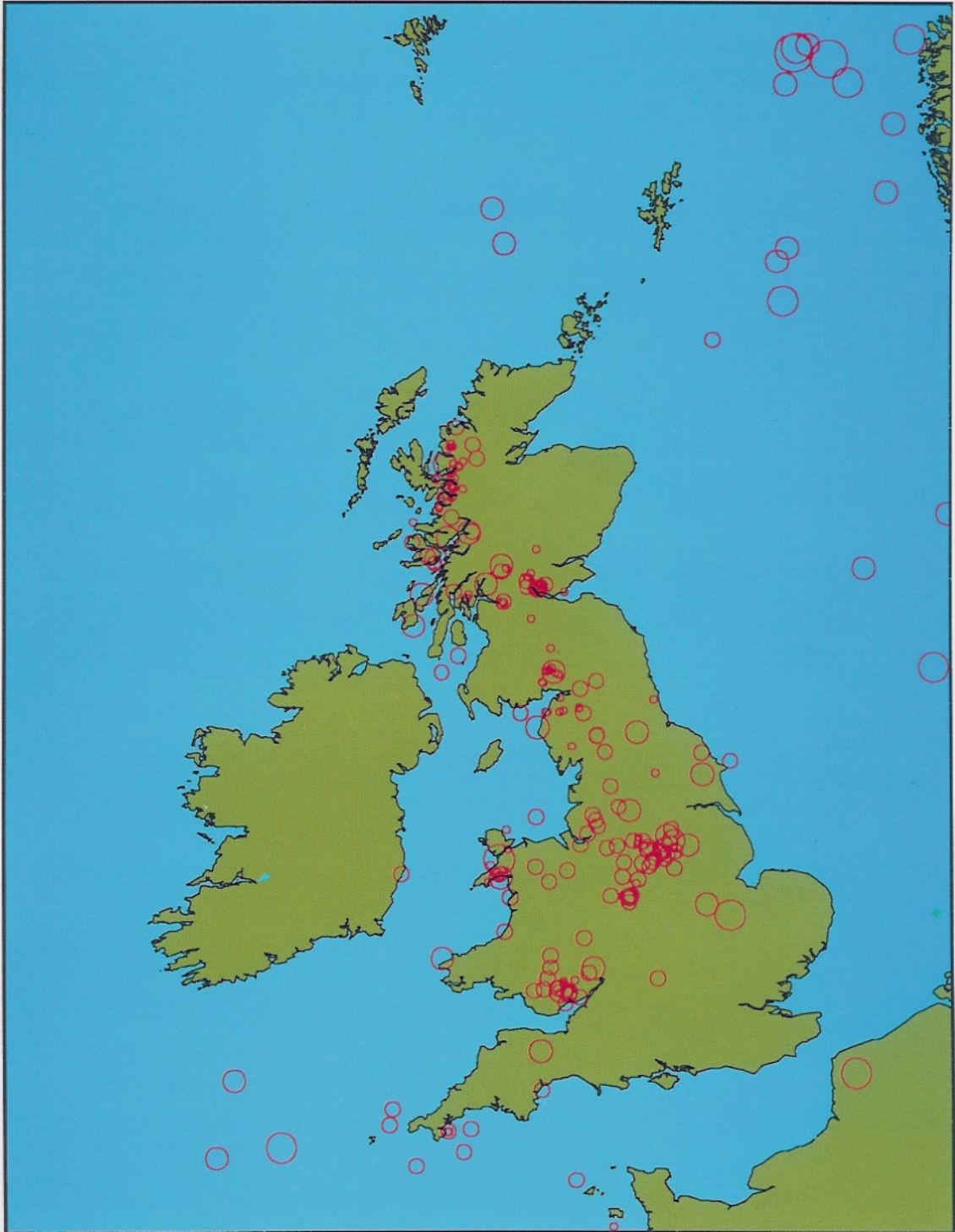




British Geological Survey

**BULLETIN OF BRITISH
EARTHQUAKES 1992**



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Bulletin of British earthquakes 1992

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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 of Great Britain and Northern Ireland. This area, including coastal waters, is covered within the limits of the detection capabilities of the seismograph network and accuracy is extended through data exchange with neighbouring countries. Seismic phase data, location details and magnitudes are presented in the Bulletin for all earthquakes detected and located by BGS during 1992 together with maps showing the larger magnitude events since 1979 (ML > 2.5) and since 1970 (ML > 3.5).

1.2 Summary of 1992 seismicity

Some 291 earthquakes have been located by the monitoring network in the year, with 50 of them having magnitudes of 2.0 or greater. Eight in that magnitude category are known to have been felt together with a few smaller ones.

The largest earthquake of the year, onshore, occurred in Caernarvon Bay on 29 July with a magnitude of 3.5 ML and was felt over an area of approximately 10,000 km². A macroseismic survey throughout the region showed that it was felt around Caernarvon with a maximum intensity of 5 MSK (just below the damaging level). The focal mechanism shows reverse faulting with a small-component of strike-slip faulting (Walker et al., 1993 and Appendix A3).

In the North Sea, the largest offshore earthquake in 1992, with magnitude 4.7 ML, occurred on 8 November in the north Viking Graben approximately 230 km NE of Shetland. A single felt report was received from the Møre region of western Norway but there were no other reports from the North Sea platforms nor other land areas probably owing to the poor weather conditions at the time of the event. It is one of the 16 events which have been located in the Viking/Central Graben area over the past year.

In Peterborough on 17 February, an earthquake with magnitude 3.3 ML was felt over an area of 7000 km² and had a maximum intensity of 5 MSK which was observed in two localities. The event parameters, together with a seismogram and macroseismic map are shown in Appendix A1.

Near Johnstonebridge in Annandale, on 27 February, a magnitude 2.7 ML event was felt with intensities up to 4 MSK. The focal mechanism for the event shows dominant normal faulting with a component of strike-slip faulting (Appendix A2). Johnstonebridge is an area which frequently experiences earthquake swarm activity; occasionally events with magnitudes greater than 2.0 ML occur and these are usually felt.

On the island of Jura, western Scotland, a magnitude 2.7 ML event was detected. Although events of this size are normally felt, it was located in a remote part of Jura and no felt reports were received.

In Strathcarron, 20 km north east of Kyle of Lochalsh, a magnitude 2.8 ML earthquake was felt by local residents with intensities of at least 3 MSK. It was located in an area where a number of events have occurred in the past 20 years; the largest, in 1974 with magnitude 4.4 ML, some 20-30 km to the south east of this event.

Twenty five small events with magnitudes ranging from 0.3 to 1.7 ML were detected in the coalfield areas of Fife; six were reported felt. In the other coalfield areas some 14 events were detected, one of which was felt. In south Wales, 1 km west of Bargoed a coalmining event with a magnitude of 2.2 ML was felt by local residents in Bargoed and some 3 km away in the village of Nelson. The felt

reports ranged from overturning of perfume, sauce and milk bottles to cracked windows. This high intensity (5 MSK) can be attributed to the shallow depth of occurrence, 1.6 km.

In 1992, 47 small events were located near the village of Constantine in Cornwall with magnitudes ranging between -0.3 and 1.0 ML. None were reported felt and form part of the continuing series which has been instrumentally recorded since 1981 and which has produced five felt earthquakes.

Three small aftershocks (1.6, 0.3 and 0.2 ML) of the July 19 1984 (magnitude 5.4 ML) Llyn earthquake were located during 1992 but none were reported felt.

Five collapse events were catalogued for 1992. They represent events which have the characteristics of a shallow source coalfield event but do not locate in known coalfield areas and may represent mine or cavern collapse.

2. CATALOGUE FORMAT

2.1 Tables

Data on the earthquakes and seismograph stations operated in 1992 are arranged as follows:

TABLE 1 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 significant non-natural events.

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

TABLE 3 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 in Table 2.

TABLE 4 is an alphabetical listing of the geographical coordinates of seismograph stations operated in 1992 by BGS and DIAS (the Dublin Institute of Advanced Studies).

TABLE 5 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 shows the crustal seismic velocity models used for event location.

2.2 Figures

FIGURE 1: seismograph network operational in December 1992.

FIGURE 2: the detection threshold of the seismograph stations operational in December 1992 for average background noise conditions where the detection criterion is that the signal has to significantly exceed 4 nanometres at 10 Hz on 3 stations.

FIGURE 3: the epicentral location map of all the events in 1992 that are listed in Table 2. It is estimated that the data set is complete for the land area.

FIGURE 4: the locations of earthquakes in the UK of magnitude 2.5 ML and above in the period 1979 to 1992. It is estimated that the data set is complete for the land area.

FIGURE 5: the locations of earthquakes in the UK of magnitude 3.5 ML and above in the period 1970 to 1992.

3. THE BGS UK SEISMOGRAPH NETWORK

3.1 Instrumentation

A standard seismic network consists of up to seven 'outstation' vertical seismometers radio-linked over distances of up to 100 km to a central site where the data, along with that from a local 3-component set of two horizontal and one vertical seismometers, are recorded on magnetic tape by a Geostore recorder. Tapes are dispatched, usually once per week, to Edinburgh for analysis.

A more detailed description of the system is given by Browitt et al (1985) and the response of the system is described by Turbitt and Stewart (1982).

At some locations, on-line paper chart recorders display three channels to permit rapid investigation of reported felt tremors. At other stations, low-gain vertical seismometers extend the dynamic range (by 34 db) of the system to stronger motions, and low frequency microphones are used to aid the discrimination of sonic booms. In addition, strong motion accelerometers installed at several locations (near Hunterston, Cornwall, Chapelcross and Jersey) record accelerations up to 0.1 g.

At locations shown in red on Figures 1 and 2 the seismograph stations are recording onto digital event triggered recorders (SEISLOG). These are designed to trigger on events and write to a computer disk, which is accessed from Edinburgh via a modem. Each morning, automatic data transfers are made to the Edinburgh VAX computer and the events are analysed during that day providing a rapid response for location and magnitude calculations. They have the advantage over the Geostore system of providing a wider dynamic range (72 db), a bandwidth of up to 40 Hz and the capacity for 16 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.

The improvements in geographic coverage of the UK is described in Turbitt (1985), with more recent developments by Browitt and Walker (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 nanometres of noise (average) at 10 Hz on at least three seismographs. Noise sources such as wind, waves, traffic and livestock vary considerably with time (about 0.5 to 15 nanometres, typically at 10 Hz) causing the magnitude thresholds to increase or decrease. In conditions of high noise, 0.8 ML should be added to the contour values.

The detection contours in Figure 2 hold true only if all stations are continuously monitored and this is not always the case. Small events in unmonitored areas may then go undetected unless they are felt and reported to BGS by local inhabitants. The detection capabilities by this process are strongly dependent on population density.

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 catalogue

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 1992 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 a series occurred almost beneath a network. For events at larger distances, and where the error columns (ERH and ERZ) 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 catalogue 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 1992 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 1992 is shown in Figure 5 with a threshold magnitude of 3.5. This is the period covered by BGS instrumentation which consisted only of the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) and a station near Kyle of Lochalsh (KYL) in the early years. The data set is likely to be complete for such magnitudes.

4.4 Magnitude

All earthquakes in the catalogue 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 to 200, and later 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 catalogue 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 catalogue 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_0) usually found close to the epicentre. The maximum felt intensity is quoted, where known, on the MSK scale (Ad Hoc Panel, 1981).

5. CATALOGUE CONTENT AND COMPLETENESS

5.1 The geographical area

The catalogue covers all of the UK land mass and its coastal waters including the North Sea to 800 kmE and 1400 kmN.

5.2 Events included

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

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

Acoustic disturbances, such as sonic booms from supersonic aircraft are included when they are felt. The air-borne waves are readily identified by their slow travel time across an array or by their signature on a microphone but they are frequently reported by local people as small earthquakes. They are indicated by 'SONIC' in both the locality and comments column of Tables 1 and 3.

Significant non-natural events, for example the Madness concert in NE London, and felt explosions are also included in Tables 1 and 3. The felt explosions are indicated by 'EXPL' in both the locality and comments column.

5.3 Events excluded

Events that are known, or suspected to be of explosive origin, are excluded from the catalogue. Explosions due to quarrying, mining, weapon testing or disposal, naval exercises, geophysical prospecting and civil engineering are all excluded where possible, unless 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 catalogue 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, and above, at times of average ambient noise levels. High noise levels may cause this threshold to rise to about 2.3. Normally, however, an earthquake of this size would be felt, if not detected, in the areas of poorer instrumental coverage. The catalogue can, therefore, be assumed to be complete for all earthquakes of magnitude 2.3 and above.

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TABLE 1
CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

KEY TO CATALOGUE 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 earthquake.
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 MSK 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 MSK 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 | M Glamorgan | : Mid Glamorgan |
| Expl | : Explosion | Notts | : Nottinghamshire |
| D & G | : Dumfries and Galloway | Derbs | : Derbyshire |
| Her & Wor | : Hereford and Worcester | N Yorks(hire) | : North Yorkshire |
| Gt(r) Manchester | : Greater Manchester | S Yorks(hire) | : South Yorkshire |
| Cambs | : Cambridgeshire | W Yorks(hire) | : West Yorkshire |
| S Glamorgan | : South Glamorgan | Staffs | : Staffordshire |
| M Tydfil | : Merthyr Tydfil | | |

Comments abbreviations

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

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...	
19920102	213948.7	59.69	1.42	592.5	1094.0	15.0	2.4	NORTHERN NORTH SEA		6153	217	0.07	4.8	5.0		C*D		
19920103	122152.8	56.05	-5.10	207.0	688.0	5.0	0.8	GLENDARUEL, STRATHCLYDE		7	32	296	0.07	1.6	1.6		B*D	
19920105	054028.2	60.35	3.94	727.3	1177.2	3.5	2.6	NORTHERN NORTH SEA		7	91	209	0.37	10.4	3.9		D*D	
19920106	030000.0							EXPL-MOTHERWELL	2+								EXPL-FELT WISHAW AREA	
19920107	031741.5	56.13	-3.75	291.2	694.1	1.0	1.1	CLACKMANNAN, CENTRAL		4	20	285	0.01				A*D	C/F
19920107	052135.5	56.46	-5.94	157.4	736.6	1.0	1.5	MULL, STRATHCLYDE		6101	342	0.17					D*D	
19920110	215902.3	61.60	3.32	682.1	1313.3	12.9	3.4	NORTHERN NORTH SEA		20	98	231	0.40	2.9	2.3		C*D	
19920115	194613.7	55.20	-3.37	312.7	590.2	6.8	0.0	JOHNSTONEBRIDGE, D & G		4	16	302	0.02				A*D	
19920117	094011.0							SONIC-KING'S LYNN										SONIC-FELT KING'S LYNN
19920122	134534.2	53.30	-1.84	410.4	378.6	0.5	0.3	BUXTON, DERBYSHIRE		6	22	179	0.14	1.0	1.4		B*C	COLLAPSE TYPE
19920122	144439.0							SONIC-WIRRAL										SONIC-FELT WIRRAL
19920126	163033.4	56.21	-3.94	279.4	703.9	5.6	1.3	DUNBLANE, CENTRAL		12	25	123	0.21	1.7	4.0		B*C	
19920127	024349.7	50.66	1.88	674.1	91.9	7.3	3.0	BOULOGNE, FRANCE		26	72	117	0.26	1.0	4.1		B*D	
19920127	221605.6	61.64	1.88	605.7	1312.5	0.6	2.6	NORTHERN NORTH SEA		12167	238	0.93	5.5	5.8			D*D	
19920129	083610.0	56.31	-4.46	247.8	715.9	1.0	1.7	BALQUHIDDER, CENTRAL	2+	36	16	129	0.38	0.9	1.1		C*C	FELT INVERLOCHLARIG
19920130	143302.3	53.14	-1.53	431.5	360.2	0.5	1.2	MATLOCK, DERBYSHIRE		4	13	161	0.33				C*D	COLLAPSE TYPE
19920201	131701.5	53.08	-1.77	415.2	354.3	0.5	1.7	ALSOP MOOR, DERBYSHIRE		9	9	142	0.39	2.8	3.0		C*C	
19920201	203752.2	52.66	-2.02	398.9	307.3	3.2	1.1	CANNOCK, STAFFORDSHIRE		7	41	174	0.44	3.8	8.2		C*C	
19920204	221850.9	56.07	-5.38	189.4	691.8	1.0	1.7	LOCH FYNE, STRATHCLYDE		16	47	305	0.27	7.2	5.3		D*D	
19920206	141159.5	53.34	-1.92	405.0	382.3	11.6	1.6	BUXTON, DERBYSHIRE		5	28	298	0.03	0.8	2.8		B*D	
19920209	054906.7	53.01	-3.14	323.3	347.0	12.5	1.4	WREXHAM, CLWYD		18	14	131	0.22	0.6	0.8		B*B	
19920211	004502.8	53.57	-2.62	359.2	408.8	10.4	1.6	STANDISH, GT MANCHESTER		29	45	95	0.24	0.6	1.0		B*C	
19920211	094658.4	52.73	-2.35	376.7	315.0	11.2	1.8	WELLINGTON, SHROPSHIRE		29	44	101	0.27	0.8	1.3		B*C	
19920212	025652.9	54.39	-3.06	331.0	500.1	7.8	0.6	CONISTON, CUMBRIA		12	13	113	0.32	1.2	4.9		C*B	
19920212	121018.0							EXPL-SHOEBURYNESS	2+									EXPL-FELT BRADWELL...
19920216	124106.9	51.54	-3.17	318.9	183.3	18.9	1.3	CARDIFF, S GLAMORGAN		6	27	286	0.08	2.2	3.2		B*D	
19920217	012233.0	52.50	-0.19	522.7	290.7	11.1	3.3	PETERBOROUGH, CAMBS	5	32	19	69	0.20	0.5	0.8		B*B	FELT CAMBRIDGESHIRE...
19920218	220744.1	57.46	-5.35	198.9	846.1	1.5	0.2	BALNACRA, HIGHLAND		5	5	164	0.23	4.2	5.4		C*D	
19920219	100230.8	55.25	-3.45	307.8	596.2	1.7	-0.1	JOHNSTONEBRIDGE, D & G		6	16	188	0.19	1.2	0.9		B*D	
19920219	185700.0							SONIC-SOLWAY FIRTH										SONIC-FELT WHITEHAVEN...
19920219	193900.0							SONIC-SOLWAY FIRTH										SONIC-FELT WHITEHAVEN...
19920219	204400.0							SONIC-SOLWAY FIRTH										SONIC-FELT WHITEHAVEN...
19920219	213300.0							SONIC-SOLWAY FIRTH										SONIC-FELT WHITEHAVEN...
19920221	100708.4	50.11	-5.18	172.9	28.4	6.7	0.9	CONSTANTINE, CORNWALL		12	3	159	0.05	0.3	0.4		A*C	
19920221	115633.2	53.29	-2.22	385.0	376.7	5.9	1.6	ALDERLEY EDGE, CHESHIRE		6	38	248	0.22	2.9	8.2		C*D	
19920221	135544.1	50.11	-5.18	172.9	28.6	6.4	0.8	CONSTANTINE, CORNWALL		10	3	281	0.01	0.1	0.1		A*D	
19920221	205410.5	50.11	-5.18	173.0	28.1	5.9	-0.2	CONSTANTINE, CORNWALL		9	3	161	0.04	0.3	0.4		A*C	
19920222	211619.7	55.11	-2.59	362.4	579.4	11.6	1.3	BEWCASTLE, CUMBRIA		13	22	273	0.24	1.9	4.4		B*D	
19920225	220319.9	57.31	-5.52	188.2	829.6	3.0	0.8	AUCHTERTYRE, HIGHLAND		6	9	140	0.10	0.8			C*C	
19920227	025024.9	55.21	-3.41	310.5	591.7	5.9	2.7	JOHNSTONEBRIDGE, D & G	4+	43	16	54	0.26	0.4	3.1		B*C	FELT NEWTON, SANDYFORD...
19920228	005027.4	53.33	-1.18	454.7	381.4	11.6	2.0	WORKSOP, NOTTS		14	25	98	0.15	0.6	4.2		B*C	
19920301	182445.5	53.06	-4.55	229.1	355.0	15.0	0.0	CAERNARVON BAY, GWYNEDD		12	13	164	0.04	0.3	0.4		A*C	
19920302	163427.5	54.54	-1.82	411.6	516.2	15.4	2.3	BARNARD CASTLE, DURHAM		40	14	62	0.29	0.6	1.0		B*A	
19920303	035222.0	52.88	-4.59	225.8	334.2	12.0	0.5	TUDWELLIOG, GWYNEDD		8	6	152	0.06	0.6	0.6		A*C	
19920303	222141.3	55.80	-3.85	284.2	657.4	1.0	0.8	ALLANTON, STRATHCLYDE		4	28	335	0.14				A*D	
19920303	223204.7	56.13	-3.74	292.0	693.8	1.7	1.0	CLACKMANNAN, CENTRAL		13	20	85	0.10	0.4	0.7		A*C	C/F
19920305	024528.9	52.94	-2.13	391.1	338.7	1.0	1.2	STONE, STAFFORDSHIRE		12	21	110	0.21	1.0	1.4		B*C	
19920305	121500.0							SONIC-BLACKPOOL										SONIC-FELT BLACKPOOL...
19920306	001928.0							SONIC-CONSTANTINE										SONIC-FELT CONSTANTINE
19920312	231937.2	57.90	-5.45	195.5	894.8	8.6	1.6	GRUINARD BAY, HIGHLAND		10	45	239	0.23	2.2	4.9		B*D	

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERR	ERZ	SQD	Comments...
19920313	232612.6	51.71	-3.30	310.2	202.0	2.5	1.5	BEDLINOG,MID GLAMORGAN		8	35	171	0.05	0.4	0.6	A*C	C/F
19920316	225301.6	56.13	-3.69	294.8	694.4	0.3	1.1	CLACKMANNAN,CENTRAL	3+	12	17	124	0.17	0.6	1.0	B*C	FELT CLACKMANNAN,C/F
19920319	072347.3	56.13	-3.71	293.9	694.4	2.0	1.3	CLACKMANNAN,CENTRAL		12	18	83	0.18	0.7	1.1	B*C	C/F
19920325	153831.8	57.56	-5.01	220.1	855.9	1.0	1.2	ACHNASHEEN,HIGHLAND		5	19	323	0.09	1.8	1.6	B*D	
19920325	163643.3	55.09	-3.61	297.0	578.1	6.5	0.9	DUMFRIES,D & G		14	10	162	0.20	0.8	3.3	B*C	
19920327	205402.4	53.18	-1.31	446.3	365.2	9.4	1.6	MANSFIELD,NOTTS		9	17	115	0.24	1.2	11.0	C*B	
19920329	024727.3	56.56	-3.76	292.0	742.3	7.1	0.2	SCOTSTON,TAYSIDE		6	10	295	0.02	0.3	0.2	A*D	
19920329	034356.6	57.33	-5.44	192.8	832.0	2.6	0.7	SALLACHY,HIGHLAND		5	13	150	0.09	1.1		C*D	
19920329	042736.0	54.89	-1.49	432.5	555.7	0.1	0.2	WASHINGTON,TYNE & WEAR		4	18	212	0.55			D*D	
19920330	211302.2	56.12	-3.74	291.7	693.5	1.4	1.4	CLACKMANNAN,CENTRAL		14	20	131	0.13	0.4	0.6	A*C	C/F
19920401	033228.5	52.07	-3.44	301.2	242.4	16.6	1.1	BUILTH WELLS,POWYS		9	12	227	0.08	0.7	0.7	A*D	
19920404	033812.0	56.12	-3.74	292.0	693.7	1.0	1.1	CLACKMANNAN,CENTRAL		14	20	86	0.10	0.3	0.5	A*C	C/F
19920405	100119.9	55.23	-3.49	305.3	593.6	8.9	0.1	JOHNSTONEBRIDGE,D & G		6	12	180	0.02	0.2	0.6	A*C	AFTERSHOCK
19920407	135915.9	53.22	-1.43	437.8	370.0	19.1	1.5	CHESTERFIELD,DERBS		7	7	180	0.25	2.6	1.8	C*C	
19920408	154939.0	52.93	-4.36	241.3	339.4	15.7	2.0	PWLLHELI,GWYNEDD		17	7	95	0.08	0.3	0.8	A*B	NE OF PWLLHELI
19920408	160047.5	52.93	-4.37	240.7	340.1	15.6	0.4	PWLLHELI,GWYNEDD		13	6	196	0.04	0.4	0.3	A*D	NE OF PWLLHELI
19920408	185758.0							SONIC-SCARBOROUGH									SONIC-FELT SCARBOROUGH...
19920409	115602.4	53.05	-1.64	424.2	350.9	0.1	1.2	ASHBOURNE,DERBYSHIRE		6	14	234	0.24	2.6	1.8	C*D	COLLAPSE TYPE
19920409	193636.7	56.12	-3.69	294.7	693.5	1.4	1.6	CLACKMANNAN,CENTRAL	3+	20	18	83	0.14	0.4	0.6	A*C	FELT CLACKMANNAN,C/F
19920410	103104.7	53.13	-1.37	442.3	359.7	0.2	1.6	PILSLEY,DERBYSHIRE		7	17	258	0.28	4.7	3.2	C*D	C/F
19920410	152637.6	62.06	2.48	634.0	1360.8	15.0	2.6	NORTHERN NORTH SEA		14131	236	0.30	4.3	4.5	C*D		
19920410	180013.6	58.86	-0.06	511.7	998.5	15.0	1.8	NORTHERN NORTH SEA		4145	357	0.07				A*D	
19920411	064538.2	51.64	-3.10	323.8	194.4	15.4	1.8	ABERCARN,GWENT		19	20	109	0.09	0.4	0.5	A*B	
19920411	065430.3	51.63	-3.10	323.6	193.1	15.0	1.2	ABERCARN,GWENT		5	21	259	0.02	0.7	0.3	A*D	
19920412	185528.3	49.89	-4.90	191.5	3.3	13.6	1.4	LIZARD POINT,CORNWALL		13	26	300	0.02	0.3	0.2	A*D	SE OF LIZARD POINT
19920413	012002.8	51.17	5.95	955.4	171.5	13.5	5.9	ROERMOND,NETHERLANDS	7	42	34	72	0.41	1.2	1.7	C*C	MAX INTENSITY(UK) =4MSK
19920413	220414.7	56.14	-3.68	295.8	695.7	1.0	1.3	CLACKMANNAN,CENTRAL	2+	12	16	87	0.49	1.7	3.0	C*C	FELT CLACKMANNAN,C/F
19920415	155960.0	56.13	-3.67	296.1	694.0	1.0	1.3	CLACKMANNAN,CENTRAL		10	17	200	0.23	1.8	1.7	B*D	C/F
19920418	142829.2	52.94	-4.39	239.8	341.4	24.0	0.3	LLEYN PENINSULA		6	5	292	0.02	0.3	0.4	A*D	LLEYN AFTERSHOCK
19920418	174215.9	50.11	-5.18	172.7	28.3	6.9	0.7	CONSTANTINE,CORNWALL		16	3	167	0.03	0.2	0.2	A*C	
19920418	175748.3	50.11	-5.18	172.8	28.3	7.1	0.0	CONSTANTINE,CORNWALL		9	3	163	0.02	0.2	0.2	A*C	
19920419	034702.6	50.11	-5.18	172.7	28.3	7.2	0.3	CONSTANTINE,CORNWALL		18	3	167	0.03	0.2	0.2	A*C	
19920419	174147.0	50.11	-5.18	172.8	28.3	7.2	0.4	CONSTANTINE,CORNWALL		16	3	164	0.03	0.2	0.2	A*C	
19920420	063609.4	56.22	2.72	692.7	713.0	5.0	2.2	CENTRAL NORTH SEA		17322	317	0.41				D*D	
19920420	071536.7	50.11	-5.18	172.9	28.4	7.1	-0.1	CONSTANTINE,CORNWALL		10	3	161	0.02	0.2	0.2	A*C	
19920420	203944.3	50.11	-5.17	173.1	28.2	6.2	0.2	CONSTANTINE,CORNWALL		11	3	157	0.02	0.2	0.2	A*C	
19920420	222026.6	51.70	-3.55	292.7	201.3	9.5	1.2	TREHERBERT,M GLAMORGAN		13	42	96	0.09	0.4	0.7	A*C	
19920421	030411.9	51.67	-3.09	324.5	197.2	13.6	1.0	NEWBRIDGE,GWENT		9	20	117	0.10	1.3	1.5	B*B	
19920423	131044.8	52.02	-5.38	168.2	241.3	5.0	2.1	ST GEORGE'S CHANNEL		20	43	154	0.23	0.8	1.9	B*C	
19920425	201058.1	52.96	-4.36	241.2	343.3	22.7	0.2	LLEYN PENINSULA		9	5	198	0.16	1.4	1.5	B*D	LLEYN AFTERSHOCK
19920426	051615.2	53.05	-3.72	284.6	352.3	8.1	1.0	PENTREFOELAS,CLWYD		8	26	147	0.27	2.8	62.4	C*C	
19920427	103023.2	56.12	-3.71	293.8	693.6	0.2	1.5	CLACKMANNAN,CENTRAL	2+	12	19	127	0.16	0.6	1.0	B*C	FELT CLACKMANNAN,C/F
19920427	145947.3	53.10	-1.58	427.9	355.9	0.5	1.3	CROMFORD,DERBYSHIRE		6	18	143	0.43	1.9	2.9	C*C	C/F
19920427	232334.2	49.00	-2.29	378.6	-100.1	12.2	0.5	JERSEY,CHANNEL ISLES		11	23	333	0.07	0.8	2.3	B*D	20KM SOUTH OF JERSEY
19920428	213405.5	52.93	-6.18	119.3	345.7	9.1	1.4	WICKLOW,EIRE	2+	20	27	90	0.27	0.8	2.5	B*C	FELT WICKLOW
19920430	083948.7	50.11	-5.18	172.7	28.3	6.7	0.7	CONSTANTINE,CORNWALL		10	3	167	0.02	0.2	0.2	A*C	
19920430	085544.8	50.11	-5.18	172.8	28.3	7.7	0.0	CONSTANTINE,CORNWALL		9	3	163	0.01	0.2	0.2	A*C	
19920430	181858.2	57.42	-5.48	191.3	842.2	2.5	-0.1	TULLICH,HIGHLAND		6	14	183	0.23	2.5		C*D	
19920501	020511.6	56.13	-3.73	292.6	694.7	2.0	1.5	CLACKMANNAN,CENTRAL		25	19	82	0.34	0.8	1.2	C*C	C/F
19920502	011907.6	50.11	-5.17	173.1	28.3	6.7	0.2	CONSTANTINE,CORNWALL		8	3	156	0.02	0.2	0.3	A*C	

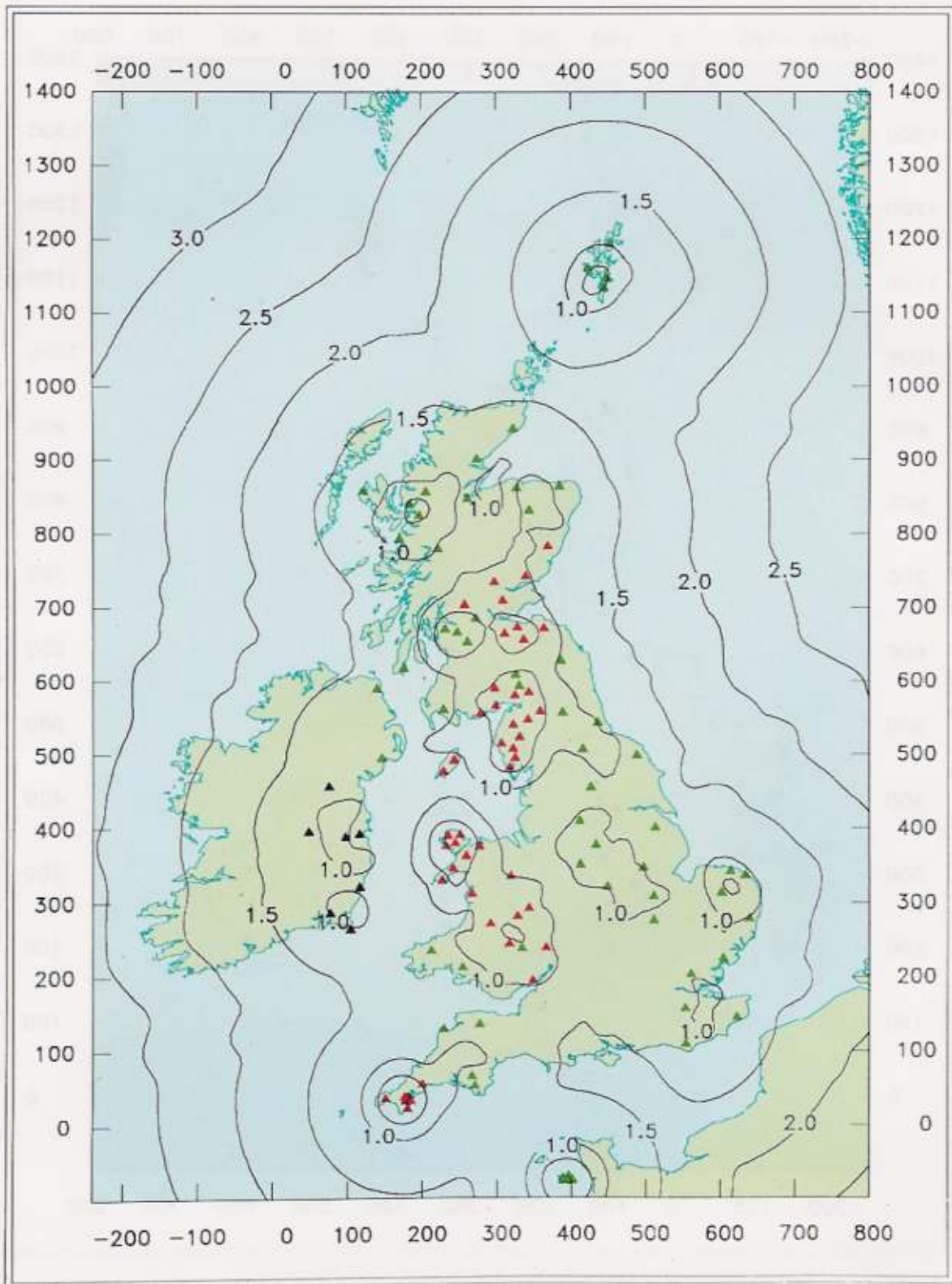


Figure 2. Earthquake detection capability in December 1992. Contour values are Richter local magnitude (ML) for 4 nanometres of noise (average) and S-wave amplitudes twice that at the third nearest station.

