, J Laughlin, W Velzian and P Millership.

The work was supported in part by:

British Nuclear Fuels plc
Department of the Environment Transport and the Regions
HM Nuclear Installations Inspectorate
The Jersey New Waterworks Company
Magnox Electric plc
Natural Environment Research Council
Nuclear Electric plc
Renfrewshire Council
Scottish Hydro-Electric plc
Scottish Nuclear Ltd
United Kingdom Nirex Limited
University of Exeter
Welsh Office
Western Frontiers Association (consortium of oil companies and Health and Safety Executive)

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)
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

TABLE 1

CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1997

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	W Glamorgan	:	West Glamorgan
Expl	:	Explosion	Notts	:	Nottinghamshire
D & G	:	Dumfries and Galloway	S'Clyde	:	Strathclyde
Her & Wor	:	Hereford and Worcester	S Yorkshire	:	South Yorkshire
N'umberland	:	Northumberland	West Yorks	:	West Yorkshire
Leics	:	Leicestershire	Staffs	:	Staffordshire
New-U-Lyme	:	Newcastle-Under-Lyme	Gloucs	:	Gloucestershire
Penin	:	Peninsula			

Comments abbreviations

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

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:1997

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970101	045901.8	55.33	-3.58	299.5	605.0	3.7	1.4	MOFFAT,D & G		21	24	74	0.11	0.3	2.1	B*C	
19970107	202902.3	55.94	-3.08	332.3	672.0	1.5	1.1	MUSSELBURGH,LOTHIAN	2+	8	1	129	0.05	0.4	0.2	A*B	C/F,FELT MUSSELBURGH...
19970109	185333.9	55.94	-3.08	332.3	672.1	1.7	1.7	MUSSELBURGH,LOTHIAN	3+	8	0	144	0.05	0.4	0.1	A*C	C/F,FELT MUSSELBURGH...
19970111	044135.6	55.93	-3.08	332.3	671.8	1.5	1.7	MUSSELBURGH,LOTHIAN	3+	7	1	125	0.04	0.5	0.2	A*B	C/F,FELT MUSSELBURGH...
19970118	090948.3	56.29	3.40	734.0	724.0	9.6	2.9	CENTRAL NORTH SEA		15	34	3	202	0.31	4.5	4.9	C*D
19970121	050124.7	55.94	-3.08	332.5	672.0	1.7	0.4	MUSSELBURGH,LOTHIAN		7	0	165	0.02	0.2	0.1	A*C	C/F
19970122	030506.7	56.95	-4.89	224.4	787.8	8.3	1.2	LOCH LOCHY,HIGHLAND		5	15	222	0.13	7.1		D*D	
19970122	183417.8	53.10	-4.37	241.5	358.4	14.1	-0.1	CAERNARVON BAY,GWYNEDD		7	14	110	0.07	0.7	1.2	A*B	
19970126	003516.1	61.63	2.71	649.3	1314.3	8.3	2.3	NORTHERN NORTH SEA		22	124	212	0.35	2.6	2.7	C*D	
19970126	071709.4	53.20	-1.29	447.7	366.7	5.6	0.8	MANSFIELD,NOTTS		5	17	187	0.09	3.1	4.9	C*D	6KM NW OF MANSFIELD
19970129	171300.6	55.94	-3.09	332.2	672.2	1.8	0.6	MUSSELBURGH,LOTHIAN	2+	6	0	168	0.01	0.1	0.1	A*C	C/F,FELT MUSSELBURGH...
19970204	221257.1	56.61	-4.57	242.3	749.6	7.4	2.7	RANNOCH MOOR,TAYSIDE	3+	24	49	107	0.12	0.4	2.4	B*C	FELT APPIN...
19970206	003619.5	53.40	-1.05	463.4	389.8	1.0	1.6	RANSKILL,NOTTS	3+	9	36	114	0.18	0.8	1.5	B*C	C/F,FELT RANSKILL
19970207	213731.0	53.42	-1.03	464.7	392.2	3.6	1.6	MALTBY,SOUTH YORKSHIRE		8	38	184	0.13	1.4	1.9	B*D	C/F,11KM EAST OF MALTBY
19970207	230708.4	53.13	-4.39	240.1	362.4	10.3	-0.4	CAERNARVON BAY,GWYNEDD		7	15	111	0.03	0.3	1.2	A*B	
19970210	230915.5	53.19	-1.53	431.5	366.3	13.4	2.9	CHESTERFIELD,DERBYSHIRE	3+	12	7	101	0.17	0.9	1.6	B*B	FELT CHESTERFIELD...
19970212	032125.8	60.36	1.76	607.4	1170.3	11.8	2.1	NORTHERN NORTH SEA		17	158	145	0.36	2.5	3.6	C*D	
19970215	021734.5	56.25	-3.75	291.5	707.5	4.0	0.1	BLACKFORD,TAYSIDE		6	15	106	0.02	0.2	0.4	A*C	
19970222	211615.2	53.19	-3.65	289.6	366.8	8.6	1.0	ABERGELE,CLWYD		8	19	267	0.04	0.8	1.1	A*D	10KM SOUTH OF ABERGELE
19970226	035821.6	55.94	-3.09	332.1	671.9	1.7	-0.3	MUSSELBURGH,LOTHIAN		6	1	144	0.01	0.1	0.1	A*C	C/F
19970226	144248.1	55.94	-3.09	332.0	672.1	1.8	-0.1	MUSSELBURGH,LOTHIAN		6	1	167	0.01	0.1	0.1	A*C	C/F
19970226	213309.6	55.94	-3.09	332.2	672.0	1.7	-0.4	MUSSELBURGH,LOTHIAN		6	1	144	0.01	0.1	0.1	A*C	C/F
19970227	093300.1	52.93	-2.82	344.7	337.2	11.2	1.7	ELLESMERE,SHROPSHIRE		16	29	131	0.07	0.3	0.9	A*C	
19970303	215750.2	55.94	-3.09	332.2	671.9	1.6	-0.2	MUSSELBURGH,LOTHIAN		5	1	137	0.01	0.2	0.1	A*D	C/F
19970304	212109.5	55.94	-3.09	332.2	671.9	1.6	-0.2	MUSSELBURGH,LOTHIAN		5	1	139	0.00	0.0	0.0	A*D	C/F
19970305	040502.4	55.93	-3.09	332.2	671.8	1.6	-0.3	MUSSELBURGH,LOTHIAN		6	1	138	0.00	0.0	0.0	A*C	C/F
19970305	205914.6	55.93	-3.08	332.4	671.8	1.7	-0.2	MUSSELBURGH,LOTHIAN		6	1	158	0.01	0.1	0.0	A*C	C/F
19970305	225041.3	55.33	-1.61	424.7	603.8	0.3	2.2	EXPL-OFFSHORE AMBLE	3+	13	45	216	0.23	1.9		C*D	EXPL-FELT AMBLE
19970306	160258.0	55.93	-3.09	332.2	671.8	1.6	0.0	MUSSELBURGH,LOTHIAN		6	1	140	0.01	0.1	0.0	A*C	C/F
19970308	010006.6	55.93	-3.09	331.6	671.4	1.3	-0.2	MUSSELBURGH,LOTHIAN		4	0	217	0.03			A*D	C/F
19970308	054208.4	56.39	-5.77	167.3	728.0	4.9	1.9	MULL,STRATHCLYDE		15	59	223	0.08	1.0	1.7	B*D	
19970308	143233.6	53.64	-1.87	408.7	416.0	11.1	1.7	HUDDERSFIELD,WEST YORKS		12	11	107	0.05	0.3	0.3	A*B	
19970310	225825.1	55.93	-3.09	332.2	671.8	1.7	-0.2	MUSSELBURGH,LOTHIAN		6	1	142	0.00	0.0	0.0	A*C	C/F
19970311	040652.0	55.93	-3.09	332.2	671.8	1.6	-0.4	MUSSELBURGH,LOTHIAN		6	1	141	0.01	0.0	0.0	A*C	C/F
19970311	214515.2	55.93	-3.09	332.2	671.8	1.7	-0.6	MUSSELBURGH,LOTHIAN		6	1	141	0.01	0.1	0.1	A*C	C/F
19970312	053957.0							SONIC-NORTH WALES									SONIC-FELT NORTH WALES..
19970312	101549.6	52.28	-2.78	346.7	264.6	13.7	2.1	LEOMINSTER,HER & WOR		9	27	163	0.10	0.6	1.4	A*C	6KM NW OF LEOMINSTER
19970314	022209.3	53.03	-4.45	235.4	351.1	13.7	0.3	CAERNARVON BAY,GYWNEDD		8	6	134	0.05	0.6	0.6	A*B	
19970317	032501.9	52.96	-4.39	239.5	343.4	22.0	-0.2	LLEYN PENIN,GWYNEDD		7	3	191	0.04	0.8	0.4	A*D	
19970317	171747.7	52.12	-2.65	355.8	247.5	13.4	0.3	HEREFORD,HER & WOR		8	12	165	0.06	0.5	1.2	A*C	5KM NE OF HEREFORD
19970318	055353.0	66.42	-2.28	387.6	1839.6	31.0	4.0	NORWEGIAN SEA		19	565	145	0.39	1.9		C*D	
19970321	182814.4	49.19	-2.02	398.6	-79.4	7.0	1.3	JERSEY,CHANNEL ISLANDS		6	2	311	0.01	0.4	0.3	A*D	3KM EAST OF JERSEY
19970323	055618.8	53.42	-1.04	464.0	391.6	2.7	2.0	BLYTH,NOTTINGHAMSHIRE	3+	8	37	182	0.08	0.9	1.7	A*D	C/F,FELT BLYTH

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970324	215225.0							SONIC-SOUTH YORKSHIRE									SONIC-FELT S YORKSHIRE
19970324	220629.0							SONIC-SOUTH YORKSHIRE									SONIC-FELT S YORKSHIRE
19970325	160446.4	54.75	-3.26	319.2	539.8	11.1	1.1	COCKERMOUTH,CUMBRIA		12	1	78	0.03	0.2	0.2	A*A	8KM NE OF COCKERMOUTH
19970328	224635.4	56.25	-3.75	291.5	707.3	4.3	1.0	BLACKFORD,TAYSIDE		7	15	106	0.03	0.2	0.5	A*C	
19970329	001424.9	56.25	-3.75	291.4	707.4	3.4	1.0	BLACKFORD,TAYSIDE		6	15	106	0.03	0.3	0.8	A*C	
19970401	025545.5	56.99	-4.03	276.9	790.5	7.8	1.3	KINGUSSIE,HIGHLAND		9	54	125	0.24	1.5		C*D	10KM SOUTH OF KINGUSSIE
19970402	002524.4	51.82	-3.59	290.4	214.8	16.7	0.7	GLYN NEATH,W GLAMORGAN		10	36	89	0.07	0.5	0.7	A*C	7KM NE OF GLYN NEATH
19970404	012253.4	50.10	-5.46	152.9	28.2	1.6	0.2	MOUNT'S BAY,CORNWALL		7	11	198	0.04	0.4	4.2	B*D	
19970404	063501.5	56.25	-3.75	291.5	707.9	2.8	0.3	BLACKFORD,TAYSIDE		7	15	107	0.03	0.2	0.6	A*C	
19970404	064332.8	56.25	-3.75	291.6	707.5	2.6	0.2	BLACKFORD,TAYSIDE		6	15	106	0.03	0.2		C*C	
19970407	031419.4	56.25	-3.75	291.6	707.5	5.0	1.4	BLACKFORD,TAYSIDE		12	15	106	0.05	0.2	0.4	A*C	
19970407	032110.1	56.24	-3.75	291.6	707.0	2.4	1.1	BLACKFORD,TAYSIDE		7	15	105	0.02	0.2	0.3	A*C	
19970407	213511.6	54.77	-2.20	387.0	542.0	9.4	1.6	ALLENHEADS,N'THMBLAND		19	10	97	0.10	0.5	1.0	A*B	
19970408	025225.2	56.25	-3.75	291.7	707.8	2.9	-0.2	BLACKFORD,TAYSIDE		5	15	106	0.02	0.2	0.7	A*D	
19970409	130011.4	60.11	-1.24	442.2	1136.4	0.0	1.0	EXPL-SHETLAND ISLANDS	2+	3	4	232	0.10			A*D	EXPL-FELT LERWICK
19970410	034651.6	53.03	-4.55	229.2	351.2	17.4	-0.2	CAERNARVON BAY,GWYNEDD		5	10	162	0.04	1.3	2.4	B*D	
19970411	144330.8	52.97	-2.26	382.4	341.7	2.6	0.9	NEWCASTLE-U-LYME,STAFFS	2+	8	29	152	0.12	0.9	1.6	A*C	C/F,FELT KEELE
19970412	030709.6	56.41	-4.79	227.9	728.0	0.3	1.4	CRIANLARICH,CENTRAL		9	37	180	0.04	0.5	0.8	A*C	
19970412	100320.5	61.60	3.30	680.8	1313.9	14.1	2.8	NORTHERN NORTH SEA		18	93	207	0.26	1.8	1.6	B*D	
19970415	011705.5	56.76	-5.04	214.3	767.7	8.4	1.5	FORT WILLIAM,HIGHLAND		11	51	143	0.10	0.6	2.8	B*D	5KM SE OF FORT WILLIAM
19970417	101030.6	57.86	-5.12	214.8	889.4	9.4	1.5	ULLAPOOL,HIGHLAND		12	31	77	0.07	0.3	7.6	C*C	5KM SOUTH OF ULLAPOOL
19970417	144955.8	56.25	-3.75	291.6	707.6	3.3	0.0	BLACKFORD,TAYSIDE		6	15	106	0.02	0.2	0.6	A*C	
19970421	050716.3	57.86	-5.14	214.0	889.6	9.6	1.3	ULLAPOOL,HIGHLAND		12	30	73	0.19	0.9	2.9	B*C	5KM SOUTH OF ULLAPOOL
19970427	152059.3	53.57	-1.20	452.7	408.4	0.9	1.7	DONCASTER,S YORKSHIRE	3+	7	41	196	0.09	1.0	1.7	B*D	C/F,FELT DONCASTER
19970501	023624.8	50.49	1.29	633.5	71.1	5.6	2.2	ENGLISH CHANNEL		6	70	303	0.26	6.1	10.7	D*D	65KM SOUTH OF FOLKESTONE
19970501	220036.4	53.54	-4.46	236.8	407.1	10.7	0.0	OFF ANGLESEY,IRISH SEA		6	18	157	0.04	0.5	0.9	A*C	9KM NORTH OF ANGLESEY
19970507	152339.2	53.01	-4.19	252.9	348.4	16.6	0.3	PORTHMADOG,GWYNEDD		10	14	129	0.04	0.3	0.6	A*B	9KM NW OF PORTHMADOG
19970511	023818.1	52.27	-2.77	347.8	264.3	17.5	0.0	LEOMINSTER,HER & WOR		7	28	167	0.05	0.5	2.3	B*C	6KM NW OF LEOMINSTER
19970513	220711.4	60.85	3.51	699.0	1231.6	15.0	3.4	NORTHERN NORTH SEA		162	53	320	0.17	14.0	19.0	D*D	
19970513	230846.1	53.29	-4.51	233.0	380.1	11.6	-0.4	HOLYHEAD,ANGLESEY		6	6	119	0.03	0.5	0.8	A*B	8KM EAST OF ANGLESEY
19970514	000502.1	56.25	-3.75	291.8	707.7	4.8	1.1	BLACKFORD,TAYSIDE		11	15	131	0.03	0.2	0.3	A*C	
19970516	094813.7	52.96	-4.39	239.7	343.2	21.9	0.1	LLEYN PENIN,GWYNEDD		6	3	107	0.03	0.6	1.2	A*B	
19970517	012830.9	63.02	2.13	608.8	1467.0	15.0	3.2	NORWEGIAN SEA		7	32	353	0.09			D*D	
19970517	024737.0	63.16	2.41	621.9	1482.9	15.0	2.8	NORWEGIAN SEA		4	34	357	0.02			A*D	
19970517	214931.8	51.90	-2.29	379.8	222.5	15.4	2.2	GLOUCESTER,GLOUCS		13	23	107	0.10	0.5	1.0	A*B	
19970518	064333.3	49.18	-2.02	398.5	-79.5	7.0	1.3	JERSEY,CHANNEL ISLANDS		5	2	316	0.02	0.7	0.4	A*D	3KM EAST OF JERSEY
19970518	161447.1	53.13	-4.37	241.5	361.8	16.6	0.2	CAERNARVON BAY,GWYNEDD		10	13	107	0.09	0.6	1.4	A*B	
19970518	233856.7	57.47	-5.25	205.2	846.9	6.3	0.3	STRATHCARRON,HIGHLAND		4	4	242	0.02			A*D	
19970519	080236.0	51.76	-1.64	424.8	206.8	6.2	2.7	CARTERTON,OXFORDSHIRE	4+	10	27	126	0.16	1.2	2.9	B*C	FELT CARTERTON...
19970522	010955.1	56.13	-3.73	292.5	694.7	0.5	0.8	CLACKMANNAN,CENTRAL		5	19	210	0.01	0.2	0.4	A*D	C/F
19970522	052748.9	56.13	-3.72	293.4	694.7	0.1	0.9	CLACKMANNAN,CENTRAL		7	18	208	0.02	0.4	0.5	A*D	C/F
19970522	053530.8	55.80	-4.60	236.9	659.5	6.7	1.2	LOCHWINNOCH,S'CLYDE		6	8	182	0.01	0.2	0.1	A*D	
19970523	043649.7	52.93	-4.54	229.2	339.7	14.7	0.4	PWLLHELI,GWYNEDD		6	10	147	0.06	1.0	1.5	A*C	7KM NW OF PWLLHELI
19970523	072947.0	52.93	-4.55	228.3	340.2	15.6	1.7	PWLLHELI,GWYNEDD		9	10	153	0.05	0.4	0.7	A*C	7KM NW OF PWLLHELI
19970524	164149.5	52.96	-2.27	381.9	340.0	3.9	1.1	NEWCASTLE-U-LYME,STAFFS		8	29	118	0.09	0.8	1.6	A*C	C/F

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970524	225615.8	55.21	-3.50	304.5	591.5	3.0	0.9	JOHNSTONEBRIDGE,D & G		8	10	168	0.07	0.7	2.4	B*C	
19970528	093604.4	56.13	-3.73	292.7	694.6	0.8	1.1	CLACKMANNAN,CENTRAL		6	19	210	0.05	0.9	1.3	A*D	C/F
19970529	020140.5	56.28	-3.68	296.3	710.4	9.1	0.4	BLACKFORD,TAYSIDE		5	11	191	0.01	0.5	0.6	A*D	
19970530	034315.3	56.13	-3.72	292.8	694.9	0.9	0.8	CLACKMANNAN,CENTRAL		5	18	210	0.02	0.5	0.7	A*D	C/F
19970530	192834.6	55.43	-3.43	309.2	615.6	12.3	1.3	TWEEDSMUIR,BORDERS		19	19	96	0.13	0.4	1.5	A*B	
19970604	030627.8	56.25	-3.75	291.5	707.5	3.4	0.1	BLACKFORD,TAYSIDE		6	15	124	0.02	0.2	0.4	A*C	
19970609	095112.0	56.19	-4.48	246.2	702.9	5.1	1.4	ABERFOYLE,CENTRAL		11	9	223	0.03	0.3	0.3	A*D	7KM WNW OF ABERFOYLE
19970609	192158.6	56.13	-3.72	292.8	694.3	0.8	0.9	CLACKMANNAN,CENTRAL		8	19	210	0.03	0.4	0.4	A*D	C/F
19970610	033733.2	56.25	-3.75	291.5	707.3	3.4	0.8	BLACKFORD,TAYSIDE		7	15	208	0.02	0.3	0.3	A*D	
19970612	184202.3	53.14	-0.89	474.3	361.3	3.7	1.5	OLLERTON,NOTTS		6	28	190	0.10	4.0	9.3	C*D	8KM SE OF OLLERTON
19970614	000900.3	52.97	-2.27	381.7	341.1	1.0	1.4	NEWCASTLE-U-LYME,STAFFS		6	29	153	0.04	0.7	1.1	A*C	C/F
19970614	153407.8	56.25	-3.75	291.4	707.4	4.4	0.6	BLACKFORD,TAYSIDE		6	15	106	0.02	0.2	0.5	A*C	
19970614	173301.5	56.25	-3.75	291.3	707.6	3.8	0.8	BLACKFORD,TAYSIDE		7	15	107	0.03	0.2	0.5	A*C	
19970617	125354.3	56.25	-3.76	291.1	708.0	2.4	0.7	BLACKFORD,TAYSIDE		7	15	108	0.03	0.1	0.3	A*C	
19970621	173833.4	55.73	-5.52	178.7	654.4	14.5	1.7	KINTYRE,STRATHCLYDE		10	43	208	0.04	0.4	0.4	A*D	
19970622	133621.8	53.26	-4.35	243.1	375.8	13.8	0.3	ANGLESEY,GWYNEDD		8	5	79	0.06	0.5	1.1	A*A	
19970622	165016.3	49.25	-2.28	379.8	-71.9	10.9	2.2	JERSEY,CHANNEL ISLANDS	4	6	7	322	0.01	0.2	0.2	A*D	FELT ST PETER...
19970622	212641.6	56.13	-3.73	292.6	694.7	1.7	1.5	CLACKMANNAN,CENTRAL		13	19	82	0.02	0.1	0.2	A*C	C/F
19970625	063549.3	56.13	-3.72	293.4	694.5	0.4	0.8	CLACKMANNAN,CENTRAL		7	18	208	0.02	0.3	0.4	A*D	C/F
19970625	133544.4	56.25	-3.76	291.2	707.9	4.7	0.9	BLACKFORD,TAYSIDE		7	15	107	0.01	0.1	0.2	A*C	
19970626	172522.7	55.55	-2.18	388.4	628.6	13.9	1.8	JEDBURGH,BORDERS		14	8	215	0.09	0.6	0.8	A*D	
19970628	202108.6	56.25	-3.75	291.4	707.7	4.5	0.6	BLACKFORD,TAYSIDE		7	15	107	0.03	0.2	0.4	A*C	
19970629	132312.2	54.44	-3.14	325.9	505.5	14.5	1.1	CONISTON,CUMBRIA		9	7	188	0.10	1.0	1.2	A*D	10KM NE OF CONISTON
19970630	103055.5	56.25	-3.75	291.4	707.8	2.8	0.3	BLACKFORD,TAYSIDE		6	15	168	0.02	0.2	0.8	A*C	
19970702	064835.3	53.03	-1.30	447.2	348.2	0.5	0.7	NOTTINGHAM,NOTTS	3+	4	30	213	0.03			A*D	C/F,FELT LINBY
19970705	070724.9	56.06	-5.80	163.4	691.7	7.3	1.8	JURA,STRATHCLYDE		12	70	168	0.04	0.2	0.8	A*D	
19970712	114646.6	52.96	-2.22	385.5	340.8	4.5	1.2	NEWCASTLE-U-LYME,STAFFS		7	26	150	0.24	2.6	3.6	C*C	C/F
19970713	225722.5	56.13	-3.73	292.3	694.6	0.8	0.7	CLACKMANNAN,CENTRAL		7	19	129	0.02	0.1	0.4	A*C	C/F
19970714	114755.8	61.37	3.86	713.0	1290.3	17.6	2.8	NORTHERN NORTH SEA		102	83	341	0.11			D*D	
19970715	155930.5	56.25	-3.75	291.4	707.6	4.5	0.5	BLACKFORD,TAYSIDE		6	15	124	0.01	0.1	0.2	A*C	
19970720	190858.9	48.88	-2.14	389.4	-113.5	20.8	0.6	JERSEY,CHANNEL ISLANDS		5	34	341	0.08	10.2		D*D	
19970721	105318.9	57.29	-4.47	250.9	824.8	4.2	1.5	LOCH NESS,HIGHLAND		13	18	85	0.11	0.6	1.0	A*C	
19970725	195340.5	56.25	-3.75	291.4	707.6	2.5	0.4	BLACKFORD,TAYSIDE		6	15	169	0.02	0.2	0.7	A*C	
19970727	130350.5	52.80	-2.75	349.5	322.3	11.7	1.7	SHREWSBURY,SHROPSHIRE		10	36	124	0.11	0.6	1.0	A*C	9KM NORTH OF SHREWSBURY
19970730	083444.0	56.25	-3.75	291.4	707.7	5.1	2.4	BLACKFORD,TAYSIDE	4+	15	15	106	0.04	0.1	0.3	A*C	FELT BLACKFORD...
19970730	083827.6	56.25	-3.75	291.4	707.6	5.1	1.6	BLACKFORD,TAYSIDE		14	15	106	0.05	0.2	0.4	A*C	
19970730	091344.1	56.25	-3.75	291.5	707.8	3.9	1.4	BLACKFORD,TAYSIDE		13	15	106	0.06	0.2	0.5	A*C	
19970731	081646.5	56.84	-5.82	166.8	778.0	6.7	1.6	MOIDART,HIGHLAND		7	48	195	0.08	1.3	3.7	B*D	
19970803	024103.6	56.13	-3.72	292.9	694.9	2.4	1.3	CLACKMANNAN,CENTRAL		15	18	82	0.04	0.1	0.4	A*C	C/F
19970803	230928.5	54.95	-2.50	368.0	562.0	2.1	0.7	HALTWHISTLE,N'THMBLAND		6	13	172	0.05	0.6	2.0	B*C	C/F
19970805	090617.2	56.25	-3.75	291.6	707.7	4.2	0.5	BLACKFORD,TAYSIDE		7	15	169	0.03	0.2	0.5	A*C	
19970808	031516.2	55.22	-3.45	307.6	592.5	7.5	-0.3	JOHNSTONEBRIDGE,D & G		4	19	314	0.05			A*D	
19970810	205332.7	53.23	-4.73	218.0	374.3	13.3	-0.9	CAERNARVON BAY,GWYNEDD		6	10	252	0.05	1.8	1.1	B*D	
19970812	030553.4	53.06	-1.08	461.9	351.5	1.0	1.1	OXTON,NOTTINGHAMSHIRE	4+	5	34	151	0.06	0.1	0.1	A*D	C/F,FELT OXTON...
19970812	081424.8	59.77	6.31	865.9	1127.5	15.0	3.0	NORWEGIAN COAST		74	19	335	0.25			D*D	

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970814	144334.3	56.24	-3.77	290.0	706.6	3.6	0.7	BLACKFORD,TAYSIDE		5	17	235	0.01	0.3	0.3	A*D	
19970814	215558.1	56.25	-3.75	291.6	707.8	3.6	1.2	BLACKFORD,TAYSIDE		12	15	131	0.02	0.1	0.2	A*C	
19970815	204810.0	55.21	-3.51	304.0	591.4	9.4	0.0	JOHNSTONEBRIDGE,D & G		7	10	168	0.04	0.4	1.1	A*C	
19970819	013024.7	57.50	-5.24	206.1	850.3	12.8	0.2	GLEN CARRON,HIGHLAND		4	4	292	0.08			A*D	
19970822	193106.1	53.06	-1.20	453.8	352.0	2.2	1.0	LINBY,NOTTINGHAMSHIRE	3+	5	31	151	0.28	3.9	8.9	C*D	C/F,FELT LINBY
19970823	132550.2	56.25	-3.75	291.4	707.8	4.6	0.6	BLACKFORD,TAYSIDE		5	15	123	0.01	0.1	0.3	A*D	
19970824	205431.0	53.47	-2.70	353.5	397.0	11.9	1.5	ST HELENS,MERSEYSIDE		18	57	147	0.15	0.8	2.1	B*D	
19970825	202331.2	56.58	-5.92	159.5	750.2	6.9	1.6	MULL,STRATHCLYDE		9	38	230	0.07	1.7	2.3	B*D	
19970826	195751.5	56.20	-4.10	269.9	702.4	3.7	2.6	DOUNE,CENTRAL	4+	17	15	76	0.03	0.1	0.2	A*C	FELT DOUNE...
19970826	210313.7	57.05	-5.77	171.2	801.9	5.9	0.5	MALLAIG,HIGHLAND		5	15	179	0.08	5.5	5.6	D*D	
19970828	210219.0	52.98	-1.96	402.5	342.7	13.1	1.1	CHEADLE,STAFFORDSHIRE		4	9	282	0.01			A*D	
19970829	141545.3	56.25	-5.56	179.3	711.8	7.2	1.8	INVERARAY,HIGHLAND		4	76	343	0.01			A*D	
19970830	040949.9	55.21	-3.50	304.6	592.2	4.1	1.0	JOHNSTONEBRIDGE,D & G		8	11	172	0.02	0.1	14.6	C*C	
19970830	042411.0	55.20	-3.51	303.9	591.0	8.6	1.2	JOHNSTONEBRIBGE,D & G		16	10	69	0.10	0.4	1.1	A*B	
19970830	045755.5	55.21	-3.50	304.7	592.1	4.1	0.1	JOHNSTONEBRIBGE,D & G		7	11	171	0.04	0.4		C*C	
19970831	054737.8	61.23	2.77	655.8	1270.4	15.0	2.9	NORTHERN NORTH SEA		14	222	330	0.20			D*D	
19970902	145727.3	55.58	-5.10	204.5	636.0	0.8	1.7	EXPL-OFF ISLE OF ARRAN	3+	7	37	167	0.07	0.6	6.0	C*C	EXPL-FELT ISLE OF ARRAN
19970907	025042.3	53.41	-4.42	239.0	393.3	17.7	-0.3	NORTH ANGLESEY,GWYNEDD		6	8	216	0.05	1.3	1.1	B*D	
19970907	125658.3	55.32	-3.58	299.5	603.5	5.3	0.4	BEATTOCK,D & G		4	24	320	0.00			A*D	
19970913	225618.1	57.18	-5.71	175.9	815.8	5.8	0.0	GLENELG,HIGHLAND		5	18	176	0.10	1.8	3.0	B*D	
19970914	210721.9	56.13	-3.72	292.9	694.8	1.0	1.0	CLACKMANNAN,CENTRAL		7	18	127	0.03	0.2	0.7	A*C	C/F
19970916	003907.2	56.25	-3.75	291.5	707.9	4.8	2.1	BLACKFORD,TAYSIDE	3+	15	15	107	0.06	0.2	0.4	A*C	FELT BLACKFORD...
19970916	005409.8	56.25	-3.74	291.9	708.1	5.7	1.0	BLACKFORD,TAYSIDE		9	15	106	0.05	0.4	1.0	A*C	
19970916	014358.3	56.25	-3.75	291.5	707.6	3.9	0.7	BLACKFORD,TAYSIDE		5	15	106	0.01	0.1	0.2	A*D	
19970923	075856.0							SONIC-NE SCOTLAND									SONIC-FELT NE SCOTLAND..
19970923	183532.2	56.19	-4.10	269.7	701.9	4.5	1.2	DOUNE,CENTRAL		8	15	129	0.05	0.3	0.7	A*C	
19970926	231937.3	56.13	-3.71	293.5	694.5	0.1	1.2	CLACKMANNAN,CENTRAL		13	18	81	0.08	0.4	0.8	A*C	C/F
19970927	061256.1	52.73	-1.14	457.8	315.2	16.9	1.7	LOUGHBOROUGH,LEICS		9	11	143	0.10	0.8	0.7	A*C	4KM SE OF LOUGHBOROUGH
19970928	234419.9	49.03	-3.91	260.1	-95.1	9.5	1.7	ENGLISH CHANNEL		18	129	234	0.32	4.2	7.6	C*D	
19971006	062141.0	56.20	-4.10	269.8	702.6	4.1	2.7	DOUNE,CENTRAL	4+	15	15	133	0.02	0.1	0.2	A*C	FELT DOUNE...
19971007	191840.8	56.13	-3.72	293.1	694.3	0.1	0.9	CLACKMANNAN,CENTRAL		7	19	128	0.03	0.3	0.6	A*C	C/F
19971008	050752.6	56.14	-3.75	291.2	695.8	0.9	1.2	CLACKMANNAN,CENTRAL		7	19	132	0.03	0.3	0.8	A*C	C/F
19971008	071328.6	56.25	-3.75	291.3	707.8	3.8	1.6	BLACKFORD,TAYSIDE	3+	11	15	107	0.04	0.2	0.5	A*C	FELT BLACKFORD
19971008	093716.0	54.23	-3.12	326.9	482.4	12.1	2.1	ULVERSTON,CUMBRIA	3+	11	12	156	0.07	0.6	0.9	A*C	FELT ULVERSTON...
19971008	102033.5	56.27	-3.72	293.8	709.5	5.5	0.9	BLACKFORD,TAYSIDE		5	13	200	0.04	0.9	0.8	A*D	
19971009	020652.3	57.36	-4.29	262.0	831.8	12.0	1.0	LOCH NESS,HIGHLAND		7	10	192	0.07	0.9	1.0	A*D	
19971012	192725.8	62.08	1.87	602.2	1361.5	15.0	2.7	NORTHERN NORTH SEA		62	33	353	0.09			D*D	
19971012	193605.2	57.68	-5.56	187.7	870.6	5.7	1.2	LOCH MAREE,HIGHLAND		5	25	183	0.08	2.7	3.1	C*D	
19971015	222138.2	53.20	-1.07	462.4	367.7	1.0	1.7	OLLERTON,NOTTS		6	31	184	0.17	3.3	4.7	C*D	C/F
19971016	001911.7	50.39	-3.73	277.0	56.0	10.4	2.8	DARTMOUTH,DEVON	4	7	13	236	0.05	0.7	0.4	A*D	FELT DARTMOUTH...
19971018	235755.9	51.86	-2.71	350.9	218.1	14.7	0.8	MONMOUTH,GWENT		6	23	165	0.05	0.5	1.1	A*C	5KM NORTH OF MONMOUTH
19971019	024223.5	57.59	-5.65	182.0	861.6	8.8	2.5	WESTER ROSS,HIGHLAND		11	23	82	0.17	0.9	10.8	C*C	
19971022	112034.8	55.66	-5.41	185.6	646.3	7.7	2.3	KINTYRE,STRATHCLYDE		17	37	134	0.09	0.5	1.5	A*C	
19971022	125255.3	56.25	-3.76	291.1	707.9	5.2	0.9	BLACKFORD,TAYSIDE		8	15	108	0.02	0.2	0.3	A*C	
19971024	230154.9	53.11	-2.40	373.1	357.0	14.5	1.4	CREWE,CHESHIRE		9	39	155	0.11	1.0	1.3	B*C	

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19971026	103141.1	56.25	-3.75	291.6	707.7	3.6	0.6	BLACKFORD,TAYSIDE		5	15	123	0.02	0.2	0.6	A*D	
19971026	213802.1	56.25	-3.75	291.5	707.7	4.4	0.9	BLACKFORD,TAYSIDE		7	15	106	0.02	0.1	0.3	A*C	
19971028	004627.3	54.64	-3.70	290.3	528.1	14.2	1.5	WORKINGTON,CUMBRIA		17	20	81	0.12	0.4	2.1	B*B	10KM WEST OF WORKINGTON
19971028	092037.7	52.97	-2.28	381.2	341.8	2.3	1.7	NEWCASTLE-U-LYME,STAFFS	3+	11	30	132	0.11	0.7	1.4	A*C	C/F,FELT KEELE
19971029	151438.0							SONIC-PEMBROKE AREA									SONIC-FELT PEMBROKE...
19971029	152053.5	53.03	-1.08	461.8	348.8	2.9	0.9	CALVERTON,NOTTS	3+	6	34	102	0.10	0.7	3.7	B*C	C/F,FELT CALVERTON...
19971030	080225.9	56.25	-3.75	291.5	707.5	4.6	0.9	BLACKFORD,TAYSIDE		5	15	124	0.01	0.2	0.4	A*D	
19971030	081313.4	56.34	-6.29	134.7	724.2	14.8	1.3	MULL,STRATHCLYDE		3	71	327	0.02			A*D	
19971030	210853.0							SONIC-EDINBURGH									SONIC-FELT EDINBURGH...
19971031	000137.4	52.96	-4.45	235.2	343.3	9.2	0.3	PWLLHELI,GWYNEDD		9	3	126	0.04	0.3	0.4	A*B	9KM NW OF PWLLHELI
19971101	054949.7	56.19	-4.10	269.5	701.7	3.6	0.9	DOUNE,CENTRAL		9	15	128	0.04	0.3	0.6	A*C	
19971103	054135.8	56.19	-4.10	269.4	702.1	4.2	1.8	DOUNE,CENTRAL	4+	13	15	131	0.02	0.1	0.2	A*C	FELT DOUNE
19971103	154843.3	56.19	-4.11	269.4	702.2	4.4	1.7	DOUNE,CENTRAL	3+	13	15	131	0.05	0.3	0.5	A*C	FELT DOUNE
19971103	190337.9	56.13	-3.72	293.0	694.6	0.5	0.9	CLACKMANNAN,CENTRAL		7	19	127	0.03	0.2	0.6	A*C	C/F
19971103	201825.4	52.96	-2.23	384.5	340.0	2.8	1.4	NEWCASTLE-U-LYME,STAFFS	3+	5	27	193	0.06	1.2	1.9	B*D	C/F,FELT KEELE
19971104	214037.8	56.13	-3.73	292.7	694.6	0.2	1.1	CLACKMANNAN,CENTRAL		7	19	128	0.04	0.3	1.1	A*C	C/F
19971106	124550.3	56.19	-4.10	269.7	701.8	4.1	1.5	DOUNE,CENTRAL		12	15	129	0.03	0.2	0.3	A*C	
19971106	201230.3	50.23	-5.40	157.8	42.3	0.5	0.5	ST IVES BAY,CORNWALL		8	16	235	0.07	1.9		C*D	UNREALISTIC DEPTH
19971107	032102.4	56.13	-3.73	292.7	694.6	1.3	0.7	CLACKMANNAN,CENTRAL		5	19	155	0.01	0.1	0.3	A*D	C/F
19971107	103436.0							SONIC-HARTLEPOOL AREA									SONIC-FELT HARTLEPOOL...
19971108	024336.0	56.24	-3.75	291.3	707.2	3.8	0.0	BLACKFORD,TAYSIDE		5	15	125	0.01	0.1	0.3	A*D	
19971108	030341.4	56.25	-3.76	291.0	707.9	3.9	0.7	BLACKFORD,TAYSIDE		9	16	108	0.04	0.2	0.6	A*C	
19971108	030445.7	56.25	-3.76	291.1	708.1	5.5	1.2	BLACKFORD,TAYSIDE		10	15	108	0.03	0.2	0.4	A*C	
19971108	041810.3	56.24	-3.75	291.3	706.9	2.9	0.2	BLACKFORD,TAYSIDE		6	15	105	0.03	0.3	0.8	A*C	
19971108	044701.5	57.67	-5.57	187.2	870.0	9.7	2.5	LOCH MAREE,HIGHLAND	4+	11	25	105	0.07	0.4	2.2	B*C	FELT GAIRLOCH
19971108	103026.6	56.25	-3.76	291.0	707.8	5.1	1.4	BLACKFORD,TAYSIDE		11	16	108	0.01	0.1	0.1	A*C	
19971109	070712.8	56.19	-4.10	269.5	702.2	3.8	1.3	DOUNE,CENTRAL		12	15	131	0.04	0.2	0.4	A*C	
19971111	012638.3	52.95	-2.25	383.3	338.8	2.8	1.7	NEWCASTLE-U-LYME,STAFFS	4+	7	28	190	0.05	0.6	0.9	A*D	C/F,FELT WHITMORE
19971111	072053.6	53.23	-2.42	371.8	370.1	10.0	1.5	NORTHWICH,CHESHIRE		9	45	175	0.08	0.8	7.3	C*C	5KM SE OF NORTHWICH
19971111	225522.2	56.25	-3.76	291.0	707.6	5.1	0.7	BLACKFORD,TAYSIDE		6	16	124	0.03	0.3	0.6	A*C	
19971112	222306.3	53.05	-1.87	409.0	350.6	0.7	0.9	ASHBOURNE,DERBYSHIRE		4	4	245	0.06			A*D	C/F
19971114	003045.4	51.63	-3.03	328.5	192.6	4.3	1.8	NEWPORT,GWENT		7	16	132	0.10	1.5	2.1	B*C	
19971114	024901.6	56.25	-3.76	291.1	707.9	4.9	1.4	BLACKFORD,TAYSIDE	4+	12	16	108	0.03	0.1	0.2	A*C	FELT BLACKFORD
19971115	050335.2	52.94	-2.26	382.4	338.5	1.3	1.4	NEWCASTLE-U-LYME,STAFFS		7	29	148	0.06	0.7	1.4	A*C	C/F
19971115	061304.9	56.25	-3.75	291.3	707.9	4.8	1.8	BLACKFORD,TAYSIDE	3+	13	15	107	0.03	0.1	0.3	A*C	FELT BLACKFORD
19971119	131256.4	51.70	-4.24	245.0	202.4	20.1	1.7	BURRY PORT,DYFED		8	8	123	0.07	0.6	1.0	A*B	
19971120	043032.8	56.82	-5.53	184.8	775.0	4.9	1.3	LOCH SHIEL,HIGHLAND		5	22	291	0.10	19.3		D*D	
19971121	012702.8	53.21	-0.99	467.5	368.8	0.5	0.8	OLLERTON,NOTTS		5	36	218	0.18	0.1	0.1	B*D	C/F
19971122	034320.2	56.18	-4.10	269.7	701.0	5.1	2.1	DOUNE,CENTRAL	4+	12	15	125	0.03	0.2	0.3	A*C	FELT DOUNE
19971123	145640.4	56.25	-3.75	291.6	707.6	3.1	0.8	BLACKFORD,TAYSIDE		8	15	106	0.03	0.2	0.5	A*C	
19971126	031618.5	52.96	-2.27	381.7	340.1	0.5	1.6	NEWCASTLE-U-LYME,STAFFS		9	30	118	0.07	0.5	1.2	A*C	C/F
19971127	140136.9	52.55	-0.83	479.6	295.4	3.4	1.9	CORBY,NORTHAMPTONSHIRE		5	30	172	0.11	1.3	3.8	B*D	8KM NW OF CORBY
19971128	023924.6	53.23	-1.09	461.0	370.5	1.0	0.9	OLLERTON,NOTTS		5	30	215	0.09	3.1	4.6	C*D	C/F
19971128	135922.5	57.37	-5.60	183.5	836.7	3.6	0.4	LOCH CARRON,HIGHLAND		4	5	189	0.07			A*D	
19971128	140613.1	57.37	-5.60	183.4	836.8	3.7	0.7	LOCH CARRON,HIGHLAND		4	5	191	0.07			A*D	

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19971128	212136.1	55.62	-5.46	182.2	641.8	4.3	2.2	KINTYRE,STRATHCLYDE		7	52	325	0.06	8.3	19.2	D*D	
19971130	005924.4	56.20	-4.10	269.6	702.7	4.0	2.7	DOUNE,CENTRAL ✓	4+	14	15	133	0.02	0.1	0.2	A*C	FELT DOUNE...
19971201	012715.9	52.92	-2.24	384.1	335.6	5.2	1.4	STONE,STAFFORDSHIRE		8	29	117	0.11	0.9	1.7	A*C	C/F
19971201	121835.5	56.14	-3.72	293.3	695.0	1.8	1.4	CLACKMANNAN,CENTRAL		7	18	127	0.06	0.4	1.2	A*C	C/F
19971202	144214.0							PROBABLE SONIC-WALES									PROB SONIC-FELT WALES
19971204	042028.9	55.63	-5.51	179.1	643.3	8.1	1.5	KINTYRE,STRATHCLYDE		5	54	339	0.02	1.0		C*D	
19971205	110038.9	53.20	-4.01	265.9	369.1	14.4	0.9	BETHESDA,GWYNEDD ✓		8	9	181	0.03	0.5	0.9	A*D	5KM NE OF BETHESDA
19971208	235603.4	57.10	-4.60	242.5	804.3	7.0	2.3	FORT AUGUSTUS,HIGHLAND	4+	14	40	84	0.13	0.6	2.5	B*C	FELT FORT AUGUSTUS...
19971209	070637.9	52.95	-2.27	381.7	338.8	0.0	1.4	NEWCASTLE-U-LYME,STAFFS	4+	7	30	149	0.07	0.9	1.2	A*C	C/F,FELT WHITMORE
19971210	190644.9	56.27	-3.75	291.4	709.8	4.6	0.5	BLACKFORD,TAYSIDE		4	15	160	0.04			A*D	
19971211	040305.6	56.29	-6.26	136.3	718.9	7.4	1.5	MULL,STRATHCLYDE		8	75	260	0.14	5.6	6.7	D*D	
19971211	112438.0							SONIC-STRATHCLYDE									SONIC-FELT EAST KILBRIDE
19971212	105640.5	52.94	-1.56	429.8	338.5	7.3	1.7	DERBY,DERBYSHIRE		6	21	150	0.11	1.3	6.0	C*C	
19971213	105704.3	52.94	-2.26	382.2	338.0	2.6	1.3	NEWCASTLE-U-LYME,STAFFS		5	30	193	0.06	1.4	2.2	B*D	C/F
19971213	214438.2	52.83	-4.11	258.0	328.5	17.1	0.3	HARLECH,GWYNEDD		7	18	105	0.03	0.4	0.9	A*B	
19971214	070528.5	52.85	-4.09	259.0	329.8	16.1	0.5	HARLECH,GWYNEDD		9	19	99	0.08	0.7	1.7	A*B	
19971216	125130.1	52.95	-2.26	382.3	339.7	1.9	1.8	NEWCASTLE-U-LYME,STAFFS	3+	9	29	117	0.14	1.0	2.2	B*C	C/F,FELT KEELE
19971219	131756.7	51.91	-4.58	222.9	227.2	4.3	1.6	NR CARMARTHEN,DYFED		7	14	104	0.10	0.4	0.7	A*C	20KM NE OF CARMARTHEN
19971219	233130.6	53.16	-4.18	254.4	364.4	9.9	1.2	CAERNARVON,GWYNEDD	3+	11	2	75	0.07	0.4	0.6	A*A	FELT TREGARTH
19971221	185721.5	56.25	-3.76	291.1	708.0	5.2	1.2	BLACKFORD,TAYSIDE		7	15	156	0.03	0.2	0.4	A*C	
19971221	195613.8	53.06	-2.23	384.6	351.7	2.4	1.4	KIDSGROVE,STAFFORDSHIRE		6	26	206	0.04	0.7	0.8	A*D	
19971222	115114.1	52.95	-2.27	382.0	339.5	0.3	1.7	NEWCASTLE-U-LYME,STAFFS		7	29	192	0.11	1.5	1.5	B*D	C/F
19971224	104330.5	54.82	-3.41	309.5	548.2	13.2	1.0	SILLOTH,CUMBRIA		14	14	90	0.08	0.4	0.8	A*B	5KM SW OF SILLOTH
19971231	200153.5	56.25	-3.76	291.1	707.6	4.8	1.0	BLACKFORD,TAYSIDE		7	15	107	0.05	0.4	0.9	A*C	

TABLE 2

CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1997

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	W Glamorgan	:	West Glamorgan
Expl	:	Explosion	Notts	:	Nottinghamshire
D & G	:	Dumfries and Galloway	S'Clyde	:	Strathclyde
Her & Wor	:	Hereford and Worcester	S Yorkshire	:	South Yorkshire
N'umberland	:	Northumberland	West Yorks	:	West Yorkshire
Leics	:	Leicestershire	Staffs	:	Staffordshire
New-U-Lyme	:	Newcastle-Under-Lyme	Gloucs	:	Gloucestershire
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:1997

