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Annual catalogues of British earthquakes recorded on LOWNET (1967-1978)

P. W. Burton and G. Neilson

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5 Atlas of seismic activity 1909–1968. S. Crampin and others
6 The IGS file of seismic activity and its use for hazard assessment. P. W. Burton
7 Annual catalogues of British earthquakes recorded on LOWNET (1967–1978). P. W. Burton and G. Neilson

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Annual catalogues of British earthquakes recorded on LOWNET (1967-1978)

PAUL W. BURTON and GRAHAM NEILSON

SUMMARY

This report details lists and epicentral maps of those British earthquakes which have been recorded on the LOWNET radio-linked seismometer network in Scotland. The main period covered is the ten years of 1969–1978.

The extent of information obtained on an earthquake using LOWNET recordings varies between earthquakes and so the various methods of epicentre determination and magnitude estimations used are all briefly described.

INTRODUCTION

There is a growing interest and concern in seismicity, earthquakes and seismic risk. This statement is true for low seismicity areas such as Britain as well as for areas of major activity.

At the turn of this century the seismometers of Milne, and then of Milne-Shaw were deployed in Britain and throughout the world. An initial interest in seismicity in Britain had been triggered by the seismic swarm activity in Comrie and Menstrie, Scotland, but the subsequent global deployment of instruments, the first world wide network, was clearly aimed at observing the major earthquakes within the earth. Despite this interest in global seismicity there has always been a small number of seismologists who have recorded British and Irish seismicity, and amongst these we find O'Reilly (1884), de Ballore (1896), Davison (1924), Dollar (1949) and Tillotson (1974). Some of this earlier work is described by Burton (1978a) and analysed by Lilwall (1976) and Burton (1978a).

The monitoring of British seismicity has at best been haphazard; however, in 1969 a network of seismometers, LOWNET, was installed across the Lowland Valley of Scotland. There are now plans to expand monitoring to include networks in the Midlands of England, extensions into Southern England and extensions northwards into Scotland. The purpose of this report is to catalogue those British earthquakes which have been recorded by LOWNET, mainly during the period 1969–1978.

LOWNET

LOWNET is centred on a three component short period set of seismometers at the Royal Observatory, Edinburgh, and is radio-linked to short period vertical component seismometers (Willmore Mk 2) at seven outstations. The network started formally in January 1969 and is described in some detail by Crampin and others (1970). The aperture of the network is about 100 km. Major changes since 1969 are the transition from recording on one-inch to half-inch magnetic tape in August 1977, and the addition of a seventh outstation, ELO, in 1970 at Logiealmond. The present LOWNET sites are shown in Figure 1 and these positions are detailed in Table 1.

Recording at the Royal Observatory, Edinburgh, started in about 1900 with a Milne seismograph system. (Some of these earlier seismograms are now retained in Edinburgh on microfilm.) The next transition in LOWNET is likely to be the removal of the recording equipment (not the seismometers) from the Royal Observatory vault to Murchison House of the IGS, radio-linking the two positions over the short distance of about one half mile.

DETERMINATION OF THE PARAMETERS OF BRITISH EARTHQUAKES RECORDED ON LOWNET

The major parameters of an earthquake to be reported in these lists, besides date and time, are the position (latitude and longitude) and magnitude (local magnitude M_L). The estimation of position or the epicentre of an earthquake will be described first.

DETERMINATION OF POSITION

There are a variety of ways of determining the position of an earthquake or explosion which has been recorded by LOWNET. Choosing a particular method is usually governed by the distance (and magnitude) of a particular event and by the number of seismometers by which it is recorded. Some of the various location methods available are used only infrequently. The methods used employ:

i time difference charts
ii epicentre relocation computer programs
iii bearing and range – near events
iv bearing and range, and SPEEDY – distant events

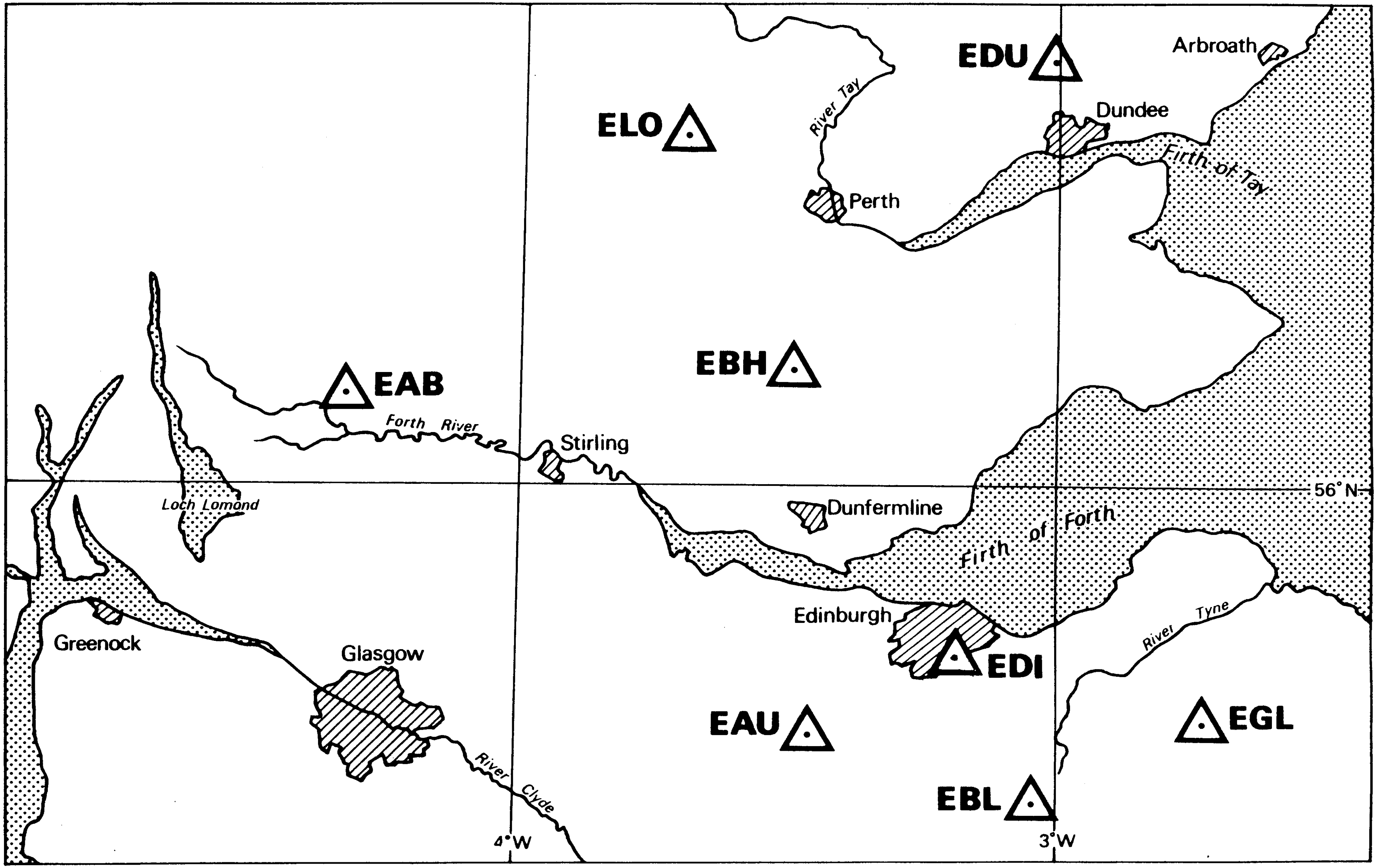

Figure 1 The positions of the eight LOWNET stations in Scotland.

Table 1 Geographic positions of the LOWNET seismometer sites

Code	Site	Co-ordinates		Height above sea level (m)
EDI	Royal Observatory, Edinburgh	55° 55′ 24″ N	3° 11′ 10″ W	125
EDU	Craigowl Hill, Dundee	56° 32′ 51″ N	3° 00′ 51″ W	275
EGL*	Gala Law	55° 51′ 42″ N	2° 44′ 18″ W	245
EAB	Aberfoyle	56° 11′ 17″ N	4° 20′ 24″ W	250
EAU	Auchinoon Hill	55° 50′ 40″ N	3° 27′ 17″ W	350
EBH*	Blackhill	56° 14′ 53″ N	3° 30′ 29″ W	375
EBL	Broad Law	55° 46′ 24″ N	3° 02′ 37″ W	365
ELO†	Logiealmond	56° 28′ 14″ N	3° 42′ 43″ W	495

* These co-ordinates redetermined since Crampin and others (1970)
† New site installed since Crampin and others (1970)

Time difference charts

Most of the events listed in this report were located using time difference charts. The principal of time difference charts is the hyperbola method which is described by Bath (1973). A series of charts showing the locus in space of the time difference between first P arrivals of an event for given pairs of stations in any network can be constructed. At IGS the method has been developed by Banson (1970) and an example of a specimen chart for two paired stations is given by Browitt (1978). Such a set of charts has been drawn for LOWNET, and the analyst, by using a minimum of three such charts (three paired stations), may determine the location of an event and also obtain some indication of accuracy. This method gives a reasonable degree of accuracy and for events with a near surface focus the error is of order a few kilometres. Locating explosions with known source parameters has verified the accuracy of this method. Although this method is usually less accurate than iterative procedures using computer programs it has the advantages that it is fast, and it is often easier to obtain unambiguous epicentres from the poorer quality data. Other measurements can also be included on the charts to assist the location of epicentres; for example S–P time intervals may be used to plot ranges from individual stations, and bearings from EDI may be calculated using the three component set sited there. It should be noted that as the depth of events increases so does the location error inherent in this method, and so the measurement of S–P intervals then becomes more important. Time difference charts are used only to locate events occurring within the network.

Epicentre relocation computer programs

Well recorded events – those which have clear onsets on the seismograms from five or more stations – are subsequently relocated using a digital computer. For events occurring inside the network the program FAMG (Crampin, 1970) is used and RLOC (Lilwall, personal communication) is used for locating events at some distance from the network. As might be expected the accuracy of hypocentre determination decreases with increasing distance from LOWNET. All locations of events given in this report are those determined instrumentally; hence location errors for events distant from LOWNET may be considerably larger than for the near events. As with the time difference chart method, these computer programs have been calibrated using explosion data and, within the network, a positional accuracy of a few hundred metres is usually obtained. When either program is used, a simple velocity–depth model is asssumed. This is:

	Layer thickness in km	P-velocity in km s^{-1}
1	0.90	3.00
2	6.28	5.65
3	21.87	6.44 overlying 7.92

Lilwall (1969) describes much of the theory relevant to modern computer practice in determining epicentres. The program RLOC takes account of poorly fitting data by assigning weights to the phase arrivals, and phases later than P may also be incorporated. FAMG calculates travel times along ray paths in a known velocity–depth structure and has the facility of allowing for local structural variations by incorporating time-terms into the analysis.

Bearing and range – near events
The above two procedures are the commonest used with LOWNET data. The events not covered by these two methods divide into the last two groups: i events near to Edinburgh, particularly the smaller coalfield events; ii very distant events, the regional earthquakes of the UK. Events near to Edinburgh are located using the three component set at Edinburgh, EDI, to obtain a bearing and range on the epicentre. The latter comes from the S–P interval. There can be errors of up to about 5 km in such locations, the largest error contributions coming from uncertainties in the estimated bearing and a lack of knowledge of travel times and velocities within the near surface sedimentary layer. For events so near, 3 to 10 km, to the station, the sedimentary layer is a large part of the ray path.

Bearing and range – distant events
These regional events may themselves be divided into two categories using magnitude as an approximate criterion. Events with $m_b^* \geqslant 4$ are located using the computer program SPEEDY (Douglas and others, 1974) and smaller events with $m_b^* \leqslant 4$ are located manually by calculating S–P ranges and bearings. The errors in this latter manual procedure are probably the largest of all the above methods; however, it is sometimes also possible to calculate depth for these distant events by using $P_n - P_g$ separation (Thirlaway, 1963).

DETERMINATION OF MAGNITUDE

There are four magnitude scales used on LOWNET:

i M_L Richter local magnitude
ii m_b body wave magnitude determined from teleseismic P waves
iii m_b^* a scale which attempts to measure m_b at short range
iv M_s surface wave magnitude.

All of these magnitude scales as applied to LOWNET are described in some detail by Jacob and Neilson (1977). The first three magnitude estimates are obtained from measurements made on seismograms obtained from short period instruments while M_s is measured from longer period information obtained from the recently installed broad band seismograph system. Of the four scales, only M_L and m_b^* are directly relevant to UK earthquakes recorded on LOWNET. A link between M_L, m_b^* and the internationally used scales m_b and M_s is of use.

Richter local magnitude scale, M_L
M_L is the commonest scale used on LOWNET. The original scale was designed by Richter for application in Southern California and is described in his book (Richter, 1958). The procedure on LOWNET is to calculate ground amplitude from the observed maximum trace amplitude, wave period and Willmore Mk 2 seismometer response (Willmore and Karnik, 1970). This value is then multiplied by the gain factor, at the same period, of a standard Wood-Anderson torsion seismometer, thus simulating the amplitude, A, which might have been recorded on an in situ Wood-Anderson instrument. The magnitude M_L is then obtained from

$$M_L = \log_{10} A - \log_{10} A_0$$

where the standardising value A_0 is the amplitude which an earthquake of magnitude zero would yield at that same distance. Clearly such calculations are tortuous but confidence in the results is gained as the body of LOWNET data and our knowledge of the local structure both increase. M_L can be used from 0 km, though as distance increases any discrepancy between Richter's A values and those that should be used in the UK will have greater impact.

Local body wave magnitude scale, m_b^*
The body wave magnitude scale, m_b, is usually defined only for teleseismic arrivals, and usually measured then from the first few cycles of P wave motion. (The USSR uses the largest motion within about the first 25 seconds; international efforts are being directed towards a uniform procedure.) However, for local events at distances greater than 200 km the P phase is separately discernible on the seismogram, and m_b^* may be defined as

$$m_b^* = \log_{10} V + 2.3 \log_{10} (r) - 2$$

where V is the peak P wave ground velocity measured in μ/s, and r is the distance in km. This equation was adopted for use on LOWNET at an early date (for example, Jacob and Willmore, 1972). It has subsequently been validated by Jacob and Neilson (1977) for UK or overall average European conditions, and a one-to-one correspondence between values of m_b^* and m_b has also been demonstrated. m_b^* is thus effectively linked to the international teleseismic scale, but because of rapid variations in the amplitude of the first P arrival caused by reflected phases in the crust it should not be used for very short ranges of less than 200 km. M_L is then appropriate.

M_L *and* m_b^*
It is possible to relate estimates of M_L to m_b^*, and thus to the internationally recognised m_b scale, by means of the formula

$$M_L = 0.72\, m_b^* + 1.0$$

which is obtained by Jacob and Neilson (1977) using 43 earthquakes over the magnitude range $2.0 \leqslant m_b^* \leqslant 4.7$. A further extrapolation giving an indication of corresponding M_s values can be obtained using Marshall's (1970) formula

$$M_s = 2.08\, m_b - 5.65$$

ANNUAL CATALOGUES OF BRITISH EARTHQUAKES RECORDED ON LOWNET (1967–1978)

Annual lists of earthquakes are attached for the ten years 1969 to 1978 and a few earthquakes are included for 1967–1968. The tabulated columns require only slight explanation. DATE is given as the day followed by the month and TIME is given as three columns containing hour, minute and second. Latitudes and longitudes are given in degrees to the second decimal place and not in degrees and minutes. Listed magnitudes are specified by type which is usually M_L; those few entries against MB indicate estimates of m_b^*. Place names are a rough indication of geographic location and the depth H, when estimated, is given in kilometres. It should be noted that in the annual lists COALFIELD refers to the Midlothian Coalfield.

(There are a small number of parameter estimates which do not follow the previously described method. For example:

i Event of 05/09/1969 is attributed to Knaresborough on macroseismic evidence; but two ranges were available on LOWNET.

ii Event of 09/07/1974 is attributed to South Wales on macroseismic evidence; but m_b^* is estimated from LOWNET records.

iii Events of 15 and 25/07/1975, and 13 and 19/05/1976, are attributed to Stoke-on-Trent on macroseismic evidence; but m_b^* is estimated from LOWNET records.)

BRITISH EARTHQUAKES ON LOWNET---BEFORE 1969

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	2811	1967	04 07 36.1	55.87	-3.12	1.8ML	LASSWADE	
IGS	0803	1968	05 26 43.4	55.02	-2.59	3.3ML	GILSLAND	
IGS	1610	1968	17 02 40.0	55.93	-3.06	3.1ML	MONKTONHALL	
IGS	0112	1968	13 04 48.0	56.09	-3.98	1.2ML	STIRLING	8
IGS	2712	1968	12 15 08.1	56.08	-3.88	0.9ML	STIRLING	8

BRITISH EARTHQUAKES ON LOWNET---1969

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	3001	1969	20 24 12.6	55.86	-3.13	1.3ML	LOANHEAD	0
IGS	2202	1969	18 11 23.9	56.11	-3.98		STIRLING	
IGS	0403	1969	19 14 08.2	55.83	-3.11	1.8ML	ROSEWELL	0
IGS	1704	1969	16 12 25.2	55.91	-3.09	1.1ML	LOANHEAD	0
IGS	2304	1969	09 21 24.3	56.01	-2.95	0.9ML	MILLERHILL	5
IGS	2404	1969	03 04 28.7	55.93	-3.10	0.8ML	DANDERHALL	0
IGS	1905	1969	08 53 57.7	55.91	-3.09	1.3ML	DANDERHALL	5
IGS	2105	1969	01 23 21.4	55.92	-3.08	0.9ML	GILMERTON	0
IGS	2305	1969	13 05 01.2	55.92	-3.10	0.0ML	GILMERTON	0
IGS	0406	1969	00 43 23.9	55.87	-3.14	1.3ML	ROSEWELL	0
IGS	0406	1969	17 37 14.4	56.13	-3.89	1.3ML	CROOKOFDEVON	0
IGS	0506	1969	02 02 55.9	55.88	-3.07	0.8ML	BONNYRIGG	0
IGS	0506	1969	10 34 23.3	55.87	-3.14	1.0ML	ROSLIN	0
IGS	1106	1969	14 41 40.8	55.88	-3.26	0.6ML	BONNYRIGG	0
IGS	1106	1969	15 35 48.7	56.86	-5.63	1.3ML	LOCH LINNHE	0
IGS	1206	1969	15 58 06.3	55.88	-3.08	0.9ML	POLTON	0
IGS	1606	1969	08 47 43.9	55.92	-3.07	1.0ML	NEWCRAIGHALL	0
IGS	0307	1969	08 59 36.5	55.92	-3.03	0.7ML	DALKEITH	0
IGS	0907	1969	15 03 00.7	56.03	-3.93	1.5ML	COWIE	0
IGS	2107	1969	11 57 55.1	57.25	-4.50		GREAT GLEN	
IGS	0108	1969	10 08 19.9	55.88	-3.10	0.0ML	DANDERHALL	0
IGS	0108	1969	17 13 19.9	56.05	-3.94	1.1ML	COWIE	0
IGS	0408	1969	11 58 28.8	55.89	-3.07	1.0ML	ROSLIN	0
IGS	1908	1969	15 26 40.3	56.16	-3.59	1.0ML	CULROSS	0
IGS	2608	1969	08 26 26.7	56.03	-3.94	2.5ML	BO'NESS	4
IGS	0509	1969	21 58 54.3	54.00	-1.45		KNARESBORO'	
IGS	1509	1969	18 09 06.4	56.05	-3.93	1.4ML	COWIE	0
IGS	1809	1969	03 43 11.6	55.93	-3.09	1.6ML	BRUNSTANE	0
IGS	1909	1969	21 53 25.6	56.06	-5.37	2.0ML	LOCHGILPHEAD	
IGS	1909	1969	18 33 15.5	55.89	-3.24	1.4ML	LIBERTON	0
IGS	2209	1969	22 56 00.3	56.30	-3.72	1.7ML	OCHIL HILLS	5
IGS	2209	1969	03 36 10.4	56.14	-3.65	1.6ML	DOLLAR	5
IGS	1310	1969	16 50 32.5	56.12	-3.40	1.2ML	ALLOA	0
IGS	1810	1969	11 39 05.6	56.01	-4.22	1.5ML	LOCH LOMOND	0
IGS	2110	1969	17 26 22.8	55.93	-5.25	2.4ML	LOCHGILPHEAD	10
IGS	2210	1969	04 05 40.5	56.03	-4.05	0.9ML	CARRON VALL	0
IGS	2210	1969	15 29 56.3	56.22	-3.85	0.6ML	OCHILL HILLS	4
IGS	0911	1969	10 32 15.8	56.95	-4.53	2.0ML	DRYMEN	0
IGS	1111	1969	13 59 37.8	56.00	-3.16	0.9ML	COALFIELD	
IGS	1311	1969	19 35 27.7	55.83	-3.12	0.4ML	S.OFROSEWELL	0
IGS	2412	1969	06 19 08.4	56.05	-3.11	0.4ML	COWIE	0
IGS	2512	1969	10 33 12.8	55.86	-3.10	1.8ML	ROSLIN	10
IGS	2512	1969	10 33 46.0	55.86	-3.10		ROSLIN	
IGS	2612	1969	14 58 10.3	53.60	-4.25	3.5ML	ANGLESEY	

BRITISH EARTHQUAKES ON LOWNET---1970

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	2501	1970	05 38 30.9	54.75	-2.00	2.0ML	STANHOPE	5
IGS	1502	1970	06 13 39.0	56.42	-3.60	1.6ML	GLENALMOND	4
IGS	1702	1970	19 26 24.2	55.89	-3.07	1.2ML	ESKBANK	0
IGS	2502	1970	12 01 13.0	55.89	-3.04		DALKEITH	
IGS	2602	1970	20 09 16.0	55.91	-3.09		MILLERHILL	
IGS	2702	1970	22 54 13.9	56.14	-3.63	2.1ML	DOLLAR	0
IGS	0303	1970	19 25 35.2	55.96	-3.10		DANDER HALL	
IGS	0403	1970	22 30 01.1	55.87	-3.10		LASSWADE	
IGS	0904	1970	14 46 33.5	56.25	-2.84	1.5ML	COLINSBURGH	0
IGS	1504	1970	05 40 56.5	56.07	-3.81	1.1ML	COWIE	0
IGS	1704	1970	17 14 14.0	55.91	-3.06		DALKEITH	
IGS	1704	1970	17 32 32.1	55.84	-3.18		ROSLIN	
IGS	1804	1970	17 35 07.1	55.85	-3.09		ROSEWELL	
IGS	1904	1970	18 47 50.2	55.85	-3.10		DALKEITH	
IGS	2004	1970	02 43 00.7	54.20	-3.75		BARROW(OFF)	
IGS	2104	1970	18 16 31.5	55.91	-3.10	-0.1ML	MONKTONHALL	
IGS	2104	1970	20 20 12.9	55.91	-3.10	-0.4ML	MONKTONHALL	
IGS	2104	1970	21 17 17.9	55.91	-3.10	-0.1ML	MONKTONHALL	
IGS	2204	1970	11 39 31.6	56.12	-2.90		FIRTHOFFORTH	
IGS	2304	1970	00 25 46.0	55.92	-3.10		DANDERHALL	
IGS	2604	1970	19 21 33.3	55.86	-3.08		COALFIELD	
IGS	2804	1970	19 05 35.1	55.90	-3.09		LASSWADE	
IGS	0405	1970	09 06 57.9	55.90	-3.09		LASSWADE	
IGS	0905	1970	21 19 07.1	55.90	-3.09		MONKTONHALL	
IGS	1005	1970	02 48 59.2	55.16	-3.33		ANNANDALE	
IGS	1005	1970	10 24 53.4	55.90	-3.06		NEWFARM	
IGS	1005	1970	13 24 55.0	55.90	-3.09		MILLERHILL	
IGS	1205	1970	04 16 05.6	55.90	-3.09		MILLERHILL	
IGS	1205	1970	20 49 58.4	55.90	-3.09	-0.7ML	MONKTONHALL	
IGS	1205	1970	21 01 16.9	55.85	-3.15	1.2ML	LOANHEAD	5
IGS	1305	1970	19 28 20.1	55.89	-3.07	-0.1ML	MONKTONHALL	
IGS	2005	1970	13 36 09.6	55.89	-3.14		MONKTONHALL	
IGS	0406	1970	06 36 31.4	54.31	-1.80	2.8ML	PENNINES	
IGS	0806	1970	18 52 33.0	56.12	-4.28		LOCHARD FOREST	0
IGS	0806	1970	20 28 00.2	56.05	-3.62	0.8ML	MONTRAVIE	
IGS	0906	1970	04 05 12.2	55.90	-3.07	-1.2ML	DALKEITH	
IGS	0906	1970	21 44 58.6	55.90	-3.01		MONKTONHALL	
IGS	1006	1970	10 43 34.0	55.92	-3.10	0.0ML	MONKTONHALL	
IGS	1506	1970	20 01 26.0	55.79	-4.15		E.KILBRIDE	
IGS	2606	1970	13 01 58.5	55.91	-3.12	-0.4ML	MONKTONHALL	
IGS	2506	1970	00 12 02.4	55.76	-3.29		PENTLANDHILS	
IGS	2506	1970	00 47 59.2	55.95	-3.07	-1.1ML	JOPPA	
IGS	3006	1970	03 57 21.1	55.91	-3.09	0.3ML	MILLERHILL	
IGS	3006	1970	05 41 17.6	55.94	-3.07	0.0ML	NEWCRAIGHALL	
IGS	3006	1970	07 04 20.0	55.91	-3.07	1.2ML	MILLERHILL	5
IGS	3006	1970	09 32 48.8	55.92	-3.08	-0.1ML	MILLERHILL	
IGS	0507	1970	14 40 06.5	55.92	-3.08		MILLERHILL	0
IGS	0607	1970	16 24 35.0	55.94	-3.07		MILLERHILL	
IGS	0607	1970	22 17 19.7	55.94	-3.09		NEWCRAIGHALL	
IGS	0807	1970	11 57 45.0	55.86	-3.07		NEWTONGRANGE	
IGS	2707	1970	02 45 13.1	53.50	-5.00	3.5ML	ANGLESEY	5
IGS	2907	1970	05 12 35.9	55.91	-3.09		GILMERTON	
IGS	2907	1970	10 19 01.5	55.84	-3.07		CARRINGTON	
IGS	3107	1970	08 08 24.6	55.94	-3.07		NEWCRAIGHALL	
IGS	0108	1970	02 31 46.9	55.97	-3.11		PORTOBELLO	
IGS	0308	1970	05 57 29.0	55.80	-4.19		E.KILBRIDE	
IGS	0408	1970	02 03 30.6	55.96	-3.11	0.4ML	PORTOBELLO	
IGS	0408	1970	16 37 22.9	55.94	-3.06	0.2ML	MONKTONHALL	
IGS	0508	1970	16 12 38.1	55.95	-3.10		NEWCRAIGHALL	
IGS	0908	1970	20 09 00.6	54.51	-2.32	4.9MB	K.STEPHEN	15
IGS	0809	1970	10 02 50.0	55.97	-3.17		MILLERHILL	0
IGS	0809	1970	18 45 50.8	55.92	-3.07		MILLERHILL	
IGS	1609	1970	13 55 59.7	55.92	-3.07		GILMERTON	
IGS	1809	1970	12 54 27.3	55.91	-3.06		DALKEITH	
IGS	2309	1970	02 19 35.0	55.98	-2.97		MILLERHILL	5
IGS	0110	1970	17 16 15.1	55.91	-3.02		SMEATON	
IGS	0410	1970	07 53 27.4	55.91	-3.09	0.5ML	MONKTONHALL	
IGS	0410	1970	19 02 00.0	54.08	-3.17		BLACKPOOL	
IGS	0710	1970	03 05 48.0	55.91	-3.09		MONKTONHALL	
IGS	1310	1970	04 52 10.3	55.90	-3.07		MILLERHILL	
IGS	1510	1970	13 19 06.5	55.87	-3.09		BONNYRIGG	
IGS	1510	1970	15 22 33.9	55.86	-3.07		NEWTONGRANGE	
IGS	1510	1970	17 54 48.5	55.95	-3.06		MUSSELBURGH	
IGS	1510	1970	20 07 47.3	55.88	-3.02		DALKEITH	
IGS	1610	1970	00 00 26.3	55.87	-3.07		ROSEWELL	5
IGS	1610	1970	06 29 10.1	55.91	-3.09		MILLERHILL	
IGS	2910	1970	04 40 23.3	56.42	-3.61	2.0ML	GLENALMOND	3
IGS	1711	1970	03 13 54.0	55.86	-3.09		NEWTONGRANGE	
IGS	2312	1970	00 47 24.0	55.92	-3.07	1.1ML	MONKTONHALL	5
IGS	2612	1970	00 24 04.6	55.85	-3.11	0.2ML	ROSEWELL	
IGS	2612	1970	15 21 57.4	55.87	-3.07		BONNYRIGG	5
IGS	3112	1970	03 37 45.9	55.92	-3.03		MILLERHILL	0
IGS	3112	1970	03 37 56.4	55.90	-3.00		MILLERHILL	

