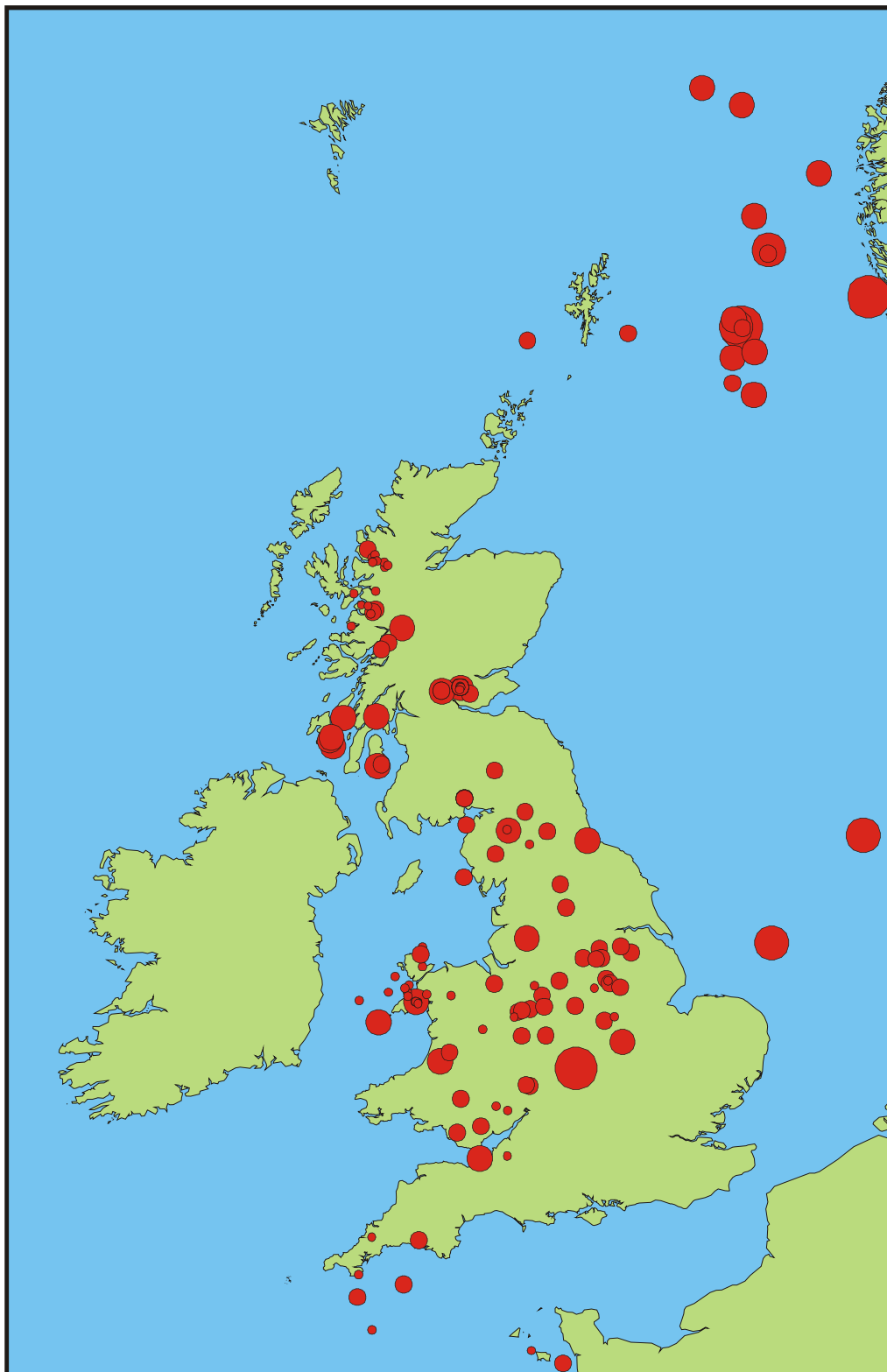




British Geological Survey

BULLETIN OF BRITISH EARTHQUAKES 2000



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TECHNICAL REPORT IR/01/28

Global Seismology and Geomagnetism

Bulletin of British earthquakes 2000

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BRITISH GEOLOGICAL SURVEY

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1. INTRODUCTION

1.1 The Bulletin

The British Geological Survey's Seismic Monitoring and Information Service operates a nationwide network of seismograph stations in the United Kingdom. The whole of the UK, including coastal waters, is covered within the limits of the detection capabilities of the seismograph network, and accuracy is extended through data exchange with neighbouring countries. Seismic phase data, location details and magnitudes are presented in the Bulletin for all earthquakes detected and located by BGS during 2000 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 km^2 , and are for the area enclosed within isoseismal 3 EMS (European Macroseismic Scale, [Appendix C](#)).

1.2 Summary of 2000 Seismicity

There have been 156 earthquakes located by the monitoring network during the year, with 35 of them having magnitudes of 2.0 ML or greater. Of these, 8 are known to have been felt, together with a further 9 smaller ones, bringing the total to 17 felt earthquakes in 2000.

The largest onshore earthquake, with a magnitude of 4.2 ML, occurred near Warwick on 23 September ([Appendix A1](#)). It was felt up to 150 km away and over an area of 14,900 km^2 . A macroseismic survey conducted after the event yielded over 2,500 replies and the resulting map of felt effects is shown in [Appendix A1](#). The highest observed intensity was 5 EMS at Warwick, where in a number of cases, objects such as ornaments, pictures or toys fell or were displaced. In a few cases, heavy objects were also said to have been displaced, including two washing machines, a cooker, a microwave and a sofa. The nearest 3-component strong motion instrument to record the earthquake was 76 km distant and accelerations of 17.3, 16.6 and 20.8 $mm s^{-2}$ were recorded for the vertical, NS and EW components, respectively. The focal mechanism indicates almost pure normal faulting on a NW-SE oriented plane, dipping either to the NE or to the SW.

The largest offshore earthquake occurred in the northern North Sea on 8 December. It had a magnitude of 4.6 ML and was located approximately 175 km east of the Shetland Islands. It was felt on a nearby oil platform in the Bruce field (20 km SW of the epicentre). One staff member reported that “the size of the movement was similar to that experienced in storm conditions although the sea state wasn't more than a few metres at the time”. Using a standard attenuation formula, it is estimated that a ground acceleration of 0.04g might have been experienced at this range; enough to be felt strongly on land. Platform dynamics may have amplified the effect at deck level.

An earthquake, with a magnitude of 4.2 ML, was located on the Norwegian Coast also on 8 December. It was felt with intensities of 5 EMS around Bergen, Norway. A further 20 events occurred in the North Sea and surrounding waters during the year, with magnitudes ranging between 1.0 and 4.5 ML, and were located using both the BGS and Norwegian networks.

Near Lochgilphead, Strathclyde, an earthquake, with a magnitude of 2.7 ML, occurred on 12 February. It was felt in Kames, Lochgilphead and Achahoish where residents described “tins fell off the shelf”, “the house was shaking” and “was woken up from sleep”, indicating an intensity of at least 4 EMS. Although the general area is seismically active, this is the largest

event since the magnitude 3.5 ML Lochgilphead earthquake in 1972, some 20 km to the northeast, which was also felt with intensities of at least 4 EMS.

Near Doune, Central Scotland, an earthquake with a magnitude of 2.3 ML occurred on 20 February. It was felt in Doune and Dunblane where residents described “windows and radiators rattled”, indicating an intensity of at least 3 EMS. This is an area which has experienced a number of earthquakes in the past. In particular, in 1997, a swarm of ten earthquakes occurred with magnitudes ranging between 0.9 and 2.7 ML. The two largest of these were felt with intensities of at least 4 EMS.

Two events occurred near Calthwaite, Cumbria with magnitudes of 0.5 and 2.6 ML. The latter occurred on 24 April ([Appendix A2](#)) and felt reports described “the whole house shook” and “the windows rattled”, indicating an intensity of at least 3 EMS. The nearest 3-component strong motion instrument to record the earthquake was 38 km distant and accelerations of 1.3, 7.2 and 1.4 mms^{-2} were recorded for the vertical, NS and EW components, respectively. A focal mechanism for the larger event was calculated and shows dominantly normal faulting with a minor component of strike-slip. The nodal planes strike NNW-SSE.

In North Wales, six events with magnitudes ranging between 0.0 to 2.7 ML, were located on the Lley Peninsula, in the same area and at similar depths (20 km) as the magnitude 5.4 ML Lley earthquake of 19 July 1984, which was felt throughout England and Wales and into Scotland and Ireland. The magnitude 2.7 ML event occurred on 22 June ([Appendix A3](#)) and felt reports were received via the media, the Police and residents in Dinorwic, Maentwrog, Llanberis and Caernarvon, North Wales. These reports described “the whole house shook” and “felt a shudder”, indicating an intensity of at least 4 EMS. This is the largest event in the Lley Peninsula area since the magnitude 2.7 ML earthquake on 15 April 1986, which was felt with intensities of 2 EMS in Pwllheli and Porthmadog. The calculated focal mechanism shows dominantly strike-slip faulting with a varying component of dip-slip. The nodal planes strike WNW-ESE and N-S. This is in reasonable agreement with the calculated focal mechanism for the 1984 earthquake. The P and T-axes are consistent with the regional stress direction for the UK.

Near Middlesbrough, Cleveland, an earthquake with a magnitude of 2.7 ML occurred on 8 August. Earthquakes of this size are usually felt when they occur onshore but enquiries to local Police stations and post offices revealed that no felt reports were received. The depth (24.4 km) may have contributed to the lack of felt effects. This is an area that has experienced little seismicity in both the historical and instrumental periods, with only two events located since 1970 within 10 km of this event.

Fourteen earthquakes were detected in the Blackford area of Tayside during the year 2000, with magnitudes ranging between 0.4 and 2.1 ML. The largest occurred on 9 August and was felt in the Blackford and Glendevon areas of Tayside, where intensities reached at least 3 EMS. Felt reports described “the furniture moved” and “the building shook”. This is an area that has continued to be active in recent years; 49 events occurred in 1997, of which five were felt by local residents; 10 events occurred in 1998, of which 2 were felt by local residents and 3 in 1999. In the same general area in 1979, a magnitude 3.2 ML Ochil Hills earthquake was felt with a maximum intensity of 5 EMS.

Seven events, with magnitudes ranging between 0.7 and 1.8 ML, occurred near Dumfries, Dumfries and Galloway. Two of these events with magnitudes of 1.2 and 1.8 ML were felt

by local residents in the Tinwald area of Dumfries and Galloway, where intensities reached at least 3 EMS.

Near Dollar, an earthquake with a magnitude of 1.1 ML, occurred on 25 September. Felt reports were received from the village of Rumbling Bridge, where intensities reached at least 3 EMS. Felt reports described “a rumbling beneath the feet”, “felt a thud” and “the whole house shook”. This is the first felt event in the Dollar area, since the magnitude 1.0 ML earthquake, on 25 August 1999, which was felt in the Forest Mill area, with intensities of at least 2 EMS.

An earthquake, with a magnitude of 1.4 ML, occurred near Mold, Clwyd on 3 November. Felt reports were received via the North Wales Environment Agency, Flintshire County Council and residents of Eryrys and Nercwys. Felt reports described “heard a tremendous bang”, “like a boulder hitting the side of the house” and “ornamental plates on the shelves rattled”, indicating an intensity of at least 4 EMS. This is the first felt event within 30 km of Mold, since the magnitude 4.5 ML Widnes earthquake, on 3 November 1976, which was felt with intensities of 4 EMS.

The coalfield areas of Yorkshire, Staffordshire, Mid Glamorgan, Northumberland and Nottinghamshire continued to experience shallow earthquake activity that is believed to be mining induced. Some 13 coalfield events, with magnitudes ranging between 0.8 and 1.9 ML, were detected during the year. Three of these were reported felt by local residents. The largest coalfield event (1.9 ML), occurred near Doncaster, South Yorkshire on 4 August. Felt reports were received via Yorkshire Television and residents of the Woodlands area of Doncaster, where intensities reached at least 5 EMS. Felt reports described “the walls shook” and “the whole street ran outside”. This is an area that has experienced similar events in the past.

2. BULLETIN FORMAT

2.1 Tables

Data on the earthquakes and seismograph stations operated in 2000 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 2000 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 2000.

FIGURE 2: Detection threshold of the seismograph stations operational in December 2000 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 2000 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 2000. 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 2000.

3. THE BGS UK SEISMOGRAPH NETWORK

3.1 Instrumentation

A standard seismic network consists of up to ten 'outstation' vertical seismometers radio-linked over distances of up to 100 km to a central site. Here the data, along with that from a local 3-component set of two horizontal and one vertical seismometers, are recorded onto a digital event-triggered recorder (SEISLOG). It is designed to trigger on events and write to a computer disk which is accessed from Edinburgh via a modem. Four times a day, data is transferred automatically to the Edinburgh central computer and the events are analysed during that day providing a rapid response for location and magnitude determinations. All of the recording centres in the UK have been upgraded to provide a SEISLOG system (Figs 1 and 2). At some centres, a continuous back-up facility is provided by the traditional magnetic tape Geostore recorders, and tapes are dispatched weekly to Edinburgh for analysis. SEISLOGS have the advantage over the Geostore system by providing digital data, of wider dynamic range (72 db), a bandwidth of up to 40 Hz and the capacity for 32 seismic channels. The system also has the facility to auto-reboot in the event of mains power failure and this normally takes three minutes once power has recovered.

At some locations, on-line paper chart recorders display three channels to enable local operators to view earthquake data. At other stations, low-gain vertical seismometers extend the dynamic range of the system (by 34 db) to stronger motions, and low frequency microphones are used to aid the discrimination of sonic booms. In addition, strong motion accelerometers have been installed at locations throughout the country and record accelerations up to 0.1g. A digitally recorded broad-band station (Guralp) located in Edinburgh, provides an assessment of surface-wave (Richter magnitude) for large Global earthquakes.

Recent developments in geographic coverage of the UK are described in Walker (2001, in press) and details of the SEISLOG system, which has been jointly developed by Bergen university and BGS are given in Utheim and Havskov (1993).

3.2 Detection Threshold

The detection capabilities of a network depend upon station distribution, instrument sensitivity and background noise levels. For the BGS UK network, the lower limit of sensitivity is governed by the background noise level. The contours in Figure 2 illustrate the lower threshold magnitude for an earthquake to significantly exceed 4 nanometers of noise (average) at 10 Hz on at least four seismographs. Noise sources such as wind, waves, traffic and livestock vary considerably with time (typically 0.5 to 15 nanometers, at 10 Hz) causing the magnitude thresholds to increase or decrease. In conditions of high noise, 0.8 ML should be added to the contour values.

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

3.3 Environmental Monitoring

The infrastructure provided by the UK nationwide seismic monitoring network, comprising remote sensing stations linked to computers, is ideal for expansion into a full-spectrum environmental monitoring network (including pollution, radioactivity and climate). The remote sites required for seismic stations (in order to escape 'cultural' vibration noise from industry, towns, roads etc) are ideal for establishing environmental baselines, long-term trends, the effects of sudden release incidents and the long-range impacts of power stations, traffic and city emissions. The data-rate for seismics, at 100 samples per second per channel, is very high compared to the normal requirements of an environmental monitoring station. It has, therefore, proved to be relatively simple to provide for the transmission of 16 channels of environmental data, at 1 minute intervals, alongside the seismics. To demonstrate this, BGS has established several remote environmental stations, recording Ultra Violet-B, a full set of meteorological parameters, radioactivity, NO_x, SO₂ and O₃ gases. At Eskdalemuir Observatory, in the Scottish Borders, a comprehensive system for environmental monitoring has been installed to prove this capability through an INTERNET connection with the wider community.

4. HYPOCENTRE PARAMETERS AND THEIR ERRORS

4.1 Epicentre Location

By accurately timing the signal onsets at a minimum of three stations, a location can be found for an earthquake which satisfies the observed pattern of arrivals. Instrumental locations in the bulletin were obtained using the computer program HYPO71 (Lee and Lahr, 1975) which iteratively adjusts a trial hypocentre (latitude, longitude, depth, and origin time) until the observed and computed arrival times coincide closely.

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

The velocity models used for the location of events in 2000 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; Assumpcao 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 2000, 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 2000 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):

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

where A is the maximum deflection (centre to peak in mm) registered by the earthquake on a Wood-Anderson seismograph and A₀ is that for a 'standard' magnitude zero earthquake at the same distance. The A₀ term is thus a distance correction factor tabulated by Richter out to 200 km, and later adjusted to include up to 600 km. Although Richter intended his method to be an approximate quantification of earthquake size and his attenuation term, A₀, 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 (I_{max}) usually found close to the epicentre. The maximum felt intensity is quoted, where known, on the European Macroseismic Scale (EMS), (Grünthal, 1998).

5. BULLETIN CONTENT AND COMPLETENESS

5.1 The Geographical Area

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

5.2 Events Included

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

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

Acoustic disturbances, such as sonic booms from supersonic aircraft, are included when they are felt. The air-borne waves are readily identified by their slow travel time across an array or by their signature on a microphone but they are frequently reported by local people as small earthquakes. They are indicated by 'SONIC' in both the locality and comments column of [Tables 1 and 3](#). There was one felt sonic event reported during the year. It occurred on 20 January in the Grampian region of Scotland. Numerous felt reports received from residents throughout the Grampian region who described “the windows rattled”, “the door rattled” and “heard a loud bang”. RAF flying complaints were contacted and confirmed that a RAF Tornado was operational in the area at the time.

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. There was one felt explosion reported during the year on 30 August in Largo Bay, Fife. The coastguard confirmed that a 300lb ordnance charge was detonated at the time.

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.

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UK Earthquake Monitoring Annual Reports

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

TABLE 1

CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 2000

KEY TO BULLETIN ENCODING

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

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

No	: Total number of P and S readings used in the event location.
DM	: Epicentral distance in kilometres to the closest station.
Gap	: Largest azimuthal separation in degrees between stations.
RMS	: Root Mean Square of the travel -time residuals in seconds.
ERH	: Standard error of the epicentre in kilometres. When this column is blank, the error is large and indeterminate.
ERZ	: Standard error of the focal depth in kilometres. When this column is blank, the error is large and indeterminate.
SQD	: S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations.

Locality abbreviations

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

Comments abbreviations

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

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:2000

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000107	221638.4	55.09	-3.63	295.8	579.0	10.3	1.8	DUMFRIES,D & G	2+	8	9	134	0.04	0.4	0.9	A*B	FELT TINWALD
20000110	040957.8	53.04	-4.20	252.3	351.7	10.6	0.7	CAERNARVON,GWYNEDD		9	11	125	0.05	0.3	1.3	A*B	11KM SE OF CAERNARVON
20000112	093549.0	52.11	-2.40	372.3	246.2	6.4	1.6	GREAT MALVERN,HER & WOR		8	13	243	0.09	1.0	2.4	B*D	
20000116	055658.8	57.05	-5.57	183.4	801.4	7.3	0.1	KNOYDART,HIGHLAND		5	20	199	0.12	8.9	8.1	D*D	
20000117	194010.8	56.22	-3.77	290.5	704.4	5.2	0.9	BLACKFORD,TAYSIDE		6	16	147	0.27	2.7	4.1	C*C	
20000120	103536.0							SONIC-GRAMPIAN	3+								SONIC-FELT ELGIN...
20000120	141051.0	51.61	-3.62	287.5	191.8	11.4	1.8	MAESTEG,MID GLAMORGAN		7	40	104	0.04	0.9	18.9	C*C	
20000120	234129.6	56.68	-5.15	207.3	758.6	4.9	1.2	LOCH LEVEN,HIGHLAND		5	19	268	0.05	2.9	3.7	C*D	
20000121	060257.3	55.09	-3.63	296.1	578.6	10.1	1.1	DUMFRIES,D & G		9	10	132	0.05	0.3	0.8	A*B	
20000122	122530.7	56.25	-3.76	291.2	707.3	4.6	1.9	BLACKFORD,TAYSIDE		10	15	106	0.05	0.3	0.6	A*C	
20000122	134315.6	56.97	-5.51	186.7	792.2	14.8	0.7	LOCH MORAR,HIGHLAND		5	20	241	0.13	0.8	2.9	B*D	
20000124	003528.1	52.12	-2.41	371.6	246.9	6.4	0.7	GREAT MALVERN,HER & WOR		6	13	242	0.06	1.1	2.7	B*D	
20000125	104813.7	53.64	-2.47	369.0	416.0	8.0	2.0	BOLTON,GTR MANCHESTER		9	42	89	0.11	0.6		C*C	
20000203	042244.4	51.38	-2.77	346.2	165.0	2.3	0.8	BRISTOL,AVON	4+	6	9	193	0.35	1.2	0.6	C*D	FELT FLAX BOURTON...
20000211	021617.9	54.58	3.61	762.4	534.9	20.0	3.2	SOUTHERN NORTH SEA		16249	279	0.23		7.5	11.2	D*D	
20000212	085128.5	55.91	-5.31	193.1	673.5	8.8	2.7	LOCHGILPHEAD,S'CLYDE	5+	13	36	135	0.11	0.5	2.9	B*C	FELT KAMES...
20000212	185106.2	52.35	-3.95	267.5	274.4	4.4	2.0	ABERYSTWYTH,DYFED		12	37	88	0.19	0.8		C*C	7KM SE OF ABERYSTWYTH
20000214	003254.2	52.81	-0.95	470.9	324.3	12.0	0.8	MELTON MOWBRAY,LEICS		4	11	196	0.01			A*D	6KM NW OF MELTON MOWBRAY
20000214	044245.6	53.13	-0.83	478.2	360.2	1.0	1.1	NEWARK-ON-TRENT,NOTTS		4	48	290	0.27			B*D	C/F
20000216	060251.5	55.88	-5.92	154.6	671.8	12.5	2.2	JURA,STRATHCLYDE		9	63	175	0.17	1.9	4.4	B*D	
20000220	055451.4	54.76	-2.11	392.7	540.7	11.8	1.1	STANHOPE,DURHAM		13	13	124	0.08	0.5	1.0	A*B	7KM WEST OF STANHOPE
20000220	093152.3	56.20	-4.10	269.7	702.6	4.6	2.3	DOUNE,CENTRAL	4+	14	15	132	0.04	0.2	0.4	A*C	FELT DOUNE...
20000224	010033.6	53.04	-2.20	386.7	348.7	3.7	1.7	NEWCASTLE-U-LYME,STAFFS		6	24	163	0.04	0.5	0.9	A*C	
20000303	075649.9	57.06	-5.70	175.6	802.5	9.6	0.8	KNOYDART,HIGHLAND		4	17	180	0.10			A*D	
20000306	220631.6	54.77	-2.84	345.8	542.4	11.8	0.5	CALTHWAITE,CUMBRIA		13	7	129	0.09	0.5	0.9	A*B	
20000313	211404.1	52.83	-2.68	354.1	325.6	13.4	0.8	SHREWSBURY,SHROPSHIRE		6	37	147	0.05	0.9	2.1	B*C	12KM NNE OF SHREWSBURY
20000315	043440.2	53.20	-1.04	464.2	367.5	1.0	0.9	OLLERTON,NOTTS		5	33	279	0.31	11.9	9.3	D*D	C/F
20000317	020556.6	53.14	-2.33	378.1	360.5	11.2	0.9	SANDBACH,CHESHIRE		11	35	118	0.16	0.9	4.0	B*C	
20000317	095725.0	53.04	-3.79	280.3	350.5	14.5	0.4	BETWS-Y-COED,GWYNEDD		8	26	131	0.04	0.5	2.6	B*B	6KM S OF BETWS-Y-COED
20000320	085041.3	53.22	-4.77	215.1	372.4	17.3	0.3	CAERNARVON BAY,GWYNEDD		7	14	261	0.07	2.2	1.9	B*D	15KM SW OF HOLYHEAD
20000320	153838.9	55.09	-3.62	296.5	578.3	10.2	0.9	DUMFRIES,D & G		8	10	129	0.07	0.5	1.4	A*B	
20000320	215456.4	55.09	-3.62	296.6	578.4	10.0	0.9	DUMFRIES,D & G		9	10	128	0.07	0.4	1.1	A*B	
20000321	052313.8	54.27	-3.61	295.4	487.4	9.2	1.0	IRISH SEA		8	20	166	0.07	1.2	6.2	C*C	
20000322	013509.1	51.68	-3.23	315.0	199.1	1.0	1.4	BARGOED,MID GLAMORGAN		8	30	80	0.14	0.7	1.9	A*C	C/F
20000324	205853.8	52.90	-2.55	363.3	333.6	5.3	1.9	MARKET DRAYTON,SALOP		8	48	149	0.05	0.5	4.1	B*C	
20000326	154328.9	56.24	-3.75	291.7	707.2	5.4	0.9	BLACKFORD,TAYSIDE		7	15	105	0.07	0.9	1.8	A*C	
20000327	020149.0	56.21	-4.11	269.0	703.4	4.6	1.7	DOUNE,CENTRAL		12	14	137	0.07	0.4	0.7	A*C	
20000331	052110.0	56.25	-3.76	291.2	707.6	5.1	0.6	BLACKFORD,TAYSIDE		8	15	107	0.07	0.5	0.8	A*C	
20000401	102213.4	57.51	-5.52	189.0	852.1	7.3	0.8	TORRIDON,HIGHLAND		4	14	253	0.05			A*D	4KM SOUTH OF TORRIDON
20000401	201507.1	52.88	-2.61	359.0	331.8	10.7	1.4	MARKET DRAYTON,SALOP		9	44	121	0.14	0.9		C*C	7KM W OF MARKET DRAYTON
20000402	084047.6	49.87	-5.18	171.2	1.7	12.7	1.7	LIZARD POINT,CORNWALL		10	20	308	0.07	1.3	2.7	B*D	SOUTH OF LIZARD POINT
20000405	164144.5	56.20	-4.11	269.0	703.2	4.6	1.2	DOUNE,CENTRAL		8	14	136	0.08	0.6	1.0	A*C	
20000406	201651.1	51.89	-2.97	332.9	222.0	15.0	0.8	ABERGAVENNY,GWENT		7	12	158	0.15	0.6	1.4	A*C	7KM NORTH OF ABERGAVENNY

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:2000 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000410	045450.5	54.96	-2.52	366.9	563.2	0.0	1.1	HALTWHISTLE,N'UMBERLND		9	12	291	0.05	0.6	0.3	A*D	C/F
20000410	211658.7	52.79	-1.12	459.4	321.4	27.0	1.3	LOUGHBOROUGH,LEICS		7	11	136	0.05	0.6	0.6	A*C	
20000411	021751.8	52.91	-2.41	372.6	334.7	8.8	1.9	MARKET DRAYTON,SALOP		6	40	147	0.17	2.0		C*C	
20000411	022613.5	59.23	2.09	633.4	1044.8	8.1	2.1	NORTHERN NORTH SEA		16180	176	0.20	1.4	2.0	B*D		
20000411	182315.2	53.17	-1.01	465.9	364.7	1.0	1.1	OLLERTON,NOTTS		5	35	205	0.24	7.1	9.8	D*D	C/F
20000414	192733.5	56.84	-4.90	223.3	775.7	12.1	2.1	FORT WILLIAM,HIGHLAND		8	5	127	0.07	0.8	0.8	A*B	12KM E OF FORT WILLIAM
20000418	172957.4	51.86	-2.77	346.7	217.8	16.7	0.7	MONMOUTH,GWENT		7	22	147	0.04	0.3	1.2	A*C	7KM NW OF MONMOUTH
20000422	001833.7	57.64	-5.64	183.0	866.7	3.2	1.8	GAIRLOCH,HIGHLAND		15	25	65	0.23	0.9	2.0	B*C	10KM SOUTH OF GAIRLOCH
20000424	051055.7	54.77	-2.81	347.6	541.5	13.8	2.6	CALTHWAITE,CUMBRIA	3+	18	9	133	0.09	0.3	0.7	A*B	FELT CALTHWAITE...
20000427	214408.9	61.49	3.82	709.7	1303.9	10.3	2.9	NORTHERN NORTH SEA		15	66	191	0.37	2.3	1.9	C*D	
20000502	213811.2	52.55	-0.81	480.7	295.4	15.3	2.1	UPPINGHAM,LEICS		8	29	122	0.10	1.1	1.9	B*B	6KM SW OF UPPINGHAM
20000503	004757.2	52.94	-4.36	241.7	341.2	24.5	0.0	LLEYN PENIN,GWYNEDD		9	6	103	0.08	0.6	1.8	A*B	
20000503	182011.6	53.22	-1.07	462.0	370.0	1.0	1.3	MARKET WORSOP,NOTTS		7	31	118	0.30	1.8	4.6	C*C	C/F
20000505	045217.1	60.73	2.61	651.3	1214.3	16.8	3.6	NORTHERN NORTH SEA		17122	149	0.19	1.2	4.8	B*D		
20000505	050901.6	60.69	2.62	651.9	1209.8	10.8	1.8	NORTHERN NORTH SEA		13123	147	0.29	1.9	4.4	B*D		
20000509	005533.8	52.92	-1.62	425.5	335.8	7.6	1.7	DERBY,DERBYSHIRE		7	18	173	0.06	0.5		C*C	10KM WEST OF DERBY
20000516	233002.3	53.53	-4.31	247.1	406.8	16.9	0.2	IRISH SEA		7	15	188	0.04	0.8	1.1	A*D	13KM NORTH OF ANGLESEY
20000518	150820.3	53.49	-0.63	491.1	400.3	18.8	1.9	GAINSBOROUGH,LINCS		5	20	187	0.07	0.1	0.1	A*D	
20000520	161654.3	52.74	-5.02	196.0	319.7	10.6	2.3	IRISH SEA		11	29	215	0.09	1.0	0.8	A*D	20KM SW OF LLEYN PENIN
20000526	200945.5	51.97	-3.57	292.0	230.9	14.2	1.6	SENNYBRIDGE,POWYS		9	24	114	0.14	0.8	1.2	A*B	
20000529	050427.7	55.10	-3.63	296.1	579.2	10.7	0.7	DUMFRIES,D & G		9	9	131	0.06	0.4	0.9	A*B	
20000601	143727.5	57.49	-5.23	206.7	848.4	7.4	0.9	GLEN CARRON,HIGHLAND		4	5	272	0.02			A*D	
20000606	115818.4	52.43	-3.78	278.9	283.1	11.0	1.5	DEVIL'S BRIDGE,DYFED		13	15	77	0.16	0.8	1.3	B*B	
20000607	032559.5	54.52	-3.04	332.5	514.4	10.9	1.1	LAKE THIRLMERE,CUMBRIA		8	9	234	0.05	0.9	1.0	A*D	
20000611	113626.5	56.25	-3.76	291.2	707.4	4.5	1.1	BLACKFORD,TAYSIDE		8	15	107	0.03	0.2	0.5	A*C	
20000612	053655.2	52.96	-4.39	239.5	343.4	24.4	0.3	LLEYN PENIN,GWYNEDD		8	3	106	0.05	0.5	1.6	A*B	
20000613	065435.4	57.02	-5.42	192.2	797.2	6.2	1.1	LOCH QUOICH,HIGHLAND		5	21	210	0.11	5.6	2.9	D*D	
20000614	132737.9	56.25	-3.75	291.5	707.9	6.0	1.0	BLACKFORD,TAYSIDE		8	15	107	0.04	0.3	0.7	A*C	
20000617	040329.6	52.12	-2.46	368.2	247.2	14.9	1.4	BROMYARD,HER & WOR		7	11	236	0.07	1.1	0.8	B*D	6KM SOUTH OF BROMYARD
20000622	143713.4	52.96	-4.39	239.5	343.4	24.5	2.7	LLEYN PENIN,GWYNEDD	4+	11	3	85	0.05	0.4	1.0	A*A	FELT LLANBERIS...
20000622	144907.8	55.39	-3.09	331.3	611.1	8.1	1.3	HAWICK,BORDERS		12	11	99	0.16	1.1	2.1	B*B	18KM WSW OF HAWICK
20000625	043117.0	55.39	-5.23	195.1	615.0	14.8	0.9	ARRAN,STRATHCLYDE		6	23	132	0.08	1.0	4.2	B*B	5KM SOUTH OF ARRAN
20000626	204959.5	53.43	-1.25	450.1	392.8	1.0	1.4	ROTHERHAM,S YORKSHIRE	3+	6	27	206	0.28	4.6	6.6	C*D	C/F,FELT SPOTSWOOD
20000627	195024.5	57.52	-5.44	193.8	853.4	9.0	-0.2	TORRIDON,HIGHLAND		3	9	257	0.01			A*D	
20000628	070959.0	56.61	-5.28	199.0	750.9	8.7	1.6	APPIN,STRATHCLYDE	3+	11	30	157	0.11	0.6	13.2	C*C	FELT APPIN...
20000628	154906.5	52.92	-2.16	389.4	336.1	2.6	1.1	STONE,STAFFORDSHIRE		6	24	140	0.03	0.4	0.7	A*C	C/F
20000629	002305.5	57.51	-5.30	202.3	852.0	13.3	-0.2	GLEN CARRON,HIGHLAND		4	2	310	0.01			A*D	
20000630	115525.1	62.47	1.36	573.4	1403.8	18.4	2.8	NORWEGIAN SEA		12216	264	0.27	6.1	7.5	D*D		
20000703	083634.6	57.51	-5.51	189.7	852.6	13.5	0.4	TORRIDON,HIGHLAND		5	13	255	0.08	2.4	3.6	B*D	8KM SOUTH OF TORRIDON
20000703	084118.7	59.37	1.67	608.2	1059.8	14.9	1.7	NORTHERN NORTH SEA		5179	343	0.35			D*D		
20000704	042154.7	53.02	-4.54	229.9	349.7	15.6	0.5	CAERNARVON BAY,GWYNEDD		8	8	157	0.07	0.9	1.4	A*C	
20000705	230954.0	53.44	-1.15	456.3	393.9	0.5	1.5	ROTHERHAM,S YORKSHIRE		7	32	116	0.13	1.0	2.4	B*C	C/F,10KM E OF ROTHERHAM
20000710	090601.4	61.09	2.37	635.3	1252.8	22.5	2.2	NORTHERN NORTH SEA		15129	176	0.19	1.2	2.3	B*D		
20000712	194852.3	50.02	-4.45	224.8	16.5	5.6	1.7	DODMAN POINT,CORNWALL		8	49	314	0.05	2.0	19.9	C*D	25KM SE OF DODMAN POINT
20000713	232046.7	55.09	-3.63	296.1	578.5	11.0	1.0	DUMFRIES,D & G		9	10	132	0.06	0.4	0.9	A*B	