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970318	055353.0	66.42	-2.28	387.6	1839.6	31.0	4.0	NORWEGIAN SEA		19	565	145	0.39	1.9		C*D	
19970517	024737.0	63.16	2.41	621.9	1482.9	15.0	2.8	NORWEGIAN SEA		4	343	57	0.02			A*D	
19970517	012830.9	63.02	2.13	608.8	1467.0	15.0	3.2	NORWEGIAN SEA		7	323	53	0.09			D*D	
19971012	192725.8	62.08	1.87	602.2	1361.5	15.0	2.7	NORTHERN NORTH SEA		6	233	53	0.09			D*D	
19970126	003516.1	61.63	2.71	649.3	1314.3	8.3	2.3	NORTHERN NORTH SEA		22	124	212	0.35	2.6	2.7	C*D	
19970412	100320.5	61.60	3.30	680.8	1313.9	14.1	2.8	NORTHERN NORTH SEA		18	93	207	0.26	1.8	1.6	B*D	
19970714	114755.8	61.37	3.86	713.0	1290.3	17.6	2.8	NORTHERN NORTH SEA		10	283	341	0.11			D*D	
19970831	054737.8	61.23	2.77	655.8	1270.4	15.0	2.9	NORTHERN NORTH SEA		14	222	330	0.20			D*D	
19970513	220711.4	60.85	3.51	699.0	1231.6	15.0	3.4	NORTHERN NORTH SEA		16	253	320	0.17	14.0	19.0	D*D	
19970212	032125.8	60.36	1.76	607.4	1170.3	11.8	2.1	NORTHERN NORTH SEA		17	158	145	0.36	2.5	3.6	C*D	
19970812	081424.8	59.77	6.31	865.9	1127.5	15.0	3.0	NORWEGIAN COAST		7	419	335	0.25			D*D	
19970417	101030.6	57.86	-5.12	214.8	889.4	9.4	1.5	ULLAPOOL,HIGHLAND		12	31	77	0.07	0.3	7.6	C*C	5KM SOUTH OF ULLAPOOL
19970421	050716.3	57.86	-5.14	214.0	889.6	9.6	1.3	ULLAPOOL,HIGHLAND		12	30	73	0.19	0.9	2.9	B*C	5KM SOUTH OF ULLAPOOL
19971012	193605.2	57.68	-5.56	187.7	870.6	5.7	1.2	LOCH MAREE,HIGHLAND		5	25	183	0.08	2.7	3.1	C*D	
19971108	044701.5	57.67	-5.57	187.2	870.0	9.7	2.5	LOCH MAREE,HIGHLAND	4+	11	25	105	0.07	0.4	2.2	B*C	FELT GAIRLOCH
19971019	024223.5	57.59	-5.65	182.0	861.6	8.8	2.5	WESTER ROSS,HIGHLAND		11	23	82	0.17	0.9	10.8	C*C	
19970819	013024.7	57.50	-5.24	206.1	850.3	12.8	0.2	GLEN CARRON,HIGHLAND		4	4	292	0.08			A*D	
19970518	233856.7	57.47	-5.25	205.2	846.9	6.3	0.3	STRATHCARRON,HIGHLAND		4	4	242	0.02			A*D	
19971128	135922.5	57.37	-5.60	183.5	836.7	3.6	0.4	LOCH CARRON,HIGHLAND		4	5	189	0.07			A*D	
19971128	140613.1	57.37	-5.60	183.4	836.8	3.7	0.7	LOCH CARRON,HIGHLAND		4	5	191	0.07			A*D	
19971009	020652.3	57.36	-4.29	262.0	831.8	12.0	1.0	LOCH NESS,HIGHLAND		7	10	192	0.07	0.9	1.0	A*D	
19970721	105318.9	57.29	-4.47	250.9	824.8	4.2	1.5	LOCH NESS,HIGHLAND		13	18	85	0.11	0.6	1.0	A*C	
19970913	225618.1	57.18	-5.71	175.9	815.8	5.8	0.0	GLENELG,HIGHLAND		5	18	176	0.10	1.8	3.0	B*D	
19971208	235603.4	57.10	-4.60	242.5	804.3	7.0	2.3	FORT AUGUSTUS,HIGHLAND	4+	14	40	84	0.13	0.6	2.5	B*C	FELT FORT AUGUSTUS...
19970826	210313.7	57.05	-5.77	171.2	801.9	5.9	0.5	MALLAIG,HIGHLAND		5	15	179	0.08	5.5	5.6	D*D	
19970401	025545.5	56.99	-4.03	276.9	790.5	7.8	1.3	KINGUSSIE,HIGHLAND		9	54	125	0.24	1.5		C*D	10KM SOUTH OF KINGUSSIE
19970122	030506.7	56.95	-4.89	224.4	787.8	8.3	1.2	LOCH LOCHY,HIGHLAND		5	15	222	0.13	7.1		D*D	
19970731	081646.5	56.84	-5.82	166.8	778.0	6.7	1.6	MOIDART,HIGHLAND		7	48	195	0.08	1.3	3.7	B*D	
19971120	043032.8	56.82	-5.53	184.8	775.0	4.9	1.3	LOCH SHIEL,HIGHLAND		5	22	291	0.10	19.3		D*D	
19970415	011705.5	56.76	-5.04	214.3	767.7	8.4	1.5	FORT WILLIAM,HIGHLAND		11	51	143	0.10	0.6	2.8	B*D	5KM SE OF FORT WILLIAM
19970204	221257.1	56.61	-4.57	242.3	749.6	7.4	2.7	RANNOCH MOOR,TAYSIDE	3+	24	49	107	0.12	0.4	2.4	B*C	FELT APPIN...
19970825	202331.2	56.58	-5.92	159.5	750.2	6.9	1.6	MULL,STRATHCLYDE		9	38	230	0.07	1.7	2.3	B*D	
19970412	030709.6	56.41	-4.79	227.9	728.0	0.3	1.4	CRIANLARICH,CENTRAL		9	37	180	0.04	0.5	0.8	A*C	
19970308	054208.4	56.39	-5.77	167.3	728.0	4.9	1.9	MULL,STRATHCLYDE		15	59	223	0.08	1.0	1.7	B*D	
19971030	081313.4	56.34	-6.29	134.7	724.2	14.8	1.3	MULL,STRATHCLYDE		3	71	327	0.02			A*D	
19970118	090948.3	56.29	3.40	734.0	724.0	9.6	2.9	CENTRAL NORTH SEA		153	43	202	0.31	4.5	4.9	C*D	
19971211	040305.6	56.29	-6.26	136.3	718.9	7.4	1.5	MULL,STRATHCLYDE		8	75	260	0.14	5.6	6.7	D*D	
19970529	020140.5	56.28	-3.68	296.3	710.4	9.1	0.4	BLACKFORD,TAYSIDE		5	11	191	0.01	0.5	0.6	A*D	
19971008	102033.5	56.27	-3.72	293.8	709.5	5.5	0.9	BLACKFORD,TAYSIDE		5	13	200	0.04	0.9	0.8	A*D	
19971210	190644.9	56.27	-3.75	291.4	709.8	4.6	0.5	BLACKFORD,TAYSIDE		4	15	160	0.04			A*D	
19970215	021734.5	56.25	-3.75	291.5	707.5	4.0	0.1	BLACKFORD,TAYSIDE		6	15	106	0.02	0.2	0.4	A*C	
19970328	224635.4	56.25	-3.75	291.5	707.3	4.3	1.0	BLACKFORD,TAYSIDE		7	15	106	0.03	0.2	0.5	A*C	
19970329	001424.9	56.25	-3.75	291.4	707.4	3.4	1.0	BLACKFORD,TAYSIDE		6	15	106	0.03	0.3	0.8	A*C	

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970404	063501.5	56.25	-3.75	291.5	707.9	2.8	0.3	BLACKFORD,TAYSIDE		7	15	107	0.03	0.2	0.6	A*C	
19970404	064332.8	56.25	-3.75	291.6	707.5	2.6	0.2	BLACKFORD,TAYSIDE		6	15	106	0.03	0.2		C*C	
19970407	031419.4	56.25	-3.75	291.6	707.5	5.0	1.4	BLACKFORD,TAYSIDE		12	15	106	0.05	0.2	0.4	A*C	
19970408	025225.2	56.25	-3.75	291.7	707.8	2.9	-0.2	BLACKFORD,TAYSIDE		5	15	106	0.02	0.2	0.7	A*D	
19970417	144955.8	56.25	-3.75	291.6	707.6	3.3	0.0	BLACKFORD,TAYSIDE		6	15	106	0.02	0.2	0.6	A*C	
19970514	000502.1	56.25	-3.75	291.8	707.7	4.8	1.1	BLACKFORD,TAYSIDE		11	15	131	0.03	0.2	0.3	A*C	
19970604	030627.8	56.25	-3.75	291.5	707.5	3.4	0.1	BLACKFORD,TAYSIDE		6	15	124	0.02	0.2	0.4	A*C	
19970610	033733.2	56.25	-3.75	291.5	707.3	3.4	0.8	BLACKFORD,TAYSIDE		7	15	208	0.02	0.3	0.3	A*D	
19970614	153407.8	56.25	-3.75	291.4	707.4	4.4	0.6	BLACKFORD,TAYSIDE		6	15	106	0.02	0.2	0.5	A*C	
19970614	173301.5	56.25	-3.75	291.3	707.6	3.8	0.8	BLACKFORD,TAYSIDE		7	15	107	0.03	0.2	0.5	A*C	
19970617	125354.3	56.25	-3.76	291.1	708.0	2.4	0.7	BLACKFORD,TAYSIDE		7	15	108	0.03	0.1	0.3	A*C	
19970625	133544.4	56.25	-3.76	291.2	707.9	4.7	0.9	BLACKFORD,TAYSIDE		7	15	107	0.01	0.1	0.2	A*C	
19970628	202108.6	56.25	-3.75	291.4	707.7	4.5	0.6	BLACKFORD,TAYSIDE		7	15	107	0.03	0.2	0.4	A*C	
19970630	103055.5	56.25	-3.75	291.4	707.8	2.8	0.3	BLACKFORD,TAYSIDE		6	15	168	0.02	0.2	0.8	A*C	
19970715	155930.5	56.25	-3.75	291.4	707.6	4.5	0.5	BLACKFORD,TAYSIDE		6	15	124	0.01	0.1	0.2	A*C	
19970725	195340.5	56.25	-3.75	291.4	707.6	2.5	0.4	BLACKFORD,TAYSIDE		6	15	169	0.02	0.2	0.7	A*C	
19970730	083444.0	56.25	-3.75	291.4	707.7	5.1	2.4	BLACKFORD,TAYSIDE	4+	15	15	106	0.04	0.1	0.3	A*C	FELT BLACKFORD...
19970730	083827.6	56.25	-3.75	291.4	707.6	5.1	1.6	BLACKFORD,TAYSIDE		14	15	106	0.05	0.2	0.4	A*C	
19970730	091344.1	56.25	-3.75	291.5	707.8	3.9	1.4	BLACKFORD,TAYSIDE		13	15	106	0.06	0.2	0.5	A*C	
19970805	090617.2	56.25	-3.75	291.6	707.7	4.2	0.5	BLACKFORD,TAYSIDE		7	15	169	0.03	0.2	0.5	A*C	
19970814	215558.1	56.25	-3.75	291.6	707.8	3.6	1.2	BLACKFORD,TAYSIDE		12	15	131	0.02	0.1	0.2	A*C	
19970823	132550.2	56.25	-3.75	291.4	707.8	4.6	0.6	BLACKFORD,TAYSIDE		5	15	123	0.01	0.1	0.3	A*D	
19970829	141545.3	56.25	-5.56	179.3	711.8	7.2	1.8	INVERARAY,HIGHLAND		4	76	343	0.01			A*D	
19970916	003907.2	56.25	-3.75	291.5	707.9	4.8	2.1	BLACKFORD,TAYSIDE	3+	15	15	107	0.06	0.2	0.4	A*C	FELT BLACKFORD...
19970916	005409.8	56.25	-3.74	291.9	708.1	5.7	1.0	BLACKFORD,TAYSIDE		9	15	106	0.05	0.4	1.0	A*C	
19970916	014358.3	56.25	-3.75	291.5	707.6	3.9	0.7	BLACKFORD,TAYSIDE		5	15	106	0.01	0.1	0.2	A*D	
19971008	071328.6	56.25	-3.75	291.3	707.8	3.8	1.6	BLACKFORD,TAYSIDE	3+	11	15	107	0.04	0.2	0.5	A*C	FELT BLACKFORD
19971022	125255.3	56.25	-3.76	291.1	707.9	5.2	0.9	BLACKFORD,TAYSIDE		8	15	108	0.02	0.2	0.3	A*C	
19971026	103141.1	56.25	-3.75	291.6	707.7	3.6	0.6	BLACKFORD,TAYSIDE		5	15	123	0.02	0.2	0.6	A*D	
19971026	213802.1	56.25	-3.75	291.5	707.7	4.4	0.9	BLACKFORD,TAYSIDE		7	15	106	0.02	0.1	0.3	A*C	
19971030	080225.9	56.25	-3.75	291.5	707.5	4.6	0.9	BLACKFORD,TAYSIDE		5	15	124	0.01	0.2	0.4	A*D	
19971108	030341.4	56.25	-3.76	291.0	707.9	3.9	0.7	BLACKFORD,TAYSIDE		9	16	108	0.04	0.2	0.6	A*C	
19971108	030445.7	56.25	-3.76	291.1	708.1	5.5	1.2	BLACKFORD,TAYSIDE		10	15	108	0.03	0.2	0.4	A*C	
19971108	103026.6	56.25	-3.76	291.0	707.8	5.1	1.4	BLACKFORD,TAYSIDE		11	16	108	0.01	0.1	0.1	A*C	
19971111	225522.2	56.25	-3.76	291.0	707.6	5.1	0.7	BLACKFORD,TAYSIDE		6	16	124	0.03	0.3	0.6	A*C	
19971114	024901.6	56.25	-3.76	291.1	707.9	4.9	1.4	BLACKFORD,TAYSIDE	4+	12	16	108	0.03	0.1	0.2	A*C	FELT BLACKFORD
19971115	061304.9	56.25	-3.75	291.3	707.9	4.8	1.8	BLACKFORD,TAYSIDE	3+	13	15	107	0.03	0.1	0.3	A*C	FELT BLACKFORD
19971123	145640.4	56.25	-3.75	291.6	707.6	3.1	0.8	BLACKFORD,TAYSIDE		8	15	106	0.03	0.2	0.5	A*C	
19971221	185721.5	56.25	-3.76	291.1	708.0	5.2	1.2	BLACKFORD,TAYSIDE		7	15	156	0.03	0.2	0.4	A*C	
19971231	200153.5	56.25	-3.76	291.1	707.6	4.8	1.0	BLACKFORD,TAYSIDE		7	15	107	0.05	0.4	0.9	A*C	
19970407	032110.1	56.24	-3.75	291.6	707.0	2.4	1.1	BLACKFORD,TAYSIDE		7	15	105	0.02	0.2	0.3	A*C	
19970814	144334.3	56.24	-3.77	290.0	706.6	3.6	0.7	BLACKFORD,TAYSIDE		5	17	235	0.01	0.3	0.3	A*D	
19971108	024336.0	56.24	-3.75	291.3	707.2	3.8	0.0	BLACKFORD,TAYSIDE		5	15	125	0.01	0.1	0.3	A*D	
19971108	041810.3	56.24	-3.75	291.3	706.9	2.9	0.2	BLACKFORD,TAYSIDE		6	15	105	0.03	0.3	0.8	A*C	
19970826	195751.5	56.20	-4.10	269.9	702.4	3.7	2.6	DOUNE,CENTRAL	4+	17	15	76	0.03	0.1	0.2	A*C	FELT DOUNE...

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19971006	062141.0	56.20	-4.10	269.8	702.6	4.1	2.7	DOUNE,CENTRAL	4+	15	15	133	0.02	0.1	0.2	A*C	FELT DOUNE...
19971130	005924.4	56.20	-4.10	269.6	702.7	4.0	2.7	DOUNE,CENTRAL	4+	14	15	133	0.02	0.1	0.2	A*C	FELT DOUNE...
19970609	095112.0	56.19	-4.48	246.2	702.9	5.1	1.4	ABERFOYLE,CENTRAL		11	9	223	0.03	0.3	0.3	A*D	7KM WNW OF ABERFOYLE
19970923	183532.2	56.19	-4.10	269.7	701.9	4.5	1.2	DOUNE,CENTRAL		8	15	129	0.05	0.3	0.7	A*C	
19971101	054949.7	56.19	-4.10	269.5	701.7	3.6	0.9	DOUNE,CENTRAL		9	15	128	0.04	0.3	0.6	A*C	
19971103	054135.8	56.19	-4.10	269.4	702.1	4.2	1.8	DOUNE,CENTRAL	4+	13	15	131	0.02	0.1	0.2	A*C	FELT DOUNE
19971103	154843.3	56.19	-4.11	269.4	702.2	4.4	1.7	DOUNE,CENTRAL	3+	13	15	131	0.05	0.3	0.5	A*C	FELT DOUNE
19971106	124550.3	56.19	-4.10	269.7	701.8	4.1	1.5	DOUNE,CENTRAL		12	15	129	0.03	0.2	0.3	A*C	
19971109	070712.8	56.19	-4.10	269.5	702.2	3.8	1.3	DOUNE,CENTRAL		12	15	131	0.04	0.2	0.4	A*C	
19971122	034320.2	56.18	-4.10	269.7	701.0	5.1	2.1	DOUNE,CENTRAL	4+	12	15	125	0.03	0.2	0.3	A*C	FELT DOUNE
19971008	050752.6	56.14	-3.75	291.2	695.8	0.9	1.2	CLACKMANNAN,CENTRAL		7	19	132	0.03	0.3	0.8	A*C	C/F
19971201	121835.5	56.14	-3.72	293.3	695.0	1.8	1.4	CLACKMANNAN,CENTRAL		7	18	127	0.06	0.4	1.2	A*C	C/F
19970522	010955.1	56.13	-3.73	292.5	694.7	0.5	0.8	CLACKMANNAN,CENTRAL		5	19	210	0.01	0.2	0.4	A*D	C/F
19970522	052748.9	56.13	-3.72	293.4	694.7	0.1	0.9	CLACKMANNAN,CENTRAL		7	18	208	0.02	0.4	0.5	A*D	C/F
19970528	093604.4	56.13	-3.73	292.7	694.6	0.8	1.1	CLACKMANNAN,CENTRAL		6	19	210	0.05	0.9	1.3	A*D	C/F
19970530	034315.3	56.13	-3.72	292.8	694.9	0.9	0.8	CLACKMANNAN,CENTRAL		5	18	210	0.02	0.5	0.7	A*D	C/F
19970609	192158.6	56.13	-3.72	292.8	694.3	0.8	0.9	CLACKMANNAN,CENTRAL		8	19	210	0.03	0.4	0.4	A*D	C/F
19970622	212641.6	56.13	-3.73	292.6	694.7	1.7	1.5	CLACKMANNAN,CENTRAL		13	19	82	0.02	0.1	0.2	A*C	C/F
19970625	063549.3	56.13	-3.72	293.4	694.5	0.4	0.8	CLACKMANNAN,CENTRAL		7	18	208	0.02	0.3	0.4	A*D	C/F
19970713	225722.5	56.13	-3.73	292.3	694.6	0.8	0.7	CLACKMANNAN,CENTRAL		7	19	129	0.02	0.1	0.4	A*C	C/F
19970803	024103.6	56.13	-3.72	292.9	694.9	2.4	1.3	CLACKMANNAN,CENTRAL		15	18	82	0.04	0.1	0.4	A*C	C/F
19970914	210721.9	56.13	-3.72	292.9	694.8	1.0	1.0	CLACKMANNAN,CENTRAL		7	18	127	0.03	0.2	0.7	A*C	C/F
19970926	231937.3	56.13	-3.71	293.5	694.5	0.1	1.2	CLACKMANNAN,CENTRAL		13	18	81	0.08	0.4	0.8	A*C	C/F
19971007	191840.8	56.13	-3.72	293.1	694.3	0.1	0.9	CLACKMANNAN,CENTRAL		7	19	128	0.03	0.3	0.6	A*C	C/F
19971103	190337.9	56.13	-3.72	293.0	694.6	0.5	0.9	CLACKMANNAN,CENTRAL		7	19	127	0.03	0.2	0.6	A*C	C/F
19971104	214037.8	56.13	-3.73	292.7	694.6	0.2	1.1	CLACKMANNAN,CENTRAL		7	19	128	0.04	0.3	1.1	A*C	C/F
19971107	032102.4	56.13	-3.73	292.7	694.6	1.3	0.7	CLACKMANNAN,CENTRAL		5	19	155	0.01	0.1	0.3	A*D	C/F
19970705	070724.9	56.06	-5.80	163.4	691.7	7.3	1.8	JURA,STRATHCLYDE		12	70	168	0.04	0.2	0.8	A*D	
19970107	202902.3	55.94	-3.08	332.3	672.0	1.5	1.1	MUSSELBURGH,LOTHIAN	2+	8	1	129	0.05	0.4	0.2	A*B	C/F,FELT MUSSELBURGH...
19970109	185333.9	55.94	-3.08	332.3	672.1	1.7	1.7	MUSSELBURGH,LOTHIAN	3+	8	0	144	0.05	0.4	0.1	A*C	C/F,FELT MUSSELBURGH...
19970121	050124.7	55.94	-3.08	332.5	672.0	1.7	0.4	MUSSELBURGH,LOTHIAN		7	0	165	0.02	0.2	0.1	A*C	C/F
19970129	171300.6	55.94	-3.09	332.2	672.2	1.8	0.6	MUSSELBURGH,LOTHIAN	2+	6	0	168	0.01	0.1	0.1	A*C	C/F,FELT MUSSELBURGH...
19970226	035821.6	55.94	-3.09	332.1	671.9	1.7	-0.3	MUSSELBURGH,LOTHIAN		6	1	144	0.01	0.1	0.1	A*C	C/F
19970226	144248.1	55.94	-3.09	332.0	672.1	1.8	-0.1	MUSSELBURGH,LOTHIAN		6	1	167	0.01	0.1	0.1	A*C	C/F
19970226	213309.6	55.94	-3.09	332.2	672.0	1.7	-0.4	MUSSELBURGH,LOTHIAN		6	1	144	0.01	0.1	0.1	A*C	C/F
19970303	215750.2	55.94	-3.09	332.2	671.9	1.6	-0.2	MUSSELBURGH,LOTHIAN		5	1	137	0.01	0.2	0.1	A*D	C/F
19970304	212109.5	55.94	-3.09	332.2	671.9	1.6	-0.2	MUSSELBURGH,LOTHIAN		5	1	139	0.00	0.0	0.0	A*D	C/F
19970111	044135.6	55.93	-3.08	332.3	671.8	1.5	1.7	MUSSELBURGH,LOTHIAN	3+	7	1	125	0.04	0.5	0.2	A*B	C/F,FELT MUSSELBURGH...
19970305	040502.4	55.93	-3.09	332.2	671.8	1.6	-0.3	MUSSELBURGH,LOTHIAN		6	1	138	0.00	0.0	0.0	A*C	C/F
19970305	205914.6	55.93	-3.08	332.4	671.8	1.7	-0.2	MUSSELBURGH,LOTHIAN		6	1	158	0.01	0.1	0.0	A*C	C/F
19970306	160258.0	55.93	-3.09	332.2	671.8	1.6	0.0	MUSSELBURGH,LOTHIAN		6	1	140	0.01	0.1	0.0	A*C	C/F
19970308	010006.6	55.93	-3.09	331.6	671.4	1.3	-0.2	MUSSELBURGH,LOTHIAN		4	0	217	0.03			A*D	C/F
19970310	225825.1	55.93	-3.09	332.2	671.8	1.7	-0.2	MUSSELBURGH,LOTHIAN		6	1	142	0.00	0.0	0.0	A*C	C/F
19970311	040652.0	55.93	-3.09	332.2	671.8	1.6	-0.4	MUSSELBURGH,LOTHIAN		6	1	141	0.01	0.0	0.0	A*C	C/F
19970311	214515.2	55.93	-3.09	332.2	671.8	1.7	-0.6	MUSSELBURGH,LOTHIAN		6	1	141	0.01	0.1	0.1	A*C	C/F

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970522	053530.8	55.80	-4.60	236.9	659.5	6.7	1.2	LOCHWINNOCH,S'CLYDE		6	8	182	0.01	0.2	0.1	A*D	
19970621	173833.4	55.73	-5.52	178.7	654.4	14.5	1.7	KINTYRE,STRATHCLYDE		10	43	208	0.04	0.4	0.4	A*D	
19971022	112034.8	55.66	-5.41	185.6	646.3	7.7	2.3	KINTYRE,STRATHCLYDE		17	37	134	0.09	0.5	1.5	A*C	
19971204	042028.9	55.63	-5.51	179.1	643.3	8.1	1.5	KINTYRE,STRATHCLYDE		5	54	339	0.02	1.0		C*D	
19971128	212136.1	55.62	-5.46	182.2	641.8	4.3	2.2	KINTYRE,STRATHCLYDE		7	52	325	0.06	8.3	19.2	D*D	
19970626	172522.7	55.55	-2.18	388.4	628.6	13.9	1.8	JEDBURGH,BORDERS		14	8	215	0.09	0.6	0.8	A*D	
19970530	192834.6	55.43	-3.43	309.2	615.6	12.3	1.3	TWEEDSMUIR,BORDERS		19	19	96	0.13	0.4	1.5	A*B	
19970101	045901.8	55.33	-3.58	299.5	605.0	3.7	1.4	MOFFAT,D & G		21	24	74	0.11	0.3	2.1	B*C	
19970907	125658.3	55.32	-3.58	299.5	603.5	5.3	0.4	BEATTOCK,D & G		4	24	320	0.00			A*D	
19970808	031516.2	55.22	-3.45	307.6	592.5	7.5	-0.3	JOHNSTONEBRIDGE,D & G		4	19	314	0.05			A*D	
19970524	225615.8	55.21	-3.50	304.5	591.5	3.0	0.9	JOHNSTONEBRIDGE,D & G		8	10	168	0.07	0.7	2.4	B*C	
19970815	204810.0	55.21	-3.51	304.0	591.4	9.4	0.0	JOHNSTONEBRIDGE,D & G		7	10	168	0.04	0.4	1.1	A*C	
19970830	040949.9	55.21	-3.50	304.6	592.2	4.1	1.0	JOHNSTONEBRIDGE,D & G		8	11	172	0.02	0.1	14.6	C*C	
19970830	045755.5	55.21	-3.50	304.7	592.1	4.1	0.1	JOHNSTONEBRIBGE,D & G		7	11	171	0.04	0.4		C*C	
19970830	042411.0	55.20	-3.51	303.9	591.0	8.6	1.2	JOHNSTONEBRIBGE,D & G		16	10	69	0.10	0.4	1.1	A*B	
19970803	230928.5	54.95	-2.50	368.0	562.0	2.1	0.7	HALTWHISTLE,N'THMBLAND		6	13	172	0.05	0.6	2.0	B*C	C/F
19971224	104330.5	54.82	-3.41	309.5	548.2	13.2	1.0	SILLOTH,CUMBRIA		14	14	90	0.08	0.4	0.8	A*B	5KM SW OF SILLOTH
19970407	213511.6	54.77	-2.20	387.0	542.0	9.4	1.6	ALLENHEADS,N'THMBLAND		19	10	97	0.10	0.5	1.0	A*B	
19970325	160446.4	54.75	-3.26	319.2	539.8	11.1	1.1	COCKERMOUTH,CUMBRIA		12	1	78	0.03	0.2	0.2	A*A	8KM NE OF COCKERMOUTH
19971028	004627.3	54.64	-3.70	290.3	528.1	14.2	1.5	WORKINGTON,CUMBRIA		17	20	81	0.12	0.4	2.1	B*B	10KM WEST OF WORKINGTON
19970629	132312.2	54.44	-3.14	325.9	505.5	14.5	1.1	CONISTON,CUMBRIA		9	7	188	0.10	1.0	1.2	A*D	10KM NE OF CONISTON
19971008	093716.0	54.23	-3.12	326.9	482.4	12.1	2.1	ULVERSTON,CUMBRIA	3+	11	12	156	0.07	0.6	0.9	A*C	FELT ULVERSTON...
19970308	143233.6	53.64	-1.87	408.7	416.0	11.1	1.7	HUDDERSFIELD,WEST YORKS		12	11	107	0.05	0.3	0.3	A*B	
19970427	152059.3	53.57	-1.20	452.7	408.4	0.9	1.7	DONCASTER,S YORKSHIRE	3+	7	41	196	0.09	1.0	1.7	B*D	C/F,FELT DONCASTER
19970501	220036.4	53.54	-4.46	236.8	407.1	10.7	0.0	OFF ANGLESEY,IRISH SEA		6	18	157	0.04	0.5	0.9	A*C	9KM NORTH OF ANGLESEY
19970824	205431.0	53.47	-2.70	353.5	397.0	11.9	1.5	ST HELENS,MERSEYSIDE		18	57	147	0.15	0.8	2.1	B*D	
19970207	213731.0	53.42	-1.03	464.7	392.2	3.6	1.6	MALTBY,SOUTH YORKSHIRE		8	38	184	0.13	1.4	1.9	B*D	C/F,11KM EAST OF MALTBY
19970323	055618.8	53.42	-1.04	464.0	391.6	2.7	2.0	BLYTH,NOTTINGHAMSHIRE	3+	8	37	182	0.08	0.9	1.7	A*D	C/F,FELT BLYTH
19970907	025042.3	53.41	-4.42	239.0	393.3	17.7	-0.3	NORTH ANGLESEY,GWYNEDD		6	8	216	0.05	1.3	1.1	B*D	
19970206	003619.5	53.40	-1.05	463.4	389.8	1.0	1.6	RANSKILL,NOTTS	3+	9	36	114	0.18	0.8	1.5	B*C	C/F,FELT RANSKILL
19970513	230846.1	53.29	-4.51	233.0	380.1	11.6	-0.4	HOLYHEAD,ANGLESEY		6	6	119	0.03	0.5	0.8	A*B	8KM EAST OF ANGLESEY
19970622	133621.8	53.26	-4.35	243.1	375.8	13.8	0.3	ANGLESEY,GWYNEDD		8	5	79	0.06	0.5	1.1	A*A	
19970810	205332.7	53.23	-4.73	218.0	374.3	13.3	-0.9	CAERNARVON BAY,GWYNEDD		6	10	252	0.05	1.8	1.1	B*D	
19971111	072053.6	53.23	-2.42	371.8	370.1	10.0	1.5	NORTHWICH,CHESHIRE		9	45	175	0.08	0.8	7.3	C*C	5KM SE OF NORTHWICH
19971128	023924.6	53.23	-1.09	461.0	370.5	1.0	0.9	OLLERTON,NOTTS		5	30	215	0.09	3.1	4.6	C*D	C/F
19971121	012702.8	53.21	-0.99	467.5	368.8	0.5	0.8	OLLERTON,NOTTS		5	36	218	0.18	0.1	0.1	B*D	C/F
19970126	071709.4	53.20	-1.29	447.7	366.7	5.6	0.8	MANSFIELD,NOTTS		5	17	187	0.09	3.1	4.9	C*D	6KM NW OF MANSFIELD
19971015	222138.2	53.20	-1.07	462.4	367.7	1.0	1.7	OLLERTON,NOTTS		6	31	184	0.17	3.3	4.7	C*D	C/F
19971205	110038.9	53.20	-4.01	265.9	369.1	14.4	0.9	BETHESDA,GWYNEDD		8	9	181	0.03	0.5	0.9	A*D	5KM NE OF BETHESDA
19970210	230915.5	53.19	-1.53	431.5	366.3	13.4	2.9	CHESTERFIELD,DERBYSHIRE	3+	12	7	101	0.17	0.9	1.6	B*B	FELT CHESTERFIELD...
19970222	211615.2	53.19	-3.65	289.6	366.8	8.6	1.0	ABERGELE,CLWYD		8	19	267	0.04	0.8	1.1	A*D	10KM SOUTH OF ABERGELE
19971219	233130.6	53.16	-4.18	254.4	364.4	9.9	1.2	CAERNARVON,GWYNEDD	3+	11	2	75	0.07	0.4	0.6	A*A	FELT TREGARTH
19970612	184202.3	53.14	-0.89	474.3	361.3	3.7	1.5	OLLERTON,NOTTS		6	28	190	0.10	4.0	9.3	C*D	8KM SE OF OLLERTON
19970207	230708.4	53.13	-4.39	240.1	362.4	10.3	-0.4	CAERNARVON BAY,GWYNEDD		7	15	111	0.03	0.3	1.2	A*B	
19970518	161447.1	53.13	-4.37	241.5	361.8	16.6	0.2	CAERNARVON BAY,GWYNEDD		10	13	107	0.09	0.6	1.4	A*B	

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19971024	230154.9	53.11	-2.40	373.1	357.0	14.5	1.4	CREWE,CHESHIRE		9	39	155	0.11	1.0	1.3	B*C	
19970122	183417.8	53.10	-4.37	241.5	358.4	14.1	-0.1	CAERNARVON BAY,GWYNEDD		7	14	110	0.07	0.7	1.2	A*B	
19970812	030553.4	53.06	-1.08	461.9	351.5	1.0	1.1	OXTON,NOTTINGHAMSHIRE	4+	5	34	151	0.06	0.1	0.1	A*D	C/F,FELT OXTON...
19970822	193106.1	53.06	-1.20	453.8	352.0	2.2	1.0	LINBY,NOTTINGHAMSHIRE	3+	5	31	151	0.28	3.9	8.9	C*D	C/F,FELT LINBY
19971221	195613.8	53.06	-2.23	384.6	351.7	2.4	1.4	KIDSGROVE,STAFFORDSHIRE		6	26	206	0.04	0.7	0.8	A*D	
19971112	222306.3	53.05	-1.87	409.0	350.6	0.7	0.9	ASHBOURNE,DERBYSHIRE		4	4	245	0.06			A*D	C/F
19970314	022209.3	53.03	-4.45	235.4	351.1	13.7	0.3	CAERNARVON BAY,GYWNEDD		8	6	134	0.05	0.6	0.6	A*B	
19970410	034651.6	53.03	-4.55	229.2	351.2	17.4	-0.2	CAERNARVON BAY,GWYNEDD		5	10	162	0.04	1.3	2.4	B*D	
19970702	064835.3	53.03	-1.30	447.2	348.2	0.5	0.7	NOTTINGHAM,NOTTS	3+	4	30	213	0.03			A*D	C/F,FELT LINBY
19971029	152053.5	53.03	-1.08	461.8	348.8	2.9	0.9	CALVERTON,NOTTS	3+	6	34	102	0.10	0.7	3.7	B*C	C/F,FELT CALVERTON...
19970507	152339.2	53.01	-4.19	252.9	348.4	16.6	0.3	PORTHMADOG,GWYNEDD		10	14	129	0.04	0.3	0.6	A*B	9KM NW OF PORTHMADOG
19970828	210219.0	52.98	-1.96	402.5	342.7	13.1	1.1	CHEADLE,STAFFORDSHIRE		4	9	282	0.01			A*D	
19970411	144330.8	52.97	-2.26	382.4	341.7	2.6	0.9	NEWCASTLE-U-LYME,STAFFS	2+	8	29	152	0.12	0.9	1.6	A*C	C/F,FELT KEELE
19970614	000900.3	52.97	-2.27	381.7	341.1	1.0	1.4	NEWCASTLE-U-LYME,STAFFS		6	29	153	0.04	0.7	1.1	A*C	C/F
19971028	092037.7	52.97	-2.28	381.2	341.8	2.3	1.7	NEWCASTLE-U-LYME,STAFFS	3+	11	30	132	0.11	0.7	1.4	A*C	C/F,FELT KEELE
19970317	032501.9	52.96	-4.39	239.5	343.4	22.0	-0.2	LLEYN PENIN,GWYNEDD		7	3	191	0.04	0.8	0.4	A*D	
19970516	094813.7	52.96	-4.39	239.7	343.2	21.9	0.1	LLEYN PENIN,GWYNEDD		6	3	107	0.03	0.6	1.2	A*B	
19970524	164149.5	52.96	-2.27	381.9	340.0	3.9	1.1	NEWCASTLE-U-LYME,STAFFS		8	29	118	0.09	0.8	1.6	A*C	C/F
19970712	114646.6	52.96	-2.22	385.5	340.8	4.5	1.2	NEWCASTLE-U-LYME,STAFFS		7	26	150	0.24	2.6	3.6	C*C	C/F
19971031	000137.4	52.96	-4.45	235.2	343.3	9.2	0.3	PWLLHELI,GWYNEDD		9	3	126	0.04	0.3	0.4	A*B	9KM NW OF PWLLHELI
19971103	201825.4	52.96	-2.23	384.5	340.0	2.8	1.4	NEWCASTLE-U-LYME,STAFFS	3+	5	27	193	0.06	1.2	1.9	B*D	C/F,FELT KEELE
19971126	031618.5	52.96	-2.27	381.7	340.1	0.5	1.6	NEWCASTLE-U-LYME,STAFFS		9	30	118	0.07	0.5	1.2	A*C	C/F
19971111	012638.3	52.95	-2.25	383.3	338.8	2.8	1.7	NEWCASTLE-U-LYME,STAFFS	4+	7	28	190	0.05	0.6	0.9	A*D	C/F,FELT WHITMORE
19971209	070637.9	52.95	-2.27	381.7	338.8	0.0	1.4	NEWCASTLE-U-LYME,STAFFS	4+	7	30	149	0.07	0.9	1.2	A*C	C/F,FELT WHITMORE
19971216	125130.1	52.95	-2.26	382.3	339.7	1.9	1.8	NEWCASTLE-U-LYME,STAFFS	3+	9	29	117	0.14	1.0	2.2	B*C	C/F,FELT KEELE
19971222	115114.1	52.95	-2.27	382.0	339.5	0.3	1.7	NEWCASTLE-U-LYME,STAFFS		7	29	192	0.11	1.5	1.5	B*D	C/F
19971115	050335.2	52.94	-2.26	382.4	338.5	1.3	1.4	NEWCASTLE-U-LYME,STAFFS		7	29	148	0.06	0.7	1.4	A*C	C/F
19971212	105640.5	52.94	-1.56	429.8	338.5	7.3	1.7	DERBY,DERBYSHIRE		6	21	150	0.11	1.3	6.0	C*C	
19971213	105704.3	52.94	-2.26	382.2	338.0	2.6	1.3	NEWCASTLE-U-LYME,STAFFS		5	30	193	0.06	1.4	2.2	B*D	C/F
19970227	093300.1	52.93	-2.82	344.7	337.2	11.2	1.7	ELLESMERE,SHROPSHIRE		16	29	131	0.07	0.3	0.9	A*C	
19970523	043649.7	52.93	-4.54	229.2	339.7	14.7	0.4	PWLLHELI,GWYNEDD		6	10	147	0.06	1.0	1.5	A*C	7KM NW OF PWLLHELI
19970523	072947.0	52.93	-4.55	228.3	340.2	15.6	1.7	PWLLHELI,GWYNEDD		9	10	153	0.05	0.4	0.7	A*C	7KM NW OF PWLLHELI
19971201	012715.9	52.92	-2.24	384.1	335.6	5.2	1.4	STONE,STAFFORDSHIRE		8	29	117	0.11	0.9	1.7	A*C	C/F
19971214	070528.5	52.85	-4.09	259.0	329.8	16.1	0.5	HARLECH,GWYNEDD		9	19	99	0.08	0.7	1.7	A*B	
19971213	214438.2	52.83	-4.11	258.0	328.5	17.1	0.3	HARLECH,GWYNEDD		7	18	105	0.03	0.4	0.9	A*B	
19970727	130350.5	52.80	-2.75	349.5	322.3	11.7	1.7	SHREWSBURY,SHROPSHIRE		10	36	124	0.11	0.6	1.0	A*C	9KM NORTH OF SHREWSBURY
19970927	061256.1	52.73	-1.14	457.8	315.2	16.9	1.7	LOUGHBOROUGH,LEICS		9	11	143	0.10	0.8	0.7	A*C	4KM SE OF LOUGHBOROUGH
19971127	140136.9	52.55	-0.83	479.6	295.4	3.4	1.9	CORBY,NORTHAMPTONSHIRE		5	30	172	0.11	1.3	3.8	B*D	8KM NW OF CORBY
19970312	101549.6	52.28	-2.78	346.7	264.6	13.7	2.1	LEOMINSTER,HER & WOR		9	27	163	0.10	0.6	1.4	A*C	6KM NW OF LEOMINSTER
19970511	023818.1	52.27	-2.77	347.8	264.3	17.5	0.0	LEOMINSTER,HER & WOR		7	28	167	0.05	0.5	2.3	B*C	6KM NW OF LEOMINSTER
19970317	171747.7	52.12	-2.65	355.8	247.5	13.4	0.3	HEREFORD,HER & WOR		8	12	165	0.06	0.5	1.2	A*C	5KM NE OF HEREFORD
19971219	131756.7	51.91	-4.58	222.9	227.2	4.3	1.6	NR CARMARTHEN,DYFED		7	14	104	0.10	0.4	0.7	A*C	20KM NE OF CARMARTHEN
19970517	214931.8	51.90	-2.29	379.8	222.5	15.4	2.2	GLOUCESTER,GLOUCS		13	23	107	0.10	0.5	1.0	A*B	
19971018	235755.9	51.86	-2.71	350.9	218.1	14.7	0.8	MONMOUTH,GWENT		6	23	165	0.05	0.5	1.1	A*C	5KM NORTH OF MONMOUTH
19970402	002524.4	51.82	-3.59	290.4	214.8	16.7	0.7	GLYN NEATH,W GLAMORGAN		10	36	89	0.07	0.5	0.7	A*C	7KM NE OF GLYN NEATH

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:1997 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970519	080236.0	51.76	-1.64	424.8	206.8	6.2	2.7	CARTERTON,OXFORDSHIRE	4+	10	27	126	0.16	1.2	2.9	B*C	FELT CARTERTON...
19971119	131256.4	51.70	-4.24	245.0	202.4	20.1	1.7	BURRY PORT,DYFED		8	8	123	0.07	0.6	1.0	A*B	
19971114	003045.4	51.63	-3.03	328.5	192.6	4.3	1.8	NEWPORT,GWENT		7	16	132	0.10	1.5	2.1	B*C	
19970501	023624.8	50.49	1.29	633.5	71.1	5.6	2.2	ENGLISH CHANNEL		6	70	303	0.26	6.1	10.7	D*D	65KM SOUTH OF FOLKESTONE
19971016	001911.7	50.39	-3.73	277.0	56.0	10.4	2.8	DARTMOUTH,DEVON	4	7	13	236	0.05	0.7	0.4	A*D	FELT DARTMOUTH...
19971106	201230.3	50.23	-5.40	157.8	42.3	0.5	0.5	ST IVES BAY,CORNWALL		8	16	235	0.07	1.9		C*D	UNREALISTIC DEPTH
19970404	012253.4	50.10	-5.46	152.9	28.2	1.6	0.2	MOUNT'S BAY,CORNWALL		7	11	198	0.04	0.4	4.2	B*D	
19970622	165016.3	49.25	-2.28	379.8	-71.9	10.9	2.2	JERSEY,CHANNEL ISLANDS	4	6	7	322	0.01	0.2	0.2	A*D	FELT ST PETER...
19970321	182814.4	49.19	-2.02	398.6	-79.4	7.0	1.3	JERSEY,CHANNEL ISLANDS		6	2	311	0.01	0.4	0.3	A*D	3KM EAST OF JERSEY
19970518	064333.3	49.18	-2.02	398.5	-79.5	7.0	1.3	JERSEY,CHANNEL ISLANDS		5	2	316	0.02	0.7	0.4	A*D	3KM EAST OF JERSEY
19970928	234419.9	49.03	-3.91	260.1	-95.1	9.5	1.7	ENGLISH CHANNEL		18	129	234	0.32	4.2	7.6	C*D	
19970720	190858.9	48.88	-2.14	389.4	-113.5	20.8	0.6	JERSEY,CHANNEL ISLANDS		5	34	341	0.08	10.2		D*D	

TABLE 3

CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY: 1997

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	W Glamorgan	:	West Glamorgan
Expl	:	Explosion	Notts	:	Nottinghamshire
D & G	:	Dumfries and Galloway	S'Clyde	:	Strathclyde
Her & Wor	:	Hereford and Worcester	S Yorkshire	:	South Yorkshire
N'umberland	:	Northumberland	West Yorks	:	West Yorkshire
Leics	:	Leicestershire	Staffs	:	Staffordshire
New-U-Lyme	:	Newcastle-Under-Lyme	Gloucs	:	Gloucestershire
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:1997

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
19970305	225041.3	55.33	-1.61	424.7	603.8	0.3	2.2	EXPL-OFFSHORE AMBLE	3+	13	45	216	0.23	1.9		C*D	EXPL-FELT AMBLE
19970312	053957.0							SONIC-NORTH WALES									SONIC-FELT NORTH WALES..
19970324	215225.0							SONIC-SOUTH YORKSHIRE									SONIC-FELT S YORKSHIRE
19970324	220629.0							SONIC-SOUTH YORKSHIRE									SONIC-FELT S YORKSHIRE
19970409	130011.4	60.11	-1.24	442.2	1136.4	0.0	1.0	EXPL-SHETLAND ISLANDS	2+	3	4	232	0.10			A*D	EXPL-FELT LERWICK
19970902	145727.3	55.58	-5.10	204.5	636.0	0.8	1.7	EXPL-OFF ISLE OF ARRAN	3+	7	37	167	0.07	0.6	6.0	C*C	EXPL-FELT ISLE OF ARRAN
19970923	075856.0							SONIC-NE SCOTLAND									SONIC-FELT NE SCOTLAND..
19971029	151438.0							SONIC-PEMBROKE AREA									SONIC-FELT PEMBROKE...
19971030	210853.0							SONIC-EDINBURGH									SONIC-FELT EDINBURGH...
19971107	103436.0							SONIC-HARTLEPOOL AREA									SONIC-FELT HARTLEPOOL...
19971202	144214.0							PROBABLE SONIC-WALES									PROB SONIC-FELT WALES
19971211	112438.0							SONIC-STRATHCLYDE									SONIC-FELT EAST KILBRIDE

TABLES 4

GEOGRAPHICAL COORDINATES OF SEISMOGRAPH STATIONS: DECEMBER 1997

TABLE 4a

GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS: DECEMBER 1997

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
ABA	BACONSTHORPE	52.8875	1.1471	611.70	336.90	13	82-	1	BGS
AEA	E.ANGLIA UNIV	52.6208	1.2403	619.30	307.50	45	84-	M	BGS
APA	PACKWAY	52.2999	1.4779	637.10	272.60	35	84-	1	BGS
AWH	WHINBURGH	52.6299	0.9512	599.70	307.70	60	80-	1R	BGS
AWI	WITTON	52.8324	1.4460	632.10	331.70	35	83-	1	BGS
BBH	BRUNTSHEIL	55.1332	-2.9299	340.72	582.50	207	92-	1	BGS
BBO	BOTHEL	54.7367	-3.2465	319.75	538.70	205	92-	3	BGS
BCM	CHAPELCROSS MIC	55.0151	-3.2212	321.92	569.64	78	92-	M	BGS
BDL	DOBCROSS HALL	54.8030	-2.9390	339.65	545.76	132	92-	1	BGS
BHH	HOWATS HILL	55.0928	-3.2187	322.23	578.28	198	92-	3	BGS
BNA	NEW ABBEY	54.9659	-3.6244	296.02	564.70	78	92-	1	BGS
BTA	TALKIN	54.9057	-2.6841	356.14	557.00	276	92-	3	BGS
BWH	WARDLAW	55.1757	-3.6551	294.61	588.08	275	92-	1	BGS
CBW	BUDOCK WATER	50.1482	-5.1144	177.53	32.29	98	81-	1	BGS
CCA	CARNMENELLIS	50.1864	-5.2277	169.62	36.87	213	81-	1	BGS
CCO	CONSTANTINE	50.1357	-5.1960	171.64	31.14	183	81-	1	BGS
CDU	DUNNERDALE	54.3363	-3.1950	322.31	494.09	362	92-	1	BGS
CGH	GOONHILLY	50.0508	-5.1649	173.46	21.61	91	81-	1	BGS
CGW	GWEEK	50.1003	-5.2224	169.58	27.29	76	93-	1	BGS
CKE	KESWICK	54.5878	-3.1062	328.52	521.98	296	92-	1	BGS
CMA	MANACCAN	50.0819	-5.1273	176.30	24.96	50	93-	1	BGS
CPZ	PENZANCE	50.1560	-5.5835	144.07	34.66	198	81-	1R	BGS
CR2	ROSEMANOWES 2	50.1669	-5.1687	173.74	34.53	152	81-	3	BGS
CSA	ST AUSTELL	50.3528	-4.8936	194.18	54.39	113	81-	1	BGS
CSF	SCAFELL	54.4478	-3.2431	319.40	506.55	548	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	139	81-	1	BGS
CWF	CHARNWOOD FST	52.7382	-1.3071	446.78	315.88	185	75-	3R	BGS
DCO	COMBE FARM	50.3200	-3.8724	266.72	48.42	410	82-	1R	BGS
DYA	YADSWORTHY	50.4352	-3.9309	262.89	61.33	280	82-	3R	BGS
EAB	ABERFOYLE	56.1881	-4.3400	254.80	701.95	250	69-	1R	BGS
EAU	AUCHINOON	55.8454	-3.4474	309.38	662.30	359	69-	1R	BGS
EBH	BLACK HILL	56.2481	-3.5081	306.56	707.19	375	69-	1R	BGS
EBL	BROAD LAW	55.7733	-3.0436	334.54	653.82	365	69-	1R	BGS
ECK	CAULDKAINE HILL	55.1812	-3.1271	328.24	588.02	337	81-	1R	BGS
EDI	EDINBURGH	55.9233	-3.1861	325.89	670.66	125	69-	3R	BGS
EDR	DRUMTOCHTY	56.9190	-2.5394	367.16	780.97	401	89-	1R	BGS
EDU	DUNDEE	56.5475	-3.0142	337.65	739.95	275	69-	1R	BGS
ELO	LOGIEALMOND	56.4706	-3.7119	294.55	732.24	495	69-	1R	BGS
EMN	MONKTONHALL	55.9295	-3.0889	331.97	671.24	52	96-	3	BGS
ENH	NEWHAILES	55.9401	-3.0795	332.58	672.42	25	96-	1	BGS
ENC	NEWCRAIGHALL	55.9318	-3.1050	330.97	671.52	45	96-96	3	BGS
ESK	ESKDALEMUIR	55.3167	-3.2050	323.54	603.18	263	65-	3R	BGS
ESY	STONEYPATH	55.9177	-2.6144	361.60	669.57	328	81-	1R	BGS
GAL	GALLOWAY	54.8664	-4.7114	226.02	555.78	105	89-	3M	BGS
GCD	CASTLE DOUGLAS	54.8638	-3.9417	275.39	553.85	189	89-	1R	BGS
GCL	CUSHENDALL	55.0783	-6.1263	136.66	583.77	278	89-	1R	BGS
GIM	N ISLE OF MAN	54.2923	-4.4670	239.46	491.34	366	89-	3R	BGS
GMK	MULL OF KINTYRE	55.3459	-5.5936	172.18	611.65	160	89-	1R	BGS
GMM	MTNS OF MOURNE	54.2377	-5.9498	142.66	489.67	155	89-	1R	BGS
HAE	ALDERS END	52.0376	-2.5475	362.45	237.88	224	82-	1R	BGS
HCG	CRAIG GOCH	52.3224	-3.6567	287.10	270.70	511	80-	1R	BGS
HEX	EXMOOR	51.0668	-3.8025	273.72	131.32	278	91-	1R	BGS
HGH	GRAY HILL	51.6380	-2.8064	344.20	193.60	210	80-	1R	BGS

TABLE 4a: continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
HLM	LONG MYND	52.5184	-2.8807	340.25	291.57	429	84-	1	BGS
HPE	PEMBROKE	51.9371	-4.7745	209.30	230.20	355	90-	1R	BGS
HPK	HAVERAH PARK	53.9554	-1.6240	424.67	451.12	227	78-	3R	BGS
HSA	SWANSEA	51.7478	-4.1543	251.30	207.70	274	87-	1R	BGS
HTL	HARTLAND	50.9944	-4.4850	225.64	124.67	91	81-	3RM	BGS
HTR	TREWERN HILL	52.0790	-3.2697	313.00	243.10	329	82-	1R	BGS
JLP	LES PLATONS	49.2428	-2.1039			131	81-	1R	BGS
JQE	QUEENS EAST	49.2000	-2.0384			58	91-	1	BGS
JRS	MAISON ST LOUIS	49.1924	-2.0917			53	81-	3R	BGS
JSA	ST AUBINS	49.1879	-2.1709			21	81-	1R	BGS
JVM	VALLE D.L.MARE	49.2169	-2.2068			64	81	1R	BGS
KAC	ACHNASHELLACH	57.4999	-5.2982	202.40	850.30	330	83-	1R	BGS
KAR	ARISAIG	56.9175	-5.8302	166.90	787.20	225	83-	1	BGS
KBI	BIRLEY GRANGE	53.2546	-1.5278	431.50	373.20	270	88-	1	BGS
KLE	KEELE UNIVERSITY	53.0038	-2.2657	382.17	345.23	203		1	KUN
KLE2	TRENT VALE	52.9878	-2.1968	386.79	343.44	125		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	1118	91-	1R	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	36	86-	3R	BGS
KSB	SHIEL BRIDGE	57.2098	-5.4230	193.30	818.40	70	83-	1R	BGS
KSK	SCOVAL	57.4653	-6.7020	118.10	851.41	250	89-	1R	BGS
KSY	SYSTON	52.9642	-0.5873	494.88	341.73	123	88-	1R	BGS
KTG	TILBROOK GRNGE	52.3261	-0.4007	508.98	271.03	78	88-	1	BGS
KUF	UFFORD	52.6175	-0.3895	509.02	303.45	35	88-	1R	BGS
KWE	WEAVER FARM	53.0163	-1.8435	410.50	346.60	320	88-	1R	BGS
LCP	CASSOP	54.7368	-1.4741	433.86	538.12	185	91-	1R	BGS
LDU	LEEDS UNIV	53.8025	-1.5553	429.35	434.45	230	83-	M	BGS
LHO	HOLMEFIRTH	53.5451	-1.8548	409.62	405.42	460	91-	1R	BGS
LMI	MILLOM	54.2206	-3.3070	314.79	481.35	140	89-	3R	BGS
LMK	MARKET RASEN	53.4569	-0.3266	511.10	396.90	130	91-	1R	BGS
LRN	RICHMOND	54.4167	-1.7858	413.90	502.40	300	91-	1R	BGS
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	100	78-	3R	BGS
LWH	WHINNY NAB	54.3335	-0.6714	486.38	493.94	265	91-	1R	BGS
MCD	COLEBURN DISTIL	57.5827	-3.2541	325.02	855.41	280	81-	3RM	BGS
MCH	MICHAELCHURCH	51.9977	-2.9983	331.47	233.77	233	78-	3	BGS
MDO	DOCHFOUR	57.4413	-4.3633	258.17	841.43	366	81-	1R	BGS
MFI	FISHRIE	57.6116	-2.2953	382.36	857.97	220	88-	1R	BGS
MLA	LATHERON	58.3050	-3.3640	320.07	935.93	190	81-	1	BGS
MME	MEIKLE CAIRN	57.3150	-2.9650	341.88	825.33	455	81-	1	BGS
MVH	ACHVAICH	57.9232	-4.1816	270.80	894.70	198	84-	1	BGS
OBR	BRABSTER	58.6142	-3.1623	332.47	970.13	89	95-	1R	BGS
OHO	HOY	58.8321	-3.2464	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	15	95-	1R	BGS
OTO	TONGUE	58.4953	-4.3940	260.49	958.79	338	95-	1R	BGS
OWE	WESTRAY	59.3180	-3.0289	341.44	1048.36	87	95-	1R	BGS
PCA	CARROT	55.7000	-4.2550	258.30	647.48	305	83-	1	BGS
PCO	CORRIE	55.9880	-4.0970	269.20	679.21	274	83-	1	BGS
PGB	GLENIFFERBRAES	55.8100	-4.4780	244.73	660.81	200	84-	3	BGS
PMS	MUIRSHIEL	55.8461	-4.7441	228.22	664.83	351	83-	1	BGS
RCR	CAPE WRATH	58.6240	-4.9986	225.90	974.53	100	95-	1R	BGS
REB	EISG-BRACHAIDH	58.1188	-5.2822	206.70	919.10	100	95-	1R	BGS
RFO	FORSNAVAL	58.2133	-7.0052	106.10	935.83	197	95-	1R	BGS
RRH	RHENIGIDALE	57.9197	-6.6882	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	-5.1684	214.61	944.33	60	95-	1R	BGS
RTO	TOLSTA	58.3778	-6.2092	153.95	950.93	74	95-	1R	BGS

