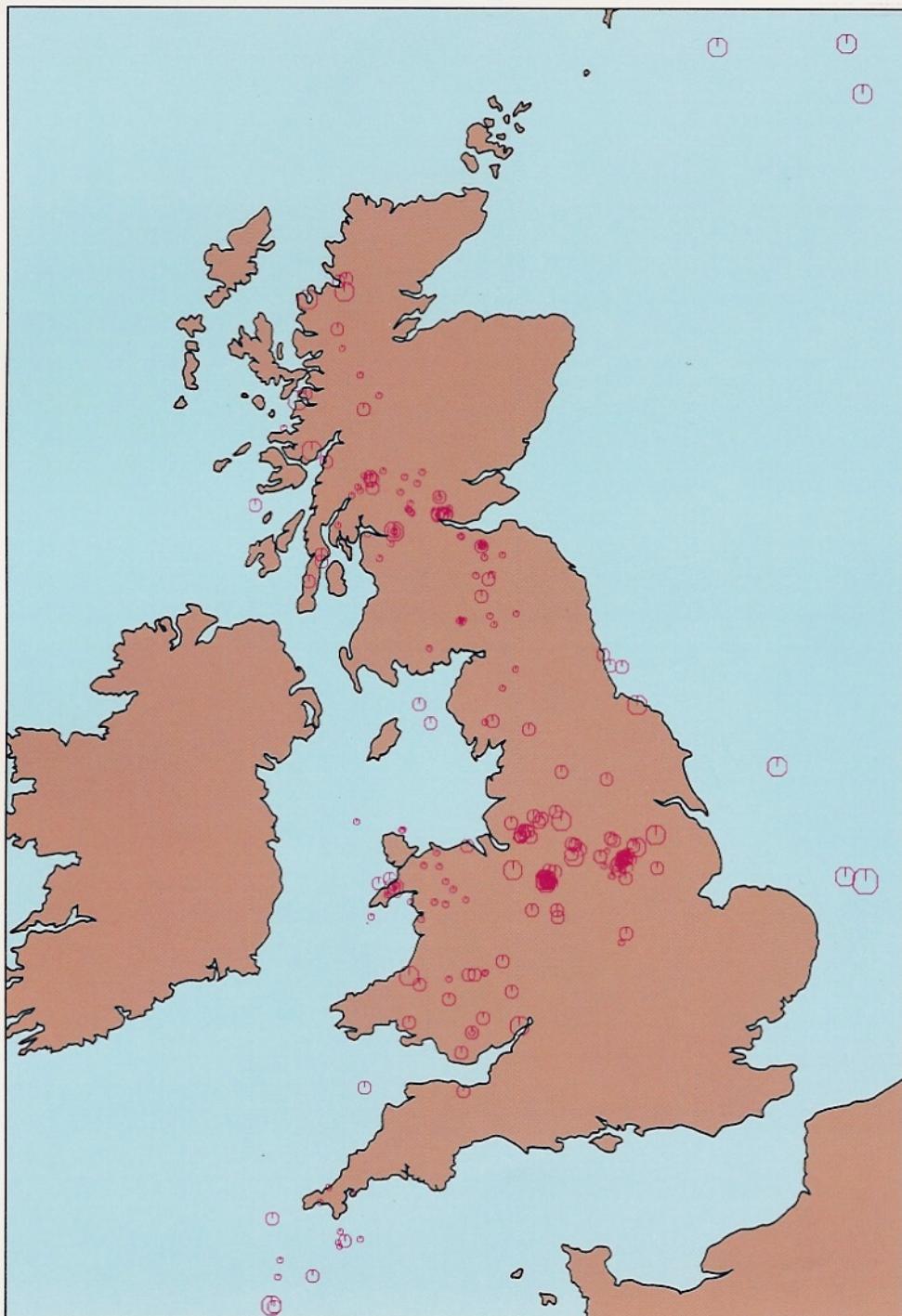




**British Geological Survey**

# **BULLETIN OF BRITISH EARTHQUAKES 1989**



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Global Seismology Series

## Bulletin of British earthquakes 1989

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## **1. Introduction**

### **1.1 The Bulletin**

Seismic phase data, location details and magnitudes are presented for all earthquakes detected and located by BGS during 1989. The land areas of Great Britain and Northern Ireland and their coastal waters are covered within the limits of the detection capabilities of the seismograph network. A map of seismic activity in the North Sea is included using data from the Bulletin of North Sea Earthquakes, 1988, by Simpson (1989).

The seismicity of the UK since 1969 is illustrated using data extracted from the previous catalogues of Burton and Neilson (1980) and Turbitt (1984 - 1990).

### **1.2 Summary of 1989 seismicity**

The largest earthquakes of the year on land, occurred on 23 April at Gainsborough, Lincolnshire and on 5 September at Loftus, Cleveland both with magnitude 2.4 ML. The former event, having a deep focus, was not felt but the latter, being shallow, reached intensity 5 MSK at Loftus.

Swarms of small earthquakes occurred at Stoke-on-Trent in Staffordshire (30 events) and at Thoresby in Nottinghamshire (24 events, 15 of them felt at intensity 2). The Thoresby events are related to mine-workings.

Other notable natural earthquakes that were reported felt were : Ullapool, 28 February (2.2 ML ; Intensity 2), Loch Nevis, 22 October (2.2 ML ; Intensity 2), Ettrick, 10 October (1.6 ML ; Intensity 3) and Bargoed, 24 March (1.5 ML ; Intensity 2).

A number of coal mining areas were affected by mining-induced earthquakes. In addition to the Thoresby area of Nottinghamshire, the Fife/Clackmannan and Midlothian coalfields in Scotland and the coalfields around Manchester, Cheshire, Nottinghamshire and the north east of England all experienced events, a number of which were felt. With the cessation of mining in the latter part of the year, the number of events detected in the Midlothian coalfield has rapidly decreased.

Aftershock activity, following the 5.4 ML earthquake on the Lleyn Peninsula in 1984, has continued at a low level (14 events). All these aftershocks are at more than 21 km focal depth and none were felt at the surface.

Offshore, magnitude 3.8 ML and 3.9 ML earthquakes occurred in the Bay of Biscay on the 6 April and 21 August respectively, and on 9 October a magnitude 3.2 ML earthquake was detected in the Southern North Sea.

## 2. Catalogue Format

### 2.1 Tables

Hypocentral parameters, for each earthquake, are tabulated under the headings:

Date	- day, month, year
Time	- Hours, minutes, seconds of origin time
Lat	- Latitude, positive North
Lon	- Longitude, positive East
KmE	- Grid reference, easting from National Grid origin near the Scilly Isles.
KmN	- Grid reference, northing
Dep	- Hypocentral depth in km, blank indicates depth unknown. Note that depths for events of quality C, D and possibly B, are unreliable due to the large errors involved.
Mag	- Richter local magnitude
Locality	- A geographical indication of the epicentral area, usually the nearest town followed by the region.
Int	- Maximum felt intensity on the MSK scale (Medvedev et al, 1964), when known. + indicates that an event was reported felt at the intensity given but no survey was initiated to determine the maximum intensity. Comments and felt areas, where appropriate, are included on the next line.
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 error of arrival time residuals in seconds
ERH	- Standard error of the epicentre in kilometres
ERZ	- Standard error of the focal depth in kilometres
Q	- Solution quality of the hypocentre averaged from QS and QD (below). A, excellent; B, good; C, fair; D, poor.
SQD	- S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations.

Data on the earthquakes and seismograph stations operated in 1989 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.

**TABLE 2** is a listing of the events in Table 1 arranged in order of decreasing latitude to facilitate identification of earthquakes in selected regions.

**TABLE 3** is a chronological listing of events which, although detected by the seismograph network, had arrival patterns too weak to permit the computation of reliable locations. An indication of the estimated epicentre is given but errors could be very large. Also included are felt sonic events and unusual man made events such as aircraft crashes. These events are not in Tables 1 or 2.

**TABLE 4** is an alphabetical listing of the geographic coordinates of seismograph stations operated in 1989 by BGS, DIAS, and Leeds University.

**TABLE 5** lists the arrival times of phases for the events in Table 1 at each station, together with amplitude information used for magnitude calculation.

**TABLE 6** is the crustal seismic velocity model used for event location.

## 2.2 Figures

**FIGURE 1:** the detection threshold of the network of seismograph stations in Table 4 for average background noise conditions where the detection criterion is signal received above 4 nanometres at 10 Hz on 3 stations.

**FIGURE 2:** the variation of epicentral location errors within the UK area for a magnitude 2.0 ML earthquake.

**FIGURE 3:** the epicentral location map of all the events in 1989 that are listed in Table 1.

**FIGURE 4:** the locations of earthquakes in the UK of magnitude 2.5 ML and above from 1979 to 1989.

**FIGURE 5:** the locations of earthquakes in the UK of magnitude 3.5 ML and above from 1969 to 1989.

**FIGURE 6:** the locations of earthquakes in the North Sea area in 1989.

### **3. The BGS UK Seismograph Network**

#### **3.1 Instrumentation**

A typical 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. Microprocessor controlled event-triggered recorders 'detect' earthquakes at selected sites to produce a digital magnetic tape and an on-line paper record. At other stations, low-gain vertical seismometers extend the dynamic range of the system to stronger motions and low frequency microphones are used to aid the discrimination of sonic booms.

The improvements in geographic coverage of the UK with the installation of more seismic networks in the last fifteen years is described in Turbitt (1985).

#### **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 1 illustrate the lower threshold magnitude for an earthquake to exceed 4 nanometres 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 1 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 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 dependant 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.

Figure 2 illustrates the likely variation of epicentral location errors within the UK area for a magnitude 2.0 earthquake, 5 km deep. These errors have been determined by the computer program ERRCON (Musson 1987) assuming P and S arrival time variances of 0.2 and 0.4 seconds respectively at all detecting stations. The rapid increase in epicentral uncertainty to 20 km and above is apparent as the epicentre moves beyond the detecting range of the seismograph network. For convenience in the tables, epicentre grid references and depths have been given to 0.1 km although this accuracy does not apply in all cases.

The general velocity model used is given in Table 6 and was derived from a series of refraction profiles traversing Britain, LISPB (Bamford et al, 1976; Bamford et al, 1978; Assumpcao and Bamford, 1978). However, for some localised areas of activity, different models have been employed and these are explained in detail in BGS reports on the particular series.

#### 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. Tremors in the Midlothian coalfield area usually have small depth errors due to the proximity of LOWNET stations and can be seen to lie in the first one or two kilometres near the coal workings.

For events at larger distances, depth errors may be up to tens of kilometres. The quality factor of the event as listed in the tables (Q), is an indication of the depth error. As a general guide only A, and possibly 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 above), 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 1979-1989 have been plotted in Figure 4. The data set is considered complete for these magnitudes in all localities. Seismicity for 1969-1989 is shown in Figure 5 with a threshold magnitude of 3.5 ML. This is the period covered by BGS instrumentation which consisted only of the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) in the early years.

#### 4.4 Magnitude

Almost 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 deflection (centre to peak in mm) registered by the earthquake on a Wood-Anderson seismograph and Ao is that for a "standard" magnitude zero earthquake at the same distance. The Ao term is thus a distance correction factor tabulated by Richter to 200, and later 600 km. Although Richter intended his method to be an approximate quantification of earthquake size and his attenuation term, Ao, strictly only applies to California, the formula is still used world-wide today. The ML magnitudes in this 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<sub>0</sub>) usually found close to the epicentre. The maximum felt intensity is quoted, where known, on the MSK scale (Medvedev et al, 1964).

# **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 3°E and 60°N. The North Sea as a whole is covered in the BGS catalogue for that area (eg Newmark and Turbitt, 1985, Newmark et al, 1986, Marrow et al, 1987, 1988 and Simpson 1989).

## **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 the coal workings and are believed to be caused by the redistribution of stress as the coal is extracted.

## **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. Unfortunately, identification by record character, location and time of occurrence is not always positive and some man-made events may have been included in the catalogue or, more rarely, a small natural event may have been excluded.

Acoustic disturbances, such as sonic booms from supersonic aircraft are also excluded although when felt they are included in Table 3. The air-borne waves are readily identified by their slow travel time across an array or by their signature on a microphone.

## **5.4 Completeness**

The contours of detection threshold in Figure 1 show that the whole of the UK is covered by the seismograph network for approximately magnitude 1.7, and above, at times of low ambient noise levels. High noise levels may cause this threshold to rise to about 2.5. 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 2.5 and above.

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Table 1

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	Hr	Mn	Secs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
010189	20	27	38.4	55.24	-3.44	308.7	595.3	6.1	0.7	JOHNSTONEBRIDGE, D & G	8	17	250	0.07	0.8	1.1	C	A*D		
040189	02	28	57.2	53.01	-2.17	388.6	345.8	4.2	1.6	STOKE-ON-TRENT, STAFFS	11	22	119	0.12	0.6	1.1	B	A*C		
060189	05	36	24.9	53.02	-2.18	387.7	346.7	3.9	1.9	STOKE-ON-TRENT, STAFFS	17	23	111	0.16	0.9	1.5	C	B*C		
060189	05	39	35.8	53.03	-2.17	388.8	348.5	7.4	1.2	STOKE-ON-TRENT, STAFFS	8	22	152	0.09	0.8	1.9	B	A*C		
070189	01	40	09.9	53.63	-2.05	396.6	414.6	10.0	1.2	LITTLEBOROUGH, GTR MAN	16	31	102	0.10	0.4	1.9	B	A*C		
070189	11	23	30.8	53.01	-2.17	388.5	346.4	5.5	1.4	STOKE-ON-TRENT, STAFFS	10	22	149	0.09	0.6	1.0	B	A*C		
070189	13	33	17.8	53.02	-2.19	387.5	346.8	2.6	1.9	STOKE-ON-TRENT, STAFFS	14	23	111	0.21	1.0	2.4	C	B*C		
070189	14	16	37.6	53.01	-2.19	387.6	346.3	3.3	2.1	STOKE-ON-TRENT, STAFFS	15	23	117	0.14	0.6	1.3	B	A*C		
070189	23	08	05.1	53.02	-2.20	386.4	346.7	2.6	1.1	STOKE-ON-TRENT, STAFFS	6	24	115	0.16	1.4	4.1	C	B*C		
080189	02	48	52.9	53.01	-2.13	391.3	345.6	9.8	1.2	STOKE-ON-TRENT, STAFFS	6	19	121	0.05	0.4	0.6	B	A*B		
080189	10	24	55.9	53.02	-2.20	386.8	347.5	2.5	0.8	STOKE-ON-TRENT, STAFFS	4	24	152	0.01	0.0	0.0	C	A*D		
080189	10	26	28.0	53.03	-2.20	386.4	348.3	2.3	1.1	STOKE-ON-TRENT, STAFFS	6	24	153	0.17	0.7	0.9	C	B*C		
100189	12	47	38.7	56.11	-3.64	298.3	691.8	0.5	1.0	BLAIRHALL, FIFE	10	17	122	0.16	0.6	0.8	C	B*C	COALFIELD TYPE	
100189	23	12	52.4	56.25	-3.73	293.0	708.2	6.9	1.4	GLEN EAGLES, TAYSIDE	13	14	103	0.18	0.7	1.2	B	B*B		
100189	23	48	13.5	55.85	-3.13	329.1	662.6	1.4	1.6	ROSEWELL, LOTHIAN	19	1	72	0.09	0.3	0.1	A	A*A	COALFIELD TYPE	
110189	02	51	30.7	53.33	-0.93	471.5	382.2	1.0	1.8	RET福德, NOTTS	7	41	252	0.07	3.0	1.5	D	C*D	COALFIELD TYPE	
120189	02	25	52.7	55.78	-2.83	348.1	653.9	2.0	0.2	LAUDER, BORDERS	8	14	229	0.13	1.7	1.5	C	B*D		
120189	06	43	52.5	53.01	-2.11	392.3	346.4	12.6	1.3	STOKE-ON-TRENT, STAFFS	9	18	147	0.06	0.7	1.1	B	A*C		
170189	02	32	47.6	56.25	-3.74	292.4	707.3	4.8	0.5	GLEN EAGLES, TAYSIDE	11	14	103	0.11	0.4	0.9	B	A*C		
170189	06	23	30.7	55.85	-3.14	328.9	662.7	1.1	1.4	ROSEWELL, LOTHIAN	22	1	77	0.08	0.2	0.1	A	A*A	COALFIELD TYPE	
180189	01	59	36.0	55.23	-3.40	311.2	594.2	1.4	0.5	JOHNSTONEBRIDGE, D & G	4	15	304	0.01	0.0	0.0	C	A*D		
180189	17	16	05.9	53.15	-3.73	284.1	362.9	15.4	0.5	LLANRWST, GWYNEDD	8	18	306	0.09	1.4	1.3	C	B*D		
190189	19	10	48.8	55.01	-3.88	279.8	570.3	1.1	0.7	CASTLE DOUGLAS, D & G	4	52	343	0.08	0.0	0.0	C	A*D		
200189	15	47	24.7	53.24	-1.41	439.5	371.4	0.2	1.6	CHESTERFIELD, DERBS	10	8	129	0.71	3.4	4.3	C	D*B	POSSIBLE COALFIELD TYPE	
230189	11	23	28.3	55.24	-3.38	312.4	594.6	0.5	-0.1	JOHNSTONEBRIDGE, D & G	4	14	300	0.01	0.0	0.0	C	A*D		
260189	03	53	09.7	53.05	-1.04	464.3	350.8	0.1	1.9	OXTON, NOTTS	6	32	162	0.16	1.2	1.5	C	B*C	COALFIELD TYPE	
270189	22	42	43.8	55.95	-4.77	226.9	676.9	0.9	0.3	GREENOCK, STRATHCLYDE	6	12	235	0.18	0.3	0.3	C	B*D		
310189	09	39	31.1	49.15	-6.15	97.6	-75.5	9.3	2.4	SCILLY ISLES, CORNWALL	12	119	345	0.08	60.614	3.1	D	D*D	OFFSHORE, 70KM SOUTH OF SCILLY ISLES	
310189	10	43	41.4	49.14	-6.11	100.2	-76.3	7.9	1.7	SCILLY ISLES, CORNWALL	10	119	346	0.04	7.6	3.7	D	D*D	OFFSHORE, 70KM SOUTH OF SCILLY ISLES	
010289	07	05	39.8	52.97	-4.41	238.2	344.0	23.5	0.7	LLEYN, GWYNEDD	16	2	98	0.09	0.4	1.1	B	A*B	LLEYN AFTERSHOCK	
010289	16	27	15.6	55.21	-2.95	339.2	590.5	4.3	0.2	LANGHOLM, D & G	5	11	202	0.09	0.0	0.1	C	A*D		
040289	00	28	17.1	53.32	-0.89	473.9	380.5	0.7	2.2	RET福德, NOTTS	9	43	252	0.36	7.2	3.6	D	D*D	EAST OF RET福德, COALFIELD TYPE	
040289	11	51	09.2	53.34	-1.77	415.6	382.1	2.8	1.8	CASTLETON, DERBYSHIRE	16	18	110	0.31	0.6	1.5	C	C*C		
080289	22	14	52.5	53.02	-2.15	389.9	347.0	9.0	1.4	STOKE-ON-TRENT, STAFFS	7	21	149	0.14	1.6	3.4	C	B*C		
090289	15	26	42.0	50.26	-5.33	162.7	45.3	6.2	0.9	PORTREATH, CORNWALL	10	11	243	0.03	0.9	1.7	C	A*D		
090289	15	31	41.4	50.26	-5.33	162.8	45.4	6.3	0.3	PORTREATH, CORNWALL	9	11	244	0.02	0.9	1.5	C	A*D		
100289	12	39	18.6	52.82	-3.64	289.3	326.1	18.7	-0.2	LAKE BALA, GWYNEDD	10	4	161	0.03	0.2	0.3	B	A*C		
100289	15	06	50.0	54.40	-2.97	337.3	501.3	5.8	1.3	AMBLESIDE, CUMBRIA	8	36	245	0.17	3.6	11.7	D	C*D		
100289	18	41	45.7	53.91	-1.32	444.8	446.7	9.8	1.2	WETHERBY, W YORKSHIRE	11	21	216	0.32	2.5	3.4	D	C*D		
170289	08	56	05.6	56.25	-3.73	292.6	707.8	3.0	1.1	GLEN EAGLES, TAYSIDE	11	14	104	0.20	0.8	3.4	C	B*C		
180289	06	43	07.7	57.43	-5.14	211.3	842.3	2.4	0.9	LOCH MONAR, HIGHLAND	7	12	265	0.24	2.1	1.7	C	B*D		
230289	19	58	26.3	52.19	-4.17	251.9	256.5	7.8	2.3	NEWQUAY, DYFED	30	49	82	0.31	0.8	1.5	C	C*C		
270289	07	48	39.0	52.86	-3.35	309.0	330.2	16.6	0.3	LAKE BALA, GWYNEDD	7	19	309	0.08	1.5	1.9	C	B*D		
270289	08	51	15.9	52.90	-4.48	233.4	336.7	6.4	0.1	LLEYN, GWYNEDD	9	9	148	0.20	1.7	3.6	C	B*C		
270289	20	04	58.8	52.77	-2.03	398.1	319.4	2.6	1.1	CANNOCK CHASE, STAFFS	6	30	171	0.10	1.1	1.8	C	B*C		
270289	20	52	50.9	52.84	-4.15	255.4	329.3	15.3	-0.4	HARLECH, GWYNEDD	10	17	127	0.08	0.4	1.0	B	A*B		
280289	13	38	31.5	57.87	-5.11	215.5	891.3	3.0	2.2	ULLAPOOL, HIGHLAND	2+	16	43	181	0.29	1.4	2.2	C	B*D	FELT RHUE

Table 1 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
010389	044311.6	52.96	-4.39	239.6	343.4	24.4	1.1	LLEYN, GWYNEDD	17	3	85	0.07	0.3	0.7	A	A*A	LLEYN AFTERSHOCK	
010389	094756.6	52.97	-4.39	239.4	344.3	21.8	1.0	LLEYN, GWYNEDD	13	2	115	0.09	0.5	0.6	B	A*B	LLEYN AFTERSHOCK	
010389	101937.9	55.97	-4.39	250.7	678.0	4.0	2.3	STRATHBLANE, S'CLYDE	21	19	130	0.07	0.2	0.6	B	A*C		
010389	181249.1	54.86	-1.10	458.0	551.9	6.6	1.6	SUNDERLAND, TYNE & WEAR	8	72	316	0.30	7.1	12.4	D	D*D		
020389	033431.1	53.01	-2.14	390.9	346.4	9.7	1.3	STOKE-ON-TRENT, STAFFS	7	20	148	0.08	0.8	1.5	B	A*C		
030389	070301.9	56.16	-3.59	301.1	697.7	3.0	0.9	POWMILL, TAYSIDE	7	11	182	0.28	6.9	81.2	D	D*D	COALFIELD TYPE F/S 3.7S BEFORE, A/S 4.8S AFTER	
040389	161420.8	53.33	-3.33	311.7	382.7	8.2	1.1	PRESTATYN, CLWYD	18	40	281	0.16	1.1	1.5	C	B*D		
050389	191629.2	47.34	-3.57	281.6	-283.7	5.0	2.5	BAY OF BISCUY	6333		355	0.07			D	D*D		
050389	192921.9	55.87	-4.44	247.5	667.2	3.6	0.7	RENFREW, STRATHCLYDE	9	8	109	0.03	0.2	1.2	B	A*B		
090389	003658.0	53.01	-2.18	387.7	345.7	1.8	1.8	STOKE-ON-TRENT, STAFFS	16	23	119	0.28	1.1	1.4	C	B*C		
110389	140117.8	53.59	-2.37	375.5	410.2	2.5	1.7	BOLTON, GTR MANCHESTER	9	48	174	0.20	6.0	1.3	D	D*C	POSSIBLE COALFIELD TYPE	
120389	070232.3	55.97	-4.39	250.6	678.1	2.7	0.3	STRATHBLANE, S'CLYDE	8	19	131	0.09	0.51	30.6	C	C*C		
130389	010121.0	55.98	-4.39	250.8	678.8	2.9	0.3	STRATHBLANE, S'CLYDE	12	18	132	0.23	0.8	5.1	C	C*C		
130389	100937.6	55.97	-4.40	250.0	678.1	3.7	0.5	STRATHBLANE, S'CLYDE	11	19	133	0.13	0.5	2.6	C	B*C		
180389	135650.9	52.20	-3.22	316.7	257.0	2.4	1.6	GLADESTRY, POWYS	15	14	100	0.10	0.4	0.7	B	A*C		
190389	095631.9	55.85	-3.13	329.1	662.9	0.5	0.6	ROSEWELL, LOTHIAN	8	1	235	0.02	0.2	0.3	C	A*D	COALFIELD TYPE	
210389	180708.2	55.86	-3.12	329.6	663.4	1.2	-0.1	ROSEWELL, LOTHIAN	8	1	261	0.05	0.5	0.9	C	A*D	COALFIELD TYPE	
220389	152701.8	55.86	-3.13	329.3	663.1	0.5	0.4	ROSEWELL, LOTHIAN	8	1	245	0.03	0.1	0.7	C	A*D	COALFIELD TYPE	
220389	205740.5	56.45	-3.99	277.5	729.9	5.3	0.1	COMRIE, TAYSIDE	6	17	223	0.18	5.7	7.1	D	D*D		
240389	000559.3	55.86	-3.11	330.4	663.0	1.5	0.4	ROSEWELL, LOTHIAN	10	2	264	0.05	0.4	0.3	C	A*D	COALFIELD TYPE	
240389	004900.8	51.68	-3.26	313.2	199.2	0.0	1.5	BARGOED, MID GLAMORGAN	8	31	239	0.13	1.7	1.6	C	B*D	FELT BARGOED	
270389	071623.7	52.77	-2.39	373.9	318.8	5.4	1.0	NEWPORT, SALOP	10	44	135	0.22	1.6	6.3	C	C*C		
280389	212025.5	56.10	-3.75	291.2	691.4	0.5	1.2	CLACKMANNAN, CENTRAL	10	22	137	0.09	0.4	0.5	B	A*C	COALFIELD TYPE	
310389	052004.6	55.86	-3.12	329.8	663.6	0.2	0.2	ROSEWELL, LOTHIAN	9	1	271	0.05	0.4	0.2	C	A*D	COALFIELD TYPE	
020489	223240.2	55.85	-3.12	330.1	662.9	1.4	-0.1	ROSEWELL, LOTHIAN	5	9	182	0.04	0.0	0.0	C	A*D	COALFIELD TYPE	
020489	223640.6	55.86	-3.12	329.6	663.4	0.8	0.5	ROSEWELL, LOTHIAN	7	1	292	0.03	0.4	1.0	C	A*D	COALFIELD TYPE	
030489	115205.7	57.07	-5.67	177.5	803.6	2.1	1.8	KNOYDART, HIGHLAND	16	20	129	0.12	0.4	0.9	B	A*C		
050489	095422.9	51.68	-3.26	313.2	199.3	0.3	0.8	BARGOED, MID GLAMORGAN	6	31	259	0.03	0.7	0.6	C	A*D		
050489	121742.2	56.11	-3.63	298.9	692.3	1.0	1.4	BLAIRHALL, FIFE	8	17	192	0.11	1.1	1.1	C	B*D	COALFIELD TYPE	
060489	091809.0	55.87	-3.14	328.8	664.9	1.6	0.6	POLTON, LOTHIAN	4	6	289	0.04	0.0	0.0	C	A*D	COALFIELD TYPE	
060489	130522.8	45.07	-3.90	250.8	-534.9	5.0	3.8	BAY OF BISCUY	8562		357	0.05			D	D*D		
060489	142022.8	56.12	-3.68	295.6	692.8	1.0	1.1	FOREST MILL, CENTRAL	6	18	245	0.11	2.2	1.9	C	B*D	COALFIELD TYPE	
060489	225410.3	55.61	-3.21	323.8	635.5	3.6	0.1	PEEBLES, BORDERS	10	21	150	0.19	1.0	2.9	C	B*C		
080489	045620.5	55.85	-3.12	329.6	662.6	1.4	0.9	ROSEWELL, LOTHIAN	7	9	118	0.08	0.4	0.4	B	A*B	COALFIELD TYPE	
080489	165408.9	51.77	-4.17	250.5	210.7	3.1	1.3	LLANELLI, DYFED	14	70	246	0.14	1.0	1.8	C	A*D	NORTH OF LLANELLI	
100489	114308.5	59.38	2.37	648.4	41063.4	1.0	2.3	NORTHERN NORTH SEA	14165		291	0.35	12.1	13.3	D	D*D		
100489	191352.4	55.86	-3.13	329.2	663.4	1.6	0.5	ROSEWELL, LOTHIAN	13	1	223	0.05	0.3	0.1	C	A*D	COALFIELD TYPE	
110489	141154.4	55.86	-3.13	329.4	663.3	0.9	0.6	ROSEWELL, LOTHIAN	10	1	255	0.03	0.2	0.3	C	A*D	COALFIELD TYPE	
130489	050319.4	55.85	-3.14	328.8	662.7	0.1	0.8	ROSEWELL, LOTHIAN	7	9	121	0.12	0.4	0.5	B	A*B	COALFIELD TYPE	
130489	050433.1	55.86	-3.10	330.9	663.3	2.6	-0.3	ROSEWELL, LOTHIAN	5	9	193	0.02	0.4	44.9	D	C*D	COALFIELD TYPE	
130489	200823.0	53.40	-1.26	449.1	390.0	0.3	1.6	WICKERSLEY, S YORKSHIRE	8	24	159	0.38	2.8	4.3	C	C*C	COALFIELD TYPE	
170489	103105.0	55.86	-3.13	329.4	663.4	1.5	0.8	ROSEWELL, LOTHIAN	17	1	106	0.09	0.4	0.2	B	A*B	COALFIELD TYPE	
170489	234214.9	54.38	-3.86	279.4	500.0	1.2	1.3	IRISH SEA	7	28	319	0.10	5.2	3.5	D	D*D		
190489	220130.6	55.86	-3.13	329.3	663.5	1.7	0.5	ROSEWELL, LOTHIAN	14	1	177	0.07	0.4	0.1	B	A*C	COALFIELD TYPE	
200489	115907.4	51.74	-2.57	360.4	204.6	2.7	2.1	LYDNEY, GLOUCESTERSHIRE	11	20	232	0.46	4.1	3.6	D	C*D		
200489	120839.6	53.55	-1.97	402.2	406.4	4.6	2.2	MOSSLEY, GTR MANCHESTER	11	50	206	0.09	2.8	1.6	D	C*D		
210489	121545.7	55.86	-3.13	329.5	663.5	1.7	0.7	ROSEWELL, LOTHIAN	16	1	233	0.10	0.5	0.2	C	A*D	COALFIELD TYPE	
210489	223654.7	57.81	-5.64	183.9	886.1	17.8	2.1	POOLEWE, HIGHLAND	7	40	323	0.05	1.0	0.6	C	B*D		
220489	094158.3	52.16	-3.59	291.2	253.0	5.6	0.6	BEULAH, POWYS	6	18	231	0.05	1.3	0.8	C	B*D		

Table 1 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
230489	214353.8	53.43	-0.61	492.6	393.7	18.1	2.4	GAINSBOROUGH, LINCS	9	46	212	0.15	1.3	1.3	C	B*D	EAST OF GAINSBOROUGH	
240489	042450.5	53.02	-2.18	387.9	347.3	5.2	1.4	STOKE-ON-TRENT, STAFFS	10	23	151	0.15	1.1	1.8	C	B*C		
240489	195311.7	59.72	0.28	528.4	41094.9	5.8	2.0	NORTHERN NORTH SEA	8	91	331	0.10	2.3	2.4	C	B*D		
250489	155225.5	55.86	-3.13	329.4	663.4	0.6	0.7	ROSEWELL, LOTHIAN	10	1	283	0.04	0.3	0.7	C	A*D	COALFIELD TYPE	
250489	204346.7	57.95	-5.19	211.0	899.9	2.0	1.4	ULLAPOOL, HIGHLAND	13	50	228	0.22	1.8	1.7	C	B*D		
260489	010840.2	55.86	-3.12	329.9	663.4	0.6	0.5	ROSEWELL, LOTHIAN	10	1	302	0.02	0.7	1.2	C	A*D	COALFIELD TYPE	
270489	194727.1	55.86	-3.12	329.7	663.4	1.1	0.6	ROSEWELL, LOTHIAN	10	1	297	0.01	0.1	0.2	C	A*D	COALFIELD TYPE	
280489	032127.5	55.97	-4.39	250.9	677.8	3.3	0.4	STRATHBLANE, CENTRAL	9	18	129	0.13	0.5	18.4	C	C*C		
300489	165213.6	56.41	-4.73	231.8	727.6	8.5	1.5	TYNDRUM, CENTRAL	11	34	263	0.39	3.9	42.0	D	C*D		
010589	032231.2	56.32	-4.70	232.8	717.0	18.2	1.0	ARDLUI, STRATHCLYDE	5	27	300	0.08	2.7	2.1	D	C*D		
020589	093940.5	47.86	-7.18	12.6	-214.2	5.0	2.6	LANDS END, CORNWALL	8281	353	0.09	11.8	6.9	D	D*D	280 KM SW OF LANDS END		
020589	122740.7	53.03	-2.19	387.3	348.3	3.9	2.0	STOKE-ON-TRENT, STAFFS	16	23	153	0.14	0.8	1.5	B	A*C		
020589	143154.6	53.03	-2.18	387.7	347.8	6.3	1.6	STOKE-ON-TRENT, STAFFS	10	23	152	0.08	0.5	0.8	B	A*C		
020589	174237.4	53.05	-2.19	387.1	350.2	2.4	1.6	STOKE-ON-TRENT, STAFFS	14	24	156	0.24	1.1	1.1	C	B*C		
030589	134635.9	56.11	-3.63	298.4	691.8	0.5	1.3	BLAIRHALL, FIFE	4	17	227	0.00	0.0	0.0	C	A*D	COALFIELD TYPE	
030589	153322.5	51.98	-3.59	290.9	233.0	16.1	1.2	BRECON, POWYS	5	24	265	0.04	1.8	0.8	C	B*D		
030589	233641.5	55.86	-3.09	331.6	663.1	1.0	0.2	ROSEWELL, LOTHIAN	7	3	303	0.05	1.1	1.3	C	B*D	COALFIELD TYPE	
040589	140700.8	52.96	-4.39	239.5	342.7	21.1	1.0	LLEYN, GWYNEDD	15	4	176	0.15	0.8	1.5	B	A*C	LLEYN AFTERSHOCK	
040589	180628.1	55.86	-3.12	329.8	663.5	1.4	0.1	ROSEWELL, LOTHIAN	9	1	282	0.06	0.9	0.5	C	A*D	COALFIELD TYPE	
070589	231601.1	53.04	-2.20	386.8	348.6	3.2	2.0	STOKE-ON-TRENT, STAFFS	17	24	154	0.18	0.9	2.0	C	B*C		
070589	231742.8	53.02	-2.20	386.8	347.3	2.3	1.8	STOKE-ON-TRENT, STAFFS	14	24	112	0.19	0.6	0.9	C	B*C		
080589	060053.5	52.20	-3.31	310.3	257.0	9.1	1.7	LL'DRINDOD WELLS, POWYS	13	14	153	0.13	1.3	3.8	C	B*C		
100589	164507.4	53.02	-2.18	387.9	347.5	2.5	1.6	STOKE-ON-TRENT, STAFFS	9	23	151	0.06	0.4	0.9	B	A*C		
100589	183442.9	53.11	-2.06	395.9	357.5	25.2	1.5	LEEK, STAFFORDSHIRE	8	18	163	0.15	1.6	1.5	C	B*C		
110589	012902.9	55.86	-3.12	329.8	663.2	1.2	0.0	ROSEWELL, LOTHIAN	9	1	246	0.06	0.6	1.0	C	A*D	COALFIELD TYPE	
110589	031914.9	49.42	-6.06	105.6	-45.5	34.5	0.9	LIZARD POINT, CORNWALL	8101	357	0.19	21.5258.7	D	D*D	SOUTHWEST OF LIZARD POINT			
120589	192626.2	59.75	2.14	632.5	1103.3	15.0	2.3	NORTHERN NORTH SEA	10186	296	0.81	34.2	44.6	D	D*D			
130589	012927.2	55.86	-3.11	330.3	663.7	1.1	0.0	ROSEWELL, LOTHIAN	9	2	253	0.03	0.4	1.0	C	A*D	COALFIELD TYPE	
130589	031041.7	56.80	-5.98	157.1	774.7	1.5	0.7	ARDNAMURCHAN, HIGHLAND	4	16	343	0.52	0.0	0.0	D	D*D		
150589	125559.7	52.11	-4.02	261.5	247.8	0.1	1.0	LAMPETER, DYFED	11	34	211	0.14	0.9	1.0	C	A*D		
150589	132117.5	55.97	-4.39	250.6	677.7	3.6	1.6	RENFREW, STRATHCLYDE	10	18	130	0.08	0.4	2.8	C	B*C		
150589	194528.7	52.69	-4.00	264.7	311.8	9.8	0.6	BARMOUTH, GWYNEDD	13	2	196	0.08	0.5	0.7	C	A*D		
150589	233452.8	52.57	-1.03	466.0	298.0	2.4	1.5	OADBY, LEICESTER	6	26	228	0.17	1.2	1.2	C	B*D		
160589	050731.4	55.22	-3.44	308.1	592.6	4.1	0.3	CARRONBRIDGE, DUMFRIES	6	19	298	0.09	1.8	1.9	C	B*D		
190589	153315.6	52.32	-2.82	344.0	269.4	17.7	1.1	LUDLOW, HEREFORD	9	22	161	0.24	1.4	3.9	C	B*C		
230589	151809.3	55.58	-3.03	334.8	632.7	5.7	1.6	TRAQUAIR, BORDERS	11	21	118	0.10	0.6	0.7	B	A*C		
270589	141600.8	53.04	-4.45	235.6	351.6	10.2	1.4	CAERNARVON BAY, GWYNEDD	24	6	97	0.22	0.6	1.0	B	B*B		
280589	030619.4	57.06	-4.61	241.4	799.1	7.3	0.9	INVERGARRY, HIGHLAND	10	45	210	0.53	3.3	7.0	D	D*D		
310589	061718.9	54.33	-2.44	371.1	492.5	6.9	1.9	SEDBERGH, CUMBRIA	9	61	159	0.10	0.8	2.0	C	B*D		
310589	185914.6	53.12	-1.08	461.7	358.4	0.1	0.7	RAINWORTH, NOTTS	5	34	263	0.03	2.4	1.4	C	B*D	COALFIELD TYPE	
020689	061005.1	53.27	-3.77	281.8	376.6	18.4	0.9	COLWYN BAY, CLWYD	25	9	176	0.15	0.6	0.7	B	A*C		
050689	014034.7	52.95	-3.53	296.9	340.6	16.6	0.4	BALA, GWYNEDD	10	17	231	0.07	0.6	0.6	C	A*D		
070689	161951.8	53.97	-1.97	401.9	452.9	0.2	1.4	SKIPTON, N YORKSHIRE	10100	307	0.29	17.3	11.8	D	D*D			
090689	142916.9	56.12	-3.76	290.4	693.6	8.6	1.2	CLACKMANNAN, CENTRAL	4	21	260	0.07	0.0	0.0	C	A*D	COALFIELD TYPE	
100689	084121.9	53.03	-2.19	387.2	348.2	4.5	2.2	STOKE-ON-TRENT, STAFFS	21	24	138	0.19	0.7	1.5	C	B*C		
100689	092851.2	53.03	-2.18	387.8	348.4	5.3	2.0	STOKE-ON-TRENT, STAFFS	20	23	137	0.14	0.5	0.8	B	A*C		
110689	004759.9	53.03	-2.20	386.5	347.8	4.0	1.1	STOKE-ON-TRENT, STAFFS	6	24	152	0.02	0.2	0.5	B	A*C		
110689	213450.9	55.85	-3.12	330.1	662.6	1.1	0.4	ROSEWELL, LOTHIAN	13	2	106	0.06	0.3	0.2	B	A*B	COALFIELD TYPE	
120689	192950.8	57.22	-4.88	226.0	818.2	2.4	0.6	GLEN MORISTON, HIGHLAND	15	40	122	0.29	0.9	1.3	C	B*C		
140689	044009.8	53.02	-2.18	387.8	347.0	4.5	1.4	STOKE-ON-TRENT, STAFFS	10	23	151	0.17	1.0	2.1	C	B*C		

Table 1 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	HrMnSeks	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
160689	221039.3	53.16	-1.36	443.1	362.8	0.2	0.5	W MANSFIELD, NOTTS	4	16	223	0.03	0.0	0.0	C	A*D	COALFIELD TYPE	
170689	202603.5	53.03	-2.18	388.1	347.6	4.0	1.0	STOKE-ON-TRENT, STAFFS	10	23	151	0.07	0.5	0.9	B	A*C		
250689	103650.1	56.41	-4.24	262.1	727.0	2.0	-0.1	LOCH EARN, CENTRAL	5	26	245	0.28	0.4	0.2	C	B*D	MAGNITUDE FROM VERTICALS	
250689	230537.0	53.02	-2.15	389.8	347.3	6.5	1.0	STOKE-ON-TRENT, STAFFS	5	21	299	0.06	2.2	1.5	C	B*D		
250689	234438.5	53.05	-2.12	392.0	350.7	17.5	1.4	STOKE-ON-TRENT, STAFFS	13	19	138	0.22	1.5	1.5	C	B*C		
270689	010000.6	56.95	-4.83	227.9	788.3	6.5	1.2	LOCH LOCHY, HIGHLAND	23	46	106	0.26	0.7	2.8	C	B*C		
270689	134136.0	56.11	-3.64	298.1	691.9	2.5	1.4	BLAIRHALL, FIFE	6	18	229	0.04	1.2	0.7	C	B*D	COALFIELD TYPE	
020789	152930.6	52.97	-4.41	238.0	343.7	22.8	0.6	LLEYN, GWYNEDD	10	2	108	0.07	0.5	1.0	B	A*B	LLEYN AFTERSHOCK	
020789	170131.0	53.16	-3.96	269.2	364.1	12.8	0.3	BETHESDA, GWYNEDD	13	12	130	0.09	0.5	0.8	B	A*B		
040789	170003.4	55.56	-5.62	171.8	635.6	2.1	1.7	SADDELL, KINTYRE	12	77	327	0.37	11.9	8.5	D	D*D		
050789	043227.3	55.96	-4.39	251.0	677.3	1.1	0.0	MILNGAVIE, STRATHCLYDE	4	18	203	0.00	0.0	0.0	C	A*D		
060789	043017.8	55.78	-5.44	184.3	659.8	3.9	1.2	CLAONIG, KINTYRE	10	44	320	0.18	9.0	19.5	D	D*D		
060789	043509.0	55.72	-5.44	183.8	652.9	5.0	1.2	CLAONIG, KINTYRE	6	46	321	0.12	17.8	39.4	D	D*D		
080789	203521.4	56.15	-4.19	263.6	698.0	12.2	0.7	THORNHILL, CENTRAL	8	10	166	0.31	3.6	6.0	C	C*C		
110789	121331.3	56.62	-5.58	180.4	753.2	0.7	2.1	MORVERN, HIGHLAND	10	37	202	0.34	5.0	3.7	D	C*D		
140789	222533.3	53.07	-1.24	451.1	352.9	2.3	0.6	KIRKBY-IN-ASHFLD, NOTTS	8	28	149	0.22	1.4	2.3	C	B*C		
160789	031026.5	56.46	-4.55	242.8	733.2	0.5	0.8	KILLIN, CENTRAL	4	34	292	0.03	0.0	0.0	C	A*D		
160789	220212.9	55.85	-3.12	329.7	662.5	0.2	0.7	ROSEWELL, LOTHIAN	9	9	119	0.05	0.3	0.2	B	A*B	COALFIELD TYPE	
180789	072208.8	53.14	-0.59	494.4	361.7	1.0	1.1	LINCOLN, LINCOLNSHIRE	4	64	306	0.16	0.0	0.0	C	B*D		
180789	095021.5	50.20	-4.97	187.8	37.1	10.0	0.5	ST MAWES, CORNWALL	13	11	310	0.03	0.4	0.5	C	A*D	4 KM NE OF ST MAWES	
200789	010548.5	53.12	-1.14	457.6	358.0	0.4	1.6	RAINWORTH, NOTTS	6	30	214	0.19	3.3	2.7	D	C*D	COALFIELD TYPE	
200789	101207.9	53.47	-4.28	248.7	399.7	11.3	-0.6	AMLWCH, GWYNEDD	5	9	311	0.00	0.1	0.1	C	A*D		
220789	002547.2	53.15	-1.03	464.6	361.7	0.5	1.7	BILSTHORPE, NOTTS	7	35	225	0.14	1.6	1.4	C	B*D	COALFIELD TYPE	
220789	203143.7	50.12	-5.45	153.6	29.6	8.2	0.2	MARAZION, CORNWALL	7	11	186	0.06	1.3	3.8	C	B*D		
240789	120516.3	51.50	-3.41	302.2	178.6	0.3	1.6	YSTRADOWEN, S GLAMORGAN	6	62	341	0.18	18.4	92.6	D	D*D		
250789	184933.1	52.96	-4.40	238.7	343.4	22.6	0.9	LLEYN, GWYNEDD	13	3	94	0.07	0.4	0.8	B	A*B	LLEYN AFTERSHOCK	
270789	000754.8	53.29	-1.31	446.3	376.8	4.9	0.7	STAVELEY, DERBYSHIRE	5	15	283	0.16	6.0	5.6	D	D*D	COALFIELD TYPE	
270789	100234.6	56.53	-5.37	192.9	742.7	5.9	1.0	PORT APPIN, STRATHCLYDE	7	52	320	0.69	14.6	24.7	D	D*D	3 KM SE OF PORT APPIN	
270789	115321.1	52.22	-3.07	326.9	258.8	1.1	0.0	KINGTON, HER & WORC	5	21	243	0.02	0.5	0.5	C	A*D		
270789	115329.4	52.21	-3.08	326.1	257.9	0.4	-0.1	KINGTON, HER & WORC	5	20	239	0.01	0.2	0.3	C	A*D		
270789	115358.9	52.21	-3.08	326.2	257.9	0.0	0.4	KINGTON, HER & WORC	5	20	240	0.01	0.2	0.3	C	A*D		
280789	115942.6	52.21	-3.08	326.4	258.0	0.4	0.2	KINGTON, HER & WORC	5	20	241	0.00	0.0	0.0	C	A*D		
280789	135816.5	52.96	-4.39	239.4	342.9	24.1	2.1	LLEYN, GWYNEDD	18	3	88	0.09	0.4	0.9	A	A*A	LLEYN AFTERSHOCK	
280789	135931.8	52.96	-4.40	238.7	342.9	24.5	1.3	LLEYN, GWYNEDD	17	3	119	0.09	0.4	0.8	B	A*B	LLEYN AFTERSHOCK	
280789	231233.4	53.18	-1.15	457.0	364.6	0.9	0.8	MANSFIELD, NOTTS	4	27	263	0.15	0.0	0.0	C	B*D	COALFIELD TYPE	
310789	162556.5	52.84	-3.80	278.5	328.1	6.0	0.3	GWYNFYNYDD, GWYNEDD	7	6	115	0.08	0.6	1.4	B	A*B		
010889	023554.3	53.20	-1.10	460.4	367.2	1.7	0.8	WARSOP, NOTTINGHAMSHIRE	4	30	273	0.05	0.0	0.0	C	A*D	COALFIELD TYPE	
010889	223124.5	49.58	-6.03	108.7	-28.1	5.0	0.9	SCILLY ISLES, CORNWALL	6	72	340	0.03	33.0	74.1	D	D*D	SE OF SCILLY ISLES	
020889	010113.5	53.54	-2.29	380.6	404.5	1.1	1.5	PRESTWICH, MANCHESTER	2+	19	53	78	0.40	1.0	1.5	D	C*D	COALFIELD TYPE, FELT WHITEFIELD
020889	025902.5	56.02	-5.20	200.5	684.9	0.0	0.5	GLENDARUEL, STRATHCLYDE	5	57	351	0.32	45.0	34.4	D	D*D		
040889	042415.8	53.35	-1.82	412.2	383.6	13.4	1.6	CASTLETON, DERBYSHIRE	12	22	132	0.13	0.8	1.5	B	A*B		
040889	085611.1	52.97	-4.41	238.2	344.4	24.2	0.7	LLEYN, GWYNEDD	10	1	113	0.06	0.6	0.8	B	A*B	LLEYN AFTERSHOCK	
040889	225556.7	56.39	-4.73	231.6	725.4	2.1	1.0	TYNDRUM, CENTRAL	10	33	261	0.31	3.5	2.8	D	C*D		
050889	041904.0	53.19	-1.08	461.7	366.8	1.0	0.9	WARSOP, NOTTINGHAMSHIRE	4	31	274	0.17	0.0	0.0	C	B*D	COALFIELD TYPE	
050889	050007.9	51.15	-3.38	303.7	139.4	5.0	1.3	BRIDGEWATER, SOMERSET	9	68	165	0.15	1.2	3.8	C	B*D		
100889	193500.6	53.18	-1.15	456.7	365.7	2.6	1.0	WARSOP, NOTTINGHAMSHIRE	4	26	265	0.09	0.0	0.0	C	A*D	COALFIELD TYPE	
110889	112135.1	56.11	-3.76	290.7	691.7	1.3	1.3	CLACKMANNAN, CENTRAL	4+	12	22	137	0.09	0.3	0.5	B	A*C	COALFIELD TYPE, FELT CLACKMANNAN
120889	135847.2	53.17	-1.14	457.8	364.4	0.9	0.9	MANSFIELD, NOTTS	4	28	264	0.22	0.0	0.0	C	B*D	COALFIELD TYPE	

Table 1 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...	
130889	125002.3	56.18	-6.39	127.8	706.9	1.0	1.2	COLONSAY, STRATHCLYDE		6127	349	0.25	2.4	1.2	C	B*D			
130889	180253.6	52.95	-4.39	239.2	342.2	23.8	1.6	LLEYN, GWYNEDD	20	4	97	0.07	0.2	0.6	B	A*B	LLEYN AFTERSHOCK		
150889	203748.6	53.16	-1.18	454.9	362.8	2.7	1.0	MANSFIELD, NOTTS		4	26	256	0.17	0.0	0.0	C	B*D	COALFIELD TYPE	
160889	032610.9	57.97	-5.08	217.6	902.1	1.0	1.3	ULLAPOOL, HIGHLAND		9	54	286	0.50	13.9	10.4	D	D*D		
210889	065246.3	47.64	-6.67	49.3	240.6	5.0	3.9	BAY OF BISCUY		6374	359	0.31				D	D*D		
220889	011552.4	53.44	-2.52	365.7	393.9	0.5	1.3	CULCHETH, MANCHESTER	14	46	111	0.33	1.2	2.8	C	C*C	COALFIELD TYPE		
220889	012058.8	53.19	-1.09	460.9	366.6	1.0	1.2	CLIPSTONE, NOTTS		4	30	273	0.14	0.0	0.0	C	A*D		
220889	064756.9	56.13	-4.15	266.6	695.3	7.0	0.7	KIPPEN, CENTRAL		5	14	186	0.33	33.0	72.9	D	D*D		
230889	052650.4	53.41	-2.41	372.9	390.1	1.0	1.6	PARTINGTON, MANCHESTER		6	50	332	0.10	8.6	6.4	D	D*D	COALFIELD TYPE	
230889	075622.6	56.26	-5.00	214.0	711.8	2.5	0.6	INVERARAY, STRATHCLYDE	12	42	273	0.24	4.8	3.8	D	C*D			
230889	102711.7	52.49	-1.10	461.4	288.3	4.3	0.4	BRUNTINGTHORPE, LEICS		6	31	246	0.34	6.5	8.7	D	D*D		
240889	225409.2	56.12	-4.14	267.0	694.5	3.6	0.1	KIPPEN, CENTRAL		4	14	229	0.34	0.0	0.0	D	C*D		
250889	131907.7	53.38	-1.21	452.8	387.7	0.4	1.8	DINNINGTON, S YORKSHIRE		8	26	297	0.43	11.5	5.7	D	D*D	COALFIELD TYPE	
260889	145654.3	53.22	-1.03	464.4	369.2	2.3	1.1	THORESBY, NOTTS		5	33	281	0.15	0.9	0.7	C	A*D	COALFIELD TYPE	
290889	224932.0	53.07	-1.23	451.3	353.2	2.6	0.9	ANNESLEY, NOTTS		7	28	150	0.05	0.4	3.3	C	B*C		
310889	201848.0	55.85	-3.13	329.0	662.8	1.4	0.5	ROSEWELL, LOTHIAN		10	1	220	0.03	0.2	0.2	C	A*D	COALFIELD TYPE	
020989	075143.8	53.22	-1.03	464.4	370.1	9.3	0.8	THORESBY, NOTTS	2+	4	19	200	0.10	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY	
14	040989	053611.6	53.00	-4.61	225.1	347.7	20.2	1.1	LLEYN, GWYNEDD		18	12	180	0.08	0.4	0.7	B	A*C	OFFSHORE LOCATION
	040989	124814.7	53.24	-1.79	413.7	371.8	0.5	2.1	BUXTON, DERBYSHIRE		11105	312	0.22	13.8	9.2	D	D*D	COALFIELD TYPE	
	040989	144554.4	56.11	-3.65	297.3	691.6	0.2	1.3	BLAIRHALL, FIFE		10	18	125	0.22	0.8	1.2	C	B*C	COALFIELD TYPE
	050989	092111.3	54.54	-4.03	268.4	518.6	1.4	1.2	IRISH SEA		9	36	169	0.27	2.0	3.6	C	B*C	OFFSHORE, ST. BEES HEAD
	050989	161323.7	54.54	-0.88	472.3	516.1	0.4	2.4	LOFTUS, CLEVELAND	5	19	81	236	0.36	2.8	1.8	D	C*D	FELT LOFTUS, EASINGTON, STAITHES & BOULBY
050989	221826.0	55.75	-4.60	236.8	653.9	5.4	0.1	BEITH, STRATHCLYDE		6	10	215	0.04	1.6	4.7	C	B*D		
060989	223928.0	53.22	-0.98	468.2	369.3	0.0	1.0	THORESBY, NOTTS	2+	5	37	286	0.19	19.6	14.9	D	D*D	COALFIELD TYPE, FELT THORESBY	
090989	021606.9	53.24	-1.02	465.3	371.5	3.4	1.3	THORESBY, NOTTS	2+	6	34	223	0.09	0.3	0.5	C	A*D	COALFIELD TYPE, FELT THORESBY	
120989	010215.5	53.22	-1.04	463.9	369.2	1.5	1.0	THORESBY, NOTTS		6	33	215	0.12	1.6	2.2	C	B*D	COALFIELD TYPE	
120989	232113.3	53.23	-1.02	465.1	370.4	2.8	1.0	THORESBY, NOTTS	2+	5	34	219	0.09	2.4	4.0	C	B*D	COALFIELD TYPE, FELT THORESBY	
130989	124242.5	53.26	-1.82	412.2	373.4	1.6	1.1	THORESBY, NOTTS	2+	4	19	267	0.12	0.0	0.0	C	A*D	COALFIELD TYPE FELT THORESBY	
130989	154922.9	56.20	-4.16	265.9	703.4	2.6	-0.2	THORNHILL, CENTRAL		4	11	182	0.14	0.0	0.0	C	A*D	A/S @ 21:42 GMT (-0.4.ML)	
130989	222919.6	53.22	-1.03	464.4	370.1	2.9	1.2	THORESBY, NOTTS	2+	5	33	231	0.11	0.6	1.2	C	A*D	COALFIELD TYPE, FELT THORESBY	
150989	102924.0	56.15	-4.17	265.4	697.7	4.5	0.9	THORNHILL, CENTRAL		8	11	123	0.09	2.1	4.8	C	B*C	F/S @ 05:16 GMT (14TH), A/S @ 00:11 GMT (17TH)	
160989	044910.4	53.46	-2.45	370.1	396.1	0.4	1.1	CHAT MOSS, MANCHESTER		9	44	129	0.16	0.4	0.7	C	B*C	COALFIELD TYPE	
170989	101542.2	53.23	-1.03	464.7	370.3	1.8	1.0	THORESBY, NOTTS	2+	4	33	283	0.10	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY	
180989	161735.9	52.71	-2.02	398.6	312.9	1.3	1.1	CANNOCK, STAFFORDSHIRE		9	36	109	0.33	2.2	4.4	C	C*C	COALFIELD TYPE	
200989	055723.9	53.57	-2.25	383.5	408.7	0.2	1.5	PRESTWICH, MANCHESTER	3+	7	37	170	0.29	2.5	3.0	C	B*C	COALFIELD TYPE, FELT WHITEFIELD	
200989	175352.5	53.24	-1.08	461.2	372.3	18.9	1.2	THORESBY, NOTTS	2+	4	30	283	0.00	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY	
220989	193820.0	53.20	-1.09	460.9	367.9	1.4	1.1	THORESBY, NOTTS	2+	4	30	275	0.06	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY	
220989	211132.0	49.97	-6.14	103.4	16.2	4.6	1.8	SCILLY ISLES, CORNWALL		8	45	340	0.04	19.1	43.5	D	D*D	7 KM EAST OF ST MARTINS	