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:2000 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000714	212524.3	52.63	-2.55	362.9	303.9	5.9	1.4	TELFORD, SHROPSHIRE		11	26	106	0.07	0.3	0.6	A*C	
20000715	034300.2	53.54	-1.16	455.8	405.7	0.3	1.7	DONCASTER, S YORKSHIRE	2+	5	59	285	0.25	18.8	10.8	D*D	C/F, FELT SCAWTHORPE
20000717	020602.6	49.54	-4.93	188.0	-36.0	15.0	0.9	ENGLISH CHANNEL		5	59	355	0.21			D*D	
20000717	233220.6	55.10	-3.63	296.1	579.1	11.0	1.2	DUMFRIES, D & G	3+	9	9	132	0.07	0.5	1.1	A*B	FELT TINWALD
20000718	145155.7	53.13	-1.28	447.9	359.3	1.0	0.8	MANSFIELD, NOTTS		4	21	232	0.40			C*D	C/F, 6KM SW OF MANSFIELD
20000723	192744.7	53.10	-4.59	226.6	359.4	15.1-0.1		CAERNARVON BAY, GWYNEDD		6	16	179	0.06	1.1	2.9	B*C	
20000801	215322.9	53.96	-1.78	414.7	452.1	11.0	1.4	WHARFDALE, N YORKSHIRE		16	10	99	0.36	1.9	2.5	C*B	
20000802	031925.7	53.05	-4.87	207.4	354.5	16.0	0.6	CAERNARVON BAY, GWYNEDD		7	29	245	0.05	1.0	3.5	B*D	
20000804	002659.5	56.83	-5.88	163.6	778.0	12.8	0.9	ARISAIG, HIGHLAND		3	10	340	0.03			A*D	10KM SOUTH OF ARISAIG
20000804	105208.7	53.54	-1.19	453.7	404.8	1.9	1.9	DONCASTER, S YORKSHIRE	5+	6	39	238	0.02	0.5	0.3	A*D	C/F, FELT DONCASTER
20000804	121059.8	49.36	-2.35	374.5	-60.1	6.7	0.7	JERSEY, CHANNEL ISLANDS		6	19	338	0.02	0.9	0.4	A*D	
20000805	052521.1	57.21	-5.44	192.5	818.3	7.0	0.1	SHIEL BRIDGE, HIGHLAND		5	1	237	0.26	0.4	0.2	B*D	
20000806	065731.5	52.64	-2.13	391.1	304.3	7.9	1.2	WOLVERHAMPTON, W MIDS		11	47	124	0.26	1.5		C*C	
20000808	024603.5	54.66	-1.39	439.6	529.9	24.4	2.7	MIDDLESBROUGH, CLEVELAND		5	10	163	0.09	3.0	4.1	C*D	8KM NW OF MIDDLESBROUGH
20000809	191615.0	56.24	-3.75	291.8	706.5	5.0	2.1	BLACKFORD, TAYSIDE	4+	8	15	104	0.05	0.4	0.7	A*C	FELT BLACKFORD...
20000811	062205.5	51.35	-3.24	313.9	162.3	7.3	2.0	BRISTOL CHANNEL		7	44	188	0.09	1.4	4.4	B*D	
20000812	142726.2	59.73	5.37	813.8	1116.7	15.0	4.5	NORWEGIAN COAST		9372	312	0.21				D*D	
20000813	032822.8	49.22	-1.84	411.3	-75.0	10.3	1.3	JERSEY, CHANNEL ISLANDS		7	14	341	0.01	0.2	0.3	A*D	
20000813	183807.1	53.19	-1.89	407.2	366.1	6.4	1.7	BUXTON, DERBYSHIRE		9	25	161	0.08	1.6	2.6	B*C	7KM SOUTH OF BUXTON
20000813	223356.2	55.41	-5.17	199.1	617.9	10.0	1.0	ARRAN, STRATHCLYDE		6	28	135	0.15	1.8		C*C	3KM SOUTH OF ARRAN
20000818	170852.0	53.46	-4.34	244.8	398.3	12.4	1.7	OFF ANGLESEY, GWYNEDD		13	7	133	0.02	0.2	0.2	A*B	5KM NORTH OF ANGLESEY
20000819	181448.9	53.13	-4.52	231.3	362.4	12.7	0.0	CAERNARVON BAY, GWYNEDD		8	14	153	0.07	0.7	1.9	A*C	
20000823	071515.2	53.06	-4.55	229.0	354.5	13.2	0.6	CAERNARVON BAY, GWYNEDD		9	12	164	0.05	0.5	0.7	A*C	
20000824	074921.2	55.40	-5.24	194.6	616.1	18.9	2.2	ARRAN, STRATHCLYDE		8	23	136	0.09	0.8	2.5	B*C	
20000830	235340.7	56.20	-2.96	340.2	700.8	3.7	1.4	EXPL-LARGO BAY, FIFE	2+	12	33	127	0.07	0.3	0.7	A*C	FELT LEVEN
20000901	114837.7	59.24	5.73	840.4	1064.4	15.0	3.3	NORWEGIAN COAST		8375	333	0.18				D*D	
20000906	002612.3	57.58	-5.49	191.7	860.3	5.2	0.6	TORRIDON, HIGHLAND		7	15	136	0.22	1.6	3.2	B*C	4KM NORTH OF TORRIDON
20000910	065255.2	52.97	-4.41	238.4	343.6	21.9	0.4	LLEYN PENIN, GWYNEDD		8	2	103	0.07	0.7	1.5	A*B	
20000911	032127.3	54.82	-3.58	298.3	548.0	4.1	1.0	SOLWAY FIRTH		9	17	239	0.09	1.0	2.7	B*D	
20000912	001419.4	54.62	-2.43	371.9	525.4	9.6	0.8	APPLEBY, CUMBRIA		8	35	311	0.13	2.1	9.7	C*D	
20000912	014225.6	50.11	-5.18	172.6	28.0	7.2-0.2		CONSTANTINE, CORNWALL		9	3	84	0.02	0.2	0.3	A*A	
20000914	214946.0	52.96	-4.37	241.1	342.6	25.1	0.7	LLEYN PENIN, GWYNEDD		9	5	101	0.04	0.4	0.9	A*B	
20000915	035724.7	52.96	-4.36	241.3	342.6	23.3	0.7	LLEYN PENIN, GWYNEDD		10	5	102	0.03	0.2	0.5	A*B	
20000918	202043.0	53.44	-1.47	435.0	394.0	0.5	1.5	SHEFFIELD, S YORKSHIRE		3	21	238	0.07			A*D	C/F, 6KM N OF SHEFFIELD
20000921	073048.3	56.99	-5.47	189.0	794.2	6.4	1.2	LOCH NEVIS, HIGHLAND		7	23	128	0.10	0.8	1.4	A*C	
20000923	042345.8	52.28	-1.61	426.6	264.8	14.4	4.2	WARWICK, WARWICKSHIRE	5	14	39	95	0.21	1.0	1.5	B*C	FELT WARWICK...
20000923	090311.5	57.46	-5.29	202.9	846.0	5.0	0.7	STRATHCARRON, HIGHLAND		4	4	207	0.04			A*D	
20000925	211000.6	56.18	-3.57	302.7	699.6	5.1	1.1	DOLLAR, CENTRAL	2+	8	8	107	0.03	0.2	0.4	A*B	FELT RUMBLING BRIDGE
20001001	011354.5	59.94	-0.43	487.6	1118.1	5.2	1.0	EAST OF SHETLAND		7	46	309	0.05	4.3	10.0	C*D	46KM SE OF SANDWICK
20001001	204709.3	52.69	-3.22	317.5	311.3	8.9	0.9	WELSHPOOL, POWYS		9	55	305	0.12	1.7	1.6	B*D	6KM NW OF WELSHPOOL
20001005	032254.9	57.17	-5.86	167.0	815.6	4.3-0.1		ISLE OF SKYE, HIGHLAND		5	22	217	0.08	0.5	10.3	C*D	
20001009	225819.8	52.95	-5.38	173.1	345.0	6.5	0.6	IRISH SEA		11	52	180	0.22	1.7	3.7	B*D	65KM SW OF HOLYHEAD
20001018	134540.8	53.33	-4.30	247.2	384.3	14.1	0.8	NORTH ANGLESEY, GWYNEDD		10	7	112	0.03	0.3	0.6	A*B	
20001019	102724.8	57.42	6.88	932.2	871.1	15.0	3.9	SKAGERRAK		19221	273	0.35		7.0	8.2	D*D	
20001026	060409.5	50.50	-4.99	187.7	71.2	7.5	0.9	NEWQUAY, CORNWALL		8	18	289	0.08	1.9	5.3	C*D	9KM NE OF NEWQUAY

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY:2000 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20001103	003208.8	53.16	-3.04	330.8	362.9	9.9	1.4	MOLD,CLWYD	4+	9	59	308	0.09	1.7	1.2	B*D	FELT MOLD...
20001109	160816.9	62.26	2.24	620.01	383.1	5.9	2.8	NORTHERN NORTH SEA		12165	254	0.31	7.6	8.0	D*D		
20001122	055148.5	57.55	-5.54	188.3	856.8	6.5	0.5	TORRIDON,HIGHLAND		6	16	139	0.10	1.1	1.6	B*C	5KM WEST OF TORRIDON
20001130	030719.8	54.21	-1.88	408.1	479.4	7.6	1.6	MIDDLEHAM,N YORKSHIRE		11	33	126	0.12	0.9		C*C	10KM SW OF MIDDLEHAM
20001204	113614.8	59.87	-2.55	369.11	109.5	11.6	1.9	WEST OF SHETLAND		8	67	202	0.06	1.1	1.3	B*D	65KM WEST OF SHETLAND
20001208	004805.9	60.16	4.64	767.91	160.5	10.9	4.2	NORWEGIAN COAST	5+	24	35	90	0.54	2.4	2.7	D*C	FELT BERGEN...
20001208	055401.6	59.94	1.93	619.71	124.1	10.3	4.6	NORTHERN NORTH SEA	3+	18175	125	0.39	2.7	4.4	C*D		FELT BRUCE FIELD
20001213	051726.4	55.64	-6.15	138.6	645.9	9.1	2.0	ISLAY,INNER HEBRIDES		6	48	257	0.05	1.8	16.7	C*D	
20001215	134205.8	55.11	-3.61	297.5	580.9	7.4	0.9	DUMFRIES,D & G		6	8	186	0.06	1.7	3.9	B*D	
20001217	002746.3	56.25	-3.76	291.1	707.7	5.4	1.8	BLACKFORD,TAYSIDE		8	15	191	0.08	0.7	1.1	A*D	
20001217	030636.3	56.25	-3.76	291.3	707.7	5.5	1.3	BLACKFORD,TAYSIDE		7	15	191	0.10	1.1	1.5	B*D	
20001219	093544.3	59.68	2.18	635.21	095.3	14.6	2.2	NORTHERN NORTH SEA		5195	343	0.50				D*D	
20001221	235309.1	53.52	1.85	655.2	410.0	8.6	3.4	SOUTHERN NORTH SEA		8	82	257	0.21	9.7	12.4	D*D	100KM N OF GT YARMOUTH
20001222	051925.1	59.93	1.95	620.81	122.7	15.8	1.9	NORTHERN NORTH SEA		6176	317	0.28				D*D	
20001222	194949.0	50.48	-4.21	243.0	67.4	5.0	1.5	BERE ALSTON,CORNWALL		5	50	341	0.19			D*D	
20001223	153315.5	56.25	-3.76	291.1	707.3	4.4	1.1	BLACKFORD,TAYSIDE		7	16	154	0.04	0.4	0.7	A*C	
20001223	230129.2	56.25	-3.76	290.9	707.3	5.0	1.4	BLACKFORD,TAYSIDE		7	16	189	0.08	1.3	1.6	B*D	
20001225	172624.9	56.25	-3.76	291.2	708.0	5.8	0.6	BLACKFORD,TAYSIDE		6	15	155	0.04	0.4	0.8	A*C	
20001226	144457.2	56.25	-3.76	291.2	707.5	5.9	1.6	BLACKFORD,TAYSIDE		9	15	107	0.05	0.3	0.7	A*C	
20001228	004141.9	55.58	-6.09	142.5	639.3	6.8	2.0	ISLAY,INNER HEBRIDES		7	89	335	0.15	6.8	11.6	D*D	7KM OFFSHORE
20001228	055125.9	56.24	-3.76	291.1	707.2	3.5	0.4	BLACKFORD,TAYSIDE		7	15	106	0.05	0.4	1.0	A*C	
20001228	055533.5	60.03	1.79	611.01	132.8	10.0	2.2	NORTHERN NORTH SEA		6165	317	0.46				D*D	
20001228	055658.0	59.93	1.80	612.31	122.6	15.0	3.3	NORTHERN NORTH SEA		10168	170	0.36	6.0	9.1	D*D		
20001228	085955.4	55.67	-6.13	140.6	649.2	11.1	2.2	ISLAY,INNER HEBRIDES		5	89	334	0.05	2.9	2.0	C*D	
20001229	050157.3	59.66	1.71	608.91	091.3	17.1	2.3	NORTHERN NORTH SEA		7170	180	0.14	3.5	4.2	C*D		

TABLE 2

**CATALOGUE OF EARTHQUAKES LISTED IN
ORDER OF DECREASING LATITUDE: 2000**

KEY TO BULLETIN ENCODING

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

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

No	: Total number of P and S readings used in the event location.
DM	: Epicentral distance in kilometres to the closest station.
Gap	: Largest azimuthal separation in degrees between stations.
RMS	: Root Mean Square of the travel -time residuals in seconds.
ERH	: Standard error of the epicentre in kilometres. When this column is blank, the error is large and indeterminate.
ERZ	: Standard error of the focal depth in kilometres. When this column is blank, the error is large and indeterminate.
SQD	: S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations.

Locality abbreviations

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

Comments abbreviations

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

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:2000

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000630	115525.1	62.47	1.36	573.41	403.8	18.4	2.8	NORWEGIAN SEA		12216	264	0.27	6.1	7.5	D*D		
20001109	160816.9	62.26	2.24	620.01	383.1	5.9	2.8	NORTHERN NORTH SEA		12165	254	0.31	7.6	8.0	D*D		
20000427	214408.9	61.49	3.82	709.71	303.9	10.3	2.9	NORTHERN NORTH SEA		15	66	191	0.37	2.3	1.9	C*D	
20000710	090601.4	61.09	2.37	635.31	252.8	22.5	2.2	NORTHERN NORTH SEA		15129	176	0.19	1.2	2.3	B*D		
20000505	045217.1	60.73	2.61	651.31	214.3	16.8	3.6	NORTHERN NORTH SEA		17122	149	0.19	1.2	4.8	B*D		
20000505	050901.6	60.69	2.62	651.91	209.8	10.8	1.8	NORTHERN NORTH SEA		13123	147	0.29	1.9	4.4	B*D		
20001208	004805.9	60.16	4.64	767.91	160.5	10.9	4.2	NORWEGIAN COAST	5+	24	35	90	0.54	2.4	2.7	D*C	FELT BERGEN...
20001228	055533.5	60.03	1.79	611.01	132.8	10.0	2.2	NORTHERN NORTH SEA		6165	317	0.46				D*D	
20001001	011354.5	59.94	-0.43	487.61	118.1	5.2	1.0	EAST OF SHETLAND		7	46	309	0.05	4.3	10.0	C*D	46KM SE OF SANDWICK
20001208	055401.6	59.94	1.93	619.71	124.1	10.3	4.6	NORTHERN NORTH SEA	3+	18175	125	0.39	2.7	4.4	C*D	FELT BRUCE FIELD	
20001222	051925.1	59.93	1.95	620.81	122.7	15.8	1.9	NORTHERN NORTH SEA		6176	317	0.28				D*D	
20001228	055658.0	59.93	1.80	612.31	122.6	15.0	3.3	NORTHERN NORTH SEA		10168	170	0.36	6.0	9.1	D*D		
20001204	113614.8	59.87	-2.55	369.11	109.5	11.6	1.9	WEST OF SHETLAND		8	67	202	0.06	1.1	1.3	B*D	65KM WEST OF SHETLAND
20000812	142726.2	59.73	5.37	813.81	116.7	15.0	4.5	NORWEGIAN COAST		9372	312	0.21				D*D	
20001219	093544.3	59.68	2.18	635.21	095.3	14.6	2.2	NORTHERN NORTH SEA		5195	343	0.50				D*D	
20001229	050157.3	59.66	1.71	608.91	091.3	17.1	2.3	NORTHERN NORTH SEA		7170	180	0.14	3.5	4.2	C*D		
20000703	084118.7	59.37	1.67	608.21	059.8	14.9	1.7	NORTHERN NORTH SEA		5179	343	0.35				D*D	
20000901	114837.7	59.24	5.73	840.41	064.4	15.0	3.3	NORWEGIAN COAST		8375	333	0.18				D*D	
20000411	022613.5	59.23	2.09	633.41	044.8	8.1	2.1	NORTHERN NORTH SEA		16180	176	0.20	1.4	2.0	B*D		
20000422	001833.7	57.64	-5.64	183.0	866.7	3.2	1.8	GAIRLOCH, HIGHLAND		15	25	65	0.23	0.9	2.0	B*C	10KM SOUTH OF GAIRLOCH
20000906	002612.3	57.58	-5.49	191.7	860.3	5.2	0.6	TORRIDON, HIGHLAND		7	15	136	0.22	1.6	3.2	B*C	4KM NORTH OF TORRIDON
20001122	055148.5	57.55	-5.54	188.3	856.8	6.5	0.5	TORRIDON, HIGHLAND		6	16	139	0.10	1.1	1.6	B*C	5KM WEST OF TORRIDON
20000627	195024.5	57.52	-5.44	193.8	853.4	9.0	-0.2	TORRIDON, HIGHLAND		3	9	257	0.01			A*D	
20000401	102213.4	57.51	-5.52	189.0	852.1	7.3	0.8	TORRIDON, HIGHLAND		4	14	253	0.05			A*D	4KM SOUTH OF TORRIDON
20000629	002305.5	57.51	-5.30	202.3	852.0	13.3	-0.2	GLEN CARRON, HIGHLAND		4	2	310	0.01			A*D	
20000703	083634.6	57.51	-5.51	189.7	852.6	13.5	0.4	TORRIDON, HIGHLAND		5	13	255	0.08	2.4	3.6	B*D	8KM SOUTH OF TORRIDON
20000601	143727.5	57.49	-5.23	206.7	848.4	7.4	0.9	GLEN CARRON, HIGHLAND		4	5	272	0.02			A*D	
20000923	090311.5	57.46	-5.29	202.9	846.0	5.0	0.7	STRATHCARRON, HIGHLAND		4	4	207	0.04			A*D	
20001019	102724.8	57.42	6.88	932.2	871.1	15.0	3.9	SKAGERRAK		19221	273	0.35	7.0	8.2	D*D		
20000805	052521.1	57.21	-5.44	192.5	818.3	7.0	0.1	SHIEL BRIDGE, HIGHLAND		5	1	237	0.26	0.4	0.2	B*D	
20001005	032254.9	57.17	-5.86	167.0	815.6	4.3	-0.1	ISLE OF SKYE, HIGHLAND		5	22	217	0.08	0.5	10.3	C*D	
20000303	075649.9	57.06	-5.70	175.6	802.5	9.6	0.8	KNOYDART, HIGHLAND		4	17	180	0.10			A*D	
20000116	055658.8	57.05	-5.57	183.4	801.4	7.3	-0.1	KNOYDART, HIGHLAND		5	20	199	0.12	8.9	8.1	D*D	
20000613	065435.4	57.02	-5.42	192.2	797.2	6.2	1.1	LOCH QUOICH, HIGHLAND		5	21	210	0.11	5.6	2.9	D*D	
20000921	073048.3	56.99	-5.47	189.0	794.2	6.4	1.2	LOCH NEVIS, HIGHLAND		7	23	128	0.10	0.8	1.4	A*C	
20000122	134315.6	56.97	-5.51	186.7	792.2	14.8	0.7	LOCH MORAR, HIGHLAND		5	20	241	0.13	0.8	2.9	B*D	
20000414	192733.5	56.84	-4.90	223.3	775.7	12.1	2.1	FORT WILLIAM, HIGHLAND		8	5	127	0.07	0.8	0.8	A*B	12KM E OF FORT WILLIAM
20000804	002659.5	56.83	-5.88	163.6	778.0	12.8	0.9	ARISAIG, HIGHLAND		3	10	340	0.03			A*D	10KM SOUTH OF ARISAIG
20000120	234129.6	56.68	-5.15	207.3	758.6	4.9	1.2	LOCH LEVEN, HIGHLAND		5	19	268	0.05	2.9	3.7	C*D	
20000628	070959.0	56.61	-5.28	199.0	750.9	8.7	1.6	APPIN, STRATHCLYDE	3+	11	30	157	0.11	0.6	13.2	C*C	FELT APPIN...
20000122	122530.7	56.25	-3.76	291.2	707.3	4.6	1.9	BLACKFORD, TAYSIDE		10	15	106	0.05	0.3	0.6	A*C	
20000331	052110.0	56.25	-3.76	291.2	707.6	5.1	0.6	BLACKFORD, TAYSIDE		8	15	107	0.07	0.5	0.8	A*C	
20000611	113626.5	56.25	-3.76	291.2	707.4	4.5	1.1	BLACKFORD, TAYSIDE		8	15	107	0.03	0.2	0.5	A*C	

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:2000 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000614	132737.9	56.25	-3.75	291.5	707.9	6.0	1.0	BLACKFORD,TAYSIDE		8	15	107	0.04	0.3	0.7	A*C	
20001217	002746.3	56.25	-3.76	291.1	707.7	5.4	1.8	BLACKFORD,TAYSIDE		8	15	191	0.08	0.7	1.1	A*D	
20001217	030636.3	56.25	-3.76	291.3	707.7	5.5	1.3	BLACKFORD,TAYSIDE		7	15	191	0.10	1.1	1.5	B*D	
20001223	153315.5	56.25	-3.76	291.1	707.3	4.4	1.1	BLACKFORD,TAYSIDE		7	16	154	0.04	0.4	0.7	A*C	
20001223	230129.2	56.25	-3.76	290.9	707.3	5.0	1.4	BLACKFORD,TAYSIDE		7	16	189	0.08	1.3	1.6	B*D	
20001225	172624.9	56.25	-3.76	291.2	708.0	5.8	0.6	BLACKFORD,TAYSIDE		6	15	155	0.04	0.4	0.8	A*C	
20001226	144457.2	56.25	-3.76	291.2	707.5	5.9	1.6	BLACKFORD,TAYSIDE		9	15	107	0.05	0.3	0.7	A*C	
20000326	154328.9	56.24	-3.75	291.7	707.2	5.4	0.9	BLACKFORD,TAYSIDE		7	15	105	0.07	0.9	1.8	A*C	
20000809	191615.0	56.24	-3.75	291.8	706.5	5.0	2.1	BLACKFORD,TAYSIDE	4+	8	15	104	0.05	0.4	0.7	A*C	FELT BLACKFORD...
20001228	055125.9	56.24	-3.76	291.1	707.2	3.5	0.4	BLACKFORD,TAYSIDE		7	15	106	0.05	0.4	1.0	A*C	
20000117	194010.8	56.22	-3.77	290.5	704.4	5.2	0.9	BLACKFORD,TAYSIDE		6	16	147	0.27	2.7	4.1	C*C	
20000327	020149.0	56.21	-4.11	269.0	703.4	4.6	1.7	DOUNE,CENTRAL		12	14	137	0.07	0.4	0.7	A*C	
20000220	093152.3	56.20	-4.10	269.7	702.6	4.6	2.3	DOUNE,CENTRAL	4+	14	15	132	0.04	0.2	0.4	A*C	FELT DOUNE...
20000405	164144.5	56.20	-4.11	269.0	703.2	4.6	1.2	DOUNE,CENTRAL		8	14	136	0.08	0.6	1.0	A*C	
20000925	211000.6	56.18	-3.57	302.7	699.6	5.1	1.1	DOLLAR,CENTRAL	2+	8	8	107	0.03	0.2	0.4	A*B	FELT RUMBLING BRIDGE
20000212	085128.5	55.91	-5.31	193.1	673.5	8.8	2.7	LOCHGILPHEAD,S'CLYDE	5+	13	36	135	0.11	0.5	2.9	B*C	FELT KAMES...
20000216	060251.5	55.88	-5.92	154.6	671.8	12.5	2.2	JURA,STRATHCLYDE		9	63	175	0.17	1.9	4.4	B*D	
20001228	085955.4	55.67	-6.13	140.6	649.2	11.1	2.2	ISLAY,INNER HEBRIDES		5	89	334	0.05	2.9	2.0	C*D	
20001213	051726.4	55.64	-6.15	138.6	645.9	9.1	2.0	ISLAY,INNER HEBRIDES		6	48	257	0.05	1.8	16.7	C*D	
20001228	004141.9	55.58	-6.09	142.5	639.3	6.8	2.0	ISLAY,INNER HEBRIDES		7	89	335	0.15	6.8	11.6	D*D	7KM OFFSHORE
20000813	223356.2	55.41	-5.17	199.1	617.9	10.0	1.0	ARRAN,STRATHCLYDE		6	28	135	0.15	1.8		C*C	3KM SOUTH OF ARRAN
20000824	074921.2	55.40	-5.24	194.6	616.1	18.9	2.2	ARRAN,STRATHCLYDE		8	23	136	0.09	0.8	2.5	B*C	
20000622	144907.8	55.39	-3.09	331.3	611.1	8.1	1.3	HAWICK,BORDERS		12	11	99	0.16	1.1	2.1	B*B	18KM WSW OF HAWICK
20000625	043117.0	55.39	-5.23	195.1	615.0	14.8	0.9	ARRAN,STRATHCLYDE		6	23	132	0.08	1.0	4.2	B*B	5KM SOUTH OF ARRAN
20001215	134205.8	55.11	-3.61	297.5	580.9	7.4	0.9	DUMFRIES,D & G		6	8	186	0.06	1.7	3.9	B*D	
20000529	050427.7	55.10	-3.63	296.1	579.2	10.7	0.7	DUMFRIES,D & G		9	9	131	0.06	0.4	0.9	A*B	
20000717	233220.6	55.10	-3.63	296.1	579.1	11.0	1.2	DUMFRIES,D & G	3+	9	9	132	0.07	0.5	1.1	A*B	FELT TINWALD
20000107	221638.4	55.09	-3.63	295.8	579.0	10.3	1.8	DUMFRIES,D & G	2+	8	9	134	0.04	0.4	0.9	A*B	FELT TINWALD
20000121	060257.3	55.09	-3.63	296.1	578.6	10.1	1.1	DUMFRIES,D & G		9	10	132	0.05	0.3	0.8	A*B	
20000320	153838.9	55.09	-3.62	296.5	578.3	10.2	0.9	DUMFRIES,D & G		8	10	129	0.07	0.5	1.4	A*B	
20000320	215456.4	55.09	-3.62	296.6	578.4	10.0	0.9	DUMFRIES,D & G		9	10	128	0.07	0.4	1.1	A*B	
20000713	232046.7	55.09	-3.63	296.1	578.5	11.0	1.0	DUMFRIES,D & G		9	10	132	0.06	0.4	0.9	A*B	
20000410	045450.5	54.96	-2.52	366.9	563.2	0.0	1.1	HALTWHISTLE,N'UMBERLND		9	12	291	0.05	0.6	0.3	A*D	C/F
20000911	032127.3	54.82	-3.58	298.3	548.0	4.1	1.0	SOLWAY FIRTH		9	17	239	0.09	1.0	2.7	B*D	
20000306	220631.6	54.77	-2.84	345.8	542.4	11.8	0.5	CALTHWAITE,CUMBRIA		13	7	129	0.09	0.5	0.9	A*B	
20000424	051055.7	54.77	-2.81	347.6	541.5	13.8	2.6	CALTHWAITE,CUMBRIA	3+	18	9	133	0.09	0.3	0.7	A*B	FELT CALTHWAITE...
20000220	055451.4	54.76	-2.11	392.7	540.7	11.8	1.1	STANHOPE,DURHAM		13	13	124	0.08	0.5	1.0	A*B	7KM WEST OF STANHOPE
20000808	024603.5	54.66	-1.39	439.6	529.9	24.4	2.7	MIDDLESBROUGH,CLEVELAND		5	10	163	0.09	3.0	4.1	C*D	8KM NW OF MIDDLESBROUGH
20000912	001419.4	54.62	-2.43	371.9	525.4	9.6	0.8	APPLEBY,CUMBRIA		8	35	311	0.13	2.1	9.7	C*D	
20000211	021617.9	54.58	3.61	762.4	534.9	20.0	3.2	SOUTHERN NORTH SEA		16249	279	0.23	7.5	11.2	D*D		
20000607	032559.5	54.52	-3.04	332.5	514.4	10.9	1.1	LAKE THIRLMERE,CUMBRIA		8	9	234	0.05	0.9	1.0	A*D	
20000321	052313.8	54.27	-3.61	295.4	487.4	9.2	1.0	IRISH SEA		8	20	166	0.07	1.2	6.2	C*C	
20001130	030719.8	54.21	-1.88	408.1	479.4	7.6	1.6	MIDDLEHAM,N YORKSHIRE		11	33	126	0.12	0.9		C*C	10KM SW OF MIDDLEHAM
20000801	215322.9	53.96	-1.78	414.7	452.1	11.0	1.4	WHARFDALE,N YORKSHIRE		16	10	99	0.36	1.9	2.5	C*B	
20000125	104813.7	53.64	-2.47	369.0	416.0	8.0	2.0	BOLTON,GTR MANCHESTER		9	42	89	0.11	0.6		C*C	

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:2000 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000715	034300.2	53.54	-1.16	455.8	405.7	0.3	1.7	DONCASTER,S YORKSHIRE	2+	5	59	285	0.25	18.8	10.8	D*D	C/F,FELT SCAWTHORPE
20000804	105208.7	53.54	-1.19	453.7	404.8	1.9	1.9	DONCASTER,S YORKSHIRE	5+	6	39	238	0.02	0.5	0.3	A*D	C/F, FELT DONCASTER
20000516	233002.3	53.53	-4.31	247.1	406.8	16.9	0.2	IRISH SEA		7	15	188	0.04	0.8	1.1	A*D	13KM NORTH OF ANGLESEY
20001221	235309.1	53.52	1.85	655.2	410.0	8.6	3.4	SOUTHERN NORTH SEA		8	82	257	0.21	9.7	12.4	D*D	100KM N OF GT YARMOUTH
20000518	150820.3	53.49	-0.63	491.1	400.3	18.8	1.9	GAINSBOROUGH,LINCS		5	20	187	0.07	0.1	0.1	A*D	
20000818	170852.0	53.46	-4.34	244.8	398.3	12.4	1.7	OFF ANGLESEY,GWYNEDD		13	7	133	0.02	0.2	0.2	A*B	5KM NORTH OF ANGLESEY
20000705	230954.0	53.44	-1.15	456.3	393.9	0.5	1.5	ROTHERHAM,S YORKSHIRE		7	32	116	0.13	1.0	2.4	B*C	C/F,10KM E OF ROTHERHAM
20000918	202043.0	53.44	-1.47	435.0	394.0	0.5	1.5	SHEFFIELD,S YORKSHIRE		3	21	238	0.07			A*D	C/F,6KM N OF SHEFFIELD
20000626	204959.5	53.43	-1.25	450.1	392.8	1.0	1.4	ROTHERHAM,S YORKSHIRE	3+	6	27	206	0.28	4.6	6.6	C*D	C/F,FELT SPOTSWOOD
20001018	134540.8	53.33	-4.30	247.2	384.3	14.1	0.8	NORTH ANGLESEY,GWYNEDD		10	7	112	0.03	0.3	0.6	A*B	
20000320	085041.3	53.22	-4.77	215.1	372.4	17.3	0.3	CAERNARVON BAY,GWYNEDD		7	14	261	0.07	2.2	1.9	B*D	15KM SW OF HOLYHEAD
20000503	182011.6	53.22	-1.07	462.0	370.0	1.0	1.3	MARKET WORSOP,NOTTS		7	31	118	0.30	1.8	4.6	C*C	C/F
20000315	043440.2	53.20	-1.04	464.2	367.5	1.0	0.9	OLLERTON,NOTTS		5	33	279	0.31	11.9	9.3	D*D	C/F
20000813	183807.1	53.19	-1.89	407.2	366.1	6.4	1.7	BUXTON,DERBYSHIRE		9	25	161	0.08	1.6	2.6	B*C	7KM SOUTH OF BUXTON
20000411	182315.2	53.17	-1.01	465.9	364.7	1.0	1.1	OLLERTON,NOTTS		5	35	205	0.24	7.1	9.8	D*D	C/F
20001103	003208.8	53.16	-3.04	330.8	362.9	9.9	1.4	MOLD,CLWYD	4+	9	59	308	0.09	1.7	1.2	B*D	FELT MOLD...
20000317	020556.6	53.14	-2.33	378.1	360.5	11.2	0.9	SANDBACH,CHESHIRE		11	35	118	0.16	0.9	4.0	B*C	
20000214	044245.6	53.13	-0.83	478.2	360.2	1.0	1.1	NEWARK-ON-TRENT,NOTTS		4	48	290	0.27			B*D	C/F
20000718	145155.7	53.13	-1.28	447.9	359.3	1.0	0.8	MANSFIELD,NOTTS		4	21	232	0.40			C*D	C/F,6KM SW OF MANSFIELD
20000819	181448.9	53.13	-4.52	231.3	362.4	12.7	0.0	CAERNARVON BAY,GWYNEDD		8	14	153	0.07	0.7	1.9	A*C	
20000723	192744.7	53.10	-4.59	226.6	359.4	15.1	-0.1	CAERNARVON BAY,GWYNEDD		6	16	179	0.06	1.1	2.9	B*C	
20000823	071515.2	53.06	-4.55	229.0	354.5	13.2	0.6	CAERNARVON BAY,GWYNEDD		9	12	164	0.05	0.5	0.7	A*C	
20000802	031925.7	53.05	-4.87	207.4	354.5	16.0	0.6	CAERNARVON BAY,GWYNEDD		7	29	245	0.05	1.0	3.5	B*D	
20000110	040957.8	53.04	-4.20	252.3	351.7	10.6	0.7	CAERNARVON,GWYNEDD		9	11	125	0.05	0.3	1.3	A*B	11KM SE OF CAERNARVON
20000224	010033.6	53.04	-2.20	386.7	348.7	3.7	1.7	NEWCASTLE-U-LYME,STAFFS		6	24	163	0.04	0.5	0.9	A*C	
20000317	095725.0	53.04	-3.79	280.3	350.5	14.5	0.4	BETWS-Y-COED,GWYNEDD		8	26	131	0.04	0.5	2.6	B*B	6KM S OF BETWS-Y-COED
20000704	042154.7	53.02	-4.54	229.9	349.7	15.6	0.5	CAERNARVON BAY,GWYNEDD		8	8	157	0.07	0.9	1.4	A*C	
20000910	065255.2	52.97	-4.41	238.4	343.6	21.9	0.4	LLEYN PENIN,GWYNEDD		8	2	103	0.07	0.7	1.5	A*B	
20000612	053655.2	52.96	-4.39	239.5	343.4	24.4	0.3	LLEYN PENIN,GWYNEDD		8	3	106	0.05	0.5	1.6	A*B	
20000622	143713.4	52.96	-4.39	239.5	343.4	24.5	2.7	LLEYN PENIN,GWYNEDD	4+	11	3	85	0.05	0.4	1.0	A*A	FELT LLANBERIS...
20000914	214946.0	52.96	-4.37	241.1	342.6	25.1	0.7	LLEYN PENIN,GWYNEDD		9	5	101	0.04	0.4	0.9	A*B	
20000915	035724.7	52.96	-4.36	241.3	342.6	23.3	0.7	LLEYN PENIN,GWYNEDD		10	5	102	0.03	0.2	0.5	A*B	
20001009	225819.8	52.95	-5.38	173.1	345.0	6.5	0.6	IRISH SEA		11	52	180	0.22	1.7	3.7	B*D	65KM SW OF HOLYHEAD
20000503	004757.2	52.94	-4.36	241.7	341.2	24.5	0.0	LLEYN PENIN,GWYNEDD		9	6	103	0.08	0.6	1.8	A*B	
20000509	005533.8	52.92	-1.62	425.5	335.8	7.6	1.7	DERBY,DERBYSHIRE		7	18	173	0.06	0.5		C*C	10KM WEST OF DERBY
20000628	154906.5	52.92	-2.16	389.4	336.1	2.6	1.1	STONE,STAFFORDSHIRE		6	24	140	0.03	0.4	0.7	A*C	C/F
20000411	021751.8	52.91	-2.41	372.6	334.7	8.8	1.9	MARKET DRAYTON,SALOP		6	40	147	0.17	2.0		C*C	
20000324	205853.8	52.90	-2.55	363.3	333.6	5.3	1.9	MARKET DRAYTON,SALOP		8	48	149	0.05	0.5	4.1	B*C	
20000401	201507.1	52.88	-2.61	359.0	331.8	10.7	1.4	MARKET DRAYTON,SALOP		9	44	121	0.14	0.9		C*C	7KM W OF MARKET DRAYTON
20000313	211404.1	52.83	-2.68	354.1	325.6	13.4	0.8	SHREWSBURY,SHROPSHIRE		6	37	147	0.05	0.9	2.1	B*C	12KM NNE OF SHREWSBURY
20000214	003254.2	52.81	-0.95	470.9	324.3	12.0	0.8	MELTON MOWBRAY,LEICS		4	11	196	0.01			A*D	6KM NW OF MELTON MOWBRAY
20000410	211658.7	52.79	-1.12	459.4	321.4	27.0	1.3	LOUGHBOROUGH,LEICS		7	11	136	0.05	0.6	0.6	A*C	
20000520	161654.3	52.74	-5.02	196.0	319.7	10.6	2.3	IRISH SEA		11	29	215	0.09	1.0	0.8	A*D	20KM SW OF LLEYN PENIN
20001001	204709.3	52.69	-3.22	317.5	311.3	8.9	0.9	WELSHPOOL,POWYS		9	55	305	0.12	1.7	1.6	B*D	6KM NW OF WELSHPOOL
20000806	065731.5	52.64	-2.13	391.1	304.3	7.9	1.2	WOLVERHAMPTON,W MIDS		11	47	124	0.26	1.5		C*C	

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE:2000 continued

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000714	212524.3	52.63	-2.55	362.9	303.9	5.9	1.4	TELFORD,SHROPSHIRE		11	26	106	0.07	0.3	0.6	A*C	
20000502	213811.2	52.55	-0.81	480.7	295.4	15.3	2.1	UPPINGHAM,LEICS		8	29	122	0.10	1.1	1.9	B*B	6KM SW OF UPPINGHAM
20000606	115818.4	52.43	-3.78	278.9	283.1	11.0	1.5	DEVIL'S BRIDGE,DYFED		13	15	77	0.16	0.8	1.3	B*B	
20000212	185106.2	52.35	-3.95	267.5	274.4	4.4	2.0	ABERYSTWYTH,DYFED		12	37	88	0.19	0.8		C*C	7KM SE OF ABERYSTWYTH
20000923	042345.8	52.28	-1.61	426.6	264.8	14.4	4.2	WARWICK,WARWICKSHIRE	5	14	39	95	0.21	1.0	1.5	B*C	FELT WARWICK...
20000124	003528.1	52.12	-2.41	371.6	246.9	6.4	0.7	GREAT MALVERN,HER & WOR		6	13	242	0.06	1.1	2.7	B*D	
20000617	040329.6	52.12	-2.46	368.2	247.2	14.9	1.4	BROMYARD,HER & WOR		7	11	236	0.07	1.1	0.8	B*D	6KM SOUTH OF BROMYARD
20000112	093549.0	52.11	-2.40	372.3	246.2	6.4	1.6	GREAT MALVERN,HER & WOR		8	13	243	0.09	1.0	2.4	B*D	
20000526	200945.5	51.97	-3.57	292.0	230.9	14.2	1.6	SENNYBRIDGE,POWYS		9	24	114	0.14	0.8	1.2	A*B	
20000406	201651.1	51.89	-2.97	332.9	222.0	15.0	0.8	ABERGAVENNY,GWENT		7	12	158	0.15	0.6	1.4	A*C	7KM NORTH OF ABERGAVENNY
20000418	172957.4	51.86	-2.77	346.7	217.8	16.7	0.7	MONMOUTH,GWENT		7	22	147	0.04	0.3	1.2	A*C	7KM NW OF MONMOUTH
20000322	013509.1	51.68	-3.23	315.0	199.1	1.0	1.4	BARGOED,MID GLAMORGAN		8	30	80	0.14	0.7	1.9	A*C	C/F
20000120	141051.0	51.61	-3.62	287.5	191.8	11.4	1.8	MAESTEG,MID GLAMORGAN		7	40	104	0.04	0.9	18.9	C*C	
20000203	042244.4	51.38	-2.77	346.2	165.0	2.3	0.8	BRISTOL,AVON	4+	6	9	193	0.35	1.2	0.6	C*D	FELT FLAX BOURTON...
20000811	062205.5	51.35	-3.24	313.9	162.3	7.3	2.0	BRISTOL CHANNEL		7	44	188	0.09	1.4	4.4	B*D	
20001026	060409.5	50.50	-4.99	187.7	71.2	7.5	0.9	NEWQUAY,CORNWALL		8	18	289	0.08	1.9	5.3	C*D	9KM NE OF NEWQUAY
20001222	194949.0	50.48	-4.21	243.0	67.4	5.0	1.5	BERE ALSTON,CORNWALL		5	50	341	0.19			D*D	
20000912	014225.6	50.11	-5.18	172.6	28.0	7.2	-0.2	CONSTANTINE,CORNWALL		9	3	84	0.02	0.2	0.3	A*A	
20000712	194852.3	50.02	-4.45	224.8	16.5	5.6	1.7	DODMAN POINT,CORNWALL		8	49	314	0.05	2.0	19.9	C*D	25KM SE OF DODMAN POINT
20000402	084047.6	49.87	-5.18	171.2	1.7	12.7	1.7	LIZARD POINT,CORNWALL		10	20	308	0.07	1.3	2.7	B*D	SOUTH OF LIZARD POINT
20000717	020602.6	49.54	-4.93	188.0	-36.0	15.0	0.9	ENGLISH CHANNEL		5	59	355	0.21			D*D	
20000804	121059.8	49.36	-2.35	374.5	-60.1	6.7	0.7	JERSEY,CHANNEL ISLANDS		6	19	338	0.02	0.9	0.4	A*D	
20000813	032822.8	49.22	-1.84	411.3	-75.0	10.3	1.3	JERSEY,CHANNEL ISLANDS		7	14	341	0.01	0.2	0.3	A*D	

TABLE 3

CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY: 2000

KEY TO BULLETIN ENCODING

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

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

No	: Total number of P and S readings used in the event location.
DM	: Epicentral distance in kilometres to the closest station.
Gap	: Largest azimuthal separation in degrees between stations.
RMS	: Root Mean Square of the travel-time residuals in seconds.
ERH	: Standard error of the epicentre in kilometres. When this column is blank, the error is large and indeterminate.
ERZ	: Standard error of the focal depth in kilometres. When this column is blank, the error is large and indeterminate.
SQD	: S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations.