TABLE 4a: continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
SAN	SANDWICK	60.0176	-1.2386	442.44	1126.05	155	85-	1	BGS
SBD	BRYN DU	52.9055	-3.2588	315.35	335.01	497	80-	1	BGS
SFH	HASELMERE	51.0604	-0.6911	491.71	129.88	260	93-	1	BGS
SIW	ISLE OF WHITE	50.6711	-1.3747	444.18	85.97	162	93-	1	BGS
SKP	KOPHILL	51.7215	-0.8099	482.20	203.25	215	93-	1	BGS
SMD	MENDIPS	51.3082	-2.7174	350.00	156.87	300	93-	1	BGS
SSP	STONEY POUND	52.4177	-3.1119	324.39	280.59	417	90-	3	BGS
SSW	STOW-ON-WOLD	51.9667	-1.8499	410.31	229.85	291	93-	1	BGS
SWK	WARMINSTER	51.1483	-2.2471	382.72	138.87	279	93-	1	BGS
SWN	SWINDON	51.5130	-1.8005	413.85	179.42	192	93-	3	BGS
TBW	BRENTWOOD	51.6549	0.2911	558.47	197.66	82	89-	1R	BGS
TCR	COLCHESTER	51.8349	0.9215	601.26	219.23	40	89-	1R	BGS
TEB	EASTBOURNE	50.8188	0.1459	551.14	104.40	70	89-	1R	BGS
TFO	FOLKESTONE	51.1136	1.1406	619.79	139.67	188	89-	3	BGS
TSA	SEVENOAKS	51.2427	0.1558	550.46	151.55	170	89-	1	BGS
WAL	WALLS	60.2576	-1.6133	421.40	1152.60	170	80-	1	BGS
WCB	CHURCH BAY	53.3782	-4.5465	230.63	389.86	135	85-	3M	BGS
WFB	FAIRBOURNE	52.6830	-4.0378	262.26	311.47	325	85-	1R	BGS
WIM	ISLE OF MAN	54.1472	-4.6735	225.41	475.70	365	85-	1R	BGS
WLF	LLYNFAES	53.2893	-4.3966	240.27	379.64	65	85-	1	BGS
WME	MYNDD EILIAN	53.3966	-4.3034	246.87	391.36	130	85-	1R	BGS
WPM	PENMAENMAWR	53.2583	-3.9049	272.95	375.20	350	85-	1R	BGS
XAL	ALLENDALE	54.8617	-2.2147	386.22	551.91	462	83-	1R	BGS
XDE	DENT	54.5058	-3.4897	303.55	513.31	291	83-	1R	BGS
XSO	SOURHOPE	55.4925	-2.2511	384.13	622.11	495	83-	1R	BGS
YEL	YELL	60.5509	-1.0830	450.29	1185.55	200	79-	1	BGS
YLL	LLANBERIS	53.1402	-4.1704	254.84	362.57	162	84-	1R	BGS
YRC	RHOSCOLYN	53.2506	-4.5741	228.28	375.74	24	84-	1R	BGS
YRE	YR EIFL	52.9810	-4.4254	237.19	345.42	197	84-	1R	BGS
YRH	RHIW	52.8335	-4.6289	222.93	329.49	300	84-	1R	BGS
DCN	CROGHAN	53.3439	-7.2767			150	77-	1R	DIAS
DLF	LYONS FARM	53.2958	-6.5314			96	91-	3	DIAS
DMS	MERRION SQUARE	53.3406	-6.2486			5	90-	1	DIAS
DMU	KINGSCOURT	53.8989	-6.9106			280	77-	1R	DIAS
DMUB	KINGSCOURT B	53.9000	-6.9086			280	94-	1	DIAS
ECB	CARRICKBYRNE	52.3661	-6.7811			125	81-	1R	DIAS
ECP	CARNSORE PT	52.1800	-6.3689			5	80-	3R	DIAS
ETA	TARA HILL	52.6958	-6.2100			140	82-	1R	DIAS

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

TABLE 4b

GEOGRAPHIC COORDINATES OF LOW GAIN STATIONS, DECEMBER 1997

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
AEU	EAST ANGLIA	52.6201	1.2347	618.93	307.44	15	94-	L	BGS
BCC	CHAPELCROSS	55.0154	-3.2202	321.98	569.67	68	92-	L	BGS
CRQ	ROSEMANOWES	50.1672	-5.1728	173.45	34.57	165	81-	LR	BGS
DYA	YADSWORTHY	50.4352	-3.9309	262.89	61.33	280	82-	LR	BGS
EDI	EDINBURGH	55.9233	-3.1861	325.89	670.66	125	89-	LR	BGS
ESK	ESKDALEMUIR	55.3167	-3.2050	323.54	603.18	263	81-	LR	BGS
GAL	GALLOWAY	54.8664	-4.7114	226.02	555.78	105	89-	L	BGS
HBL2	BONNYLANDS	52.0508	-3.0384	328.80	239.72	440	91-	LR	BGS
HTL	HARTLAND	50.9944	-4.4850	225.64	124.67	91	81-	LR	BGS
JRS	MAISON ST LOUIS	49.1924	-2.0917			53	81-	LR	BGS
KEY	KEYWORTH	52.8774	-1.0751	462.24	331.54	75	88-	L	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	36	86-	LR	BGS
LDU	LEEDS	53.8025	-1.5553	429.35	434.45	230	83-	L	BGS
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	100	78-	LR	BGS
MCH	MICHAELCHURCH	51.9977	-2.9983	331.47	233.77	233	78-	L	BGS
MCD	COLEBURN	57.5827	-3.2541	325.02	855.41	280	81-	LR	BGS
ORE	REAY	58.5480	-3.7622	297.45	963.52	100	95-	LR	BGS
POB	OBSERVATORY	55.6370	-4.4170	247.90	664.10	34	92-	L	BGS
RRR	RUBHA REIDH	57.8577	-5.8067	174.19	891.68	61	95-	LR	BGS
SWN	SWINDON	51.5130	-1.8005	413.85	179.42	192	93-	L	BGS
TFO	FOLKESTONE	51.1136	1.1406	619.79	139.67	188	89-	L	BGS
WCB	CHURCH BAY	53.3782	-4.5465	230.63	389.86	135	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 1997

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
AEU	EAST ANGLIA	52.6201	1.2347	618.93	307.44	15	94-	S	BGS
BCC	CHAPELCROSS	55.0154	-3.2202	321.98	569.67	68	92-	S	BGS
CRQ	ROSEMANOWES	50.1672	-5.1728	173.45	34.57	165	93-	SR	BGS
EMN	MONKTONHALL	55.9295	-3.0889	331.97	671.24	52	96-97	S	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	52.8774	-1.0751	462.24	331.54	75	97-	S	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	36	94-	SR	BGS
HBL2	BONNYLANDS	52.0508	-3.0384	328.80	239.72	440	91-	SR	BGS
LRWS	LERWICK	60.1397	-1.1831	445.37	1139.69	80	96-	S	BGS
RRR	RUBHA REIDH	57.8577	-5.8067	174.19	891.68	61	95-	SR	BGS
SWN	SWINDON	51.5130	-1.8005	413.85	179.42	192	93-	S	BGS
TFO	FOLKESTONE	51.1136	1.1406	619.79	139.67	188	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	-4.5465	230.63	389.86	135	97-	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: 1997

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	W Glamorgan	:	West Glamorgan
Expl	:	Explosion	Notts	:	Nottinghamshire
D & G	:	Dumfries and Galloway	S'Clyde	:	Strathclyde
Her & Wor	:	Hereford and Worcester	S Yorkshire	:	South Yorkshire
N'umberland	:	Northumberland	West Yorks	:	West Yorkshire
Leics	:	Leicestershire	Staffs	:	Staffordshire
New-U-Lyme	:	Newcastle-Under-Lyme	Gloucs	:	Gloucestershire
Penin	:	Peninsula			

Comments abbreviations

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

January 1 1997 Time: 04:59 1.8 UTC Magnitude: 1.4 ML
Lat: 55.329N Lon: 3.585W Depth: 3.7 km
Grid Ref: 299.48 kmE 604.99 kmN RMS: 0.11 secs
Locality: MOFFAT, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SZ	24	IP		C	04:59	06.41		
ESK	SN	24	ES	2		04:59	09.32		
ESK	SN	24				04:59	09.53	66	0.10
ESK	SE	24				04:59	09.47	45	0.10
ECK	SZ	33	IP		C	04:59	08.02		
BHH	SZ	35	EP	2		04:59	08.36		
BHH	SE	35	ES	3		04:59	12.70		
BHH	SN	35				04:59	12.77	84	0.22
BHH	SE	35				04:59	12.91	105	0.34
BNA	SZ	41	IP	1	D	04:59	09.03		
BBH	SZ	47	EP	1	C	04:59	10.23		
EAU	SZ	58	EP	2		04:59	12.02		
PCA	SZ	59	EP	2		04:59	12.24		
EBL	SZ	60	EP	2		04:59	12.17		
BBO	SZ	69	EP	3		04:59	13.98		
BBO	SN	69				04:59	25.40	8	0.14
BBO	SE	69				04:59	24.22	12	0.36
EDI	SZ	71	EP	3		04:59	13.85		
EDI	SN	71				04:59	23.33	16	0.28
EDI	SE	71				04:59	23.34	10	0.27
BDL	SZ	72	EP	3		04:59	14.46		
BTA	SZ	74	EP	2		04:59	15.04		
PGB	SZ	78	EP	3		04:59	15.29		
PGB	SE	78	ES	3		04:59	24.60		
PGB	SN	78				04:59	24.89	25	0.17
PGB	SE	78				04:59	24.69	41	0.18
XSO	SZ	86	EP	2		04:59	16.34		
CKE	SZ	88	EP	2		04:59	16.94		
GAL	SZ	88	EP	2		04:59	16.75		
GAL	SN	88				04:59	28.65	16	0.09
GAL	SE	88				04:59	28.74	11	0.09
ESY	SZ	90	EP	2		04:59	16.90		
PMS	SZ	93	EP	2		04:59	17.46		

January 7 1997 Time: 20:29 2.3 UTC Magnitude: 1.1 ML
Lat: 55.936N Lon: 3.083W Depth: 1.5 km
Grid Ref: 332.33 kmE 671.96 kmN RMS: 0.05 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F,FELT MUSSELBURGH... Intensity: 2+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ENH	SZ	1	IP	1	C	20:29	02.74		
EMN	SZ	1	IP	1	C	20:29	02.75		
EMN	SN	1	ES	2		20:29	03.15		
EDI	SZ	7	IP		D	20:29	03.95		
EDI	SE	7	ES	2		20:29	05.23		
EDI	SN	7				20:29	05.70	163	0.42
EDI	SE	7				20:29	05.40	207	0.24
EBL	SZ	18	IP	1	D	20:29	06.03		
EAU	SZ	25	IP	1	D	20:29	07.33		
ESY	SZ	29	EP	2		20:29	07.90		
EBH	SZ	44	EP	1	D	20:29	10.53		
ELO	SZ	71	EP	1	D	20:29	14.86		

January 9 1997 Time: 18:53 33.9 UTC Magnitude: 1.7 ML
Lat: 55.938N Lon: 3.083W Depth: 1.7 km
Grid Ref: 332.32 kmE 672.13 kmN RMS: 0.05 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F,FELT MUSSELBURGH... Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ENH	SZ	0	IP		C	18:53	34.35		
EMN	SZ	1	IP		C	18:53	34.37		
EMN	SN	1	ES	2		18:53	34.82		
EDI	SZ	7	IP		D	18:53	35.56		
EDI	SN	7	ES	2		18:53	36.81		
EBL	SZ	18	IP		D	18:53	37.65		
EAU	SZ	25	IP	1	D	18:53	38.94		
ESY	SZ	29	IP	1	D	18:53	39.50		
EBH	SZ	44	IP	1	D	18:53	42.16		
PCO	SZ	64	EP	2		18:53	45.34		
ELO	SZ	71	EP	2		18:53	46.42		
PGB	SE	88	ES	4		18:54	00.49		
PGB	SN	88				18:54	04.77	20	0.29
PGB	SE	88				18:54	04.78	18	0.28

January 11 1997 Time: 04:41 35.6 UTC Magnitude: 1.7 ML
Lat: 55.935N Lon: 3.084W Depth: 1.5 km
Grid Ref: 332.31 kmE 671.82 kmN RMS: 0.04 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F,FELT MUSSELBURGH... Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP	1	C	04:41	36.09		
ENH	SZ	1	IP		C	04:41	36.05		
EDI	SZ	7	IP		D	04:41	37.27		
EDI	SN	7	ES	2		04:41	38.52		
EBL	SZ	18	IP		D	04:41	39.35		
EAU	SZ	25	IP	1	D	04:41	40.66		
ESY	SZ	29	EP	1	D	04:41	41.19		
EBH	SZ	44	EP	1	D	04:41	43.85		
ELO	SZ	71	EP	1	D	04:41	48.19		
PGB	SZ	88	EP	4		04:41	50.91		
PGB	SN	88				04:42	06.46	21	0.29
PGB	SE	88				04:42	07.15	17	0.34

January 18 1997 Time: 09:09 48.3 UTC Magnitude: 2.9 ML
Lat: 56.291N Lon: 3.400E Depth: 9.6 km
Grid Ref: 734.03 kmE 724.01 kmN RMS: 0.31 secs
Locality: CENTRAL NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KMY	SZ	343	EP	3		09:10	34.97		
XSO	SZ	365	EP	3		09:10	38.51		
EDR	SZ	372	EP	3		09:10	38.64		
ESY	SZ	377	EP	3		09:10	39.96		
XAL	SZ	388	EP	3		09:10	40.76		
BLS5	SZ	393	EP	3		09:10	41.75		
EDU	SZ	397	EP	3		09:10	42.42		
EDI	SZ	412	EP	3		09:10	44.51		
EDI	SN	412	ES	3		09:11	24.59		
EDI	SN	412				09:11	50.66	31	1.31
EDI	SE	412				09:11	49.03	26	1.26
EBH	SZ	428	EP	3		09:10	45.86		
ESK	SZ	428	EP	3		09:10	45.65		
ESK	SE	428	ES	3		09:11	28.14		
ESK	SN	428				09:12	11.66	27	1.33
ESK	SE	428				09:12	03.90	15	1.23
ECK	SZ	429	EP	3		09:10	45.71		
ELO	SZ	440	EP	3		09:10	47.11		
NRA0	SZ	686	EPN	3		09:11	18.40		

January 21 1997 Time: 05:01 24.7 UTC Magnitude: 0.4 ML
Lat: 55.937N Lon: 3.080W Depth: 1.7 km
Grid Ref: 332.52 kmE 672.03 kmN RMS: 0.02 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ENH	SZ	0	EP	1	C	05:01	25.15		
EMN	SZ	1	IP		D	05:01	25.16		
EMN	SN	1	ES	2		05:01	25.58		
EDI	SZ	7	EP	1	C	05:01	26.42		
EDI	SE	7	ES	2		05:01	27.76		
EDI	SN	7				05:01	28.20	46	0.33
EDI	SE	7				05:01	28.48	26	0.23
EBL	SZ	18	EP	1	D	05:01	28.43		
EAU	SZ	25	EP	2		05:01	29.64		

January 22 1997 Time: 03:05 6.7 UTC Magnitude: 1.2 ML
Lat: 56.949N Lon: 4.887W Depth: 8.3 km
Grid Ref: 224.43 kmE 787.83 kmN RMS: 0.13 secs
Locality: LOCH LOCHY, HIGHLAND Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KNR	SZ	15	IP	1	D	03:05	09.92		
KSB	SZ	44	EP	2		03:05	14.16		
KPL	SZ	64	IP	1	C	03:05	17.72		
KPL	SE	64	ES	3		03:05	25.11		
KPL	SN	64				03:05	29.04	8	0.18
KPL	SE	64				03:05	28.87	13	0.19
KAC	SZ	66	EP	3		03:05	17.74		

January 22 1997 Time: 18:34 17.8 UTC Magnitude: -0.1 ML
Lat: 53.099N Lon: 4.367W Depth: 14.1 km
Grid Ref: 241.52 kmE 358.44 kmN RMS: 0.07 secs
Locality: CAERNARVON BAY, GWYNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YLL	SZ	14	IP	1	C	18:34	21.03		
YRE	SZ	14	IP	1	C	18:34	21.05		
YRC	SZ	22	IP	1	D	18:34	22.14		
WME	SZ	33	EP	2		18:34	23.71		
WCB	SZ	33	EP	2		18:34	23.82		
WCB	SE	33	ES	3		18:34	27.42		
WCB	SN	33				18:34	24.77	1	0.09
WCB	SE	33				18:34	27.88	3	0.17
YRH	SZ	34	IP	1	C	18:34	23.84		
WFB	SZ	51	EP	2		18:34	26.70		

January 26 1997 Time: 00:35 16.1 UTC Magnitude: 2.3 ML
Lat: 61.629N Lon: 2.706E Depth: 8.3 km
Grid Ref: 649.28 kmE 1314.32 kmN RMS: 0.35 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
FOO	SZ	124	EP	3		00:35	36.49		
FOO	SZ	124	ES	3		00:35	50.45		
SUE	SZ	127	EP	3		00:35	36.93		
SUE	SZ	127	ES	3		00:35	51.19		
ASK	SZ	186	EP	3		00:35	43.00		
ASK	SZ	186	ES	3		00:36	04.00		
HYA	SZ	193	EP	3		00:35	45.21		
HYA	SZ	193	ES	3		00:36	05.74		
EGD	SZ	204	EP	3		00:35	46.80		

YEL	SZ	237	EP	3		00:35	49.90		
LRW	SZ	269	EP	3		00:35	54.08		
LRW	SN	269	ES	3		00:36	22.39		
LRW	SN	269				00:36	27.09	18	1.13
LRW	SE	269				00:36	36.19	12	0.14
WAL	SZ	280	EP	3		00:35	55.59		
SAN	SZ	280	EP	3		00:35	55.28		
ODD1	SZ	287	EP	3		00:35	57.07		
ODD1	SZ	287	ES	3		00:36	25.79		
KMY	SZ	304	EP	3		00:35	58.02		
KMY	SZ	304	ES	3		00:36	29.13		
BLS5	SZ	321	EP	3		00:36	01.05		
BLS5	SZ	321	ES	3		00:36	33.21		
NRA0	SZ	485	EPN	3		00:36	20.98		
NRA0	SZ	485	ESN	3		00:37	08.41		

January 26 1997 Time: 07:17 9.4 UTC Magnitude: 0.8 ML
Lat: 53.195N Lon: 1.286W Depth: 5.6 km
Grid Ref: 447.68 kmE 366.74 kmN RMS: 0.09 secs
Locality: MANSFIELD, NOTTS Quality: D
Comments: 6KM NW OF MANSFIELD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	18	EP	1	C	07:17	12.93		
KWE	SZ	42	EP	2		07:17	16.93		
CWF	SZ	51	EP	2		07:17	18.21		
CWF	SN	51	ES	3		07:17	25.30		
CWF	SN	51				07:17	26.93	5	0.11
CWF	SE	51				07:17	24.61	6	0.09
KSY	SZ	53	EP	3		07:17	18.78		

January 29 1997 Time: 17:13 0.6 UTC Magnitude: 0.6 ML
Lat: 55.938N Lon: 3.086W Depth: 1.8 km
Grid Ref: 332.20 kmE 672.24 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F,FELT MUSSELBURGH... Intensity: 2+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ENH	SZ	0	EP	1	C	17:13	01.02		
EMN	SZ	1	IP		D	17:13	01.04		
EMN	SE	1	ES	2		17:13	01.45		
EDI	SZ	7	IP	1	D	17:13	02.23		
EDI	SE	7	ES	2		17:13	03.49		
EDI	SN	7				17:13	03.56	59	0.15
EDI	SE	7				17:13	03.65	46	0.20
EBL	SZ	19	EP	1	D	17:13	04.30		

February 4 1997 Time: 22:12 57.1 UTC Magnitude: 2.7 ML
Lat: 56.612N Lon: 4.570W Depth: 7.4 km
Grid Ref: 242.31 kmE 749.58 kmN RMS: 0.12 secs
Locality: RANNOCH MOOR, TAYSIDE Quality: C
Comments: FELT APPIN... Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	49	IP	1	C	22:13	05.34		
ELO	SZ	55	IP		C	22:13	06.25		
PCO	SZ	75	IP	1	C	22:13	09.62		
EBH	SZ	77	IP	1	C	22:13	09.88		
KAR	SZ	84	IP	1	C	22:13	10.94		
KSB	SZ	85	IP		C	22:13	10.92		
PMS	SZ	86	EP	2		22:13	11.45		
PGB	SZ	89	IP	1	C	22:13	11.88		
PGB	SN	89	ES	3		22:13	22.12		
PGB	SN	89				22:13	23.15	183	0.17
PGB	SE	89				22:13	24.59	207	0.30
MDO	SZ	93	EP	3		22:13	12.41		
EDU	SZ	96	IP	1	C	22:13	12.95		
PCA	SZ	103	EP	2		22:13	13.96		
KPL	SZ	104	IP	1	C	22:13	14.23		
KPL	SE	104	ES	3		22:13	26.50		
KPL	SN	104				22:13	28.23	102	0.15
KPL	SE	104				22:13	27.91	138	0.19
KAC	SZ	108	IP	1	C	22:13	14.74		
EAU	SZ	110	EP	2		22:13	15.06		
EDI	SZ	115	EP	3		22:13	15.69		
EDI	SE	115	ES	3		22:13	29.24		
EDI	SN	115				22:13	31.69	164	0.27
EDI	SE	115				22:13	31.64	162	0.27
EMN	SZ	119	EP	3		22:13	16.54		
ENH	SZ	119	EP	3		22:13	16.34		
MME	SZ	125	EP	3		22:13	17.29		
EDR	SZ	129	EP	2		22:13	17.98		
EBL	SZ	133	EP	2		22:13	18.65		
MVH	SZ	148	EP	3		22:13	20.10		

February 6 1997 Time: 00:36 19.5 UTC Magnitude: 1.6 ML
Lat: 53.401N Lon: 1.047W Depth: 1.0 km
Grid Ref: 463.38 kmE 389.82 kmN RMS: 0.18 secs
Locality: RANSKILL, NOTTS Quality: C
Comments: C/F,FELT RANSKILL Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	36	EP	2		00:36	26.42		
LMK	SZ	48	EP	2		00:36	28.42		
LHO	SZ	56	EP	2		00:36	29.28		
KSY	SZ	58	EP	2		00:36	29.75		
KWE	SZ	68	EP	2		00:36	31.76		
HPK	SZ	73	EP	3		00:36	32.40		
HPK	SN	73	ES	3		00:36	41.42		
HPK	SN	73				00:36	46.66	31	0.26
HPK	SE	73				00:36	47.04	34	0.19
CWF	SZ	76	EP	2		00:36	32.80		
CWF	SE	76	ES	2		00:36	41.93		
CWF	SN	76				00:36	45.08	10	0.12
CWF	SE	76				00:36	47.65	18	0.13

February 7 1997 Time: 21:37 31.0 UTC Magnitude: 1.6 ML
Lat: 53.423N Lon: 1.027W Depth: 3.6 km
Grid Ref: 464.65 kmE 392.21 kmN RMS: 0.13 secs
Locality: MALTBY, SOUTH YORKSHIRE Quality: C
Comments: C/F,11KM EAST OF MALTBY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	38	EP	1	C	21:37	37.95		
LHO	SZ	57	EP	2		21:37	40.95		
KSY	SZ	59	EP	3		21:37	41.24		
HPK	SZ	71	EP	3		21:37	43.23		
HPK	SN	71	ES	3		21:37	51.48		
HPK	SN	71				21:37	53.97	17	0.23
HPK	SE	71				21:37	58.58	31	0.21
KWE	SZ	71	EP	3		21:37	43.24		
CWF	SZ	78	EP	2		21:37	44.40		
CWF	SN	78	ES	3		21:37	53.53		
CWF	SN	78				21:37	54.87	15	0.13
CWF	SE	78				21:37	54.99	16	0.10

February 7 1997 Time: 23:07 8.4 UTC Magnitude: -0.4 ML
Lat: 53.135N Lon: 4.390W Depth: 10.3 km
Grid Ref: 240.11 kmE 362.44 kmN RMS: 0.03 secs
Locality: CAERNARVON BAY, GWYNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YLL	SZ	15	IP	1	C	23:07	11.45		
YLL	SZ	15	ES	3		23:07	13.44		
YLL	SZ	15				23:07	13.69	2	0.07
WLF	SZ	17	EP	1	D	23:07	11.76		
WLF	SZ	17	ES	2		23:07	14.06		
WLF	SZ	17				23:07	14.50	6	0.06
YRE	SZ	17	IP	1	C	23:07	11.80		
YRE	SZ	17				23:07	14.35	4	0.08
YRC	SZ	18	EP	1	D	23:07	11.87		
YRH	SZ	37	EP	3		23:07	14.73		

February 10 1997 Time: 23:09 15.5 UTC Magnitude: 2.9 ML
Lat: 53.193N Lon: 1.529W Depth: 13.4 km
Grid Ref: 431.45 kmE 366.35 kmN RMS: 0.17 secs
Locality: CHESTERFIELD, DERBYSHIRE Quality: B
Comments: FELT CHESTERFIELD...
6KM SW OF CHESTERFLD Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	7	IP		C	23:09	18.18		
KWE	SZ	29	IP		C	23:09	21.08		
LHO	SZ	45	IP	1	D	23:09	23.19		
KEY	SZ	47	IP	1	D	23:09	23.66		
CWF	SZ	53	IP	1	D	23:09	24.44		
CWF	SE	53	ES	1		23:09	30.61		
KSY	SZ	68	IP	1	D	23:09	26.93		
HPK	SZ	85	IP	1	D	23:09	29.58		
HPK	SE	85	ES	2		23:09	39.37		
HPK	SN	85				23:09	42.19	775	0.18
HPK	SE	85				23:09	40.04	765	0.15
LMK	SZ	85	IP	1	C	23:09	29.80		
KUF	SZ	100	IP	1	D	23:09	31.61		
HLM	SZ	118	IP	1	C	23:09	34.76		
SBD	SZ	121	EP	1		23:09	35.39		
KTG	SZ	123	EP	1	C	23:09	35.73		
SSP	SZ	137	IP	1	C	23:09	37.85		
SSP	SN	137	ES	3		23:09	54.04		
SSP	SN	137				23:09	55.41	99	0.17
SSP	SE	137				23:09	54.90	75	0.24
HAE	SZ	146	IP		D	23:09	39.23		

February 12 1997 Time: 03:21 25.8 UTC Magnitude: 2.1 ML
Lat: 60.364N Lon: 1.762E Depth: 11.8 km
Grid Ref: 607.43 kmE 1170.29 kmN RMS: 0.36 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	158	EP	2		03:21	49.60		
LRW	SZ	165	EP	3		03:21	50.75		
LRW	SN	165	ES	3		03:22	08.54		
LRW	SN	165				03:22	12.35	22	0.12
LRW	SE	165				03:22	12.37	21	0.13
SAN	SZ	171	EP	3		03:21	51.78		
SUE	SZ	181	EP	3		03:21	52.14		
SUE	SZ	181	ES	3		03:22	11.99		
WAL	SZ	187	EP	3		03:21	54.11		
ASK	SZ	190	EP	3		03:21	53.50		
ASK	SZ	190	ES	3		03:22	13.00		

FOO	SZ	225	EP	3		03:21	58.10		
FOO	SZ	225	ES	3		03:22	21.86		
HYA	SZ	257	EP	3		03:22	02.00		
HYA	SZ	257	ES	3		03:22	29.14		
ODD1	SZ	275	EP	3		03:22	04.62		
ODD1	SZ	275	ES	3		03:22	33.85		
BLS5	SZ	283	EP	3		03:22	04.98		
BLS5	SZ	283	ES	3		03:22	33.87		

February 15 1997 Time: 02:17 34.5 UTC Magnitude: 0.1 ML
Lat: 56.248N Lon: 3.751W Depth: 4.0 km
Grid Ref: 291.51 kmE 707.48 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	02:17	37.50		
ELO	SZ	25	EP	2		02:17	39.17		
EAB	SZ	37	EP	2		02:17	41.23		
EAU	SZ	49	ES	3		02:17	49.34		
EDI	SZ	50	EP	3		02:17	43.42		
EDI	SN	50	ES	3		02:17	49.88		
EDI	SN	50				02:17	49.97	1	0.04
EDI	SE	50				02:17	49.92	1	0.06

February 22 1997 Time: 21:16 15.2 UTC Magnitude: 1.0 ML
Lat: 53.186N Lon: 3.652W Depth: 8.6 km
Grid Ref: 289.60 kmE 366.78 kmN RMS: 0.04 secs
Locality: ABERGELE, CLWYD Quality: C
Comments: 10KM SOUTH OF ABERGELE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WPM	SZ	19	IP	1	C	21:16	18.70		
WPM	SZ	19	ES	3		21:16	21.08		
YLL	SZ	35	EP	2		21:16	21.36		
WME	SZ	49	EP	2		21:16	23.63		
WLF	SZ	51	EP	2		21:16	23.93		
YRE	SZ	57	EP	2		21:16	24.88		
WFB	SZ	62	EP	2		21:16	25.63		
WCB	SN	63	ES	2		21:16	33.11		
WCB	SN	63				21:16	33.81	6	0.18
WCB	SE	63				21:16	33.68	6	0.18
HLM	SZ	91	EP	3		21:16	31.01		

February 26 1997 Time: 03:58 21.6 UTC Magnitude: -0.3 ML
Lat: 55.936N Lon: 3.086W Depth: 1.7 km
Grid Ref: 332.14 kmE 671.95 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ENH	SZ	1	IP		D	03:58	22.11		
EMN	SZ	1	IP		D	03:58	22.09		
EMN	SE	1	ES	2		03:58	22.47		
EDI	SZ	6	EP	2		03:58	23.29		
EDI	SN	6	ES	2		03:58	24.53		
EDI	SN	6				03:58	25.80	7	0.33
EDI	SE	6				03:58	25.71	7	0.23
EBL	SZ	18	EP	2		03:58	25.37		

February 26 1997 Time: 14:42 48.1 UTC Magnitude: -0.1 ML
Lat: 55.937N Lon: 3.089W Depth: 1.8 km
Grid Ref: 331.98 kmE 672.12 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	14:42	48.59		
EMN	SE	1	ES	2		14:42	49.01		
ENH	SZ	1	IP		D	14:42	48.60		
EDI	SZ	6	EP	2		14:42	49.74		
EDI	SN	6	ES	2		14:42	50.94		
EDI	SN	6				14:42	51.24	12	0.15
EDI	SE	6				14:42	51.42	9	0.18
EBL	SZ	19	EP	2		14:42	51.85		

February 26 1997 Time: 21:33 9.6 UTC Magnitude: -0.4 ML
Lat: 55.936N Lon: 3.086W Depth: 1.7 km
Grid Ref: 332.17 kmE 671.97 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	21:33	10.00		
EMN	SE	1	ES	2		21:33	10.37		
ENH	SZ	1	IP		D	21:33	10.01		
EDI	SZ	6	EP	2		21:33	11.21		
EDI	SN	6	ES	2		21:33	12.44		
EDI	SN	6				21:33	12.81	5	0.17
EDI	SE	6				21:33	12.80	5	0.24
EBL	SZ	18	EP	2		21:33	13.28		

February 27 1997 Time: 09:33 0.1 UTC Magnitude: 1.7 ML
Lat: 52.929N Lon: 2.823W Depth: 11.2 km
Grid Ref: 344.68 kmE 337.20 kmN RMS: 0.07 secs
Locality: ELLESMERE, SHROPSHIRE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SBD	SZ	29	IP		C	09:33	05.59		
HLM	SZ	46	EP	1	D	09:33	08.08		
SSP	SZ	60	EP	2		09:33	10.32		
SSP	SN	60	ES	2		09:33	17.61		
SSP	SN	60				09:33	19.07	22	0.20
SSP	SE	60				09:33	18.57	36	0.21
KWE	SZ	67	EP	1	C	09:33	11.22		
WPM	SZ	81	EP	2		09:33	13.58		
WFB	SZ	86	EP	1	C	09:33	14.24		
HCG	SZ	88	EP	2		09:33	14.56		
YLL	SZ	94	EP	1	C	09:33	15.30		
KBI	SZ	94	EP	2		09:33	15.56		
HTR	SZ	99	EP	2		09:33	16.76		
HAE	SZ	101	EP	2		09:33	16.90		
MCH	SZ	104	EP	2		09:33	17.44		
MCH	SE	104	ES	2		09:33	29.53		
MCH	SN	104				09:33	33.12	18	0.19
MCH	SE	104				09:33	32.90	17	0.11
CWF	SZ	104	EP	3		09:33	17.08		
CWF	SN	104	ES	3		09:33	29.19		
CWF	SN	104				09:33	31.96	26	0.20
CWF	SE	104				09:33	31.37	18	0.10
YRE	SZ	108	EP	1	C	09:33	17.60		

March 3 1997 Time: 21:57 50.2 UTC Magnitude: -0.2 ML
Lat: 55.935N Lon: 3.086W Depth: 1.6 km
Grid Ref: 332.15 kmE 671.85 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	21:57	50.61		
ENH	SZ	1	IP		D	21:57	50.62		
EDI	SZ	6	EP	2		21:57	51.80		
EDI	SN	6	ES	2		21:57	53.04		
EDI	SN	6				21:57	53.79	9	0.19
EDI	SE	6				21:57	54.20	9	0.24
EBL	SZ	18	EP	2		21:57	53.88		

March 4 1997 Time: 21:21 9.5 UTC Magnitude: -0.2 ML
Lat: 55.935N Lon: 3.086W Depth: 1.6 km
Grid Ref: 332.16 kmE 671.89 kmN RMS: 0.00 secs
Locality: MUSSELBURGH, LOTHIAN Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	21:21	09.92		
ENH	SZ	1	IP		D	21:21	09.92		
EDI	SZ	6	IP	1	D	21:21	11.14		
EDI	SN	6	ES	3		21:21	12.34		
EDI	SN	6				21:21	12.74	8	0.17
EDI	SE	6				21:21	12.75	11	0.27
EBL	SZ	18	EP	2		21:21	13.21		

March 5 1997 Time: 04:05 2.4 UTC Magnitude: -0.3 ML
Lat: 55.935N Lon: 3.086W Depth: 1.6 km
Grid Ref: 332.15 kmE 671.80 kmN RMS: 0.00 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	04:05	02.79		
EMN	SN	1	ES	2		04:05	03.11		
ENH	SZ	1	IP		D	04:05	02.81		
EDI	SZ	6	EP	2		04:05	04.02		
EDI	SN	6	ES	2		04:05	05.21		
EDI	SN	6				04:05	05.98	8	0.22
EDI	SE	6				04:05	05.64	5	0.29
EBL	SZ	18	EP	3		04:05	06.07		

March 5 1997 Time: 20:59 14.6 UTC Magnitude: -0.2 ML
Lat: 55.935N Lon: 3.082W Depth: 1.7 km
Grid Ref: 332.42 kmE 671.83 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	20:59	15.01		
EMN	SN	1	ES	2		20:59	15.38		
ENH	SZ	1	IP		D	20:59	15.02		
EDI	SZ	7	IP		D	20:59	16.29		
EDI	SN	7	ES	2		20:59	17.53		
EDI	SN	7				20:59	17.71	8	0.14
EDI	SE	7				20:59	17.51	11	0.37
EBL	SZ	18	EP	2		20:59	18.27		

March 6 1997 Time: 16:02 58.0 UTC Magnitude: 0.0 ML
Lat: 55.935N Lon: 3.086W Depth: 1.6 km
Grid Ref: 332.19 kmE 671.82 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	16:02	58.43		
EMN	SN	1	ES	2		16:02	58.72		
ENH	SZ	1	IP		D	16:02	58.43		

EDI	SZ	6	EP	2		16:02	59.64		
EDI	SN	6	ES	2		16:03	00.86		
EDI	SN	6				16:03	01.25	13	0.15
EDI	SE	6				16:03	01.27	13	0.25
EBL	SZ	18	EP	3		16:03	01.69		

March 8 1997 Time: 01:00 6.6 UTC Magnitude: -0.2 ML
Lat: 55.931N Lon: 3.094W Depth: 1.3 km
Grid Ref: 331.64 kmE 671.44 kmN RMS: 0.03 secs
Locality: MUSSELBURGH, LOTHIAN Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	0	IP	1	D	01:00	06.86		
EMN	SN	0	ES	2		01:00	07.16		
EDI	SZ	6	IP	1	D	01:00	08.07		
EDI	SN	6	ES	2		01:00	09.10		
EDI	SN	6				01:00	10.13	8	0.18
EDI	SE	6				01:00	10.83	8	0.28

March 8 1997 Time: 05:42 8.4 UTC Magnitude: 1.9 ML
Lat: 56.387N Lon: 5.771W Depth: 4.9 km
Grid Ref: 167.25 kmE 728.01 kmN RMS: 0.08 secs
Locality: MULL, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	59	IP	1	C	05:42	18.58		
PMS	SZ	88	IP	1	C	05:42	23.19		
EAB	SZ	91	EP	2		05:42	23.54		
KSB	SZ	94	EP	3		05:42	24.13		
PGB	SZ	103	EP	3		05:42	25.44		
PGB	SN	103	ES	3		05:42	37.80		
PGB	SN	103				05:42	38.25	26	0.23
PGB	SE	103				05:42	39.25	25	0.23
KPL	SZ	106	IP	1	C	05:42	25.94		
KPL	SN	106	ES	3		05:42	38.76		
KPL	SN	106				05:42	40.81	23	0.17
KPL	SE	106				05:42	40.73	31	0.12
PCO	SZ	113	EP	2		05:42	26.98		
PCA	SZ	122	EP	3		05:42	28.25		
KAC	SZ	127	EP	2		05:42	29.26		
ELO	SZ	128	EP	3		05:42	29.03		
EBH	SZ	141	EP	3		05:42	30.94		
EDU	SZ	171	EP	3		05:42	35.36		
EBL	SZ	183	EP	3		05:42	36.79		

March 8 1997 Time: 14:32 33.6 UTC Magnitude: 1.7 ML
Lat: 53.640N Lon: 1.868W Depth: 11.1 km
Grid Ref: 408.75 kmE 415.96 kmN RMS: 0.05 secs
Locality: HUDDERSFIELD, WEST YORKS Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LHO	SZ	11	IP		D	14:32	36.34		
HPK	SZ	39	EP	1	C	14:32	40.44		
HPK	SN	39	ES	2		14:32	45.43		
HPK	SN	39				14:32	45.86	224	0.18
HPK	SE	39				14:32	45.84	160	0.22
KBI	SZ	49	IP	1	D	14:32	41.99		
LMK	SZ	104	EP	3		14:32	51.15		
CWF	SZ	107	EP	3		14:32	51.07		
CWF	SE	107	ES	3		14:33	03.45		
CWF	SN	107				14:33	06.55	5	0.08
CWF	SE	107				14:33	03.79	5	0.11
KSY	SZ	114	EP	3		14:32	51.96		
LMI	SZ	115	EP	3		14:32	52.08		
LMI	SN	115	ES	3		14:33	05.58		
LMI	SN	115				14:33	07.29	17	0.17
LMI	SE	115				14:33	06.68	14	0.16
CDU	SZ	117	EP	3		14:32	52.54		
CSF	SZ	127	EP	3		14:32	53.67		
HLM	SZ	142	EP	3		14:32	55.86		

March 10 1997 Time: 22:58 25.1 UTC Magnitude: -0.2 ML
Lat: 55.934N Lon: 3.086W Depth: 1.7 km
Grid Ref: 332.19 kmE 671.76 kmN RMS: 0.00 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	22:58	25.51		
EMN	SN	1	ES	2		22:58	25.82		
ENH	SZ	1	IP		D	22:58	25.52		
EDI	SZ	6	IP	1	D	22:58	26.72		
EDI	SN	6	ES	2		22:58	27.93		
EDI	SN	6				22:58	28.33	8	0.17
EDI	SE	6				22:58	29.37	8	0.23
EBL	SZ	18	EP	2		22:58	28.74		

March 11 1997 Time: 04:06 52.0 UTC Magnitude: -0.4 ML
Lat: 55.935N Lon: 3.085W Depth: 1.6 km
Grid Ref: 332.20 kmE 671.82 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP		D	04:06	52.46		
EMN	SN	1	ES	2		04:06	52.77		
ENH	SZ	1	IP		D	04:06	52.47		
EDI	SZ	6	IP	1	D	04:06	53.67		
EDI	SN	6	ES	2		04:06	54.90		
EDI	SN	6				04:06	55.64	6	0.19
EDI	SE	6				04:06	55.18	6	0.21
EBL	SZ	18	EP	2		04:06	55.73		

March 11 1997 Time: 21:45 15.2 UTC Magnitude: -0.6 ML
Lat: 55.935N Lon: 3.085W Depth: 1.7 km
Grid Ref: 332.21 kmE 671.84 kmN RMS: 0.01 secs
Locality: MUSSELBURGH, LOTHIAN Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EMN	SZ	1	IP	1	D	21:45	15.62		
EMN	SN	1	ES	2		21:45	15.94		
ENH	SZ	1	IP		D	21:45	15.63		
EDI	SZ	6	EP	2		21:45	16.82		
EDI	SN	6	ES	2		21:45	18.08		
EDI	SN	6				21:45	18.45	3	0.15
EDI	SE	6				21:45	18.45	4	0.32
EBL	SZ	18	EP	3		21:45	18.89		

March 12 1997 Time: 10:15 49.6 UTC Magnitude: 2.1 ML
Lat: 52.277N Lon: 2.782W Depth: 13.7 km
Grid Ref: 346.68 kmE 264.65 kmN RMS: 0.10 secs
Locality: LEOMINSTER, HER & WOR Quality: B
Comments: 6KM NW OF LEOMINSTER

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SSP	SZ	27	IP		D	10:15	54.96		
SSP	SN	27	ES	2		10:15	58.71		
HLM	SZ	28	IP	1	D	10:15	54.81		
HAE	SZ	31	IP	1	D	10:15	55.45		
HBL2	SZ	31	EP	1	C	10:15	55.34		
MCH	SZ	35	IP		C	10:15	55.76		
MCH	SN	35	ES	2		10:16	00.30		
HTR	SZ	40	IP	1	C	10:15	56.67		
HCG	SZ	60	IP	1	D	10:16	00.15		
HGH	SZ	71	EP	2		10:16	01.77		
SSW	SZ	73	EP	2		10:16	02.16		
SWN	SZ	109	EP	2		10:16	08.04		
SWN	SN	109				10:16	22.39	43	0.22
SWN	SE	109				10:16	22.28	27	0.30
CWF	SZ	113	EP	3		10:16	07.76		
CWF	SN	113	ES	3		10:16	20.35		
CWF	SN	113				10:16	23.59	38	0.13
CWF	SE	113				10:16	22.06	30	0.16

March 14 1997 Time: 02:22 9.3 UTC Magnitude: 0.3 ML
Lat: 53.032N Lon: 4.455W Depth: 13.7 km
Grid Ref: 235.41 kmE 351.14 kmN RMS: 0.05 secs
Locality: CAERNARVON BAY, GYWNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	6	IP		D	02:22	11.78		
YLL	SZ	23	IP		C	02:22	13.73		
YRH	SZ	25	EP	2		02:22	14.04		
YRC	SZ	26	IP	1	C	02:22	14.18		
WLF	SZ	29	IP	1	C	02:22	14.52		
WCB	SZ	39	EP	2		02:22	16.25		
WCB	SN	39	ES	2		02:22	20.34		
WCB	SN	39				02:22	20.78	3	0.12
WCB	SE	39				02:22	22.36	3	0.20
WME	SZ	42	EP	2		02:22	16.43		
WPM	SZ	45	EP	2		02:22	17.05		

March 17 1997 Time: 03:25 1.9 UTC Magnitude: -0.2 ML
Lat: 52.963N Lon: 4.390W Depth: 22.0 km
Grid Ref: 239.53 kmE 343.35 kmN RMS: 0.04 secs
Locality: LLEYN PENIN, GWYNEDD Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	3	EP	2		03:25	05.47		
YRE	SZ	3	ES	3		03:25	08.03		
YRE	SZ	3				03:25	08.75	3	0.12
YRH	SZ	22	EP	2		03:25	06.91		
YRH	SZ	22	ES	3		03:25	10.27		
YRH	SZ	22				03:25	10.55	8	0.07
YLL	SZ	25	EP	2		03:25	07.27		
YLL	SZ	25	ES	3		03:25	10.83		
YLL	SZ	25				03:25	11.28	6	0.09
WLF	SZ	36	EP	3		03:25	08.78		

March 17 1997 Time: 17:17 47.7 UTC Magnitude: 0.3 ML
Lat: 52.124N Lon: 2.646W Depth: 13.4 km
Grid Ref: 355.80 kmE 247.49 kmN RMS: 0.06 secs
Locality: HEREFORD, HER & WOR Quality: B
Comments: 5KM NE OF HEREFORD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	12	IP	1	D	17:17	50.83		
MCH	SZ	28	IP	1	C	17:17	53.03		
MCH	SN	28	ES	2		17:17	56.89		
HTR	SZ	43	IP	1	C	17:17	55.21		

SSP	SZ	46	EP	2		17:17	55.82		
SSP	SN	46	ES	3		17:18	01.65		
SSP	SN	46				17:18	03.13	3	0.11
SSP	SE	46				17:18	02.00	2	0.14
HLM	SZ	47	EP	3		17:17	55.79		
HGH	SZ	55	EP	2		17:17	57.26		
HCG	SZ	73	EP	2		17:18	00.40		

March 18 1997 Time: 05:53 53.0 UTC Magnitude: 4.0 ML
Lat: 66.424N Lon: 2.278W Depth: 31.0 km
Grid Ref: 387.59 kmE 1839.62 kmN RMS: 0.39 secs
Locality: NORWEGIAN SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JNE	SZ	565	EP	3		05:55	06.62		
JMI	SZ	567	EP	3		05:55	05.54		
JNW	SZ	571	EP	3		05:55	06.46		
FOO	SZ	646	EP	3		05:55	15.80		
YEL	SZ	657	EP	3		05:55	17.77		
NSS	SZ	693	EP	3		05:55	22.43		
NSS	SZ	693	ES	3		05:56	26.65		
LRW	SZ	703	EP	3		05:55	23.24		
LRW	SE	703	ES	3		05:56	28.80		
LRW	SN	703				05:56	34.23	28	0.17
LRW	SE	703				05:56	34.27	53	0.18
SAN	SZ	716	EP	3		05:55	25.20		
HYA	SZ	720	EP	3		05:55	24.68		
ASK	SZ	761	EP	3		05:55	30.19		
MOR8	SZ	761	EP	3		05:55	30.73		
EGD	SZ	782	EP	3		05:55	32.91		
ODD1	SZ	853	EP	3		05:55	41.77		
ODD1	SZ	853	ES	3		05:57	01.02		
ORE	SZ	881	EP	3		05:55	45.23		
ORE	SE	881	ES	3		05:57	07.41		
ORE	SN	881				05:57	35.22	27	1.36
ORE	SE	881				05:57	26.77	29	1.35
OTO	SZ	890	EP	3		05:55	46.22		
MLA	SZ	907	EP	3		05:55	48.80		
RTO	SZ	920	EP	3		05:55	50.09		
RRH	SZ	975	EP	3		05:55	57.47		
MFI	SZ	982	EP	3		05:55	58.31		
MCD	SZ	987	EP	3		05:55	58.51		

March 21 1997 Time: 18:28 14.4 UTC Magnitude: 1.3 ML
Lat: 49.185N Lon: 2.020W Depth: 7.0 km
Grid Ref: 398.58 kmE -79.44 kmN RMS: 0.01 secs
Locality: JERSEY, CHANNEL ISLANDS Quality: C
Comments: 3KM EAST OF JERSEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JQE	SZ	2	IP		C	18:28	15.90		
JRS	SZ	5	IP		C	18:28	16.21		
JRS	SN	5	ES	2		18:28	17.44		
JRS	SN	5				18:28	17.99	224	0.09
JRS	SE	5				18:28	17.73	342	0.12
JLP	SZ	9	IP		D	18:28	16.66		
JSA	SZ	11	IP	1	C	18:28	16.97		
JVM	SZ	14	IP		C	18:28	17.42		

March 23 1997 Time: 05:56 18.8 UTC Magnitude: 2.0 ML
Lat: 53.417N Lon: 1.037W Depth: 2.7 km
Grid Ref: 463.97 kmE 391.65 kmN RMS: 0.08 secs
Locality: BLYTH, NOTTINGHAMSHIRE Quality: C
Comments: C/F,FELT BLYTH Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	37	IP	1	C	05:56	25.57		
LHO	SZ	56	EP	2		05:56	28.66		
KSY	SZ	59	EP	1	D	05:56	29.01		
KWE	SZ	70	EP	1	C	05:56	30.87		
HPK	SZ	71	EP	2		05:56	31.01		
HPK	SN	71				05:56	44.04	59	0.31
HPK	SE	71				05:56	44.30	56	0.23
CWF	SZ	78	EP	2		05:56	31.97		
CWF	SE	78	ES	2		05:56	41.08		
CWF	SN	78				05:56	41.21	48	0.11
CWF	SE	78				05:56	43.70	45	0.11
KUF	SZ	99	IP	1	C	05:56	35.64		