BRITISH EARTHQUAKES ON LOWNET---1971

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0101	1971	06 12 41.9	56.60	-5.42		GREAT GLEN	
IGS	1401	1971	10 52 08.0	55.92	-3.14		TEMPLE	
IGS	1501	1971	15 33 25.8	55.90	-3.07		DALKEITH	
IGS	1501	1971	15 33 33.8	55.89	-3.07		DALKEITH	
IGS	1501	1971	15 36 24.5	55.85	-3.18		ROSLIN	
IGS	1501	1971	18 33 09.6	55.92	-3.05		DALKEITH	0
IGS	1801	1971	00 52 07.0	55.88	-3.08		BONNYRIGG	
IGS	2201	1971	08 38 37.3	56.13	-3.82	1.4ML	OCHILLHILLS	4
IGS	2801	1971	03 38 44.9	55.27	-3.13	1.7ML	ESKDALE	
IGS	0102	1971	15 29 54.0	57.26	-4.16		STRATHNAIRN	
IGS	0502	1971	19 01 55.0	55.90	-3.06	0.7ML	LASSWADE	
IGS	0502	1971	19 01 56.5	55.90	-3.00		LASSWADE	
IGS	1402	1971	18 44 05.4	58.30	1.40	2.9ML	NORTH SEA	5
IGS	1902	1971	02 57 05.4	56.13	-4.32	1.3ML	FLANDERSMOSS	5
IGS	0603	1971	01 36 50.1	56.38	-4.92		GLEN ORCHY	
IGS	2303	1971	20 05 18.9	59.40	2.80	4.7ML	NORTH SEA	
IGS	2403	1971	02 21 08.9	55.84	-3.11		ROSEWELL	
IGS	0104	1971	05 04 20.0	55.95	-3.10		NEWCRAIGHALL	
IGS	0804	1971	14 11 52.8	56.27	-5.33		LOCH AWE	
IGS	1404	1971	05 25 32.3	56.43	-3.60	2.5ML	GLENALMOND	3
IGS	1504	1971	12 26 28.1	56.42	-3.61	2.5ML	GLENALMOND	3
IGS	1504	1971	12 32 13.4	56.43	-3.61	2.2ML	GLENALMOND	3
IGS	1704	1971	08 13 25.5	56.42	-3.59	2.0ML	GLENALMOND	4
IGS	2204	1971	06 27 36.2	56.44	-3.64	2.0ML	GLENALMOND	0
IGS	2704	1971	20 35 20.0	56.08	-3.82	1.3ML	COWIE	4
IGS	2904	1971	09 11 43.9	55.91	-3.10		GILMERTON	
IGS	2904	1971	11 34 12.2	55.92	-3.07		MILLERHILL	
IGS	3004	1971	01 07 19.6	56.43	-3.61	1.8ML	GLENALMOND	2
IGS	0106	1971	18 53 25.2	57.24	-4.44	3.0ML	GREAT GLEN	5
IGS	0306	1971	00 28 58.4	55.86	-3.12		LASSWADE	
IGS	2206	1971	20 47 12.2	55.91	-3.84		CALDERCRUIKS	
IGS	0907	1971	01 00 06.9	55.97	-3.78	0.8ML	ARMADALE	3
IGS	2907	1971	16 40 50.2	55.86	-3.12		ROSEWELL	
IGS	2907	1971	17 55 49.4	55.90	-3.10		ROSEWELL	
IGS	0508	1971	19 45 36.3	55.89	-3.15		LOANHEAD	
IGS	0608	1971	18 38 42.0	56.41	-3.55	1.6ML	GLENALMOND	4
IGS	0808	1971	01 24 15.3	56.43	-3.60	2.3ML	GLENALMOND	4
IGS	1208	1971	02 35 56.0	55.80	-3.83	0.9ML	SHOTTS	5
IGS	1208	1971	06 04 54.7	56.14	-3.32		LOCHGELLY	
IGS	1808	1971	00 29 43.1	55.86	-3.07		COALFIELD	
IGS	2808	1971	16 13 50.7	54.30	-2.46		DENT,YORKS.	
IGS	3108	1971	23 56 46.0	56.45	-3.55	1.7ML	GLENALMOND	4
IGS	0309	1971	03 23 48.2	55.90	-3.10		COALFIELD	
IGS	0709	1971	09 30 35.4	56.43	-3.60	2.6ML	GLENALMOND	4
IGS	1609	1971	02 32 33.0	55.86	-3.15		ROSLIN	
IGS	1709	1971	06 09 18.9	55.95	-3.09		MUSSELBURGH	
IGS	1809	1971	01 40 51.0	54.57	-3.08		KESWICK	
IGS	2009	1971	04 23 20.9	54.46	-4.62		N.IRISH SEA	
IGS	2809	1971	05 03 54.6	54.39	-2.77		N.ENGLAND	
IGS	0310	1971	18 21 22.0	56.12	-3.97	1.1ML	STIRLING	

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0310	1971	19 14 26.5	56.15	-3.93	0.7ML	STIRLING	
IGS	0410	1971	11 02 14.8	56.35	-3.40		GLENALMOND	
IGS	0510	1971	16 57 36.0	56.14	-5.70		SCARBA IS.	
IGS	0610	1971	16 51 02.4	55.86	-3.05		NEWTONGRANGE	
IGS	0710	1971	22 49 12.6	56.17	-5.64		SCARBA IS.	
IGS	1410	1971	21 44 34.3	56.08	-3.68	0.5ML	VALLEYFIELD	
IGS	2310	1971	02 44 19.5	55.82	-3.13		TEMPLE	
IGS	2910	1971	12 26 19.3	55.85	-3.13		ROSEWELL	
IGS	3110	1971	13 25 08.9	55.33	1.50		NORTH SEA	
IGS	3110	1971	13 26 15.9	55.33	1.50		NORTH SEA	
IGS	0311	1971	15 52 32.9	56.77	-4.93		MAMORE FOR.	
IGS	0511	1971	17 09 55.4	56.43	-3.61	2.5ML	GLENALMOND	4
IGS	0611	1971	06 50 36.4	56.40	-3.53	0.9ML	GLENALMOND	3
IGS	0711	1971	12 01 31.1	56.44	-3.57	1.9ML	GLENALMOND	5
IGS	0711	1971	12 07 27.0	56.43	-3.60	2.5ML	GLENALMOND	4
IGS	1011	1971	10 30 42.2	56.44	-3.62	2.1ML	GLENALMOND	2
IGS	1011	1971	10 31 24.4	56.42	-3.53	1.0ML	GLENALMOND	5
IGS	1111	1971	06 56 05.2	56.00	-3.09		COALFIELD	
IGS	1211	1971	01 59 12.4	56.45	-3.59	1.4ML	GLENALMOND	5
IGS	1611	1971	19 18 39.6	56.46	-3.59	1.6ML	GLENALMOND	4
IGS	1911	1971	04 52 19.4	55.95	-3.09		PORTOBELLO	
IGS	2011	1971	01 19 22.4	55.93	-3.09		NEWCRAIGHALL	
IGS	2111	1971	07 68 36.2	55.86	-3.05		NEWTONGRANGE	
IGS	2411	1971	07 55 12.4	56.43	-3.60	2.2ML	GLENALMOND	4
IGS	2411	1971	15 48 49.5	56.44	-3.61	2.0ML	GLENALMOND	4
IGS	0312	1971	17 02 34.0	55.92	-3.07		MILLERHILL	
IGS	0712	1971	03 55 50.0	55.94	-3.14		EDINBURGH	
IGS	1012	1971	05 40 39.1	55.93	-3.09		MILLERHILL	
IGS	1612	1971	16 54 41.7	55.86	-3.07		NEWTONGRANGE	
IGS	2012	1971	20 51 28.5	56.15	-3.70		MENSTRIE	
IGS	2112	1971	08 19 43.7	55.95	-3.09		MILLERHILL	
IGS	2212	1971	06 11 05.3	55.91	-3.07		MILLERHILL	
IGS	2212	1971	06 38 34.5	55.94	-3.09		NEWCRAIGHALL	
IGS	2712	1971	13 40 42.5	55.94	-3.09		MILLERHILL	
IGS	2912	1971	23 07 29.9	55.93	-3.09		NEWCRAIGHALL	

BRITISH EARTHQUAKES ON LOWNET---1972

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0501	1972	17 49 02.4	55.93	-3.09		NEWCRAIGHALL	
IGS	0601	1972	09 17 32.9	55.93	-3.09		NEWCRAIGHALL	
IGS	0601	1972	20 36 29.5	55.93	-3.06		NEWCRAIGHALL	
IGS	1101	1972	15 07 21.7	56.16	-4.90		LOCHGILPHEAD	
IGS	2201	1972	15 27 59.7	56.05	-3.93	1.1ML	COWIE	
IGS	2801	1972	15 31 56.5	56.10	-4.50	1.2ML	LOCH LOMOND	
IGS	3101	1972	14 56 05.5	56.22	-3.05	1.3ML	KENNOWAY	5
IGS	0702	1972	17 13 06.0	56.18	-3.80	1.4ML	MENSTRIE	
IGS	1402	1972	15 51 40.0	56.79	-3.46		GLEN SHEE	
IGS	2002	1972	11 38 34.9	56.41	-3.54	0.8ML	GLENALMOND	
IGS	2402	1972	13 18 56.6	56.61	-4.11	1.7ML	KILLEARN	1
IGS	2602	1972	07 47 02.3	56.10	-4.36	1.6ML	KILLEARN	3
IGS	0103	1972	14 00 42.4	55.98	-5.05		COWAL	
IGS	0103	1972	16 06 48.0	56.44	-4.29		KILLIN	
IGS	0103	1972	18 06 35.7	56.42	-4.30		KILLIN	
IGS	0303	1972	18 42 37.9	55.85	-3.09		MIDLOTHIAN	0
IGS	0303	1972	20 03 31.2	55.85	-3.09		MIDLOTHIAN	
IGS	0703	1972	06 52 15.7	53.70	-2.03	4.0MB	TODMORDEN	6
IGS	1003	1972	18 07 32.7	57.01	-5.00		GREAT GLEN	
IGS	2103	1972	20 59 53.4	56.55	-3.78	1.6ML	GLENALMOND	5
IGS	2703	1972	04 05 01.1	56.34	-5.56		N.OF LUING	
IGS	2703	1972	10 08 24.1	55.94	-3.09		MIDLOTHIAN	
IGS	3103	1972	01 30 19.6	56.57	-3.80	1.1ML	GLENALMOND	5
IGS	2104	1972	13 33 37.9	62.00	2.50		N.NORTH SEA	
IGS	0805	1972	03 51 11.9	55.91	-3.09		COALFIELD	0
IGS	0905	1972	19 23 19.4	55.85	-3.13		ROSEWELL	
IGS	0905	1972	21 10 09.2	55.86	-3.05	0.6ML	NEWTONGRANGE	
IGS	0905	1972	21 17 26.4	55.87	-3.05	0.8ML	NEWTONGRANGE	
IGS	2105	1972	22 28 10.5	57.34	-6.15		RAASAY	
IGS	2405	1972	01 17 56.2	56.10	-3.82	1.4ML	ALLOA	9
IGS	2605	1972	22 34 41.7	55.88	-3.07		ESKBANK	
IGS	1306	1972	05 25 53.9	55.91	-3.09		COALFIELD	
IGS	1606	1972	17 50 42.9	56.12	-4.73	1.5ML	LOCH LOMOND	3
IGS	2806	1972	21 04 36.5	55.93	-3.09		MILLERHILL	
IGS	3006	1972	15 05 36.5	56.70	-3.81		LOCH TUMMEL	
IGS	0207	1972	19 56 26.0	56.55	-4.08	1.5ML	ARDRADNAIG	2
IGS	0707	1972	03 15 57.0	56.56	-4.52	1.5ML	LOCH TAY	4
IGS	0807	1972	22 40 52.8	56.09	-3.51	1.2ML	DUNFERMLINE	5
IGS	2107	1972	15 51 41.5	55.89	-3.20		COALFIELD	
IGS	2807	1972	04 31 11.1	56.32	-4.33	2.4ML	BEN LEDI	8
IGS	2807	1972	10 19 32.4	55.87	-3.12		COALFIELD	
IGS	0308	1972	05 26 59.1	55.90	-3.12		COALFIELD	
IGS	0908	1972	14 51 54.0	55.87	-3.10		COALFIELD	
IGS	1608	1972	18 57 52.3	56.72	-2.69		BRECHIN	
IGS	1808	1972	16 16 47.4	56.27	-4.00	2.6ML	DUNBLANE	10
IGS	1808	1972	23 03 33.5	56.29	-3.99	1.7ML	DUNBLANE	10
IGS	2208	1972	16 38 25.7	55.60	-1.92	2.8ML	N'UMBERLAND	4
IGS	2908	1972	12 37 27.0	56.02	-5.06	3.6ML	LOCHGILPHEAD	5
IGS	2008	1972	14 02 38.2	55.91	-3.09		COALFIELD	
IGS	1909	1972	03 25 07.0	56.27	-3.99	2.5ML	DUNBLANE	4
IGS	2809	1972	10 29 51.9	55.85	-3.09		COALFIELD	
IGS	2909	1972	16 38 56.1	55.85	-3.09		COALFIELD	
IGS	0110	1972	00 01 16.8	55.87	-3.10		COALFIELD	
IGS	0410	1972	21 30 12.9	56.41	-3.57	1.3ML	GLENALMOND	5
IGS	2510	1972	17 11 18.6	55.93	-3.09	2.2ML	EDINBURGH	0
IGS	2510	1972	17 11 48.6	55.91	-3.10	1.1ML	EDINBURGH	
IGS	3010	1972	22 15 59.2	55.86	-3.12		COALFIELD	
IGS	3110	1972	04 57 02.5	56.17	-3.71	0.6ML	SOLSGIRTH	
IGS	0411	1972	20 06 30.1	55.90	-3.09		DALKEITH	
IGS	1311	1972	01 53 03.6	56.86	-4.92	3.4ML	FORTWILLIAM	22
IGS	1711	1972	21 37 49.8	55.86	-3.07	0.9ML	NEWBATTLE	0

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	2011	1972	08 41 40.5	55.88	-3.06	1.6ML	NEWBATTLE	2
IGS	2411	1972	01 50 56.5	55.87	-3.07	1.0ML	NEWBATTLE	2
IGS	2511	1972	01 49 09.7	55.86	-3.05	0.8ML	NEWBATTLE	0
IGS	0312	1972	14 32 57.0	56.45	-3.82	0.4ML	GLENALMOND	2
IGS	1212	1972	21 05 06.3	55.87	-3.05	0.9ML	NEWBATTLE	0

BRITISH EARTHQUAKES ON LOWNET---1973

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0201	1973	23 53 54.1	55.90	-3.09		COALFIELD	
IGS	0401	1973	03 30 42.0	56.22	-2.63		E.FIFE	
IGS	2601	1973	05 07 00.1	53.11	-1.15	3.8MB	MANSFIELD	5
IGS	3001	1973	15 35 29.7	56.27	-4.42		GLEN FINGLAS	
IGS	3001	1973	20 36 01.2	55.85	-3.09		ARNISTON	
IGS	3101	1973	20 53 26.3	55.26	-2.82	1.5ML	HAWICK	5
IGS	0102	1973	20 59 09.6	55.88	-3.05	1.0ML	NEWBATTLE	0
IGS	0802	1973	00 32 48.6	55.88	-3.12	2.6ML	LASSWADE	5
IGS	0902	1973	02 06 39.5	59.40	-2.20	3.4ML	FAIR ISLE	5
IGS	2402	1973	00 06 49.0	55.88	-3.13	2.2ML	LASSWADE	5
IGS	0703	1973	20 28 13.7	56.13	-3.60	1.1ML	DOLLAR	7
IGS	0803	1973	22 09 16.7	55.88	-3.06	2.0ML	NEWBATTLE	3
IGS	1303	1973	19 32 20.0	55.80	-3.05		COALFIELD	
IGS	1703	1973	23 48 04.7	53.00	-2.20	2.8ML	STOKE	5
IGS	0504	1973	06 47 39.9	55.80	-3.00		COALFIELD	
IGS	0804	1973	23 19 23.0	56.42	-3.60		GLENALMOND	6
IGS	0904	1973	19 12 26.1	55.85	-3.00		COALFIELD	
IGS	1004	1973	05 25 22.6	55.85	-3.05		COALFIELD	
IGS	1904	1973	22 59 38.6	55.91	-3.06		COALFIELD	
IGS	2604	1973	09 30 01.8	56.45	-3.61		GLENALMOND	
IGS	0205	1973	16 00 55.5	55.61	-5.18		SOUNDOFBUTE	
IGS	0805	1973	06 57 05.6	55.92	-3.28		COALFIELD	
IGS	1005	1973	04 24 06.2	55.85	-3.17		COALFIELD	
IGS	1105	1973	04 48 33.0	55.92	-3.10		COALFIELD	
IGS	1405	1973	08 55 53.8	55.90	-3.05		COALFIELD	
IGS	1405	1973	19 15 52.7	56.01	-4.74		BONESS	
IGS	1905	1973	02 13 14.1	55.85	-3.05		COALFIELD	
IGS	0306	1973	09 03 45.7	54.56	-2.29	3.9ML	PENRITH	
IGS	1006	1973	20 07 53.4	55.76	-2.59		GALA LAW	
IGS	1507	1973	08 47 16.3	54.61	-2.17	4.9ML	PENRITH	
IGS	0808	1973	04 47 45.9	55.95	-3.09		COALFIELD	
IGS	2209	1973	20 03 38.8	55.92	-3.09		COALFIELD	
IGS	3010	1973	20 47 14.8	55.92	-3.83	0.7ML	NEWBATTLE	1
IGS	0311	1973	03 45 20.2	55.90	-3.10	0.3ML	COALFIELD	7
IGS	0511	1973	22 17 50.8	55.87	-3.07	0.7ML	COALFIELD	0
IGS	1411	1973	19 39 41.9	55.88	-3.07	0.5ML	NEWCRAIGHALL	2
IGS	1411	1973	19 40 59.0	55.88	-3.08	0.6ML	NEWBATTLE	
IGS	1911	1973	19 46 42.3	55.87	-3.07	0.9ML	NEWTONGRANGE	4
IGS	1911	1973	19 58 47.5	55.91	-3.12		GILMERTON	
IGS	2111	1973	21 31 38.3	55.86	-3.07	1.0ML	NEWTONGRANGE	1
IGS	2611	1973	17 47 30.2	55.88	-3.07	1.1ML	NEWBATTLE	1
IGS	2611	1973	21 30 59.3	55.80	-3.10		NEWBATTLE	
IGS	2811	1973	19 07 00.1	55.80	-3.03		NEWBATTLE	
IGS	2811	1973	21 01 01.8	55.87	-3.06	0.6ML	NEWBATTLE	1
IGS	2811	1973	21 16 06.0	55.86	-3.09	0.2ML	NEWBATTLE	0
IGS	3011	1973	18 31 10.0	55.85	-3.10		NEWBATTLE	
IGS	3011	1973	19 48 00.5	55.85	-3.10		NEWBATTLE	
IGS	3011	1973	19 50 16.2	55.85	-3.10		NEWBATTLE	

BRITISH EARTHQUAKES ON LOWNET---1974

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0201	1974	17 35 00.6	55.88	-3.07		COALFIELD	
IGS	0301	1974	16 22 20.6	55.92	-3.10		DANDERHALL	
IGS	2301	1974	20 38 01.6	52.94	-3.30	3.5ML	NORTH WALES	15
IGS	2401	1974	23 37 10.0	55.88	-3.07		COALFIELD	
IGS	3101	1974	06 46 07.3	55.96	-5.53		LOCHGILPHEAD	
IGS	1802	1974	04 27 44.7	55.88	-3.07		COALFIELD	
IGS	2502	1974	18 10 55.8	51.31	-2.60	3.7ML	NEWPORT	
IGS	2502	1974	20 03 43.5	51.64	-3.12	4.1ML	NEWPORT	
IGS	0504	1974	13 20 49.8	55.88	-3.07		COALFIELD	
IGS	0904	1974	05 25 09.2	56.19	-4.26		MENTEITH	
IGS	1004	1974	01 01 41.2	55.88	-3.07		COALFIELD	
IGS	1104	1974	03 04 28.1	55.88	-3.07		COALFIELD	
IGS	1504	1974	23 05 51.8	55.87	-3.07	1.2ML	NEWBATTLE	
IGS	1604	1974	02 17 18.4	55.88	-3.07		COALFIELD	
IGS	1604	1974	18 17 42.6	55.87	-3.09	1.0ML	COALFIELD	
IGS	2504	1974	14 50 38.9	55.86	-3.07		COALFIELD	
IGS	2904	1974	21 19 37.3	55.89	-3.12		COALFIELD	
IGS	0405	1974	22 52 09.0	55.92	-3.09		COALFIELD	
IGS	0905	1974	05 06 10.9	55.87	-3.10		COALFIELD	
IGS	2205	1974	22 32 29.1	55.88	-3.07		COALFIELD	
IGS	2305	1974	18 34 58.7	56.15	-3.67	1.8ML	DOLLAR	
IGS	0906	1974	04 29 59.8	55.86	-3.13	0.3ML	ROSEWELL	
IGS	0907	1974	00 25	51.60	-3.20	3.0MB	SOUTH WALES	
IGS	3007	1974	03 37 04.9	55.93	-3.08		BRUNSTANE	
IGS	0308	1974	05 09 27.8	55.85	-3.10		ROSEWELL	
IGS	0408	1974	09 46 51.8	57.20	-5.40	3.0ML	KINTAIL	
IGS	0408	1974	09 48 17.4	57.20	-5.40	3.9ML	KINTAIL	
IGS	0408	1974	14 31 24.0	55.85	-3.07		NEWTONGRANGE	
IGS	0608	1974	05 03 44.8	55.87	-3.10		BONNYRIGG	
IGS	0608	1974	08 07 33.1	57.20	-5.40	3.8ML	KINTAIL	
IGS	0608	1974	08 14 21.5	57.20	-5.40	3.0ML	KINTAIL	
IGS	0608	1974	18 17 37.9	57.20	-5.40	3.7ML	KINTAIL	
IGS	0608	1974	19 47 56.2	57.20	-5.40	3.9ML	KINTAIL	
IGS	0608	1974	20 35 33.8	57.20	-5.40	3.7ML	KINTAIL	
IGS	0908	1974	12 10 25.5	55.93	-3.08		NEWCRAIGHALL	0
IGS	1008	1974	12 49 43.5	57.19	-5.35	4.4ML	KINTAIL	22

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	1008	1974	12 52	57.20	-5.40	3.6ML	KINTAIL	
IGS	1008	1974	12 54	57.20	-5.40		KINTAIL	
IGS	1008	1974	17 27 06.5	57.20	-5.40		KINTAIL	
IGS	1108	1974	23 38 03.7	57.20	-5.40	3.0ML	KINTAIL	
IGS	1308	1974	19 27 12.2	57.20	-5.40	3.3ML	KINTAIL	
IGS	1408	1974	11 54 48.3	57.20	-5.40	3.0ML	KINTAIL	
IGS	1608	1974	08 53 49.0	57.20	-5.40	3.1ML	KINTAIL	
IGS	1808	1974	05 32 45.7	57.20	-5.40	2.8ML	KINTAIL	
IGS	2708	1974	23 32 21.7	57.20	-5.40	3.4ML	KINTAIL	
IGS	2908	1974	15 20 57.1	57.20	-5.40	2.6ML	KINTAIL	
IGS	3108	1974	00 17 34.1	55.93	-3.07	0.1ML	SHERIFFHALL	
IGS	3108	1974	06 52 48.6	55 85	-3.10		ROSEWELL	
IGS	0309	1974	03 59 15.0	55.90	-3.07		DANDERHALL	0
IGS	0609	1974	07 39 11.2	55.86	-3.17	0.1ML	COALFIELD	
IGS	0609	1974	11 04 00.8	55.95	-3.10	0.0ML	PORTOBELLO	
IGS	0609	1974	11 08 01.4	55.94	-3.10	0.3ML	MONKTONHALL	
IGS	1109	1974	16 20 39.6	55.90	-3.17		LIBERTON	
IGS	1809	1974	21 42 30.9	55.85	-3.10	0.7ML	POLTON	0
IGS	1909	1974	18 51 12.3	55.87	-3.10		COALFIELD	
IGS	2009	1974	13 10 36.4	56.12	-3.62		ALLOA	
IGS	2009	1974	19 04 00.6	55.93	-3.07		BRUNSTANE	0
IGS	2409	1974	20 29 11.0	56.93	-3.07	0.3ML	BRUNSTANE	
IGS	2409	1974	23 18 16.8	57.20	-5.40	2.2ML	KINTAIL	
IGS	2409	1974	23 19 48.4	57.20	-5.40	1.5ML	KINTAIL	
IGS	2509	1974	16 02 46.7	56.23	-3.72		GLEN EAGLES	
IGS	2709	1974	03 49 36.3	55.85	-3.13	1.4ML	POLTON	0
IGS	2709	1974	11 54 28.1	55.93	-3.07	0.6ML	BRUNSTANE	0
IGS	2809	1974	03 37 10.8	55.88	-3.07	1.2ML	POLTON	0
IGS	2809	1974	03 37 19.9	55.88	-3.07	1.0ML	POLTON	
IGS	0210	1974	17 35 59.0	55.87	-3.12		COALFIELD	
IGS	0310	1974	06 57 27.1	55.85	-3.10	1.2ML	POLTON	0
IGS	0410	1974	00 41 57.9	55.93	-3.07	0.4ML	BRUNSTANE	
IGS	0410	1974	00 43 56.6	55.93	-3.07	0.1ML	BRUNSTANE	
IGS	0410	1974	00 45 02.4	55.93	-3.07	0.0ML	BRUNSTANE	
IGS	0510	1974	05 13 21.2	55.92	-3.07		NEWCRAIGHALL	0
IGS	1010	1974	01 44 06.3	55.85	-3.10	1.3ML	POLTON	0
IGS	1110	1974	20 49 32.3	55.93	-3.07		BRUNSTANE	0
IGS	1110	1974	23 11 56.8	55.85	-3.10		ROSEWELL	
IGS	1510	1974	20 15 26.4	55.93	-3.07	0.5ML	BRUNSTANE	0
IGS	1810	1974	17 32 54.2	55.85	-3.15		ROSEWELL	
IGS	1910	1974	06 43 45.3	55.87	-3.10		BONNYRIGG	
IGS	2310	1974	15 15 23.0	55.93	-3.07		NEWCRAIGHALL	
IGS	2310	1974	19 12 50.9	56.08	-3.10		KIRKCALDYBAY	10
IGS	2310	1974	23 51 03.0	55.87	-3.09		COALFIELD	
IGS	2410	1974	01 55 32.3	57.20	-5.40	2.2ML	KINTAIL	
IGS	2610	1974	01 55 54.5	56.27	-3.25		LOMMONDHILL	
IGS	2610	1974	02 01 28.0	56.10	-3.65		DOLLAR	0
IGS	0211	1974	01 33 27.5	56.70	-4.94		MORVERN	
IGS	0511	1974	21 31 01.7	54.93	-3.15	3.0ML	LANGHOLM	10
IGS	0711	1974	18 04 36.9	55.90	-3.08	0.3ML	DANDERHALL	
IGS	1211	1974	13 25 01.8	55.80	-3.10		COALFIELD	
IGS	1211	1974	18 58 29.9	56.87	-3.13	0.5ML	POLTON	
IGS	1311	1974	22 06 17.6	55.87	-3.12		COALFIELD	
IGS	1411	1974	05 13 03.0	55.86	-3.11		COALFIELD	0
IGS	1811	1974	20 27 45.1	56.02	-3.10		COALFIELD	5
IGS	1811	1974	20 39 45.8	56.02	-3.10		COALFIELD	5
IGS	1911	1974	05 34 31.8	55.88	-3.10		BONNYRIGG	0
IGS	2111	1974	05 48 25.2	55.88	-3.10	0.7ML	BONNYRIGG	0
IGS	2111	1974	21 17 48.3	55.85	-3.12	1.2ML	ROSEWELL	0
IGS	2511	1974	09 40 16.0	55.91	-3.10		COALFIELD	
IGS	2611	1974	04 03 52.8	56.07	-3.10	0.9ML	KIRKCALDY BAY	0
IGS	2611	1974	06 35 38.5	55.87	-3.12	0.6ML	POLTON	0
IGS	2711	1974	04 28 02.8	55.92	-3.12		COALFIELD	
IGS	2711	1974	21 50 29.4	55.87	-3.07	0.8ML	NEWBATTLE	
IGS	0512	1974	19 09 54.1	55.88	-3.28	0.7ML	COALFIELD	0
IGS	0512	1974	19 10 00.0	55.88	-3.28	0.8ML	COALFIELD	
IGS	0512	1974	22 06 01.3	55.85	-3.12	1.2ML	COALFIELD	
IGS	0612	1974	05 29 26.4	55.85	-3.12	1.3ML	POLTON	
IGS	1112	1974	20 34 40.8	56.16	-3.65		DOLLAR	0
IGS	1212	1974	18 15 04.6	55.30	-3.08		ESKDALE	15
IGS	1312	1974	19 45 22.7	56.42	-3.55	0.6ML	GLENALMOND	0
IGS	1512	1974	09 33 54.4	55.87	-3.07	1.3ML	NEWBATTLE	
IGS	2012	1974	01 12 36.0	55.80	-3.10	0.9ML	POLTON	
IGS	2012	1974	20 15 00.8	56.07	-3.57	1.3ML	OAKLEY,FIFE	
IGS	2012	1974	20 21 30.1	56.13	-3.63	1.4ML	DOLLAR	
IGS	2012	1974	21 25 39.1	55.85	-3.12	1.1ML	POLTON	0
IGS	2812	1974	18 56 07.5	55.87	-3.07	0.2ML	COALFIELD	
IGS	3112	1974	12 51 42.0	55.89	-3.12		COALFIELD	