Locality abbreviations

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

Comments abbreviations

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

TABLE 3: CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY:2000

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments
20000120	103536.0							SONIC-GRAMPIAN	3+								SONIC-FELT ELGIN...
20000830	235340.7	56.20	-2.96	340.2	700.8	3.7	1.4	EXPL-LARGO BAY,FIFE	2+	12	33	127	0.07	0.3	0.7	A*C	FELT LEVEN

TABLES 4

GEOGRAPHICAL COORDINATES OF SEISMOGRAPH STATIONS: DECEMBER 2000

Table 4a: Geographic Coordinates of Seismographic Stations, December 2000

Table 4b: Geographic Coordinates of Low Gain Stations, December 2000

Table 4c: Geographic Coordinates of Strong Motion Stations, December 2000

TABLE 4a

GEOGRAPHIC COORDINATES OF SEISMOGRAPH STATIONS, DECEMBER 2000

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

TABLE 4a: continued

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

TABLE 4a: continued

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

Component Codes:

1	Single vertical seismometer
3	Orthogonal set of 3 seismometers
M	Low-frequency microphone
R	Station coordinates registered with the International Seismological Centre (ISC), England and the National Earthquake Information Centre (NEIC), USA

Agency Codes:

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

TABLE 4b

GEOGRAPHIC COORDINATES OF LOW GAIN STATIONS, DECEMBER 2000

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
AEU	EAST ANGLIA	52.6202	1.2347	618.93	307.45	28	94-	L	BGS
BCC	CHAPELCROSS	55.0153	-3.2201	321.99	569.66	138	92-	L	BGS
CRQ	ROSEMANOWES	50.1672	-5.1726	173.46	34.57	156	81-	L	BGS
DYA	YADSWORTHY	50.4353	-3.9310	262.88	61.34	292	82-	LR	BGS
EDI	EDINBURGH	55.9233	-3.1875	325.80	670.66	125	89-	LR	BGS
ESK	ESKDALEMUIR	55.3165	-3.2052	323.52	603.16	261	86-	LR	BGS
GAL	GALLOWAY	54.8664	-4.7114	226.02	555.78	117	89-	L	BGS
HBL2	BONNYLANDS	52.0508	-3.0384	328.80	239.71	437	91-	LR	BGS
HTL	HARTLAND	50.9943	-4.4849	225.64	124.66	86	87-	LR	BGS
JRS	MAISON ST LOUIS	49.1922	-2.0922			56	81-	LR	BGS
KEY	KEYWORTH	52.8779	-1.0757	462.20	331.59	59	88-	L	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	13	86-	LR	BGS
LDU	LEEDS	53.8058	-1.5540	429.37	434.51	74	94-	L	BGS
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	98	78-	LR	BGS
MCH	MICHAELCHURCH	51.9974	-2.9983	331.47	233.74	219	78-	L	BGS
MCD	COLEBURN DISTIL	57.5828	-3.2541	325.02	855.42	293	81-	LR	BGS
ORE	REAY	58.5480	-3.7622	297.45	963.52	100	95-	LR	BGS
POB	OBSERVATORY	55.8458	-4.4299	247.88	664.06	34	92-	L	BGS
RRR	RUBHA REIDH	57.8577	-5.8067	174.19	891.68	61	95-	LR	BGS
SWN	SWINDON	51.5131	-1.8004	413.85	179.42	192	93-	L	BGS
TFO	FOLKESTONE	51.1135	1.1409	619.81	139.66	202	89-	L	BGS
WCB	CHURCH BAY	53.3782	-4.5467	230.62	389.87	139	85-	L	BGS

Component Codes:

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

Agency Codes:

- BGS British Geological Survey

TABLE 4c

GEOGRAPHIC COORDINATES OF STRONG MOTION STATIONS, DECEMBER 2000

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

Component Codes:

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

Agency Codes:

BGS	British Geological Survey
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TABLE 5

PHASE DATA: 2000

KEY TO PHASE DATA ENCODING

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

Locality abbreviations

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

Comments abbreviations

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

January 7 2000 Time: 22:16 38.4 UTC Lat: 55.095N Lon: 3.634W Grid Ref: 295.77 kmE 579.05 kmN Locality: DUMFRIES, D & G Comments: FELT TINWALD									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	9	IP		C	22:16	41.00		
BNA	SZ	14	IP		C	22:16	41.69		
BHH	SZ	27	IP		D	22:16	43.63		
BHH	SE	27	ES	2		22:16	46.99		
BHH	SN	27				22:16	49.10	297	0.25
BHH	SE	27				22:16	48.23	432	0.22
BCC	AZ	28	IP	4	D	22:16	44.11		
GCD	SZ	32	IP		C	22:16	44.44		
ECK	SZ	34	IP		C	22:16	44.60		
ESK	SZ	37	IP		C	22:16	45.08		
ESK	SE	37	ES	2		22:16	49.99		
ESK	SN	37				22:16	50.44	101	0.20
ESK	SE	37				22:16	50.44	121	0.16
BBO	SZ	47	IP		D	22:16	47.35		
BBO	SE	47	ES	2		22:16	53.20		
BBO	SN	47				22:16	54.29	35	0.21
BBO	SE	47				22:16	55.76	37	0.23

January 10 2000 Time: 04:09 57.8 UTC Lat: 53.042N Lon: 4.203W Grid Ref: 252.33 kmE 351.70 kmN Locality: CAERNARVON, GWYNEDD Comments: 11KM SE OF CAERNARVON									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YLL	SZ	11	IP		C	04:10	00.34		
WLF	SZ	30	IP		D	04:10	03.16		
WPM	SZ	31	IP		C	04:10	03.33		
YRC	SZ	34	IP	1	C	04:10	03.79		
YRH	SZ	37	IP		C	04:10	04.23		
WME	SZ	40	IP	1	D	04:10	04.62		
WFB	SZ	41	EP	2		04:10	04.84		
WCB	SZ	44	IP	1	D	04:10	05.25		
WCB	SE	44	ES	2		04:10	10.23		
WCB	SN	44				04:10	11.10	6	0.20
WCB	SE	44				04:10	10.43	7	0.10

January 12 2000 Time: 09:35 49.0 UTC Lat: 52.113N Lon: 2.405W Grid Ref: 372.27 kmE 246.24 kmN Locality: GREAT MALVERN, HER & WOR									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	13	IP		C	09:35	51.49		
MCH	SZ	43	IP		C	09:35	56.33		
MCH	SE	43	ES	2		09:36	01.71		
MCH	SN	43				09:36	01.94	70	0.18
MCH	SE	43				09:36	02.20	48	0.14
HLM	SZ	56	IP		D	09:35	58.42		
HTR	SZ	59	IP	1	C	09:35	58.94		
SSP	SZ	59	EP	2		09:35	59.15		
SSP	SN	59	ES	2		09:36	06.51		
SSP	SE	59				09:36	07.71	17	0.22
SSP	SE	59				09:36	07.56	23	0.25
HGH	SZ	60	IP		C	09:35	59.34		

January 16 2000 Time: 05:56 58.8 UTC Lat: 57.053N Lon: 5.573W Grid Ref: 183.36 kmE 801.40 kmN Locality: KNOYDART, HIGHLAND									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSB	SZ	20	EP	1	D	05:57	02.61		
KAR	SZ	22	EP	2		05:57	02.96		
KPL	SZ	32	IP		D	05:57	04.82		
KPL	SN	32	ES	2		05:57	08.72		
KPL	SN	32				05:57	08.96	1	0.12
KPL	SE	32				05:57	08.78	3	0.19
KAC	SZ	52	EP	2		05:57	07.97		

January 17 2000 Time: 19:40 10.8 UTC Lat: 56.219N Lon: 3.766W Grid Ref: 290.50 kmE 704.37 kmN Locality: BLACKFORD, TAYSIDE									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	19:40	13.46		
PCO	SZ	33	IP	1	C	19:40	17.01		
EAB	SZ	36	IP	1	C	19:40	17.09		
EDI	SZ	49	IP	1	D	19:40	19.27		
EDI	SN	49	ES	2		19:40	25.59		
EDI	SN	49				19:40	25.69	7	0.11
EDI	SE	49				19:40	25.71	9	0.19
EDU	SZ	59	EP	2		19:40	21.35		

January 20 2000 Time: 14:10 51.0 UTC Lat: 51.613N Lon: 3.625W Grid Ref: 287.51 kmE 191.82 kmN Locality: MAESTEG, MID GLAMORGAN									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HSA	SZ	40	IP	1	D	14:10	57.98		
HGH	SZ	57	EP	2		14:11	00.80		
HTR	SZ	57	IP	1	C	14:11	00.84		
MCH	SZ	61	IP	1	C	14:11	01.24		
MCH	SN	61	ES	2		14:11	08.60		
MCH	SN	61				14:11	08.86	51	0.21
MCH	SE	61				14:11	08.78	30	0.11
HEX	SZ	62	IP	1	C	14:11	01.52		
HAE	SZ	88	EP	1	C	14:11	05.65		
HTL	SZ	91	IP	1	D	14:11	06.53		
HTL	SN	91	ES	2		14:11	16.90		
HTL	SN	91				14:11	17.06	28	0.12
HTL	SE	91				14:11	17.27	22	0.16

January 20 2000 Time: 23:41 29.6 UTC Lat: 56.680N Lon: 5.146W Grid Ref: 207.31 kmE 758.64 kmN Locality: LOCH LEVEN, HIGHLAND									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KNR	SZ	19	EP	2		23:41	33.30		
KAR	SZ	50	EP	2		23:41	38.25		
KSB	SZ	61	IP	1	C	23:41	40.19		
KPL	SZ	80	EP	2		23:41	43.42		
KPL	SE	80	ES	3		23:41	52.50		
KPL	SN	80				23:41	56.53	7	0.15
KPL	SE	80				23:41	56.76	8	0.16

January 21 2000 Time: 06:02 57.3 UTC Lat: 55.091N Lon: 3.628W Grid Ref: 296.11 kmE 578.63 kmN Locality: DUMFRIES, D & G									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	10	IP		C	06:02	59.87		
BNA	SZ	14	IP		C	06:03	00.47		
BHH	SZ	26	IP	1		06:03	02.44		
BHH	SE	26	ES	2		06:03	05.70		
BHH	SE	26				06:03	05.82	51	0.20
BHH	SE	26				06:03	06.18	61	0.21
GCD	SZ	32	IP	1	C	06:03	03.25		
ECK	SZ	33	IP	1	C	06:03	03.43		
ESK	SZ	37	IP	1	C	06:03	03.89		
ESK	SE	37	ES	2		06:03	08.82		
ESK	SN	37				06:03	09.28	15	0.18
ESK	SE	37				06:03	09.29	18	0.17
BBH	SZ	45	EP	2		06:03	05.40		

January 22 2000 Time: 12:25 30.7 UTC Lat: 56.246N Lon: 3.756W Grid Ref: 291.20 kmE 707.30 kmN Locality: BLACKFORD, TAYSIDE									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	12:25	33.73		
ELO	SZ	25	IP	1	C	12:25	35.42		
PCO	SZ	36	EP	1	C	12:25	37.23		
EAB	SZ	37	IP		C	12:25	37.36		
EAU	SZ	49	EP	2		12:25	39.31		
EDI	SZ	50	IP		D	12:25	39.55		
EDI	SN	50	ES	2		12:25	45.85		
EDI	SN	50				12:25	45.94	55	0.16
EDI	SE	50				12:25	46.11	104	0.14
EDU	SZ	57	EP	2		12:25	40.56		
PGB	SZ	66	EP	2		12:25	41.91		
PGB	SN	66				12:25	52.40	32	0.23
PGB	SE	66				12:25	57.05	41	0.27
EBL	SZ	69	EP	2		12:25	42.60		

January 22 2000 Time: 13:43 15.6 UTC Lat: 56.972N Lon: 5.509W Grid Ref: 186.74 kmE 792.21 kmN Locality: LOCH MORAR, HIGHLAND									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	20	EP	2		13:43	19.89		
KSB	SZ	27	IP		D	13:43	20.93		
KPL	SZ	42	EP	2		13:43	23.31		
KPL	SE	42	ES	2		13:43	28.44		
KPL	SN	42				13:43	30.03	4	0.16
KPL	SE	42				13:43	28.97	10	0.17
KAC	SZ	60	EP	2		13:43	26.47		

January 24 2000 Time: 00:35 28.1 UTC Lat: 52.119N Lon: 2.414W Grid Ref: 371.63 kmE 246.89 kmN Locality: GREAT MALVERN, HER & WOR									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	13	IP		C	00:35	30.57		
MCH	SZ	42	IP		C	00:35	35.38		

PHASE DATA : 2000

TABLE 5 (cont'd)

MCH	SE	42	ES	2	00:35	40.72		
MCH	SN	42			00:35	41.39	5	0.12
MCH	SE	42			00:35	40.81	8	0.14
HLM	SZ	55	EP	2	00:35	37.46		
HTR	SZ	59	EP	2	00:35	37.97		
HGH	SZ	60	EP	2	00:35	38.48		

January 25 2000 **Time: 10:48 13.7 UTC** **Magnitude: 2.0 ML**
Lat: 53.639N **Lon: 2.469W** **Depth: 8.0 km**
Grid Ref: 369.02 kmE 416.02 kmN **RMS: 0.11 secs**
Locality: BOLTON, GTR MANCHESTER **Quality: C**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LHO	SZ	42	IP		C	10:48	21.00		
HPK	SZ	66	EP	2		10:48	24.75		
HPK	SE	66	ES	2		10:48	32.82		
HPK	SN	66				10:48	34.80	86	0.24
HPK	SE	66				10:48	36.18	141	0.19
KWE	SZ	81	IP		C	10:48	27.22		
LMI	SZ	85	EP	2		10:48	27.94		
LMI	SN	85	ES	2		10:48	37.87		
LMI	SN	85				10:48	38.99	30	0.29
LMI	SE	85				10:48	39.28	31	0.25
CDU	SZ	91	IP	1	C	10:48	28.73		
SBD	SZ	97	EP	2		10:48	29.39		
WPM	SZ	105	EP	2		10:48	30.22		

February 3 2000 **Time: 04:22 44.4 UTC** **Magnitude: 0.8 ML**
Lat: 51.381N **Lon: 2.773W** **Depth: 2.3 km**
Grid Ref: 346.22 kmE 165.02 kmN **RMS: 0.35 secs**
Locality: BRISTOL, AVON **Quality: D**

**Comments: FELT FLAX BOURTON...
COLLAPSE TYPE EVENT** **Intensity: 4+**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SMD	SZ	9	IP	1	D	04:22	46.80		
SMD	SZ	9	ES	1		04:22	47.42		
HGH	SZ	29	IP		D	04:22	49.64		
SWK	SZ	45	EP	2		04:22	52.96		
MCH	SZ	70	EP	2		04:22	56.56		
MCH	SN	70				04:23	05.34	5	0.32
MCH	SE	70				04:23	05.55	3	0.24
HAE	SZ	75	IP		D	04:22	56.98		
HTR	SZ	85	EP	3		04:22	59.04		

February 11 2000 **Time: 02:16 17.9 UTC** **Magnitude: 3.2 ML**
Lat: 54.579N **Lon: 3.610E** **Depth: 20.0 km**
Grid Ref: 762.38 kmE 534.95 kmN **RMS: 0.23 secs**
Locality: SOUTHERN NORTH SEA **Quality: D**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ABA	SZ	249	EP	2		02:16	52.43		
AWH	SZ	280	EP	2		02:16	56.02		
LMK	SZ	287	EP	3		02:16	57.40		
APA	SZ	291	EP	2		02:16	57.46		
LCP	SZ	328	EP	3		02:17	02.29		
KSY	SZ	330	EP	3		02:17	02.61		
HPK	SZ	348	EP	3		02:17	05.29		
HPK	SN	348	ES	2		02:17	38.80		
HPK	SN	348				02:17	41.55	43	0.12
HPK	SE	348				02:17	41.35	32	0.24
LRN	SZ	351	EP	3		02:17	05.21		
LHO	SZ	376	EP	2		02:17	08.11		
XAL	SZ	377	EP	2		02:17	07.98		
CWF	SZ	384	EP	2		02:17	08.75		
CWF	SN	384	ES	2		02:17	45.46		
CWF	SN	384				02:17	46.53	16	0.25
CWF	SE	384				02:17	47.30	14	0.12
XSO	SZ	389	EP	2		02:17	09.24		
KWE	SZ	399	EP	3		02:17	10.72		
ESY	SZ	423	EP	3		02:17	13.42		
BBO	SN	442	ES	3		02:17	57.21		
BBO	SN	442				02:17	59.93	38	0.35
BBO	SE	442				02:17	59.58	38	0.23
EBL	SZ	444	EP	2		02:17	16.12		
ESK	SZ	445	EP	3		02:17	15.77		
ESK	SE	445	ES	3		02:17	57.77		
ESK	SN	445				02:18	00.07	16	0.12
ESK	SE	445				02:18	00.77	13	0.21
EDI	SZ	457	EP	2		02:17	17.83		
EDI	SE	457	ES	3		02:18	01.67		
EDI	SN	457				02:18	04.19	16	0.27
EDI	SE	457				02:18	04.92	9	0.22

February 12 2000 **Time: 08:51 28.5 UTC** **Magnitude: 2.7 ML**
Lat: 55.910N **Lon: 5.311W** **Depth: 8.8 km**
Grid Ref: 193.07 kmE 673.53 kmN **RMS: 0.11 secs**
Locality: LOCHGILPHEAD, S'CLYDE **Quality: C**
Comments: FELT KAMES... **Intensity: 5+**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PMS	SZ	36	IP		C	08:51	34.90		
PGB	SZ	53	IP		C	08:51	37.73		
PGB	SN	53	ES	2		08:51	44.01		
PGB	SN	53				08:51	44.33	352	0.22

PGB	SE	53				08:51				44.29	364	0.28
POB	SZ	56	IP	1	C	08:51				38.14		
GMK	SZ	65	IP		D	08:51				39.42		
PCA	SZ	70	EP	1	C	08:51				40.40		
PCO	SZ	76	IP		C	08:51				41.14		
GCL	SZ	106	EP	1	D	08:51				45.95		
EAU	SZ	117	EP	1	C	08:51				47.60		
ELO	SZ	117	EP	2		08:51				47.07		
KAR	SZ	117	EP	1	D	08:51				47.47		
EBH	SZ	118	EP	2		08:51				47.48		
GAL	SZ	122	EP	2		08:51				48.36		
GAL	SN	122				08:52				05.31	177	0.21
GAL	SE	122				08:52				05.41	160	0.12
EDI	SZ	133	EP	2		08:51				50.06		
EDI	SN	133				08:52				08.39	251	0.28
EDI	SE	133				08:52				08.43	244	0.18
KPL	SZ	161	EP	2		08:51				53.86		
KPL	SN	161				08:52				16.81	47	0.14
KPL	SE	161				08:52				17.97	77	0.16

February 12 2000 **Time: 18:51 6.2 UTC** **Magnitude: 2.0 ML**
Lat: 52.352N **Lon: 3.945W** **Depth: 4.4 km**
Grid Ref: 267.51 kmE 274.45 kmN **RMS: 0.19 secs**
Locality: ABERYSTWYTH, DYFED **Quality: C**
Comments: 7KM SE OF ABERYSTWYTH

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WFB	SZ	37	IP	1	D	18:51	12.67		
HTR	SZ	55	IP	1	D	18:51	15.86		
SSP	SZ	57	EP	2		18:51	16.14		
SSP	SN	57	ES	2		18:51	22.92		
SSP	SN	57				18:51	23.58	50	0.17
SSP	SE	57				18:51	24.24	39	0.12
HSA	SZ	68	EP	2		18:51	18.03		
YRH	SZ	71	IP	1	D	18:51	18.42		
HPE	SZ	73	EP	2		18:51	17.96		
HLM	SZ	75	EP	2		18:51	18.97		
MCH	SZ	76	EP	2		18:51	19.08		
MCH	SN	76	ES	2		18:51	28.09		
MCH	SN	76				18:51	28.27	80	0.17
MCH	SE	76				18:51	28.33	52	0.31
SBD	SZ	77	IP	1	C	18:51	19.09		
YRE	SZ	77	EP	2		18:51	19.32		

February 14 2000 **Time: 00:32 54.2 UTC** **Magnitude: 0.8 ML**
Lat: 52.812N **Lon: 0.948W** **Depth: 12.0 km**
Grid Ref: 470.86 kmE 324.35 kmN **RMS: 0.01 secs**
Locality: MELTON MOWBRAY, LEICS **Quality: C**
Comments: 6KM NW OF MELTON MOWBRAY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KEY	SZ	11	EP	2		00:32	57.13		
CWF	SZ	26	IP		C	00:32	59.10		
CWF	SN	26	ES	2		00:33	02.66		
CWF	SN	26				00:33	02.89	26	0.14
CWF	SE	26				00:33	02.94	30	0.09
KSY	SZ	30	IP	1	C	00:32	59.70		

February 14 2000 **Time: 04:42 45.6 UTC** **Magnitude: 1.1 ML**
Lat: 53.132N **Lon: 0.832W** **Depth: 1.0 km**
Grid Ref: 478.16 kmE 360.15 kmN **RMS: 0.27 secs**
Locality: NEWARK-ON-TRENT, NOTTS **Quality: C**
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	49	EP	2		04:42	54.73		
CWF	SZ	54	EP	3		04:42	55.51		
CWF	SN	54	ES	3		04:43	02.89		
CWF	SN	54				04:43	06.28	9	0.19
CWF	SE	54				04:43	06.25	10	0.18
KWE	SZ	69	EP	2		04:42	57.26		

February 16 2000 **Time: 06:02 51.5 UTC** **Magnitude: 2.2 ML**
Lat: 55.876N **Lon: 5.924W** **Depth: 12.5 km**
Grid Ref: 154.60 kmE 671.77 kmN **RMS: 0.17 secs**
Locality: JURA, STRATHCLYDE **Quality: C**

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	63	IP		C	06:03	01.89		
PMS	SZ	74	IP		C	06:03	03.79		
GCL	SZ	90	EP	2		06:03	06.45		
PGB	SZ	91	EP	1	C	06:03	06.56		
PGB	SE	91	ES	2		06:03	17.16		
PGB	SN	91				06:03	21.53	184	0.19
PGB	SE	91				06:03	19.45	127	0.27
PCA	SZ	107	EP	2		06:03	09.02		
PCO	SZ	115	EP	2		06:03	10.09		
KAR	SZ	116	EP	2		06:03	09.94		
KNR	SZ	121	EP	2		06:03	10.92		
GAL	SZ	136	EP	3		06:03	13.47		
GAL	SE	136	ES	2		06:03	29.06		
GAL	SN	136				06:03	31.79	24	0.16
GAL	SE	136				06:03	31.01	39	0.21
ELO	SZ	152	EP	2		06:03	16.24		
KPL	SZ	164	EP	3		06:03	16.70		

KPL	SN	164			06:03	39.18	14	0.17
KPL	SE	164			06:03	40.09	16	0.11
EDI	SZ	171	EP	2	06:03	19.30		
EDI	SN	171			06:03	40.96	23	0.47
EDI	SE	171			06:03	42.53	33	0.35

February 20 2000 Time: 05:54 51.4 UTC
Lat: 54.761N Lon: 2.113W
Grid Ref: 392.72 kmE 540.71 kmN
Locality: STANHOPE, DURHAM
Comments: 7KM WEST OF STANHOPE

Magnitude: 1.1 ML
Depth: 11.8 km
RMS: 0.08 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
XAL	SZ	13	IP		D	05:54	54.66		
XAL	SZ	13	ES	3		05:54	56.64		
BTA	SZ	40	IP		C	05:54	58.73		
BTA	SN	40	ES	2		05:55	03.78		
BTA	SN	40				05:55	04.38	12	0.16
BTA	SE	40				05:55	03.87	11	0.20
LCP	SZ	41	EP	2		05:54	58.83		
LRN	SZ	43	EP	2		05:54	59.26		
BDL	SZ	53	EP	2		05:55	00.73		
BBH	SZ	67	EP	2		05:55	03.06		
CKE	SZ	67	EP	2		05:55	02.83		
BBO	SZ	73	EP	2		05:55	03.73		
BHH	SE	80	ES	2		05:55	14.80		
BHH	SN	80				05:55	14.92	9	0.40
BHH	SE	80				05:55	15.42	8	0.22
CSF	SZ	81	EP	2		05:55	04.95		
CDU	SZ	85	EP	2		05:55	05.41		
HPK	SZ	95	EP	2		05:55	07.51		

February 20 2000 Time: 09:31 52.3 UTC
Lat: 56.198N Lon: 4.100W
Grid Ref: 269.74 kmE 702.58 kmN
Locality: DOUNE, CENTRAL
Comments: FELT DOUNE...

Magnitude: 2.3 ML
Depth: 4.6 km
RMS: 0.05 secs
Quality: B
Intensity: 4+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	15	IP		C	09:31	55.30		
PCO	SZ	23	IP		D	09:31	56.79		
EBH	SZ	37	IP		C	09:31	59.06		
ELO	SZ	39	EP	1	D	09:31	59.36		
POB	SZ	44	IP	1		09:32	00.24		
PGB	SZ	49	IP		D	09:32	01.03		
PGB	SE	49	ES	2		09:32	07.16		
PGB	SN	49				09:32	08.26	155	0.22
PGB	SE	49				09:32	07.81	130	0.31
PMS	SZ	56	IP	1		09:32	02.13		
PCA	SZ	56	IP	1	D	09:32	02.10		
EAU	SZ	57	EP	2		09:32	02.16		
EDI	SZ	65	IP	1	C	09:32	03.39		
EDI	SN	65	ES	2		09:32	11.34		
EDI	SN	65				09:32	11.50	143	0.30
EDI	SE	65				09:32	11.62	245	0.16
EDU	SZ	78	EP	1	C	09:32	05.42		
EBL	SZ	81	IP	1	C	09:32	05.94		

February 24 2000 Time: 01:00 33.6 UTC
Lat: 53.035N Lon: 2.198W
Grid Ref: 386.75 kmE 348.71 kmN
Locality: NEWCASTLE-U-LYME, STAFFS

Magnitude: 1.7 ML
Depth: 3.7 km
RMS: 0.04 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KLE	SZ	6	EP	9		01:00	36.00		
KLE	SZ	6	ES	4		01:00	37.45		
KWE	SZ	24	EP	2		01:00	38.11		
KBI	SZ	51	IP		C	01:00	42.62		
CWF	SZ	68	EP	1	C	01:00	45.37		
CWF	SN	68	ES	3		01:00	53.71		
CWF	SN	68				01:00	54.24	28	0.25
CWF	SE	68				01:00	54.24	23	0.20
SBD	SZ	73	EP	2		01:00	45.94		
HLM	SZ	74	EP	3		01:00	45.63		
SSP	SZ	92	EP	2		01:00	49.08		
MCH	SZ	128	EP	4		01:00	54.71		
MCH	SN	128				01:01	13.00	18	0.27
MCH	SE	128				01:01	13.09	16	0.17

March 3 2000 Time: 07:56 49.9 UTC
Lat: 57.059N Lon: 5.701W
Grid Ref: 175.62 kmE 802.50 kmN
Locality: KNOYDART, HIGHLAND

Magnitude: 0.8 ML
Depth: 9.6 km
RMS: 0.10 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	17	IP		D	07:56	53.50		
KPL	SZ	31	EP	2		07:56	55.64		
KPL	SE	31	ES	2		07:56	59.50		
KPL	SN	31				07:56	59.91	13	0.11
KPL	SE	31				07:56	59.91	20	0.17
KAC	SZ	55	IP	1	D	07:56	59.41		

March 6 2000 Time: 22:06 31.6 UTC
Lat: 54.773N Lon: 2.842W
Grid Ref: 345.82 kmE 542.38 kmN
Locality: CALTHWAITE, CUMBRIA

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BDL	SZ	7	IP		D	22:06	34.32		
BTA	SZ	18	IP	1	D	22:06	35.43		
BTA	SN	18	ES	2		22:06	38.09		
BTA	SN	18				22:06	38.48	30	0.08
BTA	SE	18				22:06	38.61	20	0.18
BBO	SZ	26	IP	1	C	22:06	36.69		
BBO	SE	26	ES	2		22:06	40.32		
CKE	SZ	27	EP	1	C	22:06	36.74		
BBH	SZ	41	EP	2		22:06	38.94		
XAL	SZ	42	EP	2		22:06	39.17		
CSF	SZ	45	EP	2		22:06	39.50		
XDE	SZ	51	IP	1	C	22:06	40.64		
CDU	SZ	54	EP	2		22:06	41.20		
BNA	SZ	55	EP	2		22:06	41.31		
BWH	SZ	69	EP	2		22:06	43.61		

March 13 2000 Time: 21:14 4.1 UTC
Lat: 52.826N Lon: 2.681W
Grid Ref: 354.14 kmE 325.64 kmN
Locality: SHREWSBURY, SHROPSHIRE
Comments: 12KM NNE OF SHREWSBURY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HLM	SZ	37	EP	2		21:14	10.69		
SBD	SZ	40	EP	2		21:14	11.24		
SSP	SZ	54	EP	2		21:14	13.41		
SSP	SN	54	ES	2		21:14	20.40		
SSP	SN	54				21:14	20.47	5	0.06
SSP	SE	54				21:14	22.72	4	0.20
KWE	SZ	60	EP	2		21:14	14.56		
WFB	SZ	93	EP	2		21:14	19.47		

March 15 2000 Time: 04:34 40.2 UTC
Lat: 53.201N Lon: 1.039W
Grid Ref: 464.17 kmE 367.55 kmN
Locality: OLLERTON, NOTTS
Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	33	EP	2		04:34	46.88		
CWF	SZ	55	EP	3		04:34	50.24		
CWF	SE	55	ES	3		04:34	57.57		
CWF	SN	55				04:35	01.70	7	0.17
CWF	SE	55				04:34	59.14	6	0.16
KWE	SZ	58	EP	1	C	04:34	50.15		
KWE	SZ	58	ES	3		04:34	58.38		

March 17 2000 Time: 02:05 56.6 UTC
Lat: 53.141N Lon: 2.327W
Grid Ref: 378.14 kmE 360.53 kmN
Locality: SANDBACH, CHESHIRE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	35	IP	1	D	02:06	03.11		
KBI	SZ	55	EP	2		02:06	06.08		
LHO	SZ	55	EP	2		02:06	05.89		
SBD	SZ	68	EP	2		02:06	07.80		
HLM	SZ	79	EP	2		02:06	09.42		
CWF	SE	82	ES	2		02:06	19.68		
CWF	SN	82				02:06	20.39	4	0.13
CWF	SE	82				02:06	20.25	4	0.14
SSP	SZ	96	EP	2		02:06	12.50		
SSP	SN	96	ES	2		02:06	23.95		
SSP	SN	96				02:06	25.15	3	0.13
SSP	SE	96				02:06	24.67	2	0.10
WPM	SZ	106	EP	2		02:06	14.18		
YLL	SZ	124	EP	3		02:06	16.33		
WFB	SZ	126	EP	2		02:06	16.75		

March 17 2000 Time: 09:57 25.0 UTC
Lat: 53.038N Lon: 3.786W
Grid Ref: 280.27 kmE 350.46 kmN
Locality: BETWS-Y-COED, GWYNEDD
Comments: 6KM S OF BETWS-Y-COED

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WPM	SZ	26	IP	1	D	09:57	29.96		
WPM	SZ	26	ES	3		09:57	33.31		
YLL	SZ	28	IP	1	D	09:57	30.28		
YLL	SZ	28	ES	3		09:57	34.03		
SBD	SZ	38	IP	1	D	09:57	31.86		
WFB	SZ	43	IP	1	C	09:57	32.52		
YRE	SZ	43	IP	1	C	09:57	32.74		
WLF	SZ	50	EP	2		09:57	33.31		
YRC	SZ	58	EP	2		09:57	34.64		
WCB	SZ	63	EP	2		09:57	35.45		
WCB	SN	63				09:57	48.07	1	0.11
WCB	SE	63				09:57	43.13	2	0.20

PHASE DATA : 2000

TABLE 5 (cont'd)

March 20 2000 Time: 08:50 41.3 UTC
Lat: 53.216N Lon: 4.770W
Grid Ref: 215.10 kmE 372.44 kmN
Locality: CAERNARVON BAY, GWYNEDD
Comments: 15KM SW OF HOLYHEAD
Magnitude: 0.3 ML
Depth: 17.3 km
RMS: 0.07 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRC	SZ	14	IP	1	C	08:50	44.95		
WCB	SZ	23	IP		C	08:50	46.09		
WCB	SN	23	ES	2		08:50	49.20		
WCB	SN	23				08:50	49.28	8	0.13
WCB	SE	23				08:50	49.28	13	0.13
WLF	SZ	26	EP	2		08:50	46.38		
YRE	SZ	35	EP	2		08:50	47.57		
WME	SZ	37	IP	1	C	08:50	47.92		
YLL	SZ	41	EP	2		08:50	48.70		

March 20 2000 Time: 15:38 38.9 UTC
Lat: 55.088N Lon: 3.622W
Grid Ref: 296.52 kmE 578.31 kmN
Locality: DUMFRIES, D & G
Magnitude: 0.9 ML
Depth: 10.2 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	10	IP		C	15:38	41.54		
BNA	SZ	14	IP	1	C	15:38	42.03		
BHH	SZ	26	IP	1	D	15:38	44.03		
BHH	SE	26	ES	2		15:38	47.31		
BHH	SN	26				15:38	47.44	28	0.22
BHH	SE	26				15:38	47.68	36	0.20
GCD	SZ	32	EP			15:38	44.85		
ECK	SZ	33	EP	2		15:38	45.07		
ESK	SZ	37	IP		C	15:38	45.58		
ESK	SE	37	ES	2		15:38	50.01		
ESK	SN	37				15:38	50.97	11	0.12
ESK	SE	37				15:38	50.90	12	0.11

March 20 2000 Time: 21:54 56.4 UTC
Lat: 55.089N Lon: 3.620W
Grid Ref: 296.59 kmE 578.36 kmN
Locality: DUMFRIES, D & G
Magnitude: 0.9 ML
Depth: 10.0 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	10	IP		C	21:54	59.00		
BNA	SZ	14	IP		C	21:54	59.51		
BHH	SZ	26	IP	1		21:55	01.44		
BHH	SN	26	ES	2		21:55	04.60		
BHH	SN	26				21:55	04.92	33	0.22
BHH	SE	26				21:55	05.57	36	0.44
GCD	SZ	32	EP	2		21:55	02.33		
ECK	SZ	33	IP	1	D	21:55	02.53		
ESK	SZ	37	IP		C	21:55	03.04		
ESK	SN	37	ES	2		21:55	07.64		
ESK	SN	37				21:55	08.43	14	0.14
ESK	SE	37				21:55	08.44	16	0.18
BBH	SZ	44	IP		C	21:55	04.52		

March 21 2000 Time: 05:23 13.8 UTC
Lat: 54.271N Lon: 3.606W
Grid Ref: 295.43 kmE 487.41 kmN
Locality: IRISH SEA
Magnitude: 1.0 ML
Depth: 9.2 km
RMS: 0.07 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LMI	SZ	20	IP		C	05:23	17.81		
LMI	SE	20	ES	2		05:23	20.69		
LMI	SN	20				05:23	20.71	28	0.18
LMI	SE	20				05:23	21.43	26	0.16
CDU	SZ	28	IP		C	05:23	18.89		
CSF	SZ	31	IP		C	05:23	19.33		
CKE	SZ	48	EP	2		05:23	22.20		
GIM	SZ	56	IP	1	C	05:23	23.65		
GIM	SN	56	ES	2		05:23	30.18		
GIM	SN	56				05:23	32.40	8	0.11
GIM	SE	56				05:23	30.76	11	0.19
GCD	SZ	69	EP	2		05:23	25.60		
WCB	SZ	117	EP	2		05:23	33.48		
WCB	SN	117				05:23	49.49	5	0.14
WCB	SE	117				05:23	48.48	5	0.14