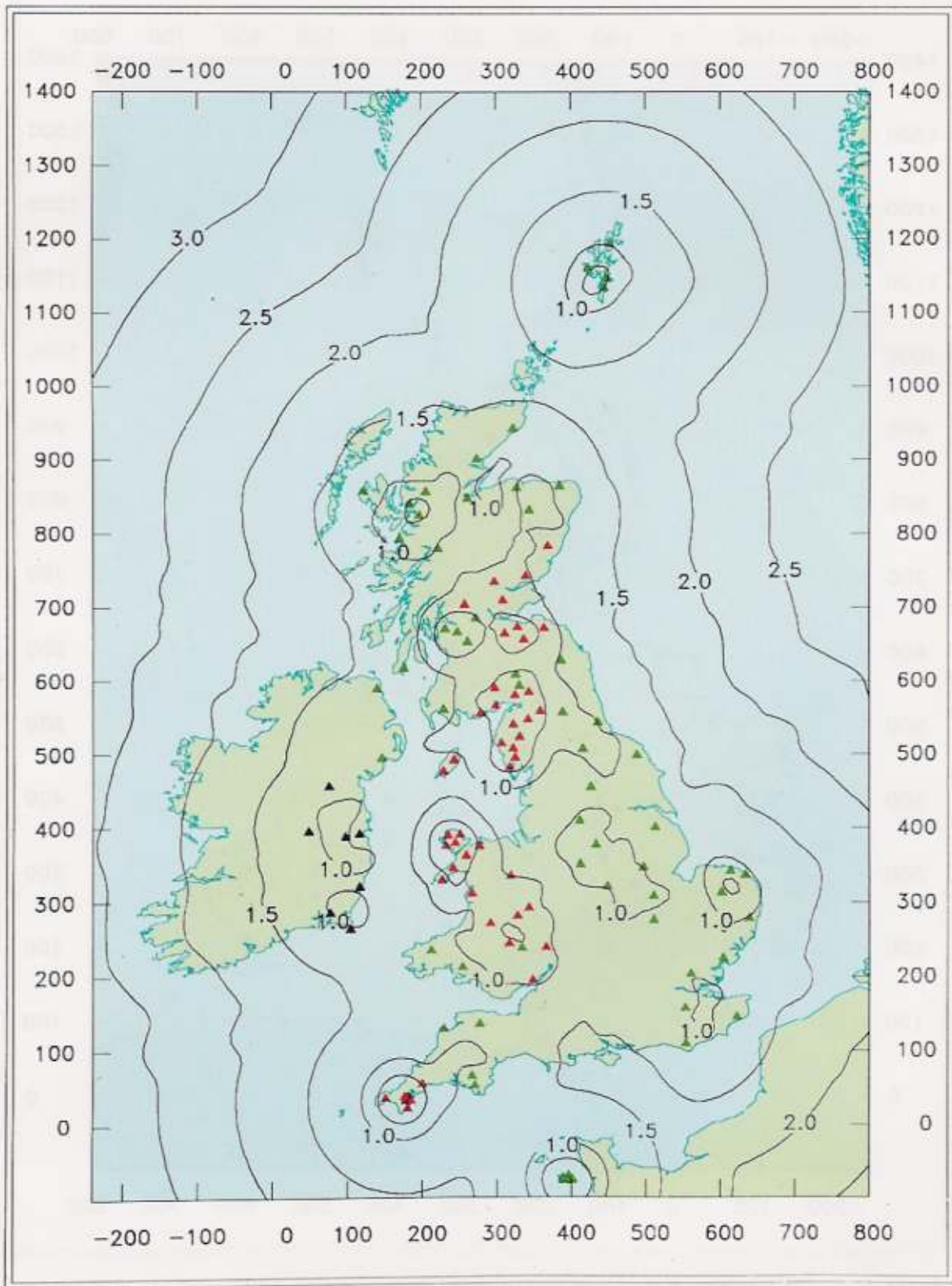


Figure 2. Earthquake detection capability in December 1992. Contour values are Richter local magnitude (ML) for 4 nanometres of noise (average) and S-wave amplitudes twice that at the third nearest station.

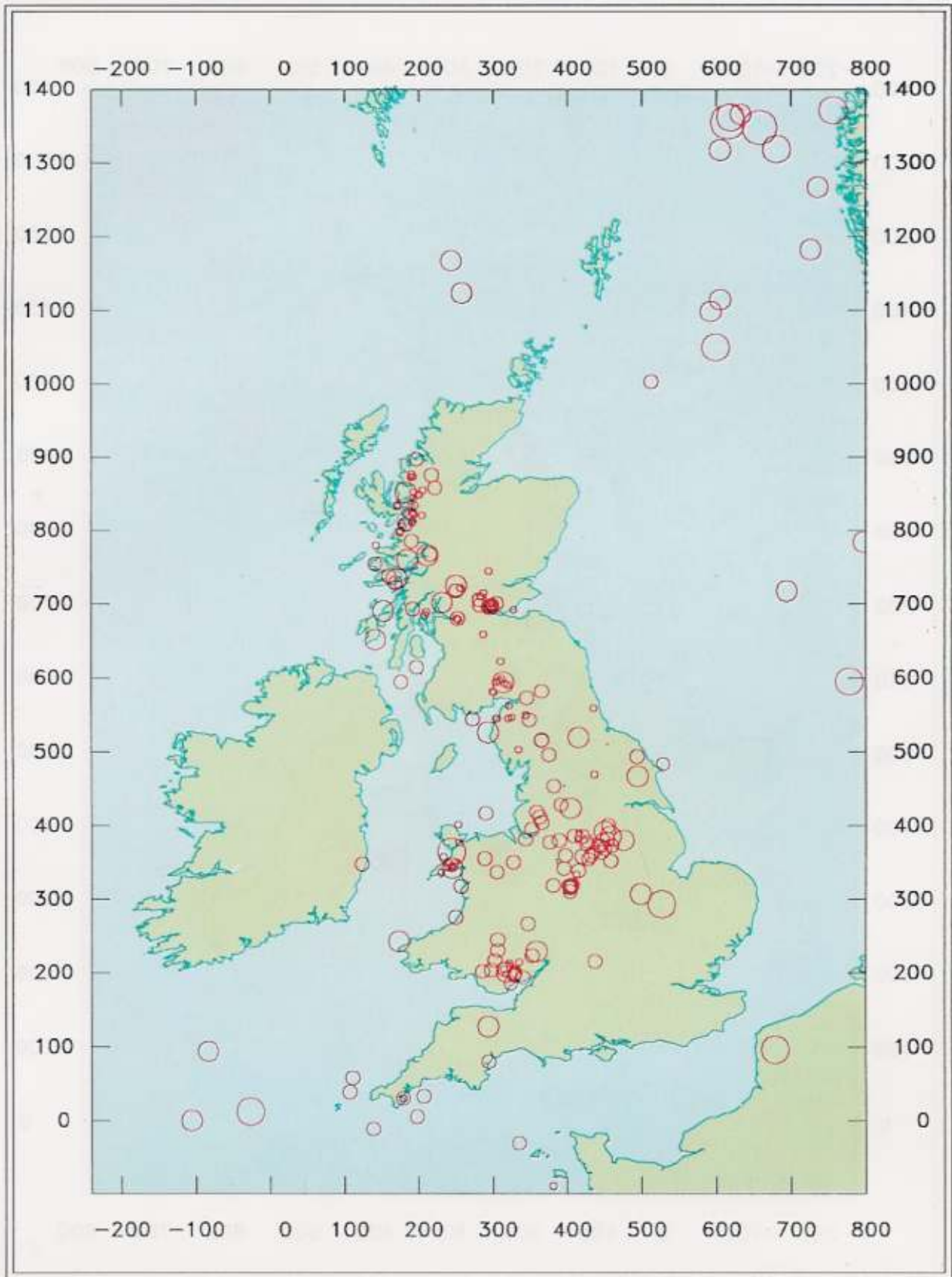


Figure 3. Epicentres of all UK earthquakes located in 1992.

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920502	150615.4	53.61	-3.71	286.5	414.0	6.1	1.1	IRISH SEA	24	41	98	0.18	0.6	1.7	B*C		
19920502	211947.0	52.73	-2.03	397.8	314.5	0.1	1.3	CANNOCK, STAFFORDSHIRE	9	35	116	0.27	1.2	1.7	B*C	C/F	
19920503	111957.3	50.11	-5.18	172.9	28.3	6.8	0.0	CONSTANTINE, CORNWALL	9	3	162	0.02	0.2	0.3	A*C		
19920503	141645.1	55.21	-3.54	301.9	592.2	4.9	0.2	JOHNSTONEBRIDGE, D & G	7	8	183	0.16	1.5	10.3	C*D	AFTERSHOCK	
19920503	171831.1	57.10	-5.63	180.1	806.7	9.3	1.2	KNOYDART, HIGHLAND	15	18	229	0.19	1.0	1.6	B*D		
19920508	130554.7	56.10	-3.20	325.4	690.0	0.1	0.8	KIRKCALDY, FIFE	8	25	141	0.38	1.3	1.9	C*C		
19920509	044216.8	54.77	-3.29	317.3	542.6	9.9	0.8	ASPATRIA, CUMBRIA	13	5	111	0.12	0.5	0.6	A*B		
19920509	110852.2	54.30	-0.61	490.7	490.0	5.6	1.7	DALBY FOREST, N YORKS	12	6	263	0.15	1.3	1.0	B*D		
19920511	042435.2	54.80	-2.91	341.2	545.9	12.6	-0.1	GAITSGILL, CUMBRIA	4	2	198	0.01			A*D		
19920513	085552.5	51.66	-3.10	323.7	196.5	16.0	1.5	NEWBRIDGE, GWENT	6	21	249	0.04	0.8	1.5	A*D		
19920515	152000.7	50.58	-3.57	288.6	77.5	2.8	1.6	TEIGNMOUTH, DEVON	15	30	191	0.29	1.7	2.5	B*D	NW OF TEIGNMOUTH	
19920515	171324.4	56.67	-5.55	182.6	758.3	1.0	2.0	KINGAIRLOCH, HIGHLAND	7104	339	0.13	15.4	12.2	D*D			
19920515	174206.3	53.30	-2.90	340.0	378.1	7.6	1.6	ELLESMERE PRT, CHESHIRE	24	50	111	0.22	0.6	1.9	B*C		
19920517	004403.8	54.93	-3.28	317.9	559.9	14.1	0.1	ANTHORN, CUMBRIA	14	19	107	0.05	0.2	0.6	A*B		
19920517	030453.9	57.23	-5.46	191.3	820.5	1.9	-0.2	GLEN SHIEL, HIGHLAND	4	3	183	0.13			A*D		
19920518	052837.6	57.08	6.39	907.9	829.6	10.0	3.4	CENTRAL NORTH SEA	32539	281	0.46	9.6	12.3	D*D			
19920519	021253.9	53.28	-0.92	471.7	376.2	0.5	2.0	GAMSTON, NOTTS	32	40	84	0.49	0.9	1.4	C*C	C/F	
19920519	190624.1	56.01	-5.12	205.5	683.6	4.1	0.8	DUNOON, STRATHCLYDE	7	29	325	0.05	1.3	1.2	B*D	NW OF DUNOON	
19920519	224431.6	53.22	-1.16	455.9	369.1	2.6	1.5	SHIREBROOK, NOTTS	10	25	211	0.26	1.7	2.6	B*D		
19920522	084019.0	61.09	4.26	737.11	261.8	19.3	2.9	NORTHERN NORTH SEA	18	27	126	0.19	0.8	1.0	B*B		
19920527	043701.9	56.12	-3.74	292.0	693.2	0.5	1.0	CLACKMANNAN, CENTRAL	14	20	81	0.12	0.4	0.7	A*C	C/F	
19920527	093810.0							SONIC-SUNDERLAND									SONIC-FELT SUNDERLAND....
19920527	231520.1	51.61	-2.93	335.7	190.9	18.2	1.1	NEWPORT, GWENT	6	9	256	0.23	4.9	3.4	C*D		
19920528	023433.4	55.97	-4.39	250.8	677.4	2.1	0.9	MILNGAVIE, STRATHCLYDE	5	18	204	0.00	0.0	0.0	A*D		
19920528	180000.0							SONIC-HARTLEPOOL									SONIC-FELT HARTLEPOOL...
19920529	020911.3	53.42	-2.77	348.7	391.5	13.0	1.3	PRESCOT, MERSEYSIDE	15	62	108	0.19	0.7	1.1	B*D		
19920602	201600.8	56.12	-3.73	292.2	693.3	0.3	1.2	CLACKMANNAN, CENTRAL	14	20	131	0.09	0.3	0.4	A*C	C/F	
19920603	101900.0							SONIC-MILTON KEYNES									SONIC-FELT MILTON KEYNES
19920605	114848.5	59.83	1.66	605.31	110.1	7.3	2.0	NORTHERN NORTH SEA	14162	169	0.34	1.9	3.2	C*D			
19920606	024628.0	52.72	-1.98	401.2	313.5	0.2	1.2	BURNTWOOD, STAFFS	9	34	118	0.60	4.1	8.0	D*C		
19920610	210900.0							SONIC-PONTELAND									SONIC-FELT PONTELAND....
19920611	050914.8	50.53	-8.91	-89.6	93.4	10.9	2.9	CELTIC SEA	22241	278	0.31	7.0	8.3	D*D	SOUTH OF IRELAND		
19920612	040521.0	56.13	-3.68	295.6	694.2	0.2	1.0	CLACKMANNAN, CENTRAL	7	17	123	0.02	0.1	0.2	A*C	C/F	
19920613	002014.4	54.09	-1.49	433.4	466.0	0.8	0.4	RIPON, N YORKSHIRE	4	17	148	0.03			A*D	C/F	
19920613	135920.2	50.11	-5.18	172.9	28.6	7.0	0.4	CONSTANTINE, CORNWALL	6	3	281	0.01	0.2	0.1	A*D		
19920615	074913.0	50.11	-5.18	172.9	28.3	7.3	0.4	CONSTANTINE, CORNWALL	12	3	161	0.02	0.2	0.1	A*C		
19920615	074942.0	50.11	-5.18	172.7	28.2	7.0	0.4	CONSTANTINE, CORNWALL	9	3	166	0.02	0.2	0.2	A*C		
19920615	144942.0	50.11	-5.18	172.9	28.1	7.0	0.8	CONSTANTINE, CORNWALL	13	3	163	0.02	0.2	0.2	A*C		
19920616	032621.1	55.68	-6.15	139.0	650.7	3.7	2.1	ISLAY, STRATHCLYDE	14	51	245	0.33	3.3	7.8	C*D		
19920616	074403.1	52.89	-3.47	300.9	333.8	5.0	1.4	LLANDRILLO, CLWYD	14	15	120	0.32	2.0	16.1	C*C		
19920617	043039.7	53.30	-1.24	450.3	378.2	6.9	1.0	WHITWELL, DERBYSHIRE	7	19	149	0.23	1.4	2.5	B*C	C/F	
19920619	001013.1	50.11	-5.18	172.7	28.4	7.1	-0.3	CONSTANTINE, CORNWALL	9	3	165	0.01	0.2	0.2	A*C		
19920619	001122.5	50.11	-5.18	172.9	28.3	7.1	-0.2	CONSTANTINE, CORNWALL	9	3	161	0.02	0.2	0.2	A*C		
19920619	002001.1	50.11	-5.18	172.7	28.4	6.9	-0.1	CONSTANTINE, CORNWALL	9	3	165	0.01	0.2	0.2	A*C		
19920620	021143.0	50.11	-5.18	172.6	28.4	6.9	-0.1	CONSTANTINE, CORNWALL	9	3	168	0.02	0.2	0.2	A*C		
19920620	021410.6	50.11	-5.18	172.7	28.3	7.0	0.0	CONSTANTINE, CORNWALL	10	3	165	0.02	0.2	0.2	A*C		
19920622	220932.5	54.50	-2.59	362.0	512.2	5.2	1.0	ORTON, CUMBRIA	20	25	73	0.17	0.4	15.5	C*C		
19920623	002153.3	50.11	-5.18	172.8	28.1	7.2	-0.3	CONSTANTINE, CORNWALL	10	3	164	0.02	0.2	0.1	A*C		
19920623	114714.8	50.11	-5.18	172.6	28.1	6.9	0.8	CONSTANTINE, CORNWALL	10	3	169	0.02	0.2	0.2	A*C		
19920623	135201.0	51.65	-3.25	313.5	195.4	15.9	0.9	NELSON, GWENT	6	31	247	0.25	6.7		D*D		

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920623	215318.9	52.91	-1.85	410.4	335.0	5.0	1.2	UTTOXETER, STAFFS		3	12	242	0.29				B*D
19920624	194743.0	56.12	-3.69	295.2	693.6	0.5	1.2	CLACKMANNAN, CENTRAL		11	18	125	0.10	0.4	0.9	A*C	C/F
19920624	213405.4	56.13	-3.76	290.9	693.9	1.8	1.0	CLACKMANNAN, CENTRAL		6	21	259	0.06	1.7	1.2	B*D	C/F
19920625	080744.2	50.38	-1.76	416.9	53.8	1.0	2.4	EXPL-BOURNEMOUTH	2+	9158	344	0.28	15.7	8.1	D*D	EXPL-FELT BOURNEMOUTH	
19920627	131128.7	50.16	-6.19	100.5	37.3	8.7	1.4	SCILLY ISLES, CORNWALL		12	44	348	0.03	1.2	0.4	B*D	NE OF SCILLY ISLES
19920627	230650.8	54.77	-3.55	300.4	542.5	3.8	-0.2	ALLONBY BAY, CUMBRIA		4	20	290	0.01				A*D
19920628	023959.6	54.77	-3.53	301.8	542.7	8.1	-0.4	ALLONBY BAY, CUMBRIA		4	18	287	0.04				A*D
19920628	122331.4	62.00	4.85	758.4	1365.6	15.0	3.2	NORWEGIAN COAST		22	27	260	0.68	4.4	2.5	D*D	
19920629	030511.8	49.84	-8.02	-33.0	11.2	1.7	3.2	SCILLY ISLES, CORNWALL		9178	355	0.07	8.1	1.2	D*D	SW OF SCILLY ISLES	
19920701	123859.2	50.11	-5.18	172.7	28.2	7.0	0.8	CONSTANTINE, CORNWALL		11	3	167	0.02	0.3	0.2	A*C	
19920702	061331.9	57.25	-5.49	189.7	823.4	2.5	-0.1	LOCH DUICH, HIGHLAND		4	6	188	0.61				D*D
19920702	142036.4	50.11	-5.18	172.7	28.2	7.2	1.0	CONSTANTINE, CORNWALL		9	3	167	0.01	0.2	0.2	A*C	
19920702	221617.2	53.21	-1.38	441.5	368.6	8.0	1.2	GRASSMOOR, DERBYSHIRE		4	38	300	0.08				A*D
19920703	033238.3	50.11	-5.18	172.4	28.3	6.5	-0.1	CONSTANTINE, CORNWALL		10	3	171	0.03	0.3	0.4	A*C	
19920703	221337.6	52.87	-1.88	407.7	330.1	5.0	0.7	KINGSTONE, STAFFS		3	42	279	0.25				B*D
19920703	221908.3	51.71	-3.32	309.1	202.1	0.8	0.7	BEDLINOG, MID GLAMORGAN		6	36	238	0.14	0.5	0.9	A*D	C/F
19920705	025120.9	51.79	-3.21	316.6	210.7	9.2	0.7	EBBW VALE, GWENT		5	27	232	0.06	2.5	12.3	C*D	
19920706	153024.1	56.60	-6.25	139.0	753.4	8.2	1.4	MULL, STRATHCLYDE		10	85	252	0.19	4.6	11.0	C*D	
19920707	023102.6	53.28	-1.74	417.1	376.2	4.3	0.8	BUXTON, DERBYSHIRE		4	15	269	0.35				C*D
19920708	085958.8	51.93	-2.67	354.0	226.5	18.4	2.1	ROSS-ON-WYE, HER & WOR		37	14	132	0.20	0.5	0.7	B*B	
19920709	213240.0	54.33	-2.43	371.7	492.8	7.7	1.1	GARSDALE, CUMBRIA		13	14	116	0.15	0.6	3.2	B*B	
19920710	155908.9	55.10	-3.63	296.2	579.2	7.8	0.4	DUMFRIES, D & G		8	9	169	0.30	2.1	5.9	C*C	
19920715	035911.3	52.71	-2.01	399.6	312.4	2.0	1.6	HUNTINGTON, STAFFS		12	36	161	0.28	1.3	1.7	B*C	
19920716	041940.5	57.21	-5.28	202.2	818.2	0.7	0.1	GLEN SHIEL, HIGHLAND		4	9	327	0.10				A*D
19920717	011950.3	56.13	-3.74	292.1	693.9	0.1	1.7	CLACKMANNAN, CENTRAL		26	20	82	0.18	0.4	0.7	B*C	C/F
19920719	012635.1	50.11	-5.18	172.6	28.2	7.2	0.3	CONSTANTINE, CORNWALL		10	3	169	0.01	0.2	0.2	A*C	
19920719	022611.4	50.11	-5.18	172.7	28.2	7.1	0.0	CONSTANTINE, CORNWALL		9	3	167	0.02	0.3	0.3	A*C	
19920719	033721.6	50.11	-5.18	172.6	28.2	7.1	0.3	CONSTANTINE, CORNWALL		9	3	168	0.02	0.2	0.3	A*C	
19920719	054915.7	50.11	-5.18	172.5	28.2	7.5	0.0	CONSTANTINE, CORNWALL		9	3	169	0.02	0.3	0.3	A*C	
19920719	074031.0	50.11	-5.18	172.7	28.2	7.2	0.4	CONSTANTINE, CORNWALL		10	3	166	0.02	0.3	0.3	A*C	
19920719	181318.6	50.11	-5.18	172.8	28.3	7.2	0.9	CONSTANTINE, CORNWALL		12	3	163	0.02	0.2	0.2	A*C	
19920725	013152.2	50.15	-4.79	200.4	31.1	11.6	1.2	DODMAN POINT, CORNWALL		12	23	327	0.02	0.3	0.2	A*D	SOUTH OF DODMAN POINT
19920726	081652.7	57.49	-5.66	180.6	849.8	15.1	2.8	STRATHCARRON, HIGHLAND	3+	19	16	227	0.24	1.7	1.0	B*D	FELT STRATHCARRON...
19920727	025809.0	50.11	-5.18	172.7	28.2	7.1	0.4	CONSTANTINE, CORNWALL		9	3	166	0.01	0.2	0.2	A*C	
19920727	030310.9	50.11	-5.18	172.7	28.4	7.0	0.1	CONSTANTINE, CORNWALL		15	3	166	0.03	0.2	0.2	A*C	
19920728	042616.4	57.47	-5.37	197.8	847.4	2.4	0.2	STRATHCARRON, HIGHLAND		4	5	186	0.13				A*D
19920728	054750.6	51.80	-3.01	330.5	211.6	17.1	0.4	ABERGAVENNY, GWENT		5	22	188	0.03	0.8	1.2	A*D	
19920728	055936.5	50.11	-5.18	172.7	28.1	7.3	0.0	CONSTANTINE, CORNWALL		9	3	168	0.02	0.2	0.3	A*C	
19920729	180514.1	53.13	-4.39	239.9	362.0	11.0	3.5	CAERNARVON BAY, GWYNEDD	5	22	15	72	0.06	0.2	0.4	A*B	FELT CAERNARVON, BANGOR...
19920730	103823.9	50.11	-5.18	172.9	28.2	7.3	0.4	CONSTANTINE, CORNWALL		10	3	161	0.02	0.2	0.2	A*C	
19920730	181144.6	57.22	-5.45	191.5	819.5	3.0	0.3	LOCH DUICH, HIGHLAND		5	2	198	0.06	1.0	1.3	A*D	
19920731	005425.4	53.38	-1.83	411.5	386.5	1.0	0.6	GLOSSOP, DERBYSHIRE	2+	3	24	302	0.03				A*D
19920731	065343.7	57.01	-5.74	173.2	797.8	3.7	0.2	MALLAIG, HIGHLAND		4	12	194	0.08				A*D
19920801	041350.6	54.75	-2.84	345.7	540.2	10.2	1.8	CALTHWAITE, CUMBRIA		38	8	42	0.12	0.2	0.7	A*A	
19920804	181723.4	55.98	-4.41	249.7	678.7	2.1	1.4	MILNEGAVIE, STRATHCLYDE		20	19	136	0.18	0.5	0.7	B*C	
19920804	193852.0	56.17	-3.68	295.5	698.9	23.1	0.4	DOLLAR, CENTRAL		7	14	139	0.17	2.5	4.0	C*C	
19920805	061759.0	55.98	-4.43	248.5	678.6	0.3	0.4	MILNEGAVIE, STRATHCLYDE		6	19	213	0.28	2.9	2.9	C*D	
19920806	073242.0	59.88	6.03	849.0	1137.4	6.4	3.7	NORWEGIAN COAST		19	33	128	0.43	2.2	2.9	C*C	
19920806	182734.6	57.07	-5.68	176.6	803.8	6.9	0.5	LOCH NEVIS, HIGHLAND		7	19	157	0.12	0.9	1.2	A*C	
19920806	185010.7	59.95	-4.55	257.6	1121.3	15.0	2.1	NW OF ORKNEY ISLANDS		5185	343	0.16					D*D

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920807	092920.4	48.93	-1.63	427.0	-107.2	5.2	1.0	OFF GRANVILLE, FRANCE		8	42	352	0.08				D*D 10KM NORTH OF GRANVILLE
19920808	195406.6	57.33	-5.83	169.5	832.5	6.0	0.5	SCALPAY, HIGHLAND		4	11	262	0.07				A*D
19920808	203000.0							MADNESS CONCERT, LONDON	2+								FELT NE LONDON
19920808	225215.7	57.31	-5.83	169.3	830.7	5.0	0.8	SCALPAY, HIGHLAND		5	11	237	0.09	3.9	3.3		C*D
19920809	200000.0							MADNESS CONCERT, LONDON	2+								FELT NE LONDON
19920811	042747.3	54.19	-0.08	525.5	479.4	0.7	1.6	BRIDLINGTON, HUMBERSIDE		8	84	276	0.08	3.5	2.2		C*D
19920811	101856.8	56.12	-3.74	291.6	693.5	0.3	1.5	CLACKMANNAN, CENTRAL		17	20	83	0.11	0.3	0.5		A*C C/F
19920814	095007.9	57.14	-5.47	190.0	810.4	2.3	0.4	GLEN SHIEL, HIGHLAND		7	9	202	0.17	0.7	0.7		B*D
19920814	200232.5	57.24	-5.65	179.8	822.1	5.1	0.1	GLEN SHIEL, HIGHLAND		4	11	257	0.01				A*D
19920815	005248.5	53.51	-2.58	361.8	401.1	13.1	1.5	GOLBORNE, GT MANCHESTER		28	38	160	0.22	0.7	1.2		B*C
19920817	005335.2	51.68	-3.26	312.9	198.6	1.6	2.2	BARGOED, MID GLAMORGAN	5+	32	24	49	0.19	0.4	1.0		B*C FELT BARGOED, NELSON..C/F
19920819	223404.1	52.98	-4.43	237.1	345.6	13.6	-0.1	LLANAELHAERN, GWYNEDD		9	0	122	0.23	1.9	3.4		B*B
19920820	092220.2	56.38	-5.79	166.2	726.9	10.1	1.8	MULL, STRATHCLYDE		14	60	225	0.22	2.8	2.2		C*D
19920821	164642.2	51.88	-2.75	348.1	220.4	13.4	1.7	MONMOUTH, GWENT		21	21	142	0.16	0.5	0.5		B*C 7KM NORTH OF MONMOUTH
19920825	112445.9	54.51	-2.58	362.4	513.2	2.4	1.7	ORTON, CUMBRIA		35	25	48	0.17	0.3	0.6		B*C 5KM NORTH OF ORTON
19920827	155200.3	56.03	-6.02	149.7	689.1	11.1	2.7	JURA, STRATHCLYDE		36	81	247	0.25	1.0	0.9		B*D OFFSHORE LOCATION
19920828	014852.8	56.12	-3.74	292.1	693.7	0.7	1.4	CLACKMANNAN, CENTRAL		23	20	81	0.12	0.3	0.4		A*C C/F
19920828	183751.3	60.07	6.16	853.2	1159.4	1.0	2.9	NORWEGIAN COAST		4404	353	0.08					A*D
19920828	185746.5	52.71	-4.18	252.6	315.3	12.2	1.0	BARMOUTH, GWYNEDD		8	33	293	0.16	2.4	1.9		B*D OFFSHORE LOCATION
19920829	042644.8	52.97	-4.38	240.1	344.0	22.0	1.6	LLEYN PENINSULA		16	3	84	0.08	0.4	0.8		A*A LLEYN AFTERSHOCK
19920831	182553.6	55.06	3.89	776.2	590.2	19.1	3.7	CENTRAL NORTH SEA		29296	213	0.38		2.0	3.2		C*D
19920831	204919.5	51.71	-3.30	310.0	202.3	0.4	1.1	BEDLINOG, MID GLAMORGAN		6	35	170	0.07	0.4	1.5		A*C C/F
19920901	025051.7	53.63	-2.68	355.3	415.4	11.2	1.7	CHORLEY, LANCASHIRE		14	25	223	0.23	2.0	1.4		B*D
19920902	192701.2	54.05	-0.61	491.2	463.0	10.1	2.1	SLEDMERE, HUMBERSIDE		19	31	172	0.40	1.6	3.5		C*C
19920907	225935.2	56.17	-3.58	301.8	698.4	4.6	1.3	DOLLAR, CENTRAL		13	10	98	0.13	0.5	1.4		A*B
19920908	203057.3	56.12	-3.73	292.4	693.8	0.1	1.1	CLACKMANNAN, CENTRAL		12	20	85	0.06	0.2	0.3		A*C C/F
19920909	001605.1	52.71	-2.03	398.3	312.1	0.7	1.5	CANNOCK, STAFFORDSHIRE		16	37	118	0.46	1.5	4.0		C*C
19920909	161341.9	57.67	-5.56	187.6	870.5	7.7	0.3	LOCH MAREE, HIGHLAND		4	25	313	0.01				A*D
19920910	102344.6	57.10	-5.72	174.6	807.6	3.4	0.6	KNOYDART, HIGHLAND		6	22	172	0.20	0.4	9.5		C*C
19920911	002431.5	51.68	-3.73	280.7	199.4	14.7	1.0	NEATH, WEST GLAMORGAN		5	54	301	0.06	1.1	2.6		B*D 7KM NW OF NEATH
19920911	135407.3	57.68	-5.51	190.6	870.8	6.3	0.4	LOCH MAREE, HIGHLAND		4	24	315	0.02				A*D
19920913	013444.2	57.49	-5.48	191.4	849.7	6.9	0.2	STRATHCARRON, HIGHLAND		6	11	233	0.04	0.7	0.5		A*D
19920913	063841.1	52.62	-0.61	494.2	303.1	3.5	2.2	KETTON, LEICESTERSHIRE		10	15	154	0.18	2.3	5.0		C*C
19920916	095536.2	49.60	-2.98	329.4	-33.1	7.2	1.3	GUERNSEY, CHANNEL ISLES		7	70	355	0.11	14.0			D*D 30KM NW OF GUERNSEY
19920917	001634.3	56.73	4.49	796.4	779.0	5.0	2.9	CENTRAL NORTH SEA		11441	336	0.25					D*D
19920918	001852.9	52.72	-1.98	401.0	313.9	0.5	1.3	CANNOCK, STAFFORDSHIRE		16	34	117	0.39	1.2	1.7		C*C C/F
19920919	182047.7	56.36	-5.72	170.2	725.2	3.5	0.9	MULL, STRATHCLYDE		4	84	355	0.07				A*D
19920920	081131.4	54.75	-4.03	269.5	541.8	12.9	1.1	KIRKCUDBRIGHT BAY, D&G		23	13	98	0.17	0.5	1.5		B*B
19920920	095809.4	56.82	-6.25	140.5	778.2	4.8	0.9	MUCK, HIGHLAND		8	28	325	0.19	6.0	5.4		D*D
19920921	223040.6	56.25	-3.90	282.1	707.6	0.0	0.5	SHERIFFMUIR, CENTRAL		4	24	247	0.16				B*D
19920922	172551.7	50.11	-5.18	173.0	28.2	7.0	0.7	CONSTANTINE, CORNWALL		14	3	161	0.02	0.2	0.1		A*C
19920923	104757.9	51.01	-3.60	287.9	125.2	10.4	2.7	TIVERTON, DEVON		40	15	85	0.35	0.8	1.4		C*B 10KM NW OF TIVERTON
19920925	052609.4	53.39	-1.30	446.4	388.2	0.2	2.0	AUGHTON, S YORKSHIRE		8	21	293	0.27	4.9	3.2		C*D C/F
19920926	003542.4	60.34	-4.83	243.6	1164.7	10.0	2.3	WEST OF SHETLAND		7203	281	0.11		6.8	6.8		D*D
19920928	160429.1	56.13	-3.69	294.6	694.3	0.1	1.7	CLACKMANNAN, CENTRAL	2+	24	18	84	0.24	0.5	0.9		B*C FELT FORESTMILL, C/F
19920929	013211.9	54.82	-2.91	341.2	547.4	2.7	0.2	GAITSGILL, CUMBRIA		5	2	255	0.06	2.5	0.6		B*D
19920929	031638.8	56.30	-3.87	284.5	713.2	0.3	0.5	SHERIFFMUIR, CENTRAL		6	23	249	0.13	4.9	2.8		C*D
19920930	165246.0	55.37	-5.25	194.1	613.1	4.3	1.2	ARRAN, STRATHCLYDE		9	22	128	0.45	4.3	11.9		C*C 8KM SOUTH OF ARRAN
19920930	195004.6	55.18	-5.57	172.9	593.3	7.3	1.4	NORTH CHANNEL		11	18	129	0.23	1.1	1.9		B*C
19920930	221642.3	56.74	-5.07	212.5	765.6	9.2	1.2	KINLOCHLEVEN, HIGHLAND		10	10	127	0.10	1.7	2.8		B*B