BRITISH EARTHQUAKES ON LOWNET---1975

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0801	1975	19 48 48.4	55.85	-3.07	0.7ML	NEWTONGRANGE	10
IGS	0901	1975	03 53 17.4	57.16	-5.32	2.8ML	KINTAIL	
IGS	1501	1975	23 30 27.8	57.05	-5.18	2.6ML	KINTAIL	
IGS	1901	1975	07 58 42.0	56.28	-3.72	1.2ML	GLEN EAGLES	10
IGS	2201	1975	21 24 23.0	56.88	-4.92	3.5ML	KINLOCHLEVEN	
IGS	2301	1975	20 00 20.9	55.92	-3.07	1.0ML	MONKTONHALL	
IGS	2701	1975	04 57 37.1	55.85	-3.12	1.0ML	ROSEWELL	0
IGS	2901	1975	21 22 05.9	55.90	-3.07	0.9ML	DALKEITH	5
IGS	2901	1975	21 55 01.5	55.92	-3.05	0.6ML	WHITECRAIG	
IGS	0402	1975	21 08 28.5	55.85	-3.13	0.4ML	ROSEWELL	0
IGS	1202	1975	01 44 10.9	56.87	-5.12	2.2ML	FORTWILLIAM	
IGS	1202	1975	01 54 19.0	57.36	-5.41	2.2ML	KINTAIL	
IGS	1202	1975	21 59 41.9	56.12	-3.53	0.7ML	DOLLAR	10
IGS	1202	1975	22 00 19.6	56.10	-3.50	0.0ML	DOLLAR	
IGS	1202	1975	22 00 50.8	56.10	-3.50	0.2ML	DOLLAR	
IGS	1402	1975	19 14 33.5	55.87	-3.07	0.6ML	LOTHIANBRDG	0
IGS	1902	1975	07 08 24.3	55.87	-3.07	0.5ML	LOTHIANBRDG	0
IGS	2502	1975	08 06 39.3	56.85	-5.74	2.3ML	FORT WILLIAM	
IGS	0403	1975	23 17 09.0	55.87	-3.08	0.7ML	NEWCRAIGHALL	0
IGS	0503	1975	04 54 11.2	55.85	-3.10	0.5ML	NEWBATTLE	0
IGS	0503	1975	07 05 02.5	55.80	-3.10		COALFIELD	
IGS	0603	1975	02 58 28.6	55.85	-3.12	-0.1ML	COALFIELD	0
IGS	0603	1975	02 16 23.7	55.87	-3.07	1.1ML	BONNYRIGG	10
IGS	0903	1975	09 35 07.0	56.43	-4.30	0.7ML	LOCHEARN	0
IGS	1803	1975	05 28 38.8	55.88	-3.07	1.0ML	COALFIELD	
IGS	1903	1975	20 45 29.0	55.92	-3.08	0.8ML	MILLERHILL	
IGS	2703	1975	05 50 37.9	55.88	-3.07	0.8ML	DALKEITH	0
IGS	3103	1975	20 45 22.9	56.05	-3.70	1.1ML	DOLLAR	10
IGS	0104	1975	02 53 01.9	55.86	-3.12	2.2ML	POLTON	
IGS	0204	1975	19 11 57.5	55.85	-3.12	0.6ML	ROSEWELL	0
IGS	0504	1975	00 28 34.0	55.85	-3.12	0.7ML	ROSEWELL	0
IGS	0804	1975	02 03 45.2	56.07	-3.67	1.0ML	DOLLAR	0
IGS	0804	1975	20 36 41.1	55.91	-3.07	1.0ML	COALFIELD	
IGS	1104	1975	19 45 02.8	56.13	-3.68	1.1ML	OCHILLHILLS	0
IGS	2304	1975	20 38 04.7	55.92	-3.10	0.2ML	COALFIELD	
IGS	2404	1975	20 11 39.0	55.88	-3.12	0.7ML	COALFIELD	
IGS	2504	1975	23 15 57.1	55.88	-3.10	0.7ML	COALFIELD	
IGS	2904	1975	07 31 15.7	56.85	-3.13	1.8ML	POLTON	0
IGS	0105	1975	20 29 44.5	55.85	-3.12	0.6ML	COALFIELD	
IGS	1405	1975	21 15 00.7	55.87	-3.10	0.7ML	COALFIELD	
IGS	1605	1975	03 36 02.3	55.85	-3.12	1.3ML	ROSEWELL	0
IGS	1805	1975	06 43 01.5	55.87	-3.13	0.6ML	COALFIELD	
IGS	2005	1975	02 19 15.0	55.93	-3.09	0.8ML	COALFIELD	
IGS	2205	1975	02 46 12.8	56.85	-4.91	3.2ML	FORTWILLIAM	5
IGS	2205	1975	05 20 43.7	56.85	-4.91		FORTWILLIAM	
IGS	2305	1975	03 32 03.2	55.88	-3.06	1.7ML	COALFIELD	
IGS	2305	1975	13 04 44.4	51.70	-3.30	3.8ML	SOUTHWALES	
IGS	2605	1975	19 41 59.3	55.92	-3.07	1.3ML	MILLERHILL	0
IGS	2805	1975	20 34 13.0	57.49	-5.50	2.3ML	WESTER ROSS	
IGS	2905	1975	19 04 36.1	56.23	-3.65	1.0ML	GLEN DEVON	
IGS	0206	1975	20 57 49.3	57.39	-5.74	1.8ML	KINTAIL	
IGS	0706	1975	01 39 43.7	55.92	-3.07	1.0ML	MILLERHILL	
IGS	1006	1975	04 01 46.8	55.02	-2.47		N.E.ENGLAND	
IGS	2506	1975	19 40 23.4	55.90	-3.09		COALFIELD	
IGS	2506	1975	20 06 39.1	55.92	-3.12		COALFIELD	
IGS	2606	1975	20 47 31.0	56.10	-3.50		DOLLAR	
IGS	2606	1975	21 29 49.9	56.10	-3.50		DOLLAR	
IGS	2606	1975	22 45 59.1	57.04	-5.63	2.2ML	KNOYDART	
IGS	0207	1975	02 21 39.8	55.92	-3.06		COALFIELD	
IGS	0207	1975	05 25 49.7	55.94	-3.12	0.9ML	COALFIELD	
IGS	1007	1975	20 18 42.2	57.50	-5.34	1.9ML	WESTER ROSS	
IGS	1507	1975	18 47 49.1			3.4MB	STOKEONTRENT	
IGS	2307	1975	01 49 38.7	56.83	-4.96	4.2ML	FORT WILLIAM	8
IGS	2307	.1975	02 17 40.8	56.80	-5.00	1.8ML	FORT WILLIAM	
IGS	2307	1975	02 30 25.8	56.80	-5.00	1.3ML	FORT WILLIAM	
IGS	2307	1975	03 22 42.0	56.80	-5.00		FORT WILLIAM	
IGS	2507	1975	17 37 14.9			2.2MB	STOKEONTRENT	
IGS	3107	1975	22 37 57.7	56.25	-3.72	1.0ML	GLEN DEVON	5
IGS	0108	1975	05 17 25.1	55.90	-3.08	0.9ML	ESKBANK	0
IGS	0608	1975	05 34 08.6	55.83	-3.12	1.1ML	ROSEWELL	5
IGS	1908	1975	05 48 45.7	55.90	-3.12	0.9ML	COALFIELD	
IGS	2008	1975	05 48 21.5	55.83	-3.20	1.3ML	ROSLIN	0
IGS	2408	1975	00 33 53.0	52.06	-3.01	3.5ML	HEREFORD	
IGS	2908	1975	18 54 59.0	55.85	-3.13	0.9ML	COALFIELD	0
IGS	0309	1975	18 55 12.1	56.60	-3.58	0.3ML	DUNKELD	
IGS	2509	1975	19 57 46.3	56.10	-3.83	0.5ML	ALLOA	
IGS	0110	1975	23 13 12.5	55.88	-3.09	1.2ML	COALFIELD	
IGS	0810	1975	22 06 23.1	56.10	-3.13		COALFIELD	
IGS	1110	1975	15 05 06.1	56.79	-4.99	3.6ML	FORTWILLIAM	9
IGS	1410	1975	01 12 52.3	55.67	-3.26	1.1ML	PEEBLES	
IGS	1610	1975	00 05 27.4	55.86	-3.10	1.2ML	COALFIELD	
IGS	1610	1975	03 19 12.7	55.86	-3.12	0.7ML	COALFIELD	
IGS	1610	1975	07 59 47.4	56.69	-4.91	1.4ML	KINLOCHLEVEN	
IGS	0211	1975	19 44 07.9	55.59	-4.98	2.5ML	ARRAN	6
IGS	0911	1975	04 22 49.9	55.89	-3.07	1.7ML	COALFIELD	
IGS	1211	1975	00 07 38.3	56.8	7.20	3.7ML	NORTH SEA	
IGS	2111	1975	13 55 36.3	57.50	-5.34	3.8ML	KINTAIL	
IGS	2411	1975	23 01 30.0	53.39	-2.23	2.2ML	MANCHESTER	
IGS	2611	1975	18 43 37.3	56.46	-4.05	2.4ML	GLENALMOND	
IGS	2611	1975	20 38 24.1	56.62	-3.87	2.3ML	ABERFELDY	
IGS	2711	1975	20 26 36.4	57.26	-5.41	4.8ML	KINTAIL	11
IGS	2711	1975	20 51 40.4	57.26	-5.82	3.8ML	KINTAIL	16
IGS	2711	1975	21 43 35.5	57.17	-5.49	3.5ML	KINTAIL	1
IGS	2711	1975	23 19 56.0	55.91	-3.09		MIDLOTHIAN	
IGS	3011	1975	18 42 44.2	57.01	-5.18	1.5ML	GLENGARRY	
IGS	0512	1975	07 28 23.6	56.00	-6.46	4.0ML	COLONSAY	
IGS	0612	1975	02 07 32.7	56.08	-3.46	1.1ML	DUNFERMLINE	
IGS	1112	1975	00 08 54.4	55.96	-3.12	1.2ML	EDINBURGH	
IGS	1612	1975	00 40 25.0	56.98	-5.00	1.3ML	LOCH LOCHY	
IGS	1612	1975	00 52 42.9	55.83	-3.39	1.4ML	AUCHINOON	
IGS	1612	1975	01 12 54.7	56.92	-4.96	1.6ML	LOCH LOCHY	
IGS	1612	1975	07 59 57.5	56.69	-4.91	1.4ML	KINLOCHLEVEN	
IGS	2112	1975	20 01 56.5	56.93	-5.16	1.4ML	FORTWILLIAM	
IGS	2312	1975	22 51 34.6	55.88	-3.12	0.6ML	COALFIELD	
IGS	2412	1975	06 34 35.8	55.87	-3.10	1.2ML	COALFIELD	
IGS	2412	1975	11 19 56.4	57.21	-5.41	1.7ML	GLEN SHIEL	

BRITISH EARTHQUAKES ON LOWNET---1976

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0201	1976	07 36 54.9	59.65	5.35	3.5ML	NORTH SEA	25
IGS	0901	1976	16 52 12.8	57.11	-5.39	2.2ML	KINTAIL	5
IGS	1701	1976	00 51 47.0	56.15	-3.62	1.3ML	DOLLAR	5
IGS	2701	1976	13 38 15.1	55.71	-5.47	2.1ML	KINTYRE PEN.	20
IGS	2801	1976	20 41 04.7	55.73	-3.67	2.3ML	CARSTAIRS	15
IGS	0402	1976	12 23 36.3	56.68	-4.97	2.5ML	KINLOCHLEVEN	5
IGS	0402	1976	12 25 33.5	56.65	-4.88	2.0ML	KINLOCHLEVEN	5
IGS	0502	1976	04 03 02.6	56.17	-3.63	1.2ML	DOLLAR	
IGS	0802	1976	22 20 01.2	55.85	-3.07	0.9ML	COALFIELD	
IGS	0303	1976	20 46 00.5	56.15	-3.64	1.7ML	DOLLAR	
IGS	0403	1976	04 47 37.3	56.92	-5.20	1.6ML	GREAT GLEN	
IGS	0403	1976	08 14 47.8	55.88	-3.12	-0.1ML	COALFIELD	
IGS	2403	1976	20 26 39.9	56.15	-3.63	0.6ML	DOLLAR	
IGS	3003	1976	23 26 51.0	56.56	-4.86	1.2ML	GREAT GLEN	
IGS	3103	1976	00 10 01.1	56.15	-3.64	1.2ML	DOLLAR	
IGS	0804	1976	06 02 55.5	56.16	-3.77	0.6ML	ALVA	
IGS	1104	1976	07 05 02.5	56.71	-4.94	1.8ML	GLEN SPEAN	5
IGS	1104	1976	07 06 44.1	56.65	-5.01	2.0ML	KINLOCHLEVEN	5
IGS	1104	1976	07 10 47.0	56.70	-5.00	0.8ML	GLEN SPEAN	
IGS	1904	1976	20 06 07.9	55.94	-3.09	0.7ML	COALFIELD	
IGS	2104	1976	22 12 42.7	56.14	-3.63	0.9ML	DOLLAR	
IGS	2704	1976	20 12 01.2	55.87	-3.12	0.5ML	COALFIELD	
IGS	2804	1976	01 03 19.5	56.82	-4.91	2.4ML	GLEN COE	
IGS	2904	1976	05 14 05.3	55.88	-3.07	0.4ML	COALFIELD	
IGS	0505	1976	07 07 29.5	55.89	-3.12	0.4ML	COALFIELD	
IGS	0705	1976	18 55 35.4	57.08	-4.51	2.0ML	FORT AUGUSTU	
IGS	0905	1976	22 31 18.8	56.47	-5.53	1.6ML	GREAT GLEN	
IGS	1005	1976	19 42 02.8	55.16	-2.78	0.7ML	LANGHOLM	
IGS	1105	1976	04 41 48.3	55.87	-3.15	1.0ML	COALFIELD	
IGS	1305	1976	06 16 05.3			3.0MB	STOKE	
IGS	1605	1976	16 36 43.7	56.69	-4.91	3.1ML	GLEN COE	
IGS	1905	1976	09 11 17.1			2.5MB	STOKE	
IGS	2005	1976	02 39 43.9	55.87	-3.13	0.8ML	COALFIELD	
IGS	2105	1976	20 01 19.0	50.50	1.00	3.5MB	CHANNEL	
IGS	2105	1976	03 38 42.8	55.87	-3.13	0.8ML	COALFIELD	
IGS	2405	1976	12 11 16.6	55.87	-3.13	0.8ML	COALFIELD	
IGS	2505	1976	23 53 41.0	55.86	-3.17	-0.2ML	COALFIELD	
IGS	2605	1976	03 43 36.4	55.86	-3.13	0.4ML	COALFIELD	
IGS	2705	1976	00 38 32.3	55.87	-3.12	0.7ML	COALFIELD	
IGS	0106	1976	09 24 38.0	55.88	-3.10	0.5ML	COALFIELD	
IGS	0306	1976	03 50 49.5	55.89	-3.12	0.7ML	COALFIELD	
IGS	1506	1976	02 38 15.9	55.86	-3.17	0.9ML	COALFIELD	
IGS	1506	1976	21 12 00.2	55.89	-3.14	0.8ML	COALFIELD	
IGS	1806	1976	00 36 06.5	55.87	-3.13	1.0ML	COALFIELD	
IGS	2206	1976	04 16 57.5	55.87	-3.13	0.7ML	COALFIELD	
IGS	2306	1976	04 41 46.0	55.87	-3.15	1.0ML	COALFIELD	
IGS	2506	1976	03 42 03.1	55.87	-3.15	1.0ML	COALFIELD	
IGS	2606	1976	04 41 18.9	55.87	-3.15	0.8ML	COALFIELD	
IGS	2806	1976	03 29 50.4	55.89	-3.12	0.6ML	COALFIELD	
IGS	2806	1976	22 49 14.4	55.88	-3.12	1.0ML	COALFIELD	
IGS	2906	1976	03 32 12.6	55.87	-3.07	1.0ML	COALFIELD	
IGS	0107	1976	09 38 16.2	55.87	-3.05	1.2ML	COALFIELD	
IGS	0107	1976	18 36 23.5	55.86	-3.15	1.0ML	COALFIELD	
IGS	0207	1976	18 17 24.1	55.87	-3.15	0.8ML	COALFIELD	
IGS	0507	1976	03 32 22.1	55.87	-3.07	1.0ML	COALFIELD	
IGS	2107	1976	06 32 01.0	54.63	-3.01	1.0ML	KESWICK	
IGS	2607	1976	22 52 47.7	55.87	-3.13	1.7ML	COALFIELD	
IGS	2707	1976	18 51 16.1	55.87	-3.13	1.1ML	COALFIELD	
IGS	2907	1976	02 26 49.1	55.87	-3.13	1.2ML	COALFIELD	
IGS	2907	1976	22 03 49.5	55.87	-3.13	1.1ML	COALFIELD	
IGS	3007	1976	02 12 51.7	57.16	-5.71	2.6ML	SKYE	
IGS	3007	1976	08 19 12.6	55.89	-3.10	0.7ML	COALFIELD	
IGS	3007	1976	19 42 52.1	55.87	-3.15	1.3ML	COALFIELD	
IGS	0208	1976	19 00 26.2	55.88	-3.10	1.3ML	COALFIELD	
IGS	0308	1976	20 10 38.6	55.87	-3.13	1.3ML	COALFIELD	
IGS	0408	1976	06 37 44.8	55.88	-3.14	0.7ML	COALFIELD	
IGS	0408	1976	20 51 09.2	56.90	-5.83	2.5ML	ISLAY	
IGS	0408	1976	22 15 48.7	55.87	-3.13	1.1ML	COALFIELD	
IGS	0508	1976	05 49 17.4	55.86	-3.15	1.5ML	COALFIELD	
IGS	0508	1976	16 42 45.6	55.87	-3.13	1.2ML	COALFIELD	
IGS	0508	1976	23 42 45.9	55.87	-3.13	1.3ML	COALFIELD	
IGS	0908	1976	19 43 06.1	55.87	-3.13	1.2ML	COALFIELD	
IGS	1108	1976	19 09 38.6	55.87	-3.13	1.0ML	COALFIELD	
IGS	1208	1976	03 56 06.2	55.87	-3.13	0.7ML	COALFIELD	
IGS	1208	1976	07 35 58.7	55.87	-3.13	1.3ML	COALFIELD	
IGS	1308	1976	00 02 33.4	55.87	-3.13	1.2ML	COALFIELD	
IGS	1608	1976	14 25 52.1	54.30	-2.33	2.8ML	DENT	9
IGS	1608	1976	15 26 24.1	55.87	-3.13	1.1ML	COALFIELD	
IGS	1708	1976	08 59 05.2	55.87	-3.13	1.0ML	COALFIELD	
IGS	1708	1976	20 51 08.3	55.86	-3.15	1.2ML	COALFIELD	
IGS	1808	1976	02 09 17.7	55.85	-3.17	0.5ML	COALFIELD	
IGS	1808	1976	11 23 32.1	55.87	-3.13	1.7ML	COALFIELD	
IGS	1808	1976	20 45 52.7	62.00	2.00	4.2ML	NORTH SEA	
IGS	2408	1976	06 31 42.7	55.87	-3.13	1.0ML	COALFIELD	
IGS	2508	1976	00 45 12.8	55.87	-3.13	0.8ML	COALFIELD	
IGS	2508	1976	12 59 36.5	55.90	-3.12	0.6ML	COALFIELD	
IGS	2508	1976	19 29 21.1	56.10	-3.51	1.2ML	DUNFERMLINE	
IGS	2508	1976	19 41 02.9	55.89	-3.12	0.3ML	COALFIELD	
IGS	2508	1976	19 41 22.3	55.89	-3.12	0.9ML	COALFIELD	
IGS	2508	1976	19 41 35.1	55.89	-3.12	0.7ML	COALFIELD	
IGS	2608	1976	02 06 29.0	55.89	-3.12	1.0ML	COALFIELD	
IGS	2608	1976	21 05 24.2	55.95	-3.12	1.0ML	COALFIELD	
IGS	2708	1976	00 00 19.0	56.18	-3.72	1.2ML	DOLLAR	
IGS	3008	1976	18 30 59.3	55.75	-3.74	1.7ML	LANARKSHIRE	
IGS	3008	1976	21 08 27.5	56.07	-3.49	0.0ML	DUNFERMLINE	
IGS	3008	1976	23 50 24.9	55.87	-3.13	1.0ML	COALFIELD	
IGS	0109	1976	23 44 36.4	55.87	-3.13	1.4ML	COALFIELD	
IGS	0209	1976	01 04 38.1	55.87	-3.13	1.1ML	COALFIELD	
IGS	0209	1976	22 54 52.1	55.88	-3.09	0.9ML	COALFIELD	
IGS	0309	1976	20 41 46.3	55.86	-3.15	0.6ML	COALFIELD	

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0409	1976	03 44 57.2	55.86	-3.13	0.3ML	COALFIELD	
IGS	0709	1976	00 50 08.1	55.85	-3.17	0.7ML	COALFIELD	
IGS	0709	1976	02 48 32.9	55.87	-3.13	0.8ML	COALFIELD	
IGS	0809	1976	00 10 07.8	55.88	-3.10	0.6ML	COALFIELD	
IGS	0809	1976	18 23 31.6	55.90	-3.07	0.8ML	COALFIELD	
IGS	1109	1976	05 49 58.4	55.94	-3.06	1.2ML	COALFIELD	
IGS	2109	1976	18 49 49.7	55.86	-3.13	0.6ML	COALFIELD	
IGS	2209	1976	05 06 27.5	55.85	-3.18	0.5ML	FIFE	
IGS	2209	1976	21 50 57.2	55.86	-3.15	1.0ML	COALFIELD	
IGS	2309	1976	00 14 28.0	56.42	-5.38	1.7ML	GREAT GLEN	5
IGS	2509	1976	04 07 55.2	55.87	-3.13	1.1ML	COALFIELD	
IGS	2809	1976	22 37 42.4	55.91	3.09	0.9ML	COALFIELD	
IGS	3009	1976	04 47 10.9	55.91	-3.09	0.2ML	COALFIELD	
IGS	0110	1976	13 06 42.4	55.87	-3.13	1.0ML	COALFIELD	
IGS	0410	1976	19 45 02.9	55.87	-3.15	0.8ML	COALFIELD	
IGS	0510	1976	01 32 02.4	55.93	-3.06	1.2ML	COALFIELD	
IGS	0610	1976	02 07 08.0	55.86	-3.15	0.5ML	COALFIELD	
IGS	0710	1976	03 16 05.1	55.92	-3.09	0.2ML	COALFIELD	
IGS	0810	1976	03 02 23.6	55.87	-3.13	0.7ML	COALFIELD	
IGS	1110	1976	23 05 19.0	55.87	-3.12	0.0ML	COALFIELD	
IGS	1110	1976	23 05 24.1	55.87	-3.12	0.1ML	COALFIELD	
IGS	1110	1976	23 05 29.1	55.87	-3.12	0.9ML	COALFIELD	
IGS	1210	1976	18 58 48.3	55.87	-3.15	0.8ML	COALFIELD	
IGS	1410	1976	04 16 30.9	55.87	-3.15	0.9ML	COALFIELD	
IGS	1410	1976	23 45 29.7	55.95	-3.09	0.4ML	COALFIELD	
IGS	1510	1976	05 35 43.2	55.88	-3.14	0.8ML	COALFIELD	
IGS	1510	1976	16 52 44.6	55.90	-3.12	0.8ML	COALFIELD	
IGS	1910	1976	18 45 51.8	55.87	-3.13	1.0ML	COALFIELD	
IGS	2010	1976	16 46 14.6	55.87	-3.15	0.8ML	COALFIELD	
IGS	2010	1976	23 06 54.6	55.63	-3.19	0.5ML	COALFIELD	
IGS	2110	1976	22 01 48.3	55.87	-3.15	0.9ML	COALFIELD	
IGS	2210	1976	09 41 39.6	55.91	-3.10	0.8ML	COALFIELD	
IGS	2210	1976	10 36 01.8	55.83	-3.12	0.6ML	COALFIELD	
IGS	2510	1976	12 32 42.8	55.86	-3.15	1.0ML	COALFIELD	
IGS	2610	1976	12 50 40.5	55.88	-3.12	0.5ML	COALFIELD	
IGS	2610	1976	13 46 40.0	55.88	-3.14	0.9ML	COALFIELD	
IGS	2710	1976	03 22 40.0	55.88	-3.12	0.3ML	COALFIELD	
IGS	2710	1976	17 15 14.2	55.95	-3.07	0.5ML	COALFIELD	
IGS	2810	1976	00 01 40.2	56.04	-4.83	1.5ML	DUNNOON	
IGS	2810	1976	09 13 05.6	55.86	-3.15	1.1ML	COALFIELD	
IGS	2810	1976	14 26 34.0	55.92	-3.06	0.8ML	COALFIELD	
IGS	2810	1976	20 52 19.0	55.93	-3.09	0.4ML	COALFIELD	
IGS	2910	1976	10 45 50.3	55.92	-3.07	0.6ML	COALFIELD	
IGS	2910	1976	17 52 05.0	55.89	-3.09	1.1ML	COALFIELD	
IGS	2810	1976	17 56 26.0	55.84	-3.15	0.9ML	COALFIELD	
IGS	3110	1976	18 58 15.0	55.88	-3.14	0.8ML	COALFIELD	
IGS	3110	1976	22 54 15.4	56.36	-3.46	0.1ML	PERTH	
IGS	0211	1976	03 38 02.1	55.88	-3.12	0.5ML	COALFIELD	
IGS	0211	1976	18 25 52.4	55.88	-3.12	1.0ML	COALFIELD	
IGS	0211	1976	20 02 14.4	55.88	-3.12	1.3ML	COALFIELD	
IGS	0311	1976	09 58 04.6	53.41	-2.69	4.5ML	WIDNES	2
IGS	0311	1976	16 23 12.6	55.88	-3.14	0.7ML	COALFIELD	
IGS	0411	1976	03 26 24.6	55.91	-3.09	0.5ML	COALFIELD	
IGS	0411	1976	04 40 19.6	55.90	-3.15	0.8ML	COALFIELD	
IGS	0411	1976	20 06 21.2	55.91	-3.09	0.5ML	COALFIELD	
IGS	0511	1976	02 15 29.6	55.87	-3.13	1.0ML	COALFIELD	
IGS	0511	1976	02 45 46.9	55.87	-3.12	0.3ML	COALFIELD	
IGS	0511	1976	09 10 28.0	55.94	-3.07	0.7ML	COALFIELD	
IGS	0511	1976	17 21 20.4	55.87	-3.12	0.9ML	COALFIELD	
IGS	0711	1976	08 15 23.4	55.93	-3.10	1.3ML	COALFIELD	
IGS	0711	1976	08 43 17.1	55.87	-3.12	0.6ML	COALFIELD	
IGS	0811	1976	03 34 45.0	55.87	-3.12	0.2ML	COALFIELD	
IGS	0811	1976	05 57 02.4	56.04	-4.78	1.8ML	GARE LOCH	
IGS	0811	1976	19 48 17.9	55.87	-3.12	0.9ML	COALFIELD	
IGS	0811	1976	20 21 39.0	55.87	-3.12	0.0ML	COALFIELD	
IGS	1011	1976	14 07 16.2	56.80	-4.97	2.0ML	GREAT GLEN	
IGS	1011	1976	04 29 34.3	55.88	-3.14	0.9ML	COALFIELD	
IGS	1011	1976	17 32 18.0	55.91	-3.07	1.0ML	COALFIELD	
IGS	1011	1976	19 15 20.4	55.87	-3.15	0.6ML	COALFIELD	
IGS	1211	1976	01 40 32.5	55.91	-3.12	0.5ML	COALFIELD	
IGS	1211	1976	18 59 59.4	55.88	-3.14	0.8ML	COALFIELD	
IGS	1311	1976	11 57 29.7	56.52	-5.18	1.4ML	GREAT GLEN	1
IGS	1511	1976	12 43 03.4	55.88	-3.07	0.9ML	COALFIELD	
IGS	1611	1976	21 14 45.5	56.13	-3.83	1.8ML	ALLOA AREA	
IGS	1711	1976	12 49 44.8	55.87	-3.13	0.5ML	COALFIELD	
IGS	1811	1976	18 50 54.6	55.88	-3.12	1.7ML	COALFIELD	
IGS	1811	1976	20 21 09.3	55.84	-3.15	0.8ML	COALFIELD	
IGS	1911	1976	13 30 20.0	55.93	-3.09	0.8ML	COALFIELD	
IGS	1911	1976	14 49 48.4	55.87	-3.13	0.6ML	COALFIELD	
IGS	1911	1976	16 04 09.1	55.85	-3.17	0.3ML	COALFIELD	
IGS	2311	1976	18 06 47.0	55.90	-3.09	0.5ML	COALFIELD	
IGS	0212	1976	21 46 10.9	55.85	-3.14	-0.1ML	COALFIELD	1
IGS	0512	1976	04 29 18.8	56.80	-6.00	2.4ML	LOCH MORAR	
IGS	0712	1976	17 12 29.8	55.88	-3.05	1.0ML	COALFIELD	5
IGS	1012	1976	11 01 40.4	55.88	-3.11	0.3ML	COALFIELD	
IGS	1012	1976	15 12 56.2	55.93	-3.08	1.2ML	COALFIELD	1
IGS	1112	1976	04 13 52.4	55.92	-3.12	0.8ML	COALFIELD	
IGS	1512	1976	20 23 31.2	55.88	-3.19	0.5ML	COALFIELD	
IGS	1712	1976	07 41 10.4	55.87	-3.22	0.7ML	COALFIELD	
IGS	1812	1976	06 00 27.2	55.88	-3.12	0.6ML	COALFIELD	0
IGS	2212	1976	00 45 54.1	55.89	-3.12	0.8ML	COALFIELD	0
IGS	2212	1976	02 31 12.2	55.81	-3.07	1.0ML	NR BROAD LAW	0
IGS	2212	1976	11 47 10.0	55.86	-3.24	0.6ML	COALFIELD	0
IGS	2212	1976	17 31 42.2	55.88	-3.18	0.4ML	COALFIELD	
IGS	2212	1976	19 07 38.6	56.15	-3.62	0.6ML	DOLLAR AREA	0
IGS	2312	1976	18 13 42.0	55.89	-3.08	0.1ML	COALFIELD	0
IGS	2712	1976	19 27 14.3	55.87	-3.14	0.4ML	COALFIELD	0