March 22 2000 Time: 01:35 9.1 UTC
Lat: 51.684N Lon: 3.230W
Grid Ref: 314.96 kmE 199.13 kmN
Locality: BARGOED, MID GLAMORGAN
Comments: C/F
Magnitude: 1.4 ML
Depth: 1.0 km
RMS: 0.14 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HGH	SZ	30	IP		C	01:35	15.05		
MCH	SZ	38	IP		C	01:35	16.44		
MCH	SN	38	ES	2		01:35	21.31		
MCH	SN	38				01:35	21.81	30	0.09
MCH	SE	38				01:35	21.43	22	0.15
HTR	SZ	44	IP	1	C	01:35	17.39		
SMD	SZ	55	EP	2		01:35	18.91		
HAE	SZ	62	EP	2		01:35	20.19		
HSA	SZ	64	EP	2		01:35	20.54		
HEX	SZ	79	EP	2		01:35	23.36		
HTL	SZ	116	EP	2		01:35	29.46		

HTL	SE	116	ES	2	01:35	42.87			
HTL	SN	116			01:35	44.45	11	0.19	
HTL	SE	116			01:35	44.64	14	0.27	

March 24 2000 Time: 20:58 53.8 UTC
Lat: 52.898N Lon: 2.546W
Grid Ref: 363.29 kmE 333.61 kmN
Locality: MARKET DRAYTON, SALOP
Magnitude: 1.9 ML
Depth: 5.3 km
RMS: 0.05 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HLM	SZ	48	IP	1	C	20:59	02.24		
SBD	SZ	48	IP		C	20:59	02.25		
KWE	SZ	49	IP	1	C	20:59	02.39		
SSP	SZ	66	EP	1	C	20:59	05.09		
SSP	SN	66	ES	3		20:59	13.19		
SSP	SN	66				20:59	13.75	37	0.14
SSP	SE	66				20:59	15.50	31	0.23
KBI	SZ	79	IP	1	C	20:59	07.19		
CWF	SZ	85	EP	2		20:59	08.04		
CWF	SN	85	ES	2		20:59	17.74		
CWF	SN	85				20:59	18.25	55	0.20
CWF	SE	85				20:59	20.82	24	0.11
HAE	SZ	96	EP	1	D	20:59	10.36		
HCG	SZ	99	EP	2		20:59	10.20		
MCH	SN	105	ES	4		20:59	23.60		
MCH	SN	105				20:59	23.86	45	0.22
MCH	SE	105				20:59	25.50	33	0.19

March 26 2000 Time: 15:43 28.9 UTC
Lat: 56.245N Lon: 3.748W
Grid Ref: 291.69 kmE 707.16 kmN
Locality: BLACKFORD, TAYSIDE
Magnitude: 0.9 ML
Depth: 5.4 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	15:43	31.94		
ELO	SZ	25	IP		C	15:43	33.68		
PCO	SZ	36	EP	1	C	15:43	35.50		
EAB	SZ	37	IP		C	15:43	35.63		
EDI	SZ	50	EP	2		15:43	37.38		
EDI	SN	50	ES	2		15:43	44.10		
EDI	SN	50				15:43	45.30	5	0.16
EDI	SE	50				15:43	44.35	11	0.18
PCA	SZ	68	EP	2		15:43	40.77		

March 27 2000 Time: 02:01 49.0 UTC
Lat: 56.205N Lon: 4.112W
Grid Ref: 269.01 kmE 703.40 kmN
Locality: DOUNE, CENTRAL
Magnitude: 1.7 ML
Depth: 4.6 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	14	IP		C	02:01	51.93		
PCO	SZ	24	IP		D	02:01	53.62		
EBH	SZ	38	EP	1	C	02:01	55.83		
ELO	SZ	39	EP	2		02:01	56.09		
PGB	SZ	50	IP	1	D	02:01	57.83		
PGB	SN	50	ES	2		02:02	04.07		
PGB	SN	50				02:02	04.49	32	0.34
PGB	SE	50				02:02	04.65	41	0.29
PMS	SZ	56	EP	2		02:01	58.86		
PCA	SZ	57	IP	1	D	02:01	58.90		
EAU	SZ	58	IP	1	D	02:01	59.17		
EDI	SZ	66	EP	2		02:02	00.37		
EDI	SN	66	ES	2		02:02	08.26		
EDI	SN	66				02:02	08.55	35	0.19
EDI	SE	66				02:02	08.55	52	0.21
EDU	SZ	78	EP	2		02:02	02.16		

March 31 2000 Time: 05:21 10.0 UTC
Lat: 56.249N Lon: 3.757W
Grid Ref: 291.17 kmE 707.60 kmN
Locality: BLACKFORD, TAYSIDE
Magnitude: 0.6 ML
Depth: 5.1 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	05:21	13.09		
ELO	SZ	25	EP	2		05:21	14.77		
PCO	SZ	36	IP	1	C	05:21	16.66		
EAB	SZ	37	IP	1	C	05:21	16.68		
EAU	SZ	49	EP	2		05:21	18.85		
EDI	SZ	51	EP	2		05:21	18.89		
EDI	SN	51	ES	2		05:21	25.32		
EDI	SN	51				05:21	25.41	3	0.14
EDI	SE	51				05:21	26.43	4	0.22
EDU	SZ	57	EP	2		05:21	19.80		

April 1 2000 Time: 10:22 13.4 UTC
Lat: 57.510N Lon: 5.524W
Grid Ref: 188.96 kmE 852.13 kmN
Locality: TORRIDON, HIGHLAND
Comments: 4KM SOUTH OF TORRIDON
Magnitude: 0.8 ML
Depth: 7.3 km
RMS: 0.05 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	14	IP		D	10:22	16.26		
KPL	SZ	21	EP	2		10:22	17.51		
KPL	SE	21	ES	2		10:22	20.27		
KPL	SN	21				10:22	20.47	33	0.14
KPL	SE	21				10:22	20.47	50	0.12

PHASE DATA : 2000

TABLE 5 (cont'd)

KSB	SZ	34	IP		C	10:22	19.50			
April 1 2000			Time: 20:15 7.1 UTC			Magnitude: 1.4 ML				
Lat: 52.882N			Lon: 2.609W			Depth: 10.7 km				
Grid Ref: 359.03 kmE 331.81 kmN			Locality: MARKET DRAYTON, SALOP			RMS: 0.14 secs				
Comments: 7KM W OF MARKET DRAYTON			Quality: C							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
SBD	SZ	44	IP		C	20:15	14.74			
HLM	SZ	44	IP		C	20:15	14.74			
KWE	SZ	54	IP	1	C	20:15	16.22			
SSP	SZ	62	IP	1	D	20:15	17.69			
SSP	SN	62	ES	2		20:15	25.94			
SSP	SN	62				20:15	26.56	11	0.16	
SSP	SE	62				20:15	28.11	10	0.23	
KBI	SZ	83	IP	1	C	20:15	21.02			
LHO	SZ	89	EP	1	C	20:15	22.12			
CWF	SZ	89	EP	3		20:15	22.10			
CWF	SN	89	ES	2		20:15	31.84			
CWF	SN	89				20:15	32.09	15	0.17	
CWF	SE	89				20:15	34.68	6	0.10	
MCH	SZ	102	EP	2		20:15	23.95			
MCH	SN	102				20:15	36.35	13	0.20	
MCH	SE	102				20:15	37.87	10	0.25	

April 2 2000			Time: 08:40 47.6 UTC			Magnitude: 1.7 ML				
Lat: 49.871N			Lon: 5.185W			Depth: 12.7 km				
Grid Ref: 171.18 kmE 1.65 kmN			Locality: LIZARD POINT, CORNWALL			RMS: 0.07 secs				
Comments: SOUTH OF LIZARD POINT			Quality: C							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
CGH	SZ	20	IP	1	D	08:40	51.82			
CMA	SZ	24	IP		D	08:40	52.25			
CGW	SZ	26	IP		D	08:40	52.73			
CCO	SZ	30	IP	1	D	08:40	53.20			
CCO	SZ	30	ES	2		08:40	57.92			
CR2	SZ	33	EP	2		08:40	53.70			
CR2	SN	33	ES	2		08:40	58.44			
CR2	SN	33				08:41	01.90	84	0.10	
CR2	SE	33				08:40	58.83	133	0.12	
CCA	SZ	35	IP	1	D	08:40	54.19			
CST	SZ	36	IP		D	08:40	54.25			
CPZ	SZ	43	IP	1	C	08:40	55.38			
CSA	SZ	58	EP	2		08:40	58.35			

April 5 2000			Time: 16:41 44.5 UTC			Magnitude: 1.2 ML				
Lat: 56.203N			Lon: 4.112W			Depth: 4.6 km				
Grid Ref: 268.98 kmE 703.17 kmN			Locality: DOUNE, CENTRAL			RMS: 0.08 secs				
Comments: DOUNE, CENTRAL			Quality: B							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
EAB	SZ	14	IP		C	16:41	47.43			
PCO	SZ	24	IP		D	16:41	49.09			
EBH	SZ	38	EP	2		16:41	51.33			
ELO	SZ	39	EP	1	C	16:41	51.68			
PGB	SZ	49	EP	2		16:41	53.29			
PGB	SE	49	ES	2		16:41	59.53			
PGB	SN	49				16:42	00.51	12	0.20	
PGB	SE	49				16:42	00.12	20	0.40	
EAU	SZ	58	EP	2		16:41	54.64			
EDU	SZ	78	EP	2		16:41	57.51			

April 6 2000			Time: 20:16 51.1 UTC			Magnitude: 0.8 ML				
Lat: 51.892N			Lon: 2.975W			Depth: 15.0 km				
Grid Ref: 332.92 kmE 222.03 kmN			Locality: ABERGAVENNY, GWENT			RMS: 0.15 secs				
Comments: 7KM NORTH OF ABERGAVENNY			Quality: B							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
MCH	SZ	12	IP		C	20:16	54.65			
MCH	SN	12	ES	2		20:16	57.52			
MCH	SN	12				20:16	57.64	49	0.11	
MCH	SE	12				20:16	57.63	25	0.11	
HTR	SZ	29	IP	1	D	20:16	56.51			
HGH	SZ	31	IP		D	20:16	56.88			
HAE	SZ	34	EP	2		20:16	57.21			
SSP	SZ	59	EP	2		20:17	00.87			
SSP	SN	59				20:17	08.52	5	0.12	
SSP	SE	59				20:17	08.56	7	0.11	
HCG	SZ	67	IP	1	D	20:17	02.36			

April 10 2000			Time: 04:54 50.5 UTC			Magnitude: 1.1 ML				
Lat: 54.962N			Lon: 2.517W			Depth: 0.0 km				
Grid Ref: 366.92 kmE 563.19 kmN			Locality: HALTWHISTLE, N'UMBERLND			RMS: 0.05 secs				
Comments: C/F			Quality: C							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
BTA	SZ	13	IP		D	04:54	53.46			
BTA	SN	13	ES	2		04:54	55.65			
BTA	SN	13				04:54	55.79	111	0.34	
BTA	SE	13				04:54	56.24	66	0.40	
BDL	SZ	32	IP	1	D	04:54	57.01			
BBH	SZ	33	IP		D	04:54	56.99			

BHH	SZ	47	EP	2		04:54	59.48			
BHH	SN	47				04:55	06.25	14	0.68	
BHH	SE	47				04:55	11.75	14	0.28	
BBO	SZ	53	IP	1	D	04:55	00.33			
BBO	SN	53	ES	3		04:55	07.34			
BBO	SN	53				04:55	09.50	12	0.38	
BBO	SE	53				04:55	09.39	14	0.25	
BNA	SZ	71	EP	2		04:55	03.35			
BWH	SZ	77	EP	2		04:55	04.21			

April 10 2000			Time: 21:16 58.7 UTC			Magnitude: 1.3 ML				
Lat: 52.787N			Lon: 1.119W			Depth: 27.0 km				
Grid Ref: 459.42 kmE 321.43 kmN			Locality: LOUGHBOROUGH, LEICS			RMS: 0.05 secs				
Comments: LOUGHBOROUGH, LEICS			Quality: B							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
KEY	SZ	11	IP		C	21:17	03.53			
CWF	SZ	14	EP	1	C	21:17	03.62			
CWF	SN	14	ES	1		21:17	07.24			
CWF	SN	14				21:17	07.31	162	0.23	
CWF	SE	14				21:17	07.47	186	0.22	
KSY	SZ	41	IP		C	21:17	06.52			
KUF	SZ	53	EP	1	D	21:17	08.17			
KWE	SZ	55	IP	1	C	21:17	08.48			
KBI	SZ	59	IP	1	D	21:17	08.96			

April 11 2000			Time: 02:17 51.8 UTC			Magnitude: 1.9 ML				
Lat: 52.909N			Lon: 2.407W			Depth: 8.8 km				
Grid Ref: 372.62 kmE 334.68 kmN			Locality: MARKET DRAYTON, SALOP			RMS: 0.17 secs				
Comments: MARKET DRAYTON, SALOP			Quality: C							
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
KWE	SZ	40	IP		C	02:17	58.76			
HLM	SZ	54	IP	1	D	02:18	00.81			
SBD	SZ	57	IP	1	C	02:18	01.61			
KBI	SZ	70	IP	1	C	02:18	03.32			
SSP	SZ	73	EP	2		02:18	03.96			
SSP	SN	73				02:18	16.84	14	0.10	
SSP	SE	73				02:18	17.20	13	0.24	
CWF	SZ	77	IP	1	D	02:18	04.89			
CWF	SN	77	ES	2		02:18	12.03			
CWF	SN	77				02:18	12.87	85	0.12	
CWF	SE	77				02:18	12.87	53	0.18	
MCH	SZ	109	EP	2		02:18	08.83			
MCH	SN	109				02:18	24.17	38	0.15	
MCH	SE	109				02:18	25.62	32	0.17	

April 11 2000			Time: 02:26 13.5 UTC				Magnitude: 2.1 ML		
Lat: 59.226N			Lon: 2.092E				Depth: 8.1 km		
Grid Ref: 633.42 kmE 1044.79 kmN							RMS: 0.20 secs		
Locality: NORTHERN NORTH SEA							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KMY	SZ	180	EP	2		02:26	40.53		
KMY	SZ	180	ES	2		02:27	00.47		
SAN	SZ	208	EP	2		02:26	43.79		
LRW	SZ	210	EP	2		02:26	44.29		
LRW	SN	210	ES	3		02:27	06.98		
LRW	SN	210				02:27	10.04	11	0.08
LRW	SE	210				02:27	10.04	10	0.19
EGD	SZ	212	IP	1	C	02:26	44.58		
EGD	SZ	212	ES	2		02:27	05.98		
BER	SZ	223	EP	2		02:26	46.30		
BER	SZ	223	ES	2		02:27	09.32		
ASK	SZ	223	EP	2		02:26	46.00		
ASK	SZ	223	ES	2		02:27	08.40		
YEL	SZ	231	EP	2		02:26	47.33		
WAL	SZ	238	EP	2		02:26	48.06		
SUE	SZ	252	EP	2		02:26	49.67		
SUE	SZ	252	ES	2		02:27	16.18		
OST	SZ	266	EP	2		02:26	51.11		
ORE	SZ	346	EP	3		02:27	00.23		

PHASE DATA : 2000

TABLE 5 (cont'd)

KSB	SZ	52	IP		C	19:27	42.40			
KAR	SZ	58	IP		C	19:27	43.28			
KPL	SZ	72	IP		C	19:27	45.79			
KPL	SE	72	ES	2		19:27	54.32			
KPL	SN	72				19:27	57.49	42	0.10	
KPL	SE	72				19:27	57.83	40	0.14	
MDO	SZ	74	IP	1	C	19:27	45.89			
KAC	SZ	77	EP	2		19:27	46.67			
ELO	SZ	83	EP	1	C	19:27	47.32			
PCO	SZ	107	EP	2		19:27	51.03			
EBH	SZ	108	EP	1	C	19:27	51.22			
PMS	SZ	111	EP	2		19:27	51.80			
PGB	SZ	117	EP	4		19:27	53.08			
PGB	SN	117				19:28	08.00	55	0.24	
PGB	SE	117				19:28	07.51	54	0.21	
RRR	SE	126	ES	4		19:28	08.67			
RRR	SN	126				19:28	11.76	19	0.11	
RRR	SE	126				19:28	11.22	21	0.25	
MCD	SZ	129	EP	4		19:27	53.48			
MCD	SN	129				19:28	11.52	54	0.27	
MCD	SE	129				19:28	11.12	28	0.22	
EDI	SZ	147	EP	4		19:27	57.46			
EDI	SN	147				19:28	15.84	18	0.27	
EDI	SE	147				19:28	15.81	26	0.21	

April 18 2000 Time: 17:29 57.4 UTC										
Lat: 51.856N Lon: 2.774W										
Grid Ref: 346.68 kmE 217.79 kmN										
Locality: MONMOUTH, GWENT										
Comments: 7KM NW OF MONMOUTH										
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
MCH	SZ	22	IP		D	17:30	02.09			
MCH	SN	22	ES	2		17:30	05.48			
MCH	SN	22				17:30	05.54	37	0.13	
MCH	SE	22				17:30	05.58	27	0.19	
HGH	SZ	24	IP		C	17:30	02.41			
HAE	SZ	26	IP		C	17:30	02.59			
HTR	SZ	42	IP		D	17:30	04.94			
SSP	SZ	67	EP	2		17:30	09.25			
SSP	SN	67	ES	2		17:30	16.69			
SSP	SN	67				17:30	18.21	3	0.18	
SSP	SE	67				17:30	17.40	3	0.09	

April 22 2000 Time: 00:18 33.7 UTC										
Lat: 57.638N Lon: 5.637W										
Grid Ref: 182.96 kmE 866.73 kmN										
Locality: GAIRLOCH, HIGHLAND										
Comments: 10KM SOUTH OF GAIRLOCH										
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
KAC	SZ	26	IP		C	00:18	38.61			
RRR	SZ	26	EP	2		00:18	38.58			
RRR	SE	26	ES	2		00:18	42.03			
RRR	SN	26				00:18	42.86	116	0.11	
RRR	SE	26				00:18	42.43	148	0.09	
KPL	SZ	33	IP		C	00:18	39.72			
KPL	SE	33	ES	2		00:18	43.43			
KPL	SN	33				00:18	43.73	95	0.12	
KPL	SE	33				00:18	44.11	113	0.13	
KSB	SZ	50	IP		C	00:18	42.34			
REB	SZ	58	IP	1	D	00:18	43.54			
KSK	SZ	66	EP	2		00:18	45.60			
RRH	SZ	70	IP	1	C	00:18	45.54			
MDO	SZ	80	EP	2		00:18	47.17			
KAR	SZ	81	EP	3		00:18	46.76			
RSC	SZ	84	IP	1	D	00:18	47.64			
RTO	SZ	89	EP	1	D	00:18	48.86			
MVH	SZ	92	IP		D	00:18	49.40			
KNR	SZ	99	EP	1	C	00:18	50.46			
MCD	SZ	143	EP	4		00:18	56.94			
MCD	SN	143				00:19	14.64	36	0.20	
MCD	SE	143				00:19	15.53	37	0.13	

April 24 2000 Time: 05:10 55.7 UTC										
Lat: 54.766N Lon: 2.814W										
Grid Ref: 347.61 kmE 541.51 kmN										
Locality: CALTHWAITE, CUMBRIA										
Comments: FELT CALTHWAITE...										
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
BDL	SZ	9	IP		D	05:10	58.74			
BTA	SZ	18	IP		D	05:10	59.86			
BTA	SN	18	ES	2		05:11	02.53			
CKE	SZ	27	IP		C	05:11	01.19			
BBO	SZ	28	IP		C	05:11	01.12			
BBO	SE	28	ES	2		05:11	04.75			
BCC	AN	38	EP	4		05:11	07.07			
BCC	AN	38	ES	4		05:11	08.11			
XAL	SZ	40	EP	2		05:11	03.00			
BBH	SZ	42	IP		D	05:11	03.41			
CSF	SZ	45	IP		C	05:11	03.87			
BHH	SZ	45	EP	1	C	05:11	03.89			
BHH	SE	45	ES	2		05:11	09.40			

ECK	SZ	50	IP		D	05:11	04.78			
XDE	SZ	52	IP		C	05:11	05.06			
CDU	SZ	54	EP	1	C	05:11	05.29			
BNA	SZ	57	IP		C	05:11	05.57			
ESK	SZ	66	IP		D	05:11	07.36			
ESK	SE	66	ES	2		05:11	14.79			
ESK	SN	66				05:11	18.14	188	0.16	
ESK	SE	66				05:11	15.19	197	0.16	
LMI	SZ	69	EP	2		05:11	07.72			
LMI	SN	69	ES	2		05:11	16.15			
LMI	SN	69				05:11	17.30	168	0.22	
LMI	SE	69				05:11	17.55	189	0.31	
BWH	SZ	71	IP		C	05:11	07.99			
GIM	SZ	119	EP	2		05:11	15.20			
GIM	SN	119				05:11	30.43	212	0.19	
GIM	SE	119				05:11	30.60	205	0.37	
PGB	SZ	158	EP	2		05:11	21.38			
PGB	SN	158				05:11	41.87	55	0.18	
PGB	SE	158				05:11	45.78	60	0.19	

April 27 2000 Time: 21:44 8.9 UTC										
Lat: 61.492N Lon: 3.822E										
Grid Ref: 709.68 kmE 1303.87 kmN										
Locality: NORTHERN NORTH SEA										
Magnitude: 2.9 ML										
Depth: 10.3 km										
RMS: 0.37 secs										
Quality: D										
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI	
FOO	SZ	66	EP	2		21:44	19.84			
FOO	SZ	66	ES	2		21:44	27.83			
SUE	SZ	70	EP	2		21:44	19.83			
SUE	SZ	70	ES	2		21:44	27.43			
HYA	SZ	132	EP	2		21:44	29.24			
HYA	SZ	132	ES	2		21:44	44.57			
ASK	SZ	136	EP	2		21:44	30.06			
BER	SZ	148	EP			21:44	31.99			
BER	SZ	148	ESG			21:44	48.60			
EGD	SZ	156	EP			21:44	33.34			
YEL	SZ	285	EP	2		21:44	48.88			
LRW	SZ	311	EP	2		21:44	51.83			
LRW	SE	311	ES	2		21:45	23.38			
LRW	SN	311				21:45	25.78	24	0.13	
LRW	SE	311				21:45	24.89	19	0.12	
SAN	SZ	321	EP	3		21:44	52.81			
WAL	SZ	326	EP	3		21:44	53.58			

May 2 2000		Time: 21:38 11.2 UTC					Magnitude: 2.1 ML		
Lat: 52.550N		Lon: 0.810W					Depth: 15.3 km		
Grid Ref: 480.70 kmE		295.41 kmN					RMS: 0.10 secs		
Locality: UPPINGHAM, LEICS							Quality: B		
Comments: 6KM SW OF UPPINGHAM									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KUF	SZ	29	IP		C	21:38	16.85		
CWF	SZ	40	IP		D	21:38	18.38		
CWF	SN	40	ES	1		21:38	23.44		
CWF	SN	40				21:38	23.54	155	0.08
CWF	SE	40				21:38	23.76	228	0.05
KEY	SZ	41	IP	1	D	21:38	18.69		
KSY	SZ	48	IP		D	21:38	19.52		
KWE	SZ	87	EP	3		21:38	25.45		
KBI	SZ	92	EP	1	D	21:38	26.34		
SKP	SZ	92	EP	2		21:38	26.16		
SSW	SZ	96	EP	2		21:38	27.50		
SWN	SZ	134	EP	2		21:38	33.51		
SWN	SN	134				21:38	51.32	34	0.25
SWN	SE	134				21:38	51.58	34	0.11

PHASE DATA : 2000

TABLE 5 (cont'd)

CWF	SN	56	ES	3	18:20	28.54		
CWF	SN	56			18:20	29.21	9	0.14
CWF	SE	56			18:20	29.61	18	0.29
KWE	SZ	57	EP	2	18:20	21.69		
LHO	SZ	63	EP	3	18:20	22.22		

May 5 2000	Time: 04:52 17.1 UTC					Magnitude: 3.6 ML			
Lat: 60.733N	Lon: 2.610E					Depth: 16.8 km			
Grid Ref: 651.28 kmE 1214.27 kmN					RMS: 0.19 secs				
Locality: NORTHERN NORTH SEA					Quality: C				
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SUE	SZ	122	EP	2		04:52	35.58		
ASK	SZ	145	EP	2		04:52	38.89		
EGD	SZ	153	EP	2		04:52	39.84		
BER	SZ	154	EP	2		04:52	40.09		
FOO	SZ	163	EP	2		04:52	41.20		
HYA	SZ	200	EP	2		04:52	45.60		
YEL	SZ	203	EP	2		04:52	46.22		
LRW	SZ	219	EP	2		04:52	47.91		
LRW	SE	219	ES	3		04:53	10.92		
LRW	SN	219				04:53	14.91	57	0.35
LRW	SE	219				04:53	17.38	80	0.25
KMY	SZ	225	EP	2		04:52	49.15		
SAN	SZ	227	EP	2		04:52	48.94		
WAL	SZ	238	EP	2		04:52	50.42		
ODD1	SZ	240	EP	2		04:52	49.98		
BLS5	SZ	259	EP	2		04:52	53.44		
OST	SZ	342	EP	2		04:53	04.04		
OWE	SZ	352	EP	2		04:53	04.94		
OHO	SZ	391	EP	2		04:53	09.57		
OBR	SZ	402	EP	2		04:53	11.20		
ORE	SZ	435	EP	2		04:53	14.43		
ORE	SN	435	ES	2		04:53	55.88		
ORE	SN	435				04:53	59.23	168	0.28
ORE	SE	435				04:54	00.28	84	0.19
MCD	SZ	485	EP	2		04:53	21.02		
MCD	SN	485				04:54	08.86	65	0.35
MCD	SE	485				04:54	10.52	81	0.25
RRR	SZ	577	EP	2		04:53	31.88		
RRR	SN	577				04:54	28.96	15	0.27
RRR	SE	577				04:54	29.66	22	0.16

May 5 2000		Time: 05:09 1.6 UTC					Magnitude: 1.8 ML		
Lat: 60.692N		Lon: 2.615E					Depth: 10.8 km		
Grid Ref: 651.86 kmE		1209.78 kmN					RMS: 0.29 secs		
Locality: NORTHERN NORTH SEA							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SUE	SZ	123	EP	2		05:09	20.47		
ASK	SZ	144	EP	2		05:09	23.28		
EGD	SZ	151	EP	2		05:09	24.69		
FOO	SZ	165	EP	2		05:09	26.74		
YEL	SZ	203	EP	2		05:09	31.12		
LRW	SZ	218	EP	2		05:09	33.27		
LRW	SN	218	ES	2		05:09	55.80		
LRW	SN	218				05:10	00.24	6	0.05
LRW	SE	218				05:10	02.21	5	0.11
KMY	SZ	222	EP	2		05:09	33.72		
KMY	SZ	222	ES	2		05:09	57.16		
SAN	SZ	225	EP	2		05:09	34.56		
WAL	SZ	238	EP	2		05:09	35.58		
ODD1	SZ	238	EP	2		05:09	35.34		
BLS5	SZ	256	EP	2		05:09	38.25		
NRA0	SZ	488	EP	2		05:10	06.00		

May 9 2000			Time: 00:55 33.8 UTC				Magnitude: 1.7 ML		
Lat: 52.919N			Lon: 1.621W				Depth: 7.6 km		
Grid Ref: 425.46 kmE 335.80 kmN							RMS: 0.06 secs		
Locality: DERBY, DERBYSHIRE							Quality: C		
Comments: 10KM WEST OF DERBY									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	18	IP	1	D	00:55	37.50		
CWF	SZ	29	IP	1	D	00:55	39.15		
CWF	SE	29	ES	1		00:55	43.06		
CWF	SN	29				00:55	43.57	237	0.14
CWF	SE	29				00:55	43.33	125	0.12
KEY	SZ	37	EP	2		00:55	40.91		
KBI	SZ	38	IP	1	C	00:55	40.51		
KSY	SZ	70	IP	1	C	00:55	45.65		
KUF	SZ	90	EP	2		00:55	48.68		

May 16 2000		Time: 23:30 2.3 UTC				Magnitude: 0.2 ML			
Lat: 53.535N		Lon: 4.307W				Depth: 16.9 km			
Grid Ref: 247.15 kmE		406.76 kmN				RMS: 0.04 secs			
Locality: IRISH SEA						Quality: C			
Comments: 13KM NORTH OF ANGLESEY									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WME	SZ	15	EP	1	C	23:30	06.06		
WCB	SZ	24	IP		C	23:30	07.05		
WCB	SE	24	ES	2		23:30	10.41		
WCB	SN	24				23:30	11.01	8	0.20
WCB	SE	24				23:30	10.51	8	0.06

WLF	SZ	28	IP	1	C	23:30	07.67		
YRC	SZ	36	EP	2		23:30	08.80		
YLL	SZ	45	EP	2		23:30	10.23		
WIM	SZ	72	EP	2		23:30	14.42		

May 18 2000		Time: 15:08 20.3 UTC				Magnitude: 1.9 ML			
Lat: 53.491N		Lon: 0.627W				Depth: 18.8 km			
Grid Ref: 491.06 kmE		400.31 kmN				RMS: 0.07 secs			
Locality: GAINSBOROUGH, LINDS						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LMK	SZ	20	IP		C	15:08	24.95		
KSY	SZ	59	IP	1	D	15:08	30.44		
KBI	SZ	65	EP	3		15:08	31.38		
LHO	SZ	82	EP	2		15:08	33.57		
CWF	SZ	95	EP	1	C	15:08	35.73		
CWF	SN	95	ES	2		15:08	46.25		
CWF	SN	95				15:08	46.61	24	0.16
CWF	SE	95				15:08	48.52	33	0.09
KWE	SZ	97	EP	2		15:08	36.22		

May 20 2000		Time: 16:16 54.3 UTC				Magnitude: 2.3 ML			
Lat: 52.736N		Lon: 5.022W				Depth: 10.6 km			
Grid Ref: 195.99 kmE		319.66 kmN				RMS: 0.09 secs			
Locality: IRISH SEA						Quality: C			
Comments: 20KM SW OF LLEYN PENIN									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRH	SZ	29	IP		C	16:16	59.38		
YRE	SZ	49	IP	1	C	16:17	02.59		
YRC	SZ	65	IP	1	C	16:17	05.25		
WFB	SZ	67	IP	1	D	16:17	05.58		
YLL	SZ	73	IP		C	16:17	06.49		
WLF	SZ	75	EP	1	C	16:17	06.51		
WCB	SZ	78	EP	2		16:17	07.57		
WCB	SN	78	ES	3		16:17	16.74		
WCB	SN	78				16:17	18.46	32	0.03
WCB	SE	78				16:17	18.04	27	0.18
WME	SZ	88	EP	2		16:17	08.54		
HPE	SZ	90	EP	2		16:17	09.20		
WPM	SZ	95	EP	2		16:17	10.02		
HCG	SZ	104	EP	2		16:17	11.15		
SBD	SZ	121	EP	2		16:17	13.84		
SSP	SZ	134	EP	2		16:17	16.10		
SSP	SE	134	ES	2		16:17	31.42		
SSP	SN	134				16:17	34.10	88	0.23
SSP	SE	134				16:17	34.13	81	0.22
HTR	SZ	140	EP	2		16:17	16.87		
MCH	SZ	160	EP	2		16:17	19.90		
MCH	SN	160				16:17	39.55	49	0.16
MCH	SE	160				16:17	39.57	44	0.15

May 26 2000			Time: 20:09 45.5 UTC			Magnitude: 1.6 ML			
Lat: 51.965N			Lon: 3.572W			Depth: 14.2 km			
Grid Ref: 291.98 kmE 230.88 kmN						RMS: 0.14 secs			
Locality: SENNYBRIDGE, POWYS						Quality: B			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HTR	SZ	24	IP		C	20:09	50.49		
MCH	SZ	40	IP	1	C	20:09	52.52		
MCH	SE	40	ES	2		20:09	57.62		
MCH	SN	40				20:09	57.79	50	0.17
MCH	SE	40				20:09	57.73	69	0.11
HCG	SZ	40	EP	1	C	20:09	52.85		
HSA	SZ	47	IP		C	20:09	53.69		
SSP	SZ	59	IP	1	C	20:09	55.49		
SSP	SN	59	ES	2		20:10	02.80		
SSP	SN	59				20:10	03.19	20	0.10
SSP	SE	59				20:10	03.09	18	0.21
HGH	SZ	64	EP	2		20:09	56.67		
HPE	SZ	83	EP	2		20:09	59.37		

May 29 2000	
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PHASE DATA : 2000

TABLE 5 (cont'd)

June 1 2000		Time: 14:37 27.5 UTC				Magnitude: 0.9 ML			
Lat: 57.485N		Lon: 5.225W				Depth: 7.4 km			
Grid Ref: 206.70 kmE		848.43 kmN				RMS: 0.02 secs			
Locality: GLEN CARRON, HIGHLAND						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	5	IP		C	14:37	29.25		
KPL	SZ	30	EP	1	D	14:37	33.12		
KPL	SN	30	ES	2		14:37	37.13		
KPL	SN	30				14:37	37.45	17	0.17
KPL	SE	30				14:37	37.47	32	0.14
KSB	SZ	33	EP	3		14:37	33.46		

June 6 2000		Time: 11:58 18.4 UTC					Magnitude: 1.5 ML		
Lat: 52.432N		Lon: 3.782W					Depth: 11.0 km		
Grid Ref: 278.89 kmE 283.13 kmN							RMS: 0.16 secs		
Locality: DEVIL'S BRIDGE, DYFED							Quality: B		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HCG	SZ	15	IP		D	11:58	21.46		
WFB	SZ	33	IP		D	11:58	24.41		
HTR	SZ	53	IP	1	D	11:58	27.71		
HLM	SZ	62	EP	1	C	11:58	29.25		
SBD	SZ	63	IP	1	C	11:58	29.14		
MCH	SZ	72	EP	2		11:58	30.62		
MCH	SE	72	ES	2		11:58	39.29		
MCH	SN	72				11:58	39.33	17	0.14
MCH	SE	72				11:58	39.52	19	0.27
YRH	SZ	73	IP		D	11:58	30.88		
YRE	SZ	75	IP		C	11:58	31.30		
HSA	SZ	80	EP	2		11:58	32.08		
YLL	SZ	83	IP		C	11:58	32.21		
HPE	SZ	87	EP	2		11:58	32.80		
WPM	SZ	92	IP	1	C	11:58	33.91		
WCB	SZ	117	EP	2		11:58	37.88		
WCB	SE	117	ES	2		11:58	50.85		
WCB	SN	117				11:58	53.92	8	0.23
WCB	SE	117				11:58	54.28	11	0.46

June 7 2000		Time: 03:25 59.5 UTC				Magnitude: 1.1 ML			
Lat: 54.521N		Lon: 3.043W				Depth: 10.9 km			
Grid Ref: 332.48 kmE		514.43 kmN				RMS: 0.05 secs			
Locality: LAKE THIRLMERE, CUMBRIA						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CKE	SZ	9	IP		D	03:26	02.05		
CSF	SZ	15	IP		C	03:26	02.95		
CDU	SZ	23	IP		C	03:26	03.96		
BBO	SZ	27	IP		D	03:26	04.75		
BBO	SN	27	ES	2		03:26	08.37		
BBO	SN	27				03:26	08.59	45	0.26
BBO	SE	27				03:26	08.73	42	0.20
XDE	SZ	29	IP	1	C	03:26	05.04		
LMI	SZ	38	IP		C	03:26	06.32		
LMI	SN	38	ES	2		03:26	11.00		
LMI	SN	38				03:26	12.06	28	0.20
LMI	SE	38				03:26	12.38	19	0.33

June 11 2000		Time: 11:36 26.5 UTC					Magnitude: 1.1 ML		
Lat: 56.247N		Lon: 3.757W					Depth: 4.5 km		
Grid Ref: 291.17 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	11:36	29.58		
ELO	SZ	25	IP		C	11:36	31.24		
PCO	SZ	36	EP	2		11:36	33.07		
EAB	SZ	37	IP		C	11:36	33.18		
EAU	SZ	49	EP	2		11:36	35.21		
EDI	SZ	51	EP	2		11:36	35.39		
EDI	SE	51	ES	2		11:36	41.82		
EDI	SN	51				11:36	42.34	10	0.16
EDI	SE	51				11:36	42.87	15	0.23
EDU	SZ	57	EP	2		11:36	36.33		

June 12 2000		Time: 05:36 55.2 UTC				Magnitude: 0.3 ML			
Lat: 52.964N		Lon: 4.391W				Depth: 24.4 km			
Grid Ref: 239.45 kmE		343.39 kmN				RMS: 0.05 secs			
Locality: LLEYN PENIN, GWYNEDD						Quality: B			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	3	EP	2		05:36	59.29		
YRH	SZ	22	IP		C	05:37	00.47		
YLL	SZ	25	IP		C	05:37	00.79		
YRC	SZ	34	EP	2		05:37	01.95		
WLF	SZ	36	EP	2		05:37	02.28		
WFB	SZ	39	EP	2		05:37	02.70		
WCB	SZ	47	EP	2		05:37	04.27		
WCB	SE	47	ES	2		05:37	09.70		
WCB	SN	47				05:37	10.48	1	0.14
WCB	SE	47				05:37	10.28	4	0.07