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920930	230624.2	52.33	-4.27	245.3	273.1	2.7	1.5	CARDIGAN BAY, WALES	13	42	133	0.34	1.0	3.2	C*C	15KM SW OF ABERYSTWYTH	
19921001	050732.3	55.03	-2.89	342.7	570.6	9.4	1.3	LONGTOWN, CUMBRIA	32	12	75	0.12	0.3	0.7	A*B		
19921002	051542.2	53.72	-2.19	387.5	424.8	2.1	1.6	BACUP, LANCASHIRE	28	28	170	0.18	0.5	0.9	B*C		
19921007	085720.4	51.82	-3.49	297.2	214.3	9.1	1.4	M TYDFIL, MID GLAMORGAN	8	33	127	0.09	0.7	6.5	C*C	11KM NW MERTHYR TYDFIL	
19921007	092531.9	51.82	-3.49	297.5	214.6	9.0	1.2	M TYDFIL, MID GLAMORGAN	7	32	127	0.03	0.1	1.4	A*C	11KM NW MERTHYR TYDFIL	
19921008	040405.7	57.52	-5.29	203.0	852.6	9.8	-0.2	GLEN CARRON, HIGHLAND	4	2	324	0.05			A*D		
19921009	000017.2	56.25	-3.93	280.7	708.6	4.8	0.4	BRACO, CENTRAL	7	26	198	0.19	2.1	3.4	B*D		
19921009	223847.0	53.24	-1.67	421.7	371.3	5.4	1.1	HASSOP, DERBYSHIRE	7	10	136	0.35	14.0		D*C		
19921010	031633.1	56.13	-3.70	294.3	694.3	0.3	1.1	CLACKMANNAN, CENTRAL	10	18	165	0.19	0.7	1.0	B*C	C/F	
19921015	155056.6	56.90	-5.48	188.1	784.0	7.1	1.8	GLENFINNAN, HIGHLAND	22	21	117	0.24	1.1	1.9	B*C		
19921017	021938.7	61.97	2.13	616.7	1350.5	8.3	4.1	NORTHERN NORTH SEA	41173	245	0.48	5.1	5.5	D*D			
19921019	101958.7	50.11	-5.18	172.9	28.3	7.1	0.1	CONSTANTINE, CORNWALL	7	3	162	0.01	0.2	0.2	A*C		
19921019	120302.2	55.18	-3.31	316.3	588.3	5.6	-0.1	BORELAND, D & G	6	17	166	0.11	0.1	1.1	A*C		
19921019	142758.3	53.33	-1.75	416.5	381.8	2.2	1.5	CASTLETON, DERBYSHIRE	8	17	154	0.36	2.0	2.6	C*C		
19921020	202014.8	56.13	-3.68	295.3	693.9	0.9	0.3	CLACKMANNAN, CENTRAL	2+	5	17	160	0.08	1.1	1.5	B*D	FELT FORESTMILL, C/F
19921021	140418.8	57.71	-5.55	188.4	874.3	1.0	0.3	LOCH MAREE, HIGHLAND	5	28	319	0.05	3.4		C*D		
19921022	015515.7	53.27	-1.65	423.6	374.6	3.4	1.3	CALVER, DERBYSHIRE	6	8	131	0.21	1.7	4.5	B*B		
19921025	094206.7	56.73	-5.12	209.1	764.3	6.4	2.2	LOCH LEVEN, HIGHLAND	2+	45	14	129	0.32	0.6	1.1	C*C	FELT ONICH, FORT WILLIAM..
19921025	213351.3	56.14	-3.94	279.5	696.1	2.4	1.5	STIRLING, CENTRAL	3+	29	20	58	0.09	0.2	0.3	A*C	FELT BRIDGE OF ALLAN
19921025	221625.7	65.22	0.76	529.0	1708.0	20.0	3.9	NORWEGIAN SEA		11445	299	0.26			D*D		
19921030	051044.9	56.17	-4.76	228.9	700.4	6.4	2.2	ARROCHAR, STRATHCLYDE		21	26	143	0.15	0.4	1.0	B*C	
19921030	173415.0	49.67	-9.11	-112.5	-0.6	4.3	2.5	SCILLY ISLES, CORNWALL		12259	354	0.60			19.7	D*D	220KM SW OF SCILLY ISLES
19921104	042002.0	62.03	2.21	620.2	1356.9	13.7	3.2	NORTHERN NORTH SEA		21174	247	0.36	4.7	5.4	C*D		
19921104	093029.0							SONIC-ORKNEY ISLANDS									SONIC-FELT ORKNEY...
19921104	124026.2	56.11	-3.69	294.9	692.0	3.6	0.9	CLACKMANNAN, CENTRAL	6	19	159	0.06	0.5	16.4	C*C	C/F	
19921104	191827.3	50.11	-5.18	172.9	28.2	7.3	-0.3	CONSTANTINE, CORNWALL	7	3	162	0.01	0.2	0.3	A*C		
19921105	221724.7	53.03	-1.18	454.6	348.2	5.0	1.2	HUCKNALL, NOTTS	5	33	192	0.11	4.4	8.0	C*D		
19921106	214630.2	50.11	-5.18	172.3	28.3	6.7	0.7	CONSTANTINE, CORNWALL	10	3	172	0.03	0.4	0.3	A*C		
19921108	173952.3	54.60	-3.70	289.9	523.9	8.9	2.0	WHITEHAVEN, CUMBRIA	47	17	59	0.22	0.4	0.7	B*B	OFFSHORE LOCATION	
19921108	191234.6	61.88	2.94	659.4	1342.8	31.4	4.7	NORTHERN NORTH SEA	2+	25116	197	0.32	1.9		C*D	FELT MORE, NORWAY	
19921108	194207.9	50.33	-6.15	104.6	56.7	1.0	1.3	SCILLY ISLES, CORNWALL		8	68	354	0.05			D*D	NE OF SCILLY ISLES
19921110	005252.4	50.11	-5.17	173.2	28.2	7.0	0.1	CONSTANTINE, CORNWALL	8	3	155	0.01	0.2	0.2	A*C		
19921111	063159.2	53.29	-1.34	444.1	376.8	0.5	1.5	CLOWNE, DERBYSHIRE	7	45	232	0.44	3.5	3.6	C*D	COLLAPSE TYPE	
19921112	090020.6	53.26	-2.41	372.4	373.8	3.1	1.8	NORTHWICH, CHESHIRE	12	47	159	0.28	1.4	3.4	B*C		
19921112	180922.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921113	092432.0	50.11	-5.18	172.7	28.6	7.3	0.8	CONSTANTINE, CORNWALL	7	3	284	0.02	0.3	0.2	A*D		
19921115	015420.7	52.27	-2.84	342.4	263.8	0.4	1.0	LEOMINSTER, HER & WOR	8	28	148	0.36	3.1	9.5	C*C		
19921117	115110.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921117	121416.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921117	234624.3	49.08	-2.35	374.6	-90.8	8.9	0.3	JERSEY, CHANNEL ISLES	9	17	335	0.08	2.7	8.0	C*D	25KM SW OF JERSEY	
19921119	130028.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921120	073722.6	53.46	-1.22	451.6	396.5	0.1	1.8	MALTBY, SOUTH YORKSHIRE	6	43	210	0.24	2.4	2.1	B*D	C/F	
19921121	041509.5	56.13	-3.72	293.1	693.9	0.5	1.0	CLACKMANNAN, CENTRAL	23	19	81	0.26	0.5	0.9	B*C	C/F	
19921123	053015.2	56.43	-5.76	167.9	732.8	8.2	2.1	MULL, STRATHCLYDE	23	54	167	0.32	1.1	2.4	C*D		
19921123	102303.0							SONIC-NEWARK-ON-TRENT									SONIC-FELT NEWARK AREA
19921124	093616.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921127	201849.4	53.68	-1.99	400.4	420.2	9.4	2.0	RIPPONDEN, W YORKSHIRE	12	17	140	0.25	3.2	6.2	C*C		
19921128	042708.8	49.72	-5.71	132.8	-13.2	4.1	1.7	LAND'S END, CORNWALL	13	49	324	0.06	0.8	1.0	A*D	25KM SW OF LAND'S END	
19921130	214103.6	53.10	-2.10	393.1	356.1	1.8	1.3	LEEK, STAFFORDSHIRE	7	20	124	0.23	1.7	2.5	B*C		
19921201	112338.0							SONIC-PENZANCE									SONIC-FELT PENZANCE...

TABLE 1: CATALOGUE OF EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...	
1992	1202	163500.9	50.11	-5.18	172.6	28.3	6.9	0.8	CONSTANTINE, CORNWALL	9	3	168	0.02	0.2	0.2	A*C		
1992	1207	134549.7	53.25	-4.24	250.4	374.7	11.4	0.6	LLANGFNI, GWYNEDD	12	11	101	0.05	0.3	0.5	A*B		
1992	1209	010633.1	57.71	-5.10	215.4	873.3	7.7	1.1	LOCH FANNICH, HIGHLAND	4	26	348	0.02			A*D		
1992	1209	214152.5	55.47	-3.47	307.0	620.5	10.4	0.4	TWEEDSMUIR, BORDERS	10	24	296	0.07	0.7	2.4	B*D		
1992	1214	133235.1	57.12	-5.49	188.4	808.3	0.5	0.3	GLEN SHIEL, HIGHLAND	5	27	207	0.02	0.4	0.4	A*D		
1992	1216	210927.8	50.11	-5.18	173.0	28.2	7.1	0.3	CONSTANTINE, CORNWALL	12	3	160	0.02	0.2	0.2	A*C		
1992	1216	211520.9	50.11	-5.18	173.0	28.2	7.1	0.1	CONSTANTINE, CORNWALL	12	3	159	0.02	0.2	0.2	A*C		
1992	1217	050230.9	50.11	-5.18	172.8	28.1	7.0	0.1	CONSTANTINE, CORNWALL	11	3	164	0.02	0.3	0.3	A*C		
1992	1218	160014.1	51.94	-3.44	301.3	228.2	14.9	1.1	BRECON, POWYS	7	19	166	0.11	1.9	1.4	B*C		
1992	1221	130200.2	55.77	-4.61	235.9	655.9	0.8	1.6	EXPL-BEITH, STRATHCLYDE	2+	22	10	208	0.08	0.3	0.3	A*D	EXPL-FELT BEITH AREA
1992	1223	183914.9	52.74	-1.97	402.0	315.7	1.8	1.8	RUGELEY, STAFFORDSHIRE	10	45	115	0.12	0.5	0.8	A*C		
1992	1225	215446.9	54.78	-3.21	321.9	544.1	9.0	0.1	MEALSGATE, CUMBRIA	5	6	159	0.02	0.3	0.6	A*D		
1992	1226	052309.1	59.24	1.49	598.9	1044.7	9.9	3.9	NORTHERN NORTH SEA	51160	117	0.43	0.9	2.0	C*D			
1992	1226	055025.8	53.46	-4.28	249.0	398.6	15.7	0.2	AMLWCH, GWYNEDD	12	8	152	0.04	0.3	0.4	A*C	OFFSHORE LOCATION	
1992	1226	170559.8	51.81	-1.52	432.7	212.5	9.4	1.5	WITNEY, OXFORDSHIRE	8	75	255	0.04	0.4	0.5	A*D		
1992	1227	185540.3	56.99	-5.74	172.8	795.4	3.7	0.5	LOCH NEVIS, HIGHLAND	4	10	205	0.29			B*D		
1992	1230	154924.9	56.38	-4.46	248.1	723.3	2.2	2.2	BALQUHIDDER, CENTRAL	32	22	109	0.29	0.7	1.0	B*C		
1992	1230	171337.2	56.35	-4.37	253.8	720.0	4.5	0.9	BALQUHIDDER, CENTRAL	8	18	229	0.25	4.3	3.5	C*D		

TABLE 2
CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1992

KEY TO CATALOGUE 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 earthquake.
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 MSK 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 MSK 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	M Glamorgan	: Mid Glamorgan
Expl	: Explosion	Notts	: Nottinghamshire
D & G	: Dumfries and Galloway	Derbs	: Derbyshire
Her & Wor	: Hereford and Worcester	N Yorks(hire)	: North Yorkshire
Gt(r) Manchester	: Greater Manchester	S Yorks(hire)	: South Yorkshire
Cambs	: Cambridgeshire	W Yorks(hire)	: West Yorkshire
S Glamorgan	: South Glamorgan	Staffs	: Staffordshire
M Tydfil	: Merthyr Tydfil		

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: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...	
19921025	221625.7	65.22	0.76	529.01708.0	20.0	3.9		NORWEGIAN SEA		11445	299	0.26				D*D		
19920410	152637.6	62.06	2.48	634.01360.8	15.0	2.6		NORTHERN NORTH SEA		14131	236	0.30	4.3	4.5		C*D		
19921104	042002.0	62.03	2.21	620.21356.9	13.7	3.2		NORTHERN NORTH SEA		21174	247	0.36	4.7	5.4		C*D		
19920628	122331.4	62.00	4.85	758.41365.6	15.0	3.2		NORWEIGIAN COAST		22	27	260	0.68	4.4	2.5		D*D	
19921017	021938.7	61.97	2.13	616.71350.5	8.3	4.1		NORTHERN NORTH SEA		41173	245	0.48	5.1	5.5		D*D		
19921108	191234.6	61.88	2.94	659.41342.8	31.4	4.7		NORTHERN NORTH SEA	2+	25116	197	0.32	1.9			C*D	FELT MORE, NORWAY	
19920127	221605.6	61.64	1.88	605.71312.5	0.6	2.6		NORTHERN NORTH SEA		12167	238	0.93	5.5	5.8		D*D		
19920110	215902.3	61.60	3.32	682.11313.3	12.9	3.4		NORTHERN NORTH SEA		20	98	231	0.40	2.9	2.3		C*D	
19920522	084019.0	61.09	4.26	737.11261.8	19.3	2.9		NORTHERN NORTH SEA		18	27	126	0.19	0.8	1.0		B*B	
19920105	054028.2	60.35	3.94	727.31177.2	3.5	2.6		NORTHERN NORTH SEA		7	91	209	0.37	10.4	3.9		D*D	
19920926	003542.4	60.34	-4.83	243.61164.7	10.0	2.3		WEST OF SHETLAND		7203	281	0.11	6.8	6.8		D*D		
19920828	183751.3	60.07	6.16	853.21159.4	1.0	2.9		NORWEGIAN COAST		4404	353	0.08				A*D		
19920806	185010.7	59.95	-4.55	257.61121.3	15.0	2.1		NW OF ORKNEY ISLANDS		5185	343	0.16				D*D		
19920806	073242.0	59.88	6.03	849.01137.4	6.4	3.7		NORWEGIAN COAST		19	33	128	0.43	2.2	2.9		C*C	
19920605	114848.5	59.83	1.66	605.31110.1	7.3	2.0		NORTHERN NORTH SEA		14162	169	0.34	1.9	3.2		C*D		
19920102	213948.7	59.69	1.42	592.51094.0	15.0	2.4		NORTHERN NORTH SEA		6153	217	0.07	4.8	5.0		C*D		
19921226	052309.1	59.24	1.49	598.91044.7	9.9	3.9		NORTHERN NORTH SEA		51160	117	0.43	0.9	2.0		C*D		
19920410	180013.6	58.86	-0.06	511.7	998.5	15.0	1.8	NORTHERN NORTH SEA		4145	357	0.07				A*D		
19920312	231937.2	57.90	-5.45	195.5	894.8	8.6	1.6	GRUINARD BAY, HIGHLAND		10	45	239	0.23	2.2	4.9		B*D	
19921021	140418.8	57.71	-5.55	188.4	874.3	1.0	0.3	LOCH MAREE, HIGHLAND		5	28	319	0.05	3.4			C*D	
19921209	010633.1	57.71	-5.10	215.4	873.3	7.7	1.1	LOCH FANNICH, HIGHLAND		4	26	348	0.02				A*D	
19920911	135407.3	57.68	-5.51	190.6	870.8	6.3	0.4	LOCH MAREE, HIGHLAND		4	24	315	0.02				A*D	
19920909	161341.9	57.67	-5.56	187.6	870.5	7.7	0.3	LOCH MAREE, HIGHLAND		4	25	313	0.01				A*D	
19920325	153831.8	57.56	-5.01	220.1	855.9	1.0	1.2	ACHNASHEEN, HIGHLAND		5	19	323	0.09	1.8	1.6		B*D	
19921008	040405.7	57.52	-5.29	203.0	852.6	9.8	-0.2	GLEN CARRON, HIGHLAND		4	2	324	0.05				A*D	
19920726	081652.7	57.49	-5.66	180.6	849.8	15.1	2.8	STRATHCARRON, HIGHLAND	3+	19	16	227	0.24	1.7	1.0		B*D	FELT STRATHCARRON...
19920913	013444.2	57.49	-5.48	191.4	849.7	6.9	0.2	STRATHCARRON, HIGHLAND		6	11	233	0.04	0.7	0.5		A*D	
19920728	042616.4	57.47	-5.37	197.8	847.4	2.4	0.2	STRATHCARRON, HIGHLAND		4	5	186	0.13				A*D	
19920218	220744.1	57.46	-5.35	198.9	846.1	1.5	0.2	BALNACRA, HIGHLAND		5	5	164	0.23	4.2	5.4		C*D	
19920430	181858.2	57.42	-5.48	191.3	842.2	2.5	-0.1	TULLICH, HIGHLAND		6	14	183	0.23	2.5			C*D	
19920329	034356.6	57.33	-5.44	192.8	832.0	2.6	0.7	SALLACHY, HIGHLAND		5	13	150	0.09	1.1			C*D	
19920808	195406.6	57.33	-5.83	169.5	832.5	6.0	0.5	SCALPAY, HIGHLAND		4	11	262	0.07				A*D	
19920225	220319.9	57.31	-5.52	188.2	829.6	3.0	0.8	AUCHTERTYRE, HIGHLAND		6	9	140	0.10	0.8			C*C	
19920808	225215.7	57.31	-5.83	169.3	830.7	5.0	0.8	SCALPAY, HIGHLAND		5	11	237	0.09	3.9	3.3		C*D	
19920702	061331.9	57.25	-5.49	189.7	823.4	2.5	-0.1	LOCH DUICH, HIGHLAND		4	6	188	0.61				D*D	
19920814	200232.5	57.24	-5.65	179.8	822.1	5.1	0.1	GLEN SHIEL, HIGHLAND		4	11	257	0.01				A*D	
19920517	030453.9	57.23	-5.46	191.3	820.5	1.9	-0.2	GLEN SHIEL, HIGHLAND		4	3	183	0.13				A*D	
19920730	181144.6	57.22	-5.45	191.5	819.5	3.0	0.3	LOCH DUICH, HIGHLAND		5	2	198	0.06	1.0	1.3		A*D	
19920716	041940.5	57.21	-5.28	202.2	818.2	0.7	0.1	GLEN SHIEL, HIGHLAND		4	9	327	0.10				A*D	
19920814	095007.9	57.14	-5.47	190.0	810.4	2.3	0.4	GLEN SHIEL, HIGHLAND		7	9	202	0.17	0.7	0.7		B*D	
19921214	133235.1	57.12	-5.49	188.4	808.3	0.5	0.3	GLEN SHIEL, HIGHLAND		5	27	207	0.02	0.4	0.4		A*D	
19920503	171831.1	57.10	-5.63	180.1	806.7	9.3	1.2	KNOYDART, HIGHLAND		15	18	229	0.19	1.0	1.6		B*D	
19920110	102344.6	57.10	-5.72	174.6	807.6	3.4	0.6	KNOYDART, HIGHLAND		6	22	172	0.20	0.4	9.5		C*C	
19920518	052837.6	57.08	6.39	907.9	829.6	10.0	3.4	CENTRAL NORTH SEA		32539	281	0.46	9.6	12.3		D*D		
19920806	182734.6	57.07	-5.68	176.6	803.8	6.9	0.5	LOCH NEVIS, HIGHLAND		7	19	157	0.12	0.9	1.2		A*C	
19920731	065343.7	57.01	-5.74	173.2	797.8	3.7	0.2	MALLAIG, HIGHLAND		4	12	194	0.08				A*D	
19921227	185540.3	56.99	-5.74	172.8	795.4	3.7	0.5	LOCH NEVIS, HIGHLAND		4	10	205	0.29				B*D	
19921015	155056.6	56.90	-5.48	188.1	784.0	7.1	1.8	GLENFINNAN, HIGHLAND		22	21	117	0.24	1.1	1.9		B*C	
19920920	095809.4	56.82	-6.25	140.5	778.2	4.8	0.9	MUCK, HIGHLAND		8	28	325	0.19	6.0	5.4		D*D	
19920930	221642.3	56.74	-5.07	212.5	765.6	9.2	1.2	KINLOCHLEVEN, HIGHLAND		10	10	127	0.10	1.7	2.8		B*B	

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...		
19920917	001634.3	56.73	4.49	796.4	779.0	5.0	2.9	CENTRAL NORTH SEA		11441	336	0.25					D*D		
19921025	094206.7	56.73	-5.12	209.1	764.3	6.4	2.2	LOCH LEVEN,HIGHLAND	2+	45	14	129	0.32	0.6	1.1		C*C	FELT ONICH,FORT WILLIAM..	
19920515	171324.4	56.67	-5.55	182.6	758.3	1.0	2.0	KINGAIRLOCH,HIGHLAND		7104	339	0.13		15.4	12.2		D*D		
19920706	153024.1	56.60	-6.25	139.0	753.4	8.2	1.4	MULL,STRATHCLYDE		10	85	252	0.19		4.6	11.0		C*D	
19920329	024727.3	56.56	-3.76	292.0	742.3	7.1	0.2	SCOTSTON,TAYSIDE		6	10	295	0.02		0.3	0.2		A*D	
19920107	052135.5	56.46	-5.94	157.4	736.6	1.0	1.5	MULL,STRATHCLYDE		6101	342	0.17						D*D	
19921123	053015.2	56.43	-5.76	167.9	732.8	8.2	2.1	MULL,STRATHCLYDE		23	54	167	0.32		1.1	2.4		C*D	
19920820	092220.2	56.38	-5.79	166.2	726.9	10.1	1.8	MULL,STRATHCLYDE		14	60	225	0.22		2.8	2.2		C*D	
19921230	154924.9	56.38	-4.46	248.1	723.3	2.2	2.2	BALQUHIDDER,CENTRAL		32	22	109	0.29		0.7	1.0		B*C	
19920919	182047.7	56.36	-5.72	170.2	725.2	3.5	0.9	MULL,STRATHCLYDE		4	84	355	0.07					A*D	
19921230	171337.2	56.35	-4.37	253.8	720.0	4.5	0.9	BALQUHIDDER,CENTRAL		8	18	229	0.25		4.3	3.5		C*D	
19920129	083610.0	56.31	-4.46	247.8	715.9	1.0	1.7	BALQUHIDDER,CENTRAL	2+	36	16	129	0.38		0.9	1.1		C*C	FELT INVERLOCHLARIG
19920929	031638.8	56.30	-3.87	284.5	713.2	0.3	0.5	SHERIFFMUIR,CENTRAL		6	23	249	0.13		4.9	2.8		C*D	
19920921	223040.6	56.25	-3.90	282.1	707.6	0.0	0.5	SHERIFFMUIR,CENTRAL		4	24	247	0.16					B*D	
19921009	000017.2	56.25	-3.93	280.7	708.6	4.8	0.4	BRACO,CENTRAL		7	26	198	0.19		2.1	3.4		B*D	
19920420	063609.4	56.22	2.72	692.7	713.0	5.0	2.2	CENTRAL NORTH SEA		17322	317	0.41						D*D	
19920126	163033.4	56.21	-3.94	279.4	703.9	5.6	1.3	DUNBLANE,CENTRAL		12	25	123	0.21		1.7	4.0		B*C	
19920804	193852.0	56.17	-3.68	295.5	698.9	23.1	0.4	DOLLAR,CENTRAL		7	14	139	0.17		2.5	4.0		C*C	
19920907	225935.2	56.17	-3.58	301.8	698.4	4.6	1.3	DOLLAR,CENTRAL		13	10	98	0.13		0.5	1.4		A*B	
19921030	051044.9	56.17	-4.76	228.9	700.4	6.4	2.2	ARROCHAR,STRATHCLYDE		21	26	143	0.15		0.4	1.0		B*C	
19920413	220414.7	56.14	-3.68	295.8	695.7	1.0	1.3	CLACKMANNAN,CENTRAL	2+	12	16	87	0.49		1.7	3.0		C*C	FELT CLACKMANNAN,C/F
19921025	213351.3	56.14	-3.94	279.5	696.1	2.4	1.5	STIRLING,CENTRAL	3+	29	20	58	0.09		0.2	0.3		A*C	FELT BRIDGE OF ALLAN
19920107	031741.5	56.13	-3.75	291.2	694.1	1.0	1.1	CLACKMANNAN,CENTRAL		4	20	285	0.01					A*D	C/F
19920303	223204.7	56.13	-3.74	292.0	693.8	1.7	1.0	CLACKMANNAN,CENTRAL		13	20	85	0.10		0.4	0.7		A*C	C/F
19920316	225301.6	56.13	-3.69	294.8	694.4	0.3	1.1	CLACKMANNAN,CENTRAL	3+	12	17	124	0.17		0.6	1.0		B*C	FELT CLACKMANNAN,C/F
19920319	072347.3	56.13	-3.71	293.9	694.4	2.0	1.3	CLACKMANNAN,CENTRAL		12	18	83	0.18		0.7	1.1		B*C	C/F
19920415	155960.0	56.13	-3.67	296.1	694.0	1.0	1.3	CLACKMANNAN,CENTRAL		10	17	200	0.23		1.8	1.7		B*D	C/F
19920501	020511.6	56.13	-3.73	292.6	694.7	2.0	1.5	CLACKMANNAN,CENTRAL		25	19	82	0.34		0.8	1.2		C*C	C/F
19920612	040521.0	56.13	-3.68	295.6	694.2	0.2	1.0	CLACKMANNAN,CENTRAL		7	17	123	0.02		0.1	0.2		A*C	C/F
19920624	213405.4	56.13	-3.76	290.9	693.9	1.8	1.0	CLACKMANNAN,CENTRAL		6	21	259	0.06		1.7	1.2		B*D	C/F
19920717	011950.3	56.13	-3.74	292.1	693.9	0.1	1.7	CLACKMANNAN,CENTRAL		26	20	82	0.18		0.4	0.7		B*C	C/F
19920928	160429.1	56.13	-3.69	294.6	694.3	0.1	1.7	CLACKMANNAN,CENTRAL	2+	24	18	84	0.24		0.5	0.9		B*C	FELT FORESTMILL,C/F
19921010	031633.1	56.13	-3.70	294.3	694.3	0.3	1.1	CLACKMANNAN,CENTRAL		10	18	165	0.19		0.7	1.0		B*C	C/F
19921020	202014.8	56.13	-3.68	295.3	693.9	0.9	0.3	CLACKMANNAN,CENTRAL	2+	5	17	160	0.08		1.1	1.5		B*D	FELT FORESTMILL,C/F
19921121	041509.5	56.13	-3.72	293.1	693.9	0.5	1.0	CLACKMANNAN,CENTRAL		23	19	81	0.26		0.5	0.9		B*C	C/F
19920330	211302.2	56.12	-3.74	291.7	693.5	1.4	1.4	CLACKMANNAN,CENTRAL		14	20	131	0.13		0.4	0.6		A*C	C/F
19920404	033812.0	56.12	-3.74	292.0	693.7	1.0	1.1	CLACKMANNAN,CENTRAL		14	20	86	0.10		0.3	0.5		A*C	C/F
19920409	193636.7	56.12	-3.69	294.7	693.5	1.4	1.6	CLACKMANNAN,CENTRAL	3+	20	18	83	0.14		0.4	0.6		A*C	FELT CLACKMANNAN,C/F
19920427	103023.2	56.12	-3.71	293.8	693.6	0.2	1.5	CLACKMANNAN,CENTRAL	2+	12	19	127	0.16		0.6	1.0		B*C	FELT CLACKMANNAN,C/F
19920527	043701.9	56.12	-3.74	292.0	693.2	0.5	1.0	CLACKMANNAN,CENTRAL		14	20	81	0.12		0.4	0.7		A*C	C/F
19920602	201600.8	56.12	-3.73	292.2	693.3	0.3	1.2	CLACKMANNAN,CENTRAL		14	20	131	0.09		0.3	0.4		A*C	C/F
19920624	194743.0	56.12	-3.69	295.2	693.6	0.5	1.2	CLACKMANNAN,CENTRAL		11	18	125	0.10		0.4	0.9		A*C	C/F
19920811	101856.8	56.12	-3.74	291.6	693.5	0.3	1.5	CLACKMANNAN,CENTRAL		17	20	83	0.11		0.3	0.5		A*C	C/F
19920828	014852.8	56.12	-3.74	292.1	693.7	0.7	1.4	CLACKMANNAN,CENTRAL		23	20	81	0.12		0.3	0.4		A*C	C/F
19920908	203057.3	56.12	-3.73	292.4	693.8	0.1	1.1	CLACKMANNAN,CENTRAL		12	20	85	0.06		0.2	0.3		A*C	C/F
19921104	124026.2	56.11	-3.69	294.9	692.0	3.6	0.9	CLACKMANNAN,CENTRAL		6	19	159	0.06		0.5	16.4		C*C	C/F
19920508	130554.7	56.10	-3.20	325.4	690.0	0.1	0.8	KIRKCALDY,FIFE		8	25	141	0.38		1.3	1.9		C*C	
19920204	221850.9	56.07	-5.38	189.4	691.8	1.0	1.7	LOCH FYNE,STRATHCLYDE		16	47	305	0.27		7.2	5.3		D*D	
19920103	122152.8	56.05	-5.10	207.0	688.0	5.0	0.8	GLENDARUEL,STRATHCLYDE		7	32	296	0.07		1.6	1.6		B*D	
19920827	155200.3	56.03	-6.02	149.7	689.1	11.1	2.7	JURA,STRATHCLYDE		36	81	247	0.25		1.0	0.9		B*D	OFFSHORE LOCATION