BRITISH EARTHQUAKES ON LOWNET---1977

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	0301	1977	03 23 43.4	55.87	-3.13	0.8ML	COALFIELD	
IGS	1101	1977	19 36 23.7	55.82	-3.20	0.3ML	COALFIELD	
IGS	1201	1977	03 42 00.8	55.90	-3.14	0.6ML	COALFIELD	
IGS	1201	1977	11 51 20.7	55.87	-3.15	0.8ML	COALFIELD	
IGS	1301	1977	04 48 11.2	55.88	-3.12	1.1ML	COALFIELD	
IGS	1301	1977	04 48 21.7	55.88	-3.12	1.5ML	COALFIELD	
IGS	1501	1977	07 45 14.2	56.73	-4.78	2.5ML	KINLOCHLEVEN	
IGS	2101	1977	10 15 33.2	55.87	-3.14	0.5ML	COALFIELD	
IGS	2601	1977	06 16 46.6	56.15	-3.72	1.5ML	DOLLAR AREA	
IGS	3101	1977	18 21 11.9	55.88	-3.52	1.1ML	WEST CALDER	
IGS	0302	1977	19 39 34.7	55.90	-3.15	0.9ML	COALFIELD	
IGS	0402	1977	03 07 45.0	55.90	-3.14	0.6ML	COALFIELD	
IGS	0802	1977	23 59 43.4	55.90	-3.08	0.8ML	COALFIELD	
IGS	1102	1977	18 40 53.3	55.91	-3.07	0.7ML	COALFIELD	
IGS	1102	1977	18 49 07.4	55.89	-3.10	0.3ML	COALFIELD	
IGS	1202	1977	02 25 45.3	55.94	-3.09	0.9ML	COALFIELD	
IGS	1502	1977	06 46 19.9	55.89	-3.12	0.4ML	COALFIELD	
IGS	1702	1977	00 18 28.1	55.88	-3.07	0.2ML	COALFIELD	
IGS	2302	1977	20 25 27.3	55.91	-3.09	0.9ML	COALFIELD	
IGS	2402	1977	23 05 27.9	56.10	-3.60	0.6ML	CULROSS	
IGS	0403	1977	03 28 42.4	55.85	-3.15	0.9ML	COALFIELD	
IGS	1003	1977	20 39 09.1	55.95	-3.07	0.8ML	COALFIELD	
IGS	1103	1977	02 37 06.4	55.94	-3.09	2.5ML	COALFIELD	
IGS	1103	1977	04 09 43.2	55.95	-3.08	1.2ML	COALFIELD	
IGS	1103	1977	20 39 54.0	55.85	-3.05	1.0ML	COALFIELD	
IGS	1103	1977	20 47 10.5	55.88	-3.09	0.9ML	COALFIELD	
IGS	1303	1977	12 46 20.0	57.26	-5.40	2.2ML	KINTAIL	
IGS	1503	1977	18 51 45.0	55.86	-3.13	1.0ML	COALFIELD	
IGS	2303	1977	16 15 54.0	56.84	-4.89	2.1ML	FORT WILLIAM	
IGS	2403	1977	11 17 56.1	56.01	-4.92	1.0ML	DUNOON AREA	
IGS	2403	1977	18 38 03.6	55.94	-3.09	0.7ML	COALFIELD	
IGS	2403	1977	23 44 58.9	55.95	-3.08	0.5ML	COALFIELD	
IGS	2503	1977	17 27 35.1	55.94	-3.07	1.5ML	COALFIELD	
IGS	2603	1977	06 36 56.6	55.94	-3.09	0.6ML	COALFIELD	
IGS	3003	1977	08 47 32.2	55.93	-3.09	1.0ML	COALFIELD	
IGS	0404	1977	19 49 40.6	56.11	-3.66	1.1ML	DOLLAR AREA	
IGS	0504	1977	00 30 26.6	55.87	-3.16	0.4ML	COALFIELD	
IGS	0604	1977	19 32 04.0	61.50	3.00	5.6ML	NORTH SEA	
IGS	0604	1977	19 38 04.0	61.50	3.00	2.8ML	NORTH SEA	
IGS	1204	1977	18 12 13.3	55.89	-3.08	1.0ML	COALFIELD	
IGS	1504	1977	00 27 33.0	56.70	6.50	1.8ML	NORTH SEA	
IGS	1504	1977	17 49 45.8	55.92	-3.05	0.9ML	COALFIELD	
IGS	1504	1977	18 14 22.1	55.86	-3.13	0.6ML	COALFIELD	
IGS	1904	1977	21 32 48.3	56.16	-3.50	0.2ML	CROOKOFDEVON	
IGS	1904	1977	21 33 01.5	56.15	-3.55	0.7ML	CROOKOFDEVON	
IGS	2004	1977	04 16 04.7	56.11	-4.04	0.3ML	STIRLING	
IGS	2204	1977	06 42 23.2	55.89	-3.09	1.6ML	COALFIELD	
IGS	2204	1977	09 59 28.7	55.85	-3.12	0.9ML	COALFIELD	
IGS	2304	1977	01 24 11.4	55.84	-3.15	0.7ML	COALFIELD	
IGS	2404	1977	06 05 53.5	55.85	-3.12	0.9ML	COALFIELD	
IGS	2504	1977	00 07 40.8	55.85	-3.12	0.7ML	COALFIELD	
IGS	2704	1977	04 36 05.2	55.85	-3.12	1.0ML	COALFIELD	
IGS	2804	1977	18 56 43.4	56.13	-3.64	0.8ML	S OF DOLLAR	
IGS	3004	1977	01 38 16.3	57.05	-5.40	2.9ML	LOCH QUOICH	
IGS	0105	1977	08 31 10.7	55.85	-3.14	0.9ML	COALFIELD	
IGS	0205	1977	20 36 12.0	59.00	5.00	4.4ML	NORTH SEA	
IGS	0905	1977	19 03 40.2	55.85	-3.12	0.8ML	COALFIELD	
IGS	1005	1977	19 05 28.7	57.37	-4.20	1.3ML	SOFINVERNESS	
IGS	1205	1977	18 41 46.9	55.92	-3.10	1.0ML	COALFIELD	
IGS	1305	1977	01 58 28.8	55.91	-3.07	0.6ML	COALFIELD	
IGS	1305	1977	01 58 36.1	55.94	-3.05	1.3ML	COALFIELD	
IGS	1305	1977	02 07 43.2	55.85	-3.13	1.0ML	COALFIELD	
IGS	1305	1977	21 41 27.3	55.87	-3.14	0.7ML	COALFIELD	
IGS	1705	1977	18 51 17.8	57.40	-4.00	1.4ML	SEOFINVERNES	
IGS	1905	1977	04 28 29.3	55.85	-3.12	1.0ML	COALFIELD	
IGS	2005	1977	01 15 16.8	55.93	-3.10	0.2ML	COALFIELD	
IGS	2005	1977	19 30 53.7	55.86	-3.07	0.7ML	COALFIELD	
IGS	2105	1977	00 37 36.7	54.82	-3.77	1.6ML	SOLWAY FIRTH	
IGS	2405	1977	13 47 34.9	55.89	-3.09	1.9ML	COALFIELD	
IGS	2605	1977	00 22 30.2	55.84	-3.13	1.2ML	COALFIELD	
IGS	2605	1977	17 07 53.2	55.92	-3.06	0.7ML	COALFIELD	
IGS	2605	1977	17 08 13.6	55.92	-3.06	1.2ML	COALFIELD	
IGS	3005	1977	20 19 33.7	55.84	-3.14	0.7ML	COALFIELD	
IGS	3105	1977	17 23 09.0	55.89	-3.08	2.2ML	COALFIELD	
IGS	0106	1977	21 41 12.4	55.91	-3.08	0.9ML	COALFIELD	
IGS	0106	1977	21 41 21.5	55.88	-3.14	1.9ML	COALFIELD	
IGS	0106	1977	21 42 06.2	55.89	-3.11	1.4ML	COALFIELD	
IGS	0206	1977	20 09 28.7	55.93	-3.07	0.9ML	COALFIELD	
IGS	0306	1977	01 27 21.7	56.11	-3.81	2.6ML	ALLOA	
IGS	0306	1977	03 55 01.8	57.51	-5.02	2.4ML	STRATHCONON	
IGS	0506	1977	01 45 01.8	55.84	-3.15	0.9ML	COALFIELD	
IGS	0706	1977	12 14 21.1	55.86	-3.12	1.2ML	COALFIELD	
IGS	0706	1977	23 38 23.6	55.96	-3.07	0.5ML	COALFIELD	
IGS	0906	1977	18 37 13.5	55.95	-3.09	1.1ML	COALFIELD	
IGS	1006	1977	02 44 27.2	55.84	-3.15	1.1ML	COALFIELD	
IGS	1106	1977	21 06 10.6	55.27	-3.42	1.9ML	S OF BEATOCK	
IGS	1306	1977	19 17 41.2	55.84	-3.14	0.7ML	COALFIELD	
IGS	1506	1977	02 27 39.3	55.86	-3.11	0.3ML	COALFILED	
IGS	1506	1977	23 22 46.7	55.87	-3.13	0.3ML	COALFIELD	
IGS	1606	1977	04 04 20.6	55.86	-3.14	0.5ML	COALFIELD	
IGS	1606	1977	04 59 44.8	55.86	-3.10	0.5ML	COALFIELD	
IGS	1706	1977	03 22 06.1	55.91	-3.07	1.3ML	COALFIELD	
IGS	1706	1977	13 35 16.1	55.84	-3.15	1.1ML	COALFIELD	
IGS	1806	1977	02 20 00.5	55.85	-3.13	0.5ML	COALFIELD	
IGS	2006	1977	12 39 38.0	55.94	-3.09	0.9ML	COALFIELD	
IGS	2006	1977	18 36 51.5	55.88	-3.09	0.6ML	COALFIELD	
IGS	2106	1977	05 26 10.7	55.86	-3.16	0.8ML	COALFIELD	
IGS	2106	1977	20 39 10.3	56.13	-3.67	0.7ML	S OF DOLLAR	
IGS	2806	1977	14 02 24.0	55.86	-3.12	2.6ML	COALFIELD	
IGS	2806	1977	21 34 58.3	56.03	-3.59	0.8ML	BONESS	
IGS	2906	1977	12 31 12.6	55.84	-3.18	0.5ML	COALFIELD	
IGS	2906	1977	14 48 34.8	55.86	-3.13	2.0ML	COALFIELD	
IGS	0207	1977	00 00 32.2	55.84	-3.14	1.2ML	COALFIELD	
IGS	0807	1977	17 06 41.4	56.10	-3.81	2.0ML	ALLOA AREA	
IGS	0907	1977	00 09 10.0	56.05	-5.44	1.5ML	LOCHGILPHEAD	
IGS	1007	1977	12 21 24.8	57.43	-5.25	2.3ML	KINTAIL AREA	
IGS	1007	1977	21 53 05.0	54.68	-2.54	1.5ML	PENRITH AREA	
IGS	1007	1977	22 07 20.7	54.68	-2.54	1.2ML	PENRITH AREA	
IGS	2607	1977	03 48 32.6	61.50	3.50	4.8ML	NORTH SEA	
IGS	2707	1977	21 05 10.3	55.84	-3.13	1.0ML	COALFIELD	
IGS	2807	1977	21 25 35.6	60.00	-3.00	3.0ML	NORTH SEA	
IGS	0408	1977	06 02 40.4	56.89	-5.76	1.9ML	ARISAIG	
IGS	1808	1977	03 58 32.6	55.85	-3.13	0.2ML	COALFIELD	
IGS	1908	1977	18 49 53.4	55.86	-3.12	-0.1ML	COALFIELD	
IGS	2508	1977	23 08 32.3	55.86	-3.14	0.5ML	COALFIELD	
IGS	3008	1977	00 26 19.8	55.85	-3.13	1.3ML	COALFIELD	
IGS	3008	1977	03 53 02.1	55.85	-3.15	0.7ML	COALFIELD	
IGS	3108	1977	04 52 38.4	55.86	-3.13	1.0ML	COALFIELD	
IGS	3108	1977	13 04 19.3	55.86	-3.12	1.1ML	COALFIELD	
IGS	3108	1977	22 06 06.5	55.86	-3.15	0.9ML	COALFIELD	
IGS	0109	1977	02 49 35.5	55.92	-3.06	0.6ML	COALFIELD	
IGS	0109	1977	10 03 23.6	55.86	-3.07	1.1ML	COALFIELD	
IGS	0209	1977	04 38 51.8	55.86	-3.12	1.3ML	COALFIELD	
IGS	0209	1977	05 16 44.2	55.87	-3.11	0.8ML	COALFIELD	
IGS	0209	1977	17 35 53.2	55.86	-3.15	1.6ML	COALFIELD	
IGS	0409	1977	19 19 08.1	55.84	-3.13	0.8ML	COALFIELD	
IGS	1009	1977	15 27 01.5	53.04	-1.86	3.5ML	NOTTS	
IGS	1209	1977	17 52 09.5	55.94	-3.11	0.4ML	COALFIELD	0
IGS	1309	1977	05 37 59.6	55.86	-3.14	0.4ML	COALFIELD	0
IGS	1409	1977	18 42 39.2	55.97	-3.10	0.3ML	COALFIELD	0
IGS	1509	1977	18 36 56.1	55.96	-3.12	0.6ML	COALFIELD	0
IGS	1909	1977	02 05 17.4	56.03	-3.56	0.1ML	BONESS	5
IGS	2009	1977	17 54 26.9	55.98	-3.11	0.5ML	COALFIELD	0
IGS	2209	1977	00 33 14.4	55.82	-3.18	1.2ML	COALFIELD	0
IGS	2609	1977	19 42 06.6	56.14	-3.67	1.4ML	DOLLAR AREA	5
IGS	2709	1977	03 08 09.1	55.86	-3.14	1.0ML	COALFIELD	2
IGS	2809	1977	03 17 38.3	55.84	-3.13	0.8ML	COALFIELD	0
IGS	2809	1977	04 27 49.2	55.85	-3.16	0.6ML	COALFIELD	0
IGS	2909	1977	07 33 26.8	55.97	-5.27	2.1ML	LOCH FYNE	5
IGS	1010	1977	22 07 01.9	55.89	-3.11	0.2ML	COALFIELD	
IGS	1010	1977	23 06 55.0	55.86	-3.11	0.7ML	COALFIELD	
IGS	1310	1977	20 16 41.7	56.14	-3.68	1.5ML	COALFIELD	
IGS	1410	1977	02 02 54.6	55.85	-3.15	1.1ML	COALFIELD	
IGS	1410	1977	04 01 17.8	55.85	-3.15	0.3ML	COALFIELD	
IGS	1510	1977	01 25 22.6	55.84	-3.14	1.3ML	COALFIELD	
IGS	1910	1977	19 02 18.5	55.62	-3.45	1.6ML	BROUGHTON	
IGS	2210	1977	04 52 05.6	55.85	-3.07	0.4ML	COALFIELD	
IGS	2410	1977	20 49 36.4	55.03	-1.32	2.0ML	OFF N'LAND	
IGS	2710	1977	01 00 38.2	56.16	-3.64	0.8ML	DOLLAR AREA	
IGS	2710	1977	19 36 10.7	56.28	-3.10	0.6ML	LADYBANK	30
IGS	2910	1977	04 06 29.9	55.85	-3.13	0.1ML	COALFIELD	
IGS	3110	1977	18 42 31.8	56.31	-3.71	2.4ML	AUCHTERADER	1
IGS	0111	1977	13 35 00.3	56.11	-3.99	2.3ML	STIRLING	3
IGS	0311	1977	13 35 03.1	55.94	-3.09	1.6ML	COALFIELD	0
IGS	0311	1977	21 48 40.1	55.94	-3.10	1.7ML	COALFIELD	1
IGS	0911	1977	03 37 39.9	58.60	-0.30	3.0ML	NORTH SEA	
IGS	0911	1977	05 34 24.3	55.95	-3.09	0.7ML	COALFIELD	
IGS	0911	1977	14 14 14.5	62.60	1.20	4.7ML	NORTH SEA	
IGS	2211	1977	17 45 46.4	55.85	-3.26	-0.1ML	PENTLANDS	
IGS	2211	1977	23 12 23.3	55.94	-3.11	0.4ML	COALFIELD	
IGS	2911	1977	20 07 23.5	55.91	-3.08	1.1ML	COALFIELD	
IGS	2911	1977	20 52 59.8	55.88	-3.07	0.3ML	COALFIELD	
IGS	2911	1977	22 37 33.5	55.85	-3.07	0.9ML	COALFIELD	
IGS	3011	1977	21 39 20.2	55.91	-3.07	1.3ML	COALFIELD	
IGS	3011	1977	23 28 25.6	55.89	-3.08	1.2ML	COALFIELD	
IGS	0112	1977	19 54 44.9	55.92	-3.06	0.5ML	COALFIELD	
IGS	0112	1977	19 55 39.6	55.92	-3.06	1.3ML	COALFIELD	
IGS	0212	1977	20 40 03.9	55.91	-3.07	0.3ML	COALFIELD	
IGS	0512	1977	03 44 57.0	61.50	2.50	4.4ML	NORTH SEA	
IGS	0812	1977	20 28 31.2	56.15	-3.65	1.5ML	DOLLAR AREA	
IGS	0912	1977	04 37 04.0	57.18	-4.95	2.0ML	GLEN GARRY	
IGS	0912	1977	05 44 14.3	55.60	-3.13	0.2ML	INNERLEITHEN	
IGS	0912	1977	07 00 04.8	55.94	-3.09	1.1ML	COALFIELD	
IGS	1212	1977	00 20 35.8	55.91	-3.12	1.3ML	COALFIELD	
IGS	1312	1977	16 12 57.8	55.94	-3.09	0.6ML	COALFIELD	
IGS	2812	1977	20 02 39.9	55.93	-3.07	0.2ML	COALFIELD	
IGS	2812	1977	21 46 25.9	55.65	-3.37	0.8ML	BROUGHTON	

BRITISH EARTHQUAKES ON LOWNET---1978

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	1201	1978	20 26 00.3	55.89	-3.13	1.1ML	COALFIELD	
IGS	1401	1978	23 58 56.5	55.84	-3.13	0.6ML	COALFIELD	
IGS	1701	1978	07 41 54.5	57.29	-5.52	3.1ML	KINTAIL AREA	
IGS	1701	1978	10 02 27.5	57.29	-5.52	3.7ML	KINTAIL AREA	
IGS	1801	1978	22 29 23.7	55.92	-3.07	1.3ML	COALFIELD	
IGS	2001	1978	16 26 15.5	55.94	-3.09	2.0ML	COALFIELD	
IGS	2001	1978	20 35 26.9	55.95	-3.10	0.7ML	COALFIELD	
IGS	0202	1978	05 08 39.5	55.91	-3.07	0.5ML	COALFIELD	
IGS	0402	1978	01 01 01.6	55.90	-3.15	0.8ML	COALFIELD	
IGS	0502	1978	05 57 13.9	55.93	-3.07	-0.1ML	COALFIELD	
IGS	0902	1978	07 34 17.9	55.93	-3.08	0.9ML	COALFIELD	
IGS	1002	1978	00 13 01.0	53.76	-1.17	2.9MB	NR. SELBY	
IGS	1402	1978	13 54 14.6	56.42	-5.32	2.0ML	GREAT GLEN	
IGS	1602	1978	04 06 39.3	55.91	-3.08	0.5ML	COALFIELD	
IGS	1602	1978	23 49 11.6	55.93	-3.09	0.8ML	COALFIELD	
IGS	2402	1978	11 04 51.0	61.10	3.70	3.7ML	NORTH SEA	
IGS	2502	1978	02 40 40.4	55.91	-3.07	1.6ML	COALFIELD	
IGS	0803	1978	04 33 13.9	60.55	4.10	3.0ML	NORTH SEA	5
IGS	1003	1978	04 37 55.6	56.15	-3.67	1.1ML	DOLLAR AREA	

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	1103	1978	01 44 24.9	57.26	-5.64	2.2ML	KINTAIL AREA	
IGS	1403	1978	05 53 23.5	55.91	-3.09	0.1ML	COALFIELD	
IGS	1603	1978	10 11 12.8	55.88	1.48	3.6ML	NORTH SEA	5
IGS	1603	1978	14 06 16.7	57.19	-5.51	3.5ML	KINTAIL AREA	3
IGS	2003	1978	19 06 39.7	57.12	-5.49	1.3ML	KINTAIL AREA	
IGS	2203	1978	23 31 59.1	57.14	-5.35	2.2ML	KINTAIL AREA	
IGS	2303	1978	03 43 34.3	55.86	-3.12	1.0ML	COALFIELD	
IGS	2303	1978	03 48 28.1	57.08	-5.56	1.6ML	KINTAIL AREA	
IGS	2303	1978	04 46 24.1	55.85	-3.13	1.4ML	COALFIELD	
IGS	2303	1978	18 47 35.2	57.20	-2.50	1.1ML	E OF FT. AUG.	
IGS	2403	1978	04 01 25.6	55.86	-3.08	0.3ML	COALFIELD	
IGS	2403	1978	04 09 34.5	55.86	-3.12	0.5ML	COALFIELD	
IGS	2403	1978	04 09 56.6	55.88	-3.11	0.7ML	COALFIELD	
IGS	2503	1978	02 59 45.2	56.42	-3.58	0.9ML	GLENALMOND	6
IGS	2503	1978	03 01 18.1	56.41	-3.52	1.5ML	GLENALMOND	4
IGS	2503	1978	03 02 41.6	56.43	-3.58	0.2ML	GLENALMOND	2
IGS	3103	1978	06 01 43.7	56.43	-3.57	0.4ML	GLENALMOND	
IGS	3103	1978	18 18 33.2	55.93	-3.08	0.8ML	COALFIELD	
IGS	0404	1978	03 08 05.1	55.93	-3.08	1.2ML	COALFIELD	0
IGS	0604	1978	02 56 59.2	57.41	-5.40	1.7ML	KINTAIL AREA	5
IGS	0604	1978	19 10 33.7	56.13	-3.63	1.6ML	DOLLAR AREA	
IGS	1104	1978	06 47 32.5	55.90	-3.10	1.8ML	COALFIELD	0
IGS	1104	1978	06 52 53.1	55.88	-3.10	1.3ML	COALFIELD	
IGS	1104	1978	08 13 05.0	55.87	-3.16	1.5ML	COALFIELD	3
IGS	1504	1978	02 14 33.5	55.85	-3.15	0.9ML	COALFIELD	
IGS	1604	1978	08 45 53.5	57.08	-5.41	2.4ML	KINTAIL AREA	0
IGS	1904	1978	09 20 10.2	56.17	-3.76		OCHIL HILLS	1
IGS	2004	1978	21 08 55.5	55.92	-3.12	1.0ML	COALFIELD	
IGS	2004	1978	22 06 24.4	55.92	-3.07	1.7ML	COALFIELD	
IGS	2204	1978	02 11 16.0	56.44	-3.62	1.1ML	GLENALMOND	
IGS	2304	1978	18 48 23.9	56.48	-3.64	0.9ML	GLENALMOND	
IGS	2504	1978	20 07 09.1	55.93	-3.08	1.3ML	COALFIELD	0
IGS	2604	1978	12 33 21.0	56.38	1.72	3.1ML	NORTH SEA	
IGS	2604	1978	13 02 46.7	56.17	-4.59	1.7ML	BEN LOMOND	3
IGS	2904	1978	20 05 57.5	55.86	-3.13	0.6ML	COALFIELD	
IGS	0505	1978	20 02 51.9	55.94	-3.03	0.8ML	COALFIELD	1
IGS	1205	1978	12 53 44.8	55.88	-3.08	1.3ML	COALFIELD	
IGS	1705	1978	05 00 33.4	55.90	-3.08	0.7ML	COALFIELD	1
IGS	1905	1978	21 18 51.6	55.91	-3.08	0.7ML	COALFIELD	3
IGS	2005	1978	07 16 16.0	55.36	-4.38	2.1ML	DALMELLINTON	4
IGS	2605	1978	18 45 06.4	55.91	-3.07	0.8ML	COALFIELD	0
IGS	2605	1978	19 35 44.5	57.23	-5.20	1.5ML	KINTAIL AREA	
IGS	2605	1978	21 50 43.3	57.48	-5.52	1.1ML	KINTAIL AREA	
IGS	2705	1978	02 25 11.4	57.48	-5.55	2.2ML	KINTAIL AREA	10
IGS	2705	1978	06 42 36.1	57.47	-5.48	1.7ML	KINTAIL AREA	10
IGS	2705	1978	16 06 05.5	57.55	-5.62	1.8ML	KINTAIL AREA	10
IGS	2705	1978	16 59 03.4	57.20	-5.83	1.5ML	SKYE	
IGS	2805	1978	07 15 04.7	57.42	-5.39	1.9ML	KINTAIL AREA	
IGS	0106	1978	20 24 20.3	55.88	-3.11	1.2ML	COALFIELD	0
IGS	0206	1978	03 50 51.3	55.91	-3.09	0.4ML	COALFIELD	7
IGS	0406	1978	01 17 48.3	55.86	-3.15	0.7ML	COALFIELD	1
IGS	0606	1978	05 23 55.8	61.13	3.55	3.7ML	NORTH SEA	10
IGS	0706	1978	04 56 59.5	55.91	-3.07	0.8ML	COALFIELD	1
IGS	0806	1978	11 41 23.7	57.48	-5.41	2.1ML	KINLOCHEWE	3
IGS	1106	1978	09 15 27.5	57.64	-5.50	3.4ML	KINLOCHEWE	5
IGS	1106	1978	14 55 42.4	57.53	-5.66	1.7ML	KINLOCHEWE	
IGS	1106	1978	16 44 32.3	57.33	-5.47	2.3ML	DORNIE	0
IGS	1406	1978	20 17 03.0	55.90	-3.11	1.3ML	COALFIELD	
IGS	1506	1978	23 14 04.4	54.79	-1.79	1.8ML	DURHAM AREA	
IGS	1606	1978	17 24 30.8	55.86	-3.14	2.2ML	COALFIELD	1
IGS	2206	1978	07 25 48.0	55.90	-3.05	0.9ML	COALFIELD	
IGS	1207	1978	20 04 04.6	53.42	-4.27	2.7ML	ANGLESEY	10
IGS	2607	1978	05 26 10.0	55.93	-3.08		COALFIELD	0
IGS	0108	1978	23 54 07.1	54.96	-1.34	1.8ML	WHITBURN	3
IGS	0108	1978	23 54 15.4	55.39	-2.93	1.2ML	HAWICK AREA	0
IGS	0108	1978	23 55 16.8	55.35	-3.50	0.5ML	MOFFAT AREA	
IGS	0208	1978	21 06 12.3	55.34	-3.50		MOFFAT AREA	5
IGS	0308	1978	01 04 30.3	55.88	-3.06		COALFIELD	0
IGS	0508	1978	04 49 04.1	55.84	-3.16		COALFIELD	0
IGS	0508	1978	06 13 33.6	55.92	-3.08		COALFIELD	5
IGS	0608	1978	03 53 05.9	55.37	-3.53		MOFFAT AREA	4
IGS	1108	1978	01 09 59.3	55.84	-3.14		COALFIELD	5
IGS	1108	1978	03 37 10.2	55.83	-3.18	0.3ML	COALFIELD	1
IGS	1108	1978	03 37 19.8	55.85	-3.11	0.6ML	COALFIELD	0
IGS	1508	1978	21 55 54.1	55.88	-3.06	0.7ML	COALFIELD	3
IGS	1608	1978	03 45 04.5	55.91	-3.07	0.6ML	COALFIELD	0
IGS	1808	1978	16 29 20.7	55.88	-3.10	1.1ML	COALFIELD	2
IGS	1908	1978	04 58 05.7	55.94	-3.06	0.3ML	COALFIELD	1
IGS	2108	1978	18 46 50.1	55.92	-3.06	0.8ML	COALFIELD	2
IGS	2308	1978	05 33 53.7	55.89	-3.10	0.8ML	COALFIELD	1
IGS	2308	1978	05 35 05.5	55.90	-3.18	1.1ML	COALFIELD	1
IGS	2408	1978	06 42 04.4	55.89	-3.10	2.5ML	COALFIELD	1
IGS	2408	1978	19 42 23.4	55.94	-3.07	1.0ML	COALFIELD	0
IGS	2408	1978	21 24 20.5	55.94	-3.11	0.3ML	COALFIELD	
IGS	2808	1978	18 43 35.6	55.88	-3.08	1.5ML	COALFIELD	0
IGS	3008	1978	01 23 30.1	56.30	-5.60	1.9ML	OBAN AREA	0
IGS	3008	1978	02 22 08.7	55.91	-3.07	0.9ML	COALFIELD	0
IGS	0109	1978	02 57 18.5	55.86	-3.17	0.8ML	COALFIELD	
IGS	0109	1978	02 57 24.9	55.87	-3.14	1.2ML	COALFIELD	0
IGS	0109	1978	04 56 34.1	55.92	-3.07	0.8ML	COALFIELD	
IGS	0709	1978	04 06 10.6	55.93	-3.08	0.9ML	COALFIELD	0
IGS	0709	1978	18 13 05.7	55.91	-3.07	0.8ML	COALFIELD	0
IGS	0909	1978	13 41 39.0	57.23	-5.45	3.8ML	KINTAIL AREA	10
IGS	0909	1978	16 46 22.5	57.11	-5.45	2.6ML	KINTAIL AREA	3
IGS	0909	1978	20 15 34.6	57.10	-5.42	2.6ML	KINTAIL AREA	0
IGS	1009	1978	03 29 44.1	57.07	-5.44	2.5ML	KINTAIL AREA	9
IGS	1009	1978	03 58 06.5	57.11	-5.24	2.0ML	KINTAIL AREA	0
IGS	1009	1978	10 09 17.1	57.13	-5.40	2.8ML	KINTAIL AREA	0
IGS	1009	1978	10 20 17.7	57.17	-5.37	2.2ML	KINTAIL AREA	8
IGS	1009	1978	16 03 07.7	57.19	-5.45	2.4ML	KINTAIL AREA	6
IGS	1309	1978	22 19 08.8	56.45	-5.42	1.3ML	OBAN AREA	1
IGS	1409	1978	19 56 00.1	55.92	-3.13	0.8ML	COALFIELD	
IGS	1909	1978	14 52 38.7	62.25	1.75	4.7MB	NORTH SEA	8