Table 1 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
240989	174344.2	53.24	-1.09	460.8	371.3	17.9	1.1	THORESBY, NOTTS	2+	4	29	218	0.06	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
250989	102705.0	53.12	-2.67	355.3	357.9	7.2	2.0	RIDLEY, CHESHIRE	15	46	276	0.25	2.9	4.5	D	C*D		
280989	122305.3	51.81	-3.10	324.0	213.3	23.2	1.4	ABERGAVENNY, GWENT	7	22	205	0.14	1.4	2.1	C	B*D		
300989	012534.2	49.78	-4.87	193.2	-8.9	4.2	0.6	LIZARD POINT, CORNWALL	7	36	348	0.18	17.1	6.0	D	D*D	SOUTH OF LIZARD POINT	
300989	105250.3	49.85	-5.16	172.8	-0.6	6.6	0.5	LIZARD POINT, CORNWALL	8	22	312	0.03	0.7	0.4	C	A*D	SOUTH OF LIZARD POINT	
300989	121700.9	49.76	-5.09	177.7	-11.4	5.6	1.4	LIZARD POINT, CORNWALL	8	33	324	0.08	21.5	47.0	D	D*D	SOUTH OF LIZARD POINT	
300989	153340.6	49.71	-5.17	171.8	-15.7	8.4	0.5	LIZARD POINT, CORNWALL	5	37	351	0.39	43.8555	5.5	D	D*D	SOUTH OF LIZARD POINT	
021089	233658.8	53.23	-1.03	464.9	370.6	2.0	1.2	THORESBY, NOTTS	5	33	220	0.04	1.2	1.4	C	B*D	COALFIELD TYPE	
081089	011703.8	53.25	-1.04	464.3	372.7	7.6	0.8	THORESBY, NOTTS	4	33	286	0.03	0.0	0.0	C	A*D	COALFIELD TYPE	
091089	193426.5	53.03	2.42	696.5	356.9	0.0	3.2	SOUTHERN NORTH SEA	17	87	287	0.69	6.3	3.6	D	D*D		
101089	103253.2	55.44	-3.13	328.8	617.0	3.9	1.6	ETTRICK, BORDERS	3+	12	15	96	0.10	0.6	1.6	B	A*C	FELT AT TUSHIELAW INN
101089	181422.1	57.58	-5.21	208.3	859.0	0.4	1.4	KINLOCHWE, HIGHLAND	13	11	193	0.27	2.0	40.2	D	C*D		
151089	051737.4	49.75	-5.19	169.9	-11.3	7.9	0.5	LIZARD POINT, CORNWALL	7	33	350	0.05	3.6	75.6	D	C*D	SOUTH OF LIZARD POINT	
161089	132252.2	56.38	-4.78	228.4	724.0	3.0	0.9	TYNDRUM, CENTRAL	11	34	262	0.26	2.3	2.8	C	B*D		
161089	155538.5	56.38	-4.74	230.7	724.8	4.9	1.1	TYNDRUM, CENTRAL	11	33	260	0.21	1.9	1.9	C	B*D		
161089	162547.7	52.95	-4.40	239.0	342.3	23.9	1.1	LLEYN, GWYNEDD	20	4	99	0.09	0.3	0.9	B	A*B	LLEYN AFTERSHOCK	
201089	032520.2	53.25	-1.02	465.4	372.6	7.6	1.3	THORESBY, NOTTS	4	34	287	0.08	0.0	0.0	C	A*D	COALFIELD TYPE	
211089	144307.3	53.24	-1.05	463.7	371.8	5.9	1.2	THORESBY, NOTTS	4	32	284	0.09	0.0	0.0	C	A*D	COALFIELD TYPE	
221089	200043.0	57.02	-5.78	170.5	798.9	7.1	2.2	LOCH NEVIS, HIGHLAND	2+	17	12	117	0.26	1.2	1.6	B	B*B	FELT MALLAIG & MORAR
231089	113313.8	53.02	-3.64	289.8	348.9	12.4	0.5	BALA, GWYNEDD	21	10	151	0.15	0.5	0.6	B	A*C	NORTH OF BALA	
231089	182536.2	56.12	-3.70	294.5	693.1	0.6	1.5	CLACKMANNAN, CENTRAL	4+	12	19	127	0.05	0.2	0.2	B	A*C	COALFIELD TYPE, FELT AT GARTFINNAN FARM
241089	144508.7	56.11	-3.64	297.9	691.7	0.2	1.5	BLAIRHALL, FIFE	9	18	123	0.08	0.3	0.5	B	A*C	COALFIELD TYPE	
241089	172558.2	53.53	-2.70	353.3	404.1	14.6	1.4	WIGAN, LANCASHIRE	21	32	73	0.15	0.4	0.7	B	A*C		
251089	004304.1	52.90	-4.49	232.4	336.8	13.7	0.7	LLEYN, GWYNEDD	13	10	156	0.07	0.5	0.5	B	A*C		
261089	191301.2	56.39	-4.70	233.1	725.2	4.8	1.3	TYNDRUM, CENTRAL	12	32	259	0.34	2.6	2.5	D	C*D		
271089	010705.6	54.96	-1.37	440.1	562.6	0.5	1.7	WHITBURN, TYNE & WEAR	11	55	266	0.25	3.7	2.6	D	C*D	COALFIELD TYPE	
021189	060243.4	56.33	-4.91	220.0	718.8	9.1	0.8	TYNDRUM, CENTRAL	14	39	269	0.50	2.8	7.3	D	C*D		
031189	191346.9	53.21	-1.11	459.5	368.4	3.4	1.0	THORESBY, NOTTS	2+	4	28	274	0.09	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
061189	005434.4	54.68	-2.83	346.7	532.4	2.4	0.9	PENRITH, CUMBRIA	11	36	97	0.25	1.4	2.2	C	B*C		
061189	235236.3	49.43	-5.56	141.5	-46.1	5.0	1.0	LIZARD POINT, CORNWALL	6	75	356	0.51	90.7	59.1	D	D*D	SOUTHWEST OF LIZARD POINT	
081189	125228.3	52.97	-4.42	237.3	344.0	22.6	0.6	LLEYN, GWYNEDD	13	1	131	0.06	0.3	0.6	B	A*B	LLEYN AFTERSHOCK	
081189	234715.6	56.30	-4.88	221.6	716.1	9.1	0.3	DALMALLY, STRATHCLYDE	7	36	301	0.17	2.2	23.3	D	C*D		
101189	031757.4	53.26	-1.00	466.7	373.8	3.8	1.1	THORESBY, NOTTS	4	35	290	0.36	0.0	0.0	D	C*D	COALFIELD TYPE	
121189	102805.6	53.41	-2.56	363.1	390.8	0.3	1.4	WARRINGTON, CHESHIRE	15	49	174	0.23	0.9	1.0	C	B*C	COALFIELD TYPE	
121189	162721.2	54.39	-3.08	329.9	499.6	5.4	0.6	CONISTON, CUMBRIA	11	14	101	0.20	0.8	1.6	C	B*C		
171189	224008.8	53.42	-2.56	362.7	391.8	0.1	1.6	WARRINGTON, CHESHIRE	21	48	86	0.31	0.9	1.3	C	C*C	COALFIELD TYPE	
181189	212448.7	55.85	-3.11	330.2	662.9	1.0	0.4	ROSEWELL, LOTHIAN	9	3	113	0.05	0.3	0.3	B	A*B	COALFIELD TYPE	
191189	164737.7	51.18	-4.81	203.5	146.3	1.6	1.1	LUNDY, BRISTOL CHANNEL	8	31	287	0.01	1.2	0.9	C	B*D		
201189	203538.5	53.22	-1.09	460.8	369.2	3.9	1.3	THORESBY, NOTTS	2+	4	30	277	0.09	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
241189	085137.7	55.88	-3.12	330.0	665.6	1.7	0.2	LASSWADE, LOTHIAN	6	4	198	0.02	0.5	0.4	C	A*D	COALFIELD TYPE	
251189	044630.8	56.36	-4.06	272.5	721.0	1.6	-0.4	COMRIE, TAYSIDE	6	25	201	0.06	0.6	0.6	C	A*D		
251189	154100.9	53.23	-1.06	462.7	370.6	3.5	1.1	THORESBY, NOTTS	4	31	281	0.06	0.0	0.0	C	A*D	COALFIELD TYPE	
261189	061207.1	55.93	-3.42	311.1	672.3	3.4	0.6	BROXBURN, LOTHIAN	11	10	101	0.13	0.5	3.8	C	B*C		
291189	053318.3	52.05	-2.69	352.6	239.2	1.0	1.0	HEREFORD, HER & WORC	4	10	182	0.03	0.0	0.0	C	A*D		
011289	034441.7	53.43	-2.57	362.0	392.9	0.2	1.2	WARRINGTON, CHESHIRE	15	46	107	0.10	0.3	0.5	B	A*C	COALFIELD TYPE	
011289	041534.9	53.22	-1.08	461.4	369.8	4.5	1.1	THORESBY, NOTTS	2+	5	30	214	0.11	0.8	1.6	C	A*D	COALFIELD TYPE, FELT

Table 1 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
051289	190046.1	53.47	-4.26	249.7	399.0	13.0	-0.4	ANGLESEY, GWYNEDD	7	8	316	0.01	0.3	0.2	C	A*D	NORTHEAST OF ANGLESEY	
061289	062929.8	55.76	-3.09	331.7	652.2	6.1	-0.3	GLADHOUSE RES, LOTHIAN	8	3	233	0.10	1.0	0.5	C	A*D		
071289	003152.1	53.22	-1.09	460.8	369.6	7.0	0.9	THORESBY, NOTTS	2+	5	30	212	0.09	2.8	11.3	D	C*D	COALFIELD TYPE, FELT THORESBY
081289	140633.0	56.11	-3.64	297.9	692.1	0.1	1.4	BLAIRHALL, FIFE	13	17	123	0.13	0.3	0.4	B	A*C	COALFIELD TYPE	
081289	231257.2	52.71	-4.72	216.0	315.7	19.1	0.9	CARDIGAN BAY	22	15	149	0.23	1.1	1.9	C	B*C		
091289	012446.2	53.47	-2.49	367.5	396.9	0.4	1.0	CULCHETH, MANCHESTER	13	43	241	0.30	3.1	3.1	D	C*D	COALFIELD TYPE	
091289	182043.3	53.23	-1.04	464.2	370.2	2.5	1.1	THORESBY, NOTTS	5	33	218	0.17	3.0	3.6	D	C*D	COALFIELD TYPE	
101289	024654.3	56.42	-4.82	226.2	729.1	0.6	0.7	TYNDRUM, CENTRAL	12	64	267	0.40	4.9	3.6	D	C*D		
101289	045118.0	55.62	-2.98	338.4	636.9	8.5	0.5	INNERLEITHEN, BORDERS	7	17	275	0.24	3.1	11.6	D	C*D		
131289	042256.0	53.46	-2.49	367.2	395.6	0.5	1.3	CULCHETH, MANCHESTER	18	44	67	0.25	0.9	1.6	C	B*C	COALFIELD TYPE	
131289	093030.4	53.42	-2.58	361.4	392.0	0.1	1.6	WARRINGTON, CHESHIRE	22	47	86	0.25	0.6	1.0	C	B*C	COALFIELD TYPE	
161289	012333.6	54.84	-2.64	359.2	549.1	4.9	0.8	CROGLIN FELL, CUMBRIA	10	27	153	0.16	1.2	2.5	C	B*C		
161289	045424.8	53.20	-1.10	460.1	367.1	0.7	1.2	THORESBY, NOTTS	2+	4	29	272	0.07	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
171289	073248.9	53.12	-2.14	390.6	348.6	7.7	1.8	STOKE-ON-TRENT, STAFFS	10	23	168	0.24	1.3	2.9	C	B*C		
181289	160220.4	53.04	-2.19	387.2	349.0	2.5	1.7	STOKE-ON-TRENT, STAFFS	5	24	163	0.04	0.9	1.3	C	A*D		
191289	140251.2	54.87	-1.27	446.8	552.7	0.5	1.8	RYHOPE, TYNE & WEAR	15	61	285	0.25	4.2	3.2	D	C*D	OFFSHORE, COALFIELD TYPE	
191289	215007.3	53.54	-4.93	206.0	409.4	9.5	0.1	IRISH SEA	8	31	320	0.06	1.4	4.0	C	B*D		
221289	113844.7	54.02	1.14	605.9	462.7	30.1	2.6	SOUTHERN NORTH SEA	21126	220	0.29	2.0	3.2	C	B*D			
241289	022240.4	56.29	-4.30	257.5	713.5	3.1	0.5	STRATHYRE, CENTRAL	8	12	230	0.26	3.9	4.9	D	C*D		
241289	034712.2	53.07	2.13	676.9	360.7	8.7	2.0	SOUTHERN NORTH SEA	7	53	314	0.32	5.2	93.1	D	D*D		
251289	062212.5	55.94	-3.43	311.0	672.3	2.6	0.1	BROXBURN, LOTHIAN	8	10	161	0.10	0.5	136.9	C	C*C		
281289	153615.3	55.28	-3.01	335.8	598.6	0.2	0.5	ESKDALE, D & G	10	13	195	0.27	1.4	1.5	C	B*D		
281289	203601.8	52.96	-4.40	238.6	343.5	22.4	1.3	LLEYN, GWYNEDD	20	2	181	0.11	0.5	0.8	C	A*D	LLEYN AFTERSHOCK	
281289	224028.7	55.30	-2.63	359.7	601.1	2.5	0.1	NEWCASTLETON, BORDERS	6	32	198	0.09	2.0	1.2	C	B*D		
291289	150336.8	53.30	-1.70	419.7	377.9	1.0	1.6	BUXTON, DERBYSHIRE	4	13	276	0.12	0.0	0.0	C	A*D		
301289	123340.0	55.25	-3.42	309.5	596.3	9.6	-0.3	MOFFAT, D & G	4	16	310	0.07	0.0	0.0	C	A*D		
311289	071301.3	52.96	-4.38	240.4	343.1	21.9	0.7	LLEYN, GWYNEDD	15	4	161	0.10	0.5	0.9	B	A*C	LLEYN AFTERSHOCK	

Table 2

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
120589	192626.2	59.75	2.14	632.5	103.3	15.0	2.3	NORTHERN, NORTH SEA	10186	296	0.81	34.2	44.6	D	D*D			
240489	195311.7	59.72	0.28	528.4	1094.9	5.8	2.0	NORTHERN, NORTH SEA	8	91	331	0.10	2.3	2.4	C	B*D		
100489	114308.5	59.38	2.37	648.4	1063.4	1.0	2.3	NORTHERN, NORTH SEA	14165	291	0.35	12.1	13.3	D	D*D			
160889	032610.9	57.97	-5.08	217.6	902.1	1.0	1.3	ULLAPOOL, HIGHLAND	9	54	286	0.50	13.9	10.4	D	D*D		
250489	204346.7	57.95	-5.19	211.0	899.9	2.0	1.4	ULLAPOOL, HIGHLAND	13	50	228	0.22	1.8	1.7	C	B*D		
280289	133831.5	57.87	-5.11	215.5	891.3	3.0	2.2	ULLAPOOL, HIGHLAND	2+	16	43	181	0.29	1.4	2.2	C	B*D	FELT RHUE
210489	223654.7	57.81	-5.64	183.9	886.1	17.8	2.1	POOLEWE, HIGHLAND		7	40	323	0.05	1.0	0.6	C	B*D	
101089	181422.1	57.58	-5.21	208.3	859.0	0.4	1.4	KINLOCHewe, HIGHLAND		13	11	193	0.27	2.0	40.2	D	C*D	
180289	064307.7	57.43	-5.14	211.3	842.3	2.4	0.9	LOCH MONAR, HIGHLAND		7	12	265	0.24	2.1	1.7	C	B*D	
120689	192950.8	57.22	-4.88	226.0	818.2	2.4	0.6	GLEN MORISTON, HIGHLAND		15	40	122	0.29	0.9	1.3	C	B*C	
030489	115205.7	57.07	-5.67	177.5	803.6	2.1	1.8	KNOYDART, HIGHLAND		16	20	129	0.12	0.4	0.9	B	A*C	
280589	030619.4	57.06	-4.61	241.4	799.1	7.3	0.9	INVERGARRY, HIGHLAND		10	45	210	0.53	3.3	7.0	D	D*D	
221089	200043.0	57.02	-5.78	170.5	798.9	7.1	2.2	LOCH NEVIS, HIGHLAND	2+	17	12	117	0.26	1.2	1.6	B	B*B	FELT MALLAIG & MORAR
270689	010000.6	56.95	-4.83	227.9	788.3	6.5	1.2	LOCH LOCHY, HIGHLAND		23	46	106	0.26	0.7	2.8	C	B*C	
130589	031041.7	56.80	-5.98	157.1	774.7	1.5	0.7	ARDNAMURCHAN, HIGHLAND		4	16	343	0.52	0.0	0.0	D	D*D	
110789	121331.3	56.62	-5.58	180.4	753.2	0.7	2.1	MORVERN, HIGHLAND		10	37	202	0.34	5.0	3.7	D	C*D	
270789	100234.6	56.53	-5.37	192.9	742.7	5.9	1.0	PORT APPIN, STRATHCLYDE		7	52	320	0.69	14.6	24.7	D	D*D	3 KM SE OF PORT APPIN
160789	031026.5	56.46	-4.55	242.8	733.2	0.5	0.8	KILLIN, CENTRAL		4	34	292	0.03	0.0	0.0	C	A*D	
220389	205740.5	56.45	-3.99	277.5	729.9	5.3	0.1	COMRIE, TAYSIDE		6	17	223	0.18	5.7	7.1	D	D*D	
101289	024654.3	56.42	-4.82	226.2	729.1	0.6	0.7	TYNDRUM, CENTRAL		12	64	267	0.40	4.9	3.6	D	C*D	
300489	165213.6	56.41	-4.73	231.8	727.6	8.5	1.5	TYNDRUM, CENTRAL		11	34	263	0.39	3.9	42.0	D	C*D	
250689	103650.1	56.41	-4.24	262.1	727.0	2.0	-0.1	LOCH EARN, CENTRAL		5	26	245	0.28	0.4	0.2	C	B*D	MAGNITUDE FROM VERTICALS
040889	225556.7	56.39	-4.73	231.6	725.4	2.1	1.0	TYNDRUM, CENTRAL		10	33	261	0.31	3.5	2.8	D	C*D	
261089	191301.2	56.39	-4.70	233.1	725.2	4.8	1.3	TYNDRUM, CENTRAL		12	32	259	0.34	2.6	2.5	D	C*D	
161089	132252.2	56.38	-4.78	228.4	724.0	3.0	0.9	TYNDRUM, CENTRAL		11	34	262	0.26	2.3	2.8	C	B*D	
161089	155538.5	56.38	-4.74	230.7	724.8	4.9	1.1	TYNDRUM, CENTRAL		11	33	260	0.21	1.9	1.9	C	B*D	
251189	044630.8	56.36	-4.06	272.5	721.0	1.6	-0.4	COMRIE, TAYSIDE		6	25	201	0.06	0.6	0.6	C	A*D	
021189	060243.4	56.33	-4.91	220.0	718.8	9.1	0.8	TYNDRUM, CENTRAL		14	39	269	0.50	2.8	7.3	D	C*D	
010589	032231.2	56.32	-4.70	232.8	717.0	18.2	1.0	ARDLUI, STRATHCLYDE		5	27	300	0.08	2.7	2.1	D	C*D	
081189	234715.6	56.30	-4.88	221.6	716.1	9.1	0.3	DALMALLY, STRATHCLYDE		7	36	301	0.17	2.2	23.3	D	C*D	
241289	022240.4	56.29	-4.30	257.5	713.5	3.1	0.5	STRATHYRE, CENTRAL		8	12	230	0.26	3.9	4.9	D	C*D	
230889	075622.6	56.26	-5.00	214.0	711.8	2.5	0.6	INVERARAY, STRATHCLYDE		12	42	273	0.24	4.8	3.8	D	C*D	
170189	023247.6	56.25	-3.74	292.4	707.3	4.8	0.5	GLEN EAGLES, TAYSIDE		11	14	103	0.11	0.4	0.9	B	A*C	
100189	231252.4	56.25	-3.73	293.0	708.2	6.9	1.4	GLEN EAGLES, TAYSIDE		13	14	103	0.18	0.7	1.2	B	B*B	
170289	085605.6	56.25	-3.73	292.6	707.8	3.0	1.1	GLEN EAGLES, TAYSIDE		11	14	104	0.20	0.8	3.4	C	B*C	
130989	154922.9	56.20	-4.16	265.9	703.4	2.6	-0.2	THORNHILL, CENTRAL		4	11	182	0.14	0.0	0.0	C	A*D	A/S @ 21:42 GMT (-0.4.ML)
130889	125002.3	56.18	-6.39	127.8	706.9	1.0	1.2	COLONSAY, STRATHCLYDE		6127	349	0.25	2.4	1.2	C	B*D		
030389	070301.9	56.16	-3.59	301.1	697.7	3.0	0.9	POWMILL, TAYSIDE		7	11	182	0.28	6.9	81.2	D	D*D	COALFIELD TYPE F/S 3.7S BEFORE, A/S 4.8S AFTER
080789	203521.4	56.15	-4.19	263.6	698.0	12.2	0.7	THORNHILL, CENTRAL		8	10	166	0.31	3.6	6.0	C	C*C	
150989	102924.0	56.15	-4.17	265.4	697.7	4.5	0.9	THORNHILL, CENTRAL		8	11	123	0.09	2.1	4.8	C	B*C	F/S @ 05:16 GMT (14TH), A/S @ 00:11 GMT (17TH)
220889	064756.9	56.13	-4.15	266.6	695.3	7.0	0.7	KIPPEN, CENTRAL		5	14	186	0.33	33.0	72.9	D	D*D	
240889	225409.2	56.12	-4.14	267.0	694.5	3.6	0.1	KIPPEN, CENTRAL		4	14	229	0.34	0.0	0.0	D	C*D	
090689	142916.9	56.12	-3.76	290.4	693.6	8.6	1.2	CLACKMANNAN, CENTRAL		4	21	260	0.07	0.0	0.0	C	A*D	COALFIELD TYPE
231089	182536.2	56.12	-3.70	294.5	693.1	0.6	1.5	CLACKMANNAN, CENTRAL	4+	12	19	127	0.05	0.2	0.2	B	A*C	COALFIELD TYPE, FELT AT GARTFINNAN FARM
060489	142022.8	56.12	-3.68	295.6	692.8	1.0	1.1	FOREST MILL, CENTRAL		6	18	245	0.11	2.2	1.9	C	B*D	COALFIELD TYPE
110889	112135.1	56.11	-3.76	290.7	691.7	1.3	1.3	CLACKMANNAN, CENTRAL	4+	12	22	137	0.09	0.3	0.5	B	A*C	COALFIELD TYPE, FELT CLACKMANNAN

Table 2 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
040989	144554.4	56.11	-3.65	297.3	691.6	0.2	1.3	BLAIRHALL, FIFE	10	18	125	0.22	0.8	1.2	C	B*C	COALFIELD TYPE	
100189	124738.7	56.11	-3.64	298.3	691.8	0.5	1.0	BLAIRHALL, FIFE	10	17	122	0.16	0.6	0.8	C	B*C	COALFIELD TYPE	
270689	134136.0	56.11	-3.64	298.1	691.9	2.5	1.4	BLAIRHALL, FIFE	6	18	229	0.04	1.2	0.7	C	B*D	COALFIELD TYPE	
241089	144508.7	56.11	-3.64	297.9	691.7	0.2	1.5	BLAIRHALL, FIFE	9	18	123	0.08	0.3	0.5	B	A*C	COALFIELD TYPE	
081289	140633.0	56.11	-3.64	297.9	692.1	0.1	1.4	BLAIRHALL, FIFE	13	17	123	0.13	0.3	0.4	B	A*C	COALFIELD TYPE	
050489	121742.2	56.11	-3.63	298.9	692.3	1.0	1.4	BLAIRHALL, FIFE	8	17	192	0.11	1.1	1.1	C	B*D	COALFIELD TYPE	
030589	134635.9	56.11	-3.63	298.4	691.8	0.5	1.3	BLAIRHALL, FIFE	4	17	227	0.00	0.0	0.0	C	A*D	COALFIELD TYPE	
280389	212025.5	56.10	-3.75	291.2	691.4	0.5	1.2	CLACKMANAN, CENTRAL	10	22	137	0.09	0.4	0.5	B	A*C	COALFIELD TYPE	
020889	025902.5	56.02	-5.20	200.5	684.9	0.0	0.5	GLENDARUEL, STRATHCLYDE	5	57	351	0.32	45.0	34.4	D	D*D		
130389	010121.0	55.98	-4.39	250.8	678.8	2.9	0.3	STRATHBLANE, S'CLYDE	12	18	132	0.23	0.8	5.1	C	C*C		
130389	100937.6	55.97	-4.40	250.0	678.1	3.7	0.5	STRATHBLANE, S'CLYDE	11	19	133	0.13	0.5	2.6	C	B*C		
010389	101937.9	55.97	-4.39	250.7	678.0	4.0	2.3	STRATHBLANE, S'CLYDE	21	19	130	0.07	0.2	0.6	B	A*C		
120389	070232.3	55.97	-4.39	250.6	678.1	2.7	0.3	STRATHBLANE, S'CLYDE	8	19	131	0.09	0.5	130.6	C	C*C		
280489	032127.5	55.97	-4.39	250.9	677.8	3.3	0.4	STRATHBLANE, CENTRAL	9	18	129	0.13	0.5	18.4	C	C*C		
150589	132117.5	55.97	-4.39	250.6	677.7	3.6	1.6	RENFREW, STRATHCLYDE	10	18	130	0.08	0.4	2.8	C	B*C		
050789	043227.3	55.96	-4.39	251.0	677.3	1.1	0.0	MILNGAVIE, STRATHCLYDE	4	18	203	0.00	0.0	0.0	C	A*D		
270189	224243.8	55.95	-4.77	226.9	676.9	0.9	0.3	GREENOCK, STRATHCLYDE	6	12	235	0.18	0.3	0.3	C	B*D		
251289	062212.5	55.94	-3.43	311.0	672.3	2.6	0.1	BROXBURN, LOTHIAN	8	10	161	0.10	0.5	136.9	C	C*C		
261189	061207.1	55.93	-3.42	311.1	672.3	3.4	0.6	BROXBURN, LOTHIAN	11	10	101	0.13	0.5	3.8	C	B*C		
241189	085137.7	55.88	-3.12	330.0	665.6	1.7	0.2	LASSWADE, LOTHIAN	6	4	198	0.02	0.5	0.4	C	A*D	COALFIELD TYPE	
050389	192921.9	55.87	-4.44	247.5	667.2	3.6	0.7	RENFREW, STRATHCLYDE	9	8	109	0.03	0.2	1.2	B	A*B		
060489	091809.0	55.87	-3.14	328.8	664.9	1.6	0.6	POLTON, LOTHIAN	4	6	289	0.04	0.0	0.0	C	A*D	COALFIELD TYPE	
220389	152701.8	55.86	-3.13	329.3	663.1	0.5	0.4	ROSEWELL, LOTHIAN	8	1	245	0.03	0.1	0.7	C	A*D	COALFIELD TYPE	
100489	191352.4	55.86	-3.13	329.2	663.4	1.6	0.5	ROSEWELL, LOTHIAN	13	1	223	0.05	0.3	0.1	C	A*D	COALFIELD TYPE	
110489	141154.4	55.86	-3.13	329.4	663.3	0.9	0.6	ROSEWELL, LOTHIAN	10	1	255	0.03	0.2	0.3	C	A*D	COALFIELD TYPE	
170489	103105.0	55.86	-3.13	329.4	663.4	1.5	0.8	ROSEWELL, LOTHIAN	17	1	106	0.09	0.4	0.2	B	A*B	COALFIELD TYPE	
190489	220130.6	55.86	-3.13	329.3	663.5	1.7	0.5	ROSEWELL, LOTHIAN	14	1	177	0.07	0.4	0.1	B	A*C	COALFIELD TYPE	
210489	121545.7	55.86	-3.13	329.5	663.5	1.7	0.7	ROSEWELL, LOTHIAN	16	1	233	0.10	0.5	0.2	C	A*D	COALFIELD TYPE	
250489	155225.5	55.86	-3.13	329.4	663.4	0.6	0.7	ROSEWELL, LOTHIAN	10	1	283	0.04	0.3	0.7	C	A*D	COALFIELD TYPE	
210389	180708.2	55.86	-3.12	329.6	663.4	1.2	-0.1	ROSEWELL, LOTHIAN	8	1	261	0.05	0.5	0.9	C	A*D	COALFIELD TYPE	
310389	052004.6	55.86	-3.12	329.8	663.6	0.2	0.2	ROSEWELL, LOTHIAN	9	1	271	0.05	0.4	0.2	C	A*D	COALFIELD TYPE	
020489	223640.6	55.86	-3.12	329.6	663.4	0.8	0.5	ROSEWELL, LOTHIAN	7	1	292	0.03	0.4	1.0	C	A*D	COALFIELD TYPE	
260489	010840.2	55.86	-3.12	329.9	663.4	0.6	0.5	ROSEWELL, LOTHIAN	10	1	302	0.02	0.7	1.2	C	A*D	COALFIELD TYPE	
270489	194727.1	55.86	-3.12	329.7	663.4	1.1	0.6	ROSEWELL, LOTHIAN	10	1	297	0.01	0.1	0.2	C	A*D	COALFIELD TYPE	
040589	180628.1	55.86	-3.12	329.8	663.5	1.4	0.1	ROSEWELL, LOTHIAN	9	1	282	0.06	0.9	0.5	C	A*D	COALFIELD TYPE	
110589	012902.9	55.86	-3.12	329.8	663.2	1.2	0.0	ROSEWELL, LOTHIAN	9	1	246	0.06	0.6	1.0	C	A*D	COALFIELD TYPE	
240389	000559.3	55.86	-3.11	330.4	663.0	1.5	0.4	ROSEWELL, LOTHIAN	10	2	264	0.05	0.4	0.3	C	A*D	COALFIELD TYPE	
130589	012927.2	55.86	-3.11	330.3	663.7	1.1	0.0	ROSEWELL, LOTHIAN	9	2	253	0.03	0.4	1.0	C	A*D	COALFIELD TYPE	
130489	050433.1	55.86	-3.10	330.9	663.3	2.6	-0.3	ROSEWELL, LOTHIAN	5	9	193	0.02	0.4	44.9	D	C*D	COALFIELD TYPE	
030589	233641.5	55.86	-3.09	331.6	663.1	1.0	0.2	ROSEWELL, LOTHIAN	7	3	303	0.05	1.1	1.3	C	B*D	COALFIELD TYPE	
170189	062330.7	55.85	-3.14	328.9	662.7	1.1	1.4	ROSEWELL, LOTHIAN	22	1	77	0.08	0.2	0.1	A	A*A	COALFIELD TYPE	
130489	050319.4	55.85	-3.14	328.8	662.7	0.1	0.8	ROSEWELL, LOTHIAN	7	9	121	0.12	0.4	0.5	B	A*B	COALFIELD TYPE	
100189	234813.5	55.85	-3.13	329.1	662.6	1.4	1.6	ROSEWELL, LOTHIAN	19	1	72	0.09	0.3	0.1	A	A*A	COALFIELD TYPE	
190389	095631.9	55.85	-3.13	329.1	662.9	0.5	0.6	ROSEWELL, LOTHIAN	8	1	235	0.02	0.2	0.3	C	A*D	COALFIELD TYPE	
310889	201848.0	55.85	-3.13	329.0	662.8	1.4	0.5	ROSEWELL, LOTHIAN	10	1	220	0.03	0.2	0.2	C	A*D	COALFIELD TYPE	
020489	223240.2	55.85	-3.12	330.1	662.9	1.4	-0.1	ROSEWELL, LOTHIAN	5	9	182	0.04	0.0	0.0	C	A*D	COALFIELD TYPE	
080489	045620.5	55.85	-3.12	329.6	662.6	1.4	0.9	ROSEWELL, LOTHIAN	7	9	118	0.08	0.4	0.4	B	A*B	COALFIELD TYPE	
110689	213450.9	55.85	-3.12	330.1	662.6	1.1	0.4	ROSEWELL, LOTHIAN	13	2	106	0.06	0.3	0.2	B	A*B	COALFIELD TYPE	
160789	220212.9	55.85	-3.12	329.7	662.5	0.2	0.7	ROSEWELL, LOTHIAN	9	9	119	0.05	0.3	0.2	B	A*B	COALFIELD TYPE	
181189	212448.7	55.85	-3.11	330.2	662.9	1.0	0.4	ROSEWELL, LOTHIAN	9	3	113	0.05	0.3	0.3	B	A*B	COALFIELD TYPE	

Table 2 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
060789	043017.8	55.78	-5.44	184.3	659.8	3.9	1.2	CLAONIG, KINTYRE	10	44	320	0.18	9.0	19.5	D	D*D		
120189	022552.7	55.78	-2.83	348.1	653.9	2.0	-0.2	LAUDER, BORDERS	8	14	229	0.13	1.7	1.5	C	B*D		
061289	062929.8	55.76	-3.09	331.7	652.2	6.1	-0.3	GLADHOUSE RES, LOTHIAN	8	3	233	0.10	1.0	0.5	C	A*D		
050989	221826.0	55.75	-4.60	236.8	653.9	5.4	0.1	BEITH, STRATHCLYDE	6	10	215	0.04	1.6	4.7	C	B*D		
060789	043509.0	55.72	-5.44	183.8	652.9	5.0	1.2	CLAONIG, KINTYRE	6	46	321	0.12	17.8	39.4	D	D*D		
101289	045118.0	55.62	-2.98	338.4	636.9	8.5	0.5	INNERLEITHEN, BORDERS	7	17	275	0.24	3.1	11.6	D	C*D		
060489	225410.3	55.61	-3.21	323.8	635.5	3.6	0.1	PEEBLES, BORDERS	10	21	150	0.19	1.0	2.9	C	B*C		
230589	151809.3	55.58	-3.03	334.8	632.7	5.7	1.6	TRAQUAIR, BORDERS	11	21	118	0.10	0.6	0.7	B	A*C		
040789	170003.4	55.56	-5.62	171.8	635.6	2.1	1.7	SADDELL, KINTYRE	12	77	327	0.37	11.9	8.5	D	D*D		
101089	103253.2	55.44	-3.13	328.8	617.0	3.9	1.6	ETTRICK, BORDERS	3+	12	15	96	0.10	0.6	1.6	B	A*C	FELT AT TUSHIELAW INN
281289	224028.7	55.30	-2.63	359.7	601.1	2.5	0.1	NEWCASTLETON, BORDERS	6	32	198	0.09	2.0	1.2	C	B*D		
281289	153615.3	55.28	-3.01	335.8	598.6	0.2	0.5	ESKDALE, D & G	10	13	195	0.27	1.4	1.5	C	B*D		
301289	123340.0	55.25	-3.42	309.5	596.3	9.6	-0.3	MOFFAT, D & G	4	16	310	0.07	0.0	0.0	C	A*D		
010189	202738.4	55.24	-3.44	308.7	595.3	6.1	0.7	JOHNSTONEBRIDGE, D & G	8	17	250	0.07	0.8	1.1	C	A*D		
230189	112328.3	55.24	-3.38	312.4	594.6	0.5	-0.1	JOHNSTONEBRIDGE, D & G	4	14	300	0.01	0.0	0.0	C	A*D		
180189	015936.0	55.23	-3.40	311.2	594.2	1.4	-0.5	JOHNSTONEBRIDGE, D & G	4	15	304	0.01	0.0	0.0	C	A*D		
160589	050731.4	55.22	-3.44	308.1	592.6	4.1	0.3	CARRONBRIDGE, DUMFRIES	6	19	298	0.09	1.8	1.9	C	B*D		
010289	162715.6	55.21	-2.95	339.2	590.5	4.3	0.2	LANGHOLM, D & G	5	11	202	0.09	0.0	0.1	C	A*D		
190189	191048.8	55.01	-3.88	279.8	570.3	1.1	0.7	CASTLE DOUGLAS, D & G	4	52	343	0.08	0.0	0.0	C	A*D		
271089	010705.6	54.96	-1.37	440.1	562.6	0.5	1.7	WHITBURN, TYNE & WEAR	11	55	266	0.25	3.7	2.6	D	C*D	COALFIELD TYPE	
191289	140251.2	54.87	-1.27	446.8	552.7	0.5	1.8	RYHOPE, TYNE & WEAR	15	61	285	0.25	4.2	3.2	D	C*D	OFFSHORE, COALFIELD TYPE	
010389	181249.1	54.86	-1.10	458.0	551.9	6.6	1.6	SUNDERLAND, TYNE & WEAR	8	72	316	0.30	7.1	12.4	D	D*D		
161289	012333.6	54.84	-2.64	359.2	549.1	4.9	0.8	CROGLIN FELL, CUMBRIA	10	27	153	0.16	1.2	2.5	C	B*C		
061189	005434.4	54.68	-2.83	346.7	532.4	2.4	0.9	PENRITH, CUMBRIA	11	36	97	0.25	1.4	2.2	C	B*C		
050989	092111.3	54.54	-4.03	268.4	518.6	1.4	1.2	IRISH SEA	9	36	169	0.27	2.0	3.6	C	B*C	OFFSHORE, ST. BEES HEAD	
050989	161323.7	54.54	-0.88	472.3	516.1	0.4	2.4	LOFTUS, CLEVELAND	5	19	81	236	0.36	2.8	1.8	D	C*D	FELT LOFTUS, EASINGTON, STAITHES & BOULBY
100289	150650.0	54.40	-2.97	337.3	501.3	5.8	1.3	AMBLESIDE, CUMBRIA	8	36	245	0.17	3.6	11.7	D	C*D		
121189	162721.2	54.39	-3.08	329.9	499.6	5.4	0.6	CONISTON, CUMBRIA	11	14	101	0.20	0.8	1.6	C	B*C		
170489	234214.9	54.38	-3.86	279.4	500.0	1.2	1.3	IRISH SEA	7	28	319	0.10	5.2	3.5	D	D*D		
310589	061718.9	54.33	-2.44	371.1	492.5	6.9	1.9	SEDBERGH, CUMBRIA	9	61	159	0.10	0.8	2.0	C	B*D		
221289	113844.7	54.02	-1.14	605.9	462.7	30.1	2.6	SOUTHERN NORTH SEA	21	126	220	0.29	2.0	3.2	C	B*D		
070689	161951.8	53.97	-1.97	401.9	452.9	0.2	1.4	SKIPTON, N YORKSHIRE	10	100	307	0.29	17.3	11.8	D	D*D		
100289	184145.7	53.91	-1.32	444.8	446.7	9.8	1.2	WETHERBY, W YORKSHIRE	11	21	216	0.32	2.5	3.4	D	C*D		
070189	014009.9	53.63	-2.05	396.6	414.6	10.0	1.2	LITTLEBOROUGH, GTR MAN	16	31	102	0.10	0.4	1.9	B	A*C		
110389	140117.8	53.59	-2.37	375.5	410.2	2.5	1.7	BOLTON, GTR MANCHESTER	9	48	174	0.20	6.0	1.3	D	D*C	POSSIBLE COALFIELD TYPE	
200989	055723.9	53.57	-2.25	383.5	408.7	0.2	1.5	PRESTWICH, MANCHESTER	3+	7	37	170	0.29	2.5	3.0	C	B*C	COALFIELD TYPE, FELT WHITEFIELD
200489	120839.6	53.55	-1.97	402.2	406.4	4.6	2.2	MOSSLEY, GTR MANCHESTER	11	50	206	0.09	2.8	1.6	D	C*D		
191289	215007.3	53.54	-4.93	206.0	409.4	9.5	0.1	IRISH SEA	8	31	320	0.06	1.4	4.0	C	B*D		
020889	010113.5	53.54	-2.29	380.6	404.5	1.1	1.5	PRESTWICH, MANCHESTER	2+	19	53	78	0.40	1.0	1.5	D	C*D	COALFIELD TYPE, FELT WHITEFIELD
241089	172558.2	53.53	-2.70	353.3	404.1	14.6	1.4	WIGAN, LANCASHIRE	21	32	73	0.15	0.4	0.7	B	A*C		
200789	101207.9	53.47	-4.28	248.7	399.7	11.3	-0.6	AMLWCH, GWYNEDD	5	9	311	0.00	0.1	0.1	C	A*D		
051289	190046.1	53.47	-4.26	249.7	399.0	13.0	-0.4	ANGLESEY, GWYNEDD	7	8	316	0.01	0.3	0.2	C	A*D	NORTHEAST OF ANGLESEY	
091289	012446.2	53.47	-2.49	367.5	396.9	0.4	1.0	CULCHETH, MANCHESTER	13	43	241	0.30	3.1	3.1	D	C*D	COALFIELD TYPE	
131289	042256.0	53.46	-2.49	367.2	395.6	0.5	1.3	CULCHETH, MANCHESTER	18	44	67	0.25	0.9	1.6	C	B*C	COALFIELD TYPE	
160989	044910.4	53.46	-2.45	370.1	396.1	0.4	1.1	CHAT MOSS, MANCHESTER	9	44	129	0.16	0.4	0.7	C	B*C	COALFIELD TYPE	
220889	011552.4	53.44	-2.52	365.7	393.9	0.5	1.3	CULCHETH, MANCHESTER	14	46	111	0.33	1.2	2.8	C	C*C	COALFIELD TYPE	
011289	034441.7	53.43	-2.57	362.0	392.9	0.2	1.2	WARRINGTON, CHESHIRE	15	46	107	0.10	0.3	0.5	B	A*C	COALFIELD TYPE	

Table 2 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...	
230489	214353.8	53.43	-0.61	492.6	393.7	18.1	2.4	GAINSBOROUGH, LINCS	9	46	212	0.15	1.3	1.3	C	B*D	EAST OF GAINSBOROUGH		
131289	093030.4	53.42	-2.58	361.4	392.0	0.1	1.6	WARRINGTON, CHESHIRE	22	47	86	0.25	0.6	1.0	C	B*C	COALFIELD TYPE		
171189	224008.8	53.42	-2.56	362.7	391.8	0.1	1.6	WARRINGTON, CHESHIRE	21	48	86	0.31	0.9	1.3	C	C*C	COALFIELD TYPE		
121189	102805.6	53.41	-2.56	363.1	390.8	0.3	1.4	WARRINGTON, CHESHIRE	15	49	174	0.23	0.9	1.0	C	B*C	COALFIELD TYPE		
230889	052650.4	53.41	-2.41	372.9	390.1	1.0	1.6	PARTINGTON, MANCHESTER	6	50	332	0.10	8.6	6.4	D	D*D	COALFIELD TYPE		
130489	200823.0	53.40	-1.26	449.1	390.0	0.3	1.6	WICKERSLEY, S YORKSHIRE	8	24	159	0.38	2.8	4.3	C	C*C	COALFIELD TYPE		
250889	131907.7	53.38	-1.21	452.8	387.7	0.4	1.8	DINNINGTON, S YORKSHIRE	8	26	297	0.43	11.5	5.7	D	D*D	COALFIELD TYPE		
040889	042415.8	53.35	-1.82	412.2	383.6	13.4	1.6	CASTLETON, DERBYSHIRE	12	22	132	0.13	0.8	1.5	B	A*B			
040289	115109.2	53.34	-1.77	415.6	382.1	2.8	1.8	CASTLETON, DERBYSHIRE	16	18	110	0.31	0.6	1.5	C	C*C			
040389	161420.8	53.33	-3.33	311.7	382.7	8.2	1.1	PRESTATYN, CLWYD	18	40	281	0.16	1.1	1.5	C	B*D			
110189	025130.7	53.33	-0.93	471.5	382.2	1.0	1.8	RETFORD, NOTTS	7	41	252	0.07	3.0	1.5	D	C*D	COALFIELD TYPE		
040289	002817.1	53.32	-0.89	473.9	380.5	0.7	2.2	RETFORD, NOTTS	9	43	252	0.36	7.2	3.6	D	D*D	EAST OF RETFORD, COALFIELD TYPE		
291289	150336.8	53.30	-1.70	419.7	377.9	1.0	1.6	BUXTON, DERBYSHIRE	4	13	276	0.12	0.0	0.0	C	A*D			
270789	000754.8	53.29	-1.31	446.3	376.8	4.9	0.7	STAVELEY, DERBYSHIRE	5	15	283	0.16	6.0	5.6	D	D*D	COALFIELD TYPE		
020689	061005.1	53.27	-3.77	281.8	376.6	18.4	0.9	COLWYN BAY, CLWYD	25	9	176	0.15	0.6	0.7	B	A*C			
130989	124242.5	53.26	-1.82	412.2	373.4	1.6	1.1	THORESBY, NOTTS	2+	4	19	267	0.12	0.0	0.0	C	A*D	COALFIELD TYPE FELT THORESBY	
20	101189	031757.4	53.26	-1.00	466.7	373.8	3.8	1.1	THORESBY, NOTTS	4	35	290	0.36	0.0	0.0	D	C*D	COALFIELD TYPE	
	081089	011703.8	53.25	-1.04	464.3	372.7	7.6	0.8	THORESBY, NOTTS	4	33	286	0.03	0.0	0.0	C	A*D	COALFIELD TYPE	
	201089	032520.2	53.25	-1.02	465.4	372.6	7.6	1.3	THORESBY, NOTTS	4	34	287	0.08	0.0	0.0	C	A*D	COALFIELD TYPE	
	040989	124814.7	53.24	-1.79	413.7	371.8	0.5	2.1	BUXTON, DERBYSHIRE	11105	312	0.22	13.8	9.2	D	D*D	COALFIELD TYPE		
	200189	154724.7	53.24	-1.41	439.5	371.4	0.2	1.6	CHESTERFIELD, DERBS	10	8	129	0.71	3.4	4.3	C	D*B	POSSIBLE COALFIELD TYPE	
	240989	174344.2	53.24	-1.09	460.8	371.3	17.9	1.1	THORESBY, NOTTS	2+	4	29	218	0.06	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
	200989	175352.5	53.24	-1.08	461.2	372.3	18.9	1.2	THORESBY, NOTTS	2+	4	30	283	0.00	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
	211089	144307.3	53.24	-1.05	463.7	371.8	5.9	1.2	THORESBY, NOTTS	2+	4	32	284	0.09	0.0	0.0	C	A*D	COALFIELD TYPE
	090989	021606.9	53.24	-1.02	465.3	371.5	3.4	1.3	THORESBY, NOTTS	2+	6	34	223	0.09	0.3	0.5	C	A*D	COALFIELD TYPE, FELT THORESBY
	251189	154100.9	53.23	-1.06	462.7	370.6	3.5	1.1	THORESBY, NOTTS	4	31	281	0.06	0.0	0.0	C	A*D	COALFIELD TYPE	
	091289	182043.3	53.23	-1.04	464.2	370.2	2.5	1.1	THORESBY, NOTTS	5	33	218	0.17	3.0	3.6	D	C*D	COALFIELD TYPE	
	170989	101542.2	53.23	-1.03	464.7	370.3	1.8	1.0	THORESBY, NOTTS	2+	4	33	283	0.10	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
	021089	233658.8	53.23	-1.03	464.9	370.6	2.0	1.2	THORESBY, NOTTS	2+	5	33	220	0.04	1.2	1.4	C	B*D	COALFIELD TYPE
	120989	232113.3	53.23	-1.02	465.1	370.4	2.8	1.0	THORESBY, NOTTS	2+	5	34	219	0.09	2.4	4.0	C	B*D	COALFIELD TYPE, FELT THORESBY
	201189	203538.5	53.22	-1.09	460.8	369.2	3.9	1.3	THORESBY, NOTTS	2+	4	30	277	0.09	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
	071289	003152.1	53.22	-1.09	460.8	369.6	7.0	0.9	THORESBY, NOTTS	2+	5	30	212	0.09	2.8	11.3	D	C*D	COALFIELD TYPE, FELT THORESBY
	011289	041534.9	53.22	-1.08	461.4	369.8	4.5	1.1	THORESBY, NOTTS	2+	5	30	214	0.11	0.8	1.6	C	A*D	COALFIELD TYPE, FELT THORESBY
	120989	010215.5	53.22	-1.04	463.9	369.2	1.5	1.0	THORESBY, NOTTS	2+	6	33	215	0.12	1.6	2.2	C	B*D	COALFIELD TYPE
	260889	145654.3	53.22	-1.03	464.4	369.2	2.3	1.1	THORESBY, NOTTS	2+	5	33	281	0.15	0.9	0.7	C	A*D	COALFIELD TYPE
	020989	075143.8	53.22	-1.03	464.4	370.1	9.3	0.8	THORESBY, NOTTS	2+	4	19	200	0.10	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
	130989	222919.6	53.22	-1.03	464.4	370.1	2.9	1.2	THORESBY, NOTTS	2+	5	33	231	0.11	0.6	1.2	C	A*D	COALFIELD TYPE, FELT THORESBY
	060989	223928.0	53.22	-0.98	468.2	369.3	0.0	1.0	THORESBY, NOTTS	2+	5	37	286	0.19	19.6	14.9	D	D*D	COALFIELD TYPE, FELT

Table 2 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
031189	191346.9	53.21	-1.11	459.5	368.4	3.4	1.0	THORESBY, NOTTS	2+	4	28	274	0.09	0.0	0.0	C	A*D	THORESBY COALFIELD TYPE, FELT
010889	023554.3	53.20	-1.10	460.4	367.2	1.7	0.8	WARSOP, NOTTINGHAMSHIRE	2+	4	30	273	0.05	0.0	0.0	C	A*D	THORESBY COALFIELD TYPE
161289	045424.8	53.20	-1.10	460.1	367.1	0.7	1.2	THORESBY, NOTTS	2+	4	29	272	0.07	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
220989	193820.0	53.20	-1.09	460.9	367.9	1.4	1.1	THORESBY, NOTTS	2+	4	30	275	0.06	0.0	0.0	C	A*D	COALFIELD TYPE, FELT THORESBY
220889	012058.8	53.19	-1.09	460.9	366.6	1.0	1.2	CLIPSTONE, NOTTS		4	30	273	0.14	0.0	0.0	C	A*D	
050889	041904.0	53.19	-1.08	461.7	366.8	1.0	0.9	WARSOP, NOTTINGHAMSHIRE		4	31	274	0.17	0.0	0.0	C	B*D	COALFIELD TYPE
280789	231233.4	53.18	-1.15	457.0	364.6	0.9	0.8	MANSFIELD, NOTTS		4	27	263	0.15	0.0	0.0	C	B*D	COALFIELD TYPE
100889	193500.6	53.18	-1.15	456.7	365.7	2.6	1.0	WARSOP, NOTTINGHAMSHIRE		4	26	265	0.09	0.0	0.0	C	A*D	COALFIELD TYPE
120889	135847.2	53.17	-1.14	457.8	364.4	0.9	0.9	MANSFIELD, NOTTS		4	28	264	0.22	0.0	0.0	C	B*D	COALFIELD TYPE
020789	170131.0	53.16	-3.96	269.2	364.1	12.8	0.3	BETHESDA, GWYNEDD	13	12	130	0.09	0.5	0.8	B	A*B		
160689	221039.3	53.16	-1.36	443.1	362.8	0.2	0.5	W MANSFIELD, NOTTS		4	16	223	0.03	0.0	0.0	C	A*D	COALFIELD TYPE
150889	203748.6	53.16	-1.18	454.9	362.8	2.7	1.0	MANSFIELD, NOTTS		4	26	256	0.17	0.0	0.0	C	B*D	COALFIELD TYPE
180189	171605.9	53.15	-3.73	284.1	362.9	15.4	0.5	LLANRWST, GWYNEDD		8	18	306	0.09	1.4	1.3	C	B*D	
220789	002547.2	53.15	-1.03	464.6	361.7	0.5	1.7	BILSTHORPE, NOTTS		7	35	225	0.14	1.6	1.4	C	B*D	COALFIELD TYPE
180789	072208.8	53.14	-0.59	494.4	361.7	1.0	1.1	LINCOLN, LINCOLNSHIRE		4	64	306	0.16	0.0	0.0	C	B*D	
250989	102705.0	53.12	-2.67	355.3	357.9	7.2	2.0	RIDLEY, CHESHIRE	15	46	276	0.25	2.9	4.5	D	C*D		
171289	073248.9	53.12	-2.14	390.6	348.6	7.7	1.8	STOKE-ON-TRENT, STAFFS	10	23	168	0.24	1.3	2.9	C	B*C		
200789	010548.5	53.12	-1.14	457.6	358.0	0.4	1.6	RAINWORTH, NOTTS		6	30	214	0.19	3.3	2.7	D	C*D	COALFIELD TYPE
310589	185914.6	53.12	-1.08	461.7	358.4	0.1	0.7	RAINWORTH, NOTTS		5	34	263	0.03	2.4	1.4	C	B*D	COALFIELD TYPE
100589	183442.9	53.11	-2.06	395.9	357.5	25.2	1.5	LEEK, STAFFORDSHIRE		8	18	163	0.15	1.6	1.5	C	B*C	
140789	222533.3	53.07	-1.24	451.1	352.9	2.3	0.6	KIRKBY-IN-ASHFLD, NOTTS		8	28	149	0.22	1.4	2.3	C	B*C	
290889	224932.0	53.07	-1.23	451.3	353.2	2.6	0.9	ANNESLEY, NOTTS		7	28	150	0.05	0.4	3.3	C	B*C	
241289	034712.2	53.07	-2.13	676.9	360.7	8.7	2.0	SOUTHERN NORTH SEA		7	53	314	0.32	5.2	93.1	D	D*D	
020589	174237.4	53.05	-2.19	387.1	350.2	2.4	1.6	STOKE-ON-TRENT, STAFFS	14	24	156	0.24	1.1	1.1	C	B*C		
250689	234438.5	53.05	-2.12	392.0	350.7	17.5	1.4	STOKE-ON-TRENT, STAFFS	13	19	138	0.22	1.5	1.5	C	B*C		
260189	035309.7	53.05	-1.04	464.3	350.8	0.1	1.9	OXTON, NOTTS		6	32	162	0.16	1.2	1.5	C	B*C	COALFIELD TYPE
270589	141600.8	53.04	-4.45	235.6	351.6	10.2	1.4	CAERNARVON BAY, GWYNEDD	24	6	97	0.22	0.6	1.0	B	B*B		
070589	231601.1	53.04	-2.20	386.8	348.6	3.2	2.0	STOKE-ON-TRENT, STAFFS	17	24	154	0.18	0.9	2.0	C	B*C		
181289	160220.4	53.04	-2.19	387.2	349.0	2.5	1.7	STOKE-ON-TRENT, STAFFS		5	24	163	0.04	0.9	1.3	C	A*D	
080189	102628.0	53.03	-2.20	386.4	348.3	2.3	1.1	STOKE-ON-TRENT, STAFFS		6	24	153	0.17	0.7	0.9	C	B*C	
110689	004759.9	53.03	-2.20	386.5	347.8	4.0	1.1	STOKE-ON-TRENT, STAFFS		6	24	152	0.02	0.2	0.5	B	A*C	
020589	122740.7	53.03	-2.19	387.3	348.3	3.9	2.0	STOKE-ON-TRENT, STAFFS		16	23	153	0.14	0.8	1.5	B	A*C	
100689	084121.9	53.03	-2.19	387.2	348.2	4.5	2.2	STOKE-ON-TRENT, STAFFS		21	24	138	0.19	0.7	1.5	C	B*C	
020589	143154.6	53.03	-2.18	387.7	347.8	6.3	1.6	STOKE-ON-TRENT, STAFFS		10	23	152	0.08	0.5	0.8	B	A*C	
100689	092851.2	53.03	-2.18	387.8	348.4	5.3	2.0	STOKE-ON-TRENT, STAFFS		20	23	137	0.14	0.5	0.8	B	A*C	
170689	202603.5	53.03	-2.18	388.1	347.6	4.0	1.0	STOKE-ON-TRENT, STAFFS		10	23	151	0.07	0.5	0.9	B	A*C	
060189	053935.8	53.03	-2.17	388.8	348.5	7.4	1.2	STOKE-ON-TRENT, STAFFS		8	22	152	0.09	0.8	1.9	B	A*C	
091089	193426.5	53.03	-2.42	696.5	356.9	0.0	3.2	SOUTHERN NORTH SEA		17	87	287	0.69	6.3	3.6	D	D*D	
231089	113313.8	53.02	-3.64	289.8	348.9	12.4	0.5	BALA, GWYNEDD	21	10	151	0.15	0.5	0.6	B	A*C	NORTH OF BALA	
070189	230805.1	53.02	-2.20	386.4	346.7	2.6	1.1	STOKE-ON-TRENT, STAFFS		6	24	115	0.16	1.4	4.1	C	B*C	
080189	102455.9	53.02	-2.20	386.8	347.5	2.5	0.8	STOKE-ON-TRENT, STAFFS		4	24	152	0.01	0.0	0.0	C	A*D	
070589	231742.8	53.02	-2.20	386.8	347.3	2.3	1.8	STOKE-ON-TRENT, STAFFS		14	24	112	0.19	0.6	0.9	C	B*C	
070189	133317.8	53.02	-2.19	387.5	346.8	2.6	1.9	STOKE-ON-TRENT, STAFFS		14	23	111	0.21	1.0	2.4	C	B*C	
060189	053624.9	53.02	-2.18	387.7	346.7	3.9	1.9	STOKE-ON-TRENT, STAFFS		17	23	111	0.16	0.9	1.5	C	B*C	
240489	042450.5	53.02	-2.18	387.9	347.3	5.2	1.4	STOKE-ON-TRENT, STAFFS		10	23	151	0.15	1.1	1.8	C	B*C	
100589	164507.4	53.02	-2.18	387.9	347.5	2.5	1.6	STOKE-ON-TRENT, STAFFS		9	23	151	0.06	0.4	0.9	B	A*C	