June 13 2000			Time: 06:54 35.4 UTC			Magnitude: 1.1 ML			
Lat: 57.019N			Lon: 5.423W			Depth: 6.2 km			
Grid Ref: 192.24 kmE			797.16 kmN			RMS: 0.11 secs			
Locality: LOCH QUOICH, HIGHLAND						Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSB	SZ	21	IP			06:54	39.49		
KNR	SZ	35	EP	2		06:54	41.75		
KPL	SZ	38	EP	1	C	06:54	42.45		
KPL	SN	38	ES	2		06:54	47.03		
KPL	SN	38				06:54	47.39	11	0.13
KPL	SE	38				06:54	47.20	34	0.12
KAC	SZ	54	EP	1	C	06:54	44.81		

June 14 2000			Time: 13:27 37.9 UTC			Magnitude: 1.0 ML			
Lat: 56.252N			Lon: 3.751W			Depth: 6.0 km			
Grid Ref: 291.49 kmE 707.94 kmN			RMS: 0.04 secs			Quality: B			
Locality: BLACKFORD, TAYSIDE									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	13:27	40.92		
ELO	SZ	25	IP		C	13:27	42.54		
EAB	SZ	37	IP		C	13:27	44.53		
PCO	SZ	37	IP		C	13:27	44.49		
EAU	SZ	49	EP	2		13:27	46.54		
EDI	SZ	51	EP	2		13:27	46.78		
EDI	SE	51	ES	2		13:27	53.05		
EDI	SN	51				13:27	53.17	8	0.20
EDI	SE	51				13:27	53.34	11	0.21
EDU	SZ	56	EP	2		13:27	47.51		

June 17 2000			Time: 04:03 29.6 UTC			Magnitude: 1.4 ML			
Lat: 52.122N			Lon: 2.464W			Depth: 14.9 km			
Grid Ref: 368.20 kmE 247.21 kmN						RMS: 0.07 secs			
Locality: BROMYARD, HER & WOR						Quality: C			
Comments: 6KM SOUTH OF BROMYARD									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	11	IP		C	04:03	32.72		
MCH	SZ	39	IP		C	04:03	36.63		
MCH	SN	39	ES	2		04:03	41.73		
MCH	SN	39				04:03	41.88	45	0.17
MCH	SE	39				04:03	41.80	36	0.16
HLM	SZ	53	EP	2		04:03	38.60		
HTR	SZ	55	EP	2		04:03	39.12		
SSP	SZ	55	EP	2		04:03	39.25		
HGH	SZ	59	EP	2		04:03	39.61		

June 22 2000		Time: 14:37 13.4 UTC				Magnitude: 2.7 ML			
Lat: 52.964N		Lon: 4.390W				Depth: 24.5 km			
Grid Ref: 239.48 kmE		343.41 kmN				RMS: 0.05 secs			
Locality: LLEYN PENIN, GWYNEDD						Quality: A			
Comments: FELT LLANBERIS...						Intensity: 4+			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	3	IP		D	14:37	17.35		
YRH	SZ	22	IP		C	14:37	18.67		
YLL	SZ	25	IP		C	14:37	18.99		
YRC	SZ	34	IP		D	14:37	20.19		
WLF	SZ	36	IP		C	14:37	20.38		
WFB	SZ	39	IP	1	D	14:37	20.83		
WPM	SZ	46	IP		C	14:37	21.89		
WCB	SZ	47	EP	1	D	14:37	22.03		
WCB	SN	47	ES	2		14:37	27.92		
WME	SZ	49	IP		C	14:37	22.00		
SBD	SZ	76	IP	1	C	14:37	26.30		
SSP	SZ	106	IP	1	D	14:37	31.10		
SSP	SN	106	ES	2		14:37	43.73		
SSP	SN	106				14:37	45.11	130	0.11
SSP	SE	106				14:37	45.22	122	0.23
MCH	SZ	143	EP	2		14:37	36.36		
MCH	SN	143				14:37	54.30	120	0.15
MCH	SE	143				14:37	54.23	137	0.17

PHASE DATA : 2000

TABLE 5 (cont'd)

BTA SN 60 ES 2 14:49 25.63
BTA SN 60 14:49 25.72 21 0.22
BTA SE 60 14:49 26.00 11 0.28

June 25 2000 Time: 04:31 17.0 UTC
Lat: 55.386N Lon: 5.234W
Grid Ref: 195.14 kmE 614.97 kmN
Locality: ARRAN, STRATHCLYDE
Comments: 5KM SOUTH OF ARRAN
Magnitude: 0.9 ML
Depth: 14.8 km
RMS: 0.08 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	23	IP		C	04:31	21.75		
PMS	SZ	60	EP	2		04:31	27.25		
GCL	SZ	66	EP	2		04:31	28.12		
GAL	SZ	67	EP	3		04:31	28.41		
GAL	SN	67	ES	2		04:31	36.54		
GAL	SN	67				04:31	39.48	4	0.16
GAL	SE	67				04:31	39.09	5	0.05
PCA	SZ	71	EP	3		04:31	28.65		

June 26 2000 Time: 20:49 59.5 UTC
Lat: 53.429N Lon: 1.246W
Grid Ref: 450.09 kmE 392.78 kmN
Locality: ROTHERHAM, S YORKSHIRE
Comments: C/F,FELT SPOTSWOOD
Magnitude: 1.4 ML
Depth: 1.0 km
RMS: 0.28 secs
Quality: D
Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	27	EP	3		20:50	05.43		
LHO	SZ	42	EP	3		20:50	07.25		
KWE	SZ	61	EP	3		20:50	10.20		
HPK	SZ	64	EP	3		20:50	10.88		
CWF	SZ	77	EP	3		20:50	12.55		
CWF	SN	77	ES	3		20:50	22.46		
CWF	SE	77				20:50	23.17	12	0.16

June 27 2000 Time: 19:50 24.5 UTC
Lat: 57.524N Lon: 5.444W
Grid Ref: 193.83 kmE 853.45 kmN
Locality: TORRIDON, HIGHLAND
Comments: 8KM SOUTH OF TORRIDON
Magnitude: -0.2 ML
Depth: 9.0 km
RMS: 0.01 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	9	IP		C	19:50	26.94		
KPL	SZ	24	EP	3		19:50	29.11		
KPL	SN	24	ES	3		19:50	32.51		
KPL	SN	24				19:50	32.79	3	0.13
KPL	SE	24				19:50	32.86	3	0.18

June 28 2000 Time: 07:09 59.0 UTC
Lat: 56.607N Lon: 5.276W
Grid Ref: 198.95 kmE 750.95 kmN
Locality: APPIN, STRATHCLYDE
Comments: FELT APPIN...
Magnitude: 1.6 ML
Depth: 8.7 km
RMS: 0.11 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KNR	SZ	30	IP		C	07:10	04.35		
KAR	SZ	48	IP		C	07:10	07.30		
KSB	SZ	68	IP		D	07:10	10.38		
EAB	SZ	74	EP	2		07:10	11.21		
KPL	SZ	85	IP	1	D	07:10	13.28		
KPL	SE	85	ES	3		07:10	23.04		
KPL	SN	85				07:10	27.82	11	0.18
KPL	SE	85				07:10	26.97	12	0.21
PMS	SZ	91	IP		D	07:10	13.94		
ELO	SZ	98	EP	2		07:10	15.05		
KAC	SZ	99	EP	2		07:10	15.74		
PCO	SZ	100	EP	2		07:10	15.50		
EBH	SZ	116	EP	2		07:10	18.23		
EDU	SZ	139	EP	2		07:10	21.89		
EDI	SE	150	ES	4		07:10	40.90		
EDI	SN	150				07:10	41.44	11	0.20
EDI	SE	150				07:10	41.96	11	0.31

June 28 2000 Time: 15:49 6.5 UTC
Lat: 52.922N Lon: 2.157W
Grid Ref: 389.45 kmE 336.13 kmN
Locality: STONE, STAFFORDSHIRE
Comments: C/F
Magnitude: 1.1 ML
Depth: 2.6 km
RMS: 0.03 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	24	IP		C	15:49	10.96		
KBI	SZ	56	IP	1	C	15:49	16.40		
CWF	SZ	61	EP	2		15:49	17.18		
CWF	SN	61	ES	2		15:49	24.83		
CWF	SN	61				15:49	27.76	9	0.11
CWF	SE	61				15:49	27.71	8	0.21
HLM	SZ	66	EP	2		15:49	17.99		
SBD	SZ	74	EP	2		15:49	19.13		
SSP	SZ	86	EP	2		15:49	21.44		
SSP	SN	86	ES	2		15:49	32.20		
SSP	SN	86				15:49	34.88	6	0.13
SSP	SE	86				15:49	35.91	5	0.24

June 29 2000 Time: 00:23 5.5 UTC
Lat: 57.515N Lon: 5.300W
Grid Ref: 202.35 kmE 851.98 kmN
Locality: GLEN CARRON, HIGHLAND
Magnitude: -0.2 ML
Depth: 13.3 km
RMS: 0.01 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	2	IP		C	00:23	07.92		
KAC	SZ	2	ES	3		00:23	09.67		
KPL	SZ	29	EP	3		00:23	11.00		
KPL	SN	29	ES	3		00:23	14.96		
KPL	SN	29				00:23	15.43	2	0.20
KPL	SE	29				00:23	15.34	2	0.09

June 30 2000 Time: 11:55 25.1 UTC
Lat: 62.473N Lon: 1.364E
Grid Ref: 573.40 kmE 1403.82 kmN
Locality: NORWEGIAN SEA
Magnitude: 2.8 ML
Depth: 18.4 km
RMS: 0.27 secs
Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
FOO	SZ	216	EP	2		11:55	55.63		
FOO	SZ	216	ES	2		11:56	17.92		
SUE	SZ	239	EP	2		11:55	57.47		
YEL	SZ	251	EP	3		11:56	00.25		
WAL	SZ	294	EP	2		11:56	05.21		
LRW	SZ	294	EP	2		11:56	05.46		
LRW	SE	294	ES	3		11:56	34.32		
LRW	SN	294				11:56	35.83	20	0.21
LRW	SE	294				11:56	35.44	31	0.12
ASK	SZ	302	EP			11:56	06.57		
ASK	SZ	302	ES			11:56	36.73		
SAN	SZ	307	EP	2		11:56	06.97		
EGD	SZ	321	EP	2		11:56	08.80		
EGD	SZ	321	ES	2		11:56	40.05		

July 3 2000 Time: 08:36 34.6 UTC
Lat: 57.515N Lon: 5.512W
Grid Ref: 189.70 kmE 852.62 kmN
Locality: TORRIDON, HIGHLAND
Comments: 8KM SOUTH OF TORRIDON
Magnitude: 0.4 ML
Depth: 13.5 km
RMS: 0.08 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	13	IP	1	C	08:36	37.91		
KPL	SZ	21	IP		D	08:36	38.93		
KPL	SE	21	ES	2		08:36	42.30		
KPL	SN	21				08:36	42.56	13	0.16
KPL	SE	21				08:36	42.56	20	0.15
KSB	SZ	34	EP	2		08:36	41.07		
KSB	SZ	34	ES	3		08:36	45.34		

July 3 2000 Time: 08:41 18.7 UTC
Lat: 59.374N Lon: 1.665E
Grid Ref: 608.20 kmE 1059.84 kmN
Locality: NORTHERN NORTH SEA
Magnitude: 1.7 ML
Depth: 14.9 km
RMS: 0.35 secs
Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SAN	SZ	179	EP	2		08:41	45.26		
LRW	SZ	181	EP	2		08:41	46.84		
LRW	SE	181	ES	2		08:42	05.89		
LRW	SN	181				08:42	09.45	6	0.07
LRW	SE	181				08:42	07.50	7	0.19
YEL	SZ	202	EP	2		08:41	48.59		
WAL	SZ	209	EP	2		08:41	49.17		

July 4 2000 Time: 04:21 54.7 UTC
Lat: 53.017N Lon: 4.536W
Grid Ref: 229.93 kmE 349.66 kmN
Locality: CAERNARVON BAY, GWYNEDD
Magnitude: 0.5 ML
Depth: 15.6 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	8	IP		D	04:21	57.64		
YRH	SZ	21	EP	1	C	04:21	59.07		
YRC	SZ	26	EP	1	C	04:21	59.76		
YLL	SZ	28	EP	1	C	04:22	00.04		
WLF	SZ	32	IP	1	C	04:22	00.43		
WCB	SZ	40	EP	2		04:22	02.11		
WCB	SE	40	ES	2		04:22	06.53		
WCB	SN	40				04:22	09.62	4	0.10
WCB	SE	40				04:22	07.56	6	0.04
WME	SZ	45	EP	2		04:22	02.34		

July 5 2000 Time: 23:09 54.0 UTC
Lat: 53.438N Lon: 1.152W
Grid Ref: 456.30 kmE 393.87 kmN
Locality: ROTHERHAM, S YORKSHIRE
Comments: C/F,10KM E OF ROTHERHAM
Magnitude: 1.5 ML
Depth: 0.5 km
RMS: 0.13 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	32	EP	2		23:10	00.41		
LHO	SZ	48	EP	2		23:10	02.81		
LMK	SZ	55	EP	3		23:10	04.08		
KWE	SZ	66	EP	2		23:10	05.92		
HPK	SZ	66	EP	3		23:10	06.00		
CWF	SZ	79	EP	2		23:10	07.79		
CWF	SE	79	ES	3		23:10	17.95		
CWF	SN	79				23:10	19.12	15	0.30
CWF	SE	79				23:10	18.74	18	0.15

PHASE DATA : 2000

TABLE 5 (cont'd)

July 10 2000 Lat: 61.088N Grid Ref: 635.29 kmE 1252.85 kmN Locality: NORTHERN NORTH SEA									
Time: 09:06 1.4 UTC Lon: 2.365E RMS: 0.19 secs Quality: C									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SUE	SZ	129	EP	2		09:06	20.33		
SUE	SZ	129	ES	2		09:06	33.87		
FOO	SZ	154	EP	2		09:06	23.89		
FOO	SZ	154	ES	2		09:06	40.47		
ASK	SZ	169	EP	2		09:06	26.22		
ASK	SZ	169	ES	2		09:06	43.40		
BER	SZ	180	ES	2		09:06	45.89		
EGD	SZ	181	EP	2		09:06	27.68		
EGD	SZ	181	ES	2		09:06	45.99		
YEL	SZ	197	EP	2		09:06	29.28		
HYA	SZ	206	EP	2		09:06	30.65		
LRW	SZ	221	EP	2		09:06	32.18		
LRW	SE	221	ES	3		09:06	54.61		
LRW	SN	221				09:06	55.65	16	0.11
LRW	SE	221				09:06	56.64	10	0.11
SAN	SZ	231	EP	2		09:06	33.44		
WAL	SZ	236	EP	2		09:06	33.91		

July 12 2000 Lat: 50.022N Grid Ref: 224.76 kmE 16.52 kmN Locality: DODMAN POINT, CORNWALL Comments: 25KM SE OF DODMAN POINT									
Time: 19:48 52.3 UTC Lon: 4.447W RMS: 0.05 secs Quality: D									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CSA	SZ	49	EP	1	D	19:49	00.75		
CMA	SZ	49	EP	2		19:49	00.90		
CGH	SZ	52	EP	2		19:49	01.18		
CR2	SZ	54	EP	2		19:49	01.78		
CR2	SN	54	ES	3		19:49	09.00		
CR2	SN	54				19:49	09.29	34	0.06
CR2	SE	54				19:49	09.61	38	0.05
CCO	SZ	55	EP	1	D	19:49	01.84		
CGW	SZ	56	EP	3		19:49	02.00		
CCA	SZ	59	EP	2		19:49	02.62		

July 13 2000 Lat: 55.090N Grid Ref: 296.08 kmE 578.50 kmN Locality: DUMFRIES, D & G									
Time: 23:20 46.7 UTC Lon: 3.628W RMS: 0.06 secs Quality: B									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	10	IP		C	23:20	49.36		
BNA	SZ	14	IP		C	23:20	49.88		
BHH	SZ	26	IP		D	23:20	51.86		
BHH	SN	26	ES	2		23:20	55.12		
BHH	SN	26				23:20	55.25	37	0.22
BHH	SE	26				23:20	55.49	39	0.21
GCD	SZ	32				23:20	52.62		
ECK	SZ	33	IP	1	D	23:20	52.87		
ESK	SZ	37	IP		C	23:20	53.38		
ESK	SE	37	ES	2		23:20	58.06		
ESK	SN	37				23:20	58.76	16	0.15
ESK	SE	37				23:20	58.69	15	0.09
BBH	SZ	45	EP	2		23:20	54.74		

July 14 2000 Lat: 52.631N Grid Ref: 362.91 kmE 303.87 kmN Locality: TELFORD, SHROPSHIRE									
Time: 21:25 24.3 UTC Lon: 2.548W RMS: 0.07 secs Quality: B									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HLM	SZ	26	IP	1	C	21:25	29.12		
SSP	SZ	45	IP	1	C	21:25	32.18		
SSP	SN	45	ES	2		21:25	37.84		
SSP	SN	45				21:25	38.34	19	0.09
SSP	SE	45				21:25	38.45	10	0.22
SBD	SZ	57	EP	3		21:25	34.03		
KWE	SZ	64	EP	2		21:25	35.12		
HAE	SZ	66	EP	2		21:25	35.58		
MCH	SZ	77	EP	2		21:25	37.07		
MCH	SN	77	ES	2		21:25	46.62		
MCH	SN	77				21:25	47.04	23	0.14
MCH	SE	77				21:25	47.09	21	0.12
HTR	SZ	79	EP	2		21:25	37.48		
HCG	SZ	83	EP	2		21:25	38.37		
CWF	SZ	85	EP	2		21:25	38.24		
CWF	SE	85	ES	3		21:25	48.19		
CWF	SE	85				21:25	50.81	13	0.08
CWF	SE	85				21:25	51.82	8	0.11
KBI	SZ	98	EP	2		21:25	40.84		

July 15 2000 Lat: 53.540N Grid Ref: 455.82 kmE 405.71 kmN Locality: DONCASTER, S YORKSHIRE Comments: C/F,FELT SCAWTHORPE									
Time: 03:43 0.2 UTC Lon: 1.160W RMS: 0.25 secs Quality: D Intensity: 2+									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	59	EP	3		03:43	10.66		

KBI	SZ	59	ES	3		03:43	18.94		
LHO	SZ	69	EP	3		03:43	12.32		
HPK	SZ	70	EP	3		03:43	13.02		
HPK	SE	70	ES	3		03:43	21.65		
CWF	SZ	97	EP	3		03:43	19.37		
CWF	SN	97	ES	3		03:43	31.12		
CWF	SN	97				03:43	33.91	13	0.29
CWF	SE	97				03:43	34.50	23	0.20

July 17 2000 Lat: 49.539N Grid Ref: 188.05 kmE -35.98 kmN Locality: ENGLISH CHANNEL									
Time: 02:06 2.6 UTC Lon: 4.930W RMS: 0.21 secs Quality: D									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CGH	SZ	59	EP	2		02:06	12.77		
CGW	SZ	66	EP	3		02:06	13.66		
CCO	SZ	69	EP	3		02:06	15.08		
CR2	SZ	72	EP	3		02:06	14.63		
CR2	SE	72	ES	3		02:06	23.47		
CR2	SN	72				02:06	25.07	3	0.06
CR2	SE	72				02:06	25.72	5	0.08

July 17 2000 Lat: 55.095N Grid Ref: 296.12 kmE 579.10 kmN Locality: DUMFRIES, D & G Comments: FELT TINWALD									
Time: 23:32 20.6 UTC Lon: 3.628W RMS: 0.07 secs Quality: B Intensity: 3+									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	9	IP		C	23:32	23.29		
BNA	SZ	14	IP		C	23:32	23.96		
BHH	SZ	26	IP	1	D	23:32	25.88		
BHH	SN	26	ES	2		23:32	29.16		
BHH	SN	26				23:32	29.29	75	0.21
BHH	SE	26				23:32	30.49	80	0.24
GCD	SZ	33	IP		C	23:32	26.71		
ECK	SZ	33	IP	1	D	23:32	26.91		
ESK	SZ	37	IP		C	23:32	27.35		
ESK	SE	37	ES	2		23:32	31.71		
ESK	SN	37				23:32	32.71	27	0.17
ESK	SE	37				23:32	32.70	29	0.15
BBH	SZ	45	IP	1	D	23:32	28.76		

July 18 2000 Lat: 53.129N Grid Ref: 447.94 kmE 359.33 kmN Locality: MANSFIELD, NOTTS Comments: C/F,6KM SW OF MANSFIELD									
Time: 14:51 55.7 UTC Lon: 1.283W RMS: 0.40 secs Quality: D									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	22	EP	3		14:52	00.39		
KWE	SZ	39	EP	3		14:52	02.68		
CWF	SZ	44	EP	3		14:52	03.35		
CWF	SE	44	ES	3		14:52	10.14		
CWF	SN	44				14:52	11.76	7	0.12
CWF	SE	44				14:52	11.09	10	0.20

July 23 2000 Lat: 53.103N Grid Ref: 226.59 kmE 359.39 kmN Locality: CAERNARVON BAY, GWYNEDD									
Time: 19:27 44.7 UTC Lon: 4.591W RMS: 0.06 secs Quality: C									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRC	SZ	17	IP	1	C	19:27	48.45		
WLF	SZ	24	EP	1	C	19:27	49.44		
YLL	SZ	29	EP	1	C	19:27	50.08		
YRH	SZ	30	EP	2		19:27	50.28		
WCB	SZ	31	EP	2		19:27	50.53		
WCB	SE	31	ES	3		19:27	54.05		
WCB	SN	31				19:27	54.50	1	0.13
WCB	SE	31				19:27	54.70	4	0.05

August 1 2000			Time: 21:53 22.9 UTC				Magnitude: 1.4 ML		
Lat: 53.965N			Lon: 1.775W				Depth: 11.0 km		
Grid Ref: 414.75 kmE 452.11 kmN							RMS: 0.36 secs		
Locality: WHARFDALE, N YORKSHIRE							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HPK	SZ	10	IP		D	21:53	25.06		
HPK	SN	10	ES	1		21:53	28.19		
HPK	SN	10				21:53	28.49	128	0.19
HPK	SE	10				21:53	28.49	81	0.16
LHO	SZ	47	EP	2		21:53	31.12		
LWH	SZ	83	IP	1	D	21:53	36.41		
CDU	SZ	102	EP	1	D	21:53	39.36		
LMI	SZ	104	IP	1	D	21:53	40.24		
LMI	SE	104	ES	3		21:53	51.34		
LMI	SN	104				21:53	54.28	10	0.23
LMI	SE	104				21:53	54.37	9	0.22
CSF	SZ	110	EP	2		21:53	40.72		
BDL	SZ	120	EP	2		21:53	42.16		
BTA	SZ	120	EP	2		21:53	42.23		
BTA	SN	120	ES	4		21:53	53.90		
BTA	SN	120				21:53	56.12	12	0.28
BTA	SE	120				21:53	56.35	12	0.44

PHASE DATA : 2000

TABLE 5 (cont'd)

XDE	SZ	127	EP	3	21:53	43.47			
BBO	SZ	129	EP	2	21:53	43.48			
BBO	SE	129	ES	3	21:53	56.64			
BBO	SN	129			21:53	57.77	10	0.24	
BBO	SE	129			21:53	58.56	11	0.25	
BBH	SZ	150	IP	1	21:53	46.82			
BHH	SZ	157	EP	2	21:53	47.81			
BNA	SZ	164	EP	2	21:53	48.89			
BWH	SZ	182	EP	3	21:53	51.68			

August 2 2000			Time: 03:19 25.7 UTC				Magnitude: 0.6 ML		
Lat: 53.053N			Lon: 4.874W				Depth: 16.0 km		
Grid Ref: 207.42 kmE			354.53 kmN				RMS: 0.05 secs		
Locality: CAERNARVON BAY, GWYNEDD							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRH	SZ	30	EP	2		03:19	31.27		
YRC	SZ	30	EP	1	C	03:19	31.29		
YRE	SZ	31	IP	1	D	03:19	31.53		
WLF	SZ	41	EP	1	C	03:19	32.93		
WCB	SZ	42	EP	2		03:19	33.31		
WCB	SN	42	ES	2		03:19	38.25		
WCB	SN	42				03:19	38.74	5	0.16
WCB	SE	42				03:19	38.30	5	0.10
YLL	SZ	48	EP	2		03:19	33.94		

August 4 2000		Time: 00:26 59.5 UTC				Magnitude: 0.9 ML			
Lat: 56.833N		Lon: 5.876W				Depth: 12.8 km			
Grid Ref: 163.57 kmE		778.00 kmN				RMS: 0.03 secs			
Locality: ARISAIG, HIGHLAND						Quality: C			
Comments: 10KM SOUTH OF ARISAIG									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	10	IP		D	00:27	02.43		
KSB	SZ	50	IP	1	D	00:27	08.23		
KPL	SZ	58	EP	3		00:27	09.03		
KPL	SE	58	ES	3		00:27	16.75		
KPL	SN	58				00:27	17.36	4	0.14
KPL	SE	58				00:27	17.33	5	0.18

August 4 2000		Time: 10:52 8.7 UTC				Magnitude: 1.9 ML			
Lat: 53.537N		Lon: 1.189W				Depth: 1.9 km			
Grid Ref: 453.74 kmE		404.82 kmN				RMS: 0.02 secs			
Locality: DONCASTER, S YORKSHIRE						Quality: C			
Comments: C/F, FELT DONCASTER						Intensity: 5+			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	39	EP	2		10:52	15.86		
HPK	SZ	55	EP	9		10:52	17.24		
HPK	SE	55	ES	4		10:52	28.28		
HPK	SN	55				10:52	26.78	57	0.17
HPK	SE	55				10:52	25.96	50	0.34
KWE	SZ	72	EP	2		10:52	21.27		
CWF	SZ	89	EP	2		10:52	23.87		
CWF	SE	89	ES	2		10:52	34.91		
CWF	SN	89				10:52	40.07	29	0.18
CWF	SE	89				10:52	38.84	44	0.16
CDU	SZ	159	EP	3		10:52	34.33		
CSF	SZ	169	EP	2		10:52	35.83		

August 4 2000			Time: 12:10 59.8 UTC			Magnitude: 0.7 ML			
Lat: 49.359N			Lon: 2.351W			Depth: 6.7 km			
Grid Ref: 374.51 kmE			-60.09 kmN			RMS: 0.02 secs			
Locality: JERSEY, CHANNEL ISLANDS						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JVM	SZ	19	IP		D	12:11	03.57		
JLP	SZ	22	IP		D	12:11	04.06		
JLP	SZ	22	ES	3		12:11	07.06		
JSA	SZ	23	IP		D	12:11	04.24		
JRS	SZ	26	IP	1	D	12:11	04.76		
JRS	SN	26	ES	3		12:11	08.49		
JRS	SN	26				12:11	09.19	23	0.11
JRS	SE	26				12:11	09.07	18	0.12

August 5 2000			Time: 05:25 21.1 UTC			Magnitude: 0.1 ML			
Lat: 57.208N			Lon: 5.436W			Depth: 7.0 km			
Grid Ref: 192.53 kmE			818.29 kmN			RMS: 0.26 secs			
Locality: SHIEL BRIDGE, HIGHLAND						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KSB	SZ	1	IP		D	05:25	22.33		
KSB	SZ	1	ES	3		05:25	22.82		
KPL	SZ	20	IP		C	05:25	25.14		
KPL	SN	20	ES	2		05:25	27.62		
KPL	SN	20				05:25	27.92	10	0.15
KPL	SE	20				05:25	27.95	8	0.14
KAC	SZ	33	EP	2		05:25	27.56		

August 6 2000			Time: 06:57 31.5 UTC			Magnitude: 1.2 ML			
Lat: 52.636N			Lon: 2.132W			Depth: 7.9 km			
Grid Ref: 391.08 kmE			304.32 kmN			RMS: 0.26 secs			
Locality: WOLVERHAMPTON, W MIDS						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	47	EP	2		06:57	39.68		
HLM	SZ	52	EP	2		06:57	40.15		

CWF	SZ	57	IP	1	C	06:57	41.28		
CWF	SN	57	ES	2		06:57	47.82		
CWF	SN	57				06:57	48.13	14	0.24
CWF	SE	57				06:57	48.10	7	0.16
SSP	SZ	71	EP	2		06:57	43.27		
SSP	SE	71	ES	3		06:57	51.34		
SSP	SN	71				06:57	52.61	7	0.12
SSP	SE	71				06:57	53.93	5	0.23
HAE	SZ	72	EP	2		06:57	43.96		
KBI	SZ	80	EP	2		06:57	44.97		
SBD	SZ	82	EP	3		06:57	45.30		
MCH	SZ	92	EP	2		06:57	46.75		
MCH	SE	92	ES	3		06:57	57.69		
MCH	SN	92				06:57	59.10	8	0.18
MCH	SE	92				06:57	59.53	11	0.14

August 8 2000			Time: 02:46 3.5 UTC			Magnitude: 2.7 ML			
Lat: 54.663N			Lon: 1.386W			Depth: 24.4 km			
Grid Ref: 439.58 kmE			529.93 kmN			RMS: 0.09 secs			
Locality: MIDDLESBROUGH, CLEVELAND						Quality: D			
Comments: 8KM NW OF MIDDLESBROUGH									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LCP	SZ	10	IP		C	02:46	07.87		
LCP	SZ	10	ES	3		02:46	10.91		
XAL	SZ	58	EP	9		02:46	19.51		
XAL	SZ	58	ES	4		02:46	26.66		
LWH	SZ	59	EP	2		02:46	13.67		
HPK	SZ	80	EP	2		02:46	16.42		
HPK	SE	80	ES	3		02:46	26.37		
HPK	SN	80				02:46	28.88	367	0.22
HPK	SE	80				02:46	28.51	400	0.18
BTA	SZ	88	EP	4		02:46	23.49		
BTA	SN	88				02:46	35.28	482	0.22
BTA	SE	88				02:46	35.00	287	0.31
BBO	SZ	120	EP	4		02:46	28.35		
BBO	SN	120				02:46	44.75	80	0.21
BBO	SE	120				02:46	51.39	91	0.31
ESK	SZ	137	EP	9		02:46	29.05		
ESK	SE	137	ES	4		02:46	46.24		
ESK	SN	137				02:46	47.14	62	0.20
ESK	SE	137				02:46	48.25	89	0.15

August 9 2000			Time: 19:16 15.0 UTC			Magnitude: 2.1 ML			
Lat: 56.239N			Lon: 3.746W			Depth: 5.0 km			
Grid Ref: 291.77 kmE			706.54 kmN			RMS: 0.05 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	19:16	18.02		
ELO	SZ	26	IP		C	19:16	19.90		
PCO	SZ	36	IP		C	19:16	21.57		
EAB	SZ	37	IP		C	19:16	21.79		
EAU	SZ	48	IP		C	19:16	23.53		
EDI	SZ	50	IP		C	19:16	23.77		
EDI	SE	50	ES	2		19:16	29.90		
EDI	SN	50				19:16	30.20	92	0.40
EDI	SE	50				19:16	30.25	159	0.30
PGB	SZ	66	EP	2		19:16	26.23		
PGB	SN	66				19:16	37.43	78	0.26
PGB	SE	66				19:16	37.69	71	0.25

August 11 2000			Time: 06:22 5.5 UTC				Magnitude: 2.0 ML		
Lat: 51.353N			Lon: 3.237W				Depth: 7.3 km		
Grid Ref: 313.86 kmE			162.35 kmN				RMS: 0.09 secs		
Locality: BRISTOL CHANNEL							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PER
SMD	SZ	37	EP	9		06:22	05.83		
SMD	SZ	37	ES	4		06:22	08.33		
HGH	SZ	44	EP	1	C	06:22	13.04		
HEX	SZ	51	IP	1	D	06:22	14.19		
MCH	SZ	74	IP	1	D	06:22	17.75		
MCH	SE	74	ES	2		06:22	26.55		
MCH	SN	74				06:22	27.16	58	0.26
MCH	SE	74				06:22	27.14	38	0.28
HTR	SZ	81	IP	1	D	06:22	18.90		
HAE	SZ	90	IP	1	C	06:22	20.60		
HTL	SZ	96	EP	2		06:22	21.78		
HTL	SN	96	ES	2		06:22	33.71		
HTL	SN	96				06:22	35.91	35	0.14
HTL	SE	96				06:22	35.28	70	0.21
SWN	SZ	102	EP	4		06:22	11.51		
SWN	SN	102				06:22	18.52	27	0.17
SWN	SE	102				06:22	18.85	27	0.09
SSP	SZ	119	EP	2		06:22	25.27		
SSP	SN	119	ES	2		06:22	39.60		
SSP	SN	119				06:22	42.60	26	0.19
SSP	SE	119				06:22	41.55	31	0.16
HPE	SZ	125	EP	2		06:22	26.28		

PHASE DATA : 2000

TABLE 5 (cont'd)

August 12 2000 Time: 14:27 26.2 UTC
Lat: 59.729N Lon: 5.370E
Grid Ref: 813.84 kmE 1116.70 kmN
Locality: NORWEGIAN COAST

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SZ	372	IP		C	14:28	14.74		
LRW	SE	372	ES	2		14:28	51.60		
LRW	SN	372				14:28	57.69	162	0.12
LRW	SE	372				14:29	01.19	166	0.16
YEL	SZ	374	EP	2		14:28	15.39		
MLA	SZ	529	EP	2		14:28	34.48		
MCD	SZ	557	EP	2		14:28	38.12		
MCD	SN	557	ES	2		14:29	31.69		
MCD	SN	557				14:29	50.82	245	0.69
MCD	SE	557				14:29	40.36	565	1.08
MME	SZ	558	EP	2		14:28	37.92		
EDR	SZ	562	EP	1	C	14:28	38.67		
MVH	SZ	590	EP	2		14:28	41.61		
EDU	SZ	610	EP	2		14:28	44.59		
MDO	SZ	623	EP	2		14:28	45.63		
ESY	SZ	639	EP	2		14:28	47.67		
EDI	SZ	664	EP	2		14:28	51.10		
EDI	SN	664	ES	2		14:29	54.84		
EDI	SN	664				14:30	04.22	735	0.97
EDI	SE	664				14:30	03.87	536	1.03

August 13 2000 Time: 03:28 22.8 UTC
Lat: 49.225N Lon: 1.844W
Grid Ref: 411.33 kmE -75.01 kmN
Locality: JERSEY, CHANNEL ISLANDS

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
JQE	SZ	14	IP		C	03:28	25.96		
JRS	SZ	18	IP		C	03:28	26.53		
JRS	SN	18	ES	1		03:28	29.28		
JRS	SN	18				03:28	29.39	178	0.15
JRS	SE	18				03:28	29.45	151	0.05
JLP	SZ	19	IP		C	03:28	26.62		
JLP	SZ	19	ES	2		03:28	29.46		
JSA	SZ	24	IP		C	03:28	27.39		
JVM	SZ	26	IP		C	03:28	27.74		

August 13 2000 Time: 18:38 7.1 UTC
Lat: 53.192N Lon: 1.893W
Grid Ref: 407.17 kmE 366.14 kmN
Locality: BUXTON, DERBYSHIRE
Comments: 7KM SOUTH OF BUXTON

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	25	IP		C	18:38	11.91		
CWF	SZ	64	EP	2		18:38	17.75		
CWF	SN	64	ES	2		18:38	25.95		
CWF	SN	64				18:38	27.95	21	0.13
CWF	SE	64				18:38	28.28	27	0.16
KEY	SZ	65	EP	2		18:38	17.99		
SBD	SZ	97	EP	2		18:38	23.13		
HLM	SZ	100	EP	2		18:38	23.61		
SSP	SZ	119	EP	2		18:38	26.60		
SSP	SN	119	ES	2		18:38	40.53		
SSP	SN	119				18:38	41.42	25	0.20
SSP	SE	119				18:38	42.54	25	0.22
WPM	SZ	135	EP	2		18:38	28.71		
LMI	SZ	148	EP	2		18:38	29.84		
LMI	SN	148				18:38	48.07	12	0.24
LMI	SE	148				18:38	47.23	8	0.43

August 13 2000 Time: 22:33 56.2 UTC
Lat: 55.414N Lon: 5.175W
Grid Ref: 199.07 kmE 617.89 kmN
Locality: ARRAN, STRATHCLYDE
Comments: 3KM SOUTH OF ARRAN

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	28	IP		C	22:34	01.39		
PMS	SZ	55	EP	2		22:34	05.54		
PCA	SZ	66	EP	2		22:34	07.36		
GAL	SZ	68	EP	2		22:34	07.83		
GAL	SE	68	ES	2		22:34	15.63		
GAL	SN	68				22:34	19.09	4	0.09
GAL	SE	68				22:34	18.39	7	0.05
GCL	SZ	71	EP	2		22:34	07.64		

August 18 2000 Time: 17:08 52.0 UTC
Lat: 53.458N Lon: 4.337W
Grid Ref: 244.84 kmE 398.32 kmN
Locality: OFF ANGLESEY, GWYNEDD
Comments: 5KM NORTH OF ANGLESEY

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WME	SZ	7	IP		D	17:08	54.47		
WCB	SZ	17	IP		C	17:08	55.50		
WCB	SN	17	ES	2		17:08	57.88		
WLF	SZ	19	IP		C	17:08	55.93		
YRC	SZ	28	IP		C	17:08	57.20		
WPM	SZ	36	IP		D	17:08	58.49		

YLL	SZ	37	IP	1	D	17:08	58.58		
YRE	SZ	54	EP	2		17:09	01.15		
YRH	SZ	72	EP	2		17:09	04.05		
WIM	SZ	80	IP	1	D	17:09	05.28		
WFB	SZ	89	EP	2		17:09	06.59		
GIM	SZ	93	EP	2		17:09	07.18		
GIM	SE	93	ES	2		17:09	17.57		
GIM	SN	93				17:09	19.94	33	0.22
GIM	SE	93				17:09	19.73	29	0.16
LMI	SZ	109	EP	2		17:09	09.40		
LMI	SE	109	ES	2		17:09	22.87		
LMI	SN	109				17:09	23.82	9	0.38
LMI	SE	109				17:09	23.58	11	0.29