	DATE	YEAR	TIME	LAT	LON	MAG	PLACE	H
IGS	2009	1978	03 47 42.8	55.94	-3.08	0.7ML	COALFIELD	1
IGS	2109	1978	01 11 02.0	55.93	-3.09	0.6ML	COALFIELD	
IGS	2509	1978	07 34 58.6	55.90	-3.07	0.3ML	COALFIELD	
IGS	2609	1978	17 38 42.4	55.94	-3.09	0.3ML	COALFIELD	0
IGS	2609	1978	21 03 49.3	55.93	-3.09	1.2ML	COALFIELD	0
IGS	2609	1978	21 04 08.6	55.94	-3.08	1.2ML	COALFIELD	4
IGS	2809	1978	02 06 08.4	55.86	-3.15	1.1ML	COALFIELD	0
IGS	2809	1978	04 37 09.9	55.86	-3.10	0.8ML	COALFIELD	1
IGS	2809	1978	18 49 18.9	55.91	-3.07	0.7ML	COALFIELD	
IGS	2809	1978	18 49 30.9	55.91	-3.08	1.2ML	COALFIELD	
IGS	0210	1978	08 49 53.2	57.15	7.14	3.7ML	NORTH SEA	30
IGS	0410	1978	19 56 11.6	55.91	-3.09	1.0ML	COALFIELD	4
IGS	0410	1978	21 03 45.6	55.93	-3.09	1.2ML	COALFIELD	2
IGS	0510	1978	12 25 40.6	55.88	-3.06	1.9ML	COALFIELD	1
IGS	0710	1978	05 26 58.6	55.94	-3.09	1.1ML	COALFIELD	0
IGS	1110	1978	20 10 35.4	55.93	-3.09	0.9ML	COALFIELD	0
IGS	1210	1978	01 31 38.5	55.88	-3.05	1.4ML	COALFIELD	1
IGS	1210	1978	19 54 05.3	56.24	-3.74	1.6ML	COALFIELD	4
IGS	2010	1978	16 27 44.7	55.83	-3.76	1.6ML	SHOTTS AREA	0
IGS	2011	1978	23 53 08.6	55.63	-3.28	1.0ML	PEEBLES AREA	20
IGS	2411	1978	07 26 31.3	57.21	-5.54	2.6ML	KINTAIL AREA	10
IGS	2611	1978	12 43 08.8	55.82	-5.02	1.8ML	ROTHESAY	0
IGS	0912	1978	21 01 56.1	61.48	3.20	3.9MB	NORTH SEA	
IGS	1312	1978	16 30 49.8	56.50	-5.28	2.3ML	OBAN AREA	
IGS	1912	1978	21 29 09.9	55.94	-3.06	0.4ML	COALFIELD	
IGS	2112	1978	15 26 08.1	55.83	-3.79	1.3ML	COALFIELD	
IGS	2312	1978	02 19 57.8	55.96	-3.08	1.3ML	COALFIELD	

MAPS OF EPICENTRES OF BRITISH EARTHQUAKES RECORDED ON LOWNET (1967–1978)

ANNUAL MAPS OF EPICENTRES

An annual map of epicentres for each of the ten years 1969 to 1978 is attached, plus a map of a few epicentres during 1967/68. These constitute Figures 2 to 12. The magnitude ranges are represented by different symbol sizes and depth, where known, is indicated by different symbol types. Where magnitude or depth is not known, and is not listed in the annual catalogues, it is assumed to be zero for the purpose of plotting an epicentre. Nearly all of the magnitudes plotted are M_L, but for those few earthquakes which are over 200 km from LOWNET and for which m_b^* is estimated this magnitude is plotted. (These epicentres are readily identified in the lists). Figure 13 plots all of the listed epicentres. Figures 14 to 25 correspond to figures 2 to 13 except the geographic boundary is Scotland, rather than all of the UK.

SPECIAL MAPS OF EPICENTRES

In addition to the basic annual maps of epicentres a few special maps are included:

Figure 26 epicentres around Edinburgh

Figure 27 epicentres associated with the Midlothian Coalfield

Figure 28 epicentres of earthquakes with magnitude 1.0 or greater in Great Britain

Figure 29 epicentres of earthquakes with magnitude M_L = 1.0 or greater in Scotland.

SYMBOLS USED ON EPICENTRE MAPS (Figures 2–29)

Different focal depth ranges, in kilometres, are represented by different symbol types, and magnitudes by symbol size as follows:

Depths (symbol types)

 up to 5.00

 5.01 to 15.00

 15.01 or greater

Magnitude (symbol radius)

·		up to 1.00
'	1.01	to 2.00
'	2.01	to 3.00
'	3.01	to 4.00
'	4.01	or greater

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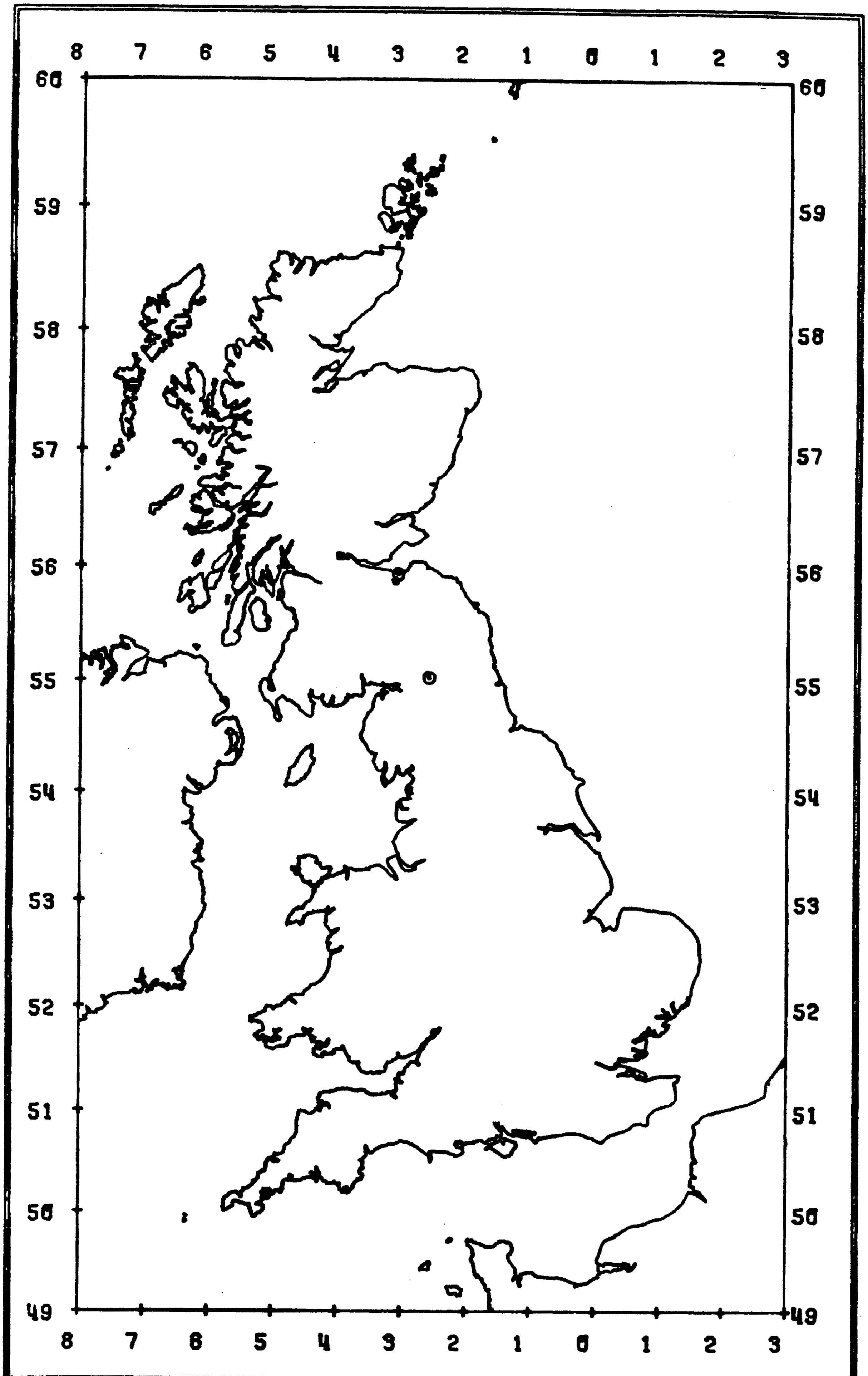


Figure 2 Epicentres in Great Britain 1967-1968.

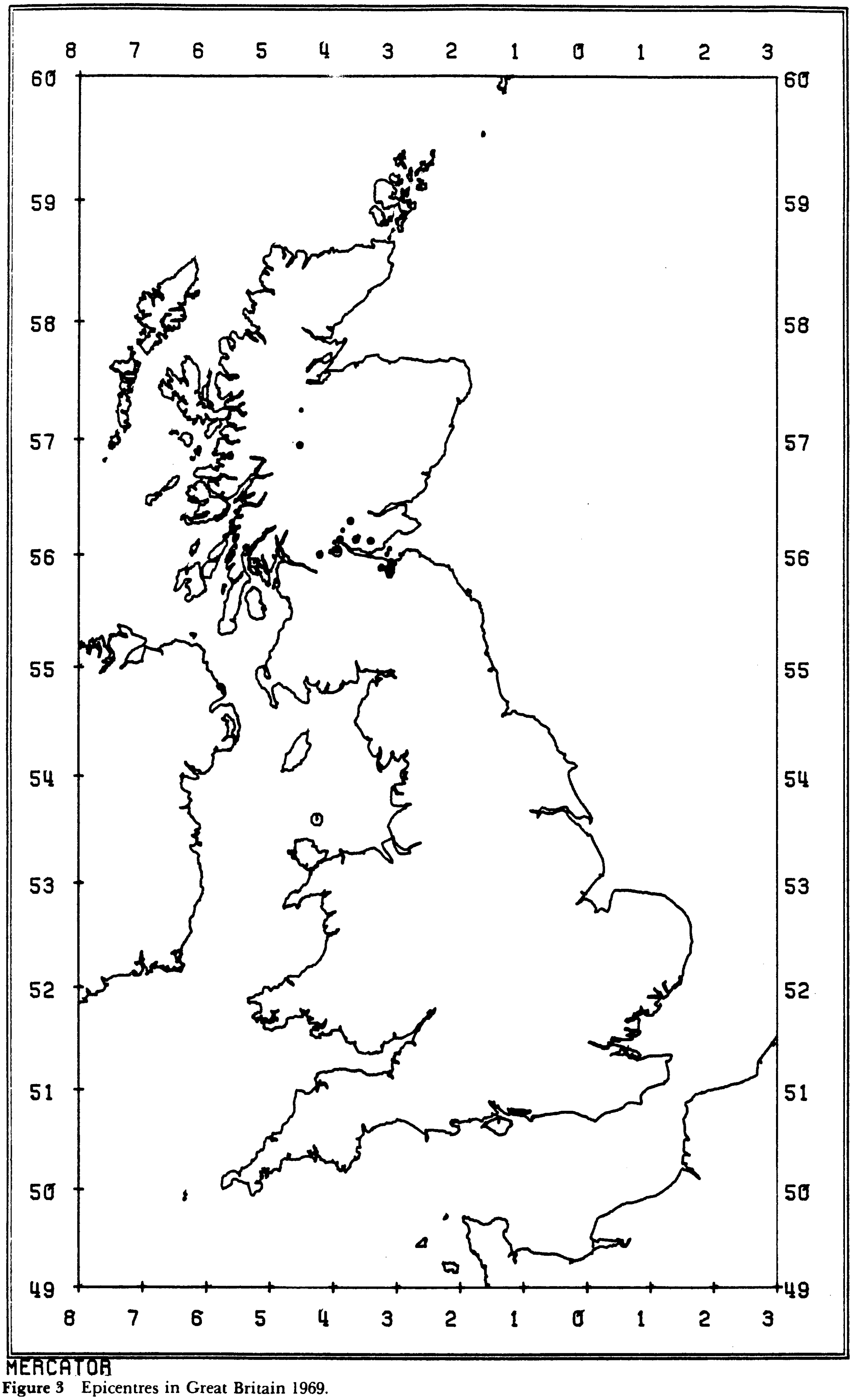


Figure 3 Epicentres in Great Britain 1969.

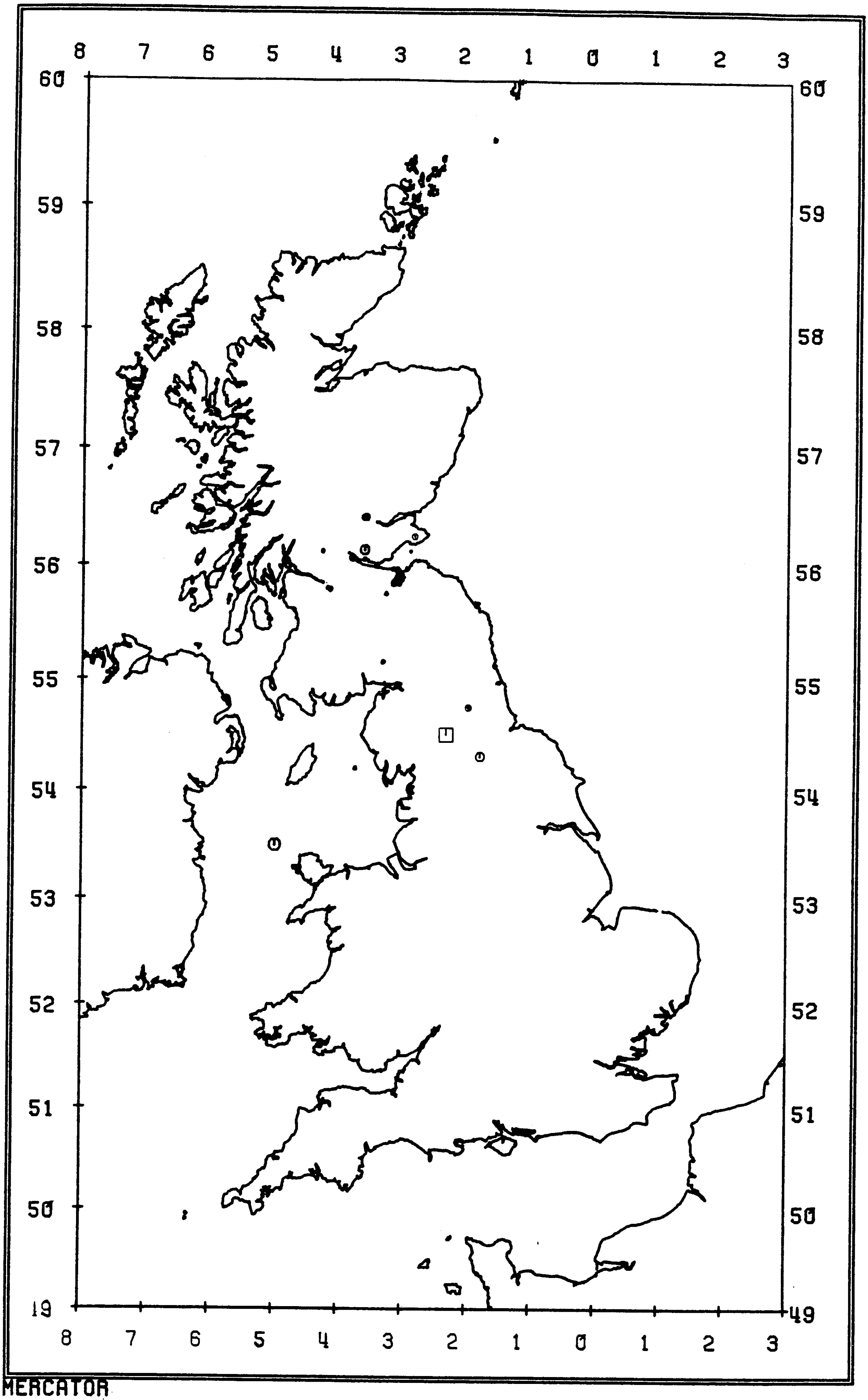


Figure 4 Epicentres in Great Britain 1970.

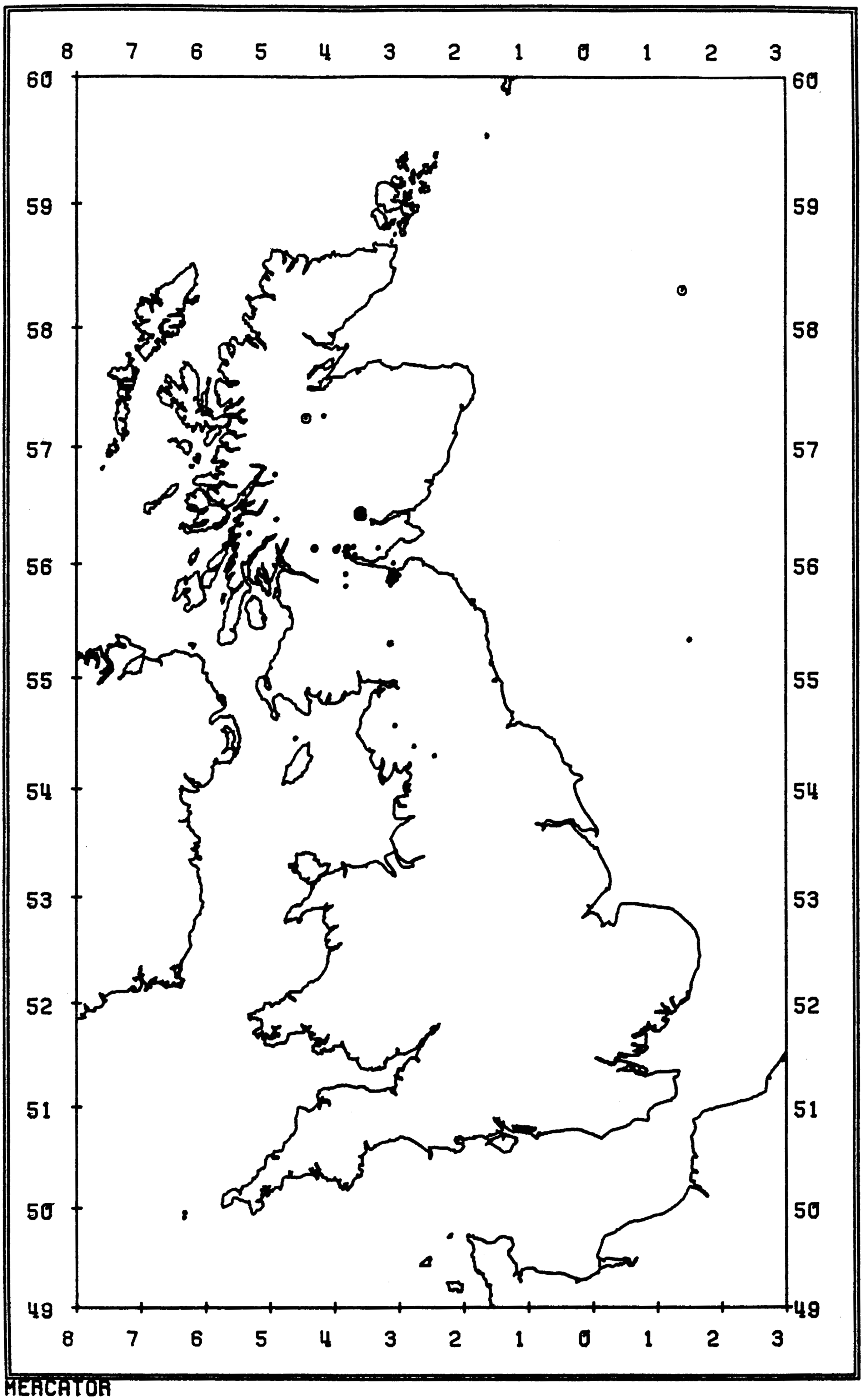


Figure 5 Epicentres in Great Britain 1971.

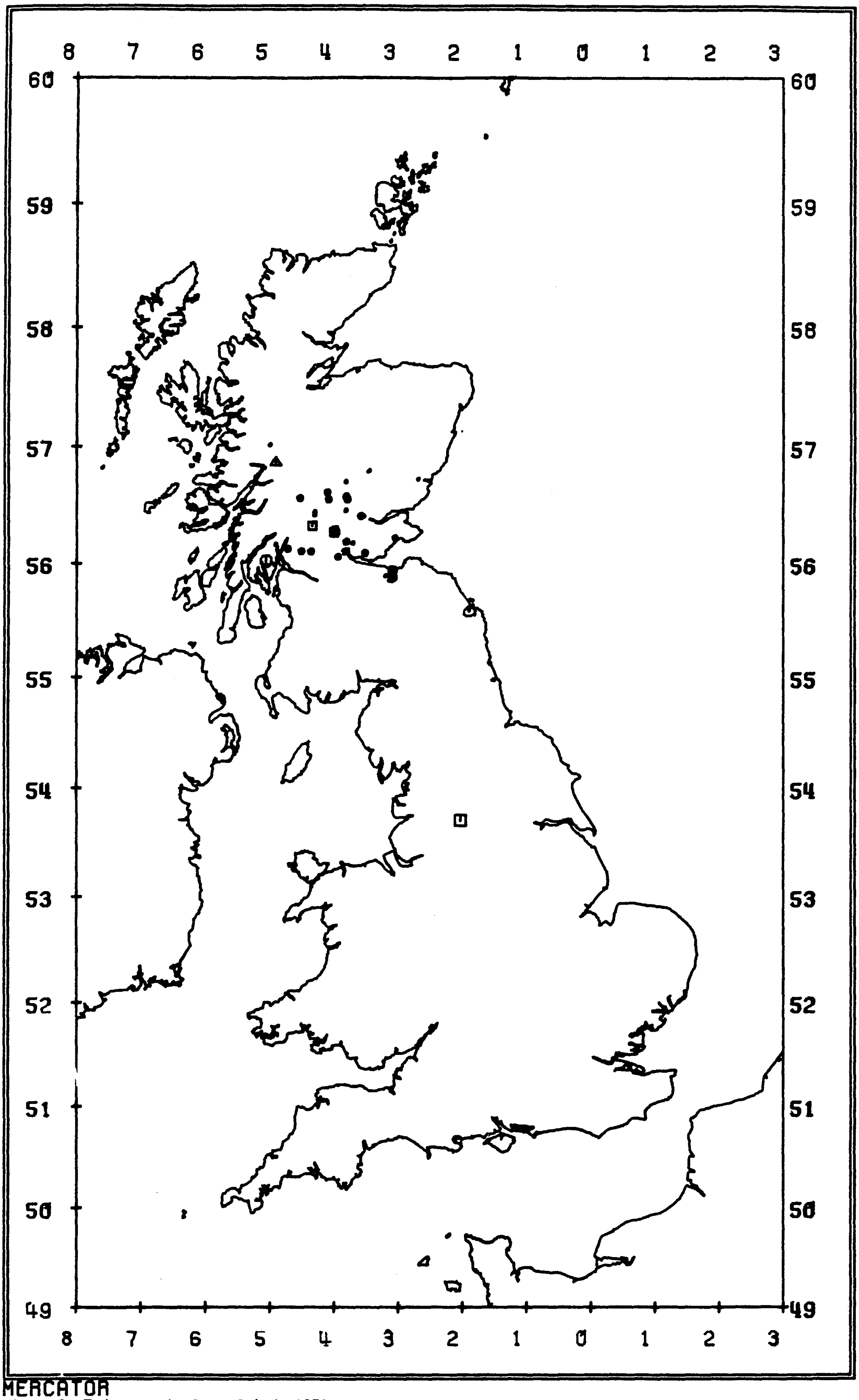


Figure 6 Epicentres in Great Britain 1972.