Table 2 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
140689	044009.8	53.02	-2.18	387.8	347.0	4.5	1.4	STOKE-ON-TRENT, STAFFS	10	23	151	0.17	1.0	2.1	C	B*C		
080289	221452.5	53.02	-2.15	389.9	347.0	9.0	1.4	STOKE-ON-TRENT, STAFFS	7	21	149	0.14	1.6	3.4	C	B*C		
250689	230537.0	53.02	-2.15	389.8	347.3	6.5	1.0	STOKE-ON-TRENT, STAFFS	5	21	299	0.06	2.2	1.5	C	B*D		
070189	141637.6	53.01	-2.19	387.6	346.3	3.3	2.1	STOKE-ON-TRENT, STAFFS	15	23	117	0.14	0.6	1.3	B	A*C		
090389	003658.0	53.01	-2.18	387.7	345.7	1.8	1.8	STOKE-ON-TRENT, STAFFS	16	23	119	0.28	1.1	1.4	C	B*C		
040189	022857.2	53.01	-2.17	388.6	345.8	4.2	1.6	STOKE-ON-TRENT, STAFFS	11	22	119	0.12	0.6	1.1	B	A*C		
070189	112330.8	53.01	-2.17	388.5	346.4	5.5	1.4	STOKE-ON-TRENT, STAFFS	10	22	149	0.09	0.6	1.0	B	A*C		
020389	033431.1	53.01	-2.14	390.9	346.4	9.7	1.3	STOKE-ON-TRENT, STAFFS	7	20	148	0.08	0.8	1.5	B	A*C		
080189	024852.9	53.01	-2.13	391.3	345.6	9.8	1.2	STOKE-ON-TRENT, STAFFS	6	19	121	0.05	0.4	0.6	B	A*B		
120189	064352.5	53.01	-2.11	392.3	346.4	12.6	1.3	STOKE-ON-TRENT, STAFFS	9	18	147	0.06	0.7	1.1	B	A*C		
040989	053611.6	53.00	-4.61	225.1	347.7	20.2	1.1	LLEYN, GWYNEDD	18	12	180	0.08	0.4	0.7	B	A*C	OFFSHORE LOCATION	
081189	125228.3	52.97	-4.42	237.3	344.0	22.6	0.6	LLEYN, GWYNEDD	13	1	131	0.06	0.3	0.6	B	A*B	LLEYN AFTERSHOCK	
010289	070539.8	52.97	-4.41	238.2	344.0	23.5	0.7	LLEYN, GWYNEDD	16	2	98	0.09	0.4	1.1	B	A*B	LLEYN AFTERSHOCK	
020789	152930.6	52.97	-4.41	238.0	343.7	22.8	0.6	LLEYN, GWYNEDD	10	2	108	0.07	0.5	1.0	B	A*B	LLEYN AFTERSHOCK	
040889	085611.1	52.97	-4.41	238.2	344.4	24.2	0.7	LLEYN, GWYNEDD	10	1	113	0.06	0.6	0.8	B	A*B	LLEYN AFTERSHOCK	
010389	094756.6	52.97	-4.39	239.4	344.3	21.8	1.0	LLEYN, GWYNEDD	13	2	115	0.09	0.5	0.6	B	A*B	LLEYN AFTERSHOCK	
250789	184933.1	52.96	-4.40	238.7	343.4	22.6	0.9	LLEYN, GWYNEDD	13	3	94	0.07	0.4	0.8	B	A*B	LLEYN AFTERSHOCK	
280789	135931.8	52.96	-4.40	238.7	342.9	24.5	1.3	LLEYN, GWYNEDD	17	3	119	0.09	0.4	0.8	B	A*B	LLEYN AFTERSHOCK	
281289	203601.8	52.96	-4.40	238.6	343.5	22.4	1.3	LLEYN, GWYNEDD	20	2	181	0.11	0.5	0.8	C	A*D	LLEYN AFTERSHOCK	
010389	044311.6	52.96	-4.39	239.6	343.4	24.4	1.1	LLEYN, GWYNEDD	17	3	85	0.07	0.3	0.7	A	A*A	LLEYN AFTERSHOCK	
040589	140700.8	52.96	-4.39	239.5	342.7	21.1	1.0	LLEYN, GWYNEDD	15	4	176	0.15	0.8	1.5	B	A*C	LLEYN AFTERSHOCK	
280789	135816.5	52.96	-4.39	239.4	342.9	24.1	2.1	LLEYN, GWYNEDD	18	3	88	0.09	0.4	0.9	A	A*A	LLEYN AFTERSHOCK	
311289	071301.3	52.96	-4.38	240.4	343.1	21.9	0.7	LLEYN, GWYNEDD	15	4	161	0.10	0.5	0.9	B	A*C	LLEYN AFTERSHOCK	
161089	162547.7	52.95	-4.40	239.0	342.3	23.9	1.1	LLEYN, GWYNEDD	20	4	99	0.09	0.3	0.9	B	A*B	LLEYN AFTERSHOCK	
130889	180253.6	52.95	-4.39	239.2	342.2	23.8	1.6	LLEYN, GWYNEDD	20	4	97	0.07	0.2	0.6	B	A*B	LLEYN AFTERSHOCK	
050689	014034.7	52.95	-3.53	296.9	340.6	16.6	0.4	BALA, GWYNEDD	10	17	231	0.07	0.6	0.6	C	A*D		
251089	004304.1	52.90	-4.49	232.4	336.8	13.7	0.7	LLEYN, GWYNEDD	13	10	156	0.07	0.5	0.5	B	A*C		
270289	085151.9	52.90	-4.48	233.4	336.7	6.4	0.1	LLEYN, GWYNEDD	9	9	148	0.20	1.7	3.6	C	B*C		
270289	074839.0	52.86	-3.35	309.0	330.2	16.6	0.3	LAKE BALA, GWYNEDD	7	19	309	0.08	1.5	1.9	C	B*D		
270289	205250.9	52.84	-4.15	255.4	329.3	15.3	-0.4	HARLECH, GWYNEDD	10	17	127	0.08	0.4	1.0	B	A*B		
310789	162556.5	52.84	-3.80	278.5	328.1	6.0	0.3	GWYNFNYDD, GWYNEDD	7	6	115	0.08	0.6	1.4	B	A*B		
100289	123918.6	52.82	-3.64	289.3	326.1	18.7	-0.2	LAKE BALA, GWYNEDD	10	4	161	0.03	0.2	0.3	B	A*C		
270389	071623.7	52.77	-2.39	373.9	318.8	5.4	1.0	NEWPORT, SALOP	10	44	135	0.22	1.6	6.3	C	C*C		
270289	200458.8	52.77	-2.03	398.1	319.4	2.6	1.1	CANNOCK CHASE, STAFFS	6	30	171	0.10	1.1	1.8	C	B*C		
081289	231257.2	52.71	-4.72	216.0	315.7	19.1	0.9	CARDIGAN BAY	22	15	149	0.23	1.1	1.9	C	B*C		
180989	161735.9	52.71	-2.02	398.6	312.9	1.3	1.1	CANNOCK, STAFFORDSHIRE	9	36	109	0.33	2.2	4.4	C	C*C	COALFIELD TYPE	
150589	194528.7	52.69	-4.00	264.7	311.8	9.8	0.6	BARMOUTH, GWYNEDD	13	2	196	0.08	0.5	0.7	C	A*D		
150589	233452.8	52.57	-1.03	466.0	298.0	2.4	1.5	OADBY, LEICESTER	6	26	228	0.17	1.2	1.2	C	B*D		
230889	102711.7	52.49	-1.10	461.4	288.3	4.3	0.4	BRUNTINGTHORPE, LEICS	6	31	246	0.34	6.5	8.7	D	D*D		
190589	153315.6	52.32	-2.82	344.0	269.4	17.7	1.1	LUDLOW, HEREFORD	9	22	161	0.24	1.4	3.9	C	B*C		
270789	115321.1	52.22	-3.07	326.9	258.8	1.1	0.0	KINTON, HER & WORC	5	21	243	0.02	0.5	0.5	C	A*D		
270789	115329.4	52.21	-3.08	326.1	257.9	0.4	-0.1	KINTON, HER & WORC	5	20	239	0.01	0.2	0.3	C	A*D		
270789	115358.9	52.21	-3.08	326.2	257.9	0.0	0.4	KINTON, HER & WORC	5	20	240	0.01	0.2	0.3	C	A*D		
280789	115942.6	52.21	-3.08	326.4	258.0	0.4	0.2	KINTON, HER & WORC	5	20	241	0.00	0.0	0.0	C	A*D		
080589	060053.5	52.20	-3.31	310.3	257.0	9.1	1.7	LL'DRINDOD WELLS, POWYS	13	14	153	0.13	1.3	3.8	C	B*C		
180389	135650.9	52.20	-3.22	316.7	257.0	2.4	1.6	GLADESTRY, POWYS	15	14	100	0.10	0.4	0.7	B	A*C		
230289	195826.3	52.19	-4.17	251.9	256.5	7.8	2.3	NEWQUAY, DYFED	30	49	82	0.31	0.8	1.5	C	C*C		
220489	094158.3	52.16	-3.59	291.2	253.0	5.6	0.6	BEULAH, POWYS	6	18	231	0.05	1.3	0.8	C	B*D		
150589	125559.7	52.11	-4.02	261.5	247.8	0.1	1.0	LAMPETER, DYFED	11	34	211	0.14	0.9	1.0	C	A*D		
291189	053318.3	52.05	-2.69	352.6	239.2	1.0	1.0	HEREFORD, HER & WORC	4	10	182	0.03	0.0	0.0	C	A*D		

Table 2 (cont'd)

## CATALOGUE OF EVENTS : 1989

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
030589	153322.5	51.98	-3.59	290.9	233.0	16.1	1.2	BRECON, POWYS	5	24	265	0.04	1.8	0.8	C	B*D		
280989	122305.3	51.81	-3.10	324.0	213.3	23.2	1.4	ABERGAVENNY, GWENT	7	22	205	0.14	1.4	2.1	C	B*D		
080489	165408.9	51.77	-4.17	250.5	210.7	3.1	1.3	LLANELLI, DYFED	14	70	246	0.14	1.0	1.8	C	A*D	NORTH OF LLANELLI	
200489	115907.4	51.74	-2.57	360.4	204.6	2.7	2.1	LYDNEY, GLOUCESTERSHIRE	11	20	232	0.46	4.1	3.6	D	C*D		
240389	004900.8	51.68	-3.26	313.2	199.2	0.0	1.5	BARGOED, MID GLAMORGAN	2+	8	31	239	0.13	1.7	1.6	C	B*D	FELT BARGOED
050489	095422.9	51.68	-3.26	313.2	199.3	0.3	0.8	BARGOED, MID GLAMORGAN	6	31	259	0.03	0.7	0.6	C	A*D		
240789	120516.3	51.50	-3.41	302.2	178.6	0.3	1.6	YSTRADOWEN, S GLAMORGAN	6	62	341	0.18	18.4	92.6	D	D*D		
191189	164737.7	51.18	-4.81	203.5	146.3	1.6	1.1	LUNDY, BRISTOL CHANNEL	8	31	287	0.01	1.2	0.9	C	B*D		
050889	050007.9	51.15	-3.38	303.7	139.4	5.0	1.3	BRIDGEWATER, SOMERSET	9	68	165	0.15	1.2	3.8	C	B*D		
090289	152642.0	50.26	-5.33	162.7	45.3	6.2	0.9	PORTREATH, CORNWALL	10	11	243	0.03	0.9	1.7	C	A*D		
090289	153141.4	50.26	-5.33	162.8	45.4	6.3	0.3	PORTREATH, CORNWALL	9	11	244	0.02	0.9	1.5	C	A*D		
180789	095021.5	50.20	-4.97	187.8	37.1	10.0	0.5	ST MAWES, CORNWALL	13	11	310	0.03	0.4	0.5	C	A*D	4 KM NE OF ST MAWES	
220789	203143.7	50.12	-5.45	153.6	29.6	8.2	0.2	MARAZION, CORNWALL	7	11	186	0.06	1.3	3.8	C	B*D		
220989	211132.0	49.97	-6.14	103.4	16.2	4.6	1.8	SCILLY ISLES, CORNWALL	8	45	340	0.04	19.1	43.5	D	D*D	7 KM EAST OF ST MARTINS	
300989	105250.3	49.85	-5.16	172.8	-0.6	6.6	0.5	LIZARD POINT, CORNWALL	8	22	312	0.03	0.7	0.4	C	A*D	SOUTH OF LIZARD POINT	
300989	012534.2	49.78	-4.87	193.2	-8.9	4.2	0.6	LIZARD POINT, CORNWALL	7	36	348	0.18	17.1	6.0	D	D*D	SOUTH OF LIZARD POINT	
300989	121700.9	49.76	-5.09	177.7	-11.4	5.6	1.4	LIZARD POINT, CORNWALL	8	33	324	0.08	21.5	47.0	D	D*D	SOUTH OF LIZARD POINT	
151089	051737.4	49.75	-5.19	169.9	-11.3	7.9	0.5	LIZARD POINT, CORNWALL	7	33	350	0.05	3.6	75.6	D	C*D	SOUTH OF LIZARD POINT	
300989	153340.6	49.71	-5.17	171.8	-15.7	8.4	0.5	LIZARD POINT, CORNWALL	5	37	351	0.39	43.8555.5	D	D*D	SOUTH OF LIZARD POINT		
010889	223124.5	49.58	-6.03	108.7	-28.1	5.0	0.9	SCILLY ISLES, CORNWALL	6	72	340	0.03	33.0	74.1	D	D*D	SE OF SCILLY ISLES	
061189	235236.3	49.43	-5.56	141.5	-46.1	5.0	1.0	LIZARD POINT, CORNWALL	6	75	356	0.51	90.7	59.1	D	D*D	SOUTHWEST OF LIZARD POINT	
110589	031914.9	49.42	-6.06	105.6	-45.5	34.5	0.9	LIZARD POINT, CORNWALL	8	101	357	0.19	21.5	258.7	D	D*D	SOUTHWEST OF LIZARD POINT	
310189	093931.1	49.15	-6.15	97.6	-75.5	9.3	2.4	SCILLY ISLES, CORNWALL	12	119	345	0.08	60.6	143.1	D	D*D	OFFSHORE, 70KM SOUTH OF SCILLY ISLES	
310189	104341.4	49.14	-6.11	100.2	-76.3	7.9	1.7	SCILLY ISLES, CORNWALL	10	119	346	0.04	7.6	3.7	D	D*D	OFFSHORE, 70KM SOUTH OF SCILLY ISLES	
020589	093940.5	47.86	-7.18	12.6	-214.2	5.0	2.6	LANDS END, CORNWALL	8	281	353	0.09	11.8	6.9	D	D*D	280 KM SW OF LANDS END	
210889	065246.3	47.64	-6.67	49.3	-240.6	5.0	3.9	BAY OF BISCAY	6	374	359	0.31			D	D*D		
050389	191629.2	47.34	-3.57	281.6	-283.7	5.0	2.5	BAY OF BISCAY	6	333	355	0.07			D	D*D		
060489	130522.8	45.07	-3.90	250.8	-534.9	5.0	3.8	BAY OF BISCAY	8	562	357	0.05			D	D*D		

Table 3

## CATALOGUE OF EVENTS : 1989

Poorly located events

Date	Hr	Mn	Secs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
070289	12	39	40.3	56.81	-4.75	232.2	772.4	1.0	1.0	LOCH TREIG, HIGHLAND	13	74	286	0.31	8.7	6.4	D	D*D	PROBABLE QUARRY BLAST	
110289	11	37								HAMPSHIRE - SONIC										FELT HAMPSHIRE, DORSET & WILTSHIRE
120289	13	09	42.9	56.40	-5.45	187.0	728.6	1.0	1.2	OBAN, STRATHCLYDE	9	73	301	0.35	14.4	10.8	D	D*D	POSSIBLE QUARRY BLAST	
130289	22	53	15.3	56.51	-5.52	183.3	740.8	1.0	1.4	LISMORE, STRATHCLYDE	9	81	305	0.56	26.0	19.4	D	D*D	POSSIBLE QUARRY BLAST	
140289	10	49								HAMPSHIRE - SONIC										FELT HAMPSHIRE, DORSET & WILTSHIRE
270289	18	09	03.4	55.08	-2.09	394.3	575.8	0.0	1.7	HEXHAM, NORTHUMBERLAND	10	25	211	0.17	1.5	1.2	C	B*D	POSSIBLE QUARRY BLAST, COALFIELD LIKE	
180389	14	43	27.0	55.09	-2.03	398.1	577.7	0.4	1.9	HEXHAM, NORTHUMBERLAND	10	99	334	0.21	7.3	5.3	D	D*D	PROBABLE QUARRY BLAST	
280389	14	30	30.6	58.44	0.28	533.0	952.0	5.0	2.8	PIPER ALPHA TOPPLE	16178	163	0.36		2.14	11.7	D	C*D	PIPER ALPHA TOPPLING EXPLOSION	
200489	06	18	30.4	51.48	1.34	631.8	180.8	5.0	2.5	MARGATE, KENT	6	92	309	0.30	16.4	15.2	D	D*D	OFFSHORE. CONFIRMED WW2 MINE DISPOSAL	
300489	23	21	36.3	56.63	-5.65	176.3	754.1	1.0	0.7	MORVERN, HIGHLAND	6	94	337	0.30	21.6	16.4	D	D*D	POOR LOCATION, NO KYLE OR MORAY DATA AVAILABLE	
040589	04	05	58							CUMBRIA - SONIC										FELT KENDAL, NEW HUTTON, BARROW, MORECAMBE...
160589	16	08								LANCASHIRE - SONIC										FELT BLACKBURN, RAINFORD, CHORLEY & WIGAN
160589	16	08	45							CUMBRIA - SONIC										FELT KIRKBY-IN-FURNESS & RAMPSIDE
230589	23	00								GRAMPIAN - SONIC										NO SEISMIC RECORD. FELT STONHEAVEN
250589	25	00								CUMBRIA - SONIC										FELT ULVERSTONE, BARROW-IN-FURNESS, LONSDALE...
220689	22	06	89	1037						HIGHLAND - SONIC										NO SEISMIC RECORD. FELT THURSO
120789	12	07	89							NORFOLK - SONIC										REPORTED BY RAF. FELT CROMER
180789	18	07	89							ISLE OF MAN - SONIC										FELT ISLE OF MAN (SOUTH)
270789	07	00		53.30	-2.80	350.0	375.0		0.7	WIRRAL, CHESHIRE	2+									FELT WIRRAL. (MACROSEISMIC LOCATION)
310789	31	07	89	145107.3	56.09	-3.40	313.2	689.9	0.2	0.8	DUNFERMLINE, FIFE	10	18	168	0.16	0.8	0.8	C	B*C	POSSIBLE QUARRY BLAST
040889	04	08	89	1200						NORTH WALES - SONIC										FELT COLWYN BAY, PRESTATYN & RHYL
250889	25	08	89	134338.6	54.42	-3.05	332.2	503.0	2.0	0.4	LTL LANGDALE, CUMBRIA	12	13	73	0.15	0.5	0.8	B	A*C	POSSIBLE QUARRY BLAST
250889	25	08	89	134407.8	54.38	-3.03	333.2	499.3	0.0	0.1	LTL LANGDALE, CUMBRIA	5	11	241	0.00	0.1	0.1	C	A*D	POSSIBLE QUARRY BLAST
091089	09	10	89	2129						YORKSHIRE - SONIC										FELT WHITBY, CASTLETON, & FLYINGDALES
141089	14	10	89	202327.6	56.01	-3.50	306.4	680.9	4.6	0.4	BLACKNESS, CENTRAL	12	19	119	0.10	0.5	1.2	B	A*C	OFFSHORE, FIRTH OF FORTH - POSSIBLE EXPLOSION
191089	19	10	89	211759.7	56.01	-3.50	306.6	681.3	6.3	0.6	BLACKNESS, CENTRAL	10	19	119	0.10	0.6	1.2	B	A*C	OFFSHORE, FIRTH OF FORTH - POSSIBLE EXPLOSION
081189	08	11	89	031201.5	56.01	-3.50	306.6	681.2	5.8	0.8	BLACKNESS, CENTRAL	14	19	118	0.08	0.3	0.6	B	A*C	OFFSHORE, FIRTH OF FORTH - POSSIBLE EXPLOSION
291189	29	11	89	0927						SOUTH WALES - SONIC										FELT SWANSEA
031289	03	12	89	141037.9	54.25	-3.15	325.2	484.3	3.5-0.4		GRIZEBECK, CUMBRIA	5	11	163	0.11	0.3	3.3	C	B*D	POSSIBLE QUARRY
111289	11	12	89	1501						LANCASHIRE - SONIC										ONSET OBSCURED BY QUARRY. FELT LANCS. UNIVERSITY

Table 4 : Geographical coordinates of seismograph stations operated by BGS, DIAS and Leeds University during 1989.

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
ABA	BACONSTHORPE	52.8875	1.1471	611.7	336.9	13	82-	1	BGS
AEA	E.ANGLIA UNIV	52.6208	1.2403	619.3	307.5	45	84-	m	BGS
AHE	HEMPNAL *	52.4730	1.3074	624.60	291.30	50	80-89	1	BGS
APA	PACKWAY	52.2999	1.4779	637.1	272.6	35	84-	1	BGS
AWH	WHINBURGH	52.6299	0.9512	599.70	307.70	60	80-	1R	BGS
AWI	WITTON	52.8324	1.4460	632.1	331.7	35	83-	1	BGS
BUWY	BURN	53.7424	-1.0668	461.54	427.76	13	85-	1R	BGS
CBW	BUDOCK WATER	50.1482	-5.1144	177.525	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	31.145	183	81-	1	BGS
CGH	GOONHILLY	50.0508	-5.1649	173.465	21.610	91	81-	1	BGS
CME	MENERDUE FARM	50.1760	-5.1903	172.238	35.608	178	82-	3	BGS
CPZ	PENZANCE	50.1560	-5.5835	144.065	34.655	198	81-	1	BGS
CR2	ROSEMANOWES 2	50.1669	-5.1687	173.7	34.5	152	81-	3	BGS
CRA	RAME	50.1648	-5.1921	172.060	34.363	198	82-	3	BGS
CRQ	ROSEMANOWES	50.1672	-5.1728	173.445	34.570	165	81-	4R	BGS
CSA	ST AUSTELL	50.3528	-4.8936	194.18	54.39	113	81-	1	BGS
CST	STITHIANS	50.1952	-5.1635	174.24	37.66	139	81-	1	BGS
CTR	TROLVIS QUARRY	50.1665	-5.1624	174.183	34.468	191	82-	3	BGS
CWF	CHARNWOOD FST	52.7382	-1.3071	446.78	315.88	152	75-	3R	BGS
DCO	COMBE FARM	50.3200	-3.8724	266.72	48.42	410	82-	1	BGS
DYA	YADSWORTHY	50.4352	-3.9309	262.89	61.33	280	82-	3	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	328.237	588.022	337	81-	1R	BGS
EDI	EDINBURGH	55.9233	-3.1861	325.89	670.66	125	69-	3R	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	323.536	603.179	263	65-	4Rm	BGS
ESY	STONEYPATH	55.9177	-2.6144	361.603	669.569	328	81-	1R	BGS
GAL	GALLOWAY	54.8664	-4.7114	226.02	555.78	105	89-	3	BGS
GCD	CASTLE DOUGLAS	54.8638	-3.9417	275.395	553.845	189	89-	1	BGS
GCL	CUSHENDAL	55.076	-6.130	136.4	583.7	275	89-	1	BGS
GIM	N ISLE OF MAN	54.2923	-4.4670	239.458	491.345	366	89-	1	BGS
GMK	MULL OF KINTYRE	55.3459	-5.5936	172.18	611.65	160	89-	1	BGS
GMM	MTS OF MOURNE	54.239	-5.951	142.6	489.8	140	89-	1	BGS
HAE	ALDERS END	52.0376	-2.5475	362.45	237.88	224	82-	1	BGS
HCG	CRAIG GOCH	52.3224	-3.6567	287.1	270.7	511	80-	1R	BGS
HGH	GRAY HILL	51.6380	-2.8064	344.2	193.6	210	80-	1	BGS
HLM	LONG MYND	52.5169	-2.8878	339.8	291.4	259	84-	1	BGS
HPK	HAVERAH PARK	53.9554	-1.6240	424.67	451.12	227	78-	4R	BGS
HSA	SWANSEA	51.7478	-4.1543	251.3	207.7	274	87-	1	BGS
HTL	HARTLAND	50.9944	-4.4850	225.636	124.667	91	81-	4Rm	BGS
HTR	TREWERN HILL	52.0790	-3.2697	313.0	243.1	329	82-	1	BGS
JLP	LES PLATONS	49.2428	-2.1039			131	81-	1	BGS
JRS	MAISON ST LOUIS	49.1924	-2.0917			53	81-	3R	BGS
JSA	ST AUBINS	49.1879	-2.1709			21	81-	1	BGS
JVM	VALLE D.L.MARE	49.2169	-2.2068			64	81	1	BGS
KAC	ACHNASHELLACH	57.4999	-5.2982	202.4	850.3	330	83-	1	BGS
KAR	ARISAIG	56.9175	-5.8302	166.9	787.2	225	83-	1	BGS

Table 4 : continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
KBI	BIRLEY GRANGE	53.2546	-1.5278	431.5	373.2	270	88-	1	BGS
KEY	KEYWORTH	52.8774	-1.0751	462.24	331.54	75	88-	L	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.212	833.498	36	86-	4R	BGS
KSB	SHEIL BRIDGE	57.2098	-5.4230	193.3	818.4	70	83-	1	BGS
KSK	SCOVAL	57.4653	-6.7020	118.1	851.4	250	89-	1	BGS
KSY	SYSTON	52.9642	-0.5873	494.875	341.730	123	88-	1	BGS
KTG	TILBROOK GRANGE	52.3261	-0.4007	508.98	271.03	78	88-	1	BGS
KUF	UFFORD	52.6175	-0.3895	509.02	303.45	35	88-	1	BGS
KWE	WEAVER FARM	53.0163	-1.8435	410.5	346.6	320	88-	1	BGS
LBO	BOWLAND	53.9790	-2.5728	362.44	453.83	320	89-	1	BGS
LCK	CROOK	54.3595	-2.8715	343.37	496.36	200	89-	1	BGS
LDU	LEEDS UNIV	53.8025	-1.5553	429.350	434.450	230	83-	m	BGS
LKL	KIRKBY LONSDALE	54.2185	-2.5345	365.15	480.46	396	89-	3	BGS
LLO	LONGRIDGE	53.8503	-2.5598	363.18	439.51	247	89-	3	BGS
LLY	LYTHAM ST ANNES	53.7976	-2.9069	340.27	433.88	33	89-	1	BGS
LMB	MORECAMBE B110	54.0259	-2.9058	340.67	459.28	-60	89-	1	BGS
LMI	MILLOM	54.2206	-3.3070	314.79	481.35	140	89-	3	BGS
LMU	MORECAMBE MIC	54.0250	-2.9051	340.71	459.18	5	89-	m	BGS
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	100	78-	4R	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	229	78-	4	BGS
MDO	DOCHFOUR	57.441	-4.363	258.17	841.43	366	81-	1	BGS
MFI	FISHRIE	57.6116	-2.2953	382.36	857.97	220	88-	1	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	270.8	894.7	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	MUIRSIEL	55.846	-4.744	228.2	664.8	351	83-	1	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
SFJ	STATEFJORD *	61.2550	1.8167			-150	85-89	3	BGS
TBW	BRENTWOOD	51.6549	0.2911	558.4	197.8	82	89-	1	BGS
TCR	COLCHESTER	51.8349	0.9125	601.2	219.2	40	89-	1	BGS
TEB	EASTBOURNE	50.8188	0.1459	551.3	104.5	70	89-	1	BGS
TFO	FOLKESTONE	51.1136	1.1406	619.8	139.6	188	89-	1	BGS
TSA	SEVENOAKS	51.2427	0.1558	550.4	151.5	170	89-	1	BGS
WAL	WALLS	60.2576	-1.6133	421.40	1152.60	170	80-	1	BGS
WBR	BRONABER	52.8560	-3.8941	272.480	330.434	340	85-	1	BGS
WCB	CHURCH BAY	53.3782	-4.5465	230.630	389.864	135	85-	3	BGS
WFB	FAIRBOURNE	52.6830	-4.0378	262.266	311.465	325	85-	1	BGS
WFF	FFESTINIOG	52.9788	-3.9877	266.559	344.262	500	86-	Lm	BGS
WIM	ISLE OF MAN	54.1472	-4.6735	225.410	475.700	365	85-	1	BGS
WLC	LLYN CONWY	52.9956	-3.7788	280.630	345.765	440	85-	3	BGS
WLF	LLYNFAES	53.2893	-4.3966	240.266	379.636	65	85-	1	BGS
WME	MYNDD EILIAN	53.3966	-4.3034	246.862	391.367	130	85-	1	BGS
WPM	PENMAENMAWR	53.2583	-3.9049	272.942	375.197	350	85-	1	BGS
WST	STWLAN	52.975	-3.989	266.45	343.85	850	86-	1	BGS
WVR	VYRNWY	52.7974	-3.6051	291.795	323.448	580	85-	1m	BGS
XAL	ALLENDALE	54.8617	-2.2147	386.218	551.910	462	83-	1R	BGS
XDE	DENT	54.5058	-3.4897	303.554	513.315	291	83-	1R	BGS
XSO	SOURHOPE	55.4925	-2.2511	384.130	622.107	495	83-	1R	BGS

Table 4 : continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
YEL	YELL	60.5509	-1.0830	450.29	1185.55	200	79-	1	BGS
YLL	LLANBERIS	53.1402	-4.1704	254.842	362.568	162	84-	1	BGS
YRC	RHOSCOLYN	53.2506	-4.5741	228.289	375.745	24	84-	1	BGS
YRE	YR EIFL	52.9810	-4.4254	237.186	345.418	197	84-	1	BGS
YRH	RHIW	52.8335	-4.6289	222.930	329.500	300	84-	1R	BGS
DCN	CROGHAN	53.3439	-7.2767			150	76-	1R	DIAS
DDK	DUNSINK OBS	53.3869	-6.3392			85		1R	DIAS
DLE	LYONS ESTATE	53.2872	-6.5436			140	80-	3R	DIAS
DKM	KILMASHOGUE	53.2553	-6.2644			280	76-	1R	DIAS
DMU	KINGSCOURT	53.8989	-6.9106			280	76-	1R	DIAS
ECB	CARRICKBYRNE	52.3661	-6.7811			125	81-	1R	DIAS
ECP	CARNSORE PT	52.1800	-6.3689			5		3R	DIAS
ETA	TARA HILL	52.6958	-6.2100			140		1R	DIAS
BMY	BINGLEY MOOR	53.8708	-1.8193	411.88	441.66	240	83-	1R	LDS
HHWY	HIGH HOYLAND	53.5867	-1.5973	426.65	410.11	205	83-	1R	LDS
OXWY	OXENHOPE MOOR	53.7908	-1.9798	401.33	432.74	438	83-	1R	LDS

\* AHE ceased recording 24-02-89

\* STJ ceased recording 23-01-89

Agency codes:

BGS	British Geological Survey
DIAS	Dublin Institute of Advanced Studies
LDS	University of Leeds

Component codes:

1	Single vertical seismometer
3	Orthogonal set of 3 seismometers
4	As in 3, above, plus one low-gain vertical
L	Single low-gain vertical seismometer
R	Station coordinates registered with the International Seismological Centre, England and the National Earthquake Information Centre, USA.
m	Low-frequency microphone

## KEY TO PHASE DATA ENCODING FORMAT

### **General description:**

The format of the seismic data presented here was originally designed to allow direct entry onto a computer coding form. The system is described by Browitt (1985). Each line is coded according to the flag in column 80. Lines with 1, 2 or 3 in column 80 give epicentral details; those with a blank in column 80 contain phase information.

### **Epicentral details (1, 2 or 3 in column 80):**

.	1	2	3	4	5	6	7	8
1234567890123456789012345678901234567890123456789012345678901234567890								
DyMoYrNetwork....Tape..SLoc...EventSec.. Ccor DekReader.TLocality.....								1
HrMnSe:c. Grid:e./Grid:n. Dep:h M:l B:* M:b M:s Io. Lat:...N Lon:...E								2
No.DM. GapRm:s.Erh:.Erz:. Q SQD Comments.....								3
CodeCoHrMnSec1..Amp1.CP1QIUSec2..Amp2.CP2QIU.Amp.CPer.MtAmp.CPer.MtJotpAmodPDist								
1234567890123456789012345678901234567890123456789012345678901234567890								

### **Line 1:**

DyMoYr :Event date....Day, Month, Year.  
Network :Name of network, eg LOWNET.  
Tape :Analogue tape number on which event is recorded eg LN123.  
S :Tape side when two sided recording selected eg 1 or 2.  
Loc :Tape footage of event eg 1200.  
Event :Event number on that tape eg 20.  
Sec :Second length of jet-pen playout in mm, eg 12.  
Ccor :Seconds error of internal clock (absolute minus clock time) eg -0.23.  
Dek :Gain of replay deck eg 5.0.  
Reader :Name of analyst.  
T :Event type. Earthquake.. L=Local, R=Regional, T=Teleseism, E=unknown  
Explosion... Q=Quarry, D=up to 10deg, A=further than 10deg  
U=Unknown, S=Sonic  
Locality :Closest generally known place or area, followed by region.

### **Line 2: (: in field indicates decimal point)**

HrMnSe:c :Hours, minutes and seconds of the origin time.  
Grid:e./ :Kilometres east and north of the National grid origin.  
Grid:n  
Dep:h :Depth of event in kilometres.  
(valid for A and possibly B quality events).  
M:l :Richter local magnitude obtained from the method described  
in the Manual of Seismological Observatory Practice (MSOP).  
B:\* :MB\*, An approximation to MB as determined using stations  
at closer ranges (paragraph 3.3.2 in MSOP).  
M:b :Body wave magnitude determined using the method described in MSOP.  
M:s :Surface wave magnitude determined using the method described in MSOP.  
Io :Maximum MSK intensity. 2+ indicates felt, no macroseismic details.  
3+, 4+ etc indicates felt at MSK 3 or 4, but no survey carried out.  
3,4,5 etc describes the maximum MSK intensity produced by the event  
Lat:... :Latitude of event in degrees and decimal degrees, positive is north  
N ::(N) North or (S) South. Only inserted if no Lat sign convention +/-  
is in use.  
Lon:... :Longitude of event in degrees and decimal degrees, negative is west  
E ::(E) East or (W) West. Only inserted if no Lon sign convention +/-  
is in use.

### **Line 3:**

No.DM. GapRm:s.Erh:.Erz:. Q SQD : HYP071 output, see catalogue abbreviations  
Comments :Descriptive remarks about felt area and other items of interest.

**Phase data (column 80 blank):**

Code :Station code eg EAB.  
Co :Component, Z=Vertical, NS=North-South, EW= East-West.  
HrMn :Time datum, Hours and Minutes for phase arrivals. -1 in Hr column indicates the end of the event.  
Sec1 :Seconds to the first arrival. For local events this is either PN or PG. Subsequent P arrivals are not usually read as the location program HYP071 does not require them.  
Amp1 :Trace amplitude (mm) of first motion of this arrival, for 3-component set.  
C :Amp1 is H: half peak-peak, C: centre-peak, F or blank: peak-peak  
A:log(ground amplitude in millimicrons)  
P1 :Phase, normally P (= PN or PG) but any MSOB code possible.  
Q :HYPO weighting factor to arrival. 0 or blank= full weighting to  
4= zero weighting (ignore). 9= use P-S interval only for this line.  
I :I=Impulsive (onset read better than 0.1s) or E=emergent (worse than 0.1s)  
U :U=First motion up/compression or D=down/dilation.  
Sec2..Amp2.CP2QIU: As for first arrival, but usually referring to S phase(SN,SG)  
Amp :Trace amplitude in millimetres at the relevant part of the phase train  
for the magnitude type indicated in Mt.  
ML:largest amplitude in trace, MB\*: Maximum in P-phase.  
MB:Maximum in first 25 seconds,MS: Rayleigh phase (Z,long period)  
M :Equivalent to ML, but not used in the magnitude calculation.  
C :As previous  
Per :Period (secs) of Amp.  
Mt :Magnitude type... ML ,B\*, MB, MS.  
Amp.CPer.Mt: As previous  
Jotp :Jet pen sensitivity in volts/cm used on playout eg 0.25,1.0,2.5,10.0  
Amod :Amplifier-modulator gain. Normally 100, 200, 400. Low-gain devices  
usually have a gain of 4.  
P :If there is a polarity reversal in the system, this column=1.  
Dist :Distance in kilometres to event from station.

010189 ESK+	ES 400		12.5	5.0DG	LJOHNSTONEBRIDGE,D & G	1	
202738.49	308.72/ 595.29		6.1 0.7		55.243	-3.436	2
8 17 250 0.07	0.8 1.1 C A*D						3
ESK Z 202741.82	P 0IU44.38		S 1ID				17
ESK NS2027	IU		IU 4.6H0.11ML		1.0	200	17
ESK EW2027	IU		IU 5.0H0.09ML		1.0	200	17
ECK Z 202742.54	P 2E 45.52		S 2ED				21
EBL Z 202749.69	P 2E 57.19		S 2E				64
EAU Z 202750.01	P 2E						67
EDI Z 202752.00	P 2E 60.83		S 2E 3.5H0.29M		0.25	200	77
EDI NS2027	E		E 6.2H0.22ML		0.25	200	77
EDI EW2027	E		E 5.1H0.10ML		0.25	200	77
ESY Z 202753.89	P 3E 64.50		S 3E				91
EBH Z 202757.25	P 3E 69.89		S 3E				112
EAB Z 202758.01	P 3E						120
ELO Z 202800.43	P 3E						138
-1							
040189KEYWORTH+	KW 035		25.0	5.0JAR	LSTOKE-ON-TRENT,STAFFS	1	
22857.27	388.59/ 345.82		4.2 1.6		53.009	-2.170	2
11 22 119 0.12	0.6 1.1 B A*C						3
KWE Z 022901.61	P 2ED04.41		S 3				22
KBI Z 022906.16	P 3E 12.68		S 3				51
KSY Z 022915.56	P 4E						106
HPK Z 022913.60	P 4E 29.04		S 3				111
HPK EW0229			25.5H0.13ML		0.25	200	111
MCH Z 022918.20	P 4E 32.92		S 3				126
MCH NS0229			11.5H0.19ML		0.25	200	126
MCH EW0229			6.4H0.19ML		0.25	200	126
WVR Z 022913.93	P 3E						99
WLC Z 022914.49	P 3E 27.90		S 3				108
WLC NS0229			6.6H0.09ML		0.25	200	108
WLC EW0229			6.7H0.17ML		0.25	200	108
WBR Z 022916.35	P 3E						117
WFB Z 022918.42	P 3E						131
-1							
060189KEYWORTH+	KW 036	556	25.0	5.0JAR/NSHLSTOKE-ON-TRENT,STAFFS	1		
53624.93	387.68/ 346.68		3.9 1.9		53.017	-2.184	2
17 23 111 0.16	0.9 1.5 C B*C						3
KWE Z 053629.35	P 1ID32.31		S 3	7.2H0.25M	1.0	200	23
KBI Z 053633.92	P 1IU40.45		S 3				51
KSY Z 053643.15	P 3E						107
KUF Z 053646.70	P 3E						129
SBD Z 053637.32	P 2ID						73
HLM Z 053637.43	P 3E						73
HAE Z 053644.11	P 3E						112
MCH Z 053645.88	P 3E 60.71		S 2EU				126
MCH NS0536			IU18.0H0.19ML		0.25	200	126
MCH EW0536			E 15.6H0.19ML		0.25	200	126
HTR Z 053646.23	P 3E 61.16		S 3				128
HGH Z 053651.63	P 3E						159
WVR Z 053641.28	P 2E						99
WLC Z 053642.57	P 2E 54.46		S 3				107
WLC NS0536			10.0H0.09ML		0.25	200	107
WLC EW0536			12.0H0.15ML		0.25	200	107
WBR Z 053643.93	P 2E						117
WFB Z 053646.03	P 2E						131
HPK Z 053643.75	P 3E 56.63		S 3				111
HPK EW0536			15.0H0.11ML		1.0	200	111
-1							
060189KEYWORTH+	KW 036		12.5	5.0JAR	LSTOKE-ON-TRENT,STAFFS	1	
53935.87	388.82/ 348.53		7.4 1.2		53.034	-2.167	2
8 22 152 0.09	0.8 1.9 B A*C						3
KWE Z 053940.02	P 3E 43.13		S 3				22
KBI Z 053944.47	P 3E						49
HLM Z 053948.50	P 3E						75
MCH Z 053956.86	P 4E 71.66		S 3				128
MCH NS0539			3.6H0.19ML		0.25	200	128
MCH EW0539			3.4H0.18ML		0.25	200	128
HPK Z 053955.08	P 4 67.58		S 4				109
HPK EW0539			2.2H0.17ML		1.0	200	109
WLC Z 053953.50	P 3 66.39		S 3				108
WLC NS0539			2.0H0.11ML		0.25	200	108
WLC EW0539			2.3H0.20ML		0.25	200	108
WBR Z 053954.78	P 3E						118
-1							
070189KEYWORTH+	KW 036		25.0	5.0JAR	LLITTLEBOROUGH,GTR MAN	1	
140 9.93	396.64/ 414.57		10.0 1.2		53.627	-2.051	2
16 31 102 0.10	0.4 1.9 B A*C						3
KBI Z 014019.09	P 1ID						54
KWE Z 014021.68	P 2E						69
WBR Z 014033.37	P 3E						150
PAPBZ 014017.89	P 2EU23.68		S 3				46
PAPBNS0140			3.6H0.07ML		1.0	195	46

PAPBEW0140				2.4H0.11ML		1.0 195	46
PAPCZ 014019.42	P 3E 26.02	S 3					55
PAPCNS0140				3.5H0.10ML		1.0 195	55
PAPCEW0140				4.5H0.14ML		1.0 195	55
PAPDZ 014020.12	P 3E						60
PAPEZ 014022.00	P 3E						73
PAPENS0140				7.0H0.11ML	0.25 200		73
PAPEEW0140				6.5H0.11ML	0.25 200		73
BMY Z 014015.60	P 1IU						31
HPK Z 014018.00	P 1IU23.72	S 3					46
HPK EW0140				9.2H0.12ML	1.0 200		46
SBD Z 014028.51	P 3E						114
WLC Z 014030.99	P 3E 46.46	S 3					135
WLC NS0140				5.6H0.11ML	0.25 200		135
WLC EW0140				3.9H0.09ML	0.25 200		135
WVR Z 014032.01	P 3E						139
WPM Z 014030.68	P 3E						130
-1							
070189KEYWORTH+	KW 036		12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS 1		
112330.82	388.49/ 346.45	5.5 1.4			53.015 -2.172		2
10 22 149 0.09	0.6 1.0 B A*C						3
KWE Z 112335.17	P 2ED38.06	S 3					22
KBI Z 112339.67	P 3E						51
SBD Z 112343.02	P 3E						74
MCH Z 112352.31	P 4E 66.41	S 3					126
MCH NS1123				7.4H0.18ML	0.25 200		126
MCH EW1123				7.4H0.13ML	0.25 200		126
WVR Z 112347.21	P 3E						100
WLC Z 112348.56	P 3E 60.93	S 3					108
WLC NS1123				4.9H0.10ML	0.25 200		108
WLC EW1123				5.3H0.14ML	0.25 200		108
WBR Z 112349.93	P 3E						117
WFB Z 112352.38	P 3E						131
YRH Z 112357.27	P 3E						167
-1							
070189KEYWORTH+	KW 036		25.0	5.0JAR	LSTOKE-ON-TRENT, STAFFS 1		
133317.87	387.54/ 346.81	2.6 1.9			53.018 -2.186		2
14 23 111 0.21	1.0 2.4 C B*C						3
KWE Z 133322.27	P 2ED25.28	S 3					23
KBI Z 133326.87	P 2IU						51
KSY Z 133336.33	P 4E						108
BMY Z 133335.41	P 4E						98
HPK Z 133336.91	P 4E 49.70	S 3					111
HPK EW1333				11.6H0.14ML	1.0 200		111
SBD Z 133330.22	P 3E						73
HLM Z 133330.13	P 4E						73
HAE Z 133337.05	P 3E						112
MCH Z 133338.87	P 3E 53.51	S 3					126
MCH NS1333				19.0H0.18ML	0.25 200		126
MCH EW1333				20.1H0.16ML	0.25 200		126
HGH Z 133344.39	P 4E						159
WVR Z 133334.40	P 3E						99
WLC Z 133335.41	P 3E 47.46	S 3					107
WLC NS1333				10.6H0.12ML	0.25 200		107
WLC EW1333				12.6H0.19ML	0.25 200		107
WBR Z 133336.98	P 3E						116
WFB Z 133339.06	P 3E						130
YRH Z 133344.38	P 3E						166
-1							
070189KEYWORTH+	KW 036		25.0	5.0JAR	LSTOKE-ON-TRENT, STAFFS 1		
141637.64	387.62/ 346.30	3.3 2.1			53.014 -2.185		2
15 23 117 0.14	0.6 1.3 B A*C						3
KWE Z 141642.09	P 1ED45.06	S 3					23
KBI Z 141646.65	P 1IU53.40	S 3					52
KSY Z 141657.43	P 4E						107
BMY Z 141655.15	P 4E						99
HPK Z 141656.07	P 3E 69.55	S 3					111
HLM Z 141649.94	P 3E						73
SBD Z 141650.01	P 2E						73
HAE Z 141657.29	P 4E						111
MCH Z 141658.69	P 3E 73.44	S 3					126
MCH NS1416				8.9H0.18ML	1.0 200		126
MCH EW1416				8.0H0.18ML	1.0 200		126
HGH Z 141664.40	P 4E						159
WVR Z 141654.09	P 2ED						99
WLC Z 141655.04	P 3E 67.28	S 3					107
WLC NS1416				15.4H0.11ML	0.25 200		107
WLC EW1416				16.8H0.20ML	0.25 200		107
WBR Z 141656.77	P 3E						116
WFB Z 141658.80	P 3E						130
YRH Z 141664.12	P 3E						166
HPK EW1416				15.0H0.17ML	1.0 200		111
-1							

070189KEYWORTH+	KW 036	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1
23 8 5.10	386.37/ 346.73	2.6 1.1	53.017 -2.203	2	3
6 24 115 0.16	1.4 4.1 C B*C				24
KWE Z 230809.71	P 3ED				52
KBI Z 230814.23	P 2EU				111
HPK Z 230823.96	P 3E 37.08	S 3	11.3H0.12ML	0.25 200	126
HPK EW2308			3.6H0.17ML	0.25 200	126
MCH Z 230828.09	P 4E 40.96	S 3	3.3H0.16ML	0.25 200	126
MCH NS2308			2.4H0.09ML	0.25 200	106
MCH EW2308			1.8H0.13ML	0.25 200	106
WLC Z 230823.50	P 4 35.46	S 3			-1
WLC NS2308					106
WLC EW2308					106
					-1
080189KEYWORTH+	KW 036	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1
24852.92	391.32/ 345.56	9.8 1.2	53.007 -2.129	2	3
6 19 121 0.05	0.4 0.6 B A*B				19
KWE Z 024856.82	P 3E				49
KBI Z 024861.29	P 3E				111
HPK Z 024871.86	P 4E 84.16	S 3	10.5H0.14ML	0.25 200	127
HPK EW0248			3.7H0.18ML	0.25 200	127
MCH Z 024874.83	P 4 88.11	S 3	3.5H0.17ML	0.25 200	127
MCH NS0248			2.6H0.09ML	0.25 200	111
MCH EW0248			2.5H0.13ML	0.25 200	111
WLC Z 024871.92	P 4 84.14	S 3			-1
WLC NS0248					134
WLC EW0248					WFB Z 024874.11
					P 3E
					-1
080189KEYWORTH+	KW 036	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1
102455.92	386.84/ 347.53	2.5 0.8	53.025 -2.196	2	3
4 24 152 0.01	0.0 0.0 C A*D				24
KWE Z 102500.40	P 3E				52
KBI Z 102505.13	P 3E				127
MCH Z 102517.40	P 4 31.93	S 3	3.5H0.10ML	0.25 200	127
MCH NS1025			3.1H0.13ML	0.25 200	127
MCH EW1025			1.4H0.09ML	0.25 200	106
WLC Z 102514.72	P 4 26.50	S	1.2H0.13ML	0.25 200	106
WLC NS1025					-1
WLC EW1025					WFB Z 102649.72
					P 3E
					-1
080189KEYWORTH+	KW 036	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1
102628.06	386.39/ 348.32	2.3 1.1	53.032 -2.203	2	3
6 24 153 0.17	0.7 0.9 C B*C				24
KWE Z 102632.65	P 3ED35.80	S 3			52
KBI Z 102637.42	P 3EU				127
MCH Z 102650.75	P 4 64.15	S 3	6.1H0.12ML	0.25 200	127
MCH NS1026			5.8H0.12ML	0.25 200	127
MCH EW1026			3.2H0.09ML	0.25 200	106
WLC Z 102646.20	P 4 58.50	S 3	3.1H0.12ML	0.25 200	106
WLC NS1026					-1
WLC EW1026					WFB Z 102649.72
					P 3E
					-1
100189 LOWNET	LN 625 2046	12.5	5.0DWR	LBLAIRHALL, FIFE	1
124738.73	298.29/ 691.83	0.5 1.0	56.108 -3.636	2	3
10 17 122 0.16	0.6 0.8 C B*C COALFIELD TYPE				18
EBH Z 124742.32	P 2E 45.50	S 2E			32
EAU Z 124744.75	P 2E 49.52	S 2EU			35
EDI Z 124745.58	P 3E 50.40	S 2E 4.4 0.29M	0.25 200	35	
EDI NS1247	E	EU 7.3H0.40ML	0.25 200	35	
EDI EW1247	E	E 4.9H0.40ML	0.25 200	35	
ELO Z 124746.23	P 2E 52.12	S 3E			41
EAB Z 124747.72	P 3E 53.30	S 3E			45
					-1
100189 LOWNET	LN 625	25.0	5.0DWR	LGLEN EAGLES, TAYSIDE	1
231252.42	292.97/ 708.16	6.9 1.4	56.254 -3.728	2	3
13 14 103 0.18	0.7 1.2 B B*B				14
EBH Z 231255.28	P 0IU57.22	S 1IU			24
ELO Z 231257.15	P 0IU60.30	S 2EU			39
EAB Z 231259.43	P 0IU63.91	S 2EU			49
EAU Z 231301.00	P 1IU				50
EDI Z 231301.21	P 2EU07.10	S 2E 3.5H0.08M	1.0 200	50	
EDI NS2313	E	ED 7.0H0.09ML	1.0 200	50	
EDI EW2313	E	E 4.3H0.09ML	1.0 200	50	
EDU Z 231301.74	P 2EU08.89	S 3EU			55
EBL Z 231303.99	P 3E				68
ESY Z 231305.81	P 3E				79
ESK Z 231311.59	P 4E 24.23	S 2ED			109
ESK NS2313	E	E 3.6H0.12ML	1.0 200	109	
ESK EW2313	E	E 3.5H0.10ML	1.0 200	109	
ECK Z 231313.78	P 2EU28.20	S 3E			125
MCD Z 231317.70	P 1EU33.81	S 3E			

MCD NS2313			05.3H0.10ML	01.0	200
MCD EW2313			09.0H0.11ML	01.0	200
MDO Z 231316.09	P 1E 31.10	S 3E			
MME Z 231313.20	P 2E				
-1					
100189 LOWNET+	LN 625 2204	12.5	5.0DWR	LROSEWELL, LOTHIAN	1
234813.52	329.12/ 662.64	1.4 1.6		55.852 -3.132	2
19 1 72 0.09	0.3 0.1 A A*A COALFIELD TYPE				3
EDI Z 234815.62	P 1IU17.19	S 2E 11.3H0.30M		1.0 200	9
EDI NS2348	IU	E 6.7H0.60ML		1.0 200	9
EDI EW2348	ID	EU 9.6H0.20ML		1.0 200	9
EBL Z 234815.91	P 1ID17.56	S 3E			10
EAU Z 234817.68	P 2ED20.89	S 3E			20
ESY Z 234819.83	P 2E 24.43	S 3E			33
EBH Z 234822.60	P 2E 29.30	S 3E			50
EDU Z 234827.42	P 3E				78
RGH Z 234813.91	P 0ID				1
RHC Z 234813.94	P 0ID				1
RCA Z 234813.98	P 0ID14.36	S 2			2
RCA NS2348		ID10.5H0.12ML		2.5 4	2
RCA EW2348		ED 7.5H0.10ML		2.5 4	2
RCH Z 234814.03	P 0ID14.45	S 2			2
RCH NS		ID			2
RCH EW		ED			2
RRD Z 234814.04	P 0ID				1
RMM Z 234814.21	P 0ID				2
-1					
110189 KEYWORTH+	KW 036	12.5	5.0JAR	LRETFORD, NOTTS	1
25130.71	471.52/ 382.16	1.0 1.8		53.331 -0.926	2
7 41 252 0.07	3.0 1.5 D C*D COALFIELD TYPE				3
KBI Z 025138.33	P 3E				41
KSY Z 025139.37	P 3E				47
KWE Z 025143.10	P 3E				71
SBD Z 025157.25	P 3E 76.56	S 3			163
MCH Z 025162.50	P 4 85.60	S 3			204
MCH NS0251		2.6H0.35ML		0.25 200	204
MCH EW0251		3.2H0.26ML		0.25 200	204
WLC Z 025161.20	P 4 83.15	S 3			194
WLC NS0251		2.5H0.36ML		0.25 200	194
WLC EW0251		2.5H0.28ML		0.25 200	194
-1					
120189 LOWNET	LN 626 281	12.5	5.0DWR	LLAUDER, BORDERS	1
22552.79	348.15/ 653.94	2.0-0.2		55.776 -2.827	2
8 14 229 0.13	1.7 1.5 C B*D				3
EBL Z 022555.63	P 0ID57.75	S 2E			14
ESY Z 022556.89	P 0IU59.72	S 2E			21
EDI Z 022558.55	P 3E 62.00	S 2E 1.8H0.10ML		0.25 200	28
EDI NS0225	E 62.00	S E 4.6H0.09ML		0.25 200	28
EDI EW0225	E	E 3.2H0.10ML		0.25 200	28
EAU Z 022559.71	P 2EU64.77	S 3E			40
-1					
120189 KEYWORTH+	KW 037	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1
64352.53	392.30/ 346.44	12.6 1.3		53.015 -2.115	2
9 18 147 0.06	0.7 1.1 B A*C				3
KWE Z 064356.38	P 3E 59.32	S 3			18
KBI Z 064360.82	P 3E				48
MCH Z 064374.60	P 4E 87.73	S 3			128
MCH NS0643		8.0H0.12ML		0.25 200	128
MCH EW0643		6.5H0.14ML		0.25 200	128
WLC Z 064370.50	P 3E 83.70	S 3			112
WLC NS0643		3.5H0.11ML		0.25 200	112
WLC EW0643		3.8H0.13ML		0.25 200	112
WBR Z 064371.99	P 3E				121
WFB Z 064373.34	P 3E				135
YRH Z 064378.43	P 3E				170
-1					
170189 LOWNET	LN 626 1936	12.5	5.0DWR	LGLEN EAGLES, TAYSIDE	1
23247.65	292.42/ 707.30	4.8 0.5		56.246 -3.736	2
11 14 103 0.11	0.4 0.9 B A*C				3
EBH Z 023250.60	P 0IU52.49	S 2EU			14
ELO Z 023252.49	P 0IU55.71	S 2EU			25
EAB Z 023254.65	P 3E 59.49	S 2EU			38
EAU Z 023256.31	P 2EU				48
EDI Z 023256.89	P 3E 62.68	S 2E 1.5 0.09M		0.25 200	50
EDI NS0232	E	E 2.2H0.14ML		0.25 200	50
EDI EW0232	E 62.68	S E 2.2H0.18ML		0.25 200	50
EDU Z 023257.40	P 3E 64.30	S 2E			56
-1					
170189 LOWNET+	LN 626 25.0	5.0JAR/DWRLROSEWELL, LOTHIAN		1	
62330.74	328.88/ 662.70	1.1 1.4		55.852 -3.136	2
22 1 77 0.08	0.2 0.1 A A*A COALFIELD TYPE				3
RGH Z 062331.07	P 0ID				1
RHC Z 062331.11	P 0ID				1