August 19 2000 Time: 18:14 48.9 UTC
Lat: 53.132N Lon: 4.522W
Grid Ref: 231.29 kmE 362.43 kmN
Locality: CAERNARVON BAY, GWYNEDD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRC	SZ	14	IP	1	D	18:14	52.13		
YRE	SZ	18	IP	1	D	18:14	52.62		
WLF	SZ	19	IP	1	C	18:14	52.76		
YLL	SZ	24	IP	1	D	18:14	53.44		
WCB	SZ	27	EP	2		18:14	54.15		
WCB	SN	27	ES	2		18:14	57.30		
WCB	SN	27				18:14	57.60	4	0.08
WCB	SE	27				18:14	57.52	4	0.18
WME	SZ	33	EP	2		18:14	54.80		
YRH	SZ	34	EP	2		18:14	54.95		

August 23 2000 Time: 07:15 15.2 UTC
Lat: 53.060N Lon: 4.552W
Grid Ref: 228.97 kmE 354.48 kmN
Locality: CAERNARVON BAY, GWYNEDD

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRC	SZ	12	IP		D	07:15	18.22		
YRC	SZ	21	EP	2		07:15	19.44		
YRH	SZ	26	IP		C	07:15	20.04		
YLL	SZ	27	IP		C	07:15	20.28		
WLF	SZ	28	IP	1	C	07:15	20.25		
WCB	SZ	35	IP	1	C	07:15	21.63		
WCB	SE	35	ES	2		07:15	25.79		
WCB	SN	35				07:15	25.99	7	0.13
WCB	SE	35				07:15	26.88	6	0.11
WME	SZ	41	IP		C	07:15	22.25		
WPM	SZ	49	IP		C	07:15	23.65		

August 24 2000 Time: 07:49 21.2 UTC
Lat: 55.396N Lon: 5.244W
Grid Ref: 194.62 kmE 616.13 kmN
Locality: ARRAN, STRATHCLYDE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	23	IP		C	07:49	26.19		
PMS	SZ	59	EP	2		07:49	31.25		
GCL	SZ	66	EP	2		07:49	32.23		
PGB	SZ	67	EP	2		07:49	32.35		
PGB	SE	67	ES	2		07:49	40.46		
PGB	SN	67				07:49	40.91	94	0.18
PGB	SE	67				07:49	43.01	124	0.19
GAL	SZ	68	IP	1	C	07:49	32.74		
GAL	SE	68	ES	2		07:49	40.68		
GAL	SN	68				07:49	43.41	55	0.09
GAL	SE	68				07:49	43.58	122	0.08
PCA	SZ	71	EP	1	C	07:49	32.99		
BWH	SZ	104	IP	1	C	07:49	38.27		
BHH	SZ	133	EP	2		07:49	42.89		
BHH	SN	133				07:49	59.73	36	0.24
BHH	SE	133				07:49	58.64	36	0.27
GMM	SZ	137	EP	2		07:49	42.50		

September 1 2000 Time: 11:48 37.7 UTC
Lat: 59.236N Lon: 5.730E
Grid Ref: 840.38 kmE 1064.36 kmN
Locality: NORWEGIAN COAST

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SZ	375	EP	2		11:49	28.70		
LRW	SN	375	ES	2		11:50	05.66		
LRW	SN	375				11:50	11.10	13	0.18
LRW	SE	375				11:50	12.84	13	0.15
SAN	SZ	375	EP	2		11:49	28.51		
YEL	SZ	381	EP	2		11:49	29.80		
WAL	SZ	401	EP	2		11:49	32.08		
OST	SZ	448	EP	2		11:49	38.11		
OWE	SZ	473	EP	2		11:49	40.77		
OHO	SZ	492	EP	2		11:49	42.75		
MLA	SZ	512	EP	3		11:49	44.91		
ORE	SZ	528	EP	2		11:49	46.86		
ORE	SE	528	ES	2		11:50	38.34		
ORE	SN	528				11:50	40.77	35	0.34
ORE	SE	528				11:50	38.97	22	0.20
MME	SZ	533	EP	2		11:49	47.53		

PHASE DATA : 2000

TABLE 5 (cont'd)

MCD	SZ	534	EP	3	11:49	47.99			
MCD	SE	534	ES	2	11:50	39.98			
MCD	SN	534			11:50	42.66	15	0.20	
MCD	SE	534			11:50	42.79	18	0.47	

September 6 2000 Time: 00:26 12.3 UTC
Lat: 57.585N Lon: 5.485W
Grid Ref: 191.70 kmE 860.30 kmN
Locality: TORRIDON, HIGHLAND
Comments: 4KM NORTH OF TORRIDON
Magnitude: 0.6 ML
Depth: 5.2 km
RMS: 0.22 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	15	IP		C	00:26	15.33		
KPL	SZ	29	EP	2		00:26	17.88		
KPL	SE	29	ES	2		00:26	21.38		
KPL	SN	29				00:26	21.62	8	0.09
KPL	SE	29				00:26	22.20	9	0.13
RRR	SZ	36	EP	2		00:26	19.22		
RRR	SE	36	ES	2		00:26	23.39		
RRR	SN	36				00:26	24.09	11	0.08
RRR	SE	36				00:26	24.12	12	0.08
KSB	SZ	42	IP		D	00:26	19.73		
MDO	SZ	69	EP	2		00:26	23.77		

September 10 2000 Time: 06:52 55.2 UTC
Lat: 52.965N Lon: 4.407W
Grid Ref: 238.39 kmE 343.61 kmN
Locality: LLEYN PENIN, GWYNEDD
Magnitude: 0.4 ML
Depth: 21.9 km
RMS: 0.07 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	2	IP	1	D	06:52	58.82		
YRH	SZ	21	IP		C	06:53	00.11		
YLL	SZ	25	EP	2		06:53	00.57		
YRC	SZ	34	EP	2		06:53	01.79		
WLF	SZ	36	EP	2		06:53	01.95		
WFB	SZ	40	EP	2		06:53	02.63		
WCB	SZ	47	EP	3		06:53	04.01		
WCB	SN	47	ES	2		06:53	09.75		
WCB	SN	47				06:53	10.32	2	0.07
WCB	SE	47				06:53	10.19	4	0.10

September 11 2000 Time: 03:21 27.3 UTC
Lat: 54.816N Lon: 3.582W
Grid Ref: 298.32 kmE 547.95 kmN
Locality: SOLWAY FIRTH
Magnitude: 1.0 ML
Depth: 4.1 km
RMS: 0.09 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BNA	SZ	17	IP		D	03:21	30.56		
BBO	SZ	23	IP	1	D	03:21	31.69		
BBO	SN	23	ES	2		03:21	34.78		
BBO	SN	23				03:21	34.88	60	0.24
BBO	SE	23				03:21	34.79	23	0.20
BHH	SZ	39	IP		C	03:21	34.20		
BHH	SE	39	ES	2		03:21	39.06		
BHH	SN	39				03:21	40.74	17	0.24
BHH	SE	39				03:21	40.85	19	0.29
BWH	SZ	40	IP		D	03:21	34.59		
BDL	SZ	41	EP	2		03:21	34.84		
BBH	SZ	55	EP	2		03:21	36.95		
BTA	SZ	59	EP	2		03:21	37.76		
BTA	SN	59				03:21	45.64	13	0.25
BTA	SE	59				03:21	45.74	6	0.23

September 12 2000 Time: 00:14 19.4 UTC
Lat: 54.623N Lon: 2.435W
Grid Ref: 371.94 kmE 525.40 kmN
Locality: APPLEBY, CUMBRIA
Magnitude: 0.8 ML
Depth: 9.6 km
RMS: 0.13 secs
Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BTA	SZ	35	EP	2		00:14	25.58		
BTA	SN	35	ES	2		00:14	30.41		
BTA	SN	35				00:14	30.82	8	0.08
BTA	SE	35				00:14	30.53	8	0.24
BDL	SZ	38	IP		C	00:14	26.39		
BBO	SZ	54	EP	2		00:14	28.87		
BBO	SN	54	ES	2		00:14	35.40		
BBO	SN	54				00:14	36.68	5	0.22
BBO	SE	54				00:14	36.04	4	0.22
BBH	SZ	65	IP		C	00:14	30.57		
BHH	SZ	73	EP	2		00:14	32.40		
BHH	SN	73	ES	2		00:14	40.95		
BHH	SN	73				00:14	41.82	7	0.23
BHH	SE	73				00:14	42.69	7	0.22

September 12 2000 Time: 01:42 25.6 UTC
Lat: 50.108N Lon: 5.180W
Grid Ref: 172.64 kmE 28.03 kmN
Locality: CONSTANTINE, CORNWALL
Magnitude: -0.2 ML
Depth: 7.2 km
RMS: 0.02 secs
Quality: A

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CGW	SZ	3	IP	1	C	01:42	26.94		
CCO	SZ	3	IP	1	D	01:42	27.01		
CCO	SZ	3				01:42	28.28	6	0.06
CMA	SZ	5	IP	1	D	01:42	27.09		
CGH	SZ	7	IP		D	01:42	27.26		
CBW	SZ	7	IP		C	01:42	27.25		

CR2	SZ	7	IP		C	01:42	27.30		
CR2	SE	7	ES	2		01:42	28.56		
CR2	SE	7				01:42	28.61	11	0.04
CCA	SZ	9	IP		D	01:42	27.62		
CST	SZ	10	IP		D	01:42	27.69		
CST	SZ	10				01:42	29.33	7	0.04

September 14 2000 Time: 21:49 46.0 UTC
Lat: 52.957N Lon: 4.365W
Grid Ref: 241.14 kmE 342.56 kmN
Locality: LLEYN PENIN, GWYNEDD
Magnitude: 0.7 ML
Depth: 25.1 km
RMS: 0.04 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	5	IP		D	21:49	50.22		
YRH	SZ	22	IP		C	21:49	51.43		
YLL	SZ	24	IP		C	21:49	51.60		
YRC	SZ	36	IP		D	21:49	53.06		
WLF	SZ	37	EP	1	C	21:49	53.25		
WFB	SZ	38	EP	2		21:49	53.31		
WPM	SZ	46	IP	1	C	21:49	54.50		
WCB	SZ	49	IP	1	C	21:49	54.99		
WCB	SN	49	ES	2		21:50	00.80		
WCB	SN	49				21:50	01.43	5	0.11
WCB	SE	49				21:50	01.39	4	0.10

September 15 2000 Time: 03:57 24.7 UTC
Lat: 52.957N Lon: 4.362W
Grid Ref: 241.35 kmE 342.64 kmN
Locality: LLEYN PENIN, GWYNEDD
Magnitude: 0.7 ML
Depth: 23.3 km
RMS: 0.03 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRE	SZ	5	IP		D	03:57	28.53		
YRH	SZ	23	IP		C	03:57	29.94		
YLL	SZ	24	IP		C	03:57	30.11		
YRC	SZ	36	IP		D	03:57	31.55		
WLF	SZ	37	IP		C	03:57	31.69		
WFB	SZ	38	EP	1	D	03:57	31.80		
WPM	SZ	45	IP	1	C	03:57	32.99		
WCB	SZ	48	IP		C	03:57	33.51		
WCB	SN	48	ES	2		03:57	39.29		
WCB	SN	48				03:57	39.92	4	0.12
WCB	SE	48				03:57	39.89	5	0.11
WME	SZ	49	EP	2		03:57	33.36		

September 18 2000 Time: 20:20 43.0 UTC
Lat: 53.442N Lon: 1.472W
Grid Ref: 435.05 kmE 394.04 kmN
Locality: SHEFFIELD, S YORKSHIRE
Comments: C/F,6KM N OF SHEFFIELD
Magnitude: 1.5 ML
Depth: 0.5 km
RMS: 0.07 secs
Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	21	EP	2		20:20	47.37		
LHO	SZ	28	EP	2		20:20	48.60		
CWF	SZ	79	EP	3		20:20	57.14		
CWF	SN	79	ES	3		20:21	07.92		
CWF	SN	79				20:21	11.27	13	0.16
CWF	SE	79				20:21	11.77	21	0.26

September 21 2000 Time: 07:30 48.3 UTC
Lat: 56.991N Lon: 5.473W
Grid Ref: 189.04 kmE 794.20 kmN
Locality: LOCH NEVIS, HIGHLAND
Magnitude: 1.2 ML
Depth: 6.4 km
RMS: 0.10 secs
Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAR	SZ	23	IP		C	07:30	52.74		
KSB	SZ	25	IP		D	07:30	52.95		
KNR	SZ	36	EP	2		07:30	54.76		
KPL	SZ	40	IP	1	D	07:30	55.58		
KPL	SE	40	ES	2		07:31	00.52		
KPL	SN	40				07:31	03.83	16	0.08
KPL	SE	40				07:31	00.78	34	0.14
KAC	SZ	58	IP	1	C	07:30	58.53		
MDO	SZ	84	EP	2		07:31	02.61		
MVH	SZ	130	EP	3		07:31	10.19		

September 23 2000 Time: 04:23 45.8 UTC
Lat: 52.280N Lon: 1.610W
Grid Ref: 426.57 kmE 264.82 kmN
Locality: WARWICK, WARWICKSHIRE
Comments: FELT WARWICK...
Magnitude: 4.2 ML
Depth: 14.4 km
RMS: 0.21 secs
Quality: C
Intensity: 5

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SSW	SZ	39	IP		C	04:23	52.81		
CWF	SZ	55	IP		C	04:23	55.21		
CWF	SE	55	ES	2		04:24	02.00		
HAZ	SZ	69	IP		C	04:23	57.29		
KEY	SZ	76	IP		C	04:23	58.86		
KEY2	AZ	76	EP	4		04:23	58.88		
KEY2	AN	76				04:24	08.85	12556	0.19
KEY2	AE	76				04:24	08.85	21391	0.22
SKP	SZ	83	EP	2		04:23	59.25		
KTG	SZ	83	EP	3		04:23	59.33		
SWN	AZ	86	EP	4		04:24	00.29		
SWN	SZ	86	IP		C	04:24	00.12		
SWN	SN	86	ES	2		04:24	10.78		
SWN	AN	86				04:24	12.29	5451	0.56

PHASE DATA : 2000

TABLE 5 (cont'd)

SWN	AE	86			04:24	11.25	6102	0.46
HLM	SZ	90	IP	C	04:24	00.55		
KUF	SZ	91	IP	C	04:24	00.65		
MCH	SZ	100	IP	C	04:24	01.92		
MCH	SE	100	ES	2	04:24	13.60		
HBL2	AZ	101	EP	4	04:24	02.25		
HBL2	AN	101			04:24	14.04	7716	0.69
HBL2	AE	101			04:24	16.12	6263	0.73
SSP	SZ	104	IP	C	04:24	02.70		
SSP	SE	104	ES	2	04:24	14.95		
HEA	BZ	105	IP	4 C	04:24	02.68		
HGH	SZ	109	IP	C	04:24	03.31		
KBI	SZ	109	IP	1 C	04:24	03.68		
WOL	BZ	111	IP	4 C	04:24	03.49		
HTR	SZ	116	IP	C	04:24	04.23		
SWK	SZ	133	IP	1 C	04:24	07.45		
LLW	BZ	153	IP	4 D	04:24	10.20		
SCK	BZ	173	IP	4 C	04:24	13.00		
MMY	BZ	212	IP	4 C	04:24	17.19		
BHM	BZ	226	IP	4 D	04:24	20.86		

September 23 2000			Time: 09:03 11.5 UTC			Magnitude: 0.7 ML			
Lat: 57.462N			Lon: 5.286W			Depth: 5.0 km			
Grid Ref: 202.92 kmE 846.03 kmN			RMS: 0.04 secs			Quality: C			
Locality: STRATHCARRON, HIGHLAND									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	4	IP		C	09:03	12.85		
KPL	SZ	26	IP		D	09:03	16.30		
KPL	SN	26	ES	2		09:03	20.01		
KPL	SN	26				09:03	20.41	25	0.14
KPL	SE	26				09:03	20.44	21	0.14
KSB	SZ	29	IP		D	09:03	16.95		
KSB	SZ	29	ES	3		09:03	19.90		

September 25 2000		Time: 21:10 0.6 UTC				Magnitude: 1.1 ML			
Lat: 56.179N		Lon: 3.568W				Depth: 5.1 km			
Grid Ref: 302.68 kmE 699.62 kmN		RMS: 0.03 secs				Quality: B			
Locality: DOLLAR, CENTRAL		Comments: FELT RUMBLING BRIDGE				Intensity: 2+			
6KM EAST OF DOLLAR		Comments: 65KM SW OF HOLYHEAD				Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	9	IP		C	21:10	02.61		
ELO	SZ	34	IP	1	C	21:10	06.83		
EDI	SZ	37	IP		D	21:10	07.43		
EDI	SN	37	ES	2		21:10	12.23		
EDI	SN	37				21:10	12.85	17	0.18
EDI	SE	37				21:10	12.91	21	0.24
EAU	SZ	38	IP		D	21:10	07.54		
PCO	SZ	39	EP	2		21:10	07.75		
EDU	SZ	54	EP	1	C	21:10	09.94		
EBL	SZ	56	IP	1	D	21:10	10.36		
EDR	SZ	104	EP	2		21:10	17.84		

October 1 2000			Time: 01:13 54.5 UTC				Magnitude: 1.0 ML		
Lat: 59.939N			Lon: 0.431W				Depth: 5.2 km		
Grid Ref: 487.64 kmE			1118.06 kmN				RMS: 0.05 secs		
Locality: EAST OF SHETLAND							Quality: D		
Comments: 46KM SE OF SANDWICK									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SAN	SZ	46	IP	1	C	01:14	02.57		
SAN	SZ	46	ES	3		01:14	08.68		
LRW	SZ	47	EP	3		01:14	02.83		
LRW	SE	47	ES	2		01:14	08.75		
LRW	SN	47				01:14	09.73	12	0.16
LRW	SE	47				01:14	10.88	10	0.20
WAL	SZ	75	EP	2		01:14	07.09		
WAL	SZ	75	ES	3		01:14	16.36		
YEL	SZ	77	EP	2		01:14	07.45		

October 1 2000			Time: 20:47 9.3 UTC			Magnitude: 0.9 ML			
Lat: 52.693N			Lon: 3.221W			Depth: 8.9 km			
Grid Ref: 317.50 kmE 311.33 kmN						RMS: 0.12 secs			
Locality: WELSHPOOL, POWYS						Quality: C			
Comments: 6KM NW OF WELSHPOOL									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WFB	SZ	55	EP	2		20:47	18.81		
WFB	SZ	55	ES	3		20:47	25.83		
WPM	SZ	78	EP	2		20:47	22.69		
YLL	SZ	81	EP	2		20:47	22.90		
YLL	SZ	81	ES	3		20:47	32.78		
YRE	SZ	87	EP	2		20:47	24.20		
YRH	SZ	96	EP	2		20:47	25.41		
WME	SZ	107	EP	2		20:47	27.26		
WCB	SZ	117	EP	2		20:47	28.57		
WCB	SN	117				20:47	44.98	3	0.08
WCB	SE	117				20:47	44.22	2	0.08

October 5 2000			Time: 03:22 54.9 UTC			Magnitude: -0.1 ML			
Lat: 57.173N			Lon: 5.855W			Depth: 4.3 km			
Grid Ref: 166.98 kmE 815.65 kmN						RMS: 0.08 secs			
Locality: ISLE OF SKYE, HIGHLAND						Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SZ	22	IP	1	C	03:22	59.19		
KPL	SN	22	ES	2		03:23	01.91		
KPL	SN	22				03:23	02.02	5	0.11
KPL	SE	22				03:23	02.00	5	0.11
KSB	SZ	27	IP		C	03:22	59.94		
KSB	SZ	27	ES	3		03:23	03.42		
KAR	SZ	28	IP	1	D	03:23	00.14		

October 9 2000			Time: 22:58 19.8 UTC			Magnitude: 0.6 ML			
Lat: 52.954N			Lon: 5.379W			Depth: 6.5 km			
Grid Ref: 173.06 kmE 345.04 kmN						RMS: 0.22 secs			
Locality: IRISH SEA						Quality: C			
Comments: 65KM SW OF HOLYHEAD									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
YRH	SZ	52	EP	3		22:58	29.17		
YRC	SZ	63	EP	3		22:58	30.03		
YRE	SZ	64	EP	3		22:58	30.85		
WCB	SZ	73	EP	3		22:58	32.24		
WCB	SN	73	ES	3		22:58	41.13		
WCB	SN	73				22:58	43.08	2	0.07
WCB	SE	73				22:58	42.58	2	0.29
WLF	SZ	76	EP	3		22:58	32.05		
YLL	SZ	84	EP	3		22:58	33.93		
DLF	SZ	86	EP	3		22:58	34.10		
WME	SZ	87	EP	3		22:58	34.05		
WFB	SZ	95	EP	2		22:58	35.30		
DCN	SZ	134	ES	3		22:58	57.10		

October 18 2000			Time: 13:45 40.8 UTC			Magnitude: 0.8 ML			
Lat: 53.333N			Lon: 4.295W			Depth: 14.1 km			
Grid Ref: 247.17 kmE 384.26 kmN						RMS: 0.03 secs			
Locality: NORTH ANGLESEY, GWYNEDD						Quality: B			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WME	SZ	7	IP	1	C	13:45	43.42		
WLF	SZ	8	IP	1	C	13:45	43.59		
WCB	SZ	18	IP		C	13:45	44.59		
WCB	SN	18	ES	2		13:45	47.06		
WCB	SN	18				13:45	47.23	60	0.06
WCB	SE	18				13:45	47.19	44	0.10
YRC	SZ	21	IP	1	C	13:45	45.02		
YLL	SZ	23	EP	1	C	13:45	45.28		
WPM	SZ	27	EP	2		13:45	45.95		
YRE	SZ	40	EP	2		13:45	47.84		
YRH	SZ	60	EP	2		13:45	50.84		
WFB	SZ	74	EP	2		13:45	53.07		

October 19 2000			Time: 10:27 24.8 UTC			Magnitude: 3.9 ML			
Lat: 57.417N			Lon: 6.877E			Depth: 15.0 km			
Grid Ref: 932.23 kmE 871.14 kmN			RMS: 0.35 secs			Quality: D			
Locality: SKAGERRAK									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KMY	SZ	221	EP	3		10:27	55.76		
ODD1	SZ	278	EP	3		10:28	03.84		
EGD	SZ	332	EP	3		10:28	09.96		
BER	SZ	342	EP	3		10:28	11.30		
BER	SZ	342	ES	3		10:28	45.30		
ASK	SZ	354	EP	3		10:28	12.48		
ASK	SZ	354	ES	3		10:28	47.95		
SAN	SZ	553	EP	3		10:28	37.09		
LRW	SZ	556	EP	3		10:28	37.27		
LRW	SE	556	ES	4		10:29	28.89		
LRW	SN	556				10:29	31.23	19	0.18
LRW	SE	556				10:29	31.89	17	0.21
YEL	SZ	576	EP	3		10:28	39.68		
OST	SZ	583	EP	3		10:28	41.89		
MCD	SZ	608	EP	3		10:28	45.58		
MCD	SN	608	ES	3		10:29	42.74		
MCD	SN	608				10:29	46.88	47	0.29
MCD	SE	608				10:29	46.40	31	0.26
OBR	SZ	609	EP	3		10:28	44.75		
OHO	SZ	617	EP	3		10:28	45.95		
ORE	SZ	642	EP	3		10:28	48.84		
ORE	SE	642	ES	3		10:29	48.45		
ORE	SN	642				10:29	50.95	72	0.25
ORE	SE	642				10:29	52.38	60	0.46
MDO	SZ	676	EP	3		10:28	54.00		
OTO	SZ	677	EP	3		10:28	52.96		

PHASE DATA : 2000

TABLE 5 (cont'd)

CST	SZ	36	EP	2		06:04	15.98		
CR2	SZ	39	IP		C	06:04	16.52		
CR2	SE	39	ES	3		06:04	21.61		
CCA	SZ	39	IP		C	06:04	16.46		
CCA	SZ	39				06:04	25.00	35	1.50
CBW	SZ	40	EP	2		06:04	16.60		
CCO	SZ	43	IP	1	C	06:04	17.19		
CCO	SZ	43				06:04	22.85	17	0.05
CPZ	SZ	57	EP	1	C	06:04	19.30		

November 3 2000 Time: 00:32 8.8 UTC							Magnitude: 1.4 ML		
Lat: 53.158N Lon: 3.035W							Depth: 9.9 km		
Grid Ref: 330.80 kmE 362.85 kmN							RMS: 0.09 secs		
Locality: MOLD, CLWYD							Quality: C		
Comments: FELT MOLD...							Intensity: 4+		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WPM	SZ	59	EP	1		00:32	18.74		
WPM	SZ	59	ES	2		00:32	25.75		
YLL	SZ	76	EP	2		00:32	21.44		
WFB	SZ	86	EP	3		00:32	23.02		
WLF	SZ	92	EP	2		00:32	24.21		
YRE	SZ	95	EP	2		00:32	24.67		
YRC	SZ	104	EP	2		00:32	25.71		
YRC	SZ	104	ES	2		00:32	36.93		
WCB	SZ	104	EP	3		00:32	26.20		
WCB	SN	104	ES	2		00:32	37.31		
WCB	SN	104				00:32	40.61	29	1.24
WCB	SE	104				00:32	40.94	19	1.31

November 9 2000 Time: 16:08 16.9 UTC							Magnitude: 2.8 ML		
Lat: 62.263N Lon: 2.239E							Depth: 5.9 km		
Grid Ref: 619.99 kmE 1383.10 kmN							RMS: 0.31 secs		
Locality: NORTHERN NORTH SEA							Quality: D		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
FOO	SZ	165	EP	1		16:08	42.06		
FOO	SZ	165	ES	3		16:09	00.31		
SUE	SZ	189	EP	1		16:08	45.07		
SUE	SZ	189	ES	3		16:09	05.96		
HYA	SZ	242	EP	1		16:08	52.59		
HYA	SZ	242	ES	3		16:09	20.05		
ASK	SZ	254	EP	1		16:08	53.30		
ASK	SZ	254	ES	3		16:09	20.25		
YEL	SZ	261	EP	2		16:08	54.08		
LRW	SZ	300	EP	3		16:08	59.08		
LRW	SE	300	ES	3		16:09	30.14		
LRW	SN	300				16:09	33.14	20	0.10
LRW	SE	300				16:09	32.90	31	0.10
WAL	SZ	305	EP	2		16:08	59.61		
SAN	SZ	313	EP	3		16:09	00.56		

November 22 2000 Time: 05:51 48.5 UTC							Magnitude: 0.5 ML		
Lat: 57.552N Lon: 5.538W							Depth: 6.5 km		
Grid Ref: 188.32 kmE 856.83 kmN							RMS: 0.10 secs		
Locality: TORRIDON, HIGHLAND							Quality: C		
Comments: 5KM WEST OF TORRIDON									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KAC	SZ	16	IP		C	05:51	51.65		
KAC	SZ	16	ES	3		05:51	52.75		
KPL	SZ	25	EP	2		05:51	53.28		
KPL	SN	25	ES	3		05:51	56.52		
KPL	SN	25				05:51	56.61	8	0.19
KPL	SE	25				05:51	56.84	13	0.12
RRR	SZ	38	EP	2		05:51	55.38		
RRR	SN	38	ES	3		05:51	59.94		
RRR	SN	38				05:52	00.44	10	0.11
RRR	SE	38				05:52	01.87	7	0.05
KSB	SZ	39	IP		D	05:51	55.44		

November 30 2000 Time: 03:07 19.8 UTC							Magnitude: 1.6 ML		
Lat: 54.210N Lon: 1.876W							Depth: 7.6 km		
Grid Ref: 408.11 kmE 479.41 kmN							RMS: 0.12 secs		
Locality: MIDDLEHAM, N YORKSHIRE							Quality: C		
Comments: 10KM SW OF MIDDLEHAM									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HPK	SZ	33	IP		D	03:07	25.59		
HPK	SE	33	ES	2		03:07	30.06		
HPK	SN	33				03:07	30.20	115	0.16
HPK	SE	33				03:07	30.32	105	0.17
LCP	SZ	64	EP	2		03:07	30.71		
LHO	SZ	74	EP	1	C	03:07	32.27		
XAL	SZ	76	IP	1	D	03:07	32.05		
CDU	SZ	87	EP	2		03:07	33.58		
CKE	SZ	90	EP	2		03:07	34.58		
BTA	SZ	93	EP	2		03:07	35.24		
BTA	SN	93	ES	2		03:07	46.24		
BTA	SN	93				03:07	49.33	11	0.21
BTA	SE	93				03:07	49.08	13	0.29
LMI	SZ	93	EP	2		03:07	35.19		
LMI	SN	93				03:07	46.74	9	0.23
LMI	SE	93				03:07	48.40	17	0.25
BDL	SZ	95	EP	2		03:07	35.10		

BBO	SZ	106	EP	2		03:07	37.41		
BBO	SN	106	ES	2		03:07	49.32		
BBO	SN	106				03:07	50.18	19	0.29
BBO	SE	106				03:07	50.06	21	0.17

December 4 2000 Time: 11:36 14.8 UTC							Magnitude: 1.9 ML		
Lat: 59.870N Lon: 2.552W							Depth: 11.6 km		
Grid Ref: 369.11 kmE 1109.54 kmN							RMS: 0.06 secs		
Locality: WEST OF SHETLAND							Quality: C		
Comments: 65KM WEST OF SHETLAND									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WAL	SZ	68	IP	1	D	11:36	26.08		
SAN	SZ	75	EP	2		11:36	27.36		
LRW	SZ	82	EP	2		11:36	28.46		
LRW	SN	82	ES	2		11:36	38.23		
LRW	SN	82				11:36	39.67	22	0.12
LRW	SE	82				11:36	39.61	26	0.17
OST	SZ	87	EP	2		11:36	29.12		
YEL	SZ	111	IP	1	C	11:36	32.68		
ORE	SZ	163	EP	2		11:36	40.25		
ORE	SN	163	ES	3		11:36	58.61		
ORE	SN	163				11:36	58.98	16	0.33
ORE	SE	163				11:36	59.35	19	0.19

December 8 2000 Time: 00:48 5.9 UTC							Magnitude: 4.2 ML		
Lat: 60.163N Lon: 4.637E							Depth: 10.9 km		
Grid Ref: 767.94 kmE 1160.52 kmN							RMS: 0.54 secs		
Locality: NORWEGIAN COAST							Quality: D		
Comments: FELT BERGEN...							Intensity: 5+		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EGD	SZ	35	IP	1	C	00:48	11.48		
BER	SZ	46	IP	1	C	00:48	13.17		
ASK	SZ	47	IP	1	C	00:48	13.75		
KMY	SZ	112	IP	1	C	00:48	23.46		
KMY	SZ	112	ES	3		00:48	36.41		
ODD1	SZ	115	IP	1	D	00:48	25.50		
HYA	SZ	140	EP	1		00:48	27.12		
FOO	SZ	162	EP	1		00:48	30.49		
YEL	SZ	318	EP	1	C	00:48	50.45		
LRW	SZ	324	EP	2		00:48	50.89		
LRW	SN	324	ES	3		00:49	24.00		
LRW	SN	324				00:49	35.46	110	0.16
LRW	SE	324				00:49	34.22	111	0.22
SAN	SZ	327	EP	2		00:48	51.15		
WAL	SZ	347	EP	2		00:48	54.31		
OST	SZ	423	EP	1	D	00:49	03.21		
OWE	SZ	442	EP	2		00:49	06.24		
OHO	SZ	471	EP	1	C	00:49	08.94		
OBR	SZ	476	EP	1	C	00:49	09.27		
MLA	SZ	502	EP	1	C	00:49	12.34		
ORE	SZ	510	EP	2		00:49	13.42		
ORE	SE	510	ES	3		00:50	03.17		
ORE	SN	510				00:50	04.82	277	0.25
ORE	SE	510				00:50	03.55	306	0.27
MCD	SZ	538	EP	1	C	00:49	16.83		
MCD	SN	538	ES	3		00:50	08.46		
MCD	SN	538				00:50	11.06	107	0.17
MCD	SE	538				00:50	12.61	104	0.23
MME	SZ	543	EP	3		00:49	17.47		
OTO	SZ	547	EP	2		00:49	17.71		

December 8 2000				Time: 05:54 1.6 UTC				Magnitude: 4.6 ML			
Lat: 59.944N				Lon: 1.934E				Depth: 10.3 km			
Grid Ref: 619.71 kmE 1124.13 kmN								RMS: 0.39 secs			
Locality: NORTHERN NORTH SEA								Quality: D			
Comments: FELT BRUCE FIELD								Intensity: 3+			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI		
LRW	SZ	175	EP	1	C	05:54	27.40				
LRW	SE	175	ES	2		05:54	46.46				
SAN	SZ	177	IP	1	C	05:54	27.71				
YEL	SZ	181	EP	1	C	05:54	29.10				
EGD	SZ	187	EP	2		05:54	29.01				
ASK	SZ	191	EP	2		05:54	29.77				
BER	SZ	195	EP	2		05:54	30.22				
SUE	SZ	199	EP	2		05:54	30.83				
WAL	SZ	201	IP		C	05:54	31.32				
KMY	SZ	204	EP	2		05:54	31.10				
KMY	SZ	204	ES	3		05:54	53.78				
OST	SZ	272	EP	2		05:54	40.18				
OWE	SZ	289	IP		C	05:54	42.54				
OHO	SZ	319	EP	2		05:54	45.48				
OBR	SZ	326	EP	2		05:54	46.01				
MLA	SZ	354	EP	3		05:54	48.89				
ORE	SZ	361	EP	2		05:54	50.13				
ORE	SN	361	ES	2		05:55	25.96				
KPL	SZ	528	EP	2		05:55	09.33				
KPL	SN	528				05:56	35.70	360	1.26		
KPL	SE	528				05:56	43.24	410	1.17		
EDI	SZ	541	EP	2		05:55	11.51				
EDI	SN	541				05:56	07.40	341	0.34		
EDI	SE	541				05:56	06.73	448	0.34		

PHASE DATA : 2000

TABLE 5 (cont'd)

December 13 2000			Time: 05:17 26.4 UTC			Magnitude: 2.0 ML			
Lat: 55.636N			Lon: 6.155W			Depth: 9.1 km			
Grid Ref: 138.56 kmE			645.86 kmN			RMS: 0.05 secs			
Locality: ISLAY, INNER HEBRIDES						Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
GMK	SZ	48	IP		C	05:17	34.64		
GCL	SZ	62	EP	2		05:17	36.83		
PMS	SZ	92	IP	1	D	05:17	41.37		
PGB	SZ	107	EP	2		05:17	43.98		
PGB	SN	107	ES	2		05:17	56.01		
PGB	SN	107				05:17	58.45	36	0.19
PGB	SE	107				05:17	57.99	43	0.18
PCA	SZ	120	EP	2		05:17	45.90		
GAL	SZ	126	EP	3		05:17	47.40		
GAL	SE	126	ES	3		05:18	01.72		
GAL	SN	126				05:18	03.91	14	0.18
GAL	SE	126				05:18	03.54	20	0.19

December 15 2000			Time: 13:42 5.8 UTC			Magnitude: 0.9 ML			
Lat: 55.112N			Lon: 3.606W			Depth: 7.4 km			
Grid Ref: 297.54 kmE 580.88 kmN						RMS: 0.06 secs			
Locality: DUMFRIES, D & G						Quality: C			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
BWH	SZ	8	IP		C	13:42	07.87		
BHH	SZ	25	IP	1	D	13:42	10.46		
BHH	SE	25	ES	2		13:42	13.82		
BHH	SN	25				13:42	13.86	31	0.23
BHH	SE	25				13:42	15.05	40	0.22
BBH	SZ	43	EP	2		13:42	13.47		
BBO	SZ	48	EP	2		13:42	14.14		
BDL	SZ	55	EP	2		13:42	15.77		

December 17 2000			Time: 00:27 46.3 UTC			Magnitude: 1.8 ML			
Lat: 56.249N			Lon: 3.757W			Depth: 5.4 km			
Grid Ref: 291.13 kmE 707.69 kmN			RMS: 0.08 secs						
Locality: BLACKFORD, TAYSIDE			Quality: C						
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	00:27	49.40		
PCO	SZ	36	IP		C	00:27	52.85		
EAU	SZ	49	EP	2		00:27	55.05		
EDI	SZ	51	IP		D	00:27	55.18		
EDI	SN	51	ES	2		00:28	01.44		
EDI	SN	51				00:28	01.54	62	0.18
EDI	SE	51				00:28	01.75	64	0.29
EDU	SZ	57	IP	1	C	00:27	56.07		
PGB	SZ	67	IP		C	00:27	57.53		
PGB	SN	67				00:28	10.68	33	0.41
PGB	SE	67				00:28	11.03	41	0.20
EBL	SZ	69	EP	1	D	00:27	58.08		

December 17 2000			Time: 03:06 36.3 UTC				Magnitude: 1.3 ML		
Lat: 56.249N			Lon: 3.755W				Depth: 5.5 km		
Grid Ref: 291.27 kmE			707.69 kmN				RMS: 0.10 secs		
Locality: BLACKFORD, TAYSIDE							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	03:06	39.43		
PCO	SZ	36	EP	2		03:06	42.91		
EAU	SZ	49	EP	2		03:06	45.10		
EDI	SZ	51	IP		D	03:06	45.19		
EDI	SN	51	ES	2		03:06	51.46		
EDI	SN	51				03:06	51.69	17	0.36
EDI	SE	51				03:06	51.77	20	0.27
EDU	SZ	57	EP	2		03:06	46.07		
PGB	SZ	67	IP	1	C	03:06	47.56		
PGB	SN	67				03:07	00.90	10	0.22
PGB	SE	67				03:07	00.02	10	0.37