March 25 1997 Time: 16:04 46.4 UTC Magnitude: 1.1 ML
Lat: 54.747N Lon: 3.256W Depth: 11.1 km
Grid Ref: 319.16 kmE 539.81 kmN RMS: 0.03 secs
Locality: COCKERMOUTH, CUMBRIA Quality: A
Comments: 8KM NE OF COCKERMOUTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BBO	SZ	1	IP		D	16:04	48.46		
BBO	SN	1	ES	1		16:04	49.87		
CKE	SZ	20	IP	1	D	16:04	50.49		
BDL	SZ	21	IP	1	C	16:04	50.70		
XDE	SZ	31	EP	1	D	16:04	52.17		
CSF	SZ	33	IP		D	16:04	52.47		
BNA	SZ	34	IP	1	D	16:04	52.63		
BHH	SE	39	ES	3		16:04	58.23		
BHH	SN	39				16:04	59.41	26	0.26
BHH	SE	39				16:04	58.38	20	0.15
BTA	SZ	41	IP	1	C	16:04	53.70		
BTA	SN	41				16:05	00.33	5	0.11
BTA	SE	41				16:05	00.45	5	0.08
GCD	SZ	46	EP	2		16:04	54.58		
CDU	SZ	46	IP	1	D	16:04	54.46		
ECK	SZ	49	EP	2		16:04	54.97		
LMI	SZ	59	EP	3		16:04	56.72		
LMI	SN	59				16:05	03.83	15	0.31
LMI	SE	59				16:05	04.86	18	0.08

March 28 1997 Time: 22:46 35.4 UTC Magnitude: 1.0 ML
Lat: 56.246N Lon: 3.751W Depth: 4.3 km
Grid Ref: 291.53 kmE 707.35 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP	1	C	22:46	38.41		
ELO	SZ	25	IP	1	C	22:46	40.10		
PCO	SZ	36	EP	3		22:46	42.02		
EAB	SZ	37	IP	1	C	22:46	42.14		
EDI	SZ	50	EP	3		22:46	44.30		
EDI	SN	50	ES	3		22:46	50.64		
EDI	SN	50				22:46	56.90	19	1.20
EDI	SE	50				22:46	53.01	11	1.21
EDU	SZ	57	EP	3		22:46	45.24		
PGB	SZ	67	EP	4		22:46	46.94		
PGB	SN	67				22:46	57.94	26	1.36
PGB	SE	67				22:47	07.25	20	1.20

March 29 1997 Time: 00:14 24.9 UTC Magnitude: 1.0 ML
Lat: 56.247N Lon: 3.752W Depth: 3.4 km
Grid Ref: 291.44 kmE 707.41 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	00:14	27.92		
ELO	SZ	25	IP	1	C	00:14	29.60		
PCO	SZ	36	EP	2		00:14	31.51		
EAB	SZ	37	IP	1	C	00:14	31.62		
EDI	SN	50	ES	3		00:14	40.29		
EDI	SN	50				00:14	42.19	16	0.89
EDI	SE	50				00:14	42.08	9	0.98
EDU	SZ	57	EP	3		00:14	34.85		
PGB	SZ	67	EP	4		00:14	36.34		
PGB	SN	67				00:14	59.84	26	1.35
PGB	SE	67				00:14	52.93	19	1.24

April 1 1997 Time: 02:55 45.5 UTC Magnitude: 1.3 ML
Lat: 56.989N Lon: 4.025W Depth: 7.8 km
Grid Ref: 276.94 kmE 790.45 kmN RMS: 0.24 secs
Locality: KINGUSSIE, HIGHLAND Quality: D
Comments: 10KM SOUTH OF KINGUSSIE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
MDO	SZ	54	IP	1	C	02:55	54.60		
ELO	SZ	61	IP	1	C	02:55	55.55		
EDU	SZ	79	EP	3		02:55	58.90		
MCD	SZ	81	EP	3		02:55	59.14		
MCD	SE	81	ES	3		02:56	08.63		
MCD	SN	81				02:56	15.03	7	0.09
MCD	SE	81				02:56	13.17	10	0.26
EBH	SZ	88	EP	3		02:56	00.55		
KSB	SZ	88	EP	3		02:56	00.02		
EDR	SZ	91	EP	2		02:56	00.44		
KAC	SZ	96	EP	3		02:56	01.65		
EDI	SZ	129	EP	3		02:56	06.22		
EDI	SE	129	ES	3		02:56	21.63		
EDI	SN	129				02:56	24.31	6	0.49
EDI	SE	129				02:56	24.84	5	0.29

April 2 1997 Time: 00:25 24.4 UTC Magnitude: 0.7 ML
Lat: 51.821N Lon: 3.590W Depth: 16.7 km
Grid Ref: 290.40 kmE 214.84 kmN RMS: 0.07 secs
Locality: GLYN NEATH, W GLAMORGAN Quality: B
Comments: 7KM NE OF GLYN NEATH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HTR	SZ	36	EP	2		00:25	31.14		
MCH	SZ	45	EP	2		00:25	32.31		
MCH	SN	45	ES	2		00:25	38.25		
MCH	SN	45				00:25	38.76	7	0.15
MCH	SE	45				00:25	38.41	10	0.17
HCG	SZ	56	EP	2		00:25	34.09		
HGH	SZ	58	EP	2		00:25	34.37		
SSP	SZ	74	EP	2		00:25	36.68		
SSP	SE	74	ES	3		00:25	45.82		
SSP	SN	74				00:25	48.96	2	0.10
SSP	SE	74				00:25	47.95	2	0.17
HAE	SZ	76	EP	2		00:25	37.17		
HPE	SZ	83	EP	3		00:25	37.88		
HEX	SZ	85	EP	2		00:25	38.32		

April 4 1997 Time: 01:22 53.4 UTC Magnitude: 0.2 ML
Lat: 50.102N Lon: 5.456W Depth: 1.6 km
Grid Ref: 152.91 kmE 28.19 kmN RMS: 0.04 secs
Locality: MOUNT'S BAY, CORNWALL Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CPZ	SZ	11	IP		D	01:22	55.34		
CCO	SZ	19	EP	3		01:22	56.76		
CCA	SZ	19	EP	3		01:22	56.72		
CR2	SZ	22	EP	2		01:22	57.29		
CR2	SN	22	ES	2		01:23	00.06		
CR2	SN	22				01:23	00.14	25	0.04
CR2	SE	22				01:23	00.12	4	0.05
CGH	SZ	22	EP	3		01:22	57.10		
CST	SZ	23	EP	2		01:22	57.54		

April 4 1997 Time: 06:35 1.5 UTC Magnitude: 0.3 ML
Lat: 56.251N Lon: 3.752W Depth: 2.8 km
Grid Ref: 291.46 kmE 707.91 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	06:35	04.54		
EBH	SZ	15	ES	2		06:35	06.68		
EBH	SZ	15				06:35	06.71	20	0.11
ELO	SZ	25	EP	2		06:35	06.14		
ELO	SZ	25	ES	3		06:35	09.45		
EAB	SZ	37	EP	2		06:35	08.25		
EAB	SZ	37				06:35	08.30	3	0.06
EAU	SZ	49	EP	3		06:35	10.29		
EDU	SZ	56	EP	3		06:35	11.47		

April 4 1997 Time: 06:43 32.8 UTC Magnitude: 0.2 ML
Lat: 56.248N Lon: 3.750W Depth: 2.6 km
Grid Ref: 291.59 kmE 707.48 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	06:43	35.83		
EBH	SZ	15	ES	1		06:43	37.97		
EBH	SZ	15				06:43	37.99	20	0.09
ELO	SZ	25	EP	2		06:43	37.54		
ELO	SZ	25	ES	2		06:43	40.88		
ELO	SZ	25				06:43	41.07	2	0.14
EAB	SZ	37	EP	1	C	06:43	39.57		
EAB	SZ	37				06:43	39.62	5	0.06
EAU	SZ	49	EP	3		06:43	41.51		

April 7 1997 Time: 03:14 19.4 UTC Magnitude: 1.4 ML
Lat: 56.248N Lon: 3.750W Depth: 5.0 km
Grid Ref: 291.55 kmE 707.48 kmN RMS: 0.05 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	03:14	22.46		
ELO	SZ	25	IP		C	03:14	24.15		
PCO	SZ	36	IP	1	C	03:14	26.06		
EAB	SZ	37	IP		C	03:14	26.18		
EAU	SZ	49	EP	2		03:14	28.10		
EDI	SZ	50	EP	1	D	03:14	28.29		
EDI	SN	50	ES	2		03:14	34.62		
EDI	SN	50				03:14	34.75	17	0.18
EDI	SE	50				03:14	34.85	23	0.19
EDU	SZ	56	EP	1	D	03:14	29.18		
PGB	SZ	67	EP	2		03:14	30.65		
PGB	SN	67				03:14	43.98	20	0.24
PGB	SE	67				03:14	44.26	18	0.32
EBL	SZ	69	EP	2		03:14	31.32		
PCA	SZ	69	EP	3		03:14	31.21		
PMS	SZ	76	EP	2		03:14	32.21		

April 7 1997 Time: 03:21 10.1 UTC Magnitude: 1.1 ML
Lat: 56.243N Lon: 3.750W Depth: 2.4 km
Grid Ref: 291.57 kmE 706.99 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	03:21	13.18		
EBH	SZ	15	ES	3		03:21	15.32		
ELO	SZ	25	EP	2		03:21	14.95		
EAB	SZ	37	EP	2		03:21	16.93		
EAU	SZ	48	EP	3		03:21	18.76		
EDI	SE	50	ES	3		03:21	25.69		
EDI	SN	50				03:21	30.66	14	0.13
EDI	SE	50				03:21	27.60	9	0.13
EDU	SZ	57	EP	3		03:21	20.15		

April 7 1997 Time: 21:35 11.6 UTC Magnitude: 1.6 ML
Lat: 54.773N Lon: 2.202W Depth: 9.4 km
Grid Ref: 387.03 kmE 542.02 kmN RMS: 0.10 secs
Locality: ALLENHEADS, N'THMBLAND Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
XAL	SZ	10	IP		D	21:35	14.10		
BTA	SZ	34	IP		C	21:35	17.53		
BTA	SE	34	ES	3		21:35	21.94		
BTA	SN	34				21:35	22.49	45	0.24
BTA	SE	34				21:35	23.92	38	0.32
LCP	SZ	47	IP	1	C	21:35	19.62		
LRN	SZ	48	EP	2		21:35	19.90		
BDL	SZ	48	IP	1	C	21:35	19.68		
BBH	SZ	62	EP	1	D	21:35	21.85		
CKE	SZ	62	EP	2		21:35	22.11		
BBO	SZ	67	EP	1	C	21:35	22.79		
BBO	SN	67	ES	3		21:35	30.90		
BBO	SN	67				21:35	33.54	18	0.25
BBO	SE	67				21:35	33.60	17	0.19
BHH	SZ	74	EP	3		21:35	23.99		
BHH	SE	74	ES	3		21:35	33.03		
BHH	SN	74				21:35	34.50	43	0.27
BHH	SE	74				21:35	35.78	44	0.23
ECK	SZ	75	EP	1	D	21:35	24.02		
CSF	SZ	76	EP	1	C	21:35	24.30		
XSO	SZ	80	IP	1	D	21:35	25.18		
CDU	SZ	81	EP	1	C	21:35	24.87		
ESK	SZ	88	EP	3		21:35	26.34		
ESK	SE	88	ES	2		21:35	36.70		
ESK	SN	88				21:35	37.05	13	0.10
ESK	SE	88				21:35	37.05	12	0.12
XDE	SZ	88	EP	2		21:35	26.26		

April 8 1997 Time: 02:52 25.2 UTC Magnitude: -0.2 ML
Lat: 56.250N Lon: 3.749W Depth: 2.9 km
Grid Ref: 291.67 kmE 707.77 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	02:52	28.23		
EBH	SZ	15	ES	2		02:52	30.37		
EBH	SZ	15				02:52	30.38	7	0.11
ELO	SZ	25	EP	2		02:52	29.88		
EAB	SZ	37	EP	2		02:52	32.00		
EAB	SZ	37				02:52	32.04	1	0.08
EAU	SZ	49	EP	3		02:52	33.99		

April 10 1997 Time: 03:46 51.6 UTC Magnitude: -0.2 ML
Lat: 53.030N Lon: 4.548W Depth: 17.4 km
Grid Ref: 229.15 kmE 351.20 kmN RMS: 0.04 secs
Locality: CAERNARVON BAY, GWYNEDD Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	10	IP	1	D	03:46	54.89		
YRE	SZ	10				03:46	57.59	6	0.05
YRH	SZ	23	EP	2		03:46	56.24		
YRH	SZ	23	ES	3		03:46	59.57		
YRH	SZ	23				03:46	59.94	9	0.06
YRC	SZ	25	EP	3		03:46	56.58		
YRC	SZ	25				03:47	00.99	2	0.33
YLL	SZ	28	EP	3		03:46	57.14		
WLF	SZ	31	EP	2		03:46	57.36		

April 11 1997 Time: 14:43 30.8 UTC Magnitude: 0.9 ML
Lat: 52.972N Lon: 2.262W Depth: 2.6 km
Grid Ref: 382.43 kmE 341.67 kmN RMS: 0.12 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F,FELT KEELE Intensity: 2+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KLE	SZ	4	EP	9		14:43	32.60		
KLE	SZ	4	ES	4		14:43	33.39		
KLE2	SZ	5	EP	9		14:43	32.10		
KLE2	SZ	5	ES	4		14:43	33.58		
KLE3	SZ	14	EP	9		14:43	33.80		
KLE3	SZ	14	ES	4		14:43	36.37		
KWE	SZ	29	IP	1	D	14:43	36.06		
KBI	SZ	58	EP	2		14:43	41.16		
SBD	SZ	68	EP	3		14:43	42.40		
CWF	SZ	69	EP	2		14:43	42.91		
CWF	SN	69	ES	3		14:43	51.30		
CWF	SN	69				14:43	51.87	6	0.23
CWF	SE	69				14:43	54.59	5	0.49
LHO	SZ	69	EP	3		14:43	42.74		
HPK	SN	117	ES	3		14:44	04.41		
YLL	SZ	129	EP	3		14:43	53.20		
YRE	SZ	145	EP	3		14:43	54.70		

April 12 1997 Time: 03:07 9.6 UTC Magnitude: 1.4 ML
Lat: 56.413N Lon: 4.790W Depth: 0.3 km
Grid Ref: 227.92 kmE 727.97 kmN RMS: 0.04 secs
Locality: CRIANLARICH, CENTRAL Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	37	EP	2		03:07	16.83		
ELO	SZ	67	EP	2		03:07	21.50		
EBH	SZ	81	EP	3		03:07	23.89		
KAR	SZ	85	EP	3		03:07	24.37		
KSB	SZ	97	EP	3		03:07	26.30		
EAU	SZ	105	EP	3		03:07	27.51		
EDU	SZ	110	EP	3		03:07	28.41		
EDI	SZ	114	EP	3		03:07	28.87		
EDI	SN	114	ES	3		03:07	42.85		
EDI	SN	114				03:07	45.36	6	0.54

EDI	SE	114				03:07	45.99	11	0.44

April 12 1997 Time: 10:03 20.5 UTC Magnitude: 2.8 ML
Lat: 61.604N Lon: 3.297E Depth: 14.1 km
Grid Ref: 680.79 kmE 1313.94 kmN RMS: 0.26 secs
Locality: NORTHERN NORTH SEA Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
FOO	SZ	93	IP	3	D	10:03	35.22		
FOO	SZ	93	ES	3		10:03	45.85		
SUE	SZ	99	IP	3	D	10:03	36.84		
SUE	SZ	99	ES	3		10:03	47.69		
HYA	SZ	162	IP	3	C	10:03	44.36		
HYA	SZ	162	ES	3		10:04	02.58		
ODD1	SZ	262	IP	3	D	10:03	57.49		
ODD1	SZ	262	ES	3		10:04	24.25		
YEL	SZ	264	EP	3		10:03	57.52		
YEL	SZ	264	ES	3		10:04	24.07		
KMY	SZ	288	IP	3	D	10:04	00.23		
LRW	SZ	293	EP	3		10:04	01.20		
LRW	SN	293	ES	3		10:04	30.57		
LRW	SN	293				10:04	33.44	9	0.11
LRW	SE	293				10:04	34.60	10	0.14
BLS5	SZ	299	EP	3		10:04	01.93		
BLS5	SZ	299	ES	3		10:04	31.44		
SAN	SZ	304	EP	3		10:04	02.41		
SAN	SZ	304	ES	3		10:04	32.65		
MCD	SE	581	ES	3		10:05	31.99		
MCD	SN	581				10:05	32.70	7	0.21
MCD	SE	581				10:05	32.10	5	0.13

April 15 1997 Time: 01:17 5.5 UTC Magnitude: 1.5 ML
Lat: 56.764N Lon: 5.038W Depth: 8.4 km
Grid Ref: 214.33 kmE 767.67 kmN RMS: 0.10 secs
Locality: FORT WILLIAM, HIGHLAND Quality: C
Comments: 5KM SE OF FORT WILLIAM

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	51	EP	2		01:17	14.40		
KAR	SZ	51	ES	3		01:17	20.67		
KSB	SZ	55	EP	2		01:17	14.76		
EAB	SZ	77	EP	2		01:17	18.26		
KAC	SZ	84	EP	3		01:17	19.36		
MDO	SZ	86	EP	3		01:17	19.74		
ELO	SZ	88	EP	3		01:17	19.86		
EBH	SZ	110	EP	3		01:17	23.65		
EAU	SZ	142	EP	3		01:17	28.18		
EDI	SZ	148	EP	3		01:17	29.04		
EDI	SN	148	ES	3		01:17	46.12		
EDI	SN	148				01:17	48.67	5	0.18
EDI	SE	148				01:17	48.39	6	0.31

April 17 1997 Time: 10:10 30.6 UTC Magnitude: 1.5 ML
Lat: 57.855N Lon: 5.121W Depth: 9.4 km
Grid Ref: 214.82 kmE 889.35 kmN RMS: 0.07 secs
Locality: ULLAPOOL, HIGHLAND Quality: C
Comments: 5KM SOUTH OF ULLAPOOL

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
REB	SZ	31	IP		C	10:10	36.28		
RRR	SZ	41	IP		C	10:10	37.88		
RRR	SN	41	ES	2		10:10	42.71		
RRR	SN	41				10:10	43.18	40	0.19
RRR	SE	41				10:10	43.17	32	0.19
KAC	SZ	41	IP		D	10:10	37.81		
RSC	SZ	55	EP	2		10:10	39.92		
MVH	SZ	56	IP	1	C	10:10	40.22		
MDO	SZ	65	IP	1	C	10:10	41.53		
KPL	SZ	66	EP	2		10:10	41.75		
KPL	SE	66	ES	3		10:10	49.39		
KPL	SN	66				10:10	56.74	10	0.18
KPL	SE	66				10:10	53.48	12	0.21
RCR	SZ	86	IP	1	D	10:10	44.89		
RTO	SZ	87	IP	1	C	10:10	45.16		
RRH	SZ	93	EP	1	C	10:10	46.01		
MCD	SZ	115	EP	1	C	10:10	49.78		
MCD	SE	115	ES	2		10:11	02.77		
MCD	SN	115				10:11	04.88	21	0.11
MCD	SE	115				10:11	04.60	24	0.14
MLA	SZ	115	EP	2		10:10	49.52		
RFO	SZ	118	EP	1	C	10:10	49.93		

April 17 1997 Time: 14:49 55.8 UTC Magnitude: 0.0 ML
Lat: 56.249N Lon: 3.750W Depth: 3.3 km
Grid Ref: 291.57 kmE 707.61 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	14:49	58.86		
EBH	SZ	15	ES	2		14:50	01.01		
EBH	SZ	15				14:50	01.02	12	0.08
ELO	SZ	25	EP	2		14:50	00.46		
ELO	SZ	25	ES	2		14:50	03.92		
ELO	SZ	25				14:50	04.42	2	0.12
EAB	SZ	37	EP	1	C	14:50	02.60		
EAB	SZ	37				14:50	02.64	3	0.06
EAU	SZ	49	EP	3		14:50	04.50		

April 21 1997 Time: 05:07 16.3 UTC Magnitude: 1.3 ML
Lat: 57.857N Lon: 5.135W Depth: 9.6 km
Grid Ref: 214.01 kmE 889.61 kmN RMS: 0.19 secs
Locality: ULLAPOOL, HIGHLAND Quality: C
Comments: 5KM SOUTH OF ULLAPOOL

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
REB	SZ	30	EP	3		05:07	21.92		
RRR	SZ	40	EP	3		05:07	23.54		
RRR	SN	40	ES	3		05:07	28.04		
RRR	SN	40				05:07	28.93	16	0.21
RRR	SE	40				05:07	28.84	16	0.21
KAC	SZ	41	IP	1	D	05:07	23.48		
MVH	SZ	57	IP	1	C	05:07	25.92		
MDO	SZ	65	EP	2		05:07	27.20		
KPL	SZ	66	EP	2		05:07	27.51		
KPL	SN	66	ES	3		05:07	35.10		
KPL	SN	66				05:07	38.98	10	0.20
KPL	SE	66				05:07	38.98	10	0.16
KSB	SZ	74	EP	3		05:07	28.75		
ORE	SZ	112	EP	3		05:07	34.65		
ORE	SN	112	ES	3		05:07	47.25		
ORE	SN	112				05:07	48.97	9	0.13
ORE	SE	112				05:07	50.14	31	0.89
MCD	SZ	116	EP	3		05:07	35.44		

April 27 1997 Time: 15:20 59.3 UTC Magnitude: 1.7 ML
Lat: 53.569N Lon: 1.204W Depth: 0.9 km
Grid Ref: 452.74 kmE 408.38 kmN RMS: 0.09 secs
Locality: DONCASTER, S YORKSHIRE Quality: C
Comments: C/F,FELT DONCASTER Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	41	EP	3		15:21	07.09		
LHO	SZ	43	EP	3		15:21	07.40		
LMK	SZ	60	ES	3		15:21	17.91		
KWE	SZ	75	EP	3		15:21	12.38		
KSY	SZ	79	EP	3		15:21	12.77		
CWF	SZ	93	EP	2		15:21	15.54		
CWF	SE	93	ES	3		15:21	26.83		
CWF	SN	93				15:21	30.03	12	0.22
CWF	SE	93				15:21	30.60	27	0.15

May 1 1997 Time: 02:36 24.8 UTC Magnitude: 2.2 ML
Lat: 50.492N Lon: 1.292E Depth: 5.6 km
Grid Ref: 633.49 kmE 71.06 kmN RMS: 0.26 secs
Locality: ENGLISH CHANNEL Quality: D
Comments: 65KM SOUTH OF FOLKESTONE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
TFO	SZ	70	EP	2		02:36	36.53		
TFO	SN	70	ES	2		02:36	45.24		
TFO	SN	70				02:36	48.20	114	0.17
TFO	SE	70				02:36	47.61	88	0.12
TEB	SZ	89	EP	2		02:36	39.32		
TSA	SZ	116	EP	2		02:36	43.70		
TCR	SZ	152	EP	3		02:36	49.74		
SFH	SZ	154	EP	2		02:36	49.93		
SKP	SZ	201	EP	2		02:36	55.55		
SMD	SZ	296	EP	3		02:37	07.08		

May 1 1997 Time: 22:00 36.4 UTC Magnitude: 0.0 ML
Lat: 53.535N Lon: 4.463W Depth: 10.7 km
Grid Ref: 236.78 kmE 407.15 kmN RMS: 0.04 secs
Locality: OFF ANGLESEY, IRISH SEA Quality: B
Comments: 9KM NORTH OF ANGLESEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WCB	SZ	18	IP		D	22:00	40.06		
WCB	SE	18	ES	2		22:00	42.47		
WCB	SN	18				22:00	42.71	6	0.11
WCB	SE	18				22:00	42.68	9	0.10
WME	SZ	19	IP		D	22:00	40.08		
WLF	SZ	28	EP	2		22:00	41.32		
YRC	SZ	33	EP	3		22:00	42.04		
WIM	SZ	70	EP	2		22:00	48.14		

May 7 1997 Time: 15:23 39.2 UTC Magnitude: 0.3 ML
Lat: 53.013N Lon: 4.194W Depth: 16.6 km
Grid Ref: 252.86 kmE 348.42 kmN RMS: 0.04 secs
Locality: PORTHMADOG, GWYNEDD Quality: B
Comments: 9KM NW OF PORTHMADOG

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YLL	SZ	14	IP		D	15:23	42.76		
YRE	SZ	16	IP		C	15:23	43.01		
WLF	SZ	34	EP	2		15:23	45.36		
WPM	SZ	34	EP	1	C	15:23	45.37		
YRH	SZ	35	IP	1	C	15:23	45.64		
YRC	SZ	37	IP	1	C	15:23	45.81		
WFB	SZ	38	EP	2		15:23	45.99		
WME	SZ	43	EP	2		15:23	46.69		
WCB	SZ	47	EP	2		15:23	47.26		

WCB	SE	47	ES	3		15:23	52.54		
WCB	SN	47				15:23	55.28	1	0.12
WCB	SE	47				15:23	54.70	4	0.06

May 11 1997 Time: 02:38 18.1 UTC Magnitude: 0.0 ML
Lat: 52.274N Lon: 2.765W Depth: 17.5 km
Grid Ref: 347.79 kmE 264.30 kmN RMS: 0.05 secs
Locality: LEOMINSTER, HER & WOR Quality: C
Comments: 6KM NW OF LEOMINSTER

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HLM	SZ	28	EP	2		02:38	23.57		
SSP	SZ	29	EP	2		02:38	23.75		
SSP	SN	29	ES	3		02:38	27.71		
SSP	SN	29				02:38	27.89	4	0.24
SSP	SE	29				02:38	27.96	3	0.12
HAE	SZ	30	EP	2		02:38	23.92		
MCH	SZ	35	IP	1	C	02:38	24.53		
MCH	SE	35	ES	2		02:38	29.11		
HTR	SZ	41	EP	2		02:38	25.45		
HGH	SZ	71	EP	2		02:38	30.60		

May 13 1997 Time: 22:07 11.4 UTC Magnitude: 3.4 ML
Lat: 60.854N Lon: 3.509E Depth: 15.0 km
Grid Ref: 699.04 kmE 1231.58 kmN RMS: 0.17 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	253	EP	2		22:07	47.02		
LRW	SZ	270	EP	3		22:07	48.94		
LRW	SE	270	ES	3		22:08	15.95		
LRW	SN	270				22:08	20.65	55	0.10
LRW	SE	270				22:08	18.82	56	0.10
SAN	SZ	278	EP	3		22:07	49.86		
OST	SZ	391	EP	3		22:08	04.28		
OWE	SZ	402	EP	3		22:08	05.35		
OHO	SZ	441	EP	3		22:08	10.33		
OBR	SZ	451	EP	3		22:08	11.67		
MLA	SZ	481	EP	3		22:08	15.28		
ORE	SZ	483	EP	3		22:08	15.67		
ORE	SN	483	ES	3		22:09	02.45		
ORE	SN	483				22:09	06.63	28	0.14
ORE	SE	483				22:09	06.79	27	0.10
MFI	SZ	490	EP	3		22:08	16.57		
OTO	SZ	517	EP	3		22:08	19.35		
MCD	SZ	531	EP	3		22:08	21.30		
MCD	SE	531	ES	3		22:09	12.74		
MCD	SN	531				22:09	16.58	32	0.13
MCD	SE	531				22:09	15.95	22	0.22
MME	SZ	541	EP	3		22:08	22.71		

May 13 1997 Time: 23:08 46.1 UTC Magnitude: -0.4 ML
Lat: 53.291N Lon: 4.506W Depth: 11.6 km
Grid Ref: 232.96 kmE 380.06 kmN RMS: 0.03 secs
Locality: HOLYHEAD, ANGLESEY Quality: B
Comments: 8KM EAST OF ANGLESEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRC	SZ	6	IP	1	C	23:08	48.32		
WLF	SZ	7	EP	2		23:08	48.43		
WCB	SZ	10	IP	1	C	23:08	48.70		
WCB	SN	10	ES	2		23:08	50.51		
WCB	SN	10				23:08	50.55	5	0.09
WCB	SE	10				23:08	50.55	5	0.10
WME	SZ	18	EP	1	C	23:08	49.69		
YRE	SZ	35	EP	2		23:08	52.38		

May 14 1997 Time: 00:05 2.1 UTC Magnitude: 1.1 ML
Lat: 56.250N Lon: 3.746W Depth: 4.8 km
Grid Ref: 291.83 kmE 707.73 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	00:05	05.08		
ELO	SZ	25	IP	1	C	00:05	06.74		
PCO	SZ	36	EP	2		00:05	08.68		
EAU	SZ	49	EP	3		00:05	10.74		
EDI	SZ	50	EP	3		00:05	10.97		
EDI	SN	50	ES	3		00:05	17.28		
EDI	SN	50				00:05	17.39	9	0.19
EDI	SE	50				00:05	17.54	16	0.23
EDU	SZ	56	EP	3		00:05	11.76		
PGB	SZ	67	EP	3		00:05	13.51		
PGB	SN	67	ES	3		00:05	21.85		
PGB	SN	67				00:05	23.34	8	0.15
PGB	SE	67				00:05	23.62	8	0.17
PCA	SZ	69	EP	3		00:05	13.76		
PMS	SZ	77	EP	3		00:05	15.08		

May 16 1997 Time: 09:48 13.7 UTC Magnitude: 0.1 ML
Lat: 52.962N Lon: 4.386W Depth: 21.9 km
Grid Ref: 239.74 kmE 343.18 kmN RMS: 0.03 secs
Locality: LLEYN PENIN, GWYNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	3	IP	1	D	09:48	17.31		
YRH	SZ	22	IP	1	C	09:48	18.68		
YLL	SZ	25	IP	1	C	09:48	19.02		
WFB	SZ	39	EP	2		09:48	20.93		
WCB	SZ	48	EP	3		09:48	22.45		
WCB	SE	48	ES	3		09:48	28.19		
WCB	SN	48				09:48	29.04	1	0.07
WCB	SE	48				09:48	29.36	2	0.13

May 17 1997 Time: 01:28 30.9 UTC Magnitude: 3.2 ML
Lat: 63.020N Lon: 2.128E Depth: 15.0 km
Grid Ref: 608.80 kmE 1466.97 kmN RMS: 0.09 secs
Locality: NORWEGIAN SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	323	EP	3		01:29	15.07		
LRW	SZ	366	EP	3		01:29	20.51		
LRW	SE	366	ES	3		01:29	56.43		
LRW	SN	366				01:30	01.87	24	0.15
LRW	SE	366				01:30	02.52	51	0.18
SAN	SZ	380	EP	3		01:29	22.11		
ORE	SE	593	ES	3		01:30	45.35		
ORE	SN	593				01:30	53.02	5	0.21
ORE	SE	593				01:30	50.60	7	0.27
MVH	SZ	665	ES	3		01:31	00.94		
MCD	SE	675	ES	3		01:31	03.11		
MCD	SN	675				01:31	06.95	7	0.19
MCD	SE	675				01:31	05.83	7	0.24

May 17 1997 Time: 02:47 37.0 UTC Magnitude: 2.8 ML
Lat: 63.155N Lon: 2.408E Depth: 15.0 km
Grid Ref: 621.91 kmE 1482.94 kmN RMS: 0.02 secs
Locality: NORWEGIAN SEA Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	343	EP	2		02:48	23.62		
LRW	SZ	387	EP	3		02:48	29.05		
LRW	SE	387	ES	3		02:49	07.00		
LRW	SN	387				02:49	10.00	7	0.23
LRW	SE	387				02:49	10.76	10	0.17
SAN	SZ	400	EP	3		02:48	30.60		

May 17 1997 Time: 21:49 31.8 UTC Magnitude: 2.2 ML
Lat: 51.900N Lon: 2.294W Depth: 15.4 km
Grid Ref: 379.80 kmE 222.46 kmN RMS: 0.10 secs
Locality: GLOUCESTER, GLOUCS Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	23	IP		D	21:49	36.68		
SSW	SZ	31	IP	1	C	21:49	37.69		
HGH	SZ	46	IP	1	C	21:49	39.79		
MCH	SZ	50	EP	2		21:49	40.40		
MCH	SN	50	ES	3		21:49	46.45		
MCH	SN	50				21:49	47.45	128	0.11
MCH	SE	50				21:49	47.17	137	0.20
SWN	SZ	55	IP	1	D	21:49	41.16		
SWN	SN	55	ES	2		21:49	48.24		
SWN	SN	55				21:49	49.44	117	0.18
SWN	SE	55				21:49	49.99	96	0.17
HTR	SZ	70	EP	2		21:49	43.47		
SMD	SZ	72	EP	2		21:49	43.67		
SSP	SZ	80	EP	1	D	21:49	45.26		
SSP	SE	80	ES	2		21:49	55.32		
SSP	SN	80				21:49	56.02	76	0.17
SSP	SE	80				21:49	56.08	64	0.24
HLM	SZ	80	IP	1	D	21:49	44.85		
SWK	SZ	84	IP	1	D	21:49	45.80		

May 18 1997 Time: 06:43 33.3 UTC Magnitude: 1.3 ML
Lat: 49.185N Lon: 2.021W Depth: 7.0 km
Grid Ref: 398.47 kmE -79.47 kmN RMS: 0.02 secs
Locality: JERSEY, CHANNEL ISLANDS Quality: C
Comments: 3KM EAST OF JERSEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JQE	SZ	2	IP		C	06:43	34.69		
JRS	SZ	5	IP		C	06:43	35.00		
JRS	SN	5	ES	2		06:43	36.22		
JRS	SN	5				06:43	36.28	235	0.12
JRS	SE	5				06:43	36.46	314	0.10
JLP	SZ	9	IP		D	06:43	35.45		
JVM	SZ	14	IP		C	06:43	36.21		

May 18 1997 Time: 16:14 47.1 UTC Magnitude: 0.2 ML
Lat: 53.130N Lon: 4.370W Depth: 16.6 km
Grid Ref: 241.45 kmE 361.80 kmN RMS: 0.09 secs
Locality: CAERNARVON BAY, GWYNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YLL	SZ	13	IP	1	D	16:14	50.61		
YRE	SZ	17	EP	2		16:14	51.04		
WLF	SZ	18	IP	1	C	16:14	50.98		
YRC	SZ	19	EP	2		16:14	51.30		
WCB	SZ	30	IP	1	C	16:14	52.87		
WCB	SE	30	ES	3		16:14	56.54		
WCB	SN	30				16:14	57.30	4	0.14
WCB	SE	30				16:14	57.39	4	0.09

WME	SZ	30	EP	1	C	16:14	52.58		
WPM	SZ	34	IP	1	C	16:14	53.43		
YRH	SZ	37	IP	1	C	16:14	53.69		
WFB	SZ	55	EP	2		16:14	56.27		

May 18 1997 Time: 23:38 56.7 UTC Magnitude: 0.3 ML
Lat: 57.471N Lon: 5.249W Depth: 6.3 km
Grid Ref: 205.18 kmE 846.88 kmN RMS: 0.02 secs
Locality: STRATHCARRON, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	4	IP		C	23:38	58.22		
KPL	SZ	28	EP	2		23:39	02.03		
KPL	SN	28	ES	3		23:39	05.84		
KPL	SN	28				23:39	06.02	6	0.17
KPL	SE	28				23:39	05.97	8	0.13
KSB	SZ	31	EP	3		23:39	02.37		

May 19 1997 Time: 08:02 36.0 UTC Magnitude: 2.7 ML
Lat: 51.759N Lon: 1.640W Depth: 6.2 km
Grid Ref: 424.81 kmE 206.81 kmN RMS: 0.16 secs
Locality: CARTERTON, OXFORDSHIRE Quality: C
Comments: FELT CARTERTON... Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SSW	SZ	27	IP	1	D	08:02	41.24		
SWN	SZ	30	IP		C	08:02	41.38		
SWN	SN	30	ES	2		08:02	45.89		
SKP	SZ	58	EP	2		08:02	45.90		
HAE	SZ	70	IP		D	08:02	47.60		
SWK	SZ	80	IP		C	08:02	49.65		
HGH	SZ	82	IP	1	C	08:02	49.41		
SMD	SZ	90	EP	2		08:02	50.69		
MCH	SZ	97	IP	1	D	08:02	51.78		
MCH	SN	97	ES	2		08:03	03.63		
MCH	SN	97				08:03	05.68	174	0.13
MCH	SE	97				08:03	06.00	113	0.20
SFH	SZ	102	IP	1	D	08:02	53.63		
CWF	SZ	111	EP	2		08:02	54.22		
CWF	SE	111	ES	3		08:03	07.17		
CWF	SN	111				08:03	12.17	190	0.16
CWF	SE	111				08:03	12.22	281	0.16
HTR	SZ	118	EP	2		08:02	55.02		
HLM	SZ	120	EP	2		08:02	55.31		
SSP	SZ	125	IP	1	D	08:02	56.20		
SSP	SN	125	ES	2		08:03	10.75		
SSP	SN	125				08:03	15.08	94	0.16
SSP	SE	125				08:03	15.14	98	0.33
HCG	SZ	152	EP	1	D	08:03	00.67		
SBD	SZ	169	EP	2		08:03	03.07		

May 22 1997 Time: 01:09 55.1 UTC Magnitude: 0.8 ML
Lat: 56.133N Lon: 3.730W Depth: 0.5 km
Grid Ref: 292.52 kmE 694.72 kmN RMS: 0.01 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	1		01:09	59.08		
EAU	SZ	37	EP	3		01:10	02.10		
ELO	SZ	38	EP	2		01:10	02.26		
EDI	SZ	41	EP	3		01:10	02.84		
EDI	SN	41	ES	3		01:10	08.57		
EDI	SN	41				01:10	08.89	6	0.22
EDI	SE	41				01:10	09.72	14	0.51

May 22 1997 Time: 05:27 48.9 UTC Magnitude: 0.9 ML
Lat: 56.133N Lon: 3.716W Depth: 0.1 km
Grid Ref: 293.36 kmE 694.74 kmN RMS: 0.02 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	18	EP	2		05:27	52.94		
EAU	SZ	36	EP	3		05:27	55.97		
ELO	SZ	38	EP	2		05:27	56.22		
EDI	SZ	41	EP	3		05:27	56.72		
EDI	SE	41	ES	3		05:28	02.40		
EDI	SN	41				05:28	04.76	12	0.40
EDI	SE	41				05:28	07.26	12	0.41
EBL	SZ	58	EP	3		05:27	59.61		
EDU	SZ	63	EP	3		05:28	00.35		

May 22 1997 Time: 05:35 30.8 UTC Magnitude: 1.2 ML
Lat: 55.802N Lon: 4.603W Depth: 6.7 km
Grid Ref: 236.87 kmE 659.55 kmN RMS: 0.01 secs
Locality: LOCHWINNOCH, S'CLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PGB	SZ	8	IP		D	05:35	32.81		
PGB	SN	8	ES	2		05:35	34.26		
PGB	SN	8				05:35	34.31	251	0.16
PGB	SE	8				05:35	34.36	156	0.15
PMS	SZ	10	IP	1	C	05:35	33.13		
POB	SZ	12	EP	3		05:35	33.40		
PCA	SZ	25	EP	3		05:35	35.46		
PCO	SZ	38	EP	3		05:35	37.54		

May 23 1997 Time: 04:36 49.7 UTC Magnitude: 0.4 ML
Lat: 52.927N Lon: 4.542W Depth: 14.7 km
Grid Ref: 229.16 kmE 339.72 kmN RMS: 0.06 secs
Locality: PWLLHELI, GWYNEDD Quality: B
Comments: 7KM NW OF PWLLHELI

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	10	EP	2		04:36	52.67		
YRH	SZ	12	IP		C	04:36	52.80		
YLL	SZ	34	IP	1	C	04:36	55.79		
YRC	SZ	36	EP	2		04:36	56.15		
WLF	SZ	41	EP	2		04:36	56.68		
WFB	SZ	44	EP	2		04:36	57.27		
WCB	SZ	50	EP	2		04:36	59.66		
WCB	SE	50	ES	2		04:37	04.06		
WCB	SN	50				04:37	04.60	2	0.15
WCB	SE	50				04:37	05.28	3	0.12

May 23 1997 Time: 07:29 47.0 UTC Magnitude: 1.7 ML
Lat: 52.932N Lon: 4.555W Depth: 15.6 km
Grid Ref: 228.33 kmE 340.23 kmN RMS: 0.05 secs
Locality: PWLLHELI, GWYNEDD Quality: B
Comments: 7KM NW OF PWLLHELI

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	10	IP		D	07:29	50.12		
YRH	SZ	12	IP		C	07:29	50.26		
YLL	SZ	35	IP	1	C	07:29	53.26		
YRC	SZ	36	IP	1	D	07:29	53.41		
WLF	SZ	41	IP	1	D	07:29	54.10		
WFB	SZ	45	IP	1	D	07:29	54.76		
WCB	SZ	50	EP	2		07:29	55.62		
WCB	SE	50	ES	2		07:30	01.51		
WCB	SN	50				07:30	01.69	21	0.07
WCB	SE	50				07:30	02.68	17	0.11
WPM	SZ	57	EP	1	C	07:29	56.58		
SBD	SZ	87	EP	2		07:30	01.01		
SSP	SZ	113	EP	2		07:30	05.54		
SSP	SN	113				07:30	20.63	36	0.13
SSP	SE	113				07:30	21.20	28	0.15

May 24 1997 Time: 16:41 49.5 UTC Magnitude: 1.1 ML
Lat: 52.957N Lon: 2.269W Depth: 3.9 km
Grid Ref: 381.93 kmE 340.01 kmN RMS: 0.09 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	29	IP	1	D	16:41	54.86		
KBI	SZ	60	EP	3		16:41	59.50		
HLM	SZ	64	EP	3		16:42	00.46		
SBD	SZ	67	EP	2		16:42	00.88		
CWF	SZ	69	EP	2		16:42	01.48		
CWF	SN	69	ES	2		16:42	09.57		
CWF	SN	69				16:42	10.57	7	0.27
CWF	SE	69				16:42	13.22	4	0.28
LHO	SZ	71	EP	2		16:42	01.62		
SSP	SZ	83	EP	3		16:42	03.63		
SSP	SN	83				16:42	18.02	10	0.21
SSP	SE	83				16:42	18.85	8	0.21

May 24 1997 Time: 22:56 15.8 UTC Magnitude: 0.9 ML
Lat: 55.209N Lon: 3.501W Depth: 3.0 km
Grid Ref: 304.47 kmE 591.54 kmN RMS: 0.07 secs
Locality: JOHNSTONEBRIDGE, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	11	IP	1	C	22:56	18.18		
BHH	SZ	22	EP	3		22:56	20.18		
BHH	SE	22	ES	3		22:56	23.06		
BHH	SN	22				22:56	23.34	58	0.16
BHH	SE	22				22:56	23.12	44	0.18
ESK	SZ	22	IP		C	22:56	20.20		
ESK	SE	22	ES	3		22:56	23.08		
ESK	SN	22				22:56	23.66	28	0.10
ESK	SE	22				22:56	23.13	18	0.08
ECK	SZ	24	IP	1	C	22:56	20.58		
BBH	SZ	37	IP	1	C	22:56	22.56		
BBO	SZ	55	EP	3		22:56	25.51		
XDE	SZ	78	EP	3		22:56	29.22		
XSO	SZ	85	EP	3		22:56	30.34		
CDU	SZ	99	EP	3		22:56	32.72		
LMI	SZ	111	EP	3		22:56	34.52		
LMI	SN	111				22:56	48.79	5	0.22
LMI	SE	111				22:56	48.96	3	0.23

May 28 1997 Time: 09:36 4.4 UTC Magnitude: 1.1 ML
Lat: 56.132N Lon: 3.727W Depth: 0.8 km
Grid Ref: 292.65 kmE 694.65 kmN RMS: 0.05 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	IP	1	C	09:36	08.38		

EAU	SZ	36	EP	2		09:36	11.48		
ELO	SZ	38	EP	1	D	09:36	11.58		
EDI	SZ	41	EP	2		09:36	12.16		
EDI	SN	41	ES	2		09:36	17.81		
EDI	SN	41				09:36	23.63	32	1.06
EDI	SE	41				09:36	18.34	21	0.32
EBL	SZ	59	EP	2		09:36	14.87		

May 29 1997 Time: 02:01 40.5 UTC Magnitude: 0.4 ML
Lat: 56.275N Lon: 3.676W Depth: 9.1 km
Grid Ref: 296.25 kmE 710.42 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	11	IP		C	02:01	43.12		
ELO	SZ	22	EP	3		02:01	44.76		
EDI	SZ	50	EP	3		02:01	49.01		
EDI	SE	50	ES	3		02:01	55.27		
EDI	SN	50				02:01	56.70	5	0.78
EDI	SE	50				02:01	55.43	2	0.20
EAU	SZ	50	EP	3		02:01	49.12		

May 30 1997 Time: 03:43 15.3 UTC Magnitude: 0.8 ML
Lat: 56.135N Lon: 3.725W Depth: 0.9 km
Grid Ref: 292.81 kmE 694.90 kmN RMS: 0.02 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	1		03:43	19.17		
EAU	SZ	37	EP	2		03:43	22.26		
ELO	SZ	37	EP	2		03:43	22.36		
EDI	SZ	41	EP	2		03:43	22.95		
EDI	SN	41	ES	3		03:43	28.62		
EDI	SN	41				03:43	30.96	8	0.32
EDI	SE	41				03:43	33.78	12	0.36

May 30 1997 Time: 19:28 34.6 UTC Magnitude: 1.3 ML
Lat: 55.426N Lon: 3.434W Depth: 12.3 km
Grid Ref: 309.24 kmE 615.60 kmN RMS: 0.13 secs
Locality: TWEEDSMUIR, BORDERS Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SZ	19	IP	1	D	19:28	38.92		
ESK	SE	19	ES	3		19:28	41.49		
ESK	SN	19				19:28	41.63	91	0.13
ESK	SE	19				19:28	41.63	76	0.13
BWH	SZ	31	EP	2		19:28	40.44		
ECK	SZ	34	IP	1	D	19:28	41.10		
BHH	SZ	40	IP	1	D	19:28	41.92		
BHH	SN	40	ES	3		19:28	46.79		
BHH	SN	40				19:28	46.81	23	0.25
BHH	SE	40				19:28	47.36	27	0.21
EBL	SZ	46	EP	3		19:28	42.83		
BBH	SZ	46	EP	3		19:28	42.79		
BNA	SZ	53	EP	2		19:28	43.71		
EDI	SN	58	ES	3		19:28	51.70		
EDI	SN	58				19:28	52.44	17	0.28
EDI	SE	58				19:28	52.33	12	0.21
GCD	SZ	71	EP	3		19:28	46.73		
BTA	SZ	75	EP	3		19:28	47.73		
BTA	SN	75	ES	3		19:28	56.75		
BTA	SN	75				19:28	57.30	17	0.21
BTA	SE	75				19:28	57.52	13	0.21
ESY	SZ	75	EP	3		19:28	47.45		
XSO	SZ	75	IP	1	C	19:28	47.48		
BDL	SZ	76	EP	3		19:28	47.66		
PGB	SE	79	ES	3		19:28	57.70		
PGB	SN	79				19:29	00.02	21	0.19
PGB	SE	79				19:28	58.15	11	0.19
EBH	SZ	92	EP	3		19:28	50.40		
XDE	SZ	103	EP	3		19:28	52.03		
CDU	SZ	122	EP	3		19:28	54.72		

June 4 1997 Time: 03:06 27.8 UTC Magnitude: 0.1 ML
Lat: 56.247N Lon: 3.751W Depth: 3.4 km
Grid Ref: 291.52 kmE 707.46 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	03:06	30.86		
ELO	SZ	25	EP	3		03:06	32.53		
EAB	SZ	37	EP	2		03:06	34.60		
EDI	SZ	50	EP	3		03:06	36.82		
EDI	SE	50	ES	3		03:06	43.26		
EDI	SN	50				03:06	43.20	1	0.10
EDI	SE	50				03:06	43.32	1	0.07
EDU	SZ	56	EP	3		03:06	37.71		

June 9 1997 Time: 09:51 12.0 UTC Magnitude: 1.4 ML
Lat: 56.194N Lon: 4.479W Depth: 5.1 km
Grid Ref: 246.22 kmE 702.91 kmN RMS: 0.03 secs
Locality: ABERFOYLE, CENTRAL Quality: C
Comments: 7KM WNW OF ABERFOYLE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	9	IP		C	09:51	14.01		
PCO	SZ	33	IP	1	C	09:51	18.11		
PMS	SZ	42	EP	3		09:51	19.53		
PGB	SZ	43	EP	2		09:51	19.68		
PGB	SN	43	ES	3		09:51	25.19		
PGB	SN	43				09:51	25.35	36	0.22
PGB	SE	43				09:51	25.24	16	0.23
EBH	SZ	61	EP	3		09:51	22.41		
EAU	SZ	75	EP	3		09:51	24.73		
EDI	SZ	86	EP	3		09:51	26.25		
EDI	SE	86	ES	3		09:51	36.83		
EDI	SN	86				09:51	41.51	15	0.29
EDI	SE	86				09:51	41.28	11	0.19
EDU	SZ	99	EP	3		09:51	28.28		
EBL	SZ	101	EP	3		09:51	28.74		

June 9 1997 Time: 19:21 58.6 UTC Magnitude: 0.9 ML
Lat: 56.129N Lon: 3.724W Depth: 0.8 km
Grid Ref: 292.82 kmE 694.25 kmN RMS: 0.03 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	2		19:22	02.59		
EBH	SZ	19	ES	3		19:22	05.50		
EAU	SZ	36	EP	3		19:22	05.51		
ELO	SZ	38	EP	3		19:22	05.80		
EDI	SZ	41	EP	3		19:22	06.22		
EDI	SE	41	ES	3		19:22	11.85		
EDI	SN	41				19:22	13.55	10	0.27
EDI	SE	41				19:22	13.91	13	0.46
EBL	SZ	58	EP	3		19:22	09.14		
EDU	SZ	64	EP	3		19:22	10.01		

June 10 1997 Time: 03:37 33.2 UTC Magnitude: 0.8 ML
Lat: 56.246N Lon: 3.751W Depth: 3.4 km
Grid Ref: 291.52 kmE 707.31 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	03:37	36.26		
ELO	SZ	25	EP	2		03:37	37.94		
EAU	SZ	49	EP	3		03:37	41.91		
EDI	SZ	50	EP	3		03:37	42.14		
EDI	SE	50	ES	3		03:37	48.59		
EDI	SN	50				03:37	48.55	4	0.17
EDI	SE	50				03:37	48.67	7	0.22
EDU	SZ	57	EP	2		03:37	43.13		
EBL	SZ	69	EP	3		03:37	44.98		