RCA Z 062331.13	P 0ID31.41	S 1		1
RCH Z 062331.19	P 0ID31.56	S 1		1
RRD Z 062331.23	P 1IU			1
RMM Z 062331.37	P 01D			2
EDI Z 062332.80	P 0IU34.40	S 3E 13.4H0.31M	2.5 200	9
EDI NS0623	IU34.40	S ED 7.7H0.80ML	2.5 200	9
EDI EW0623	ID	ED 6.7H0.60ML	2.5 200	9
EBL Z 062333.13	P 0ID34.60	S 3ED		11
EAU Z 062334.90	P 0IU37.80	S 3E		20
ESY Z 062337.17	P 2ED41.78	S 3E		34
EBH Z 062339.91	P 2ED46.77	S 3EU		50
EDU Z 062344.42	P 3E			78
ELO Z 062344.51	P 3E			78
EAB Z 062345.32	P 3E 55.91	S 3E		84
	-1			
180189 ESK	ES 402	12.5	5.0DG	LJOHNSTONEBRIDGE,D & G 1
15936.06	311.23/ 594.24	1.4-0.5		55.234 -3.396 2
4 15 304 0.01	0.0 0.0 C A*D			3
ESK Z 015939.30	P 0IU41.67	S 2ED		15
ESK NS0159	IU	E 4.5H0.09ML	0.25 200	15
ESK EW0159	IU	ED 3.0H0.10ML	0.25 200	15
ECK Z 015939.80	P 3E 42.52	S 1ED		18
	-1			
180189N WALES			5.0RITCHIELLLANRWST, GWYNEDD	1
1716 5.91	284.14/ 362.93	15.4 0.5		53.151 -3.733 2
8 18 306 0.09	1.4 1.3 C B*D			3
WLC Z 17169.8	P 1I 12.4	S 1		18
WLC NS1716		10.4H0.06ML	1.0 200	18
WLC EW1716		8.5 H0.10ML	1.0 200	18
WVR Z 171613.05	P 2E 17.91	S 3		40
WBR Z 171612.15	P 2E 16.09	S 3		35
WST Z 171610.87	P 1IU14.45	S 2		26
	-1			
190189 ESK	ES 403	12.5	5.0DG	LCASTLE DOUGLAS,D & G 1
191048.86	279.84/ 570.31	1.1 0.7		55.013 -3.879 2
4 52 343 0.08	0.0 0.0 C A*D			3
ECK Z 191058.24	P 1IU65.26	S 2EU		52
ESK Z 191058.89	P 1IU65.93	S 3E		55
ESK NS1910	E	ED 6.4H0.09ML	0.25 200	55
ESK EW1910	ID	E 5.3H0.07ML	0.25 200	55
	-1			
200189KEYWORTH+	KW 038	12.5	5.0JAR	LCHESTERFIELD, DERBS 1
154724.72	439.53/ 371.43	0.2 1.6		53.238 -1.408 2
10 8 129 0.71	3.4 4.3 C D*B POSSIBLE COALFIELD TYPE			3
KBI Z 154725.28	P 3E			8
KWE Z 154732.69	P 3E			38
KSY Z 154735.72	P 3E			63
SBD Z 154746.67	P 3E			129
MCH Z 154754.50	P 3E 74.12	S 3E		175
MCH NS1547		5.9H0.28ML	0.25 200	175
MCH EW1547		4.6H0.19ML	0.25 200	175
HPK Z 154739.27	P 3E			81
WVR Z 154749.19	P 3E			156
WLC Z 154749.88	P 3E			161
WLC NS1547		3.1H0.17ML	0.25 200	161
WLC EW1547		2.3H0.17ML	0.25 200	161
WBR Z 154751.86	P 3E			172
	-1			
230189 ESK	ES 403	12.5	5.0DG	LJOHNSTONEBRIDGE,D & G 1
112328.36	312.42/ 594.62	0.5-0.1		55.238 -3.377 2
4 14 300 0.01	0.0 0.0 C A*D			3
ESK Z 112331.57	P 0IU33.92	S 2ED		14
ESK NS1123	IU	E 11.0H0.10ML	0.25 200	14
ESK EW1123	IU	ED 8.7H0.11ML	0.25 200	14
ECK Z 112332.10	P 2ED34.82	S 1ID		17
	-1			
260189KEYWORTH+	KW 039	12.5	5.0JAR	LOXTON, NOTTS 1
353 9.71	464.32/ 350.78	0.1 1.9		53.050 -1.040 2
6 32 162 0.16	1.2 1.5 C B*C COALFIELD TYPE			3
KSY Z 035316.02	P 3EU			32
KBI Z 035317.32	P 2ED			40
KWE Z 035319.50	P 3ED26.81	S 4		54
MCH Z 0353	59.63	S 3		177
MCH NS0353		5.2H0.28ML	0.25 200	177
MCH EW0353		3.9H0.29ML	0.25 200	177
WVR Z 0353	59.85	S 3		175
WLC Z 0353	61.89	S 3		184
WLC NS0353		5.0H0.33ML	0.25 200	184
WLC EW0353		3.8H0.52ML	0.25 200	184
	-1			
270189 PAISLEY+		12.5	5.0DG	LGREENOCK, STRATHCLYDE 1
224243.85	226.85/ 676.89	0.9 0.3		55.954 -4.774 2
6 12 235 0.18	0.3 0.3 C B*D			3

PMS Z 224246.48	P 1ID48.96	S 1ID		12
PGB Z 224248.52	P 2E 52.41	S 1E		25
PGB NS2242	E	IU10.5H0.08ML	0.25 200	25
PGB EW2242	E	EU 5.1H0.13ML	0.25 200	25
EAB Z 224250.90	P 2E 56.45	S 3E 5.0H0.19ML	0.25 200	38
-1				
310189 CORNWALL		5.0	LSCILLY ISLES,CORNWALL 1	
93931.10	97.58/-75.48	9.3 2.4	49.146 -6.148	2
12119 345 0.08	60.6143.1 D D*D OFFSHORE,70KM SOUTH OF		SCILLY ISLES	3
CPZ Z 093950.41	P 1 U			120
CGH Z 093951.25	P 1 U			123
CCO Z 093951.91	P 1 U			130
CCA Z 093952.30	P 1 U			133
CR2 Z 093952.37	P 1 U68.01	S 2		134
CR2 NS0939		3.5 H0.05ML	10.0 200	134
CR2 EW0939		4.0 H0.05ML	10.0 200	134
CBW Z 093952.47	P 1 U			134
CST Z 093952.75	P 1 U			137
CTR Z 093952.40	P 1 U68.11	S 2		134
CME Z 093952.36	P 1 U			134
CRA Z 093952.27	P 1EU			133
-1				
310189 CORNWALL		5.0	LSCILLY ISLES,CORNWALL 1	
104341.49	100.19/-76.33	7.9 1.7	49.140 -6.111	2
10119 346 0.04	7.6 3.7 D D*D OFFSHORE,70KM SOUTH OF		SCILLY ISLES	3
CPZ Z 104400.83	P 1EU			119
CGH Z 104401.80	P 2			122
CCO Z 104402.34	P 1			129
CCA Z 104402.70	P 1			133
CR2 Z 104402.80	P 2 18.40	S 2		133
CR2 NS1044		7.6 H0.05ML	1.0 200	133
CR2 EW1044		7.3 H0.05ML	1.0 200	133
CBW Z 104402.95	P 2			133
CST Z 104403.13	P 1			136
CME Z 104402.85	P 1 18.35	S 2		133
CRA Z 104402.62	P 1			132
-1				
010289N WALES		5.0RITCHIELLLEYN, Gwynedd		1
7 539.86	238.23/ 343.98	23.5 0.7	52.968 -4.409	2
16 2 98 0.09	0.4 1.1 B A*B LLEYN AFTERSHOCK			3
WLC Z 070547.75	P 2E 53.12	S 2		42
WLC NS0705		9.1 H0.1 ML	0.25 200	42
WLC EW0705		11.2H0.08ML	0.25 200	42
YRH Z 070544.98	P 1IU			21
WBR Z 070546.96	P 2E 51.65	S 2		37
WST Z 070545.80	P 1IU50.00	S 2		28
WFB Z 070547.32	P 3E 52.29	S 3		40
YRC Z 070545.99	P 2E 51.06	S 2		33
YRE Z 070543.62	P 1IU			2
WLF Z 070546.70	P 3E 51.38	S 2		36
YLL Z 070545.40	P 1IU48.84	S 3		25
-1				
010289 ESK	ES 404	12.5	5.0DG	LLANGHOLM,D & G
162715.68	339.21/ 590.52	4.3 0.2		55.205 -2.955
5 11 202 0.09	0.0 0.1 C A*D			2
ECK Z 162718.18	P 0IU19.70	S 1ID		11
ESK Z 162719.71	P 0ID22.34	S 1IU		20
ESK NS1627	ID	ID17.5H0.10ML	0.25 200	20
ESK EW1627	ID	ID13.0H0.10ML	0.25 200	20
XSO Z 162725.20	P 3E			55
-1				
040289KEYWORTH+	KW 040	12.5	5.0JAR	LRETDFORD,NOTTS
02817.10	473.93/ 380.50	0.7 2.2		53.316 -0.890
9 43 252 0.36	7.2 3.6 D D*D EAST OF RETFORD, COALFIELD TYPE			2
KBI Z 002824.58	P 3E			43
KSY Z 002825.36	P 3E			44
KWE Z 002828.98	P 3E			72
HAE Z 002846.41	P 3E			181
MCH Z 002849.23	P 3E 72.90	S 3E		205
MCH NS0028		7.5H0.37ML	0.25 200	205
MCH EW0028		5.6H0.34ML	0.25 200	205
WBR Z 002850.11	P 3E			208
WLC Z 002848.30	P 3E 70.98	S 3E		196
WLC NS0028		6.1H0.40ML	0.25 200	196
WLC EW0028		5.3H0.38ML	0.25 200	196
-1				
040289KEYWORTH+	KW 040	12.5	5.0JAR	LCASTLETON,DERBYSHIRE
1151 9.26	415.55/ 382.08	2.8 1.8		53.335 -1.766
16 18 110 0.31	0.6 1.5 C C*C			2
KBI Z 115112.61	P 3EU15.4	S 3E		3
KWE Z 115115.21	P 2ED20.25	S 3E		18
KSY Z 115124.62	P 3E			36
HAE Z 115134.43	P 3E			89
154				

MCH Z 115136.82	P 3E 56.51	S 3E			171
MCH NS1151		6.0H0.40ML	0.25 200	171	
MCH EW1151		4.5H0.32ML	0.25 200	171	
HTR Z 115137.39	P 3E			173	
BMY Z 115119.36	P 3E			60	
HPK Z 115121.34	P 3E			70	
WVR Z 115131.70	P 3E			137	
WLC Z 115132.11	P 3E 49.02	S 3E		140	
WLC NS1151		5.1H0.35ML	0.25 200	140	
WLC EW1151		2.1H0.32ML	0.25 200	140	
WBR Z 115134.18	P 3E			152	
WFB Z 115136.28	P 3E			169	
-1					
080289KEYWORTH+	KW 041	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1
221452.57	389.93/ 347.02	9.0 1.4	53.020	-2.150	2
7 21 149 0.14	1.6 3.4 C B*C				3
KWE Z 221456.63	P 3E 59.62	S 3		21	
KBI Z 221461.03	P 3E			49	
MCH Z 2214	87.94	S 3		128	
MCH NS2214		8.6H0.18ML	0.25 200	128	
MCH EW2214		6.2H0.18ML	0.25 200	128	
WVR Z 221469.13	P 3			101	
WLC Z 221470.42	P 4 82.26	S 3		109	
WLC NS2214		4.3H0.12ML	0.25 200	109	
WLC EW2214		4.1H0.17ML	0.25 200	109	
WBR Z 221472.09	P 3			119	
-1					
090289 CORNWALL		5.0ABW	PORTREATH, CORNWALL	1	
152642.02	162.75/ 45.30	6.2 0.9	50.259	-5.329	2
10 11 243 0.03	0.9 1.7 C A*D				3
CCA Z 152644.24	P 0ID			11	
CST Z 152644.58	P 0ID			14	
CR2 Z 152644.91	P 0ID47.07	S 1		15	
CR2 NS1526		4.7 H0.04ML	10.0 200	15	
CR2 EW1526		4.8 H0.05ML	10.0 200	15	
CBW Z 152645.60	P 0ID			20	
CPZ Z 152645.91	P 0IU			22	
CGH Z 152646.96	P 4ID			26	
CSA Z 152647.30	P 4IU			33	
CME Z 152644.65	P 0ID			14	
CTR Z 152644.96	P 0ID47.24	S 1		16	
CRA Z 152644.78	P 0ID			14	
-1					
090289 CORNWALL		5.0ABW	PORTREATH, CORNWALL	1	
153141.44	162.76/ 45.42	6.3 0.3	50.260	-5.329	2
9 11 244 0.02	0.9 1.5 C A*D				3
CCA Z 153143.70	P 0ID			11	
CST Z 153144.03	P 0ID			14	
CR2 Z 153144.36	P 0ID46.57	S 1		16	
CR2 NS1531		5.5 H0.04ML	2.5 200	16	
CR2 EW1531		6.2 H0.04ML	2.5 200	16	
CBW Z 153145.05	P 0ID			20	
CPZ Z 153145.35	P 0IU			22	
CSA Z 153145.00	P 4			33	
CGH Z 153145.00	P 4			26	
CME Z 153144.07	P 1ID46.05	S 1		14	
CRA Z 153144.21	P 1ID			14	
-1					
100289N WALES		5.0RITCHIE LAKE BALA, GWYNEDD	1		
123918.66	289.33/ 326.09	18.7-0.2	52.821	-3.642	2
10 4 161 0.03	0.2 0.3 B A*C				3
WLC Z 123923.35	P 1ID26.48	S 2		22	
WLC NS1239		5.0 H0.09ML	0.25 200	22	
WLC EW1239		4.1 H0.14ML	0.25 200	22	
WVR Z 123921.80	P 2E 23.91	S 3		4	
WBR Z 123922.82	P 2E 25.77	S 1		17	
WST Z 123924.29	P 3E 28.16	S 2		29	
WFB Z 123924.56	P 1IU28.48	S 2		31	
-1					
100289 ESK	ES 406	12.5	5.0DG	LAMBLESIDE, CUMBRIA	1
15 650.00	337.29/ 501.26	5.8 1.3	54.403	-2.966	2
8 36 245 0.17	3.6 11.7 D C*D				3
XDE Z 150656.50	P 1ED			36	
XAL Z 150701.58	P 2E			71	
ECK Z 150704.44	P 2E 14.69	S 3		87	
ESK Z 150707.23	P 2EU19.11	S 3		103	
ESK NS1507		6.0 0.15 ML	0.25 200	103	
ESK EW1507		4.9 0.17 ML	0.25 200	103	
XSO Z 150711.50	P 2E 27.33	S 3		130	
-1					
100289KEYWORTH+	KW 041	12.5	5.0JAR	LWETHERBY, W YORKSHIRE	1
184145.70	444.79/ 446.73	9.8 1.2	53.915	-1.318	2
11 21 216 0.32	2.5 3.4 D C*D				3

KBI Z 184158.12	P 3E 67.40	S 3		75
KWE Z 184163.45	P 3E 75.28	S 3		106
KSY Z 184164.30	P 3E			116
MCH Z 1841	4 106.00	S 3		241
MCH NS1841			2.2H0.09ML	0.25 200 241
MCH EW1841			1.5H0.10ML	0.25 200 241
WLC Z 184175.50	P 3E			193
WLC NS1841			1.9H0.10ML	0.25 200 193
WLC EW1841			1.4H0.16ML	0.25 200 193
HPK Z 184149.56	P 0IU53.60	S 3		21
HPK NS1841			10.0H0.12ML	2.5 200 21
HPK EW1841			9.6H0.10ML	2.5 200 21
BUR Z 184150.67	P 2EU			25
BMY Z 184151.63	P 1IU			33
-1				
170289 LOWNET	LN 632 643	12.5	5.0DWR	LGLEN EAGLES,TAYSIDE 1
856 5.67	292.59/ 707.82	3.0 1.1	56.251	-3.734 2
11 14 104 0.20	0.8 3.4 C B*C			3
EBH Z 085608.60	P 0IU10.00	S 3E		14
ELO Z 085610.49	P 1IU13.45	S 2E		25
EAB Z 085612.75	P 2E 17.49	S 2E		38
EAU Z 085614.40	P 2E			49
EDI Z 085614.56	P 3E 20.00	S 3E	7.3H0.15M	0.25 200 50
EDI NS0856	E		E 10.8H0.11ML	0.25 200 50
EDI EW0856	E		E 7.5H0.22ML	0.25 200 50
EDU Z 085615.45	P 3E 22.26	S 3E		55
-1				
180289 KYLE		5.0	LOCH MONAR,HIGHLAND 1	
643 7.77	211.30/ 842.30	2.4 0.9	57.432	-5.144 2
7 12 265 0.24	2.1 1.7 C B*D			3
KPL Z 064314.06	P 1EU 18.39	S 2E		32
KPL NS0643			04.5H0.16ML	1.0 200 32
KPL EW0643			03.5H0.14ML	1.0 200 32
KAR Z 064320.10	P 1E			71
KSB Z 064313.12	P 2ED 16.90	S 1		30
KAC Z 064310.36	P 1IU 11.94	S 1		12
SKS Z 064320.26	P 3E			94
-1				
230289N WALES+			5.0RITCHIE NEWQUAY,DYFED 1	
195826.34	251.90/ 256.54	7.8 2.3	52.187	-4.167 2
30 49 82 0.31	0.8 1.5 C C*C			3
WLC Z 195841.5	P 1IU52.44	S 2		94
YRH Z 195839.7	P 1ID48.98	S 3		79
WBR Z 195838.85	P 1IU48.13	S 3		77
WST Z 195840.86	P 2E 51.25	S 2		89
WFB Z 195835.80	P 1IU42.69	S 2		56
WCB Z 195848.22	P 3E 63.60	S 2		135
WCB NS1958			10.0H0.14ML	1.0 200 135
WCB EW1958			14.4H0.12ML	1.0 200 135
ECB Z 195853.4	P 3E 73.8	S 3		180
YRE Z 195841.56	P 2ID52.12	S 2		90
WLF Z 195846.61	P 1IU60.00	S 3		124
MCH Z 195840.11	P 1ID49.70	S 2		83
MCH NS1958			7.7 H0.17ML	2.5 200 83
MCH EW1958			7.2 H0.12ML	2.5 200 83
HAE Z 195844.81	P 3E			112
HGH Z 195844.86	P 2E			112
HTR Z 195837.06	P 2E			63
ETA Z 195850.2	P 1IU67.6	S 2		150
ECP Z 195850.0	P 2E 67.2	S 2		151
DMU Z 195904.8	P 2E			265
HTL Z 195848.8	P 3E			135
HSA Z 195834.55	P 3E			49
-1				
270289N WALES			5.0RITCHIELLAKE BALA, GWYNEDD 1	
74839.05	309.04/ 330.19	16.6 0.3	52.861	-3.351 2
7 19 309 0.08	1.5 1.9 C B*D			3
WLC Z 074844.95	P 2 49.05	S 2		32
WLC NS0748			11.0H0.06ML	0.25 200 32
WLC EW0748			7.2 H0.06ML	0.25 200 32
WVR Z 074843.22	P 1IU45.80	S 4		19
WBR Z 074845.60	P 2E 50.15	S 2		37
WST Z 074847.0	P 1IU			45
WFB Z 074847.66	P 1IU			50
-1				
270289N WALES			5.0RITCHIE LLEYN, GWYNEDD 1	
85151.94	233.41/ 336.75	6.4 0.1	52.902	-4.477 2
9 9 148 0.20	1.7 3.6 C B*C			3
WLC Z 085160.05	P 2E 65.29	S 3		48
WLC NS0851			4.5 H0.06ML	0.25 200 48
WLC EW0851			2.1 H0.05ML	0.25 200 48
YRH Z 085154.50	P 1IU55.7	S 2		13
WST Z 085157.71	P 1ID			34

YRE Z 085154.1	P 1ID55.13	S 2			10
WFB Z 085158.4	P 2E 63.4	S 3			38
-1					
270289KEYWORTH+	KW 043	12.5	5.0JAR	LCANNOCK CHASE,STAFFS	1
20 458.88	398.14/ 319.35	2.6 1.1		52.771 -2.028	2
6 30 171 0.10	1.1 1.8 C B*C				3
KWE Z 200504.39	P 3EU				30
KBI Z 200509.94	P 3E				63
MCH Z 200516.78	P 3E 28.61	S 4E			109
MCH NS2005		4.6H0.12ML	0.25 200	109	
MCH EW2005		4.0H0.15ML	0.25 200	109	
HGH Z 200521.42	P 3E				137
WLC Z 200519.30	P 3E 33.12	S 3E			121
WLC NS2005		2.3H0.13ML	0.25 200	121	
WLC EW2005		2.5H0.16ML	0.25 200	121	
-1					
270289N WALES		5.0RITCHIE HARLECH, GWYNEDD			1
205250.97	255.35/ 329.30	15.3-0.4		52.841 -4.148	2
10 17 127 0.08	0.4 1.0 B A*B				3
WLC Z 205256.49	P 3E 60.20	S 3			30
WLC NS2052		2.1 H0.06ML	0.25 200	30	
WLC EW2052		2.2 H0.08ML	0.25 200	30	
WVR Z 205257.50	P 3E				37
WST Z 205254.98	P 1ID57.56	S 1			18
WFB Z 205255.02	P 1IU57.75	S 3			19
YRH Z 205256.91	P 2E				33
WBR Z 205255.0	P 3E 57.52	S 3			17
-1					
280289MORAY+		5.0BS	ULLAPOOL, HIGHLAND		1
133831.54	215.53/ 891.30	3.0 2.2		2+ 57.873 -5.111	2
16 43 181 0.29	1.4 2.2 C B*D FELT RHUE				3
MVH Z 133840.89	P 1IU				55
MDO Z 133843.34	P 1IU51.40	S 3E			66
MLA Z 133849.90	P 1IU				114
MCD Z 133851.00	P 1EU64.80	S 3E			115
MCD NS1338		07.5H0.12ML	02.5 200	115	
MCD EW1338		08.5H0.10ML	02.5 200	115	
MFI Z 133859.52	P 2ED				170
MME Z 133854.70	P 1EU72.00	S 3E			143
KAC Z 133839.34	P 1ID45.01	S 2E			43
KPL Z 133842.96	P 1ED51.67	S 2E			68
KPL NS1338		09.0H0.17ML	01.0 200	68	
KSK Z 133849.40	P 2E 62.44	S 2E			105
KAR Z 133850.48	P 1E				115
KPL EW1338		10.0H0.18ML	01.0 200	68	
-1					
010389N WALES		5.0RITCHIELLLEYN, GWYNEDD			1
44311.64	239.60/ 343.35	24.4 1.1		52.963 -4.388	2
17 3 85 0.07	0.3 0.7 A A*A LLEYN AFTERSHOCK				3
WCB Z 044320.1	P 3E 26.07	S 3			47
WCB NS0443		7.5 H0.05ML	0.25 200	47	
WCB EW0443		7.6 H0.20ML	0.25 200	47	
YRC Z 044318.43	P 1ID23.20	S 2			34
YRE Z 044315.56	P 1ID				3
WPM Z 044320.03	P 1IU				46
WLF Z 044318.72	P 2E 23.4	S 2			36
YLL Z 044317.14	P 1IU20.16	S 3			25
WLC Z 044319.44	P 1IU24.7	S 2			41
WLC NS0443		11.0H0.16ML	1.0 200	41	
WLC EW0443		8.10H0.12ML	1.0 200	41	
YRH Z 044316.93	P 1IU				22
WBR Z 044318.59	P 2E 23.12	S 3			35
WST Z 044317.5	P 1IU21.59	S 2			27
WFB Z 044319.0	P 3E				39
-1					
010389N WALES		5.0RITCHIELLLEYN, GWYNEDD			1
94756.60	239.42/ 344.30	21.8 1.0		52.972 -4.392	2
13 2 115 0.09	0.5 0.6 B A*B LLEYN AFTERSHOCK				3
WLC Z 09484.1	P 1IU9.4	S 2			41
WLC NS0948		13.9H0.15ML	0.25 200	41	
WLC EW0948		12.9H0.10ML	0.25 200	41	
YRH Z 09481.63	P 1IU5.22	S 2			22
WBR Z 09483.28	P 2E 7.90	S 2			36
WST Z 09482.22	P 1ID6.22	S 2			27
YRC Z 09483.11	P 2E				33
YRE Z 09480.20	P 1I 2.42	S 2			3
YLL Z 09481.83	P 1IU5.42	S 3			24
-1					
010389 LOWNET+	LN 634 16	12.5	5.0DWR	LSTRATHBLANE, S'CLYDE	1
101937.96	250.71/ 678.02	4.0 2.3		55.972 -4.392	2
21 19 130 0.07	0.2 0.6 B A*C				3
EAB Z 101942.61	P 1EU45.81	S 2E			24
EAU Z 101948.40	P 1IU				60

EBH Z 101948.71	P 2ED56.55	S 2EU		63
ELO Z 101950.12	P 2E 58.60	S 2ED		70
EDI Z 101950.80	P 2E 59.46	S 3E 2.5H0.19M	2.5 200	76
MCD NS1020		05.3H0.16ML	01.0 200	192
MCD EW1020		04.5H0.18ML	01.0 200	192
ESY Z 101956.25	P 3E 68.2	S 3E 5.2H0.3 M	1.0 200	111
EDU Z 101955.81	P 3E 68.19	S 2E		107
PCO Z 101941.56	P 0IU44.37	S		19
PMS Z 101942.87	P 0IU46.40	S 2ED		26
ESK Z 101955.44	P 2EU67.76	S 3		105
ESK NS1019		06.6H0.17ML	02.5 200	105
ESK EW1019		07.1H0.14ML	02.5 200	105
ECK Z 101957.81	P 2E 71.33	S 3		119
EDI NS1019	E	E 5.0H0.20ML	2.5 200	76
EDI EW1019	E	E 4.4H0.19ML	2.5 200	76
PCA Z 101943.69	P 1ID47.93	S 3E		32
MCD Z 102007.57	P 2E 29.50	S 3E		192
PGB Z 101941.64	P 0IU44.19	S 1E		19
-1				
010389ESK	ES 408	12.5	5.0DG	LSUNDERLAND, TYNE & WEAR 1
181249.10	458.04/ 551.89	6.6 1.6		54.858 -1.096 2
8 72 316 0.30	7.1 12.4 D*D			3
XAL Z 181300.61	P 2E 10.61	S 2E		72
XSO Z 181305.98	P 1E 17.95	S 2ED		102
ECK Z 181310.34	P 2E 26.15	S 3E		135
ESK Z 181311.90	P 2E 28.74	S 3E		144
ESK NS1813		05.7H0.18ML	0.25 200	144
ESK EW1813		06.0H0.17ML	0.25 200	144
-1				
020389KEYWORTH+	KW 043	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS 1
33431.19	390.90/ 346.37	9.7 1.3		53.014 -2.136 2
7 20 148 0.08	0.8 1.5 B*A*C			3
KWE Z 033435.14	P 3E 38.00	S 3E		20
KBI Z 033439.60	P 3E			49
MCH Z 033452.10	P 4 66.48	S 3E		127
MCH NS0334		7.0H0.19ML	0.25 200	127
MCH EW0334		4.6H0.18ML	0.25 200	127
WLC Z 033449.40	P 3E 62.21	S 3E		110
WLC NS0334		2.8H0.10ML	0.25 200	110
WLC EW0334		3.9H0.12ML	0.25 200	110
WBR Z 033450.00	P 3E			120
-1				
030389 LOWNET	LN 634 634	12.5	5.0DWR	LPOWMILL, TAYSIDE 1
7 3 1.96	301.12/ 697.73	3.0 0.9		56.162 -3.592 2
7 11 182 0.28	6.9 81.2 D*D COALFIELD TYPE	F/S 3.7S BEFORE, A/S 4.8S AFTER 3		
EBH Z 070304.40	P 1IU05.81	S 3E		11
EAU Z 070307.50	P 2E 11.50	S 3E		36
EAB Z 070308.16	P 2E 12.80	S 3E		47
ELO Z 070308.52	P 2E 12.83	S 3E		35
EDI Z 070308.60	P 3E 13.90	S 3E 3.7H0.40M	0.25 200	37
EDI NS0703	E	E 5.0H0.40ML	0.25 200	37
EDI EW0703	E	E 4.3H0.35ML	0.25 200	37
-1				
040389N WALES			5.0RITCHIE PRESTATYN, CLWYD	1
161420.83	311.74/ 382.68	8.2 1.1		53.333 -3.326 2
18 40 281 0.16	1.1 1.5 C B*D			3
WLC Z 161429.23	P 2E 34.62	S 2		48
WLC NS1614		13.3H0.1 ML	0.25 200	48
WLC EW1614		9.0 H0.1 ML	0.25 200	48
WBR Z 161431.85	P 2E 39.11	S 2		65
WST Z 161431.12	P 2E 38.00	S 2		60
WFB Z 161435.20	P 2E			87
WCB Z 161435.14	P 4 44.00	S 3		81
WCB NS1614		10.5H0.1 ML	0.25 200	81
WCB EW1614		8.1 H0.15ML	0.25 200	81
WPM Z 161427.7	P 2E 31.51	S 3		40
WLF Z 161432.7	P 2E			72
WME Z 161431.85	P 2E 39.26	S 3		65
YLL Z 161430.72	P 3E 37.90	S 3		60
YRH Z 161437.85	P 3E			104
WVR Z 161431.35	P 3E			63
YRE Z 161434.90	P 2E			83
-1				
050389 CORNWALL			5.0ABW LBAY OF BISCAY	1
191629.27	281.55 -283.74	5.0 2.5		47.336 -3.568 2
6333 355 0.07	D D*D			3
CBW Z 191716.30	P 2E			333
CCO Z 191716.65	P 2E			334
CR2 Z 191716.86	P 2E 51.64	S 2		336
CR2 NS1917		3.5 0.09 ML	1.0 200	336
CR2 EW1917		4.0 0.05 ML	1.0 200	336
CCA Z 191717.40	P 2E			340
CSA Z 191718.55	P 2E			349

-1
050389 PAISLEY+ PA 251 1412 12.5 5.0DWR LRENFREW,STRATHCLYDE 1
192921.94 247.47/ 667.17 3.6 0.7 55.874 -4.438 2
9 8 109 0.03 0.2 1.2 B A*B 3
PGB Z 192923.73 P 1IU24.94 S 2EU 2.4H0.10M 2.5 200 8
PGB NS1929 ED ED10.5H0.11ML 2.5 200 8
PGB EW1929 IU ED 6.4H0.11ML 2.5 200 8
PMS Z 192925.70 P 1IU28.41 S 2IU 19
PCA Z 192926.22 P 2EU29.33 S 3E 23
PCO Z 192926.62 P 3E 30.03 S 3E 25
EAB Z 192928.93 P 2E 32.64 S 2E 36
EBH Z 192933.88 P 2EU42.40 S 3E 71
EDI Z 192935.93 P 3E 46.77 S 3E 1.6H0.09M 0.25 200 79
EDI NS1929 E E 2.0H0.10ML 0.25 200 79
EDI EW1929 E E 2.0H0.11ML 0.25 200 79
-1
090389N WALES+ 5.0MEAR/JARSTOKE-ON-TRENT, STAFFS 1
03658.01 387.68/ 345.67 1.8 1.8 53.008 -2.184 2
16 23 119 0.28 1.1 1.4 C B*C 3
WLC Z 003715.91 P 3E 28.42 S 3 107
WLC NS0037 10.0H0.12ML 0.25 200 107
WLC EW0037 11.5H0.14ML 0.25 200 107
YRH Z 003724.64 P 3E 166
WVR Z 003714.25 P 3E 26.25 S 3 99
WBR Z 003717.2 P 2E 116
WST Z 003717.9 P 3E 121
WFB Z 003719.28 P 3E 34.53 S 4 130
YRE Z 003722.48 P 3E 39.9 S 4 151
KWE Z 003702.50 P 3E 05.51 S 4 23
KBI Z 003706.97 P 3E 52
HTR Z 003719.43 P 3E 127
MCH Z 003719.08 P 3E 34.02 S 3 125
MCH NS0037 18.5H0.18ML 0.25 200 125
MCH EW0037 19.6H0.18ML 0.25 200 125
BMY Z 003716.10 P 4E 99
HPK Z 003716.97 P 3E 30.40 S 3 112
-1
110389N WALES+ 5.0RITCHIEBOLTON,GTR MANCHESTER 1
14 117.85 375.46/ 410.19 2.5 1.7 53.587 -2.371 2
9 48 174 0.20 6.0 1.3 D D*C POSSIBLE COALFIELD TYPE 3
WLC Z 140137.09 P 3E 50.53 S 3 115
WLC NS1401 6.6 H0.12ML 0.25 200 115
WLC EW1401 12.0H0.16ML 0.25 200 115
WVR Z 140137.30 P 3E 121
WFB Z 140142.13 P 3E 150
BMY Z 140126.20 P 3E 32.73 S 2E 48
HPK Z 140129.19 P 2E 37.11 S 2E 1.7H0.18M 1.0 200 64
HPK NS1401 E EU 9.5H0.19ML 1.0 200 64
HPK EW1401 E ED 4.5H0.19ML 1.0 200 64
-1
120389 PAISLEY+ PA 252 1241 12.5 5.0DWR LSTRATHBLANE,S'CLYDE 1
7 232.30 250.63/ 678.05 2.7 0.3 55.972 -4.394 2
8 19 131 0.09 0.5130.6 C C*C 3
PGB Z 070235.90 P 2E 38.49 S 2E 0.7H0.15M 1.0 200 19
PGB NS0702 ED ED 5.4H0.10ML 1.0 200 19
PGB EW0702 E ID 2.2H0.17ML 1.0 200 19
PCO Z 070236.00 P 1IU38.53 S 3E 19
EAB Z 070236.60 P 3E 40.20 S 2EU 2.6H0.08M 0.25 200 24
PMS Z 070237.27 P 1IU40.70 S 3E 26
EBH Z 070241.11 P 2E 50.97 S 2E 2.1H0.10M 0.25 200 63
-1
130389 PAISLEY+ PA 252 1491 12.5 5.0DWR LSTRATHBLANE,S'CLYDE 1
1 121.02 250.77/ 678.76 2.9 0.3 55.979 -4.392 2
12 18 132 0.23 0.8 5.1 C C*C 3
PGB Z 010124.61 P 3E 27.30 S 2E 1.0H0.10M 1.0 200 20
PGB NS0101 EU EU 6.3H0.11ML 1.0 200 20
PGB EW0101 E IU 1.8H0.19ML 1.0 200 20
EAB Z 010124.70 P 3E 28.78 S 2E 24
PCO Z 010124.88 P 1IU27.40 S 3E 18
PMS Z 010126.12 P 1IU29.61 S 2ED 27
PCA Z 010126.89 P 3E 31.10 S 3E 32
EBH Z 010130.10 P 4E 39.70 S 3E 63
EAU Z 010131.50 P 3E 61
EDI Z 010132.00 P 4E 46.30 S 3E 1.3H0.09M 0.25 200 76
EDI NS0101 E E 1.1H0.10ML 0.25 200 76
EDI EW0101 E E 1.3H0.08ML 0.25 200 76
-1
130389 PAISLEY+ PA 252 1616 12.5 5.0DWR LSTRATHBLANE,S'CLYDE 1
10 937.64 249.98/ 678.11 3.7 0.5 55.973 -4.404 2
11 19 133 0.13 0.5 2.6 C B*C 3
PGB Z 100941.34 P 2E 43.89 S 2E 1.0H0.10M 1.0 200 19
PGB NS1009 E EU 7.8H0.10ML 1.0 200 19
PGB EW1009 E ID 2.6H0.18ML 1.0 200 19

PCO Z 100941.39	P 2EU44.00	S 3E			19
EAB Z 100942.31	P 3E 45.53	S 2E			24
PMS Z 100942.62	P 2EU45.63	S 3E			26
EBH Z 100948.43	P 3E 56.32	S 3E			64
EDI Z 100950.2	P 4E 60.09	S 3E	3.8H0.10M	0.25 200	76
EDI NS1009	E	E	3.0H0.10ML	0.25 200	76
EDI EW1009	E	E	1.6H0.11ML	0.25 200	76
-1					
180389 HEREFORD+	HF511		5.0 NSH	LGLADESTRY, POWYS	1
135650.90	316.74/ 256.97	2.4 1.6		52.204 -3.218	2
15 14 100 0.10	0.4 0.7 B A*C				3
MCH Z 135656.04	P 1I 59.70	S 1I			28
MCH NS1356			07.0H0.08ML	2.5 200	28
MCH EW1356			11.0H0.10ML	2.5 200	28
HAE Z 135659.85	P 1ID				50
HCG Z 135656.75	P 1ID				33
HGH Z 135662.73	P 3E				69
HTR Z 135653.90	P 1ID				14
HLM Z 135658.41	P 1IU				41
WLC Z 13577.19	P 3E 19.23	S 3			96
WLC NS1357			12.5H0.12ML	1.0 200	96
WLC EW1357			4.5 H0.11ML	1.0 200	96
YRH Z 135710.4	P 2E				119
WVR Z 13573.31	P 3E 11.5	S 3			71
WBR Z 13575.28	P 3E				86
WFB Z 13574.09	P 2E				77
WPM Z 135711.82	P 2E				126
KWE Z 135712.50	P 2E				
-1					
190389 LOWNET+	LN 636 1337	25.0	5.0DWR	LROSEWELL, LOTHIAN	1
95631.97	329.15/ 662.94	0.5 0.6		55.854 -3.132	2
8 1 235 0.02	0.2 0.3 C A*D COALFIELD TYPE				3
RHC Z 095632.32	P 0ID				1
RGH Z 095632.34	P 0ID				1
RRD Z 095632.40	P 0ID				1
RCA Z 095632.47	P 1ID32.94	S 3E			2
RCH Z 095632.53	P 1ID33.04	S 3E			2
RMM Z 095632.61	P 1ID				2
EDI Z 095633.96	P 1IU35.70	S 2EU	9.3H0.29M	1.0 200	8
EDI NS0956	IU	ED	3.5H0.70ML	1.0 200	8
EDI EW0956	E	EU	4.0H0.29ML	1.0 200	8
EBL Z 095634.20	P 1ID36.09	S 2EU			11
EAU Z 095636.18	P 2E 38.30	S 3E			20
ESY Z 095638.01	P 3E				33
-1					
210389 LOWNET+	RO 078	25.0	5.0JAR	LROSEWELL, LOTHIAN	1
18 7 8.28	329.58/ 663.38	1.2-0.1		55.858 -3.125	2
8 1 261 0.05	0.5 0.9 C A*D COALFIELD TYPE				3
RHC Z 180708.74	P 0IU				1
RGH Z 180708.79	P 0IU				2
RCA Z 180708.94	P 2EU09.56	S 3E			2
RCA NS1807			9.6H0.10M	0.25 4	2
RCA EW1807			9.5H0.11M	0.25 4	2
RRD Z 180708.95	P 2EU				2
RCH Z 180708.98	P 2EU09.58	S 3E			2
RMM Z 180709.00	P 2ED				2
EDI Z 180710.30	P 2ED11.82	S 2EU	4.0H0.22M	0.25 200	8
EDI NS1807	ED	IU	9.1H0.12ML	0.25 200	8
EDI EW1807	EU	IU	7.6H0.20ML	0.25 200	8
EAU Z 180712.40	P 2EU				21
-1					
220389 LOWNET+	RO 078	25.0	5.0JAR/DWLROSEWELL, LOTHIAN		1
1527 1.84	329.29/ 663.07	0.5 0.4		55.856 -3.130	2
8 1 245 0.03	0.1 0.7 C A*D COALFIELD TYPE				3
RHC Z 152702.19	P 0ID				1
RGH Z 152702.26	P 0ID				1
RRD Z 152702.32	P 0IU				1
RCA Z 152702.41	P 0ID02.85	S 2E			2
RCA NS1527			4.6H0.13M	1.0 4	2
RCA EW1527			4.5H0.10M	1.0 4	2
RCH Z 152702.46	P 0ID02.95	S 2E			2
RMM Z 152702.47	P 0ID				2
EDI Z 152703.90	P 1IU05.02	S 3E	3.8H0.28M	1.0 200	8
EDI NS1527	IU	E	2.5H0.40ML	1.0 200	8
EDI EW1527	ED	E	2.5H0.41ML	1.0 200	8
-1					
220389 LOWNET	LN 637 195	12.5	5.0DWR	LCOMRIE, TAYSIDE	1
205740.57	277.51/ 729.94	5.3 0.1		56.446 -3.987	2
6 17 223 0.18	5.7 7.1 D D*D				3
ELO Z 205743.90	P 2E 46.30	S 2EU	5.1H0.15ML	0.25 200	17
EAB Z 205747.30	P 2E 51.81	S 2EU	3.2H0.09ML	0.25 200	36
EBH Z 205747.71	P 2E 52.20	S 2EU	4.0H0.12ML	0.25 200	37
-1					

240389	LOWNET+	RO 078	25.0	5.0DWR	LROSEWELL, LOTHIAN	1
	0 559.33	330.35/ 663.04	1.5 0.4		55.856 -3.113	2
10	2 264 0.05	0.4 0.3 C A*D COALFIELD TYPE				3
RHC Z	000559.99	P 0IU				2
RGH Z	000600.04	P 0IU				2
RRD Z	000600.08	P 1IU	S			2
RCA Z	000600.18	P 1ED00.95	S 3E			3
RCA NS0006			5.0H0.14M		1.0 4	3
RCA EW0006			4.9H0.13M		1.0 4	3
RCH Z	000600.24	P 2E 00.98	S 3E			3
RMM Z	000600.25	P 2ED				3
EDI Z	000601.60	P 1ID03.19	S 1EU 1.9H0.30M		1.0 200	9
EDI NS0006		ID	IU 4.5H0.21ML		1.0 200	9
EDI EW0006		EU	IU 4.9H0.21ML		1.0 200	9
EBL Z	000602.90	P 3E				10
	-1					
240389	HEREFORD	HF412		5.0NSH	LBARGOED, MID GLAMORGAN	1
	049 0.86	313.25/ 199.22	0.0 1.5		2+ 51.685 -3.255	2
8 31	239 0.13	1.7 1.6 C B*D FELT BARGOED				3
MCH Z	004908.34	P 2I 13.91	S 1			39
MCH NS0049			04.9H0.20ML		1 200	39
MCH EW0049			06.3H0.32ML		1 200	39
HAE Z	004912.65	P 3E				63
HCG Z	004914.52	P 2I				76
HGH Z	004906.98	P 1ID11.81	S 2			31
HTR Z	004909.18	P 1I 15.30	S 2			44
	-1					
270389	KEYWORTH+	KW 047	12.5	5.0JAR	LNEWPORT, SALOP	1
	71623.73	373.93/ 318.77	5.4 1.0		52.766 -2.386	2
10 44	135 0.22	1.6 6.3 C C*C				3
KWE Z	071631.73	P 2EU				46
KBI Z	071637.28	P 3E				79
HLM Z	071631.39	P 2E				44
HAE Z	071637.88	P 3E				82
MCH Z	071639.40	P 2E 50.72	S 3			95
MCH NS0716			8.0H0.08ML		0.25 200	95
MCH EW0716			4.9H0.09ML		0.25 200	95
HTR Z	071640.10	P 3E				97
HCG Z	071640.43	P 3E				99
WFB Z	071642.73	P 3E				112
WLC Z	0716	4 51.33	S 3			97
WLC NS0716			3.7H0.09ML		0.25 200	97
WLC EW0716			3.2H0.11ML		0.25 200	97
	-1					
280389	LOWNET	LN 638	12.5	5.0DWR	LCLACKMANNAN, CENTRAL	1
	212025.56	291.19/ 691.45	0.5 1.2		56.103 -3.750	2
10 22	137 0.09	0.4 0.5 B A*C COALFIELD TYPE				3
EBH Z	212030.02	P 1ID33.61	S 2ED			22
EAU Z	212032.13	P 2ED37.10	S 2EU			34
EAB Z	212032.89	P 2EU37.13	S 3E			38
EDI Z	212033.19	P 2ED38.90	S 2E 4.9H0.50M		0.25 200	41
EDI NS2120		E	IU 7.2H0.40ML		0.25 200	41
EDI EW2120		EU	EU 6.8H0.38ML		0.25 200	41
ELO Z	212033.30	P 3E 38.94	S 3E			41
	-1					
310389	LOWNET+	RO 080	25.0	5.0JAR/DWRLROSEWELL, LOTHIAN	1	
	520 4.66	329.76/ 663.56	0.2 0.2		55.860 -3.122	2
9 1	271 0.05	0.4 0.2 C A*D COALFIELD TYPE				3
RHC Z	052005.13	P 1IU				1
RGH Z	052005.21	P 2EU05.72	S 3IU			2
RCA Z	052005.33	P 3E 06.03	S 3E			2
RCA NS0520			5.2H0.12M		0.25 4	2
RCA EW0520			5.7H0.11M		0.25 4	2
RCH Z	052005.34	P 2EU06.10	S 3E			2
RRD Z	052005.37	P 2E				2
RMM Z	052005.38	P 3E				2
EDI Z	052006.70	P 2ED08.15	S 2E 6.0H0.30M		0.25 200	8
EDI NS0520		ED	EU 8.7H0.28ML		0.25 200	8
EDI EW0520		EU	IU 9.2H0.29ML		0.25 200	8
EAU Z	052008.88	P 2ED				
EBL Z	052007.02	P 3EU08.82	S 2E			
	-1					
020489	LOWNET	LN 638	1795	12.5	5.0DWR	LROSEWELL, LOTHIAN
	223240.27	330.08/ 662.88	1.4-0.1		55.854 -3.117	2
5 9	182 0.04	0.0 0.0 C A*D COALFIELD TYPE				3
EDI Z	223242.52	P 2E 44.18	S 2EU 8.1H0.32M		0.25 200	9
EDI NS2232		E	ED 5.0H0.28ML		0.25 200	9
EDI EW2232		E	EU 4.4H0.28ML		0.25 200	9
EBL Z	223242.70	P 3E 44.50	S 2E			10
EAU Z	223244.55	P 2E				21
	-1					
020489	LOWNET+	RO 080	25.0	5.0DWR	LROSEWELL, LOTHIAN	1
	223640.66	329.57/ 663.41	0.8 0.5		55.859 -3.125	2

7	1	292	0.03	0.4	1.0	C A*D	COALFIELD TYPE		3
RHC	Z	223641.09		P	1IU				1
RGH	Z	223641.13		P	2E				2
RRD	Z	223641.26		P	2E				2
RCA	Z	223641.30		P	2E 41.81	S 3E			2
RCA	NS2236					3.2H0.09M		1.0	4
RCA	EW2236					4.1H0.14M		1.0	4
RCH	Z	223641.36		P	2E 41.88	S 3E			2
EDI	Z	223642.70		P	1ID44.19	S 2E	2.9H0.30M	1.0	200
EDI	NS2236					ED	5.0H0.21ML	1.0	200
EDI	EW2236					EU	5.8H0.21ML	1.0	200
EBL	Z	223643.00		P	2ED44.63	S 3E			11
EAU	Z	223644.81		P	1IU				21
	-1								
030489	KYLE+					5.0BS	LKNOYDART, HIGHLAND		1
	1152	5.79	177.54/	803.60	2.1	1.8		57.070	-5.670
16	20	129	0.12	0.4	0.9	B A*C			2
KAR	Z	115208.92		P	1ID11.28	S 3E			3
KSB	Z	115209.38		P	1ID11.78	S 3E			20
KPL	Z	115210.72		P	1ED14.36	S 2E			22
KPL	NS1152					19.0H0.12ML		01.0	200
KPL	EW1152					18.0H0.28ML		01.0	200
KAC	Z	115214.36		P	1ED20.36	S 3E			30
KSK	Z	115218.08		P	1E				53
MDO	Z	115220.11		P	1EU				76
MVH	Z	115226.60		P	1E 41.00	S 3E			89
MCD	Z	115230.99		P	3E 48.10	S 3E			130
MCD	NS1152					06.0H0.10ML		01.0	200
MCD	EW1152					04.5H0.13ML		01.0	200
MME	Z	115232.50		P	2E 49.90	S 3E			157
	-1								166
050489	HEREFORD		HF514			5.0 NSH	BARGOED, MID GLAMORGAN		1
	95422.96	313.23/	199.30		0.3	0.8		51.685	-3.255
6	31	259	0.03	0.7	0.6	C A*D			2
MCH	Z	095430.48		P	1ID35.90	S 1I			3
MCH	NS0954					11.7H0.18ML		0.25	200
MCH	EW0954					07.0H0.12ML		0.25	200
HGH	Z	095429.18		P	1IU33.69	S 1I			39
HTR	Z	095431.20		P	1ID37.35	S 1I			39
	-1								39
050489	LOWNET		LN 639			5.0 DWR	LBLAIRHALL, FIFE		1
	121742.29	298.88/	692.26	1.0	1.4			56.112	-3.626
8	17	192	0.11	1.1	1.1	C B*D	COALFIELD TYPE		2
EDI	Z	121748.90		P	1IU53.90	S 2E	2.3H0.41M		3
EDI	NS1217			IU		E	4.3H0.40ML		35
EDI	EW1217			ID		E	3.9H0.32ML		35
EAU	Z	121748.32		P	1IU52.84	S 3E			35
EBH	Z	121745.90		P	1IU48.32	S 2I			32
ELO	Z	121749.90		P	2ED55.70	S 3E			17
	-1								40
060489	LOWNET		LN 639	569	12.5	5.0 DWR	LPOLTON, LOTHIAN		1
	918	9.08	328.79/	664.85	1.6	0.6		55.872	-3.138
4	6	289	0.04	0.0	0.0	C A*D	COALFIELD TYPE		2
EDI	Z	091810.90		P	2ED12.22	S 2EU	3.5H0.30M		3
EDI	NS0918			E		E	6.8H0.22ML		7
EDI	EW0918			EU		EU	6.8H0.22ML		7
EAU	Z	091813.08		P	1ID16.30	S 3E			7
	-1								20
060489	CORNWALL					5.0	BAY OF BISCAY		1
	13	522.85	250.76/-534.85		5.0	3.8		45.071	-3.896
	8562	357	0.05		D	D*D			2
CGH	Z	130639.13		P	2E				3
CBW	Z	130639.95		P	2E				562
CCO	Z	130640.00		P	2E				572
CR2	Z	130640.24		P	2E 96.80	S 2			572
CR2	NS1306					16.0H0.05ML		1.0	200
CR2	EW1306					16.0H0.06ML		1.0	200
CCA	Z	130640.60		P	2E				575
CST	Z	130640.60		P	2E				578
CPZ	Z	130640.89		P	2E				578
	-1								580
060489	LOWNET		LN 639	662	12.5	5.0 DWR	LFOREST MILL, CENTRAL		1
	142022.85	295.58/	692.79	1.0	1.1			56.116	-3.680
6	18	245	0.11	2.2	1.9	C B*D	COALFIELD TYPE		2
EBH	Z	142026.61		P	1IU29.50	S 2EU	6.0H0.42ML		3
ELO	Z	142029.80		P	3E 35.8	S 3E	5.5H0.42ML		18
EAB	Z	142030.80		P	3E 36.3	S 3E	4.8H0.50ML		40
	-1								42
060489	LOWNET+		LN 639	756	12.5	5.0 DWR	LPEEBLES, BORDERS		1
	225410.34	323.83/	635.49	3.6	0.1			55.607	-3.209
10	21	150	0.19	1.0	2.9	C B*C			2
EBL	Z	225414.9		P	4E 17.30	S 2E			3
EAU	Z	225416.09		P	2E 20.02	S 2E			21
									31