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920519	190624.1	56.01	-5.12	205.5	683.6	4.1	0.8	DUNOON, STRATHCLYDE		7	29	325	0.05	1.3	1.2	B*D	NW OF DUNOON
19920804	181723.4	55.98	-4.41	249.7	678.7	2.1	1.4	MILNEGAVIE, STRATHCLYDE		20	19	136	0.18	0.5	0.7	B*C	
19920805	061759.0	55.98	-4.43	248.5	678.6	0.3	0.4	MILNEGAVIE, STRATHCLYDE		6	19	213	0.28	2.9	2.9	C*D	
19920528	023433.4	55.97	-4.39	250.8	677.4	2.1	0.9	MILNEGAVIE, STRATHCLYDE		5	18	204	0.00	0.0	0.0	A*D	
19920303	222141.3	55.80	-3.85	284.2	657.4	1.0	0.8	ALLANTON, STRATHCLYDE		4	28	335	0.14			A*D	
19920616	032621.1	55.68	-6.15	139.0	650.7	3.7	2.1	ISLAY, STRATHCLYDE		14	51	245	0.33	3.3	7.8	C*D	
19921209	214152.5	55.47	-3.47	307.0	620.5	10.4	0.4	TWEEDSMUIR, BORDERS		10	24	296	0.07	0.7	2.4	B*D	
19920930	165246.0	55.37	-5.25	194.1	613.1	4.3	1.2	ARRAN, STRATHCLYDE		9	22	128	0.45	4.3	11.9	C*C	8KM SOUTH OF ARRAN
19920219	100230.8	55.25	-3.45	307.8	596.2	1.7-0.1		JOHNSTONEBRIDGE, D & G		6	16	188	0.19	1.2	0.9	B*D	
19920405	100119.9	55.23	-3.49	305.3	593.6	8.9	0.1	JOHNSTONEBRIDGE, D & G		6	12	180	0.02	0.2	0.6	A*C	AFTERSHOCK
19920227	025024.9	55.21	-3.41	310.5	591.7	5.9	2.7	JOHNSTONEBRIDGE, D & G	4+	43	16	54	0.26	0.4	3.1	B*C	FELT NEWTON, SANDYFORD...
19920503	141645.1	55.21	-3.54	301.9	592.2	4.9	0.2	JOHNSTONEBRIDGE, D & G		7	8	183	0.16	1.5	10.3	C*D	AFTERSHOCK
19920115	194613.7	55.20	-3.37	312.7	590.2	6.8	0.0	JOHNSTONEBRIDGE, D & G		4	16	302	0.02			A*D	
19920930	195004.6	55.18	-5.57	172.9	593.3	7.3	1.4	NORTH CHANNEL		11	18	129	0.23	1.1	1.9	B*C	
19921019	120302.2	55.18	-3.31	316.3	588.3	5.6-0.1		BORELAND, D & G		6	17	166	0.11	0.1	1.1	A*C	
19920222	211619.7	55.11	-2.59	362.4	579.4	11.6	1.3	BEWCASTLE, CUMBRIA		13	22	273	0.24	1.9	4.4	B*D	
19920710	155908.9	55.10	-3.63	296.2	579.2	7.8	0.4	DUMFRIES, D & G		8	9	169	0.30	2.1	5.9	C*C	
19920325	163643.3	55.09	-3.61	297.0	578.1	6.5	0.9	DUMFRIES, D & G		14	10	162	0.20	0.8	3.3	B*C	
19920831	182553.6	55.06	3.89	776.2	590.2	19.1	3.7	CENTRAL NORTH SEA		29296	213	0.38		2.0	3.2	C*D	
19921001	050732.3	55.03	-2.89	342.7	570.6	9.4	1.3	LONGTOWN, CUMBRIA		32	12	75	0.12	0.3	0.7	A*B	
19920517	004403.8	54.93	-3.28	317.9	559.9	14.1	0.1	ANTHORN, CUMBRIA		14	19	107	0.05	0.2	0.6	A*B	
19920329	042736.0	54.89	-1.49	432.5	555.7	0.1	0.2	WASHINGTON, TYNE & WEAR		4	18	212	0.55			D*D	
19920929	013211.9	54.82	-2.91	341.2	547.4	2.7	0.2	GAITSGILL, CUMBRIA		5	2	255	0.06	2.5	0.6	B*D	
19920511	042435.2	54.80	-2.91	341.2	545.9	12.6-0.1		GAITSGILL, CUMBRIA		4	2	198	0.01			A*D	
19921225	215446.9	54.78	-3.21	321.9	544.1	9.0	0.1	MEALSGATE, CUMBRIA		5	6	159	0.02	0.3	0.6	A*D	
19920509	044216.8	54.77	-3.29	317.3	542.6	9.9	0.8	ASPATRIA, CUMBRIA		13	5	111	0.12	0.5	0.6	A*B	
19920627	230650.8	54.77	-3.55	300.4	542.5	3.8-0.2		ALLONBY BAY, CUMBRIA		4	20	290	0.01			A*D	
19920628	023959.6	54.77	-3.53	301.8	542.7	8.1-0.4		ALLONBY BAY, CUMBRIA		4	18	287	0.04			A*D	
19920801	041350.6	54.75	-2.84	345.7	540.2	10.2	1.8	CALTHWAITE, CUMBRIA		38	8	42	0.12	0.2	0.7	A*A	
19920920	081131.4	54.75	-4.03	269.5	541.8	12.9	1.1	KIRKCUDBRIGHT BAY, D&G		23	13	98	0.17	0.5	1.5	B*B	
19921108	173952.3	54.60	-3.70	289.9	523.9	8.9	2.0	WHITEHAVEN, CUMBRIA		47	17	59	0.22	0.4	0.7	B*B	OFFSHORE LOCATION
19920302	163427.5	54.54	-1.82	411.6	516.2	15.4	2.3	BARNARD CASTLE, DURHAM		40	14	62	0.29	0.6	1.0	B*A	
19920825	112445.9	54.51	-2.58	362.4	513.2	2.4	1.7	ORTON, CUMBRIA		35	25	48	0.17	0.3	0.6	B*C	5KM NORTH OF ORTON
19920622	220932.5	54.50	-2.59	362.0	512.2	5.2	1.0	ORTON, CUMBRIA		20	25	73	0.17	0.4	15.5	C*C	
19920212	025652.9	54.39	-3.06	331.0	500.1	7.8	0.6	CONISTON, CUMBRIA		12	13	113	0.32	1.2	4.9	C*B	
19920709	213240.0	54.33	-2.43	371.7	492.8	7.7	1.1	GARSDALE, CUMBRIA		13	14	116	0.15	0.6	3.2	B*B	
19920509	110852.2	54.30	-0.61	490.7	490.0	5.6	1.7	DALBY FOREST, N YORKS		12	6	263	0.15	1.3	1.0	B*D	
19920811	042747.3	54.19	-0.08	525.5	479.4	0.7	1.6	BRIDLINGTON, HUMBERSIDE		8	84	276	0.08	3.5	2.2	C*D	
19920613	002014.4	54.09	-1.49	433.4	466.0	0.8	0.4	RIPON, N YORKSHIRE		4	17	148	0.03			A*D	C/F
19920902	192701.2	54.05	-0.61	491.2	463.0	10.1	2.1	SLEDMERE, HUMBERSIDE		19	31	172	0.40	1.6	3.5	C*C	
19921002	051542.2	53.72	-2.19	387.5	424.8	2.1	1.6	BACUP, LANCASHIRE		28	28	170	0.18	0.5	0.9	B*C	
19921127	201849.4	53.68	-1.99	400.4	420.2	9.4	2.0	RIPPONDEN, W YORKSHIRE		12	17	140	0.25	3.2	6.2	C*C	
19920901	025051.7	53.63	-2.68	355.3	415.4	11.2	1.7	CHORLEY, LANCASHIRE		14	25	223	0.23	2.0	1.4	B*D	
19920502	150615.4	53.61	-3.71	286.5	414.0	6.1	1.1	IRISH SEA		24	41	98	0.18	0.6	1.7	B*C	
19920211	004502.8	53.57	-2.62	359.2	408.8	10.4	1.6	STANDISH, GT MANCHESTER		29	45	95	0.24	0.6	1.0	B*C	
19920815	005248.5	53.51	-2.58	361.8	401.1	13.1	1.5	GOLBORNE, GT MANCHESTER		28	38	160	0.22	0.7	1.2	B*C	
19921120	073722.6	53.46	-1.22	451.6	396.5	0.1	1.8	MALTBY, SOUTH YORKSHIRE		6	43	210	0.24	2.4	2.1	B*D	C/F
19921226	055025.8	53.46	-4.28	249.0	398.6	15.7	0.2	AMLWCH, GWYNEDD		12	8	152	0.04	0.3	0.4	A*C	OFFSHORE LOCATION
19920529	020911.3	53.42	-2.77	348.7	391.5	13.0	1.3	PRESCOT, MERSEYSIDE		15	62	108	0.19	0.7	1.1	B*D	
19920925	052609.4	53.39	-1.30	446.4	388.2	0.2	2.0	AUGHTON, S YORKSHIRE		8	21	293	0.27	4.9	3.2	C*D	C/F

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920731	005425.4	53.38	-1.83	411.5	386.5	1.0	0.6	GLOSSOP, DERBYSHIRE	2+	3	24	302	0.03				A*D FELT GLOSSOP
19920206	141159.5	53.34	-1.92	405.0	382.3	11.6	1.6	BUXTON, DERBYSHIRE		5	28	298	0.03	0.8	2.8		B*D
19920228	005027.4	53.33	-1.18	454.7	381.4	11.6	2.0	WORKSOP, NOTTS		14	25	98	0.15	0.6	4.2		B*C
19921019	142758.3	53.33	-1.75	416.5	381.8	2.2	1.5	CASTLETON, DERBYSHIRE		8	17	154	0.36	2.0	2.6		C*C
19920122	134534.2	53.30	-1.84	410.4	378.6	0.5	0.3	BUXTON, DERBYSHIRE		6	22	179	0.14	1.0	1.4		B*C COLLAPSE TYPE
19920515	174206.3	53.30	-2.90	340.0	378.1	7.6	1.6	ELLESMERE PRT, CHESHIRE		24	50	111	0.22	0.6	1.9		B*C
19920617	043039.7	53.30	-1.24	450.3	378.2	6.9	1.0	WHITWELL, DERBYSHIRE		7	19	149	0.23	1.4	2.5		B*C C/F
19920221	115633.2	53.29	-2.22	385.0	376.7	5.9	1.6	ALDERLEY EDGE, CHESHIRE		6	38	248	0.22	2.9	8.2		C*D
19921111	063159.2	53.29	-1.34	444.1	376.8	0.5	1.5	CLOWNE, DERBYSHIRE		7	45	232	0.44	3.5	3.6		C*D COLLAPSE TYPE
19920519	021253.9	53.28	-0.92	471.7	376.2	0.5	2.0	GAMSTON, NOTTS		32	40	84	0.49	0.9	1.4		C*C C/F
19920707	023102.6	53.28	-1.74	417.1	376.2	4.3	0.8	BUXTON, DERBYSHIRE		4	15	269	0.35				C*D COLLAPSE TYPE
19921022	015515.7	53.27	-1.65	423.6	374.6	3.4	1.3	CALVER, DERBYSHIRE		6	8	131	0.21	1.7	4.5		B*B
19921112	090020.6	53.26	-2.41	372.4	373.8	3.1	1.8	NORTHWICH, CHESHIRE		12	47	159	0.28	1.4	3.4		B*C
19921207	134549.7	53.25	-4.24	250.4	374.7	11.4	0.6	LLANGFNI, GWYNEDD		12	11	101	0.05	0.3	0.5		A*B
19921009	223847.0	53.24	-1.67	421.7	371.3	5.4	1.1	HASSOP, DERBYSHIRE		7	10	136	0.35	14.0			D*C
19920407	135915.9	53.22	-1.43	437.8	370.0	19.1	1.5	CHESTERFIELD, DERBS		7	7	180	0.25	2.6	1.8		C*C
19920519	224431.6	53.22	-1.16	455.9	369.1	2.6	1.5	SHIREBROOK, NOTTS		10	25	211	0.26	1.7	2.6		B*D
19920702	221617.2	53.21	-1.38	441.5	368.6	8.0	1.2	GRASSMOOR, DERBYSHIRE		4	38	300	0.08				A*D
19920327	205402.4	53.18	-1.31	446.3	365.2	9.4	1.6	MANSFIELD, NOTTS		9	17	115	0.24	1.2	11.0		C*B
19920130	143302.3	53.14	-1.53	431.5	360.2	0.5	1.2	MATLOCK, DERBYSHIRE		4	13	161	0.33				C*D COLLAPSE TYPE
19920410	103104.7	53.13	-1.37	442.3	359.7	0.2	1.6	PILSLEY, DERBYSHIRE		7	17	258	0.28	4.7	3.2		C*D C/F
19920729	180514.1	53.13	-4.39	239.9	362.0	11.0	3.5	CAERNARVON BAY, GWYNEDD	5	22	15	72	0.06	0.2	0.4		A*B FELT CAERNARVON, BANGOR...
19920427	145947.3	53.10	-1.58	427.9	355.9	0.5	1.3	CROMFORD, DERBYSHIRE		6	18	143	0.43	1.9	2.9		C*C C/F
19921130	214103.6	53.10	-2.10	393.1	356.1	1.8	1.3	LEEK, STAFFORDSHIRE		7	20	124	0.23	1.7	2.5		B*C
19920201	131701.5	53.08	-1.77	415.2	354.3	0.5	1.7	ALSOOP MOOR, DERBYSHIRE		9	9	142	0.39	2.8	3.0		C*C
19920301	182445.5	53.06	-4.55	229.1	355.0	15.0	0.0	CAERNARVON BAY, GWYNEDD		12	13	164	0.04	0.3	0.4		A*C
19920409	115602.4	53.05	-1.64	424.2	350.9	0.1	1.2	ASHBOURNE, DERBYSHIRE		6	14	234	0.24	2.6	1.8		C*D COLLAPSE TYPE
19920426	051615.2	53.05	-3.72	284.6	352.3	8.1	1.0	PENTREFOELAS, CLWYD		8	26	147	0.27	2.8	62.4		C*C
19921105	221724.7	53.03	-1.18	454.6	348.2	5.0	1.2	HUCKNALL, NOTTS		5	33	192	0.11	4.4	8.0		C*D
19920209	054906.7	53.01	-3.14	323.3	347.0	12.5	1.4	WREXHAM, CLWYD		18	14	131	0.22	0.6	0.8		B*B
19920819	223404.1	52.98	-4.43	237.1	345.6	13.6	-0.1	LLANAELHAEARN, GWYNEDD		9	0	122	0.23	1.9	3.4		B*B
19920829	042644.8	52.97	-4.38	240.1	344.0	22.0	1.6	LLEYN PENINSULA		16	3	84	0.08	0.4	0.8		A*A LLEYN AFTERSHOCK
19920425	201058.1	52.96	-4.36	241.2	343.3	22.7	0.2	LLEYN PENINSULA		9	5	198	0.16	1.4	1.5		B*D LLEYN AFTERSHOCK
19920305	024528.9	52.94	-2.13	391.1	338.7	1.0	1.2	STONE, STAFFORDSHIRE		12	21	110	0.21	1.0	1.4		B*C
19920418	142829.2	52.94	-4.39	239.8	341.4	24.0	0.3	LLEYN PENINSULA		6	5	292	0.02	0.3	0.4		A*D LLEYN AFTERSHOCK
19920408	154939.0	52.93	-4.36	241.3	339.4	15.7	2.0	PWLLHELI, GWYNEDD		17	7	95	0.08	0.3	0.8		A*B NE OF PWLLHELI
19920408	160047.5	52.93	-4.37	240.7	340.1	15.6	0.4	PWLLHELI, GWYNEDD		13	6	196	0.04	0.4	0.3		A*D NE OF PWLLHELI
19920428	213405.5	52.93	-6.18	119.3	345.7	9.1	1.4	WICKLOW, EIRE	2+	20	27	90	0.27	0.8	2.5		B*C FELT WICKLOW
19920623	215318.9	52.91	-1.85	410.4	335.0	5.0	1.2	UTTOXETER, STAFFS		3	12	242	0.29				B*D
19920616	074403.1	52.89	-3.47	300.9	333.8	5.0	1.4	LLANDRILLO, CLWYD		14	15	120	0.32	2.0	16.1		C*C
19920303	035222.0	52.88	-4.59	225.8	334.2	12.0	0.5	TUDWEILILOG, GWYNEDD		8	6	152	0.06	0.6	0.6		A*C
19920703	221337.6	52.87	-1.88	407.7	330.1	5.0	0.7	KINGSTONE, STAFFS		3	42	279	0.25				B*D
19921223	183914.9	52.74	-1.97	402.0	315.7	1.8	1.8	RUGELEY, STAFFORDSHIRE		10	45	115	0.12	0.5	0.8		A*C
19920211	094658.4	52.73	-2.35	376.7	315.0	11.2	1.8	WELLINGTON, SHROPSHIRE		29	44	101	0.27	0.8	1.3		B*C
19920502	211947.0	52.73	-2.03	397.8	314.5	0.1	1.3	CANNOCK, STAFFORDSHIRE		9	35	116	0.27	1.2	1.7		B*C C/F
19920606	024628.0	52.72	-1.98	401.2	313.5	0.2	1.2	BURNWOOD, STAFFS		9	34	118	0.60	4.1	8.0		D*C
19920918	001852.9	52.72	-1.98	401.0	313.9	0.5	1.3	CANNOCK, STAFFORDSHIRE		16	34	117	0.39	1.2	1.7		C*C C/F
19920715	035911.3	52.71	-2.01	399.6	312.4	2.0	1.6	HUNTINGTON, STAFFS		12	36	161	0.28	1.3	1.7		B*C
19920828	185746.5	52.71	-4.18	252.6	315.3	12.2	1.0	BARMOUTH, GWYNEDD		8	33	293	0.16	2.4	1.9		B*D OFFSHORE LOCATION
19920909	001605.1	52.71	-2.03	398.3	312.1	0.7	1.5	CANNOCK, STAFFORDSHIRE		16	37	118	0.46	1.5	4.0		C*C

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920201	203752.2	52.66	-2.02	398.9	307.3	3.2	1.1	CANNOCK, STAFFORDSHIRE		7	41	174	0.44	3.8	8.2	C*C	
19920913	063841.1	52.62	-0.61	494.2	303.1	3.5	2.2	KETTON, LEICESTERSHIRE		10	15	154	0.18	2.3	5.0	C*C	
19920217	012233.0	52.50	-0.19	522.7	290.7	11.1	3.3	PETERBOROUGH, CAMBS	5	32	19	69	0.20	0.5	0.8	B*B	FELT CAMBRIDGESHIRE...
19920930	230624.2	52.33	-4.27	245.3	273.1	2.7	1.5	CARDIGAN BAY, WALES		13	42	133	0.34	1.0	3.2	C*C	15KM SW OF ABERYSTWYTH
19921115	015420.7	52.27	-2.84	342.4	263.8	0.4	1.0	LEOMINSTER, HER & WOR		8	28	148	0.36	3.1	9.5	C*C	
19920401	033228.5	52.07	-3.44	301.2	242.4	16.6	1.1	BUILTH WELLS, POWYS		9	12	227	0.08	0.7	0.7	A*D	
19920423	131044.8	52.02	-5.38	168.2	241.3	5.0	2.1	ST GEORGE'S CHANNEL		20	43	154	0.23	0.8	1.9	B*C	
19921218	160014.1	51.94	-3.44	301.3	228.2	14.9	1.1	BRECON, POWYS		7	19	166	0.11	1.9	1.4	B*C	
19920708	085958.8	51.93	-2.67	354.0	226.5	18.4	2.1	ROSS-ON-WYE, HER & WOR		37	14	132	0.20	0.5	0.7	B*B	
19920821	164642.2	51.88	-2.75	348.1	220.4	13.4	1.7	MONMOUTH, GWENT		21	21	142	0.16	0.5	0.5	B*C	7KM NORTH OF MONMOUTH
19921007	085720.4	51.82	-3.49	297.2	214.3	9.1	1.4	M TYDFIL, MID GLAMORGAN		8	33	127	0.09	0.7	6.5	C*C	11KM NW MERTHYR TYDFIL
19921007	092531.9	51.82	-3.49	297.5	214.6	9.0	1.2	M TYDFIL, MID GLAMORGAN		7	32	127	0.03	0.1	1.4	A*C	11KM NW MERTHYR TYDFIL
19921226	170559.8	51.81	-1.52	432.7	212.5	9.4	1.5	WITNEY, OXFORDSHIRE		8	75	255	0.04	0.4	0.5	A*D	
19920728	054750.6	51.80	-3.01	330.5	211.6	17.1	0.4	ABERGAVENNY, GWENT		5	22	188	0.03	0.8	1.2	A*D	
19920705	025120.9	51.79	-3.21	316.6	210.7	9.2	0.7	EBBW VALE, GWENT		5	27	232	0.06	2.5	12.3	C*D	
19920313	232612.6	51.71	-3.30	310.2	202.0	2.5	1.5	BEDLINOG, MID GLAMORGAN		8	35	171	0.05	0.4	0.6	A*C	C/F
19920703	221908.3	51.71	-3.32	309.1	202.1	0.8	0.7	BEDLINOG, MID GLAMORGAN		6	36	238	0.14	0.5	0.9	A*D	C/F
19920831	204919.5	51.71	-3.30	310.0	202.3	0.4	1.1	BEDLINOG, MID GLAMORGAN		6	35	170	0.07	0.4	1.5	A*C	C/F
19920420	222026.6	51.70	-3.55	292.7	201.3	9.5	1.2	TREHERBERT, M GLAMORGAN		13	42	96	0.09	0.4	0.7	A*C	
19920817	005335.2	51.68	-3.26	312.9	198.6	1.6	2.2	BARGOED, MID GLAMORGAN	5+	32	24	49	0.19	0.4	1.0	B*C	FELT BARGOED, NELSON..C/F
19920911	002431.5	51.68	-3.73	280.7	199.4	14.7	1.0	NEATH, WEST GLAMORGAN		5	54	301	0.06	1.1	2.6	B*D	7KM NW OF NEATH
19920421	030411.9	51.67	-3.09	324.5	197.2	13.6	1.0	NEWBRIDGE, GWENT		9	20	117	0.10	1.3	1.5	B*B	
19920513	085552.5	51.66	-3.10	323.7	196.5	16.0	1.5	NEWBRIDGE, GWENT		6	21	249	0.04	0.8	1.5	A*D	
19920623	135201.0	51.65	-3.25	313.5	195.4	15.9	0.9	NELSON, GWENT		6	31	247	0.25	6.7		D*D	
19920411	064538.2	51.64	-3.10	323.8	194.4	15.4	1.8	ABERCARN, GWENT		19	20	109	0.09	0.4	0.5	A*B	
19920411	065430.3	51.63	-3.10	323.6	193.1	15.0	1.2	ABERCARN, GWENT		5	21	259	0.02	0.7	0.3	A*D	
19920527	231520.1	51.61	-2.93	335.7	190.9	18.2	1.1	NEWPORT, GWENT		6	9	256	0.23	4.9	3.4	C*D	
19920216	124106.9	51.54	-3.17	318.9	183.3	18.9	1.3	CARDIFF, S GLAMORGAN		6	27	286	0.08	2.2	3.2	B*D	
19920413	012002.8	51.17	5.95	955.4	171.5	13.5	5.9	ROERMOND, NETHERLANDS	7	42	34	72	0.41	1.2	1.7	C*C	MAX INTENSITY(UK) =4MSK
19920923	104757.9	51.01	-3.60	287.9	125.2	10.4	2.7	TIVERTON, DEVON		40	15	85	0.35	0.8	1.4	C*B	10KM NW OF TIVERTON
19920127	024349.7	50.66	1.88	674.1	91.9	7.3	3.0	BOULOGNE, FRANCE		26	72	117	0.26	1.0	4.1	B*D	
19920515	152000.7	50.58	-3.57	288.6	77.5	2.8	1.6	TEIGNMOUTH, DEVON		15	30	191	0.29	1.7	2.5	B*D	NW OF TEIGNMOUTH
19920611	050914.8	50.53	-8.91	-89.6	93.4	10.9	2.9	CELTIC SEA		22241	278	0.31	7.0	8.3	D*D	SOUTH OF IRELAND	
19921108	194207.9	50.33	-6.15	104.6	56.7	1.0	1.3	SCILLY ISLES, CORNWALL		8	68	354	0.05			D*D	NE OF SCILLY ISLES
19920627	131128.7	50.16	-6.19	100.5	37.3	8.7	1.4	SCILLY ISLES, CORNWALL		12	44	348	0.03	1.2	0.4	B*D	NE OF SCILLY ISLES
19920725	013152.2	50.15	-4.79	200.4	31.1	11.6	1.2	DODMAN POINT, CORNWALL		12	23	327	0.02	0.3	0.2	A*D	SOUTH OF DODMAN POINT
19920221	100708.4	50.11	-5.18	172.9	28.4	6.7	0.9	CONSTANTINE, CORNWALL		12	3	159	0.05	0.3	0.4	A*C	
19920221	135544.1	50.11	-5.18	172.9	28.6	6.4	0.8	CONSTANTINE, CORNWALL		10	3	281	0.01	0.1	0.1	A*D	
19920221	205410.5	50.11	-5.18	173.0	28.1	5.9	-0.2	CONSTANTINE, CORNWALL		9	3	161	0.04	0.3	0.4	A*C	
19920418	174215.9	50.11	-5.18	172.7	28.3	6.9	0.7	CONSTANTINE, CORNWALL		16	3	167	0.03	0.2	0.2	A*C	
19920418	175748.3	50.11	-5.18	172.8	28.3	7.1	0.0	CONSTANTINE, CORNWALL		9	3	163	0.02	0.2	0.2	A*C	
19920419	034702.6	50.11	-5.18	172.7	28.3	7.2	0.3	CONSTANTINE, CORNWALL		18	3	167	0.03	0.2	0.2	A*C	
19920419	174147.0	50.11	-5.18	172.8	28.3	7.2	0.4	CONSTANTINE, CORNWALL		16	3	164	0.03	0.2	0.2	A*C	
19920420	071536.7	50.11	-5.18	172.9	28.4	7.1	-0.1	CONSTANTINE, CORNWALL		10	3	161	0.02	0.2	0.2	A*C	
19920420	203944.3	50.11	-5.17	173.1	28.2	6.2	0.2	CONSTANTINE, CORNWALL		11	3	157	0.02	0.2	0.2	A*C	
19920430	083948.7	50.11	-5.18	172.7	28.3	6.7	0.7	CONSTANTINE, CORNWALL		10	3	167	0.02	0.2	0.2	A*C	
19920430	085544.8	50.11	-5.18	172.8	28.3	7.7	0.0	CONSTANTINE, CORNWALL		9	3	163	0.01	0.2	0.2	A*C	
19920502	011907.6	50.11	-5.17	173.1	28.3	6.7	0.2	CONSTANTINE, CORNWALL		8	3	156	0.02	0.2	0.3	A*C	
19920503	111957.3	50.11	-5.18	172.9	28.3	6.8	0.0	CONSTANTINE, CORNWALL		9	3	162	0.02	0.2	0.3	A*C	
19920613	135920.2	50.11	-5.18	172.9	28.6	7.0	0.4	CONSTANTINE, CORNWALL		6	3	281	0.01	0.2	0.1	A*D	

TABLE 2: CATALOGUE OF EARTHQUAKES LISTED IN ORDER OF DECREASING LATITUDE: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...	
19920615	074913.0	50.11	-5.18	172.9	28.3	7.3	0.4	CONSTANTINE, CORNWALL	12	3	161	0.02	0.2	0.1	A*C			
19920615	074942.0	50.11	-5.18	172.7	28.2	7.0	0.4	CONSTANTINE, CORNWALL	9	3	166	0.02	0.2	0.2	A*C			
19920615	144942.0	50.11	-5.18	172.9	28.1	7.0	0.8	CONSTANTINE, CORNWALL	13	3	163	0.02	0.2	0.2	A*C			
19920619	001013.1	50.11	-5.18	172.7	28.4	7.1	-0.3	CONSTANTINE, CORNWALL	9	3	165	0.01	0.2	0.2	A*C			
19920619	001122.5	50.11	-5.18	172.9	28.3	7.1	-0.2	CONSTANTINE, CORNWALL	9	3	161	0.02	0.2	0.2	A*C			
19920619	002001.1	50.11	-5.18	172.7	28.4	6.9	-0.1	CONSTANTINE, CORNWALL	9	3	165	0.01	0.2	0.2	A*C			
19920620	021143.0	50.11	-5.18	172.6	28.4	6.9	-0.1	CONSTANTINE, CORNWALL	9	3	168	0.02	0.2	0.2	A*C			
19920620	021410.6	50.11	-5.18	172.7	28.3	7.0	0.0	CONSTANTINE, CORNWALL	10	3	165	0.02	0.2	0.2	A*C			
19920623	002153.3	50.11	-5.18	172.8	28.1	7.2	-0.3	CONSTANTINE, CORNWALL	10	3	164	0.02	0.2	0.1	A*C			
19920623	114714.8	50.11	-5.18	172.6	28.1	6.9	0.8	CONSTANTINE, CORNWALL	10	3	169	0.02	0.2	0.2	A*C			
19920701	123859.2	50.11	-5.18	172.7	28.2	7.0	0.8	CONSTANTINE, CORNWALL	11	3	167	0.02	0.3	0.2	A*C			
19920702	142036.4	50.11	-5.18	172.7	28.2	7.2	1.0	CONSTANTINE, CORNWALL	9	3	167	0.01	0.2	0.2	A*C			
19920703	033238.3	50.11	-5.18	172.4	28.3	6.5	-0.1	CONSTANTINE, CORNWALL	10	3	171	0.03	0.3	0.4	A*C			
19920719	012635.1	50.11	-5.18	172.6	28.2	7.2	0.3	CONSTANTINE, CORNWALL	10	3	169	0.01	0.2	0.2	A*C			
19920719	022611.4	50.11	-5.18	172.7	28.2	7.1	0.0	CONSTANTINE, CORNWALL	9	3	167	0.02	0.3	0.3	A*C			
19920719	033721.6	50.11	-5.18	172.6	28.2	7.1	0.3	CONSTANTINE, CORNWALL	9	3	168	0.02	0.2	0.3	A*C			
19920719	054915.7	50.11	-5.18	172.5	28.2	7.5	0.0	CONSTANTINE, CORNWALL	9	3	169	0.02	0.3	0.3	A*C			
19920719	074031.0	50.11	-5.18	172.7	28.2	7.2	0.4	CONSTANTINE, CORNWALL	10	3	166	0.02	0.3	0.3	A*C			
19920719	181318.6	50.11	-5.18	172.8	28.3	7.2	0.9	CONSTANTINE, CORNWALL	12	3	163	0.02	0.2	0.2	A*C			
19920727	025809.0	50.11	-5.18	172.7	28.2	7.1	0.4	CONSTANTINE, CORNWALL	9	3	166	0.01	0.2	0.2	A*C			
19920727	030310.9	50.11	-5.18	172.7	28.4	7.0	0.1	CONSTANTINE, CORNWALL	15	3	166	0.03	0.2	0.2	A*C			
19920728	055936.5	50.11	-5.18	172.7	28.1	7.3	0.0	CONSTANTINE, CORNWALL	9	3	168	0.02	0.2	0.3	A*C			
19920730	103823.9	50.11	-5.18	172.9	28.2	7.3	0.4	CONSTANTINE, CORNWALL	10	3	161	0.02	0.2	0.2	A*C			
19920922	172551.7	50.11	-5.18	173.0	28.2	7.0	0.7	CONSTANTINE, CORNWALL	14	3	161	0.02	0.2	0.1	A*C			
19921019	101958.7	50.11	-5.18	172.9	28.3	7.1	0.1	CONSTANTINE, CORNWALL	7	3	162	0.01	0.2	0.2	A*C			
19921104	191827.3	50.11	-5.18	172.9	28.2	7.3	-0.3	CONSTANTINE, CORNWALL	7	3	162	0.01	0.2	0.3	A*C			
19921106	214630.2	50.11	-5.18	172.3	28.3	6.7	0.7	CONSTANTINE, CORNWALL	10	3	172	0.03	0.4	0.3	A*C			
19921110	005252.4	50.11	-5.17	173.2	28.2	7.0	0.1	CONSTANTINE, CORNWALL	8	3	155	0.01	0.2	0.2	A*C			
19921113	092432.0	50.11	-5.18	172.7	28.6	7.3	0.8	CONSTANTINE, CORNWALL	7	3	284	0.02	0.3	0.2	A*D			
19921202	163500.9	50.11	-5.18	172.6	28.3	6.9	0.8	CONSTANTINE, CORNWALL	9	3	168	0.02	0.2	0.2	A*C			
19921216	210927.8	50.11	-5.18	173.0	28.2	7.1	0.3	CONSTANTINE, CORNWALL	12	3	160	0.02	0.2	0.2	A*C			
19921216	211520.9	50.11	-5.18	173.0	28.2	7.1	0.1	CONSTANTINE, CORNWALL	12	3	159	0.02	0.2	0.2	A*C			
19921217	050230.9	50.11	-5.18	172.8	28.1	7.0	0.1	CONSTANTINE, CORNWALL	11	3	164	0.02	0.3	0.3	A*C			
19920412	185528.3	49.89	-4.90	191.5	3.3	13.6	1.4	LIZARD POINT, CORNWALL	13	26	300	0.02	0.3	0.2	A*D	SE OF LIZARD POINT		
19920629	030511.8	49.84	-8.02	-33.0	11.2	1.7	3.2	SCILLY ISLES, CORNWALL	9178	355	0.07	8.1	1.2	D*D	SW OF SCILLY ISLES			
19921128	042708.8	49.72	-5.71	132.8	-13.2	4.1	1.7	LAND'S END, CORNWALL	13	49	324	0.06	0.8	1.0	A*D	25KM SW OF LAND'S END		
19921030	173415.0	49.67	-9.11	-112.5	-0.6	4.3	2.5	SCILLY ISLES, CORNWALL	12259	354	0.60		19.7	D*D	220KM SW OF SCILLY ISLES			
19920916	095536.2	49.60	-2.98	329.4	-33.1	7.2	1.3	GUERNSEY, CHANNEL ISLES	7	70	355	0.11	14.0		D*D	30KM NW OF GUERNSEY		
19921117	234624.3	49.08	-2.35	374.6	-90.8	8.9	0.3	JERSEY, CHANNEL ISLES	9	17	335	0.08	2.7	8.0	C*D	25KM SW OF JERSEY		
19920427	232334.2	49.00	-2.29	378.6	-100.1	12.2	0.5	JERSEY, CHANNEL ISLES	11	23	333	0.07	0.8	2.3	B*D	20KM SOUTH OF JERSEY		
19920807	092920.4	48.93	-1.63	427.0	-107.2	5.2	1.0	OFF GRANVILLE, FRANCE	8	42	352	0.08			D*D	10KM NORTH OF GRANVILLE		