December 19 2000			Time: 09:35 44.3 UTC			Magnitude: 2.2 ML			
Lat: 59.677N			Lon: 2.179E			Depth: 14.6 km			
Grid Ref: 635.24 kmE			1095.25 kmN			RMS: 0.50 secs			
Locality: NORTHERN NORTH SEA						Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SZ	195	EP	2		09:36	14.37		
LRW	SN	195	ES	3		09:36	33.93		
LRW	SN	195				09:36	34.72	23	0.18
LRW	SE	195				09:36	37.03	16	0.12
SAN	SZ	196	EP	3		09:36	12.68		
YEL	SZ	206	EP	2		09:36	14.70		
WAL	SZ	222	EP	3		09:36	16.20		

December 21 2000			Time: 23:53 9.1 UTC			Magnitude: 3.4 ML			
Lat: 53.524N			Lon: 1.850E			Depth: 8.6 km			
Grid Ref: 655.18 kmE 409.98 kmN			RMS: 0.21 secs			Quality: D			
Locality: SOUTHERN NORTH SEA									
Comments: 100KM N OF GT YARMOUTH									
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
AWI	SZ	82	EP	2		23:53	22.48		
AEU	SZ	109	EP	2		23:53	26.92		
AEU	SE	109	ES	2		23:53	39.57		
KBI	SZ	227	EP	3		23:53	41.82		
CWF	SZ	229	EP	2		23:53	43.25		

CWF	SN	229				23:54	14.45	194	0.33
CWF	SE	229				23:54	14.60	121	0.29
HPK	SZ	235	EP	3		23:53	43.18		
HPK	SE	235	ES	3		23:54	08.88		
LCP	SZ	256	EP	3		23:53	46.11		
LMI	SZ	348	EP	4		23:53	57.57		
LMI	SN	348				23:54	58.77	143	0.71
LMI	SE	348				23:54	59.25	162	1.30

December 22 2000			Time: 05:19 25.1 UTC			Magnitude: 1.9 ML			
Lat: 59.931N			Lon: 1.953E			Depth: 15.8 km			
Grid Ref: 620.85 kmE 1122.74 kmN						RMS: 0.28 secs			
Locality: NORTHERN NORTH SEA						Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SZ	176	EP	2		05:19	51.57		
LRW	SE	176	ES	2		05:20	11.11		
LRW	SN	176				05:20	12.58	15	0.20
LRW	SE	176				05:20	13.30	10	0.22
SAN	SZ	178	EP	2		05:19	52.39		
YEL	SZ	182	EP	2		05:19	52.57		
WAL	SZ	202	EP	2		05:19	54.09		
OST	SZ	272	EP	2		05:20	03.61		
OHO	SZ	320	EP	2		05:20	08.92		

December 22 2000			Time: 19:49 49.0 UTC			Magnitude: 1.5 ML			
Lat: 50.485N			Lon: 4.213W			Depth: 5.0 km			
Grid Ref: 243.04 kmE			67.37 kmN			RMS: 0.19 secs			
Locality: BERE ALSTON, CORNWALL						Quality: D			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CSA	SZ	50	EP	2		19:49	57.62		
CR2	SZ	77	EP	3		19:50	01.92		
CR2	SE	77	ES	3		19:50	11.29		
CR2	SE	77				19:50	14.53	14	0.07
CCA	SZ	80	EP	2		19:50	02.57		
CGH	SZ	83	EP	2		19:50	02.72		

December 23 2000			Time: 15:33 15.5 UTC			Magnitude: 1.1 ML			
Lat: 56.246N			Lon: 3.758W			Depth: 4.4 km			
Grid Ref: 291.06 kmE			707.30 kmN			RMS: 0.04 secs			
Locality: BLACKFORD, TAYSIDE						Quality: B			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	15:33	18.62		
EAB	SZ	37	IP		C	15:33	22.18		
EAU	SZ	49	EP	2		15:33	24.17		
EDI	SZ	51	IP		D	15:33	24.41		
EDI	SN	51	ES	2		15:33	30.80		
EDI	SN	51				15:33	30.79	11	0.12
EDI	SE	51				15:33	33.21	10	0.25
EDU	SZ	57	EP	2		15:33	25.43		
EBL	SZ	69	EP	2		15:33	27.45		

December 23 2000			Time: 23:01 29.2 UTC				Magnitude: 1.4 ML		
Lat: 56.246N			Lon: 3.761W				Depth: 5.0 km		
Grid Ref: 290.91 kmE			707.34 kmN				RMS: 0.08 secs		
Locality: BLACKFORD, TAYSIDE							Quality: C		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	16	IP		C	23:01	32.36		
EAB	SZ	36	IP		C	23:01	35.87		
PCO	SZ	36	EP	2		23:01	35.79		
EAU	SZ	49	EP	2		23:01	37.98		
EDI	SZ	51	IP		D	23:01	38.12		
EDI	SN	51	ES	2		23:01	44.44		
EDI	SN	51				23:01	44.62	24	0.34
EDI	SE	51				23:01	45.40	20	0.18
PGB	SZ	66	IP	1	C	23:01	40.38		
PGB	SN	66				23:01	53.92	20	0.52
PGB	SE	66				23:01	52.69	13	0.44

December 25 2000			Time: 17:26 24.9 UTC			Magnitude: 0.6 ML			
Lat: 56.252N			Lon: 3.757W			Depth: 5.8 km			
Grid Ref: 291.18 kmE			707.97 kmN			RMS: 0.04 secs			
Locality: BLACKFORD, TAYSIDE						Quality: B			
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EBH	SZ	15	IP		C	17:26	27.98		
EAB	SZ	37	IP	1	C	17:26	31.51		
EAU	SZ	49	EP	2		17:26	33.50		
EDI	SZ	51	EP	2		17:26	33.77		
EDI	SN	51	ES	2		17:26	40.07		
EDI	SN	51				17:26	40.14	4	0.19
EDI	SE	51				17:26	40.57	3	0.19
EDU	SZ	57	EP	2		17:26	34.60		

PHASE DATA : 2000

TABLE 5 (cont'd)

EAU	SZ	49	EP	2		14:45	05.88		
EDI	SZ	51	IP	1	D	14:45	06.07		
EDI	SN	51	ES	2		14:45	12.36		
EDI	SN	51				14:45	12.46	32	0.20
EDI	SE	51				14:45	12.68	28	0.26
EDU	SZ	57	EP	2		14:45	06.91		
PGB	SZ	66	EP	2		14:45	08.39		
PGB	SN	66				14:45	21.36	23	0.27
PGB	SE	66				14:45	21.89	28	0.19

December 28 2000 Time: 00:41 41.9 UTC Magnitude: 2.0 ML
Lat: 55.579N Lon: 6.086W Depth: 6.8 km
Grid Ref: 142.51 kmE 639.27 kmN RMS: 0.15 secs
Locality: ISLAY, INNER HEBRIDES Quality: D
Comments: 7KM OFFSHORE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PMS	SZ	89	EP	2		00:41	56.47		
PMS	SZ	89	ES	3		00:42	07.11		
PGB	SZ	104	EP	2		00:41	58.98		
PGB	SE	104	ES	2		00:42	11.50		
PGB	SN	104				00:42	13.60	36	0.17
PGB	SE	104				00:42	13.06	34	0.19
PCA	SZ	116	IP	1	C	00:42	00.80		
EAB	SZ	129	EP	3		00:42	02.89		
PCO	SZ	133	EP	3		00:42	03.71		

December 28 2000 Time: 05:51 25.9 UTC Magnitude: 0.4 ML
Lat: 56.245N Lon: 3.758W Depth: 3.5 km
Grid Ref: 291.09 kmE 707.21 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	05:51	28.99		
ELO	SZ	25	EP	2		05:51	30.60		
EAB	SZ	37	IP		C	05:51	32.53		
EAU	SZ	49	EP	2		05:51	34.64		
EDI	SZ	50	EP	2		05:51	34.76		
EDI	SE	50	ES	3		05:51	41.18		
EDI	SN	50				05:51	41.12	3	0.16
EDI	SE	50				05:51	42.79	2	0.15
EDU	SZ	57	EP	2		05:51	35.92		

December 28 2000 Time: 05:55 33.5 UTC Magnitude: 2.2 ML
Lat: 60.026N Lon: 1.788E Depth: 10.0 km
Grid Ref: 611.05 kmE 1132.81 kmN RMS: 0.46 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SZ	166	EP	2		05:55	59.74		
LRW	SE	166	ES	2		05:56	17.98		
LRW	SN	166				05:56	20.87	20	0.22
LRW	SE	166				05:56	21.08	26	0.16
YEL	SZ	169	EP	2		05:55	59.87		
SAN	SZ	169	EP	3		05:55	57.98		
WAL	SZ	191	EP	2		05:56	01.80		
OST	SZ	267	EP	3		05:56	12.16		

December 28 2000 Time: 05:56 58.0 UTC Magnitude: 3.3 ML
Lat: 59.934N Lon: 1.801E Depth: 15.0 km
Grid Ref: 612.35 kmE 1122.56 kmN RMS: 0.36 secs
Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SZ	168	EP	2		05:57	22.63		
LRW	SE	168	ES	2		05:57	40.97		
LRW	SN	168				05:57	45.28	147	0.26
LRW	SE	168				05:57	45.48	162	0.18
SAN	SZ	170	EP	2		05:57	22.36		
YEL	SZ	174	EP	2		05:57	23.77		
WAL	SZ	194	EP	2		05:57	26.05		
EGD	SZ	194	EP	3		05:57	25.40		
ASK	SZ	198	EP	3		05:57	26.97		
BER	SZ	202	EP	3		05:57	27.03		
OST	SZ	264	EP	2		05:57	34.95		
OWE	SZ	281	EP	2		05:57	37.58		
OHO	SZ	312	EP	2		05:57	40.42		
ORE	SZ	353	EP	3		05:57	44.76		
ORE	SN	353				05:58	21.52	66	0.14
ORE	SE	353				05:58	21.48	55	0.17

December 28 2000 Time: 08:59 55.4 UTC Magnitude: 2.2 ML
Lat: 55.667N Lon: 6.125W Depth: 11.1 km
Grid Ref: 140.63 kmE 649.23 kmN RMS: 0.05 secs
Locality: ISLAY, INNER HEBRIDES Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PMS	SZ	89	EP	1	D	09:00	09.93		
PGB	SZ	105	EP	2		09:00	12.53		
PGB	SN	105	ES	2		09:00	24.87		
PGB	SN	105				09:00	27.12	50	0.17
PGB	SE	105				09:00	26.57	53	0.23
PCA	SZ	118	IP	1	C	09:00	14.30		
EAB	SZ	126	EP	2		09:00	15.50		

December 29 2000 Time: 05:01 57.3 UTC							Magnitude: 2.3 ML		
Lat: 59.655N Lon: 1.708E							Depth: 17.1 km		
Grid Ref: 608.88 kmE 1091.29 kmN							RMS: 0.14 secs		
Locality: NORTHERN NORTH SEA							Quality: D		
STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SAN	SZ	170	EP	2		05:02	22.98		
LRW	SZ	170	EP	2		05:02	23.38		
LRW	SN	170	ES	2		05:02	41.78		
LRW	SN	170				05:02	43.40	27	0.27
LRW	SE	170				05:02	43.47	30	0.20
YEL	SZ	185	EP	2		05:02	25.04		
WAL	SZ	197	EP	2		05:02	26.07		
KMY	SZ	207	EP	3		05:02	27.61		
EGD	SZ	208	EP	3		05:02	27.78		

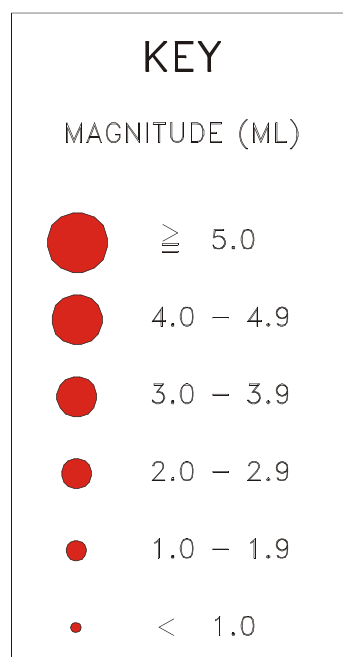
TABLE 6
DEPTH/CRUSTAL VELOCITY MODELS

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

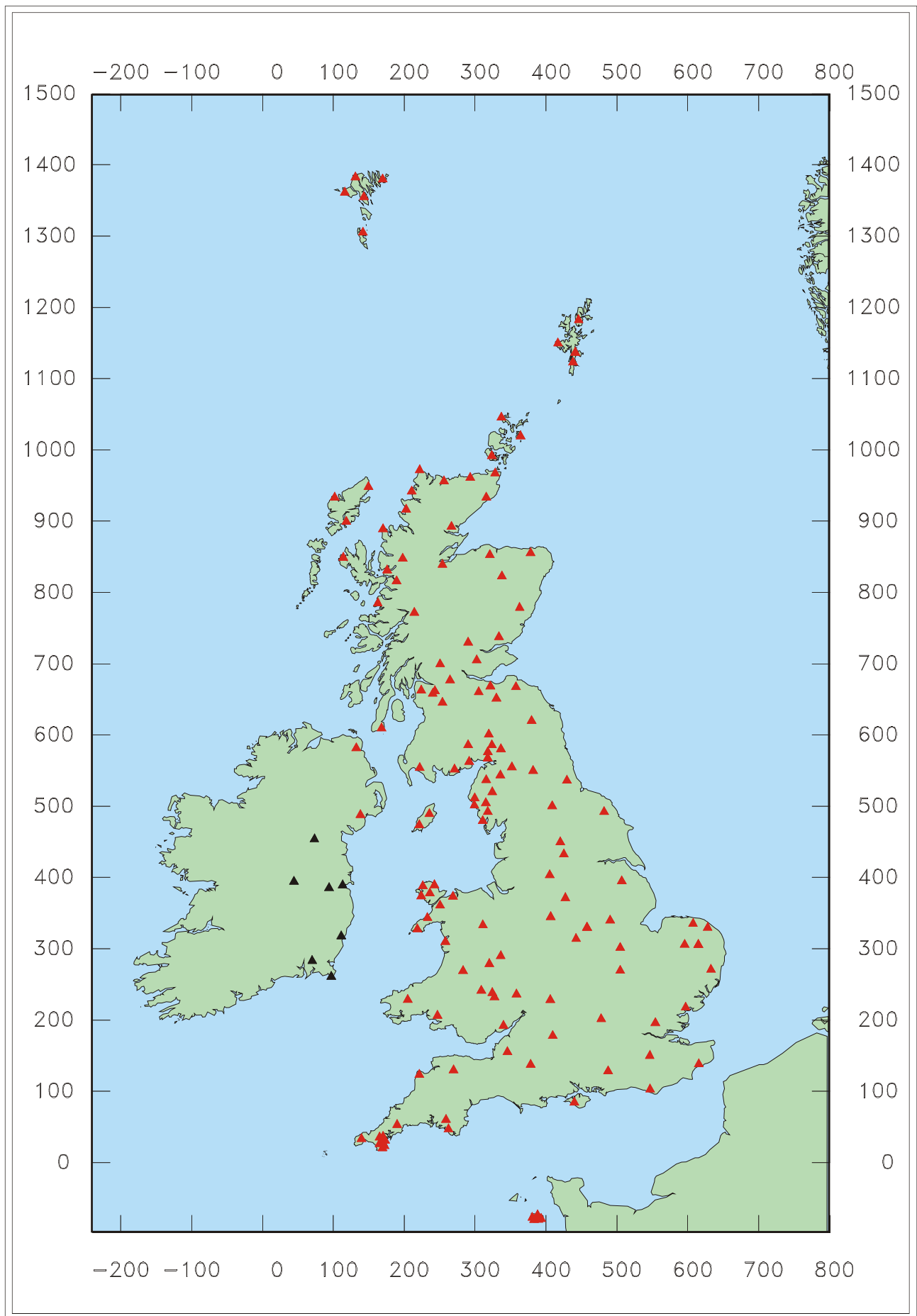


Figure 1. Seismograph network operational in December 2000. Colour coding shows the rapid access stations (red) and DIAS stations (black).

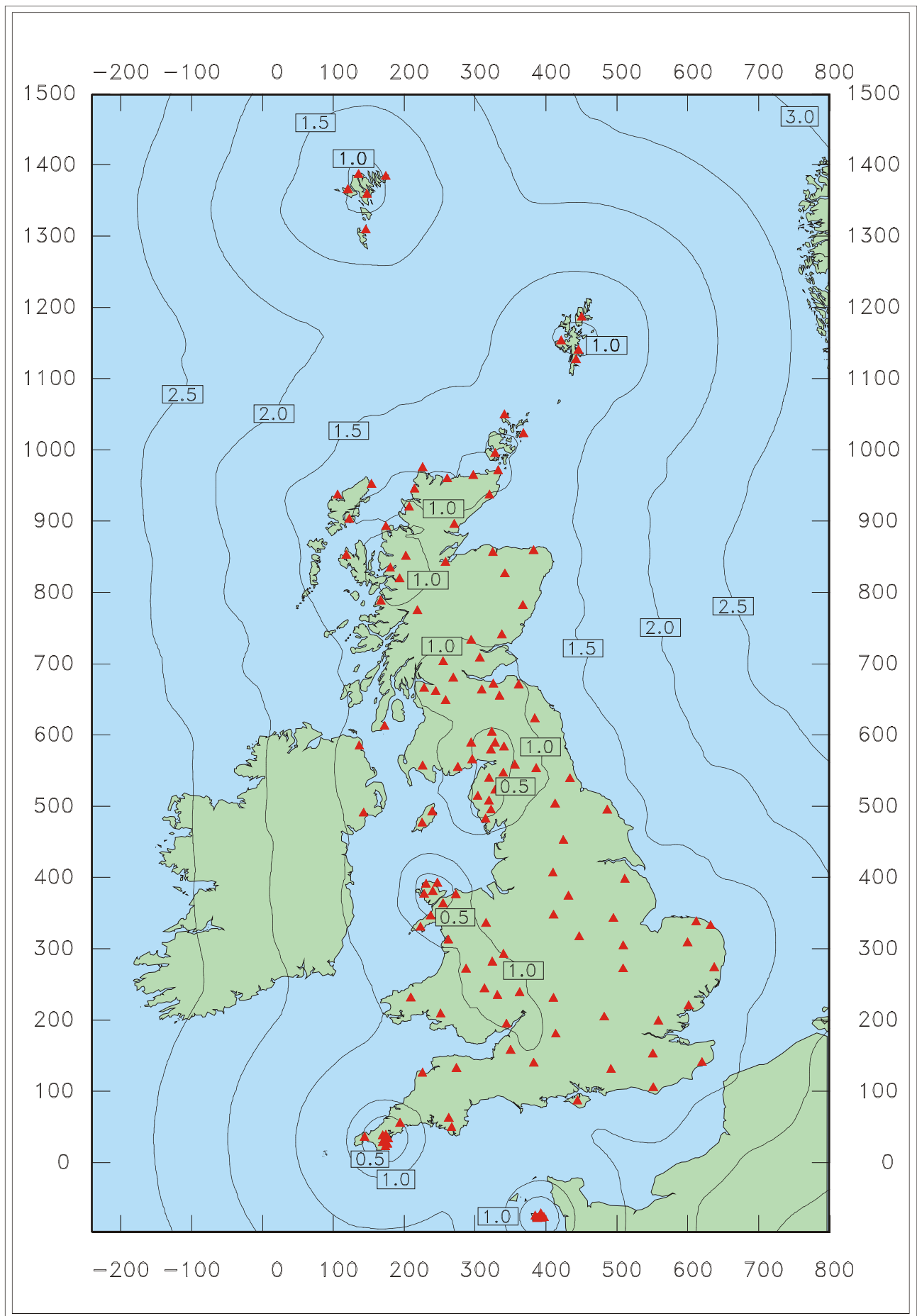


Figure 2. Earthquake detection capability in December 2000. Contour values are Richter local magnitude (ML) for 4 nanometres of noise (average) and S-wave amplitude twice that at the fourth nearest station.

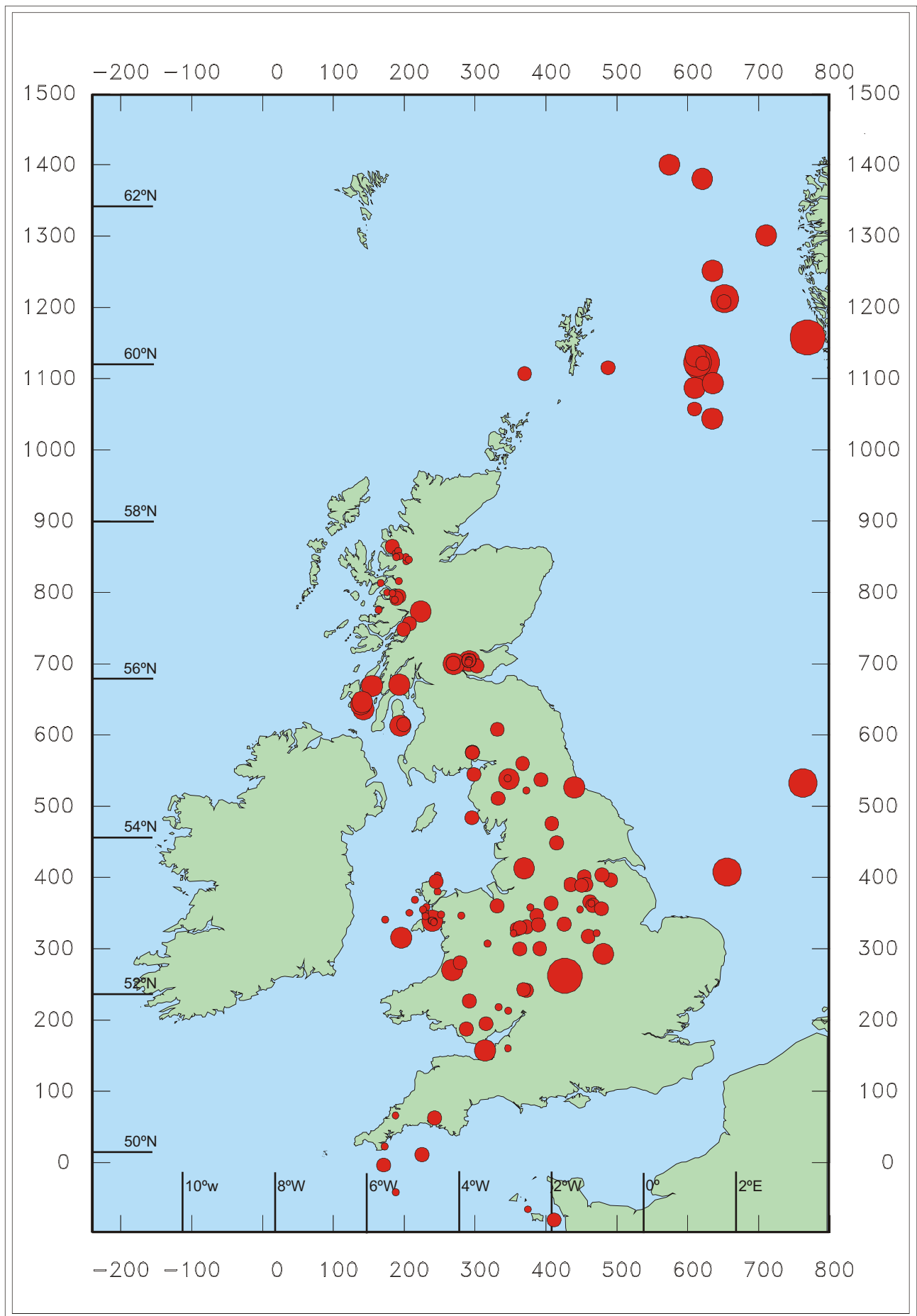


Figure 3. Epicentres of all UK earthquakes located in 2000.

[Key to Epicentre Map](#)

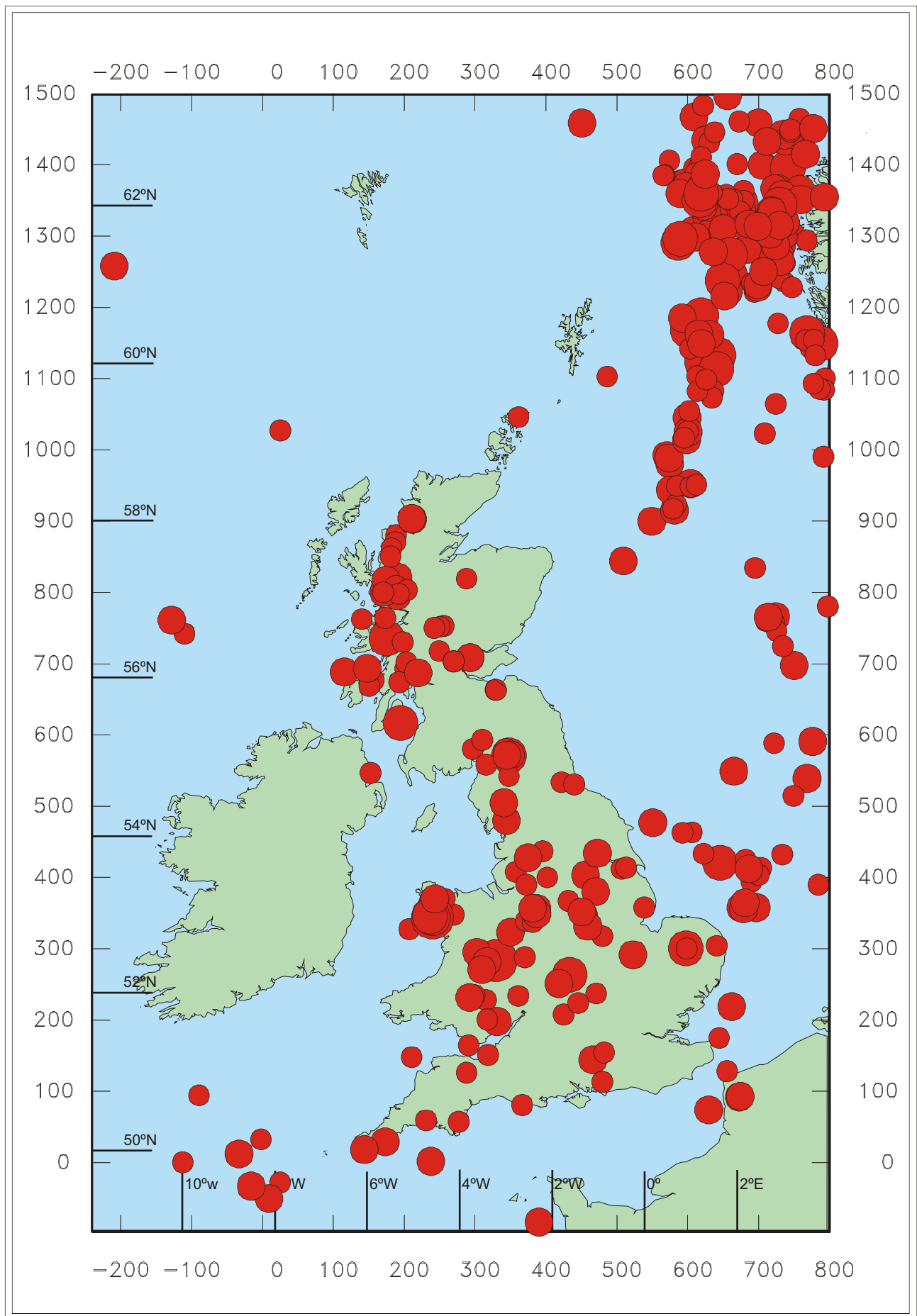


Figure 4. Epicentres of earthquakes with magnitudes 2.5 ML or greater, for the period 1979 to 2000.

[Key to Epicentre Map](#)

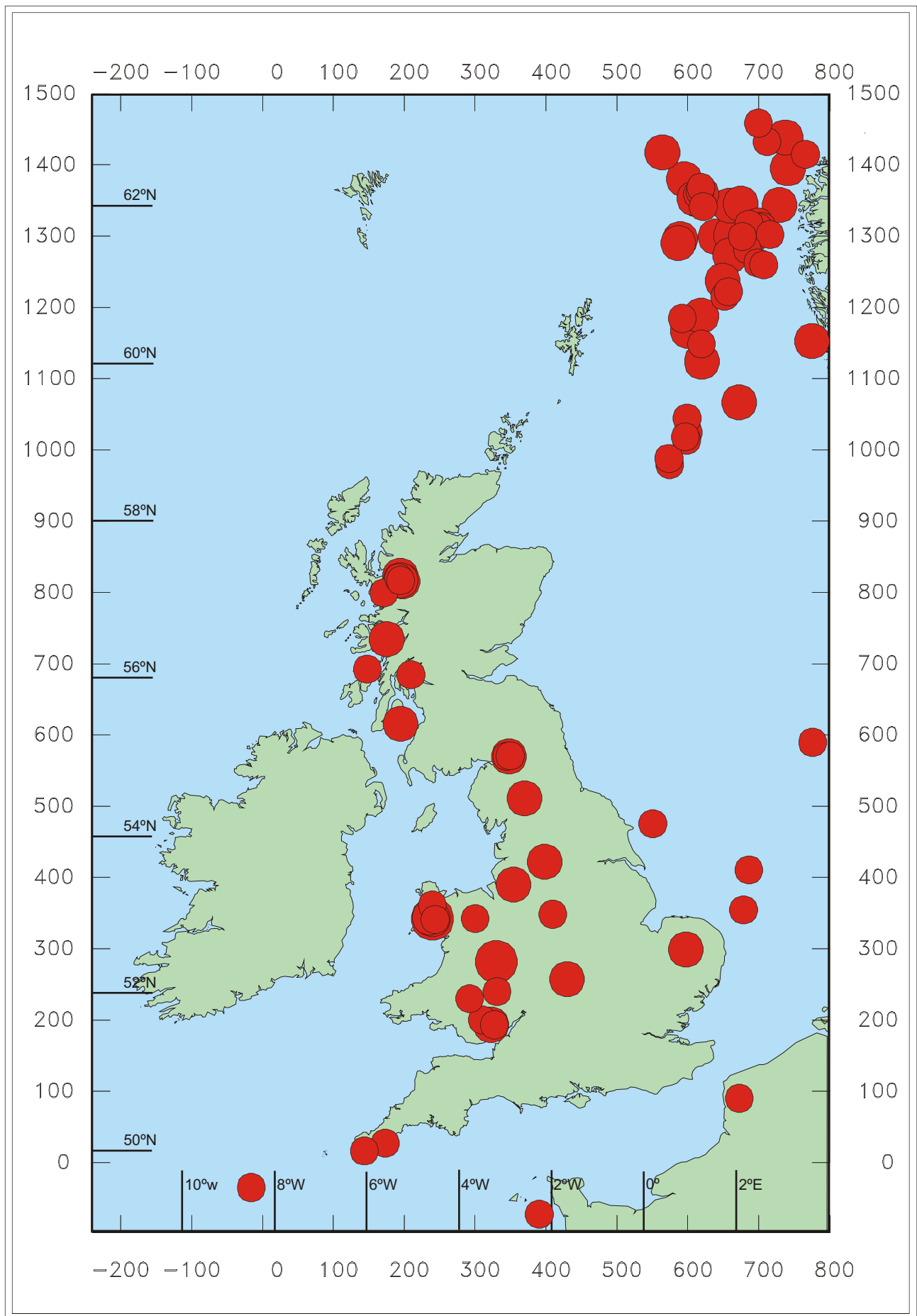


Figure 5. Epicentres of earthquakes with magnitudes 3.5 ML or greater, for the period 1970 to 2000.

[Key to Epicentre Map](#)

APPENDIX A
SIGNIFICANT EARTHQUAKES IN 2000

Appendix A1 Warwick Earthquake 23 September 2000

Appendix A2 Calthwaite Earthquake 24 April 2000

Appendix A3 Lleyn Peninsula Earthquake 22 June 2000

APPENDIX A1

WARWICK EARTHQUAKE, 23 SEPTEMBER 2000

PARAMETERS

Date:	23 September 2000
Origin Time:	04:23 45.8 UTC
Latitude and longitude:	52.28° N 1.61° W
Grid Reference:	426.6 km E 264.8 km N
Depth:	14.4 km
Magnitude:	4.2 ML
Hypo Solution Quality:	C (B*C)
Epicentral Error (1 std. dev.):	3.0 km
Depth Error (1 std. dev.):	4.0 km

Discussion

The largest onshore earthquake, with a magnitude of 4.2 ML, occurred near Warwick on 23 September. It was felt up to 150 km away and over an area of 14,900km². A macroseismic survey conducted after the event yielded over 2,500 replies and the resulting map of felt effects is shown in Appendix A1. The highest observed intensity was 5 EMS at Warwick, where in a number of cases, objects such as ornaments, pictures or toys fell or were displaced. In a few cases, heavy objects were also said to have been displaced, including two washing machines, a cooker, a microwave and a sofa. The nearest 3-component strong motion instrument to record the earthquake was 76 km distant and accelerations of 17.3, 16.6 and 20.8 mms⁻² were recorded for the vertical, NS and EW components, respectively. The focal mechanism indicates almost pure normal faulting on a NW-SE oriented plane, dipping either to the NE or to the SW.

Seismograms recorded by the BGS networks around Borders and the strong motion instruments at Keyworth (KEY) are shown in [Figure A1.1](#) and [A1.2](#), the focal mechanism is shown in [Figure A1.3](#) and an isoseismal map is shown in [Figure A1.4](#).

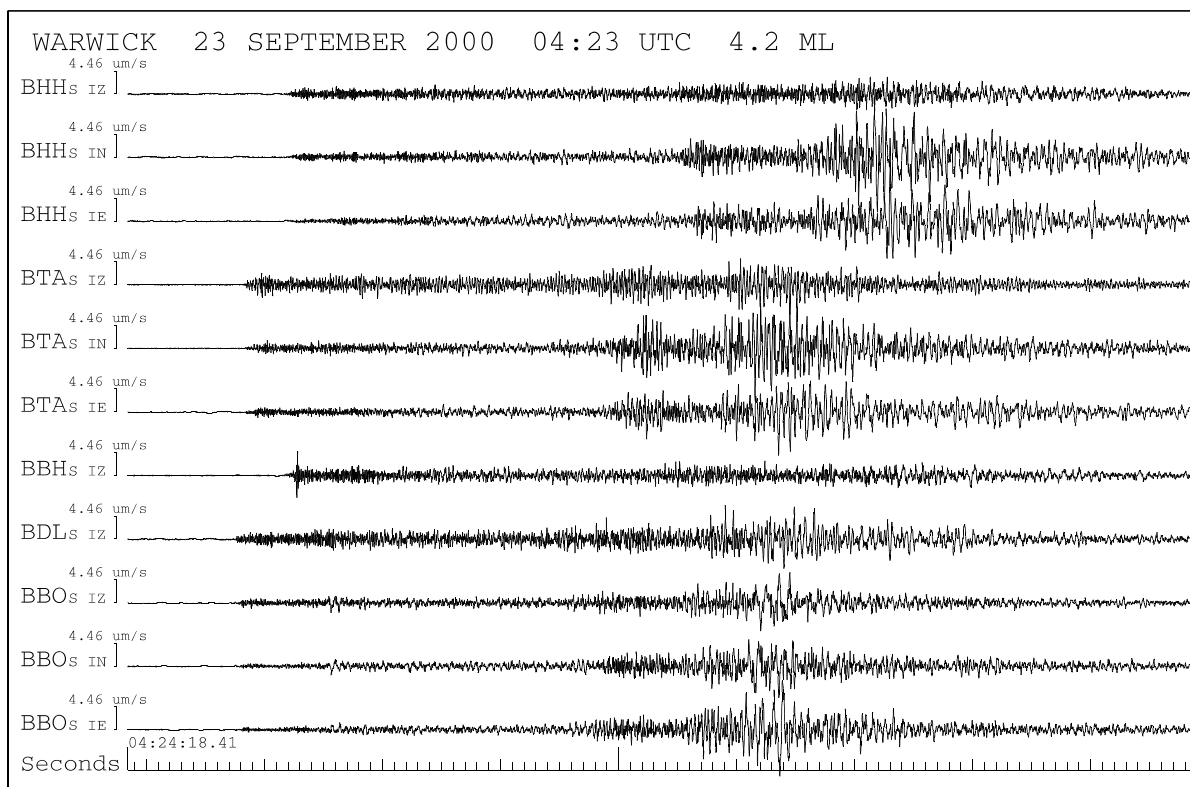


Figure A1.1. Seismograms of the Warwick earthquake of 23 September 2000 04:23 UTC 4.2 ML recorded on the Borders network.