June 12 1997 Time: 18:42 2.3 UTC Magnitude: 1.5 ML
Lat: 53.143N Lon: 0.890W Depth: 3.7 km
Grid Ref: 474.26 kmE 361.26 kmN RMS: 0.10 secs
Locality: OLLERTON, NOTTS Quality: D
Comments: 8KM SE OF OLLERTON

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSY	SZ	28	IP	1	D	18:42	07.53		
KBI	SZ	44	EP	3		18:42	10.04		
CWF	SZ	53	EP	1	C	18:42	11.59		
CWF	SN	53	ES	2		18:42	18.39		
CWF	SN	53				18:42	18.77	22	0.09
CWF	SE	53				18:42	18.95	24	0.22
KWE	SZ	65	EP	2		18:42	13.79		
LHO	SZ	78	EP	2		18:42	15.53		

June 14 1997 Time: 00:09 0.3 UTC Magnitude: 1.4 ML
Lat: 52.967N Lon: 2.272W Depth: 1.0 km
Grid Ref: 381.73 kmE 341.10 kmN RMS: 0.04 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	29	EP	2		00:09	06.01		
KBI	SZ	59	EP	3		00:09	11.05		
SBD	SZ	67	EP	3		00:09	12.13		
CWF	SZ	70	EP	3		00:09	12.58		
SSP	SZ	83	EP	3		00:09	14.84		
SSP	SN	83	ES	3		00:09	25.28		
SSP	SN	83				00:09	26.75	13	0.23
SSP	SE	83				00:09	27.26	9	0.31
HCG	SZ	118	EP	3		00:09	20.79		

June 14 1997 Time: 15:34 7.8 UTC Magnitude: 0.6 ML
Lat: 56.247N Lon: 3.752W Depth: 4.4 km
Grid Ref: 291.44 kmE 707.42 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP	1	C	15:34	10.90		
ELO	SZ	25	EP	2		15:34	12.55		
EAB	SZ	37	IP	1	C	15:34	14.59		
EAU	SZ	49	EP	3		15:34	16.50		
EDI	SE	50	ES	3		15:34	23.14		
EDI	SN	50				15:34	23.68	3	0.21
EDI	SE	50				15:34	24.06	5	0.29

EDU	SZ	57	EP	3		15:34	17.65		

June 14 1997 Time: 17:33 1.5 UTC Magnitude: 0.8 ML
Lat: 56.249N Lon: 3.754W Depth: 3.8 km
Grid Ref: 291.33 kmE 707.63 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	17:33	04.61		
ELO	SZ	25	EP	2		17:33	06.24		
EAB	SZ	37	IP		C	17:33	08.28		
EAU	SZ	49	EP	3		17:33	10.32		
EDI	SZ	51	EP	3		17:33	10.51		
EDI	SE	51	ES	3		17:33	16.95		
EDI	SN	51				17:33	16.93	4	0.17
EDI	SE	51				17:33	17.06	7	0.20
EDU	SZ	57	EP	3		17:33	11.38		

June 17 1997 Time: 12:53 54.3 UTC Magnitude: 0.7 ML
Lat: 56.252N Lon: 3.757W Depth: 2.4 km
Grid Ref: 291.12 kmE 707.95 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	12:53	57.41		
EBH	SZ	16	ES	3		12:53	59.60		
EBH	SZ	16				12:53	59.74	40	0.07
ELO	SZ	25	EP	2		12:53	59.00		
ELO	SZ	25	ES	3		12:54	02.31		
EAB	SZ	37	IP	1	C	12:54	01.03		
EAB	SZ	37				12:54	01.10	5	0.08
EAU	SZ	49	EP	3		12:54	03.16		
EDU	SZ	57	EP	3		12:54	04.29		
EDU	SZ	57				12:54	12.33	5	0.12

June 21 1997 Time: 17:38 33.4 UTC Magnitude: 1.7 ML
Lat: 55.732N Lon: 5.525W Depth: 14.5 km
Grid Ref: 178.72 kmE 654.36 kmN RMS: 0.04 secs
Locality: KINTYRE, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	43	EP	2		17:38	41.03		
PMS	SZ	51	IP	1	C	17:38	42.14		
PGB	SZ	66	EP	3		17:38	44.67		
PGB	SE	66	ES	3		17:38	52.73		
PGB	SN	66				17:38	53.33	45	0.20
PGB	SE	66				17:38	53.38	40	0.15
PCA	SZ	80	EP	2		17:38	46.69		
GCL	SZ	82	EP	2		17:38	47.04		
EAB	SZ	90	EP	2		17:38	48.07		
PCO	SZ	94	EP	3		17:38	48.82		
GAL	SZ	109	EP	3		17:38	50.93		
GAL	SE	109	ES	3		17:39	03.72		
GAL	SN	109				17:39	06.92	10	0.16
GAL	SE	109				17:39	06.32	15	0.14

June 22 1997 Time: 13:36 21.8 UTC Magnitude: 0.3 ML
Lat: 53.256N Lon: 4.353W Depth: 13.8 km
Grid Ref: 243.05 kmE 375.83 kmN RMS: 0.06 secs
Locality: ANGLESEY, GWYNEDD Quality: A

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WLF	SZ	5	EP	2		13:36	24.14		
YRC	SZ	15	IP	1	C	13:36	25.19		
WME	SZ	16	EP	1	C	13:36	25.25		
YLL	SZ	18	EP	2		13:36	25.59		
WCB	SZ	19	IP		D	13:36	25.75		
WCB	SN	19	ES	2		13:36	28.29		
WCB	SN	19				13:36	28.35	13	0.07
WCB	SE	19				13:36	28.38	19	0.07
WPM	SZ	30	EP	2		13:36	27.31		
YRE	SZ	31	EP	2		13:36	27.35		
YRH	SZ	51	EP	2		13:36	30.25		

June 22 1997 Time: 16:50 16.3 UTC Magnitude: 2.2 ML
Lat: 49.252N Lon: 2.278W Depth: 10.9 km
Grid Ref: 379.77 kmE -71.91 kmN RMS: 0.01 secs
Locality: JERSEY, CHANNEL ISLANDS Quality: C
Comments: FELT ST PETER...
2KM WEST OF GROSNEZ POINT
Intensity: 4

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JVM	SZ	7	IP		D	16:50	18.60		
JSA	SZ	11	IP		D	16:50	19.04		
JLP	SZ	13	IP		D	16:50	19.30		
JRS	SZ	15	IP		D	16:50	19.61		
JRS	SE	15	ES	2		16:50	22.07		
JQE	SZ	18	IP		D	16:50	20.09		
DCO	SZ	165	EP	3		16:50	43.08		
DYA	SZ	177	EP	3		16:50	44.81		
DYA	SN	177	ES	3		16:51	04.53		
DYA	SN	177				16:51	07.01	28	0.17
DYA	SE	177				16:51	08.52	34	0.29
CR2	SE	232	ES	4		16:51	12.01		
CR2	SN	232				16:51	22.87	13	0.07
CR2	SE	232				16:51	18.24	7	0.07

June 22 1997 Time: 21:26 41.6 UTC Magnitude: 1.5 ML
Lat: 56.133N Lon: 3.728W Depth: 1.7 km
Grid Ref: 292.61 kmE 694.72 kmN RMS: 0.02 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	2		21:26	45.35		
PCO	SZ	28	EP	2		21:26	46.95		
EAU	SZ	37	EP	2		21:26	48.39		
ELO	SZ	38	EP	2		21:26	48.57		
EAB	SZ	39	EP	2		21:26	48.68		
EDI	SZ	41	EP	2		21:26	49.11		
EDI	SE	41	ES	3		21:26	54.68		
EDI	SN	41				21:26	57.37	34	0.42
EDI	SE	41				21:26	57.33	39	0.34
EMN	SZ	46	EP	3		21:26	50.03		
PCA	SZ	58	EP	3		21:26	51.97		
PGB	SZ	59	EP	3		21:26	52.06		
PGB	SN	59	ES	3		21:26	59.74		
PGB	SN	59				21:27	00.76	28	0.37
PGB	SE	59				21:27	02.64	23	0.28
EBL	SZ	59	EP	3		21:26	51.98		
PMS	SZ	71	EP	3		21:26	53.92		

June 25 1997 Time: 06:35 49.3 UTC Magnitude: 0.8 ML
Lat: 56.132N Lon: 3.716W Depth: 0.4 km
Grid Ref: 293.36 kmE 694.53 kmN RMS: 0.02 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	18	EP	2		06:35	53.23		
EAU	SZ	36	EP	3		06:35	56.26		
ELO	SZ	38	EP	2		06:35	56.51		
EDI	SZ	40	EP	3		06:35	56.92		
EDI	SE	40	ES	3		06:36	02.59		
EDI	SN	40				06:36	03.21	7	0.30
EDI	SE	40				06:36	03.17	10	0.27
EBL	SZ	58	EP	3		06:35	59.85		
EDU	SZ	64	EP	3		06:36	00.73		

June 25 1997 Time: 13:35 44.4 UTC Magnitude: 0.9 ML
Lat: 56.251N Lon: 3.756W Depth: 4.7 km
Grid Ref: 291.21 kmE 707.88 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	13:35	47.53		
ELO	SZ	25	EP	2		13:35	49.07		
EAB	SZ	37	IP	1	C	13:35	51.16		
EAU	SZ	49	EP	3		13:35	53.08		
EDI	SZ	51	EP	3		13:35	53.37		
EDI	SE	51	ES	3		13:35	59.83		
EDI	SN	51				13:35	59.73	7	0.33
EDI	SE	51				13:35	59.99	8	0.20
EDU	SZ	57	EP	3		13:35	54.24		

June 26 1997 Time: 17:25 22.7 UTC Magnitude: 1.8 ML
Lat: 55.551N Lon: 2.185W Depth: 13.9 km
Grid Ref: 388.35 kmE 628.60 kmN RMS: 0.09 secs
Locality: JEDBURGH, BORDERS Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
XSO	SZ	8	EP	2		17:25	25.64		
ESY	SZ	49	IP	1	D	17:25	31.43		
EBL	SZ	59	IP	1	C	17:25	33.27		
BBH	SZ	66	EP	3		17:25	34.21		
ESK	SZ	70	IP		C	17:25	34.66		
ESK	SN	70	ES	3		17:25	43.51		
ESK	SN	70				17:25	44.58	42	0.12
ESK	SE	70				17:25	44.80	21	0.11
ECK	SZ	73	EP	2		17:25	35.23		
EDI	SZ	75	EP	3		17:25	35.76		
EDI	SN	75	ES	3		17:25	44.86		
EDI	SN	75				17:25	45.45	23	0.17
EDI	SE	75				17:25	46.11	13	0.24
XAL	SZ	77	EP	3		17:25	36.05		
BTA	SZ	79	EP	3		17:25	36.29		
BTA	SE	79	ES	3		17:25	45.85		
BTA	SN	79				17:25	48.35	56	0.29
BTA	SE	79				17:25	48.68	50	0.25
BHH	SZ	83	EP	3		17:25	36.94		
BHH	SE	83	ES	3		17:25	47.05		

June 28 1997 Time: 20:21 8.6 UTC Magnitude: 0.6 ML
Lat: 56.250N Lon: 3.753W Depth: 4.5 km
Grid Ref: 291.42 kmE 707.74 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP	1	C	20:21	11.71		
ELO	SZ	25	EP	2		20:21	13.32		
EAB	SZ	37	IP	1	C	20:21	15.40		

EAU	SZ	49	EP	3	20:21	17.35		
EDI	SZ	51	EP	3	20:21	17.60		
EDI	SN	51	ES	3	20:21	23.98		
EDI	SN	51			20:21	24.08	2	0.14
EDI	SE	51			20:21	24.20	5	0.17
EDU	SZ	56	EP	3	20:21	18.41		

June 29 1997 Time: 13:23 12.2 UTC Magnitude: 1.1 ML
Lat: 54.439N Lon: 3.143W Depth: 14.5 km
Grid Ref: 325.87 kmE 505.52 kmN RMS: 0.10 secs
Locality: CONISTON, CUMBRIA Quality: C
Comments: 10KM NE OF CONISTON

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CSF	SZ	7	IP	1	C	13:23	15.20		
CDU	SZ	12	IP	1	D	13:23	15.64		
CKE	SZ	17	IP	1	C	13:23	16.09		
XDE	SZ	24	IP	1	D	13:23	17.10		
LMI	SZ	27	EP	2		13:23	17.61		
LMI	SN	27	ES	2		13:23	21.10		
LMI	SN	27				13:23	22.09	42	0.17
LMI	SE	27				13:23	22.13	32	0.17
GCD	SZ	70	EP	3		13:23	24.59		
GIM	SZ	88	IP	1	C	13:23	27.16		
GIM	SN	88	ES	2		13:23	37.35		
GIM	SN	88				13:23	37.78	12	0.17
GIM	SE	88				13:23	38.21	5	0.07

June 30 1997 Time: 10:30 55.5 UTC Magnitude: 0.3 ML
Lat: 56.251N Lon: 3.753W Depth: 2.8 km
Grid Ref: 291.42 kmE 707.83 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	10:30	58.57		
EBH	SZ	15	ES	1		10:31	00.75		
EBH	SZ	15				10:31	00.80	23	0.07
ELO	SZ	25	EP	2		10:31	00.17		
ELO	SZ	25	ES	3		10:31	03.51		
EAB	SZ	37	IP	1	C	10:31	02.26		
EAB	SZ	37				10:31	02.33	2	0.08
EDU	SZ	56	EP	3		10:31	05.40		

July 2 1997 Time: 06:48 35.3 UTC Magnitude: 0.7 ML
Lat: 53.028N Lon: 1.296W Depth: 0.5 km
Grid Ref: 447.19 kmE 348.16 kmN RMS: 0.03 secs
Locality: NOTTINGHAM, NOTTS Quality: C
Comments: C/F,FELT LINBY Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	30	EP	2		06:48	41.20		
CWF	SZ	32	EP	3		06:48	41.59		
CWF	SE	32	ES	2		06:48	46.28		
CWF	SN	32				06:48	48.95	13	0.25
CWF	SE	32				06:48	47.98	11	0.27
KWE	SZ	37	EP	2		06:48	42.41		

July 5 1997 Time: 07:07 24.9 UTC Magnitude: 1.8 ML
Lat: 56.060N Lon: 5.802W Depth: 7.3 km
Grid Ref: 163.35 kmE 691.73 kmN RMS: 0.04 secs
Locality: JURA, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PMS	SZ	70	IP	1	C	07:07	36.66		
GMK	SZ	81	IP	1	D	07:07	38.25		
PGB	SZ	87	EP	3		07:07	39.32		
PGB	SE	87	ES	3		07:07	49.82		
PGB	SN	87				07:07	52.25	36	0.16
PGB	SE	87				07:07	52.41	21	0.14
EAB	SZ	92	EP	3		07:07	39.97		
KAR	SZ	96	EP	2		07:07	40.55		
PCO	SZ	107	EP	3		07:07	42.31		
GCL	SZ	111	EP	2		07:07	43.01		
KSB	SZ	130	EP	3		07:07	45.93		
ELO	SZ	137	EP	3		07:07	46.96		
KPL	SZ	143	EP	3		07:07	47.81		
KPL	SE	143	ES	3		07:08	04.22		
KPL	SN	143				07:08	07.04	13	0.14
KPL	SE	143				07:08	07.35	15	0.21
GAL	SE	150	ES	4		07:08	06.13		
GAL	SN	150				07:08	09.57	12	0.16
GAL	SE	150				07:08	09.57	14	0.12

July 12 1997 Time: 11:46 46.6 UTC Magnitude: 1.2 ML
Lat: 52.965N Lon: 2.216W Depth: 4.5 km
Grid Ref: 385.53 kmE 340.85 kmN RMS: 0.24 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	26	EP	1	D	11:46	51.36		
KBI	SZ	56	EP	3		11:46	56.39		
CWF	SN	66	ES	3		11:47	06.05		
CWF	SN	66				11:47	07.06	6	0.27
CWF	SE	66				11:47	08.97	3	0.18
HLM	SZ	67	EP	2		11:46	58.65		
SBD	SZ	71	EP	2		11:46	58.53		
SSP	SZ	86	EP	2		11:47	00.17		
SSP	SN	86	ES	2		11:47	10.36		
SSP	SN	86				11:47	11.89	9	0.20
SSP	SE	86				11:47	12.83	10	0.24
WPM	SZ	118	EP	3		11:47	06.25		
MCH	SE	120	ES	2		11:47	21.39		
HCG	SZ	121	EP	2		11:47	06.17		
WCB	SZ	162	EP	3		11:47	11.80		
WCB	SN	162	ES	3		11:47	30.29		
WCB	SN	162				11:47	31.86	4	0.27
WCB	SE	162				11:47	32.02	4	0.23

July 13 1997 Time: 22:57 22.5 UTC Magnitude: 0.7 ML
Lat: 56.132N Lon: 3.734W Depth: 0.8 km
Grid Ref: 292.26 kmE 694.62 kmN RMS: 0.02 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	1	C	22:57	26.54		
EAU	SZ	37	EP	3		22:57	29.56		
EAB	SZ	38	EP	3		22:57	29.79		
ELO	SZ	38	EP	3		22:57	29.75		
EDI	SZ	41	EP	3		22:57	30.35		
EDI	SN	41	ES	3		22:57	36.03		
EDI	SN	41				22:57	38.51	7	0.32
EDI	SE	41				22:57	40.95	8	0.45
EBL	SZ	59	EP	3		22:57	33.18		

July 14 1997 Time: 11:47 55.8 UTC Magnitude: 2.8 ML
Lat: 61.368N Lon: 3.862E Depth: 17.6 km
Grid Ref: 713.03 kmE 1290.31 kmN RMS: 0.11 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	283	EP	2		11:48	34.69		
LRW	SZ	307	EP	3		11:48	37.72		
LRW	SE	307	ES	3		11:49	08.21		
LRW	SN	307				11:49	10.56	12	0.17
LRW	SE	307				11:49	10.74	13	0.11
SAN	SZ	317	EP	3		11:48	38.89		
OST	SZ	437	EP	3		11:48	53.66		
OWE	SZ	444	EP	3		11:48	54.88		
OHO	SZ	486	EP	3		11:48	59.96		
OBR	SZ	498	EP	3		11:49	01.20		
ORE	SZ	529	EP	3		11:49	05.51		
ORE	SN	529	ES	3		11:49	56.09		
ORE	SN	529				11:50	00.21	6	0.16
ORE	SE	529				11:50	02.06	5	0.17

July 15 1997 Time: 15:59 30.5 UTC Magnitude: 0.5 ML
Lat: 56.249N Lon: 3.753W Depth: 4.5 km
Grid Ref: 291.40 kmE 707.61 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	15:59	33.62		
ELO	SZ	25	EP	2		15:59	35.24		
EAB	SZ	37	EP	2		15:59	37.31		
EDI	SZ	51	EP	3		15:59	39.42		
EDI	SN	51	ES	3		15:59	45.95		
EDI	SN	51				15:59	48.61	3	0.18
EDI	SE	51				15:59	46.11	3	0.18
EDU	SZ	57	EP	3		15:59	40.35		

July 20 1997 Time: 19:08 58.9 UTC Magnitude: 0.6 ML
Lat: 48.878N Lon: 2.145W Depth: 20.8 km
Grid Ref: 389.37 kmE -113.51 kmN RMS: 0.08 secs
Locality: JERSEY, CHANNEL ISLANDS Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JRS	SZ	35	EP	1	D	19:09	05.86		
JRS	SN	35	ES	3		19:09	10.61		
JRS	SN	35				19:09	11.57	6	0.08
JRS	SE	35				19:09	10.78	8	0.10
JSA	SZ	35	EP	1	C	19:09	05.57		
JQE	SZ	37	EP	1	C	19:09	05.81		
JVM	SZ	38	EP	2		19:09	06.04		

July 21 1997 Time: 10:53 18.9 UTC Magnitude: 1.5 ML
Lat: 57.290N Lon: 4.475W Depth: 4.2 km
Grid Ref: 250.85 kmE 824.84 kmN RMS: 0.11 secs
Locality: LOCH NESS, HIGHLAND Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
MDO	SZ	18	IP		D	10:53	22.43		
KAC	SZ	55	IP	1	C	10:53	28.62		
KSB	SZ	58	EP	2		10:53	28.94		
KPL	SZ	71	EP	3		10:53	30.93		
KPL	SE	71	ES	3		10:53	39.68		
KPL	SN	71				10:53	39.85	10	0.17
KPL	SE	71				10:53	45.52	9	0.16
MVH	SZ	73	EP	3		10:53	31.27		
MCD	SZ	80	EP	2		10:53	32.60		
MCD	SN	80	ES	3		10:53	42.11		

MCD	SN	80				10:53	44.86	26	0.12
MCD	SE	80				10:53	46.53	30	0.23
MME	SZ	91	EP	3		10:53	34.21		
ELO	SZ	102	EP	3		10:53	35.75		
EAB	SZ	123	EP	3		10:53	39.23		
EDR	SZ	124	EP	3		10:53	39.39		
MLA	SZ	131	EP	3		10:53	40.34		

July 25 1997 Time: 19:53 40.5 UTC Magnitude: 0.4 ML
Lat: 56.249N Lon: 3.753W Depth: 2.5 km
Grid Ref: 291.41 kmE 707.65 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	19:53	43.53		
EBH	SZ	15	ES	1		19:53	45.70		
EBH	SZ	15				19:53	45.82	27	0.09
ELO	SZ	25	EP	2		19:53	45.14		
EAB	SZ	37	IP	1	C	19:53	47.21		
EAB	SZ	37	ES	2		19:53	52.15		
EAB	SZ	37				19:53	54.17	3	0.13
EDU	SZ	56	EP	3		19:53	50.44		

July 27 1997 Time: 13:03 50.5 UTC Magnitude: 1.7 ML
Lat: 52.796N Lon: 2.749W Depth: 11.7 km
Grid Ref: 349.48 kmE 322.31 kmN RMS: 0.11 secs
Locality: SHREWSBURY, SHROPSHIRE Quality: B
Comments: 9KM NORTH OF SHREWSBURY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SBD	SZ	36	EP	2		13:03	57.01		
SSP	SZ	49	EP	1	C	13:03	58.95		
SSP	SE	49	ES	2		13:04	04.94		
SSP	SN	49				13:04	05.93	43	0.18
SSP	SE	49				13:04	05.94	53	0.30
KWE	SZ	66	IP	1	C	13:04	01.65		
HCG	SZ	81	IP	1	C	13:04	03.90		
HAE	SZ	86	EP	2		13:04	04.97		
MCH	SZ	90	EP	2		13:04	05.46		
MCH	SE	90	ES	2		13:04	16.23		
WPM	SZ	93	EP	2		13:04	05.77		
CWF	SZ	98	EP	2		13:04	06.61		
CWF	SN	98	ES	3		13:04	17.62		
CWF	SN	98				13:04	19.16	30	0.13
CWF	SE	98				13:04	20.97	18	0.30
YRE	SZ	115	EP	2		13:04	09.36		
WME	SZ	124	EP	2		13:04	10.78		
HGH	SZ	129	EP	2		13:04	12.06		
WCB	SZ	137	EP	2		13:04	12.50		
WCB	SN	137	ES	2		13:04	27.84		
WCB	SN	137				13:04	28.05	10	0.21
WCB	SE	137				13:04	30.80	11	0.24

July 30 1997 Time: 08:34 44.0 UTC Magnitude: 2.4 ML
Lat: 56.249N Lon: 3.752W Depth: 5.1 km
Grid Ref: 291.43 kmE 707.67 kmN RMS: 0.04 secs
Locality: BLACKFORD, TAYSIDE Quality: B
Comments: FELT BLACKFORD... Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	08:34	47.10		
ELO	SZ	25	IP	1	C	08:34	48.75		
PCO	SZ	36	IP	1	C	08:34	50.72		
EAB	SZ	37	IP		C	08:34	50.82		
EAU	SZ	49	EP	3		08:34	52.68		
EDI	SZ	51	EP	2		08:34	52.94		
EDI	SN	51	ES	3		08:34	59.34		
EDI	SN	51				08:35	05.11	163	0.35
EDI	SE	51				08:34	59.47	202	0.26
EDU	SZ	56	EP	2		08:34	53.78		
PGB	SZ	67	IP	1	C	08:34	55.34		
PGB	SE	67	ES	3		08:35	03.71		
PGB	SN	67				08:35	08.70	253	0.23
PGB	SE	67				08:35	05.67	126	0.19
EBL	SZ	69	EP	3		08:34	55.81		
PCA	SZ	69	EP	2		08:34	55.74		
PMS	SZ	76	EP	2		08:34	56.85		
ESY	SZ	80	EP	3		08:34	57.50		
ESK	SE	109	ES	3		08:35	15.21		
ESK	SN	109				08:35	18.42	76	0.19
ESK	SE	109				08:35	18.23	101	0.25

July 30 1997 Time: 08:38 27.6 UTC Magnitude: 1.6 ML
Lat: 56.249N Lon: 3.753W Depth: 5.1 km
Grid Ref: 291.42 kmE 707.63 kmN RMS: 0.05 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	08:38	30.71		
ELO	SZ	25	IP	1	C	08:38	32.35		
PCO	SZ	36	EP	2		08:38	34.28		
EAB	SZ	37	IP		C	08:38	34.39		
EAU	SZ	49	EP	2		08:38	36.39		
EDI	SZ	51	EP	3		08:38	36.52		
EDI	SN	51	ES	3		08:38	42.92		
EDI	SN	51				08:38	43.01	23	0.22
EDI	SE	51				08:38	43.05	34	0.22
EDU	SZ	56	EP	3		08:38	37.36		
PGB	SZ	67	EP	3		08:38	38.97		
PGB	SE	67	ES	3		08:38	47.26		
PGB	SN	67				08:38	52.88	25	0.13
PGB	SE	67				08:38	50.04	31	0.38
PCA	SZ	69	EP	3		08:38	39.21		
EBL	SZ	69	EP	3		08:38	39.35		
PMS	SZ	76	EP	3		08:38	40.42		
ESY	SZ	80	EP	3		08:38	40.93		
ESK	SE	109	ES	4		08:38	58.59		
ESK	SN	109				08:39	01.98	13	0.19
ESK	SE	109				08:39	01.76	14	0.13

July 30 1997 Time: 09:13 44.1 UTC Magnitude: 1.4 ML
Lat: 56.250N Lon: 3.751W Depth: 3.9 km
Grid Ref: 291.52 kmE 707.81 kmN RMS: 0.06 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	09:13	47.11		
ELO	SZ	25	EP	2		09:13	48.73		
PCO	SZ	36	EP	2		09:13	50.69		
EAB	SZ	37	IP	1	C	09:13	50.77		
EAU	SZ	49	EP	3		09:13	52.84		
EDI	SZ	51	EP	2		09:13	53.00		
EDI	SN	51	ES	3		09:13	59.33		
EDI	SN	51				09:13	59.41	12	0.21
EDI	SE	51				09:13	59.56	20	0.16
EDU	SZ	56	EP	3		09:13	53.84		
PGB	SZ	67	EP	3		09:13	55.57		
PGB	SN	67	ES	3		09:14	04.01		
PGB	SN	67				09:14	08.61	20	0.27
PGB	SE	67				09:14	09.45	9	0.16
EBL	SZ	69	EP	3		09:13	55.94		
PCA	SZ	69	EP	3		09:13	55.93		
PMS	SZ	77	EP	3		09:13	57.07		
ESK	SN	110	ES	3		09:14	15.42		
ESK	SN	110				09:14	18.36	9	0.20
ESK	SE	110				09:14	18.16	9	0.16

July 31 1997 Time: 08:16 46.5 UTC Magnitude: 1.6 ML
Lat: 56.835N Lon: 5.823W Depth: 6.7 km
Grid Ref: 166.84 kmE 778.02 kmN RMS: 0.08 secs
Locality: MOIDART, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSB	SZ	48	IP	1	C	08:16	54.75		
KPL	SZ	57	IP	1	D	08:16	56.13		
KPL	SN	57	ES	3		08:17	03.42		
KPL	SN	57				08:17	03.53	30	0.12
KPL	SE	57				08:17	03.59	24	0.13
KAC	SZ	81	EP	2		08:16	59.98		
KSK	SZ	88	EP	3		08:17	01.07		
EAB	SZ	116	EP	3		08:17	05.44		
ELO	SZ	136	EP	3		08:17	08.29		

August 3 1997 Time: 02:41 3.6 UTC Magnitude: 1.3 ML
Lat: 56.135N Lon: 3.723W Depth: 2.4 km
Grid Ref: 292.94 kmE 694.88 kmN RMS: 0.04 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	18	IP	1	C	02:41	07.25		
PCO	SZ	28	IP	1	D	02:41	08.98		
EAU	SZ	37	EP	3		02:41	10.27		
ELO	SZ	37	EP	2		02:41	10.44		
EAB	SZ	39	EP	3		02:41	10.61		
EDI	SZ	41	EP	2		02:41	11.05		
EDI	SE	41	ES	3		02:41	16.49		
EDI	SN	41				02:41	19.01	33	0.50
EDI	SE	41				02:41	22.02	34	0.34
EMN	SZ	46	EP	3		02:41	11.95		
ENH	SZ	46	EP	3		02:41	11.80		
EBL	SZ	58	EP	3		02:41	13.79		
PGB	SE	59	ES	3		02:41	21.63		
PGB	SN	59				02:41	25.88	14	0.46
PGB	SE	59				02:41	24.33	10	0.25
PCA	SZ	59	EP	3		02:41	13.92		
PMS	SZ	71	EP	3		02:41	15.95		
ESY	SZ	73	EP	3		02:41	16.14		
ESK	SE	97	ES	3		02:41	31.68		
ESK	SN	97				02:41	32.89	5	0.16
ESK	SE	97				02:41	35.79	9	0.18

August 3 1997 Time: 23:09 28.5 UTC Magnitude: 0.7 ML
Lat: 54.952N Lon: 2.500W Depth: 2.1 km
Grid Ref: 367.96 kmE 562.03 kmN RMS: 0.05 secs
Locality: HALTWHISTLE, N'THMBLAND Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BTA	SZ	13	IP	1	D	23:09	31.34		

BTA	SN	13	ES	3		23:09	33.48		
BTA	SN	13				23:09	34.88	47	0.40
BTA	SE	13				23:09	35.30	72	0.38
XAL	SZ	21	EP	2		23:09	32.75		
BDL	SZ	33	EP	3		23:09	34.90		
BBH	SZ	34	IP	1	D	23:09	34.90		
BHH	SZ	49	EP	3		23:09	36.75		
BBO	SZ	54	EP	2		23:09	38.15		
BNA	SZ	72	EP	3		23:09	41.48		

August 5 1997 Time: 09:06 17.2 UTC Magnitude: 0.5 ML
Lat: 56.250N Lon: 3.749W Depth: 4.2 km
Grid Ref: 291.65 kmE 707.72 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	09:06	20.20		
EBH	SZ	15	ES	1		09:06	22.36		
EBH	SZ	15				09:06	22.41	32	0.07
ELO	SZ	25	EP	2		09:06	21.85		
ELO	SZ	25	ES	2		09:06	25.21		
EAB	SZ	37	EP	1	C	09:06	23.95		
EAB	SZ	37				09:06	30.22	2	0.10
EDU	SZ	56	EP	3		09:06	27.02		
EDU	SZ	56	ES	3		09:06	34.03		
EDU	SZ	56				09:06	35.18	4	0.18

August 8 1997 Time: 03:15 16.2 UTC Magnitude: -0.3 ML
Lat: 55.218N Lon: 3.453W Depth: 7.5 km
Grid Ref: 307.57 kmE 592.53 kmN RMS: 0.05 secs
Locality: JOHNSTONEBRIDGE, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SZ	19	IP	1	C	03:15	20.01		
ESK	SN	19	ES	3		03:15	22.89		
ESK	SN	19				03:15	23.42	5	0.10
ESK	SE	19				03:15	22.94	3	0.09
ECK	SZ	21	IP	1	C	03:15	20.40		
ECK	SZ	21	ES	3		03:15	23.27		

August 10 1997 Time: 20:53 32.7 UTC Magnitude: -0.9 ML
Lat: 53.235N Lon: 4.727W Depth: 13.3 km
Grid Ref: 218.04 kmE 374.33 kmN RMS: 0.05 secs
Locality: CAERNARVON BAY, GWYNEDD Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRC	SZ	10	EP	2		20:53	35.54		
WCB	SZ	20	IP	1	C	20:53	36.74		
WCB	SN	20	ES	3		20:53	40.51		
WCB	SN	20				20:53	40.87	1	0.05
WCB	SE	20				20:53	40.61	1	0.10
WLF	SZ	23	EP	2		20:53	37.12		
WME	SZ	34	EP	2		20:53	38.77		
YRE	SZ	35	EP	3		20:53	38.95		

August 12 1997 Time: 03:05 53.4 UTC Magnitude: 1.1 ML
Lat: 53.057N Lon: 1.076W Depth: 1.0 km
Grid Ref: 461.91 kmE 351.50 kmN RMS: 0.06 secs
Locality: OXTON, NOTTINGHAMSHIRE Quality: C
Comments: C/F,FELT OXTON... Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSY	SZ	34	EP	2		03:05	59.94		
KBI	SZ	37	EP	3		03:06	00.47		
CWF	SZ	39	EP	3		03:06	00.82		
CWF	SE	39	ES	3		03:06	05.96		
CWF	SN	39				03:06	09.18	5	0.27
CWF	SE	39				03:06	09.80	5	0.21
LHO	SZ	75	EP	3		03:06	06.47		
HPK	SZ	106	EP	3		03:06	11.39		
HPK	SN	106	ES	3		03:06	24.48		
SBD	SZ	148	EP	3		03:06	17.85		
SSP	SE	155	ES	3		03:06	37.14		
SSP	SN	155				03:06	39.97	8	0.25
SSP	SE	155				03:06	43.70	7	0.26

August 12 1997 Time: 08:14 24.8 UTC Magnitude: 3.0 ML
Lat: 59.770N Lon: 6.310E Depth: 15.0 km
Grid Ref: 865.87 kmE 1127.50 kmN RMS: 0.25 secs
Locality: NORWEGIAN COAST Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	419	EP	3		08:15	20.53		
LRW	SZ	420	EP	3		08:15	21.48		
LRW	SN	420	ES	3		08:16	02.11		
LRW	SN	420				08:16	09.16	8	0.14
LRW	SE	420				08:16	08.69	10	0.15
SAN	SZ	423	EP	3		08:15	21.20		
WAL	SZ	446	EP	3		08:15	24.04		
OWE	SZ	531	EP	3		08:15	34.98		
ORE	SE	592	ES	3		08:16	38.80		
ORE	SN	592				08:16	40.06	7	0.25
ORE	SE	592				08:16	40.04	5	0.24

August 14 1997 Time: 14:43 34.3 UTC Magnitude: 0.7 ML
Lat: 56.239N Lon: 3.775W Depth: 3.6 km
Grid Ref: 290.02 kmE 706.57 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	17	IP	1	C	14:43	37.61		
ELO	SZ	26	EP	3		14:43	39.21		
EDI	SZ	51	EP	3		14:43	43.33		
EDI	SN	51	ES	3		14:43	49.85		
EDI	SN	51				14:43	49.92	3	0.09
EDI	SE	51				14:43	49.95	6	0.16
EDU	SZ	58	EP	3		14:43	44.47		

August 14 1997 Time: 21:55 58.1 UTC Magnitude: 1.2 ML
Lat: 56.251N Lon: 3.749W Depth: 3.6 km
Grid Ref: 291.62 kmE 707.85 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	21:56	01.13		
ELO	SZ	25	EP	2		21:56	02.74		
PCO	SZ	36	EP	2		21:56	04.75		
EAU	SZ	49	EP	2		21:56	06.84		
EDI	SZ	51	EP	3		21:56	07.02		
EDI	SE	51	ES	3		21:56	13.55		
EDI	SN	51				21:56	14.47	10	0.29
EDI	SE	51				21:56	13.64	16	0.18
EDU	SZ	56	EP	3		21:56	07.96		
PGB	SZ	67	EP	3		21:56	09.56		
PGB	SN	67	ES	3		21:56	18.01		
PGB	SN	67				21:56	19.66	12	0.24
PGB	SE	67				21:56	21.47	10	0.29
PCA	SZ	69	EP	3		21:56	09.92		
EBL	SZ	69	EP	3		21:56	09.86		
PMS	SZ	77	EP	3		21:56	11.14		

August 15 1997 Time: 20:48 10.0 UTC Magnitude: 0.0 ML
Lat: 55.207N Lon: 3.509W Depth: 9.4 km
Grid Ref: 304.02 kmE 591.39 kmN RMS: 0.04 secs
Locality: JOHNSTONEBRIDGE, D & G Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	10	IP	1	C	20:48	12.52		
BHH	SZ	22	EP	3		20:48	14.35		
BHH	SE	22	ES	3		20:48	17.45		
BHH	SN	22				20:48	17.67	12	0.13
BHH	SE	22				20:48	17.45	9	0.16
ESK	SZ	23	IP	1	C	20:48	14.38		
ESK	SN	23	ES	3		20:48	17.49		
ESK	SN	23				20:48	17.84	4	0.09
ESK	SE	23				20:48	17.37	2	0.14
ECK	SZ	25	EP	2		20:48	14.70		
BNA	SZ	28	EP	3		20:48	15.12		

August 19 1997 Time: 01:30 24.7 UTC Magnitude: 0.2 ML
Lat: 57.501N Lon: 5.236W Depth: 12.8 km
Grid Ref: 206.13 kmE 850.29 kmN RMS: 0.08 secs
Locality: GLEN CARRON, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	4	EP	2		01:30	27.07		
KPL	SZ	31	EP	3		01:30	30.61		
KPL	SN	31	ES	3		01:30	34.56		
KPL	SN	31				01:30	34.84	3	0.09
KPL	SE	31				01:30	34.97	5	0.16
KSB	SZ	34	EP	3		01:30	30.90		

August 22 1997 Time: 19:31 6.1 UTC Magnitude: 1.0 ML
Lat: 53.062N Lon: 1.196W Depth: 2.2 km
Grid Ref: 453.84 kmE 352.01 kmN RMS: 0.28 secs
Locality: LINBY, NOTTINGHAMSHIRE Quality: D
Comments: C/F,FELT LINBY Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	31	EP	3		19:31	11.32		
CWF	SZ	37	EP	3		19:31	12.65		
CWF	SN	37	ES	3		19:31	17.75		
CWF	SN	37				19:31	34.51	85	1.18
CWF	SE	37				19:31	24.26	10	0.20
KSY	SZ	42	EP	3		19:31	13.90		
KWE	SZ	44	EP	2		19:31	14.26		

August 23 1997 Time: 13:25 50.2 UTC Magnitude: 0.6 ML
Lat: 56.250N Lon: 3.753W Depth: 4.6 km
Grid Ref: 291.37 kmE 707.76 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP	1	C	13:25	53.26		
ELO	SZ	25	EP	2		13:25	54.84		
EAB	SZ	37	EP	2		13:25	56.94		
EDI	SE	51	ES	3		13:26	05.57		
EDI	SN	51				13:26	06.94	3	0.23
EDI	SE	51				13:26	05.76	4	0.15
EDU	SZ	56	EP	3		13:25	60.00		

August 24 1997 Time: 20:54 31.0 UTC Magnitude: 1.5 ML
Lat: 53.467N Lon: 2.701W Depth: 11.9 km
Grid Ref: 353.46 kmE 396.97 kmN RMS: 0.15 secs
Locality: ST HELENS, MERSEYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LHO	SZ	57	EP	2		20:54	40.56		
SBD	SZ	73	EP	3		20:54	43.15		
KWE	SZ	76	EP	3		20:54	43.45		
KBI	SZ	82	EP	3		20:54	44.75		
WPM	SZ	83	EP	3		20:54	45.04		
HPK	SZ	90	EP	1	C	20:54	45.91		
HPK	SN	90	ES	2		20:54	56.46		
HPK	SN	90				20:54	57.55	41	0.30
HPK	SE	90				20:54	57.94	28	0.38
YLL	SZ	105	EP	3		20:54	48.00		
WME	SZ	107	EP	3		20:54	48.32		
WLF	SZ	115	EP	3		20:54	49.38		
SSP	SZ	120	EP	3		20:54	50.50		
SSP	SE	120	ES	3		20:55	04.87		
SSP	SN	120				20:55	06.26	8	0.22
SSP	SE	120				20:55	06.71	7	0.27
WCB	SZ	123	EP	3		20:54	50.59		
WCB	SN	123	ES	3		20:55	04.62		
WCB	SN	123				20:55	06.97	5	0.17
WCB	SE	123				20:55	07.11	3	0.18
CWF	SZ	124	EP	3		20:54	50.64		
CWF	SN	124	ES	3		20:55	04.34		
CWF	SN	124				20:55	06.67	8	0.26
CWF	SE	124				20:55	06.65	7	0.18
WFB	SZ	125	EP	3		20:54	50.87		
YRE	SZ	127	EP	3		20:54	51.14		
YRC	SZ	127	EP	3		20:54	51.05		
HCG	SZ	143	EP	3		20:54	53.60		
YRH	SZ	147	EP	3		20:54	53.85		
KSY	SZ	152	EP	3		20:54	55.57		

August 25 1997 Time: 20:23 31.2 UTC Magnitude: 1.6 ML
Lat: 56.582N Lon: 5.916W Depth: 6.9 km
Grid Ref: 159.55 kmE 750.21 kmN RMS: 0.07 secs
Locality: MULL, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	38	EP	2		20:23	37.95		
KSB	SZ	76	EP	2		20:23	43.81		
KPL	SZ	86	EP	3		20:23	45.48		
KPL	SE	86	ES	3		20:23	55.80		
KPL	SN	86				20:23	58.95	14	0.16
KPL	SE	86				20:23	58.91	19	0.18
EAB	SZ	107	EP	3		20:23	48.71		
KAC	SZ	109	EP	3		20:23	49.14		
PMS	SZ	110	EP	2		20:23	49.11		
PGB	SE	124	ES	3		20:24	05.95		
PGB	SN	124				20:24	06.83	13	0.14
PGB	SE	124				20:24	06.65	8	0.20
ELO	SZ	136	EP	3		20:23	53.19		

August 26 1997 Time: 19:57 51.5 UTC Magnitude: 2.6 ML
Lat: 56.196N Lon: 4.096W Depth: 3.7 km
Grid Ref: 269.93 kmE 702.36 kmN RMS: 0.03 secs
Locality: DOUNE, CENTRAL Quality: B
Comments: FELT DOUNE... Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	19:57	54.55		
PCO	SZ	23	IP		D	19:57	56.00		
EBH	SZ	37	IP	1	C	19:57	58.29		
ELO	SZ	39	EP	2		19:57	58.55		
POB	SZ	44	EP	3		19:57	59.47		
PGB	SZ	49	IP		D	19:58	00.26		
PGB	SN	49	ES	3		19:58	06.60		
PGB	SN	49				19:58	07.51	272	0.22
PGB	SE	49				19:58	07.05	194	0.34
EAU	SZ	56	EP	3		19:58	01.37		
PCA	SZ	56	IP		D	19:58	01.32		
PMS	SZ	56	IP	1	D	19:58	01.37		
EDI	SZ	64	IP	1	C	19:58	02.61		
EDI	SE	64	ES	3		19:58	10.68		
EDI	SN	64				19:58	10.70	236	0.31
EDI	SE	64				19:58	10.81	357	0.32
EDU	SZ	77	EP	2		19:58	04.65		
EBL	SZ	81	IP	1	C	19:58	05.18		
KNR	SZ	88	EP	3		19:58	06.36		
ESY	SZ	97	EP	3		19:58	07.79		
ESK	SN	113	ES	3		19:58	23.61		
ESK	SN	113				19:58	25.80	121	0.14
ESK	SE	113				19:58	25.11	108	0.16

August 26 1997 Time: 21:03 13.7 UTC Magnitude: 0.5 ML
Lat: 57.051N Lon: 5.773W Depth: 5.9 km
Grid Ref: 171.23 kmE 801.89 kmN RMS: 0.08 secs
Locality: MALLAIG, HIGHLAND Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	15	IP	1	D	21:03	16.80		
KSB	SZ	28	IP		D	21:03	18.85		
KPL	SZ	33	IP	1	D	21:03	19.78		
KPL	SN	33	ES	3		21:03	23.89		
KPL	SN	33				21:03	23.97	7	0.11
KPL	SE	33				21:03	24.18	8	0.10
KAC	SZ	58	IP	1	D	21:03	23.67		

August 28 1997 Time: 21:02 19.0 UTC Magnitude: 1.1 ML
Lat: 52.981N Lon: 1.962W Depth: 13.1 km
Grid Ref: 402.53 kmE 342.66 kmN RMS: 0.01 secs
Locality: CHEADLE, STAFFORDSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	9	IP	1	C	21:02	21.76		
KBI	SZ	42	IP	1	C	21:02	26.41		
CWF	SZ	52	EP	2		21:02	27.85		
CWF	SN	52	ES	3		21:02	34.39		
CWF	SN	52				21:02	35.55	11	0.10
CWF	SE	52				21:02	36.04	9	0.10

August 29 1997 Time: 14:15 45.3 UTC Magnitude: 1.8 ML
Lat: 56.248N Lon: 5.563W Depth: 7.2 km
Grid Ref: 179.28 kmE 711.85 kmN RMS: 0.01 secs
Locality: INVERARAY, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	76	EP	3		14:15	58.04		
KSB	SZ	108	EP	3		14:16	02.84		
KPL	SZ	122	EP	3		14:16	05.10		
KPL	SN	122	ES	3		14:16	19.46		
KPL	SN	122				14:16	19.96	20	0.16
KPL	SE	122				14:16	20.21	18	0.23
KAC	SZ	140	EP	3		14:16	08.71		

August 30 1997 Time: 04:09 49.9 UTC Magnitude: 1.0 ML
Lat: 55.215N Lon: 3.500W Depth: 4.1 km
Grid Ref: 304.59 kmE 592.17 kmN RMS: 0.02 secs
Locality: JOHNSTONEBRIDGE, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	11	IP		C	04:09	52.27		
ESK	SZ	22	IP		C	04:09	54.11		
ESK	SN	22	ES	2		04:09	56.96		
ESK	SN	22				04:09	57.52	40	0.09
ESK	SE	22				04:09	57.04	27	0.11
BHH	SZ	22	IP	1	D	04:09	54.26		
BHH	SN	22	ES	1		04:09	57.11		
BHH	SN	22				04:09	57.43	89	0.16
BHH	SE	22				04:09	57.22	64	0.15
ECK	SZ	24	IP	1	C	04:09	54.49		
BBH	SZ	37	EP	2		04:09	56.64		
BBO	SZ	56	EP	3		04:09	59.60		
BTA	SN	62	ES	4		04:10	08.54		
BTA	SN	62				04:10	08.69	8	0.31
BTA	SE	62				04:10	10.04	7	0.30
CKE	SZ	74	EP	3		04:10	02.64		
CSF	SZ	87	EP	3		04:10	04.62		
CDU	SZ	100	EP	3		04:10	06.70		

August 30 1997 Time: 04:24 11.0 UTC Magnitude: 1.2 ML
Lat: 55.204N Lon: 3.510W Depth: 8.6 km
Grid Ref: 303.88 kmE 591.04 kmN RMS: 0.10 secs
Locality: JOHNSTONEBRIBGE, D & G Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	10	IP		C	04:24	13.47		
BHH	SZ	22	IP	1	D	04:24	15.44		
BHH	SE	22	ES	2		04:24	18.33		
BHH	SN	22				04:24	18.63	184	0.16
BHH	SE	22				04:24	18.40	145	0.17
ESK	SZ	23	IP	1	C	04:24	15.29		
ESK	SN	23				04:24	18.72	97	0.10
ESK	SE	23				04:24	18.49	38	0.08
ECK	SZ	25	IP		C	04:24	15.68		
BNA	SZ	28	IP		D	04:24	16.02		
BBH	SZ	38	IP		C	04:24	17.84		
GCD	SZ	47	EP	3		04:24	19.23		
BBO	SZ	55	IP	1	D	04:24	20.73		
BBO	SN	55	ES	3		04:24	27.41		
BBO	SN	55				04:24	28.95	8	0.28
BBO	SE	55				04:24	28.31	6	0.18
EBL	SZ	70	EP	3		04:24	22.93		
EAU	SZ	72	EP	3		04:24	23.36		
PCA	SZ	73	EP	3		04:24	23.48		
XDE	SZ	78	EP	2		04:24	24.29		
XSO	SZ	86	EP	2		04:24	25.37		
CDU	SZ	99	EP	3		04:24	27.71		

August 30 1997 Time: 04:57 55.5 UTC Magnitude: 0.1 ML
Lat: 55.214N Lon: 3.499W Depth: 4.1 km
Grid Ref: 304.66 kmE 592.09 kmN RMS: 0.04 secs
Locality: JOHNSTONEBRIBGE, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	11	IP		C	04:57	57.93		
BHH	SZ	22	EP	2		04:57	59.74		

BHH	SE	22	ES	2		04:58	02.81		
BHH	SN	22				04:58	03.09	13	0.16
BHH	SE	22				04:58	02.85	9	0.17
ESK	SZ	22	IP	1	C	04:57	59.76		
ESK	SE	22	ES	2		04:58	02.64		
ESK	SN	22				04:58	03.16	6	0.09
ESK	SE	22				04:58	02.69	3	0.09
ECK	SZ	24	IP	1	C	04:58	00.14		
BBH	SZ	37	EP	1	C	04:58	02.30		

August 31 1997 Time: 05:47 37.8 UTC Magnitude: 2.9 ML
Lat: 61.232N Lon: 2.767E Depth: 15.0 km
Grid Ref: 655.78 kmE 1270.41 kmN RMS: 0.20 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	222	EP	3		05:48	09.31		
LRW	SZ	248	EP	3		05:48	12.66		
LRW	SN	248	ES	3		05:48	38.00		
LRW	SN	248				05:48	39.78	14	0.13
LRW	SE	248				05:48	39.80	17	0.13
SAN	SZ	258	EP	2		05:48	13.71		
WAL	SZ	263	EP	3		05:48	14.36		
OST	SZ	380	EP	3		05:48	29.31		
OWE	SZ	385	EP	3		05:48	29.93		
OHO	SZ	429	EP	3		05:48	34.63		
OBR	SZ	442	EP	3		05:48	36.69		
ORE	SZ	472	EP	3		05:48	40.66		
ORE	SE	472	ES	3		05:49	26.44		
ORE	SN	472				05:49	29.06	9	0.13
ORE	SE	472				05:49	29.07	11	0.24
MLA	SZ	474	ES	3		05:49	26.40		
OTO	SZ	504	EP	3		05:48	44.42		
MCD	SN	531	ES	3		05:49	38.61		
MCD	SN	531				05:49	40.42	10	0.24
MCD	SE	531				05:49	39.54	11	0.25

September 7 1997 Time: 02:50 42.3 UTC Magnitude: -0.3 ML
Lat: 53.412N Lon: 4.422W Depth: 17.7 km
Grid Ref: 239.02 kmE 393.32 kmN RMS: 0.05 secs
Locality: NORTH ANGLESEY, GWYNEDD Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WME	SZ	8	IP	1	C	02:50	45.45		
WCB	SZ	9	IP	1	D	02:50	45.59		
WCB	SE	9	ES	2		02:50	47.75		
WCB	SN	9				02:50	47.82	5	0.05
WCB	SE	9				02:50	47.86	7	0.06
WLF	SZ	14	EP	1	C	02:50	46.03		
YRC	SZ	21	IP	1	C	02:50	46.69		
YLL	SZ	35	EP	3		02:50	48.52		