ESK Z 225416.61	P 2ED20.25	S 2E	2.8H0.09M	0.25	200	32
ESK NS2254	EU	E	2.5H0.09ML	0.25	200	32
ESK EW2254	E	E	3.5H0.09ML	0.25	200	32
ECK Z 225419.20	P 3ED24.91	S 3E				48
EDI Z 225416.83	P 2E 21.49	S 2E	1.2H0.10M	0.25	200	35
EDI NS2254	E	E	3.2H0.14ML	0.25	200	35
EDI EW2254	E	E	2.2H0.12ML	0.25	200	35
ESY Z 225419.9	P 4E 24.80	S 3E				51
-1						
080489 LOWNET	LN 639 1194	12.5	5.0DWR	LROSEWELL, LOTHIAN	1	
45620.56	329.61/ 662.60	1.4 0.9		55.851 -3.124	2	
7 9 118 0.08	0.4 0.4 B A*B COALFIELD TYPE					3
EDI Z 045622.80	P 0IU24.39	S 2ED14.5H0.39M		1.0 200	9	
EDI NS0456	IU	ED12.8H0.23ML		1.0 200	9	
EDI EW0456	ID	EU 8.0H0.38ML		1.0 200	9	
EBL Z 045623.00	P 1ED24.71	S 3E				10
EAU Z 045624.91	P 2EU28.02	S 3E				21
ESY Z 045627.32	P 3E 31.70	S 3E				33
EBH Z 045630.02	P 2E 36.58	S 3E				50
-1						
080489N WALES+			5.0RITCHIELLLANELLI, DYFED			1
1654 8.91	250.51/ 210.73	3.1 1.3		51.775 -4.167	2	
14 70 246 0.14	1.0 1.8 C A*D NORTH OF LLANELLI					3
WLC Z 165431.55	P 3E 46.91	S 3				138
WLC NS1654		8.0 H0.1 ML		0.25 200	138	
WLC EW1654		7.5 H0.12ML		0.25 200	138	
YRH Z 165428.96	P 2E					122
WFB Z 165425.85	P 3E 37.22	S 3				101
YRE Z 165431.10	P 3E 46.90	S 2				135
WST Z 1654	46.12	S 2				134
HPK Z 120848.50	P 2E 54.90	S 2I				
HPK NS1208		07.0H0.20				1
MCH Z 165422.90	P 2E 32.56	S 2				84
MCH NS1654		17.5H0.05ML		0.25 200	84	
MCH EW1654		9.6 H0.06ML		0.25 200	84	
HCG Z 165420.9	P 1IU28.6	S 3				70
HGH Z 165424.92	P 3E					95
HTR Z 165420.82	P 3E					70
-1						
100489 NORTH SEA			5.0BS	NORTHERN NORTH SEA	1	
1143 8.59	648.35 1063.42	1.0 2.3		59.384 2.374	2	
14165 291 0.35	12.1 13.3 D D*D					3
SUE Z 114342.52	P 1I 66.00	S 3I				229
HYA Z 114350.13	P 1I 78.86	S 3E				290
ODD1Z 114344.71	P 1I 70.91	S 3E				247
KMY Z 114333.68	P 1E 52.94	S 3E				165
ASK Z 114338.74	P 1I 59.97	S 3E				200
BLS1Z 114345.74	P 1E 71.98	S 3E				253
FRO Z 114351.31	P 2E 81.50	S 3E				298
-1						
100489 LOWNET+	RO 082	25.0	5.0DWR	LROSEWELL, LOTHIAN	1	
191352.48	329.22/ 663.40	1.6 0.5		55.859 -3.131	2	
13 1 223 0.05	0.3 0.1 C A*D COALFIELD TYPE					3
RHC Z 191352.99	P 0IU53.36	S 2IU				1
RGH Z 191353.05	P 0IU53.56	S 2IU				1
RMM Z 191353.11	P 2E					2
RRD Z 191353.16	P 2E 53.61	S 2IU				2
RCA Z 191353.17	P 2E 53.69	S 3E	3.9H0.25M	1.0 4	2	
RCA NS1913	E	E	5.1H0.12M	1.0 4	2	
RCA EW1913	E	EU	6.2H0.14M	1.0 4	2	
RCH Z 191353.26	P 2ED53.62	S 3E	8.8H0.22M	1.0 4	2	
RCH NS1913	E	E	7.0H0.25M	1.0 4	2	
RCH EW1913	E	EU	6.9H0.24M	1.0 4	2	
EDI Z 191354.59	P 2ED55.97	S 2E	3.0H0.28M	1.0 200	8	
EDI NS1913	ED	EU	5.1H0.21ML	1.0 200	8	
EDI EW1913	EU	E	5.5H0.22ML	1.0 200	8	
EBL Z 191354.68	P 3E 55.97	S 3E				11
EAU Z 191356.71	P 2ED59.91	S 3E				20
EBH Z 191401.61	P 3E					49
-1						
110489 LOWNET+	RO 082	25.0	5.0DWR	LROSEWELL, LOTHIAN	1	
141154.40	329.45/ 663.34	0.9 0.6		55.858 -3.127	2	
10 1 255 0.03	0.2 0.3 C A*D COALFIELD TYPE					3
RHC Z 141154.77	P 1IU55.15	S 2ED				1
RGH Z 141154.87	P 1IU					1
RRD Z 141154.95	P 2E 55.44	S 2IU				2
RCA Z 141155.05	P 2E 55.52	S 3E	4.8H0.20M	1.0 4	2	
RCA NS1411	E	E	6.7H0.11M	1.0 4	2	
RCA EW1411	E	EU	7.5H0.13M	1.0 4	2	
RMM Z 141155.05	P 2EU					2
RCH Z 141155.09	P 2ED55.52	S 3E	9.8H0.20M	1.0 4	2	
RCH NS1411	E	E	8.5H0.25M	1.0 4	2	
RCH EW1411	E	EU	8.0H0.26M	1.0 4	2	

EDI Z 141156.40	P 2ED57.72	S 2E	3.7H0.30M	1.0	200	8
EDI EW1411	ED	EU	6.6H0.20ML	1.0	200	8
EDI NS1411	EU	E	7.4H0.22ML	1.0	200	8
EAU Z 141158.52	P 2E				21	
-1						
130489 LOWNET	LN 640	526	12.5	5.0DWR	LROSEWELL, LOTHIAN	1
5 319.46	328.84/	662.67	0.1 0.8		55.852	-3.137
7 9 121	0.12	0.4	0.5 B A*B COALFIELD TYPE			2
EDI Z 050321.60	P 1ID22.93	S 2E	5.3H0.28M	1.0	200	9
EDI NS0503	ID	EU	13.6H0.21ML	1.0	200	9
EDI EW0503	EU	E	9.3H0.21ML	1.0	200	9
EBL Z 050321.91	P 2ED23.05	S 3EU			11	
EAU Z 050323.79	P 1ID				20	
ESY Z 050326.14	P 2E				34	
EBH Z 050328.86	P 2E				50	
-1						
130489 LOWNET	LN 640	526	12.5	5.0DWR	LROSEWELL, LOTHIAN	1
5 433.11	330.89/	663.28	2.6-0.3		55.858	-3.104
5 9 193	0.02	0.4 44.9 D C*D COALFIELD TYPE				3
EDI Z 050435.11	P 1ED36.49	S 2E	2.5H0.29M	0.25	200	9
EDI NS0504	ED	EU	3.8H0.18ML	0.25	200	9
EDI EW0504	EU	E	4.0H0.22ML	0.25	200	9
EBL Z 050435.29	P 2E	36.87	S 3E		10	
EAU Z 050437.30	P 2ED				22	
-1						
130489 KEYWORTH+	KW 050		12.5	5.0JAR	LWICKERSLEY, S YORKSHIRE	1
20 823.04	449.15/	389.99	0.3 1.6		53.404	-1.261
8 24 159	0.38	2.8	4.3 C C*C COALFIELD TYPE			2
KBI Z 200827.72	P 2E				24	
KWE Z 200833.28	P 3E				58	
KSY Z 200835.00	P 3E				67	
HPK Z 200835.40	P 3E	43.00	S 3		66	
HPK NS2008			6.6H0.13ML	1.0	200	66
HPK EW2008			4.7H0.21ML	1.0	200	66
WVR Z 200851.29	P 3E				171	
WLC Z 200851.40	P 3E	72.35	S 3		174	
WLC NS2008			2.3H0.14ML	0.25	200	174
WLC EW2008			1.7H0.20ML	0.25	200	174
MCH Z 2008	P 4				196	
MCH NS2008			5.1H0.20ML	0.25	200	196
MCH EW2008			4.3H0.18ML	0.25	200	196
-1						
170489 LOWNET+	RO 083		25.0	5.0DWR	LROSEWELL, LOTHIAN	1
1031 5.00	329.43/	663.45	1.5 0.8		55.859	-3.128
17 1 106	0.09	0.4 0.2 B A*B COALFIELD TYPE				2
RHC Z 103105.51	P 0IU05.88	S 2ED			1	
RGH Z 103105.58	P 1IU06.06	S 2ED			1	
RRD Z 103105.69	P 3E	06.11	S 2EU		2	
RCA Z 103105.71	P 2EU06.27	S 3E	2.5H0.10M	2.5	4	2
RCA NS1031	E		2.8H0.11M	2.5	4	2
RCA EW1031	E		3.7H0.12M	2.5	4	2
RCH Z 103105.75	P 2E	06.13	S 3E	2.5	4	2
RCH NS1031	E		5.5H0.21M	2.5	4	2
RCH EW1031	E		5.5H0.19M	2.5	4	2
RMM Z 103105.78	P 2ED				2	
EDI Z 103107.10	P 0ID08.42	S 2E	6.5H0.30M	1.0	200	8
EDI NS1031	ID		10.5H0.22ML	1.0	200	8
EDI EW1031	IU		11.8H0.22ML	1.0	200	8
EBL Z 103107.40	P 2ED08.56	S 3E			11	
EAU Z 103109.28	P 0ID12.48	S 3E			21	
ESY Z 103111.62	P 3E				33	
EBH Z 103114.38	P 2EU20.89	S 3E			49	
-1						
170489 ESK	ES416		5.0BS	IRISH SEA		1
234214.97	279.40/	499.97	1.2 1.3		54.381	-3.857
7 28 319	0.10	5.2	3.5 D D*D			2
XDE Z 234220.30	P 1IU				28	
ECK Z 234232.20	P 2EU44.40	S 3E			101	
ESK Z 234233.81	P 3E	47.50	S 3E		112	
ESK NS2342			06.5H0.09ML	0.25	200	112
ESK EW2342			07.5H0.12ML	0.25	200	112
XAL Z 234234.80	P 2E	49.49	S 3E		119	
-1						
190489 LOWNET+	RO 084		25.0	5.0DWR	LROSEWELL, LOTHIAN	1
22 130.60	329.28/	663.52	1.7 0.5		55.860	-3.130
14 1 177	0.07	0.4 0.1 B A*C COALFIELD TYPE				2
RHC Z 220131.09	P 0IU31.44	S 2ED			1	
RGH Z 220131.15	P 0IU				1	
RCA Z 220131.28	P 2EU31.86	S 3E	4.4H0.19M	1.0	4	2
RCA NS2201	E		3.4H0.20M	1.0	4	2
RCA EW2201	ED		3.8H0.19M	1.0	4	2
RCH Z 220131.30	P 2EU31.83	S 3E	8.4H0.19M	1.0	4	2
RCH NS2201	E		8.8H0.20M	1.0	4	2

RCH EW2201	E	E	8.4H0.19M	1.0	4	2
RRD Z 220131.36	P 2EU					2
RMM Z 220131.37	P 1ID					2
EDI Z 220132.61	P 2ED34.10	S 2E	4.3H0.28M	1.0	200	8
EDI NS2201	ED	ED	7.4H0.18ML	1.0	200	8
EDI EW2201	EU	EU	5.8H0.21ML	1.0	200	8
EBL Z 220132.98	P 3E 34.60	S 3E				11
EAU Z 220134.80	P 2ED37.80	S 3E				20
EBH Z 220139.69	P 3E					49
-1						
200489 N WALES+	WF 195		5.0NSH	LYDNEY, GLOUCESTERSHIRE	1	
1159 7.40	360.42/ 204.63	2.7 2.1		51.738 -2.573	2	
11 20 232 0.46	4.1 3.6 D C*D					3
WLC Z 115933.95	P 3E 53.20	S E				162
WLC NS1159			06.5H0.48ML	0.25	200	162
WLC EW1159			07.0H0.40ML	0.25	200	162
YRH Z 115937.00	P 1ID					186
WVR Z 115930.40	P 2ID					137
WBR Z 115932.50	P 3E					154
WFB Z 115930.78	P 3E					145
MCH Z 115913.80	P 2E					41
MCH NS			23.2H0.25	0.25		41
MCH EW			22.0H0.38	0.25		41
HAE Z 115913.20	P 1I					33
HGH Z 115911.16	P 1I					20
HTR Z 115917.22	P 2E 24.38	S 2I				61
-1						
200489 N WALES+	WF 195		5.0NSH	LMOSSLEY, GTR MANCHESTER	1	
12 839.68	402.25/ 406.36	4.6 2.2		53.554 -1.966	2	
11 50 206 0.09	2.8 1.6 D C*D					3
WLC Z 120901.60	P 2E 17.68	S 2I				136
WLC NS1209			04.5H0.25ML	1.0	200	136
WLC EW1209			04.5H0.28ML	1.0	200	136
WVR Z 120902.30	P 2E 18.79	S 2E				138
WBR Z 120903.80	P 2ID21.38	S 2E				150
WST Z 120903.50	P 2ID					150
WFB Z 120906.35	P 3E 26.06	S 3E				169
HPK Z 120848.50	P 2E 54.90	S 2I				50
HPK NS1208			07.0H0.20	1.0		50
HPK EW1208			07.0H0.19	1.0		
-1						
210489 LOWNET+	RO 084	25.0	5.0DWR	LROSEWELL, LOTHIAN	1	
121545.71	329.50/ 663.46	1.7 0.7		55.859 -3.126	2	
16 1 233 0.10	0.5 0.2 C A*D COALFIELD TYPE					3
RHC Z 121546.22	P 1IU46.63	S 2EU				1
RGH Z 121546.29	P 0IU46.80	S 3E				2
RCA Z 121546.43	P 2EU47.01	S 3E	2.4H0.10M	2.5	4	2
RCA NS1215	E	EU	2.1H0.09M	2.5	4	2
RCA EW1215	E	E	3.3H0.10M	2.5	4	2
RRD Z 121546.45	P 2EU46.85	S 2EU				2
RCH Z 121546.50	P 2E 47.02	S 3E	5.5H0.18M	2.5	4	2
RCH NS1215	E	ED	4.5H0.15M	2.5	4	2
RCH EW1215	E	ED	4.6H0.18M	2.5	4	2
RMM Z 121546.51	P 2ED47.06	S 3E				2
EDI Z 121547.81	P 1ID49.11	S 2E	5.5H0.30M	1.0	200	8
EDI NS1215	ED	EU	8.5H0.22ML	1.0	200	8
EDI EW1215	EU	E	9.0H0.22ML	1.0	200	8
EAU Z 121549.95	P 1ID53.22	S 3E				21
EBH Z 121554.90	P 3E 61.60	S 3E				49
-1						
210489 KYLE+		5.0		LPOOLEWE, HIGHLAND	1	
223654.73	183.90/ 886.06	17.8 2.1		57.812 -5.638	2	
7 40 323 0.05	1.0 0.6 C B*D					3
KAC Z 223702.08	P 1IU07.04	S 2E				40
KPL Z 223703.88	P 1EU10.16	S 2E				53
KPL NS2237			12.5H0.10ML	02.5	200	53
KPL EW2237			10.0H0.14ML	02.5	200	53
KSB Z 223706.32	P 1EU13.80	S 2E				68
KAR Z 223710.80	P 3E 22.80	S 3E				100
MVH Z 223708.71	P 1EU18.30	S 3E				
MDO Z 223708.81	P 1EU					
MLA Z 223717.71	P 1ED34.50	S 3E				
MCD Z 223717.81	P 1E 34.41	S 3E				
MCD NS2237			08.0H0.10ML	01.0	200	
MCD EW2237			09.5H0.11ML	01.0	200	
MME Z 223719.20	P 1E 41.49	S 3E				
MFI Z 223726.70	P 1E					
-1						
220489 HEREFORD	HF 517		5.0NSH	LBEULAH, POWYS	1	
94158.39	291.21/ 253.01	5.6 0.6		52.164 -3.591	2	
6 18 231 0.05	1.3 0.8 C B*D					3
MCH Z 094206.30	P 1ID12.08	S 2I				45
MCH NS0942			04.5H0.10ML	0.25	200	45

MCH	EW0942				04.0H0.18ML		0.25	200	45
HCG	Z 094201.95	P II	04.61	S 2I					18
HTR	Z 094203.05	P II	06.20	S 2E					24
	-1								
230489	KEYWORTH+	KW 051		25.0	5.0JAR	LGA	INSBOROUGH, LINCS	1	
		214353.88	492.58/ 393.70	18.1 2.4		53.432	-0.606	2	
		9 46	212 0.15	1.3 1.3 C B*D EAST OF GAINSBOROUGH					3
KSY	Z 214403.05	P 1IU09.87		S 3					52
KBI	Z 214404.60	P 2EU13.03		S 3					65
KUF	Z 214408.35	P 3E							92
KWE	Z 214409.09	P 3E							95
BUR	Z 214402.15	P 2ED							46
HPK	Z 214408.22	P 1ID19.02		S 3					89
HPK	NS2144				14.7H0.19ML		1.0	200	89
HPK	EW2144				18.4H0.20ML		1.0	200	89
	-1								
240489	KEYWORTH+	KW 051		25.0	5.0JAR	LST	OKE-ON-TRENT, STAFFS	1	
		42450.59	387.89/ 347.31	5.2 1.4		53.023	-2.181	2	
		10 23	151 0.15	1.1 1.8 C B*C					3
KWE	Z 042454.97	P 2E 58.05		S 3					23
KBI	Z 042459.48	P 2E							51
WVR	Z 042466.81	P 3E							99
WLC	Z 042467.71	P 3E 80.76		S 3					107
WLC	NS0424				3.1H0.13ML		0.25	200	107
WLC	EW0424				4.1H0.12ML		0.25	200	107
WBR	Z 042469.83	P 3E							117
WFB	Z 042472.28	P 3E							131
YRH	Z 042477.17	P 3E							166
MCH	Z 042471.70	P 4 86.32		S 3					127
MCH	NS0424				9.7H0.21ML		0.25	200	127
MCH	EW0424				5.3H0.19ML		0.25	200	127
	-1								
240489	SHETLAND				5.0BS	RNORTHERN	NORTH SEA	1	
		195311.74	528.44 1094.88	5.8 2.0		59.720	0.284	2	
		8 91	331 0.10	2.3 2.4 C B*D					3
LRW	Z 195326.91	P 1EU37.50		S 3E					94
LRW	NS1953				4.5H0.09ML		2.5	200	94
LRW	EW1953				4.2H0.08ML		2.5	200	94
SAN	Z 195326.63	P 1ED37.20		S 3E					92
WAL	Z 195331.40	P 1E 45.00		S 3E					120
YEL	Z 195331.00	P 1E 44.90		S 3E					120
	-1								
250489	LOWNET+	RO 085		25.0	5.0DWR	LROSEWELL,	LOTHIAN	1	
		155225.55	329.39/ 663.38	0.6 0.7		55.858	-3.128	2	
		10 1	283 0.04	0.3 0.7 C A*D COALFIELD TYPE					3
RHC	Z 155225.90	P 1IU26.24		S 2ED					1
RGH	Z 155225.96	P 2EU26.35		S 3E					1
RCH	Z 155226.15	P 2E 26.65		S 3E 16.6H0.20M			1.0	4	2
RCH	NS1552	E		E 15.1H0.22M			1.0	4	2
RCH	EW1552	E		E 12.2H0.25M			1.0	4	2
RRD	Z 155226.19	P 3E 26.52		S 2E					2
RCA	Z 155226.25	P 3E 26.70		S 2E					2
RCA	NS1552	E		EU 5.3H0.13M			1.0	4	2
RCA	EW1552	E		E 5.1H0.19M			1.0	4	2
EDI	Z 155227.50	P 1ID28.95		S 2E 5.5H0.29M			1.0	200	8
EDI	NS1552	ED		ED 9.6H0.22ML			1.0	200	8
EDI	EW1552	E		EU 8.1H0.22ML			1.0	200	8
EAU	Z 155229.64	P 1ID32.89		S 3E					21
EBH	Z 155234.78	P 3E							49
	-1								
250489	KYLE+				5.0	LULLAPOOL,	HIGHLAND	1	
		204346.79	211.04/ 899.92	2.0 1.4		57.949	-5.193	2	
		13 50	228 0.22	1.8 1.7 C B*D					3
KAC	Z 204354.92	P 2E 60.44		S 2E					50
KSB	Z 204362.12	P 4E 69.80		S 3E					83
KAR	Z 204367.20	P 3E							121
KPL	NS204359.00	P 3E		05.0H0.14ML			0.25	200	73
KPL	EW204359.00	P 3E		05.5H0.16ML			0.25	200	73
KPL	Z 204359.00	P 3E							73
MVH	Z 204356.40	P 1EU							60
MDO	Z 204358.90	P 1EU							75
MLA	Z 204405.41	P 2E 18.20		S 3E					115
MCD	Z 204406.60	P 1EU20.92		S 3E					122
MCD	NS2044				03.0H0.18ML		01.0	200	122
MCD	EW2044				03.0H0.10ML		01.0	200	122
MME	Z 204410.50	P 2E 28.30		S 3E					151
	-1								
260489	LOWNET+	RO 085		25.0	5.0DWR	LROSEWELL,	LOTHIAN	1	
		1 840.23	329.94/ 663.37	0.6 0.5		55.858	-3.119	2	
		10 1	302 0.02	0.7 1.2 C A*D COALFIELD TYPE					3
RHC	Z 010840.73	P 1IU41.13		S 1IU					2
RGH	Z 010840.80	P 1IU41.30		S 2EU					2
RRD	Z 010840.86	P 3E 41.36		S 2EU					2

RCH Z 010841.04	P 2ED41.52	S 3E	8.0H0.22M	1.0	4	3
RCH NS0108	E	EU	8.9H0.19M	1.0	4	3
RCH EW0108	E	E	7.4H0.25M	1.0	4	3
RCA Z 010841.06	P 3E 41.57	S 3E	4.7H0.19M	1.0	4	3
RCA NS0108	E	EU	6.6H0.10M	1.0	4	3
RCA EW0108	E	E	4.0H0.16M	1.0	4	3
EDI Z 010842.39	P 1ID43.81	S 2E	4.0H0.29M	1.0	200	8
EDI NS0108	ID	ED	5.6H0.20ML	1.0	200	8
EDI EW0108	EU	E	5.0H0.23ML	1.0	200	8
EBL Z 010842.60	P 2E 44.41	S 3EU			11	
EAU Z 010844.52	P 1ID47.60	S 3E			21	
-1						
270489 LOWNET+	RO 085	25.0	5.0DWR	LROSEWELL,LOTHIAN	1	
194727.15	329.71/ 663.43	1.1 0.6		55.859 -3.123	2	
10 1 297 0.01	0.1 0.2 C A*D COALFIELD TYPE				3	
RHC Z 194727.65	P 0IU28.00	S 2ED			1	
RGH Z 194727.71	P 0IU28.22	S 2EU			2	
RRD Z 194727.80	P 2E 28.28	S 2EU			2	
RCH Z 194727.86	P 2EU28.40	S 3E 15.0H0.20M		1.0	4	2
RCH NS1947	E	ED13.3H0.22M		1.0	4	2
RCH EW1947	E	EU11.8H0.24M		1.0	4	2
RCA Z 194727.87	P 2EU28.46	S 2ED 6.7H0.17M		1.0	4	2
RCA NS1947	E	EU 5.5H0.12M		1.0	4	2
RCA EW1947	E	EU 5.0H0.18M		1.0	4	2
EDI Z 194729.22	P 0ID30.70	S 2E 5.1H0.28M		1.0	200	8
EDI NS1947	ID	ED 8.6H0.22ML		1.0	200	8
EDI EW1947	EU	EU 7.5H0.22ML		1.0	200	8
EBL Z 194729.50	P 3E 30.70	S 3E			11	
EAU Z 194731.39	P 1ID34.70	S 3E			21	
EBH Z 194736.50	P 3E 42.90	S 3E			50	
-1						
280489 PAISLEY+	PA 258	12.5	5.0DWR	LSTRATHBLANE,CENTRAL	1	
32127.57	250.92/ 677.81	3.3 0.4		55.970 -4.389	2	
9 18 129 0.13	0.5 18.4 C C*C				3	
PCO Z 032131.18	P 0IU33.71	S 3E			18	
PGB Z 032131.18	P 2E 33.82	S 2E 3.5H0.12M		0.25	200	19
PGB NS0321	E	EU21.5H0.11ML		0.25	200	19
PGB EW0321	E	ED13.6H0.19ML		0.25	200	19
PMS Z 032132.50	P 2EU36.00	S 3E			26	
EAB Z 032132.50	P 2E 35.33	S 2E 4.3H0.10M		0.25	200	25
PCA Z 032133.30	P 3E				31	
EBH Z 032138.59	P 3E 45.76	S 2E 3.1H0.15M		0.25	200	63
-1						
300489 LOWNET	LN 642 1735	12.5	5.0DWR	LTYNDRUM,CENTRAL	1	
165213.69	231.77/ 727.61	8.5 1.5		56.411 -4.727	2	
11 34 263 0.39	3.9 42.0 D C*D				3	
EAB Z 165219.89	P 2E 24.22	S 3E			35	
ELO Z 165223.31	P 3E 32.25	S 3E			63	
PCO Z 165224.30	P 2EU				61	
PMS Z 165224.49	P 2EU31.67	S 2ED 3.5H0.10M		0.25	200	63
PGB Z 165226.07	P 2ED33.33	2E			69	
PGB NS1652	E	ED 3.0H0.11M		0.25	200	69
EBH Z 165226.31	P 3E 36.79	S 3E			78	
EDI Z 165228.5	P 4E 45.71	S 2E 3.1H0.18M		0.25	200	110
EDI NS1652	E	E 5.8H0.20ML		0.25	200	110
EDI EW1652	E	E 3.2H0.30ML		0.25	200	110
PCA Z 165229.87	P 1ED				84	
EDU Z 165231.50	P 3E 44.30	S 3E			107	
-1						
010589 LOWNET+	LN 642		5.0DWR	LARDLUI,STRATHCLYDE	1	
32231.29	232.82/ 717.02	18.2 1.0		56.316 -4.703	2	
5 27 300 0.08	2.7 2.1 D C*D				3	
EAB Z 032236.78	PG2E 40.72	SG3E			27	
ELO Z 032241.25	P 2E 48.70	S 3E			64	
PGB Z 032241.51	P 1ED50.35	S 2E			58	
PGB NS0322		2E 4.5H0.07ML		0.25	200	58
PGB EW0322		2E 3.5H0.06ML		0.25	200	58
EBH Z 032242.40	P 2E 51.46	S 3E			74	
PCA Z 032246.11	P 1ED				74	
PMS Z 032240.35	P 2ED				52	
PCO Z 032240.40	P 2EU				53	
EAU Z 032247.90	P 4E 60.92	S 3E			94	
EDU Z 032248.37	P 3E 61.93	S 3E			107	
EDI Z 032248.75	P 3E 62.78	S 3E 3.2H0.19M		0.25	200	104
EDI NS0322		E 5.8H0.15ML		0.25	200	104
EDI EW0322		E 5.8H0.22ML		0.25	200	104
-1						
020589 CORNWALL		5.0		LLANDS END,CORNWALL	1	
93940.53	12.61/-214.17	5.0 2.6		47.856 -7.180	2	
8281 353 0.09	11.8 6.9 D D*D 280 KM SW OF LANDS END				3	
CPZ Z 094021.39	P 1E				281	
CGH Z 094022.09	P 2E				285	
CCO Z 094022.68	P 1E				292	

CCA Z 094023.06	P 1E					296
CBW Z 094023.15	P 1E					296
CR2 Z 094023.16	P 1E 54.28	S 2				296
CR2 NS0940		11.5H0.04ML		1.0	200	296
CR2 EW0940		9.4H0.05ML		1.0	200	296
CST Z 094023.40	P 1E					299
-1						
020589KEYWORTH+	KW 052	25.0	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1	
122740.71	387.33/ 348.33	3.9 2.0		53.032	-2.189	2
16 23 153 0.14	0.8 1.5 B A*C					3
KWE Z 122745.19	P 2ED48.22	S 3				23
KBI Z 122749.69	P 2EU					51
KSY Z 122760.32	P 4E					108
HLM Z 122753.00	P 3E					74
HAE Z 122760.10	P 3E					113
MCH Z 122761.81	P 3E 76.58	S 3				128
MCH NS1227		9.1H0.19ML		1.0	200	128
MCH EW1227		9.0H0.15ML		1.0	200	128
HTR Z 122762.08	P 3E					129
HCG Z 122762.13	P 3E					127
WVR Z 122757.05	P 3E					99
WLC Z 122758.30	P 2ED70.91	S 3				107
WLC NS1227		4.5H0.10ML		1.0	200	107
WLC EW1227		6.0H0.13ML		1.0	200	107
WBR Z 122759.90	P 2EU					116
WST Z 122760.60	P 3E					121
WFB Z 122761.90	P 3E					130
YRH Z 122767.25	P 3E					166
-1						
020589KEYWORTH+	KW 052	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1	
143154.69	387.68/ 347.84	6.3 1.6		53.027	-2.184	2
10 23 152 0.08	0.5 0.8 B A*C					3
KWE Z 143159.09	P 3E					23
KBI Z 143163.50	P 3E					51
MCH Z 143176.87	P 4 90.41	S 3				127
MCH NS1431		11.0H0.19ML		0.25	200	127
MCH EW1431		11.5H0.17ML		0.25	200	127
WVR Z 143171.12	P 3E					99
WLC Z 143172.44	P 3E 84.85	S 3				107
WLC NS1431		5.5H0.10ML		0.25	200	107
WLC EW1431		7.0H0.15ML		0.25	200	107
WBR Z 143173.69	P 3E					117
WST Z 143174.42	P 3E					121
WFB Z 143175.68	P 3E					131
YRH Z 143181.18	P 3E					166
-1						
020589KEYWORTH+	KW 052	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1	
174237.42	387.14/ 350.25	2.4 1.6		53.049	-2.192	2
14 24 156 0.24	1.1 1.1 C B*C					3
KWE Z 174241.91	P 3E 45.03	S 3				24
KBI Z 174246.46	P 3E					50
HLM Z 174251.10	P 4E					76
MCH Z 174259.24	P 3E 73.40	S 3				129
MCH NS1742		14.9H0.14ML		0.25	200	129
MCH EW1742		14.4H0.15ML		0.25	200	129
HAE Z 174257.24	P 3E					115
HCG Z 174259.16	P 3E					128
HTR Z 174259.24	P 3E					130
WVR Z 174253.98	P 3E					99
WLC Z 174255.04	P 3E 67.85	S 3				107
WLC NS1742		8.1H0.11ML		0.25	200	107
WLC EW1742		8.6H0.12ML		0.25	200	107
WBR Z 174256.60	P 3E					116
WFB Z 174258.71	P 3E					131
YRH Z 174264.14	P 3E					166
-1						
030589LOWNET	LN 643		5.0GAM	BLAIRHALL, FIFE		1
134635.90	298.44/ 691.77	0.5 1.3		56.108	-3.633	2
4 17 227 0.00	0.0 0.0 C A*D COALFIELD TYPE					3
EBH Z 134639.69	P 1E					17
EAU Z 134642.06	P 2E					31
EDI Z 134642.61	P 0ID47.51	S 2				35
EDI NS1346		S 2 10.4H0.18ML		0.25	200	35
EDI EW1346		S 2 11.8H1.25ML		0.25	200	35
ELO Z 134643.80	P 1ID49.60	S 2				41
-1						
030589HEREFORD	HF 518		5.0NSH	BRECON, POWYS		1
153322.50	290.91/ 232.96	16.1 1.2		51.984	-3.589	2
5 24 265 0.04	1.8 0.8 C B*D					3
MCH Z 153329.80	P 1I 35.15	S 1I				41
MCH NS1533		07.0H0.08ML		1	200	41
MCH EW1533		11.5H0.08ML		1	200	41
HCG Z 153329.42	P 1ID					38

HTR Z 153327.56	P 1IU					24
HLM Z 153335.20	P 2E					76
-1						
030589LOWNET+	LN643					1
233641.54	331.61/ 663.11	1.0 0.2	5.0GAM	LROSEWELL, LOTHIAN	55.856 -3.093	2
7 3 303 0.05	1.1 1.3 C B*D COALFIELD TYPE					3
RHC Z 233642.36	P 0IU					3
RGH Z 233642.43	P 0IU					4
RCA Z 233642.60	P 2E 43.36	S 3				4
RCA NS2336		3	7.6H0.07M		1.0 200	4
RCA EW2336		3	5.5H0.09M		1.0 200	4
RCH Z 233642.67	P 1E 43.37	S 2				4
RCH NS2336	43.37	S 2	13.2H0.09M		1.0 200	4
RCH EW2336		2	11.8H0.07M		1.0 200	4
EDI Z 233644.93	P 0ID46.44	S 2				10
EDI NS2336		2	9.1H0.07ML		1.0 200	10
EDI EW2336		2	8.6H0.07ML		1.0 200	10
EBL Z 233645.40	P 2E 47.07	S 3				10
EAU Z 233647.10	P 1ID					23
-1						
040589N WALES			5.0RITCHIELLLEYN, GWYNEDD			1
14 7 0.81	239.48/ 342.72	21.1 1.0		52.	-4.390	2
15 4 176 0.15	0.8 1.5 B A*C LLEYN AFTERSHOCK					3
WLC Z 14078.3	P 1I 13.54	S 2				41
WLC NS1407			5.4 H0.15ML		1.0 200	41
WLC EW1407			1.9 H0.10ML		1.0 200	41
WBR Z 14077.35	2E 11.97	S 2				35
WST Z 14076.52	P 1IU10.26	S 3				27
WFB Z 14077.85	P 3E 12.85	S 3				39
YRC Z 14077.32	P 2E 12.0	S 2				35
YRE Z 14074.36	P 2E					4
WLF Z 14078.10	P 1ID12.2	S 2				37
YLL Z 14075.97	P 1IU9.75	S 2				25
-1						
040589LOWNET+	LN643		5.0GAM	LROSEWELL, LOTHIAN	55.860 -3.121	1
18 628.10	329.82/ 663.50	1.4 0.1				2
9 1 282 0.06	0.9 0.5 C A*D COALFIELD TYPE					3
RHC Z 180628.58	P 0IU28.94	S 3				1
RGH Z 180628.54	P 0IU29.11	S 2				2
RCH Z 180628.84	P 1IU29.22	S 2				2
RCH NS1806		2	8.2H0.06M		1.0 200	2
RCH EW1806		2	7.7H0.09M		1.0 200	2
RCA Z 180628.89	P 1IU	2				2
RCA NS1806		2	5.5H0.07M		1.0 200	2
RCA EW1806		2	4.0H0.08M		1.0 200	2
EDI Z 180630.16	P 0ID31.67	S 2				8
EDI NS1806		2	5.1H0.09ML		1.0 200	8
EDI EW1806		2	4.9H0.09ML		1.0 200	8
EBL Z 180630.49	P 2E 32.28	S 3				11
EAU Z 180632.42	P 1ID					21
-1						
070589KEYWORTH+	KW 053	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1	
2316 1.15	386.84/ 348.65	3.2 2.0		53.035 -2.196		2
17 24 154 0.18	0.9 2.0 C B*C					3
KWE Z 231605.67	P 2ED08.72	S 3E				24
KBI Z 231610.16	P 2EU					51
KSY Z 231619.52	P 3E					108
KUF Z 231623.06	P 3E					130
HLM Z 231613.45	P 3E					74
MCH Z 231622.31	P 3E 37.10	S 2				128
MCH NS2316			7.0H0.11ML		1.0 200	128
MCH EW2316			5.5H0.13ML		1.0 200	128
HCG Z 231622.50	P 3E					127
HTR Z 231623.04	P 4E					129
HGH Z 231627.88	P 3E					161
WVR Z 231617.70	P 2ED29.35	S 3				98
WLC Z 231618.75	P 2EU31.46	S 3				106
WLC NS2316			3.6H0.11ML		1.0 200	106
WLC EW2316			4.4H0.12ML		1.0 200	106
WBR Z 231620.38	P 3E					116
WST Z 231620.98	P 3E					121
WFB Z 231622.41	P 2ED37.58	S 4				130
YRH Z 231627.71	P 2ED					165
HPK Z 231620.90	P 4 32.62	S 4				109
HPK NS2316			10.0H0.16ML		1.0 200	109
HPK EW2316			10.0H0.15ML		1.0 200	109
-1						
070589KEYWORTH+	KW 053	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS	1	
231742.85	386.76/ 347.30	2.3 1.8		53.022 -2.197		2
14 24 112 0.19	0.6 0.9 C B*C					3
KWE Z 231747.25	P 2EU50.46	S 3E				24
KBI Z 231751.90	P 2EU					52
KSY Z 231761.37	P 3E					108

KUF Z 231764.79	P 3E					130
MCH Z 231765.25	P 4 78.88	S 3				126
MCH NS2317			3.9H0.18ML		1.0 200	126
MCH EW2317			3.7H0.14ML		1.0 200	126
WVR Z 231759.40	P 3E					98
WLC Z 231760.50	P 3E 73.20	S 2				106
WLC NS2317			8.9H0.10ML		0.25 200	106
WLC EW2317			9.9H0.12ML		0.25 200	106
WBR Z 231762.09	P 3E					116
WST Z 231763.39	P 3E					120
WFB Z 231764.12	P 3E					130
YRH Z 231769.44	P 3E					165
HPK Z 231762.42	P 4 74.68	S 3				111
HPK NS2317			6.0H0.14ML		1.0 200	111
HPK EW2317			8.4H0.13ML		1.0 200	111
-1						
080589 HEREFORD+	HF 519		5.0NSH	LL'DRINDOD WELLS, POWYS1		
6 053.53	310.29/ 256.98	9.1 1.7		52.203	-3.313	2
13 14 153 0.13	1.3 3.8 C B*C					3
MCH Z 060059.20	P 1ID63.41	S 1I				31
MCH NS0600			18.5H0.11ML		2.5 200	31
MCH EW0600			13.0H0.10ML		2.5 200	31
HCG Z 060058.54	P 1ID62.20	S 1I				27
HGH Z 060065.58	P 3E					72
HTR Z 060056.60	P 1ID					14
WLC Z 060109.2	P 4 19.99	S 3				94
WLC NS			06.0H0.13		0.25	94
WLC EW			04.2H0.15		0.25	94
WVR Z 060105.5	P 3E 13.45	S 3				69
WBR Z 060107.64	P 2E 17.03	S 3				83
WFB Z 060105.82	P 2E 13.9	S 2				73
-1						
100589 KEYWORTH+	KW 053	12.5	5.0JAR	L STOKE-ON-TRENT, STAFFS 1		
1645 7.45	387.90/ 347.52	2.5 1.6		53.025	-2.180	2
9 23 151 0.06	0.4 0.9 B A*C					3
KWE Z 164511.78	P 3E					23
KBI Z 164516.50	P 3E					51
MCH Z 164528.05	P 4 43.58	S 3				127
MCH NS1645			12.0H0.20ML		0.25 200	127
MCH EW1645			12.1H0.17ML		0.25 200	127
WVR Z 164524.12	P 3E					99
WLC Z 164525.34	P 3E 37.77	S 3				107
WLC NS1645			5.5H0.15ML		0.25 200	107
WLC EW1645			6.0H0.12ML		0.25 200	107
WBR Z 164526.64	P 3E					117
WFB Z 164528.79	P 3E					131
YRH Z 164534.13	P 3E					166
-1						
100589 KEYWORTH+	KW 053	12.5	5.0JAR	L LEEK, STAFFORDSHIRE	1	
183442.98	395.89/ 357.47	25.2 1.5		53.114	-2.061	2
8 18 163 0.15	1.6 1.5 C B*C					3
KWE Z 183448.13	P 2EU					18
KBI Z 183450.41	P 2IU					39
MCH Z 183464.07	P 4 79.70	S 2E				140
MCH NS1834			11.0H0.17ML		0.25 200	140
MCH EW1834			8.4H0.11ML		0.25 200	140
WVR Z 183460.20	P 3E					110
WLC Z 183461.50	P 3E 74.08	S 3E				116
WLC NS1834			4.2H0.18ML		0.25 200	116
WLC EW1834			4.3H0.12ML		0.25 200	116
WBR Z 183462.71	P 3E					126
WFB Z 183465.00	P 3E					141
YRH Z 183470.32	P 3E					175
-1						
110589 LOWNET+	LN 644		5.0GAM	L ROSEWELL, LOTHIAN	1	
129 2.98	329.82/ 663.25	1.2 0.0		55.857	-3.121	2
9 1 246 0.06	0.6 1.0 C A*D COALFIELD TYPE					3
RHC Z 01290339	P 0IU					1
RGH Z 01290345	P 0IU					2
RRD Z 012903.57	P 0ID04.02	S 3				2
RCA Z 012903.59	P 1E 04.17	S 2				2
RCA NS0129		2	5.6H0.07M		1.0 4	2
RCA EW0129		2	5.2H0.07M		1.0 4	2
RMM Z 012903.68	P 1IU					2
EDI Z 012905.17	P 0ID06.66	S 2				8
EDI NS0129		2	5.9H0.08ML		1.0 200	8
EDI EW0129		2	4.9H0.08ML		1.0 200	8
EBL Z 012905.50	P 2E					11
EAU Z 012907.37	P 1ID10.57	S 3				21
-1						
110589 CORNWALL		5.0	LLIZARD POINT, CORNWALL	1		
31914.99	105.58/ -45.48	34.5 0.9		49.419	-6.060	2
8101 357 0.19	21.5258.7 D D*D SOUTHWEST OF	LIZARD POINT				3

CCO Z 031931.25	P 2E 42.27	S 2			101
CR2 Z 0319	43.05	S 2			105
CR2 NS0319		5.9 H0.05ML	0.25 200	105	
CR2 EW0319		6.1 H0.07ML	0.25 200	105	
CCA Z 0319	43.10	S 2			104
CST Z 031931.46	P 2E 44.05	S 2			108
CTR Z 0319	43.16	S 2			105
CRA Z 0319	43.50	S 2			104
-1					
120589NORTH SEA		5.0BS	RNORTHERN NORTH SEA	1	
192626.22	632.48 1103.27	15.0 2.3	59.750 2.139	2	
10186 296 0.81	34.2 44.6 D D*D			3	
SUE Z 192654.90	P 1E 77.20	S 3E		205	
HYA Z 192704.00	P 1E 34.20	S 3E		273	
ODD1Z 192702.00	P 1E 27.00	S 3E		253	
KMY Z 192653.70	P 1E 70.70	S 3E		186	
ASK Z 192653.50	P 1E 75.90	S 3E		189	
-1					
130589LOWNET+	LN 644	5.0GAM	LROSEWELL,LOTHIAN	1	
12927.22	330.32/ 663.70	1.1 0.0	55.861 -3.113	2	
9 2 253 0.03	0.4 1.0 C A*D COALFIELD TYPE			3	
RHC Z 012927.76	P 0IU			2	
RGH Z 012927.83	P 0IU			2	
RRD Z 012927.93	P 1E			3	
RCA Z 012928.02	P 1E 28.62	S 2		3	
RCA NS0129		2	6.0H0.07M	1.0 200	3
RCA EW0129		2	5.6H0.07M	1.0 200	3
RCH Z 012928.05	P 1ID28.50	S 2		3	
RCH NS0129		2	8.0H0.07M	1.0 200	3
RCH EW0129		2	6.7H0.09M	1.0 200	3
EDI Z 012929.28	P 0IU30.87	S 2		8	
EDI NS0129		2	6.3H0.08ML	1.0 200	8
EDI EW0129		2	5.1H0.06ML	1.0 200	8
EAU Z 012931.50	P 1ID			21	
-1					
130589LOWNET+	LN 644	5.0GAM	LARDNAMURCHAN,HIGHLAND	1	
31041.71	157.12/ 774.72	1.5 0.7	56.801 -5.979	2	
4 16 343 0.52	0.0 0.0 D D*D			3	
EAB Z 031069.53	P 2E			122	
KAR Z 031044.57	P 1ID47.96	S 3		16	
KPL Z 031053.43	P 1ID60.44	S 3		63	
KPL NS0310		3	4.2H0.09ML	0.25 200	63
KPL EW0310		3	4.4H0.09ML	0.25 200	63
-1					
150589HEREFORD+	HF 520	5.0NSH	LLAMPETER,DYFED	1	
125559.73	261.49/ 247.83	0.1 1.0	52.111 -4.023	2	
11 34 211 0.14	0.9 1.0 C A*D			3	
MCH Z 125612.32	P 2E 21.74	S 2		71	
MCH NS1256		06.6H0.11ML	0.25 200	71	
MCH EW1256		06.5H0.10	0.25	71	
HCG Z 125606.22	P 1I 11.48	S 1		34	
HGH Z 125616.93	P 2E			99	
HTR Z 125609.38	P 3E			52	
YRH Z 125615.35	P 2I			90	
WBR Z 125614.38	P 3E			83	
WST Z 125616.38	P 3E 28.57	S 2E		96	
WFB Z 125611.05	P 3E			64	
-1					
150589ESK+	ES420	5.0BS	LRENFREW,STRATHCLYDE	1	
132117.52	250.64/ 677.67	3.6 1.6	55.969 -4.393	2	
10 18 130 0.08	0.4 2.8 C B*C			3	
ESK Z 132135.01	P 1ED47.80	S 3E		104	
ESK NS1321		06.0H0.09ML	01.0 200	104	
ESK NS1321		07.5H0.10ML	01.0 200	104	
ECK Z 132137.41	P 2E 51.40	S 3E		119	
XDE Z 132145.50	P 3E			173	
EAB Z 132122.26	P 0IU25.40	S 2		25	
EBH Z 132128.44	P 1ID36.11	S 3		64	
ELO Z 132129.90	P 1E 37.93	S 3		70	
EDI Z 132132.82	P 2E 40.42	S 3		77	
EDI NS1321		S 3	5.3H0.06ML	1.0 200	77
EDI EW1321		S 3	4.7H0.07ML	1.0 200	77
EDU Z 132135.66	P 1E			107	
ESY Z 132137.52	P 1E			113	
PGB Z 132121.15	P 0IU23.63	S 2			
PCO Z 132121.16	P 0IU23.81	S 3			
PMS Z 132122.40	P 0IU25.90	S 3			
-1					
150589N WALES		5.0RITCHIELBARMOUTH, Gwynedd	1		
194528.73	264.74/ 311.76	9.8 0.6	52.686 -4.001	2	
13 2 196 0.08	0.5 0.7 C A*D			3	
WLC Z 194535.19	P 1IU39.59	S 2		38	
WLC NS1945		9.0 H0.11ML	0.25 200	38	

WLC	EW1945			7.3	H0.09ML	0.25	200	38
YRH	Z 194536.52	P 1IU41.80	S 1					45
WVR	Z 194534.0	P 2E 37.58	S 2					30
WBR	Z 194532.56	P 1IU35.20	S 1					20
WST	Z 194534.44	P 1ID38.19	S 3					32
WFB	Z 194530.40	P 2E						3
YRE	Z 194536.40	P 3E						44
WPM	Z 194539.28	P 3E						64
	-1							
150589	KEYWORTH KW 054		12.5	5.0JAR	LOADBY, LEICESTER	1		
	233452.80	465.96/ 297.96	2.4 1.5		52.575 -1.027	2		
6	26 228 0.17	1.2 1.2 C B*D				3		
CWF	Z 233457.98	P 2 61.01	S 2					26
KUF	Z 233460.62	P 1IU						43
KSY	Z 233462.18	P 2ID						53
KWE	Z 233466.10	P 3E		6.5H0.30ML	0.25 200	74		
KBI	Z 233467.27	P 3E						83
	-1							
160589	ESK ES420			5.0BS	LCARRONBRIDGE, DUMFRIES	1		
	5 731.46	308.07/ 592.61	4.1 0.3		55.219 -3.445	2		
6	19 298 0.09	1.8 1.9 C B*D				3		
ESK	Z 050735.09	P 1IU37.60	S 3E					19
ESK NS0507				05.5H0.10ML	01.0 200	19		
ESK EW0507				05.0H0.07ML	01.0 200	19		
ECK	Z 050735.49	P 1EU38.40	S 3E					21
XSO	Z 050745.30	P 2E						82
XAL	Z 050746.10	P 2E						88
	-1							
190589	HEREFORD HF 521			5.0NSH	LUDLOW, HEREFORD	1		
	153315.67	344.04/ 269.40	17.7 1.1		52.319 -2.821	2		
9	22 161 0.24	1.4 3.9 C B*C				3		
MCH	Z 153322.90	P 3E 27.70	S 2I					38
MCH NS1533				08.0H0.18ML	0.25 200	38		
MCH EW1533				15.0H0.30ML	0.25 200	38		
HAE	Z 153322.46	P 2I 27.48	S 2E					37
HCG	Z 153326.28	P 2I 32.45	S 2E					57
HTR	Z 153322.89	P 3E						41
HLM	Z 153320.40	P 2I 24.08	S 1I					22
	-1							
230589	ESK+ ES421			5.0BS	LTRAQUAIR, BORDERS	1		
	1518 9.32	334.78/ 632.70	5.7 1.6		55.584 -3.035	2		
11	21 118 0.10	0.6 0.7 B A*C				3		
ESK	Z 151815.10	P 1IU18.72	S 3E					32
ESK NS1518				02.8H0.09ML	10.0 200	32		
ESK EW1518				05.0H0.09ML	10.0 200	32		
ECK	Z 151817.41	P 1ED22.50	S 3E					45
XSO	Z 151818.31	P 2EU24.31	S 3E					51
XAL	Z 151826.00	P 1ED						96
XDE	Z 151830.21	P 2E						124
EBL	Z 151813.51	P 0ID16.28	S 2					21
EAU	Z 151816.40	P 0ID						39
EDI	Z 151816.35	P 1ID21.36	S 2					39
EDI NS1518				2 7.6H0.08ML	2.5 200	39		
EDI EW1518				2 7.4H0.08ML	2.5 200	39		
ESY	Z 151817.27	P 1IU						46
	-1							
270589	N WALES+ LN 646			5.0RITCHIELCAERNARVON	BAY, GWYNEDD	1		
	1416 0.86	235.56/ 351.63	10.2 1.4		53.036 -4.453	2		
24	6 97 0.22	0.6 1.0 B B*B				3		
WCB	Z 14167.55	P 2IU11.9	S 3					39
WCB NS1416				5.6 H0.06ML	1.0 200	39		
WCB EW1416				6.1 H0.08ML	1.0 200	39		
YRC	Z 14165.5	P 1IU8.69	S 3					25
YRE	Z 14163.11	P 1ID						6
WPM	Z 14168.41	P 2IU						44
WLF	Z 14165.9	P 1IU						28
WME	Z 14167.8	P 1IU12.82	S 2					41
YLL	Z 14165.06	P 1IU8.03	S 2					22
WLC	Z 14169.30	P 3E 14.25	S 2					46
WLC NS1416				10.0H0.15ML	2.5 200	46		
WLC EW1416				8.0 H0.11ML	2.5 200	46		
YRH	Z 14165.4	P 1IU						26
WVR	Z 141611.25	P 2E 18.61	S 2					63
WBR	Z 14168.1	P 1ID12.80	S 3					43
WST	Z 14166.45	P 2E						32
WFB	Z 14169.04	P 2E 14.79	S 2					48
ECP	Z 141626.0	P 3E 44.60	S 3					161
ECB	Z 141627.9	P 3E 48.20	S 3					174
	-1							
280589	LOWNET+ LN 646			5.0GAM	LINVERGARRY, HIGHLAND	1		
	3 619.45	241.41/ 799.13	7.3 0.9		57.056 -4.615	2		
10	45 210 0.53	3.3 7.0 D D*D				3		
ELO	Z 030633.54	P 1ID43.61	S 3	8.7H0.08M	0.25 200	85		

EAB Z 030636.11	P 2E 46.72	S 3	5.9H0.06M	0.25 200	98
EBH Z 030638.10	P 2ID50.89	S 3	3.7H0.08M	0.25 200	113
MDO Z 030626.89	P 3E 32.40	S 2		46	
MCD Z 030636.80	P 3E 48.59	S 3		101	
MCD NS0306			2.9H0.11ML	0.25 200	101
MCD EW0306			3.5H0.09ML	0.25 200	101
-1					
310589ESK+ ES422			5.0BS	LSEDBERGH, CUMBRIA	1
61718.92 371.11/ 492.52	6.9 1.9		54.327 -2.444		2
9 61 159 0.10 0.8	2.0 C B*D				3
XAL Z 061729.20	P 1E			61	
XDE Z 061730.70	P 1ED39.50	S 3E		71	
ECK Z 061736.51	P 1EU48.60	S 3E		105	
ESK Z 061739.19	P 2EU52.71	S 3E		121	
ESK NS0617			04.8H0.09ML	01.0 200	121
ESK EW0617			05.8H0.17ML	01.0 200	121
XSO Z 061740.80	P 2E 55.89	S 3E		130	
WLC Z 061746.01	P 3E 64.10	S 2E		172	
WLC NS0617			10.5H0.20	0.25	172
WLC EW0617			09.5H0.10		172
WVR Z 061747.08	P 3E			187	
WBR Z 061747.38	P 2E			190	
WST Z 061746.42	P 3E			182	
EBL Z 061746.12	P 1IU65.08	S 3			
EAU Z 061748.50	P 2E 67.88	S 3			
ESY Z 061748.50	P 2E 68.21	S 3			
EDI Z 061752.10	P 4 70.11	S 3			
EDI NS0617		3	6.7H0.07ML	0.25 200	
EDI EW0617		3	3.8H0.07ML	0.25 200	
HPK Z 061730.38	P 0ID38.56	S 2			
HPK NS0617		2	7.0H0.09ML	2.5 200	
-1					
310589KEYWORTH KW 056		12.5	5.0JAR	LRAINWORTH, NOTTS	1
185914.60 461.66/ 358.42	0.1 0.7		53.119 -1.079		2
5 34 263 0.03 2.4	1.4 C B*D COALFIELD TYPE				3
KBI Z 185921.16	P 3E 26.05	S 3		34	
CWF Z 185923.18	P 3E 29.37	S 3		45	
CWF NS1859			5.9H0.10ML	0.25 200	45
CWF EW1859			5.8H0.13ML	0.25 200	45
KWE Z 185924.32	P 3E			52	
KSY Z 185926.17	P 4E			37	
-1					
020689N WALES+			5.0RITCHIELCOLWYN BAY, CLWYD		1
610 5.16 281.77/ 376.58	18.4 0.9		53.273 -3.773		2
25 9 176 0.15 0.6	0.7 B A*C				3
WCB Z 061014.09	P 3E 20.00	S 3		53	
WCB NS0610			10.0H0.14ML	0.25 200	53
WCB EW0610			7.7 H0.12ML	0.25 200	53
YRC Z 061014.15	P 2E 20.56	S 2		54	
YRE Z 061014.77	P 1ID			54	
WPM Z 06108.4	P 1IU10.88	S 1		9	
WLF Z 061012.41	P 1IU			42	
WME Z 061012.23	P 2E 16.56	S 3		38	
YLL Z 061010.9	P 1IU15.10	S 2		30	
WLC Z 061010.97	P 2E 15.06	S 3		31	
WLC NS0610			12.0H0.07ML	2.5 200	31
WLC EW0610			11.5H0.10ML	2.5 200	31
YRH Z 061017.7	P 2E			75	
WVR Z 061014.38	P 1ID21.0	S 3		54	
WBR Z 061013.25	P 2E 18.92	S 2		47	
WST Z 061011.75	P 1IU			36	
WFB Z 061016.4	P 2E			68	
HLM Z 061022.0	P 3E			103	
HCG Z 061022.50	P 3E			106	
WIM Z 061023.29	P 3E 36.29	S 2		114	
-1					
050689N WALES			5.0RITCHIELBALA, GWYNEDD		1
14034.70 296.85/ 340.56	16.6 0.4		52.952 -3.535		2
10 17 231 0.07 0.6	0.6 C A*D				3
WLC Z 014038.70	P 2E 41.34	S 2		17	
WLC NS0140			15.0H0.08ML	1.0 200	17
WLC EW0140			8.4 H0.05ML	1.0 200	17
WVR Z 014038.75	P 2E 41.40	S 2		18	
WBR Z 014039.88	P 1IU43.30	S 2		26	
WFB Z 014042.63	P 2E 47.90	S 2		45	
WLF Z 0140	54.09	S 3		69	
WPM Z 0140	46.98	S 3		42	
-1					
070689ESK ES423			5.0BS	L SKIPTON, N YORKSHIRE	1
161951.87 401.93/ 452.87	0.2 1.4		53.972 -1.971		2
10100 307 0.29 17.3	11.8 D D*D				3
XAL Z 162009.10	P 1EU21.41	S 3E		100	
XDE Z 162011.29	P 2ED26.00	S 3E		116	