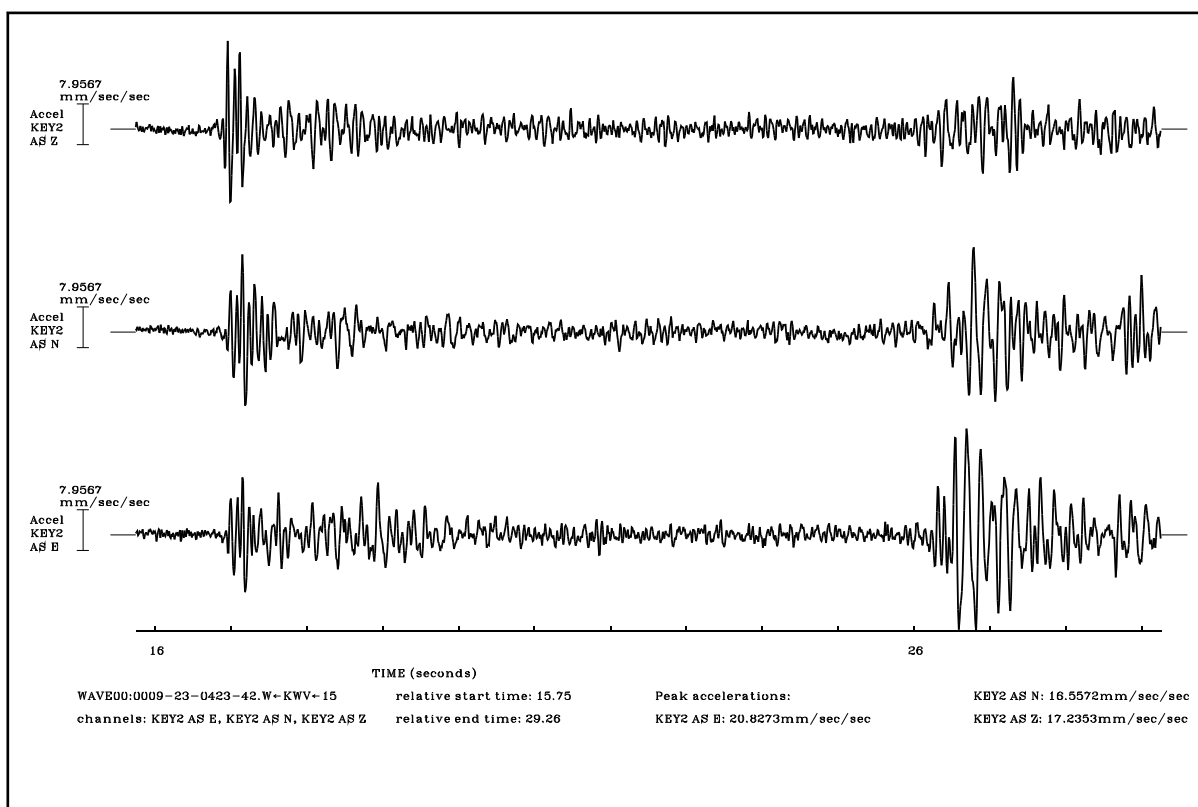


Figure A1.2. Seismograms of the Warwick earthquake of 23 September 2000 04:23 UTC 4.2 ML recorded on the strong motion instruments at Keyworth (KEY2).

FAULT PLANE SOLUTION : WARWICK EARTHQUAKE OF 23 SEPTEMBER 2000

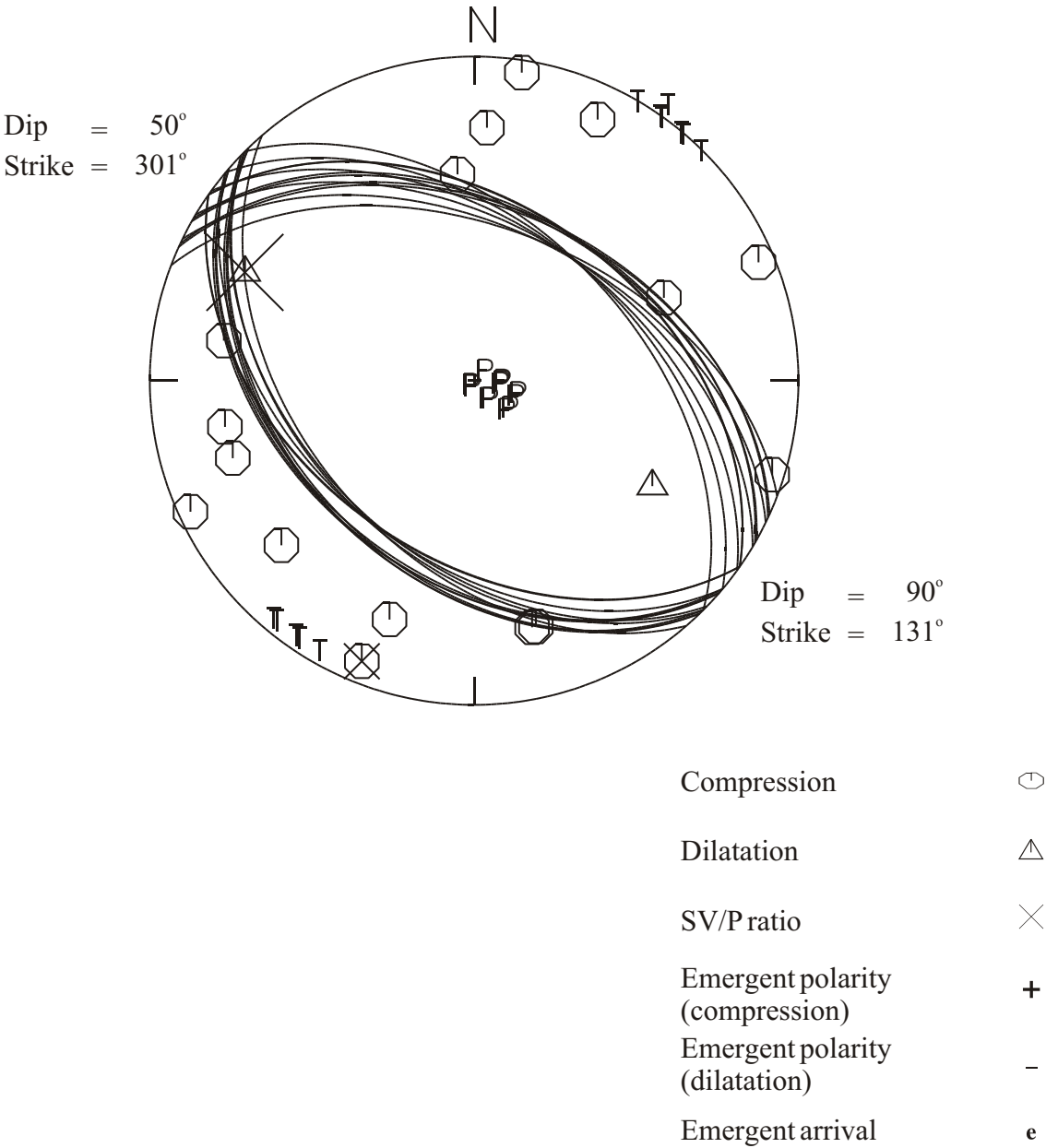


Figure A1.3. Equal area projection of the lower focal hemisphere for the Warwick earthquake of 23 September 2000 04:23 UTC 4.2 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

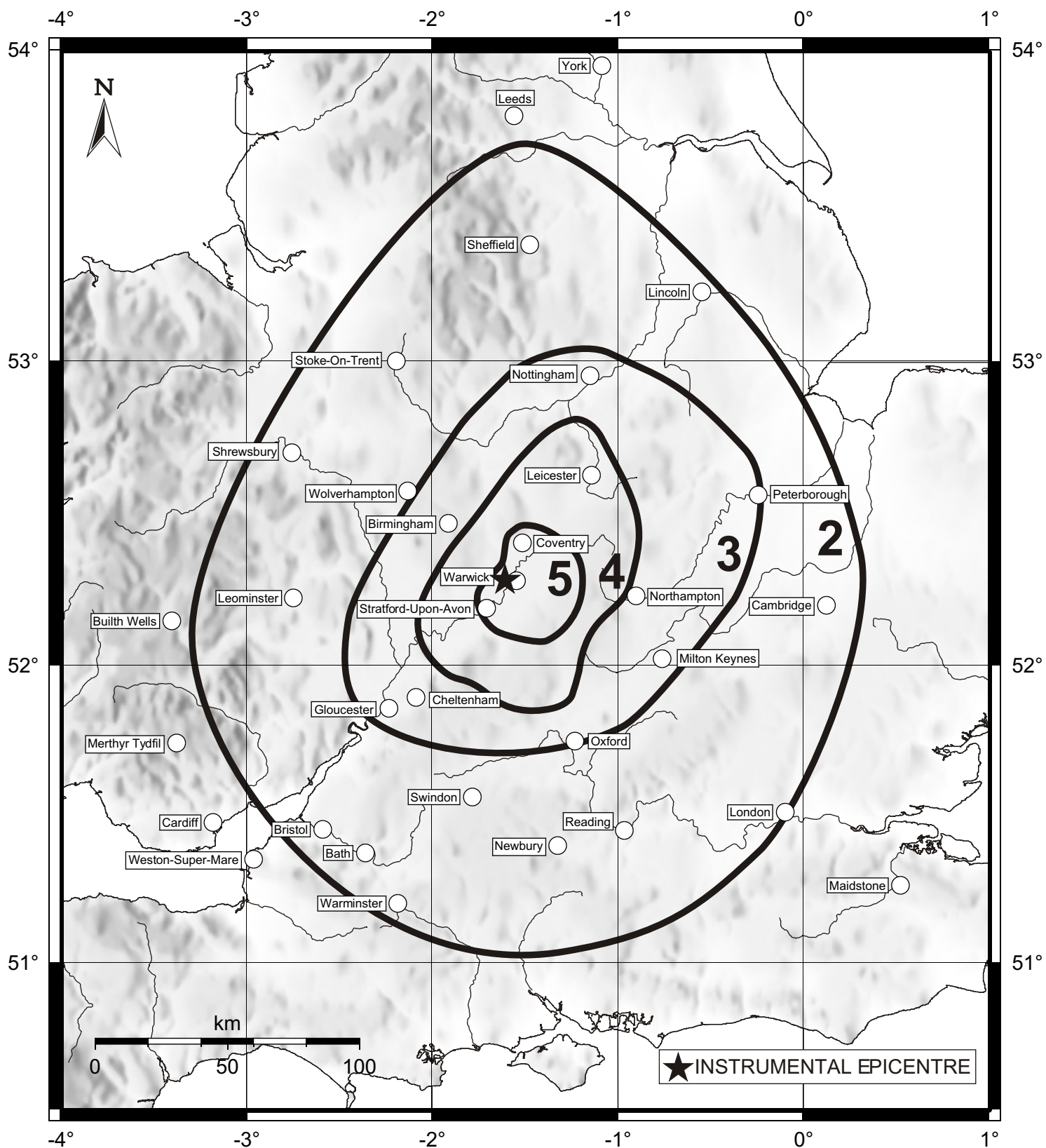


Figure A1.4. Warwick Earthquake 23 September 2000, 04:23 UTC (4.2 ML) - EMS Intensities

APPENDIX A2

CALTHWAITE EARTHQUAKE, 24 APRIL 2000

PARAMETERS

Date:	24 April 2000
Origin Time:	05:10 55.7 UTC
Latitude and longitude:	54.77° N 2.81° W
Grid Reference:	347.6 km E 541.5 km N
Depth:	13.8 km
Magnitude:	2.6 ML
Hypo Solution Quality:	B (A*B)
Epicentral Error (1 std. dev.):	0.8 km
Depth Error (1 std. dev.):	2.8 km

Discussion

Two events occurred near Calthwaite, Cumbria with magnitudes of 0.5 and 2.6 ML. The latter occurred on 24 April and felt reports described “the whole house shook” and “the windows rattled”, indicating an intensity of at least 3 EMS. The nearest 3-component strong motion instrument to record the earthquake was 38 km distant and accelerations of 1.3, 7.2 and 1.4 mms^{-2} were recorded for the vertical, NS and EW components, respectively. A focal mechanism for the larger event was calculated and shows dominantly normal faulting with a minor component of strike-slip. The nodal planes strike NNW-SSE.

Seismograms recorded by the BGS networks around Cumbria and Leeds are shown in [Figure A2.1](#) and the focal mechanism is shown in [Figure A2.2](#).

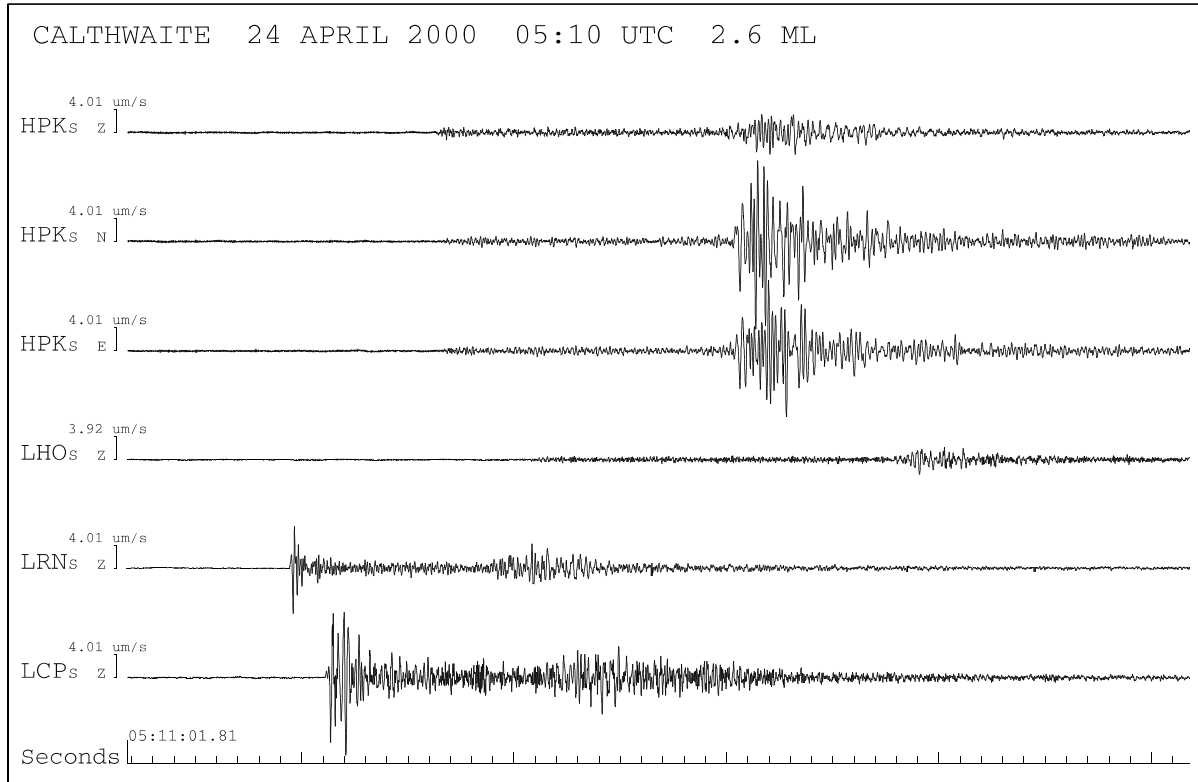
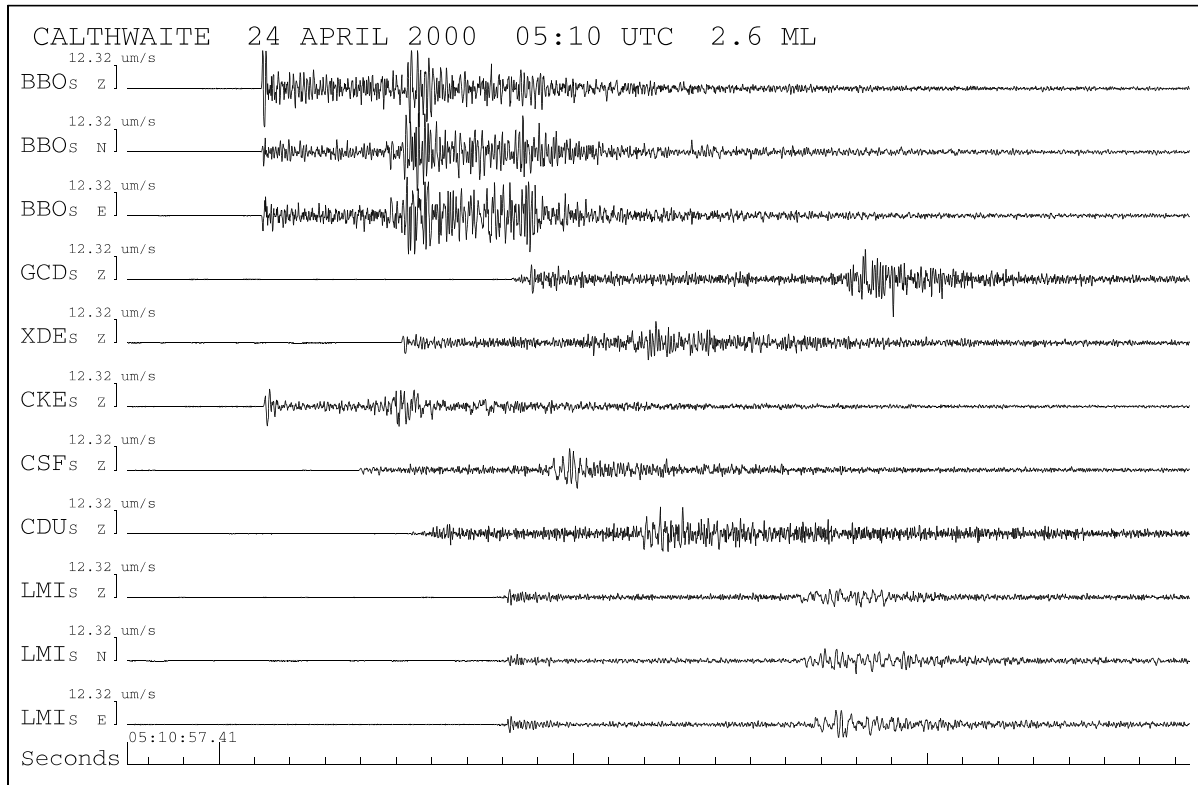


Figure A2.1. Seismograms of the Calthwaite earthquake 24 April 2000 05:10 UTC 2.6 ML recorded on the Cumbria and Leeds networks.

FAULT PLANE SOLUTION : CALTHWAITE EARTHQUAKE OF 24 APRIL 2000

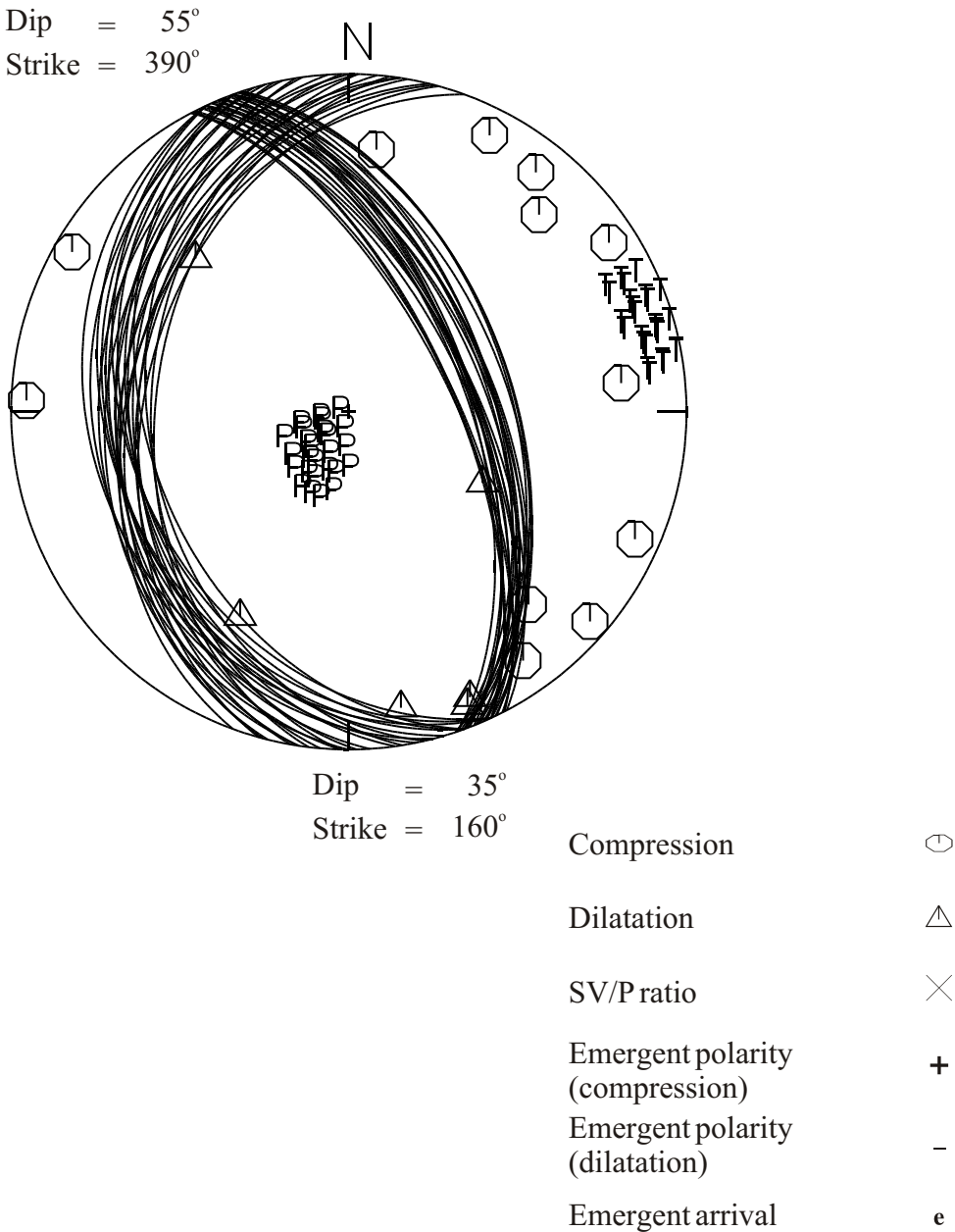


Figure A2.2. Equal area projection of the lower focal hemisphere for the Calthwaite earthquake of 24 April 2000 05:10 UTC 2.6 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

APPENDIX A3

LLEYN PENINSULA EARTHQUAKE, 22 JUNE 2000

PARAMETERS

Date:	22 June 2000
Origin Time:	14:37 13.4 UTC
Latitude and longitude:	52.96° N 4.39° W
Grid Reference:	239.5 km E 343.4 km N
Depth:	24.5 km
Magnitude:	2.7 ML
Hypo Solution Quality:	A (A*A)
Epicentral Error (1 std. dev.):	0.8 km
Depth Error (1 std. dev.):	4.1 km

Discussion

In North Wales, six events with magnitudes ranging between 0.0 to 2.7 ML, were located on the Lleyn Peninsula, in the same area and at similar depths (20 km) as the magnitude 5.4 ML Lleyn earthquake of 19 July 1984, which was felt throughout England and Wales and into Scotland and Ireland. The magnitude 2.7 ML event occurred on 22 June and felt reports were received via the media, the Police and residents of the Dinorwic, Maentwrog, Llanberis and Caernarfon areas of North Wales. These reports described “the whole house shook” and “felt a shudder”, indicating an intensity of at least 4 EMS. This is the largest event in the Lleyn Peninsula area since the magnitude 2.7 ML earthquake on 15 April 1986, which was felt with intensities of 2 EMS in Pwllheli and Porthmadog. The calculated focal mechanism shows dominantly strike-slip faulting with a varying component of dip-slip. The nodal planes strike WNW-ESE and N-S. This is in reasonable agreement with the calculated focal mechanism for the 1984 earthquake. The P and T-axis orientation are consistent with the regional stress direction for the UK.

Seismograms recorded by the BGS networks around Hereford and North Wales are shown in [Figure A3.1](#) and the focal mechanism is shown in [Figure A3.2](#).

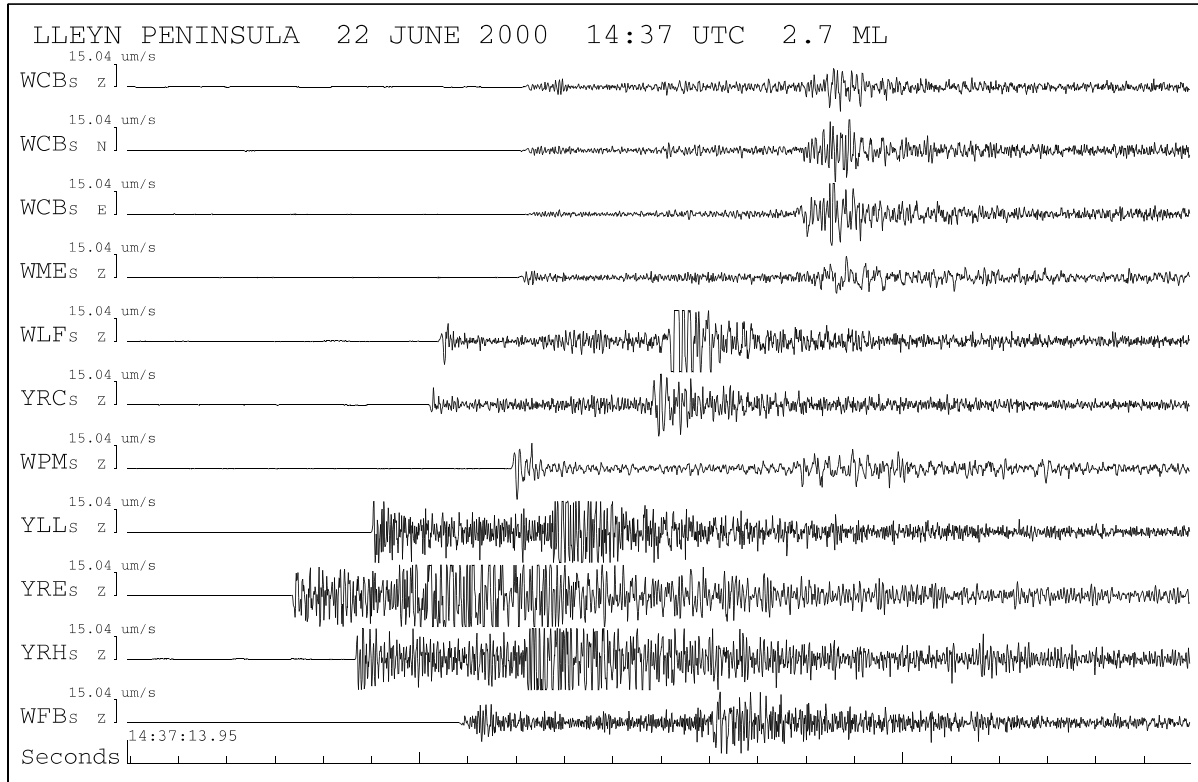
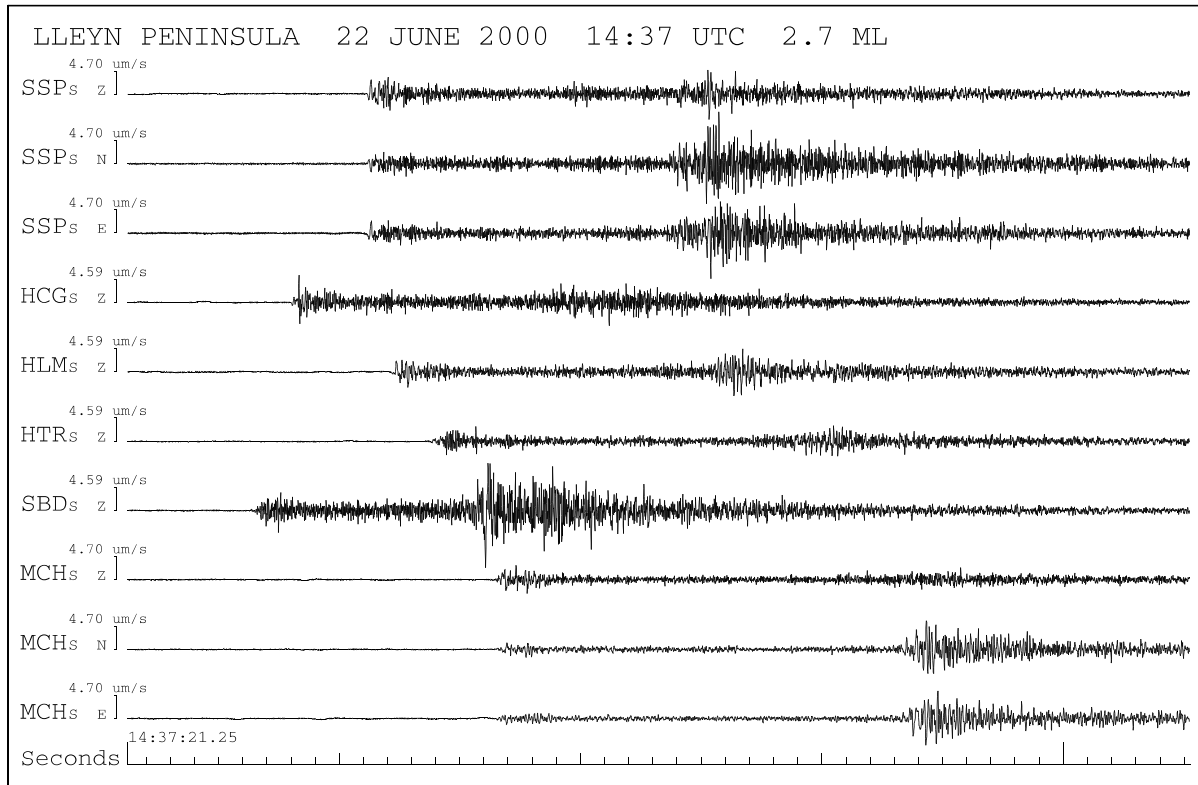


Figure A3.1. Seismograms of the Lleyn earthquake 22 June 2000 14:37 UTC 2.7 ML recorded on the Hereford and North Wales networks.

FAULT PLANE SOLUTION : LLEYN EARTHQUAKE OF 22 JUNE 2000

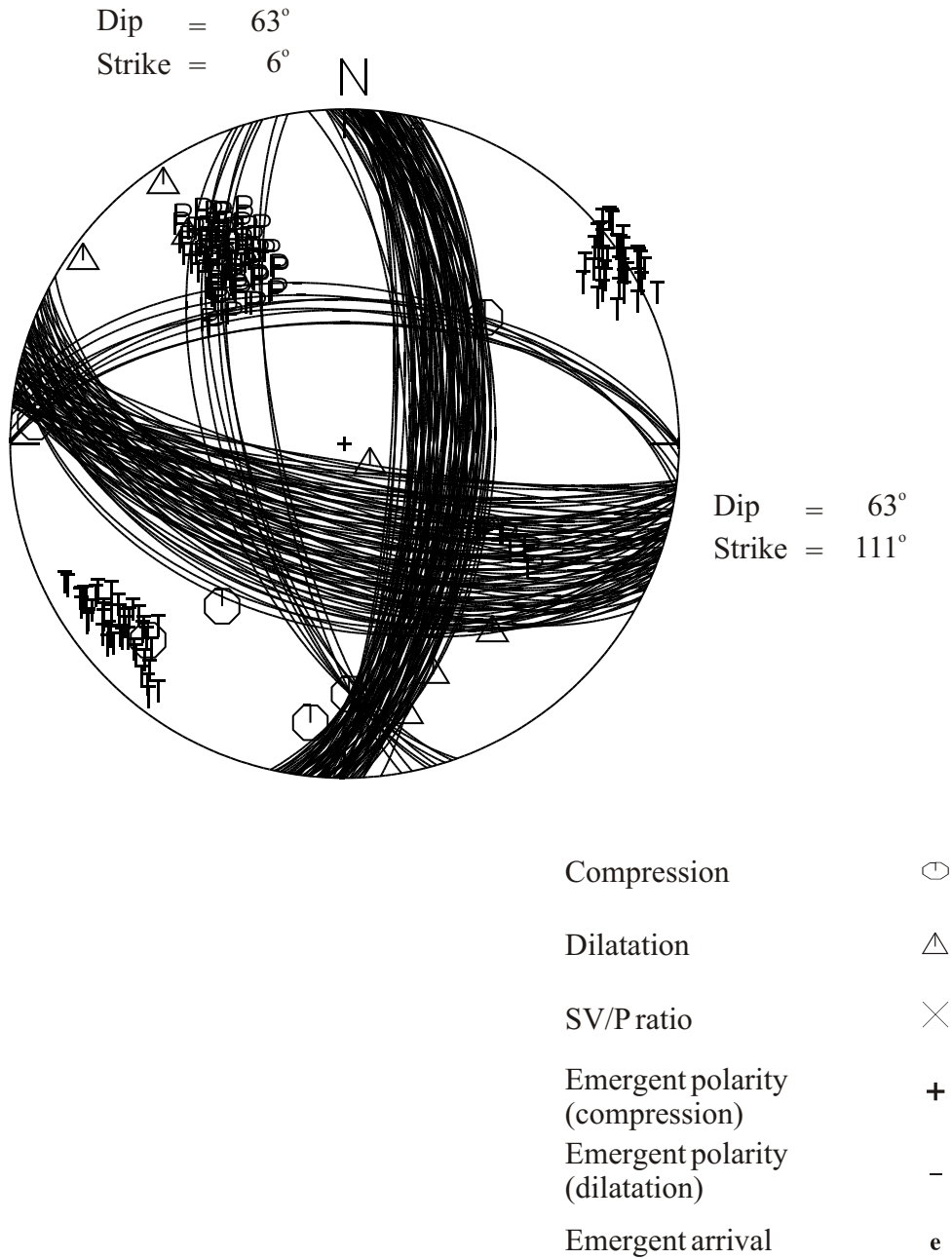


Figure A3.2. Equal area projection of the lower focal hemisphere for the Lleyne earthquake of 22 June 2000 14:37 UTC 2.7 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

APPENDIX B

EARTHQUAKE INFORMATION CHARGES

APPENDIX B

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

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

BULLETIN OF BRITISH EARTHQUAKES: PRICE LIST

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

APPENDIX C

EUROPEAN MACROSEISMIC SCALE (EMS 98)

APPENDIX C

1 - Not felt

Not felt, even under the most favourable circumstances.

2 - Scarcely felt

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

3 - Weak

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

4 - Largely observed

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

5 - Strong

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

6 - Slightly damaging

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

7 - Damaging

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

8 - Heavily damaging

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

9 - Destructive

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

10 - Very destructive

Many ordinary buildings collapse.

11 - Devastating

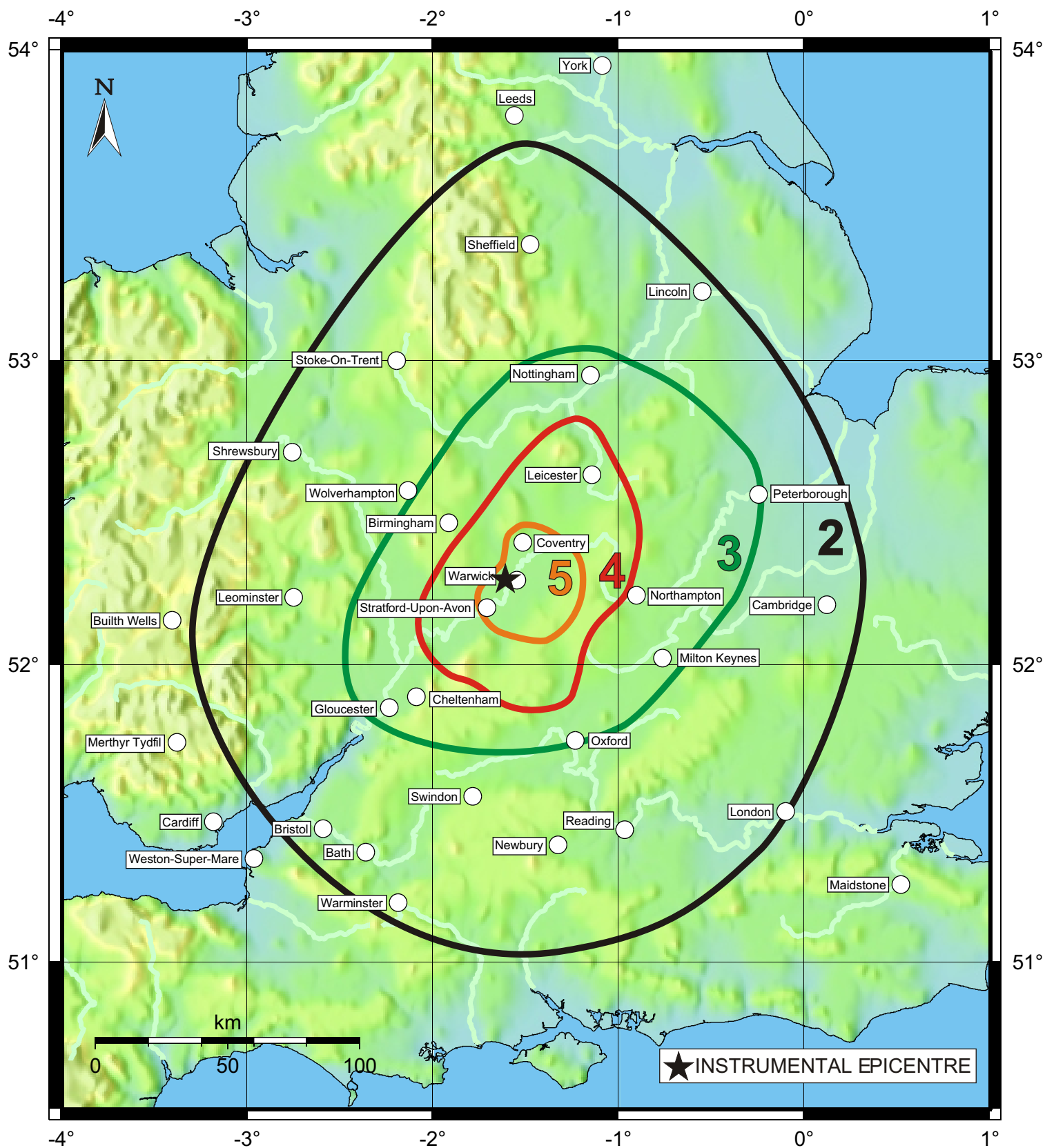
Most ordinary buildings collapse.

12 - Completely devastating

Practically all structures above and below ground are heavily damaged or destroyed.

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



Warwick Earthquake 23 September 2000, 04:23 UTC (4.2 ML) - EMS Intensities