TABLE 3
CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY: 1992

KEY TO CATALOGUE 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 earthquake.
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 MSK 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 MSK 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 | M Glamorgan | : Mid Glamorgan |
| Expl | : Explosion | Notts | : Nottinghamshire |
| D & G | : Dumfries and Galloway | Derbs | : Derbyshire |
| Her & Wor | : Hereford and Worcester | N Yorks(hire) | : North Yorkshire |
| Gt(r) Manchester | : Greater Manchester | S Yorks(hire) | : South Yorkshire |
| Cambs | : Cambridgeshire | W Yorks(hire) | : West Yorkshire |
| S Glamorgan | : South Glamorgan | Staffs | : Staffordshire |
| M Tydfil | : Merthyr Tydfil | | |

Comments abbreviations

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

TABLE 3: CATALOGUE OF NON-NATURAL EVENTS LISTED CHRONOLOGICALLY: 1992

YearMoDy	HrMnSecs	Lat	Lon	kmE	kmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	SQD	Comments...
19920106	030000.0							EXPL-MOTHERWELL	2+								EXPL-FELT WISHAW AREA
19920117	094011.0							SONIC-KING'S LYNN									SONIC-FELT KING'S LYNN
19920122	144439.0							SONIC-WIRRAL									SONIC-FELT WIRRAL
19920212	121018.0							EXPL-SHOEBURYNNESS	2+								EXPL-FELT BRADWELL...
19920219	185700.0							SONIC-SOLWAY FIRTH									SONIC-FELT WHITEHAVEN...
19920219	193900.0							SONIC-SOLWAY FIRTH									SONIC-FELT WHITEHAVEN...
19920219	204400.0							SONIC-SOLWAY FIRTH									SONIC-FELT WHITEHAVEN...
19920219	213300.0							SONIC-SOLWAY FIRTH									SONIC-FELT WHITEHAVEN...
19920305	121500.0							SONIC-BLACKPOOL									SONIC-FELT BLACKPOOL...
19920306	001928.0							SONIC-CONSTANTINE									SONIC-FELT CONSTANTINE
19920408	185758.0							SONIC-SCARBOROUGH									SONIC-FELT SCARBOROUGH...
19920527	093810.0							SONIC-SUNDERLAND									SONIC-FELT SUNDERLAND....
19920528	180000.0							SONIC-HARTLEPOOL									SONIC-FELT HARTLEPOOL...
19920603	101900.0							SONIC-MILTON KEYNES									SONIC-FELT MILTON KEYNES
19920610	210900.0							SONIC-PONTELAND									SONIC-FELT PONTELAND....
19920625	080744.2	50.38	-1.76	416.9	53.8	1.0	2.4	EXPL-BOURNEMOUTH	2+	9158	344	0.28	15.7	8.1	D*D		EXPL-FELT BOURNEMOUTH
19920808	203000.0							MADNESS CONCERT,LONDON	2+								FELT NE LONDON
19920809	200000.0							MADNESS CONCERT,LONDON	2+								FELT NE LONDON
19921104	093029.0							SONIC-ORKNEY ISLANDS									SONIC-FELT ORKNEY...
19921112	180922.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921117	115110.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921117	121416.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921119	130028.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921123	102303.0							SONIC-NEWARK-ON-TRENT									SONIC-FELT NEWARK AREA
19921124	093616.0							SONIC-PETERBOROUGH									SONIC-FELT PETERBOROUGH..
19921201	112338.0							SONIC-PENZANCE									SONIC-FELT PENZANCE...
19921221	130200.2	55.77	-4.61	235.9	655.9	0.8	1.6	EXPL-BEITH,STRATHCLYDE	2+	22	10	208	0.08	0.3	0.3	A*D	EXPL-FELT BEITH AREA

TABLE 4
GEOGRAPHICAL COORDINATES OF SEISMOGRAPH STATIONS: DECEMBER 1992

TABLE 4 : GEOGRAPHICAL CO-ORDINATES OF SEISMOGRAPH STATIONS: DECEMBER 1992

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
ABA	BAONSTHORPE	52.8875	1.1471	611.70	336.90	13	82-	1	BGS
AEA	E.ANGLIA UNIV	52.6208	1.2403	619.30	307.50	45	84-	m	BGS
APA	PACKWAY	52.2999	1.4779	637.10	272.60	35	84-	1	BGS
AWH	WHINBURGH	52.6299	0.9512	599.70	307.70	60	80-	1R	BGS
AWI	WITTON	52.8324	1.4460	632.09	331.69	35	83-	1	BGS
*BBH	BRUNTSHEIL	55.1332	-2.9299	340.72	582.50	207	92-	1	BGS
*BBO	BOTHEL	54.7367	-3.2465	319.75	538.70	205	92-	3	BGS
*BCC	CHAPELCROSS	55.0154	-3.2202	321.99	569.67	68	92-	L	BGS
*BCM	CHAPELCROSS MIC	55.0151	-3.2212	321.92	569.64	78	92-	m	BGS
*BDL	DOBCROSS HALL	54.8030	-2.9390	339.65	545.76	132	92-	1	BGS
*BHH	HOWATS HILL	55.0928	-3.2187	322.23	578.28	198	92-	3	BGS
*BNA	NEW ABBEY	54.9659	-3.6244	296.02	564.70	78	92-	1	BGS
*BTA	TALKIN	54.9057	-2.6841	356.14	557.00	276	92-	3	BGS
*BWH	WARDLAW	55.1757	-3.6551	294.61	588.08	275	92-	1	BGS
CBW	BUDOCK WATER	50.1482	-5.1144	177.53	32.29	98	81-	1	BGS
CCA	CARMENELLIS	50.1864	-5.2277	169.62	36.87	213	81-	1	BGS
CCO	CONSTANTINE	50.1357	-5.1960	171.64	31.15	183	81-	1	BGS
*CDU	DUNNERDALE	54.3363	-3.1950	322.31	494.09	362	92-	1	BGS
CGH	GOONHILLY	50.0508	-5.1649	173.47	21.61	91	81-	1	BGS
*CKE	KESWICK	54.5878	-3.1062	328.52	521.98	296	92-	1	BGS
CME	MENERDUE FARM	50.1760	-5.1903	172.24	35.61	178	82-	3R	BGS
CPZ	PENZANCE	50.1560	-5.5835	144.07	34.66	198	81-	1R	BGS
CR2	ROSEMANOWES 2	50.1669	-5.1687	173.74	34.53	152	81-	3	BGS
CRA	RAME	50.1648	-5.1921	172.06	34.36	198	82-	3	BGS
CRQ	ROSEMANOWES	50.1672	-5.1728	173.45	34.57	165	81-	SR	BGS
CSA	ST AUSTELL	50.3528	-4.8936	194.18	54.39	113	81-	1	BGS
*CSF	SCAFELL	54.4478	-3.2431	319.40	506.55	548	92-	1	BGS
*CSM	SELLAFIELD MIC	54.4183	-3.4913	303.24	503.58	50	92-	m	BGS
CST	STITHIANS	50.1952	-5.1635	174.24	37.66	139	81-	1	BGS
CTR	TROLVIS QUARRY	50.1665	-5.1624	174.18	34.47	191	82-	3	BGS
CWF	CHARWOOD FST	52.7382	-1.3071	446.78	315.88	185	75-	3R	BGS
DCO	COMBE FARM	50.3200	-3.8724	266.72	48.42	410	82-	1R	BGS
DYA	YADSWORTHY	50.4352	-3.9309	262.89	61.33	280	82-	3R	BGS
EAB	ABERFOYLE	56.1881	-4.3400	254.80	701.95	250	69-	1R	BGS
*EAU	AUCHINOON	55.8444	-3.4547	308.92	662.20	350	69-	1R	BGS
EBH	BLACK HILL	56.2481	-3.5081	306.56	707.19	375	69-	1R	BGS
EBL	BROAD LAW	55.7733	-3.0436	334.54	653.82	365	69-	1R	BGS
ECK	CAULDKAINE HILL	55.1812	-3.1271	328.24	588.02	337	81-	1R	BGS
EDI	EDINBURGH	55.9233	-3.1861	325.89	670.66	125	69-	4R	BGS
*EDR	DRUMTOCHTY	56.9184	-2.5404	367.18	780.96	388	89-	1R	BGS
EDU	DUNDEE	56.5475	-3.0142	337.65	739.95	275	69-	1R	BGS
ELO	LOGIEALMOND	56.4706	-3.7119	294.55	732.24	495	69-	1R	BGS
ESK	ESKDALEMUIR	55.3167	-3.2050	323.54	603.18	263	65-	4R	BGS
ESY	STONEYPATH	55.9177	-2.6144	361.60	669.57	328	81-	1R	BGS
GAL	GALLOWAY	54.8664	-4.7114	226.02	555.78	105	89-	4m	BGS
GCD	CASTLE DOUGLAS	54.8638	-3.9417	275.40	553.85	189	89-	1R	BGS
GCL	CUSHENDALL	55.076	-6.130	136.4	583.7	275	89-	1R	BGS
*GIM	N ISLE OF MAN	54.2923	-4.4670	239.46	491.35	366	89-	3R	BGS
GMK	MULL OF KINTYRE	55.3459	-5.5936	172.18	611.65	160	89-	1R	BGS
GMM	MTS OF MOURNE	54.239	-5.951	142.6	489.8	140	89-	1R	BGS
HAE	ALDERS END	52.0376	-2.5475	362.45	237.88	224	82-	1R	BGS
HBL2	BONNYLANDS	52.0508	-3.0384	328.80	239.72	440	91-	LR	BGS
HCG	CRAIG GOCH	52.3224	-3.6567	287.10	270.70	511	80-	1R	BGS
HEX	HEXMOOR	51.0668	-3.8025	273.72	131.32	278	91-	1R	BGS
HGH	GRAY HILL	51.6380	-2.8064	344.20	193.64	210	80-	1R	BGS
HLM	LONG MYND	52.5169	-2.8878	339.76	291.41	259	84-	1	BGS
HPE	PEMBROKE	51.9371	-4.7745	209.27	230.18	355	90-	1R	BGS
HPK	HAVERAH PARK	53.9554	-1.6240	424.67	451.12	227	78-	3R	BGS
HSA	SWANSEA	51.7478	-4.1543	251.30	207.70	274	87-	1R	BGS

TABLE 4 : continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
HTL	HARTLAND	50.9944	-4.4850	225.64	124.67	91	81-	4Rm	BGS
HTR	TREWERN HILL	52.0790	-3.2697	313.00	243.10	329	82-	1R	BGS
JLP	LES PLATONS	49.2428	-2.1039			131	81-	1R	BGS
JQE	QUEENS EAST	49.200	-2.038			56	91-	1	BGS
JQS	QUEENS SOUTH	49.180	-2.063			62	91-	1	BGS
JQW	QUEENS WEST	49.196	-2.057			73	91-	1	BGS
JRS	MAISON ST LOUIS	49.1924	-2.0917			53	81-	4R	BGS
JSA	ST AUBINS	49.1879	-2.1709			21	81-	1R	BGS
JVM	VALLE D.L.MARE	49.2169	-2.2068			64	81	1R	BGS
KAC	ACHNASHELLACH	57.4999	-5.2982	202.40	850.29	330	83-	1R	BGS
KAR	ARISAIG	56.9175	-5.8302	166.90	787.20	225	83-	1	BGS
KBI	BIRLEY GRANGE	53.2546	-1.5278	431.50	373.20	270	88-	1	BGS
KEY	KEYWORTH	52.8774	-1.0751	462.24	331.54	75	88-	L	BGS
KNR	NEVIS RANGE	56.8219	-4.9714	218.68	773.97	1118	91-	1R	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.21	833.50	36	86-	4R	BGS
KSB	SHIEL BRIDGE	57.2098	-5.4230	193.30	818.39	70	83-	1R	BGS
KSK	SCOVAL	57.4653	-6.7020	118.09	851.40	250	89-	1R	BGS
KSY	SYSTON	52.9642	-0.5873	494.88	341.73	123	88-	1R	BGS
KTG	TILBROOK GRNGE	52.3261	-0.4007	508.98	271.03	78	88-	1	BGS
KUF	UFFORD	52.6175	-0.3895	509.02	303.45	35	88-	1R	BGS
KWE	WEAVER FARM	53.0163	-1.8435	410.50	346.60	320	88-	1R	BGS
*LBO	BOWLAND	53.9790	-2.5728	362.44	453.83	320	89-92	1R	BGS
*LBH	MORECAMBE B102	54.0324	-2.9058	340.68	460.00	-85	90-92	1R	BGS
*LBS	MORECAMBE	54.0324	-2.0958	340.68	460.00	15	92-92	1	BGS
*LCK	CROOK	54.3595	-2.8715	343.37	496.36	200	89-92	1R	BGS
LCP	CASSOP	54.7368	-1.4741	433.86	538.12	185	91-	1R	BGS
LDU	LEEDS UNIV	53.8025	-1.5553	429.35	434.45	230	83-	m	BGS
LHO	HOLMEFIRTH	53.5451	-1.8548	409.62	405.42	460	91-	1R	BGS
*LKL	KIRKBY LONSDALE	54.2185	-2.5345	365.15	480.46	396	89-92	3R	BGS
*LLO	LONGRIDGE	53.8503	-2.5598	363.18	439.51	247	89-92	3R	BGS
LMI	MILLOM	54.2206	-3.3070	314.79	481.35	140	89-	3R	BGS
LMK	MARKET RASEN	53.4569	-0.3266	511.10	396.90	130	91-	1R	BGS
*LMU	MORECAMBE MIC	54.0250	-2.9051	340.71	459.18	5	89-92	m	BGS
LRN	RICHMOND	54.4167	-1.7858	413.90	502.40	300	91-	1R	BGS
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	100	78-	4R	BGS
LWH	WHINNY NAB	54.3335	-0.6714	486.38	493.94	265	91-	1R	BGS
MCD	COLEBURN DISTIL	57.5827	-3.2541	325.02	855.41	280	81-	4Rm	BGS
MCH	MICHAELCHURCH	51.9977	-2.9983	331.47	233.77	233	78-	4	BGS
MDO	DOCHFOUR	57.4412	-4.3633	258.17	841.43	366	81-	1R	BGS
MFI	FISHRIE	57.6116	-2.2953	382.36	857.97	220	88-	1R	BGS
MLA	LATHERON	58.305	-3.364	320.1	935.9	190	81-	1	BGS
MME	MEIKLE CAIRN	57.315	-2.965	341.9	825.3	455	81-	1	BGS
MVH	ACHVAICH	57.9232	-4.1816	270.79	894.70	198	84-	1	BGS
PCA	CARROT	55.700	-4.255	258.3	647.5	305	83-	1	BGS
PCO	CORRIE	55.988	-4.097	269.2	679.2	274	83-	1	BGS
PGB	GLENIFFERBRAES	55.810	-4.478	244.5	660.5	200	84-	3	BGS
PMS	MUIRSHIEL	55.846	-4.744	228.2	664.8	351	83-	1	BGS
*POB	OBSERVATORY	55.637	-4.417	247.9	664.1	34	92-	L	BGS
SAN	SANDWICK	60.0176	-1.2386	442.44	1126.05	155	85-	1	BGS
SBD	BRYN DU	52.9055	-3.2588	315.35	335.01	497	80-	1	BGS
SSP	STONE POUND	52.4177	-3.1119	324.39	280.59	417	90-	3	BGS
TBW	BRENTWOOD	51.6549	0.2911	558.47	197.66	82	89-	1R	BGS
TCR	COLCHESTER	51.8349	0.9215	601.26	219.23	40	89-	1R	BGS
TEB	EASTBOURNE	50.8188	0.1459	551.14	104.40	70	89-	1R	BGS
TFO	FOLKESTONE	51.1136	1.1406	619.79	139.67	188	89-	4	BGS
TSA	SEVENOAKS	51.2427	0.1558	550.46	151.55	170	89-	1	BGS
WAL	WALLS	60.2576	-1.6133	421.40	1152.60	170	80-	1	BGS
*WCB	CHURCH BAY	53.3782	-4.5465	230.63	389.86	135	85-	4m	BGS
WFB	FAIRBOURNE	52.6830	-4.0378	262.27	311.47	325	85-	1R	BGS

TABLE 4 : continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
WIM	ISLE OF MAN	54.1472	-4.6735	225.41	475.70	365	85-	1R	BGS
WLF	LLYNFAES	53.2893	-4.3966	240.27	379.64	65	85-	1	BGS
WME	MYNDD EILIAN	53.3966	-4.3034	246.86	391.37	130	85-	1R	BGS
WPM	PENMAENMAWR	53.2583	-3.9049	272.94	375.20	350	85-	1R	BGS
XAL	ALLENDALE	54.8617	-2.2147	386.22	551.91	462	83-	1R	BGS
XDE	DENT	54.5058	-3.4897	303.55	513.32	291	83-	1R	BGS
XSO	SOURHOPE	55.4925	-2.2511	384.13	622.11	495	83-	1R	BGS
YEL	YELL	60.5509	-1.0830	450.29	1185.55	200	79-	1	BGS
YLL	LLANBERIS	53.1402	-4.1704	254.84	362.57	162	84-	1R	BGS
YRC	RHOSCOLYN	53.2506	-4.5741	228.28	375.74	24	84-	1R	BGS
YRE	YR EIFL	52.9810	-4.4254	237.19	345.42	197	84-	1R	BGS
YRH	RHIW	52.8335	-4.6289	222.93	329.50	300	84-	1R	BGS
DCN	CROGHAN	53.3439	-7.2767			150	77-	1R	DIAS
DLF	LYONS FARM	53.2958	-6.5314			96	91-	3	DIAS
DMU	KINGSCOURT	53.8989	-6.9106			280	77-	1R	DIAS
DMS	MERRION SQUARE	53.3406	-6.2486			5	90-	1	DIAS
ECB	CARRICKBYRNE	52.3661	-6.7811			125	81-	1R	DIAS
ECP	CARNSORE PT	52.1800	-6.3689			5	80-	3R	DIAS
ETA	TARA HILL	52.6958	-6.2100			140	82-	1R	DIAS

* BBH,BBO,BDL,BHH,BNA,BTA & BWH installed 1 February 1992

* POB installed 12 February 1992

* LBS installed 16 February 1992 and removed 14 October 1992

* BCM installed 26 February 1992

* CDU,CKE & CSF installed 17 September 1992

* GIM became a 3-component site on 17 September 1992

* CSM installed 13 October 1992

* LCK removed 13 October 1992

* LBH,LBO,LKL,LLO & LMU removed 14 October 1992

* BCC installed 22 October 1992

* WCB received a low frequency microphone on 24 October 1992

* EAU on 1 Jan 1993 these co-ords revised to Gr.Ref. 309.38kmE 662.30kmN

* EDR on 4 Jun 1993 these co-ords revised to Gr.Ref. 367.16kmE 780.97kmN

Agency codes:

BGS British Geological Survey
 DIAS Dublin Institute of Advanced Studies

Component codes:

1 Single vertical seismometer
 3 Orthogonal set of 3 seismometers
 4 As in 3, above, plus one low-gain vertical
 S Orthogonal set of 3 strong motion seismometers plus
 one low-gain vertical seismometer
 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
 m Low-frequency microphone

TABLE 5
PHASE DATA: 1992

KEY TO PHASE DATA ENCODING

Time	: 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.
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 earthquake.
Locality	: A geographical indication of the epicentral area, usually the nearest town followed by the region.
Intensity	: Maximum MSK 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 MSK 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 nanometers (nm)
PERI	: Period in seconds

Locality abbreviations

Sonic	: Sonic boom	M Glamorgan	: Mid Glamorgan
Expl	: Explosion	Notts	: Nottinghamshire
D & G	: Dumfries and Galloway	Derbs	: Derbyshire
Her & Wor	: Hereford and Worcester	N Yorks(hire)	: North Yorkshire
Gt(r) Manchester	: Greater Manchester	S Yorks(hire)	: South Yorkshire
Cambs	: Cambridgeshire	W Yorks(hire)	: West Yorkshire
S Glamorgan	: South Glamorgan	Staffs	: Staffordshire
M Tydfil	: Merthyr Tydfil		

Comments abbreviations

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

PHASE DATA : 1992

TABLE 5

January 2 1992 Time: 21:39 48.7 UTC Magnitude: 2.4 ML
 Lat: 59.687N Lon: 1.421E Depth: 15.0 km
 Grid Ref: 592.55 kmE 1093.96 kmN RMS: 0.07 secs
 Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ASK	SZ	228	EP	3		21:40	21.00		
ASK	SZ	228	ES	4		21:40	42.60		
SUE	SZ	239	ES	3		21:40	47.00		
HYA	SZ	310	ES	3		21:41	02.30		
LRW	SN	154	ES	3		21:40	28.87		
SAN	SZ	153	EP	3		21:40	11.00		
SAN	SZ	153	ES	3		21:40	28.47		
SAN	SZ	153				21:40	30.08	42	0.19

MLA	SZ	523	ES	2		21:61			01.56
ODD1	SZ	260	EP	3		21:59			39.05
ODD1	SZ	260	ES	3		21:60			05.71
KMY	SZ	286	EP	3		21:59			42.21
KMY	SZ	286	ES	3		21:60			10.24
SUE	SZ	98	EP	3		21:59			18.08
SUE	SZ	98	ES	3		21:59			29.26
BER	SZ	173	EP	3		21:59			28.00
ASK	SZ	160	EP	3		21:59			26.45
ASK	SZ	160	ES	3		21:59			44.80
HYA	SZ	161	EP	3		21:59			25.77
HYA	SZ	161	EP	3		21:59			44.41

January 3 1992 Time: 12:21 52.8 UTC Magnitude: 0.8 ML
 Lat: 56.046N Lon: 5.100W Depth: 5.0 km
 Grid Ref: 206.97 kmE 688.04 kmN RMS: 0.07 secs
 Locality: GLENDARUEL, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PGB	SZ	47	EP	2	C	12:22	01.17		
PGB	SN	47	ES	3		12:22	07.24		
PGB	SN	47				12:22	10.83	8	0.14
PGB	SE	47				12:22	03.63	6	0.07
PCA	SZ	65	EP	3		12:22	03.79		
PMS	SZ	32	EP	2	C	12:21	58.68		
EAB	SZ	50	EP	2		12:22	01.63		
EAB	SZ	50	ES	3		12:22	07.89		
PCO	SZ	63	EP	3		12:22	03.65		

January 15 1992 Time: 19:46 13.7 UTC Magnitude: 0.0 ML
 Lat: 55.199N Lon: 3.371W Depth: 6.8 km
 Grid Ref: 312.74 kmE 590.24 kmN RMS: 0.02 secs
 Locality: JOHNSTONEBRIDGE, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SN	17				19:46			20.00
ESK	SE	17	ES	2		19:46			19.60
ESK	SE	17				19:46			20.43
ESK	SZ	17	EP	2	C	19:46			17.14
ECK	SZ	16	EP		C	19:46			16.90
ECK	SZ	16	ES	2		19:46			19.29

January 5 1992 Time: 05:40 28.2 UTC Magnitude: 2.6 ML
 Lat: 60.347N Lon: 3.937E Depth: 3.5 km
 Grid Ref: 727.34 kmE 1177.25 kmN RMS: 0.37 secs
 Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ASK	SZ	71	IP	4		05:40	43.00		
SUE	SZ	91	EP	3		05:40	43.00		
HYA	SZ	153	EP	3		05:40	52.40		
HYA	SZ	153	ES	3		05:41	10.00		
LRW	SN	285	ES	3		05:41	37.69		
LRW	SE	285	EP	3		05:41	08.34		
LRW	SE	285	ES	3		05:41	37.01		
LRW	SE	285				05:41	40.10	17	0.24
SAN	SZ	289	EP	3		05:41	09.70		
SAN	SZ	289	ES	3		05:41	40.01		

January 22 1992 Time: 13:45 34.2 UTC Magnitude: 0.3 ML
 Lat: 53.304N Lon: 1.844W Depth: 0.5 km
 Grid Ref: 410.41 kmE 378.60 kmN RMS: 0.14 secs
 Locality: BUXTON, DERBYSHIRE Quality: C
 Comments: COLLAPSE TYPE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	32	EP	2		13:45			40.33
KWE	SZ	32	ES	3		13:45			45.14
KBI	SZ	22	EP	2		13:45			38.60
KBI	SZ	22	ES	3		13:45			42.21
LHO	SZ	27	EP	3		13:45			39.78
LHO	SZ	27	ES	3		13:45			43.39
LHO	SZ	27				13:45			46.24

January 7 1992 Time: 03:17 41.5 UTC Magnitude: 1.1 ML
 Lat: 56.127N Lon: 3.750W Depth: 1.0 km
 Grid Ref: 291.21 kmE 694.07 kmN RMS: 0.01 secs
 Locality: CLACKMANNAN, CENTRAL Quality: C
 Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EDI	SZ	42	EP	2		03:17	49.34		
EDI	SN	42	ES	3		03:17	55.05		
EDI	SN	42				03:17	59.37	36	1.08
EBH	SZ	20	EP	2		03:17	45.65		
EBH	SZ	20	ES	3		03:17	48.70		

January 26 1992 Time: 16:30 33.4 UTC Magnitude: 1.3 ML
 Lat: 56.212N Lon: 3.945W Depth: 5.6 km
 Grid Ref: 279.39 kmE 703.85 kmN RMS: 0.21 secs
 Locality: DUNBLANE, CENTRAL Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EDI	SN	57	ES	3		16:30			50.23
EDI	SE	57				16:30			53.93
EAU	SZ	51	EP	3		16:30			42.48
ESY	SZ	89	EP	3		16:30			48.57
EAB	SZ	25	IP	2		16:30			38.12
EAB	SZ	25	EP	3		16:30			38.12
EAB	SZ	25	ES	3		16:30			41.45
EBH	SZ	27	EP	2		16:30			38.45
EDU	SZ	69	EP	3		16:30			44.93
ELO	SZ	32	IP	1	D	16:30			39.50
ELO	SZ	32	ES	3		16:30			43.49
ESK	SN	110	EP	3		16:30			50.48
ESK	SN	110	ES	3		16:31			04.73
ESK	SN	110				16:31			07.33
ESK	SE	110				16:31			06.74
EDI	SZ	57	EP	3		16:30			43.39
EDI	SN	57				16:30			57.65

January 7 1992 Time: 05:21 35.5 UTC Magnitude: 1.5 ML
 Lat: 56.459N Lon: 5.938W Depth: 1.0 km
 Grid Ref: 157.44 kmE 736.61 kmN RMS: 0.17 secs
 Locality: MULL, STRATHCLYDE Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PGB	SZ	116	EP	3		05:21	54.76		
PGB	SE	116				05:22	09.67	12	1.16
PGB	SN	116	ES	3		05:22	08.61		
PGB	SN	116				05:22	12.24	16	0.21
PMS	SZ	101	EP	3		05:21	52.54		
PMS	SZ	101	ES	3		05:22	05.36		
PCO	SZ	126	EP	2		05:21	56.46		
PCO	SZ	126	ES	3		05:22	11.71		

January 27 1992 Time: 02:43 49.7 UTC Magnitude: 3.0 ML
 Lat: 50.662N Lon: 1.880E Depth: 7.3 km
 Grid Ref: 674.13 kmE 91.93 kmN RMS: 0.26 secs
 Locality: BOULOGNE, FRANCE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
SNF	SZ	171	EP	3		02:44			16.17
LDF	SZ	272	EP	3		02:44			29.20
FLN	SZ	271	EP	3		02:44			29.10
GRR	SZ	321	EP	3		02:44			35.30
LPF	SZ	362	EP	3		02:44			39.90
APA	SZ	184	EP	2		02:44			18.14
AWI	SZ	243	EP	2		02:44			25.52
ABA	SZ	253	EP	2		02:44			26.56
TFO	SN	72				02:44			22.96
TFO	SE	72	ES	2		02:44			09.19
TFO	SE	72				02:44			11.49
TFO	SZ	72	EP	2		02:44			00.50
TBB	SZ	124	IP	1	C	02:44			10.09
TSA	SZ	137	EP	2		02:44			12.06
TBW	SZ	157	EP	2		02:44			14.68
TCR	SZ	147	EP	2	C	02:44			12.87
SSP	SZ	398	EP	3		02:44			44.61
SSP	SN	398				02:45			48.85
SSP	SE	398				02:45			32.42
HAE	SZ	345	EP	2		02:44			38.44
HGH	SZ	346	EP	2		02:44			38.45
HLM	SZ	390	EP	3		02:44			43.50
JRS	SN	329				02:45			31.26
JRS	SE	329	ES	3		02:45			10.35

January 10 1992 Time: 21:59 2.3 UTC Magnitude: 3.4 ML
 Lat: 61.597N Lon: 3.321E Depth: 12.9 km
 Grid Ref: 682.14 kmE 1313.28 kmN RMS: 0.40 secs
 Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
LRW	SN	294	ES	2		21:60	13.06		
LRW	SN	294				21:60	15.52	54	0.09
LRW	SE	294				21:60	15.76	43	0.12
LRW	SZ	294	EP	2		21:59	43.27		
SAN	SZ	304	EP	2		21:59	44.38		
SAN	SZ	304	ES	4		21:60	13.53		
MCD	SN	581	ES	2		21:61	13.92		
MCD	SN	581				21:61	14.64	25	0.41
MCD	SE	581				21:61	15.94	23	0.13
MDO	SZ	636	ES	2		21:61	25.70		
MME	SZ	595	EP	2		21:60	19.53		
MME	SZ	595	ES	3		21:61	16.77		
MVH	SZ	587	EP	2		21:60	19.11		
MVH	SZ	587	ES	3		21:61	15.24		
MLA	SZ	523	EP	2		21:60	11.42		

PHASE DATA : 1992

TABLE 5 (cont'd)

JRS	SE	329				02:45	28.18	73	0.74
JRS	SZ	329	EP	2		02:44	36.16		
JLP	SZ	326	EP	2		02:44	35.97		
JSA	SZ	334	EP	3		02:44	36.25		
JVM	SZ	335	EP	2		02:44	36.63		
JQS	SZ	328	EP	3		02:44	35.54		
JQW	SZ	327	EP	3		02:44	35.65		
UCC	SZ	176	EP	3		02:44	17.40		

January 27 1992 Time: 22:16 5.6 UTC Magnitude: 2.6 ML
 Lat: 61.639N Lon: 1.884E Depth: 0.6 km
 Grid Ref: 605.73 kmE 1312.51 kmN RMS: 0.93 secs
 Locality: NORTHERN NORTH SEA Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ODD1	SN	322	IP			22:16	50.50		
ODD1	SN	322	ES			22:17	25.30		
KMY	SZ	328	IP			22:16	50.40		
KMY	SZ	328	ES			22:17	24.60		
SUE	SZ	167	EP			22:16	30.70		
SUE	SZ	167	ES			22:16	51.80		
HYA	SZ	236	EP			22:16	39.80		
HYA	SZ	236	ES			22:17	07.80		
ASK	SZ	220	EP			22:16	37.60		
ASK	SZ	220	ES			22:17	03.70		
LRW	SN	236				22:17	12.31	36	0.44
LRW	SE	236	ES	2		22:17	05.92		
LRW	SE	236				22:17	10.49	30	0.33
LRW	SZ	236	ES			22:17	06.54		
SAN	SZ	248	EP	4		22:16	36.55		
SAN	SZ	248	ES	3		22:17	08.80		