ECK Z 162017.99	P 2E 35.00	S 3E		154
ESK Z 162019.00	P 2EU39.39	S 3E		170
ESK NS1620		03.8H0.10ML	0.25 200	170
ESK EW1620		04.8H0.14ML	0.25 200	170
XSO Z 162019.39	P 3E 39.90	S 3E		170
-1				
090689LOWNET	LN 648	5.0GAM	LCLACKMANNAN, CENTRAL	1
142916.98	290.44/ 693.57	8.6 1.2	56.122 -3.762	2
4 21 260 0.07	0.0 0.0 C A*D COALFIELD TYPE			3
EBH Z 142921.06	P 0IU	2		21
EAU Z 142923.59	P 1E 28.34	S 3		36
ELO Z 142925.60	P 3I 30.95	S 3		39
EDI Z 142924.11	P 1I 29.32	S 3	4.5H0.90M	0.25 200 42
EDI NS1429		3	6.8H0.42ML	0.25 200 42
EDI EW1429		3	9.5H0.35ML	0.25 200 42
-1				
100689HEREFORD+	HF 524	5.0ONSH/JARLSTOKE-ON-TRENT, STAFFS	1	
84121.98	387.20/ 348.24	4.5 2.2	53.031 -2.191	2
21 24 138 0.19	0.7 1.5 C B*C			3
MCH Z 084143.04	P 1ID57.75	S 2		127
MCH NS0841		18.0H0.18ML	1 200	127
MCH EW0841		15.5H0.14ML	1 200	127
HCG Z 084143.00	P 3E			127
HGH Z 084148.56	P 3E			161
HTR Z 084143.20	P 2ID58.28	S 3		129
HLM Z 084134.28	P 2I			74
HAE Z 084141.13	P 3E			113
KWE Z 084126.37	P 1IU29.49	S 3E		24
KBI Z 084130.90	P 2E			51
CWF Z 084133.59	P 1ID41.83	S 3E		68
CWF NS0841		14.5H0.15ML	1.0 200	68
CWF EW0841		13.7H0.16ML	1.0 200	68
KSY Z 084140.42	P 3E			108
WVR Z 084138.28	P 2EU49.93	S 3E		99
WLC Z 084139.64	P 2ED51.98	S 3E		107
WLC NS0841		9.0H0.10ML	1.0 200	107
WLC EW0841		12.4H0.11ML	1.0 200	107
WBR Z 084141.03	P 2ED			116
WFB Z 084143.13	P 2EU			130
YRH Z 084148.49	P 2E			166
WPM Z 084141.94	P 3E			118
-1				
100689HEREFORD+	HF 524	5.0ONSH/JARLSTOKE-ON-TRENT, STAFFS	1	
92851.25	387.76/ 348.45	5.3 2.0	53.033 -2.183	2
20 23 137 0.14	0.5 0.8 B A*C			3
MCH Z 092872.30	P 2E 87.02	S 2E		128
MCH NS0928		10.5H0.20ML	1 200	128
MCH EW0928		08.5H0.12ML	1 200	128
HCG Z 092872.68	P 3E			127
HGH Z 092877.90	P 3E			161
HTR Z 092872.65	P 2E 87.45	S 3E		129
HLM Z 092863.58	P 2E			75
HAE Z 092870.50	P 3E			114
KWE Z 092855.62	P 1ID58.75	S 2E		23
KBI Z 092860.06	P 2EU			50
CWF Z 092862.83	P 2E 71.02	S 2E		67
CWF NS0928		7.0H0.18ML	1.0 200	67
CWF EW0928		8.5H0.15ML	1.0 200	67
WVR Z 092867.66	P 2ED79.33	S 3E		99
WLC Z 092868.91	P 2ED80.82	S 3E		107
WLC NS0928		4.5H0.11ML	1.0 200	107
WLC EW0928		5.6H0.13ML	1.0 200	107
WBR Z 092870.29	P 2ED			117
WFB Z 092872.43	P 2ED			131
YRH Z 092877.80	P 2E			166
WCB Z 092878.18	P 4E 95.47	S 3E		163
-1				
110689KEYWORTH+	KW 058	12.5	5.0JAR	LSTOKE-ON-TRENT, STAFFS 1
04759.95	386.53/ 347.79	4.0 1.1	53.027 -2.201	2
6 24 152 0.02	0.2 0.5 B A*C			3
KWE Z 004804.52	P 1IU			24
KBI Z 004809.04	P 2EU			52
CWF Z 004811.62	P 2ED20.16	S 3E		68
CWF NS0048		7.3H0.07ML	0.25 200	68
CWF EW0048		4.9H0.06ML	0.25 200	68
MCH Z 004821.20	P 3E 35.77	S 2E		127
MCH NS0048		8.5H0.19ML	0.25 200	127
MCH EW0048		5.7H0.17ML	0.25 200	127
WLC Z 004818.60	P 4 30.27	S 3E		106
WLC NS0048		5.8H0.08ML	0.25 200	106
WLC EW0048		4.1H0.13ML	0.25 200	106
-1				
110689LOWNET+	LN 648	5.0GAM	LROSEWELL, LOTHIAN	1

213450.97	330.12/	662.62	1.1	0.4		55.852	-3.116	2
13 2 106 0.06	0.3	0.2 B A*B COALFIELD TYPE						3
EDI Z 213453.20	P 1IU54.97	S 2	7.8H0.29M			1.0 200	9	
EDI NS2134		2	5.2H0.18ML			1.0 200	9	
EDI EW2134		2	3.8H0.21ML			1.0 200	9	
EBL Z 213453.37	P 0ID						10	
EAU Z 213455.25	P 1ID58.50	S 2					21	
ESY Z 213457.47	P 2E 61.66	S 3					32	
EBH Z 213460.49	P 2E						51	
RRD Z 213451.55	P 1ID52.06	S 3					2	
RGH Z 213451.55	P 1ID						2	
RCA Z 213451.60	P 0ID52.56	S 3					3	
RCA NS2134		3	7.5H0.11M			1.0 4	3	
RCA EW2134		3	4.1H0.10M			1.0 4	3	
RCH Z 213451.65	P 0ID52.73	S 3					3	
RCH NS2134		3	6.1H0.21M			1.0 4	3	
RCH EW2134		3	7.1H0.36M			1.0 4	3	
-1								
120689LOWNET+	LN 648		5.0GAM	LGLEN MORISTON,HIGHLAND1				
192950.81	225.96/	818.18	2.4 0.6		57.221	-4.883	2	
15 40 122 0.29	0.9	1.3 C B*C					3	
ELO Z 193009.24	P 1E 23.82	S 3	3.1H0.08M		0.25 200	110		
EAB Z 193010.57	P 1E 24.93	S 3	3.2H0.12M		0.25 200	120		
EDU Z 193012.38	P 2E						136	
EBH Z 193013.22	P 2E 29.31	S 3					137	
KPL Z 192959.61	P 2E 65.60	S 2					48	
KPL NS1929			3.3H0.13ML		0.25 200	48		
KPL EW1929			2.5H0.15ML		0.25 200	48		
MDO Z 192957.92	P 3E 62.85	S 2					40	
MVH Z 193006.42	P 3E 16.73	S 2					89	
MCD Z 193007.90	P 3E 21.63	S 2					106	
MCD NS1930			1.5H0.11ML		0.25 200	106		
MCD EW1930			1.6H0.12ML		0.25 200	106		
-1								
140689KEYWORTH+	KW 058		12.5	5.0JAR	LSTOKE-ON-TRENT,STAFFS 1			
440 9.83	387.81/	346.99	4.5 1.4		53.020	-2.182	2	
10 23 151 0.17	1.0	2.1 C B*C					3	
KWE Z 044014.25	P 2E 17.00	S 3E					23	
KBI Z 044018.82	P 2EU						51	
CWF Z 044021.31	P 3E 29.38	S 3E					67	
CWF NS0440			5.1H0.14ML		0.25 200	67		
CWF EW0440			4.8H0.16ML		0.25 200	67		
MCH Z 044031.65	P 4 45.59	S 3E					127	
MCH NS0440			12.3H0.19ML		0.25 200	127		
MCH EW0440			7.4H0.18ML		0.25 200	127		
WLC Z 044027.50	P 4 40.07	S 3E					107	
WLC NS0440			5.7H0.12ML		0.25 200	107		
WLC EW0440			7.1H0.22ML		0.25 200	107		
WVR Z 044026.05	P 3E						99	
WFB Z 044031.55	P 3E						130	
YRH Z 044036.40	P 3E						166	
-1								
160689KEYWORTH	KW 059		5.0GAM/JARLW MANSFIELD,NOTTS		53.160	-1.356	1	
221039.37	443.07/	362.79	0.2 0.5				2	
4 16 223 0.03	0.0	0.0 C A*D COALFIELD TYPE					3	
KBI Z 221042.90	P 3E						16	
KWE Z 221046.38	P 2ED						36	
CWF Z 221048.20	P 3E 54.78	S 3					47	
CWF NS2210		3	6.0H0.09ML		0.25 200	47		
CWF EW2210		3	4.5H0.07ML		0.25 200	47		
-1								
170689KEYWORTH+	KW 059		12.5	5.0JAR	LSTOKE-ON-TRENT,STAFFS 1			
2026 3.50	388.15/	347.64	4.0 1.0		53.026	-2.177	2	
10 23 151 0.07	0.5	0.9 B A*C					3	
KWE Z 202607.81	P 3E 10.90	S 3E					23	
KBI Z 202612.40	P 3E						50	
CWF Z 202615.06	P 3E 23.18	S 3E					67	
CWF NS2026			5.1H0.08ML		0.25 200	67		
CWF EW2026			5.0H0.07ML		0.25 200	67		
WLC Z 202621.28	P 3E 33.45	S 3E					108	
WLC NS2026			5.8H0.13ML		0.25 200	108		
WLC EW2026			6.6H0.11ML		0.25 200	108		
WBR Z 202622.60	P 3E						117	
WFB Z 202624.90	P 3E						131	
YRH Z 202630.00	P 3E						166	
-1								
250689LOWNET	LN 650		5.0GAM	LLOCH EARN,CENTRAL		1		
103650.11	262.08/	727.03	2.0-0.1		56.415	-4.236	2	
5 26 245 0.28	0.4	0.2 C B*D MAGNITUDE FROM VERTICALS					3	
EAB Z 103655.12	P 2E 58.89	S 3	3.1H0.09ML		0.25 200	26		
ELO Z 103656.11	P 1IU60.59	S 3	3.5H0.10ML		0.25 200	33		
EBH Z 103659.50	P 2E						49	
EDU Z 103663.50	P 2E						77	

-1								
250689KEYWORTH+ KW 060					5.0GAM/JARLSTOKE-ON-TRENT, STAFFS 1			
23 537.09	389.78/ 347.33	6.5	1.0		53.023	-2.152	2	
5 21 299 0.06	2.2	1.5 C B*D					3	
KWE Z 230541.10	P 2EU44.25	S 3					21	
KBI Z 230545.63	P 2EU						49	
CWF Z 230548.20	P 2E 56.00	S 3					65	
CWF NS2305		3	5.6H0.10ML		0.25	200	65	
CWF EW2305		3	6.1H0.09ML		0.25	200	65	
WLC Z 230552.00	P 4		3.4H0.10ML		0.25	200	109	
WLC NS2305			3.8H0.12ML		0.25	200	109	
WLC EW2305								
-1								
250689KEYWORTH+ KW 060				5.0JAR/GAMLSTOKE-ON-TRENT, STAFFS 1				
234438.55	392.02/ 350.68	17.5	1.4	53.053	-2.119	2		
13 19 138 0.22	1.5 1.5 C B*C						3	
KWE Z 234443.06	P 1ID46.30	S 3					19	
KBI Z 234446.65	P 1IU						46	
CWF Z 234449.19	P 0ID58.13	S 2					65	
CWF NS2344		2	4.4H0.06ML		1.0	200	65	
CWF EW2344		2	3.2H0.06ML		1.0	200	65	
KUF Z 234460.48	P 4E						126	
YRE Z 234462.79	P 3E 79.94	S 3E					155	
WCB Z 234465.60	P 4E 83.05	S 3E					166	
WCB NS2344			4.3H0.12ML		0.25	200	166	
WCB EW2344			4.0H0.13ML		0.25	200	166	
WVR Z 234455.11	P 2E						104	
WLC Z 234456.38	P 3E 68.55	S 3E					112	
WLC NS2344			9.3H0.12ML		0.25	200	112	
WLC EW2344			11.7H0.12ML		0.25	200	112	
WBR Z 234457.71	P 2E						121	
WFB Z 234459.84	P 3E						136	
-1								
270689LOWNET+ LN 650				5.0GAM	LLOCH LOCHY, HIGHLAND	1		
1 0 0.61	227.85/ 788.34	6.5	1.2	56.954	-4.831	2		
23 46 106 0.26	0.7 2.8 C B*C						3	
ELO Z 010014.79	P 0IU25.28	S 2					87	
EAB Z 010015.92	P 1I 25.71	S 3					91	
EBH Z 010019.30	P 1E 32.30	S 3					113	
EDU Z 010020.30	P 1IU34.52	S 3					120	
EDI Z 010026.60	P 4E 43.19	S 3					153	
EDI NS0100		3	4.4H0.07ML		0.25	200	153	
EDI EW0100		3	4.0H0.09ML		0.25	200	153	
KSB Z 010008.26	P 0IU14.13	S 3					46	
KAR Z 010010.97	P 0IU18.43	S 2					61	
KAC Z 010011.28	P 2E						67	
KPL Z 010011.63	P 0IU20.46	S 2					66	
KPL NS0100		2	3.2H0.06ML		1.0	200	66	
KPL EW0100		2	3.7H0.07ML		1.0	200	66	
MDO Z 010011.10	P 1EU18.20	S 3E					61	
MME Z 010020.21	P 1E 33.80	S 3E					120	
MCD Z 010020.40	P 1ED33.70	S 3E					118	
MCD NS0100			07.5H0.10ML		0.25	200	118	
MCD EW0100			08.0H0.13ML		0.25	200	118	
MVH Z 0100	33.20	S 3E					115	
-1								
270689LOWNET LN650				5.0GAM	LBLAIRHALL, FIFE	1		
134136.08	298.07/ 691.86	2.5	1.4	56.109	-3.639	2		
6 18 229 0.04	1.2 0.7 C B*D COALFIELD TYPE						3	
EBH Z 134139.51	P 0IU42.23	S 3					18	
EAU Z 134141.92	P 1E 46.41	S 3					32	
EDI Z 134142.61	P 2E 47.36	S 3	2.4H0.30M		1.0	200	35	
EDI NS1341		3	4.5H0.38ML		1.0	200	35	
EDI EW1341		3	3.8H0.40ML		1.0	200	35	
ELO Z 134143.50	P 2E 49.38	S 3					41	
EAB Z 134144.41	P 2E 50.02	S 3					45	
-1								
020789N WALES				5.0RITCHIELLLEYN, GWYNEDD		1		
152930.67	238.01/ 343.74	22.8	0.6	52.966	-4.412	2		
10 2 108 0.07	0.5 1.0 B A*B LLEYN AFTERSHOCK						3	
WLC Z 152938.49	P 2E 43.7	S 3					43	
WLC NS1529			7.5 H0.1 ML		0.25	200	43	
WLC EW1529			6.6 H0.09ML		0.25	200	43	
YRH Z 152935.7	P 2E						21	
WBR Z 1529	42.31	S 2					37	
WST Z 152936.6	P 1IU40.70	S 2					28	
WFB Z 1529	43.30	S 2					40	
YRE Z 152934.29	P 2E						2	
YLL Z 152936.17	P 1IU39.98	S 2					25	
-1								
020789N WALES				5.0RITCHIELBETHESDA, GWYNEDD		1		
17 131.07	269.25/ 364.08	12.8	0.3	53.158	-3.956	2		
13 12 130 0.09	0.5 0.8 B A*B						3	

WLC Z 170135.2	P 1ID38.1	S 2		22	
WBR Z 170137.3	P 3E 41.45	S 2		34	
WST Z 170135.1	P 2E 38.0	S 3		20	
WLC NS1701		5.9 H0.08ML	1.0 200	22	
WLC EW1701		2.7 H0.11ML	1.0 200	22	
WFB Z 170140.00	P 3E 46.50	S 3		53	
WPM Z 170134.05	P 2E			12	
WLF Z 170136.82	P 3E 41.00	S 3		33	
YLL Z 170134.33	P 3E 36.00	S 3		15	
-1					
040789 PAISLEY+	PA 267 02	12.5	5.0PB/DWR LSADDELL,KINTYRE	1	
17 0 3.48	171.78/ 635.60	2.1 1.7	55.561 -5.619	2	
12 77 327 0.37	11.9 8.5 D D*D			3	
PGB Z 170016.59	P 1ID		0.25	77	
PGB NS1700	26.13	S 2EU6.5 H0.13ML	1.0 200	77	
PGB EW1700	25.89	S 2EU7.0 H0.12ML	1.0 200	77	
PCA Z 170018.10	P 1ED				
PCO Z 170021.57	P 2ED		0.25 200	107	
EAB Z 170020.88	P 2E 34.64	S 3		106	
EAU Z 170026.59	P 2E 43.72	S 3		140	
EBH Z 170028.49	P 2ED45.42	S 3		153	
EDI Z 170029.05	P 3E 48.57	S 2	2.2H0.24M	0.25 200	158
EDI NS1700		3	5.5H0.16ML	0.25 200	158
EDI EW1700		3	5.6H0.19ML	0.25 200	158
ELO Z 170029.20	P 4E 49.20	S 3		156	
EBL Z 170030.10	P 3E			164	
-1					
050789PAISLEY	PA 268 01	12.5	5.0PACB LMILNGAVIE,STRATHCLYDE	1	
43227.38	251.04/ 677.26	1.1 0.0	55.965 -4.387	2	
4 18 203 0.00	0.0 0.0 C A*D			3	
PGB Z 043231.19	P 1EU33.95	S 2ID		18	
PGB NS0432		08.5H0.1 ML	0.25 200	18	
PGB EW0432		12.5H0.1 ML	0.25 200	18	
PMS Z 043232.50	P 1EU			26	
PCO Z 043231.19	P 1IU			18	
-1					
060789PAISLEY+	PA 268 12.5		5.0PB/DWR LCLAONIG,KINTYRE	1	
43017.89	184.32/ 659.81	3.9 1.2	55.783 -5.440	2	
10 44 320 0.18	9.0 19.5 D D*D			3	
PGB Z 043028.3	P 1EU36.2	S 1IU		60	
PGB NS0430		21.0H0.08ML	0.25 200	60	
PGB EW0430		14.5H0.08ML	0.25 200	60	
PCA Z 043030.64	P 2ED			75	
PMS Z 043025.80	P 1ED31.32	S 2ED		44	
PCO Z 043032.44	P 2ED			87	
EAB Z 043032.20	P 3E 41.72	S 3E		82	
EAU Z 043039.10	P 4E 54.45	S 3E		125	
EBH Z 043039.55	P 3E 55.13	S 3E		131	
ELO Z 043040.48	P 3E 55.90	S 3E		132	
EDI Z 043041.31	P 3E 59.00	S 2E	1.5H0.20M	0.25 200	142
EDI NS0430		2E	3.2H0.13ML	0.25 200	142
EDI EW0430		2E	1.5H0.19ML	0.25 200	142
-1					
060789PAISLEY+	PA 268	12.5	5.0PB/DWR LCLAONIG,KINTYRE	1	
435 9.03	183.78/ 652.95	5.0 1.2	55.722 -5.443	2	
6 46 321 0.12	17.8 39.4 D D*D			3	
PGB Z 043519.53	P 2ED27.25	S 2ED		61	
PGB NS0435		18.0H0.08ML	0.25 200	61	
PGB EW0435		12.5H0.08ML	0.25 200	61	
PCA Z 043521.75	P 2ED			75	
PMS Z 043516.89	P 2ED			46	
EAB Z 043523.50	P 2E 33.88	S 3E		86	
EAU Z 043530.72	P 2E 45.83	S 3E		126	
EBH Z 043531.81	P 3E 47.80	S 3E		134	
ELO Z 043531.92	P 3E 47.42	S 3E		136	
EDI Z 043533.39	P 3E 50.71	S 3E		143	
EDI NS0435		3E	2.5H0.18ML	0.25 200	143
EDI EW0435		3E	1.8H0.21ML	0.25 200	143
-1					
080789 LOWNET	LN 652 1413	12.5	5.0DWR LTHORNHILL,CENTRAL	1	
203521.48	263.65/ 697.96	12.2 0.7	56.155 -4.195	2	
8 10 166 0.31	3.6 6.0 C C*C			3	
EAB Z 203524.60	P 1ID26.11	S 1ED		200	
EBH Z 203528.99	P 2E 34.93	S 2E		44	
EAU Z 203530.49	P 3E 38.51	S 3E		58	
EDI Z 203532.55	P 3E 41.58	S 2E	1.2H0.12M	0.25 200	68
EDI NS2035	E	E	2.5H0.19ML	0.25 200	68
EDI EW2035	E	E	2.3H0.11ML	0.25 200	68
-1					
110789 LOWNET+	LN 652 528	12.5	5.0DWR LMORVERN,HIGHLAND	1	
121331.32	180.42/ 753.21	0.7 2.1	56.619 -5.579	2	
10 37 202 0.34	5.0 3.7 D C*D			3	
EAB Z 121346.54	P 2E 59.60	S 3E		90	

ELO Z 121350.99	P 2E 64.91	S 3E			116
EBH Z 121354.04	P 2E 70.30	S 3E			134
EAU Z 121357.40	P 2E 75.90	S 3E			158
EDU Z 121357.91	P 2E				158
EDI Z 121358.6	P 4E 77.68	S 3E	4.5H0.21M	0.25 200	167
EDI NS1213	E		E 11.3H0.23ML	0.25 200	167
EDI EW1213	E		E 8.6H0.22ML	0.25 200	167
EBL Z 121401.41	P 3E				183
ESY Z 121403.20	P 3E				200
KAR Z 121338.17	P 2E				37
KSB Z 121343.26	P 1IU51.32	S 3			66
KPL Z 121345.47	P 2E 55.94	S 3			80
KPL NS1213		3	8.7H0.18ML	1.0 200	80
KPL EW1213		3	14.1H0.13ML	1.0 200	80
KSK Z 121351.78	P 3E				116
-1					
140789KEYWORTH	KW 063	12.5	5.0GAM	LKIRKBY-IN-ASHFLD,NOTTS1	
222533.39	451.11/ 352.89	2.3 0.6		53.071 -1.237	2
8 28 149 0.22	1.4 2.3 C B*C				3
KBI Z 222538.18	P 2E 42.80	S 3			28
CWF Z 222540.30	P 0ID44.82	S 3			37
CWF NS2225		3	8.0H0.09ML	0.25 200	37
CWF EW2225		3	9.6H0.09ML	0.25 200	37
KWE Z 222540.89	P 1IU46.50	S 4			41
KSY Z 222541.69	P 2ED47.17	S 3			45
KUF Z 222546.69	P 2E				76
-1					
160789 LOWNET+	LN 653 1511	12.5	5.0DWR	LKILLIN,CENTRAL	1
31026.52	242.76/ 733.23	0.5 0.8		56.465 -4.553	2
4 34 292 0.03	0.0 0.0 C A*D				3
EAB Z 031033.02	P 3E 37.80	S 2E			34
ELO Z 031036.20	P 3E 43.09	S 3E			52
EBH Z 031039.63	P 2E 48.90	S 3E			69
EDU Z 031043.59	P 3E 56.50	S 3E			95
EDI Z 031043.9	P 4E 58.33	S 3E	1.3H0.10M	0.25 200	104
EDI NS0310	E		E 2.4H0.12ML	0.25 200	104
EDI EW0310	E		E 2.5H0.20ML	0.25 200	104
PCO Z 031037.20	P 3E 45.71	S 2E			60
PMS Z 031039.10	P 2E 49.82	S 3E			70
PGB Z 031040.35	P 2E 51.00	S 3E	1.6H0.10M	0.25 200	73
PGB NS0310	E		E 1.8H0.14ML	0.25 200	73
PGB EW0310	E 51.00	S ED	2.1H0.15ML	0.25 200	73
-1					
160789 LOWNET	LN 653 1772	12.5	5.0DWR	LROSEWELL,LOTHIAN	1
22 212.94	329.66/ 662.47	0.2 0.7		55.850 -3.124	2
9 9 119 0.05	0.3 0.2 B A*B COALFIELD TYPE				3
EDI Z 220215.19	P 1IU16.85	S 2E	11.3H0.29M	1.0 200	9
EDI NS2202	IU		ED 5.0H0.60ML	1.0 200	9
EDI EW2202	ED		EU 5.5H0.29ML	1.0 200	9
EBL Z 220215.40	P 1ID17.29	S 2EU			10
EAU Z 220217.30	P 2E 20.59	S 2E			21
ESY Z 220219.33	P 3E				33
EBH Z 220222.50	P 2EU				50
EDU Z 220226.80	P 3E				78
-1					
180789KEYWORTH	KW063		5.0GAM	LLINCOLN,LINCOLNSHIRE	1
722 8.82	494.43/ 361.73	1.0 1.1		53.144 -0.588	2
4 64 306 0.16	0.0 0.0 C B*D				3
KBI Z 072220.16	P 3E				64
CWF Z 072220.56	P 3ED31.10	S 3			66
CWF NS0722		3	7.3H0.12ML	0.25 200	66
CWF EW0722		3	9.5H0.10ML	0.25 200	66
KWE Z 072224.35	P 3E				85
-1					
180789 CORNWALL		5.0	LST MAWES,CORNWALL		1
95021.58	187.76/ 37.10	10.0 0.5		50.195 -4.974	2
13 11 310 0.03	0.4 0.5 C A*D 4 KM NE OF ST MAWES				3
CBW Z 095024.19	P 1IU				11
CST Z 095024.50	P 1IU				14
CR2 Z 095024.62	P 1IU26.90	S 1			14
CR2 NS0950		3.3 H0.03ML		10.0 200	14
CR2 EW0950		3.3 H0.03ML		10.0 200	14
CCO Z 095025.05	P 1IU				17
CCA Z 095025.17	P 1IU				18
CGH Z 095025.63	P 2IU				21
CPZ Z 095029.22	P 4IU				44
CTR Z 095024.54	P 1 26.85	S 1			14
CME Z 095024.80	P 1 27.20	S 1			16
CRA Z 095024.85	P 1 27.44	S 1			16
-1					
200789KEYWORTH+	KW 063	12.5	5.0GAM/JARLRAINWORTH,NOTTS		1
1 548.50	457.62/ 358.03	0.4 1.6		53.116 -1.139	2
6 30 214 0.19	3.3 2.7 D C*D COALFIELD TYPE				3

KBI Z 010554.34	P IID					30
CWF Z 010556.66	P IID62.74	S 3				44
CWF NS0105		8.0H0.08ML	0.25	200		44
CWF EW0105		7.1H0.12ML	0.25	200		44
HLM Z 010572.23	P 4E					136
HAE Z 010574.81	P 4E					153
MCH Z 010578.00	P 3E 99.27	S 3				177
MCH NS0105		10.5H0.25ML	0.25	200		177
MCH EW0105		5.5H0.23ML	0.25	200		177
HPK Z 010565.96	P 3E 77.70	S 3E				99
HPK NS0105		10.0H0.17ML	1.0	200		99
HPK EW0105		6.1H0.18ML	1.0	200		99
KWE Z 010557.75	P 1ID					48
-1						
200789N WALES		5.0RITCHIELAMILWCH, GWYNEDD				1
1012 7.95 248.69/ 399.74	11.3-0.6		53.472	-4.280		2
5 9 311 0.00 0.1 0.1 C A*D						3
WCB Z 101211.90	P 2E 14.60	S 2				21
WCB NS1012		3.0 H0.06ML	0.25	200		21
WCB EW1012		4.0 H0.06ML	0.25	200		21
WLF Z 1012	14.90	S 3				22
WME Z 101210.35	P 2E 11.97	S 2				9
-1						
220789KEYWORTH+ KW 064	12.5	5.0JAR	LBILSTHORPE, NOTTS			1
02547.21 464.56/ 361.75	0.5 1.7		53.149	-1.035		2
7 35 225 0.14 1.6 1.4 C B*D COALFIELD TYPE						3
KBI Z 002553.89	P 2E 58.73	S 3E				35
CWF Z 002556.27	P 2E 63.17	S 3E				49
CWF NS0025		2.0H0.82ML	0.25	200		49
CWF EW0025		3.4H0.80ML	0.25	200		49
KWE Z 002557.70	P 2E					56
WLC Z 002619.31	P 4					185
WLC NS0025		5.2H0.25ML	0.25	200		185
WLC EW0025		4.0H0.15ML	0.25	200		185
HPK Z 002564.04	P 3E 76.21	S 3E				98
HPK NS0025		11.7H0.19ML	1.0	200		98
HPK EW0025		8.0H0.20ML	1.0	200		98
-1						
220789 CORNWALL		5.0	LMARAZION, CORNWALL			1
203143.78 153.60/ 29.60	8.2 0.2		50.115	-5.447		2
7 11 186 0.06 1.3 3.8 C B*D						3
CGH Z 203148.01	P 1					21
CCA Z 203147.45	P 1					18
CBW Z 203148.27	P 1					24
CPZ Z 203146.31	P 1 48.22	S 2				11
CR2 Z 2031	50.70	S 2				21
CST Z 2031	51.21	S 2				22
CR2 NS2031		5.6 H0.05ML	1.0	200		21
CR2 EW2031		7.0 H0.06ML	1.0	200		21
-1						
240789HEREFORD HF530		5.0NSH	LYSTRADOWEN, S GLAMORGAN1			1
12 516.39 302.16/ 178.63	0.3 1.6		51.498	-3.410		2
6 62 341 0.18 18.4 92.6 D D*D						3
MCH Z 120527.56	P 2ED34.91	S 1I				63
MCH NS1205		16.0H0.28ML	0.25	200		63
MCH EW1205		06.5H0.25ML	0.25	200		63
HTR Z 120528.32	P 2E 35.92	S 2E				65
HLM Z 120538.36	P 3E 54.08	S 3E				119
-1						
250789N WALES		5.0RITCHIELLLEYN, GWYNEDD				1
184933.13 238.72/ 343.39	22.6 0.9		52.963	-4.402		2
13 3 94 0.07 0.4 0.8 B A*B LLEYN AFTERSHOCK						3
WLC Z 184940.8	P 2E 46.20	S 2				42
WLC NS1849		5.1 H0.07ML	1.0	200		42
WLC EW1849		4.1 H0.09ML	1.0	200		42
YRH Z 184938.15	P 1IU					21
WBR Z 184940.00	P 3E 44.70	S 2				36
WST Z 184938.95	P 2E 42.95	S 1				28
WFB Z 184940.50	P 3E 45.22	S 3				40
YRE Z 184936.80	P 1ID					3
WPM Z 184941.45	P 2E					47
YLL Z 184938.50	P 2E 42.22	S 1				25
-1						
270789KEYWORTH+ KW 064	12.5	5.0JAR/GAMLSTAVELEY, DERBYSHIRE				1
0 754.86 446.29/ 376.82	4.9 0.7		53.286	-1.306		2
5 15 283 0.16 6.0 5.6 D D*D COALFIELD TYPE						3
KBI Z 000757.90	P 0ID					15
KWE Z 000763.11	P 2E 69.27	S 3				47
CWF Z 000765.70	P 3E 72.72	S 3				61
CWF NS0007		3 2.8H0.11ML	0.25	200		61
CWF EW0007		3 2.6H0.14ML	0.25	200		61
-1						
270789KYLE KY 418		5.0DH	LPORT APPIN, STRATHCLYDE1			

10	234.62	192.90/	742.73	5.9	1.0		56.531	-5.368	2
7	52	320	0.69	14.6	24.7	D D*D	3	KM SE OF PORT APPIN	3
KPL Z	100250.00	P	1ED60.03		S	2EU			92
KPL NS1002						02.4H0.09ML		1.0 200	92
KPL EW1002						03.6H0.10ML		1.0 200	92
KAR Z	100242.88	P	2ED						52
KSB Z	100246.60	P	1IU						76
KAC Z	100253.38	P	2EU66.07		S	3	02.0H0.12ML	1.0 200	108
KSZ Z	100256.60	P	2EU						132
	-1								
270789HEREFORD	HF	530				5.0NSH	LKINGTON, HER & WORC	1	
	115321.13	326.94/	258.83	1.1	0.0		52.222	-3.070	2
5	21	243	0.02	0.5	0.5	C A*D			3
MCH Z	115326.20	P	1IU29.84		S	2I			26
MCH NS1153						05.0H0.20ML		0.25 200	26
MCH EW1153						03.0H0.11ML		0.25 200	26
HCG Z	115328.90	P	3E						42
HTR Z	115325.40	P	1ID28.58		S	2I			21
	-1								
270789HEREFORD	HF	530				5.0NSH	LKINGTON, HER & WORC	1	
	115329.40	326.07/	257.91	0.4	-0.1		52.214	-3.082	2
5	20	239	0.01	0.2	0.3	C A*D			3
MCH Z	115334.46	P	1ID38.12		S	2I			25
MCH NS1153						04.0H0.08ML		0.25 200	25
MCH EW1153						04.0H0.15ML		0.25 200	25
HCG Z	115337.20	P	3E						41
HTR Z	115333.59	P	1ID36.68		S	2I			20
	-1								
270789HEREFORD	HF	530				5.0NSH	LKINGTON, HER & WORC	1	
	115358.94	326.19/	257.91	0.0	0.4		52.214	-3.080	2
5	20	240	0.01	0.2	0.3	C A*D			3
MCH Z	115404.05	P	1I 07.80		S	1I			25
MCH NS1154						08.5H0.15ML		0.25 200	25
MCH EW1154						11.0H0.12ML		0.25 200	25
HCG Z	115406.85	P	3E						41
HTR Z	115403.25	P	1ID06.35		S	1I			20
	-1								
280789HEREFORD	HF	530				5.0NSH/DH	LKINGTON, HER & WORC	1	
	115942.66	326.40/	257.99	0.4	0.2		52.215	-3.077	2
5	20	241	0.00	0.0	0.0	C A*D			3
MCH Z	115947.70	P	2I 51.38		S	2I			25
MCH NS1159						06.5H0.20ML		0.25 200	25
MCH EW1159						04.5H0.16ML		0.25 200	25
HCG Z	115950.50	P	3E						41
HTR Z	115946.90	P	1ID50.00		S	2I			20
	-1								
280789N WALES						5.0RITCHIELLLEYN, Gwynedd		1	
	135816.50	239.41/	342.91	24.1	2.1		52.959	-4.391	2
18	3	88	0.09	0.4	0.9	A A*A LLEYN AFTERSHOCK			3
WCB Z	135825.26	P	1IU31.05		S	2			48
WCB NS1358						4.0 H0.07ML		10.0 200	48
WCB EW1358						4.1 H0.15ML		10.0 200	48
YRC Z	135823.28	P	1ID						35
YRE Z	135820.39	P	1ID						3
WPM Z	135824.99	P	1IU						47
WLF Z	135823.55	P	1IU28.3		S	2			37
WME Z	135825.12	P	1IU31.21		S	3			49
YLL Z	135822.05	P	1IU						25
WLC Z	135824.3	P	1IU29.7		S	2			41
WLC SM1358						12.0H0.09ML		4.0 200	41
YRH Z	135821.7	P	1IU						21
WVR Z	135826.2	P	1IU						56
WBR Z	135823.4	P	1IU27.85		S	3			35
WST Z	135822.4	P	1IU						27
WFB Z	135823.9	P	2E						39
	-1								
280789N WALES						5.0RITCHIELLLEYN, Gwynedd		1	
	135931.81	238.72/	342.88	24.5	1.3		52.959	-4.401	2
17	3	119	0.09	0.4	0.8	B A*B LLEYN AFTERSHOCK			3
WCB Z	135940.55	P	3E 46.42		S	2			48
WCB NS1359						4.0 H0.06ML		1.0 200	48
WCB EW1359						4.0 H0.12ML		1.0 200	48
YRC Z	135938.62	P	1IU43.3		S	2			35
YRE Z	135935.73	P	1ID						3
WPM Z	135940.34	P	1IU46.49		S	2			47
WLF Z	135938.92	P	2E 43.61		S	1			37
WME Z	135940.6	P	2E						49
YLL Z	135937.4	P	1IU						26
WLC Z	135939.65	P	1IU45.03		S	1			42
WLC NS1359						6.5 H0.11ML		2.5 200	42
WLC EW1359						5.9 H0.11ML		2.5 200	42
YRH Z	135937.04	P	1IU40.52		S	1			21
WBR Z	135938.72	P	2E						36

WST Z 135937.7	P 3E		28
-1			
280789KEYWORTH	KW 065	5.0GAM/JARLMANSFIELD, NOTTS	1
231233.47	456.98/ 364.62	0.9 0.8	53.175 -1.147 2
4 27 263 0.15	0.0 0.0 C B*D COALFIELD TYPE		3
KBI Z 231238.71	P 1IU		27
CWF Z 231242.75	P 2E 49.20	S 3	50
CWF NS2312		3 6.6H0.10ML	0.25 200 50
CWF EW2312		3 8.1H0.10ML	0.25 200 50
KWE Z 231243.00	P 3E 49.21	S 4	50
-1			
310789N WALES		5.0RITCHIELGWYNFYNYDD, GWYNEDD	1
162556.56	278.49/ 328.10	6.0 0.3	52.836 -3.804 2
7 6 115 0.08	0.6 1.4 B A*B		3
WLC Z 162559.79	P 2E 61.90	S 1	18
WLC NS1625		3.3 H0.12ML	1.0 200 18
WLC EW1625		4.4 H0.15ML	1.0 200 18
WVR Z 162559.30	P 2E 60.79	S 3	14
WBR Z 162558.20	P 1ID 59.00	S 3	7
WFB Z 162560.60	P 1IU		23
-1			
010889KEYWORTH	KW 065	12.5	5.0GAM/JARLWARSOP, NOTTINGHAMSHIRE1
23554.35	460.41/ 367.20	1.7 0.8	53.198 -1.096 2
4 30 273 0.05	0.0 0.0 C A*D COALFIELD TYPE		3
KBI Z 023559.90	P 3E		30
CWF Z 023563.90	P 3E 70.90	S 3	53
CWF NS0235		6.1H0.09ML	0.25 200 53
CWF EW0235		8.4H0.09ML	0.25 200 53
KWE Z 023564.12	P 3E		54
-1			
010889 CORNWALL		5.0ABW	LSCILLY ISLES, CORNWALL 1
223124.53	108.69/ -28.06	5.0 0.9	49.577 -6.030 2
6 72 340 0.03	33.0 74.1 D D*D SE OF SCILLY ISLES		3
CPZ Z 223136.70	P 1		72
CCO Z 223138.92	P 1		86
CR2 Z 223139.51	P 1 50.48	S 2	90
CR2 NS2231		8.5 H0.04ML	0.25 200 90
CR2 EW2231		10.1H0.04ML	0.25 200 90
CBW Z 223139.70	P 1		92
CST Z 223140.00	P 1		93
-1			
020889KEYWORTH+	KW 065	12.5	5.0JAR
1 113.51	380.58/ 404.53	1.1 1.5	LPRESTWICH, MANCHESTER 1
19 53 78 0.40	1.0 1.5 D C*D COALFIELD TYPE, FELT		2+ 53.537 -2.293 2
KBI Z 010123.90	P 3E		WHITEFIELD 3
KWE Z 010125.15	P 3E		60
CWF Z 010132.25	P 3E 46.53	S 3E	65
CWF NS0101		7.2H0.19ML	0.25 200 111
CWF EW0101		6.4H0.25ML	0.25 200 111
WLC Z 010132.95	P 3E 46.47	S 3E	116
WLC NS0101		6.3H0.30ML	0.25 200 116
WLC EW0101		8.0H0.27ML	0.25 200 116
WFB Z 010137.97	P 3E		151
WPM Z 010132.49	P 3E		112
YLL Z 010135.10	P 3E 51.22	S 3E	133
WCB Z 010137.70	P 4 56.05	S 3E	151
WCB NS0101		1.7H0.23ML	0.25 200 151
WCB EW0101		1.9H0.21ML	0.25 200 151
YRE Z 010138.29	P 3E 57.00	S 3E	155
LBO Z 010123.40	P 3E 29.80	S 3E	53
LMI Z 010131.30	P 3E 44.07	S 3E	101
LMI NS0101		5.5H0.19ML	0.25 200 101
LMI EW0101		5.7H0.19ML	0.25 200 101
HPK Z 010124.66	P 3E 33.13	S 3E	64
HPK NS0101		8.1H0.17ML	1.0 200 64
HPK EW0101		4.7H0.19ML	1.0 200 64
-1			
020889 LOWNET	LN 656 172	12.5	5.0DWR
259 2.55	200.48/ 684.92	0.0 0.5	LGLENDARUEL, STRATHCLYDE1
5 57 351 0.32	45.0 34.4 D D*D		56.016 -5.201 2
EAB Z 025913.27	P 3E 20.37	S 3E	3
ELO Z 025920.37	P 2EU33.95	S 3E	1.2H0.09ML 0.25 200 57
EDU Z 025927.77	P 3E		1.6H0.17ML 0.25 200 105
-1			1.48
040889 LANCS+	LA 003	12.5	5.0JAR
42415.80	412.20/ 383.55	13.4 1.6	LCASTLETON, DERBYSHIRE 1
12 22 132 0.13	0.8 1.5 B A*B		53.348 -1.817 2
LBO Z 042430.15	P 2E		3
LCK Z 042436.87	P 3E		86
LMI Z 042438.06	P 3E 52.87	S 3E	132
LMI NS0424		9.0H0.18ML	138
LMI EW0424		5.9H0.14ML	0.25 195 138
KBI Z 042420.44	P 0IU		22

KWE Z 042422.43	P 2ED					37
CWF Z 042428.29	P 2E 37.40	S 3E				76
CWF NS0424		9.1H0.07ML	1.0 200			76
CWF EW0424		8.9H0.09ML	1.0 200			76
KSY Z 042431.25	P 3E 42.14	S 3E				93
HPK Z 042427.44	P 1ID35.61	S 2E				69
HPK NS0424		9.8H0.14M	2.5 200			69
HPK EW0424		10.7H0.13M	2.5 200			69
-1						
040889N WALES		5.0RITCHIELLLEYN, GWYNEDD				1
85611.15	238.25/ 344.44	24.2 0.7	52.973	-4.409		2
10 1 113 0.06	0.6 0.8 B A*B LLEYN	AFTERSHOCK				3
WLC Z 085619.0	P 2E 24.39	S 2				42
WLC NS0856		8.2 H0.17ML	0.25 200			42
WLC EW0856		5.0 H0.10ML	0.25 200			42
YRH Z 085616.45	P 1IU19.94	S 1				21
WBR Z 085618.95	P 3E 22.75	S 3				37
WST Z 085617.18	P 2E 21.22	S 2				28
YLL Z 085616.70	P 2E 20.58	S 1				25
YRE Z 085615.00	P 1ID					1
-1						
040889 LOWNET+	LN 656 1107	12.5	5.0DWR	LTYNDRUM, CENTRAL		1
225556.78	231.63/ 725.43	2.1 1.0	56.391	-4.728		2
10 33 261 0.31	3.5 2.8 D C*D					3
EAB Z 225602.30	P 3E 07.02	S 3E		0.25 200		33
PMS Z 225607.26	P 2E 15.11	S 2E				61
PCO Z 225607.45	P 2E 15.19	S 2E				60
ELO Z 225607.71	P 2EU15.93	S 3E				63
PGB Z 225609.29	P 3E 18.97	S 3E	1.2H0.10M	0.25 200		67
PGB NS2256	E	E	2.8H0.18ML	0.25 200		67
PGB EW2256	E	E	1.4H0.18ML	0.25 200		67
EBH Z 225610.48	P 3E					77
EDI Z 225612.70	P 4E 29.20	S 2E	1.2H0.20M	0.25 200		109
EDI NS2256	E	E	3.2H0.19ML	0.25 200		109
EDI EW2256	E	E	3.3H0.20ML	0.25 200		109
EAU Z 225613.30	P 3E					100
EDU Z 225614.80	P 3E					107
-1						
050889 KEYWORTH	KW 066	12.5	5.0GAM/JARLWARSOP, NOTTINGHAMSHIRE			1
419 4.06	461.67/ 366.80	1.0 0.9	53.194	-1.077		2
4 31 274 0.17	0.0 0.0 C B*D COALFIELD TYPE					3
KBI Z 041909.80	P 3E					31
KWE Z 041914.28	P 3E					55
CWF Z 041913.83	P 3E 20.80	S 3E				53
CWF NS0419		6.2H0.11ML	0.25 200			53
CWF EW0419		8.1H0.10ML	0.25 200			53
-1						
050889 HEREFORD+	HF 513		5.0NSH	LBRIDGEWATER, SOMERSET		1
5 0 7.90	303.69/ 139.37	5.0 1.3	51.145	-3.377		2
9 68 165 0.15	1.2 3.8 C B*D					3
MCH Z 050024.16	P 3E 36.20	S 1I				98
MCH NS0500		13.5H0.08ML	0.25 200			98
MCH EW0500		08.5H0.08ML	0.25 200			98
HAE Z 050026.5	P 2E 40.40	S 4I				115
HCG Z 050030.20	P 3E 47.18	S 4E				132
HGH Z 050019.30	P 2E					68
HTR Z 050025.55	P 2E					104
DYA Z 050022.80	P 1 33.05	S 2				88
DCO Z 050024.25	P 1					98
HTL Z 050021.20	P 1					79
-1						
100889 KEYWORTH	KW 066	12.5	5.0GAM/JARLWARSOP, NOTTINGHAMSHIRE			1
1935 0.60	456.73/ 365.66	2.6 1.0	53.185	-1.151		2
4 26 265 0.09	0.0 0.0 C A*D COALFIELD TYPE					3
KBI Z 193505.45	P 2EU					26
CWF Z 193509.68	P 3ED16.25	S 3E				51
CWF NS1935		10.0H0.08ML	0.25 200			51
CWF EW1935		12.1H0.10ML	0.25 200			51
KWE Z 193509.67	P 3E					50
-1						
110889 LOWNET	LN 657 728	12.5	5.0DWR	LCLACKMANNAN, CENTRAL		1
112135.12	290.67/ 691.69	1.3 1.3	4+ 56.106	-3.758		2
12 22 137 0.09	0.3 0.5 B A*C COALFIELD TYPE, FELT		CLACKMANNAN			3
EBH Z 112139.62	P 1ID43.04	S 3E		0.25 200		22
EAU Z 112141.61	P 2EU46.45	S 3E				35
EAB Z 112142.20	P 2EU47.29	S 3E				37
ELO Z 112142.72	P 3E 48.11	S 3E				41
EDI Z 112142.80	P 2ED48.50	S 2E	8.1H0.26M	0.25 200		41
EDI NS1121	E	ED12.1H0.31ML	0.25 200			41
EDI EW1121	E	ED15.1H0.22ML	0.25 200			41
EDU Z 112146.80	P 3E 55.78	S 3E				67
-1						
120889 KEYWORTH	KW 067	12.5	5.0GAM/JARLMANSFIELD, NOTTS			1

135847.25	457.81/	364.36	0.9	0.9		53.173	-1.135	2	
4 28 264	0.22	0.0	0.0	C B*D	COALFIELD TYPE			3	
KBI Z	135852.58		P	2EU				28	
CWF Z	135856.49		P	3E	63.00	S 3		50	
CWF NS1358						8.5H0.11ML	0.25	200	
CWF EW1358						9.4H0.10ML	0.25	200	
KWE Z	135857.00		P	3EU				50	
	-1								
130889 LOWNET	LN 657	1410		12.5	5.0DWR	LCOLONSAY, STRATHCLYDE	1		
1250 2.30	127.80/	706.89		1.0	1.2	56.177	-6.387	2	
6127 349	0.25	2.4	1.2	C B*D				3	
EAB Z	125023.20		P	2E	38.75	S 3E	3.5H0.10ML	0.25	200
ELO Z	125029.50		P	2E	49.41	S 3E	3.5H0.15ML	0.25	200
EBH Z	125031.28		P	3E	52.52	S 3E	1.2H0.21ML	0.25	200
	-1								
130889N WALES					5.0RITCHIELLLEYN, GWYNEDD		1		
18 253.64	239.17/	342.18	23.8	1.6		52.953	-4.394	2	
20 4 97	0.07	0.2	0.6	B A*B	LLEYN AFTERSHOCK			3	
WLC Z	180261.43		P	1IU	66.71	S 2		42	
WLC NS1802						19.5H0.15ML	2.5	200	
WLC EW1802						13.4H0.10ML	2.5	200	
YRH Z	180258.74		P	1IU				42	
WVR Z	180263.44		P	2E				56	
WBR Z	180260.34		P	3E				35	
WST Z	180259.49		P	1IU	63.41	S 2		27	
WFB Z	180260.82		P	2E	65.90	S 2		38	
WCB Z	180262.42		P	3E	68.31	S 2		48	
WCB NS1802						5.0 H0.06ML	1.0	200	
WCB EW1802						9.6 H0.09ML	1.0	200	
YRC Z	180260.49		P	1ID	65.19	S 2		48	
YRE Z	180257.50		P	1ID				35	
WPM Z	180262.19		P	1IU				4	
WLF Z	180260.72		P	2E	65.56	S 2		47	
WME Z	180262.20		P	3E	68.65	S 3		38	
YLL Z	180259.29		P	1IU				50	
	-1							26	
150889KEYWORTH	KW 067			12.5	5.0GAM/JARLMANSFIELD, NOTTS		1		
203748.68	454.90/	362.78	2.7	1.0		53.159	-1.179	2	
4 26 256	0.17	0.0	0.0	C B*D	COALFIELD TYPE			3	
KBI Z	203753.35		P	2ED				26	
CWF Z	203757.30		P	3E	63.38	S 3E		48	
CWF NS2037						6.6H0.17ML	0.25	200	
CWF EW2037						9.0H0.14ML	0.22	200	
KWE Z	203757.46		P	3E				48	
	-1							47	
160889MORAY					5.0BS	ULLAPOOL, HIGHLAND	1		
32610.98	217.65/	902.11	1.0	1.3		57.971	-5.083	2	
9 54 286	0.50	13.9	10.4	D D*D				3	
MVH Z	032620.62		P	1EU	27.00	S 3E		54	
MDO Z	032623.00		P	2E				73	
MLA Z	032629.50		P	2EU	42.41	S 3E		108	
MCD Z	032631.10		P	2E	45.40	S 3E		117	
MCD NS0326						05.8H0.08ML	0.25	200	
MCD EW0326						10.0H0.10ML	0.25	200	
MME Z	032635.50		P	3E	53.20	S 3E		117	
	-1							146	
210889 JERSEY					5.0ABW	BAY OF BISCUY	1		
65246.31	49.28/-240.62		5.0	3.9		47.640	-6.670	2	
6374 359	0.31		D	D*D				3	
JLP Z	0653					32.5H0.10ML	1.0	200	
JSA Z	0653					40.0H0.10ML	1.0	200	
JVM Z	065338.80		P	1	76.5	S 2		374	
JRS Z	065339.0		P	1	78.7	S 2		381	
	-1								
220889LANCS+	LA 006			12.5	5.0JAR	LCULCHETH, MANCHESTER	1		
11552.44	365.74/	393.88	0.5	1.3		53.440	-2.516	2	
14 46 111	0.33	1.2	2.8	C C*C	COALFIELD TYPE			3	
KWE Z	011604.29		P	2ED				65	
KBI Z	011604.68		P	3E				69	
CWF Z	011611.61		P	3E	26.32	S 4E		113	
CWF NS0116						5.5H0.14ML	0.25	195	
CWF EW0116						5.0H0.13ML	0.25	195	
LLO Z	011600.70		P	2EU				113	
LBO Z	011603.30		P	3E				46	
LMI Z	011610.26		P	3E	23.10	S 3E		60	
LMI NS0116						8.4H0.17ML	0.25	200	
LMI EW0116						7.6H0.26ML	0.25	200	
SBD Z	011605.52		P	3E				101	
WVR Z	011609.80		P	3E	22.50	S 4E		78	
WLC Z	011609.58		P	3E	21.60	S 3E		102	
WLC NS0116						4.8H0.13ML	0.25	200	
WLC EW0116						5.8H0.12ML	0.25	200	
WPM Z	011609.43		P	3E				98	
								95	

WCB Z 011615.18	P 3E 31.43	S 3E		135	
-1					
220889KEYWORTH	KW 068	12.5	5.0JAR	LCLIPSTONE, NOTTS	1
12058.89	460.92/ 366.58	1.0 1.2		53.193 -1.088	2
4 30 273 0.14	0.0 0.0 C A*D				3
KBI Z 012104.55	P 3ED				30
CWF Z 012108.57	P 3E 15.53	S 3E			53
CWF NS0121		9.2H0.17ML		0.25 200	53
CWF EW0121		12.5H0.12ML		0.25 200	53
KWE Z 012108.96	P 3E				54
-1					
220889 LOWNET	LN 658 1989	12.5	5.0DWR	LKIPPEN, CENTRAL	1
64756.94	266.60/ 695.31	7.0 0.7		56.132 -4.147	2
5 14 186 0.33	33.0 72.9 D D*D				3
EAB Z 064800.10	P 2EU01.70	S 2E 28.5H0.11M		0.25 200	14
EBH Z 064804.89	P 3E 09.52	S 3E 5.9H0.11M		0.25 200	42
EDI Z 064808.46	P 4E 15.22	S 3E 2.1H0.10M		0.25 200	64
EDI NS0648	E	E 4.0H0.15ML		0.25 200	64
EDI EW0648	E	E 2.4H0.10ML		0.25 200	64
-1					
230889LANCS	LA 006	12.5	5.0JAR	LPARTINGTON, MANCHESTER	1
52650.43	372.95/ 390.13	1.0 1.6		53.407 -2.407	2
6 50 332 0.10	8.6 6.4 D D*D COALFIELD TYPE				3
LLO Z 052659.70	P 3E				50
LBO Z 052661.78	P 3E				65
LKL Z 052666.00	P 3E				91
LMI Z 052668.70	P 3E 82.03	S 3E			108
LMI NS0526		6.0H0.20ML		0.25 200	108
LMI EW0526		7.4H0.24ML		0.25 200	108
LCK Z 052669.38	P 3E				110
-1					
230889 LOWNET+	LN 658 2338	12.5	5.0DWR	LINVERARAY, STRATHCLYDE	1
75622.61	213.96/ 711.79	2.5 0.6		56.262 -5.004	2
12 42 273 0.24	4.8 3.8 D C*D				3
EAB Z 075630.00	P 2E 35.60	S 2E 8.5H0.10M		0.25 200	42
PMS Z 075631.32	P 1IU37.60	S 2E			49
PGB Z 075633.24	P 3E 40.93	S 3E 1.0H0.09M		0.25 200	60
PGB NS0756	E	E 4.0H0.10ML		0.25 200	60
PGB EW0756	E	E 2.2H0.09ML		0.25 200	60
PCO Z 075634.11	P 1IU42.19	S 3E			64
ELO Z 075636.12	P 3E 46.28	S 3E 7.5H0.16M		0.25 200	83
EBH Z 075638.51	P 2E 49.72	S 2E 5.0H0.15M		0.25 200	93
EDU Z 075644.50	P 4E 60.30	S 3E			127
-1					
230889KEYWORTH	KW 068	12.5	5.0JAR	LBRUNTINGTHORPE, LEICS	1
102711.77	461.35/ 288.32	4.3 0.4		52.489 -1.096	2
6 31 246 0.34	6.5 8.7 D D*D				3
CWF Z 102717.53	P 1ID21.38	S 2E			31
CWF NS1027		9.1H0.07ML		0.25 200	31
CWF EW1027		11.5H0.09ML		0.25 200	31
KUF Z 102720.35	P 3E				50
KWE Z 102725.10	P 3E				77
KBI Z 102727.60	P 3E				90
KSY Z 102723.24	P 3E				63
-1					
240889 LOWNET	LN 659 545	12.5	5.0DWR	LKIPPEN, CENTRAL	1
2254 9.24	267.00/ 694.52	3.6 0.1		56.125 -4.140	2
4 14 229 0.34	0.0 0.0 D C*D				3
EAB Z 225412.12	P 1IU13.70	S 2EU13.5H0.10ML		0.25 200	14
EBH Z 225417.19	P 3E 22.55	S 2E			42
-1					
250889HEREFORD+	HF 534		5.0NSH/JAR	DLNNINGTON, S YORKSHIRE	1
1319 7.70	452.80/ 387.72	0.4 1.8		53.383 -1.206	2
8 26 297 0.43	11.5 5.7 D D*D COALFIELD TYPE				3
MCH Z 131939.08	P 3E 64.04	S 3E			196
MCH NS1319		05.0H0.32ML		0.25 200	196
MCH EW1319		08.5H0.40ML		0.25 200	196
SBD Z 131931.40	P 3ED50.29	S 3			147
HAE Z 131936.50	P 3E				175
HTR Z 131939.60	P 3E				201
KBI Z 131912.82	P 3E				26
KWE Z 131917.70	P 3E				59
CWF Z 131920.35	P 3E				72
CWF NS1319		3.5H0.46ML		0.25 200	72
CWF EW1319		4.9H0.52ML		0.25 200	72
-1					
260889KEYWORTH	KW 069	12.5	5.0JAR	LTHORESBY, NOTTS	1
145654.34	464.41/ 369.25	2.3 1.1		53.216 -1.035	2
5 33 281 0.15	0.9 0.7 C A*D COALFIELD TYPE				3
KBI Z 145700.32	P 2E				33
CWF Z 145704.40	P 3E 11.38	S 3E			56
CWF NS1457		8.0H0.18ML		0.25 200	56
CWF EW1457		9.3H0.11ML		0.25 200	56