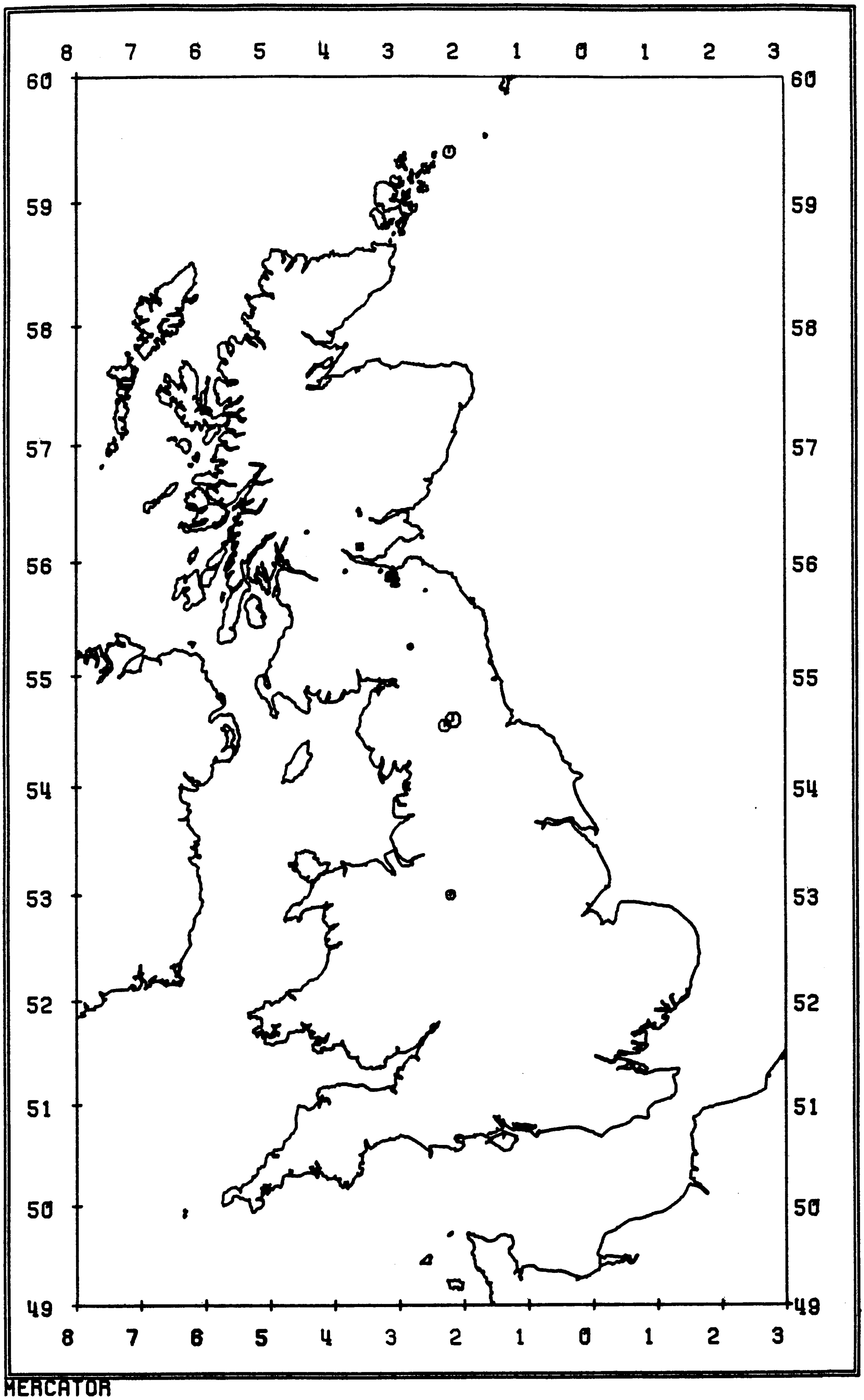


Figure 7 Epicentres in Great Britain 1973.

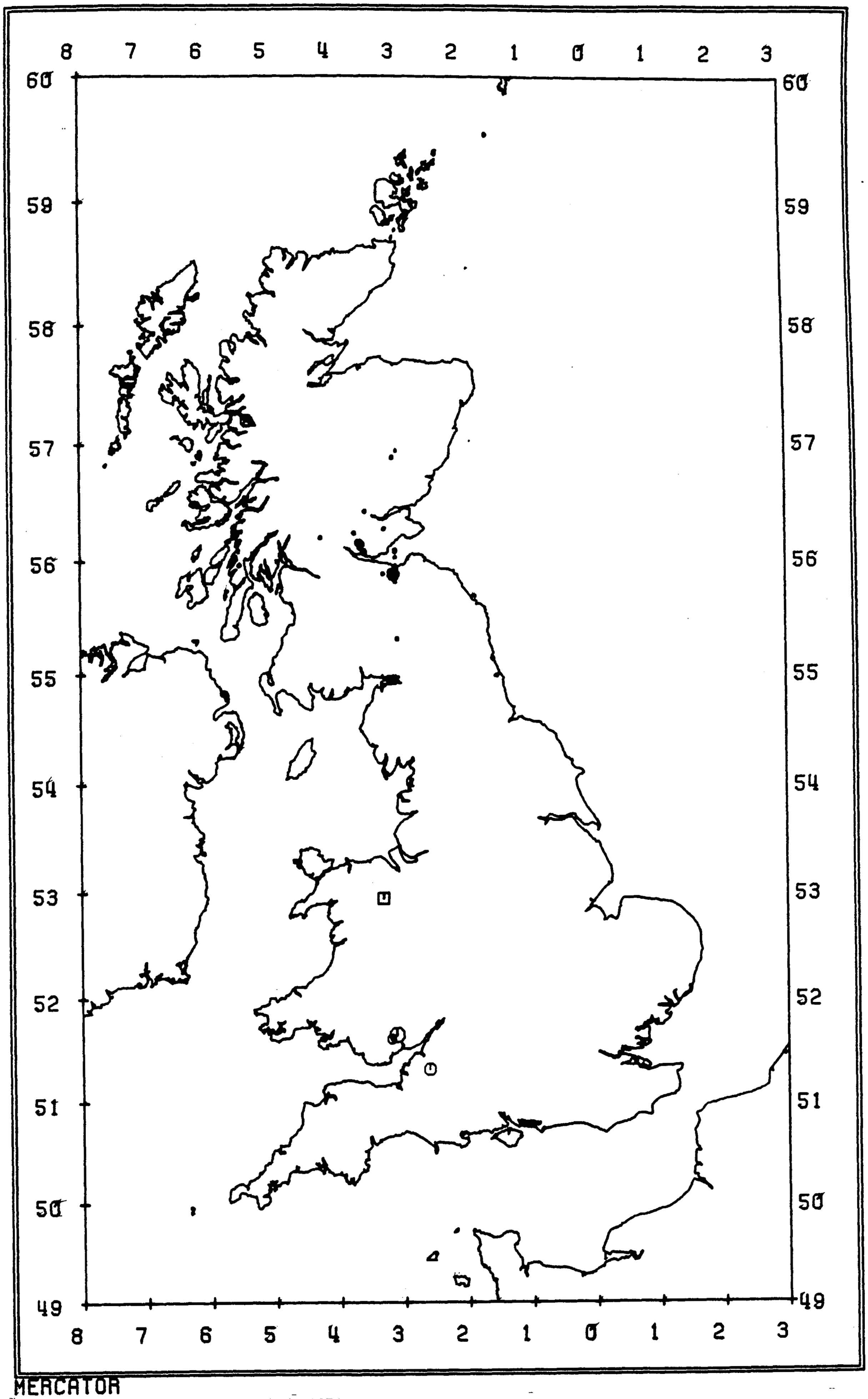


Figure 8 Epicentres in Great Britain 1974.

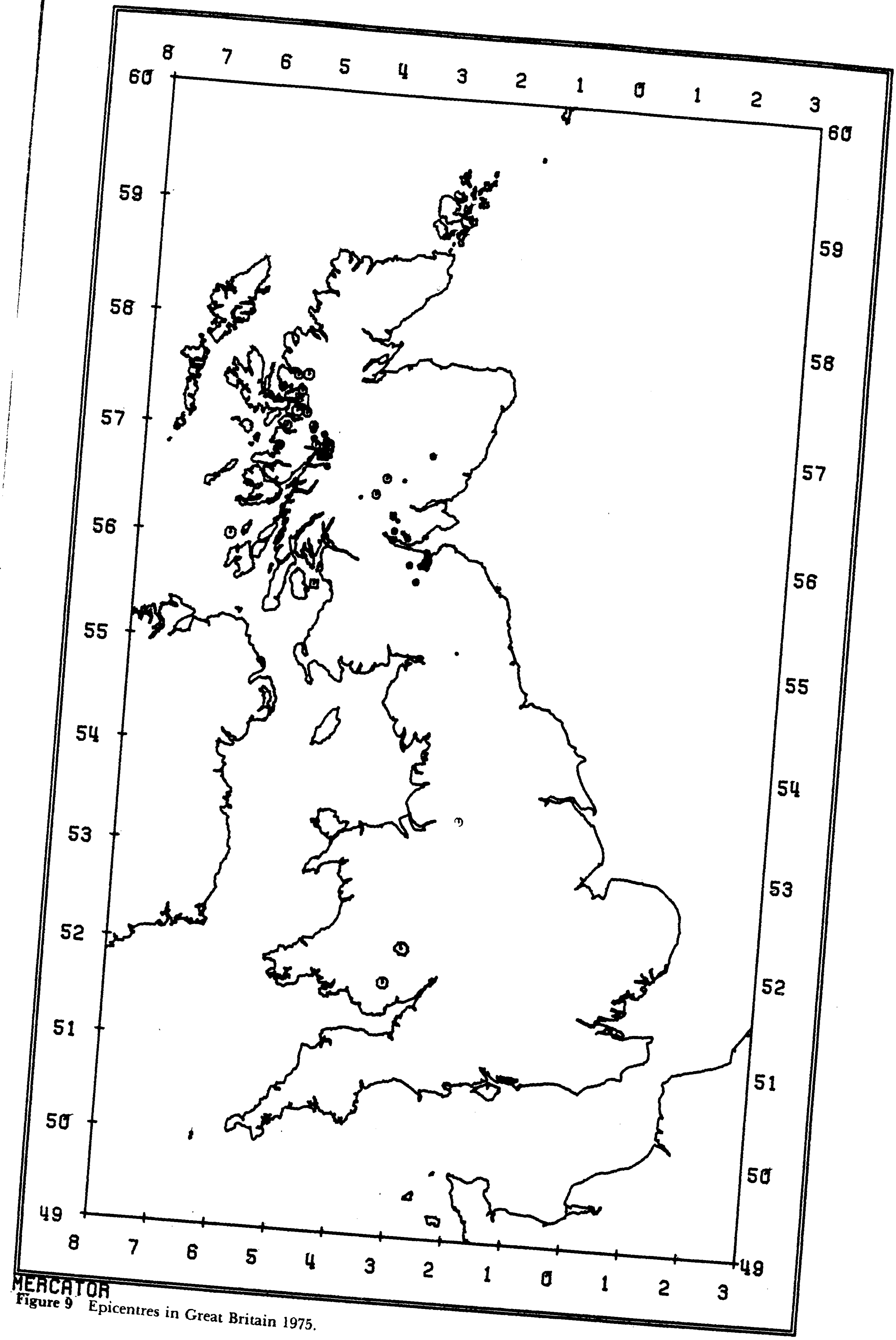


Figure 9 Epicentres in Great Britain 1975.

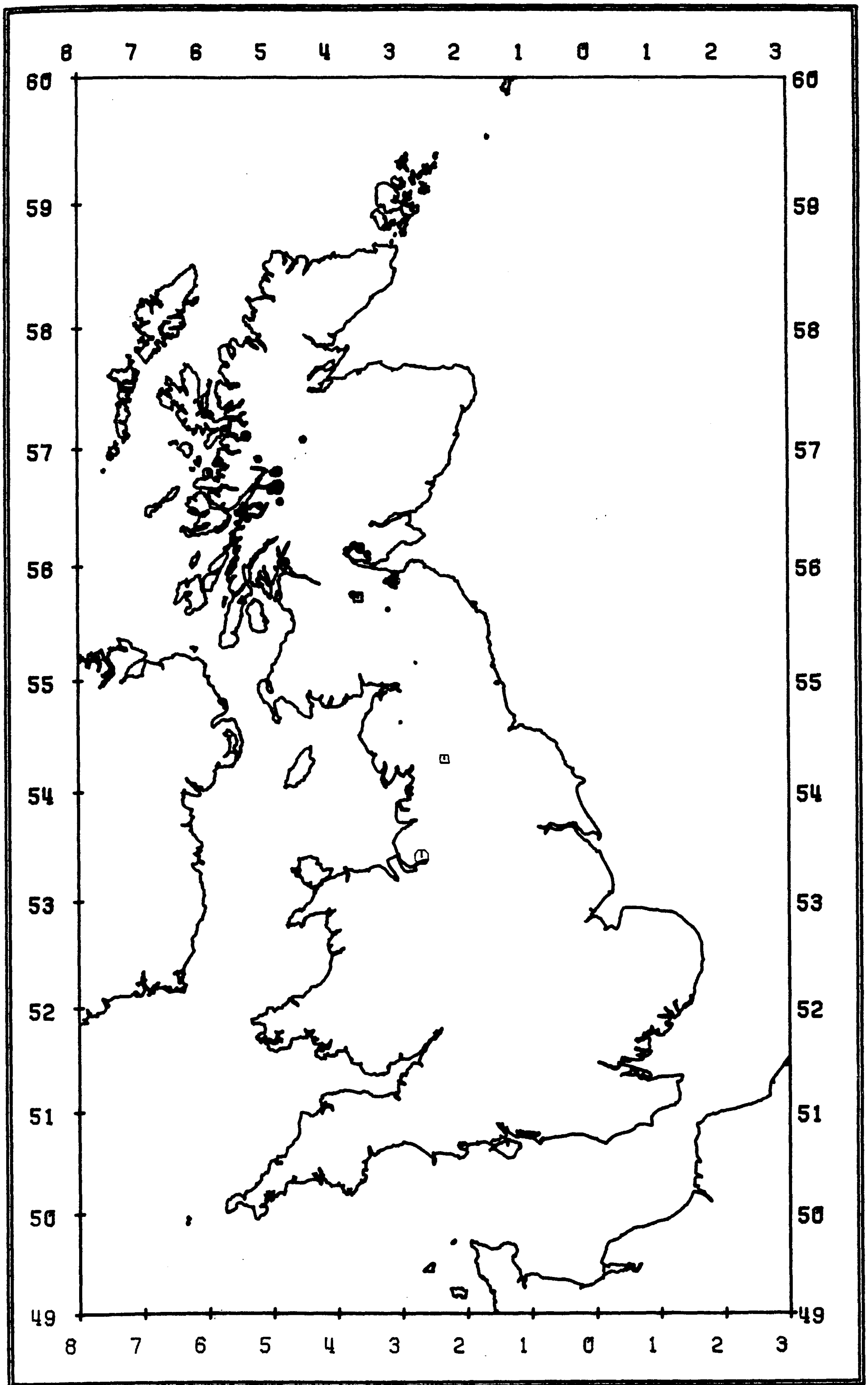


Figure 10 Epicentres in Great Britain 1976.

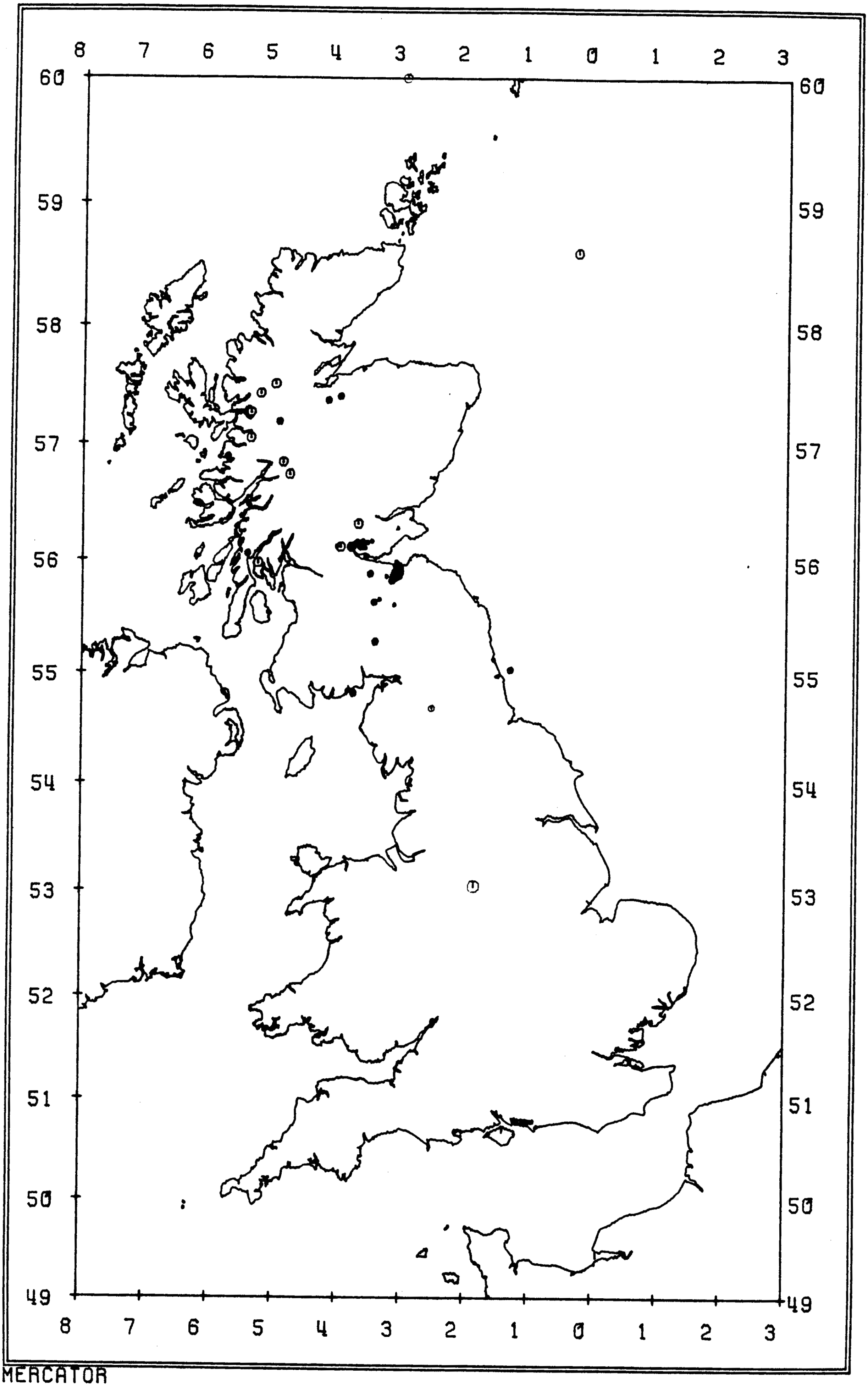
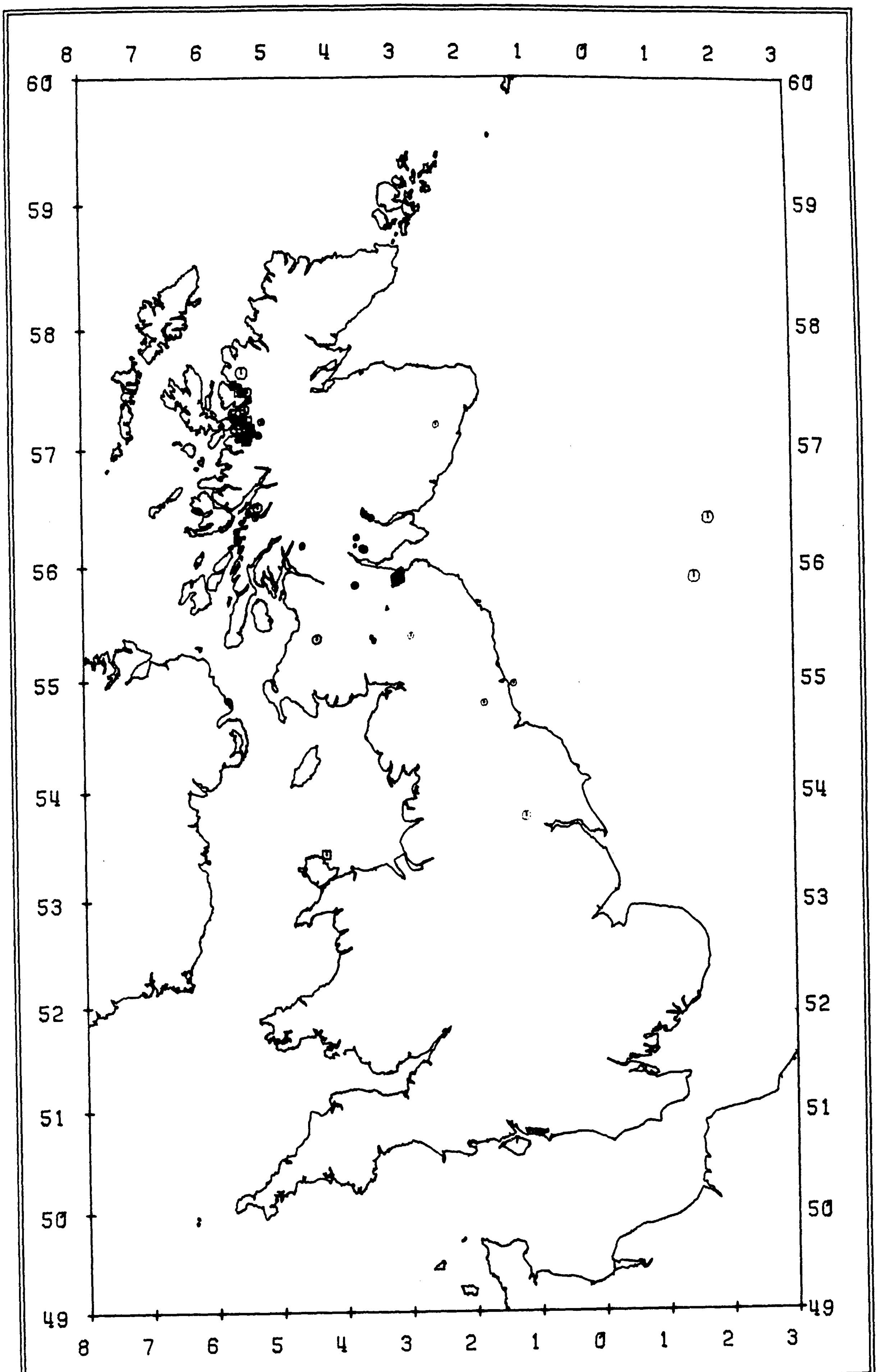


Figure 11 Epicentres in Great Britain 1977.



MERCATOR

Figure 12 Epicentres in Great Britain 1978.

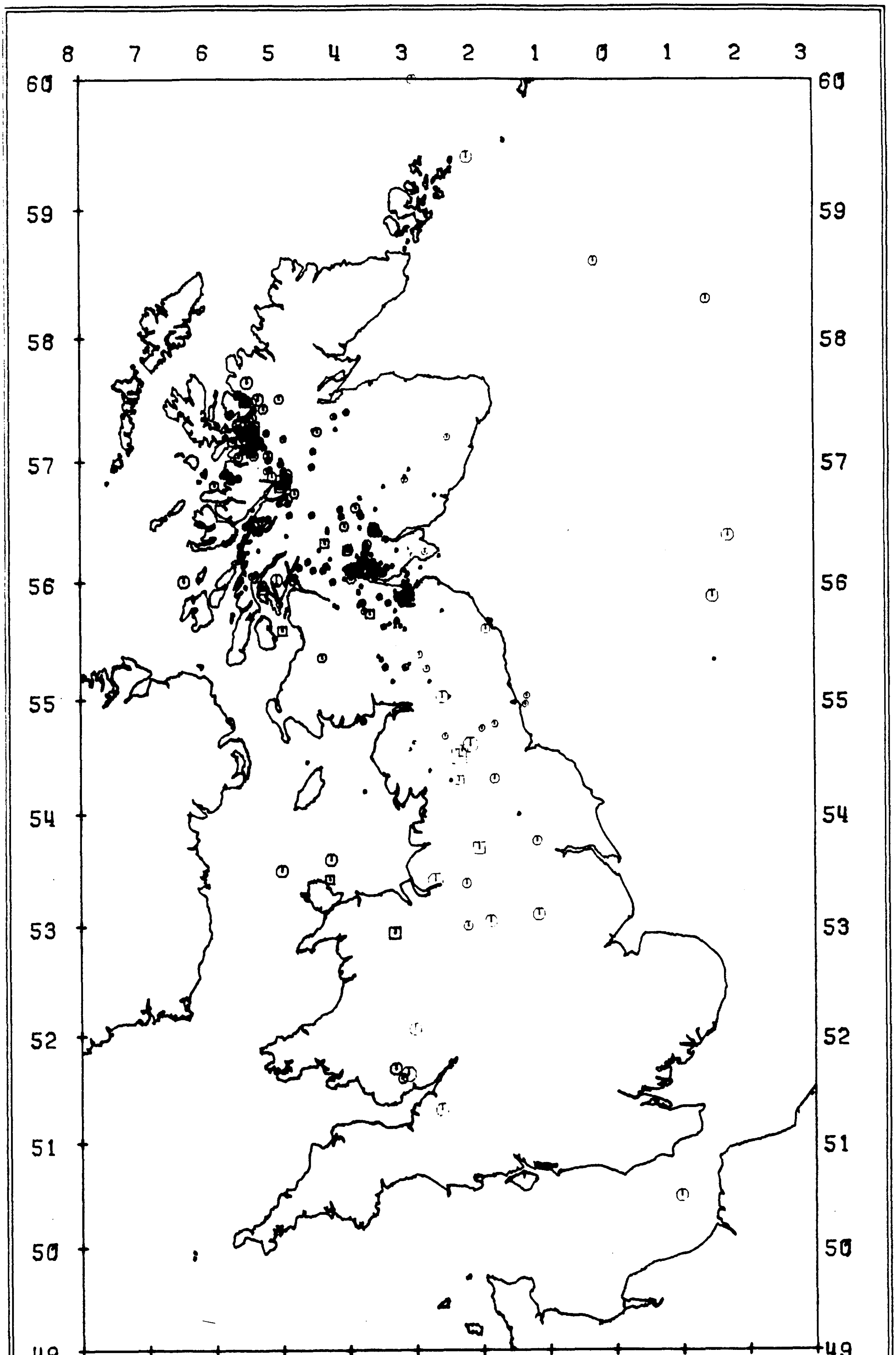


Figure 13 All epicentres in Great Britain 1967-1978.

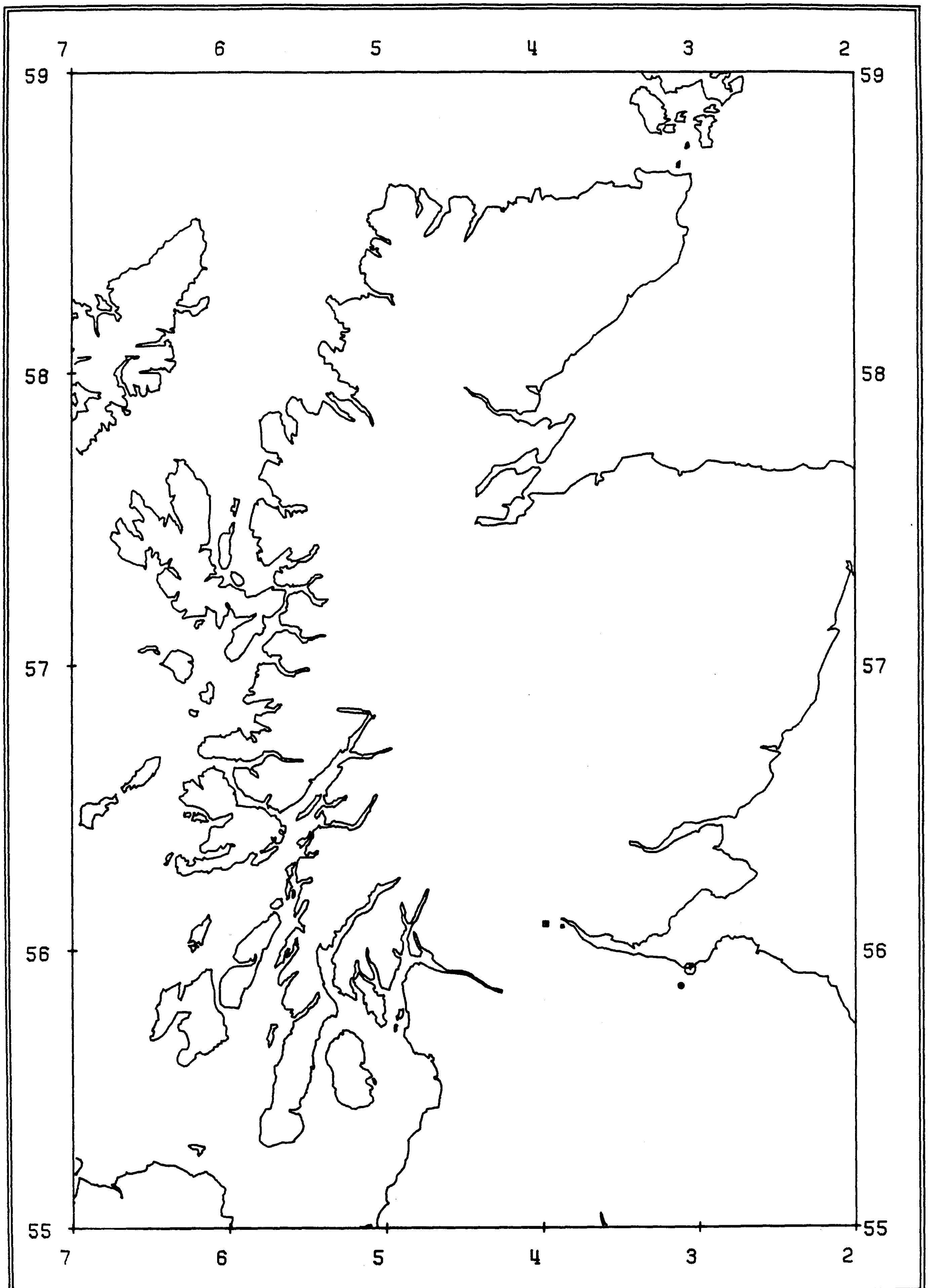


Figure 14 Epicentres in Scotland 1967-1968.