September 7 1997 Time: 12:56 58.3 UTC Magnitude: 0.4 ML
Lat: 55.315N Lon: 3.584W Depth: 5.3 km
Grid Ref: 299.47 kmE 603.49 kmN RMS: 0.00 secs
Locality: BEATTOCK, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SZ	24	IP		C	12:57	02.85		
ESK	SE	24	ES	2		12:57	06.08		
ESK	SN	24				12:57	06.22	15	0.13
ESK	SE	24				12:57	06.67	12	0.06
ECK	SZ	33	IP		D	12:57	04.25		
XSO	SZ	87	EP	3		12:57	13.03		

September 13 1997 Time: 22:56 18.1 UTC Magnitude: 0.0 ML
Lat: 57.179N Lon: 5.708W Depth: 5.8 km
Grid Ref: 175.90 kmE 815.84 kmN RMS: 0.10 secs
Locality: GLENELG, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SZ	18	IP	1	C	22:56	21.86		
KPL	SE	18	ES	2		22:56	24.06		
KPL	SN	18				22:56	24.35	10	0.09
KPL	SE	18				22:56	24.53	7	0.07
KSB	SZ	18	IP	1	C	22:56	21.62		
KAR	SZ	30	IP	1	C	22:56	23.68		
KAC	SZ	44	EP	2		22:56	25.81		

September 14 1997 Time: 21:07 21.9 UTC Magnitude: 1.0 ML
Lat: 56.134N Lon: 3.723W Depth: 1.0 km
Grid Ref: 292.94 kmE 694.82 kmN RMS: 0.03 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	18	EP	2		21:07	25.74		
EAU	SZ	37	EP	3		21:07	28.90		
ELO	SZ	38	EP	2		21:07	29.03		
EAB	SZ	39	EP	3		21:07	29.21		
EDI	SZ	41	EP	2		21:07	29.55		
EDI	SN	41	ES	3		21:07	35.20		
EDI	SN	41				21:07	37.50	13	0.31
EDI	SE	41				21:07	36.56	17	0.27
EBL	SZ	58	EP	3		21:07	32.43		

September 16 1997 Time: 00:39 7.2 UTC Magnitude: 2.1 ML
Lat: 56.251N Lon: 3.752W Depth: 4.8 km
Grid Ref: 291.46 kmE 707.89 kmN RMS: 0.06 secs
Locality: BLACKFORD, TAYSIDE Quality: B
Comments: FELT BLACKFORD... Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	00:39	10.21		
ELO	SZ	25	IP		D	00:39	11.86		
PCO	SZ	36	IP		C	00:39	13.86		
EAB	SZ	37	IP		C	00:39	13.95		
EAU	SZ	49	EP	3		00:39	15.92		
EDI	SZ	51	EP	2		00:39	16.11		
EDI	SE	51	ES	2		00:39	22.58		
EDI	SN	51				00:39	24.29	63	0.51
EDI	SE	51				00:39	22.77	101	0.29
EDU	SZ	56	EP	1	C	00:39	16.98		
PGB	SZ	67	EP	2		00:39	18.59		
PGB	SE	67	ES	2		00:39	26.89		
PGB	SN	67				00:39	28.92	109	0.24
PGB	SE	67				00:39	30.62	75	0.34
EBL	SZ	69	EP	3		00:39	18.90		
PCA	SZ	69	EP	2		00:39	19.02		
PMS	SZ	77	EP	1	C	00:39	19.97		
EDR	SZ	105	EP	2		00:39	24.27		
ESK	SN	110	ES	3		00:39	38.44		
ESK	SN	110				00:39	43.02	35	0.20
ESK	SE	110				00:39	41.73	37	0.21

September 16 1997 Time: 00:54 9.8 UTC Magnitude: 1.0 ML
Lat: 56.253N Lon: 3.744W Depth: 5.7 km
Grid Ref: 291.93 kmE 708.06 kmN RMS: 0.05 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	00:54	12.78		
ELO	SZ	24	IP		D	00:54	14.43		
PCO	SZ	37	IP	1	C	00:54	16.47		
EAB	SZ	38	IP		C	00:54	16.53		
EAU	SZ	49	EP	3		00:54	18.43		
EDI	SZ	51	EP	3		00:54	18.63		
EDI	SN	51	ES	3		00:54	25.08		
EDI	SN	51				00:54	27.01	5	0.22
EDI	SE	51				00:54	25.33	6	0.29
PGB	SE	67	ES	4		00:54	29.69		
PGB	SN	67				00:54	31.62	11	0.41
PGB	SE	67				00:54	31.26	6	0.18
PCA	SZ	69	EP	2		00:54	21.60		
PMS	SZ	77	EP	2		00:54	22.81		

September 16 1997 Time: 01:43 58.3 UTC Magnitude: 0.7 ML
Lat: 56.248N Lon: 3.751W Depth: 3.9 km
Grid Ref: 291.53 kmE 707.55 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	01:44	01.29		
ELO	SZ	25	IP		D	01:44	02.95		
EAB	SZ	37	IP		C	01:44	05.03		
EAU	SZ	49	EP	2		01:44	06.91		
EDI	SN	50	ES	3		01:44	13.64		
EDI	SN	50				01:44	14.61	5	0.38
EDI	SE	50				01:44	13.78	4	0.16

September 23 1997 Time: 18:35 32.2 UTC Magnitude: 1.2 ML
Lat: 56.192N Lon: 4.100W Depth: 4.5 km
Grid Ref: 269.68 kmE 701.89 kmN RMS: 0.05 secs
Locality: DOUNE, CENTRAL Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	18:35	35.19		
PCO	SZ	23	IP		D	18:35	36.58		
EBH	SZ	37	IP	1	C	18:35	38.97		
ELO	SZ	39	EP	1	C	18:35	39.35		
PGB	SE	49	ES	2		18:35	47.07		
PGB	SN	49				18:35	47.65	15	0.17
PGB	SE	49				18:35	47.15	8	0.16
PMS	SZ	56	EP	3		18:35	42.09		
PCA	SZ	56	EP	2		18:35	41.89		
EDI	SN	64	ES	2		18:35	51.14		
EDI	SN	64				18:35	51.40	13	0.35
EDI	SE	64				18:35	51.38	17	0.22

September 26 1997 Time: 23:19 37.3 UTC Magnitude: 1.2 ML
Lat: 56.132N Lon: 3.714W Depth: 0.1 km
Grid Ref: 293.48 kmE 694.51 kmN RMS: 0.08 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	18	IP	1	C	23:19	41.30		
PCO	SZ	29	IP	1	D	23:19	43.08		
EAU	SZ	36	EP	2		23:19	44.21		
ELO	SZ	38	EP	2		23:19	44.52		
EAB	SZ	39	IP	1	D	23:19	44.68		
EDI	SZ	40	IP	1	C	23:19	45.10		

EDI	SE	40	ES	2		23:19	50.58		
EDI	SN	40				23:19	52.98	16	0.30
EDI	SE	40				23:19	51.86	21	0.36
EBL	SZ	58	EP	2		23:19	47.80		
PCA	SZ	59	EP	2		23:19	47.98		
PGB	SZ	60	EP	1	C	23:19	48.24		
PGB	SN	60	ES	3		23:19	56.30		
PGB	SN	60				23:20	00.15	9	0.20
PGB	SE	60				23:20	01.31	12	0.49
EDU	SZ	63	EP	3		23:19	48.89		
PMS	SZ	72	EP	2		23:19	50.15		

September 27 1997 Time: 06:12 56.1 UTC Magnitude: 1.7 ML
Lat: 52.731N Lon: 1.144W Depth: 16.9 km
Grid Ref: 457.81 kmE 315.18 kmN RMS: 0.10 secs
Locality: LOUGHBOROUGH, LEICS Quality: B
Comments: 4KM SE OF LOUGHBOROUGH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CWF	SZ	11	IP	1	D	06:12	59.54		
CWF	SE	11	ES	2		06:13	02.18		
CWF	SN	11				06:13	02.37	245	0.10
CWF	SE	11				06:13	02.56	193	0.10
KEY	SZ	17	EP	2		06:13	00.39		
KSY	SZ	46	IP	1	C	06:13	04.14		
KUF	SZ	53	EP	2		06:13	05.46		
KWE	SZ	57	EP	2		06:13	05.89		
KBI	SZ	64	IP	1	C	06:13	07.06		
KTG	SZ	68	EP	2		06:13	07.54		
LHO	SZ	102	EP	2		06:13	12.61		
HLM	SZ	120	EP	2		06:13	15.26		
HAE	SZ	123	EP	2		06:13	15.69		
SSP	SZ	138	EP	2		06:13	18.21		
SSP	SE	138	ES	2		06:13	33.45		
SSP	SN	138				06:13	34.04	11	0.22
SSP	SE	138				06:13	35.69	11	0.25
HPK	SZ	140	EP	3		06:13	18.99		
HPK	SN	140	ES	3		06:13	35.46		
HPK	SN	140				06:13	36.66	49	0.18
HPK	SE	140				06:13	36.71	30	0.24
SBD	SZ	144	EP	2		06:13	19.45		
MCH	SZ	150	EP	2		06:13	19.94		
MCH	SN	150	ES	2		06:13	37.00		
MCH	SN	150				06:13	38.53	6	0.17
MCH	SE	150				06:13	39.84	11	0.20
HTR	SZ	162	EP	2		06:13	21.75		
HCG	SZ	177	EP	3		06:13	23.58		

September 28 1997 Time: 23:44 19.9 UTC Magnitude: 1.7 ML
Lat: 49.028N Lon: 3.914W Depth: 9.5 km
Grid Ref: 260.07 kmE -95.07 kmN RMS: 0.32 secs
Locality: ENGLISH CHANNEL Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JSA	SZ	129	EP	3		23:44	40.90		
JRS	SZ	134	EP	2		23:44	41.16		
JRS	SN	134	ES	3		23:44	56.98		
JRS	SN	134				23:44	59.22	15	0.14
JRS	SE	134				23:44	59.47	12	0.09
JQE	SZ	138	EP	3		23:44	41.60		
DCO	SZ	144	EP	2		23:44	42.85		
CGH	SZ	145	EP	3		23:44	43.07		
CMA	SZ	146	EP	3		23:44	42.60		
CBW	SZ	152	EP	3		23:44	43.54		
CGW	SZ	152	EP	2		23:44	43.89		
CCO	SZ	154	EP	2		23:44	43.87		
CCO	SZ	154	ES	3		23:45	01.65		
CR2	SZ	156	EP	3		23:44	45.70		
CR2	SE	156	ES	3		23:45	01.69		
CR2	SN	156				23:45	04.58	5	0.13
CR2	SE	156				23:45	08.08	7	0.02
DYA	SZ	157	EP	3		23:44	46.00		
DYA	SE	157	ES	3		23:45	02.47		
DYA	SN	157				23:45	05.24	10	0.14
DYA	SE	157				23:45	05.24	12	0.13
CST	SZ	158	EP	2		23:44	45.30		
CCA	SZ	160	EP	3		23:44	44.55		
CPZ	SZ	174	EP	3		23:44	48.10		

October 6 1997 Time: 06:21 41.0 UTC Magnitude: 2.7 ML
Lat: 56.198N Lon: 4.099W Depth: 4.1 km
Grid Ref: 269.77 kmE 702.59 kmN RMS: 0.02 secs
Locality: DOUNE, CENTRAL Quality: B
Comments: FELT DOUNE... Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	06:21	43.97		
PCO	SZ	23	IP		D	06:21	45.42		
EBH	SZ	37	IP		C	06:21	47.71		
ELO	SZ	39	IP	1	D	06:21	47.97		
POB	SZ	44	IP	1	D	06:21	48.88		
PGB	SZ	49	IP		D	06:21	49.66		
PGB	SN	49	ES	2		06:21	56.00		
PGB	SN	49				06:21	56.93	396	0.18
PGB	SE	49				06:21	58.05	281	0.44
PCA	SZ	56	IP		D	06:21	50.72		
PMS	SZ	56	IP		D	06:21	50.79		
EAU	SZ	57	EP	1	C	06:21	50.83		
EDI	SZ	65	IP	1	C	06:21	51.99		
EDI	SE	65	ES	2		06:22	00.11		
EDI	SN	65				06:22	00.13	301	0.24
EDI	SE	65				06:22	00.24	490	0.20
EDU	SZ	78	EP	1	C	06:21	54.07		
EBL	SZ	81	IP	1	C	06:21	54.61		
ESY	SZ	98	EP	2		06:21	57.28		
ESK	SZ	113	EP	3		06:21	59.37		
ESK	SN	113	ES	3		06:22	12.99		
GMK	SZ	133	EP	3		06:22	02.48		
GAL	SZ	153	EP	3		06:22	05.33		

October 7 1997 Time: 19:18 40.8 UTC Magnitude: 0.9 ML
Lat: 56.129N Lon: 3.720W Depth: 0.1 km
Grid Ref: 293.08 kmE 694.28 kmN RMS: 0.03 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	1	C	19:18	44.77		
EAU	SZ	36	EP	2		19:18	47.75		
ELO	SZ	38	EP	1	C	19:18	48.13		
EAB	SZ	39	EP	3		19:18	48.26		
EDI	SZ	41	EP	1	C	19:18	48.58		
EDI	SN	41	ES	2		19:18	54.18		
EDI	SN	41				19:18	54.35	11	0.31
EDI	SE	41				19:18	55.52	12	0.27
EBL	SZ	58	EP	3		19:18	51.35		

October 8 1997 Time: 05:07 52.6 UTC Magnitude: 1.2 ML
Lat: 56.143N Lon: 3.751W Depth: 0.9 km
Grid Ref: 291.23 kmE 695.81 kmN RMS: 0.03 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	19	EP	1	C	05:07	56.61		
PCO	SZ	28	EP	1	D	05:07	58.03		
ELO	SZ	37	EP	2		05:07	59.51		
EAU	SZ	38	EP	3		05:07	59.82		
EDI	SZ	43	EP	1	C	05:08	00.54		
EDI	SE	43	ES	2		05:08	06.47		
EDI	SN	43				05:08	08.53	19	0.50
EDI	SE	43				05:08	07.56	20	0.23
EBL	SZ	60	EP	2		05:08	03.37		

October 8 1997 Time: 07:13 28.6 UTC Magnitude: 1.6 ML
Lat: 56.251N Lon: 3.754W Depth: 3.8 km
Grid Ref: 291.30 kmE 707.84 kmN RMS: 0.04 secs
Locality: BLACKFORD, TAYSIDE Quality: B
Comments: FELT BLACKFORD Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	07:13	31.69		
ELO	SZ	25	IP		D	07:13	33.28		
PCO	SZ	36	EP	1	C	07:13	35.25		
EAB	SZ	37	EP	1	C	07:13	35.36		
EAU	SZ	49	EP	2		07:13	37.39		
EDI	SZ	51	EP	1	D	07:13	37.60		
EDI	SE	51	ES	2		07:13	44.08		
EDI	SN	51				07:13	44.03	23	0.20
EDI	SE	51				07:13	44.19	46	0.19
EDU	SZ	56	EP	3		07:13	38.55		
EBL	SZ	69	EP	3		07:13	40.48		
PCA	SZ	69	EP	1	C	07:13	40.53		
PMS	SZ	76	EP	1	D	07:13	41.48		
ESK	SE	110	ES	4		07:14	00.08		
ESK	SN	110				07:14	05.48	12	0.19
ESK	SE	110				07:14	04.54	19	0.18

October 8 1997 Time: 09:37 16.0 UTC Magnitude: 2.1 ML
Lat: 54.232N Lon: 3.121W Depth: 12.1 km
Grid Ref: 326.94 kmE 482.45 kmN RMS: 0.07 secs
Locality: ULVERSTON, CUMBRIA Quality: B
Comments: FELT ULVERSTON... Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LMI	SZ	12	IP		D	09:37	19.20		
LMI	SE	12	ES	1		09:37	21.28		
CDU	SZ	13	IP		D	09:37	19.34		
CSF	SZ	25	IP		D	09:37	21.07		
XDE	SZ	39	IP		D	09:37	23.14		
CKE	SZ	40	IP	1	C	09:37	23.27		
BBO	SZ	57	IP	1	C	09:37	25.98		
BBO	SE	57	ES	2		09:37	32.83		
BBO	SN	57				09:37	34.98	75	0.34
BBO	SE	57				09:37	36.18	45	0.15
GIM	SZ	88	IP	1	C	09:37	30.91		
GIM	SN	88				09:37	41.08	83	0.16
GIM	SE	88				09:37	41.92	56	0.17
LRN	SZ	89	IP	1	C	09:37	31.17		

HPK	SZ	103	EP	2		09:37	33.38		

October 8 1997 Time: 10:20 33.5 UTC Magnitude: 0.9 ML
Lat: 56.266N Lon: 3.716W Depth: 5.5 km
Grid Ref: 293.75 kmE 709.46 kmN RMS: 0.04 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	13	IP		C	10:20	36.27		
ELO	SZ	23	EP	1	D	10:20	37.89		
EDI	SE	50	ES	2		10:20	48.69		
EDI	SN	50				10:20	49.60	8	0.31
EDI	SE	50				10:20	48.77	7	0.15
EAU	SZ	50	EP	2		10:20	42.28		
EDU	SZ	54	EP	3		10:20	42.87		

October 9 1997 Time: 02:06 52.3 UTC Magnitude: 1.0 ML
Lat: 57.356N Lon: 4.294W Depth: 12.0 km
Grid Ref: 262.02 kmE 831.80 kmN RMS: 0.07 secs
Locality: LOCH NESS, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
MDO	SZ	10	IP		C	02:06	55.15		
KAC	SZ	63	EP	1	D	02:07	02.80		
MVH	SZ	64	EP	2		02:07	03.06		
MCD	SZ	67	EP	1	C	02:07	03.54		
MCD	SE	67	ES	2		02:07	11.73		
MCD	SN	67				02:07	14.17	5	0.21
MCD	SE	67				02:07	12.25	8	0.20
MME	SZ	80	EP	2		02:07	05.68		
MFI	SZ	123	EP	2		02:07	12.19		

October 12 1997 Time: 19:27 25.8 UTC Magnitude: 2.7 ML
Lat: 62.079N Lon: 1.873E Depth: 15.0 km
Grid Ref: 602.23 kmE 1361.46 kmN RMS: 0.09 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YEL	SZ	233	IP	1	D	19:27	58.66		
YEL	SZ	233	ES	3		19:28	22.60		
LRW	SZ	272	EP	2		19:28	03.58		
LRW	SN	272	ES	3		19:28	31.51		
LRW	SN	272				19:28	32.77	27	0.08
LRW	SE	272				19:28	32.82	21	0.12
WAL	SZ	276	EP	2		19:28	04.18		
SAN	SZ	285	EP	2		19:28	05.07		

October 12 1997 Time: 19:36 5.2 UTC Magnitude: 1.2 ML
Lat: 57.675N Lon: 5.561W Depth: 5.7 km
Grid Ref: 187.72 kmE 870.60 kmN RMS: 0.08 secs
Locality: LOCH MAREE, HIGHLAND Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
RRR	SZ	25	IP	1	C	19:36	10.01		
RRR	SE	25	ES	2		19:36	13.21		
RRR	SN	25				19:36	13.61	89	0.13
RRR	SE	25				19:36	13.57	64	0.08
KAC	SZ	25	IP		C	19:36	09.91		
REB	SZ	52	IP	1	D	19:36	14.18		
RTO	SZ	87	IP	1	C	19:36	19.87		
RFO	SZ	105	EP	2		19:36	22.48		

October 15 1997 Time: 22:21 38.2 UTC Magnitude: 1.7 ML
Lat: 53.203N Lon: 1.066W Depth: 1.0 km
Grid Ref: 462.36 kmE 367.73 kmN RMS: 0.17 secs
Locality: OLLERTON, NOTTS Quality: D
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	31	EP	2		22:21	44.42		
KSY	SZ	42	EP	2		22:21	46.02		
CWF	SZ	54	EP	2		22:21	48.02		
CWF	SE	54	ES	2		22:21	55.29		
CWF	SN	54				22:22	00.57	13	0.24
CWF	SE	54				22:21	57.61	11	0.28
KWE	SZ	56	EP	2		22:21	48.20		
LHO	SZ	65	EP	2		22:21	48.73		
HPK	SZ	92	EP	3		22:21	52.50		
HPK	SN	92	ES	3		22:22	04.10		
HPK	SN	92				22:22	10.09	69	0.16
HPK	SE	92				22:22	08.50	54	0.37

October 16 1997 Time: 00:19 11.7 UTC Magnitude: 2.8 ML
Lat: 50.390N Lon: 3.730W Depth: 10.4 km
Grid Ref: 277.03 kmE 55.99 kmN RMS: 0.05 secs
Locality: DARTMOUTH, DEVON Quality: C
Comments: FELT DARTMOUTH... Intensity: 4

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
DCO	SZ	13	IP		C	00:19	14.53		
DYA	SZ	15	IP		D	00:19	14.92		
DYA	SE	15	ES	2		00:19	17.29		
HEX	SZ	75	EP	1	C	00:19	24.48		
CSA	SZ	83	EP	2		00:19	25.54		
HTL	SZ	86	IP	1	D	00:19	26.61		
HTL	SN	86	ES	2		00:19	36.97		
HTL	SN	86				00:19	38.05	252	0.19
HTL	SE	86				00:19	37.84	247	0.14
CR2	SZ	106	EP	2		00:19	29.42		
CR2	SN	106	ES	2		00:19	42.24		
CR2	SN	106				00:19	44.22	230	0.08
CR2	SE	106				00:19	44.98	138	0.08

October 18 1997 Time: 23:57 55.9 UTC Magnitude: 0.8 ML
Lat: 51.859N Lon: 2.713W Depth: 14.7 km
Grid Ref: 350.89 kmE 218.06 kmN RMS: 0.05 secs
Locality: MONMOUTH, GWENT Quality: B
Comments: 5KM NORTH OF MONMOUTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	23	IP		C	23:58	00.52		
HGH	SZ	25	IP		C	23:58	00.88		
MCH	SZ	25	IP		D	23:58	00.87		
MCH	SN	25	ES	2		23:58	04.45		
MCH	SN	25				23:58	04.60	42	0.11
MCH	SE	25				23:58	04.60	39	0.08
HTR	SZ	45	IP		D	23:58	03.86		
SSP	SZ	68	EP	2		23:58	07.52		
SSP	SN	68				23:58	18.99	3	0.13
SSP	SE	68				23:58	16.58	3	0.19

October 19 1997 Time: 02:42 23.5 UTC Magnitude: 2.5 ML
Lat: 57.592N Lon: 5.648W Depth: 8.8 km
Grid Ref: 182.04 kmE 861.61 kmN RMS: 0.17 secs
Locality: WESTER ROSS, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	23	IP		C	02:42	28.14		
KPL	SZ	28	IP		D	02:42	28.71		
KPL	SE	28	ES	2		02:42	32.19		
RRR	SZ	31	EP	2		02:42	29.15		
RRR	SE	31	ES	2		02:42	33.23		
KSB	SZ	45	IP		C	02:42	31.21		
REB	SZ	63	IP		D	02:42	34.00		
KSK	SZ	65	IP		C	02:42	34.71		
RRH	SZ	72	EP	1	C	02:42	35.19		
KAR	SZ	76	IP	1	D	02:42	35.95		
MDO	SZ	79	EP	1	C	02:42	36.56		
RSC	SZ	89	EP	1	D	02:42	37.96		
RTO	SZ	94	EP	1	C	02:42	38.78		
MCD	SZ	143	EP	2		02:42	45.64		
MCD	SE	143	ES	3		02:43	02.13		
MCD	SN	143				02:43	04.34	58	0.19
MCD	SE	143				02:43	04.44	98	0.14
ORE	SZ	154	EP	3		02:42	47.35		
ORE	SN	154				02:43	07.50	62	0.14
ORE	SE	154				02:43	07.25	44	0.12

October 22 1997 Time: 11:20 34.8 UTC Magnitude: 2.3 ML
Lat: 55.663N Lon: 5.409W Depth: 7.7 km
Grid Ref: 185.61 kmE 646.30 kmN RMS: 0.09 secs
Locality: KINTYRE, STRATHCLYDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	37	IP		D	11:20	41.25		
PMS	SZ	46	IP		C	11:20	42.55		
PGB	SZ	61	IP		C	11:20	45.07		
PGB	SE	61	ES	2		11:20	52.45		
PGB	SN	61				11:20	52.54	231	0.21
PGB	SE	61				11:20	52.61	287	0.22
PCA	SZ	73	IP		C	11:20	46.90		
GCL	SZ	79	IP		D	11:20	47.98		
EAB	SZ	89	EP	1	C	11:20	49.16		
PCO	SZ	90	EP	1	D	11:20	49.68		
GAL	SZ	99	EP	1	D	11:20	51.04		
GAL	SE	99	ES	3		11:21	02.82		
GAL	SN	99				11:21	05.78	24	0.08
GAL	SE	99				11:21	04.97	45	0.16
EAU	SZ	125	EP	2		11:20	55.05		
KNR	SZ	132	EP	2		11:20	55.89		
EBH	SZ	135	EP	2		11:20	56.56		
EDI	SZ	142	EP	2		11:20	57.42		
EDI	SN	142	ES	3		11:21	13.89		
EDI	SN	142				11:21	18.64	38	0.22
EDI	SE	142				11:21	16.87	29	0.20
KAR	SZ	142	EP	2		11:20	57.46		
EBL	SZ	149	EP	2		11:20	58.47		

October 22 1997 Time: 12:52 55.3 UTC Magnitude: 0.9 ML
Lat: 56.251N Lon: 3.758W Depth: 5.2 km
Grid Ref: 291.11 kmE 707.86 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	12:52	58.39		
ELO	SZ	25	IP	1	C	12:52	59.93		
PCO	SZ	36	EP	1	C	12:53	01.88		
EAB	SZ	37	IP		C	12:53	01.96		
EDI	SZ	51	EP	3		12:53	04.15		
EDI	SN	51	ES	3		12:53	10.56		
EDI	SN	51				12:53	10.65	9	0.16
EDI	SE	51				12:53	10.89	5	0.04

EDU	SZ	57	EP	1	C	12:53	05.05		
PCA	SZ	69	EP	2		12:53	07.01		

October 24 1997 Time: 23:01 54.9 UTC Magnitude: 1.4 ML
Lat: 53.109N Lon: 2.402W Depth: 14.5 km
Grid Ref: 373.07 kmE 356.98 kmN RMS: 0.11 secs
Locality: CREWE, CHESHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	39	IP	1	C	23:02	01.83		
KBI	SZ	61	EP	1	C	23:02	05.24		
SBD	SZ	62	EP	1	C	23:02	05.26		
HLM	SZ	73	EP	3		23:02	07.45		
CWF	SZ	85	EP	2		23:02	08.97		
CWF	SN	85	ES	2		23:02	18.86		
CWF	SN	85				23:02	19.64	14	0.10
CWF	SE	85				23:02	22.38	6	0.06
SSP	SZ	91	EP	2		23:02	10.06		
SSP	SE	91	ES	2		23:02	21.19		
SSP	SN	91				23:02	21.71	11	0.11
SSP	SE	91				23:02	23.14	8	0.13
WPM	SZ	102	EP	2		23:02	11.28		
MCH	SZ	130	EP	3		23:02	16.22		
MCH	SN	130	ES	3		23:02	31.32		
MCH	SN	130				23:02	31.73	6	0.18
MCH	SE	130				23:02	33.67	12	0.12

October 26 1997 Time: 10:31 41.1 UTC Magnitude: 0.6 ML
Lat: 56.250N Lon: 3.750W Depth: 3.6 km
Grid Ref: 291.57 kmE 707.70 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	10:31	44.12		
ELO	SZ	25	IP		D	10:31	45.74		
EAB	SZ	37	IP		C	10:31	47.87		
EDI	SE	51	ES	3		10:31	56.54		
EDI	SN	51				10:31	56.64	3	0.24
EDI	SE	51				10:31	56.68	4	0.28
EDU	SZ	56	EP	3		10:31	50.99		

October 26 1997 Time: 21:38 2.1 UTC Magnitude: 0.9 ML
Lat: 56.250N Lon: 3.750W Depth: 4.4 km
Grid Ref: 291.55 kmE 707.74 kmN RMS: 0.02 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	21:38	05.14		
ELO	SZ	25	IP		D	21:38	06.76		
EAB	SZ	37	IP		C	21:38	08.88		
EAU	SZ	49	EP	2		21:38	10.74		
EDI	SZ	51	EP	3		21:38	11.07		
EDI	SE	51	ES	2		21:38	17.45		
EDI	SN	51				21:38	18.88	6	0.29
EDI	SE	51				21:38	17.72	9	0.27
EDU	SZ	56	EP	3		21:38	11.88		

October 28 1997 Time: 00:46 27.3 UTC Magnitude: 1.5 ML
Lat: 54.636N Lon: 3.700W Depth: 14.2 km
Grid Ref: 290.27 kmE 528.10 kmN RMS: 0.12 secs
Locality: WORKINGTON, CUMBRIA Quality: B
Comments: 10KM WEST OF WORKINGTON OFFSHORE LOCATION

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
XDE	SZ	20	IP		D	00:46	31.65		
GCD	SZ	30	IP		D	00:46	33.20		
BBO	SZ	31	IP	1	C	00:46	33.05		
BBO	SN	31				00:46	37.57	68	0.20
BBO	SE	31				00:46	37.49	47	0.14
CSF	SZ	36	IP	1	D	00:46	34.03		
BNA	SZ	37	IP		C	00:46	34.07		
CKE	SZ	39	EP	1	C	00:46	34.53		
CDU	SZ	47	IP		D	00:46	35.75		
LMI	SZ	53	IP	1	D	00:46	36.88		
LMI	SN	53	ES	2		00:46	43.27		
LMI	SN	53				00:46	43.45	20	0.20
LMI	SE	53				00:46	47.12	19	0.30
BWH	SZ	60	IP		C	00:46	38.04		
BHH	SZ	60	IP	1	C	00:46	37.57		
BHH	SN	60	ES	2		00:46	45.18		
BHH	SN	60				00:46	46.57	40	0.23
BHH	SE	60				00:46	48.48	37	0.21
GIM	SZ	63	IP	1	C	00:46	38.19		
GIM	SN	63				00:46	48.34	21	0.15
GIM	SE	63				00:46	48.37	19	0.22
GAL	SZ	70	IP	1	C	00:46	39.81		
GAL	SN	70	ES	2		00:46	47.87		
GAL	SN	70				00:46	49.14	24	0.24
GAL	SE	70				00:46	51.10	22	0.19
BTA	SZ	72	EP	2		00:46	39.78		
BTA	SN	72				00:46	50.34	18	0.23
BTA	SE	72				00:46	50.65	20	0.34
BBH	SZ	74	IP	1	C	00:46	39.99		

October 28 1997 Time: 09:20 37.7 UTC Magnitude: 1.7 ML
Lat: 52.973N Lon: 2.279W Depth: 2.3 km
Grid Ref: 381.24 kmE 341.77 kmN RMS: 0.11 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F,FELT KEELE Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	30	IP	1	D	09:20	43.11		
KBI	SZ	59	IP	1	D	09:20	48.21		
HLM	SZ	65	EP	2		09:20	49.42		
CWF	SZ	70	EP	2		09:20	49.81		
SSP	SZ	84	EP	2		09:20	51.92		
SSP	SN	84	ES	2		09:21	01.98		
SSP	SN	84				09:21	03.59	18	0.18
SSP	SE	84				09:21	03.69	13	0.23
WPM	SZ	113	EP	3		09:20	56.62		
MCH	SZ	119	EP	2		09:20	57.49		
MCH	SE	119	ES	2		09:21	11.83		
MCH	SN	119				09:21	14.16	22	0.23
MCH	SE	119				09:21	16.46	33	0.18
HTR	SZ	120	EP	2		09:20	57.53		
YLL	SZ	128	EP	2		09:20	58.63		

October 29 1997 Time: 15:20 53.5 UTC Magnitude: 0.9 ML
Lat: 53.032N Lon: 1.078W Depth: 2.9 km
Grid Ref: 461.85 kmE 348.77 kmN RMS: 0.10 secs
Locality: CALVERTON, NOTTS Quality: C
Comments: C/F,FELT CALVERTON... Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSY	SZ	34	EP	1	C	15:20	59.68		
CWF	SZ	36	EP	2		15:21	00.29		
CWF	SE	36	ES	2		15:21	04.77		
CWF	SN	36				15:21	08.70	15	0.34
CWF	SE	36				15:21	09.82	16	0.46
KBI	SZ	39	EP	1	D	15:21	00.55		
KWE	SZ	52	EP	3		15:21	02.66		
LMK	SZ	69	EP	3		15:21	05.61		

October 30 1997 Time: 08:02 25.9 UTC Magnitude: 0.9 ML
Lat: 56.248N Lon: 3.751W Depth: 4.6 km
Grid Ref: 291.48 kmE 707.50 kmN RMS: 0.01 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	08:02	28.91		
ELO	SZ	25	IP	1	C	08:02	30.59		
EAB	SZ	37	EP	1	C	08:02	32.63		
EDI	SE	50	ES	2		08:02	41.20		
EDI	SN	50				08:02	41.16	5	0.16
EDI	SE	50				08:02	41.35	10	0.30
EDU	SZ	57	EP	2		08:02	35.62		

October 30 1997 Time: 08:13 13.4 UTC Magnitude: 1.3 ML
Lat: 56.335N Lon: 6.293W Depth: 14.8 km
Grid Ref: 134.67 kmE 724.17 kmN RMS: 0.02 secs
Locality: MULL, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	71	EP	3		08:13	25.25		
KNR	SZ	98	EP	3		08:13	29.23		
KSB	SZ	111	EP	3		08:13	31.19		
KPL	SZ	118	EP	3		08:13	32.17		
KPL	SN	118	ES	3		08:13	45.80		
KPL	SN	118				08:13	48.13	5	0.10
KPL	SE	118				08:13	49.38	8	0.16
KAC	SZ	143	EP	3		08:13	35.99		

October 31 1997 Time: 00:01 37.4 UTC Magnitude: 0.3 ML
Lat: 52.961N Lon: 4.453W Depth: 9.2 km
Grid Ref: 235.24 kmE 343.26 kmN RMS: 0.04 secs
Locality: PWLLHELI, GWYNEDD Quality: B
Comments: 9KM NW OF PWLLHELI

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	3	IP		D	00:01	39.06		
YRE	SZ	3	ES	2		00:01	40.20		
YRE	SZ	3				00:01	40.47	44	0.08
YRH	SZ	19	IP		C	00:01	40.90		
YRH	SZ	19				00:01	43.49	6	0.06
YLL	SZ	28	IP		C	00:01	42.33		
YLL	SZ	28	ES	3		00:01	45.51		
YRC	SZ	33	IP	1	D	00:01	43.31		
WLF	SZ	37	IP		D	00:01	43.75		
WLF	SZ	37				00:01	48.43	7	0.14
WFB	SZ	42	EP	2		00:01	44.63		
WPM	SZ	50	EP	2		00:01	45.89		

November 1 1997 Time: 05:49 49.7 UTC Magnitude: 0.9 ML
Lat: 56.190N Lon: 4.102W Depth: 3.6 km
Grid Ref: 269.54 kmE 701.67 kmN RMS: 0.04 secs
Locality: DOUNE, CENTRAL Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	05:49	52.62		
PCO	SZ	23	IP		D	05:49	54.02		
EBH	SZ	38	EP	1	C	05:49	56.43		

EAU	SZ	49	EP	2		03:03	50.15		
EDI	SZ	51	EP	2		03:03	50.31		
EDI	SE	51	ES	3		03:03	56.88		
EDI	SN	51				03:03	56.75	4	0.18
EDI	SE	51				03:03	58.73	6	0.35
EDU	SZ	57	EP	3		03:03	51.33		
PMS	SZ	76	EP	3		03:03	54.29		

November 8 1997 Time: 03:04 45.7 UTC **Magnitude: 1.2 ML**
Lat: 56.253N Lon: 3.758W **Depth: 5.5 km**
Grid Ref: 291.07 kmE 708.07 kmN **RMS: 0.03 secs**
Locality: BLACKFORD, TAYSIDE **Quality: B**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	03:04	48.78		
ELO	SZ	24	IP	1	C	03:04	50.30		
PCO	SZ	36	EP	1	D	03:04	52.30		
EAB	SZ	37	IP		C	03:04	52.32		
EAU	SZ	49	EP	2		03:04	54.37		
EDI	SZ	51	IP		D	03:04	54.60		
EDI	SN	51	ES	2		03:05	00.95		
EDI	SN	51				03:05	01.01	13	0.14
EDI	SE	51				03:05	01.99	15	0.24
EDU	SZ	57	EP	1	C	03:04	55.38		
PGB	SZ	67	EP	1	D	03:04	56.95		
PGB	SN	67				03:05	09.63	13	0.17
PGB	SE	67				03:05	08.17	8	0.24
PMS	SZ	76	EP	2		03:04	58.45		

November 8 1997 Time: 04:18 10.3 UTC **Magnitude: 0.2 ML**
Lat: 56.242N Lon: 3.754W **Depth: 2.9 km**
Grid Ref: 291.33 kmE 706.85 kmN **RMS: 0.03 secs**
Locality: BLACKFORD, TAYSIDE **Quality: B**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	04:18	13.39		
ELO	SZ	26	EP	1	D	04:18	15.11		
EAB	SZ	37	IP		C	04:18	17.04		
EAU	SZ	48	EP	3		04:18	18.98		
EDI	SN	50	ES	3		04:18	25.67		
EDI	SN	50				04:18	25.78	2	0.16
EDI	SE	50				04:18	25.86	1	0.07
EDU	SZ	57	EP	3		04:18	20.39		

November 8 1997 Time: 04:47 1.5 UTC **Magnitude: 2.5 ML**
Lat: 57.670N Lon: 5.569W **Depth: 9.7 km**
Grid Ref: 187.18 kmE 870.03 kmN **RMS: 0.07 secs**
Locality: LOCH MAREE, HIGHLAND **Quality: C**
Comments: FELT GAIRLOCH **Intensity: 4+**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	25	IP		C	04:47	06.26		
RRR	SZ	25	IP	1	C	04:47	06.32		
RRR	SE	25	ES	2		04:47	09.61		
KPL	SZ	37	EP	1	C	04:47	08.09		
KSB	SZ	52	IP	1	C	04:47	10.41		
REB	SZ	53	IP		D	04:47	10.50		
RRH	SZ	72	EP	1	C	04:47	13.61		
MDO	SZ	77	EP	2		04:47	14.35		
RSC	SZ	79	IP	1	D	04:47	14.57		
RTO	SZ	87	IP	1	C	04:47	16.16		
MVH	SZ	87	IP	1	D	04:47	16.20		
KNR	SZ	101	IP	1	C	04:47	18.43		
OTO	SZ	115	IP	1	D	04:47	20.38		
MCD	SZ	139	EP	2		04:47	23.75		
MCD	SN	139	ES	2		04:47	39.30		
MCD	SN	139				04:47	41.28	78	0.30
MCD	SE	139				04:47	42.19	97	0.23
ORE	SZ	145	EP	2		04:47	24.27		
ORE	SN	145				04:47	42.96	51	0.22
ORE	SE	145				04:47	42.96	47	0.15

November 8 1997 Time: 10:30 26.6 UTC **Magnitude: 1.4 ML**
Lat: 56.250N Lon: 3.759W **Depth: 5.1 km**
Grid Ref: 291.04 kmE 707.82 kmN **RMS: 0.01 secs**
Locality: BLACKFORD, TAYSIDE **Quality: B**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	10:30	29.75		
ELO	SZ	25	EP	1	C	10:30	31.29		
PCO	SZ	36	EP	1	C	10:30	33.24		
EAB	SZ	37	IP		C	10:30	33.31		
EAU	SZ	49	EP	2		10:30	35.26		
EDI	SZ	51	IP	1	D	10:30	35.54		
EDI	SN	51	ES	2		10:30	42.00		
EDI	SN	51				10:30	41.99	21	0.13
EDI	SE	51				10:30	43.08	23	0.28
EDU	SZ	57	EP	1	C	10:30	36.40		
PGB	SZ	67	EP	2		10:30	37.89		
PGB	SN	67	ES	3		10:30	46.17		
PGB	SN	67				10:30	50.63	16	0.18
PGB	SE	67				10:30	49.37	14	0.37
PMS	SZ	76	EP	2		10:30	39.42		

November 9 1997 Time: 07:07 12.8 UTC **Magnitude: 1.3 ML**
Lat: 56.194N Lon: 4.103W **Depth: 3.8 km**
Grid Ref: 269.53 kmE 702.19 kmN **RMS: 0.04 secs**
Locality: DOUNE, CENTRAL **Quality: B**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	07:07	15.77		
PCO	SZ	23	IP		D	07:07	17.20		
EBH	SZ	37	EP	1	C	07:07	19.56		
ELO	SZ	39	EP	1	C	07:07	19.96		
PGB	SZ	49	IP	1	D	07:07	21.46		
PGB	SN	49	ES	2		07:07	27.83		
PGB	SN	49				07:07	27.94	18	0.41
PGB	SE	49				07:07	28.41	13	0.28
PMS	SZ	56	EP	1	D	07:07	22.60		
EAU	SZ	56	EP	1	C	07:07	22.69		
PCA	SZ	56	IP	1	D	07:07	22.53		
EDI	SZ	65	EP	2		07:07	23.84		
EDI	SE	65	ES	2		07:07	31.96		
EDI	SN	65				07:07	32.12	19	0.36
EDI	SE	65				07:07	32.09	17	0.25
EDU	SZ	78	EP	2		07:07	25.95		

November 11 1997 Time: 01:26 38.3 UTC **Magnitude: 1.7 ML**
Lat: 52.946N Lon: 2.249W **Depth: 2.8 km**
Grid Ref: 383.29 kmE 338.80 kmN **RMS: 0.05 secs**
Locality: NEWCASTLE-U-LYME, STAFFS **Quality: C**
Comments: C/F,FELT WHITMORE **Intensity: 4+**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	28	IP	1	D	01:26	43.51		
KBI	SZ	59	IP	1	D	01:26	48.65		
HLM	SZ	64	EP	3		01:26	49.31		
CWF	SZ	68	EP	3		01:26	50.07		
CWF	SN	68	ES	3		01:26	58.32		
CWF	SN	68				01:26	59.33	18	0.28
CWF	SE	68				01:26	59.44	13	0.25
SSP	SZ	83	EP	3		01:26	52.26		
SSP	SE	83	ES	3		01:27	02.54		
SSP	SN	83				01:27	04.02	21	0.18
SSP	SE	83				01:27	07.44	15	0.22
MCH	SZ	117	EP	3		01:26	57.74		
MCH	SN	117	ES	3		01:27	12.06		
MCH	SN	117				01:27	14.58	21	0.20
MCH	SE	117				01:27	16.99	35	0.17

November 11 1997 Time: 07:20 53.6 UTC **Magnitude: 1.5 ML**
Lat: 53.227N Lon: 2.423W **Depth: 10.0 km**
Grid Ref: 371.75 kmE 370.05 kmN **RMS: 0.08 secs**
Locality: NORTHWICH, CHESHIRE **Quality: C**
Comments: 5KM SE OF NORTHWICH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	45	EP	2		07:21	01.43		
KBI	SZ	60	EP	2		07:21	03.77		
HLM	SZ	85	EP	3		07:21	07.08		
CWF	SZ	93	EP	3		07:21	09.03		
CWF	SN	93	ES	3		07:21	19.68		
CWF	SN	93				07:21	23.12	9	0.14
CWF	SE	93				07:21	23.97	9	0.08
WPM	SZ	99	EP	2		07:21	09.77		
SSP	SZ	101	EP	2		07:21	10.30		
SSP	SN	101	ES	3		07:21	22.59		
SSP	SN	101				07:21	24.18	9	0.12
SSP	SE	101				07:21	24.23	14	0.25
YLL	SZ	117	EP	2		07:21	12.48		
WFB	SZ	124	EP	2		07:21	13.69		
YRE	SZ	137	EP	2		07:21	15.38		
YRH	SZ	154	EP	2		07:21	17.69		

November 11 1997 Time: 22:55 22.2 UTC **Magnitude: 0.7 ML**
Lat: 56.249N Lon: 3.759W **Depth: 5.1 km**
Grid Ref: 291.05 kmE 707.62 kmN **RMS: 0.03 secs**
Locality: BLACKFORD, TAYSIDE **Quality: B**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	22:55	25.33		
ELO	SZ	25	EP	2		22:55	26.93		
EAB	SZ	37	IP		C	22:55	28.90		
EDI	SZ	51	EP	1	D	22:55	31.15		
EDI	SE	51	ES	2		22:55	37.55		
EDI	SN	51				22:55	37.55	4	0.18
EDI	SE	51				22:55	37.79	4	0.29
EDU	SZ	57	EP	3		22:55	31.99		

November 12 1997 Time: 22:23 6.3 UTC **Magnitude: 0.9 ML**
Lat: 53.052N Lon: 1.865W **Depth: 0.7 km**
Grid Ref: 409.04 kmE 350.59 kmN **RMS: 0.06 secs**
Locality: ASHBOURNE, DERBYSHIRE **Quality: C**
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	4	EP	2		22:23	07.40		
KBI	SZ	32	EP	2		22:23	12.52		
CWF	SZ	51	EP	3		22:23	16.25		
CWF	SN	51	ES	3		22:23	22.73		

CWF	SN	51			22:23	23.06	8	0.20
CWF	SE	51			22:23	23.30	5	0.22

November 14 1997 Time: 00:30 45.4 UTC Magnitude: 1.8 ML
Lat: 51.627N Lon: 3.034W Depth: 4.3 km
Grid Ref: 328.46 kmE 192.56 kmN RMS: 0.10 secs
Locality: NEWPORT, GWENT Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HGH	SZ	16	IP		D	00:30	48.51		
MCH	SZ	41	IP	1	C	00:30	52.85		
MCH	SN	41	ES	1		00:30	58.15		
MCH	SN	41				00:30	58.37	96	0.20
MCH	SE	41				00:30	58.33	147	0.15
SMD	SZ	42	EP	2		00:30	52.94		
HTR	SZ	53	IP	1	D	00:30	54.66		
HAE	SZ	57	IP	1	C	00:30	55.44		
HSA	SZ	79	IP	1	C	00:30	59.11		
HEX	SZ	82	IP	1	C	00:30	59.98		
SSP	SZ	88	EP	2		00:31	00.20		
SSP	SN	88				00:31	15.87	16	0.14
SSP	SE	88				00:31	11.21	21	0.21
HTL	SZ	123	EP	2		00:31	06.88		
HTL	SN	123	ES	2		00:31	21.25		
HTL	SN	123				00:31	22.52	17	0.24
HTL	SE	123				00:31	22.95	20	0.16

November 14 1997 Time: 02:49 1.6 UTC Magnitude: 1.4 ML
Lat: 56.251N Lon: 3.758W Depth: 4.9 km
Grid Ref: 291.08 kmE 707.86 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B
Comments: FELT BLACKFORD Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	02:49	04.76		
ELO	SZ	25	IP	1	D	02:49	06.29		
PCO	SZ	36	EP	1	C	02:49	08.18		
EAB	SZ	37	IP		C	02:49	08.32		
EAU	SZ	49	EP	3		02:49	10.33		
EDI	SZ	51	EP	1	D	02:49	10.59		
EDI	SN	51	ES	2		02:49	17.01		
EDI	SN	51				02:49	17.02	18	0.15
EDI	SE	51				02:49	19.30	23	0.27
EDU	SZ	57	EP	1	C	02:49	11.39		
PGB	SZ	67	EP	2		02:49	12.98		
PGB	SN	67	ES	3		02:49	21.26		
PGB	SN	67				02:49	23.59	20	0.48
PGB	SE	67				02:49	24.43	15	0.37
PCA	SZ	69	EP	2		02:49	13.38		
PMS	SZ	76	EP	2		02:49	14.46		

November 15 1997 Time: 05:03 35.2 UTC Magnitude: 1.4 ML
Lat: 52.944N Lon: 2.263W Depth: 1.3 km
Grid Ref: 382.36 kmE 338.52 kmN RMS: 0.06 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	29	IP	1	D	05:03	40.81		
KBI	SZ	60	EP	1	D	05:03	45.94		
HLM	SZ	63	EP	2		05:03	46.43		
SBD	SZ	67	IP	1	D	05:03	46.98		
CWF	SZ	68	EP	2		05:03	47.12		
CWF	SN	68				05:03	56.61	12	0.27
CWF	SE	68				05:03	56.73	6	0.26
SSP	SZ	82	EP	2		05:03	49.54		
SSP	SN	82	ES	2		05:03	59.62		
SSP	SN	82				05:04	01.21	13	0.19
SSP	SE	82				05:04	04.25	9	0.23
MCH	SZ	117	EP	2		05:03	55.04		
MCH	SN	117				05:04	11.97	15	0.17
MCH	SE	117				05:04	14.18	23	0.16

November 15 1997 Time: 06:13 4.9 UTC Magnitude: 1.8 ML
Lat: 56.252N Lon: 3.754W Depth: 4.8 km
Grid Ref: 291.35 kmE 707.95 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B
Comments: FELT BLACKFORD Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	06:13	08.00		
ELO	SZ	25	IP		D	06:13	09.58		
PCO	SZ	36	IP		C	06:13	11.61		
EAB	SZ	37	IP		C	06:13	11.67		
EAU	SZ	49	EP	2		06:13	13.59		
EDI	SZ	51	EP	2		06:13	13.92		
EDI	SN	51	ES	2		06:13	20.27		
EDI	SN	51				06:13	22.28	31	0.35
EDI	SE	51				06:13	20.56	56	0.23
EDU	SZ	56	EP	2		06:13	14.71		
PGB	SZ	67	EP	1	D	06:13	16.34		
PGB	SN	67	ES	3		06:13	24.54		
PGB	SN	67				06:13	26.56	62	0.31
PGB	SE	67				06:13	28.23	29	0.21
EBL	SZ	69	EP	3		06:13	16.81		
PCA	SZ	69	EP	2		06:13	16.78		
PMS	SZ	77	EP	2		06:13	17.75		
ESY	SZ	80	EP	3		06:13	18.51		

November 19 1997 Time: 13:12 56.4 UTC Magnitude: 1.7 ML
Lat: 51.699N Lon: 4.243W Depth: 20.1 km
Grid Ref: 245.00 kmE 202.41 kmN RMS: 0.07 secs
Locality: BURRY PORT, DYFED Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HSA	SZ	8	IP	1	D	13:13	00.09		
HPE	SZ	45	IP		C	13:13	04.55		
HTR	SZ	79	EP	2		13:13	09.21		
HCG	SZ	80	EP	2		13:13	09.59		
HTL	SZ	80	IP	1	D	13:13	09.66		
HTL	SE	80	ES	2		13:13	18.72		
HTL	SN	80				13:13	19.92	15	0.13
HTL	SE	80				13:13	20.21	17	0.27
MCH	SZ	92	EP	2		13:13	11.04		
MCH	SN	92	ES	2		13:13	22.12		
MCH	SN	92				13:13	24.72	15	0.08
MCH	SE	92				13:13	24.86	11	0.10
HGH	SZ	100	EP	2		13:13	12.33		
SSP	SZ	111	EP	2		13:13	14.21		
SSP	SE	111	ES	2		13:13	28.06		
SSP	SN	111				13:13	29.52	34	0.17
SSP	SE	111				13:13	30.48	16	0.22