January 29 1992 Time: 08:36 10.0 UTC Magnitude: 1.7 ML
 Lat: 56.311N Lon: 4.462W Depth: 1.0 km
 Grid Ref: 247.75 kmE 715.91 kmN RMS: 0.38 secs
 Locality: BALQUHIDDER, CENTRAL Quality: C
 Comments: FELT INVERLOCHLARIG Intensity: 2+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SN	136	ES	3		08:36	48.53		
ESK	SN	136				08:36	51.09	10	0.46
ESK	SE	136				08:36	50.91	9	0.47
ESK	SZ	136	EP	3	C	08:36	32.35		
XSO	SZ	166	EP	3		08:36	37.47		
XSO	SZ	166	ES	3		08:36	57.67		
ECK	SZ	151	EP	3		08:36	35.20		
MCD	SN	160	ES	3		08:36	56.34		
MCD	SN	160				08:36	57.38	17	0.33
MCD	SE	160	ES	3		08:36	56.43		
MCD	SE	160				08:36	57.74	14	0.30
MCD	SZ	160	EP	3		08:36	35.97		
MDO	SZ	126	EP	3		08:36	31.54		
MDO	SZ	126	ES	3		08:36	46.77		
MME	SZ	144	EP	3		08:36	33.68		
MME	SZ	144	ES	3		08:36	52.22		
MVH	SZ	180	ES	3		08:37	00.75		
MFI	SZ	196	EP	4		08:36	13.77		
MFI	SZ	196	ES	4		08:36	41.27		
EDI	SN	90	ES	3		08:36	36.79		
EDI	SN	90				08:36	41.10	22	0.23
EDI	SE	90				08:36	41.02	19	0.20
EAU	SZ	81	EP	3	C	08:36	24.16		
EBL	SZ	107	EP	3		08:36	28.50		
ESY	SZ	123	EP	2		08:36	30.57		
EAB	SZ	16	IP	1		08:36	13.36		
EAB	SZ	16	ES	3		08:36	15.40		
EBH	SZ	59	EP	2		08:36	20.40		
EDU	SZ	93	EP	3		08:36	25.66		
ELO	SZ	50	EP	1	C	08:36	18.59		
EDR	SZ	136	EP	3		08:36	32.41		
EDI	SZ	90	EP	3	C	08:36	25.87		
KPL	SN	136				08:36	49.59	19	0.39
KPL	SE	136	ES	3		08:36	48.55		
KPL	SE	136				08:36	49.66	20	0.39
KPL	SZ	136	EP	3	D	08:36	32.88		
KPL	SZ	136				08:36	38.99		
KNR	SZ	65	EP	3		08:36	20.99		
KNR	SZ	65	ES	3		08:36	28.75		
KSB	SZ	116	EP	3		08:36	29.93		
ECK	SZ	151	ES	3		08:36	53.45		
ECK	SZ	151	ES	3		08:36	53.45		
PGB	SZ	56	EP	2		08:36	20.42		
PGB	SN	56	ES	3		08:36	27.40		
PGB	SN	56				08:36	30.24	24	0.25
PGB	SE	56				08:36	27.04	17	0.40
PCA	SZ	69	EP	2		08:36	22.43		
PMS	SZ	55	EP	2		08:36	20.03		
PMS	SZ	55	ES	3		08:36	26.61		
PCO	SZ	43	IP	1	C	08:36	17.85		
PCO	SZ	43	ES	3		08:36	23.96		

January 30 1992 Time: 14:33 2.3 UTC Magnitude: 1.2 ML
 Lat: 53.138N Lon: 1.529W Depth: 0.5 km
 Grid Ref: 431.49 kmE 360.21 kmN RMS: 0.33 secs
 Locality: MATLOCK, DERBYSHIRE Quality: D
 Comments: COLLAPSE TYPE

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
CFW	SZ	47	EP	3		14:33	11.15		
CFW	SN	47				14:33	18.53	18	0.56
KWE	SZ	25	EP	2		14:33	07.03		
KWE	SZ	25	ES	3		14:33	11.90		
KBI	SZ	13	EP	3		14:33	05.40		

February 1 1992 Time: 13:17 1.5 UTC Magnitude: 1.7 ML
 Lat: 53.085N Lon: 1.773W Depth: 0.5 km
 Grid Ref: 415.19 kmE 354.31 kmN RMS: 0.39 secs
 Locality: ALSOP MOOR, DERBYSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	9	IP	1	C	13:17	03.61		
KWE	SZ	9	ES	3		13:17	06.05		
CFW	SZ	50	EP	2		13:17	10.19		
CFW	SN	50	ES	2		13:17	17.54		
CFW	SN	50				13:17	18.47	57	0.25
CFW	SE	50				13:17	18.57	23	0.16
KSY	SZ	81	EP	3		13:17	16.18		
HPK	SZ	97	EP	3		13:17	18.21		
HPK	SN	97	ES			13:17	30.59		
HPK	SN	97				13:17	33.51	35	0.19
HPK	SE	97				13:17	32.72	22	0.48
LHO	SZ	51	EP	3		13:17	10.49		
LRN	SZ	148	EP	3		13:17	25.71		

February 1 1992 Time: 20:37 52.2 UTC Magnitude: 1.1 ML
 Lat: 52.664N Lon: 2.016W Depth: 3.2 km
 Grid Ref: 398.92 kmE 307.35 kmN RMS: 0.44 secs
 Locality: CANNOCK, STAFFORDSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KBI	SZ	74	ES	3		20:38	13.21		
HLM	SZ	61	EP	3		20:38	02.86		
SBD	SZ	88	EP	3		20:38	06.91		
CFW	SZ	49	EP	3		20:38	01.21		
CFW	SN	49	ES	2		20:38	07.30		
CFW	SN	49				20:38	08.07	19	0.30
CFW	SE	49				20:38	07.89	9	0.30
KWE	SZ	41	EP	2		20:37	58.72		
KWE	SZ	41	ES	2		20:38	05.73		

February 4 1992 Time: 22:18 50.9 UTC Magnitude: 1.7 ML
 Lat: 56.072N Lon: 5.384W Depth: 1.0 km
 Grid Ref: 189.44 kmE 691.77 kmN RMS: 0.27 secs
 Locality: LOCH FYNE, STRATHCLYDE Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PGB	SN	64	ES	3		22:19	10.49		
PGB	SZ	64	IP	1	C	22:19	02.34		
PGB	SN	64	ES	3		22:19	10.49		
PGB	SN	64				22:19	13.00	25	0.14
PGB	SE	64				22:19	13.29	35	0.24
PCA	SZ	82	IP	1	C	22:19	05.08		
PCA	SZ	82	ES	3		22:19	14.89		
PMS	SZ	47	IP		C	22:18	59.58		
PMS	SZ	47	ES	3		22:19	05.92		
PCO	SZ	81	IP	1	C	22:19	05.15		
PCO	SZ	81	IS	2		22:19	15.58		
EAU	SZ	123	EP	3		22:19	11.54		
EAB	SZ	66	EP	2		22:19	02.29		
EAB	SZ	66	ES	3		22:19	09.99		
EBH	SZ	118	EP	3		22:19	11.33		
EBH	SZ	118	ES	3		22:19	24.95		
EDU	SZ	156	ES	3		22:19	35.06		
ELO	SZ	113	EP	3		22:19	09.50		
ELO	SZ	113	ES	3		22:19	23.63		

February 6 1992 Time: 14:11 59.5 UTC Magnitude: 1.6 ML
 Lat: 53.337N Lon: 1.925W Depth: 11.6 km
 Grid Ref: 404.98 kmE 382.28 kmN RMS: 0.03 secs
 Locality: BUXTON, DERBYSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KWE	SZ	36	IP	1		14:12	06.05		
KWE	SZ	36	ES	3		14:12	10.67		
KBI	SZ	28	IP	1		14:12	04.78		
CFW	SZ	79	EP	1	C	14:12	12.52		
CFW	SN	79	ES			14:12	22.08		
CFW	SN	79				14:12	25.30	28	0.76
CFW	SE	79				14:12	26.62	23	0.65

February 9 1992 Time: 05:49 6.7 UTC Magnitude: 1.4 ML
 Lat: 53.014N Lon: 3.144W Depth: 12.5 km
 Grid Ref: 323.26 kmE 346.96 kmN RMS: 0.22 secs
 Locality: WREXHAM, CLWYD Quality: B

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
WPM	SZ	58	EP	2		05:49	16.66		
YLL	SZ	70	EP	2		05:49	18.63		

PHASE DATA : 1992

TABLE 5 (cont'd)

YRH	SZ	6				03:52	26.00	40	0.06	
YLL	SZ	41	IP		C	03:52	29.08			
YLL	SZ	41				03:52	29.09	5	0.05	
WFB	SZ	43	IP	1	D	03:52	29.54			
YRE	SZ	16	IP	1	C	03:52	25.35			
YRE	SZ	16	ES	1		03:52	27.76			
YRE	SZ	16				03:52	27.95	37	0.11	
WLF	SZ	48	ES	2		03:52	35.68			
YRC	SZ	42	ES	2		03:52	34.32			

March 3 1992 Time: 22:21 41.3 UTC Magnitude: 0.8 ML
 Lat: 55.796N Lon: 3.848W Depth: 1.0 km
 Grid Ref: 284.17 kmE 657.40 kmN RMS: 0.14 secs
 Locality: ALLANTON, STRATHCLYDE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
PGB	SZ	40	EP	3		22:21	48.98		
PGB	SN	40				22:21	52.99	18	1.00
PGB	SE	40	ES	3		22:21	54.07		
PGB	SE	40				22:21	59.44	19	1.12
PCA	SZ	28	EP	2		22:21	46.69		
PCA	SZ	28	ES	3		22:21	50.90		

March 3 1992 Time: 22:32 4.7 UTC Magnitude: 1.0 ML
 Lat: 56.125N Lon: 3.737W Depth: 1.7 km
 Grid Ref: 292.03 kmE 693.84 kmN RMS: 0.10 secs
 Locality: CLACKMANNAN, CENTRAL Quality: B
 Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EDI	SN	41	EP	2		22:32	12.18		
EDI	SN	41				22:32	22.60	23	0.88
EDI	SE	41	ES	2		22:32	17.77		
EDI	SE	41				22:32	18.24	20	0.62
EAU	SZ	36	EP	2		22:32	11.33		
EAU	SZ	36	ES	3		22:32	16.12		
EBL	SZ	59	EP	3		22:32	14.91		
ESY	SZ	74	EP	2		22:32	17.69		
EAB	SZ	38	EP	2		22:32	11.70		
EAB	SZ	38	ES	4		22:32	14.97		
EBH	SZ	20	EP	2		22:32	08.53		
EBH	SZ	20	ES	3		22:32	11.68		
EDU	SZ	65	EP	2		22:32	16.24		
ELO	SZ	39	IP	1		22:32	11.81		
ELO	SZ	39	ES	3		22:32	17.00		
PCO	SZ	27	EP	2		22:32	10.02		

March 5 1992 Time: 02:45 28.9 UTC Magnitude: 1.2 ML
 Lat: 52.945N Lon: 2.132W Depth: 1.0 km
 Grid Ref: 391.10 kmE 338.68 kmN RMS: 0.21 secs
 Locality: STONE, STAFFORDSHIRE Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HAE	SZ	105	EP	2		02:45	46.93		
HCG	SZ	124	EP	2		02:45	50.18		
HLM	SZ	70	EP	2		02:45	41.15		
SBD	SZ	76	IP	1	D	02:45	41.96		
KWE	SZ	21	EP			02:45	33.20		
KBI	SZ	53	EP	1		02:45	38.67		
SSP	SZ	89	EP	2		02:45	44.09		
SSP	SE	89				02:45	58.27	3	0.21
SSP	SN	89	ES	2		02:45	55.26		
SSP	SN	89				02:45	57.16	4	0.17
CWF	SZ	60	EP	3		02:45	39.34		
CWF	SN	60	ES	3		02:45	47.35		
HPK	SZ	117	EP	3		02:45	48.87		
HPK	SN	117	ES	3		02:46	03.11		
HPK	SN	117				02:46	08.49	13	0.19

March 12 1992 Time: 23:19 37.2 UTC Magnitude: 1.6 ML
 Lat: 57.896N Lon: 5.452W Depth: 8.6 km
 Grid Ref: 195.46 kmE 894.85 kmN RMS: 0.23 secs
 Locality: GRUINARD BAY, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SN	63	ES	3		23:19	55.51		
KPL	SE	63				23:19	58.67	21	0.19
KPL	SZ	63	EP	3		23:19	47.73		
KAC	SZ	45	EP	2		23:19	45.07		
KAC	SZ	45	ES	3		23:19	50.47		
MVH	SZ	75	EP	2		23:19	49.58		
MVH	SZ	75	ES	3		23:19	58.24		
MLA	SZ	131	EP	2		23:19	58.49		
MLA	SZ	131	ES	3		23:20	13.28		
MDO	SZ	82	EP	2		23:19	51.05		
MDO	SZ	82	ES	3		23:20	01.14		

March 13 1992 Time: 23:26 12.6 UTC Magnitude: 1.5 ML
 Lat: 51.709N Lon: 3.299W Depth: 2.5 km
 Grid Ref: 310.23 kmE 201.95 kmN RMS: 0.05 secs
 Locality: BEDLINOG, MID GLAMORGAN Quality: B
 Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
HCG	SZ	73	EP	3		23:26	25.68		
HGH	SZ	35	IP	1	D	23:26	19.41		

HGH	SZ	35	ES	2		23:26	24.16		
HTR	SZ	41	EP	2		23:26	20.30		
MCH	SN	38				23:26	25.48	51	0.12
MCH	SE	38	ES	1		23:26	25.17		
MCH	SE	38				23:26	27.95	55	0.54
MCH	SZ	38	IP	1	C	23:26	19.91		
HSA	SZ	59	EP	3		23:26	23.41		
HAE	SZ	63	ES	2		23:26	32.32		

March 16 1992 Time: 22:53 1.6 UTC Magnitude: 1.1 ML
 Lat: 56.130N Lon: 3.693W Depth: 0.3 km
 Grid Ref: 294.76 kmE 694.35 kmN RMS: 0.17 secs
 Locality: CLACKMANNAN, CENTRAL Quality: C
 Comments: FELT CLACKMANNAN, C/F Intensity: 3+

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EDI	SN	39	ES	3		22:53	14.75		
EDI	SN	39				22:53	19.28	26	0.86
EDI	SE	39				22:53	17.21	45	0.79
EAU	SZ	35	EP	2		22:53	08.49		
EAU	SZ	35	ES	3		22:53	13.51		
EBL	SZ	57	EP	2		22:53	11.93		
EAB	SZ	41	EP	2		22:53	09.43		
EAB	SZ	41	ES	3		22:53	15.06		
EBH	SZ	17	EP	2		22:53	05.50		
EBH	SZ	17	ES	3		22:53	08.51		
ELO	SZ	38	EP	3		22:53	09.00		
ELO	SZ	38	ES	3		22:53	13.84		
EDR	SZ	113	EP	2		22:53	21.18		
EDI	SZ	39	EP	2		22:53	08.83		

March 19 1992 Time: 07:23 47.3 UTC Magnitude: 1.3 ML
 Lat: 56.130N Lon: 3.707W Depth: 2.0 km
 Grid Ref: 293.91 kmE 694.35 kmN RMS: 0.18 secs
 Locality: CLACKMANNAN, CENTRAL Quality: C
 Comments: C/F

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAU	SZ	36	EP			07:23	53.77		
EAU	SZ	36	ES	2		07:23	58.80		
EAU	SZ	36				07:24	04.48	45	0.69
EBL	SZ	57	EP	3		07:23	57.11		
EBL	SZ	57	ES	3		07:24	03.27		
ESY	SZ	72	EP	2		07:23	59.67		
EAB	SZ	40	EP	2		07:23	54.57		
EAB	SZ	40	ES	3		07:23	59.94		
EAB	SZ	40				07:24	03.17	31	0.53
EBH	SZ	18	IP	1	D	07:23	50.74		
EBH	SZ	18	ES	2		07:23	53.65		
EDU	SZ	63	EP	2		07:23	58.77		
ELO	SZ	38	EP	2		07:23	54.32		
ELO	SZ	38	ES	3		07:23	58.99		
PCO	SZ	29	EP	3		07:23	52.76		

March 25 1992 Time: 15:38 31.8 UTC Magnitude: 1.2 ML
 Lat: 57.558N Lon: 5.007W Depth: 1.0 km
 Grid Ref: 220.13 kmE 855.91 kmN RMS: 0.09 secs
 Locality: ACHNASHEEN, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SN	46				15:38	51.25	35	0.78
KPL	SE	46	ES	3		15:38	46.53		
KPL	SE	46				15:38	47.75	23	0.69
KPL	SZ	46	EP	1	D	15:38	40.35		
KSB	SZ	46	EP	2	D	15:38	40.35		
KSB	SZ	46	ES	3		15:38	46.49		
KAC	SZ	19	EP	2		15:38	35.49		
KAC	SZ	19	ES	4		15:38	37.70		

March 25 1992 Time: 16:36 43.3 UTC Magnitude: 0.9 ML
 Lat: 55.086N Lon: 3.614W Depth: 6.5 km
 Grid Ref: 296.98 kmE 578.09 kmN RMS: 0.20 secs
 Locality: DUMFRIES, D & G Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
ESK	SN	37	ES	3		16:36	55.07		
ESK	SN	37				16:36	55.14	19	0.26
ESK	SE	37				16:36	55.13	16	0.28
ESK	SZ	37	EP	3		16:36	49.78		
ECK	SZ	33	EP	3		16:36	49.35		
ECK	SZ	33	ES	3		16:36	53.39		
BHH	SZ	25	EP	2	D	16:36	48.31		
BHH	SN	25	ES	3		16:36	51.53		
BHH	SN	25				16:36	53.39	44	0.09
BHH	SE	25				16:36	53.75	19	0.11
BBH	SZ	44	EP	3		16:36	50.96		
BBH	SZ	44	ES	3		16:36	56.36		
BNA	SZ	14	IP	1		16:36	46.31		
BNA	SZ	14	ES	2	C	16:36	48.06		
BBO	SZ	46	EP	3		16:36	51.89		
BBO	SZ	46	ES	3		16:36	56.57		
BWH	SZ	10	IP	1	C	16:36	45.78		
BWH	SZ	10	ES	3		16:36	47.01		

PHASE DATA : 1992

TABLE 5 (cont'd)

Table with columns: Station (BDL, BHH, BBO, etc.), Phase (SZ, SN, SE, etc.), Time (00:44), Magnitude (09.04), Depth (12.15, 08.03, etc.), and other parameters.

Table with columns: Station (CWF, KSY, KWE, etc.), Phase (SN, SE, ES, etc.), Time (02:13), Magnitude (14.69), Depth (13.23, 13.69, etc.), and other parameters.

May 17 1992 Time: 03:04 53.9 UTC Magnitude: -0.2 ML
Lat: 57.228N Lon: 5.458W Depth: 1.9 km
Grid Ref: 191.31 kmE 820.47 kmN RMS: 0.13 secs
Locality: GLEN SHIEL, HIGHLAND Quality: C

May 18 1992 Time: 05:28 37.6 UTC Magnitude: 3.4 ML
Lat: 57.076N Lon: 6.391E Depth: 10.0 km
Grid Ref: 907.91 kmE 829.60 kmN RMS: 0.46 secs
Locality: CENTRAL NORTH SEA Quality: D

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Contains multiple rows of seismic data for the May 18 event.

May 19 1992 Time: 19:06 24.1 UTC Magnitude: 0.8 ML
Lat: 56.006N Lon: 5.120W Depth: 4.1 km
Grid Ref: 205.53 kmE 683.63 kmN RMS: 0.05 secs
Locality: DUNOON, STRATHCLYDE Quality: C
Comments: NW OF DUNOON

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Contains multiple rows of seismic data for the May 19 event.

May 19 1992 Time: 22:44 31.6 UTC Magnitude: 1.5 ML
Lat: 53.215N Lon: 1.163W Depth: 2.6 km
Grid Ref: 455.86 kmE 369.07 kmN RMS: 0.26 secs
Locality: SHIREBROOK, NOTTS Quality: C

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Contains multiple rows of seismic data for the May 19 event.

May 22 1992 Time: 08:40 19.0 UTC Magnitude: 2.9 ML
Lat: 61.093N Lon: 4.258E Depth: 19.3 km
Grid Ref: 737.06 kmE 1261.76 kmN RMS: 0.19 secs
Locality: NORTHERN NORTH SEA Quality: B

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Contains multiple rows of seismic data for the May 22 event.

May 19 1992 Time: 02:12 53.9 UTC Magnitude: 2.0 ML
Lat: 53.277N Lon: 0.925W Depth: 0.5 km
Grid Ref: 471.70 kmE 376.17 kmN RMS: 0.49 secs
Locality: GAMSTON, NOTTS Quality: C

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Contains multiple rows of seismic data for the May 19 event.

HGH SZ 31 EP 2 13:52 06.80
HGH SZ 31 ES 1 13:52 11.10
HTR SZ 48 EP 2 13:52 09.24

BBO SZ 18 ES 3 02:40 05.99
BBO SZ 18 02:40 06.26 3 0.09

June 23 1992 Time: 21:53 18.9 UTC Magnitude: 1.2 ML
Lat: 52.912N Lon: 1.845W Depth: 5.0 km
Grid Ref: 410.41 kmE 335.00 kmN RMS: 0.29 secs
Locality: UTTOXETER, STAFFS Quality: C
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
CWF SN 41 ES 3 21:53 31.56
CWF SN 41 21:53 31.85 21 0.36
KWE SZ 12 EP 3 21:53 21.02
KBI SZ 44 EP 2 21:53 26.99

June 28 1992 Time: 12:23 31.4 UTC Magnitude: 3.2 ML
Lat: 62.000N Lon: 4.853E Depth: 15.0 km
Grid Ref: 758.40 kmE 1365.61 kmN RMS: 0.68 secs
Locality: NORWEIGIAN COAST Quality: D
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
FOO SZ 46 EP 1 12:23 39.43
FOO SZ 46 ES 3 12:23 43.87
FRO SZ 27 EP 1 12:23 37.48
FRO SZ 27 ES 3 12:23 40.51
SUE SZ 105 EP 1 12:23 47.91
SUE SZ 105 ES 3 12:23 59.28
BER SZ 182 EP 1 12:23 58.21
BER SZ 182 ES 3 12:24 19.81
HYA SZ 117 EP 1 12:23 49.69
HYA SZ 117 ES 3 12:24 02.36
ASK SZ 170 EP 1 12:23 56.85
ASK SZ 170 ES 3 12:24 14.82
ODD1 SZ 252 EP 1 12:24 07.08
ODD1 SZ 252 ES 3 12:24 33.38
KMY SZ 312 EP 1 12:24 14.17
KMY SZ 312 ES 3 12:24 44.26
SAN SZ 397 EP 2 12:24 24.03
SAN SZ 397 ES 2 12:25 04.41
YEL SZ 357 EP 3 12:24 19.84
YEL SZ 357 ES 3 12:24 55.86
LRW SZ 386 EP 3 12:24 21.73
LRW SN 386 12:25 04.52 20 0.39
LRW SE 386 ES 3 12:25 00.82
LRW SE 386 12:25 03.09 28 0.22

June 24 1992 Time: 19:47 43.0 UTC Magnitude: 1.2 ML
Lat: 56.124N Lon: 3.686W Depth: 0.5 km
Grid Ref: 295.18 kmE 693.64 kmN RMS: 0.10 secs
Locality: CLACKMANNAN, CENTRAL Quality: B
Comments: C/F
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
EDI SN 38 ES 19:47 54.93
EDI SN 38 19:48 00.25 27 0.66
EDI SE 38 ES 2 19:47 56.02
EDI SE 38 19:47 58.09 45 0.86
EAU SZ 34 EP 2 19:47 49.42
EAU SZ 34 ES 3 19:47 53.88
EBL SZ 56 EP 2 19:47 52.82
EAB SZ 41 EP 2 19:47 50.39
EAB SZ 41 ES 3 19:47 55.75
EBH SZ 18 IP 1 D 19:47 46.49
EBH SZ 18 ES 2 19:47 49.14
ELO SZ 39 IP 1 D 19:47 49.98
ELO SZ 39 ES 3 19:47 55.36
EDI SZ 38 EP 2 D 19:47 50.15

June 29 1992 Time: 03:05 11.8 UTC Magnitude: 3.2 ML
Lat: 49.843N Lon: 8.025W Depth: 1.7 km
Grid Ref: -33.01 kmE 11.18 kmN RMS: 0.07 secs
Locality: SCILLY ISLES, CORNWALL Quality: D
Comments: SW OF SCILLY ISLES
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
CR2 SZ 208 EP 2 03:05 43.91
CR2 SN 208 ES 2 03:06 07.24
CR2 SN 208 03:06 13.84 176 0.41
CR2 SE 208 03:06 13.63 144 0.32
CGH SZ 207 EP 3 03:05 43.72
CCA SZ 204 EP 2 03:05 43.51
CBW SZ 211 EP 2 03:05 44.13
CPZ SZ 179 EP 2 03:05 40.12
CME SZ 207 EP 2 03:05 43.61
CRA SZ 206 EP 2 03:05 43.53
CST SZ 209 EP 2 03:05 44.00

June 24 1992 Time: 21:34 5.4 UTC Magnitude: 1.0 ML
Lat: 56.125N Lon: 3.756W Depth: 1.8 km
Grid Ref: 290.88 kmE 693.87 kmN RMS: 0.06 secs
Locality: CLACKMANNAN, CENTRAL Quality: C
Comments: C/F
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
EDI SZ 42 EP 2 21:34 13.16
EDI SN 42 ES 3 21:34 18.62
EDI SN 42 21:34 19.75 12 0.69
EDI SE 42 ES 3 21:34 18.89
EDI SE 42 21:34 20.89 30 0.86
EAU SZ 37 EP 2 21:34 12.17
EAU SZ 37 ES 2 21:34 17.05
EBH SZ 21 EP 2 D 21:34 09.37
EBH SZ 21 ES 3 21:34 12.45

July 1 1992 Time: 12:38 59.2 UTC Magnitude: 0.8 ML
Lat: 50.110N Lon: 5.180W Depth: 7.0 km
Grid Ref: 172.68 kmE 28.24 kmN RMS: 0.02 secs
Locality: CONSTANTINE, CORNWALL Quality: B
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
CTR SN 6 ES 1 12:39 02.09
CME SZ 7 IP 1 C 12:39 01.01
CR2 SZ 6 IP 1 C 12:39 00.88
CR2 SN 6 ES 1 12:39 02.09
CR2 SN 6 12:39 02.16 67 0.04
CR2 SE 6 12:39 02.18 118 0.06
CCO SZ 3 EP 1 12:39 00.56
CCA SZ 9 EP 1 12:39 01.18
CST SZ 10 IP 1 C 12:39 01.28
CBW SZ 6 IP C 12:39 00.85
CRA SZ 6 IP 1 C 12:39 00.84
CGH SZ 7 IP C 12:39 00.87
CGH SZ 7 ES 2 12:39 02.19

June 27 1992 Time: 13:11 28.7 UTC Magnitude: 1.4 ML
Lat: 50.159N Lon: 6.194W Depth: 8.7 km
Grid Ref: 100.47 kmE 37.27 kmN RMS: 0.03 secs
Locality: SCILLY ISLES, CORNWALL Quality: C
Comments: NE OF SCILLY ISLES
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
CR2 SZ 73 IP C 13:11 41.35
CR2 SN 73 ES 1 13:11 51.04
CR2 SN 73 13:11 54.85 15 0.02
CR2 SE 73 13:11 52.20 13 0.04
CGH SZ 75 EP 1 C 13:11 41.55
CCO SZ 72 IP 1 C 13:11 41.00
CCA SZ 69 IP 1 C 13:11 40.69
CST SZ 74 EP 1 C 13:11 41.50
CBW SZ 77 IP 1 C 13:11 41.95
CPZ SZ 44 EP 1 13:11 36.42
CME SZ 72 IP C 13:11 41.12
CME SN 72 ES 2 13:11 50.77
CTR SZ 74 IP 1 C 13:11 41.42
CRA SZ 72 EP 1 C 13:11 41.07

July 2 1992 Time: 06:13 31.9 UTC Magnitude: -0.1 ML
Lat: 57.253N Lon: 5.486W Depth: 2.5 km
Grid Ref: 189.75 kmE 823.40 kmN RMS: 0.61 secs
Locality: LOCH DUICH, HIGHLAND Quality: D
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
KPL SN 14 06:13 38.36 8 0.37
KPL SE 14 ES 3 06:13 36.40
KPL SE 14 06:13 37.97 7 0.31
KPL SZ 14 EP 2 06:13 35.60
KSB SZ 6 EP 2 06:13 33.13
KSB SZ 6 ES 3 06:13 33.85

June 27 1992 Time: 23:06 50.8 UTC Magnitude: -0.2 ML
Lat: 54.768N Lon: 3.549W Depth: 3.8 km
Grid Ref: 300.35 kmE 542.51 kmN RMS: 0.01 secs
Locality: ALLONBY BAY, CUMBRIA Quality: C
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
BHH SZ 42 EP 2 23:06 58.28
BHH SE 42 ES 3 23:07 03.60
BBO SZ 20 IP 1 C 23:06 54.68
BBO SZ 20 ES 3 23:06 57.41
BBO SZ 20 23:06 57.55 5 0.09

July 2 1992 Time: 14:20 36.4 UTC Magnitude: 1.0 ML
Lat: 50.110N Lon: 5.180W Depth: 7.2 km
Grid Ref: 172.68 kmE 28.18 kmN RMS: 0.01 secs
Locality: CONSTANTINE, CORNWALL Quality: B
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
CTR SZ 7 IP C 14:20 38.06
CME SZ 7 IP C 14:20 38.19
CR2 SZ 6 IP C 14:20 38.06
CR2 SN 6 ES 14:20 39.32

June 28 1992 Time: 02:39 59.6 UTC Magnitude: -0.4 ML
Lat: 54.770N Lon: 3.527W Depth: 8.1 km
Grid Ref: 301.75 kmE 542.74 kmN RMS: 0.04 secs
Locality: ALLONBY BAY, CUMBRIA Quality: C
STAT CO DIST PHAS WT P HrMn SECS AMPL PERI
BHH SZ 41 EP 3 02:40 07.00
BHH SE 41 ES 2 02:40 12.12
BBO SZ 18 EP 3 02:40 03.28

PHASE DATA : 1992

TABLE 5 (cont'd)

CBW SZ 6 IP C 05:59 38.13
CRA SZ 6 IP C 05:59 38.15
CME SZ 8 EP 05:59 38.29

July 30 1992 Time: 10:38 23.9 UTC Magnitude: 0.4 ML
Lat: 50.110N Lon: 5.176W Depth: 7.3 km
Grid Ref: 172.92 kmE 28.23 kmN RMS: 0.02 secs
Locality: CONSTANTINE, CORNWALL Quality: B

July 29 1992 Time: 18:05 14.1 UTC Magnitude: 3.5 ML
Lat: 53.131N Lon: 4.393W Depth: 11.0 km
Grid Ref: 239.93 kmE 362.00 kmN RMS: 0.06 secs
Locality: CAERNARVON BAY, GWYNEDD Quality: B
Comments: FELT CAERNARVON, BANGOR..

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Rows include CR2, CR2, CR2, CR2, CGH, CCO, CCA, CST, CST, CBW, CME.

Main data table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Rows include LLW, ECP, BCP, ECB, EDI, EDI, EDI, EAU, EBL, ESY, EAB, EBH, ELO, EDI, MCH, HTL, HTL, HTL, HSA, HSA, HEX, CWF, CWF, CWF, KWE, KBI, HPK, MCH, MCH, MCH, WME, WLF, YRC, WPM, YLL, YRE, YRH, WFB, WIM, SSP, HAE, HCG, HCG, HGH, HLM, HTR, HTR, SBD, SBD, HBL2, HBL2, SSP, DLF, DLF, DMU, DCN, LMI, LMI, LMI, LCK, LBH, LKL, LBO, LLO, LLO, BHH, BHH, BHH, BHA, BBO, BTA, BWH, BBH, BD, WCB, WCB.

July 30 1992 Time: 18:11 44.6 UTC Magnitude: 0.3 ML
Lat: 57.219N Lon: 5.453W Depth: 3.0 km
Grid Ref: 191.55 kmE 819.55 kmN RMS: 0.06 secs
Locality: LOCH DUICH, HIGHLAND Quality: C

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Rows include KPL, KPL, KPL, KPL, KSB, KSB, KAC.

July 31 1992 Time: 00:54 25.4 UTC Magnitude: 0.6 ML
Lat: 53.375N Lon: 1.827W Depth: 1.0 km
Grid Ref: 411.54 kmE 386.54 kmN RMS: 0.03 secs
Locality: GLOSSOP, DERBYSHIRE Quality: C
Comments: FELT GLOSSOP

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Rows include KBI, KBI, KWE.