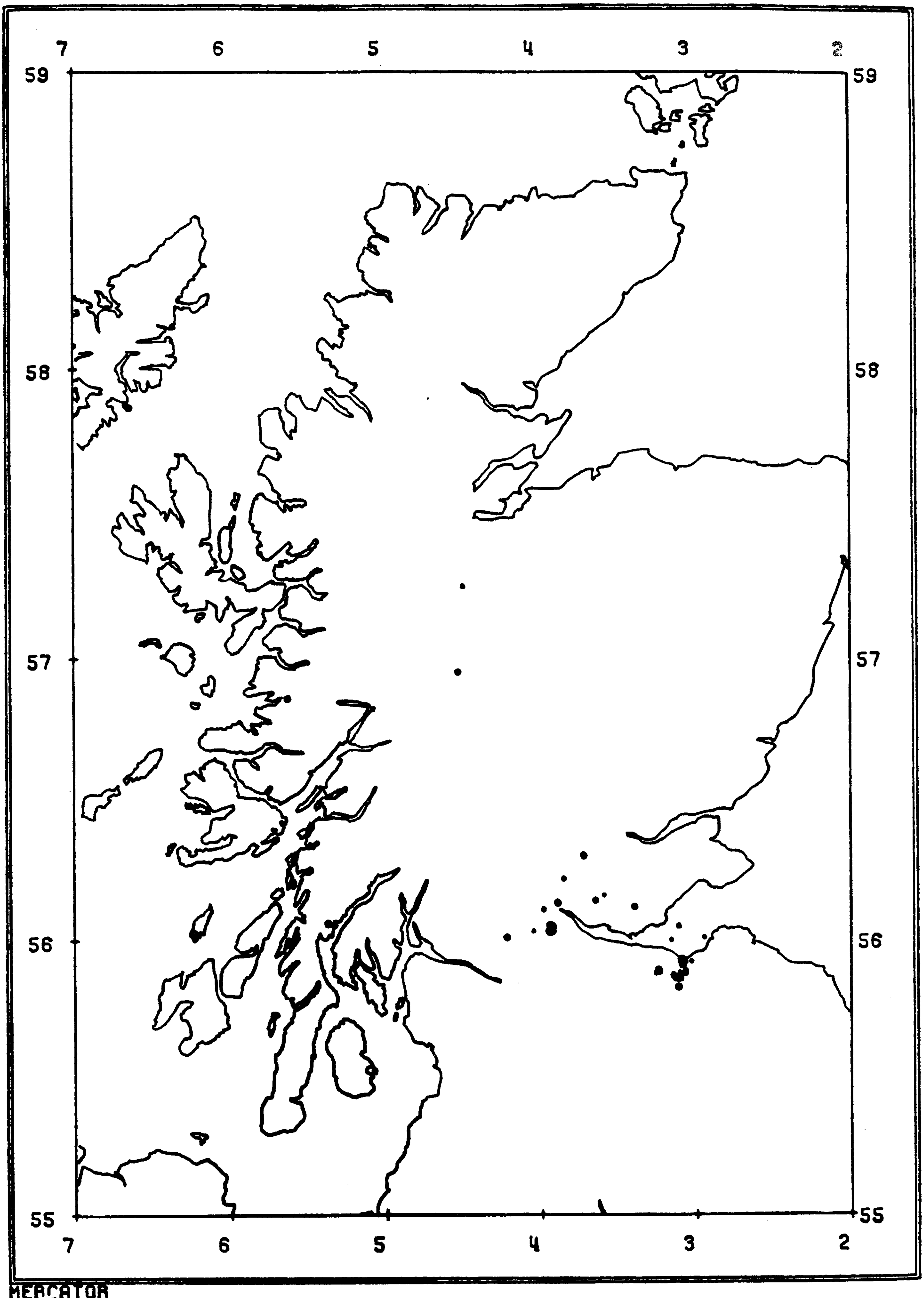


Figure 15 Epicentres in Scotland 1969.

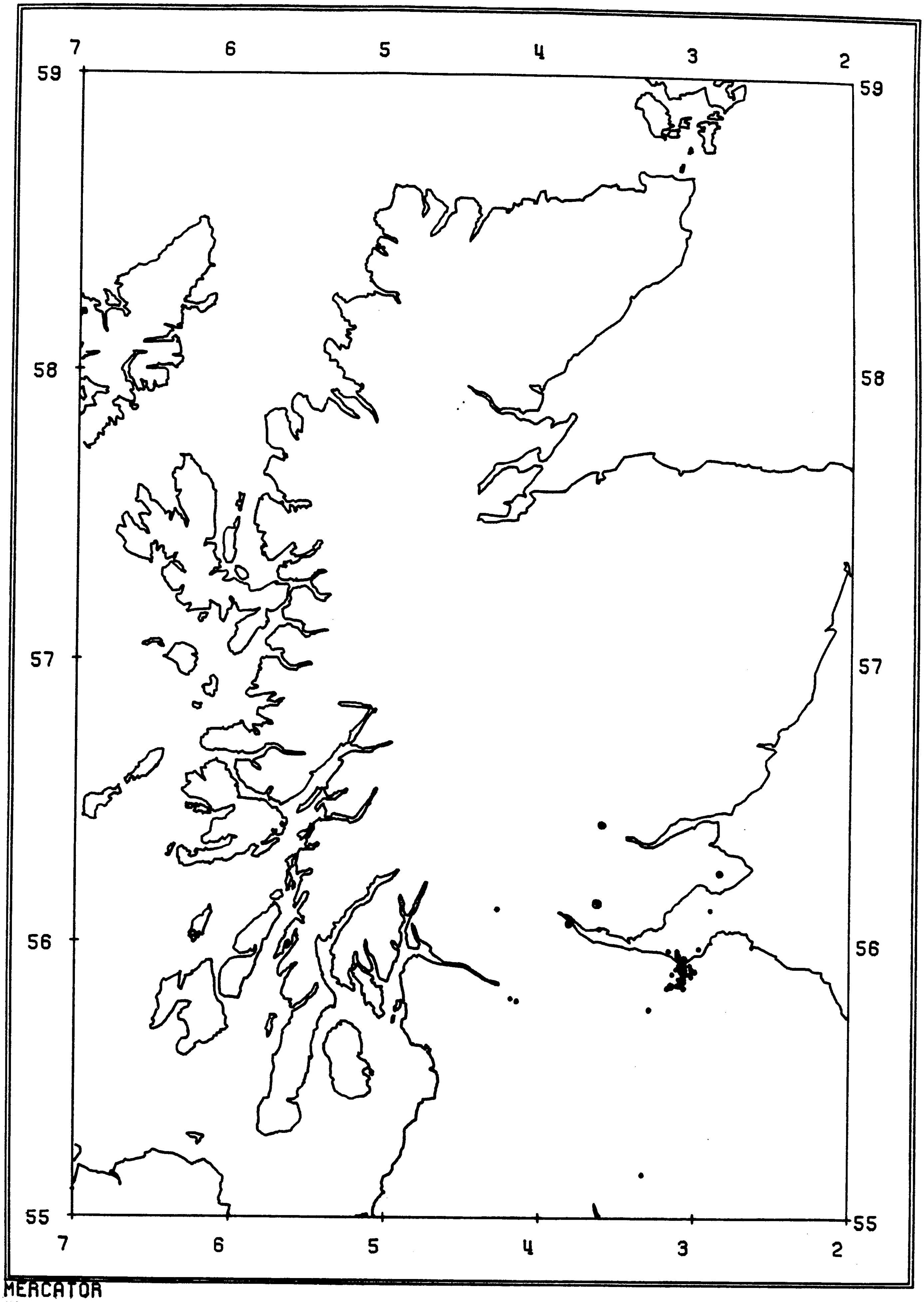


Figure 16 Epicentres in Scotland 1970.

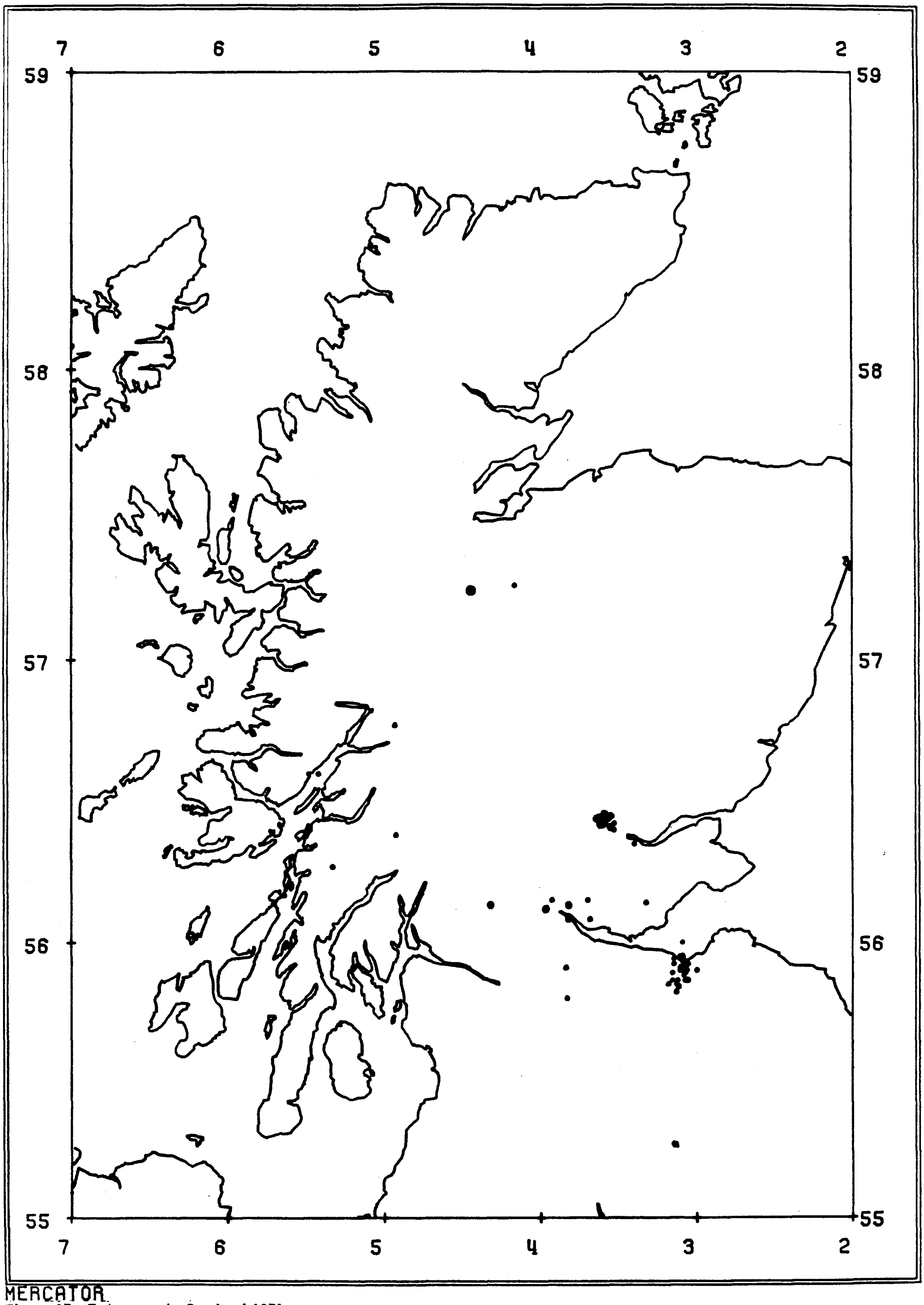


Figure 17 Epicentres in Scotland 1971.

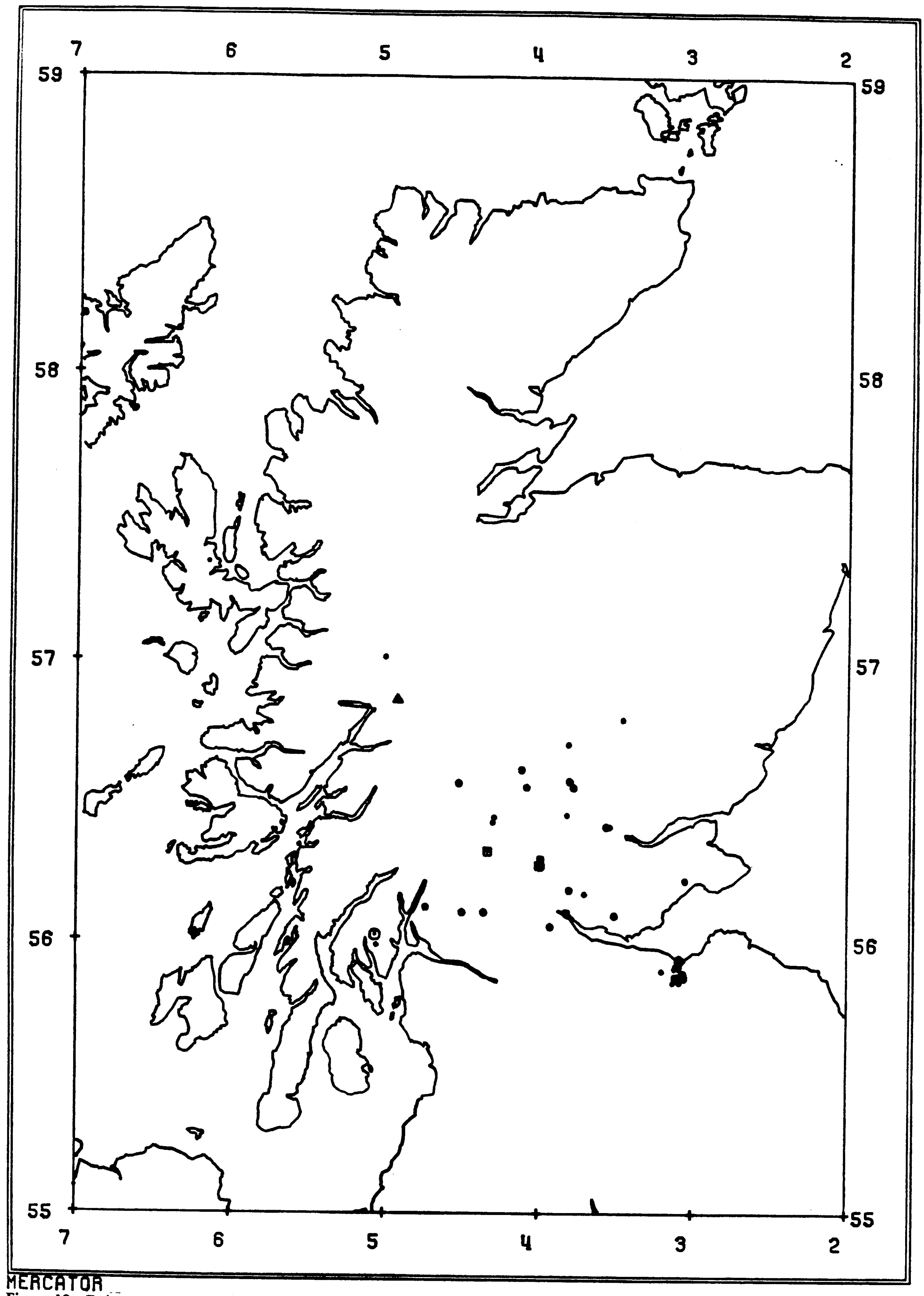


Figure 18 Epicentres in Scotland 1972.

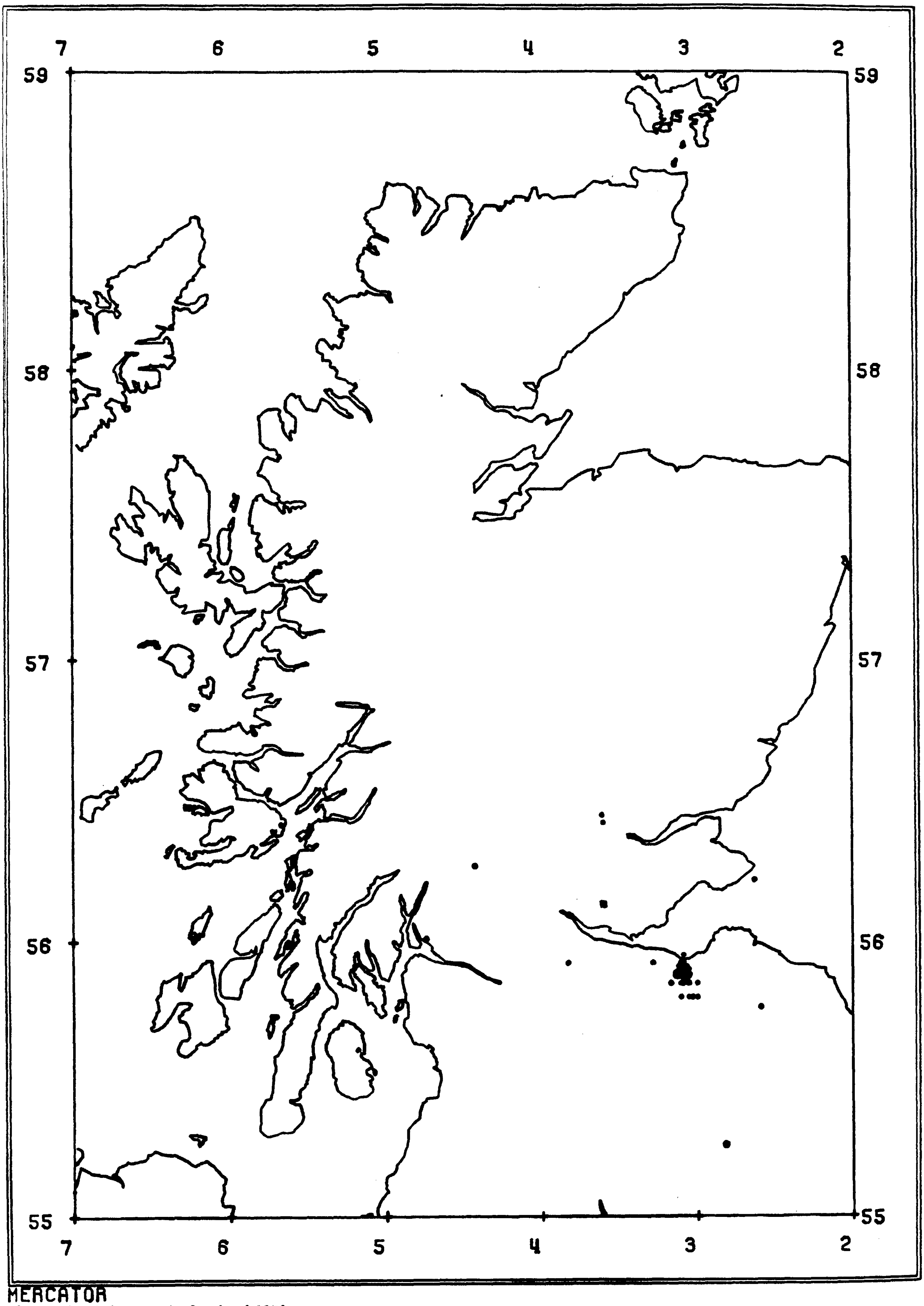


Figure 19 Epicentres in Scotland 1973.

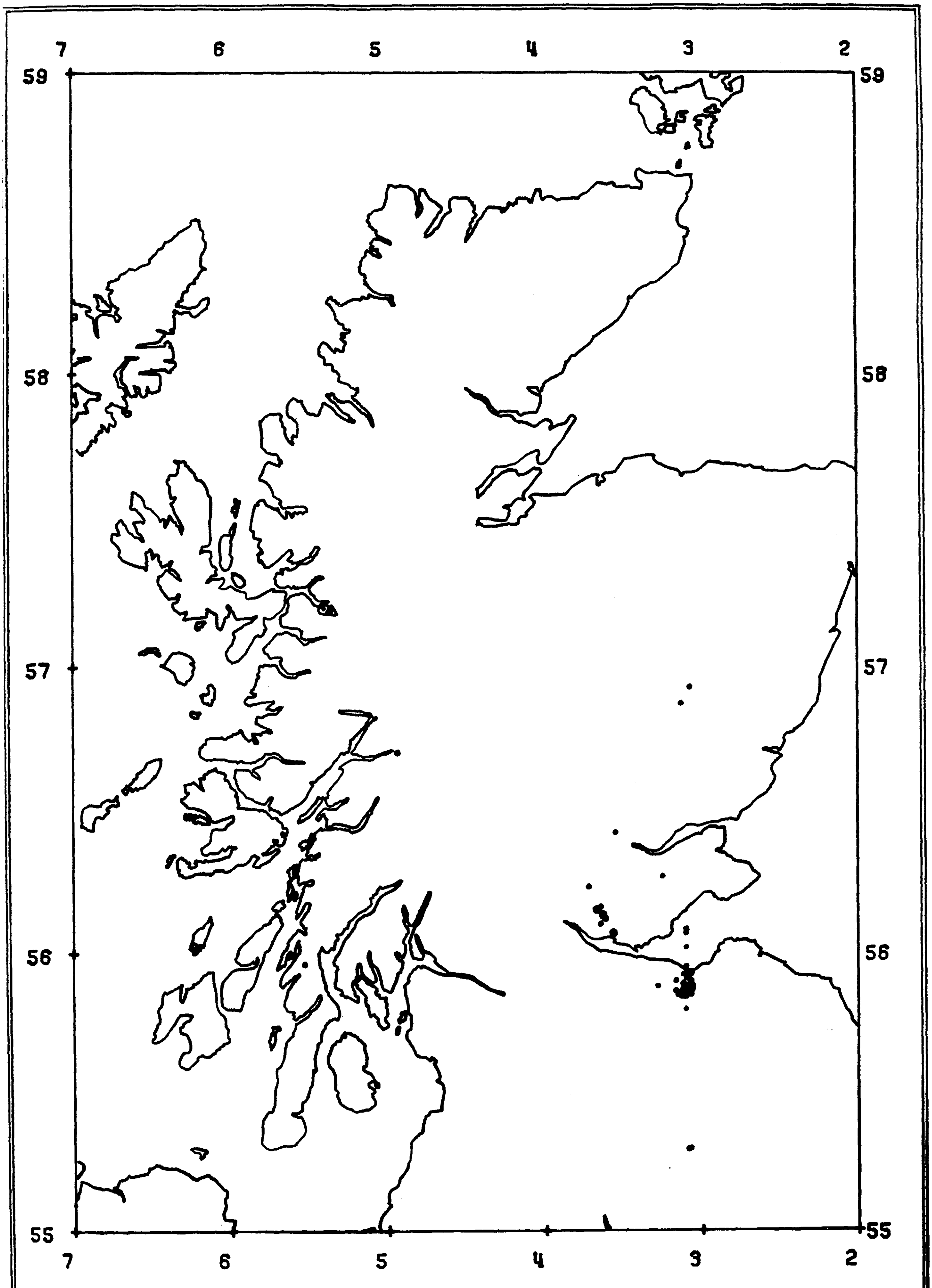


Figure 20 Epicentres in Scotland 1974.

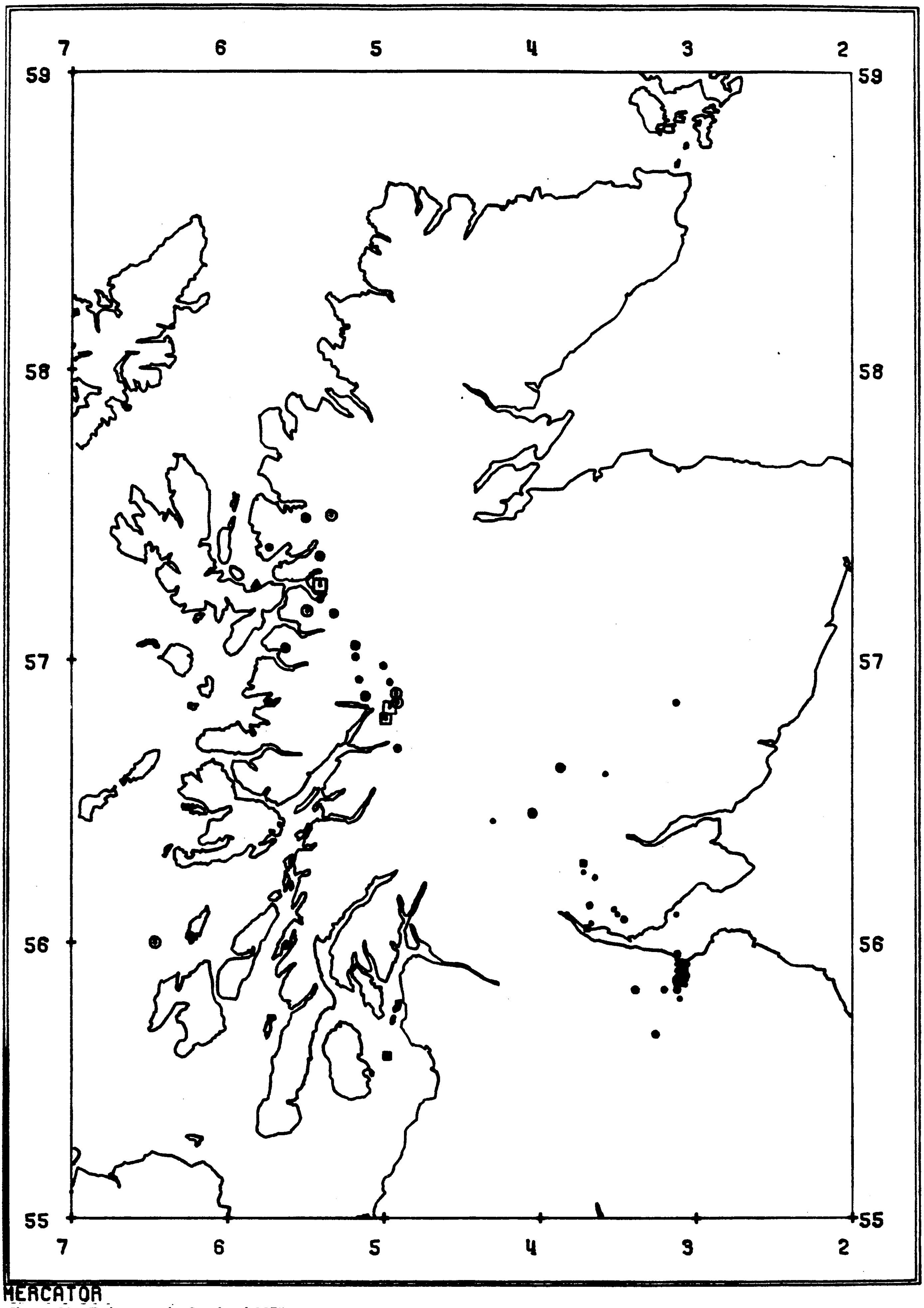


Figure 21 Epicentres in Scotland 1975.