KWE Z 145704.80	P 2EU12.13	S 3E		58
-1				
290889KEYWORTH	KW 069	12.5	5.0JAR	LANNESLEY,NOTTS 1
	224932.08	451.28/ 353.23	2.6 0.9	53.074 -1.235 2
7 28 150 0.05	0.4	3.3 C B*C		3
KBI Z 224937.30	P 1IU41.20	S 3E		28
CWF Z 224939.00	P 0ID43.39	S 2E		38
CWF NS2249		3.5H0.07ML	1.0 200	38
CWF EW2249		1.5H0.38ML	1.0 200	38
KWE Z 224939.51	P 1ID			41
KSY Z 224940.18	P 2E			45
KUF Z 224945.08	P 3E			76
-1				
310889 LOWNET+	LN 660	515	12.5	5.0JAR/DWRLROSEWELL,LOTHIAN 1
	201848.06	329.02/ 662.83	1.4 0.5	55.853 -3.134 2
10 1 220 0.03	0.2	0.2 C A*D COALFIELD TYPE		3
RHC Z 201848.47	P 0ID			1
RGH Z 201848.50	P 0ID			1
RRD Z 201848.56	P 1ED			1
RCA Z 201848.66	P 1ID49.05	S 2E		2
RCA NS2018		5.7H0.12M	1.0 4	2
RCA EW2018		5.0H0.10M	1.0 4	2
RCH Z 201848.70	P 1ID49.15	S 2E		2
RMM Z 201848.77	P 1ID			2
EDI Z 201850.19	P 1IU51.83	S 3EU 6.4H0.28M	1.0 200	8
EDI NS2018	IU	EU 4.5H0.20ML	1.0 200	8
EDI EW2018	ED	EU 6.5H0.31ML	1.0 200	8
EBL Z 201850.45	P 1ID52.25	S 3E		11
EAU Z 201852.28	P 2E 55.58	S 2EU		20
ESY Z 201854.28	P 3E 58.57	S 3E		33
EBH Z 201857.35	P 3E 64.10	S 3E		50
-1				
020989KEYWORTH	KW 070	12.5	5.0NSH	LTHORESBY,NOTTS 1
	75143.82	464.44/ 370.13	9.3 0.8	2+ 53.224 -1.035 2
4 19 200 0.10	0.0	0.0 C A*D COALFIELD TYPE,FELT	THORESBY	3
CWF Z 075151.30	P 3E 56.42	P 2I		41
CWF NS0751		05.0H0.20ML	0.25 200	41
CWF EW0751		07.0H0.14ML	0.25 200	41
KWE Z 075149.66	P 2E			32
KBI Z 075147.40	P 2E			19
-1				
040989N WALES		5.0	LLLEYN, Gwynedd	1
	53611.60	225.09/ 347.75	20.2 1.1	52.998 -4.607 2
18 12 180 0.08	0.4	0.7 B A*C OFFSHORE LOCATION		3
WCB Z 053619.5	P 3E 24.56	S 2		43
WCB NS0536		3.0 H0.1 ML	1.0 200	43
WCB EW0536		3.4 H0.09ML	1.0 200	43
YRC Z 053617.26	P 1IU21.10	S 2		28
YRE Z 053615.31	P 2EU			12
WLF Z 053618.05	P 2EU22.60	S 3		35
YLL Z 053617.81	P 2EU			33
WLC Z 053621.10	P 3E 27.81	S 2		56
WLC NS0536		6.7 H0.07ML	1.0 200	56
WLC EW0536		3.9 H0.10ML	1.0 200	56
YRH Z 053616.02	P 3E 19.12	S 3		18
WBR Z 053620.35	P 2E 26.40	S 2		51
WST Z 053618.95	P 3E 24.31	S 2		42
WFB Z 053620.69	P 3E 26.85	S 3		52
-1				
040989HEREFORD	HF 536	12.5	5.0NSH	LBUXTON,DERBYSHIRE 1
	124814.77	413.75/ 371.78	0.5 2.1	53.243 -1.794 2
11105 312 0.22	13.8	9.2 D D*D COALFIELD TYPE		3
MCH Z 124840.40	P 3E 59.60	S 2I		161
MCH NS1248		15.7H0.25ML	0.25 200	161
MCH EW1248		08.5H0.22ML	0.25 200	161
SBD Z 124832.92	P 2ID45.22	S 2E		105
HAE Z 124838.45	P 2E 56.20	S 2E		144
HCG Z 124841.00	P 3E 59.85	S 2E		162
HTR Z 124841.12	P 2E 60.15	S 2E		164
HLM Z 124833.34	P 2E			109
-1				
040989 LOWNET	LN660	1759	12.5	5.0DWR LBLAIRHALL,FIFE 1
	144554.40	297.31/ 691.62	0.2 1.3	56.106 -3.651 2
10 18 125 0.22	0.8	1.2 C B*C COALFIELD TYPE		3
EBH Z 144558.05	P 1IU61.70	S 2EU		18
EAU Z 144600.74	P 2E 05.10	S 3E		32
EDI Z 144601.42	P 3E 06.30	S 2EU 6.0H0.53M	0.25 200	36
EDI NS1446	E	ED 9.5H0.48ML	0.25 200	36
EDI EW1446	E	EU11.8H0.40ML	0.25 200	36
ELO Z 144601.72	P 2E 07.91	S 2EU		41
EAB Z 144602.69	P 3E 09.01	S 3E		44
-1				
050989LANCS+	LA 008	12.5	5.0JAR	LIRISH SEA 1

92111.37	268.38/	518.60	1.4	1.2		54.545	-4.035	2
9 36 169 0.27	2.0	3.6 C B*C OFFSHORE,ST.BEES HEAD						3
LMI Z 092121.57	P 1ID28.40	S 4E					60	
LMI NS0921			10.6H0.07ML			0.25	200	60
LMI EW0921			8.4H0.10ML			0.25	200	60
LCK Z 092125.21	P 2ED33.23	S 3E						78
LKL Z 092129.45	P 2E 40.64	S 4E						104
LBO Z 092130.80	P 2E							114
LLO Z 092132.30	P 2E							124
XDE Z 092117.51	P 3E							36
ECK Z 092126.73	P 4E							92
ESK Z 092128.40	P 2E 40.91	S 2E						101
ESK NS0921			5.9H0.11ML			0.25	200	101
ESK EW0921			7.8H0.16ML			0.25	200	101
XAL Z 092131.99	P 4E							123
WIM Z 092122.19	P 3E							61
WCB Z 0921	P 4 49.29	S 3E						134
WCB NS0921			3.0H0.13ML			0.25	200	134
WCB EW0921			2.2H0.17ML			0.25	200	134
-1								
050989LANCS/ESK+	LA 008		12.5		5.0JAR/BS LLOFTUS,CLEVELAND			1
161323.79	472.33/	516.11	0.4	2.4	5	54.535	-0.882	2
19 81 236 0.36	2.8	1.8 D C*D FELT LOFTUS,EASINGTON,			STAITHES & BOULBY			3
XAL Z 161339.32	P 2ED							93
XSO Z 161346.59	P 2ID62.60	S 4E						138
ECK Z 161350.10	P 2EU68.90	S 3E						161
XDE Z 161351.49	P 2ED72.10	S 4E						169
ESK Z 161352.39	P 1ED72.20	S 3E						173
ESK NS1613			06.5H0.10ML			01.0	200	173
ESK EW1613			06.0H0.10ML			01.0	200	173
ESY Z 161354.07	P 3E							189
EDI Z 161356.05	P 3E 80.58	S 3E						213
EDI NS1613			08.0H0.60ML			0.25	200	213
EDI EW1613			06.8H0.62ML			0.25	200	213
LKL Z 161342.73	P 2EU							113
LBO Z 161345.00	P 2EU							126
LCK Z 161345.38	P 1ID							131
LMI Z 161350.63	P 2ED69.50	S 3E						161
LMI NS1613			6.0H0.26ML			1.0	200	161
LMI EW1613			8.5H0.30ML			1.0	200	161
KWE Z 161352.50	P 3E 74.40	S 3						180
CWF Z 161354.75	P 4 79.98	S 4E						202
CWF NS1613			11.3H0.17ML			0.25	200	202
CWF EW1613			14.3H0.17ML			0.25	200	202
HPK Z 161337.55	P 3E 47.90	S 3E						81
-1								
050989 PAISLEY	PA 276		12.5		5.0DG	LBEITH,STRATHCLYDE		1
221826.05	236.82/	653.90	5.4	0.1		55.751	-4.600	2
6 10 215 0.04	1.6	4.7 C B*D						3
PGB Z 221828.25	P 2EU29.99	S 1				0.25	200	10
PGB NS2218			16.2H0.11ML			0.25	200	10
PGB EW2218			16.5H0.10ML			0.25	200	10
PMS Z 221829.00	P 2E 31.00	S 1						14
PCA Z 221830.33	P 1IU33.50	S 1						22
-1								
060989KEYWORTH	KW 070		5.0		LTHORESBY,NOTTS			1
223928.00	468.22/	369.27	0.0	1.0	2+	53.216	-0.978	2
5 37 286 0.19	19.6	14.9 D D*D COALFIELD TYPE,FELT			THORESBY			3
CWF Z 223938.90	P 3E 46.01	S 2E						58
CWF NS2239			07.0H0.12ML			0.25	200	58
CWF EW2239			08.5H0.10ML			0.25	200	58
KWE Z 223939.26	P 2E 47.45	S 2I						62
KBI Z 223934.82	P 3E							37
-1								
090989KEYWORTH	KW 071		5.0NSH		LTHORESBY,NOTTS			1
216 6.92	465.31/	371.50	3.4	1.3	2+	53.236	-1.021	2
6 34 223 0.09	0.3	0.5 C A*D COALFIELD TYPE,FELT			THORESBY			3
CWF Z 021617.18	P 3E 24.30	S 1I						59
CWF NS0216			10.5H0.13ML			0.25	200	59
CWF EW0216			14.5H0.10ML			0.25	200	59
KSY Z 021614.42	P 3E							42
KWE Z 021617.44	P 2E							60
KBI Z 021613.06	P 2I							34
KUF Z 021620.75	P 2E							81
-1								
120989KEYWORTH	KW 071		5.0NSH		LTHORESBY,NOTTS			1
1 215.54	463.86/	369.23	1.5	1.0		53.216	-1.044	2
6 33 215 0.12	1.6	2.2 C B*D COALFIELD TYPE						3
CWF Z 010225.72	P 3E 32.70	S 2I						56
CWF NS0102			10.0H0.09ML			0.25	200	56
CWF EW0102			12.5H0.08ML			0.25	200	56
KSY Z 010223.10	P 2E							42
KWE Z 010226.08	P 2E							58

KBI Z 010221.62	P 2I					33
KUF Z 010229.28	P 2E					80
-1						
120989KEYWORTH	KW 071	12.5	5.0NSH	LTHORESBY,NOTTS	1	
	232113.39	465.14/ 370.35	2.8 1.0	2+ 53.226 -1.024	2	
5 34 219 0.09	2.4	4.0 C B*D COALFIELD TYPE,FELT		THORESBY	3	
CWF Z 232123.68	P 3E 30.60	S 2I				58
CWF NS2321			05.5H0.10ML		0.25 200	58
CWF EW2321			07.5H0.12ML		0.25 200	58
KSY Z 232120.84	P 2E					41
KWE Z 232123.82	P 2I					60
KBI Z 232119.42	P 3E					34
-1						
130989KEYWORTH	KW 071	12.5	5.0NSH	LTHORESBY,NOTTS	1	
	124242.54	412.16/ 373.36	1.6 1.1	2+ 53.257 -1.818	2	
4 19 267 0.12	0.0	0.0 C A*D COALFIELD TYPE FELT		THORESBY	3	
CWF Z 124254.48	P 2ID					67
CWF NS1242			10.5H0.08ML		0.25 200	67
CWF EW1242			09.0H0.10ML		0.25 200	67
KSY Z 124257.75	P 2E					89
KWE Z 124247.60	P 1IU51.60	3				27
KBI Z 124246.35	P 1I 49.78	3				19
-1						
130989LOWNET	LN 93	12.5	5.0DWR	LTHORNHILL,CENTRAL	1	
	154922.93	265.88/ 703.38	2.6-0.2		56.204 -4.162	2
4 11 182 0.14	0.0	0.0 C A*D A/S @ 21:42 GMT (-0.4.ML)				3
EAB Z 154925.34	P 2ED26.92	S 2ED 8.0H0.10ML			0.25 200	11
EBH Z 154930.49	P 2E 35.44	S 3E 1.5H0.09ML			0.25 200	41
-1						
130989KEYWORTH	KW 071	12.5	5.0NSH	LTHORESBY,NOTTS	1	
	222919.67	464.44/ 370.13	2.9 1.2	2+ 53.224 -1.035	2	
5 33 231 0.11	0.6	1.2 C A*D COALFIELD TYPE,FELT		THORESBY	3	
CWF EW2229			12.0H0.10ML		0.25 200	57
KWE Z 222930.08	P 2E					59
KBI Z 222925.60	P 2I					33
KUF Z 222933.28	P 2I					80
-1						
150989LOWNET	LN 662	678	12.5	5.0DWR	LTHORNHILL,CENTRAL	1
	102924.00	265.43/ 697.67	4.5 0.9		56.153 -4.167	2
8 11 123 0.09	2.1	4.8 C B*C F/S @ 05:16 GMT (14TH),		A/S @ 00:11 GMT (17TH)		
EAB Z 102926.51	P 1ID28.11	S 2ED14.4H0.11M			1.0 200	12
EBH Z 102931.60	P 2ED37.00	S 2E 2.4H0.11M			1.0 200	42
ELO Z 102932.12	P 3E					45
EDI Z 102935.10	P 4E 43.60	S 3E 3.6H0.11M			0.25 200	66
EDI NS1029	E	EU 4.5H0.18ML			0.25 200	66
EDI EW1029	E	EU 3.2H0.11ML			0.25 200	66
PCO Z 102927.70	P 1IU29.59	S 3E				19
-1						
160989LANCS+	LA 010	12.5	5.0JAR	LCHAT MOSS,MANCHESTER	1	
	44910.48	370.15/ 396.15	0.4 1.1		53.461 -2.450	2
9 44 129 0.16	0.4	0.7 C B*C COALFIELD TYPE				3
LLO Z 044918.65	P 3E					44
LBO Z 044920.91	P 3E					58
LKL Z 044925.05	P 3E					85
LMI Z 044927.75	P 3E 40.43	S 3E				102
LMI NS0449			4.1H0.20ML		0.25 200	102
LMI EW0449			6.5H0.26ML		0.25 200	102
LCK Z 044928.29	P 3E					104
KBI Z 044922.10	P 3E					66
CWF Z 044930.45	P 4 44.48	S 4E				111
CWF NS0449			3.8H0.15ML		0.25 200	111
CWF EW0449			2.5H0.15ML		0.25 200	111
HPK Z 044924.78	P 4E 34.36	S 3E				78
WLC Z 044927.40	P 4E 40.94	S 3E				103
WLC NS0449			1.7H0.16ML		0.25 200	103
WLC EW0449			2.0H0.18ML		0.25 200	103
-1						
170989KEYWORTH	KW 072	12.5	5.0NSH	LTHORESBY,NOTTS	1	
	101542.27	464.67/ 370.31	1.8 1.0	2+ 53.226 -1.031	2	
4 33 283 0.10	0.0	0.0 C A*D COALFIELD TYPE,FELT		THORESBY	3	
CWF Z 101552.60	P 3E 59.70	S 1I				57
CWF NS1015			08.0H0.08ML		0.25 200	57
CWF EW1015			12.0H0.11ML		0.25 200	57
KWE Z 101552.88	P 2E					59
KBI Z 101548.40	P 2E					33
-1						
180989KEYWORTH+	KW 072	12.5	5.0NSH	LCANNOCK,STAFFORDSHIRE	1	
	161735.92	398.58/ 312.93	1.3 1.1		52.714 -2.021	2
9 36 109 0.33	2.2	4.4 C C*C COALFIELD TYPE				3
CWF Z 161744.70	P 2ID51.24	S 1I				48
CWF NS1617			16.5H0.10ML		0.25 200	48
CWF EW1617			10.1H0.12ML		0.25 200	48
KWE Z 161742.25	P 2I					36

KBI Z 161748.14	P 2I				69
KUF Z 161755.00	P 1ID				111
MCH Z 161752.82	P 3E				104
MCH NS1617		09.5H0.10		0.25	104
MCH EW1617		09.0H0.15		0.25	104
SBD Z 161751.15	P 3E				86
HCG Z 161756.05	P 3E				119
HGH Z 161757.50	P 3E				131
-1					
200989LANCS+	LA 010	12.5	5.0JAR	L PRESTWICH, MANCHESTER	1
55723.99	383.47/ 408.74	0.2 1.5		3+ 53.575 -2.250	2
7 37 170 0.29	2.5	3.0 C B*C COALFIELD TYPE, FELT		WHITEFIELD	3
LLO Z 055731.44	P 3E				37
LBO Z 055732.89	P 3E				50
LMI Z 055740.66	P 3E 53.78	S 3E			100
LMI NS0557			5.5H0.17ML	0.25 200	100
LMI EW0557			5.6H0.20ML	0.25 200	100
LCK Z 055741.09	P 3E				96
WLC Z 055742.67	P 4 57.41	S 4			121
WLC NS0557			4.3H0.30ML	0.25 200	121
WLC EW0557			7.8H0.21ML	0.25 200	121
CWF Z 055743.10	P 3E 58.21	S 4			112
CWF NS0557			7.1H0.20ML	0.25 200	112
CWF EW0557			8.6H0.20ML	0.25 200	112
HPK Z 0557	4 42.68	S 3E			59
-1					
200989KEYWORTH	KW 072	12.5	5.0NSH	L THORESBY, NOTTS	1
175352.57	461.24/ 372.28	18.9 1.2		2+ 53.244 -1.082	2
4 30 283 0.00	0.0	0.0 C A*D COALFIELD TYPE, FELT		THORESBY	3
CWF Z 175402.55	P 3E 09.64	S 1I			58
CWF NS1754			09.0H0.14ML	0.25 200	58
CWF EW1754			11.5H0.10ML	0.25 200	58
KWE Z 175402.34	P 3E				57
KBI Z 175358.50	P 2E				30
-1					
220989KEYWORTH	KW 073	12.5	5.0NSH	L THORESBY, NOTTS	1
193820.00	460.94/ 367.86	1.4 1.1		2+ 53.204 -1.088	2
4 30 275 0.06	0.0	0.0 C A*D COALFIELD TYPE, FELT		THORESBY	3
CWF Z 193829.80	P 3E 36.88	S 1I			54
CWF NS1938			09.0H0.10ML	0.25 200	54
CWF EW1938			11.5H0.12ML	0.25 200	54
KWE Z 193830.00	P 3E				55
KBI Z 193825.70	P 2I				30
-1					
220989CORNWALL			5.0ABW	L SCILLY ISLES, CORNWALL	1
211132.07	103.36/ 16.20	4.6 1.8		49.971 -6.138	2
8 45 340 0.04	19.1 43.5 D D*D 7	KM EAST OF ST MARTINS			3
CPZ Z 211140.00	P 1 U				45
CCO Z 211143.88	P 1				70
CCA Z 211143.92	P 1				69
CGH Z 211144.02	P 1				70
CR2 Z 211144.40	P 1 53.36	S 1			73
CR2 NS2111			6.2 H0.06ML	2.5 200	73
CR2 EW2111			8.9 H0.05ML	2.5 200	73
CST Z 211144.65	P 1				74
CBW Z 211144.85	P 1				76
-1					
240989KEYWORTH	KW 073	12.5	5.0NSH	L THORESBY, NOTTS	1
174344.27	460.81/ 371.31	17.9 1.1		2+ 53.235 -1.089	2
4 29 218 0.06	0.0	0.0 C A*D COALFIELD TYPE, FELT		THORESBY	3
CWF Z 174353.98	P 3E 61.24	S 2I			57
CWF NS1743			06.5H0.14ML	0.25 200	57
CWF EW1743			08.0H0.12ML	0.25 200	57
KSY Z 174352.40	P 2I				45
KWE Z 174354.35	P 4E				56
KBI Z 174350.08	P 2E				29
-1					
250989HEREFORD+	HF 539		5.0NSH	L RIDLEY, CHESHIRE	1
1027 5.08	355.29/ 357.89	7.2 2.0		53.116 -2.668	2
15 46 276 0.25	2.9 4.5 D C*D				3
MCH Z 102726.08	P 3E 40.49	S 2I			127
MCH NS1027			11.5H0.08ML	0.25	127
MCH EW1027			08.5H0.05ML	0.25	127
SBD Z 102713.12	P 2ID19.70	S 2I			46
HAE Z 102724.78	P 3E				120
HLM Z 102716.39	P 2ID24.70	S 1I			68
HCG Z 102723.12	P 3E				111
WLC Z 102717.75	P 3E 26.62	S 1			76
WVR Z 102717.20	P 2E 25.41	S 3			72
WBR Z 102719.42	P 2E				87
WFB Z 102722.04	P 2E 34.95	S 3			104
WLC NS1027			10.4H0.17ML	0.25 200	76
WLC EW1027			06.5H0.14	0.25	

-1

280989	HEREFORD	HF 539		5.0NSH	LABERGAVENNY, GWENT	1
1223	5.33	324.03/ 213.27	23.2 1.4		51.812 -3.102	2
7 22	205 0.14	1.4 2.1 C B*D				3
MCH Z	122310.60	P 1ID14.40	S II			22
MCH NS	1223			05.2H0.08ML	10 200	22
MCH EW	1223			06.0H0.08ML	10 200	22
HAE Z	122313.90	P 1I 19.35	S II			46
HGH Z	122311.38	P 1ID15.50	S II			28
HTR Z	122311.58	P 1ID				32

-1

300989	CORNWALL		5.0	LLIZARD POINT, CORNWALL	1	
12534.21	193.19/ -8.88	4.2 0.6		49.784 -4.873	2	
7 36	348 0.18	17.1 6.0 D D*D SOUTH OF LIZARD POINT			3	
CGH Z	012540.83	P 1			36	
CBW Z	012541.90	P 2E			44	
CCO Z	012542.12	P 1			45	
CR2 Z	012542.66	P 1 48.80	S 2		48	
CR2 NS	0125			10.0H0.04ML	0.25 200	48
CR2 EW	0125			8.5H0.06ML	0.25 200	48
CST Z	012543.30	P 2			50	
CCA Z	012543.66	P 2			51	

-1

300989	CORNWALL		5.0	LLIZARD POINT, CORNWALL	1	
105250.37	172.77/ -0.62	6.6 0.5		49.851 -5.161	2	
8 22	312 0.03	0.7 0.4 C A*D SOUTH OF LIZARD POINT			3	
CGH Z	105254.67	P 1			22	
CCO Z	105256.23	P 1			32	
CBW Z	105256.38	P 1			33	
CR2 Z	105256.74	P 1 61.35	S 2		35	
CCA Z	105257.15	P 1			38	
CST Z	105257.20	P 1			38	
CPZ Z	105258.30	P 1			46	
CR2 EW	1052			3.5 H0.05ML	1.0 200	35
CR2 NS	1052			4.0 H0.05ML	1.0 200	35

-1

300989	CORNWALL		5.0	LLIZARD POINT, CORNWALL	1	
1217 0.93	177.73/ -11.44	5.6 1.4		49.756 -5.086	2	
8 33	324 0.08	21.5 47.0 D D*D SOUTH OF LIZARD POINT			3	
CGH Z	121707.07	P 1			33	
CCO Z	121708.40	P 1			43	
CBW Z	121708.70	P 1			44	
CR2 Z	121709.00	P 1 14.98	S 1		46	
CR2 NS	12171			6.0 H0.05ML	2.5 200	46
CR2 EW	12171			6.0 H0.07ML	2.5 200	46
CST Z	121709.60	P 1			49	
CCA Z	121709.63	P 1			49	
CPZ Z	121710.75	P 1			57	

-1

300989	CORNWALL		5.0	LLIZARD POINT, CORNWALL	1	
153340.61	171.77/ -15.68	8.4 0.5		49.715 -5.166	2	
5 37	351 0.39	43.8555.5 D D*D SOUTH OF LIZARD POINT			3	
CGH Z	153347.50	P 1			37	
CCO Z	153348.09	P 2			47	
CBW Z	153349.25	P 2			48	
CR2 Z	1533	55.12	S 2		50	
CCA Z	1533	56.45	S 2		53	
CR2 NS	1533			8.0 H0.05ML	0.25 200	50
CR2 EW	1533			6.5 H0.06ML	0.25 200	50

-1

021089	KEYWORTH	KW 074		5.0NSH	LTHORESBY, NOTTS	1
233658.87	464.86/ 370.64	2.0 1.2			53.229 -1.028	2
5 33	220 0.04	1.2 1.4 C B*D COALFIELD TYPE				3
CWF Z	233709.10	P 3E 16.35	S II			58
CWF NS	2337			08.5H0.15ML	0.25 200	58
CWF EW	2337			10.5H0.11ML	0.25 200	58
KSY Z	233706.50	P 3E				42
KWE Z	233709.40	P 2E				59
KBI Z	233705.05	P 2E				34

-1

081089	KEYWORTH	KW 074		5.0NSH	LTHORESBY, NOTTS	1
117 3.86	464.26/ 372.75	7.6 0.8			53.248 -1.037	2
4 33	286 0.03	0.0 0.0 C A*D COALFIELD TYPE				3
CWF Z	011713.92	P 3E 21.08	S 2I			60
CWF NS	0117			05.0H0.12ML	0.25 200	60
CWF EW	0117			04.0H0.09ML	0.25 200	60
KWE Z	011714.00	P 3E				60
KBI Z	011709.72	P 3E				33

-1

091089	EA/KW+		12.5	5.0DG	RSOUTHERN NORTH SEA	1
193426.53	696.47/ 356.93	0.0 3.2			53.027 2.422	2
17 87	287 0.69	6.3 3.6 D D*D				3
ABA Z	193440.80	P 1ID				87

AWH Z 193444.41	P 1IU57.08	S 3		109
APA Z 193444.46	P 1IU57.09	S 2		103
KUF Z 193457.55	P 1ID80.74	S 3		195
KSY Z 193458.41	P 3E 82.05	S 3		202
KTG Z 193459.39	P 2ED83.58	S 3		206
CWF Z 193504.71	P 1ID32.97	S 2		253
CWF NS1935		7.5H0.30ML	01.0 200	253
CWF EW1935		4.5H0.24ML	01.0 200	253
KBI Z 193505.80	P 2E			266
KWE Z 193507.59	P 2E 42.45	S 3		286
HPK Z 193510.10	P 3E 41.70	S 4		288
HPK NS1935		11.1H0.26ML	01.0 200	288
HPK EW1935		15.1H0.30ML	01.0 200	288
ESY Z 193530.10	P 2E 72.70	S 3		458
EBL Z 193530.90	P 2E 76.30	S 3		469
EDI Z 193533.20	P 3E 79.40	S 3		486
EDI NS1935		2.5H0.80ML	0.25 200	486
EDI EW1935		2.5H0.80ML	0.25 200	486
-1				
101089ESK+	ES 441	12.5	5.0DDG/DWRLETTTRICK,BORDERS	1
103253.21	328.80/ 616.96	3.9 1.6	3+ 55.441 -3.126	2
12 15 96 0.10	0.6 1.6 B A*C FELT AT TUSHIELAW INN			3
ESK Z 103256.26	P 0ID58.25	S 2E 4.5H0.10M	10.0 200	15
ESK NS1032	IU	E 4.6H0.10M	10.0 200	15
ESK EW1032	EU	ED 6.4H0.10M	10.0 200	15
ECK Z 103258.69	P 1EU62.30	S 2E		29
EBL Z 103300.01	P 2E 04.30	S 2ED		37
EAU Z 103302.05	P 1EU			49
EDI Z 103302.81	P 2E 09.30	S 2E 2.6H0.11M	1.0 200	54
EDI NS1033	IU	EU 4.1H0.11ML	1.0 200	54
EDI EW1033	E	EU 2.2H0.22ML	1.0 200	54
XSO Z 103302.92	P 1IU			56
ESY Z 103303.82	P 1IU11.00	S 2E		62
PCA Z 103306.22	P 1EU			77
XAL Z 103308.31	P 3E			87
EBH Z 103309.10	P 2E 19.19	S 3E		93
PGB Z 103309.50	P 3E 20.20	S 3E		95
PGB NS1033	E	E 7.0H0.10ML	1.0 200	95
PGB EW1033	E	E 6.8H0.13ML	1.0 200	95
XDE Z 103311.28	P 3E			107
PMS Z 103311.72	P 3E			112
EAB Z 103312.49	P 2E 26.36	S 3E		113
ELO Z 103313.12	P 3E 27.30	S 3E		120
-1				
101089MORAY+		5.0BS	LKINLOCHEWE,HIGHLAND	1
181422.17	208.29/ 858.98	0.4 1.4	57.580 -5.207	2
13 11 193 0.27	2.0 40.2 D C*D			3
MDO Z 181430.60	P 1EU37.20	S 3E		53
MVH Z 181433.69	P 1EU42.50	S 3E		72
MCD Z 181441.10	P 1EU54.00	S 3E		117
MCD NS1814		06.2H0.09ML	01.0 200	117
MCD EW1814		07.5H0.10ML	01.0 200	117
MME Z 181444.31	P 1EU60.20	S 3E		138
ELO Z 181447.60	P 1EU65.10	S 3E 5.0H0.21M	0.25 200	153
EAB Z 181448.41	P 2E 66.81	S 3E 2.6H0.09M	0.25 200	164
EDU Z 181450.95	P 3E			176
EBH Z 181452.02	P 3E 71.90	S 3E 2.9H0.22M	0.25 200	181
KPL Z 181428.25	P 2E 32.67	S 2E		38
KAR Z 181437.01	P 2E			83
KAC Z 181423.92	P 1ID24.88	S 3E		11
KPL NS1814		03.5H0.12ML	01.0 200	38
KPL EW1814		04.5H0.11ML	01.0 200	38
-1				
151089 CORNWALL		5.0	LLIZARD POINT,CORNWALL	1
51737.43	169.87/ -11.32	7.9 0.5	49.754 -5.195	2
7 33 350 0.05	3.6 75.6 D C*D SOUTH OF LIZARD POINT			3
CGH Z 051743.47	P 1			33
CCO Z 051744.81	P 2			43
CBW Z 051745.10	P 2			44
CR2 Z 051745.33	P 2 51.20	S 2		46
CR2 NS0517		S 7.3H0.05ML	0.25 200	46
CR2 EW0517		8.0 0.06 ML	0.25 200	46
CST Z 051745.95	P 1			49
CCA Z 0517	51.80	S 2		48
-1				
161089 LOWNET	LN 666 1694	12.5	5.0DWR	LTYNDRUM,CENTRAL 1
132252.27	228.42/ 724.02	3.0 0.9	56.377 -4.779	2
11 34 262 0.26	2.3 2.8 C B*D			3
EAB Z 132258.43	P 1IU62.71	S 3E		34
ELO Z 132303.32	P 1IU11.00	S 3E 7.0H0.09ML	0.25 200	67
EBH Z 132306.21	P 2E 16.28	S 3E		80
EDU Z 132310.50	P 2E 23.90	S 3E 2.4H0.10ML	0.25 200	110
PMS Z 132302.68	P 2E 10.00	S 3E		59

PCO Z 132303.00	P 2E						61
-1							
161089 LOWNET+	LN 666 1729	12.5	5.0DWR	LTYNDRUM,CENTRAL			1
155538.53	230.69/ 724.76	4.9 1.1		56.385 -4.743			2
11 33 260 0.21	1.9 1.9 C B*D						3
EAB Z 155544.56	P 1EU48.99	S 3E		0.25 200			33
ELO Z 155549.40	P 1IU57.09	S 3E	9.9H0.10M	0.25 200			64
EBH Z 155552.05	P 3E						78
EDU Z 155556.51	P 3E 69.42	S 3E	3.0H0.15M	0.25 200			108
EDI Z 155557.10	P 4E 71.30	S 3E	3.3H0.15M	0.25 200			109
EDI NS1555	E	E	3.5H0.11ML	0.25 200			109
EDI EW1555	E	E	3.9H0.20ML	0.25 200			109
PMS Z 155548.80	P 2E 56.28	S 3E					60
PCO Z 155549.06	P 2E						60
-1							
161089N WALES			5.0RITCHIELLLEYN,GWYNEDD				1
162547.78	238.96/ 342.32	23.9 1.1		52.954 -4.397			2
20 4 99 0.09	0.3 0.9 B A*B LLLEYN AFTERSHOCK						3
WLC Z 162555.60	P 1IU61.01	S 1					42
WCB NS1625			6.0 H0.07ML	0.25 200			48
WCB EW1625			9.4 H0.07ML	0.25 200			48
YRH Z 162552.90	P 1IU						21
WBR Z 162554.50	P 3E 59.20	S 3					36
WST Z 162553.66	P 1IU57.69	S 3					28
WFB Z 162555.22	P 3E 60.06	S 3					39
WCB Z 162556.99	P 3E 62.50	S 2					48
YRC Z 162554.45	P 3E 59.35	S 2					35
YRE Z 162551.60	P 2E						4
WPM Z 162556.30	P 3E						47
WLF Z 162554.85	P 2E 59.69	S 2					37
WME Z 162556.59	P 1IU62.80	S 2					50
YLL Z 162553.40	P 1IU57.30	S 3					26
WLC NS1625			15.7H0.15ML	1.0 200			42
WLC EW1625			10.0H0.12ML	1.0 200			42
-1							
201089KEYWORTH KW 076		12.5	5.0NSH	LTHORESBY,NOTTS			1
32520.23 465.40/ 372.62		7.6 1.3		53.246 -1.020			2
4 34 287 0.08	0.0 0.0 C A*D COALFIELD TYPE						3
CWF Z 032530.36	P 2E 37.48	S 1I					60
CWF NS0325			09.5H0.09ML	0.25 200			60
CWF EW0325			20.5H0.11ML	0.25 200			60
KWE Z 0325 30.60	P 2I						61
KBI Z 0325 26.26	P 2I						34
-1							
211089KEYWORTH KW 076		12.5	5.0NSH	LTHORESBY,NOTTS			1
1443 7.37 463.67/ 371.78		5.9 1.2		53.239 -1.046			2
4 32 284 0.09	0.0 0.0 C A*D COALFIELD TYPE						3
CWF Z 144317.44	P 2E 24.45	S 1I					58
CWF NS1443			11.0H0.10ML	0.25 200			58
CWF EW1443			11.5H0.11ML	0.25 200			58
KWE Z 144317.60	P 3E						59
KBI Z 144313.22	P 2I						32
-1							
221089 LOWNET+	LN 667 1521	12.5	5.0DG/DWR	LLOCHE NEVIS,HIGHLAND			1
20 043.07 170.51/ 798.87		7.1 2.2	2+	57.024 -5.782			2
17 12 117 0.26	1.2 1.6 B B*B FELT MALLAIG & MORAR						3
EAB Z 200104.30	P 2ED18.79	S 3E	4.0H0.20M	1.0 200			129
ELO Z 200105.80	P 3E 22.41	S 2EE	4.1H0.16M	1.0 200			141
EBH Z 200109.95	P 3E 28.34	S 3E	5.3H0.19M	1.0 200			164
EDU Z 200112.50	P 4E 32.89	S 4E					177
EDR Z 200112.50	P 3EU						197
EDI Z 200116.14	P 4ED35.58	S 3E	2.4H0.24M	1.0 200			201
EDI NS2001	E	S E	3.8H0.24ML	1.0 200			201
EDI EW2001	E	E	2.5H0.28ML	1.0 200			201
EBL Z 200116.33	P 3E						219
KAC Z 200053.08	P 2E						61
MDO Z 200058.81	P 3EU						98
MVH Z 200104.00	P 1ED18.50	S 3E					139
MCD Z 200108.12	P 1E 24.50	S 3E					165
MCD NS2001			5.3H0.10ML	1.0 200			165
MCD EW2001			6.5H0.09ML	1.0 200			165
MME Z 200109.20	P 2E 27.30	S 3E					173
MLA Z 2001	34.60	S 3E					203
MFI Z 200115.30	P 2E						220
KSK Z 200055.16	P 2E						74
KAR Z 200045.28	P 1ID						12
KSB Z 200048.16	P 1IU						30
KPL Z 200048.98	P 1IU						36
-1							
231089N WALES+			5.0RITCHIELBALA,GWYNEDD				1
113313.82 289.79/ 348.87		12.4 0.5		53.025 -3.643			2
21 10 151 0.15	0.5 0.6 B A*C NORTH OF BALA						3
WCB Z 113325.02	P 4E 34.20	S 2					72

YRC Z 113325.03	P 3E 32.96	S 2		67
YRE Z 113323.08	P 1IU			53
WPM Z 113319.45	P 1I 22.85	S 2		31
WLF Z 113323.75	P 2E 30.60	S 2		58
WME Z 113323.78	P 3E			60
YLL Z 113320.50	P 1IU25.10	S 2		38
WLC Z 113316.65	P 1IU18.38	S 1		10
WLC NS1133		8.5 H0.1 ML	1.0 200	10
WLC EW1133		17.5H0.1 ML	1.0 200	10
YRH Z 113325.70	P 1IU			70
WVR Z 113318.55	P 1ID			26
WBR Z 113318.69	P 1IU			25
WST Z 113318.45	P 1IU			24
WFB Z 113321.90	P 3E 27.12	S 2		46
SBD Z 113319.1	P 1ID22.80	S 1		29
-1				
231089 LOWNET	LN 667 1827	12.5	5.0DWR	LCLACKMANNAN,CENTRAL 1
182536.29	294.54/ 693.06	0.6 1.5	4+ 56.119 -3.696	2
12 19 127 0.05	0.2 0.2 B A*C COALFIELD	TYPE, FELT AT	GARTFINNAN FARM	3
EBH Z 182540.20	P 0IU43.11	S 2EU15.4H0.55M	1.0 200	19
EAU Z 182542.91	P 2EU47.56	S 2EU 5.1H0.39M	1.0 200	34
EDI Z 182543.69	P 2EU49.07	S 2E 3.1H0.19M	1.0 200	39
EDI NS1825	ED	ED 3.1H0.52ML	1.0 200	39
EDI EW1825	EU	EU 5.4H0.29ML	1.0 200	39
ELO Z 182543.72	P 1ID49.21	S 2EU 2.6H0.42M	1.0 200	39
EAB Z 182544.00	P 1ID49.65	S 3ED		41
EBL Z 182546.50	P 2E 54.00	S 2EU		56
EDU Z 182547.98	P 2EU55.98	S 3E		64
-1				
241089 LOWNET	LN 667 2108	12.5	5.0DWR	LBLAIRHALL,FIFE 1
1445 8.75	297.90/ 691.71	0.2 1.5	56.107 -3.642	2
9 18 123 0.08	0.3 0.5 B A*C COALFIELD	TYPE		3
EBH Z 144512.50	P 1IU15.60	S 3E 12.1H0.63M	1.0 200	18
EAU Z 144514.99	P 3E	2.2H0.45M	1.0 200	32
EDI Z 144515.60	P 2EU20.55	S 2E 2.0H0.44M	1.0 200	35
EDI NS1445	ED	EU 4.6H0.36ML	1.0 200	35
EDI EW1445	EU	EU 5.0H0.45ML	1.0 200	35
ELO Z 144516.49	P 2E 22.35	S 2EU 4.6H0.35M	1.0 200	41
EAB Z 144517.00	P 3E 23.37	S 3E		44
EDU Z 144520.40	P 3E			63
-1				
241089 LANCS+	LA 015	12.5	5.0JAR	LWIGAN, LANCASHIRE 1
172558.23	353.29/ 404.14	14.6 1.4	53.532 -2.705	2
21 32 73 0.15	0.4 0.7 B A*C			3
LLY Z 172604.37	P 3E			33
LLO Z 172604.98	P 1ID			37
LBO Z 172607.02	P 3E			51
LKL Z 172611.28	P 3E 20.00	S 3		77
LMI Z 172612.68	P 3E 22.91	S 2		86
LMI NS1726		11.5H0.21ML	0.25 200	86
LMI EW1726		10.4H0.13ML	0.25 200	86
LCK Z 172613.43	P 3E 23.52	S 3		93
SBD Z 172611.30	P 1IU21.02	S 3		79
WPM Z 172612.40	P 2ED			85
WLF Z 172616.40	P 3 30.01	S 3		116
WCB Z 172616.50	P 4 32.07	S 3		123
WCB NS1726		4.2H0.10ML	0.25 200	123
WCB EW1726		4.6H0.10ML	0.25 200	123
WLC Z 172613.35	P 2E 24.50	S 3		93
WLC NS1726		11.7H0.11ML	0.25 200	93
WLC EW1726		15.1H0.10ML	0.25 200	93
WVR Z 172614.79	P 2ID			102
KWE Z 172611.62	P 3E			81
KBI Z 172612.31	P 3E			84
HPK Z 172612.10	P 3 22.09	S 3		86
-1				
251089N WALES			5.0RITCHIELLLEYN, GWYNEDD	1
043 4.16	232.44/ 336.78	13.7 0.7	52.902 -4.492	2
13 10 156 0.07	0.5 0.5 B A*C			3
YRE Z 004307.02	P 1IU08.90	S 1		10
YLL Z 004310.30	P 1IU14.51	S 1		34
WLC Z 004312.70	P 1IU18.41	S 1		49
WLC NS0043		5.1 H0.16ML	0.25 200	49
WLC EW0043		4.7 H0.09ML	0.25 200	49
YRH Z 004307.20	P 1IU09.30	S 1		12
WBR Z 004311.31	P 2E 16.05	S 2		41
WST Z 004309.95	P 3E			35
WFB Z 004311.09	P 3E 15.58	S 3		39
-1				
261089 PAISLEY+	PA284	12.5	5.0DG	LTYNDRUM, CENTRAL 1
1913 1.28	233.06/ 725.17	4.8 1.3	56.389 -4.705	2
12 32 259 0.34	2.6 2.5 D C*D			3
PMS Z 191311.53	P 2EU18.89	S 2		61

PCO Z 191311.78	P 2E 19.49	S 3		59
PGB Z 191313.26	P 3E 20.80	S 3		66
PGB NS1913		4.8H0.17ML	0.25 200	66
PGB EW1913		5.0H0.18ML	0.25 200	66
PCA Z 191315.71	P 3E			82
EAB Z 191307.16	P 1IU10.82	S 3E 11.1H0.20M	0.25 200	32
ELO Z 191311.90	P 2E 19.45	S 2E 7.1H0.17M	0.25 200	62
EBH Z 191314.71	P 2E 23.85	S 3E 3.3H0.19M	0.25 200	76
EAU Z 191318.30	P 3E			99
EDU Z 191319.59	P 2EU31.42	S 3E		106
EDI Z 191320.62	P 2E 32.80	S 2E 3.1H0.19M	0.25 200	108
EDI NS1913	E	EU 6.0H0.20ML	0.25 200	108
EDI EW1913	E	E 4.6H0.40ML	0.25 200	108
EBL Z 191322.50	P 3E			124
-1				
271089LANCS+	LA 016	12.5	5.0JAR	LWHITBURN, TYNE & WEAR 1
1 7 5.67	440.08/ 562.64	0.5 1.7	54.957	-1.374 2
11 55 266 0.25	3.7 2.6 D C*D COALFIELD TYPE			3
LKL Z 010724.73	P 3E 38.22	S 3E		111
LCK Z 010725.40	P 2EU			117
LBO Z 010728.18	P 3E			134
LMI Z 010730.10	P 3E 48.13	S 3E		149
LMI NS0107		6.2H0.32ML	0.25 200	149
LMI EW0107		6.0H0.38ML	0.25 200	149
XAL Z 010715.29	P 3E 21.70	S 3		55
XSO Z 010719.48	P 3E 30.34	S 2		82
ECK Z 010725.23	P 2E 39.70	S 3		115
ESK Z 010726.55	P 2E 41.46	S 3		124
ESK NS0107	41.46	S	5.4H0.19ML	0.25 200 124
ESK EW0107			4.6H0.28ML	0.25 200 124
ESY Z 010727.92	P 2E 45.00	S 3E		133
EBL Z 010728.88	P 2E 47.22	S 3E		140
EDI Z 010731.70	P 2E 51.99	S 2E 2.8H0.40M	0.25 200	157
EDI NS0107	E	E 3.2H0.41ML	0.25 200	157
EDI EW0107	E	EU 2.6H0.39ML	0.25 200	157
EBH Z 010737.61	P 3E 62.40	S 3E		197
-1				
021189 LOWNET+	LN 669 309	12.5	5.0DWR	LTYNDRUM, CENTRAL 1
6 243.49	220.03/ 718.78	9.1 0.8	56.327	-4.911 2
14 39 269 0.50	2.8 7.3 D C*D			3
ZAB Z 060250.20	P 2E 55.01	S 3E 3.0H0.09M	0.25 200	39
ELO Z 060255.41	P 3E 64.22	S 3E 1.5H0.10M	0.25 200	76
EBH Z 060258.06	P 3E 69.14	S 3E		87
EDI Z 060303.22	P 3E 17.91	S 3E 2.1H0.19M	0.25 200	116
EDI NS0603	E	E 2.0H0.15ML	0.25 200	116
EDI EW0603	E	E 0.8H0.19ML	0.25 200	116
PMS Z 060253.07	P 2E 58.71	S 3E		55
PCO Z 060254.20	P 2E 61.98	S 3E		63
PGB Z 060254.40	P 3E 61.90	S 3E		64
PGB NS0602	E	E 3.5H0.15ML	0.25 200	64
PGB EW0602	E	E 3.2H0.11ML	0.25 200	64
-1				
031189KEYWORTH	KW 078	12.5	5.0NSH	LTHORESBY, NOTTS 1
191346.96	459.50/ 368.42	3.4 1.0	2+ 53.209	-1.109 2
4 28 274 0.09	0.0 0.0 C A*D COALFIELD TYPE, FELT		THORESBY	3
CWF Z 191356.47	P 3E 63.38	S 1I		54
CWF NS1913		09.2H0.10ML	0.25 200	54
CWF EW1913		10.5H0.10ML	0.25 200	54
KWE Z 191356.60	P 3E			54
KBI Z 191352.20	P 2E			28
-1				
061189LANCS+	LA 017	12.5	5.0JAR	LPENRITH, CUMBRIA 1
05434.47	346.72/ 532.45	2.4 0.9	54.684	-2.827 2
11 36 97 0.25	1.4 2.2 C B*C			3
LCK Z 005441.20	P 1IU45.51	S 2		36
LKL Z 005444.30	P 1IU			55
LMI Z 005445.00	P 2E 53.07	S 2		60
LMI NS0054		4.9H0.11ML	0.25 200	60
LMI EW0054		5.3H0.10ML	0.25 200	60
LBO Z 005448.91	P 4E			80
XAL Z 005442.29	P 2E			44
XDE Z 005442.81	P 2E			47
ECK Z 005444.38	P 2E			59
ESK Z 005447.50	P 2E 55.57	S 3		75
ESK NS0054		8.4H0.09ML	0.25 200	75
ESK EW0054		5.9H0.09ML	0.25 200	75
XSO Z 005451.02	P 2ID			97
-1				
061189 CORNWALL		5.0ABW	LLIZARD POINT, CORNWALL 1	
235236.35	141.54/ -46.14	5.0 1.0	49.430	-5.565 2
6 75 356 0.51	90.7 59.1 D D*D SOUTHWEST OF LIZARD POINT			3
CR2 Z 2352	61.80	S 2		87
CR2 NS2352		8.9 H0.05ML	0.25 200	87

CR2 EW2352			10.0H0.06ML	0.25	200	87
CGH Z 235248.47	P 2					75
CCO Z 235249.95	P 2					83
CST Z 235251.20	P 2	61.80	S 2			90
CBW Z 235251.50	P 2					86
-1						
081189N WALES			5.0RITCHIELLLEYN, Gwynedd	1		
125228.39	237.29/ 344.00	22.6 0.6	52.968 -4.423	2		
13 1 131 0.06	0.3	0.6 B A*B LLEYN AFTERSHOCK		3		
WLC Z 125236.30	P 1IU41.72	S 2				43
WLC NS1252			8.0 H0.06ML	0.25	200	43
WLC EW1252			11.0H0.09ML	0.25	200	43
YRH Z 125233.40	P 1ID36.69	S 1				20
WBR Z 125235.45	P 2E 40.20	S 1				38
WST Z 125234.40	P 1IU38.50	S 1				29
YRE Z 125231.99	P 1IU					1
YLL Z 125233.91	P 1IU37.65	S 2				26
WLF Z 125235.17	P 2E 39.92	S 2				36
-1						
081189 LOWNET+	LN 670	212	12.5	5.0DWR	LDALMALLY, STRATHCLYDE	1
234715.68	221.58/ 716.15	9.1 0.3		56.304 -4.884	2	
7 36 301 0.17	2.2 23.3 D C*D				3	
EAB Z 234722.15	P 1ED26.69	S 2E	2.8H0.06M	0.25	200	36
PMS Z 234724.34	P 2E 30.85	S 3				52
PGB Z 234725.99	P 2E 33.90	S 3				61
PGB NS2347			1.6H0.10ML	0.25	200	61
PGB EW2347			1.3H0.11ML	0.25	200	61
PCO Z 234726.08	P 2E					60
-1						
101189 KEYWORTH	KW 079		12.5	5.0NSH	LTHORESBY, NOTTS	1
31757.42	466.73/ 373.81	3.8 1.1		53.257 -1.000	2	
4 35 290 0.36	0.0 0.0 D C*D COALFIELD TYPE				3	
CWF Z 031808.22	P 2E 15.38	S 2I				61
CWF NS0318			09.0H0.12ML	0.25	200	61
CWF EW0318			08.0H0.11ML	0.25	200	61
KWE Z 031808.65	P 2E					62
KBI Z 031803.35	P 2I					35
-1						
121189 LANCS+	LA 018		12.5	5.0JAR	LWARRINGTON, CHESHIRE	1
1028 5.62	363.12/ 390.77	0.3 1.4		53.412 -2.555	2	
15 49 174 0.23	0.9 1.0 C B*C COALFIELD TYPE				3	
LLO Z 102814.57	P 3E					49
LLY Z 102814.75	P 3E 21.16	S 3				49
LBO Z 102816.98	P 3E					63
LKL Z 102821.38	P 3E 32.29	S 3				90
LMI Z 102823.70	P 3E 36.41	S 3				103
LMI NS1028			9.0H0.20ML	0.25	200	103
LMI EW1028			10.3H0.24ML	0.25	200	103
LCK Z 102824.35	P 3E 36.90	S 3				108
HPK Z 102820.20	P 3 31.82	S 3				86
CWF Z 1028	P 4					112
CWF NS1028			6.5H0.17ML	0.25	200	112
CWF EW1028			8.4H0.15ML	0.25	200	112
SBD Z 102818.50	P 3E 28.25	S 3				73
WLC Z 102822.55	P 4E 33.60	S 3				94
WLC NS1028			2.7H0.15ML	0.25	200	94
WLC EW1028			3.0H0.12ML	0.25	200	94
-1						
121189 LANCS+	LA 018		12.5	5.0JAR	LCONISTON, CUMBRIA	1
162721.23	329.87/ 499.56	5.4 0.6		54.387 -3.080	2	
11 14 101 0.20	0.8 1.6 C B*C				3	
LCK Z 162724.15	P 1IU25.90	S 3				14
LMI Z 162725.82	P 1IU29.05	S 3				24
LMI NS1627			4.2H0.10ML	1.0	200	24
LMI EW1627			4.6H0.10ML	1.0	200	24
LKL Z 162728.45	P 2E 33.35	S 3				40
XDE Z 162726.72	P 3E 30.46	S 3				30
XAL Z 162734.99	P 3E					77
ECK Z 162736.56	P 3E					89
ESK Z 1627	P 4 50.85	S 3				104
ESK NS1627			2.5H0.09ML	0.25	200	104
ESK EW1627			2.1H0.12ML	0.25	200	104
-1						
171189 LANCS+	LA 019		12.5	5.0JAR	LWARRINGTON, CHESHIRE	1
2240 8.84	362.69/ 391.76	0.1 1.6		53.421 -2.561	2	
21 48 86 0.31	0.9 1.3 C C*C COALFIELD TYPE				3	
LLO Z 224017.38	P 2EU24.12	S 4				48
LLY Z 224017.70	P 3E					48
LBO Z 224019.82	P 2ED					62
LKL Z 224024.38	P 2ED					89
LMI Z 224026.80	P 2ED39.39	S 3				102
LMI NS2240			12.8H0.20ML	0.25	200	102
LMI EW2240			13.4H0.21ML	0.25	200	102

LCK Z 224027.20	P 3E 39.89	S 3		106
HPK Z 224023.95	P 2EU34.91	S 3		86
CWF Z 2240	4 42.08	S 3		113
CWF NS2240		8.1H0.20ML	0.25 200	113
CWF EW2240		10.4H0.17ML	0.25 200	113
SBD Z 224021.60	P 3E			74
MCH Z 224036.00	P 3E 54.55	S 3		161
WPM Z 224025.17	P 3E			91
YLL Z 224028.02	P 3E			112
WME Z 224028.70	P 3E 42.88	S 4		116
WCB Z 224030.71	P 3E 46.50	S 3		132
WCB NS2240		3.5H0.20ML	0.25 200	132
WCB EW2240		2.7H0.30ML	0.25 200	132
YRE Z 224031.15	P 3E			134
WLC Z 224024.50	P 3E			94
-1				
181189 LOWNET+	LN 671 1169	12.5	5.0DWR	LROSEWELL, LOTHIAN 1
212448.79	330.24/ 662.91	1.0 0.4		55.854 -3.115 2
9 3 113 0.05	0.3 0.3 B A*B COALFIELD TYPE			3
RCH Z 212449.58	P 0ID49.97	S 2E 5.9H0.12M	1.0 4	3
RCH NS2124	E	EU 2.5H0.17M	1.0 4	3
RCH EW2124	ED	E 3.5H0.20M	1.0 4	3
EDI Z 212451.01	P 1IU52.66	S 2EU14.8H0.31M	0.25 200	9
EDI NS2124	EU	ED 8.3H0.70ML	0.25 200	9
EDI EW2124	E	EU10.7H0.31ML	0.25 200	9
EBL Z 212451.20	P 1ID53.09	S 3EU		10
EAU Z 212453.02	P 4E 56.30	S 3E		21
ESY Z 212454.27	P 3E 59.48	S 3E		32
EBH Z 212458.30	P 3E			50
-1				
191189 CORNWALL+		5.0		LLUNDY, BRISTOL CHANNEL 1
164737.74	203.49/ 146.34	1.6 1.1		51.182 -4.812 2
8 31 287 0.01	1.2 0.9 C B*D			3
CR2 Z 164757.02	P 1 71.15	S 2		116
CR2 NS1647		13.0H0.05ML	0.25 200	116
CR2 EW1647		14.5H0.05ML	0.25 200	116
CCA Z 164756.85	P 1 D70.80	S 2		115
CBW Z 164757.23	P 1 D			117
CPZ Z 164758.70	P 1E			127
HTL Z 164743.62	P 1 D47.90	S 1		31
HTL NS1647		8.5 H0.09ML	1.0 200	31
HTL EW1647		7.2 H0.07ML	1.0 200	31
-1				
201189 KEYWORTH	KW 080		5.0NSH	LTHORESBY, NOTTS 1
203538.56	460.79/ 369.16	3.9 1.3		2+ 53.216 -1.090 2
4 30 277 0.09	0.0 0.0 C A*D COALFIELD TYPE, FELT			3
CWF Z 203548.22	P 3E 55.20	S 1I		55
CWF NS2035		15.5H0.11ML	0.25 200	55
CWF EW2035		15.0H0.12ML	0.25 200	55
KWE Z 203548.46	P 3E			55
KBI Z 203544.00	P 2E			30
-1				
241189 LOWNET	LN 672 656	12.5	5.0DWR	LLASSWADE, LOTHIAN 1
85137.78	329.98/ 665.62	1.7 0.2		55.879 -3.119 2
6 4 198 0.02	0.5 0.4 C A*D COALFIELD TYPE			3
RCH Z 085138.75	P 1IU39.50	S 2E 6.8H0.14M	0.25 4	4
RCH EW0851	EU	EU 7.5H0.24M	0.25 4	4
EDI Z 085139.45	P 1ID40.69	S 2EU 7.4H0.29M	0.25 200	7
EDI NS0851	ID	EU10.5H0.15ML	0.25 200	7
EDI EW0851	EU	ED10.5H0.55ML	0.25 200	7
EBL Z 085140.59	P 2E 42.51	S 3E		13
-1				
251189 LOWNET	LN 672 938	12.5	5.0DWR	LCOMRIE, TAYSIDE 1
44630.80	272.47/ 721.03	1.6-0.4		56.364 -4.065 2
6 25 201 0.06	0.6 0.6 C A*D			3
EAB Z 044635.90	P 3E 39.47	S 3E 1.2H0.11ML	0.25 200	26
EBH Z 044637.60	P 3E 42.72	S 3E 1.4H0.13ML	0.25 200	37
ELO Z 044635.56	P 3E 39.20	S 3E 2.5H0.09ML	0.25 200	25
-1				
251189 KEYWORTH	KW 081	12.5	5.0NSH	LTHORESBY, NOTTS 1
1541 0.99	462.72/ 370.60	3.5 1.1		53.228 -1.060 2
4 31 281 0.06	0.0 0.0 C A*D COALFIELD TYPE			3
CWF Z 154111.00	P 3E 17.98	S 1I		57
CWF NS1541		11.5H0.09ML	0.25 200	57
CWF EW1541		12.0H0.10ML	0.25 200	57
KWE Z 154111.12	P 3E			57
KBI Z 154106.75	P 2I			31
-1				
261189 LOWNET+	LN 672 1287	12.5	5.0DWR/DG	LBROXBURN, LOTHIAN 1
612 7.18	311.12/ 672.28	3.4 0.6		55.935 -3.423 2
11 10 101 0.13	0.5 3.8 C B*C			3
EAU Z 061209.56	P 0IU10.81	S 2EU		10
EDI Z 061210.22	P 1EU12.42	S 1EU 4.6H0.12M	1.0 200	15