November 20 1997 Time: 04:30 32.8 UTC Magnitude: 1.3 ML
Lat: 56.817N Lon: 5.527W Depth: 4.9 km
Grid Ref: 184.77 kmE 775.01 kmN RMS: 0.10 secs
Locality: LOCH SHIEL, HIGHLAND Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	22	IP	1	C	04:30	36.95		
KSB	SZ	44	IP	1	D	04:30	40.49		
KPL	SZ	59	EP	2		04:30	43.01		
KPL	SN	59	ES	3		04:30	50.45		
KPL	SN	59				04:30	54.06	16	0.10
KPL	SE	59				04:30	54.19	11	0.14
KAC	SZ	77	EP	1	C	04:30	46.04		

November 21 1997 Time: 01:27 2.8 UTC Magnitude: 0.8 ML
Lat: 53.211N Lon: 0.989W Depth: 0.5 km
Grid Ref: 467.52 kmE 368.78 kmN RMS: 0.18 secs
Locality: OLLERTON, NOTTS Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	36	EP	2		01:27	09.91		
KSY	SZ	39	EP	2		01:27	10.22		
CWF	SZ	57	EP	3		01:27	12.69		
CWF	SN	57	ES	3		01:27	21.04		
CWF	SN	57				01:27	21.92	4	0.16
CWF	SE	57				01:27	22.40	5	0.30
KWE	SZ	61	EP	2		01:27	13.68		

November 22 1997 Time: 03:43 20.2 UTC Magnitude: 2.1 ML
Lat: 56.184N Lon: 4.100W Depth: 5.1 km
Grid Ref: 269.70 kmE 701.04 kmN RMS: 0.03 secs
Locality: DOUNE, CENTRAL Quality: B
Comments: FELT DOUNE Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	03:43	23.26		
PCO	SZ	22	IP		D	03:43	24.37		
EBH	SZ	37	EP	1	C	03:43	27.00		
ELO	SZ	40	IP	1	C	03:43	27.39		
POB	SZ	43	EP	1	D	03:43	27.84		
PGB	SZ	48	IP		D	03:43	28.64		
PGB	SE	48	ES	2		03:43	34.79		
PGB	SN	48				03:43	35.47	136	0.23
PGB	SE	48				03:43	35.46	83	0.25
PMS	SZ	55	IP		D	03:43	29.80		
PCA	SZ	55	IP		D	03:43	29.71		
EDI	SN	64	ES	3		03:43	39.14		
EDI	SN	64				03:43	39.71	99	0.37
EDI	SE	64				03:43	39.66	106	0.25
EDU	SZ	78	EP	2		03:43	33.43		
EBL	SZ	80	EP	3		03:43	33.68		

November 23 1997 Time: 14:56 40.4 UTC Magnitude: 0.8 ML
Lat: 56.249N Lon: 3.750W Depth: 3.1 km
Grid Ref: 291.58 kmE 707.59 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	14:56	43.43		
ELO	SZ	25	IP	1	D	14:56	45.08		
PCO	SZ	36	EP	2		14:56	46.93		
EAB	SZ	37	IP	1	C	14:56	47.22		
EAU	SZ	49	EP	3		14:56	49.16		
EDI	SE	50	ES	2		14:56	55.92		
EDI	SN	50				14:56	58.89	6	0.35
EDI	SE	50				14:56	58.13	6	0.31
PCA	SZ	69	EP	2		14:56	52.16		

PMS	SZ	77	EP	3		14:56	53.42		

November 26 1997 Time: 03:16 18.5 UTC Magnitude: 1.6 ML
Lat: 52.957N Lon: 2.272W Depth: 0.5 km
Grid Ref: 381.74 kmE 340.07 kmN RMS: 0.07 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	30	IP	1	D	03:16	24.31		
KBI	SZ	60	IP	1	D	03:16	29.46		
HLM	SZ	64	EP	2		03:16	29.61		
SBD	SZ	67	EP	1	C	03:16	30.45		
CWF	SZ	70	IP	1	C	03:16	30.90		
CWF	SE	70	ES	3		03:16	39.92		
CWF	SN	70				03:16	40.14	24	0.29
CWF	SE	70				03:16	40.13	14	0.27
LHO	SZ	71	EP	1	D	03:16	31.05		
SSP	SZ	83	EP	2		03:16	32.85		
SSP	SN	83	ES	3		03:16	43.23		
SSP	SN	83				03:16	44.48	18	0.26
SSP	SE	83				03:16	45.05	16	0.30
MCH	SZ	118	EP	2		03:16	38.64		
MCH	SN	118	ES	3		03:16	52.86		
MCH	SN	118				03:16	55.20	18	0.17
MCH	SE	118				03:16	57.61	28	0.19

November 27 1997 Time: 14:01 36.9 UTC Magnitude: 1.9 ML
Lat: 52.550N Lon: 0.826W Depth: 3.4 km
Grid Ref: 479.63 kmE 295.39 kmN RMS: 0.11 secs
Locality: CORBY, NORTHAMPTONSHIRE Quality: C
Comments: 8KM NW OF CORBY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KUF	SZ	31	IP		C	14:01	42.51		
KTG	SZ	38	EP	2		14:01	43.89		
CWF	SZ	39	IP	1	D	14:01	43.99		
CWF	SN	39	ES	2		14:01	48.58		
CWF	SN	39				14:01	49.06	105	0.16
CWF	SE	39				14:01	48.95	91	0.12
KSY	SZ	49	EP	2		14:01	45.82		
MCH	SZ	161	EP	2		14:02	03.43		
MCH	SE	161	ES	3		14:02	21.92		
MCH	SN	161				14:02	23.68	15	0.11
MCH	SE	161				14:02	23.22	15	0.23

November 28 1997 Time: 02:39 24.6 UTC Magnitude: 0.9 ML
Lat: 53.227N Lon: 1.086W Depth: 1.0 km
Grid Ref: 461.04 kmE 370.45 kmN RMS: 0.09 secs
Locality: OLLERTON, NOTTS Quality: D
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	30	EP	2		02:39	30.30		
KSY	SZ	44	EP	2		02:39	32.86		
KWE	SZ	56	EP	2		02:39	34.86		
CWF	SZ	56	EP	3		02:39	34.64		
CWF	SE	56	ES	3		02:39	42.22		
CWF	SN	56				02:39	44.97	5	0.21
CWF	SE	56				02:39	45.04	5	0.14

November 28 1997 Time: 13:59 22.5 UTC Magnitude: 0.4 ML
Lat: 57.369N Lon: 5.601W Depth: 3.6 km
Grid Ref: 183.48 kmE 836.71 kmN RMS: 0.07 secs
Locality: LOCH CARRON, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SZ	5	IP		C	13:59	23.87		
KPL	SN	5	ES	2		13:59	24.56		
KPL	SN	5				13:59	24.65	36	0.12
KPL	SE	5				13:59	24.70	33	0.10
KSB	SZ	21	IP	1	C	13:59	26.42		
KAC	SZ	23	EP	1	D	13:59	26.88		

November 28 1997 Time: 14:06 13.1 UTC Magnitude: 0.7 ML
Lat: 57.370N Lon: 5.603W Depth: 3.7 km
Grid Ref: 183.38 kmE 836.78 kmN RMS: 0.07 secs
Locality: LOCH CARRON, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SZ	5	IP	1	D	14:06	14.51		
KPL	SN	5	ES	2		14:06	15.20		
KPL	SN	5				14:06	15.29	78	0.12
KPL	SE	5				14:06	15.34	63	0.10
KSB	SZ	21	IP	1	C	14:06	17.05		
KAC	SZ	23	EP	1	D	14:06	17.50		

November 28 1997 Time: 21:21 36.1 UTC Magnitude: 2.2 ML
Lat: 55.621N Lon: 5.460W Depth: 4.3 km
Grid Ref: 182.16 kmE 641.79 kmN RMS: 0.06 secs
Locality: KINTYRE, STRATHCLYDE Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PMS	SZ	52	IP	1	D	21:21	45.07		
PGB	SZ	65	IP	1	C	21:21	47.31		
PGB	SN	65	ES	2		21:21	55.56		
PGB	SN	65				21:21	56.54	138	0.19
PGB	SE	65				21:21	55.74	88	0.15
PCA	SZ	76	IP	1	C	21:21	49.00		
EAB	SZ	94	EP	2		21:21	51.81		
PCO	SZ	95	EP	2		21:21	51.86		
EAU	SZ	129	EP	2		21:21	57.27		
EDI	SN	147	ES	3		21:22	17.85		
EDI	SN	147				21:22	18.77	26	0.37
EDI	SE	147				21:22	18.58	35	0.30

November 30 1997 Time: 00:59 24.4 UTC Magnitude: 2.7 ML
Lat: 56.199N Lon: 4.102W Depth: 4.0 km
Grid Ref: 269.57 kmE 702.65 kmN RMS: 0.02 secs
Locality: DOUNE, CENTRAL Quality: B
Comments: FELT DOUNE... Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	00:59	27.36		
PCO	SZ	24	IP		D	00:59	28.88		
EBH	SZ	37	IP		C	00:59	31.15		
ELO	SZ	39	IP	1	D	00:59	31.46		
POB	SZ	44	IP		D	00:59	32.32		
PGB	SZ	49	IP		D	00:59	33.10		
PGB	SN	49	ES	1		00:59	39.49		
PGB	SN	49				00:59	40.36	424	0.25
PGB	SE	49				00:59	39.91	282	0.28
PCA	SZ	56	IP		D	00:59	34.18		
PMS	SZ	56	IP		D	00:59	34.18		
EAU	SZ	57	EP	1	C	00:59	34.25		
EDI	SZ	65	IP	1	C	00:59	35.50		
EDI	SE	65	ES	2		00:59	43.62		
EDI	SN	65				00:59	43.62	294	0.25
EDI	SE	65				00:59	43.74	482	0.19
EDU	SZ	78	EP	1	C	00:59	37.49		
EBL	SZ	81	IP	1	C	00:59	38.09		
EDR	SZ	125	EP	3		00:59	44.90		

December 1 1997 Time: 01:27 15.9 UTC Magnitude: 1.4 ML
Lat: 52.918N Lon: 2.237W Depth: 5.2 km
Grid Ref: 384.07 kmE 335.64 kmN RMS: 0.11 secs
Locality: STONE, STAFFORDSHIRE Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KLE2	SZ	8	EP	9		01:27	18.70		
KLE2	SZ	8	ES	4		01:27	19.98		
KLE	SZ	10	EP	9		01:27	17.50		
KLE	SZ	10	ES	4		01:27	18.40		
KWE	SZ	29	EP	2		01:27	21.25		
KBI	SZ	61	EP	2		01:27	26.54		
HLM	SZ	62	EP	2		01:27	26.52		
CWF	SN	66	ES	3		01:27	35.20		
CWF	SN	66				01:27	37.13	12	0.21
CWF	SE	66				01:27	37.15	7	0.21
SBD	SZ	69	IP	1	C	01:27	27.53		
LHO	SZ	74	EP	2		01:27	28.33		
SSP	SZ	81	EP	2		01:27	30.00		
SSP	SN	81	ES	2		01:27	39.60		
SSP	SN	81				01:27	41.85	10	0.21
SSP	SE	81				01:27	43.41	8	0.22
MCH	SZ	115	EP	2		01:27	35.54		
MCH	SE	115	ES	3		01:27	50.13		
MCH	SN	115				01:27	54.49	9	0.21
MCH	SE	115				01:27	54.92	16	0.19

December 1 1997 Time: 12:18 35.5 UTC Magnitude: 1.4 ML
Lat: 56.136N Lon: 3.718W Depth: 1.8 km
Grid Ref: 293.26 kmE 694.98 kmN RMS: 0.06 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	18	IP	1	C	12:18	39.16		
PCO	SZ	29	IP	1	D	12:18	41.03		
EAU	SZ	37	EP	2		12:18	42.26		
EAB	SZ	39	IP	1	D	12:18	42.62		
EDI	SZ	41	EP	1	C	12:18	42.92		
EDI	SE	41	ES	2		12:18	48.33		
EDI	SN	41				12:18	52.01	25	0.28
EDI	SE	41				12:18	51.78	34	0.44
PGB	SZ	60	EP	2		12:18	46.10		
PGB	SN	60				12:19	03.56	32	0.36
PGB	SE	60				12:19	00.31	19	0.45

December 4 1997 Time: 04:20 28.9 UTC Magnitude: 1.5 ML
Lat: 55.633N Lon: 5.509W Depth: 8.1 km
Grid Ref: 179.13 kmE 643.32 kmN RMS: 0.02 secs
Locality: KINTYRE, STRATHCLYDE Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PMS	SZ	54	EP	2		04:20	38.05		
PGB	SZ	68	IP	1	C	04:20	40.29		
PGB	SN	68	ES	1		04:20	48.53		
PGB	SN	68				04:20	48.68	19	0.33
PGB	SE	68				04:20	48.71	17	0.16
PCA	SZ	79	EP	2		04:20	42.02		

PCO	SZ	97	EP	3		04:20	44.88		

December 5 1997 Time: 11:00 38.9 UTC Magnitude: 0.9 ML
Lat: 53.202N Lon: 4.007W Depth: 14.4 km
Grid Ref: 265.94 kmE 369.09 kmN RMS: 0.03 secs
Locality: BETHESDA, GWYNEDD Quality: C
Comments: 5KM NE OF BETHESDA

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WPM	SZ	9	IP	1	C	11:00	41.77		
YLL	SZ	13	IP		C	11:00	42.13		
WLF	SZ	28	IP	1	D	11:00	44.05		
WME	SZ	29	IP	1	D	11:00	44.33		
YRE	SZ	37	IP		C	11:00	45.51		
YRC	SZ	38	EP	2		11:00	45.78		
WCB	SZ	41	EP	2		11:00	46.24		
WCB	SN	41	ES	2		11:00	50.97		
WCB	SN	41				11:00	51.23	13	0.12
WCB	SE	41				11:00	51.15	10	0.19
WFB	SZ	58	IP	1	C	11:00	48.38		

December 8 1997 Time: 23:56 3.4 UTC Magnitude: 2.3 ML
Lat: 57.103N Lon: 4.601W Depth: 7.0 km
Grid Ref: 242.46 kmE 804.28 kmN RMS: 0.13 secs
Locality: FORT AUGUSTUS, HIGHLAND Quality: C
Comments: FELT FORT AUGUSTUS...
5KM SE OF FORT AUGUSTUS

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
MDO	SZ	40	IP		D	23:56	10.43		
KAC	SZ	61	IP	1	C	23:56	13.74		
KPL	SZ	69	IP		C	23:56	15.07		
KPL	SE	69	ES	2		23:56	23.31		
KPL	SN	69				23:56	26.79	124	0.10
KPL	SE	69				23:56	26.68	185	0.08
KAR	SZ	78	EP	2		23:56	16.40		
MVH	SZ	95	EP	2		23:56	19.15		
MCD	SZ	97	IP	1	D	23:56	19.62		
MCD	SN	97	ES	2		23:56	31.28		
MCD	SN	97				23:56	32.98	85	0.11
MCD	SE	97				23:56	32.80	91	0.10
MME	SZ	102	EP	2		23:56	20.19		
EAB	SZ	103	EP	2		23:56	20.07		
RRR	SZ	111	EP	2		23:56	21.75		
RRR	SE	111	ES	2		23:56	35.09		
RRR	SN	111				23:56	37.54	37	0.12
RRR	SE	111				23:56	37.27	35	0.19
EDU	SZ	115	EP	2		23:56	22.23		
EBH	SZ	116	EP	2		23:56	22.28		
REB	SZ	120	EP	2		23:56	22.90		
EDR	SZ	127	EP	2		23:56	23.50		
KSK	SZ	133	EP	2		23:56	25.44		
MFI	SZ	150	EP	2		23:56	27.89		
MLA	SZ	153	EP	2		23:56	27.33		
RRH	SZ	155	EP	2		23:56	27.48		
EDI	SZ	158	EP	2		23:56	28.71		
EDI	SN	158	ES	2		23:56	46.44		
EDI	SN	158				23:56	48.37	30	0.18
EDI	SE	158				23:56	49.46	46	0.44

December 9 1997 Time: 07:06 37.9 UTC Magnitude: 1.4 ML
Lat: 52.946N Lon: 2.273W Depth: 0.0 km
Grid Ref: 381.68 kmE 338.80 kmN RMS: 0.07 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: B
Comments: C/F,FELT WHITMORE Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KLE	SZ	7	EP	9		07:06	37.00		
KLE	SZ	7	ES	4		07:06	37.88		
KLE2	SZ	7	EP	9		07:06	37.50		
KLE2	SZ	7	ES	4		07:06	38.30		
KWE	SZ	30	IP	1	D	07:06	43.81		
KBI	SZ	61	IP	1	D	07:06	48.95		
HLM	SZ	63	EP	2		07:06	49.22		
SBD	SZ	67	EP	2		07:06	49.84		
CWF	SE	69	ES	2		07:06	59.35		
CWF	SN	69				07:06	59.51	16	0.25
CWF	SE	69				07:06	59.54	8	0.28
SSP	SZ	82	EP	2		07:06	52.49		
SSP	SN	82	ES	2		07:07	02.67		
SSP	SN	82				07:07	03.88	10	0.27
SSP	SE	82				07:07	05.79	10	0.26
MCH	SZ	117	EP	2		07:06	58.02		
MCH	SN	117	ES	2		07:07	12.37		
MCH	SN	117				07:07	14.90	11	0.24
MCH	SE	117				07:07	17.32	18	0.20

December 10 1997 Time: 19:06 44.9 UTC Magnitude: 0.5 ML
Lat: 56.269N Lon: 3.754W Depth: 4.6 km
Grid Ref: 291.37 kmE 709.82 kmN RMS: 0.04 secs
Locality: BLACKFORD, TAYSIDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	19:06	48.04		
EBH	SZ	15	ES	2		19:06	50.15		
EBH	SZ	15				19:06	50.34	17	0.07
EAB	SZ	37	IP		C	19:06	51.69		
EAB	SZ	37				19:06	56.58	3	0.05
EDU	SZ	55	EP	3		19:06	54.49		
EDU	SZ	55				19:07	02.86	5	0.19

December 11 1997 Time: 04:03 5.6 UTC Magnitude: 1.5 ML
Lat: 56.290N Lon: 6.262W Depth: 7.4 km
Grid Ref: 136.28 kmE 718.94 kmN RMS: 0.14 secs
Locality: MULL, STRATHCLYDE Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	75	EP	1	D	04:03	17.96		
PMS	SZ	107	EP	2		04:03	23.10		
EAB	SZ	120	EP	2		04:03	24.89		
KPL	SZ	123	EP	3		04:03	25.77		
KPL	SE	123	ES	3		04:03	40.11		
KPL	SN	123				04:03	41.25	3	0.08
KPL	SE	123				04:03	44.29	6	0.13
PGB	SZ	124	EP	3		04:03	25.92		
PGB	SE	124	ES	3		04:03	39.73		
PGB	SN	124				04:03	40.97	19	0.25
PGB	SE	124				04:03	41.81	16	0.18
PCO	SZ	139	EP	2		04:03	28.13		
KAC	SZ	147	EP	3		04:03	29.31		

December 12 1997 Time: 10:56 40.5 UTC Magnitude: 1.7 ML
Lat: 52.943N Lon: 1.557W Depth: 7.3 km
Grid Ref: 429.78 kmE 338.47 kmN RMS: 0.11 secs
Locality: DERBY, DERBYSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	21	EP	1	C	10:56	44.55		
CWF	SZ	28	IP		D	10:56	45.69		
CWF	SE	28	ES	2		10:56	49.45		
CWF	SN	28				10:56	49.70	47	0.18
CWF	SE	28				10:56	49.68	67	0.13
KBI	SZ	35	EP	2		10:56	46.33		
KSY	SZ	65	EP	2		10:56	51.52		
LHO	SZ	70	IP	1	D	10:56	52.31		
LMK	SZ	100	EP	3		10:56	57.35		
SSP	SZ	120	EP	2		10:57	00.84		
SSP	SN	120				10:57	17.93	18	0.22
SSP	SE	120				10:57	18.11	16	0.24
MCH	SZ	144	EP	2		10:57	04.41		
MCH	SN	144				10:57	25.72	27	0.14
MCH	SE	144				10:57	24.63	34	0.17

December 13 1997 Time: 10:57 4.3 UTC Magnitude: 1.3 ML
Lat: 52.939N Lon: 2.264W Depth: 2.6 km
Grid Ref: 382.23 kmE 338.01 kmN RMS: 0.06 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	30	EP	2		10:57	09.74		
KBI	SZ	61	EP	2		10:57	14.90		
HLM	SZ	63	EP	2		10:57	15.20		
CWF	SZ	68	EP	3		10:57	16.29		
CWF	SN	68	ES	3		10:57	24.60		
CWF	SN	68				10:57	25.05	5	0.25
CWF	SE	68				10:57	27.27	5	0.21
MCH	SN	116	ES	3		10:57	38.63		
MCH	SN	116				10:57	40.95	8	0.21
MCH	SE	116				10:57	43.17	16	0.20

December 13 1997 Time: 21:44 38.2 UTC Magnitude: 0.3 ML
Lat: 52.835N Lon: 4.108W Depth: 17.1 km
Grid Ref: 257.99 kmE 328.49 kmN RMS: 0.03 secs
Locality: HARLECH, GWYNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WFB	SZ	18	IP	1	D	21:44	42.25		
WFB	SZ	18	ES	3		21:44	44.97		
WFB	SZ	18				21:44	42.48	11	0.06
YRE	SZ	27	EP	2		21:44	43.44		
YLL	SZ	34	EP	2		21:44	44.50		
YLL	SZ	34				21:44	46.85	16	1.13
YRH	SZ	35	IP	1	C	21:44	44.62		
YRH	SZ	35				21:44	49.29	3	0.13
YRC	SZ	56	EP	2		21:44	47.50		
SBD	SZ	58	EP	3		21:44	48.04		

December 14 1997 Time: 07:05 28.5 UTC Magnitude: 0.5 ML
Lat: 52.847N Lon: 4.094W Depth: 16.1 km
Grid Ref: 259.02 kmE 329.83 kmN RMS: 0.08 secs
Locality: HARLECH, GWYNEDD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WFB	SZ	19	IP		D	07:05	32.54		
WFB	SZ	19	ES	3		07:05	35.24		
WFB	SZ	19				07:05	32.77	31	0.07
YRE	SZ	27	EP	2		07:05	33.72		
YRE	SZ	27				07:05	38.44	9	0.10
YLL	SZ	33	EP	2		07:05	34.35		
YRH	SZ	36	IP	1	C	07:05	34.93		

YRH	SZ	36				07:05	39.53	6	0.07
WPM	SZ	48	IP	1	C	07:05	36.70		
WLF	SZ	53	EP	2		07:05	37.37		
YRC	SZ	55	EP	2		07:05	37.63		
SBD	SZ	57	EP	2		07:05	38.17		

December 16 1997 Time: 12:51 30.1 UTC Magnitude: 1.8 ML
Lat: 52.954N Lon: 2.263W Depth: 1.9 km
Grid Ref: 382.30 kmE 339.73 kmN RMS: 0.14 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: C
Comments: C/F,FELT KEELE Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	29	IP	1	D	12:51	35.68		
KBI	SZ	60	IP	1	D	12:51	40.77		
HLM	SZ	64	EP	2		12:51	41.10		
SBD	SZ	67	EP	2		12:51	41.85		
CWF	SZ	69	EP	2		12:51	42.33		
CWF	SN	69	ES	2		12:51	50.45		
CWF	SN	69				12:51	51.51	25	0.27
CWF	SE	69				12:51	58.13	19	0.23
LHO	SZ	71	EP	2		12:51	42.44		
SSP	SZ	83	EP	2		12:51	44.44		
SSP	SE	83	ES	2		12:51	55.01		
SSP	SN	83				12:51	56.12	47	0.19
SSP	SE	83				12:51	59.66	43	0.26
WCB	SZ	160	EP	2		12:51	56.31		
WCB	SE	160	ES	2		12:52	15.03		
WCB	SN	160				12:52	16.10	15	0.25
WCB	SE	160				12:52	16.67	13	0.23

December 19 1997 Time: 13:17 56.7 UTC Magnitude: 1.6 ML
Lat: 51.914N Lon: 4.576W Depth: 4.3 km
Grid Ref: 222.86 kmE 227.16 kmN RMS: 0.10 secs
Locality: NR CARMARTHEN, DYFED Quality: B
Comments: 20KM NE OF CARMARTHEN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HPE	SZ	14	IP		C	13:17	59.53		
HSA	SZ	35	IP		D	13:18	02.93		
WFB	SZ	93	EP	2		13:18	12.31		
YRH	SZ	102	EP	2		13:18	13.96		
HTL	SZ	103	EP	2		13:18	14.21		
HTL	SE	103	ES	2		13:18	26.44		
HTL	SN	103				13:18	27.59	16	0.37
HTL	SE	103				13:18	27.35	15	0.22
HEX	SZ	109	EP	2		13:18	14.93		

December 19 1997 Time: 23:31 30.6 UTC Magnitude: 1.2 ML
Lat: 53.156N Lon: 4.178W Depth: 9.9 km
Grid Ref: 254.40 kmE 364.38 kmN RMS: 0.07 secs
Locality: CAERNARVON, GWYNEDD Quality: A
Comments: FELT TREGARTH Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YLL	SZ	2	IP		C	23:31	32.47		
WLF	SZ	21	IP		D	23:31	34.78		
WPM	SZ	22	IP		C	23:31	34.80		
YRE	SZ	26	IP	1	C	23:31	35.43		
WME	SZ	28	IP		D	23:31	35.89		
YRC	SZ	29	EP	1	D	23:31	35.86		
WCB	SZ	35	IP	1	D	23:31	36.92		
WCB	SE	35	ES	2		23:31	41.13		
WCB	SN	35				23:31	41.54	13	0.10
WCB	SE	35				23:31	41.42	18	0.14
YRH	SZ	47	IP	1	C	23:31	38.74		
WFB	SZ	54	IP	1	D	23:31	39.62		
SBD	SZ	68	EP	3		23:31	41.85		
HCG	SZ	99	EP	3		23:31	46.78		
SSP	SZ	109	EP	1	C	23:31	48.69		
SSP	SE	109	ES	3		23:32	01.17		
SSP	SN	109				23:32	05.12	6	0.12
SSP	SE	109				23:32	04.87	7	0.22
HLM	SZ	113	EP	3		23:31	49.15		
HTR	SZ	135	EP	3		23:31	52.67		
MCH	SZ	152	EP	3		23:31	55.19		
MCH	SN	152				23:32	15.21	3	0.16
MCH	SE	152				23:32	15.15	4	0.20

December 21 1997 Time: 18:57 21.5 UTC Magnitude: 1.2 ML
Lat: 56.252N Lon: 3.757W Depth: 5.2 km
Grid Ref: 291.14 kmE 708.01 kmN RMS: 0.03 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	18:57	24.56		
PCO	SZ	36	EP	1	C	18:57	28.08		
EAB	SZ	37	IP		C	18:57	28.16		
EDI	SZ	51	IP	1	D	18:57	30.40		
EDI	SE	51	ES	2		18:57	36.79		
EDI	SN	51				18:57	36.80	15	0.15
EDI	SE	51				18:57	37.01	15	0.19
EDU	SZ	56	EP	1	C	18:57	31.21		
PGB	SZ	67	EP	2		18:57	32.84		
PGB	SN	67				18:57	43.40	11	0.34
PGB	SE	67				18:57	46.40	8	0.26

December 21 1997 Time: 19:56 13.8 UTC Magnitude: 1.4 ML
Lat: 53.062N Lon: 2.230W Depth: 2.4 km
Grid Ref: 384.58 kmE 351.73 kmN RMS: 0.04 secs
Locality: KIDSGROVE, STAFFORDSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	27	EP	1	C	19:56	18.74		
KBI	SZ	52	EP	1	C	19:56	23.01		
CWF	SZ	72	IP	1	C	19:56	26.20		
CWF	SN	72	ES	1		19:56	35.14		
CWF	SN	72				19:56	35.65	28	0.18
CWF	SE	72				19:56	35.37	15	0.19
SSP	SZ	93	EP	2		19:56	29.34		
SSP	SE	93	ES	3		19:56	41.03		
SSP	SN	93				19:56	42.64	10	0.22
SSP	SE	93				19:56	42.83	6	0.18
KSY	SZ	111	EP	2		19:56	33.03		

December 22 1997 Time: 11:51 14.1 UTC Magnitude: 1.7 ML
Lat: 52.953N Lon: 2.268W Depth: 0.3 km
Grid Ref: 382.02 kmE 339.55 kmN RMS: 0.11 secs
Locality: NEWCASTLE-U-LYME, STAFFS Quality: C
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	29	EP	2		11:51	19.90		
KBI	SZ	60	EP	2		11:51	25.01		
HLM	SZ	64	EP	2		11:51	25.33		
CWF	SZ	69	EP	2		11:51	26.44		
CWF	SN	69	ES	3		11:51	35.49		
CWF	SN	69				11:51	35.75	14	0.21
CWF	SE	69				11:51	37.31	12	0.28
SSP	SZ	83	IP	1	C	11:51	28.61		
SSP	SE	83	ES	2		11:51	39.10		
SSP	SN	83				11:51	39.69	32	0.16
SSP	SE	83				11:51	43.88	34	0.24
MCH	SZ	117	EP	2		11:51	34.23		
MCH	SN	117				11:51	52.90	30	0.16
MCH	SE	117				11:51	53.40	46	0.23
WCB	SZ	160	EP	3		11:51	41.10		
WCB	SN	160	ES	3		11:51	59.83		
WCB	SN	160				11:52	01.64	10	0.28
WCB	SE	160				11:52	00.81	7	0.13

December 24 1997 Time: 10:43 30.5 UTC Magnitude: 1.0 ML
Lat: 54.820N Lon: 3.409W Depth: 13.2 km
Grid Ref: 309.50 kmE 548.16 kmN RMS: 0.08 secs
Locality: SILLOTH, CUMBRIA Quality: B
Comments: 5KM SW OF SILLOTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BBO	SZ	14	IP	1	D	10:43	33.99		
BBO	SN	14	ES	2		10:43	36.39		
BBO	SN	14				10:43	36.57	37	0.15
BBO	SE	14				10:43	36.53	44	0.09
BNA	SZ	21	IP		D	10:43	34.97		
BDL	SZ	30	EP	2		10:43	36.48		
CKE	SZ	32	EP	2		10:43	36.53		
BHH	SZ	33	IP	1	C	10:43	36.66		
BHH	SN	33	ES	2		10:43	40.97		
BHH	SN	33				10:43	41.21	26	0.22
BHH	SE	33				10:43	41.31	45	0.29
GCD	SZ	35	EP	2		10:43	36.91		
XDE	SZ	35	IP		D	10:43	37.14		
BWH	SZ	43	IP		D	10:43	38.39		
CSF	SZ	43	IP	1	D	10:43	38.12		
BBH	SZ	46	IP	1	C	10:43	38.83		
BTA	SE	47	ES	2		10:43	45.47		
ESK	SZ	57	EP	2		10:43	40.51		
ESK	SN	57	ES	2		10:43	47.24		
ESK	SN	57				10:43	48.06	8	0.11
ESK	SE	57				10:43	47.96	12	0.17

December 31 1997 Time: 20:01 53.5 UTC Magnitude: 1.0 ML
Lat: 56.249N Lon: 3.758W Depth: 4.8 km
Grid Ref: 291.10 kmE 707.62 kmN RMS: 0.05 secs
Locality: BLACKFORD, TAYSIDE Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	20:01	56.64		
ELO	SZ	25	EP	2		20:01	58.26		
PCO	SZ	36	EP	2		20:02	00.16		
EAB	SZ	37	IP		C	20:02	00.22		
EAU	SZ	49	EP	2		20:02	02.28		
EDI	SZ	51	IP	1	D	20:02	02.47		
EDI	SN	51	ES	2		20:02	08.80		
EDI	SN	51				20:02	09.11	7	0.17
EDI	SE	51				20:02	09.83	10	0.30

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

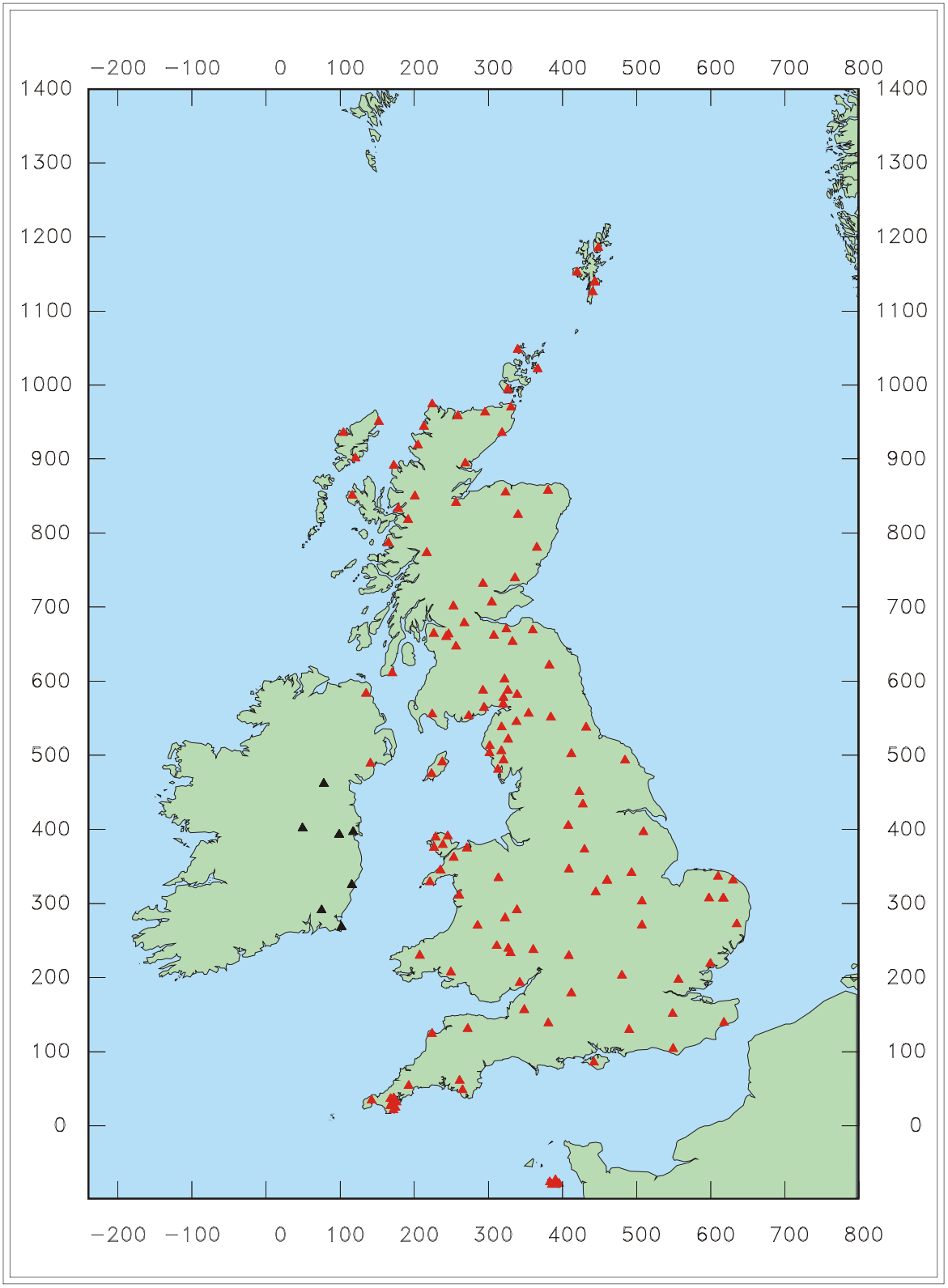


Figure 1. Seismograph network operational in December 1997. Colour coding shows the rapid access stations (red) and DIAS stations (black).

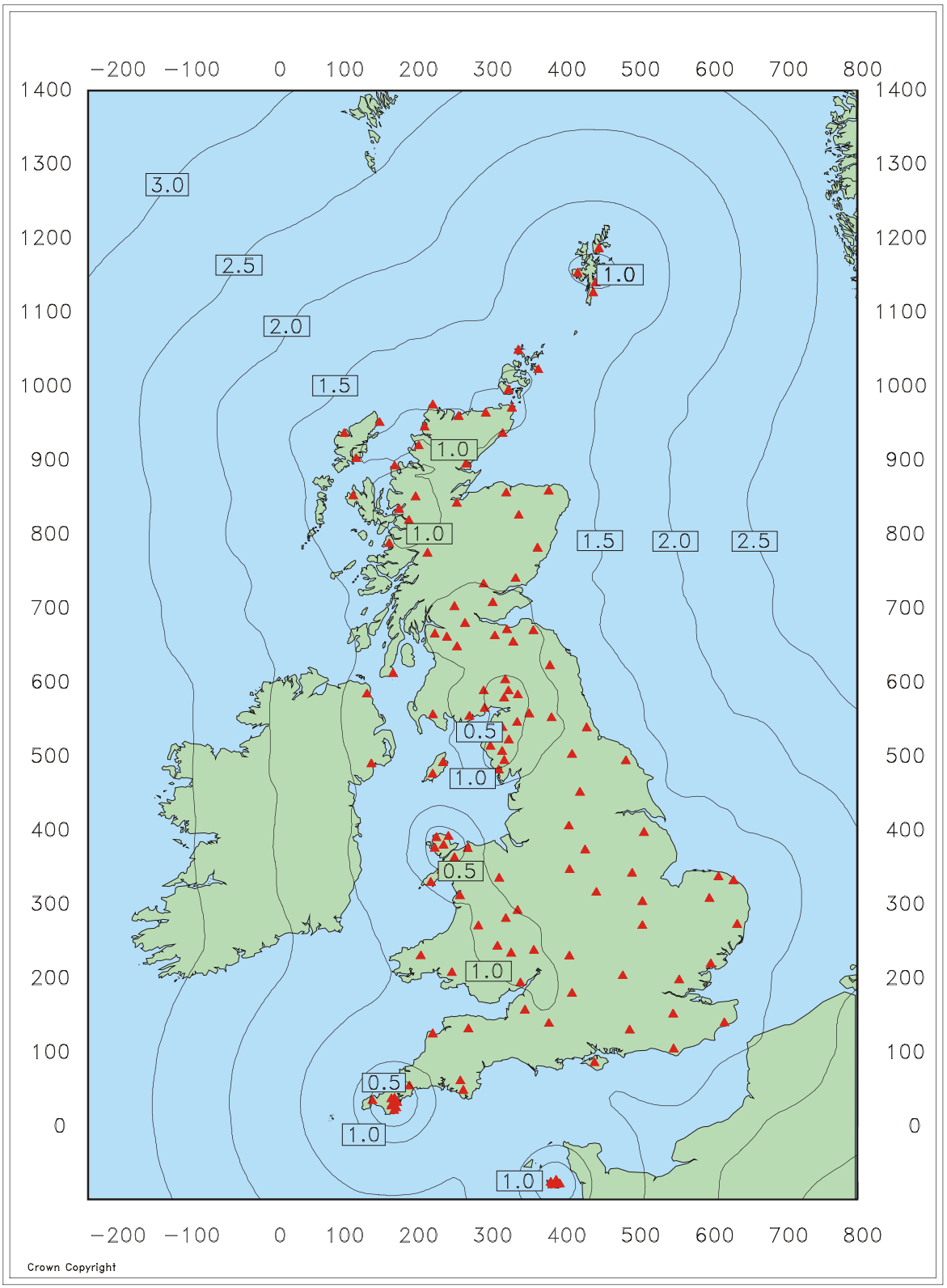


Figure 2. Earthquake detection capability in December 1997. Contour values are Richter local magnitude (ML) for 4 nanometres of noise (average) and S−wave amplitudes twice that at the fourth nearest station.

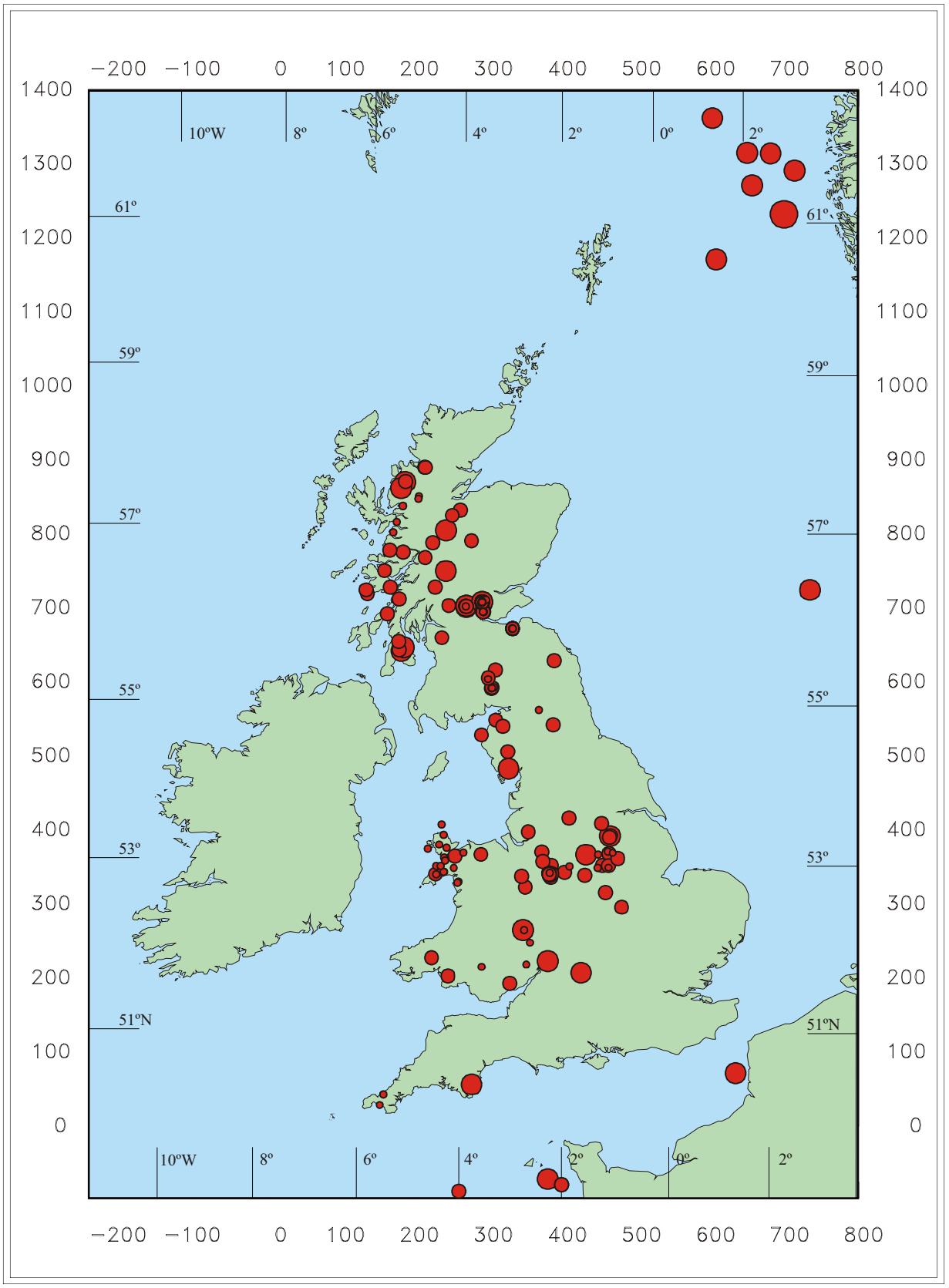


Figure 3. Epicentres of all UK earthquakes located in 1997.

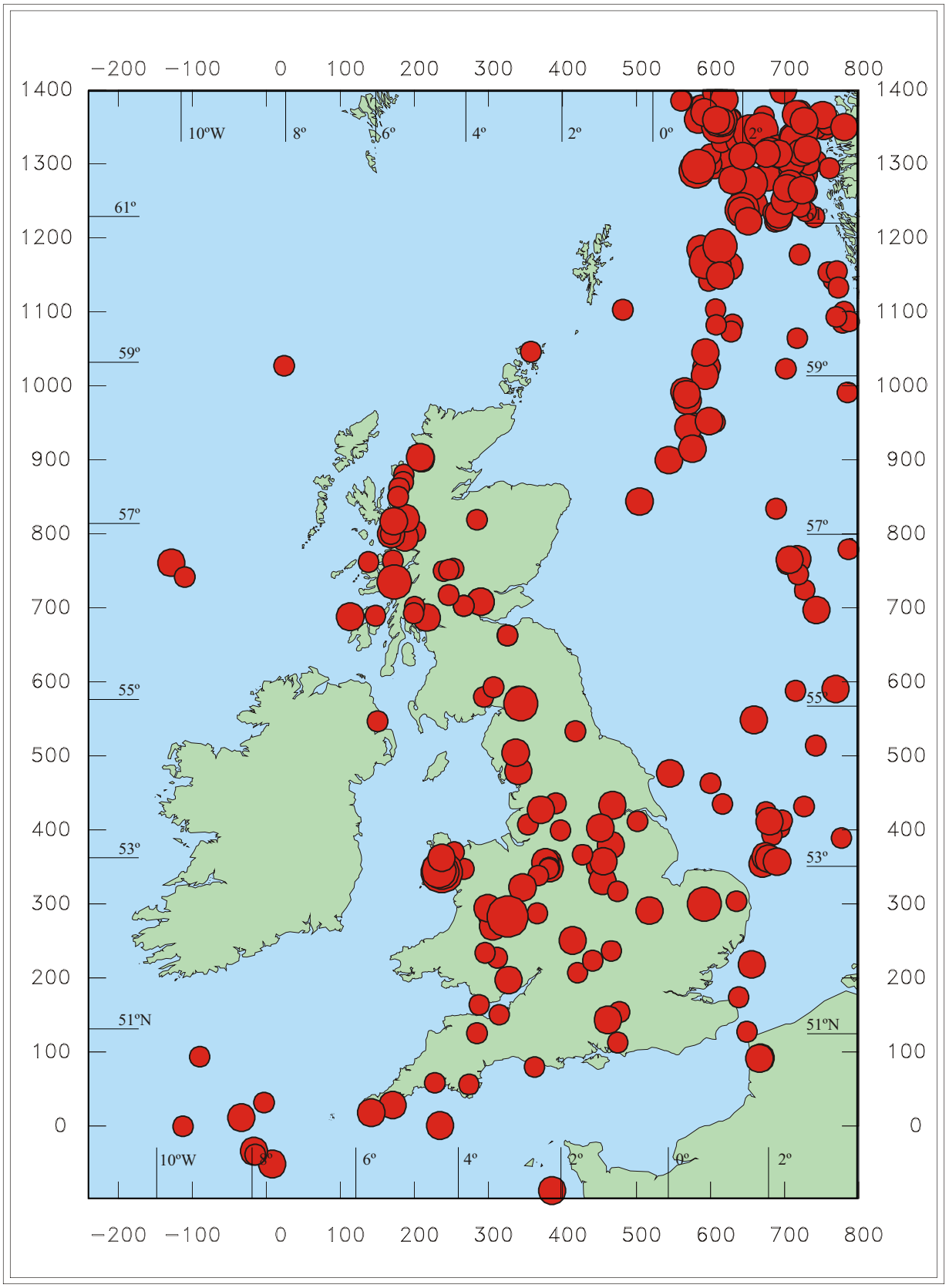


Figure 4. Epicentres of earthquakes with magnitudes 2.5 ML or greater, for the period 1979 to 1997.

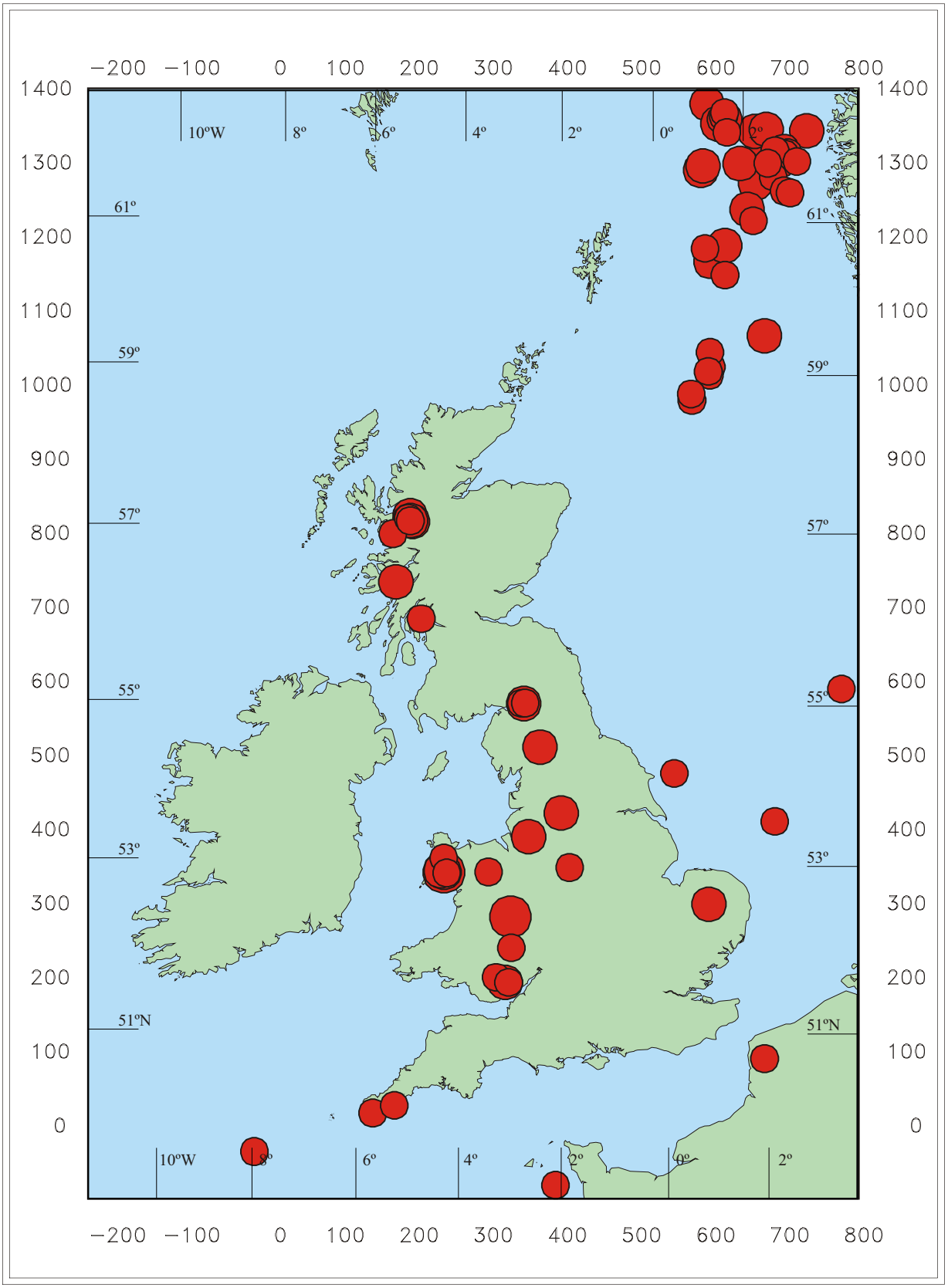


Figure 5. Epicentres of earthquakes with magnitudes 3.5 ML or greater, for the period 1970 to 1997.