July 31 1992 Time: 06:53 43.7 UTC Magnitude: 0.2 ML
Lat: 57.015N Lon: 5.737W Depth: 3.7 km
Grid Ref: 173.15 kmE 797.75 kmN RMS: 0.08 secs
Locality: MALLAIG, HIGHLAND Quality: C

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Rows include KAR, KAR, KAR, KSB, KSB.

August 1 1992 Time: 04:13 50.6 UTC Magnitude: 1.8 ML
Lat: 54.753N Lon: 2.844W Depth: 10.2 km
Grid Ref: 345.67 kmE 540.16 kmN RMS: 0.12 secs
Locality: CALTHWAITE, CUMBRIA Quality: A

Table with columns: STAT, CO, DIST, PHAS, WT, P, HrMn, SECS, AMPL, PERI. Rows include XSO, XSO, ECK, GIM, GIM, GCD, GCD, LLO, LLO, HPG, HPG, LRN, LRN, EDI, EDI, EDI, EDI, PGB, PGB, PGB, BHH, BHH, BHH, BHA, BBO, BBO, BBO, BTA, BTA, BTA, BTA.

PHASE DATA : 1992

TABLE 5 (cont'd)

CWF	SN	104	ES	2	17:06	29.32		
CWF	SN	104			17:06	32.11	8	0.17
CWF	SE	104			17:06	31.75	11	0.19
KSY	SZ	143	EP	3	17:06	22.57		
KWE	SZ	136	ES	3	17:06	37.25		

December 27 1992 Time: 18:55 40.3 UTC Magnitude: 0.5 ML
 Lat: 56.994N Lon: 5.741W Depth: 3.7 km
 Grid Ref: 172.78 kmE 795.39 kmN RMS: 0.29 secs
 Locality: LOCH NEVIS, HIGHLAND Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
KPL	SZ	39	EP	3		18:55	47.95		
KPL	SN	39				18:55	52.60	4	0.54
KPL	SE	39	ES	2		18:55	52.23		
KPL	SE	39				18:55	52.32	6	0.22
KAR	SZ	10	EP	2	C	18:55	42.65		
KAR	SZ	10	ES	3		18:55	43.97		

December 30 1992 Time: 15:49 24.9 UTC Magnitude: 2.2 ML
 Lat: 56.378N Lon: 4.459W Depth: 2.2 km
 Grid Ref: 248.15 kmE 723.30 kmN RMS: 0.29 secs
 Locality: BALQUHIDDER, CENTRAL Quality: C

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EDI	SN	94	ES	3		15:49	52.77		
EDI	SN	94				15:49	56.66	92	0.44
EDI	SE	94				15:49	56.88	67	0.38
EAU	SZ	86	EP	2		15:49	39.76		
EBL	SZ	111	EP	2		15:49	43.95		
ESY	SZ	126	EP	2		15:49	46.07		
ESY	SZ	126	ES	3		15:50	00.83		
EAB	SZ	22	IPG		C	15:49	29.21		
EBH	SZ	61	EP	2	C	15:49	35.64		
EDU	SZ	91	EP	2		15:49	40.51		
ELO	SZ	47	IPG		C	15:49	33.31		
ELO	SZ	47	ES	2		15:49	38.87		
EDR	SZ	132	EP	3		15:49	46.51		
EDI	SZ	94	EP	3		15:49	40.92		
KPL	SN	129				15:50	04.46	30	0.18
KPL	SE	129	ES	3		15:50	01.87		
KPL	SE	129				15:50	04.12	55	0.70
KPL	SZ	129	EP	2		15:49	46.60		
KAR	SZ	104	EP	2	D	15:49	42.26		
KAR	SZ	104	ES	3		15:49	55.35		
KAC	SZ	135	EP	2	C	15:49	47.42		
KAC	SZ	135	ES	3		15:50	03.23		
BNA	SZ	166	EP	2		15:49	51.75		
BNA	SZ	166	ES	3		15:50	10.68		
BWH	SZ	143	EP	3		15:49	48.73		
BWH	SZ	143	ES	3		15:50	04.50		
BBH	SZ	169	EP	2		15:49	52.84		
PCA	SZ	77	EP	2	D	15:49	38.21		
PMS	SZ	62	EP	3		15:49	35.81		
PMS	SZ	62	ES	3		15:49	42.95		
PCO	SZ	49	IP		C	15:49	33.79		
KNR	SZ	59	EP	2		15:49	34.81		
PGB	SZ	63	IP	1	C	15:49	36.06		
PGB	SN	63	ES	3		15:49	43.61		
PGB	SN	63				15:49	45.98	49	0.36
PGB	SE	63				15:49	45.36	34	0.47
BHH	SZ	163	EP	3		15:49	51.54		
BHH	SN	163	ES			15:50	10.73		
BHH	SN	163				15:50	12.49	69	0.28
BHH	SE	163				15:50	12.15	67	0.34

December 30 1992 Time: 17:13 37.2 UTC Magnitude: 0.9 ML
 Lat: 56.350N Lon: 4.367W Depth: 4.5 km
 Grid Ref: 253.76 kmE 720.04 kmN RMS: 0.25 secs
 Locality: BALQUHIDDER, CENTRAL Quality: D

STAT	CO	DIST	PHAS	WT	P	HrMn	SECS	AMPL	PERI
EAB	SZ	18	EP	3		17:13	40.44		
EDU	SZ	86	EP	3		17:13	51.73		
ELO	SZ	43	EP	3		17:13	44.60		
ELO	SZ	43	ES	3		17:13	50.10		
ELO	SZ	43				17:13	51.53	10	0.23
PCO	SZ	44	EP	2		17:13	44.99		
PMS	SZ	61	EP	3		17:13	47.96		
PMS	SZ	61	ES	3		17:13	55.23		
PMS	SZ	61				17:13	55.36	9	0.89
EBH	SZ	54	EP	2		17:13	47.02		

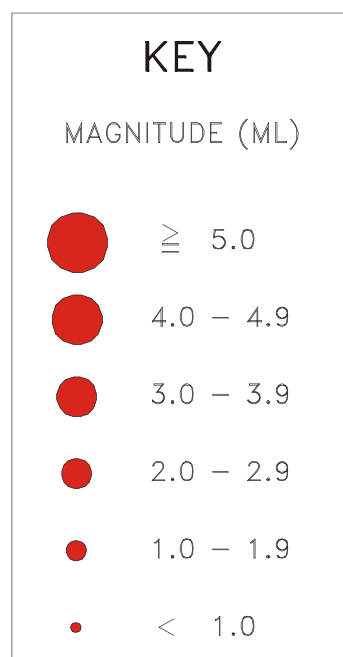
TABLE 6
DEPTH/CRUSTAL VELOCITY MODELS

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

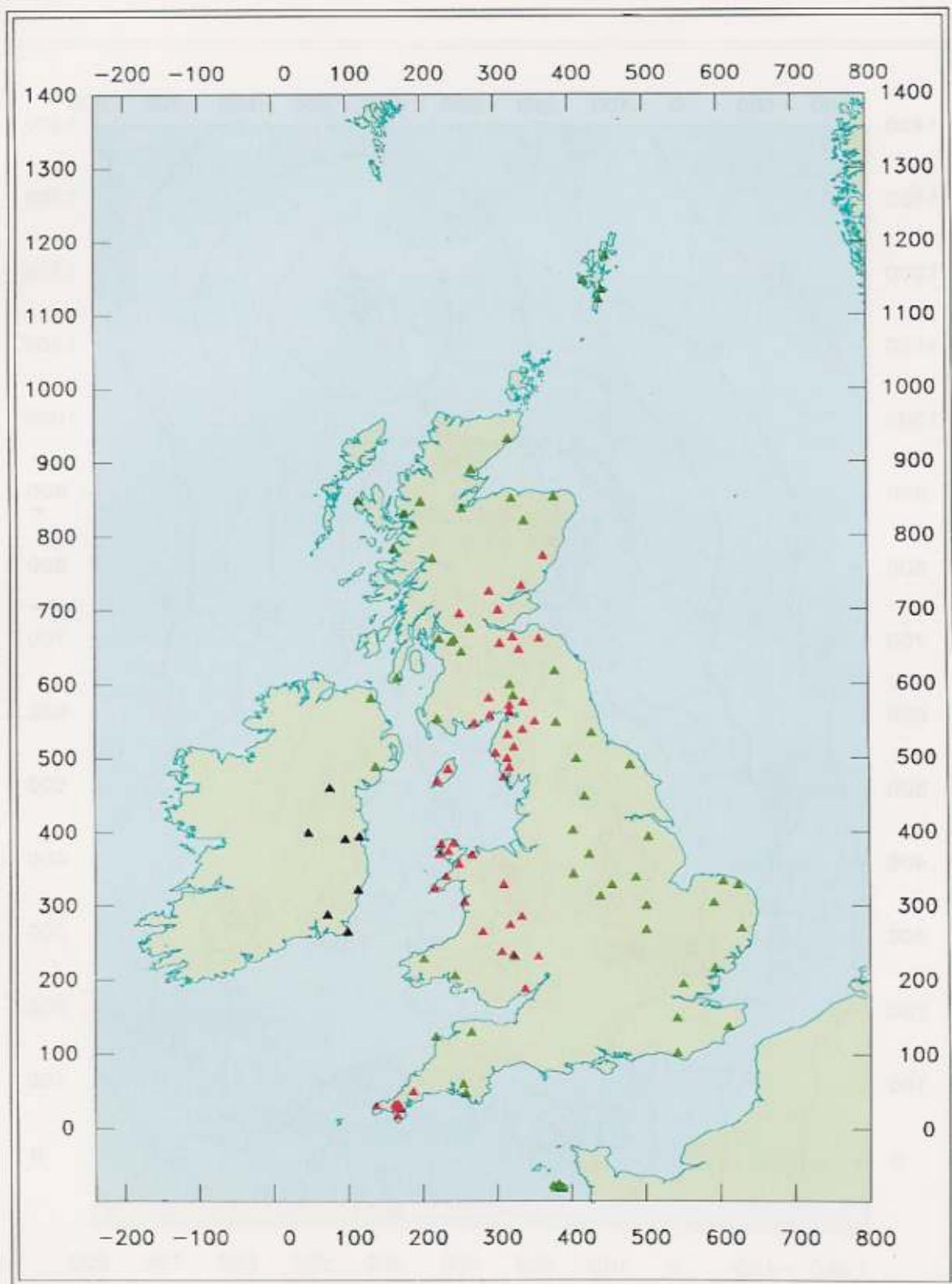


Figure 1. Seismograph network operational in December 1992. Colour coding shows the standard stations (green), those upgraded to rapid access by December 1992 (red) and DIAS stations (black).

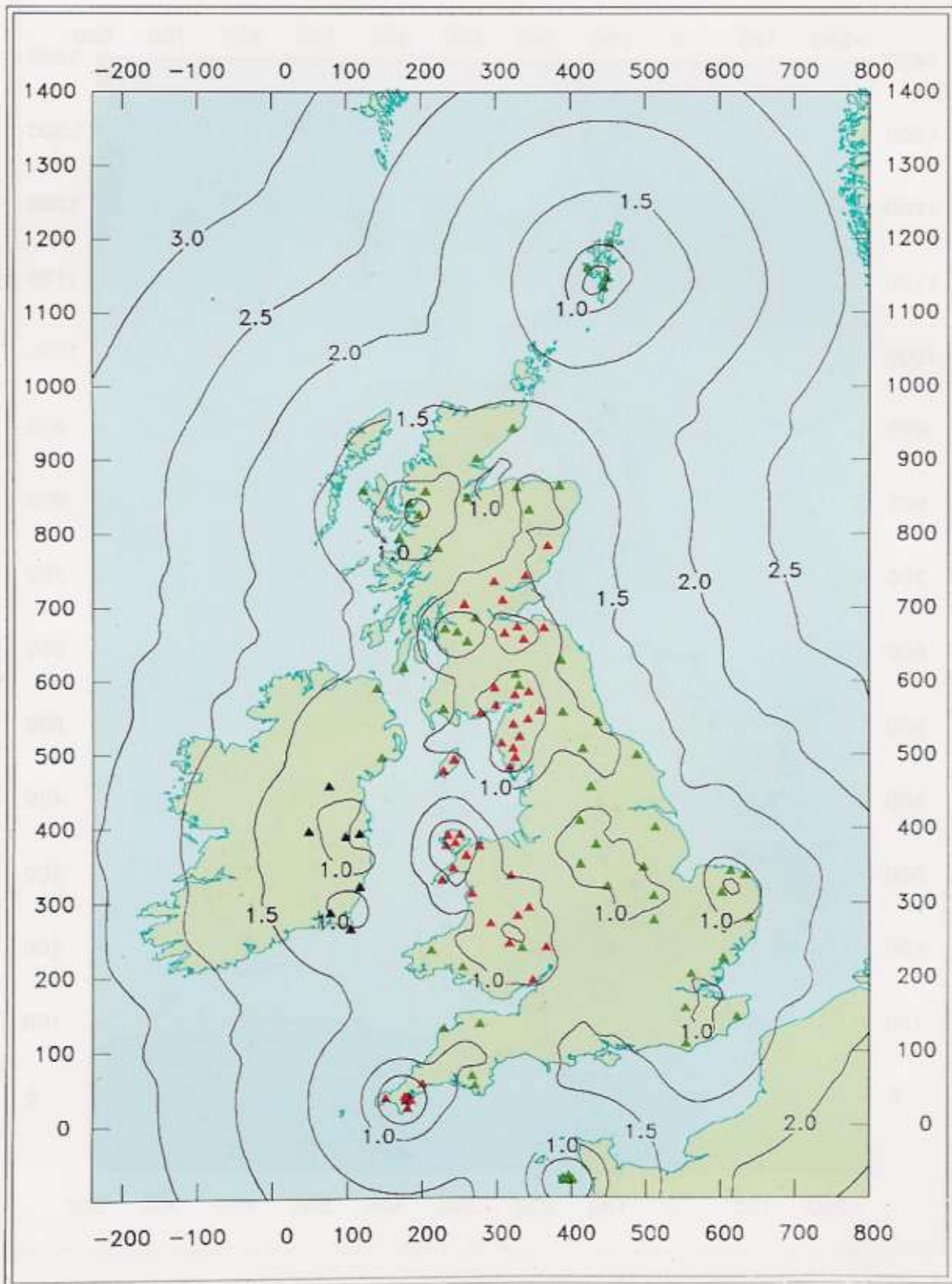


Figure 2. Earthquake detection capability in December 1992. Contour values are Richter local magnitude (ML) for 4 nanometres of noise (average) and S-wave amplitudes twice that at the third nearest station.

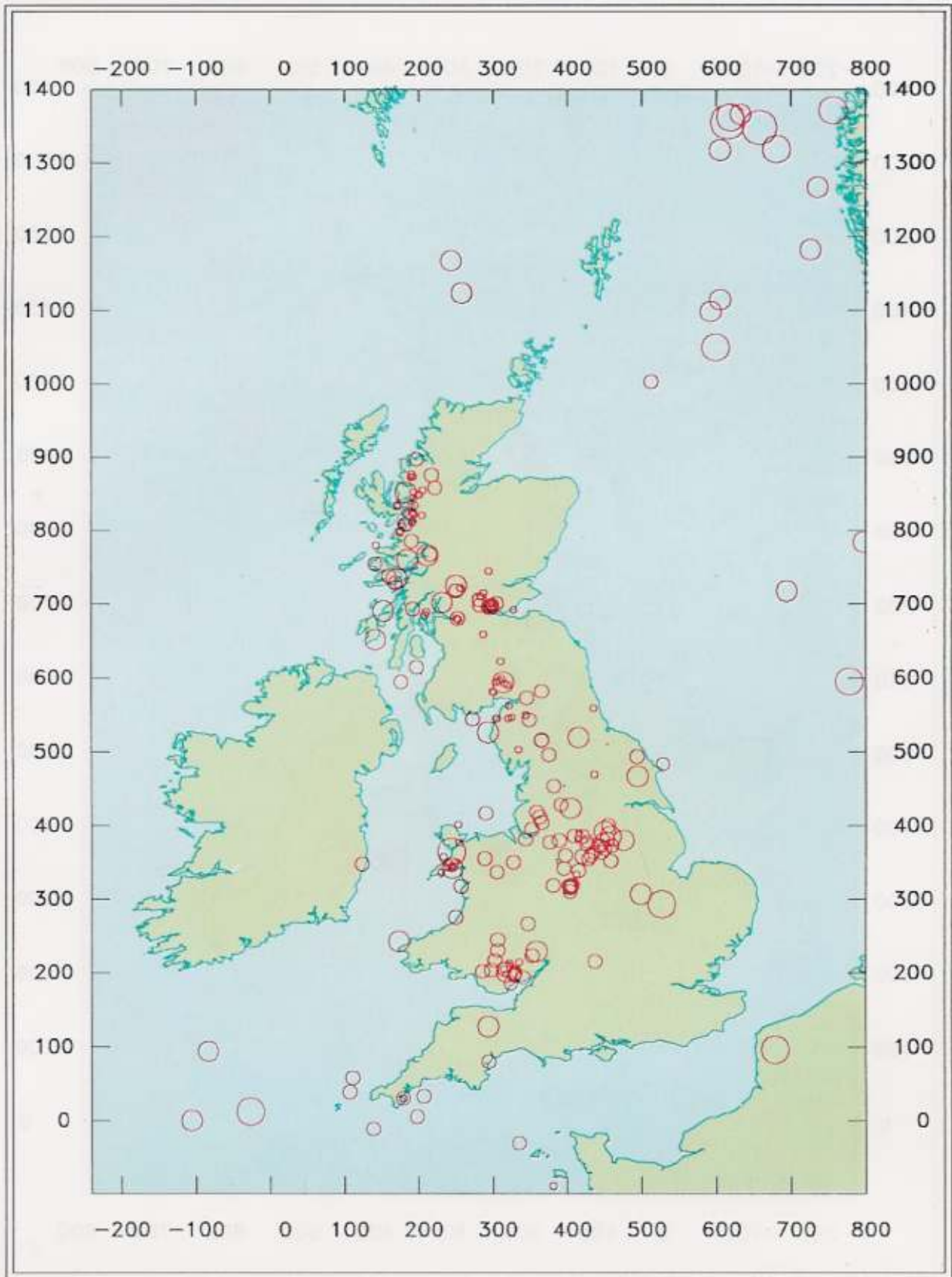


Figure 3. Epicentres of all UK earthquakes located in 1992.

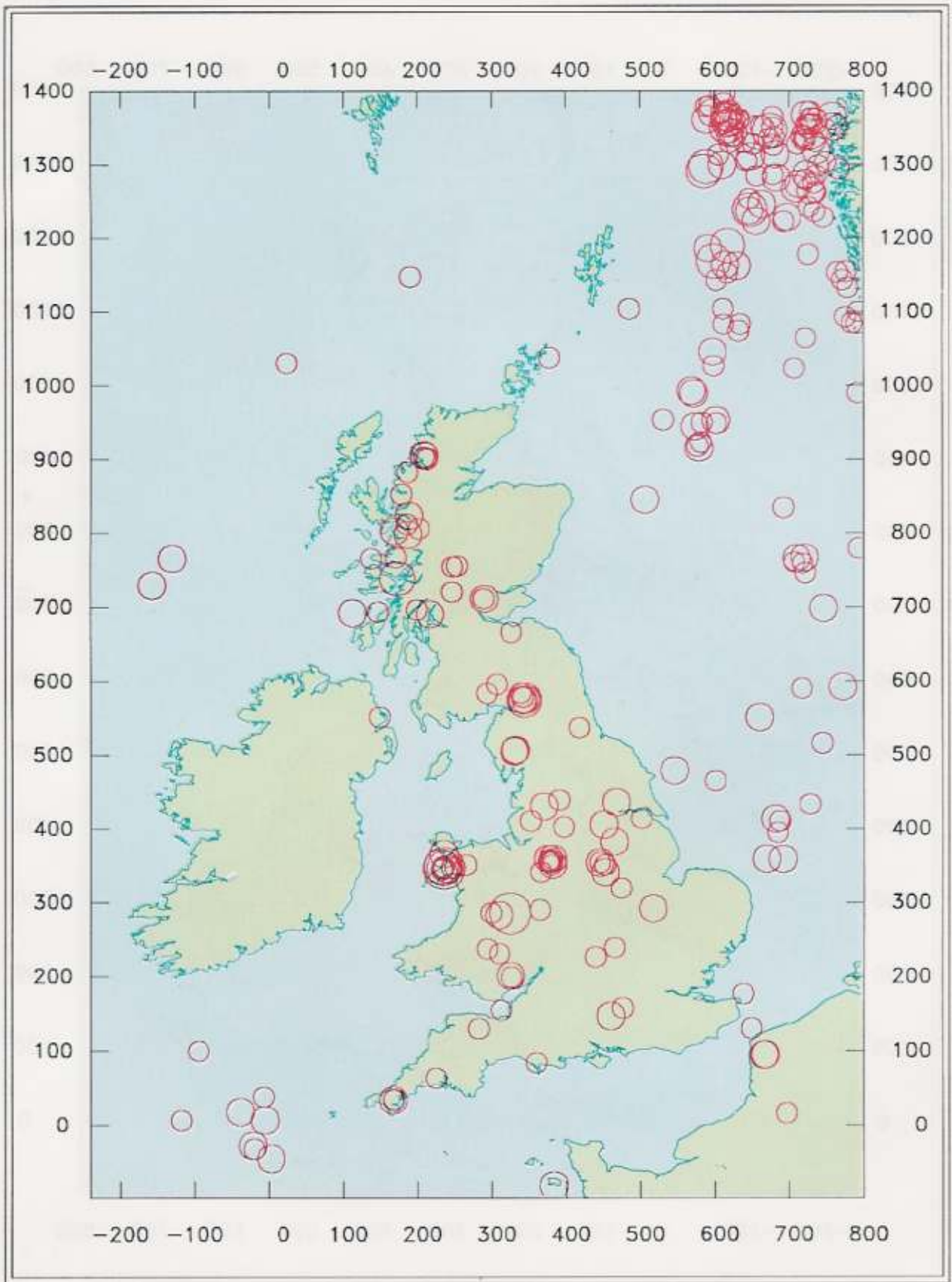


Figure 4. Epicentres of earthquakes with magnitudes 2.5 ML or greater, for the period 1979 to 1992.

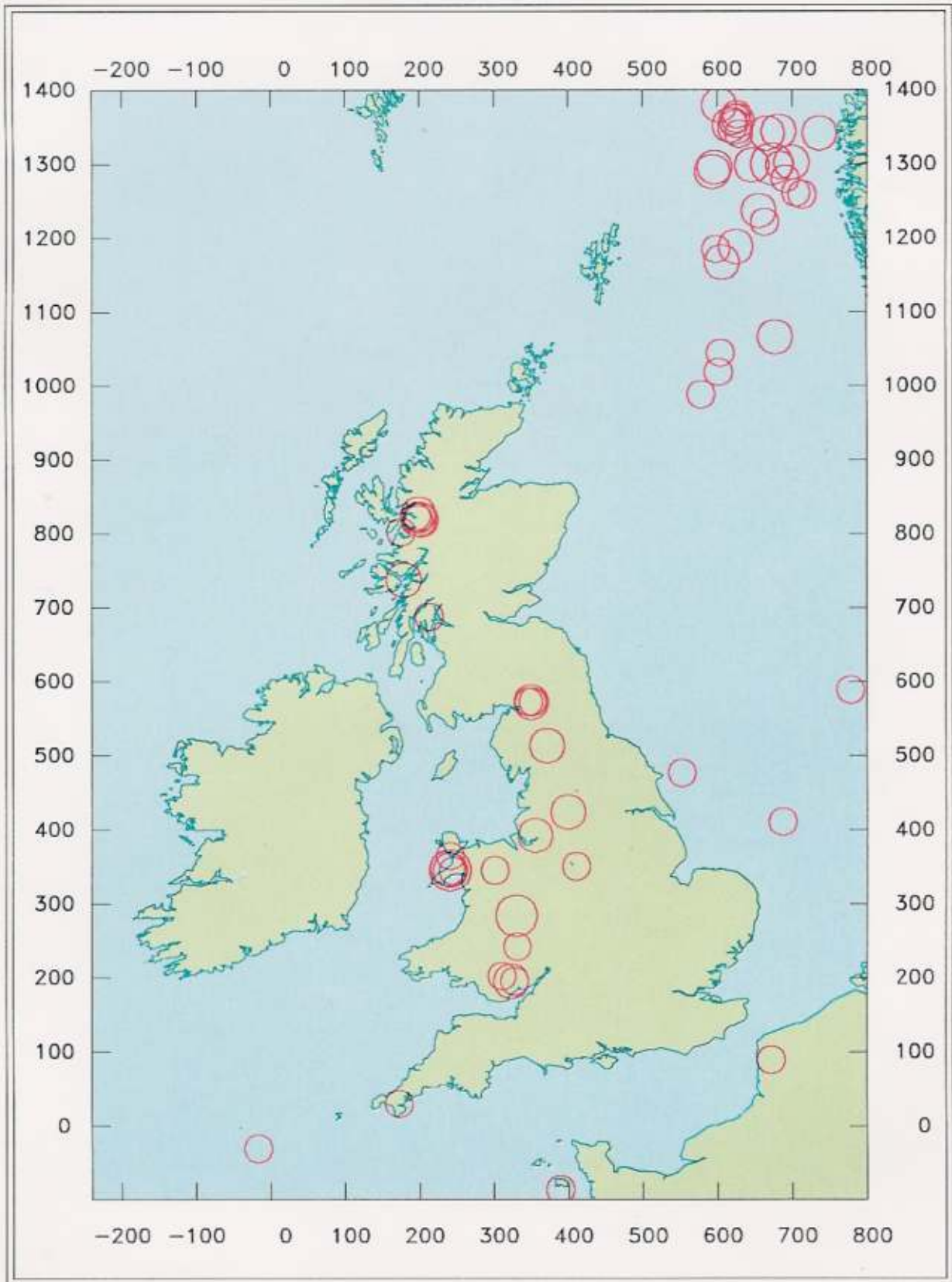


Figure 5. Epicentres of earthquakes with magnitudes 3.5 ML or greater, for the period 1970 to 1992.

APPENDIX A
SIGNIFICANT EARTHQUAKES IN 1992

APPENDIX A1

PETERBOROUGH EARTHQUAKE, 17 FEBRUARY 1992

PARAMETERS

Date:	17 February 1992
Origin Time:	01:22 33.0 UTC
Latitude and Longitude:	52.500°N 0.193°W
Grid Reference:	522.7 kmE 290.7 kmN
Depth:	11.1 Km
Magnitude:	3.3 ML
Hypo Solution Quality:	B (B*B)
Epicentral Error (1 std. dev.):	2.0 km
Depth Error (1 std. dev.):	6.8 km

Discussion

The Peterborough earthquake of 17 February with a magnitude of 3.3 ML was felt over an area of 7000 km². Seismograms of the earthquake from the BGS networks in Hereford and SE England are shown in Figure A1.1. A fault plane solution was attempted but due to the incomplete station coverage and insufficient knowledge of the surrounding geology no reliable solution could be obtained. However, there was some indication of strike-slip motion consistent with a maximum NW-SE compressive stress direction. A macroseismic survey was carried out at the time of the event with 800 replies received and a maximum intensity of 5 MSK was observed at two localities. The macroseismic map is shown in Figure A1.2.

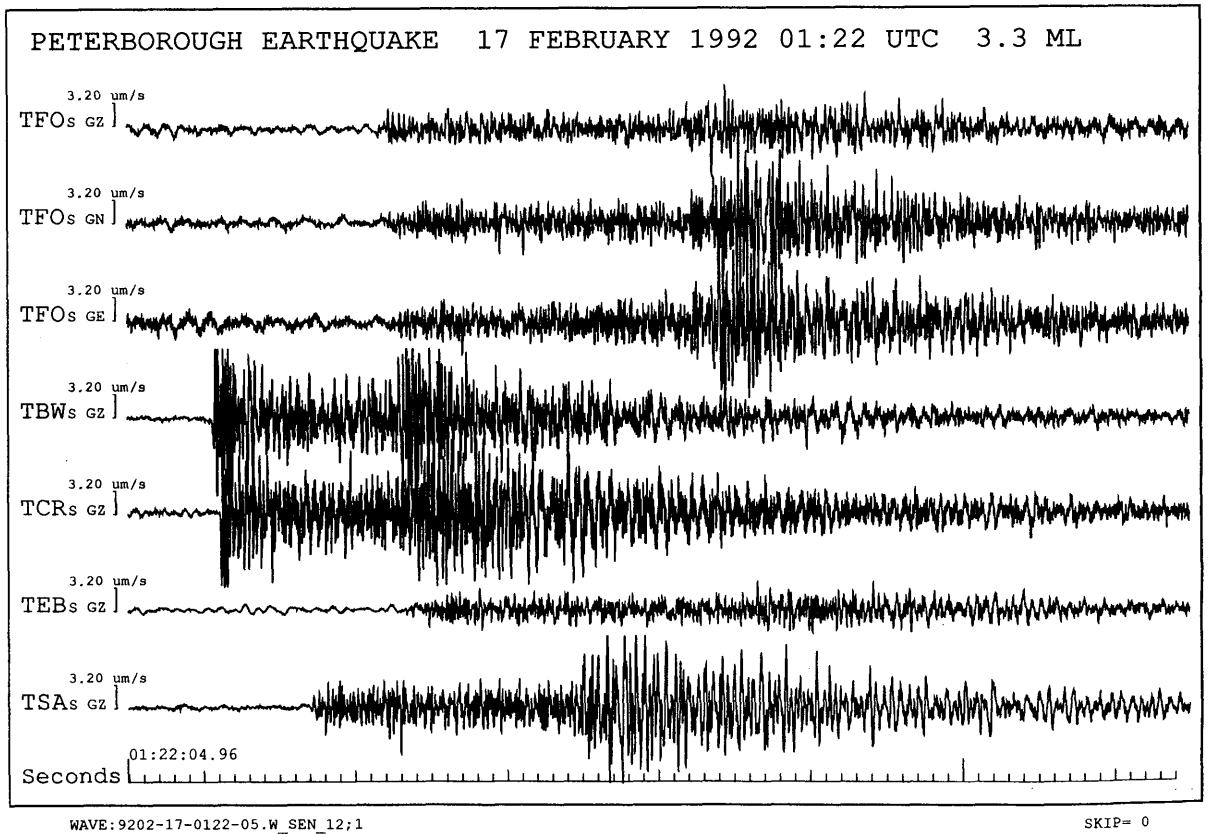
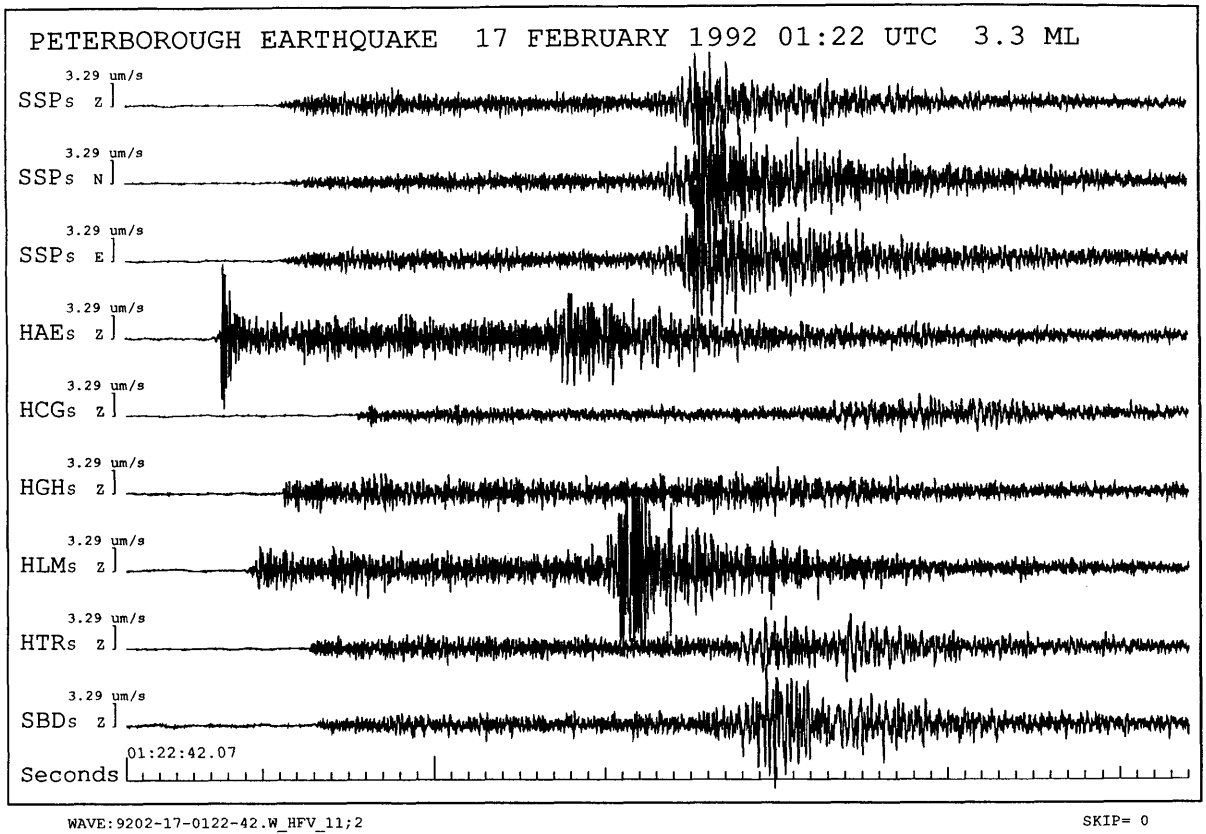


Figure A1.1. Seismograms of the Peterborough earthquake 17 February 1992 01:22 UTC 3.3 ML recorded the Hereford and SE England networks.