EDI NS0612	E	IU	4.0H0.16ML	1.0	200	15
EDI EW0612	IU	EU	6.0H0.18ML	1.0	200	15
EBL Z 061212.80	P 2EU16.51	S 2E				30
EBH Z 061213.60	P 1IU18.30	S 2E				35
PCO Z 061214.83	P 3E 18.81	S 4E				43
ESY Z 061215.91	P 3E					51
PCA Z 061218.96	P 3E					58
EDU Z 061219.79	P 3E					73
PGB Z 061219.86	P 3E 27.30	S 3E				68
PGB NS0612	E	E	5.3H0.10ML	0.25	200	68
PGB EW0612	E	E	3.9H0.10ML	0.25	200	68
-1						
291189HEREFORD	HF 547	12.5	5.0NSH	LHEREFORD, HER & WORC	1	
53318.36	352.64/ 239.17	1.0 1.0		52.048 -2.691	2	
4 10 182 0.03	0.0 0.0 C A*D					3
MCH Z 053322.82	P 1IU	S 1I				22
MCH NS0533			06.4H0.14ML	02.5	200	22
MCH EW0533			05.5H0.11ML	02.5	200	22
HAE Z 053320.78	P 1ID					10
HGH Z 053326.94	P 2ED					46
HTR Z 053325.32	P 3E					40
-1						
011289LANCS+	LA021	12.5	5.0JAR	LWARRINGTON, CHESHIRE	1	
34441.79	361.97/ 392.94	0.2 1.2		53.432 -2.572	2	
15 46 107 0.10	0.3 0.5 B A*C COALFIELD TYPE					3
LLO Z 034450.23	P 3 57.00	S 3				47
LLY Z 034450.44	P 2EU57.00	S 3				46
LBO Z 034452.70	P 2EU					61
LKL Z 034457.18	P 2ED68.11	S 3				88
LMI Z 034459.50	P 3E 72.02	S 3				100
LMI NS0344			6.3H0.20ML	0.25	200	100
LMI EW0344			7.7H0.22ML	0.25	200	100
LCK Z 034460.11	P 3E 72.68	S 3				105
HPK Z 034456.68	P 3E					86
CWF Z 0344	4 75.40	S 3				115
CWF NS0344			4.4H0.15ML	0.25	200	115
CWF EW0344			5.1H0.17ML	0.25	200	115
WLC Z 0344	4 69.90	S 3				94
WLC NS0344			2.7H0.11ML	0.25	200	94
WLC EW0344			2.2H0.18ML	0.25	200	94
WPM Z 034457.40	P 3E					91
-1						
011289KEYWORTH	KW 082		5.0NSH	LTHORESBY, NOTTS	1	
41534.94	461.35/ 369.83	4.5 1.1		2+ 53.222 -1.081	2	
5 30 214 0.11	0.8 1.6 C A*D COALFIELD TYPE, FELT			THORESBY		3
CWF Z 041544.66	P 3E 51.68	S 1I				56
CWF NS0415			09.4H0.11ML	0.25	200	56
CWF EW0415			10.0H0.12ML	0.25	200	56
KWE Z 041544.9	P 3E					56
KBI Z 041540.45	P 2E					30
KSY Z 041542.85	P 3E					44
-1						
051289N WALES			5.0RITCHIELANGLESEY, GWYNEDD			1
19 046.11	249.71/ 399.02	13.0-0.4		53.466 -4.264	2	
7 8 316 0.01	0.3 0.2 C A*D NORTHEAST OF ANGLESEY					3
WCB Z 190050.3	P 1IU53.10	S 3				21
WCB NS1900			4.6 H0.09ML	0.25	200	21
WCB EW1900			4.0 H0.07ML	0.25	200	21
YRC Z 190051.86	P 1IU					32
WLF Z 190050.32	P 1IU53.23	S 2				22
WME Z 190048.69	P 1IU50.46	S 1				8
-1						
061289 LOWNET	LN 673 2292	12.5	5.0DWR	LGLADHOUSE RES, LOTHIAN	1	
62929.80	331.69/ 652.19	6.1-0.3		55.758 -3.089	2	
8 3 233 0.10	1.0 0.5 C A*D					3
EBL Z 062931.23	P 0IU32.16	S 2EU				3
EDI Z 062933.90	P 3E 36.41	S 3E	2.0H0.22M	0.25	200	19
EDI NS0629	E	E	2.8H0.18ML	0.25	200	19
EDI EW0629	E	E	2.5H0.18ML	0.25	200	19
EAU Z 062934.61	P 2EU37.72	S 3E				25
ESY Z 062936.10	P 3E 40.60	S 3E				35
-1						
071289KEYWORTH	KW 083	12.5	5.0NSH	LTHORESBY, NOTTS	1	
03152.12	460.80/ 369.57	7.0 0.9		2+ 53.219 -1.089	2	
5 30 212 0.09	2.8 11.3 D C*D COALFIELD TYPE, FELT			THORESBY		3
CWF Z 003162.0	P 3E 68.50	S 2I				56
CWF NS0031			06.0H0.10ML	0.25	200	56
CWF EW0031			04.5H0.15ML	0.25	200	56
KSY Z 003159.8	P 2E					44
KWE Z 003161.5	P 3E					55
KBI Z 003157.6	P 3E					30
-1						
081289 LOWNET	LN 674 724	12.5	5.0DWR	LBLAIRHALL, FIFE	1	

PHASE DATA : 1989

Table 5 (cont'd)

14	633.03	297.93/	692.07	0.1	1.4		56.111	-3.641	2
13	17	123	0.13	0.3	0.4	B A*C COALFIELD TYPE			3
EBH	Z	140636.73		P 1IU39.72	S 2ED				17
EAU	Z	140639.20		P 3E 44.00	S 3E				32
EDI	Z	140639.86		P 2E 45.11	S 2EU 6.5H0.50M		0.25	200	35
EDI	NS1406			E	ED15.0H0.32ML		0.25	200	35
EDI	EW1406			E	ED18.5H0.29ML		0.25	200	35
ELO	Z	140640.71		P 2EU46.62	S 2EU				40
EAB	Z	140641.30		P 3E 47.72	S 3ED				44
EBL	Z	140642.60		P 3E 50.01	S 2EU				53
EDU	Z	140644.30		P 3E					62
	-1								
081289N	WALES+					5.0RITCHIELCARDIGAN BAY			1
	231257.26	216.04/	315.73	19.1	0.9		52.708	-4.723	2
22	15	149	0.23	1.1	1.9	C B*C			3
WCB	Z	231310.02		P 3E 18.40	S 3				76
WCB	NS2313					8.0 H0.07ML		0.25	200
WCB	EW2313					6.0 H0.11ML		0.25	200
YRC	Z	231307.77		P 2E 14.99	S 2				61
YRE	Z	231304.00		P 1IU					37
WPM	Z	231310.48		P 3E 20.21	S 3				82
WLF	Z	231308.65		P 3E					68
YLL	Z	231307.50		P 1IU14.62	S 2				61
WLC	NS2313			P 3E 17.07	S 3				71
WLC	EW2313					8.0 H0.1 ML		0.25	200
YRH	Z	231301.55		P 1IU					15
WVR	Z	231309.70		P 3E 18.60	S 2				76
WBR	Z	231307.03		P 2E 13.82	S 2				58
WST	Z	231307.05		P 2E					58
WFB	Z	231305.41		P 2E 11.09	S 2				46
ECP	Z	231317.3		P 2E 32.0	S 3				127
	-1								
091289LANCS+		LA 022		12.5		5.0JAR	L CULCHETH, MANCHESTER		1
	12446.27	367.50/	396.93	0.4	1.0		53.468	-2.490	2
13	43	241	0.30	3.1	3.1	D C*D COALFIELD TYPE			3
LLO	Z	012454.19		P 3E					43
LLY	Z	012454.52		P 3E 61.00	S 3				46
LBO	Z	012456.59		P 3E					57
LKL	Z	012460.88		P 3E					84
LMI	Z	012463.78		P 3E 76.17	S 3				100
LMI	NS0124					2.7 0.22 ML		0.25	200
LMI	EW0124					4.1 0.28 ML		0.25	200
LCK	Z	012464.08		P 3E					102
HPK	EW0124			4 70.32	S 3				
WPM	Z	012462.68		P 3E 75.44	S 3				97
YRE	Z	012468.97		P 3E					140
WLC	Z	012463.67		P 3E					101
WLC	NS0124					1.5H0.12ML		0.25	200
WLC	EW0124					1.6H0.18ML		0.25	200
WST	Z	012465.20		P 3E					114
	-1								
091289KEYWORTH		KW 083		12.5		5.0NSH	L THORESBY, NOTTS		1
	182043.37	464.20/	370.22	2.5	1.1		53.225	-1.038	2
5	33	218	0.17	3.0	3.6	D C*D COALFIELD TYPE			3
CWF	Z	182053.65		P 3E 60.7	S 1I				57
CWF	NS1820					11.0H0.11ML		0.25	200
CWF	EW1820					07.0H0.15ML		0.25	200
KSY	Z	182050.8		P 3E					57
KWE	Z	182053.9		P 3E					57
KBI	Z	182049.2		P 3E					57
	-1								
101289	LOWNET+	LN 674	1227	12.5		5.0DWR	L TYNDRUM, CENTRAL		1
	24654.33	226.20/	729.08	0.6	0.7		56.422	-4.818	2
12	64	267	0.40	4.9	3.6	D C*D			3
EAB	Z	024654.80		P 4E 61.60	S 4E	1.5H0.22M		0.25	200
ELO	Z	024706.33		P 2E 19.10	S 3E	2.2H0.16M		0.25	200
EBH	Z	024707.75		P 3E 20.00	S 3E				69
EDU	Z	024713.00		P 3E 27.70	S 3E				83
EDI	Z	024713.10		P 3E 27.30	S 3E	1.0H0.19M		0.25	200
EDI	NS0247			E	E	1.1H0.16ML		0.25	200
EDI	EW0247			E	E	1.0H0.16ML		0.25	200
PMS	Z	024705.91		P 3E 14.34	S 2				116
PCO	Z	024706.31		P 2E 14.90	S 3	1.9H0.15M		0.25	200
	-1								64
101289	LOWNET	LN 674	1256	12.5		5.0DWR	L INNERLEITHEN, BORDERS		1
	45118.09	338.45/	636.88	8.5	0.5		55.622	-2.977	2
7	17	275	0.24	3.1	11.6	D C*D			3
EBL	Z	045121.58		P 0ID24.31	S 2ED				17
EAU	Z	045124.43		P 1ID					39
EDI	Z	045124.95		P 3E 29.22	S 2E	1.5H0.25M		0.25	200
EDI	NS0451			E	EU	3.2H0.26ML		0.25	200
EDI	EW0451			E	EU	2.6H0.25ML		0.25	200

ESY Z 045125.33	P 1IU30.10	S 3E				40
-1						
131289LANCS+	LA 022	12.5	5.0JAR	LCULCHETH, MANCHESTER	1	
	42256.05	367.23/ 395.58	0.5 1.3	53.456	-2.494	2
18 44 67 0.25	0.9	1.6 C B*C COALFIELD TYPE				3
LLO Z 042304.00	P 3E					44
LLY Z 042304.52	P 3E 11.20	S 3				47
LBO Z 042306.56	P 3E					59
LKL Z 042310.98	P 3E					85
LMI Z 042313.78	P 3E 26.27	S 3				101
LMI NS0423		6.6 0.23 ML		0.25 200	101	
LMI EW0423		7.9 0.28 ML		0.25 200	101	
LCK Z 042313.96	P 3E 26.63	S 3				104
HPK Z 042310.29	P 3E 20.11	S 3				80
KWE Z 042307.70	P 3E					66
KBI Z 042308.33	P 3E					68
CWF Z 042316.11	P 4 30.63	S 4				113
CWF NS0423		4.1H0.22ML		0.25 200	113	
CWF EW0423		3.2H0.26ML		0.25 200	113	
SBD Z 042309.40	P 3E					80
HLM Z 042314.53	P 3E					108
WVR Z 042313.48	P 3E					105
WLC Z 042313.43	P 3E					100
WLC NS0423		2.6H0.15ML		0.25 200	100	
WLC EW0423		2.9H0.19ML		0.25 200	100	
WPM Z 042312.89	P 3E					96
-1						
131289LANCS+	LA 022	12.5	5.0JAR	LWARRINGTON, CHESHIRE	1	
	93030.48	361.35/ 391.96	0.1 1.6	53.423	-2.582	2
22 47 86 0.25	0.6	1.0 C B*C COALFIELD TYPE				3
LLO Z 093039.12	P 3E 45.78	S 3				48
LLY Z 093039.21	P 2IU45.80	S 3				47
LBO Z 093041.38	P 3E					62
LKL Z 093045.98	P 2ED					89
LMI Z 093048.33	P 2EU61.03	S 3				101
LMI NS0930		4.9H0.18ML		1.0 200	101	
LMI EW0930		5.4H0.21ML		1.0 200	101	
LCK Z 093048.78	P 2ED					106
HPK Z 093045.38	P 3E 56.60	S 3				87
CWF Z 0930	P 4 64.10	S 3				114
CWF NS0930		9.2H0.20ML		0.25 200	114	
CWF EW0930		13.5H0.17ML		0.25 200	114	
SBD Z 093042.55	P 3E					73
MCH Z 093057.46	P 3E 76.18	S 3				161
WLC Z 093046.72	P 3E 58.26	S 3				93
WLC NS0930		4.7H0.13ML		0.25 200	93	
WLC EW0930		5.0H0.17ML		0.25 200	93	
WVR Z 093047.17	P 3E 59.06	S 3				98
WPM Z 093046.35	P 3E					90
WCB Z 093052.48	P 3E 68.33	S 3				131
YRE Z 093052.74	P 3E 69.24	S 3				133
-1						
161289 ESK	ES 452	12.5	5.0DG	LCROGLIN FELL, CUMBRIA	1	
	12333.62	359.16/ 549.13	4.9 0.8	54.835	-2.636	2
10 27 153 0.16	1.2	2.5 C B*C				3
XAL Z 012338.78	P 0IU42.21	S 2				27
ECK Z 012342.35	P 2ED48.44	S 3				50
ESK Z 012344.85	P 2E 52.45	S 3				65
ESK NS0123		5.2H0.08ML		0.25 200	65	
ESK EW0123		7.0H0.08ML		0.25 200	65	
XDE Z 012345.10	P 3E 53.05	S 2				66
XSO Z 012347.00	P 3E 56.09	S 2				77
-1						
161289KEYWORTH	KW 084		5.0NSH	LTHORESBY, NOTTS	1	
	45424.81	460.10/ 367.06	0.7 1.2	2+	53.197	-1.100
4 29 272 0.07	0.0	0.0 C A*D COALFIELD TYPE, FELT		THORESBY		2
CWF Z 045434.58	P 3E 41.65	S 1I				3
CWF NS0454		17.0H0.10ML		0.25 200	53	
CWF EW0454		10.0H0.15ML		0.25 200	53	
KWE Z 045434.80	P 3E					54
KBI Z 045430.51	P 2E					29
-1						
171289KEYWORTH+	KW 084	12.5	5.0NSH	LSTOKE-ON-TRENT, STAFFS	1	
	73248.90	390.55/ 348.61	7.7 1.8	53.124	-2.141	2
10 23 168 0.24	1.3	2.9 C B*C				3
CWF Z 073261.05	P 3E 69.26	S				71
CWF NS0732		07.1H0.23ML		01.0 200	71	
CWF EW0732		05.5H0.15ML		01.0 200	71	
KWE Z 073253.60	P 3E					23
KBI Z 073256.40	P 2E					44
WLC Z 073307.22	P 2E 19.70	S				111
WLC NS0733		16.0H0.21ML		0.25 200	111	
WLC EW0733		10.5H0.18ML		0.25 200	111	

YRH Z 073316.00	P 1ID						170
WVR Z 073305.92	P 2E						105
WBR Z 073308.56	P 2E						121
WFB Z 073310.60	P 2E						137
-1							
181289KEYWORTH+	KW 084			5.0NSH	LSTOKE-ON-TRENT, STAFFS	1	
16 220.41	387.25/ 349.04	2.5 1.7		53.038	-2.190	2	
5 24 163 0.04	0.9 1.3 C A*D					3	
CWF Z 160232.25	P 2E 40.74	S 1I					68
CWF NS1602		08.0H0.12ML		1	200	68	
CWF EW1602		06.5H0.11ML		1	200	68	
KWE Z 160224.78	P 2I						24
KBI Z 160229.44	P 1IU						51
SBD Z 160232.95	P 1ID						73
-1							
191289 LOWNET+	LN 675 2049	12.5	5.0DWR	LRYHOPE, TYNE & WEAR	1		
14 251.29	446.81/ 552.69	0.5 1.8		54.867	-1.271	2	
15 61 285 0.25	4.2 3.2 D C*D OFFSHORE, COALFIELD TYPE					3	
ESY Z 140315.10	P 2E 32.61	S 3E					145
EGL Z 140316.00	P 2E 34.50	S 3E					151
EDI Z 140319.02	P 3E 40.10	S 3E	9.6H0.21M	0.25	200	169	
EDI NS1403	E	E	8.2H0.16ML	0.25	200	169	
EDI EW1403	E	E	5.9H0.31ML	0.25	200	169	
EAU Z 140319.52	P 2E						176
EBH Z 140323.71	P 3E						209
EDU Z 140324.92	P 3E						217
ELO Z 140326.78	P 3E						236
XAL Z 140301.98	P 1ID						61
XSO Z 140307.43	P 1IU						94
ECK Z 140312.20	P 2E						124
ESK Z 140313.61	P 1IU29.85	S 3					133
ESK NS1403		10.7H0.12ML		0.25	200	133	
ESK EW1403		7.6H0.14ML		0.25	200	133	
XDE Z 140316.28	P 3E						149
-1							
191289N WALES			5.0RITCHIELIRISH SEA			1	
2150 7.39	206.03/ 409.37	9.5 0.1		53.545	-4.928	2	
8 31 320 0.06	1.4 4.0 C B*D					3	
WCB Z 215012.99	P 1IU16.70	S 1					31
WCB NS2150		5.6 H0.07ML		0.25	200	31	
WCB EW2150		8.7 H0.06ML		0.25	200	31	
YRC Z 215014.27	P 1ID19.11	S 2					40
YRE Z 215019.46	P 2E						71
WLF Z 215015.14	P 1IU20.29	S 3					45
WME Z 215015.00	P 4E 20.26	S 1					45
WLC NS2150	35.40	S 2					
-1							
221289KEYWORTH+	KW 085	12.5	5.0NSH	RSOUTHERN NORTH SEA	1		
113844.74	605.94 462.71	30.1 2.6		54.019	1.144	2	
21126 220 0.29	2.0 3.2 C B*D					3	
CWF Z 113915.24	P 3E 37.54	S 3					217
CWF NS1139		14.0H0.10ML		0.25	200	217	
CWF EW1139		18.5H0.10ML		0.25	200	217	
KSY Z 113909.25	P 2E						164
KWE Z 113916.60	P 3E						227
KBI Z 113912.84	P 2E						196
AWI Z 113904.69	P 2 20.05	S 2	12.6H0.07ML	2.5	200	134	
ABA Z 113904.04	P 2 19.89	S 4	12.6H0.07ML	2.5	200	126	
AWH Z 113907.45	P 2 24.07	S 2					155
APA Z 113912.10	P 2						193
ESY Z 113928.37	P 2E 58.88	S 3E					320
EBL Z 113930.00	P 2E 61.15	S 3E					332
EDI Z 113931.70	P 3E 66.10	S 2E	1.5H0.18M	1.0	200	349	
EDI NS1139	E	E	4.1H0.20ML	1.0	200	349	
EDI EW1139	E	E	2.4H0.19ML	1.0	200	349	
XSO Z 113922.74	P 2E 49.50	S 3					273
ESK Z 113928.20	P 3E 58.69	S 2					315
ESK NS1139		12.0H0.10ML		0.25	200	315	
ESK EW1139		12.0H0.10ML		0.25	200	315	
-1							
241289 LOWNET+	LN 676 916	12.5	5.0DWR	LSTRATHYRE, CENTRAL	1		
22240.47	257.50/ 713.52	3.1 0.5		56.293	-4.303	2	
8 12 230 0.26	3.9 4.9 D C*D					3	
EAB Z 022243.08	P 3E 44.52	S 2EU15.0H0.08M		0.25	200	12	
ELO Z 022248.09	P 2E 52.80	S 3E 2.7H0.15M		0.25	200	42	
EBH Z 022249.48	P 3E 55.91	S 3E 1.4H0.10M		0.25	200	49	
EDU Z 022254.72	P 3E						85
EDI Z 022254.90	P 4E 65.50	S 3E	1.3H0.12M	0.25	200	81	
EDI NS0222	E	E	2.3H0.08ML	0.25	200	81	
EDI EW0222	E	E	2.0H0.11ML	0.25	200	81	
PCO Z 022247.36	P 3E						36
-1							
241289KEYWORTH+	KW 085	12.5	5.0NSH	RSOUTHERN NORTH SEA	1		

34712.22	676.88	360.66	8.7	2.0		53.071	2.134	2
7 53 314 0.32	5.2 93.1	D D*D					3	
CWF Z 034747.65	P 4E	74.95	S 4				235	
CWF NS0347				11.0H0.10ML		0.25	200	235
CWF EW0347				05.5H0.10ML		0.25	200	235
KSY Z 034741.82	P 4I	64.26	S 4				183	
KUF Z 034740.40	P 4ID	62.80	S 4				178	
APA Z 034728.15	P 1	39.48	S 2				97	
AWH Z 034728.31	P 1						94	
AWI Z 034721.11	1	28.19	2	11.6H0.13ML		2.5	200	53
ABA Z 034723.30	P 1	32.00	S 3				69	
-1								
251289 LOWNET	LN 676	1301	12.5	5.0DWR	L BROXBURN, LOTHIAN		1	
62212.54	311.01/	672.33	2.6	0.1		55.936	-3.425	2
8 10 161 0.10	0.5136.9	C C*C					3	
EAU Z 062214.87	P 0IU16.19		S 2ED				10	
EDI Z 062215.55	P 1IU17.70		S 2E	5.5H0.19M		0.25	200	15
EDI NS0622	E			EU 7.0H0.19ML		0.25	200	15
EDI EW0622	EU			EU 8.8H0.16ML		0.25	200	15
EBL Z 062218.06	P 2EU22.11		S 2EU				30	
EBH Z 062218.99	P 3E 23.58		S 3E				35	
-1								
281289 LOWNET+	LN 677	119	12.5	5.0DWR	LESKDALE, D & G		1	
153615.35	335.77/	598.56	0.2	0.5		55.277	-3.011	2
10 13 195 0.27	1.4	1.5 C B*D					3	
EBL Z 153625.68	P 3E 33.20		S 2E				55	
EDI Z 153627.64	P 3E 37.52		S 2E	0.7H0.21M		0.25	200	73
EDI NS1536	E			1.5H0.21ML		0.25	200	73
EDI EW1536	E			1.5H0.29ML		0.25	200	73
EAU Z 153626.00	P 3E						69	
ESY Z 153629.70	P 3E 40.91		S 3E				76	
ESK Z 153618.31	P 0IU20.89		S 1				13	
ESK NS1536				5.0H0.11ML		1.0	200	13
ESK EW1536				5.5H0.11ML		1.0	200	13
ECK Z 153618.30	P 3E 20.71		S 2				13	
-1								
281289N WALES				5.0RITCHIE LLLEYN, GWYNEDD			1	
2036 1.88	238.58/	343.46	22.4	1.3		52.964	-4.404	2
20 2 181 0.11	0.5	0.8 C A*D	LLEYN	AFTERSHOCK			3	
WCB Z 203610.40	P 2E 16.12		S 2				47	
WCB NS2036				4.5 H0.06ML		1.0	200	47
WCB EW2036				4.9 H0.07ML		1.0	200	47
YRC Z 203608.46	P 1ID13.03		S 1				34	
YRE Z 203605.60	P 1ID						2	
WPM Z 203610.19	P 1IU16.30		S 2				47	
WLF Z 203608.64	P 1ID13.40		S 1				36	
WME Z 203610.50	P 1IU						49	
YLL Z 203607.26	P 1IU10.89		S 1				25	
WLC Z 203609.60	P 1IU15.02		S 1				42	
WLC NS2036				8.0 H0.08ML		2.5	200	42
WLC EW2036				6.9 H0.09ML		2.5	200	42
WVR Z 203611.47	P 3E						57	
WBR Z 203608.71	P 1IU13.46		S 1				36	
WST Z 203607.64	P 1IU						28	
WFB Z 203609.50	P 2E 14.29		S 2				40	
-1								
281289 ESK	ES 454		12.5	5.0DG	L NEWCASTLETON, BORDERS		1	
224028.78	359.73/	601.13	2.5	0.1		55.303	-2.634	2
6 32 198 0.09	2.0	1.2 C B*D					3	
XSO Z 224034.75	P 1IU38.99		S 2				32	
ECK Z 224034.87	P 1IU39.80		S 3				34	
ESK Z 224035.48	P 1IU40.20		S 2				36	
ESK NS2240				4.0H0.09ML		0.25	200	36
ESK EW2240				3.1H0.08ML		0.25	200	36
-1								
291289 KEYWORTH	KW 086		12.5	5.0NSH	L BUXTON, DERBYSHIRE		1	
15 336.88	419.74/	377.93	1.0	1.6		53.298	-1.704	2
4 13 276 0.12	0.0	0.0 C A*D					3	
CWF Z 150349.15	P 2I 57.6		S 1I				68	
CWF NS1503				10.5H0.25ML		0.25	200	68
CWF EW1503				15.0H0.20ML		0.25	200	68
KWE Z 150342.98	P 2E						33	
KBI Z 150339.75	P 2I						13	
-1								
301289 ESK	ES 454		12.5	5.0DG	L MOFFAT, D & G		1	
123340.03	309.47/	596.32	9.6-0.3			55.253	-3.424	2
4 16 310 0.07	0.0	0.0 C A*D					3	
ESK Z 123343.31	P 0IU45.87		S 1				16	
ESK NS1233				5.0H0.10ML		0.25	200	16
ESK EW1233				5.6H0.09ML		0.25	200	16
ECK Z 123344.17	P 1ID46.99		S 1				21	
-1								
311289N WALES				5.0RITCHIE LLLEYN, GWYNEDD			1	

713 1.36	240.42/ 343.06	21.9 0.7	52.961	-4.376	2
15 4 161 0.10	0.5 0.9 B A*C	LLEYN AFTERSHOCK			3
WLC Z 071308.72	P 1IU13.88	S 1			40
WLC NS0713			11.1H0.15ML	0.25 200	40
WLC EW0713			6.1 H0.08ML	0.25 200	40
WBR Z 071308.20	P 3E 12.42	S 1			35
WST Z 071306.79	P 1IU10.70	S 1			26
WFB Z 071308.68	P 2E 13.25	S 1			38
YRC Z 071307.97	P 3E 12.66	S 2			35
YRE Z 071305.00	P 1ID				4
WLF Z 071308.35	P 2E 12.84	S 1			37
YLL Z 071306.77	P 2E 10.20	S 1			24
-1					

TABLE 6 : Typical depth / crustal velocity for Britain

Depth to top of layer (km)	P-wave velocity (km/s)
0.0	4.0
2.52	5.9
7.55	6.45
18.87	7.0
34.15	8.0

$$V_p/V_s = 1.73$$

## KEY TO SYMBOLS

### DEPTHS (kms)



< 50



50 ≤ AND < 99



99 ≤

### MAGNITUDE

#### (Symbol Radius)

< 1.0

1.0 ≤ AND < 2.0

2.0 ≤ AND < 3.0

3.0 ≤ AND < 4.0

4.0 ≤ AND < 5.0

5.0 ≤

## KEY TO EPICENTRE MAPS, FIGURES 3 TO 6

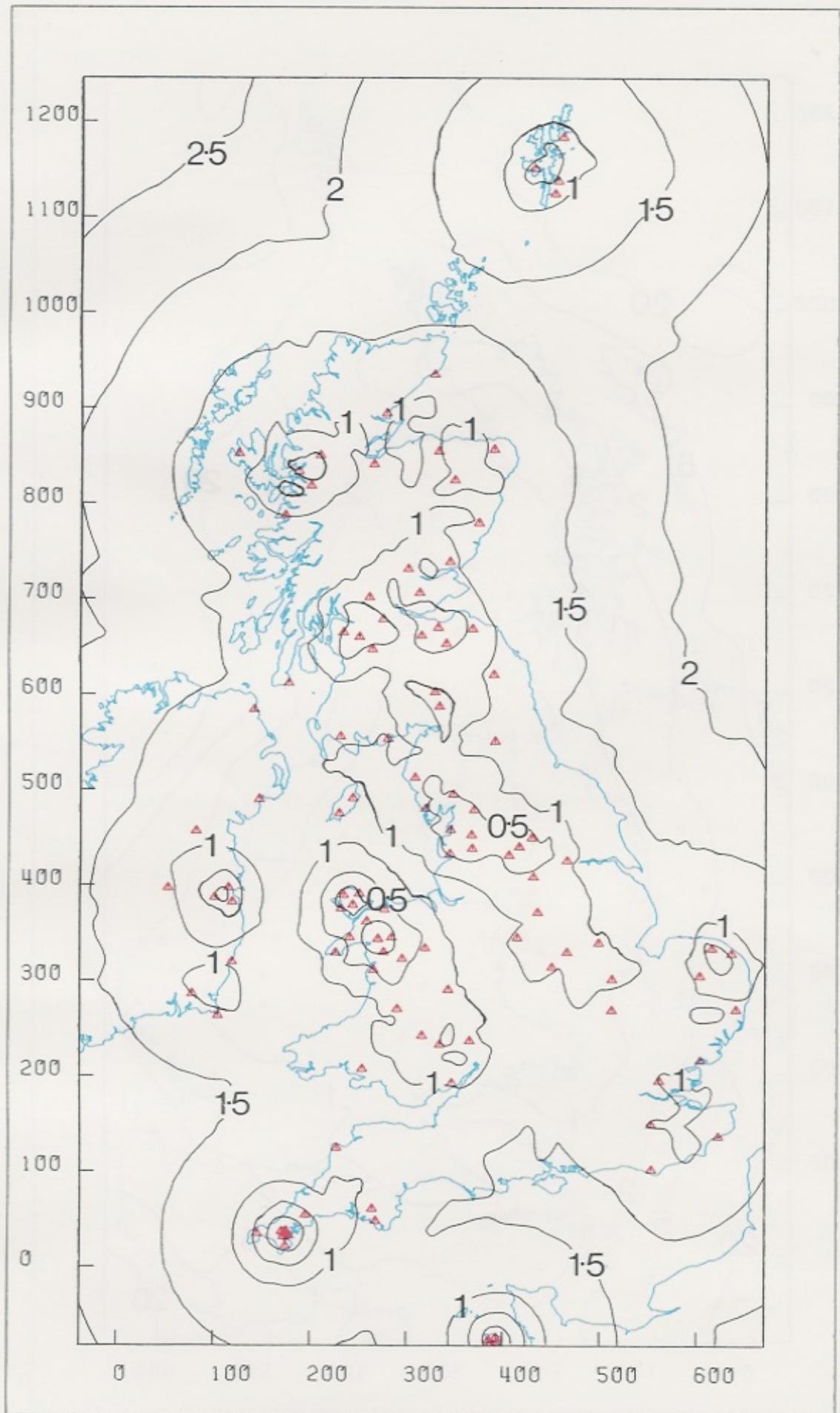


Fig.1 : BGS and DIAS seismographs ( $\blacktriangle$ ) 1989, and their detection capabilities for magnitudes in 0.5ML steps, with average noise conditions

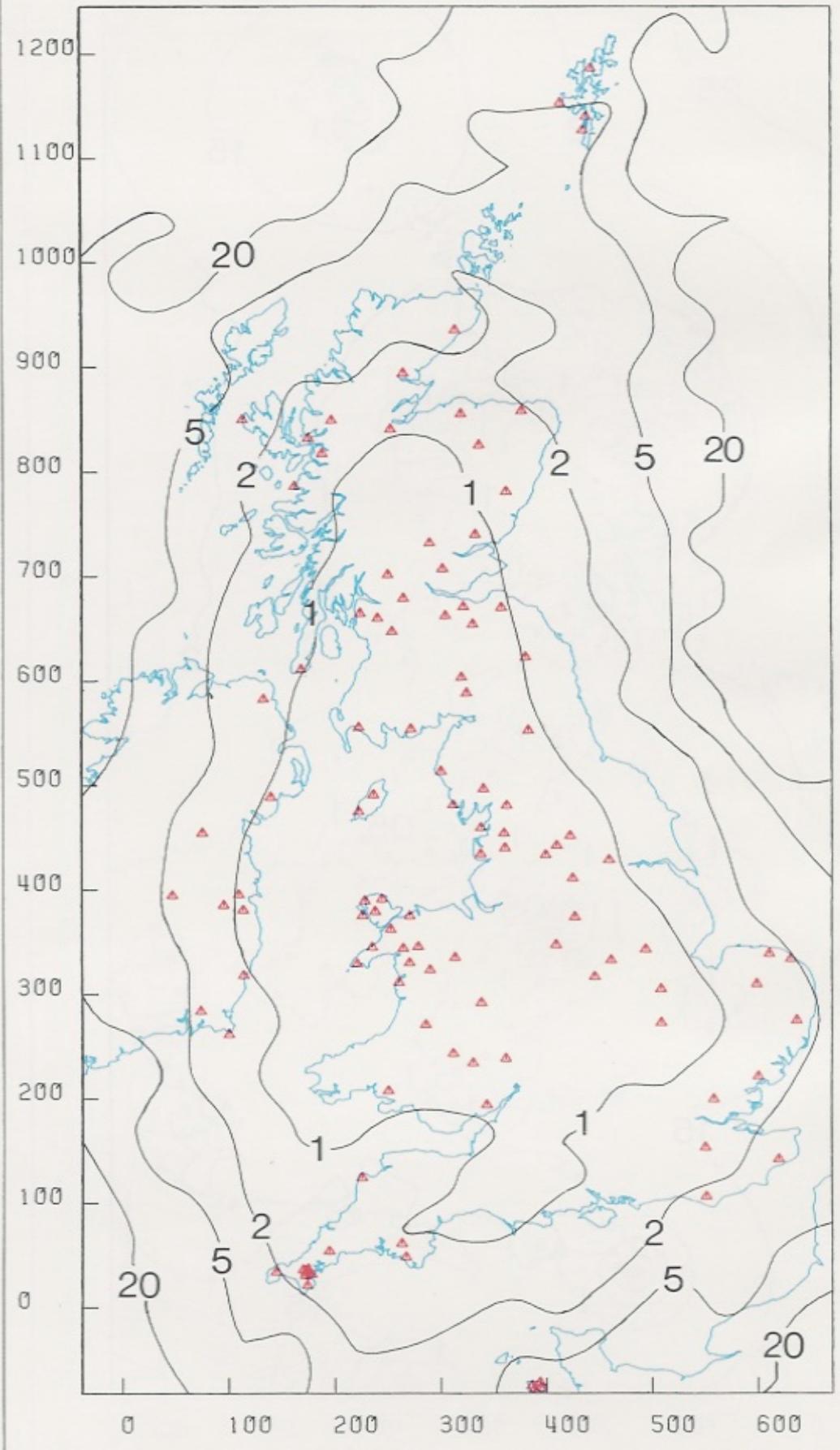


Fig.2 : Theoretical epicentral location errors in km  
for a magnitude 2.0ML earthquake

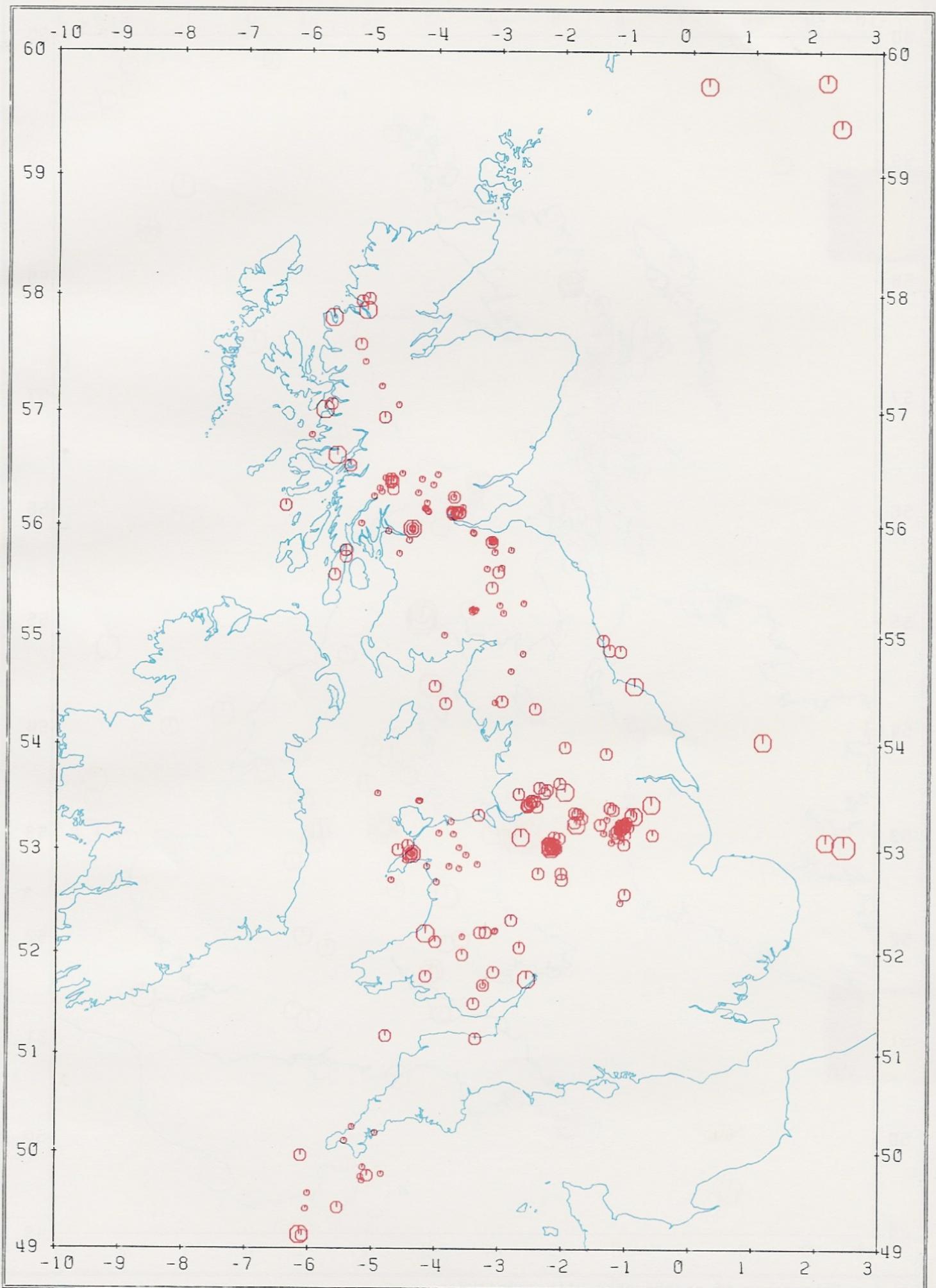


Fig.3 : Epicentres of all earthquakes, 1989

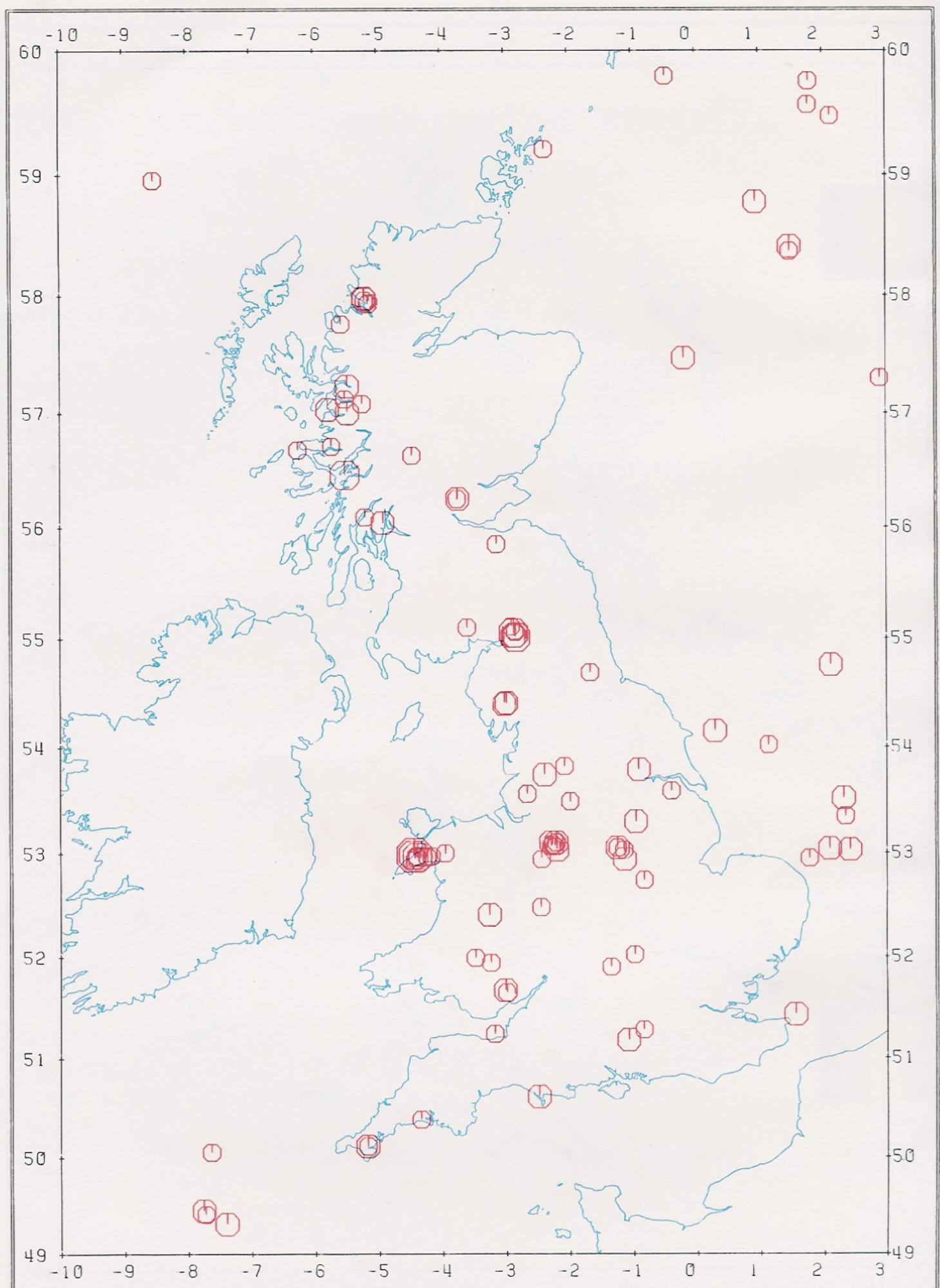


Fig.4 : Epicentres of earthquakes with magnitudes  
2.5ML or greater, 1979-89

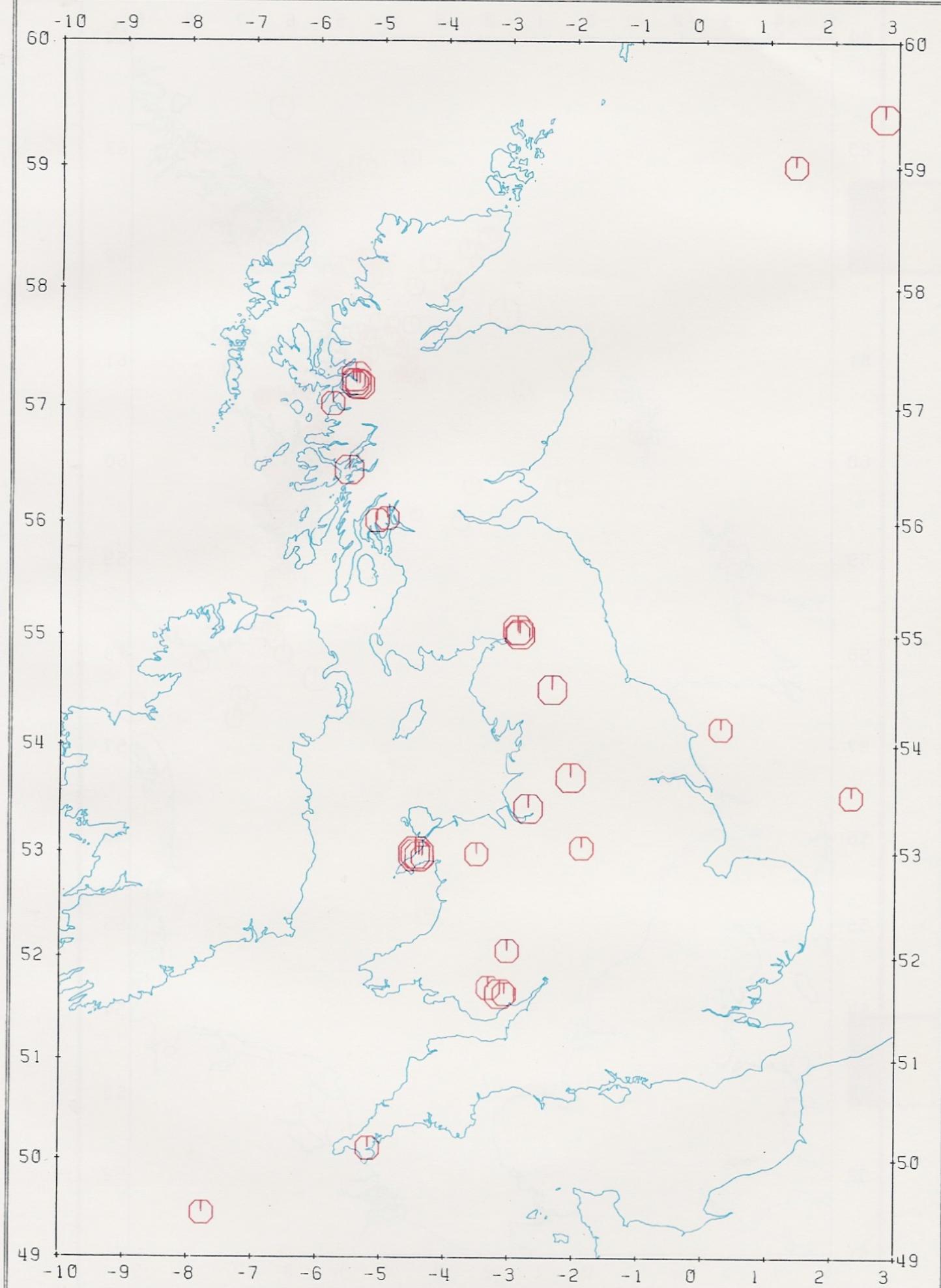


Fig.5 : Epicentres of earthquakes with magnitudes 3.5ML or greater, 1969-89

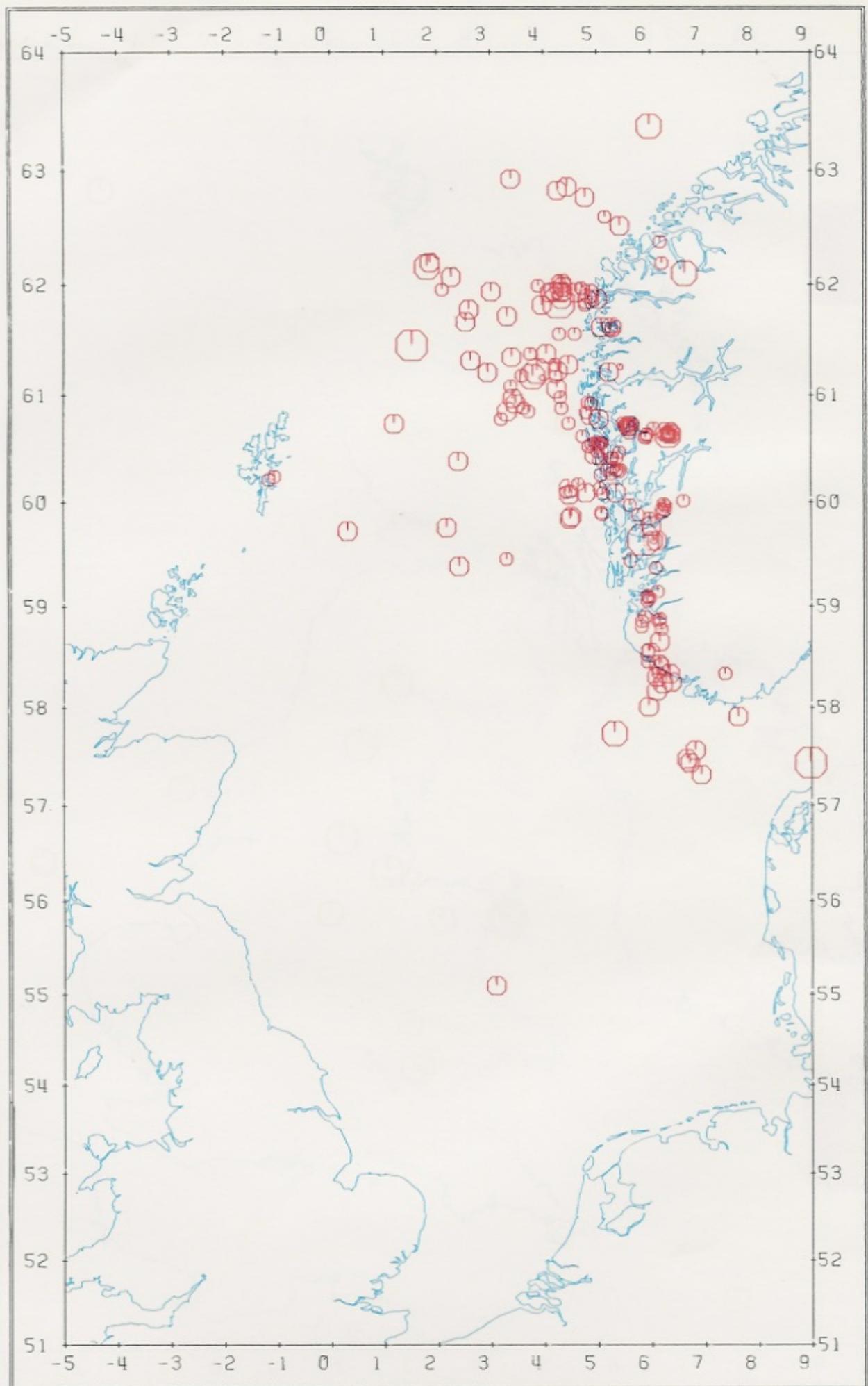
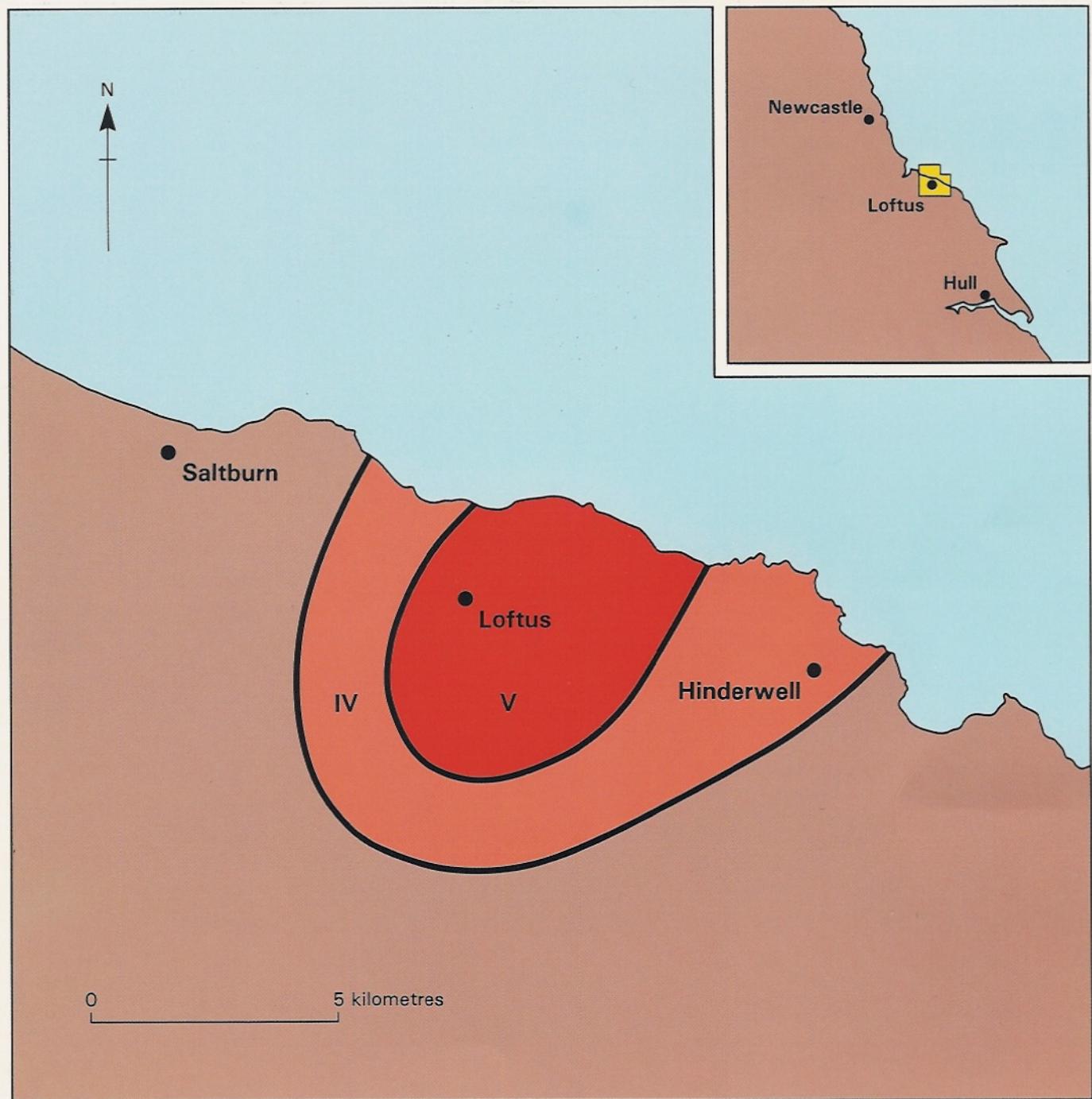


Fig.6 : Epicentres in the North Sea, 1989



Loftus Earthquake 5th September 1989 16.13 GMT (2.4 ML) – MSK INTENSITIES