APPENDIX A

SIGNIFICANT EARTHQUAKES IN 1997

APPENDIX A1

CHESTERFIELD EARTHQUAKE, 10 FEBRUARY 1997

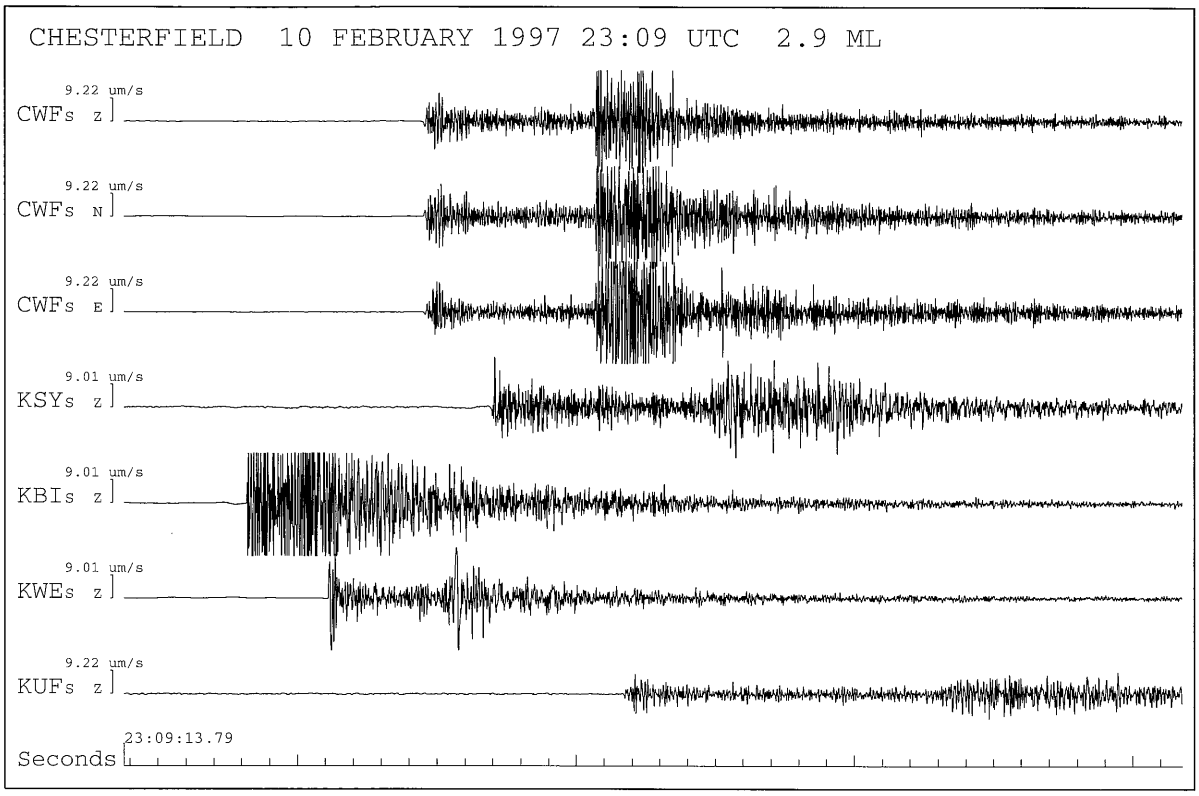
PARAMETERS

Date:	**10 February 1997**
Origin Time:	**23:09 15.5 UTC**
Latitude and longitude	**1.53^{o} W**
Grid Reference:	**431.5 km E 366.3 km N**
Depth:	**13.4 km**
Magnitude:	**2.9 ML**
Hypo Solution Quality:	**B (B*B)**
Epicentral Error (1 std. dev.):	**2.3 km**
Depth Error (1 std. dev.):	**3.4 km**

Discussion

The largest onshore earthquake occurred on 10 February, with a magnitude of 2.9 ML; it was located approximately 6 km southwest of Chesterfield in Derbyshire. Felt effects were experienced throughout Chesterfield, Ashgate, South Wingfield and Matlock, where residents typically reported "the house trembled" and "the whole bed shook". A fault plane solution of the event shows reverse faulting with a component of strike-slip motion on planes striking EW and dipping south or planes striking NE and dipping to the NW. This is the first event that has been felt in the area, since the magnitude 1.8 ML Chesterfield earthquake, on 3 February 1987, which was felt with intensities of at least 3 EMS in the epicentral area.

Seismograms recorded by the BGS networks around Keyworth and Hereford are shown in Figure A1.1 and the fault plane solution in Figure A1.2.



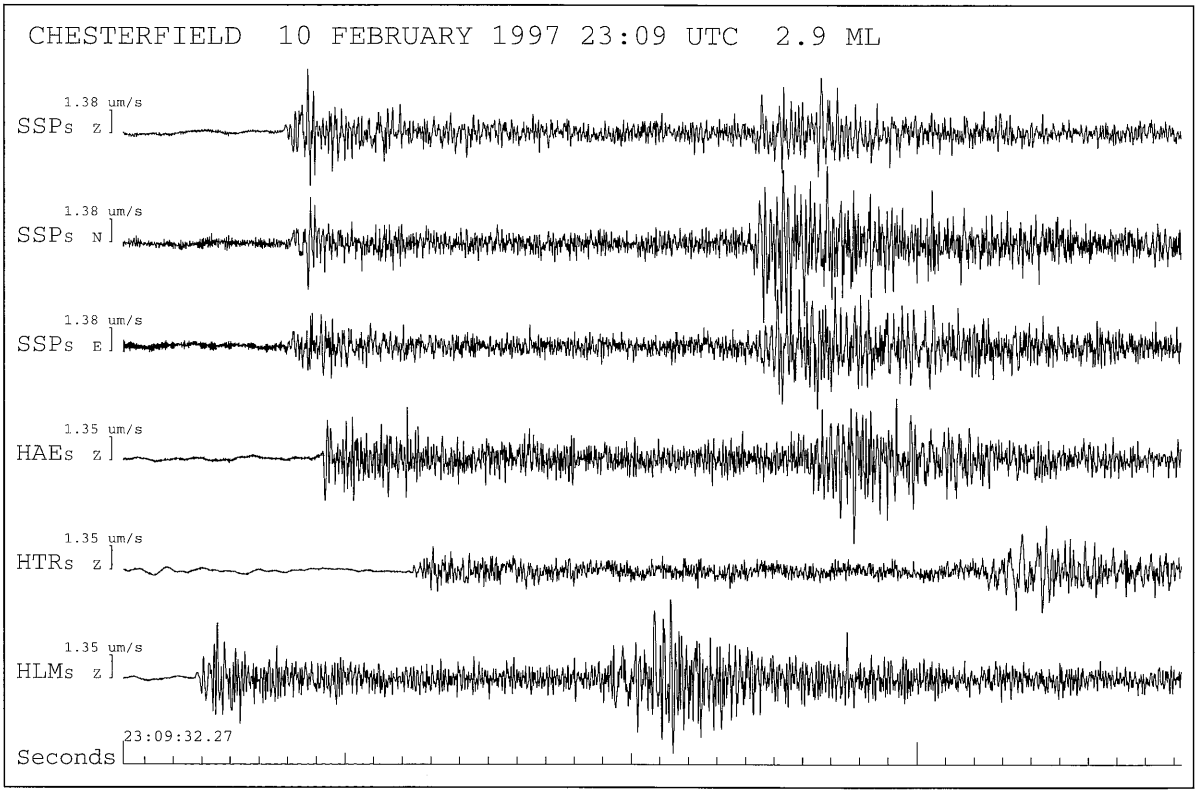


Figure A1.1. Seismograms of the Chesterfield earthquake 10 February 1997 23:09 UTC 2.9 ML recorded on the Keyworth and Hereford networks.

FAULT PLANE SOLUTION : CHESTERFIELD EARTHQUAKE

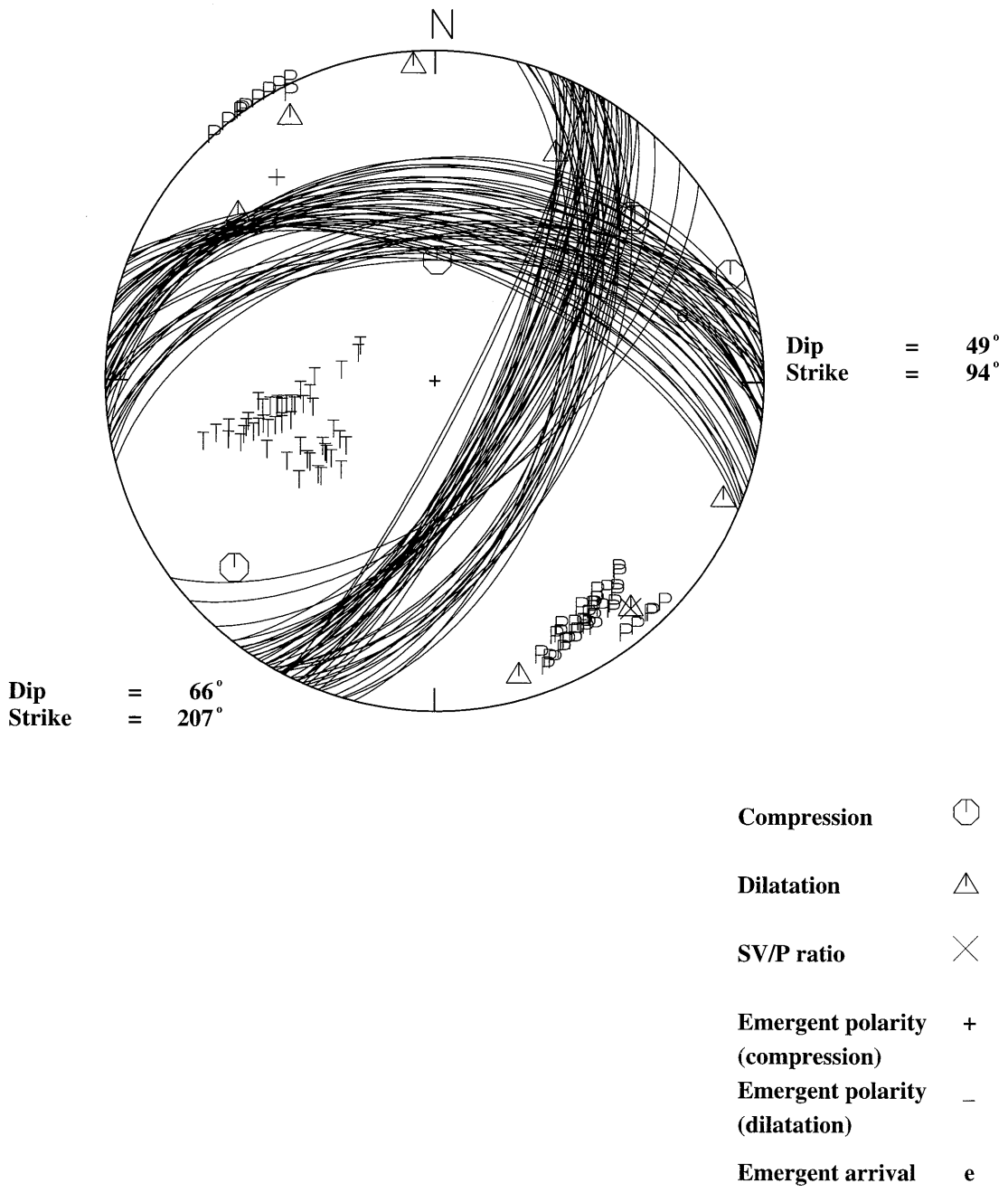


Figure A1.2. Equal area projection of the upper focal hemisphere for the Chesterfield earthquake of 10 February 1997 23:09 UTC 2.9 ML.The axes of maximum and minimum compressive stress are denoted by P and T respectively.

APPENDIX A2

JERSEY EARTHQUAKE, 22 JUNE 1997

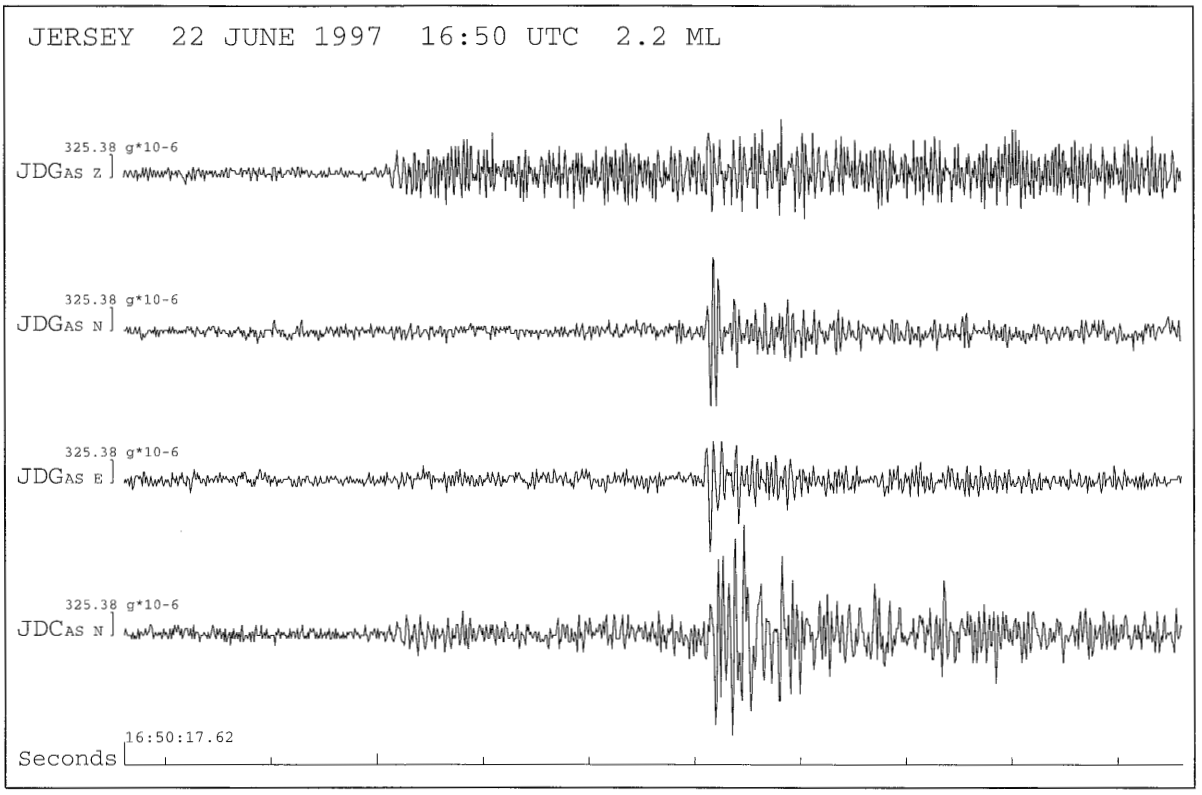
PARAMETERS

Date:	**22 June 1997**
Origin Time:	**16:50 16.3 UTC**
Latitude and longitude:	**49.25^{o} N 2.28^{o} W**
Grid Reference:	**379.8 km E -71.9 km N**
Depth:	**10.9 km**
Magnitude:	**2.2 ML**
Hypo Solution Quality:	**C (A*D)**
Epicentral Error (1 std. dev.):	**3.0 km**
Depth Error (1 std. dev.):	**3.3 km**

Discussion

On 22 June, an earthquake, with a magnitude of 2.2 ML, occurred offshore Jersey in the Channel Islands, approximately 2 km west of Grosnez Point. The event was felt throughout Jersey, where felt reports described "the floor vibrated for 15-20 seconds", "the whole bungalow shook" and "like a plane crashing". A macroseismic survey was carried out and 117 replies were received (111 positive and 6 negative). They indicated a maximum intensity of 4 EMS close to the epicentre. This is the largest event in the area since the magnitude 3.5 ML St. Aubin's Bay earthquake, on 30 April 1990, which was felt throughout Jersey and Guernsey and had a maximum intensity of 5 EMS.

Seismograms recorded by the BGS networks around Jersey and Devon are shown in Figure A2.1 and an isoseismal map in Figure A2.2.



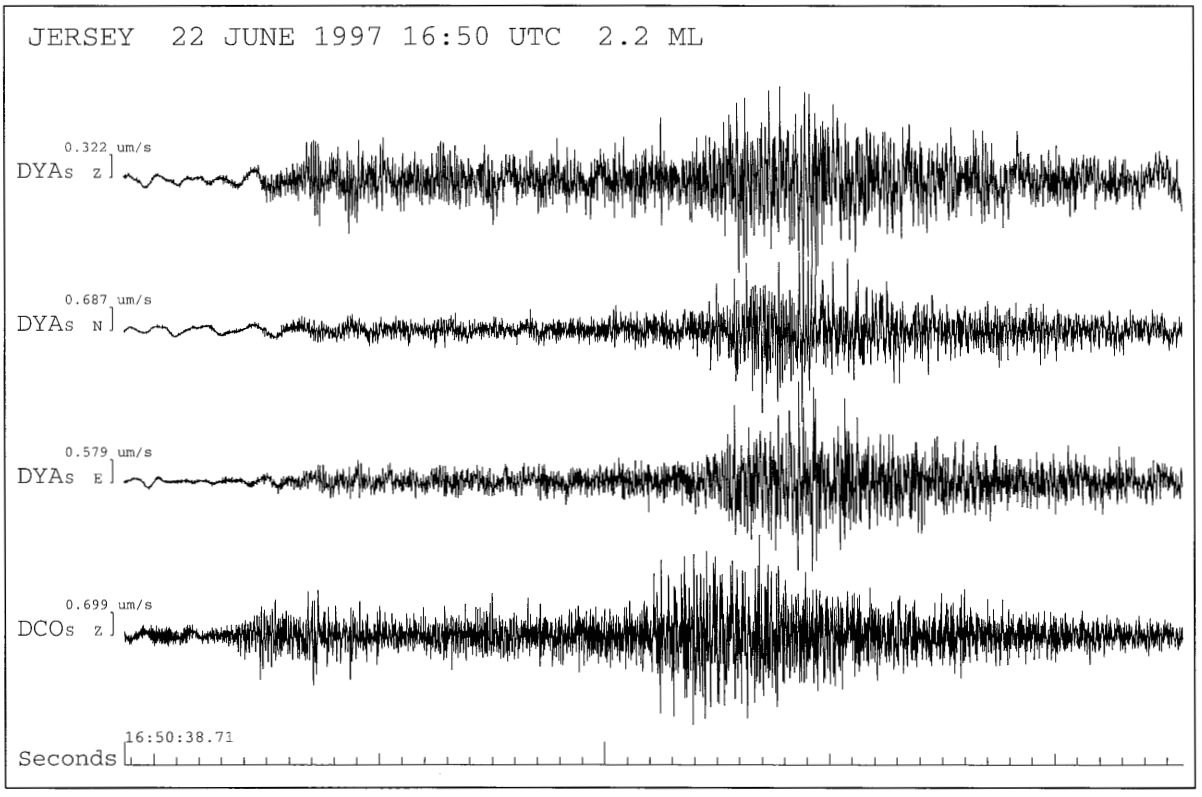


Figure A2.1. Seismograms of the Jersey earthquake 22 June 1997 16:50 UTC 2.2 ML recorded on the Jersey and Devon networks.

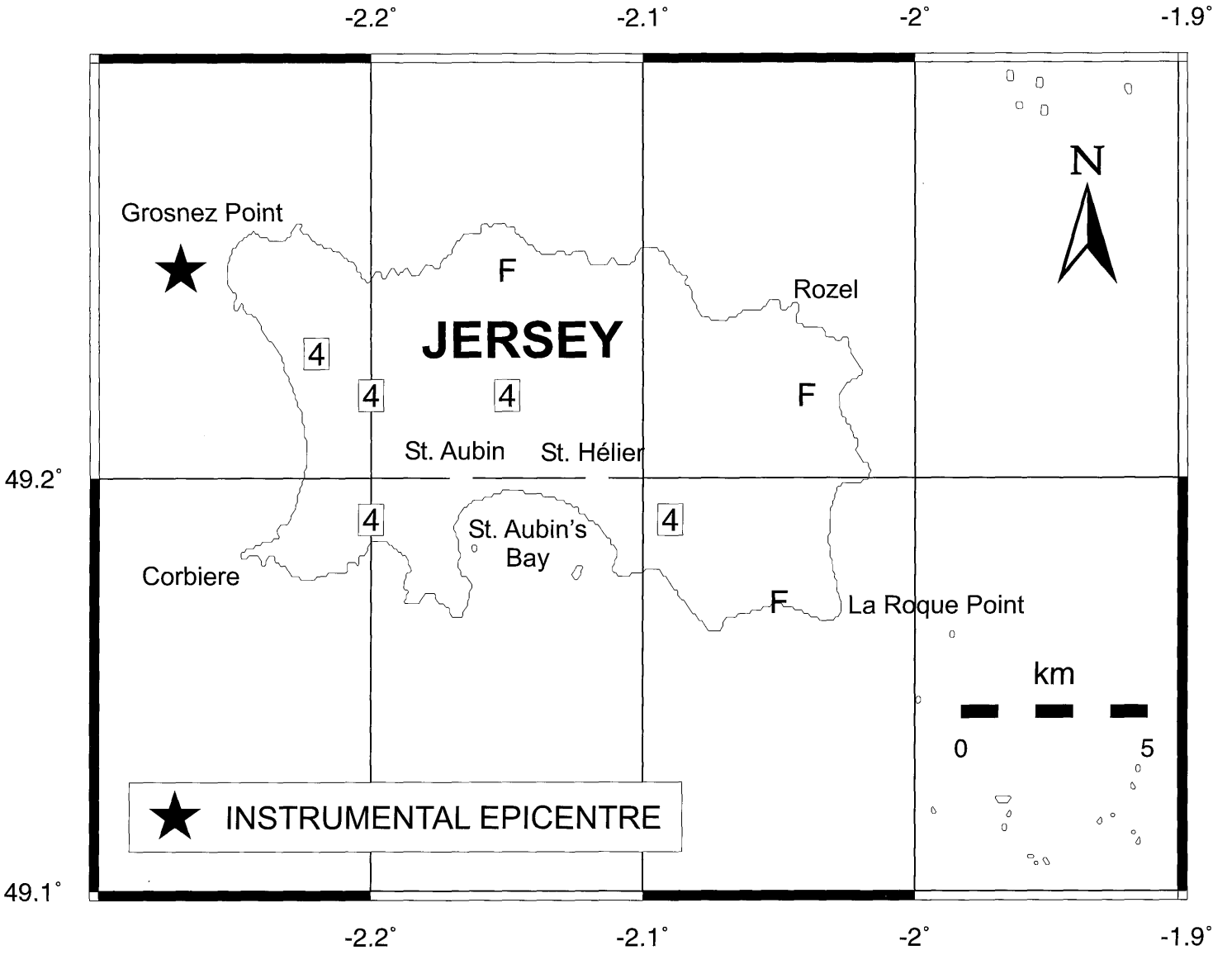


Figure A2.2. Jersey Earthquake 22 June 1997, 16:50 UTC (2.2 ML) - EMS Intensities

APPENDIX A3

DARTMOUTH EARTHQUAKE, 16 OCTOBER 1997

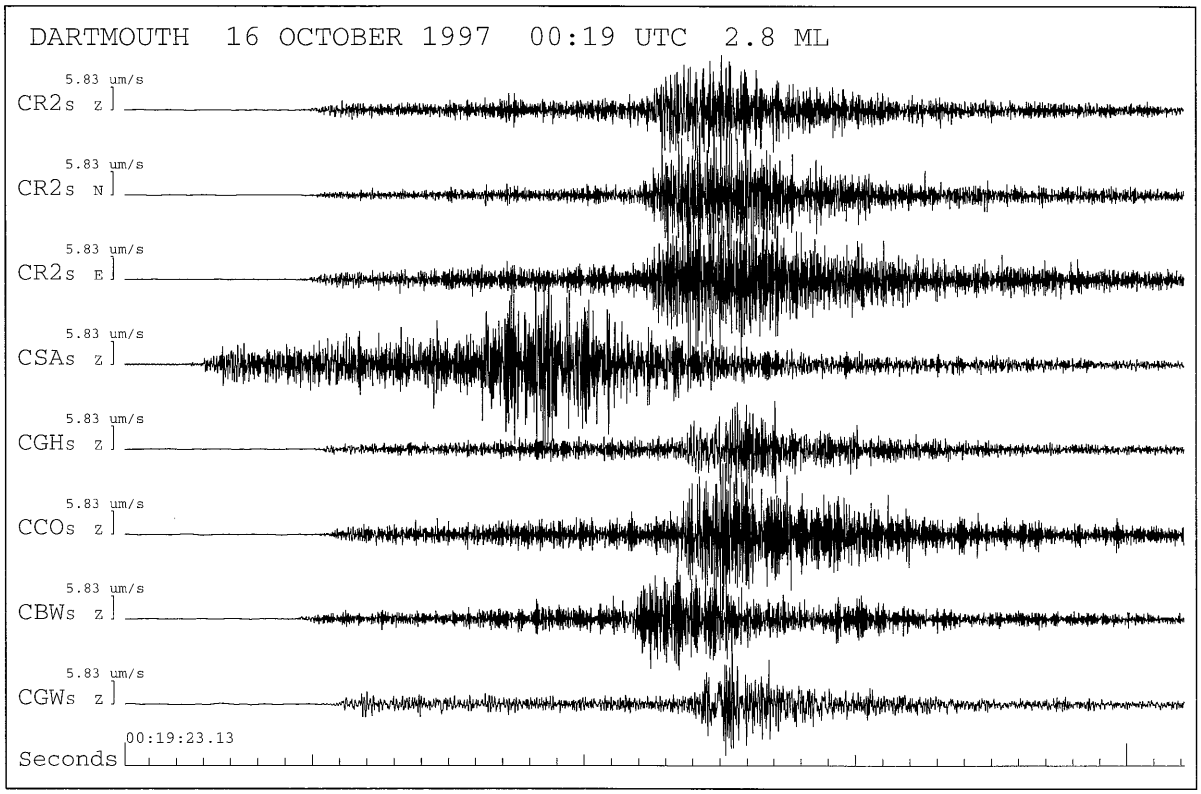
PARAMETERS

Date:	**16 October 1997**
Origin Time:	**00:19 11.7 UTC**
Latitude and longitude:	**50.39^{o} N 3.73^{o} W**
Grid Reference:	**277.0 km E 56.0 km N**
Depth:	**10.4 km**
Magnitude:	**2.8 ML**
Hypo Solution Quality:	**C (A*D)**
Epicentral Error (1 std. dev.):	**1.6 km**
Depth Error (1 std. dev.):	**2.7 km**

Discussion

An earthquake, with a magnitude of 2.8 ML, occurred on 16 October approximately 10 km northwest of Dartmouth in Devon. Felt reports described "being woken up and the bedside cabinet shaking", "a great shake moved the foundations" and "the house shook from side to side for 1-2 seconds". A macroseismic survey was carried out and 162 replies were received (156 positive and 6 negative). They indicated a maximum intensity of 4 EMS close to the epicentre and a felt area of 1400 km^{2}. No focal mechanism was obtained for this event owing to the poor station distribution in the epicentral region.

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



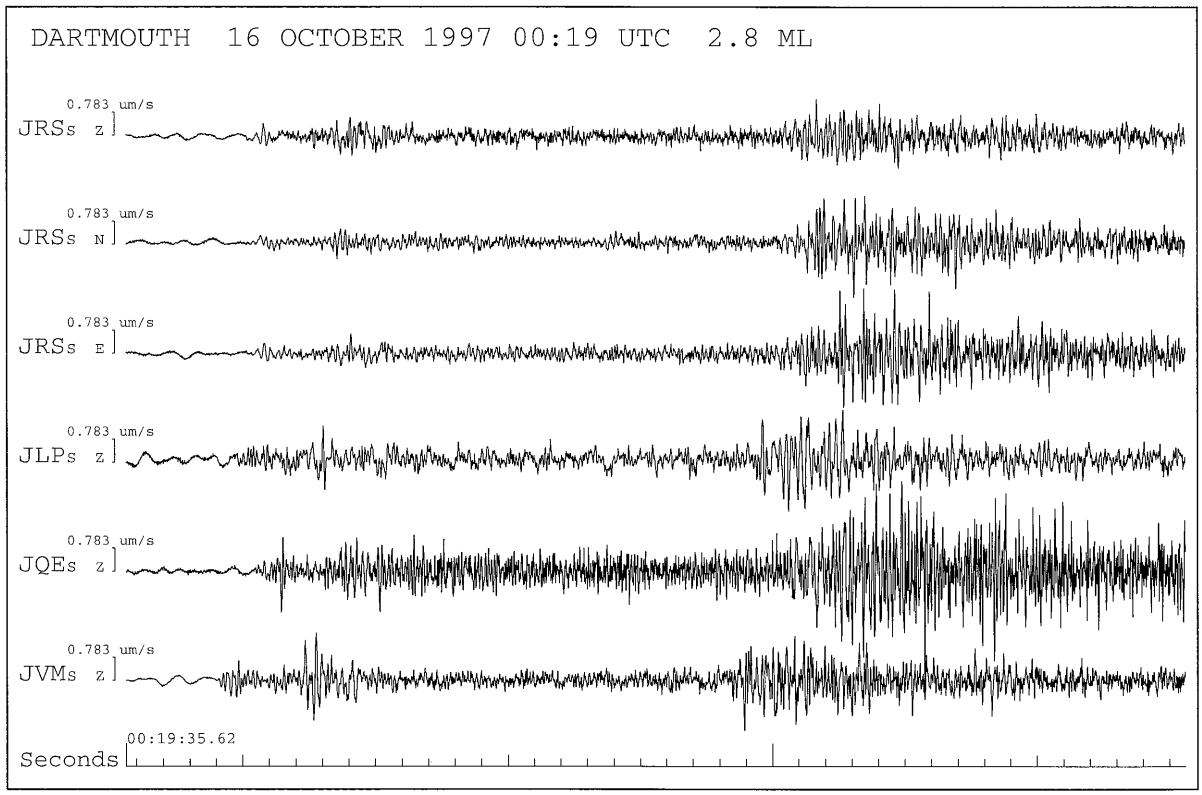


Figure A3.1. Seismograms of the Dartmouth earthquake 16 October 1997 00:19 UTC 2.8 ML recorded on the Cornwall and Jersey networks.

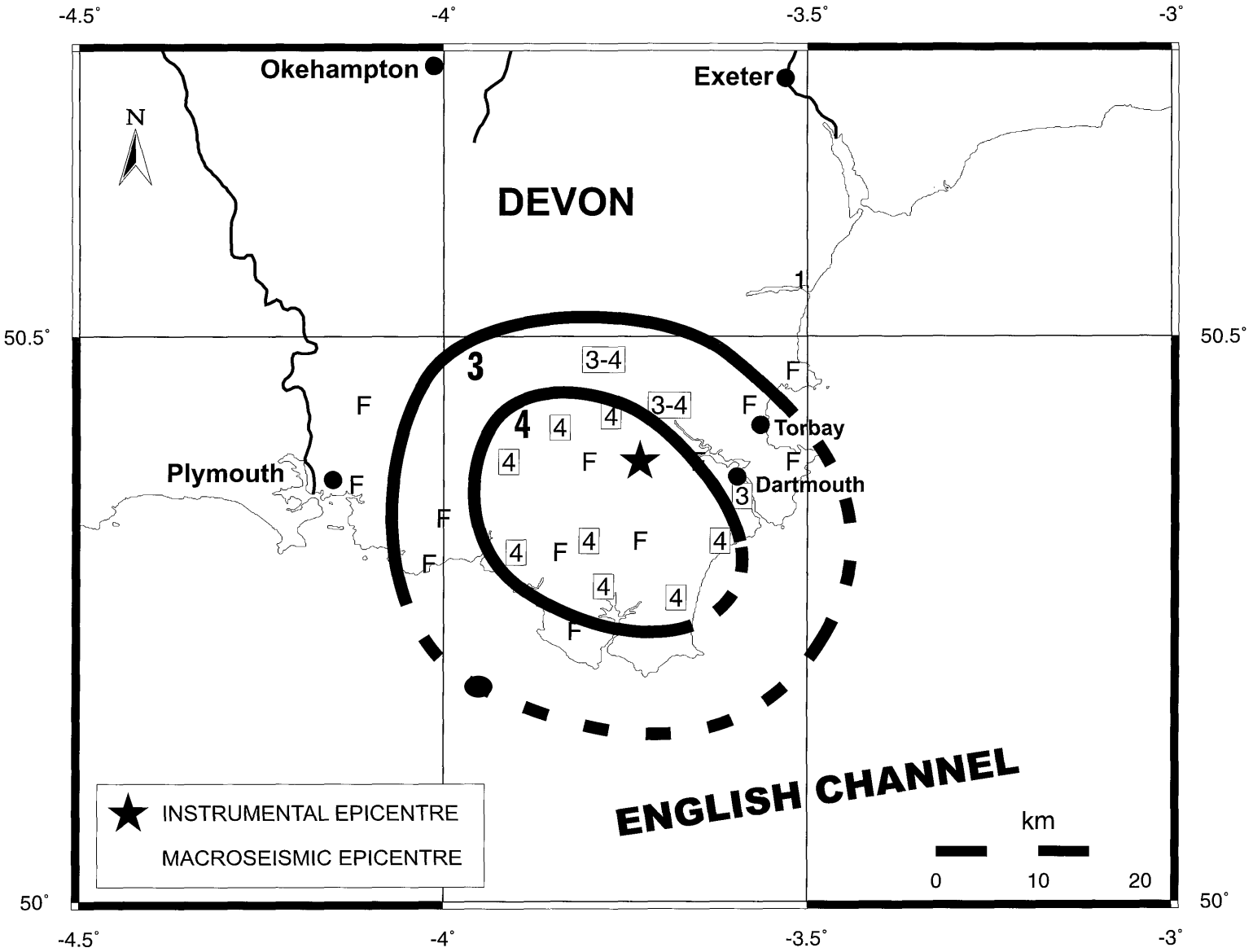


Figure A3.2. Dartmouth Earthquake 16th October 1997, 00:19 UTC (2.8 ML) - EMS Intensities

APPENDIX A4

MUSSELBURGH EARTHQUAKES, 9 & 11 JANUARY 1997

PARAMETERS

Date:	**9 January 1997**	**11 January 1997**
Origin Time:	**18:53 33.9 UTC**	**04:41 35.6 UTC**
Latitude and longitude:	**55.94^{o} N 3.08^{o} W**	**55.93^{o} N 3.08^{o} W**
Grid Reference:	**332.3 km E 672.1 km N**	**332.3 km E 671.8 km N**
Depth:	**1.7 km**	**1.5 km**
Magnitude:	**1.7 ML**	**1.7 ML**
Hypo Solution Quality:	**B (A*C)**	**B (A*B)**
Epicentral Error (1 std. dev.):	**0.5 km**	**0.6 km**
Depth Error (1 std. dev.):	**0.4 km**	**0.7 km**

Discussion

The area east of Edinburgh continued to be active during the first three months of the year, a series of 17 events occurred in the Musselburgh/Newcraighall area and represent a continuation of the activity which started in October 1996. The largest of these events in 1997, with magnitudes of 1.7 ML, occurred on 9 and 11 January and were felt in the Musselburgh area with intensities of at least 4 EMS. Four events in this series were felt by local residents who described "the whole house shook and rumbled" and "there was a loud bang". The pattern (most events occurring in the working week - Figure A4.3) and location of the activity was a consequence of mining at Monktonhall colliery. The two most likely causes of these events are: the undermining and subsidence of old workings with void and pillar collapses and shearing in strained rock layers; or the bridging, and subsequent breaking during subsidence, of a strong rock layer between the mine and the surface (in this case, 900 metres above). Following the closure of Monktonhall Colliery in March 1997, no further events have been detected.

Seismograms recorded by the BGS networks in the Scottish Lowlands (LOWNET) are shown in Figure A4.1 and A4.2 and a histogram, with number of events against day of the week, in Figure A4.3.

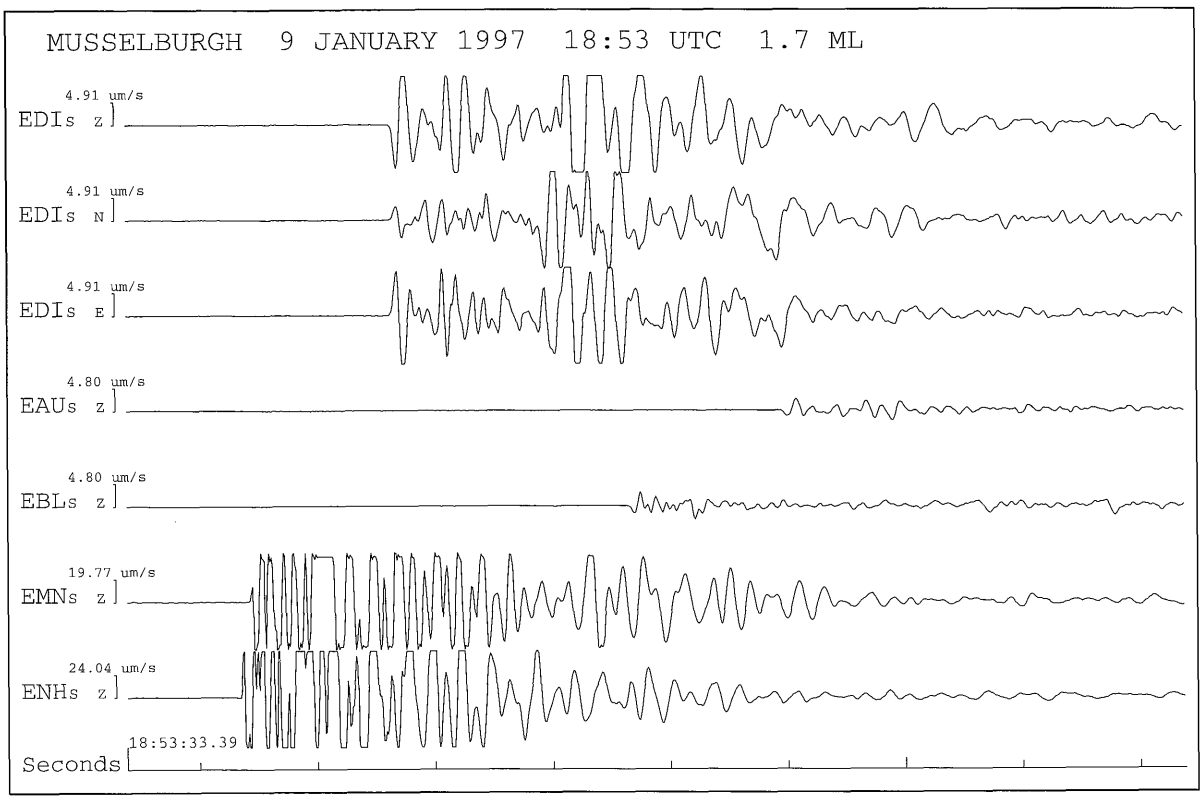
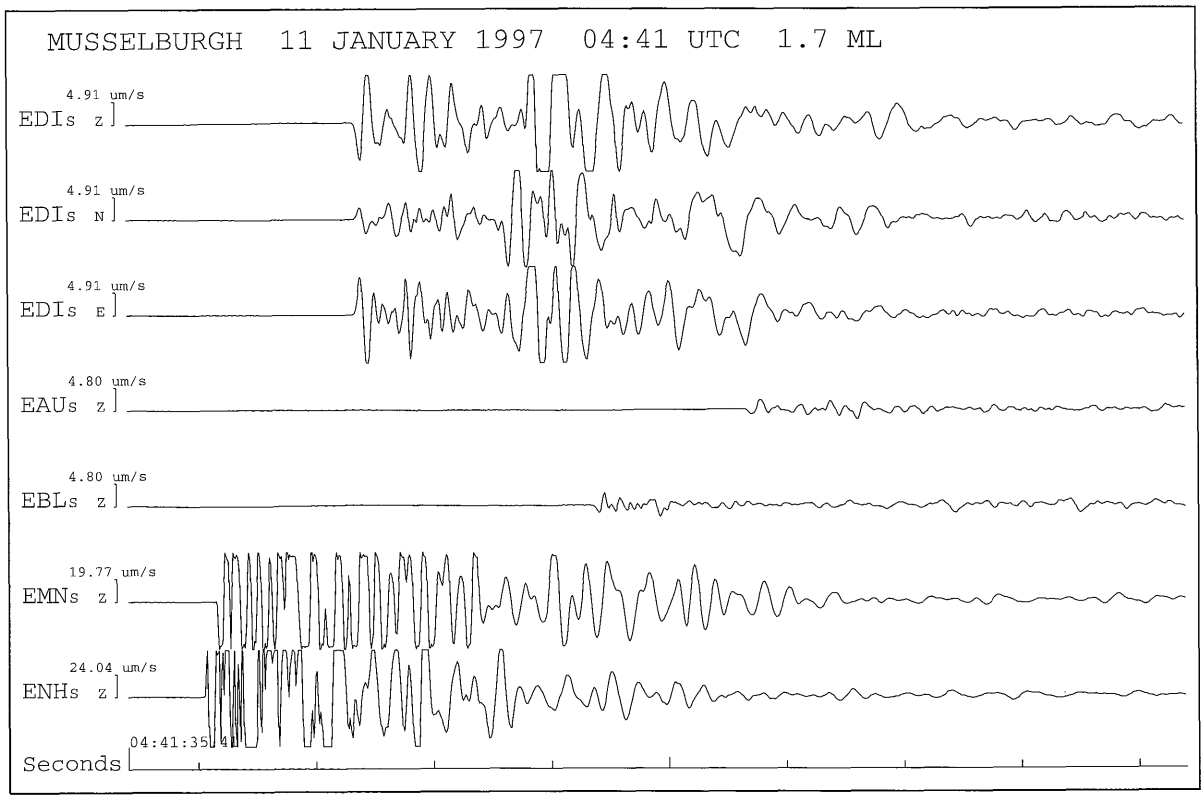


Figure A4.1. Seismogram of the Musselburgh earthquake 9 January 1997 18:53 UTC 1.7 ML recorded on the LOWNET network.



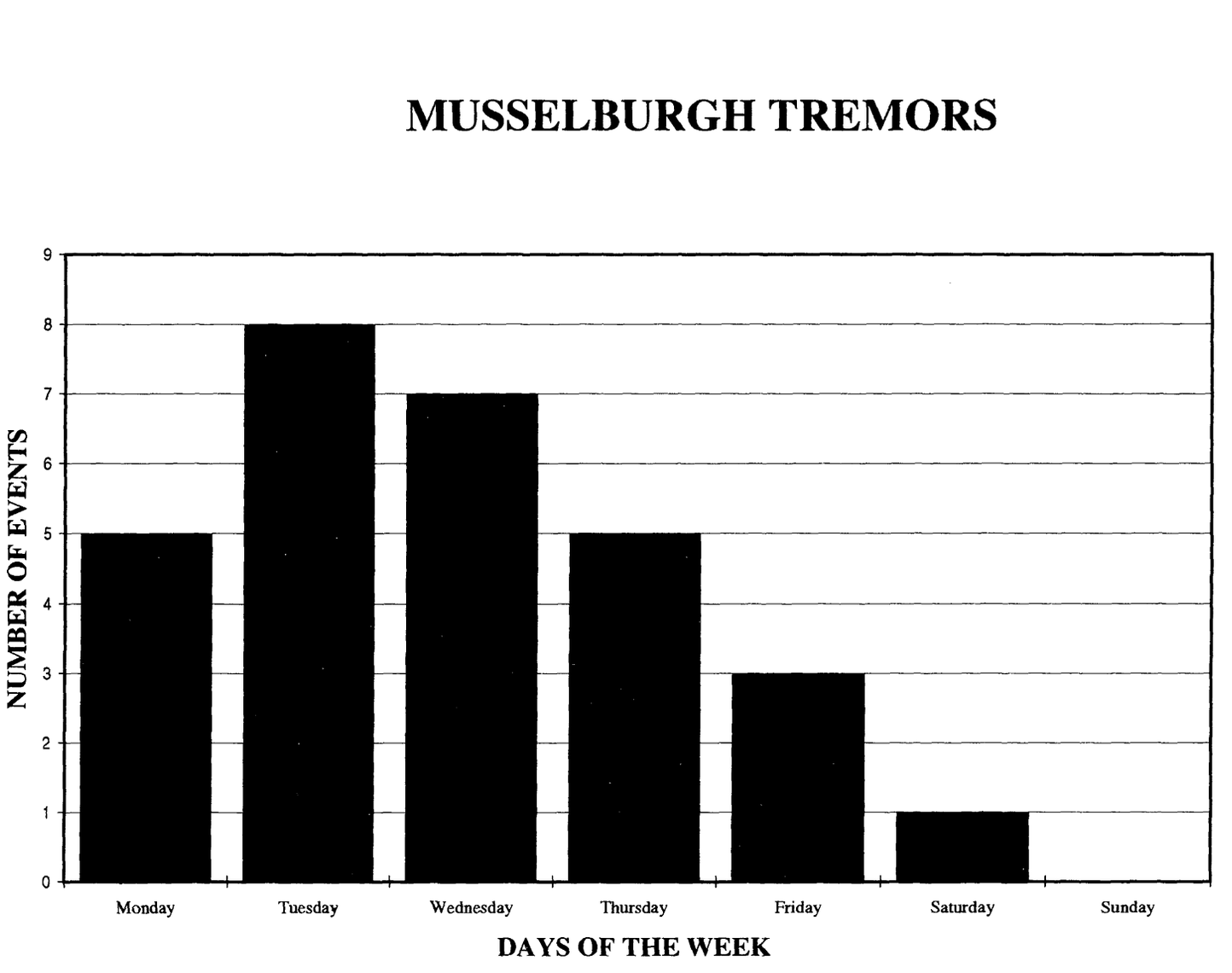


Figure A4.3. Histogram of cumulative number of Musselburgh events during 1997 against day of the week.

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 1/2 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.	**£90.00 + VAT**

For more information on the above and other services available please contact Ms A B Walker 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**

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 92)

APPENDIX C

SYNOPSIS OF EMS-92 INTENSITY SCALE

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.

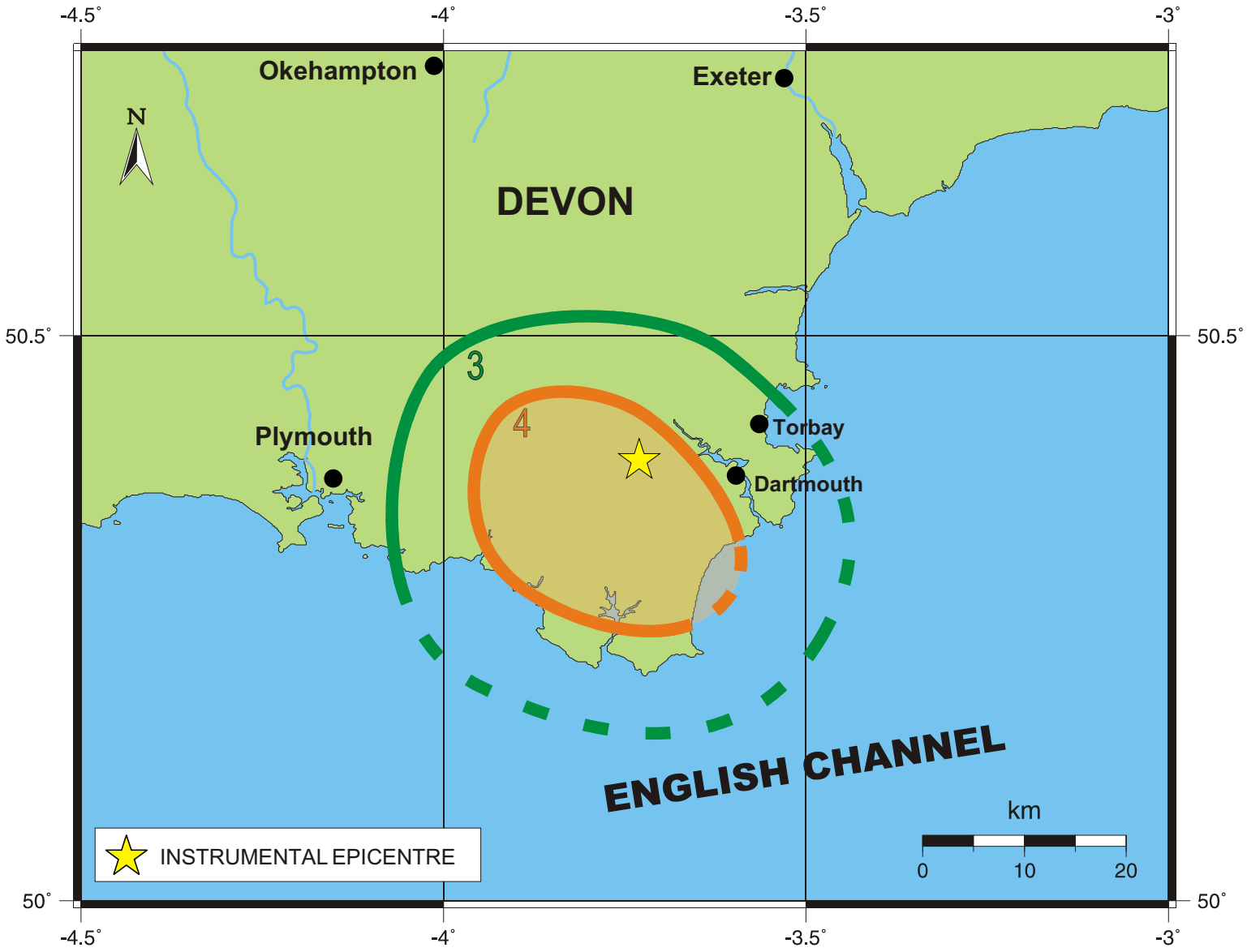
10 - Very destructive
Many ordinary buildings collapse.

11 - Devastating
Most ordinary buildings collapse.

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

_____-****-_____

A complete description of the EMS-92 scale is given in:
Grunthal, G.,(Ed) 1993. European Macroseismic scale 1992 (up-dated MSK-scale). Cahiers du Centre European de Geodynamique et de Seismologie. **Vol 7**.



Natural Environment Research Council

Dartmouth Earthquake 16th October 1997, 00:19 UTC (2.8 ML) - EMS Intensities