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. £64.00 for first hour and £32.00 for each additional ½ hour. Note: charges can be waived for the public, media and schools.	£64.00 + VAT
A search and interpretation of raw macroseismic (felt reports) for a specific region for an individual earthquake.	£90.00 + VAT

For more information on the above and other services available please contact Ms A B Walker at the Global Seismology Research Group, Murchison House, West Mains Road, Edinburgh, EH9 3LA.

CATALOGUE 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
Turbitt, T., et al., 1990. Bulletin of British Earthquakes 1989. BGS Global Seismology Report No. WL/90/49	£12.50 + pp
Turbitt, T., et al., 1991. Bulletin of British Earthquakes 1990. BGS Global Seismology Report No. WL/91/34.	£12.50 + pp
Turbitt, T., et al., 1991. Bulletin of British Earthquakes 1991. BGS Global Seismology Report No. WL/92/29.	£12.50 + pp

A complete list of Seismology group publications can be obtained by writing to Mrs A. Muir at Global Seismology Research Group, Murchison House, West Mains Road, Edinburgh, EH9 3LA.

APPENDIX B
EARTHQUAKE INFORMATION CHARGES

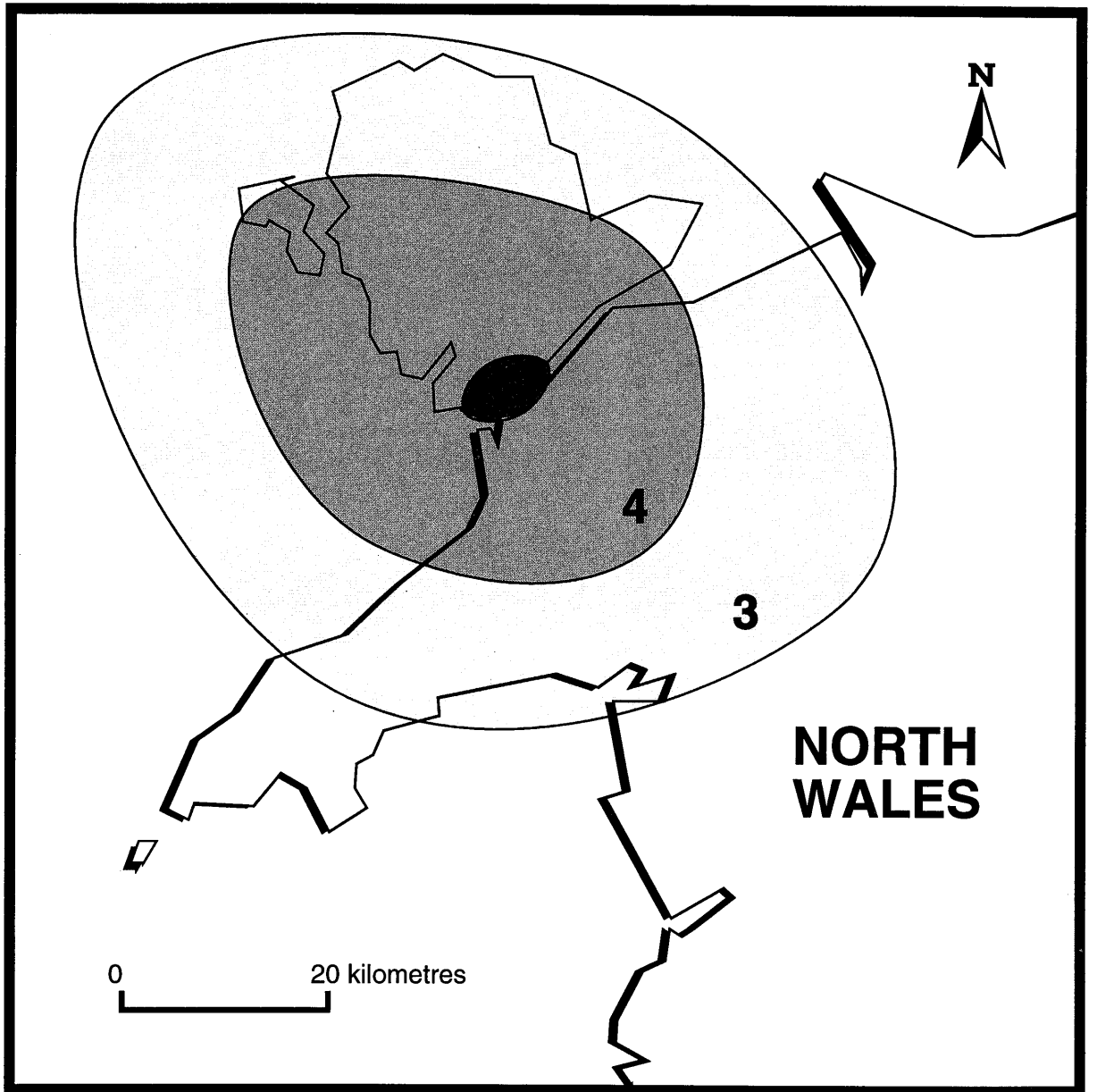


Figure A3.3. Caernarvon Bay Earthquake 29th July 1992, 18:05 UTC (3.5 ML) - MSK Intensities

FAULT PLANE SOLUTION : CAERNARVON BAY EARTHQUAKE

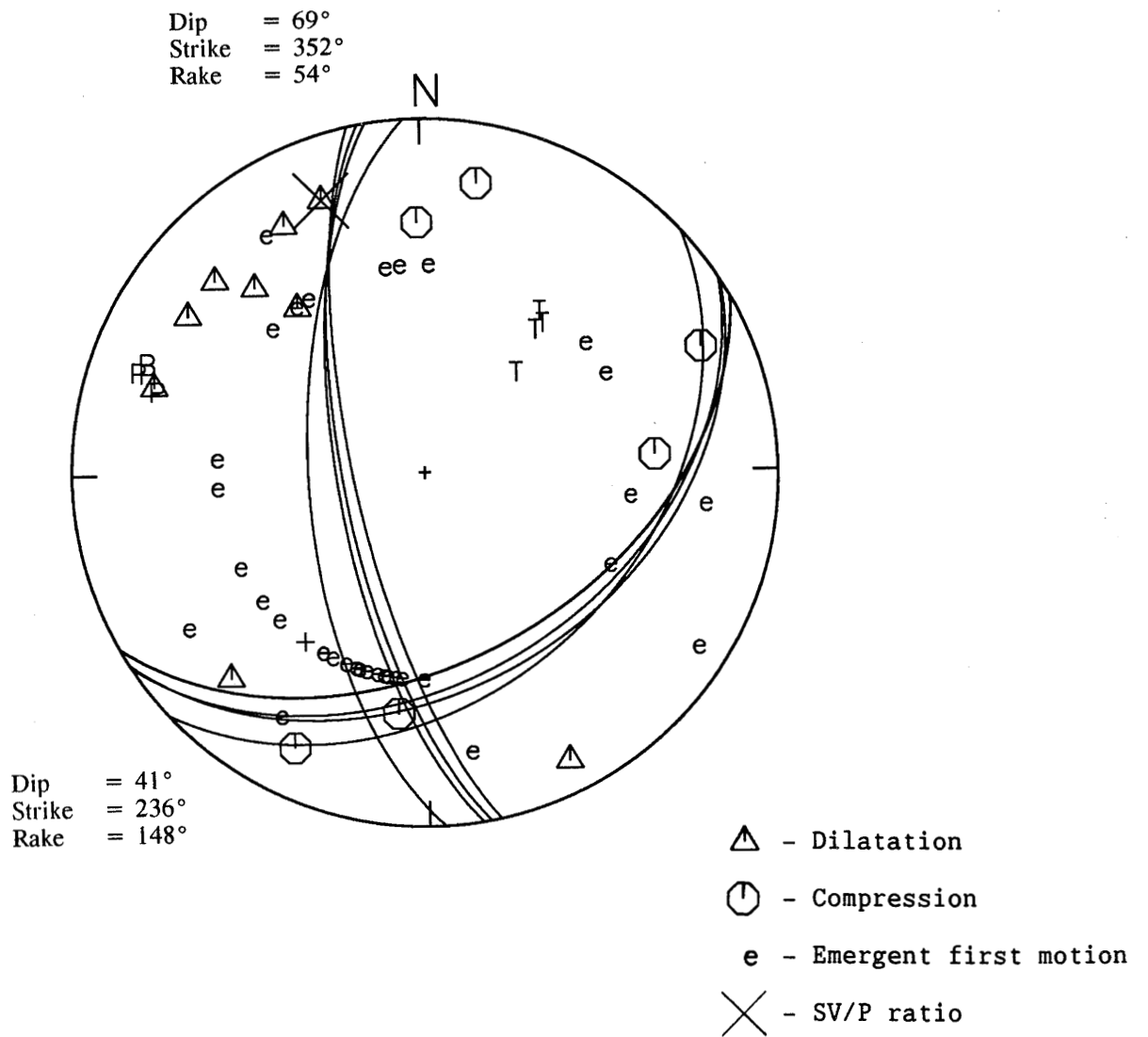


Figure A3.2. Equal area projection of the upper focal hemisphere for the Caernarvon Bay earthquake 29 July 1992 18:05 UTC 3.5 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

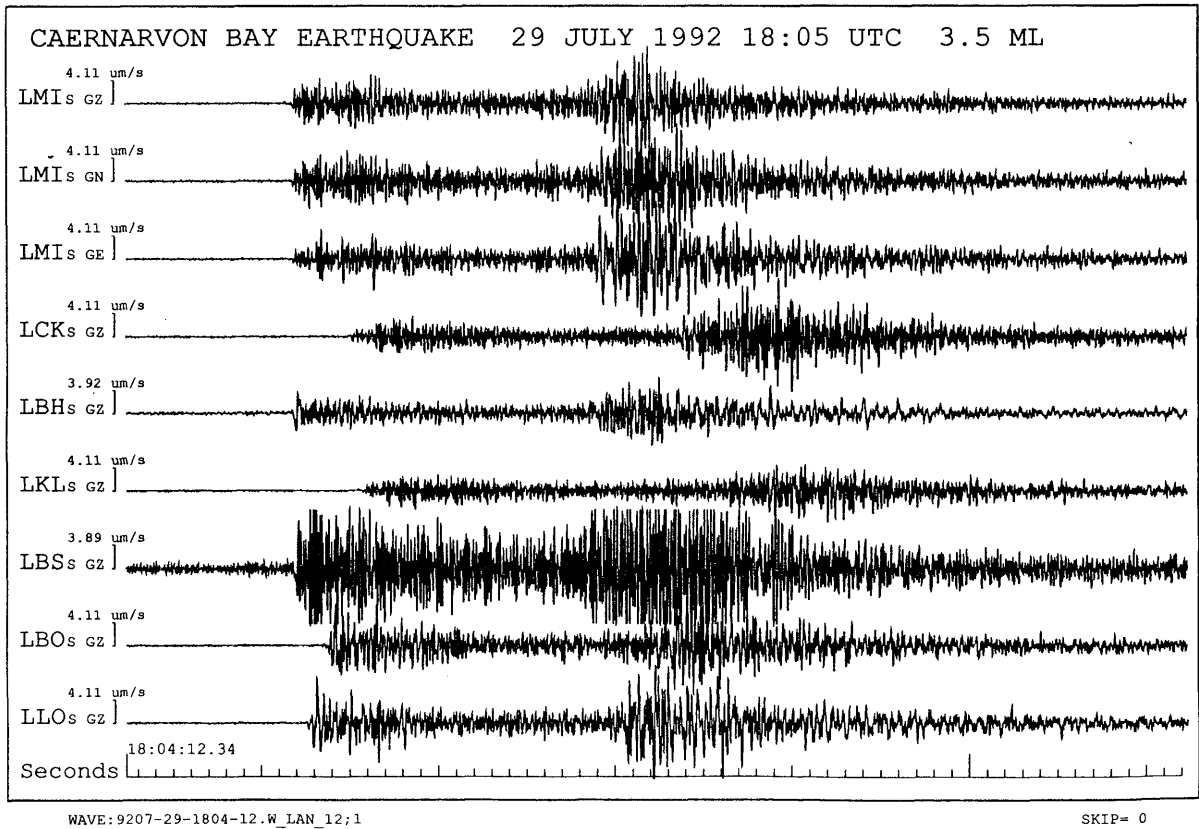
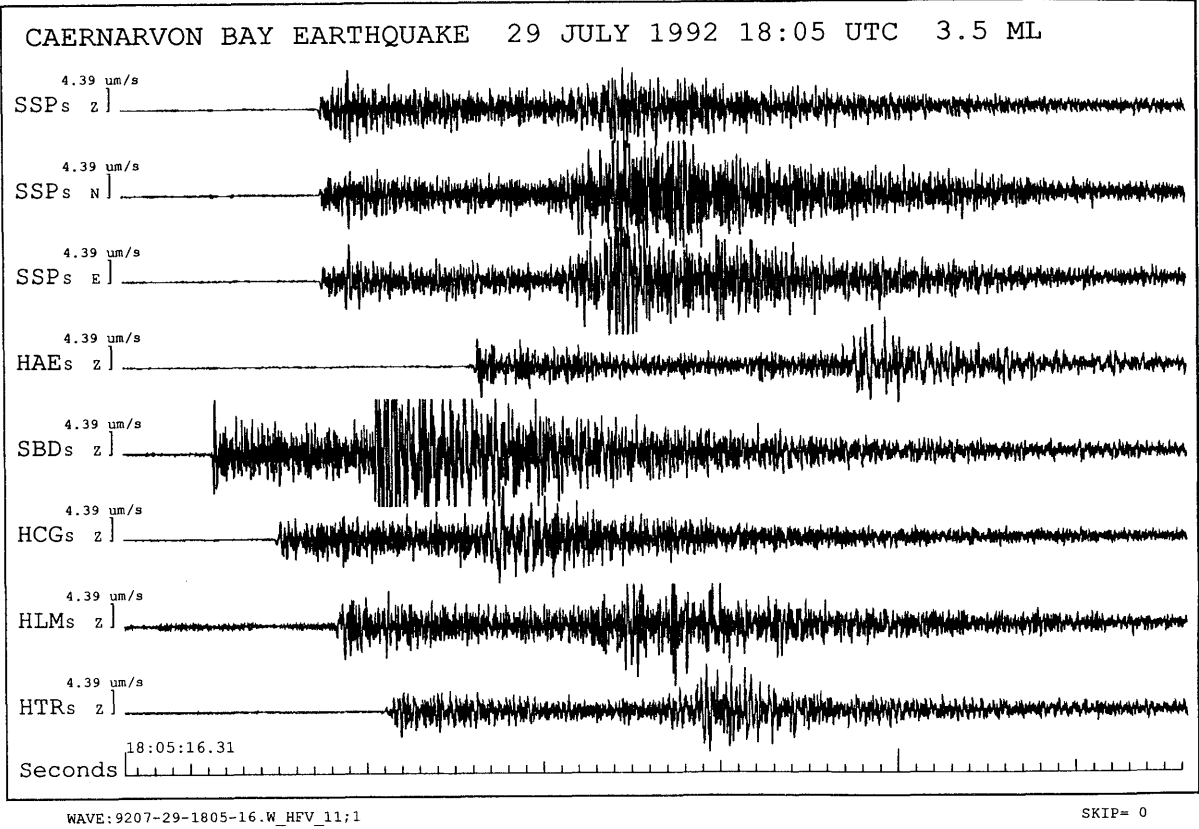


Figure A3.1. Seismograms of the Caernarvon Bay earthquake 29 July 1992 18:05 UTC 3.5 ML recorded on the Hereford and Lancashire networks.

APPENDIX A3

CAERNARVON BAY EARTHQUAKE, 29 JULY 1992

PARAMETERS

Date:	29 July 1992
Origin Time:	18:05 14.1 UTC
Latitude and Longitude:	53.131°N 4.393°W
Grid Reference:	239.9 kmE 362.0 kmN
Depth:	11.0 km
Magnitude:	3.5 ML
Hypo Solution Quality:	B (A*B)
Epicentral Error (1 std. dev.):	1.1 km
Depth Error (1 std. dev.):	5.9 km

Discussion

This was the largest earthquake of the year with an onshore location and occurred in Caernarvon Bay on 29 July with a magnitude of 3.5 ML. Seismograms of the event from the BGS networks in Hereford and Lancashire are shown in Figure A3.1. The focal mechanism shows reverse faulting with a small-component of strike-slip faulting with movement either on a near-vertical plane striking NS and dipping 69° to the east or a near-horizontal plane striking NE-SW and dipping 41° to NW (Figure A3.2.). A macroseismic survey throughout the region showed it was felt over an area of approximately 10,000 km² with a maximum intensity of 5 MSK (Figure A3.3.).

FAULT PLANE SOLUTION : JOHNSTONEBRIDGE EARTHQUAKE

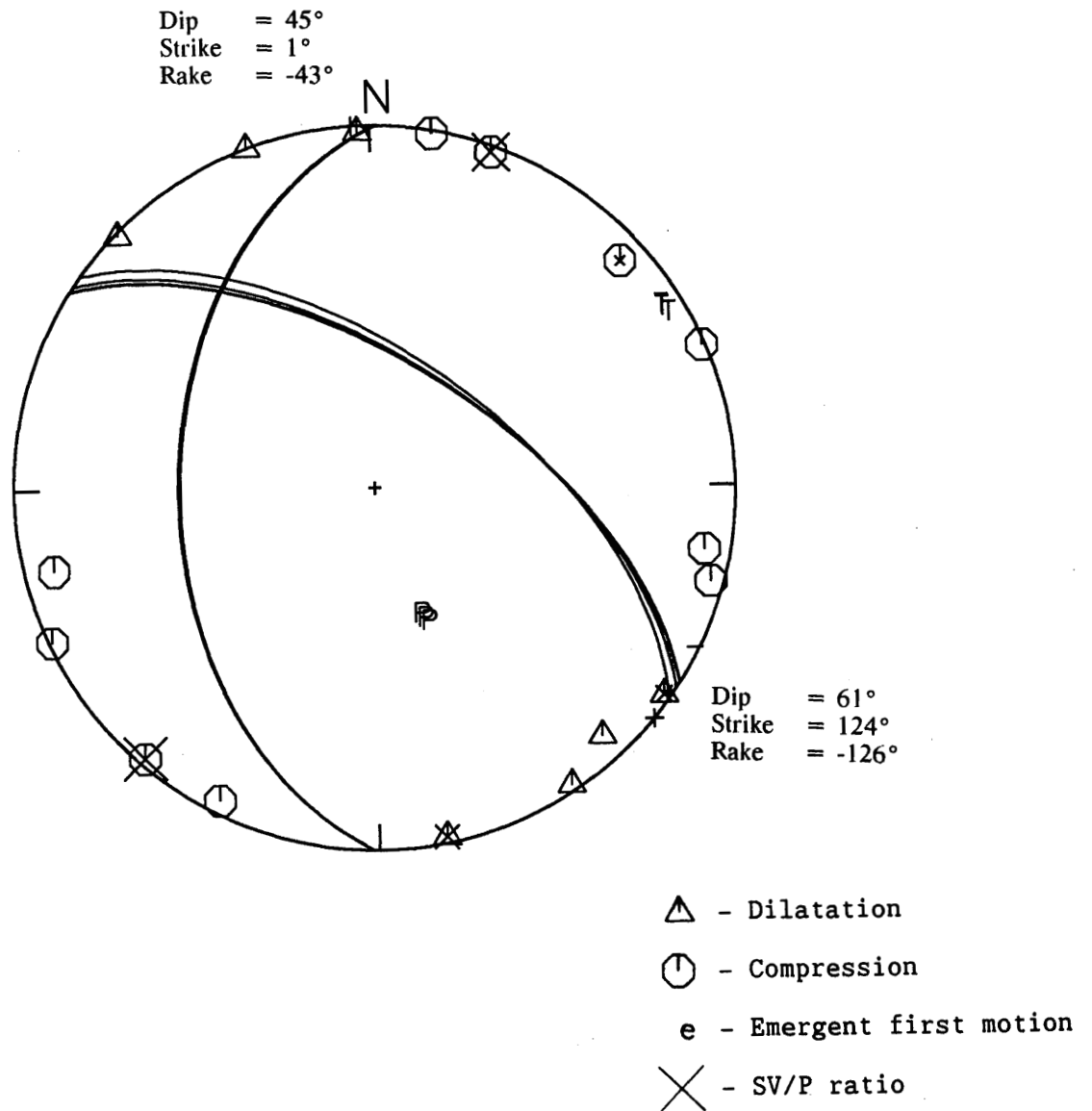


Figure A2.2. Equal area projection of the upper focal hemisphere for the Johnstonebridge earthquake 27 February 1992 02:50 UTC 2.7 ML. The axes of maximum and minimum compressive stress are denoted by P and T respectively.

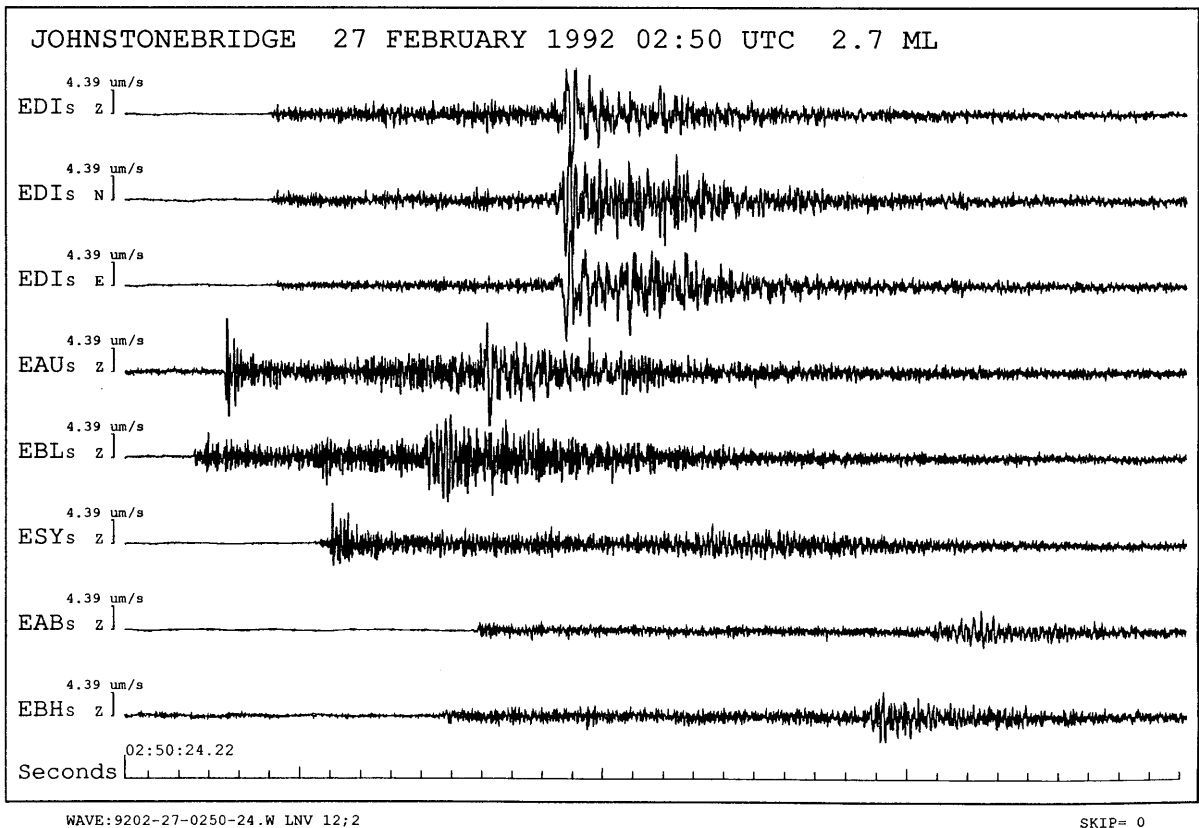
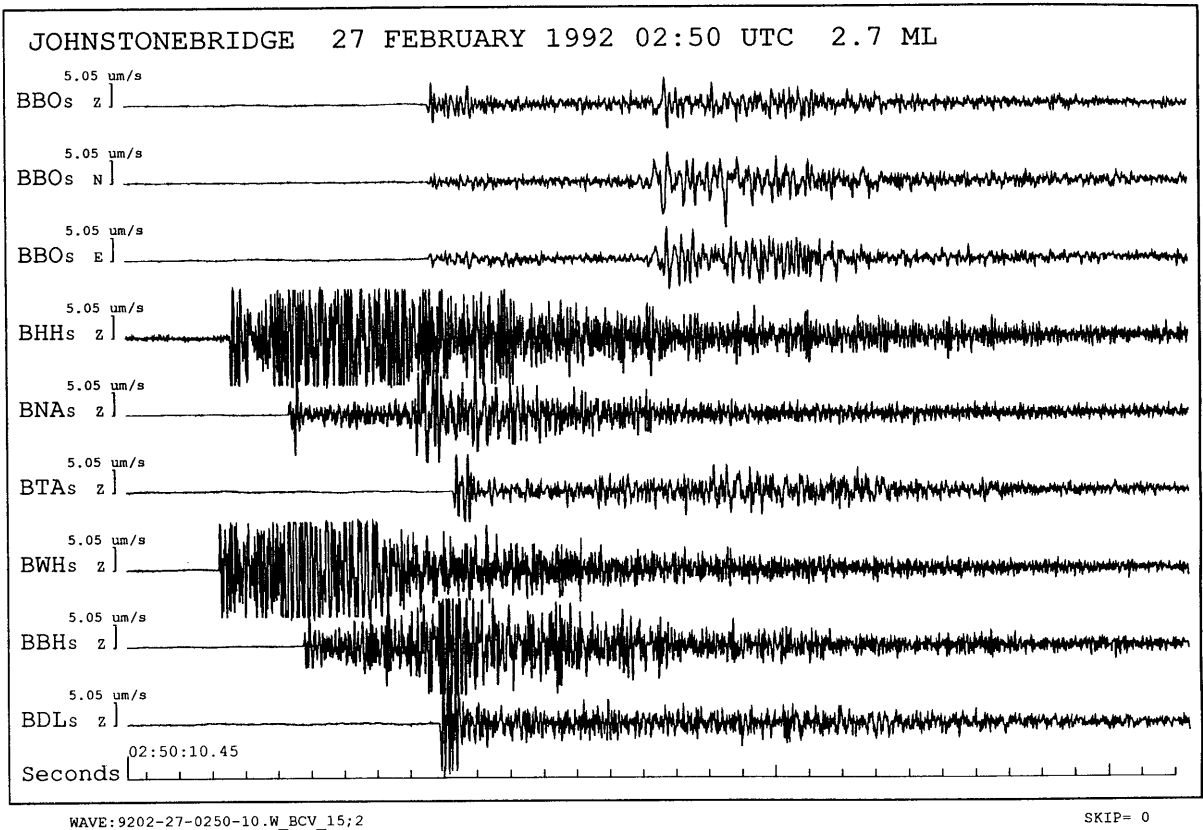


Figure A2.1. Seismograms of the Johnstonebridge earthquake 27 February 1992 02:50 UTC 2.7 ML recorded on the Borders and Lownet networks.

APPENDIX A2

JOHNSTONEBRIDGE EARTHQUAKE, 27 FEBRUARY 1992

PARAMETERS

Date:	27 February 1992
Origin Time:	02:50 24.9 UTC
Latitude and Longitude:	55.211°N 3.408°W
Grid Reference:	310.5 kmE 591.7 kmN
Depth:	5.9 km
Magnitude:	2.7 ML
Hypo Solution Quality:	C (B*C)
Epicentral Error (1 std. dev.):	0.9 km
Depth Error (1 std. dev.):	5.2 km

Discussion

An event close to Johnstonebridge in Annandale occurred at 02:50 UTC on 27 February. The magnitude of this event was 2.7 ML and it was felt in the Johnstonebridge area with intensities up to 4 MSK. Seismograms of the earthquake from the BGS networks in the Borders and Scottish Lowlands are shown in Figure A2.1. The focal mechanism for the event shows dominant normal faulting with a component of strike-slip faulting and movement on either a plane striking NS and dipping 45° to the east or a plane striking NW-SE and dipping 61° SW (Figure A2.2).

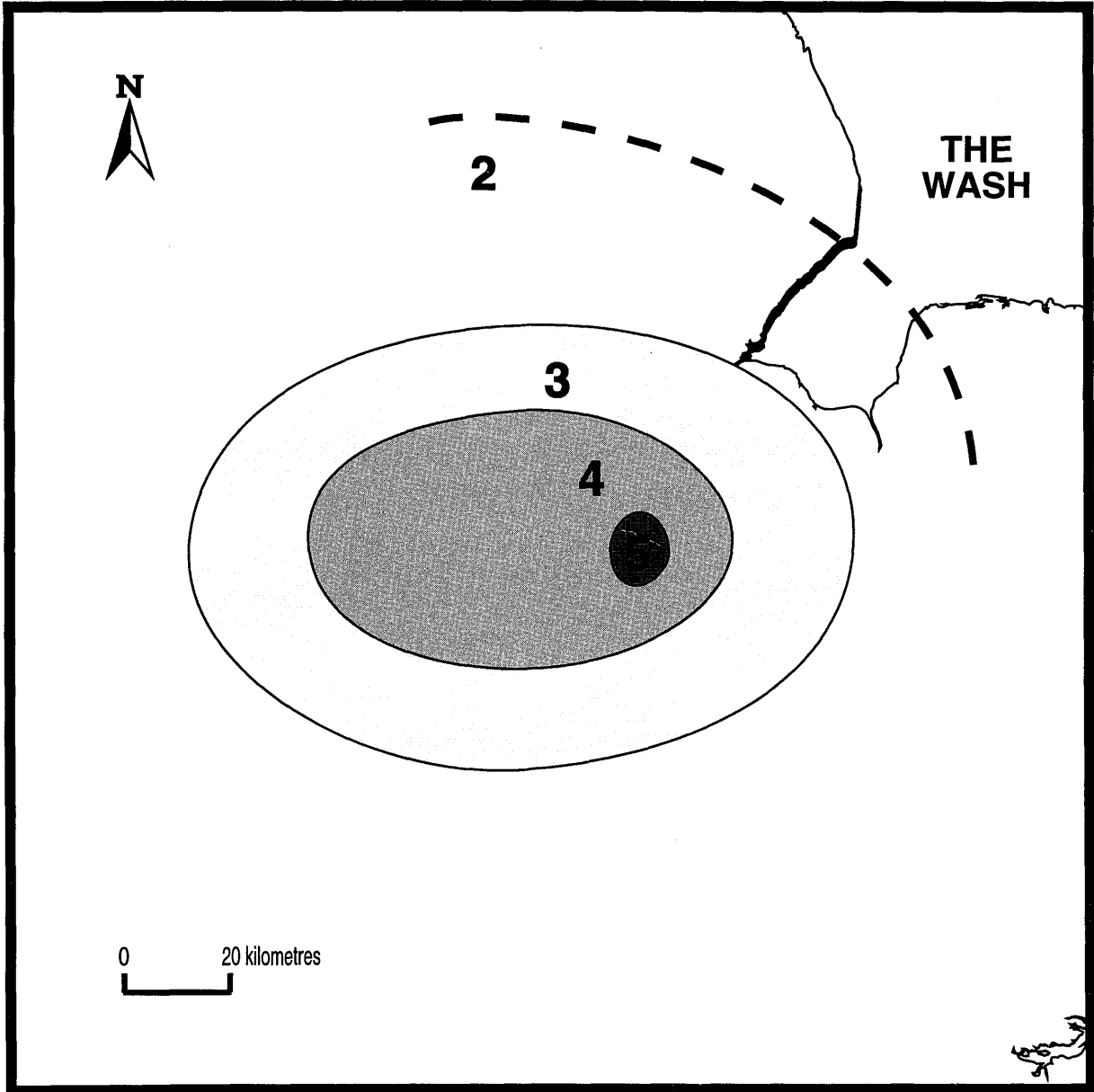


Figure A1.2. Peterborough Earthquake 17th February 1992, 01:22 UTC (3.3ML) - MSK Intensities



Peterborough Earthquake 17th February 1992, 01:22 UTC (3.3ML) - MSK Intensities