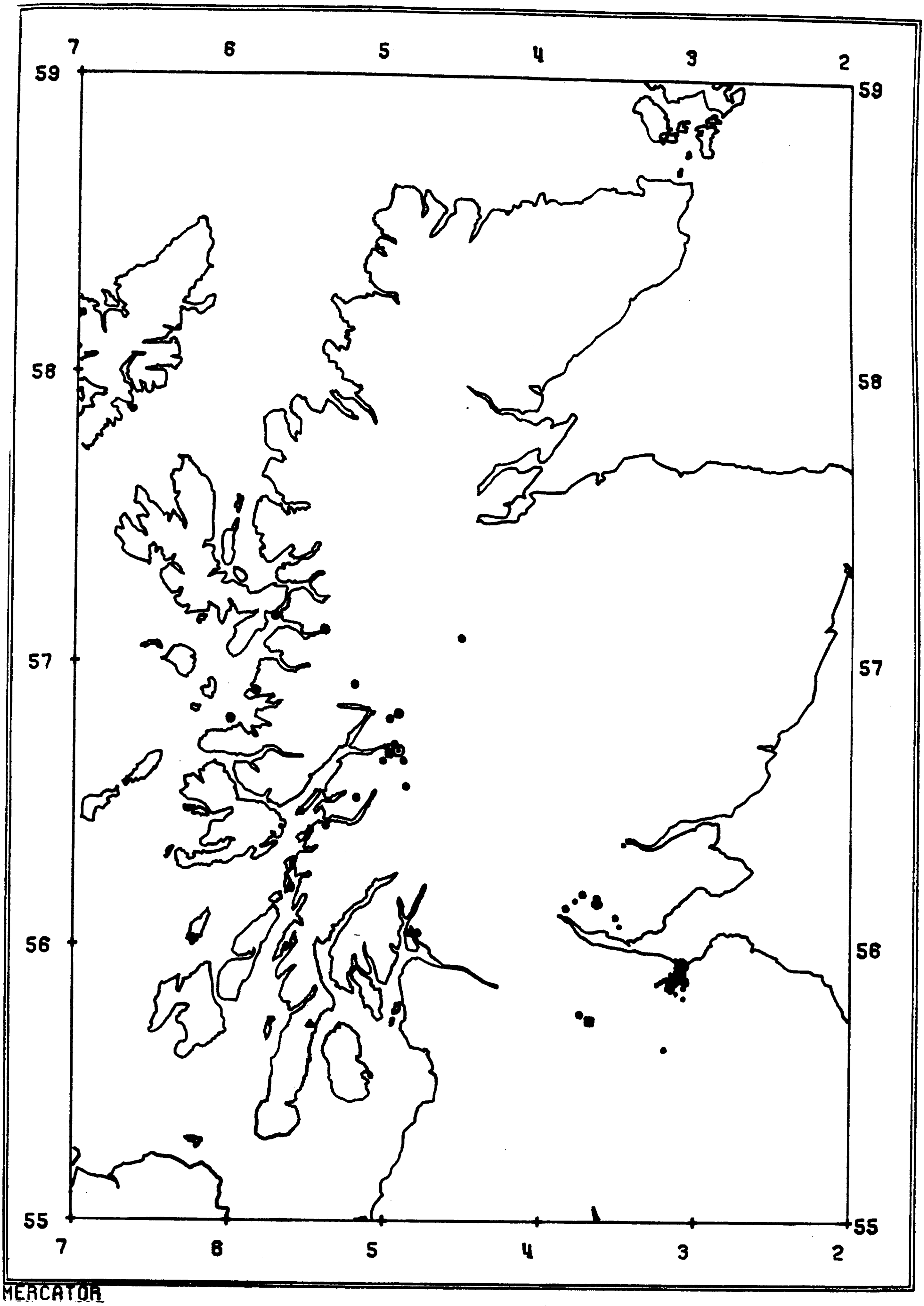


Figure 22 Epicentres in Scotland 1976.

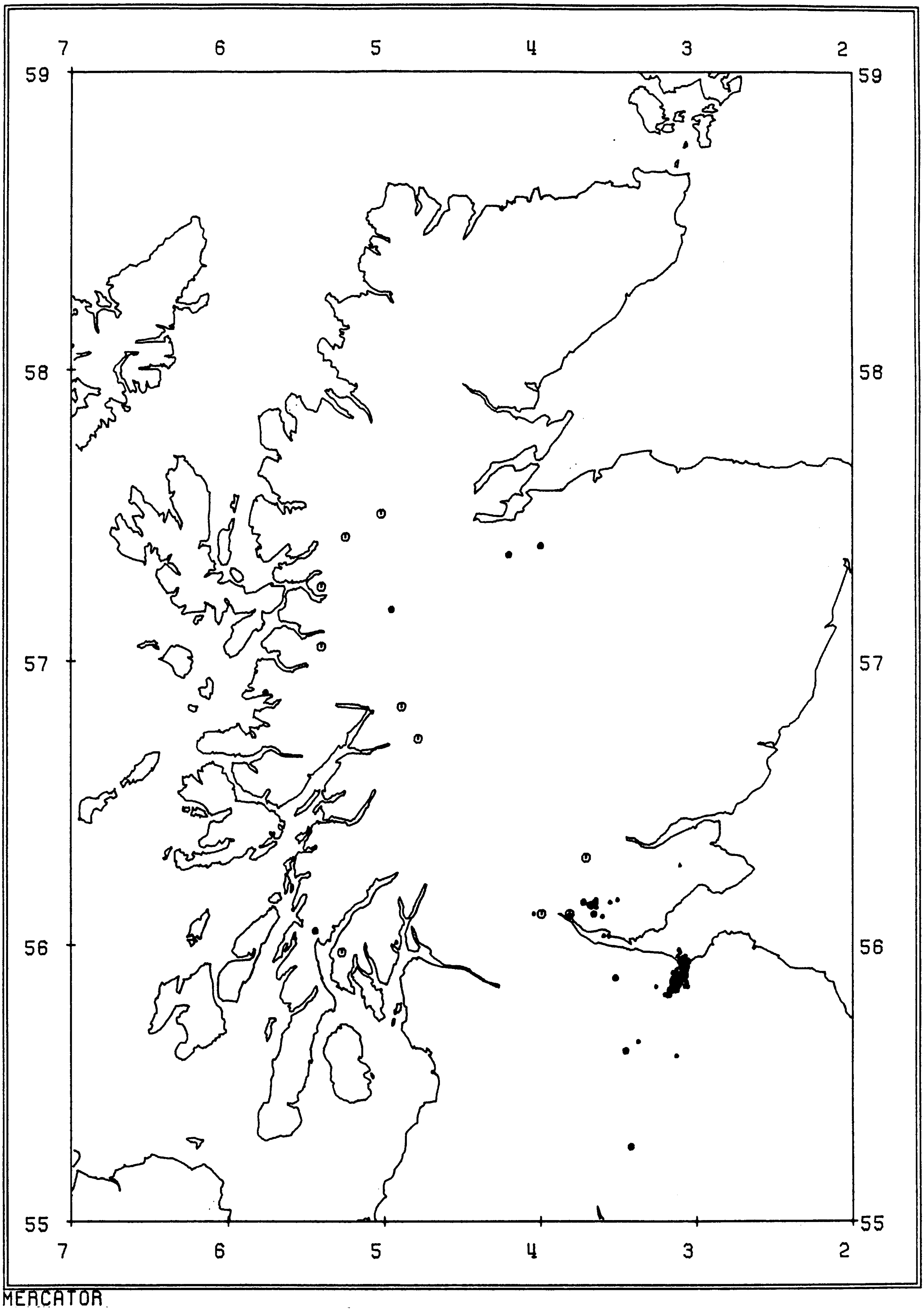


Figure 23 Epicentres in Scotland 1977.

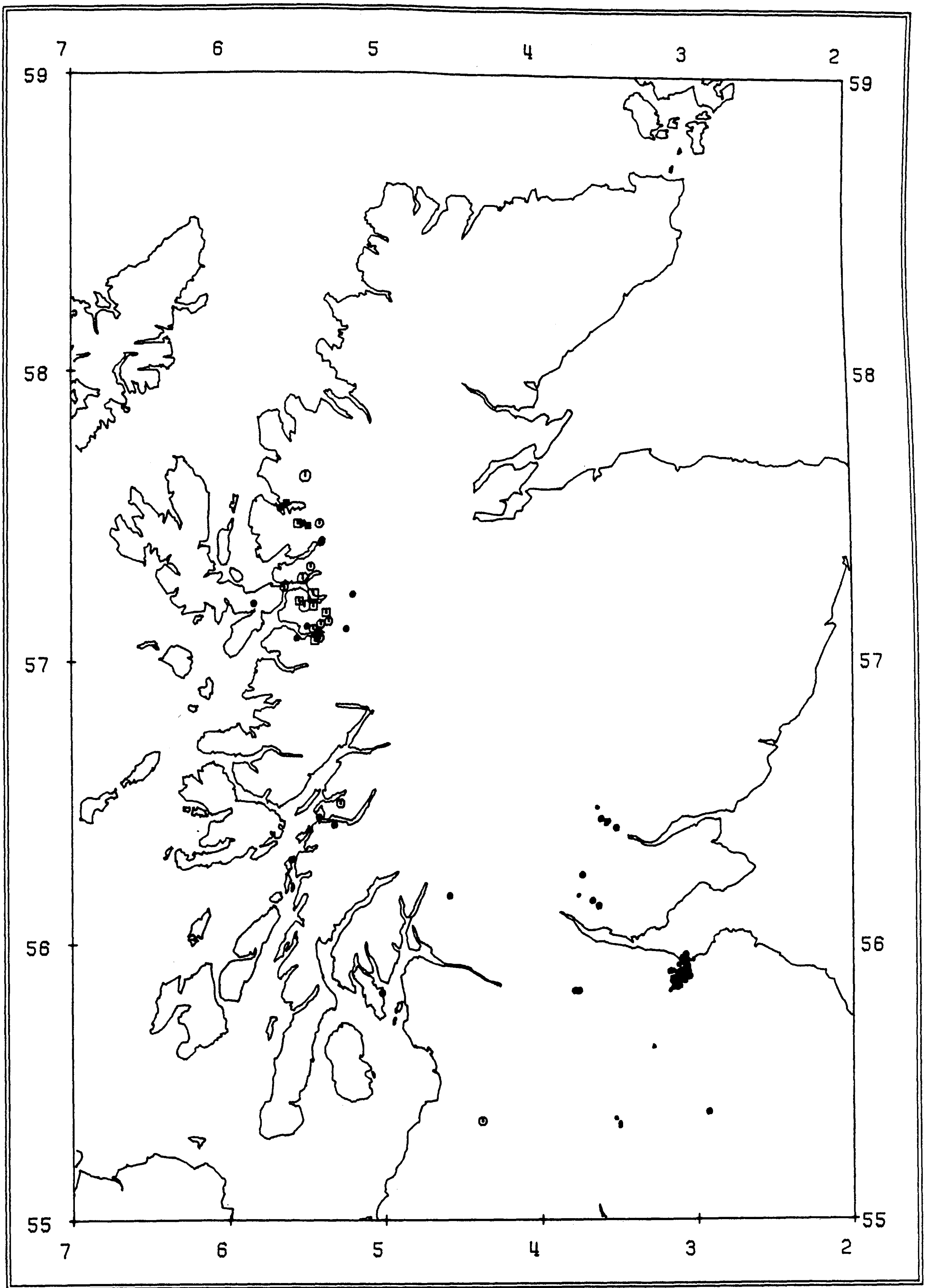


Figure 24 Epicentres in Scotland 1978.

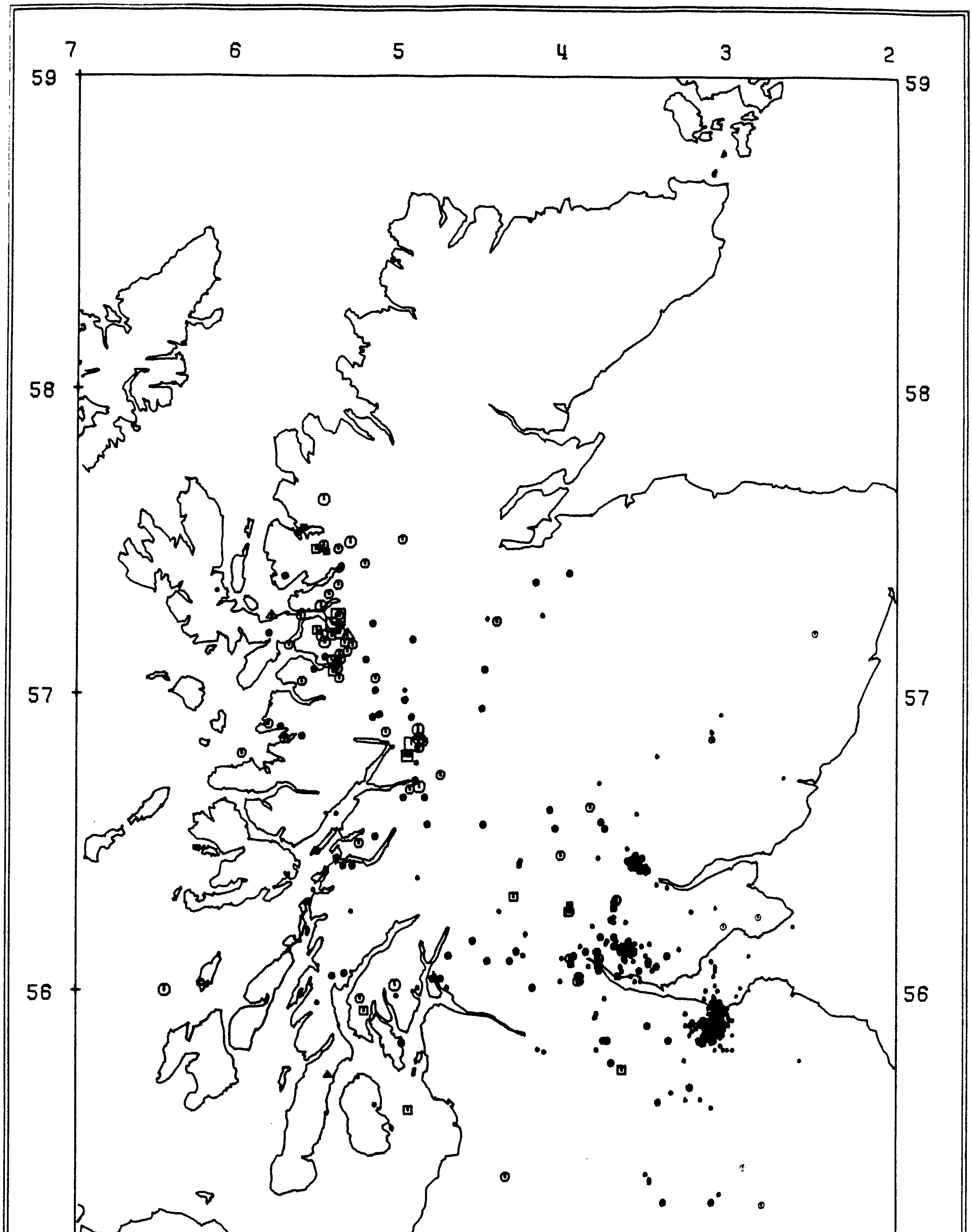


Figure 25 All epicentres in Scotland 1967-1978.

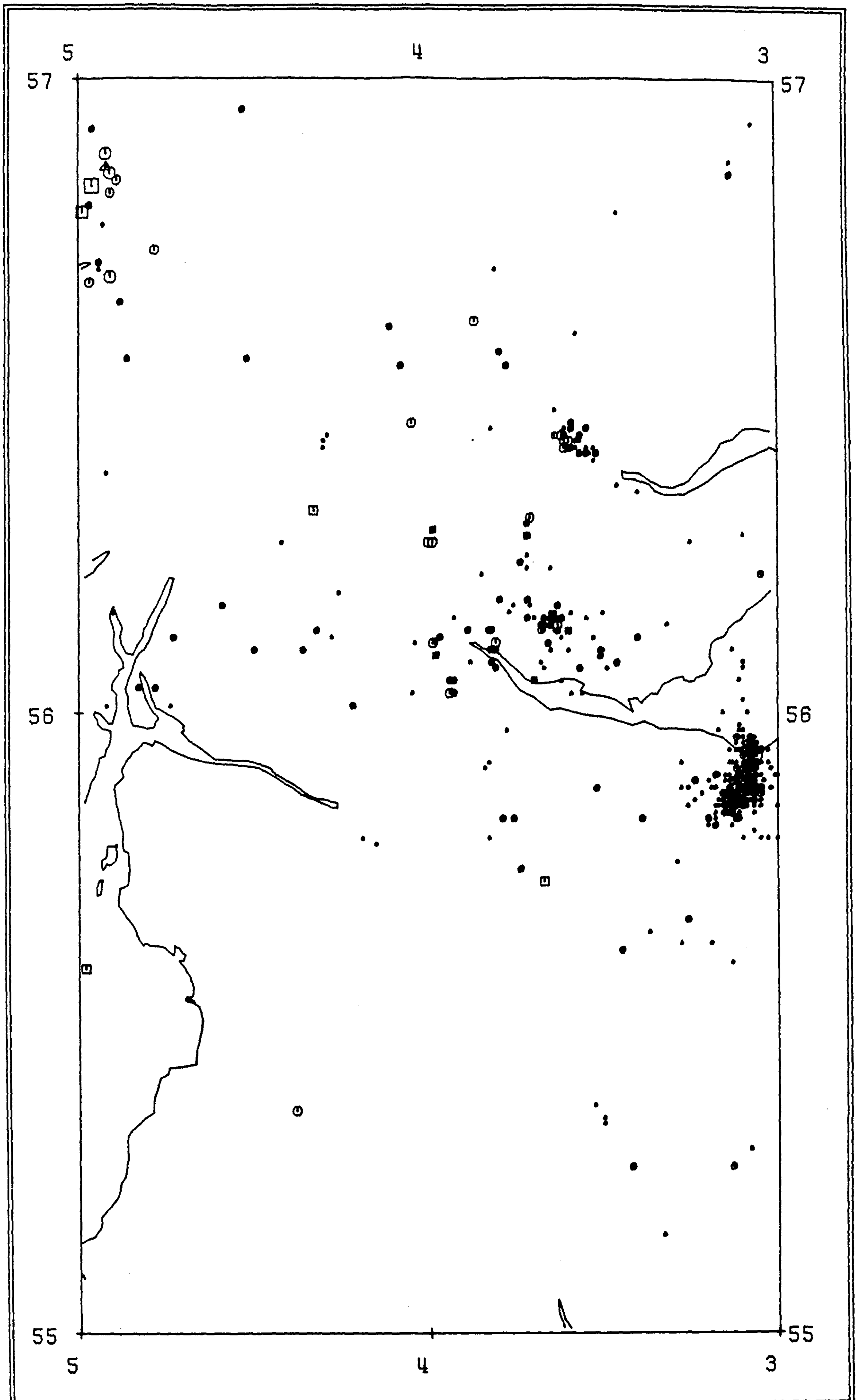


Figure 26 Epicentres around Edinburgh 1967-1978.

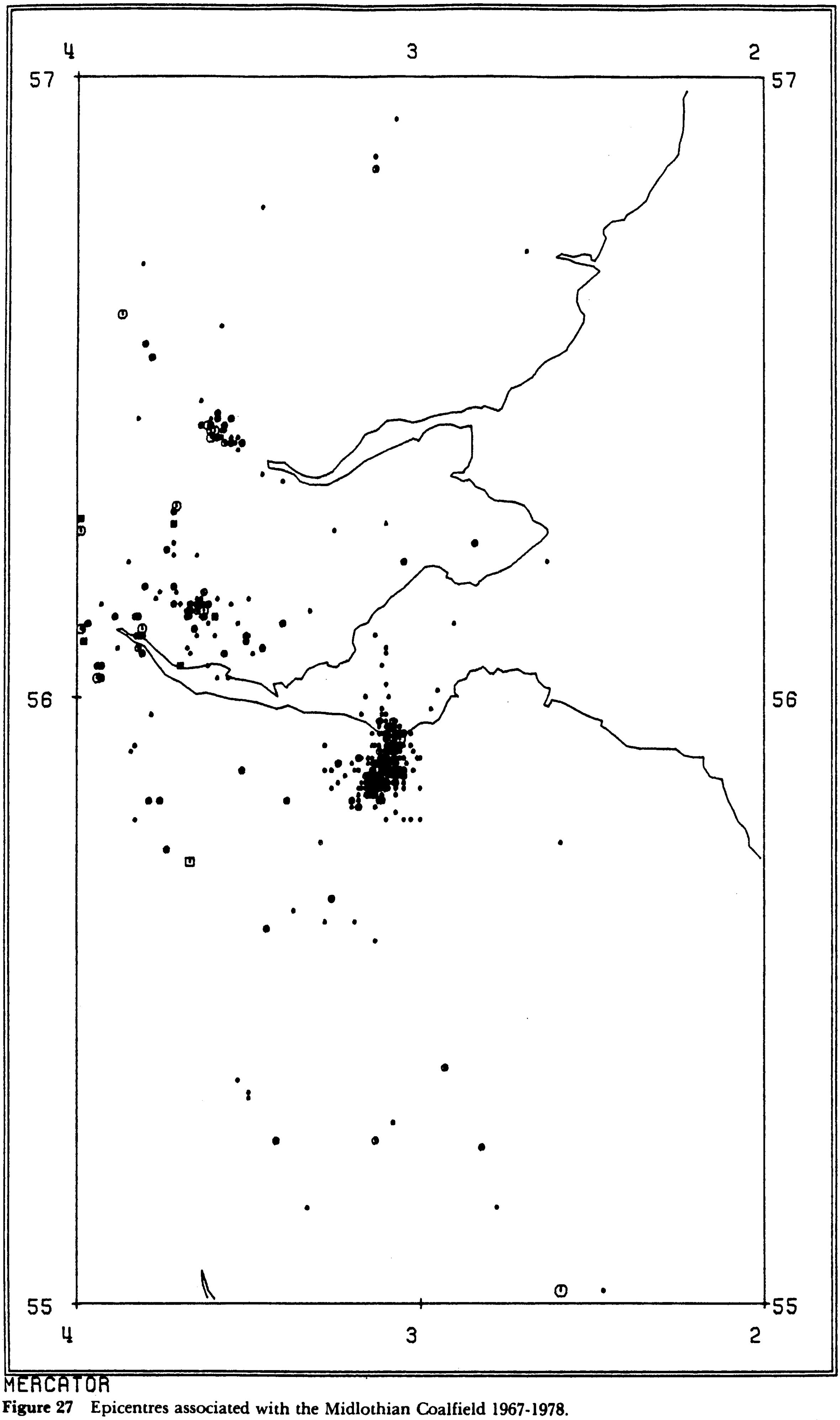


Figure 27 Epicentres associated with the Midlothian Coalfield 1967-1978.

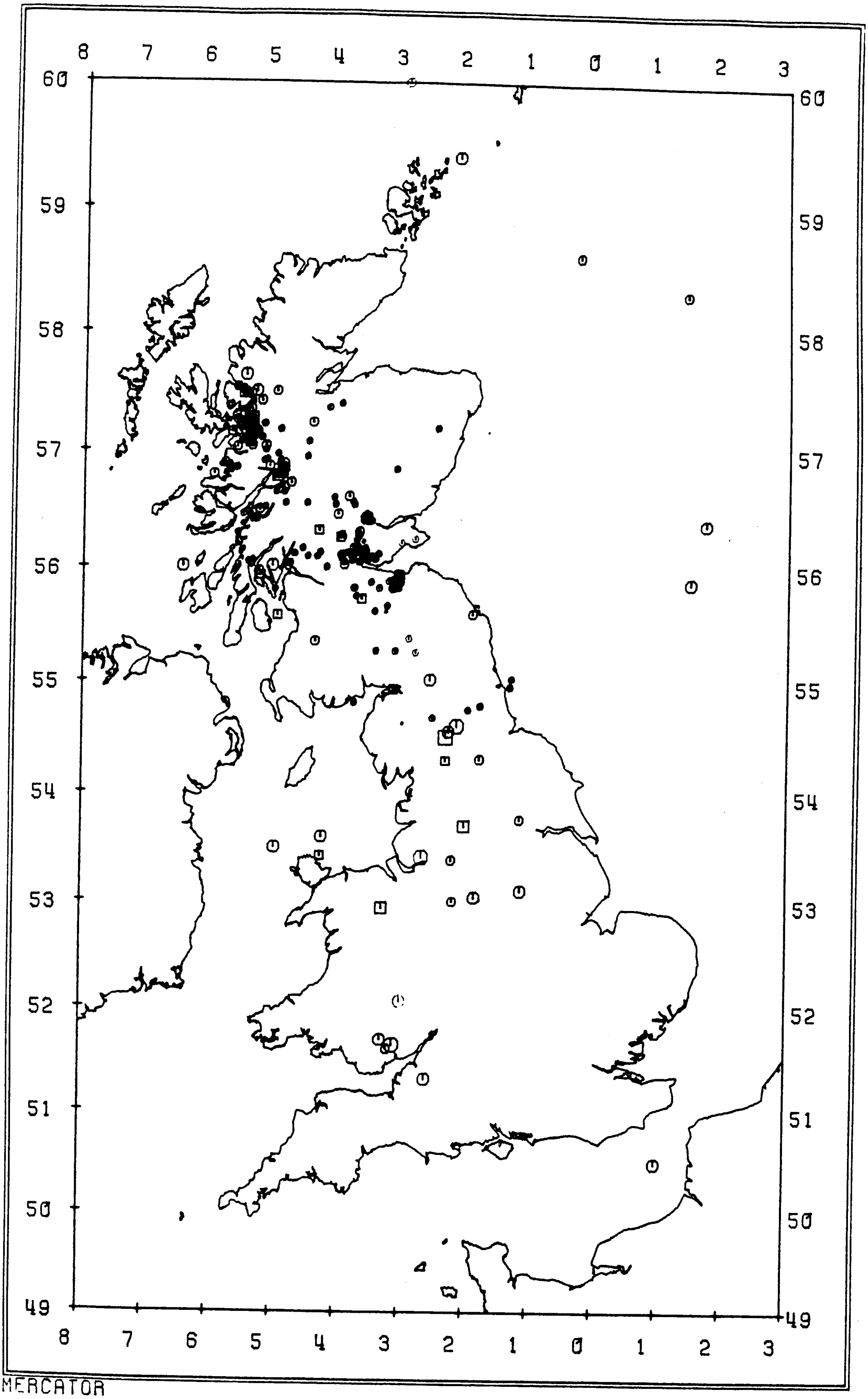


Figure 28 Epicentres of earthquakes with magnitude 1.0 or greater in Great Britain 1967-1978.

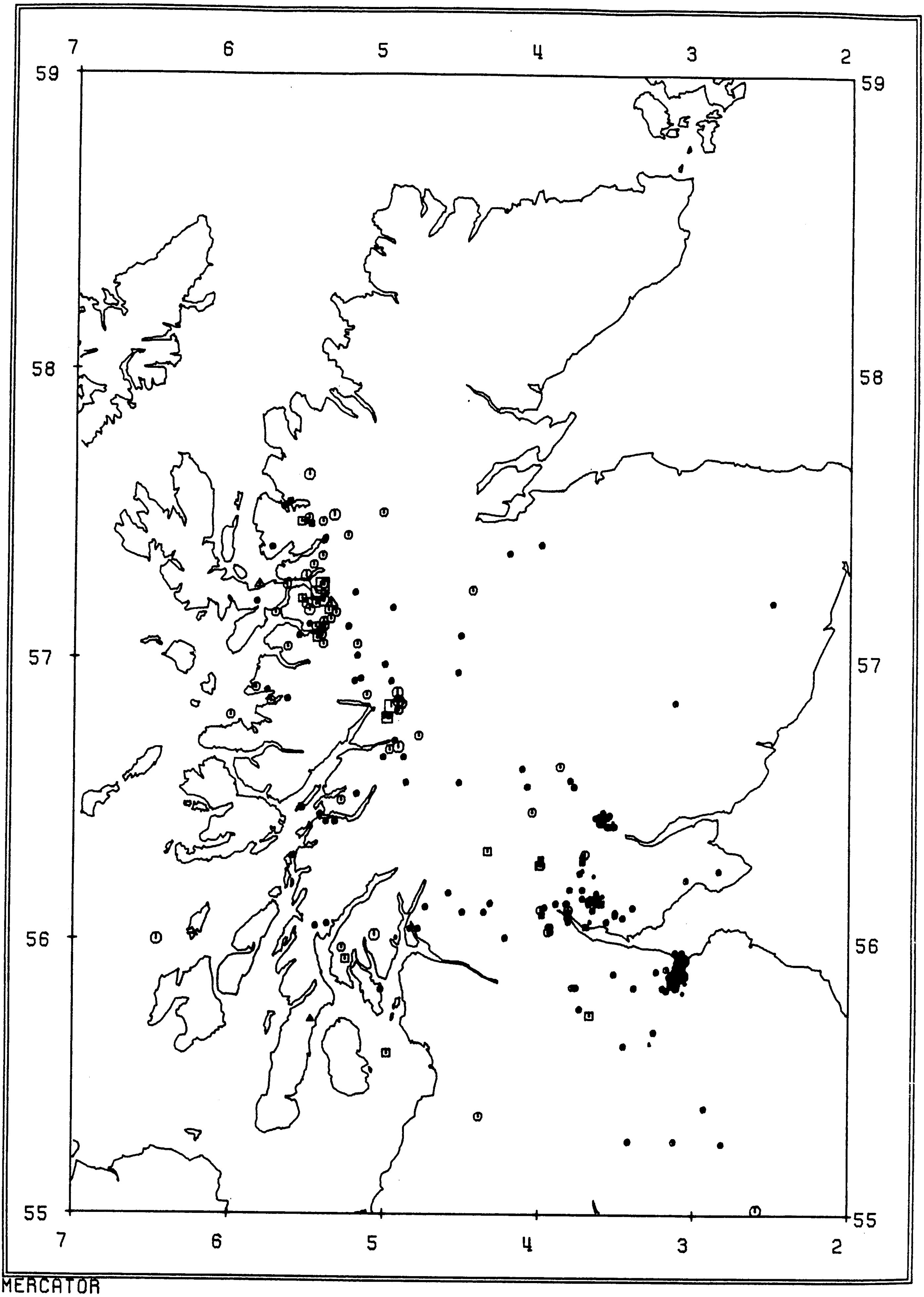


Figure 29 Epicentres of earthquakes with magnitude M_L=1.0 or greater in Scotland 1967-1978.